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OFFICIAL GAZETTE UNITED STATES PATENT OFFICE

VOL. 190 - 191

MAY - JUNE

1913

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1913.

ERRATA.

1,060,672, page 37, fourth claim, line 1, for the word "relative" read *relatively*.

1,061,754, page 445, first claim, line 7, for the word "fitting" read *filling*.

1,062,561, page 753, in heading, after residence of patentees, insert *Assignors to Waterbury Tool Company, Waterburg, Conn., a Corporation of Connecticut.*

1,062,855, page 893, in heading, assignment, name of assignee, for "Markham Rifle Company," read *Markham Air Rifle Company.*

91,660, (Trade-Mark,) page 788, strike out all after number—heading and claim—and insert the word WITHDRAWN.

Commissioner's Decisions, page 1028, first column, syllabus, line 4, strike out the words "to dissolve."

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THE OFFICIAL GAZETTE

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Prints	6—	No. 3,249 to No. 3,254, inclusive.
Reissues	None.	
Total	825	

TO RESIDENTS OF THE UNITED STATES.

States.	Patents and Designs.	Trade-Marks, Labels, and Prints.	States.	Patents and Designs.	Trade-Marks, Labels, and Prints.
Alabama	4	.....	North Carolina	1	2
Arizona	3	1	North Dakota	1	1
Arkansas	3	1	Ohio	36	7
California	25	1	Oklahoma	5	.....
Colorado	10	2	Oregon	4	.....
Connecticut	16	2	Pennsylvania	50	4
Delaware	.....	.....	Rhode Island	3	1
Florida	2	4	South Carolina	.....	.....
Georgia	7	3	South Dakota	2	.....
Idaho	1	.....	Tennessee	3	1
Illinois	67	9	Texas	16	2
Indiana	16	1	Utah	5	1
Iowa	13	1	Vermont	2	.....
Kansas	7	1	Virginia	7	1
Kentucky	8	.....	Washington	14	2
Louisiana	2	1	West Virginia	4	.....
Maine	10	.....	Wisconsin	14	.....
Maryland	4	1	Wyoming	1	.....
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Michigan	25	6	Alaska, District of	.....	.....
Minnesota	12	3	Canal Zone	.....	.....
Mississippi	1	.....	District of Columbia	5	.....
Missouri	20	1	Hawaii Territory	1	.....
Montana	1	.....	Philippine Islands	.....	.....
Nebraska	7	1	Porto Rico	1	.....
Nevada	.....	.....	U. S. Army	.....	.....
New Hampshire	3	.....	U. S. Navy	.....	.....
New Jersey	29	4			
New Mexico	1	.....	Total to residents of the United States	631	107
New York	117	38			

TO RESIDENTS OF FOREIGN COUNTRIES.

Countries.	Patents and Designs.	Trade-Marks.	Countries.	Patents and Designs.	Trade-Marks.
Argentina	.....	.....	Netherlands	1	.....
Austria-Hungary	.....	.....	Newfoundland	.....	.....
Belgium	1	.....	New South Wales	1	.....
Brazil	1	.....	New Zealand	3	.....
British West Indies	.....	.....	Norway	1	.....
Canada	7	.....	Queensland	.....	.....
Cape Colony	.....	.....	Roumania	.....	.....
Chile	.....	.....	Russia	2	.....
China	.....	.....	Scotland	1	.....
Costa Rica	.....	.....	South Australia	.....	.....
Cuba	.....	.....	Spain	.....	.....
Denmark	.....	.....	Sweden	1	.....
Ecuador	.....	.....	Switzerland	1	1
England	18	3	Transvaal, South Africa	1	.....
France	7	2	Victoria	1	.....
Germany	25	3	Western Australia	.....	.....
Ireland	.....	.....			
Isle of Jersey	.....	.....			
Italy	2	.....	Total to residents of foreign countries	75	10
Japan	.....	.....			
Mexico	1	1			

Drawings.

PRECAUTIONS TO BE OBSERVED IN FORWARDING DRAWINGS TO THE UNITED STATES PATENT OFFICE.

Where drawings are to be filed in connection with an application for Letters Patent in the United States Patent Office, each sheet, before it can be accepted by the Office as a part of the application, must be signed in the name of the inventor at the lower right-hand corner, either by him or by an attorney whose written authorisation from the applicant is filed in connection with the application. This signature must also be attested by two witnesses, each of whom should sign the drawing at the lower left-hand corner of the sheet. The signatures should never be written on a line parallel with the longer edges of the sheet, one of the shorter edges being always regarded, for the purpose of locating the signatures, as the lower edge of the sheet. The signatures must all be within the margin-lines of the sheet and below the lines of the drawing. The title of the invention should be written with pencil on the back of each sheet of drawings.

When there are filed on the same day two or more applications by the same inventor, each of the documents and drawings belonging to the same application should have placed thereon the same letter or number, which should be different from the letter or number placed upon those of any other of the applications.

It is desirable that all parts of the complete application, including the drawings, be deposited in the Office at the same time. Should, however, the other parts of the application be filed before the drawings are sent, the latter when forwarded should be accompanied by a letter stating the number of sheets inclosed, and that the drawings are to be filed with the other parts of the application, giving the date at which such other parts were filed in the Office, the name of the inventor, and title of the invention. If the application has received a serial number, that should also be given, and it should be indorsed with pencil on the back of each sheet of drawings. The letter should also state, if such be the case, that the new drawings are to be substituted for those previously filed.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business May 3, 1913.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended	No. of applications awaiting action.
313	1. Fences; Harrows and Diggers; Plows; Seeders and Planters; Trees, Plants, and Flowers.	Feb. 19	Feb. 28	766
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Pneumatic Despatch; Pneumatics; Presses; Store-Service; Tobacco.	Jan. 17	Feb. 19	672
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Metal-Founding; Metallurgy; Plastic Metal Working.	Apr. 4	Apr. 21	262
232	4. Bridges; Conveyers; Excavating; Hoisting; Hydraulic Engineering; Loading and Unloading; Metallic Building Structures; Traversing Hoists.	Feb. 6	Mar. 19	687
167	5. Bookbinding; Harvesters; Jewelry; Music.	Feb. 20	Feb. 19	583
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Medicines; Preserving; Sugar and Salt; Substance Preparation.	Jan. 27	Mar. 3	760
312	7. Educational Appliances; Clutches; Games and Toys; Mechanical Motors; Optics; Velocipedes.	Dec. 26	Feb. 7	1000
131	8. Beds; Chairs; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Jan. 20	Apr. 4	566
142	9. Air and Gas Pumps; Fluid-Pressure Regulators; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Wind-Wheels.	Dec. 26	Apr. 1	574
235	10. Carriages and Wagons	Dec. 4	Feb. 24	1174
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whips and Whip Apparatus.	Mar. 20	Mar. 19	371
322	12. Elevators; Journal-Boxes, Pulleys, and Shafting; Lubrication; Machine Elements.	Jan. 29	Feb. 28	1095
329	13. Arms, Projectiles, and Explosive Charges, Making; Bolt, Nail, Nut, Rivet, and Screw Making; Boring and Drilling; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 7	Feb. 21	760
307	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Metal-Ornamenting; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Jan. 20	Apr. 4	506
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Liquid Coating Compositions; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastic Compositions; Plastics.	Nov. 26	Feb. 28	1224
189	16. Radiant Energy; Telegraphy; Telephony.	Jan. 6	Feb. 11	542
308	17. Matrix-Making; Paper Manufactures; Printing; Type-Bar Making.	Mar. 14	Mar. 27	320
227	18. Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 10	Mar. 17	225
236	19. Dampers, Automatic; Furnaces; Heat-Distributing Systems; Stoves and Furnaces.	Feb. 6	Mar. 10	549
179	20. Artificial Limbs; Builders' Hardware; Dentistry; Locks and Latches; Safes; Undertaking.	Mar. 5	Apr. 1	210

Applications Under Examination—Continued.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended	No. of applications awaiting action.
112	21. Brakes and Gins; Carding; Cloth-Finishing; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 7	Feb. 13	555
249	22. Aeronautics; Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Firearms; Marine Propulsion; Ordnance; Ships.	Jan. 27	Apr. 3	379
379	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Time-Controlling Mechanism.	Feb. 3	Mar. 3	508
144	24. Apparel; Apparel Apparatus; Sewing-Machines.	Jan. 22	Apr. 3	609
315	25. Butchering; Mills; Threshing; Vegetable Cutters and Crushers.	Mar. 28	Apr. 11	219
106	26. Electricity, Generation; Motive Power.	Nov. 18	Jan. 13	650
372	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Feb. 20	Mar. 13	506
65	28. Internal-Combustion Engines	Jan. 2	Jan. 2	1185
147	29. Coopering; Fire-Escapes; Ladders; Roofs; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Wood-working; Woodworking-Tools.	Nov. 4	Mar. 7	845
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Feb. 6	Apr. 14	530
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue.	Jan. 25	Jan. 28	510
278	32. Carbonating Beverages; Dispensing Beverages; Dispensing-Cans; Ornamentation; Packaging Liquids; Refrigeration.	Jan. 17	Apr. 3	364
71	33. Cutlery; Domestic Cooking Vessels; Masonry and Concrete Structures; Paving; Tents, Canopies, Umbrellas, and Canes.	Dec. 27	Feb. 27	339
304	34. Railways; Railway-Brakes; Railway Rails and Joints; Railway Rolling-Stock; Railway Ties and Fasteners.	Jan. 29	Feb. 19	478
244	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Garment-Supporters; Toilet.	Feb. 13	Mar. 27	783
264	36. Drafting; Driers; Engraving; Measuring Instruments; Photography.	Nov. 3	Mar. 5	953
107	37. Electric Lamps; Electricity, Conductors; Electricity, Conduits; Electricity, General Applications.	Nov. 8	Jan. 7	904
378	38. Animal Husbandry; Artesian and Oil Wells; Fishing and Trapping; Stationery; Stone-Working.	Jan. 6	Feb. 24	841
321	39. Water Distribution	Feb. 3	Apr. 1	460
280	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Jan. 28	Mar. 5	1060
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Feb. 26	Mar. 20	627
279	42. Electric Railways; Electric Signaling; Railway Signaling; Signals.	Feb. 10	Feb. 6	722
382	43. Baths and Closets; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Mar. 17	Mar. 28	309

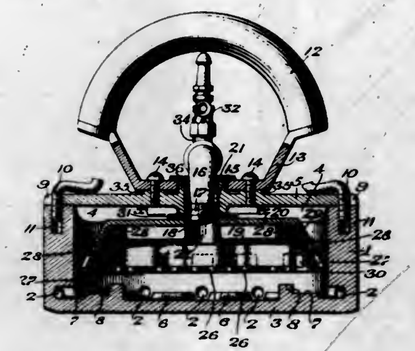
Oldest new case, Nov. 3; oldest amended, Jan. 2.
Total number of applications awaiting action..... 27,332

161	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.			
	Trade-Marks	Feb. 25	Apr. 12	808
	Designs	Mar. 19	Apr. 10	290
	Labels and Prints	Apr. 24	Apr. 24	76

PATENTS

GRANTED MAY 6, 1913.

1,060,572. GAS-HEATED IRON. HARRY ABRAMSON, Philadelphia, Pa. Filed Nov. 6, 1912. Serial No. 729,839. (Cl. 158—23.1.)



1. In a device of the character stated, a hollow body having a plurality of openings adjacent the bottom thereof, a burner located in said hollow body, having a plurality of perforations therein adapted to direct a flame or flames downwardly upon said bottom, a shield having downwardly extending side walls partially inclosing said burner and forming a heating chamber, said walls having passages therein, means to introduce a combustible mixture to said burner, and means to discharge the products of combustion to the exterior of said hollow body.

2. In a device of the character stated, a hollow body having a plurality of openings adjacent the bottom thereof, a plurality of lugs formed on the bottom of said body and on the inside thereof, a burner juxtaposed with respect to said lugs and having a plurality of perforations adapted to direct a flame against said lugs, a shield having downwardly extending and outwardly flaring side walls partially inclosing said burner and having a plurality of openings therein, said shield forming a heating chamber, means to introduce a combustible mixture to said burner, and means to discharge the products of combustion to the exterior of said hollow body.

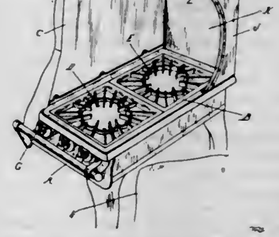
3. In a device of the character stated, a hollow body having a plurality of openings adjacent the bottom thereof and a longitudinally disposed recess in each side, a plate, detachably secured to said hollow body, forming a top therefor, a burner juxtaposed with respect to the bottom of said hollow body, said burner having ends situated adjacent the toe portions of the body and having laterally extending intermediate members and said burner having a plurality of perforations therein adapted to direct a flame or flames to the bottom of said body, a shield in said hollow body forming a heating chamber partially inclosing said burner, and means passing through said top plate for introducing a combustible mixture into said burner.

4. In a device of the character stated, a hollow body, a burner located therein, said burner having ends situated adjacent the toe portions of the body and having laterally extending intermediate members and having a plurality of perforations adapted to direct a flame or flames to the bottom of said body, a shield in said hollow body forming a heating chamber partially inclosing said burner, means to conduct air to said heating chamber, and means to discharge the products of combustion to the exterior of said hollow body.

5. In a device of the character stated, a hollow body, a burner located therein, said burner having ends situated adjacent the toe portions of the body and having laterally extending intermediate members and having a plurality of perforations adapted to direct a flame or flames to the bottom of said body, means to maintain said burner in fixed relation to said body, a shield in said hollow body forming a heating chamber partially inclosing said burner, a gas inlet to said burner projecting exterior of said hollow body, means to introduce air to said heating chamber, and means to discharge the products of combustion to the exterior of said hollow body.

[Claims 6 to 12 not printed in the Gazette.]

1,060,573. GAS-RANGE. JOHN A. ALEXANDER and FRANK K. BERRY, Battle Creek, Mich., assignors to A. B. Stove Company, Battle Creek, Mich., a Corporation of Michigan. Filed June 16, 1911. Serial No. 633,601. (Cl. 126—39.)



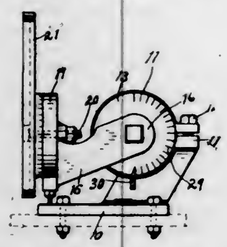
1. In a gas range, the combination with a frame of an open-top burner mounted on a portion of said frame, an oven mounted on an adjacent portion of said frame, a second open-top burner positioned above the first-mentioned burner, a bracket extending downward from said upper burner, and means extending between said bracket and said oven for shielding the upper burner from the draft created by the first-mentioned burner, there being a draft communication for said upper burner leading to the space out of the path of the draft created by the first-mentioned burner.

2. In a gas range, the combination of the frame, an open top burner mounted thereon, a hood extending upward from said frame and partially covering said burner, a shelf above said hood, a burner between said hood and shelf, and a shield for closing the front opening between said hood and shelf to exclude the draft from the lower burner.

3. In a gas range, the combination of the frame, an open top burner thereon, a shelf above said open top burner, a hood for said open top burner forming a support for said shelf, a burner below said shelf, a shield below and a shield in front of said burner, said hood having draft openings for said upper burner, communicating with the space outside of said hood.

4. In a gas range, the combination with a frame of an open top burner mounted on a portion of said frame, an oven mounted on an adjacent portion of said frame, an upper burner positioned above the lower burner, a shelf for said upper burner, a wall extending from said shelf downward to said frame, a bracket extending from said shelf downward to said frame, and a shield for said upper burner extending from said bracket to said oven.

1,060,574. ATTACHMENT FOR DRILL-PRESSES. ANDERS EMIL ANDERSON, Lake Forest, Ill., assignor of one-half to Anders G. Johnson, Lake Forest, Ill. Filed May 10, 1912. Serial No. 696,340. (Cl. 77—63.)



1. The combination with a base; a circular clamping member carried by said base; a head adjustably mounted in said circular clamping member and provided with a shoulder around one end and a recess in such end; an arm having one end fitted in said recess; a washer; and a bolt through said arm, head and washer clamping said circular clamping member between said washer and the shoulder on said head to adjustably secure said head in said circular clamping member and said arm in said recess, substantially as described.

2. The combination with a base; a circular clamping member carried by said base; a head adjustably mounted in said circular clamping member and provided with a shoulder around one end and a recess in such end; an arm having one end fitted in said recess; a washer; a bolt through said arm, head and washer clamping said circular clamping member between said washer and the shoulder on said head to adjustably secure said head in said circular clamping member and said arm in said recess; a work securing head carried by said arm; and an auxiliary support adjustably secured in said work holding head, substantially as described.

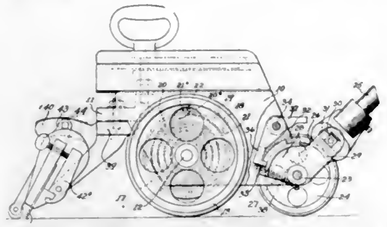
3. The combination with a base, of a slitted circular clamping member carried by said base; a head rotatively mounted in said slitted circular clamping member and provided with a shoulder around one of its ends engaging the side of such clamping member, said head being also provided with a perforation through its axial portion and a recess around one end of such perforation; means for clamping said slitted circular clamping member around said head; an arm having one end fitted in said recess and provided with a perforation; a washer; a bolt through said arm, head and washer clamping said slitted circular clamping member between said shoulder and said washer on said head; and a work securing head on said arm, substantially as described.

1,060,575. MOTOR FOR FLOOR-SCRAPERS AND THE LIKE. EMIL W. ANDERSON, Chicago, Ill., assignor to Triple "A" Machine Company, Manistee, Mich. Filed June 12, 1912. Serial No. 703,153. (Cl. 185—37.)

1. The combination with a reciprocatory carriage, of means for storing up energy upon each stroke of the carriage; and means for expending the energy stored up upon a prior stroke to assist the propulsion of said carriage.

2. The combination with a reciprocatory carriage, of springs arranged for storing up energy upon each stroke of the carriage; and means for expending the energy in said springs to assist the propulsion of said carriage in each direction.

3. The combination with a reciprocatory wheeled carriage; of oppositely arranged springs coöperating with said wheels, one of said springs for storing energy upon one movement of the carriage, while the opposite spring expends energy stored on the previous movement of the carriage.

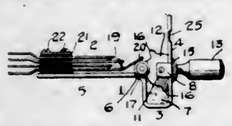


4. The combination with a reciprocatory carriage; of a shaft mounted in said carriage; wheels fixed to said shaft for rotation upon the movement of said carriage; a sleeve rigidly mounted on said shaft; and oppositely wound springs arranged upon said sleeve having their inner terminals secured to said sleeve and their outer terminals to said carriage.

5. The combination with a reciprocatory carriage; of a shaft mounted for rotation therein; traction wheels fixed to said shaft a sleeve rigidly mounted on said shaft provided with a longitudinal groove therein; oppositely wound springs mounted on said sleeve having their terminals bent inwardly and secured in the groove aforesaid; and a pin securing the outer terminals of said springs to the carriage aforesaid.

[Claim 6 not printed in the Gazette.]

1,060,576. KEY CONSTRUCTION AND SUPPORT FOR TELEPHONIC APPARATUS. WALLACE PFAU ANDRICK, EDGAR LOWE, and HOWELL W. HAFF, Jamaica, N. Y., assignors to Kelley Monroe Turner, Jamaica, N. Y. Filed Mar. 13, 1911. Serial No. 614,047. (Cl. 179—91.)

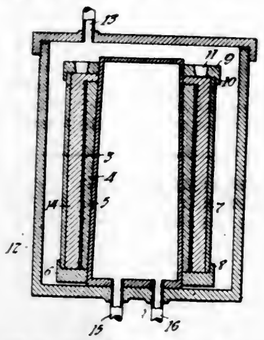


1. A key construction and support comprising a one piece frame formed of sheet metal having a vertical front wall and a horizontal rear ledge joined by a channel form, keys supported behind and protruding through said wall and projecting downward partly into said channel, and groups of spring blades screwed to the upper surface of said ledge and coöperating with the respective keys.

2. A key construction and support comprising a one piece frame of channel form having a vertical front wall and a rearwardly extending ledge and having ears bent up from the bottom of the channel and lugs bent over from the ends of said front wall, a spindle passed through said ears and lugs behind said wall, keys supported by said spindle and protruding through said wall and extending down into said channel below said ledge, and groups of spring blades supported by said ledge and adapted to be engaged by said keys, said front wall constituting an escutcheon front, substantially as described.

1,060,577. PROCESS OF MAKING DUPLICATE PHONOGRAPH-RECORDS. JONAS W. AYLSWORTH, East Orange, N. J., assignor, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Sept. 17, 1909. Serial No. 518,272. (Cl. 181—16.)

1. The process of duplicating phonograph records which consists in forming a temporary matrix around a master record, removing the master record, forming a metallic master within the temporary matrix, removing the latter, forming a permanent matrix around the metallic master of a substance whose coefficient of expansion is relatively high as compared with metals, removing the metallic master, forming metallic duplicate records within said permanent matrix, applying heat to separate the records from the matrix by relative change of diameter, and removing the records from the matrix by relative longitudinal movement, substantially as described.



2. The process of duplicating phonograph records which consists in casting about a metallic master record a matrix of a substance whose coefficient of expansion is relatively high as compared with metals, removing the metallic master, forming metallic duplicate records within said permanent matrix, applying heat to separate the records from the matrix by relative change of diameter, and removing the records from the matrix by relative longitudinal movement, substantially as described.

3. The process of duplicating phonograph records which consists in casting about a metallic master record a matrix of a non-metallic substance whose coefficient of expansion is relatively high as compared with metals, and which is not attacked by certain plating baths, removing the metallic master and depositing within the matrix formed a deposit of a metal from a plating bath by which the substance of the matrix is not attacked to form a metallic duplicate record, substantially as described.

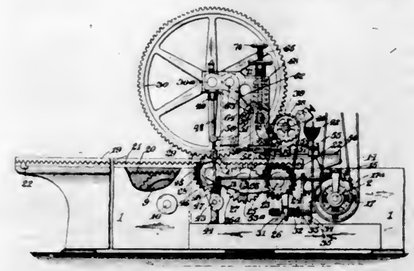
4. The process of duplicating phonograph records which consists in casting about a metallic master record, a matrix of a non-metallic substance whose coefficient of expansion is relatively high as compared with metals, and which is not attacked by certain acids and certain plating baths, dissolving away the metallic master in an acid which does not attack the matrix, electrolytically depositing within the matrix a deposit of a metal from a plating bath by which the substance of the matrix is not attacked to form a metallic duplicate record, and separating the latter from the matrix by relative change of diameter, substantially as described.

5. The process of duplicating phonograph records which consists in casting about a metallic master record a matrix of a non-metallic substance whose coefficient of expansion is relatively high as compared with metals, which is not attacked by certain acids, and which has a high melting point, dissolving away the metallic master in an acid which does not attack the matrix, forming a metallic duplicate record within the matrix, and applying heat to separate the record from the matrix by relative change in diameter of the record and matrix, substantially as described.

[Claims 6 to 13 not printed in the Gazette.]

1,060,578. PRINTING-MACHINE. WILLIAM M. BACON, St. Louis, Mo., assignor to Oscar H. Hyde, St. Louis, Mo. Filed May 27, 1912. Serial No. 699,968. (Cl. 101—6.)

1. A machine of the character described comprising a vertically movable cylinder, levers, and a plurality of springs, an arm of each of said levers supporting the shaft of said cylinder, the opposite arms of said levers normally retained between said springs, and means for regulating the pressure of said springs relative to said levers, whereby the resistance of said cylinder to upward movement may be regulated and the pressure of the printing form minutely adjusted relative to the material printed upon.

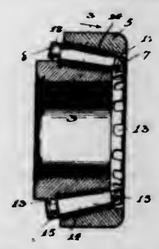


2. A machine of the character described comprising a reciprocally movable carriage, racks thereupon, a vertically movable cylinder disposed thereabove, levers, pinions adapted to engage said racks, and a plurality of gears carried by said levers, said pinions adapted to impart the motion of said racks to said gears, certain of said gears disposed substantially beneath and adapted to drive said cylinder, and automatic means for moving said levers in response to the vertical movement of said cylinder, whereby rotation of the same is insured.

3. A machine of the character described comprising a reciprocally movable carriage, a revoluble cylinder disposed thereabove, an ink-fountain, levers, and a plurality of springs, an arm of each said levers supporting the shaft of said cylinder, the opposite arms of said levers normally retained between said springs, means for vertically moving said cylinder, mechanism adapted to reciprocate said fountain, devices for effecting the simultaneous operation of said means and mechanism, and means for regulating the pressure of said springs relative to said levers, whereby the resistance of said cylinder to upward movement may be regulated and the pressure of the printing form minutely adjusted relative to the material printed upon.

4. A machine of the character described comprising a reciprocally movable carriage, racks thereupon, a vertically movable cylinder disposed thereabove, an ink-fountain, levers, pinions adapted to engage said racks, and a plurality of gears carried by said levers, said pinions adapted to impart the motion of said racks to said gears, certain of said gears disposed substantially beneath and adapted to drive said cylinder, means for vertically moving said cylinder, mechanism adapted to reciprocate said fountain, devices for effecting the simultaneous operation of said means and mechanism, and automatic means for moving said levers in response to the vertical movement of said cylinder, whereby rotation of the same is insured.

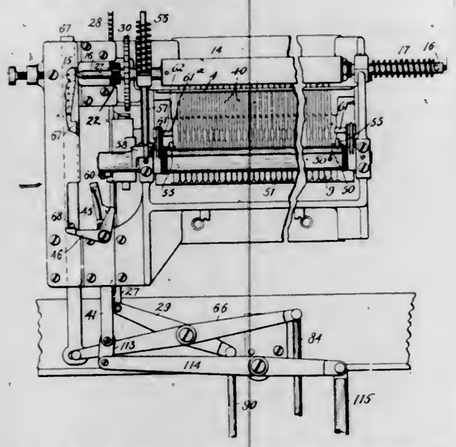
1,060,579. BEARING-ROLLER RETAINER. PAUL BAYER, Kenosha, Wis., assignor to The Thomas B. Jeffery Company, Kenosha, Wis., a Corporation of Wisconsin. Filed Nov. 11, 1912. Serial No. 730,570. (Cl. 64—62.)



An integral pressed metal retainer for bearing rollers comprising a conical shell having inturned annular flanges

at its ends, a plurality of ribs suitably spaced apart and forming bearing openings between adjacent ribs, said ribs terminating short of said annular flanges, bearing rollers between said flanges provided with a spindle at each end and fingers formed integral with said flanges and overlying the ends of said spindles.

1,060,580. SPACER SELECTING AND RELEASING MECHANISM. BENJAMIN F. BELLOWS, Cleveland, Ohio, assignor to Electric Compositor Company, New York, N. Y., a Corporation of New Jersey. Filed July 16, 1909. Serial No. 507,918. (Cl. 199—7.)



1. In spacer selecting and releasing mechanism, the combination of a selecting member adapted to be moved in two directions relatively transverse to each other and having in its surface a plurality of holes, a row of pins arranged opposite the perforated surface of said selecting member, said pins being adapted to enter such holes in the selecting member as are brought into alinement with them whereby relative movement is permissible as between said selecting member and those pins which are alined with holes therein, but is not permissible as between said selecting member and those pins which are not alined with holes therein, and escapement mechanism severally connected with said pins.

2. In spacer selecting and releasing mechanism, the combination of a selecting member adapted to be moved in two directions relatively transverse to each other, having in its surface a plurality of holes which are arranged in two relatively transverse rows corresponding in direction to the direction in which the member moves, spring operated escapement controlling mechanisms, and pins severally connected with said escapement controlling mechanisms and arranged with their ends opposed to the perforated surface of said selecting member, and means normally restraining the operation of said escapement device.

3. In spacer selecting and releasing mechanism, the combination of a rotatable and endwise movable cylinder having in its surface a plurality of holes, a plurality of spacer controlling escapement mechanisms, pins severally connected with said escapement mechanisms and arranged with their ends opposed to the surface of said cylinder, the ends of said pins being of such size that they may enter any holes on the cylinder brought into alinement with them.

4. In a spacer selecting and releasing mechanism, the combination of a rotatable and endwise movable cylinder having in its surface a plurality of holes, a plurality of spacer controlling escapement mechanisms, pins severally connected with said escapement mechanisms and arranged with their ends opposed to the surface of said cylinder, the ends of said pins being of such size that they may enter any holes on the cylinder brought into alinement with them, spring actuated mechanisms for severally operating the escapement controlling mechanisms, means normally restraining the operation of said escapement controlling mechanisms, and means withdrawing said restraining means.

5. In spacer selecting and releasing mechanisms, the combination of a rotatable and endwise movable cylinder having in its surface a plurality of holes, a plurality of escapement controlling levers, pins severally connected with said levers and arranged with their ends opposed to the surface of the cylinder, the ends of said pins being of such size that they may enter any holes on the cylinder brought into alinement with them, a cam normally restraining the spacer releasing movements of said levers, and spring actuated mechanisms for moving said levers when their movement is permitted by said cam.

[Claims 6 to 8 not printed in the Gazette.]

1,060,581. INSTRUMENT-STAND. SAMUEL BUEGELEISEN, New York, N. Y. Filed May 23, 1912. Serial No. 699,159. (Cl. 211—24.)



A support of the character described comprising an inverted U-shaped main frame having loops formed in opposite legs thereof and a U-shaped support therefor having loops formed in the ends of the legs thereof adapted to engage said first mentioned loops, retaining means at the upper and lower portions of said main framework, said retaining means at said upper portion of said main framework comprising a pair of resilient jaws adapted to engage the neck of a musical instrument, and said retaining means at the lower portion thereof comprising a bridge extending across the legs of said main framework having a central loop adapted to engage the base of the instrument.

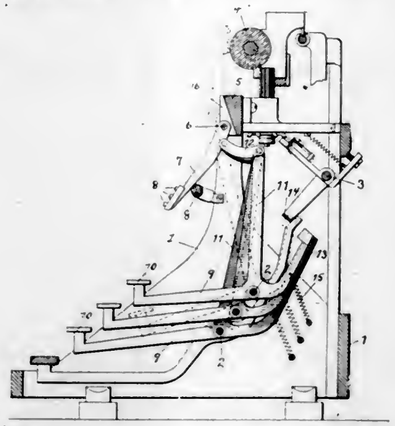
1,060,582. TYPE-WRITING MACHINE. LEE S. BURRIDGE, New York, N. Y. Continuation of application Serial No. 64,624, filed June 15, 1901. This application filed June 8, 1907. Serial No. 377,959. (Cl. 197—22.)

1. In a typewriting machine, the combination of a series of suspended type levers, a series of substantially horizontal parallel similar links connected thereto, a series of arms or levers connected to said links and pivotally mounted in a series of banks, said arms or levers being bent respectively at different angles relatively to their pivots to bring their several points of attachment to said links immediately in rear of their respective type levers.

2. In a typewriting machine, the series of three arm key levers, one arm bearing a key, the second extending upwardly and connected to the type carrier and the third extending rearwardly and upwardly and arranged and adapted to operate universal spacing mechanism, substantially as set forth.

3. In a typewriting machine, the combination of a type-bar arranged to move through substantially a semi-circle, an operating lever, and a link connecting the same to the type-bar, said lever and link being so connected that they

exert successively a thrust and a toggle action upon the type-bar, to increase the leverage of the lever upon the type-bar at the last part of the printing stroke, substantially as set forth.

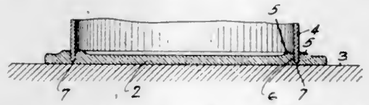


4. In a front strike typewriting machine having a keyboard, the combination of a cylindrical platen, a complement of pendent pivoted type-bars entirely below the platen and each arranged to swing forwardly over the keyboard and then upwardly and rearwardly against the front of said platen, a system of thrust bars or links connected to said type levers, and means for operating said thrust bars or links so as to cause the said type levers to swing each through about a semi-circle.

5. In a front strike typewriting machine, the combination of a type lever arranged to move through substantially a semi-circle, a link pivoted at one end to the type lever and a key-bearing lever pivoted to the link at the other end, said key lever pivoted in such relation to the type-lever as to enable said link to swing said type-lever through the semi-circle.

[Claims 6 to 66 not printed in the Gazette.]

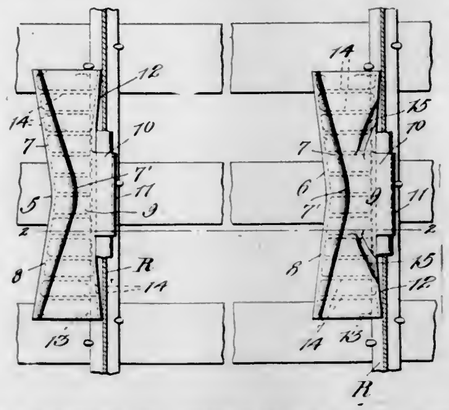
1,060,583. METHOD OF FORMING GLASS SHAPES. WILLIAM BUTTLER, Indianapolis, Ind. Filed Jan. 21, 1911. Serial No. 603,959. (Cl. 49—79.)



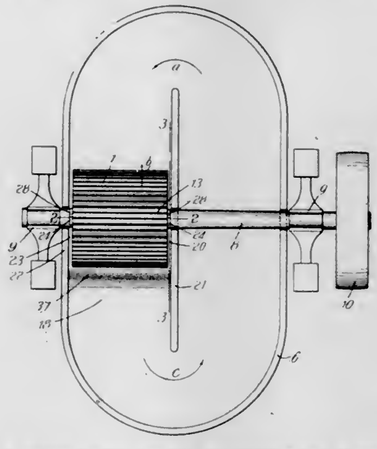
The method of forming shapes of glass-ware having a glazed surface and rounded periphery, which comprises producing a sheet of plastic glass, displacing the glass inwardly upon the peripheral outline of the desired shape while it is still plastic but after it has stiffened sufficiently to retain the shape caused by the displacement, and to form a surface glaze, thereby forming a raised rounded rim or periphery and leaving the glaze of the main body of the sheet undisturbed, allowing the glass to cool, positioning the sheet to bring said outline in registry with cutting means, and then separating the shape from the sheet by cutting the sheet upon the reverse side from said formed outline.

1,060,584. CAR-REPLACER. ARCHIE L. CALHOUN, Rockwell, Fla. Filed Sept. 17, 1910. Serial No. 582,562. (Cl. 104—163.)

A car replacer set comprising a pair of members each embodying a central platform with longitudinally arranged inclined approaches bounded on the outer side with an upstanding inclined guide rib diverging in opposite directions from the longitudinal axis of the central platform, the inner side of said platform having a lateral extension arranged to overlie the ball of the rail, means for supporting said members, the inclined approaches of one member being provided each with a groove extending downwardly and inwardly and having their inner ends terminating adjacent the central portion of the central platform and the outer ends thereof terminating adjacent the medial inner edge of the inclined approaches, substantially as described.



1,060,585. BEATING-ENGINE. THEODORE W. CHASE. Barnet, Vt. Filed Apr. 26, 1912. Serial No. 693,338. (Cl. 92—24.)



1. A beater engine having, in combination, a shaft, a beater roll embodying two heads fast to said shaft, a frame constituting a tank in which said roll is adapted to rotate and a clearer fast to one head of said roll, said clearer consisting of a rectangular bar of metal and fastening means extending therethrough transversely of said shaft and connecting said clearer to said head.

2. A beater engine having, in combination, a shaft, a beater roll embodying two heads, a frame constituting a tank in which said roll is adapted to rotate and a clearer fast to one head of said roll and inclined at an angle to a radial line intersecting the outer end of said clearer, and fastening means extending through said clearer and transversely of said shaft.

3. A beater engine having, in combination, a shaft, a beater roll embodying two heads, a frame constituting a

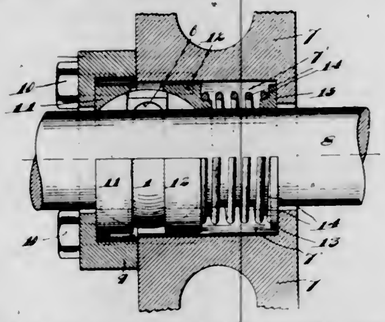
tank in which said roll is adapted to rotate, a projection on one head of said roll, a metal bar and fastening bolts extending through said projection and transversely of said shaft.

4. A beater engine having, in combination, a beater roll embodying two heads, a frame constituting a tank in which said roll is adapted to rotate, a projection on one head of said roll, a rectangular metal bar having holes extending therethrough at right angles to each other and bolts adapted to project through said holes into said projection, whereby said bar may be successively fastened to said roll with different faces on the advancing side thereof.

5. A beater engine having, in combination, a beater roll embodying two heads, a frame constituting a tank in which said roll is adapted to rotate, a projection on one head of said roll having converging sides and a clearer consisting of a metal bar adapted to be fastened to either of said converging sides.

[Claims 6 and 7 not printed in the Gazette.]

1,060,586. METALLIC PACKING-RING. JAMES JOSEPH CLARK, Nashville, Tenn. Filed Sept. 9, 1912. Serial No. 719,351. (Cl. 121—109.)



1. A packing comprising a packing member having a central opening for the member to be packed, said packing member being formed in two parts having exteriorly bearing surfaces separated by an annular oil groove, the parts of the packing member being arranged with radial slits communicating with the said bearing surfaces, substantially as described.

2. A packing comprising a packing member forming two spherical portions, provided with a central opening adapted for the reception of the member to be packed, said portions at their central part being formed with an exteriorly disposed annular oil groove and having bearing surfaces separated by said groove and radial slits arranged in the edges of said portion, substantially as described.

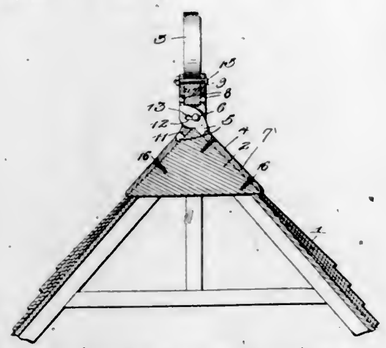
3. A packing comprising a packing member composed of two spherical portions, having a central opening adapted for the reception of the member to be packed, said portions being formed with annular oil grooves; and oppositely disposed bearing surfaces and slits arranged in said portions communicating with the said bearing surfaces, substantially as described.

4. A packing comprising a packing member composed of two interlocking portions, having a central opening adapted for the reception of the member to be packed; annular bearing surfaces formed on said interlocking portions in the central opening, adapted for engagement with the member to be packed, and having annular oil grooves disposed therebetween, the said interlocking portions being provided with radial slits communicating with the said bearing surfaces, substantially as described.

5. A packing comprising a packing member, composed of two portions provided at their opposite ends with a lug and a notch, adapted to fit the corresponding parts on the other and having a central opening for the member to be packed, the said portions having continuous bearing surfaces and being separated by an annular oil groove, substantially as described.

[Claim 6 not printed in the Gazette.]

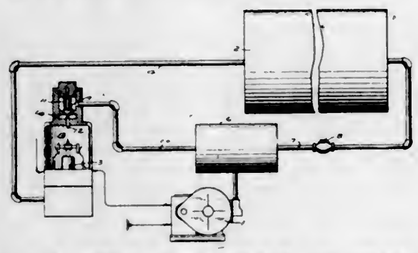
1,060,587. CRESTING-HOLDER. WILLIAM CONLAN, Quincy, Wash. Filed June 12, 1912. Serial No. 703,299. (Cl. 108—24.)



1. An adjustable cresting holder comprising a pair of cross levers adapted to be secured to a ridge board, the lower portions of said levers forming diverging legs and the upper portions forming spaced jaws, the levers being notched at their crossing point and provided with registering slots having their upper walls notched, and a bolt working within said slots to pivotally connect the levers.

2. The combination with a pitched roof, having a ridge board triangular in cross section, and cresting strips, of a pair of cross-levers, the lower portions forming diverging legs adapted to be secured to the ridge board and the upper portions forming parallel, spaced jaws, adapted to grip said cresting, each jaw being formed with a transverse opening near its upper edge, a bolt adapted to be secured in said openings, a plurality of inwardly projecting spurs formed on the jaws, the cross-levers being formed with registering, transverse slots having their upper walls notched, and a bolt working within said slots to pivotally connect the levers.

1,060,588. UNLOADING DEVICE FOR PUMPS. EDWARD H. DEWSON, New York, N. Y., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1907. Serial No. 391,120. (Cl. 230—24.)



1. In a pressure control apparatus, the combination with a pump and a pump governor, of a receptacle into which said pump compresses fluid, and means operated by a moving part of said governor, for releasing fluid from said receptacle.

2. In a pressure control apparatus, the combination with a pump and a pump governor, of a receptacle into which said pump compresses fluid, and valve means, operated by a moving part of said governor in the movement to cut out position, for releasing fluid from said receptacle.

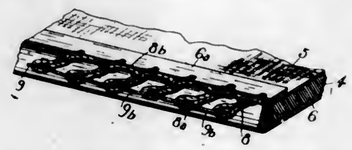
3. In a pressure control apparatus, the combination with a pump, a reservoir, and a governor, subject to reservoir pressure, for controlling said pump, of a receptacle intermediate said reservoir and pump, into which said pump compresses fluid, a check valve for preventing back flow from the reservoir to said receptacle, and means, operated by a moving part of said governor in the movement to cut out position, for releasing fluid from said receptacle.

4. In a pressure control apparatus, the combination, with a pump, of a governor for said pump comprising a controlling device, a valve governed by the pump pressure for controlling the action of said controlling device and adapted to release fluid acting on the pump piston upon movement to the cut out position.

5. In a pressure control apparatus, the combination with a pump and a pump governor, of means, operated by said governor for reducing the pressure on the pump at starting, and means for limiting said reduction in pressure.

[Claims 6 to 9 not printed in the Gazette.]

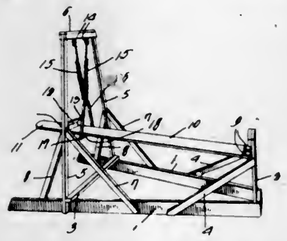
1,060,589. WOOL SOLE FOR SLIPPERS. ERIK DILLBERG, Joliet, Ill., assignor to Buchanan-Lawrence Company, Joliet, Ill., a Corporation of Illinois. Filed Jan. 11, 1913. Serial No. 741,384. (Cl. 36—26.)



1. A sole comprising a base member adapted to serve as a stiffener, a cover member of leather or other suitable material applied to the under side of said base member and overlapping the edges, and a portion of the upper surface of said base member, a cord applied along the edge of said sole in the form of a series of loops extending vertically and horizontally of said sole, and means for attaching said cord to said sole, said means penetrating the covering for said base member.

2. A sole comprising a base and stiffening member, a cover for said member extending over the lower surface thereof along the edge and over a portion of the upper surface thereof, a cord applied to the edge of said sole and adapted to overlie said edge throughout a substantial portion of the cover and also adapted to project above said edge, and means for securing said cord to said sole.

1,060,590. SEESAW. WILLIAM J. DONNENWERTH, Charlton, Iowa. Filed Sept. 12, 1912. Serial No. 720,071. (Cl. 46—22.)

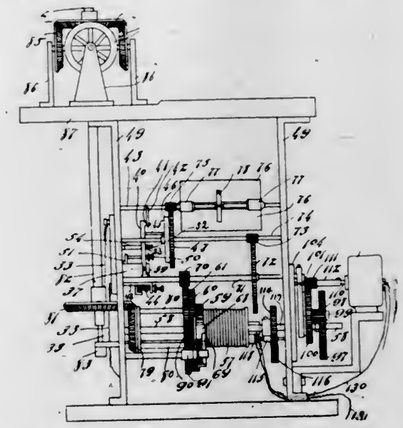


1. A see-saw, having a swinging member hingedly connected at one end, and provided with a seat upon the free end, of a resilient supporting medium for the free end thereof removably attached to the free end of the swinging member to compensate for various weights upon the free end of the swinging member.

2. A see-saw, comprising a supporting base, a swinging member hingedly connected at one end and carried by the base, the free end constituting a seat, a cross piece adjustably mounted below the free end of the swinging member, a resilient connection for supporting said cross piece, and means carried by the base for supporting said resilient connection.

3. A see-saw, comprising a base, a swinging member hinged at one end to the base, a seat and hand grip carried upon the free end thereof, a bail having a cross piece removably surrounding the free end of the swinging member, and a resilient support for said bail.

1,060,591. CLOCK. BERNHARD Z. FRIEDMAN, Fort Worth, Tex. Filed Sept. 30, 1911. Serial No. 652,134. (Cl. 58—41.)



1. In a clock, the combination of a train of gearing, a drum and a weight for operating said gearing, and means for winding said drum consisting of an electric motor provided with gearing, a winding gearing operatively connected with said drum, the gearing of said motor being normally disconnected from said winding gearing, a tension spring in said motor gearing for automatically causing said motor gearing to engage said winding gearing for driving the winding gearing, and a traveling switch actuated by said train of gearing for periodically operating said motor.

2. In a clock, the combination of a train of gearing, a drum and a weight for operating said gearing, a winding gearing operatively connected with said drum, an electric motor provided with gearing normally disconnected from said winding gearing but adapted to engage said winding gearing when the motor is running, and a traveling switch operated by said train of gearing adapted to close a circuit in said motor periodically for operating the motor.

3. In a clock, the combination of a train of gearing, a drum and weight for operating said gearing, a winding gearing operatively connected with said drum, an electric motor provided with gearing normally disconnected from said winding gearing, and means carried by said motor gearing for automatically causing the motor gearing to engage the winding gearing when the motor is running and for automatically disengaging the motor gearing from said winding gearing when the motor stops driving the winding gearing.

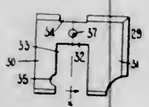
4. In a clock, the combination of a train of gearing, a drum and a weight for operating said gearing, a winding gearing operatively connected with said drum, an electric motor provided with gearing normally disconnected from said winding gearing, said motor gearing including a cog wheel provided with an interior ratchet, a hanger for said motor gearing, and a tension spring countersunk in the meeting faces of said cog wheel and said hanger with one end attached to the hanger and the other end adapted to engage said rack for automatically causing said motor

gearing to engage said winding gearing when the motor is running and to disengage said motor gearing from the winding gearing when the motor stops running.

5. In a clock, the combination of a train of gearing, a drum and a weight for operating said gearing, a winding gearing operatively connected with said drum, an electric motor provided with gearing normally disconnected from said winding gearing, means carried by said motor gearing for automatically causing the motor gearing to engage the winding gearing when the motor is running and to disengage said winding gearing when the motor stops, a screw threaded shaft operatively connected with said winding gearing and said train of gearing, a traveling switch operatively connected with said screw threaded shaft for operating said motor periodically, and a tripping device in the path of said switch for closing the contact in said switch when the switch is driven by said train of gearing and for breaking the contact when said switch is being driven by said winding gearing.

[Claims 6 and 7 not printed in the Gazette.]

1,060,592. TYPE-WRITING MACHINE. WALTER L. GALE, Syracuse, N. Y., assignor to The Monarch Typewriter Company, Syracuse, N. Y., a Corporation of New York. Filed Nov. 25, 1912. Serial No. 733,378. (Cl. 197—179.)



1. In tabulating mechanism for typewriting machines, the combination of a plurality of tabulator stops and interlocking means associated therewith and operating normally to interlock the stops with each other.

2. In tabulating mechanism for typewriting machines, the combination of a stop holder, a tabulator stop, self-retaining means associated with said tabulator stop, and devices for moving said stop on said stop holder, said means remaining constantly effective during such movement.

3. In tabulating mechanism for typewriting machines the combination of a stop holder, a plurality of tabulator stops, and individual means for each stop, said means cooperating with the corresponding means of associate stops to prevent accidental displacement of the stops in respect of each other and of the stop holder.

4. In tabulating mechanism for typewriting machines, the combination of a stop holder, a tabulator stop having a device for retaining it on said holder, and means for moving said stop relatively to said holder, said device remaining constantly effective during such movement.

5. In tabulating mechanism for typewriting machines, the combination of a stop holder, a plurality of tabulator stops, and individual means for each stop, said means of one stop coöperating directly with the corresponding means of the associate stops to retain the stops in position.

[Claims 6 to 22 not printed in the Gazette.]

1,060,593. DEVICE FOR HOLDING VINE-SUPPORTS. IRA J. GREEN, Hoskins, Oreg. Filed July 8, 1912. Serial No. 708,377. (Cl. 248—20.)

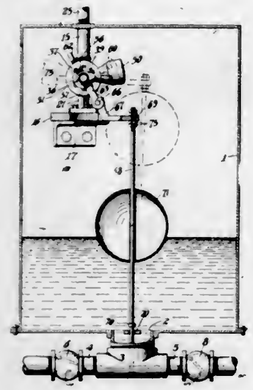
1. A device for supporting a wire upon a post or similar support comprising sections twisted upon each other and having pointed ends engageable with the post, the pointed ends at one end of the device being disposed away from each other and the pointed ends at the other ends of the device being disposed toward each other, said device being provided with a shoulder located at a point between its ends.

2. A device for supporting wire upon a post or similar support comprising sections connected intermediate their ends, one terminal of each section being curved to embrace the post and provided with a prong, the terminals of said sections remote from their curved terminals diverging from the intermediate portion and being disposed to extend



within the post, one of the members being formed with a wire supporting extension.

1,060,594. PUMP. WILLIAM U. GRIFFITHS, Philadelphia, Pa. Filed Aug. 12, 1911. Serial No. 643,771. (Cl. 103—8.)



1. In a pump, the combination of a casing having a chamber which casing is provided with a port for permitting the entry of water into said chamber, a port for permitting the entry of air, steam or other gaseous fluid into the said chamber and a port for permitting communication of the said chamber with air at normal pressure, the said two last named ports being located in opposite and juxtaposition with respect to each other, a nut being supported in operative position with relation to one of the two last named ports, valves supported upon the said nut and means for turning the said nut alternately in opposite directions to cause bodily movement thereof transversely of the planes of the said ports to cause movement of the said valves alternately toward and from the said ports to open and close the same.

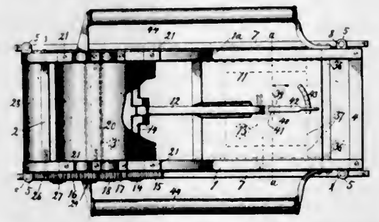
2. In a pump, the combination of a casing having a chamber which casing is provided with a port for permitting the ingress and egress of water from the said chamber, a port for permitting the ingress of air, steam or other gaseous fluid into the said chamber and a port for providing communication between the said chamber and air at normal pressure, an internally screw threaded nut supported in operative relation to one of the two last named ports, one end of the said nut being closed, valves supported upon the closure of said nut and means for turning the said nut alternately in opposite directions, thereby causing bodily movement of the said nut transversely of the planes of the said two last named ports whereby the said valves are alternately moved in opposite directions toward and from the said ports to open and close the same.

3. In a pump, the combination of a casing having a chamber which casing is provided with a port, means for permitting and controlling the induction and eduction of water through the said port into and from the said chamber, means for permitting the induction of air, steam or other gaseous fluid into the said chamber and means for providing communication between the said chamber and air at normal pressure and means for controlling the entry of said air, steam or other gaseous fluid into the said chamber and also controlling communication of the said chamber with air at normal pressure, the said last mentioned means comprising a nut, valves carried thereby and means for causing rotative movement of the said nut alternately in opposite directions.

4. In a pump, the combination of a casing having a chamber, a member located in the said chamber and having an opening extending therethrough which opening communicates with a source of air, steam or other gaseous fluid under pressure, a member located in the said chamber which member has an opening therethrough which communicates with air at normal pressure, and one of the said members having a projecting portion provided with screw threads, a nut in engagment with the said screw threaded portion, valves carried by the said nut and means for causing rotative movement of the said nut alternately in opposite directions to thereby cause bodily movement of the said nut in opposite directions whereby the said valves are moved in opposite directions to open and close the openings through the said members.

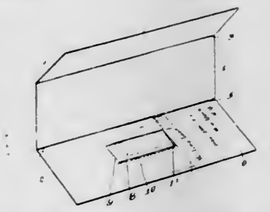
5. In a pump, the combination of a casing having a chamber, which casing is provided with a port through which water enters and leaves the said chamber, members supported in the said chamber and projecting through the said casing, the said members being provided with parts projecting laterally therefrom and toward each other and the said members being provided with openings which extend through the said projecting parts and outwardly through the said members, the opening in one of the said members communicating with a source of air, steam or other gaseous fluid under pressure and the opening of the other of said members communicating with air at normal pressure, a nut operatively connected to one of the said projecting parts, said nut having a plate extending across one end thereof, valves secured to the said plate and means for causing rotative movement of the said nut alternately in opposite directions, whereby movement of the said valves in opposite directions is caused to alternately open and close the openings through the said members and the said projecting parts.

1,060,595. SANDPAPERING-MACHINE. CHARLES F. HAUG, St. Paul, Minn. Filed July 5, 1912. Serial No. 707,935. (Cl. 51—13.)



A sand papering machine comprising a movable frame having handles adapted to be held by the hands of the operator, a rotating roller mounted in the frame and having means for holding sandpaper detachably secured about it, and a motor mounted on the frame and operatively connected with the roller, a crank shaft journaled in the frame and rotatably connected with the motor, a block slidably mounted in the frame, and having means for detachably holding sandpaper to it, and a pitman connecting said block with the crank of the crank shaft, runners carried by the frame and movable to and from the sand papering side of the machine, and springs holding said runners normally lower than the sandpapering surfaces of the machine.

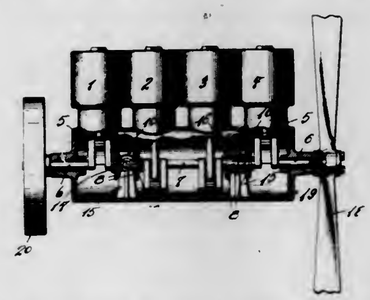
1,060,596. MAILING-FOLDER. WILLIAM B. HENRI, Chicago, Ill. Filed Apr. 29, 1912. Serial No. 693,971. (Cl. 120—74.)



1. A mailing folder comprising a body portion, an inner flap and an outer flap, said inner flap having one end scored its entire width to provide a detachable postcard and also provided with an integrally formed rectangular longitudinally extending member cut free at one edge on the line of said scoring and also cut free at two of its other edges and adapted to resiliently engage the lower edge of said outer flap.

2. A mailing folder comprising a body portion, an inner flap, an outer flap, said inner flap having a scoring at one end forming a portion adapted to be detached and provided with a return address on the inside thereof, a space upon the other side of said portion adapted for receiving a sending address constituting a pre-signature, said outer flap being shorter than and adapted to overlap the inner flap and said inner flap being provided with an integrally formed member cut free at three of its edges, one of said cut edges corresponding with said scoring and said member being adapted to resiliently engage the lower edge of said outer flap.

1,060,597. NON-GYROSCOPIC AERONAUTIC ENGINE. WILLIAM PHILLIP HOLZMARK, St. Louis, Mo., assignor of one-half to Isaac Holzmark, St. Louis, Mo. Filed Aug. 26, 1912. Serial No. 717,123. (Cl. 244—25.)



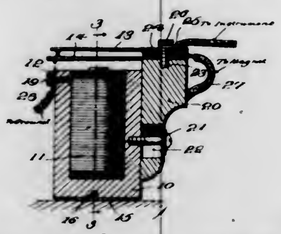
1. A non-gyroscopic aeronautic engine, comprising an engine provided with oppositely rotatable axially-alined crank-shaft sections, and a reverse-gear connecting said sections to neutralize the gyroscopic effect of each section.

2. The combination of two tandem aeronautical engines having axially-alined crank-shaft sections, and a reverse-gear connecting said sections, to permit the crank of one of said engines to rotate in one direction while the crank of the other engine rotates in a reverse direction.

3. The combination of two aeronautical reversely-running engines having a series of axially-alined crank-shaft sections, suitable bearings for said sections, and a reversing-gear connecting said sections and permitting one of said sections to rotate in one direction while the adjoin-

ing section rotates in a reverse direction, in combination with a single propeller connected to one of said sections, to be driven simultaneously by both of said reversely-running engines.

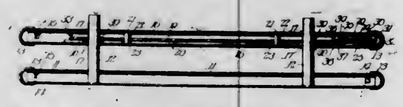
1,060,598. APPARATUS FOR GROUNDING TELEPHONE-WIRES. PALMER T. HUDSON, Everton, Mo. Filed July 11, 1912. Serial No. 708,919. (Cl. 175—268.)



1. A circuit breaker including a supporting block, an electro-magnet carried by the block, a second block adjustably secured to the first, an armature carried by the second block, electrical connection between one terminal of the magnet and said armature, and a contact plate normally in engagement with the armature.

2. A circuit breaker including a supporting block, an electro-magnet carried by the block, a second block adjustably secured to the first, an armature carried by the second block, electrical connection between one terminal of the magnet and said armature, a contact plate normally in engagement with the armature, and a second contact plate carried by the block and adapted for engagement by the armature when the latter is attracted to the magnet.

1,060,599. TEMPORARY BINDER. JOSEPH D. HUGHES, Chicago, Ill., assignor to Workman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 4, 1912. Serial No. 723,848. (Cl. 129—12.)



1. In an expansible binder, the combination with a stationary clamping member having posts arising therefrom, and a movable clamping member having transverse openings for the reception of the posts, of a locking device carried by the movable member and comprising elements bodily movable one with reference to the other and adapted to engage on opposite sides of each of the posts, and means to impart relative longitudinal movement to the locking elements, said means comprising a member mounted upon one of the elements and adjustably engaging the other element, substantially as described.

2. In an expansible binder, the combination with a stationary clamping member having posts arising therefrom, and a suitable clamping member having transverse openings for the reception of the posts, of a locking device carried by the movable member and comprising relatively movable elements having registering apertures of a cross section greater than that of the posts and adapted to be brought out of register and to engage the posts upon opposite sides thereof when shifted longitudinally relative to each other, and shifting means comprising a member mounted upon one of the elements and adjustably engaging the other element, substantially as described.

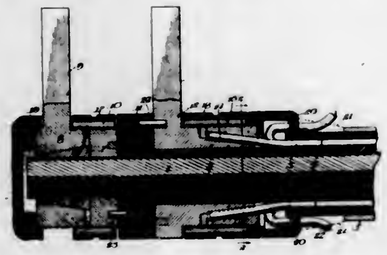
3. In an expansible binder, the combination with a stationary clamping member having a post arising therefrom, and a movable clamping member having a transverse opening for the reception of the post, of a locking device carried by the movable member and comprising two superposed relatively movable elements provided with superposed reversely tapering apertures adapted to receive the post, and means to impart relative movement to the locking elements to cause them to grip the post upon opposite sides, substantially as described.

4. In an expansible binder, the combination, with a stationary clamping member having posts arising therefrom, and a movable clamping member having transverse openings for the reception of the posts, of a locking device carried by the movable member and comprising two relatively movable elements provided with pairs of superposed reversely ovate apertures spaced apart a distance corresponding to the distance separating the aforesaid openings and adapted to receive the posts, and means to impart relative movement to the locking elements to cause them to grip the posts upon opposite sides, substantially as described.

5. In an expansible binder, the combination, with a stationary clamping member having posts arising therefrom, and a movable clamping member having transverse openings for the reception of the posts, of a locking device carried by the movable member and comprising two relatively movable elements each provided with apertures spaced apart a distance corresponding to the distance separating the aforesaid openings and adapted to receive the posts, and means to impart relative movement to the locking elements to cause them to grip the posts upon opposite sides, said means comprising an adjusting screw swiveled in one of the elements and threaded in to the other, substantially as described.

[Claims 6 to 12 not printed in the Gazette.]

1,060,600. CONNECTOR. BERTRAND G. JAMIESON and CARL A. KELLER, Chicago, Ill. Filed June 28, 1910. Serial No. 569,275. (Cl. 173—353.)



1. A device of the character described comprising a cable having two concentrically arranged conductors separated by insulation, a terminal for the outer conductor having a pair of relatively movable clamping members one within the other, and concentric with the inner conductor for the purpose of clamping the outer conductor between them, and means for drawing said clamping members together whereby to clamp the said outer conductor between said clamping members.

2. A device of the character described comprising a cable having two concentrically arranged conductors separated by insulation, a terminal for the outer conductor having a pair of relatively movable clamping members one within the other, and concentric with the inner conductor for the purpose of clamping the outer conductor between them, and a screw threaded ring for drawing said clamping members together whereby to clamp the said outer conductor between said clamping members.

3. A device of the character described comprising a cable having two concentrically arranged conductors separated by insulation, a terminal for the outer conductor having a pair of relatively movable wedge-shaped clamping members, and concentric with the inner conductor for the purpose of clamping the outer conductor between them, and means for drawing said clamping members together whereby to clamp the said outer conductor between said clamping members.

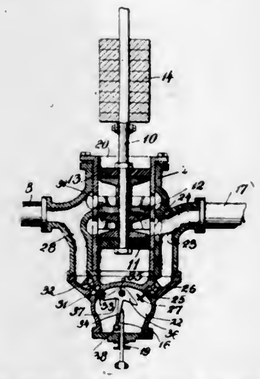
4. A device of the character described comprising a cable having two concentrically arranged conductors sepa

rated by insulation, a terminal for the outer conductor having a pair of relatively movable wedge-shaped clamping members, and concentric with the inner conductor for the purpose of clamping the outer conductor between them, and a screw threaded ring for drawing said clamping members together whereby to clamp the said outer conductor between said clamping members.

5. A device of the character described comprising a cable having two concentrically arranged conductors separated by insulation, a terminal for the outer stranded conductor having a pair of relatively movable clamping members one within the other, and concentric with the inner conductor for the purpose of clamping the outer conductor between them, and means for drawing said clamping members together whereby to clamp the said outer conductor between said clamping members, said members having indentations to receive the units of said stranded conductor.

[Claims 6 to 8 not printed in the Gazette.]

1,060,601. AUTOMATIC STOP-VALVE FOR HYDRAULIC ELEVATORS. KARL E. OSSIAN JANSSON, New York, N. Y., assignor to John Sherman Hoyt, New York, N. Y. Filed June 1, 1909, Serial No. 499,504. Renewed Sept. 20, 1912. Serial No. 721,522. (Cl. 138—14.)



1. A valve having one open and a single closed position and arranged to shut off the flow of fluid through it in either direction, said valve comprising means governed by the direction of flow at the time the valve is moved to its closed position and controlled by such closing movement of the valve for permitting the passage of fluid through it in a direction opposite to that in which it has been shut off.

2. A valve having an open position for allowing fluid to flow through it in either direction, means for holding the valve open when unacted upon by external forces, said valve comprising a by-pass for allowing fluid to flow around the valve when the latter is closed, and means for preventing the fluid from flowing through the by-pass in the direction in which it was flowing through the valve at the time said valve was closed governed by the direction of flow at the time the valve is moved to its closed position and controlled by such closing movement of the valve.

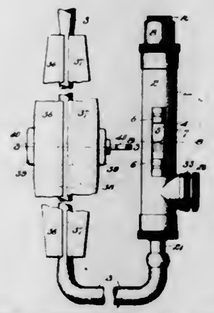
3. A valve having an open position for allowing fluid to flow through it in either direction, a casing for said valve constructed to form a by-pass around the valve, oppositely disposed check-valves in said by-pass, and means actuated by the movement of the valve for holding one or the other of said check-valves open when said valve is closed.

4. A valve having an open position for allowing fluid to flow through it in either direction and a closed position for shutting off said flow, a casing in said valve constructed to form a by-pass around the valve, oppositely disposed check-valves in said by-pass, means dependent upon the direction of flow for holding one or the other of said check-valves open, and means actuated by the closing of the valve for locking the open check-valve in its open position.

5. A valve having an open position for allowing fluid to flow through it in either direction, and a closed position for shutting off said flow, a casing for said valve constructed to form a by-pass around the valve, oppositely-disposed check-valves in said by-pass, a pivoted lever arranged to hold one of the check-valves open when the flow through the valve is in one direction, and the other check-valve open when the flow is in the opposite direction, and means actuated by the closing of the valves for locking the lever in its holding position.

[Claims 6 to 8 not printed in the Gazette.]

1,060,602. LEVELING INSTRUMENT. GUSTAV A. JENNING, East St. Louis, Ill. Filed July 19, 1911. Serial No. 639,438. (Cl. 73—124.)



1. The improved leveling-instrument, comprising a pair of tubes, transparent-tubes arranged within the first mentioned tubes, collapsible-sacks arranged in the lower ends of said first mentioned tubes in the spaces below said transparent-tubes, a flexible-tube connecting the said collapsible sacks and adapted to be filled with fluid, the space above said collapsible sacks being adapted to be partially filled with fluid, and a combined fluid-trap and continuously open air-vent at the upper end of each of said first mentioned tubes.

2. The improved leveling-instrument, comprising a pair of tubes, transparent-tubes arranged within the first mentioned tubes, collapsible-sacks arranged in the lower ends of said first mentioned tubes in the spaces below said transparent-tubes, a flexible-tube connecting the said collapsible-sacks and adapted to be filled with fluid, the spaces above said collapsible-sacks being adapted to be partially filled with fluid, a combined fluid-trap and air-vent at the upper end of each of said first mentioned tubes, and a second combined fluid-trap and air-vent located above said first mentioned combined fluid-trap and air-vent and in communication with the interior thereof.

3. The improved leveling-instrument, comprising a pair of tubes, transparent-tubes arranged within the first mentioned tubes, collapsible-sacks arranged in the lower ends of said first mentioned tubes in the spaces below said transparent-tubes, a flexible-tube connecting the said collapsible-sacks and adapted to be filled with fluid the space above said collapsible-sacks being adapted to be partially filled with fluid, a combined fluid-trap and air-vent at the upper end of each of said first mentioned tubes, a pointer for each of said transparent-tubes, and a volute-cam for adjusting one of said pointers.

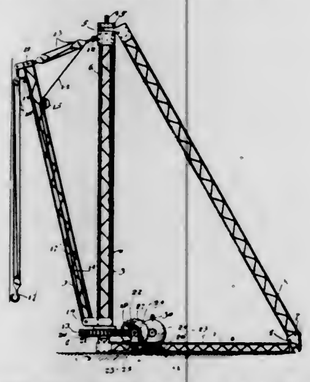
4. The improved leveling-instrument, comprising a pair of tubes, transparent-tubes arranged within the first mentioned tubes, collapsible-sacks arranged in the lower ends of said first mentioned tubes in the spaces below said transparent-tubes, a flexible-tube connecting the said collapsible-sacks and adapted to be filled with fluid, a combined fluid-trap and continuously open tubular air-vent

at the upper end of each of said first mentioned tubes, and a clamp for squeezing said flexible-tube.

5. In combination with two liquid-containing leveling devices, a flexible tube, connected to each of said devices, and a separate portable hose-squeezing clamp having opposite retaining grooves in its clamping jaws for holding said clamp upon said hose and for squeezing said tube.

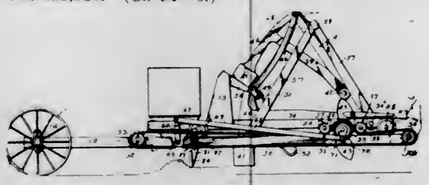
[Claims 6 and 7 not printed in the Gazette.]

1,060,603. DERRICK. AKSEL P. JOHNSEN, Chicago, Ill. Filed Dec. 20, 1910. Serial No. 598,340. (Cl. 212—68.)



In a knock-down derrick, a pair of angularly disposed horizontal base members, a swinging mast mounted thereon, a motor, a bed plate for said motor arranged between said base members and spaced apart therefrom, a frame rigidly but detachably connecting said bed plate and said base members and rigidly spacing the latter apart, a shaft driven by said motor, bearings for said shaft on said bed plate and one of said base members, a gearing connecting the lower end of said mast and the adjacent end of said shaft substantially as described.

1,060,604. ROAD-MAKING MACHINE. CHARLES F. KEARLES, Indianola, Iowa. Filed May 6, 1912. Serial No. 695,560. (Cl. 94—6.)



1. In a device of the class described, a frame, a plurality of tamping means mounted on said frame and means operating said tamping means, a hopper located in front of said tamping means, means for discharging the contents of said hopper in the path of said tamping means and a scraper arranged between said hopper and said tamping means.

2. In a device of the class described, a frame, a plurality of tamping devices operatively mounted thereon, a transverse shaft, means on said shaft for operating said tamping devices, a hopper arranged in front of said tamping devices and means operated from said shaft for discharging the contents of said hopper in the path of said tamping devices.

3. In a device of the class described, a frame, a plurality of tamping means mounted thereon, means for operating said tamping means, means for cleaning the under surfaces of said tamping means and means for operating said cleaning means.

4. In a device of the class described, a frame, a plurality of tamping means mounted thereon, means for operating said tamping means, means for cleaning the under surfaces of said tamping means, means for cleaning the sides of said tamping means and means for operating said cleaning means.

5. In a device of the class described, a frame, a plurality of plunger heads, means for alternately raising said plunger heads, means for cleaning the lower surfaces of said plunger heads, during their upward movement and means for operating said cleaning means.

[Claims 6 to 14 not printed in the Gazette.]

1,060,605. DEVICE FOR STRINGING AND CUTTING BEANS FOR COOKING. WILLIAM RICHARD ALLENDER KEMP, Maida Road Epping, near Sydney, New South Wales, Australia. Filed Sept. 20, 1912. Serial No. 721,384. (Cl. 146—7.)



1. A device for stringing beans comprising a flat and straight resilient limb, a base rigidly supporting such limb at one of its ends, a head carried by the free end of such limb, a second head in proximity to the first head and adjacent to the flat side of such limb, the adjacent sides of the heads being provided with bean-guiding surfaces adapted to guide the bean in a path transverse to the resilient limb and in substantial parallelism to its flat sides, a support for the second head carried by the base, and a string-remover on each head in the path of the edge portions of the bean as it passes between the bean-guiding surfaces of the heads.

2. A device for stringing beans comprising a flat and straight resilient limb, a base rigidly supporting such limb at one of its ends, a head carried by the free end of such limb, a second head in proximity to the first head and adjacent to the flat side of such limb, the adjacent sides of the heads being provided with bean-guiding surfaces adapted to guide the bean in a path transverse to the resilient limb and in substantial parallelism to its flat sides, a rigid support for the second head carried by the base, and a string-remover on each head in the path of the edge portions of the bean as it passes between the bean-guiding surfaces of the heads.

3. A device for stringing and slicing beans comprising relatively spring-pressed heads, a string-removing knife mounted on each head, and a slicing device in proximity to the string-removing knives in the path of movement of the bean between such knives.

4. A device for stringing and slicing beans comprising relatively spring-pressed heads, a string-removing knife mounted on each head, and a plurality of stationary slicers at the rear of the cutting edges of the string-removing knives in the path of movement of the bean so that the string-removing knives and the slicers will be in engagement with the bean concurrently.

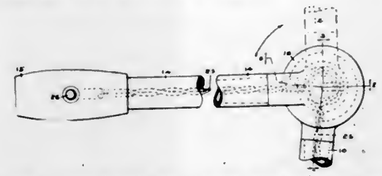
5. A device for stringing and slicing beans comprising a rigidly upstanding limb, a spring-pressed upstanding limb alongside of the rigid limb, supporting means for the limbs, heads carried by the upper ends of the limbs, a string-removing knife mounted on each head, and a slicing device supported by the rigid limb and projecting into the path of the bean rearwardly from the heads.

[Claims 6 to 8 not printed in the Gazette.]

1,060,606. STEERING-KNUCKLE. HAROLD H. KENNEDY, Indianapolis, Ind., assignor to The Waverly Company, a Corporation of Indiana. Filed Apr. 24, 1911. Serial No. 623,131. (Cl. 21—90.)

1. The combination, with a steering-post, a steering arm, an enlargement formed on one end of the post and

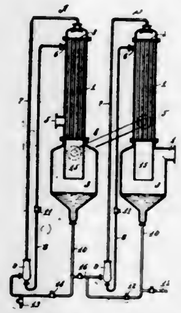
arm, an annular groove formed in one of the enlargements, a segmental rib formed on the other enlargement, said rib adapted to engage said groove, means to limit the rotary travel between said enlargements, and means for holding said post and arm in operative relation.



2. The combination, with a steering-post, an enlargement thereon, an annular groove formed in the face of said enlargement, a steering-arm, an enlargement formed thereon, a rib formed on the face of said enlargement and adapted to ride in said groove, means extending across said groove to limit the rotary travel of said arm, and means for holding the post and arm in operative relation.

3. The combination, with a steering-post, an enlargement formed on said post and provided with a transverse aperture, an annular groove formed in the face of said enlargement, a steering-arm, an enlargement formed thereon, a rib formed on the face of said enlargement and adapted to ride in said groove, a spindle on the enlargement on said arm adapted to extend through the aperture in the enlargement on the post, a washer adapted to form a bearing for the free end of the spindle, means to prevent independent rotary movement of said washer on said spindle, and means for holding the washer, post and arm in operative relation.

1,060,607. EVAPORATING APPARATUS. PAUL KESTNER, Lille, France, assignor to Kestner Evaporator Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 11, 1912. Serial No. 719,810. (Cl. 127—9.)



1. In evaporating apparatus, heating and evaporating elements, a chamber at or near the top of the apparatus distributing liquid to said evaporating elements, a chamber near the base of the apparatus for receiving evaporated liquid, a conduit supplying liquid to the distributing chamber and a pipe connection between the top of the heating element and a point in said conduit.

2. In evaporating apparatus, heating and evaporating elements, a chamber at or near the top of the apparatus distributing liquid to said evaporating elements, a chamber near the base of the apparatus for receiving evaporated liquid, a conduit supplying liquid to the distributing chamber and a pipe connection between the top of the heating element and a point in said conduit, said point being provided with an injector device into which said pipe connection enters.

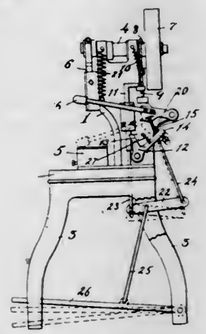
3. In evaporating apparatus, heating and evaporating elements, a chamber at or near the top of the apparatus distributing liquid to said evaporating elements, a chamber near the base of the apparatus for receiving evaporated liquid, a conduit supplying liquid to the distributing chamber, a pipe connection between the top of the heating element and a low point in said conduit and a pipe connection for evaporated liquid connecting said receiving chamber for evaporated liquid and said conduit.

4. In evaporating apparatus, heating and evaporating elements, a chamber at or near the top of the apparatus distributing liquid to said evaporating elements, a chamber near the base of the apparatus for receiving evaporated liquid, a conduit supplying liquid to the distributing chamber, a pipe connection between the top of the heating element and a point in said conduit, said point being provided with an injector device into which said pipe connection enters, and a pipe connection for evaporated liquid connecting said receiving chamber for evaporated liquid and said conduit.

5. In an evaporating apparatus, a plurality of vertical evaporating tubes, a surrounding heating casing, a distributing chamber for liquid above and supplying said tubes, a chamber at the base for evaporated liquid, a conduit for incoming liquid supplying said distributing chamber and a pipe connection between said heating casing and a point in said conduit.

[Claims 6 to 10 not printed in the Gazette.]

1,060,608. SAFETY DEVICE. GEORGE P. KNAPP, Bridgeport, Conn. Filed July 25, 1912. Serial No. 711,588. (Cl. 164—107.)



1. The combination with the driving clutch of a power press and operated by a treadle in common therewith, and a guard pivoted to swing into position to protect the operating field of the press, of a floating lever interposed between the actuating treadle and the operated parts substantially as shown.

2. The combination with a power press having a constantly moving drive pulley and a tripping clutch between said pulley and the working head of the press, of a swinging guard adapted to be moved to surround the work field of the machine, and tripping mechanism embodying a floating lever substantially as shown and connected to first positively move the guard into protecting position and then trip the clutch, all substantially as shown.

3. In a power press the combination with a latched clutch tripping rod, of a floating lever connected at one end with the clutch trip and at the other end with the swinging guard and actuated through a third and intermediate connection with an operating lever, all substantially as shown and described.

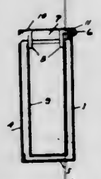
4. The combination with a latched tripping rod of a power press of a swinging guard adapted to move into and out of the working field of the press and actuated by a treadle in common with the press tripping rod, the guard adapted to release the latch of the tripping rod when the guard in its movement has reached a position to protect the working field of the press, all substantially as shown.

5. In a power press and in combination, a power driven, reciprocating, tool-carrying head provided with a trip-

ping clutch between the power supply and the head and a latched actuating rod therefor, a swinging guard arranged to move into and out of the working field of the press, a floating lever connected at one end to the latched actuating rod of the clutch and at the other end to the swinging guard and at its central part with an operating lever, means to trip the latch on the clutch actuating rod when the guard is brought into position to guard the working field of the machine, a spring to normally hold the power clutch open and a spring to normally hold the guard in a position to permit free access to the working field of the press, all substantially as, and for the purpose, set forth.

[Claims 6 and 7 not printed in the Gazette.]

1,060,609. TANK. FRANK H. LINDENBERG, Columbus, Ohio. Filed Jan. 26, 1912. Serial No. 673,649. (Cl. 4—5.)



1. A sheet metal tank having an open top, an independent bracing element for said top portion, an independent inner receptacle, and means carried by the upper portion of said tank for maintaining said inner receptacle in spaced relation to said tank.

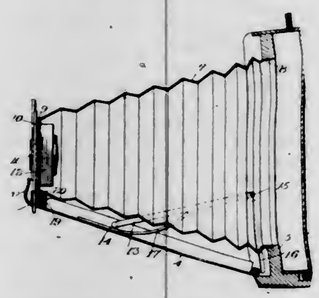
2. A sheet metal tank having an opening in the top, bracing means spanning said top, an inner receptacle, and means carried by said bracing means for maintaining said inner receptacle in spaced relation to said tank.

3. A tank formed with an open top, an independent bracing framework, a lining, and fingers on said framework for maintaining said lining in spaced relation to said tank.

4. A tank comprising a receptacle having an open top, a framework bracing said top, depending fingers on said framework, and an inner lining held spaced from said tank by said fingers.

5. A tank comprising a receptacle having an open top, a framework bracing said top, a lining, L-shaped retaining fingers on said framework and for said lining, and a slidable top, said fingers being constructed to partially support said top.

1,060,610. PHOTOGRAPHIC CAMERA. JOHN LINDER, Deer Park, Wash., assignor to Eastman Kodak Co., Rochester, N. Y., a Corporation of New York. Filed Aug. 5, 1910. Serial No. 575,639. (Cl. 95—40.)



1. The combination with a camera body, of a tapered bellows connected thereto at one end, a bed hinged to the body, supporting means for maintaining the bed in an inclined outwardly extending and rigid position relatively to the body in which position it lies substantially parallel with a face of the bellows when the latter is extended, a front independent of said supporting means connected to the other end of the bellows and coöperating devices for detachably mounting the front in any of a plurality of upright positions on the bed substantially parallel with the body, comprising a plurality of sockets extending diagonally through the bed and a stem on the front adapted to be inserted within the sockets, selectively.

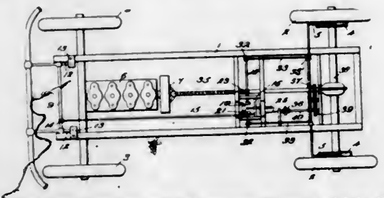
2. In a camera, the combination with a body, a bellows and a bed provided with an opening forming a socket having a shoulder portion, of a front connected to the bellows and provided with a stem adapted to be received within the socket to detachably mount the front on the bed and having a locking shoulder coöperating with the shouldered portion of the socket, one of said shoulders being spring actuated.

3. In a camera, the combination with a body, a bellows and a bed provided with an opening forming a socket having a shoulder portion, of a front connected to the bellows and provided with a supporting stem adapted to be received within the socket to detachably mount the front on the bed and composed of a pair of substantially rigid tongues associated with an intermediate resilient tongue having a locking shoulder coöperating with the shouldered portion of the socket.

4. In a camera, the combination with a body, a bellows and a bed provided with an opening forming a socket extending through the same from side to side, a front connected to the bellows and provided with a stem adapted to be received within the socket from the top side of the bed to detachably mount the front on the latter and having a spring actuated locking shoulder engaging the shoulder formed by the edge of the socket opening on the under side of the bed.

5. In a camera, the combination with a body, a bellows and a bed provided with an opening forming a socket extending through the same from side to side, of a front connected to the bellows and comprising a plate forming a lens board and having an extension thereon forming a supporting stem adapted to be received within the socket from the top side of the bed to detachably mount the front on the latter, said stem being composed of a pair of substantially rigid tongues associated with an intermediate resilient tongue having a locking shoulder coöperating with the shoulder formed by the edge of the socket opening on the under side of the bed and accessible to the fingers of the operator from such side for releasing purposes.

1,060,611. AUTOMOBILE SAFETY APPLIANCE. RICHARD A. MAGILL, Atlanta, Ga. Filed May 31, 1911. Serial No. 630,532. (Cl. 21—90.)



1. The combination with a motor driven vehicle having a wheel brake and clutch driving connections, of means for automatically applying the brake and disconnecting said clutch connections comprising; a bracket mounted on the vehicle frame; a crank shaft journaled on said bracket; connections between said crank shaft and said brake; connections between said crank shaft and one of the clutch connections; a spring tensioned rod mounted on said bracket and connected with the crank shaft and adapted to actuate the same; a pawl pivotally mounted on the bracket and adapted to engage with and hold the crank shaft in set position; a fender movably mounted on the vehicle; connections between said fender and said pawl adapted to release the pawl through the movement of the fender; a governor for the vehicle; and connections between said governor and said pawl for actuating the pawl to release the crank shaft whereby to apply the brake and disconnect the clutch connections, substantially as described.

2. The combination with a motor driven vehicle having a wheel brake and clutch driving connections of means for automatically applying said brake and disconnecting said clutch driving connections comprising a bracket mounted on the frame of the vehicle; a crank shaft journaled on said bracket; oppositely disposed arms mounted on said crank shaft; connections between said arms, the wheel brake, and one of said clutch driving connections; a spring tensioned rod mounted on the bracket and connected with and normally tending to actuate said crank shaft; a pawl pivotally mounted on said bracket and adapted to engage with and hold the crank shaft in set position; a pair of oppositely disposed arms secured to said pawl; a fender swingingly mounted on the vehicle; a rod connecting said fender and one of said pawl arms and adapted to actuate the pawl arm to release the pawl through the movement of the fender; a governor for the vehicle; and a rod connecting said governor with the other pawl arm adapted to actuate said pawl arm to release the pawl through the speed of the governor, substantially as described.

1,060,612. TOY. CARL BERTHOLD MANGELSDORFF, Bergedorff, Germany, assignor to Alastair M. Frame, New York, N. Y. Filed Oct. 23, 1911. Serial No. 656,302. (Cl. 46—32.)



1. In a toy, in combination, a top having a plug, a pistol having a barrel and a handle, a rod rotatable within the barrel, a spring adapted to be tensioned when the rod is rotated, means connected to the rod whereby it may be rotated, means provided upon the rod and adapted to detachably hold the plug of the top when inserted in the muzzle of the barrel of the pistol, a trigger movably held to the handle of the pistol, and means provided upon the rod and adapted to be engaged by the trigger to hold said rod when rotated so that when the trigger is pulled for disengagement with the holding means the rod will be reversely rotated by said spring for imparting rotation to the top whereby its plug will be released and the top propelled from the pistol.

2. In a toy, in combination, a top having a plug, a pistol having a barrel and a handle, a rod rotatable within the barrel, a spring adapted to be tensioned when the rod is rotated, means connected to the rod whereby it may be rotated, a clutch provided upon the rod and adapted to detachably hold the plug of the top when inserted in the muzzle of the barrel of the pistol, a trigger movably held to the handle of the pistol, and means provided upon the rod and adapted to be engaged by the trigger to hold said rod when rotated so that when the trigger is pulled for disengagement with the holding means the rod will be reversely rotated by said spring for imparting rotation to the top whereby its plug will be released and the top propelled from the pistol.

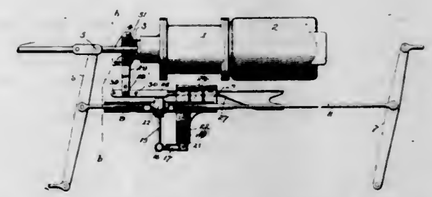
3. In a toy, in combination, a top having a plug, a pistol having a barrel and a handle, a rod rotatable within the barrel, means connected to the rod whereby it may be rotated, a spring provided within the barrel and adapted to be tensioned when the rod is rotated, a clutch provided upon the rod and adapted to detachably hold the plug of the top when inserted in the muzzle of the barrel of the pistol, a trigger movably held to the handle of the pistol, and a ratchet provided upon the rod and adapted to be engaged by the trigger to hold said rod when rotated so that when the trigger is pulled for disengagement with the ratchet the rod will be reversely rotated by said spring for imparting rotation to the top whereby its plug will be released and the top propelled from the pistol.

4. In a toy, in combination, a top having a plug, a pistol having a barrel and a handle, a rod rotatable within the barrel, a sleeve revolubly held upon the muzzle of the barrel and connected to the rod whereby said rod may be rotated when the sleeve is revolved, means provided upon the rod and adapted to detachably hold the plug of the top when inserted in the muzzle of the barrel of the pistol, a trigger movably held to the handle of the pistol, and means provided upon the rod and adapted to be engaged by the trigger to hold said rod when rotated so that when the trigger is pulled for disengagement with the holding means the rod will be reversely rotated by said spring for imparting rotation to the top whereby its plug will be released and the top propelled from the pistol.

5. In a toy, in combination, a top having a plug, a clutch provided upon the plug, a pistol having a barrel and a handle, a spring adapted to be tensioned when the rod is rotated, a sleeve revolubly held upon the muzzle of the barrel and connected to the rod whereby said rod may be rotated when the sleeve is revolved, a clutch provided upon the rod and adapted to detachably engage the clutch of the top when the plug is inserted in the muzzle of the barrel of the pistol, a trigger movably held to the handle of the pistol, and means provided upon the rod and adapted to be engaged by the trigger to hold said rod when rotated so that when the trigger is pulled for disengagement with the holding means the rod will be reversely rotated by said spring for imparting rotation to the top whereby said plug will be released and the top propelled from the pistol.

[Claims 6 to 10 not printed in the Gazette.]

1,060,613. SLACK-ADJUSTER. JOHN OSBORNE MARS, Omaha, Nebr. Filed Sept. 5, 1911. Serial No. 647,687. (Cl. 188—49.)



1. The combination of a brake cylinder; a piston and piston-rod therein; a guide-frame; a cam-bar guided in the guide-frame; an adjustable connection between the cam-bar and the piston-rod; a plunger mounted in the guide-frame and adapted to be moved by excessive movements of the cam-bar; a spring opposing the movement of the plunger; suitable brake rigging in operative relation with the piston rod; a threaded member adapted to adjust the slack in the brake rigging; a pawl and ratchet mechanism adapted to rotate the threaded member; and operative connections between the plunger and the ratchet mechanism.

2. The combination of a brake cylinder; a piston and piston-rod therein; a guide-frame; a cam-bar guided in

the guide-frame; means for connecting the cam-bar to move with the piston-rod; a plunger mounted in the frame and adapted to be moved by excessive movements of the cam-bar; a spring opposing the movement of the plunger; brake rigging in operative relation with the piston-rod; a threaded member adapted to adjust the slack in the brake rigging; a pawl and ratchet mechanism adapted to rotate the threaded member in a direction to take up the slack; and operative connections between the plunger and the ratchet mechanism.

3. The combination of a brake cylinder; a piston and piston-rod therein; a bracket attached to the piston-rod; a guide frame; a cam-bar guided in the guide-frame and provided with a plurality of holes; a pin passed through one or another of said holes and engaging the bracket, whereby an adjustable connection between the bar and the bracket is obtained; brake rigging in operative relation with the piston-rod; a threaded member adapted to adjust the slack in the brake rigging; a ratchet mechanism adapted to rotate the threaded member in a direction to take up the slack; and a reciprocating mechanism actuated by excessive movements of the cam-bar, supported by the supporting frame, and connected to the ratchet mechanism to actuate the latter.

4. The combination of a brake cylinder; a piston and piston-rod therein; suitable brake rigging in operative relation with the piston rod; a guide-frame; a reciprocating member guided by the guide-frame and provided with an inclined face; adjustable connections between the reciprocating member and the piston rod; a second reciprocating member adapted to be engaged and moved by the inclined face of the first reciprocating member when it moves an excessive distance; a ratchet mechanism adapted to take up slack in the brake rigging; and operative connections between the second reciprocating member and the ratchet mechanism.

5. The combination of a brake cylinder; a piston and piston-rod therein; brake rigging including a tension rod, and operatively related to the piston-rod; a guide-frame; a cam-bar guided in the guide-frame; adjustable connections between the cam-bar and the piston-rod; a plunger mounted in the guide-frame, and adapted to be moved by excessive movements of the cam-bar; a spring opposing such movement of the plunger; a turn-buckle adapted to adjust the length of the tension rod; a ratchet mechanism adapted to turn the turn-buckle in a direction to shorten the tension rod; and operative connections between the plunger and the ratchet mechanism.

[Claims 6 and 7 not printed in the Gazette.]

1,060,614. PROCESS OF MAKING ARTIFICIAL STONE. WILLIAM FITZ CHARLES MASON MCCARTY, Pleasantville, N. Y. Filed Mar. 8, 1911. Serial No. 613,029. (Cl. 106—30.)

1. The herein described process which consists in adding to silica a softening reagent consisting of nitric and hydrofluoric acids, adding to the resulting plastic mass a hardening reagent comprising an alkaline-earth, compound, and permitting the resulting mass to harden.

2. The herein described process, which consists in adding to silica a softening reagent, mixing the resulting softened mass with silica, adding to the mixture a hardening reagent, and permitting the resulting mass to harden.

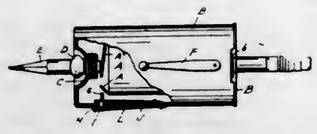
3. The herein described process, which consists in adding to silica a softening reagent, mixing the resulting softened mass with silica, adding to the mixture a hardening reagent consisting of a compound of an alkaline-earth metal, and permitting the resulting mass to harden.

4. The herein described process, which consists in adding to silica a softening reagent comprising nitric and hydrofluoric acids, mixing the softened mass with silica and adding to the mixture a hardening reagent comprising a compound of an alkaline-earth metal, and permitting the mass to harden.

5. The herein described process, which consists in adding to silica a softening reagent, incorporating in the mass a compound of an alkaline-earth metal and an organic acid, and permitting such mass to harden.

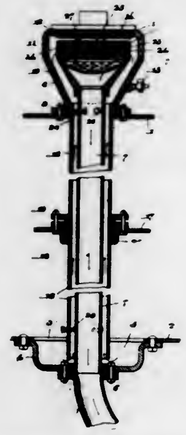
[Claims 6 to 9 not printed in the Gazette.]

1,060,615. COMBINED VEST-POCKET PENCIL AND PEN HOLDER AND ELECTRIC LIGHT. EVERT A. METCALF, Forbes, Mo. Filed Apr. 13, 1912. Serial No. 690,619. (Cl. 240—8.4.)



As an article of manufacture, a pocket battery-lamp having a push button, a casing for said lamp provided on one side with a resilient securing strip, and on another side with an article-holding clasp, and also having a spring metal strip pivoted to said casing and adapted to be swung over the push button to hold the battery circuit closed; substantially as described.

1,060,616. TANK-SIPHON FOR LOCOMOTIVES. JAMES E. MURRAY, Albuquerque, N. Mex. Filed Sept. 3, 1912. Serial No. 718,261. (Cl. 210—16.)



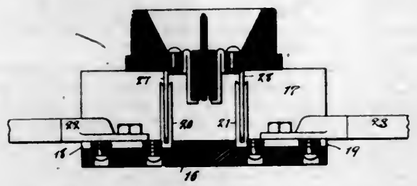
1. A tank, in combination with a siphon, the upper end of said siphon projecting above said tank and enlarged to form a strainer box, said strainer box being provided with an opening, a closure for said opening, and means in said strainer box for filtering the water and entrapping the matter filtered therefrom.

2. A locomotive water tank in combination with a siphon comprising a strainer box fixed to and projecting above the top of said tank, a pipe depending from said box, a pipe connection at the bottom of said tank, a vertically disposed pipe fixed to said connection and extending upwardly through the first said pipe into said box, and means on the upper end of said last mentioned pipe and within said box for filtering the water and entrapping the matter filtered therefrom.

3. A locomotive water tank in combination with a siphon comprising a strainer box provided with an opening in its top, a closure for said opening accessible from the top of said tank, a pipe depending from said box, a pipe connection at the bottom of said tank, a vertically disposed pipe fixed to said connection and extending upwardly to the first said pipe into said box, and means on the upper end of the last mentioned pipe and within said box for filtering the water.

4. A tank, in combination with a siphon and means in said siphon for filtering the water and entrapping the matter filtered therefrom, said means comprising a body portion, a screen in said body portion, a foraminated cage covering the upper end of said body portion and an inwardly swinging gate in said cage.

1,060,617. FUSE-HOLDING DEVICE. THOMAS E. MURRAY, New York, N. Y. Filed Jan. 6, 1913. Serial No. 740,366. (Cl. 175—292.)



1. A fuse carrier of insulating material, and a fuse strip secured thereon, the said carrier comprising a block having on one side a projecting plate, and the fuse strip being doubled over the outer edge of said plate and lying in contact with the opposite sides of said plate and said block.

2. A fuse carrier of insulating material, and a fuse strip secured thereon, the said carrier comprising a block having on one side a projecting plate, and the fuse strip being doubled over the outer edge of said plate and lying in contact with the opposite sides of said plate and said block: the thickness of said plate being such as will permit the reaction of the fields caused by the current in the parts of the fuse strip on its opposite sides to separate said parts on the blowing of said strip.

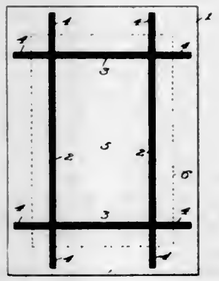
3. A fuse-holding device, comprising a block of insulating material having a projection of reduced thickness on one side and a recess on the opposite side, and a fuse strip doubled over the edge of said projection and having its ends entering said recess.

4. A fuse-holding device, comprising a support having an opening, contacts in said opening, a carrier of insulating material comprising a block having on one side a projecting plate, and a fuse strip secured on said carrier, doubled over the outer edge of said plate and lying in contact with the opposite sides of said plate and said block: the parts of the strip on the opposite sides of said block coöperating with said contacts.

5. A fuse-holding device, comprising a support having an opening, a pair of contacts on said support and extending below said opening and on opposite sides thereof and having inwardly turned flanges, a block of insulating material, and a fuse strip doubled over said block and secured thereto: the said contacts receiving and supporting said block on said flanges and coöperating with the parts of said strip on opposite sides of said block.

[Claim 6 not printed in the Gazette.]

1,060,618. PHOTOGRAPHIC-PRINTING MASK. HENRY E. NILES, Rochester, N. Y., assignor to Eastman Kodak Co., Rochester, N. Y., a Corporation of New York. Filed Nov. 22, 1907. Serial No. 403,280. (Cl. 95—74.)



1. As an article of manufacture a mask for use in photographic printing comprising a sheet of material capable of transmitting light and adapted to be interposed between the negative and the sensitized recording surface, said sheet having incorporated in its structure as a substantially integral part thereof an opaque substance forming border lines removed from the edges of the sheet and inclosing a portion of the latter of a predetermined extent within which the photograph is to be included.

2. As an article of manufacture, a mask for use in photographic printing comprising a sheet of material capable of transmitting light and adapted to be interposed between the negative and the sensitized recording surface and having incorporated in its structure as a substantially integral part thereof, an opaque substance arranged to form a rectangular border line inclosing a portion of the sheet within which the photograph is to be included, the lines forming the adjacent sides of said border being extended beyond the point of intersection for the purposes described.

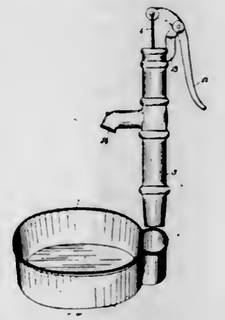
3. As an article of manufacture, a mask for use in photographic printing comprising a sheet of transparent material of uniform thickness adapted to be interposed between the negative and the sensitized recording surface and having incorporated in its structure as a substantially integral part thereof an opaque substance continuous with its surface and forming border lines of definite and uniform width removed from the edges of the sheet and inclosing a portion of the latter of a predetermined extent within which the photograph is to be included.

4. A photographic printing mask, consisting of a sheet having a border portion capable of preventing entirely the transmission of actinic rays, and a portion surrounding said border portion which permits the passage of actinic rays.

5. A photographic printing mask consisting of a sheet having a border portion and a surrounding portion, said border portion being capable of preventing the passage therethrough of actinic rays to a greater degree than the surrounding portion.

[Claims 6 to 8 not printed in the Gazette.]

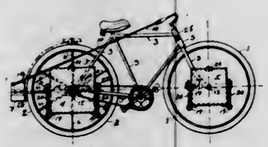
1,060,619. TOY. ALBERT J. NUSLY, Jr., Canton, Ohio, assignor to Pinafour Toy Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 25, 1911. Serial No. 645,976. (Cl. 46—37.)



1. In a toy of the class described, the combination of a water receptacle provided with a pump-stock socket, the chamber of which communicates with the water receptacle, a pump-stock having located therein check and piston valves and provided with a spout, a piston-rod and a handle connected to said piston rod, and the delivery end of the spout located above the water receptacle connected to the pump-stock, substantially as and for the purpose specified.

2. In a toy of the class described, the combination of a water receptacle provided with a pump-stock socket, the chamber of which communicates with the water receptacle, a pump-stock having located therein a piston valve, means for operating the piston valve, and a check valve consisting of a rubber ball and a metal seating, substantially as and for the purpose specified.

1,060,620. HYDROCYCLE. MORRIS L. OSOFS and MORRIS R. SLUTZKY, New York, N. Y. Filed July 22, 1912. Serial No. 710,949. (Cl. 115—2.)



1. In a hydrocycle a bicycle, propelling vanes secured to the rear wheel thereof, a rudder adapted to steer it, a pair of inflated floats of nearly cubical shape supporting each wheel of said bicycle, combined with side bars secured to the axles of said bicycle, horizontal rods detachably connecting said floats to said side bars, and straps secured to the edges of said floats and adapted to form sockets for said rods.

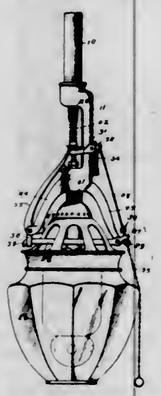
2. In a hydrocycle a bicycle, propelling vanes secured to the rear wheel thereof, a rudder adapted to steer it, a pair of inflated floats supporting each wheel of said bicycle, combined with side bars secured to the axle of each wheel of said bicycle, vertical posts connected to said side bars and horizontal rods detachably connecting said floats to said vertical posts.

3. In a hydrocycle a bicycle, propelling vanes secured to the rear wheel thereof, a rudder adapted to steer it, and a forked frame connecting said rudder to the axle of the rear wheel of said bicycle, combined with a pair of inflated floats detachably connected to the axle of each wheel of said bicycle.

4. In a hydrocycle a bicycle, propelling vanes secured to the rear wheel thereof, a rudder adapted to steer it, a forked rudder frame pivotally connected to the axle of the rear wheel of said bicycle, combined with a pair of inflated floats detachably connected to the axle of each wheel of the said bicycle.

5. In a hydrocycle a bicycle, inflated floats detachably connected thereto, propelling vanes secured to the rear wheel of the said bicycle, a rudder adapted to steer the frame, a rudder frame pivotally connected to said bicycle and adapted for rotating said rudder in its own plane..

1,060,621. AUTOMATIC CUT-OFF FOR GAS-LIGHTS. WILLIAM C. OSWALT, Percy, Iowa, assignor of one-half to John C. Oswalt, Percy, Iowa. Filed July 1, 1912. Serial No. 707,115. (Cl. 67—117.)

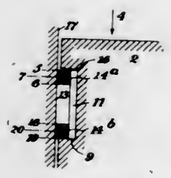


1. In a device of the class described, a gas carrying tube, a burner connected therewith, a partition in said tube provided with an opening, said partition forming a valve seat, a valve, yielding means for normally holding said valve in said seat, an expansion bar adjacent to said burner, means for holding said valve open, arranged to normally stand in inoperative position, means whereby said valve is opened and said bar moved to position for permitting said last named means to move to operative position for holding the valve open against said yielding means, said bar being so located and arranged that the contraction thereof moves the said first named means to inoperative position.

2. In a device of the class described, a gas carrying tube, a valve seat formed therein, a valve, yielding means for normally holding said valve in its seated position, a burner connected with said tube, an expansion bar adjacent to said burner, means whereby said valve may be held in its open position, and means whereby said last named means may be moved to operative position and at the same time moving said expansion bar into operative position with relation to said means for holding the valve open, said expansion bar being so arranged that the contraction thereof releases said means for holding said valve open.

3. In a device of the class described, a tube having an offset central portion, a partition with an opening therein, near the lower end of said tube forming a valve seat, a needle valve extending to a point outside said tube, an expansible and contractible plate designed to be near a burner, yielding means for holding said valve in its seated position, a collar on said stem, a pivoted lever arranged to drop of its own weight into position for holding said stem in position with the valve unseated when said stem and collar are raised, an extension on said lever provided with an opening in which said plate is slidably mounted, a downward extension on said plate, provided with a shoulder, means for raising said stem and for raising said plate to position where said shoulder is in engagement with the extension on said lever, said plate being so arranged that the expansion thereof moves said shoulder past said extension on said lever so that its contraction will move said lever out of engagement with said collar.

1,060,622. PACKING OF PISTONS, PLUNGERS, AND THE LIKE. HENRY PERCY OWEN, Liverpool, England. Filed Mar. 19, 1912. Serial No. 684,757. (Cl. 121—108.)

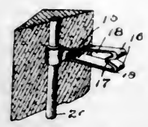


1. The combination with a piston having an annular peripheral groove; of a packing ring disposed in said groove with sufficient freedom to provide a space between the groove wall and the edge of said ring for admitting high pressure fluid to the inner peripheral surface of said ring and having passageways from its inner peripheral surface to its outer peripheral or bearing surface, the total area of the bearing surface being not less than the effective total area of the internal peripheral surface exposed to ring expanding pressure.

2. The combination of a work piston having an annular packing ring groove, and a packing ring disposed therein with sufficient play to admit maximum fluid pressure to the inner peripheral ring surface, said packing ring having passageways from its inner peripheral surface to its bearing surface to admit maximum fluid pressure to the bearing surface, the total area of the bearing surface being not substantially less than the total area of the projection of the inner peripheral surface on the bearing surface.

3. The combination with a piston cylinder and a piston operating therein, provided with an annular peripheral groove; of a packing ring fitting loosely in said annular groove, with its outer peripheral surface adapted to bear against the cylinder wall, said ring by reason of its loose fit within the annular groove having its inner peripheral surface exposed to maximum pressure tending to expand the ring, and being provided with passageways from its inner peripheral surface to its outer bearing surface, the total area of said bearing surface being not less than the total area of the inner peripheral surface exposed to ring-expanding pressure.

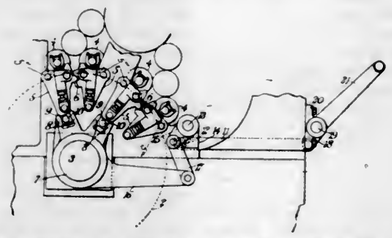
1,060,623. REINFORCED-CONCRETE FENCE-POST AND FASTENER THEREFOR. HORACE P. OWENS, Atlanta, Ga. Filed Sept. 12, 1912. Serial No. 720,062. (Cl. 39—12.)



1. A fence post comprising a concrete body, a reinforcing and anchoring rod extending longitudinally therethrough, and a plurality of wire fasteners each looped around said rod and having its ends projecting beyond the surface of the body and reversely bent to meet terminally and form resilient hooks defining a common entrance throat.

2. A fence post comprising a concrete body, a reinforcing rod extending longitudinally therethrough, and a plurality of metal straps each looped closely around said rod and having its intermediate portions twisted around each other from a vertical into a horizontal plane and embedded in the concrete body, the free ends of said straps projecting beyond the surface of the body and being reversely bent to meet terminally and form resilient hooks defining an intermediate common entrance throat.

1,060,624. MEANS FOR TRIPPING THE INKING-ROLLERS OF PRINTING-PRESSES. HERBERT PEARCE, THOMAS ROBERT GILLETT PARKER, and FRED WESLEY WRIGHT, Broadheath, England, assignors to Linotype and Machinery Limited, London, England. Filed July 22, 1912. Serial No. 710,881. (Cl. 101—71.)



1. In means for tripping the inking rollers of a printing press, the combination with the said rollers and the form of plate cylinder, of roller-supporting plates pivoted on axes positioned, respectively, at less radial distances from the axis of said cylinder than the axes of their inking rollers; blocks pivoted upon the supporting plates; slotted arms embracing said blocks; and means for moving all the slotted arms simultaneously and in the same direction to move the supporting plates likewise.

2. In means for tripping the inking rollers of a printing press, the combination with the said rollers and the form or plate cylinder, of roller-supporting plates pivoted on axes positioned, respectively, at less radial distances from the axis of said cylinder than the axes of their inking rollers; blocks pivoted upon the supporting plates; slotted arms embracing said blocks; and means for moving all the slotted arms simultaneously to move the supporting plates likewise.

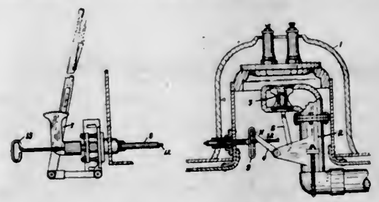
3. In means for tripping the inking rollers of a printing press, the combination with the said rollers and the form or plate cylinder, of roller-supporting plates pivoted on axes positioned, respectively, at less radial distances from the axis of said cylinder than the axes of their inking rollers; blocks pivoted upon the supporting plates; slotted arms embracing said blocks with a sliding fit; and means for reciprocating all the slotted arms simultaneously and in the same direction to rock the supporting plates likewise.

4. In means for tripping the inking rollers of a printing press, the combination with the said rollers and the form or plate cylinder, of roller-supporting plates pivoted on axes positioned, respectively, at less radial distances from the axis of said cylinder than the axes of their inking rollers; blocks pivoted upon the supporting plates; slotted arms embracing said blocks with a sliding fit; and means for reciprocating all the slotted arms simultaneously to rock the supporting plates likewise.

5. In means for tripping the inking rollers of a printing press, the combination with each two adjacent inking rollers and the form or plate cylinder, of roller-supporting plates pivoted on axes severally positioned radially between the axes of the inking rollers and that of the said cylinder and arranged in geared pairs; a block pivoted upon one supporting plate of each geared pair; a slotted arm embracing each block; and means for reciprocating all the arms simultaneously to rock all the supporting plates.

[Claims 6 to 9 not printed in the Gazette.]

1,060,625. THROTTLE-VALVE LEVER FOR LOCOMOTIVES. HILLYARD PERRY, Oak Ridge, Ontario, Canada. Filed Apr. 12, 1911. Serial No. 620,640. (Cl. 137—4.)



1. In a device of the class described, a hollow puppet valve rod, operating mechanism for the puppet valve and a safety control rod extending through said hollow rod and adapted to engage with said mechanism.

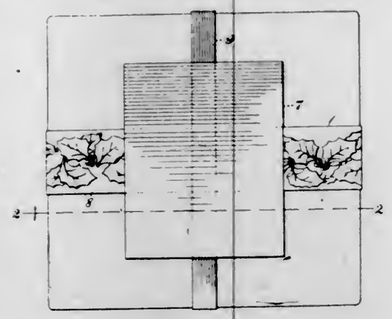
2. In a device of the class described, a puppet valve, a bell crank pivotally supported adjacent to the puppet valve, a link pivotally connecting one arm of said bell crank to the puppet valve, a tubular rod having a slotted cross head formed at one end thereof and operatively connected to said bell crank and a control rod extending through said tubular rod and having a forked end adapted to engage with the link connecting the puppet valve with said bell crank.

1,060,626. PACKAGE. THOMAS W. S. PHILLIPS, Mount Vernon, N. Y., assignor to Geo. Borgfeldt & Co., New York, N. Y., a Corporation of New Jersey. Filed Sept. 4, 1912. Serial No. 718,443. (Cl. 229—8.)

1. A package comprising a body, a cover fitting on said body, a label secured to said cover at spaced intervals and having portions intermediate of said intervals free from the cover, and a symbolical band entirely free from said cover and freely slidable beneath the free portions of said label, said symbolical band having its opposite free ends frictionally held between said cover and said body whereby said band is maintained against movement relatively to the cover.

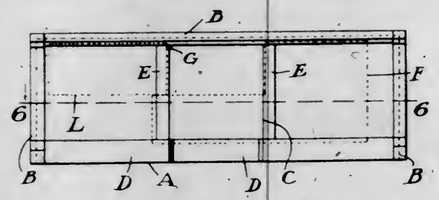
2. A package comprising a body, a cover fitting on said body, a label secured to said cover at spaced intervals and having portions intermediate of said intervals free from the cover, a symbolical band entirely free from said cover and freely slidable beneath the free portions of said label, said symbolical band having its opposite free ends fric-

tionally held between said cover and said body whereby said band is maintained against movement relatively to said cover, and a ribbon or the like extending transversely above said band and beneath the free portions



of said label and surrounding said package whereby the cover and body are secured against relative movement to each other and the band is held in engagement with the cover.

1,060,627. FRONT PANEL FOR PLAYER-PIANOS. MIKE PRISCIANTELLI, New York, N. Y., assignor to Behning Piano Company, New York, N. Y., a Corporation of New York. Filed Sept. 6, 1912. Serial No. 718,828. (Cl. 84—159.)



1. A front panel for player pianos having an opening, a main slide having a portion thereof cut away slidably mounted on said panel and adapted, when positioned at one extremity of its travel, to wholly cover said opening, and partially close said opening, when positioned in the other extremity of its travel, a transparent slide also slidably mounted on said panel and adapted to coöperate with the main slide, so as to occupy the position of the cut away portion therein, for the purpose of closing said opening in the panel.

2. A front panel for player pianos having an opening, a main slide having a portion thereof cut away slidably mounted on said panel, and a transparent slide also slidably mounted on the panel and adapted to occupy substantially the cut away space in the main slide, whereby said opening may be closed either entirely by the main slide, or by the main and transparent slides conjointly.

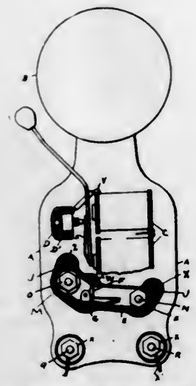
3. A front panel for player pianos having an opening, a main slide adapted to partially close said opening, and a coöperating transparent slide adapted to close said opening when the latter is partially closed by the main slide.

4. A front panel for player pianos having an opening, a main slide mounted on said panel shiftable to two positions and having two parts of different areas, one of which parts completely closes the opening when said slide occupies one of its positions, the other part partially closing the opening when the slide occupies its other position, and a transparent slide also mounted on the panel and coöperating with the main slide to close that portion of the opening which is left uncovered when said main slide occupies the said other position.

5. A front panel for player pianos provided with an opening, a main slide mounted on said panel and having one portion thereof adapted to fully close said opening and a second portion adapted to only close a part of said opening, and a coöperating transparent slide mounted on the panel and adapted to close that part of the opening left uncovered by the said second portion of the main slide.

[Claims 6 and 7 not printed in the Gazette.]

1,060,628. ELECTRIC BELL. CHARLES M. PROCTOR, Detroit, Mich. Filed Apr. 29, 1912. Serial No. 693,929. (Cl. 177—7.)

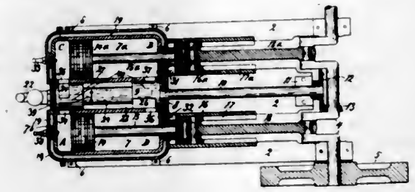


1. In an electric bell, in combination with a plurally perforated base plate, a pair of magnet coils, and an armature member, supported by said base plate, a pair of binding post members insulated from said base plate and adapted to receive the ends of circuit wires approaching said plate from the same side as that on which said posts are located, a second pair of binding post members also insulated from said base plate and located adjacent certain of the perforations therein, adapted to receive the ends of wires approaching the reverse face of the plate and passing through said perforations, and means connecting one of each pair of posts with the corresponding member of the other pair, whereby either pair is rendered immediately available for completion of the energizing circuit for the bell upon connection of the wires thereto, substantially as described.

2. In an electric bell, in combination with a base plate provided with a plurality of perforations, a pair of magnet coils mounted thereon an armature member pivotally supported thereon though insulated therefrom, a pair of binding post members one of which is insulated from direct connection with said armature though adapted to be placed in circuit therewith, said posts being adapted to receive the ends of circuit wires passing through adjacent perforations in the base plate from the under side thereof, and a second pair of binding posts also insulated from the base plate, and connected with said first named pair of binding posts, adapted to receive the ends of circuit wires directly approaching that face of the base plate on which the operative parts of the bell are located, substantially as described.

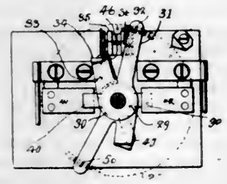
3. In an electric bell, the combination with a perforated base plate, a pair of magnet coils and an armature and hammer member mounted thereon, and a plurality of pairs of binding post members, the corresponding members of each of which are permanently connected the one with the other, and one of each pair being insulated from direct connection with the armature, one of said pairs of circuit wires approaching the plate on the same side as that whereon the posts are mounted, and the other of said pairs being located adjacent the perforations in said plate to receive the ends of circuit wires approaching the plate from beneath and passing therethrough, substantially as described.

1,060,629. EXPLOSIVE-ENGINE AND VALVE-GEAR FOR SAME. ERNEST S. REILAND, St. Paul, Minn. Filed Oct. 30, 1912. Serial No. 728,701. (Cl. 123—63.)



In an explosive engine, the combination with a frame, of a shaft journaled therein and having two cranks arranged in the same radial plane, a cylindrical valve chamber, a valve plug rotatable therein and having a stem extending toward the crank shaft, a bevel gear fixed on the crank-shaft and a bevel gear twice as large meshing therewith and fixed on the valve stem; two cylinders arranged one at each side of the valve chamber and having near their ends ports entering the valve chamber, a piston in each cylinder, a piston rod extending from each piston, a guided cross-head at the end of each piston rod, and a pitman connecting each cross-head with one of the cranks; said valve chamber having at one end a fuel intake and at one side an exhaust opening, and the valve plug therein having a central passage communicating with the fuel-intake and terminating in two fuel-delivering ports, one near each end of the plug in peripheral line with the cylinder ports; said ports in the plug being arranged radially at right angles; said plug also having near its middle a peripheral recess forming a space which at all times communicates with the main exhaust port of the valve chamber; said recess having longitudinal extensions arranged one slightly in front of each fuel-delivering port in the plug, and means in both ends of each cylinder for igniting the fuel.

1,060,630. ELECTRIC TIME-SWITCH. SAMUEL G. RHODES and ALBERT B. RYPINSKI, New York, N. Y., assignors to Thomas E. Murray, New York, N. Y. Filed Oct. 9, 1912. Serial No. 724,703. (Cl. 161—27.)



1. An electric time switch, comprising a time mechanism, a shaft actuated thereby, a sleeve loose on said shaft, a switch member on said sleeve, a radial arm on said sleeve, a spring interposed between said sleeve and said shaft, a movable stop in the path of revolution of said radial arm, and a cam plate on said shaft: the said cam plate coöperating with said stop to move the same out of engagement with said radial arm.

2. An electric time switch, comprising a time mechanism, a shaft actuated thereby, a sleeve loose on said shaft, a switch member on said sleeve, a radial arm on said sleeve, a spring interposed between said sleeve and said shaft, a movable stop in the path of revolution of said radial arm, and a cam plate rotatably adjustable on said shaft: the said cam plate coöperating with said stop to move the same out of engagement with said radial arm.

3. An electric time switch, comprising a time mechanism, a shaft actuated thereby, a sleeve loose on said shaft, a switch member on said sleeve, a radial arm on said sleeve, a spring interposed between said sleeve and said shaft, two movable stops successively disposed in the path of revolution of said radial arm, and a cam plate on said shaft: the said cam plate coöperating with said stops to move the same successively out of engagement with said radial arm.

4. An electric time switch, comprising a time mechanism, a shaft actuated thereby, a sleeve loose on said shaft, a switch member on said sleeve, a radial arm on said sleeve, a spring interposed between said sleeve and said shaft, a movable stop in the path of revolution of said radial arm, a cam plate rotatably adjustable on said shaft, and means for holding said plate in adjusted position: the said cam plate coöperating with said stop to move the same out of engagement with said radial arm.

5. An electric time switch, comprising a time mechanism, a shaft actuated thereby, a sleeve loose on said shaft, a switch member on said sleeve, a radial arm on said sleeve, a spring interposed between said sleeve and said shaft, a movable stop in the path of revolution of said radial arm, a cam plate rotatably adjustable on said shaft, a dial on said shaft, and means for detachably securing said cam plate to said dial: the said cam plate coöperating with said stop to move the same out of engagement with said radial arm.

[Claims 6 and 7 not printed in the Gazette.]

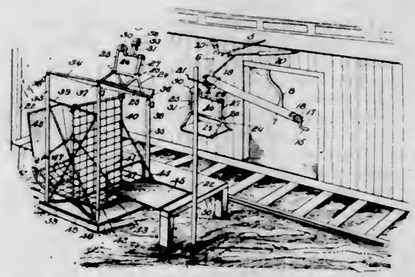
1,060,631. TOY. FRANK K. RICH and MATTHEW G. MARSH, East Eddington, Me. Filed Sept. 28, 1911. Serial No. 651,734. (Cl. 46—14.)



1. The combination with a finger ring having a splayed opening, of a tubular shank having one end flanged into said splayed opening the outer end being flared to provide a flat riding surface having a downwardly flanged edge, a pin having a head and held within the bore of said shank, and a pin wheel upon said pin and revolving upon said flat riding surface, as and in the manner set forth.

2. The combination with a finger ring having a splayed opening, of a tubular shank having one end flanged into said splayed opening the outer end of said shank being flared outward to provide a flat riding surface ending in a downwardly flanged edge, a cement mixture within said shank bore, a pin having a head and chiseled end forced into said cement while plastic, and a pin-wheel held upon said pin and revolving upon said flat riding surface, as and in the manner set forth.

1,060,632. MAIL-BAG CATCHING AND DELIVERING MECHANISM. WILLIAM T. ROOK, Leedey, Okla. Filed June 18, 1912. Serial No. 704,439. (Cl. 105—231.)



1. In a mechanism for the stated purpose, a receiving device comprising a vertically oscillating swing, a retaining plate pivotally mounted on the swing and adapted to extend therefrom in the plane of movement of the same,

and a trip mounted on the swing in position to engage said plate and adapted to be released therefrom under the impact of a delivered mail-bag.

2. In a mechanism for the stated purpose, a receiver comprising a swing, a retaining plate pivotally mounted upon the swing, a trip pivoted upon the swing adjacent the retaining plate and provided with offsets adapted to engage under the end of the said plate, whereby the retaining plate will be supported in an extended position, and springs bearing upon the said plate and upon the swing to turn the said plate into an upright position when the trip is released by a delivered bag.

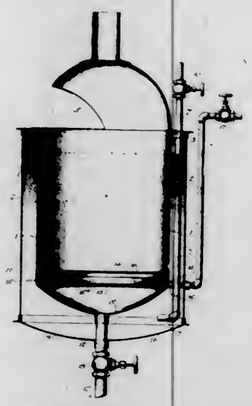
3. In an apparatus for the purpose set forth, a platform constituting a rest for a bag carrier, a swing freely suspended at its upper end beneath said platform and adapted to receive a bag carrier, and means for delivering a carrier to the swing and taking up the carrier on the platform.

4. In a mechanism for the purpose set forth, a supporting arm, means on said arm for receiving a mail-bag carrier and releasably supporting the same, means on the arm for moving said carrier and said supporting means to the outer end of the said arm, and means for releasing said supporting means.

5. In a mechanism for the purpose set forth, the combination of a supporting arm, a conveyer housed within the said arm, means for actuating said conveyer, a clutch member upon said conveyer, a mail-bag carrier having means for engaging said clutch member, and means coacting with said clutch member to releasably support the mail-bag carrier.

[Claims 6 to 9 not printed in the Gazette.]

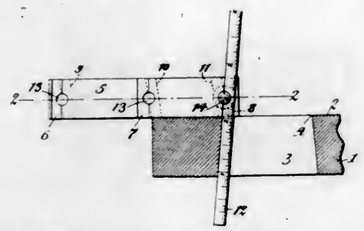
1,060,633. APPARATUS FOR TREATING BUTTER. ROBERT ROOS, Chicago, Ill. Filed Feb. 24, 1913. Serial No. 750,381. (Cl. 126—370.)



1. An apparatus of the character described, comprising a heating jacket, a melting vat or kettle arranged within said jacket, a reticulated bottom for said vat or kettle, a perforated steam supply pipe arranged within said vat or kettle beneath said reticulated bottom, a pipe for admission of steam to said steam supply pipe, a shield interposed between said steam supply pipe and said reticulated bottom and a discharge pipe leading from the bottom of the vat or kettle.

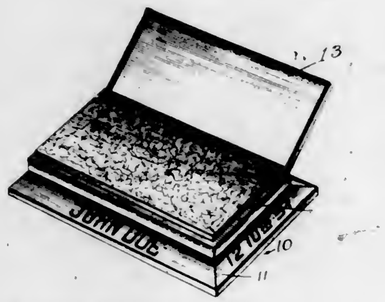
2. An apparatus of the character described, comprising a heating jacket, a melting vat or kettle arranged within said jacket, a reticulated bottom for said vat or kettle, an annular, perforated steam supply pipe arranged within said vat or kettle adjacent the wall thereof and beneath said reticulated bottom, a pipe for admission of steam to said steam supply pipe, an annular, downwardly inclined shield interposed between said steam supply pipe and said reticulated bottom and a discharge pipe leading from the bottom of the vat or kettle.

1,060,634. DIE-MAKER'S CLEARANCE-GAGE. GUSTAF ROSÉN, Buffalo, N. Y. Filed Aug. 1, 1912. Serial No. 712,703. (Cl. 73—187.)



A die maker's clearance gage comprising a stock having an opening extending therethrough and two groove seats arranged transversely on its opposite sides and intersecting said opening, one of said seats being arranged at one angle relatively to the length of the stock and the other seat being arranged at another angle relatively to the length of the stock; a blade adapted to engage either of said seats, and a clamping device for holding said blade in place on the stock arranged in said opening.

1,060,635. PROCESS OF AND MEANS FOR MAKING RESILIENT INKING-PADS. GEORGE H. ROWLEY, Chicago, Ill. Filed Oct. 24, 1910. Serial No. 588,683. (Cl. 18—59.)



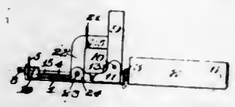
1. The method of making a resilient inking pad having a hinged metallic cover above an ink-absorbing piece, which consists in placing in the bottom of a mold the inverted cover with its outer surface in contact with the solid bottom of said mold, placing the ink-absorbing piece in said inverted cover, arranging the hinge member of said inverted cover to lie above said ink-absorbing piece within the space provided in said mold for the material to form the resilient base, and pouring said material in said mold to overlie said ink-absorbing piece and surround the hinge member.

2. The method of making an inking pad having a hinged cover above an ink-absorbing piece supported on a resilient base, which consists in placing in the bottom of a mold an inverted cover of less lateral extent than the opening to said mold, protecting the outer surface of said inverted cover from communication with the space to receive the base material, placing the ink-receiving piece in said inverted cover in protecting contact with its inner surface, arranging the hinge member of said inverted cover above said ink-absorbing piece in the space provided in said mold for the base material, and pouring said base material into said mold over the ink-absorbing piece and around the hinge member, flush with the relatively large opening to said mold for purposes described.

3. A mold for use in making resilient inking pads having its interior shaped to provide a central imperforate cover-receiving recess surrounded by a slanting perforate groove, and suitably formed inserts in said grooves removable therefrom as described.

4. A mold for use in making resilient inking pads of the character described, having a central imperforate base portion, integral portions surrounding said imperforate base portion to form thereabove a space neatly to receive the cover and a portion of the moldable base of the pad to be made by said mold, the mold beyond said integral base-surrounding portions being formed into slanting plate-receiving grooves, said mold having perforations extending from the bottoms of said grooves to the bottom of said mold outside the imperforate base portion thereof underlying said cover-receiving recess, and said mold beyond said grooves extending to the plane of the opening thereof, for purposes described.

1,060,636. VIEW-FINDER. ALFRED A. RUTTAN and CHARLES E. HUTCHINGS, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 19, 1912. Serial No. 721,173. (Cl. 95—52.)



1. In a finder, the combination with a lens and an angle mirror, of a sight having an operative position between the lens and mirror along the line of the axis of the lens.

2. In a folding finder, the combination with a pivoted lens and a pivoted angle mirror arranged to fold beneath the lens, of a pivoted sight having an operative position between the lens and mirror.

3. In a folding finder, the combination with a pivoted lens and a pivoted angle mirror arranged to fold beneath the lens, of a pivoted yoke shaped sight arranged to span the optical axis of the lens between the latter and the mirror and to fold against the mirror.

4. In a folding finder, the combination with a pivoted lens, a pivoted angle mirror and a spring for actuating the latter toward its operative position, of a pivoted sight having an operative position between the lens and mirror and arranged to act as a stop for the mirror defining the operative position of the latter.

5. In a folding finder, the combination with a pivoted lens, a pivoted angle mirror and a spring for actuating each part toward its operative position, of a pivoted sight having an operative position between the lens and mirror and coöperating with the latter to actuate it to folded position and a link connection between the lens and sight.

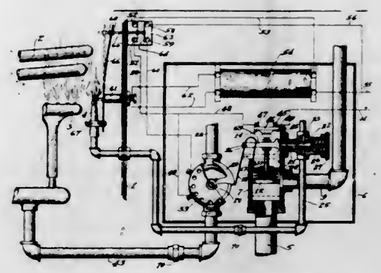
[Claims 6 to 8 not printed in the Gazette.]

1,060,637. BABY-CRIB. FRANKLIN M. SAWYER, Kansas City, Mo. Filed Sept. 19, 1911. Serial No. 650,233. (Cl. 5—59.)



A crib, comprising a rectangular frame, a bottom upon said frame, sides having bottom bars paralleling and adjacent to the sides of the rectangular frame, U-shaped clips pivotally connecting the extremities of adjacent side bars of the rectangular frame with the bottom bars of the sides so that the latter may swing from a position vertically above to a position below the end bars of said rectangular frame, and an extensible leg frame arranged between the side bars of the rectangular frame and pivoted at its upper end to said side bars.

1,060,638. WATER-HEATER. BERNARD A. SCHRODER, Birmingham, Ala. Filed Dec. 26, 1911. Serial No. 667,797. (Cl. 126—351.)



1. The combination in a water heater, of a main gas burner, a pilot burner, a thermostat primarily responsive to the pilot flame, means controlled by the flow of water through the heater to control the supply of gas to said pilot burner, mechanism for controlling the admission of gas to the main burner, means operable by said thermostat and mechanism responsive to said means and adapted to control the supply of gas to the said main burner.

2. The combination in a water heater, of a main gas burner, a pilot burner, means to supply gas to said burners, a motor operated valve acting on the gas supplied to the main burner, a valve responsive to the flow of water through the heater for controlling the supply of gas to the pilot burner, theremostat means responsive primarily to the heat of the pilot flame and means controlled thereby and adapted in turn to control the opening of the main gas valve.

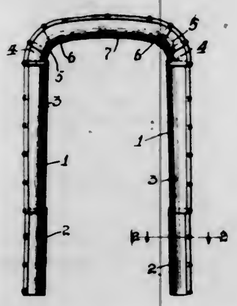
3. The combination in a water heater, of a main gas burner, a pilot burner, means to supply gas to said burners, a motor operated valve acting on the gas supplied to the main burner, a valve responsive to the flow of water through the heater for controlling the supply of gas to the pilot burner, thermostat means responsive to the heat of the pilot flame and adapted to control the opening of the main gas valve, and means controlled by the flow of water through the heater to hold the main gas valve fully open under predetermined conditions of flow.

4. The combination with a water heater, of main gas burners, a pilot burner, a thermostat exposed to the pilot flame, motor operated mechanism for controlling the admission of gas to the main burners, valve means controlled by the draw of water through the heater and adapted to supply gas to said pilot burners, and mechanism controlled by said thermostat which prevents said main gas valve mechanism opening until the pilot flame is burning normally.

5. In a water heater having gas burners, a pilot flame and a water coil, the combination therewith of a controller mechanism comprising a primary controller device which moves responsive and proportionally to the drawing of water, a secondary controller device which moves responsive to the intensity of heat of the pilot flame, valve mechanism for the gas flowing to the burners, and power means, responsive to the joint control of said primary and secondary controller means, which controls the operation of said valve mechanism.

[Claims 6 to 25 not printed in the Gazette.]

1,060,639. SECTIONAL VESTIBULE-DIAPHRAGM. HARRY H. SCHROYER, Chicago, Ill., assignor to The Acme Supply Company, a Corporation of Illinois. Filed Apr. 8, 1912. Serial No. 689,355. (Cl. 105—61.)



1. In a device of the class described outwardly directed U-shaped diaphragms, a plurality of detachable sections comprising each of said diaphragms, and releasable clamps engaging the diaphragms one to the other at the edges thereof.

2. In a railway diaphragm the diaphragm legs comprising strips of fabric arranged side by side, and clamps engaging corresponding edges of said strips together and embracing an inner clamping member arranged between said edges, an outer clamping member to engage over said edges, and bolts extending between said edges and engaging the clamping members and acting to draw the same into gripping engagement with said edges.

3. A diaphragm comprising relatively short strips of fabric arranged to form the diaphragm legs, and secured together with adjacent ends overlapping, and metallic clamps releasably engaging the corresponding edges of said short diaphragm sections and serving to stiffen the same.

4. A sectional diaphragm embracing vertical sections of fabric, each comprising a plurality of relatively short pieces arranged with the lower end of each upper section overlapping the adjacent end of a lower section and detachably engaged thereto, said sectional diaphragms arranged with outer ends releasably attached to the respective face plates, clamping and stiffening means embracing an inner clamping member engaged between adjacent edges of said sections, an outer member inclosing said edges and said inner clamping means, and bolts engaged through both and acting to draw the same together.

5. A sectional diaphragm embracing vertical sections of fabric, each comprising a plurality of relatively short pieces arranged with the lower end of each upper section overlapping the adjacent end of a lower section and detachably engaged thereto, said diaphragm having the outer edges releasably attached to the respective face plates, clamping and stiffening means embracing an inner clamping member engaged between adjacent edges of said sections, an outer member inclosing said edges and said inner clamping means, bolts engaged through said outer and inner members and acting to draw the same together, and releasable clamps engaging the adjacent and corresponding edges of said vertical sections together.

[Claims 6 to 11 not printed in the Gazette.]

1,060,640. MANUFACTURE OF NITROGEN COMPOUNDS OF SILICON AND ALUMINIUM. OTTOKAR SERPEK, Paris, France, assignor to Societe Generale des Nitrures, Paris, France. Filed Nov. 9, 1911. Serial No. 659,413. (Cl. 23—13.)

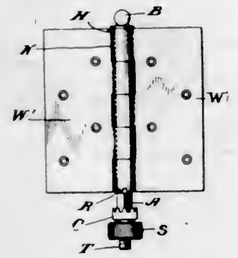
1. A process for the manufacture of nitrogen compounds of silicon and aluminium from bodies containing silica and alumina in combination, consisting in subjecting the bodies with carbon to the action of a current of nitrogen, first at a temperature below 1500° to 1600° C. to form silicon nitrid and then at a higher temperature to form aluminium nitrid.

2. A process for the manufacture of nitrogen compounds of silicon and aluminium, comprising the mixture with carbon of a body containing silica and alumina, heating said mixture for a suitable length of time in a current of nitrogen free from oxygen at a temperature lower than the volatilization point of silica, and then heating said mixture in a current of nitrogen at a temperature sufficient for the formation of aluminium nitrid.

3. A process for the manufacture of nitrogen compounds of silicon and aluminium, comprising the mixture with carbon of a body containing silica and alumina, heating said mixture in a current of nitrogen free from oxygen at a temperature lower than the volatilization-point of silica for a sufficient time to cause transformation of the silica into nitrid, and then continuing the treatment at a higher temperature to the point of rapid formation of aluminium nitrid.

4. A process for the manufacture of nitrogen compounds of silicon and aluminium, comprising the mixture with carbon of a body containing silica and alumina, heating said mixture for a sufficient time in a current of nitrogen free from oxygen at a temperature not exceeding 1300 to 1500° C., and then, heating said mixture in a current of nitrogen at a temperature of about 1600 to 1800° C.

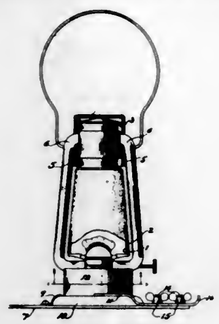
1,060,641. HINGE-LOCK. SIDNEY C. SLADDEN, New York, N. Y. Filed July 31, 1912. Serial No. 712,544. (Cl. 16—110.)



A hinge lock comprising the plurality of hinge butts, said butts provided with bored knuckles, the exposed side of one of said knuckles at the edge of one of said butts having teeth extended axially; a hinge pin adapted for insertion in said bore to pivotally connect said butts, said pin having a head at one end, a squared portion at the other end, the squared portion, and a screw threaded portion adjacent said squared portion; a crown having a squared perforation to fit the squared portion on said pin and provided with crown teeth to engage the teeth on said knuckle; and a screw threaded nut engaging said toothed end of said pin and adapted to move said crown into and out of engagements with the toothed end of said knuckles.

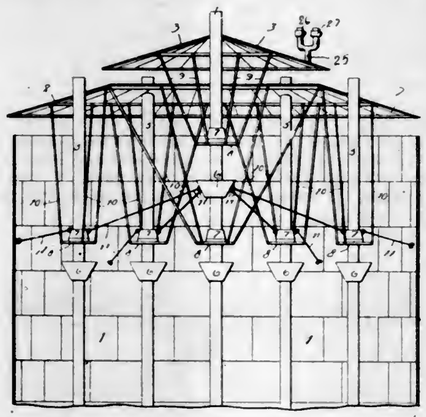
1,060,642. FOOT-WARMER. IRA SMITH, Grayslake, Ill. Filed Mar. 1, 1912. Serial No. 680,857. (Cl. 126—208.)

A lantern provided with a metallic globe covered with asbestos and adapted to be substituted for the ordinary glass globe thereof, and a metallic cap covered with asbestos and adapted to pass over the top of a lantern and



provided in its sides with notches adapted to pass over the side bars of a lantern, substantially as described.

1,060,643. SAFETY OIL-TANK. JAMES H. SMITH, Port Arthur, Tex., assignor of one-third to Joseph W. Burnes, Port Arthur, Tex. Filed May 7, 1912. Serial No. 695,766. (Cl. 220—124.)



1. The combination with a tank for holding oil or the like and having its upper end formed open, of a plurality of separate lid sections normally engaging each other and closing the open end of the tank and adapted to be elevated by different degrees of pressure within said tank, whereby only one lid section will be elevated when the pressure is slight and both lid sections elevated when the pressure is great, means to guide the lid sections during their movement, and means to limit the upward movement of the same.

2. The combination with a tank having its upper end formed open, of a vertically movable lid for normally closing the open end of the tank and formed of a plurality of independently movable lid sections and separate means to limit the upward movement of the sections to hold them in spaced relation to each other when in the uppermost position.

3. The combination with a tank having its upper end formed open, of a vertically movable lid for normally closing the open end of the tank and formed of a plurality of independently vertically movable lid sections, substantially vertically disposed posts upon which the lid sections are longitudinally movably mounted, and means engaging the posts to limit the upward movement of the lid sections.

1,060,644. CABLE-SPLICE. HERBERT S. SNYDER, Fairview, and RAMER METZ, Metz, W. Va. Filed Oct. 10, 1911. Serial No. 653,893. Renewed Nov. 6, 1912. Serial No. 729,884. (Cl. 28—5.)



1. A cable splice having a plurality of friction pieces extending transversely therethrough, each piece consisting of a loose hempen rope-strand.

2. A cable splice having a plurality of independent loose hempen rope-strands extended transversely therethrough, said strands approximating the diameter of the splice in length and constituting friction pieces.

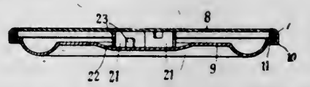
3. A splice for connecting wire cables to Manila ropes, comprising a wire cable having a plurality of loose fiber strands directed transversely therethrough, and a Manila rope having its strands laid around the wire cable, the ends of said loose strands being received between the laid strands of the rope.

4. A splice for connecting wire cables to Manila ropes, comprising a wire cable having a plurality of loose fiber strands of greater length than the diameter of the rope directed transversely therethrough, and a Manila rope having its strands laid around the wire cable, the ends of said loose strands being bound between adjacent laid strands of the rope.

5. A splice for connecting wire cables to Manila ropes, comprising a wire cable having a plurality of loose fiber strands directed transversely therethrough, fiber strands wound closely upon said cable and having their ends held in fixed position, and a Manila rope having its strands laid around the wire cable to bind upon said wound strands, the ends of the loose strands being received between adjacent laid strands and projecting outward beyond the rope's surface.

[Claims 6 to 8 not printed in the Gazette.]

1,060,645. STOVE LID OR COVER. DAVID W. SOWERS, Buffalo, N. Y. Filed Dec. 23, 1907. Serial No. 407,811. (Cl. 126—220.)



1. A device of the class described; comprising a level upper plate member; and a lower plate member having a locking portion and being provided with a torus and a dished center to form air containing spaces between said plates, the rim of said upper member being formed around the locking portion of said lower member; substantially as described.

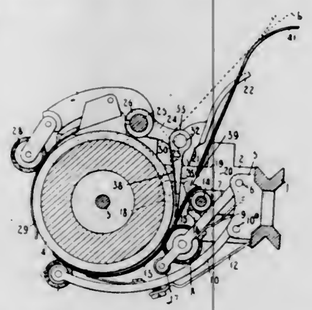
2. A device of the class described; comprising an upper member and a lower member formed together at their peripheries, one of said members having a torus opening inwardly and a dished center connected by grooves, and the other member having an aperture in communication with said torus to permit entrance of outer air, said latter member having an upright, peripheral flange terminating in a seating edge, said flange being engaged with the periphery of said lower member; substantially as described.

3. A device of the class described; comprising a top member and a bottom member secured together at their edges, and having their central portions arranged at a distance from each other with an intervening space in the form of a torus near the periphery of said device, for circulation of air; said top member having a plurality of widely separated openings to give access for air to said space and to promote circulation of air therethrough.

4. A device of the class described; comprising a bottom member provided with a peripheral, integral flange inclined downwardly and inwardly relatively to the body of said member; and a top member provided with an integral

downwardly directed retaining portion having a reëntrant flange at its lower extremity to form a seating edge, said downwardly extending portion embracing said flange of said bottom member and serving to hold said top and bottom members in assembled relation; substantially as described.

1,060,646. TYPE-WRITING MACHINE. HERBERT H. STEELE, Marcellus, N. Y., assignor to The Monarch Typewriter Company, Syracuse, N. Y., a Corporation of New York. Filed Mar. 25, 1910. Serial No. 551,424. (Cl. 197—128.)



1. In a typewriting machine, the combination of a platen, paper feeding means coöperative with both a narrow work sheet and a wider work sheet, said work sheets being superposed one on the other, a paper clamp operative against the narrow sheet only to clamp it against the platen to impede turning movement thereof and tend to prevent consequent advance of the paper, and connections between said paper clamp and said paper feeding means.

2. In a typewriting machine, the combination of a platen, paper feeding means, a paper clamp, and devices connected with said means for moving said paper clamp into operation, said clamp being restored to normal inoperative position by gravity.

3. In a typewriting machine, the combination of a platen, a paper finger contrivance comprising a paper finger coöperative with the platen at one side thereof to feed paper, and a paper clamp carried by said paper finger contrivance, said paper clamp operating at the opposite side of the platen from said paper finger to prevent paper from being fed or displaced relatively to the platen.

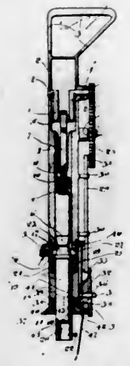
4. In a typewriting machine, the combination of a platen, a paper finger contrivance coöperative with the platen at the front side thereof to feed paper, and a paper clamp carried by said contrivance and coöperative with said platen at the rear side thereof to prevent paper from being fed or displaced relatively to the platen.

5. In a typewriting machine, the combination of a platen carrier, a platen thereon, a paper finger rod supported over the platen, a paper finger contrivance adjustable along said platen and coöperative with the front face of the platen to clamp paper and prevent it from being displaced relatively to the platen, and a paper clamp pivoted to said contrivance and coöperative with the platen at the rear side thereof.

[Claims 6 and 7 not printed in the Gazette.]

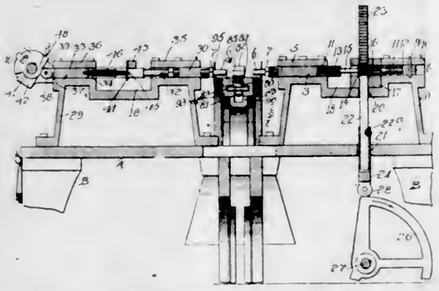
1,060,647. CONCRETE-DRILL. FREDERICK J. STEINBACH, Chicago, Ill. Filed May 17, 1911. Serial No. 627,717. (Cl. 125—10.)

1. In a device of the class described, a barrel, a tool holder mounted for reciprocation in said barrel, means for imparting a blow to said tool holder, a beveled gear rotatably mounted on the end of said barrel and in splined engagement with said tool holder, a second beveled gear mounted upon said barrel but in mesh with the last mentioned gear, a rod mounted for reciprocation and on said barrel and operated synchronously with said blow imparting means, and a ratchet connection between said second beveled gear and the adjacent end of said rod, substantially as described.



2. In a device of the class described, a barrel, a beveled gear at the end of said barrel provided with a hub having a peripheral groove, a pair of semicircular bands secured to the end of said barrel and each provided with an inturned flange engaging in said groove, a tool holder mounted for reciprocation in the end of said barrel and extending through said gear, a splined connection between said gear and said tool holder, means for intermittently turning said gear, substantially as described.

1,060,648. NUT-CRACKING MACHINE. TADDEO C. SUZZI, Chicago, Ill., assignor, by mesne assignments, to United Fig & Date Co., a Copartnership consisting of Peter Costa, Louis Ginocchio, and Anton M. Meyer, Chicago, Ill. Filed Apr. 4, 1910. Serial No. 553,336. (Cl. 146—3.)



1. In a nut cracking machine, mechanism for imparting indeterminate thrust movement to a cracking plunger, comprising a threaded rotatable member having threaded engagement with the plunger at one end and engaging a rigid part of the frame of the machine at its other end, a gear pinion on said plunger between the ends thereof, and a reciprocable rack-bar meshing with said pinion for rotating said threaded member.

2. In a nut cracking machine, the combination with a rigid part of the frame and a reciprocable plunger, of mechanism for imparting indeterminate thrust movement to said plunger in one direction relatively to said frame, comprising a rotatable threaded member having threaded engagement with at least one of said parts, a gear pinion thereon, and a rack-bar meshing with said pinion.

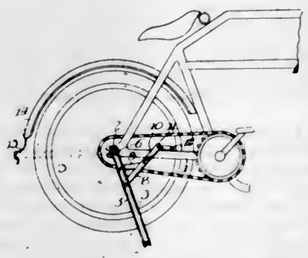
3. In a nut cracking machine, the combination with a rigid part of the frame and a reciprocable plunger, of mechanism for imparting indeterminate thrust movement to said plunger in one direction relatively to said frame, comprising a rotatable threaded member having threaded engagement with at least one of said parts, a gear pinion thereon, and a rack-bar meshing with said pinion and adapted to be moved by gravity to rotate said threaded member in one direction, and power actuated means on the frame of the machine for restoring said rack-bar to its normal position after each movement thereof by gravity.

4. In a nut cracking machine, the combination with a rigid part of the frame and a reciprocable plunger, of mechanism for imparting indeterminate thrust movement to said plunger in one direction relatively to said frame comprising a rotatable member equipped with right and left threads respectively at opposite ends and having threaded engagement with said plunger and said rigid part of said frame, a pinion rigid with said rotatable member, and a rack-bar meshing with said pinion.

5. In a nut cracking machine, the combination with a rigid part of the frame and a reciprocable plunger, of mechanism for imparting indeterminate thrust movement to said plunger in one direction relatively to said frame comprising a rotatable member equipped with right and left threads respectively at opposite ends and having threaded engagement with said plunger and said rigid part of said frame, a pinion rigid with said rotatable member, a rack-bar meshing with said pinion and adapted to be moved by gravity to rotate said threaded member in one direction, and power actuated means on the frame of the machine for restoring said rack-bar to its normal position after each movement thereof by gravity.

[Claims 6 to 23 not printed in the Gazette.]

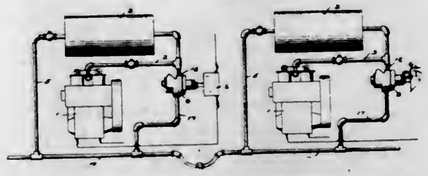
1,060,649. SUPPORT AND LOCK FOR CYCLES. JOHN J. TOBIN, Chicago, Ill., assignor to Mend Cycle Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 12, 1912. Serial No. 714,530. (Cl. 208—75.)



1. The combination with a wheeled vehicle having a horizontally disposed member, of a stand for said vehicle comprising a substantially U-shaped frame the upper ends of the arms of which are pivotally connected to said vehicle, brackets projecting from said arms having their upper ends bifurcated and extending above said horizontally disposed vehicle member and in which said vehicle member is seated, and means connecting the ends of said bifurcations above said vehicle member that lock said stand to said vehicle.

2. The combination with a wheeled vehicle having a horizontally disposed member, of a stand for said vehicle comprising a substantially U-shaped frame the upper ends of the arms of which are pivotally connected to said vehicle, brackets projecting from said arms each consisting of an upwardly inclined bar having its lower end secured to one of said arms and a tie-bar connecting said bar to said arm having its outer portion bent parallel with and secured to said bar, the outer ends of said inclined bar and tie-bar bent away from each other and forming bifurcations that extend above said horizontally disposed vehicle member and in which said vehicle member is seated, and removable means connecting the ends of said bifurcations above said vehicle member that lock said stand to said vehicle.

1,060,650. DIFFERENTIAL-PRESSURE GOVERNOR FOR PUMPS. WALTER V. TURNER, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 16, 1907. Serial No. 393,020. (Cl. 230—24.)



1. A pressure governor comprising a controlling device, a regulating mechanism, subject to opposing pressures of the pump and a spring, for governing the action of said controlling device, and an abutment, subject to the opposing pressures of different pumps and a spring, normally opposing said regulating mechanism spring, said abutment being actuated by an increase in pressure from one pump to counteract the effect of said differential spring.

2. A pressure governor comprising a controlling device, a regulating mechanism comprising an abutment, subject to the opposing pressures of the pump and an adjustable spring, for governing the action of said controlling device, a yielding resistance means opposing said regulating spring, and means operated by the opposing pressures from different pumps for acting on said resistance means to cause said regulating means to operate.

3. In a pressure governing apparatus, the combination with an air pump, reservoir, and reservoir pipe line, of a movable abutment, subject to the opposing pressures of the reservoir and an adjustable spring, for controlling said pump and an abutment, subject on one face to the pressure of a spring adapted to oppose the pressure of said adjustable spring, the latter abutment being subject to reservoir line pressure in a direction tending to relieve the adjustable spring of the pressure of said opposing spring.

4. A pressure governing apparatus comprising a controlling device or switch, an abutment subject on one side to the pressure of an adjustable spring and on the opposite side to reservoir pressure and a yielding resistance means, and means subject on opposite sides to pressures from different pumps for opposing said yielding resistance means.

5. In a pressure governing apparatus, the combination with an air pump, reservoir and reservoir pipe line, of a movable abutment subject to the opposing pressures of an adjustable spring and said reservoir, for controlling said pump, and another movable abutment subject to the opposing pressures of the reservoir and pipe line, for varying the pressure on the first mentioned abutment.

[Claims 6 to 9 not printed in the Gazette.]

1,060,651. OZONE-GENERATOR. ANDREW L. VAN PATTEN, Los Angeles, Cal. Filed Aug. 21, 1912. Serial No. 716,188. (Cl. 204—32.)

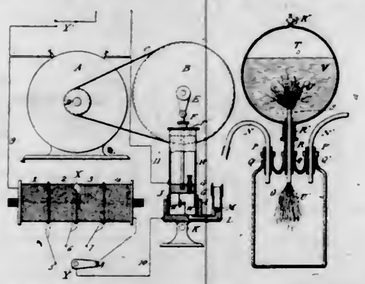
1. In an ozone-generator, an air pump, opposing electrodes within the pump chamber and means for producing high tension sparks between said electrodes in said chamber.

2. In an ozone-generator, an air pump, a fixed and a movable electrode in the pump chamber, and means for producing high tension sparks between said electrodes in said chamber.

3. In an ozone-generator, an air pump, a fixed electrode, a movable electrode secured to and reciprocated with the piston of the pump, and means for producing high tension sparks between said electrodes in a chamber adjacent to said piston.

4. In an ozone generator, an air-pump, a valve controlling the eduction passage of the pump to produce compression of air in the chamber of the pump and means for producing sparks adjacent to the piston at one end of its stroke.

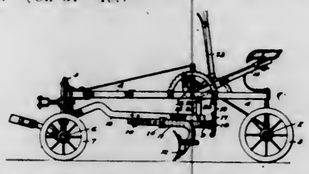
5. In an ozone-generator, an air pump, a valve controlling the eduction passage of the pump to produce com-



pression of air in the chamber of the pump, electrodes within the pump, and means for producing sparks between said electrodes in the pump.

[Claims 6 to 12 not printed in the Gazette.]

1,060,652. GRADING-MACHINE. RAYMOND WATERMAN, Minneapolis, Minn. Filed Mar. 23, 1912. Serial No. 685,870. (Cl. 37—49.)



1. A grading machine comprising a frame having carrying wheels, a ring, a scraper blade carried thereby, links pivotally connected with said frame, and a rocker pivotally connected with said ring and having pivotal connections at its ends with said links.

2. A grading machine comprising a frame having carrying wheels, a ring having a draft connection with said frame, a scraper blade carried thereby, a rocker pivoted at a point intermediate to its ends on said ring, and links pivotally connecting the ends of said rocker with said frame.

3. A grading machine comprising a frame having carrying wheels, a ring having a draft bar connection with said frame, a scraper blade carried by said ring, a rocker pivotally connected with the rear portion of said ring near the center thereof, and rigid links pivotally connecting the ends of said rocker with said frame.

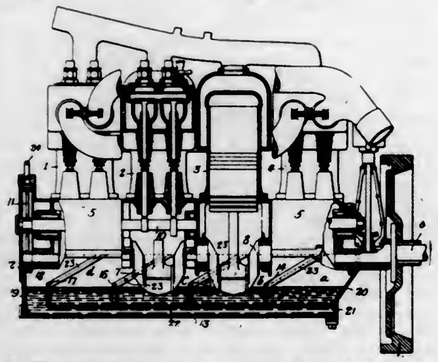
4. A grading machine comprising a frame having carrying wheels, a scraper blade, a rocker having its middle portion pivotally connected with said scraper blade, and links pivotally connecting the ends of said rocker with said frame.

5. A grading machine comprising a frame having carrying wheels, a scraper blade, a rocker having its middle portion pivotally connected with said blade, and means connecting the ends of said rocker with said frame.

1,060,653. OILING SYSTEM FOR ENGINES. ERNEST M. WHITE, Globe, Ariz. Filed June 27, 1911. Serial No. 635,564. (Cl. 184—11.)

1. The combination in an engine oiling system of a crank case provided with a series of crank compartments and a reservoir; means for collecting the oil splashed up by each crank and delivering it into the next adjacent compartment and finally into said reservoir; with a conduit extending from one of the compartments under the other compartments and opening into the bottom of the reservoir.

2. The combination in an engine oiling system of a crank case having a series of oil-containing crank compartments; a reservoir in line with and at substantially the same level as said compartments; a series of conduits for causing oil to be successively passed through said compartments and finally to the reservoir; with a conduit connecting the bottom of the first compartment of the series to the bottom of the reservoir.



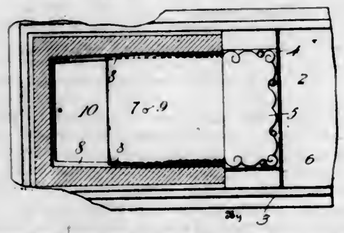
3. The combination in an engine oiling system of a crank case having a series of crank compartments; with means for causing oil to be passed successively through said compartments, the same including a container normally holding a relatively large body of oil out of active circulation; and means for connecting said container to one of the compartments of the series in position to cause the oil in storage to be automatically delivered to said compartment when the engine is inclined.

4. The combination in an engine oiling system of a crank case having a series of compartments; a reservoir at the forward end of the engine at substantially the level of said compartments; a conduit connecting the lower part of said reservoir with the lower part of the compartment at the rear end of the engine; and means for causing oil thrown up by the cranks to flow from one compartment to another and finally to said reservoir; the reservoir being formed to retain a relatively large body of oil out of active circulation when the engine is in a level position.

5. The combination in an engine oiling system of a crank case having a series of compartments; a reservoir at the forward end of the engine; a conduit connecting said reservoir with the compartment at the rear end of the engine, and means for causing oil thrown up by the cranks to flow from one compartment to another and finally to said reservoir; the reservoir and conduit being formed to retain a relatively large body of oil out of active circulation when the engine is in a level position and mounted to deliver said oil to the compartments when the engine is longitudinally inclined.

[Claim 6 not printed in the Gazette.]

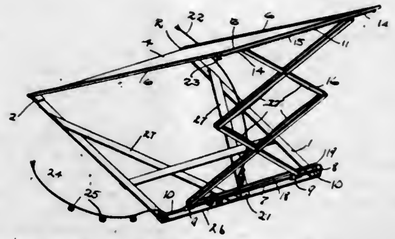
1,060,654. CASKET-TOP. HENRY ALLEN WISE, Rockwell, N. C., assignor to Rockwell Furniture Company, Rockwell, N. C., a Corporation of North Carolina. Filed Sept. 13, 1911. Serial No. 649,179. (Cl. 27—14.)



A cover for burial cases, including a frame whose sides are formed with inclined grooves which taper in their

vertical width, being wider vertically toward the rear end of the casket cover than at the front end, the opposite grooves also having a convergence toward each other in a direction toward the front end of the casket cover, a head section having its lateral edges slidably engaging within said grooves and which edges converge toward each other to a lesser degree than the converging grooves in the frame, so that the head section has a lateral wedging engagement within and between the said grooves in the frame.

1,060,655. BODY-REST. GEORGE WOOD, Cleveland, Ohio. Filed July 17, 1912. Serial No. 709,870. (Cl. 5—43.)



1. In a device of the character described, the combination of a base; a support hinged to the base; an extensible member disposed between the base and support; a spring tending to extend said member; means operable by movement of said member adapted in a plurality of positions of the member to restrain its contraction; and means for releasing said restraining means.

2. In a device of the character described, the combination of a base; a support hinged to the base; an extensible member disposed between the base and support; a spring tending to extend said member; a bar provided with a plurality of teeth; a projection, said bar and projection being relatively movable by movement of said member, said projection being normally in engagement with one of said teeth and adapted to restrain contraction of said member; and means for disengaging the tooth and projection.

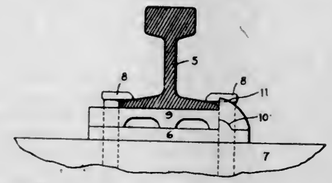
3. In a device of the character described, the combination of a base; a support hinged to the base; an extensible member disposed between the base and support; a spring tending to extend said member; a bar provided with a plurality of teeth, said bar being movable by movement of said member; a projection normally engaging one of said teeth and adapted to restrain contraction, but not extension, of said member; and means for disengaging the tooth and projection.

4. In a device of the character described, the combination of a base; a support hinged to the base; a lazy-tong slidably connected at its opposite ends to the support and the base; a spring tending to extend said lazy-tong; a bar secured to said lazy-tong and movable by movement of the lazy-tong, said bar being provided with a plurality of teeth; a projection normally engaging one of said teeth and adapted to restrain contraction, but not extension, of said lazy-tong; and means for disengaging the tooth and projection.

5. In a device of the character described, the combination of a base; a support hinged at one end to the base; a transverse rod secured to the support near the opposite end; a second transverse rod secured to the base near its corresponding end; two blocks slidable on the first rod; two blocks slidable on the second rod; a lazy-tong secured at its ends to said blocks; a spring tending to extend said lazy-tong; a bar pivoted at one end to one of the blocks on the second rod and provided near its opposite end with a plurality of teeth; a pin secured to the other block on the second rod and normally engaging one of said teeth and adapted to restrain contraction, but not extension, of said lazy-tong; and a trip adapted to raise said bar to disengage said tooth and said pin.

[Claim 6 not printed in the Gazette.]

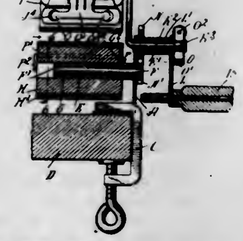
1,060,656. RAIL-SHIM. HOWARD C. WOODBRIDGE, Rochester, N. Y., assignor of one-third to Michael G. McInerney and one-third to John P. Reynolds, Rochester, N. Y. Filed Mar. 5, 1913. Serial No. 752,192. (Cl. 238—2.)



1. A rail-shim adapted to be introduced between a tie-plate and the base of a rail, the shim having, on its lower surface, a shoulder adapted to abut against the flange of the tie-plate, and, on its upper surface, a projection with a rail-engaging surface which lies in the same vertical plane as said shoulder.

2. A rail-shim adapted to be introduced between a tie-plate and the base of a rail, the shim having, on its lower surface, a recess shorter than the shim and adapted to receive the flange of the tie-plate, and, on its upper surface, an abutment having a rail-engaging surface which lies in the same vertical plane as the inner surface of the flange.

1,060,657. RAZOR-BLADE SHARPENER. CHRISTIAN ALTER, New York, N. Y. Filed Feb. 16, 1912. Serial No. 677,901. (Cl. 51—16.)

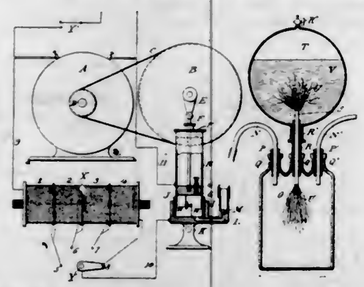


1. A razor blade sharpener, comprising a revoluble sharpening wheel, a swing arm, a blade holder on the said swing arm for holding a razor blade in peripheral engagement with the said wheel, and actuating means frictionally connected with the said swing arm and positively connected with the said sharpening wheel to rotate the latter and to impart a swinging motion to the said swing arm to engage either side of the cutting edge of the blade with the peripheral face of the said wheel.

2. A razor blade sharpener, comprising a revoluble sharpening wheel, a swing arm having a member approximately parallel to the axis of the said wheel, a blade holder on the said swing arm member and adapted to hold a blade in engagement with the peripheral face of the said wheel, a manually-controlled gearing for rotating the said wheel, and a friction drive connected with the said gearing and mounted on the said swing arm to impart a swinging motion to the latter to engage either side of the cutting edge of the blade with the peripheral face of the said wheel.

3. A razor blade sharpener, comprising a revoluble sharpening wheel, a swing arm having a member approximately parallel to the axis of the said wheel, a blade holder on the said swing arm member and adapted to hold a blade in engagement with the peripheral face of the said wheel, a crank arm mounted to turn loosely on the pivot of the said swing arm, gear wheels connecting

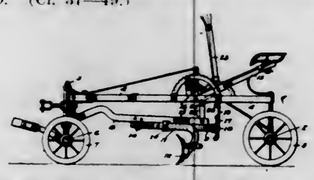
5. In an ozone-generator, an air pump, a valve controlling the eduction passage of the pump to produce com-



pression of air in the chamber of the pump, electrodes within the pump, and means for producing sparks between said electrodes in the pump.

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1. A grading machine comprising a frame having carrying wheels, a ring, a scraper blade carried thereby, links pivotally connected with said frame, and a rocker pivotally connected with said ring and having pivotal connections at its ends with said links.

2. A grading machine comprising a frame having carrying wheels, a ring having a draft connection with said frame, a scraper blade carried thereby, a rocker pivoted at a point intermediate to its ends on said ring, and links pivotally connecting the ends of said rocker with said frame.

3. A grading machine comprising a frame having carrying wheels, a ring having a draft bar connection with said frame, a scraper blade carried by said ring, a rocker pivotally connected with the rear portion of said ring near the center thereof, and rigid links pivotally connecting the ends of said rocker with said frame.

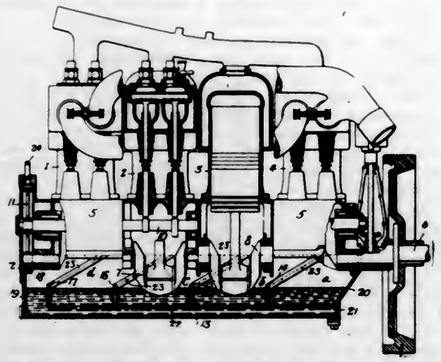
4. A grading machine comprising a frame having carrying wheels, a scraper blade, a rocker having its middle portion pivotally connected with said scraper blade, and links pivotally connecting the ends of said rocker with said frame.

5. A grading machine comprising a frame having carrying wheels, a scraper blade, a rocker having its middle portion pivotally connected with said blade, and means connecting the ends of said rocker with said frame.

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2. The combination in an engine oiling system of a crank case having a series of oil-containing crank compartments; a reservoir in line with and at substantially the same level as said compartments; a series of conduits for causing oil to be successively passed through said compartments and finally to the reservoir; with a conduit connecting the bottom of the first compartment of the series to the bottom of the reservoir.



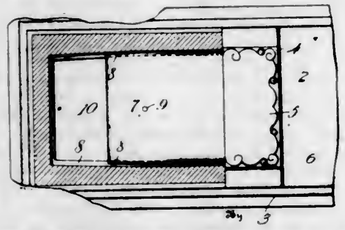
3. The combination in an engine oiling system of a crank case having a series of crank compartments; with means for causing oil to be passed successively through said compartments, the same including a container normally holding a relatively large body of oil out of active circulation; and means for connecting said container to one of the compartments of the series in position to cause the oil in storage to be automatically delivered to said compartment when the engine is inclined.

4. The combination in an engine oiling system of a crank case having a series of compartments; a reservoir at the forward end of the engine at substantially the level of said compartments; a conduit connecting the lower part of said reservoir with the lower part of the compartment at the rear end of the engine; and means for causing oil thrown up by the cranks to flow from one compartment to another and finally to said reservoir; the reservoir being formed to retain a relatively large body of oil out of active circulation when the engine is in a level position.

5. The combination in an engine oiling system of a crank case having a series of compartments; a reservoir at the forward end of the engine; a conduit connecting said reservoir with the compartment at the rear end of the engine, and means for causing oil thrown up by the cranks to flow from one compartment to another and finally to said reservoir; the reservoir and conduit being formed to retain a relatively large body of oil out of active circulation when the engine is in a level position and mounted to deliver said oil to the compartments when the engine is longitudinally inclined.

[Claim 6 not printed in the Gazette.]

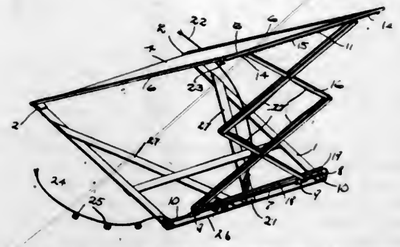
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1. In a device of the character described, the combination of a base; a support hinged to the base; an extensible member disposed between the base and support; a spring tending to extend said member; means operable by movement of said member adapted in a plurality of positions of the member to restrain its contraction; and means for releasing said restraining means.

2. In a device of the character described, the combination of a base; a support hinged to the base; an extensible member disposed between the base and support; a spring tending to extend said member; a bar provided with a plurality of teeth; a projection, said bar and projection being relatively movable by movement of said member, said projection being normally in engagement with one of said teeth and adapted to restrain contraction of said member; and means for disengaging the tooth and projection.

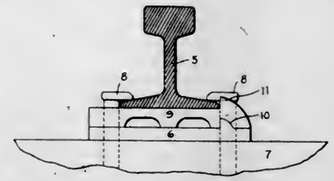
3. In a device of the character described, the combination of a base; a support hinged to the base; an extensible member disposed between the base and support; a spring tending to extend said member; a bar provided with a plurality of teeth, said bar being movable by movement of said member; a projection normally engaging one of said teeth and adapted to restrain contraction, but not extension, of said member; and means for disengaging the tooth and projection.

4. In a device of the character described, the combination of a base; a support hinged to the base; a lazy-tong slidably connected at its opposite ends to the support and the base; a spring tending to extend said lazy-tong; a bar secured to said lazy-tong and movable by movement of the lazy-tong, said bar being provided with a plurality of teeth; a projection normally engaging one of said teeth and adapted to restrain contraction, but not extension, of said lazy-tong; and means for disengaging the tooth and projection.

5. In a device of the character described, the combination of a base; a support hinged at one end to the base; a transverse rod secured to the support near the opposite end; a second transverse rod secured to the base near its corresponding end; two blocks slidable on the first rod; two blocks slidable on the second rod; a lazy-tong secured at its ends to said blocks; a spring tending to extend said lazy-tong; a bar pivoted at one end to one of the blocks on the second rod and provided near its opposite end with a plurality of teeth; a pin secured to the other block on the second rod and normally engaging one of said teeth and adapted to restrain contraction, but not extension, of said lazy-tong; and a trip adapted to raise said bar to disengage said tooth and said pin.

[Claim 6 not printed in the Gazette.]

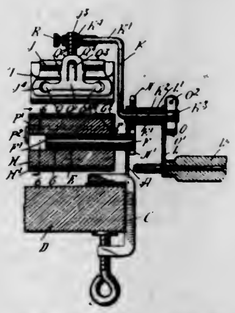
1,060,656. RAIL-SHIM. HOWARD C. WOODBRIDGE, Rochester, N. Y., assignor of one-third to Michael G. McInerney and one-third to John P. Reynolds, Rochester, N. Y. Filed Mar. 5, 1913. Serial No. 752,192. (Cl. 238—2.)



1. A rail-shim adapted to be introduced between a tie-plate and the base of a rail, the shim having, on its lower surface, a shoulder adapted to abut against the flange of the tie-plate, and, on its upper surface, a projection with a rail-engaging surface which lies in the same vertical plane as said shoulder.

2. A rail-shim adapted to be introduced between a tie-plate and the base of a rail, the shim having, on its lower surface, a recess shorter than the shim and adapted to receive the flange of the tie-plate, and, on its upper surface, an abutment having a rail-engaging surface which lies in the same vertical plane as the inner surface of the flange.

1,060,657. RAZOR-BLADE SHARPENER. CHRISTIAN ALTER, New York, N. Y. Filed Feb. 16, 1912. Serial No. 677,901. (Cl. 51—16.)



1. A razor blade sharpener, comprising a revoluble sharpening wheel, a swing arm, a blade holder on the said swing arm for holding a razor blade in peripheral engagement with the said wheel, and actuating means frictionally connected with the said swing arm and positively connected with the said sharpening wheel to rotate the latter and to impart a swinging motion to the said swing arm to engage either side of the cutting edge of the blade with the peripheral face of the said wheel.

2. A razor blade sharpener, comprising a revoluble sharpening wheel, a swing arm having a member approximately parallel to the axis of the said wheel, a blade holder on the said swing arm member and adapted to hold a blade in engagement with the peripheral face of the said wheel, a manually-controlled gearing for rotating the said wheel, and a friction drive connected with the said gearing and mounted on the said swing arm to impart a swinging motion to the latter to engage either side of the cutting edge of the blade with the peripheral face of the said wheel.

3. A razor blade sharpener, comprising a revoluble sharpening wheel, a swing arm having a member approximately parallel to the axis of the said wheel, a blade holder on the said swing arm member and adapted to hold a blade in engagement with the peripheral face of the said wheel, a crank arm mounted to turn loosely on the pivot of the said swing arm, gear wheels connecting

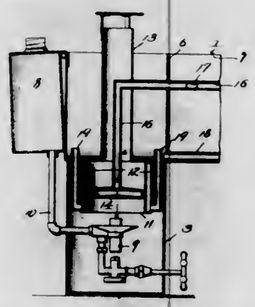
the said crank arm with the said wheel, and a friction device connecting the said crank arm with the pivot of the said swing arm.

4. A razor blade sharpener, comprising a revoluble sharpening wheel, a swing arm having a member extending approximately parallel to the said wheel, a blade holder for holding a razor blade and adjustably held on the said swing arm member, and manually-controlled means for imparting a swinging motion to the said swing arm and rotating the said wheel.

5. A razor blade sharpener, comprising a frame, a shaft journaled in the said frame, a sleeve on the said shaft and adapted to turn with the said shaft, a sharpening wheel removably held on the said sleeve and rotating with the same, a swing arm having parallel members at the ends, one of the said members being the outer free member and parallel to the axis of the said wheel, and the other member being journaled in a bearing on the said frame, a blade holder on the said free member of the swing frame, a crank arm having a hub loose on the bearing for the journal member of the swing arm, gear wheels connecting the hub of the said crank arm with the said shaft, and a friction clamp held on the said crank arm and engaging the said journal member of the swing arm.

[Claims 6 to 10 not printed in the Gazette.]

1,060,658. TANK AND HEATER. JOSEPH AMBRUSTER, Freeport, Ill. Filed June 14, 1911. Serial No. 633,118. (Cl. 126—348.)

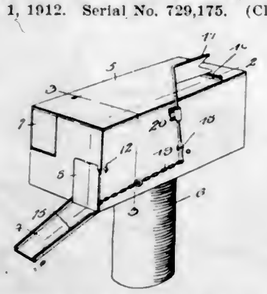


1. A device of the kind described comprising a trough divided into three compartments, means for heating water in one of said end compartments, a pipe conducting heated water from said end compartment through the middle compartment and discharging the same into the other end compartment, said pipe being branched in the middle compartment, and a return pipe extending from the second mentioned end compartment back to the first mentioned end compartment.

2. A device of the kind described comprising a trough divided into middle and end compartments, a cylinder having a water jacket arranged under one of the end compartments, the water jacket communicating with said compartment, a flue for products of combustion extending upwardly through said compartment from said cylinder, a heating device arranged beneath said cylinder, a hollow disk arranged in said cylinder and in communication with the upper portion of the water jacket, a water supply pipe extending from said disk upwardly through a portion of said flue, and thence through the middle compartment to the other end compartment into which it discharges, and a return pipe leading from the last mentioned compartment and discharging into the first mentioned end compartment.

3. A device of the kind described comprising a trough divided into middle and end compartments, supporting legs for said trough, a heating device incased in one of said supporting legs and beneath an end compartment adapted to contain water, means for conveying water from said compartment through the middle compartment and into the opposite end compartment, the middle compartment forming a feeding trough, the said feed being warmed by passage of water through said middle compartment.

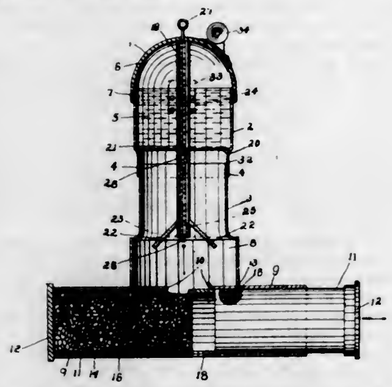
1,060,659. MAIL-BOX. JOHN A. AMMANN, Geneva, Iowa. Filed Nov. 1, 1912. Serial No. 729,175. (Cl. 232—20.)



1. The combination with a mail box, of a pair of doors mounted in the front wall thereof, a common hinge rod for said doors mounted upon the front wall of the mail box, said doors being movable in opposite directions, means normally acting to yieldingly hold the doors in their closed positions, an inclined mail receiving chute mounted within the box and extending beyond one of the doors, said latter door opening outwardly to release the mail for movement in the chute, and means carried by said door to engage the mail and insure its movement when the door is opened.

2. The combination with a mail box, of a pair of doors mounted in the front wall thereof, a common hinge rod for said doors, the doors being located upon opposite sides of the rod to open in opposite directions, a spring bearing upon one of the doors to normally hold said doors closed, an inclined mail discharge chute arranged within the box and extending outwardly beneath one of said doors, said door opening outwardly to release the mail for downward movement in the chute, and means fixed to the inner face of said door to engage the mail in the chute and insure its downward movement when the door is opened.

1,060,660. ACETYLENE-LAMP. JOSEPH ANSON, Madoc, Ontario, Canada, assignor of one-third to William Sleeman and one-third to Thomas Sleeman, Bessemer, Ontario, Canada. Filed Sept. 23, 1912. Serial No. 721,756. 721,756. (Cl. 48—23.)

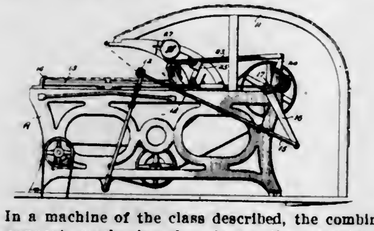


1. In combination in a device of the character described, a gas chamber, a horizontal tubular casing integral therewith and open at both ends and having an opening in the longitudinal center of its upper face communicating with the gas chamber, a gasket slidably mounted in the central portion of the tube, a carbid containing casing adapted to be inserted into one end of the tube and of such length as, in combination with the gasket, to completely close the opening between the tube and the gas chamber.

2. In a device of the character described means for recharging the lamp without extinguishing, comprising; a gas chamber, a horizontal tubular casing integral therewith and open at both ends, and having an opening in its upper face communicating with the gas chamber, a carbid containing casing adapted to be inserted into operative position for generating purposes in one end of the tube, a gasket carried in the tubular casing and adapted to coact with the carbid containing casing to completely cover the opening between the gas chamber and the tubular casing; and a second carbid containing casing identical with the first mentioned casing and adapted to be inserted into the tubular casing from the opposite end thereof when the carbid carried by the first mentioned casing is used and thus force the first casing outwardly by engaging the gasket and forcing it outwardly until the gasket occupies the same relative position to the second mentioned casing as it did to the first mentioned casing.

3. In a device of the character described recharging means, comprising; a gas chamber; a tubular casing carried thereby and communicating therewith, a gasket carried in the tubular casing, a carbid cartridge inserted into one end of the casing and adapted to coact with the gasket to shut off communication between the gas chamber and tubular casing, and a second carbid cartridge identical with the first and adapted to be inserted into the opposite end of the tubular casing and to coact with the gasket to force the first mentioned cartridge outwardly until the gasket and the second cartridge occupy the same relative positions to the gas chamber and to each other, as the first mentioned cartridge and the gasket did.

1,060,661. MACHINE FOR PUTTING LABELS ON DRY GOODS. WENDELL P. ANTHONY, Ridley Park, Pa., assignor to The Eddystone Manufacturing Company, Eddystone, Pa., a Corporation of Pennsylvania. Filed June 9, 1911. Serial No. 632,189. (Cl. 216—33.)



1. In a machine of the class described, the combination of a support, mechanism for placing the material to be stamped on said support, a shaft arranged to rotate in definite relation to said mechanism, intermittent gearing actuated by said shaft, a bar arranged to be moved endwise and oscillated by said gearing, and means carried by said bar for affixing stamps to the material after it has been placed on said support.

2. In a machine of the class described, the combination of a support, mechanism for placing the material to be stamped on said support, a shaft arranged to rotate in definite relation to said mechanism, a bar arranged to be moved endwise and oscillated by said shaft, means on said bar for holding a stamp strip, means for intermittently feeding the stamp strip, and means for severing stamps from the strip and affixing them to the material after the latter has been placed on said support.

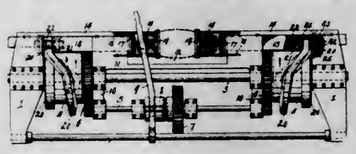
3. In a machine of the class described, the combination of a support, mechanism for placing the material to be stamped on said support, a shaft arranged to rotate in definite relation to said mechanism, a bar arranged to have one end move in a circular path, a link mounted on a fixed pivot and pivotally connected with the bar intermediate the ends of the latter, and means on the other end of said bar for affixing stamps to the material after it has been placed on said support.

4. In a machine of the class described, the combination of a support, mechanism for placing the material to be stamped on said support, a shaft, intermittent gearing driven by said shaft, a bar arranged to have one end moved in a circular path by said gearing, means for causing an intermediate point on said bar to move in a curved path, and means on the other end of said bar for affixing stamps to the material after it has been placed on said support.

5. In a machine of the class described, the combination of a support, mechanism for placing the material to be stamped on said support, a shaft, a bar, means operated by said shaft for moving one end of said bar in a circular path, means adapted to move an intermediate point on said bar in a fixed path, means on the other end of said bar for holding a stamp strip, means carried by the bar for feeding the stamp strip, stationary means for moistening the stamps, and means pivotally connected with said bar for pressing the stamps on the material.

[Claims 6 to 10 not printed in the Gazette.]

1,060,662. POWER-PRESS. LEONHARD BAUROTH, Toledo, Ohio, assignor to Charles H. Wacker, Chicago, Ill. Filed Nov. 13, 1911. Serial No. 660,089. (Cl. 113—38.)



1. In a metal working machine having a reciprocal part, a rotatable member having a circumferentially extending cam-rib, rolls carried by said part and between which said cam-rib works to cause reciprocal movements of the part when the member is rotated, said rib having in succession a neutral portion, a cam portion which, when in coaction with said rolls, causes a rapid and then a slower movement of the part in the same direction and then a comparatively rapid return of the part to neutral position.

2. In a metal working machine having a reciprocal part, a rotatable member having a cam portion for coacting with said part to impart predetermined reciprocal movements thereto when the member is rotated, and means acting on a portion of said member in opposition to said part to resist the thrust in one direction of the part thereon.

3. In a metal working machine having a reciprocal part, a rotatable member having a circumferentially extending cam-rib and an annular thrust surface, said rib being adapted to act on said part to impart reciprocal movements thereto when the member is rotated, and a thrust roll working on the thrust surface of said member to resist the thrust of said part in one direction on said member.

4. In combination, a frame, a part reciprocally movable in said frame, a rotatable member having a circumferentially extending cam-rib for acting on said part to impart reciprocal movements thereto and having an annular thrust surface, and a roll anchored to the frame and working on said thrust surface to oppose the thrust of said part in one direction on the member.

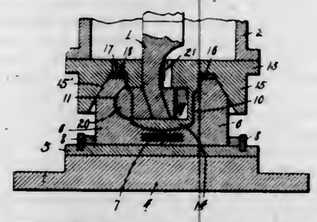
5. In a metal working machine having a plurality of reciprocal parts, rotatable means having endless cam surfaces for acting on respective ones of said parts to impart predetermined reciprocal movements thereto when said means is rotated, and means opposed to each of said parts for resisting the thrust thereof in one direction of its movement upon said rotatable means.

[Claims 6 to 16 not printed in the Gazette.]

1,060,663. SHEET-METAL-WORKING MACHINE. LEONHARD BAUROTH, Toledo, Ohio, assignor to Charles H. Wacker, Chicago, Ill. Filed June 14, 1912. Serial No. 703,700. (Cl. 113—48.)

1. A shaping mechanism having in combination a work-holding matrix, means for holding an article firmly

in said matrix and having a relatively movable die part, and means for acting on said part to move it outward relative to said article-holding means to coöperate with the matrix in forming a protuberant part on a side of the article and then to retract such part.



2. An article-shaping mechanism having in combination a work-holding matrix provided with an interior side cavity, means for coöperating with the matrix to firmly hold work therein, a die carried by said means for transverse reciprocatory movements, and a member movable to act on said die to force it into said matrix cavity and then to retract it.

3. An article-shaping mechanism having a matrix, means movable to coöperate with the matrix to hold an article therein, said means having a part for fitting into the matrix, a die carried by such part for transverse reciprocatory movements relative thereto, and a plunger movable relative to said means and adapted when moved in one direction to impart work-shaping movements to the die and when moved in the other direction to retract the die from work-shaping position.

4. An article-shaping mechanism having a matrix provided on its interior with a laterally projecting cavity, a blank-holder having a part for fitting into an article blank carried by the matrix, means carried by said part for coöperating with said matrix cavity to form a lateral protuberant part on the blank, and reciprocatory means operable to impart work-shaping and retracting movements to the means carried by said part.

5. A mechanism of the class described having a work-holding matrix, a member for coöperating with said matrix to hold work therein, said member having a part for fitting into the work, a die carried by said part for lateral reciprocal movements relative thereto, and means movable at an angle to the work-shaping movements of said die and adapted to act on said die to move the same to coöperate with the matrix to form a lateral protuberant part on the work and then to retract it within its carrying part.

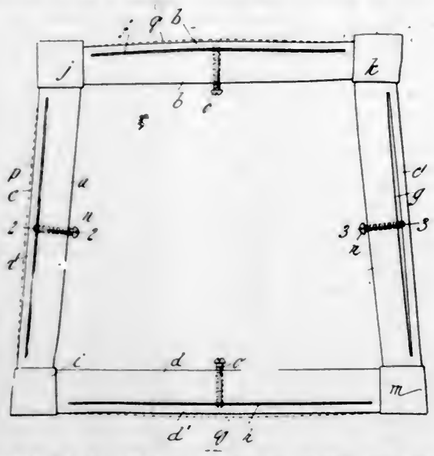
[Claims 6 to 14 not printed in the Gazette.]

1,060,664. CHAIR-SEAT FRAME. FREDERICK BEAUDRY, Springfield, Mass. Filed May 7, 1912. Serial No. 695,662. (Cl. 155—4.)

1. In a chair bottom, the combination, a frame-work which is composed of side and end members secured together, each of the members being formed with a slit extending substantially their entire length, and close to the outer edges of said members to form a thin flexible portion of the frame or members, and means extending across the slit to force the thin flexible outer edge portions of said members of the frame outwardly when it is desired to tighten the material composing the bottom part of the chair.

2. As an improvement in chair construction, comprising a frame-work, the side and end members of which are slitted near one edge to provide a resilient or thinned portion of the frame members, screws located in the main portion of the seat members and engaging the resilient portion, whereby said portion may be forced outwardly into a bowed shape to increase the tension of the material that is secured to the outer edges of the frame and composing the chair seat member proper.

3. As an improvement in chair construction, the frame-work of which is constructed to increase the tension of the material composing the seat portion and that is attached to the outer edges of the frame work, said frame-work comprising members having a slit therein near its outer edges to form a resilient portion of the frame-work, screws



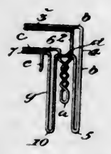
arranged at an angle to the plane of the seat frame and engaging the resilient portion thereof to force the same outward into a bowed position, whereby the bottom material of the chair may be tightened.

1,060,665. CATHETER. CHARLES W. BELL, Strong, Me., assignor of one-half to John S. Harlow, Dixfield, Me. Filed July 29, 1910. Serial No. 574,515. (Cl. 128—28.)



The improved catheter comprising a tube of flexible material having a solid end and an orifice in the side near said end, and having in the wall thereof a substantially straight longitudinal rib, said rib terminating within said solid end and being of material capable of taking a given set and thereafter adhering to the same.

1,060,666. PENCIL, BOOK, AND CARD HOLDER. EDWIN M. CHANDLER. Salt Lake City, Utah. Filed Nov. 20, 1912. Serial No. 732,464. (Cl. 24—3.)



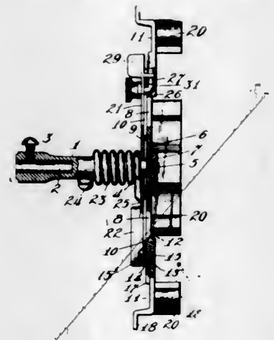
1. A device of the class described consisting of a continuous piece of spring metal bent and twisted near its center to form a pocket engaging clip; thence extended at right angles to form one side of a book holding clamp and two circular alined pencil loops; thence bent at right angles to form the other portion of said book holding clamp; and the bottom portion of said book holding clamp bent upon itself to form a card holding clamp.

2. In a device of the class described the combination of a piece of metal bent to form a pocket engaging member; thence outwardly extended to form one portion of a book holding member; thence bent to form two spaced apart alined pencil holding loops and by means of another bend to form the other side of said book holding clamp; and a card holding clamp formed by bending the bottom portion of said book holding clamp upon itself.

3. A clip for pens, pencils and books composed of a continuous wire bent and twisted at its center to form a pocket clip; thence extended and bent at right angles thereto to form two horizontal circular pencil holding loops; one portion of said wire then bent to form a substantially vertical pencil clamp; thence both wires extended and bent to form one portion of a book clamp; thence both ends of said wire bent upon themselves to form a card holding clamp.

4. A device of the class described consisting of a continuous piece of wire bent and twisted near its center to form a pocket engaging clip, thence bent at practically right angles thereto and spaced apart to form one side of a book holding clamp; thence bent to form two circular spiral-like alined pencil loops; thence bent at right angles and parallel with each other to form the other portion of said book holding clamp; then bent upon themselves to form a card holding clamp.

1,060,667. HAT-CHUCK. JOHN H. CHENOWETH, Chicago, Ill. Filed Apr. 19, 1909, Serial No. 490,685. Renewed Sept. 30, 1912. Serial No. 723,239. (Cl. 223—21.)



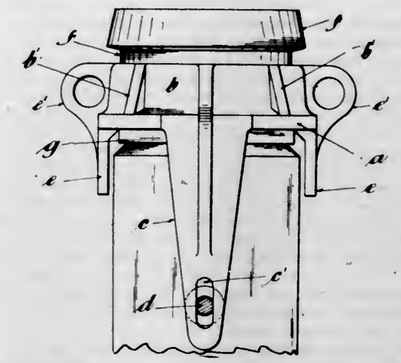
1. In a hat chuck, the combination with a supporting spindle, of a spider member carried thereby and provided with a plurality of angularly disposed arms, reciprocatory gripper members carried by said arms, a wrist plate movably mounted on said spindle, links operatively connecting the gripper members with the wrist plate whereby the latter may be adjusted to any desired position, a spring tending to force said gripper members outwardly, and means for positively locking said gripper members in any adjusted position.

2. In a hat chuck, the combination with a main shaft, of a spider connected thereto and provided with outwardly extending arms, a gripper member reciprocable on each arm, a wrist plate pivoted to said shaft and connected with each of said members, a spring tending to rotate said wrist plate to draw the members inwardly, means for moving said wrist plate to carry the members outwardly, and means for locking said wrist plate in adjusted position.

3. In a hat chuck, the combination with a shaft, of a spider frame carried thereon, a gripper member reciprocable on each arm of said spider frame, a wrist plate pivoted on said shaft and connected with each of said members, a torsion spring secured to said shaft and said wrist plate and tending to rotate said wrist plate to draw the members inwardly, means for positively rotating said wrist plate to draw the members inwardly, and means for locking said wrist plate after positive rotation thereof.

4. In a hat chuck, the combination with a shaft, of a spider frame carried thereon, a gripper member reciprocable on each arm of said spider frame, a wrist plate pivoted on said shaft and connected with each of said members, a torsion spring secured to said shaft and said wrist plate and tending to rotate said wrist plate to draw the members inwardly, means for positively rotating said wrist plate to draw the members inwardly, an arm extending from said wrist plate, a segment carried by the spider, and locking mechanism coöperating with said arm and segment to lock said wrist plate after rotation thereof to adjust the gripper members inwardly.

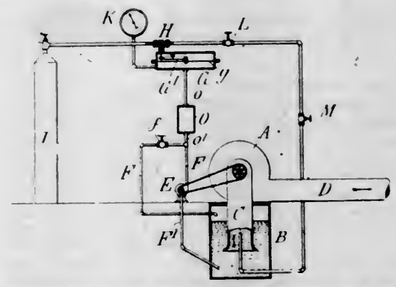
1,060,668. HELMET FOR USE IN THE DRIVING OF REINFORCED-CONCRETE PILES. GERVASE WATSON CRAWSHAW, Leeds, England. Filed July 6, 1912. Serial No. 707,988. (Cl. 61—37.)



1. A helmet for use in driving reinforced concrete piles, comprising a stout steel plate, arms and lugs depending from said plate and designed to lie alongside two diametrically opposite sides of the pile, an annular flange rising from the top face of said plate, and forming a socket, a short wooden "dolly" or block fitting the said socket, the "dolly" and flange being tapered substantially as set forth.

2. A helmet for use in driving reinforced concrete piles, comprising a stout steel plate with two depending arms at points diametrically opposite each other, and each arm slotted near its free end, two shorter arms or lugs depending from said plate and loops or rings for enabling the helmet to be lifted on to and off from the pile, or for lifting, slinging and pitching the pile in position with the helmet in position ready for driving, the plate, arms, flanges and loops being all formed solid with each other, as set forth.

1,060,669. APPARATUS FOR PURIFYING WATER. CARL ROGER DARNALL, Washington, D. C. Filed Dec. 4, 1912. Serial No. 734,914. (Cl. 210—1.)



1. An apparatus for purifying liquids comprising means whereby the liquid to be purified is caused to flow in a given direction, means for introducing into the liquid a purifying agent, including a pressure regulator and suit-

able valves for controlling the supply of said agent to the liquid, and means operated synchronously with said first named means, whereby any variation in the flow of the liquid will cause a variation in the supply of the purifying agent in the same proportion.

2. An apparatus for purifying liquids comprising means whereby the liquid to be purified is caused to flow in a given direction, valve-controlled means for introducing into the liquid minute quantities of a purifying agent, including a pressure regulator, and means actuated by and synchronously with said first named means for varying the pressure in said regulator, whereby any variation in the quantity of liquid under treatment will effect a proportionate decrease or increase in the quantity of the purifying agent introduced.

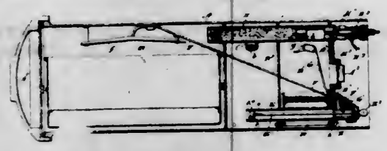
3. An apparatus for purifying liquids comprising a source of liquid supply, a pump by which the liquid is caused to flow in a given direction, a gas reservoir, a conduit leading from said gas reservoir to the liquid to be treated, a pressure regulator in said conduit, an auxiliary pump actuated by and synchronously with the main liquid pump, an air chamber interposed between and communicating with said pressure regulator and the discharge from said auxiliary pump, and suitable valves in said conduit and discharge, whereby any variation in the quantity of liquid flowing from the pump will cause a corresponding variation in the quantity of gas introduced into the liquid.

4. In combination, a source of liquid supply, a conduit through which the liquid is caused to flow, a gas tank and valve-controlled pipes leading from said tank into the flowing liquid, including a pressure regulator, and means whereby any variation in the quantity of liquid flowing will vary the quantity of gas introduced therein in the same proportion.

5. In combination, a pump for drawing water from a source of supply, an auxiliary pump actuated by and synchronously with the first named pump and having a discharge pipe with a valve therein for controlling the discharge therefrom, a gas tank, valved pipes leading from said gas tank into the water drawn through said pump, a pressure regulator in communication with said pipes, an air chamber in communication with said auxiliary pump and said pressure regulator, and means whereby the flow of gas into the water is regulated automatically in such manner that when the quantity of water passing through the pump varies the quantity of gas introduced into the water will vary in the same proportion.

[Claims 6 to 9 not printed in the Gazette.]

1,060,670. ACETYLENE-GAS GENERATOR. GEORGE H. DAVIS, Portland, Me. Filed May 20, 1912. Serial No. 698,527. (Cl. 48—23.)



1. In an acetylene gas generator, a water chamber, a main gas generating chamber, an auxiliary gas generating chamber, all of said chambers being closed for the maintenance of a normally high pressure therein, a communication between the water chamber and the gas generating chamber adapted to alternately feed the water from the water chamber to the main generating chamber, and gas from the main generating chamber to the water chamber, upon a diminution of the normal pressure in either of said chambers, a valve for closing said communication, a communication between said water chamber and said auxiliary generating chamber adapted to alternately feed water from the water chamber to the auxiliary generating chamber, and gas from the auxiliary generating chamber to the water chamber upon a diminution of the normal pressure in either of said chambers, a valve for closing said last mentioned communication, and an outlet pipe connected to said main generating chamber and to said auxiliary generating chamber.

2. In an acetylene gas generator, a water chamber, a main gas generating chamber, an auxiliary gas generating chamber, all of said chambers being closed for the maintenance of a normally high pressure therein, a communication between the water chamber and the gas generating chamber adapted to alternately feed the water from the water chamber to the main generating chamber and gas from the main generating chamber to the water chamber upon a diminution of the normal pressure in either of said chambers, a valve for closing said communication, a communication between said water chamber and said auxiliary generating chamber adapted to alternately feed water from the water chamber to the auxiliary generating chamber and gas from the auxiliary chamber to the water chamber upon a diminution of the normal pressure in either of said chambers, a valve for closing said last mentioned communication, means associated with said communication for forcing water therethrough from the water chamber, and an outlet pipe connected to said main generating chamber and to said auxiliary generating chamber.

3. In an acetylene gas generator, a water chamber, a main gas generating chamber adapted to contain carbid, an auxiliary generating chamber adapted to contain carbid, all of said chambers being closed for the maintenance of a normally high pressure therein, a valved pipe extending from the lower portion of the water chamber to the upper portion of the main generating chamber, a valved pipe extending from the lower portion of the water chamber to the upper portion of the auxiliary generating chamber, a manually operable pump associated with said pipes for forcing water therethrough from the water chamber, and a gas outlet pipe connected to both of said generating chambers.

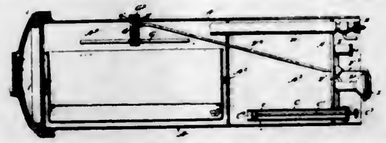
4. In an acetylene gas generator of the character described, a water chamber, a main gas generating chamber adapted to contain carbid, an auxiliary generating chamber adapted to contain carbid, all of said chambers being closed for the maintenance of a normally high pressure therein, a pump cylinder in communication with the water chamber, a pipe connected at its lower end to said pump cylinder and extending into the upper portion of the main generating chamber, a valve in said pipe, a second pipe connected at its lower end to said pump cylinder and extending into the upper portion of said auxiliary generating chamber, a valve in said second pipe, a piston in said pump cylinder, means for actuating said piston, and an outlet pipe connected to said main generating chamber and to said auxiliary generating chamber.

5. In an actylene gas generator, a water chamber, a gas generating chamber adapted to contain carbid, said chambers being closed for the maintenance of a normally high pressure therein, a communication between the water chamber and the gas generating chamber adapted to alternately feed water from the water chamber to the generating chamber, and gas from the generating chamber to the water chamber upon a diminution of the normal pressure in either of said chambers, a safety valve in the water chamber, a communication between the upper portion of the generating chamber and the lower portion of the water chamber, and a check valve in said communication normally held closed by the water in the water chamber.

[Claim 6 not printed in the Gazette.]

1,060,671. ACETYLENE-GAS GENERATOR. GEORGE H. DAVIS, Portland, Me. Filed May 20, 1912. Serial No. 698,528. (Cl. 48—4.)

1. In an acetylene gas generator, a water chamber and a gas generating chamber, said chambers being closed for the maintenance of a normally high pressure therein, a communication between the lower portion of the water chamber and the gas generating chamber, adapted to alternately feed water from the water chamber to the generating chamber and gas from the generating chamber to the water chamber, upon a diminution of the normal pressure in either of said chambers, a valve in said communication, means for normally holding said valve in its open position, and means actuated by the pressure in the generating chamber for closing said valve and means associated with said communication for positively forcing water from the water chamber through said communication into the generating chamber to prime the generator.



2. In an acetylene gas generator, a water chamber and a gas generating chamber, said chambers being closed for the maintenance of a normally high pressure therein, a communication between the lower portion of the water chamber and the generating chamber adapted to alternately feed water from the water chamber to the generating chamber and gas from the generating chamber to the water chamber, upon a diminution of the normal pressure in either of said chambers, a valve in said communication, means for normally holding said valve in its open position, a diaphragm chamber, a diaphragm therein, a connection between said diaphragm and said valve, and a connection between the diaphragm chamber and the generating chamber and means associated with said communication for positively forcing water from the water chamber through said communication into the generating chamber to prime the generator.

3. In an acetylene gas generator, a water chamber and a gas generating chamber, said chambers being closed for the maintenance of a normally high pressure therein, a communication between the lower portion of the water chamber and the gas generating chamber adapted to alternately feed water from the water chamber to the generating chamber and gas from the generating chamber to the water chamber, upon a diminution of the normal pressure in either of said chambers, a valve in said communication, a diaphragm chamber, a diaphragm therein, a valve rod connecting said diaphragm and said valve, a spring for normally holding said valve in its open position, and a pipe connecting the diaphragm chamber with the communication between the water chamber and the generating chamber above the valve therein and means associated with said communication for positively forcing water from the water chamber through said communication into the generating chamber to prime the generator.

4. In an acetylene gas generator, a water chamber and a gas generating chamber, said chambers being closed for the maintenance of a normally high pressure therein, a communication between the lower portion of the water chamber and the gas generating chamber, a normally open valve in said communication, means controlled by the pressure in the gas generating chamber for closing said valve, and means associated with said communication for forcing water from the water chamber through said communication into the generating chamber.

5. In an acetylene gas generator, a water chamber and a gas generating chamber, said chambers being closed for the maintenance therein of a normally high pressure, a communication between the lower portion of the water chamber and the gas generating chamber, a pressure actuated valve in said communication, and means associated with said communication for forcing water from the water chamber through said communication into the generating chamber.

[Claims 6 to 8 not printed in the Gazette.]

1,060,672. SOUND-BOX FOR TALKING-MACHINES. WILBURN N. DENNISON, Merchantville, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Jan. 24, 1907. Serial No. 353,774. (Cl. 181—11.)

1. In a sound box, the combination with a valve seat, of a valve mounted to oscillate with respect to said seat, a stylus connected to said valve, and means to adjust the position of the axis of said valve toward and away from said seat.



2. In a sound box, the combination with a flexible valve, of a stylus bar on which said valve is mounted, a torsional spring forming a pivot for said bar, and laterally adjustable means to clamp said bar to said spring.

3. In a sound box, the combination with a stylus bar, of a torsional spring on which said bar is mounted, mountings for said spring, laterally adjustable means to clamp said mountings to said spring, and means to adjustably clamp said bar to said spring.

4. In a sound box, the combination with a relative stationary member, of a stylus bar, a torsional spring upon which said stylus bar is adjustable, clamping blocks for said spring, means to adjust said blocks laterally with respect to said stationary member, and a valve mounted on said stylus bar.

5. In a sound box, the combination with a stationary member, of a stylus bar, a torsional spring upon which said bar is adjustably mounted, blocks for said spring secured to said stationary member, means to adjust said spring laterally with respect to said stationary member, and a flexible valve mounted on the inner end of said stylus bar.

[Claims 6 to 44 not printed in the Gazette.]

1,060,673. CATALYZER FOR HYDROGENATING OILS AND THE LIKE. CARLETON ELLIS, Montclair, N. J. Filed Jan. 3, 1913. Serial No. 740,054. (Cl. 23—28.)

1. A catalyzer comprising a porous body coated but substantially not impregnated with a metallic catalyzer.

2. A catalyzer comprising a finely-granular substantially porous body coated but substantially not impregnated with a metallic catalizer.

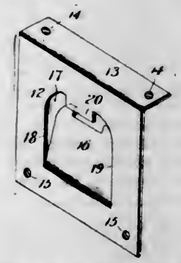
3. A catalyzer comprisipg a finely-granular substantially porous body coated but substantially not impregnated with catalytic nickel material.

4. A catalyzer comprising active charcoal coated but substantially not impregnated with reduced nickel.

5. A catalyzer comprising finely-granular active charcoal coated but substantially not impregnated with catalytic nickel material.

[Claims 6 to 8 not printed in the Gazette.]

1,060,674. BOTTLE-OPENER. OLIVER F. FOSTER, Elmira Heights, N. Y. Filed Oct. 18, 1912. Serial No. 726,555. (Cl. 65—46.)



1. A bottle opener for bottles provided with crown and similar caps, comprising a metal plate, an integral projec-

tion struck from the metal of which the plate is composed and leaving a recess in the plate, and an integral lip on the plate extending into the recess adapted to engage the cap.

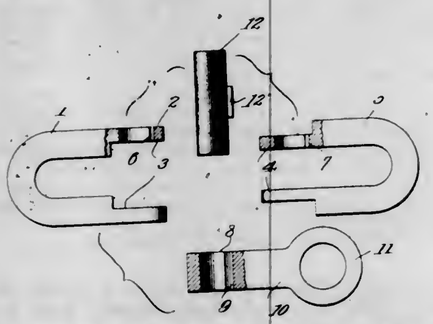
2. A bottle opener for bottles provided with crown and similar caps, comprising a metal plate adapted to be secured to a support, an integral tongue struck from the metal of which the plate is composed, and bent at its attached edge at an angle to the plate whereby a recess is formed in the plate to receive the end of a bottle and its cap and a cap-engaging means is formed on the plate opposite the attached edge of the tongue.

3. A bottle opener for bottles provided with crown and similar caps, comprising a plate adapted to be secured to a support and having a recess therein, a lip extending into the recess and adapted to engage a bottle cap, and a tongue disposed at an angle to the plate and also adapted to engage the cap.

4. A bottle opener for bottles provided with crown and similar caps comprising a metal plate adapted to be mounted on a support and having an integral flange at one end, an integral tongue struck from the metal of which the plate is composed and bent at its attached edge at an angle to the plate whereby a recess is formed in the plate to receive the end of the neck of a bottle and the cap thereon, and a lip integral with the plate and extending into the recess, said lip and tongue being on opposite sides of the recess so that the removal of the cap may be accomplished by engaging the flange or rib of the cap beneath the lip and supporting the opposite side of the cap on the inclined surface of the tongue as a fulcrum.

5. A bottle opener for bottles having crown and similar caps, said opener comprising the combination of a metallic plate having an opening therethrough, a member supported adjacent said opening and disposed at an angle to said plate, said opening being adapted to receive the capped end of a bottle, the said member constituting one engaging means for the cap and the edge of the said opening constituting another engaging means for the cap.

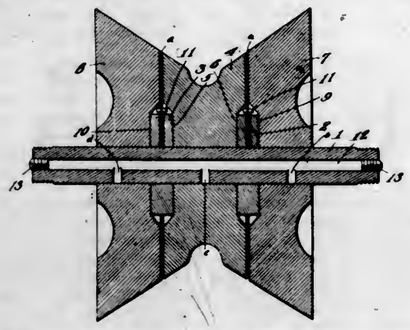
1,060,675. TAG-LINE CLEVIS. JOHN E. GILCHRIST, South Bend, Wash. Filed Sept. 3, 1912. Serial No. 718,312. (Cl. 24—201.)



A clevis including opposed members each having terminal eyes, the eyes of one member lapping the eyes of the other member, a collar insertible between said eyes, one eye of each member having a keyway and there being a keyway in the collar, all of said keyways being adapted to register when the clevis members and collar are out of normal position relative to each other, and a pin seated in the eyes and collar and having a key insertible through the keyways in the eyes and adapted to be seated in the keyway in the collar, the length of said key being equal to the length of the keyway in the collar.

1,060,676. LOGGING OR BUTT CHAIN LEAD-BLOCK. JOHN E. GILCHRIST, South Bend, Wash. Filed Oct. 23, 1912. Serial No. 727,466. (Cl. 57—34.)

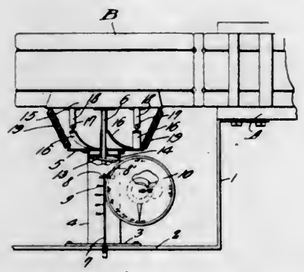
1. A block, including a hanger, a spindle mounted therein, three independently mounted and rotatable sheaves mounted upon the spindle and constituting a rotatable sectional cable guide, and means fixedly secured to the spindle and between the sheaves for maintaining the sheaves in spaced relation and for independent rotation.



2. A sheave block, including a hanger, a spindle mounted in the hanger, two spacing disks secured upon the spindle and in spaced relation to each other, an inner sheave rotatably mounted upon the spindle and between the spacing disks, and two outer sheaves, independent of each other mounted upon the spindle one beyond each of the spacing disks and between the adjacent portions of the hanger.

3. A sheave block, having a hanger, a spindle mounted in the hanger, a centrally disposed sheave mounted upon the spindle, the opposite faces thereof being provided with concentrically disposed recessed portions, two circular spacing disks fixed upon the spindle and disposed to have a portion thereof seated within the respective recesses of the sheave, and two outer sheaves rotatably mounted upon the spindle beyond each spacing disk, each of the outer sheaves being provided with a concentrically disposed recess to incase the remaining portion of the spacing disks, the sheaves being held in spaced relation to the central sheave by the spacing disks and all of the sheaves being independent of each other.

1,060,677. SCALE. ORIN L. GORDON, Robinson, Ill. Filed Nov. 25, 1912. Serial No. 733,489. (Cl. 73—46.)

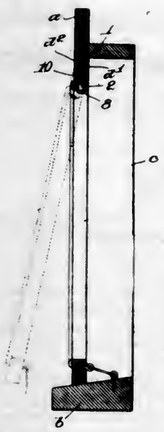


1. The combination with a scale, of a pedestal, a rod slidably mounted within the pedestal, a spring for holding the rod elevated, a load receiving pan mounted upon the upper end of said rod, said pan and rod being capable of rotary movement, and coacting means carried by the pedestal and pan for holding the pan against downward movement during the reception of a load, said holding means being made inoperative when the pan is rotated to weigh the load.

2. The combination with a scale, of a cylindrical pedestal, a slidably mounted and rotatable post disposed within the pedestal, a spring holding the post elevated, a load receiving pan mounted upon the upper end of said post, and coöperable means carried upon the under side of the pan and the upper end of the pedestal for holding the pan against lowering during receipt of a load, the rotation of the pan rendering the holding means inoperative to permit the load to depress the pan and the spring.

3. The combination with a scale, of a cylindrical pedestal, a slidably mounted and rotatable post disposed within the pedestal, a spring for holding the post elevated, a load receiving pan mounted upon the upper end of said post, a plurality of cam tracks disposed upon the upper end of the pedestal, and a plurality of antifrictional supporting rollers for the pan disposed for coactive relation with the cam tracks, said rollers and cam tracks retaining the pan and post against depression during the reception of a load, the rotation of the pan and post rendering the rollers and tracks inoperative and permitting the load to depress the pan against the spring.

1,060,678. SCREW-HINGE. VIVIAN GREENIDGE, Newton Highlands, Mass. Filed Aug. 15, 1912. Serial No. 715,183. (Cl. 16—48.)



1. In a screw hinge, a rotatable, threaded member, a driving member therefor, a permanent resilient connection between said members holding them normally in alinement but permitting relative lateral swinging movement and axial separation, and a positive, separable coupling between the adjacent ends of said members, whereby the threaded member may be rotated by the driving member and the latter may swing into and out of alinement with the threaded member.

2. In a hinge, in combination, two attaching members placed end to end, a positive, axially-separable coupling between the adjacent ends of said members and by which rotation of one member is transmitted to the other, and a spring connection between said members, acting normally to maintain them in axial alinement and with the coupling in operative condition.

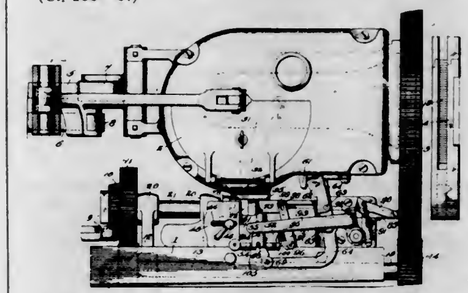
3. In a screw hinge, a rotatable, threaded member, a second member having a retaining head and by which it may be rotated, a lug and socket coupling between the adjacent ends of said members, whereby rotation of the headed member is transmitted positively to the threaded member, to screw the latter into place, and a spring coiled about the adjacent ends of said members and permanently attached thereto, said spring acting normally to maintain the coupling operative while permitting axial separation of the two members.

4. In a screw hinge, a screw-threaded member, a stud-like member having a retaining head by which it may be rotated, one of said members having a flat-walled socket in its end, a lug on the adjacent end of the other member, to enter the socket and constitute therewith a separable hinge-coupling between said members, and a spiral spring encircling the adjacent ends of said members and permanently attached to each, the spring normally acting to maintain the members in axial alinement with the lug of one member seated in the socket of the other member.

5. In a screw hinge, a threaded member adapted to be screwed into place, an elongated, stud-like driving member having a retaining head and adapted to enter a socket in one of the parts to be united by the hinge, a positive, axially separable coupling between the adjacent ends of said members, whereby rotation of the driving member is transmitted to the threaded member, and a resilient, normally contracted connection between said members, holding them normally in alinement while permitting swinging movement of one relatively to the other and also permitting limited axial separation of said members.

[Claims 6 and 7 not printed in the Gazette.]

1,060,679. SINGLE-TYPE-CASTING ATTACHMENT FOR LINOTYPE-MACHINES. JOHN EDWARD HANRAHAN, Baltimore, Md., assignor to The Chesapeake Addressing Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 31, 1910. Serial No. 579,825. (Cl. 199—9.)



1. In a linotype machine, the combination of means comprising a pot for casting a line of type; and means for simultaneously casting from the said pot a single type, substantially as described.

2. In a linotype machine, the combination of a metal pot; means coacting therewith for casting a line of type; and additional means also coacting with said pot and said first mentioned means for simultaneously casting a single type, substantially as described.

3. In a linotype machine, the combination of a metal pot; means to move the same; means coacting with said pot for casting a line of type; a mold for casting a single type; and connections between said pot and said mold for moving the latter by the motions of said pot, substantially as described.

4. In a linotype machine the combination of a metal pot; means to move the same; means coacting with said pot for casting a line of type; a mold for casting a single type; connections between said pot and said mold for moving the latter by the motions of said pot; and connections between said mold and said line of type casting means causing said single type to be cast simultaneously with said line of type, substantially as described.

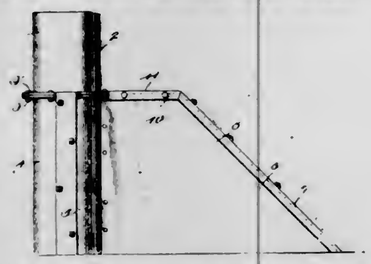
5. In a linotype machine, the combination of a metal pot; means coacting therewith for casting a line of type; and additional means comprising a reciprocating mold also coacting with said pot and said first mentioned means for simultaneously casting a single type, substantially as described.

[Claims 6 to 25 not printed in the Gazette.]

1,060,680. MOLD FOR CONCRETE POSTS. WILLIAM HARTLEY, Atlanta, Ind. Filed Apr. 10, 1912. Serial No. 689,741. (Cl. 25—118.)

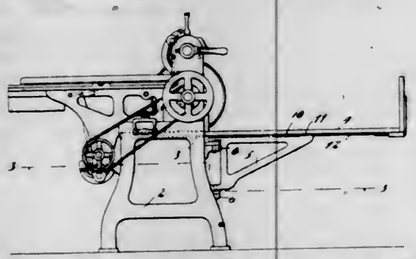
1. A mold for concrete posts comprising a plurality of plates forming a tubular member, longitudinal flanges formed on each of said plates, means for spacing said flanges thereby forming a recess therebetween, and closures secured to the upper edges of said flanges and connecting the same.

2. A mold for concrete posts comprising a plurality of curved plates forming a tubular member, longitudinal flanges formed on each of said plates, means for spacing said flanges thereby forming a recess therebetween, channel bars secured to the upper edges of said flanges thereby closing the recesses, and a tubular member secured to the upper edge of the first mentioned tubular member.



3. A mold for concrete posts comprising a plurality of curved plates forming a tubular member, each of said plates formed with a longitudinal flange, means for spacing said flanges thereby forming a recess, channel bars secured to the upper edges of the said plates for closing the opening therein, and means for closing the opening between the said tubular member and the recess formed by the said plates.

1,060,681. SCORING AND OTHER SHEET-WORKING MACHINE. OTTO M. HOCH, Rochester, N. Y., assignor to M. D. Knowlton Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 3, 1910. Serial No. 535,971. (Cl. 164—60.)



1. The combination with a supporting frame, of a table having a sliding connection therewith, a table supporting means at each side thereof pivoted to said frame, and a connection pivoted to each of said supporting means and to the table for automatically moving said supporting means simultaneously with the movements of the table.

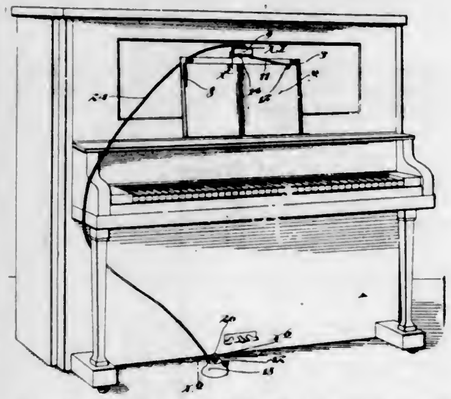
2. The combination with a supporting frame, of a table having a sliding connection therewith, a bracket for supporting said table pivoted at each side of said supporting frame, and two links each pivotally connected at one end to said table and at their opposite ends each to one of said brackets, whereby said brackets will be folded against the frame when the table is moved inwardly and swung outwardly into supporting position when the table is withdrawn.

3. The combination with a supporting frame, of a table having a sliding connection therewith, a table supporting bracket pivoted at each side of said frame below said table, and a separate link pivoted to each bracket at one end and independently pivoted to the table at their opposite ends for swinging the brackets when the table is moved.

4. The combination with a supporting frame, of a table having a sliding connection therewith, table supporting brackets hinged to said frame and having a pivoted link connection with the table to be moved therewith, and slide rails on the table to receive the engagement of said brackets.

5. In a scoring machine, the combination with the frame thereof, of a table having a sliding connection with said frame, swinging table-supporting brackets hinged to said frame adjacent to opposite sides of the table, links connecting at one end with said brackets and at their opposite ends being pivoted to the table, and slide rails on the table to receive the engagement of said brackets, substantially as and for the purpose set forth.

1,060,682. MUSIC-LEAF TURNER. HALVOR E. HOINES, Minneapolis, Minn. Filed Mar. 20, 1912. Serial No. 685,038. (Cl. 84—135.)



1. In a device of the kind described, the combination with a music rack, of a plurality of leaf turning devices, carried by said rack, an escapement coöperating with each of said leaf turning devices, means for actuating said leaf turning devices after the same have been released by said escapements, a casing located at a distant point from said music rack, releasing devices, movably mounted in said casing, flexible connections between said escapements and releasing devices, and common means operative successively on said releasing devices, to actuate said escapements, substantially as described.

2. In a device of the kind described, the combination with a music rack, of a plurality of leaf turning devices, carried by said rack, an escapement coöperating with each of said leaf turning devices, means for actuating said leaf turning devices after the same have been released by said escapements, a casing located at a distant point from said music rack, releasing devices, movably mounted in said casing, flexible connections between said escapements and releasing devices, common means operative successively on said releasing devices, to actuate said escapements, and means for holding said releasing devices in inoperative positions, substantially as described.

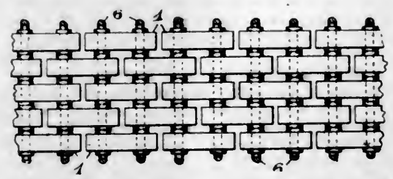
3. In a device of the kind described, the combination with a music rack, of a plurality of leaf turning devices carried by said rack, an escapement coöperating with each of said leaf turning devices, means for actuating said leaf turning devices after the same have been released by said escapements, a casing located at a distant point from said music rack, releasing devices, movably mounted in said casing, flexible connections between said escapements and releasing devices, common means operative successively on said releasing devices, to actuate said escapements, means for holding said releasing devices in inoperative positions, and means for returning said releasing devices to operative positions, substantially as described.

4. In a device of the kind described, the combination with a music rack, of a plurality of leaf turning devices carried by said rack, an escapeemnt coöperating with each of said leaf turning devices, means for actuating said leaf turning devices, after the same have been released by said escapements, a casing, releasing plates, movably mounted in said casing, flexible connections between said escapements and releasing plates, and a yieldingly held plunger, operative successively on said releasing plates, to actuate said escapements, substantially as described.

5. In a device of the kind described, the combination with a music rack, of a plurality of leaf turning devices carried by said rack, an escapement coöperating with each of said leaf turning devices, means for actuating said leaf turning devices, after the same have been released by said escapements, a casing, releasing plates, movably mounted in said casing, flexible connections between said escapements and releasing plates, a yieldingly held plunger, operative successively on said releasing plates, to actuate said escapements, and a yieldingly held plunger for returning said releasing plates to operative positions, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,060,683. GRATE. SYLVESTER H. HUNT, Long Branch, N. J. Filed Apr. 1, 1912. Serial No. 687,840. (Cl. 110—40.)



1. In a grate of the general character set forth, a sectional grate-link comprising a lower link proper and an upper renewable link-element, a locking means for operatively mounting said upper link-element upon said lower link proper, said upper link-element having portions in the form of petticoats overlapping the sides of the lower link proper, said petticoats extending the entire lengths of said link-elements, and all arranged and constructed to prevent said locking device working out of place, or being otherwise affected by heat or obstructions.

2. In a grate of the general character set forth, a sectional grate-link comprising a lower link proper, and an upper renewable link-element, said lower link proper being formed with transversely extending recesses formed with inclined surface-portions, said upper link-element being provided with downwardly extend'ng retaining lugs having inclined surface-portions, said lugs extending into and registering with the recesses in said lower link proper, and a locking means in one of said recesses, said locking means being journaled between and into holding engagement with the inclined surface-portions of said recess and the lug which registers with said recess, so as to retain said lug in holding engagement with the retaining lug in said recess.

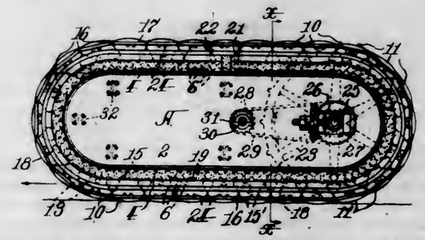
3. In a grate of the general character set forth, a sectional grate-link comprising a lower link proper, and an upper renewable link-element, said lower link proper being formed with transversely extending recesses formed with inclined surface-portions, said upper link-element being provided with downwardly extending retaining lugs having inclined surface-portions, said lugs extending into and registering with the recesses in said lower link proper, and a cylindrical locking pin in one of said recesses, said locking pin being jammed between and into holding engagement with the inclined surface-portions of said recess and the lug which registers with said recess, so as to retain said lug in holding engagement with the retaining lug in said recess.

4. In a grate of the general character set forth, a sectional grate-link comprising a lower link proper, and an upper renewable link-element resting upon said upper link, said lower link proper being formed with transversely extending recesses formed with inclined surface-portions, said upper link-element being provided with downwardly extending retaining lugs having inclined surface-portions, said lugs extending into and registering with the recesses in said lower link proper, and a locking means in one of said recesses in holding engagement with the retaining lug in said recess, said upper link-element having portions overlapping the sides of said lower link proper, and also overlapping the end-portions of said locking means, all arranged and constructed to prevent said locking means working out of place, or being otherwise affected by heat or obstructions.

5. In a grate of the general character set forth, a sectional grate-link comprising a lower link proper, and an upper renewable link-element resting upon said upper link, said lower link proper being formed with transversely extending recesses formed with inclined surface-portions, said upper link-element being provided with downwardly extending retaining lugs having inclined surface-portions, said lugs extending into and registering with the recesses in said lower link proper, and a cylindrical locking pin in one of said recesses in holding engagement with the retaining lug in said recess, said upper link-element having portions overlapping the sides of said lower link proper, and also overlapping the end-portions of said locking pin, all arranged and constructed to prevent said locking pin working out of place, or being otherwise affected by heat or obstructions.

[Claims 6 to 10 not printed in the Gazette.]

1,060,684. TRACTION DEVICE. JOHN S. HUNTER, Egeland, N. D. Filed Mar. 25, 1912. Serial No. 686,186. (Cl. 21—114.)



1. A traction device comprising a frame having parallel guideways at the periphery thereof, said guideways retaining a series of free roller bearings forming a continuous anti-friction guideway, an endless chain of shoes about said frame, the adjacent edges of which being formed with interconnected tongues and grooves and each of said shoes having a pair of inwardly projecting side flanges which form tracks for said frame, every other pair of flanges on said shoes straddling the succeeding pair of flanges on the next shoe to limit lateral movement of said shoes and means secured to the outer sides of the straddling flanges for eliminating friction of said track against the walls of said guideways while said chain is in motion.

2. A traction device comprising a loop shaped frame having an anti-friction guideway about the periphery thereof, a series of shoes joined together to form a continuous tread, said shoes having projecting flanges into said guideway and forming a track on which said frame is adapted to travel and anti-friction bearings secured to the outer sides of every other one of said flanges adapted to travel in a continuous groove formed in the side of said guideways to prevent the displacement of said track and reduce the friction between the track and said guideways.

3. A device of the class set forth, comprising a loop shaped frame, parallel endless channels about said frame, a series of rollers adapted to run freely in said channels and a continuous tread about said frame composed of a series of shoes hinged together, said shoes having inwardly projecting flanges which form an endless track over which said rollers are adapted to travel and means for retaining said rollers in said channels independent of said track.

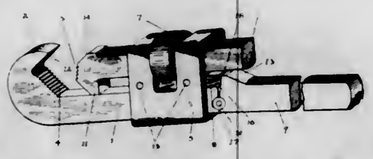
4. A traction device, comprising a loop shaped frame about which extend parallel channels adapted to retain

a series of free roller bearings, a tread formed of an endless chain of shoes hinged together, said shoes having a curved outer face, a pair of inwardly projecting flanges intermeshing with the flanges on the adjacent shoes, the pairs of flanges on each alternate shoe straddling the pair of flanges on the next succeeding shoe making a continuous track of equal width for said roller bearings, and means for engaging the inner face of said shoes centrally between said flanges to evenly drive said device.

5. A traction device comprising a frame having parallel guideways at its periphery, a chain of shoes surrounding the periphery of the frame, a series of free roller bearings adapted to run freely in said guideways which are so formed as to prevent the escapement of said roller bearings, a pair of flanges projecting at right angles from the inner faces of the opposite ends of said shoes, the pair of flanges on one shoe straddling the flanges on the next succeeding shoe, alternately, the outer edges of all of said flanges being parallel with the inner faces of said shoes, said flanges extending into said guideways and against said roller bearings, forming a continuous track for said device.

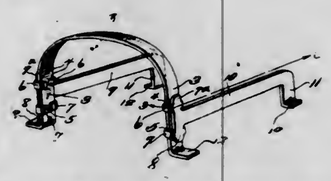
[Claims 6 and 7 not printed in the Gazette.]

1,060,685. PIPE-WRENCH. ELIHU K. JONES, Portland, Oreg. Filed Oct. 1, 1912. Serial No. 723,346. (Cl. 81—126.)



A pipe wrench comprising a fixed member having a recurved pipe-engaging portion whose inner face stands at an acute angle with reference to the body thereof, and whose inner end is formed at right angles thereto and is beveled at the rear side, a member mounted on the fixed member and adapted to be moved into engagement with a pipe, the engaging end thereof being extended to form a bearing to slide upon the fixed member and so shaped that as the wrench is manipulated its pressure upon the pipe will be increased, a bar conforming in thickness to said extended portion, secured to the movable member and projecting inwardly to the plane of said beveled end portion and a handle hinged at the front side of the beveled portion, so as to bear thereon and upon said projecting bar, whereby, by the manipulation of the handle, the jaws will further close till said handle engages the right angularly formed end portion.

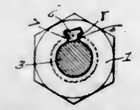
1,060,686. FIRE-DOG. JOHN W. KINARD, Centerville, Ala. Filed Sept. 7, 1912. Serial No. 719,105. (Cl. 126—298.)



1. In combination, an arched member having sides forming vertical legs terminating in feet, the opposite edges of each side having diametrically opposite recesses, the recesses of each edge of each side being spaced, andirons, one end of each of which terminates in a leg having a foot, while the other end of each iron terminates in a T-shaped portion arranged flat against and parallel to the side of the arch, the opposite ends of the T-shaped portion having diametrically opposite lugs registering with said recesses and bent to surround the side of the arch and seated in said recesses, the opposite ends of the T-shaped portion in conjunction with the side constituting means for reinforcing the andiron.

2. In combination, an arched member having sides terminating in feet, the sides having recesses, andirons, one end of each of which terminates in a leg having a foot, while the other end of each iron terminates in a T-shaped portion arranged against and parallel to the sides of the arch, the T-shaped portion having lugs over-lapping a side of the arch and seated in the recesses.

1,060,687. NUT-LOCK. MORRIS D. KOPPLE, New York, N. Y. Filed Sept. 21, 1908. Serial No. 453,989. (Cl. 151—25.)



1. A nut-lock including in combination, a nut provided with a channel extending through said nut substantially parallel with the threaded portion thereof, and with a communicating passage extending between said channel and the bore of the nut, said channel being at one side of relatively greater dimensional area than at the other side, and a locking member comprising pivot and branch-portions adapted to be housed in said channel and communicating passage and of dimensions less than those of the channel and communicating passage whereby said member may have a limited oscillatory movement in the channel and present above the pivot-portion of the locking member a key-receiving space.

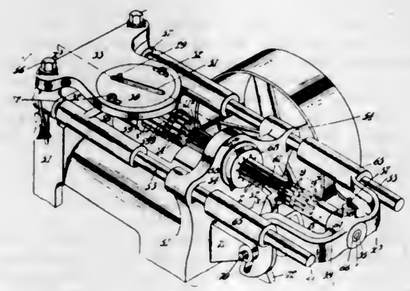
2. A nut lock including in combination, a nut provided with an elongated recess and with a communicating passage extending between said recess and the threaded interior of the nut, said recess being of relatively wider dimension than said passage, and a locking member housed in said recess and passage and comprising a pivot portion occupying a position in said recess, and an engaging portion adapted to engage the stem of a bolt or the like and occupying a position in said passage and extending at an angle from said pivot portion, the aforementioned recess being of dimensions greater than said pivot portion of said locking member whereby a positioning instrumentality may be inserted into the recess and against said pivot portion..

3. A nut lock including in combination, a nut provided with an elongated recess of larger dimensional area at one side than at the other and extending through the nut substantially parallel with the threaded interior thereof; said nut also being provided with a communicating passage between said recess and said threaded interior and having its walls arranged at an angle to each other; and a locking member housed in said recess and channel and comprising a pivot portion and an integral branch portion, said pivot portion being adapted to fulcrum at the narrow portion of said recess and to have a limited movement at the opposite portion thereof; the sides of said branch portion being converged and adapted to engage, respectively, the walls of said passage.

4. The combination of a bolt and a self-locking nut, said nut being provided with an elongated recess extending through said nut substantially parallel with the threaded interior thereof and being of relatively larger dimension at one side than at the other, a communicating passage between said recess and said interior and of a width less than that of said recess, and a locking member housed within said recess and passage and comprising a pivot portion and a branch portion, said pivot portion being of a width relatively greater than that of said branch portion and adapted to fulcrum in the narrow portion of said recess and to have a limited movement at its opposite side in the larger portion of said recess, one side of the branch portion lying at an obtuse angle to the pivot portion, and the interior surface of said branch portion being threaded to conform to the threaded interior of the nut; said nut being extended over said recess at both ends and upset to engage the respective end surfaces of said locking member; the aforementioned enlarged portion of said recess being sufficient to receive a key inserted to prevent a swinging movement of the locking member.

5. A nut lock including in combination, a nut, a recess extending through said nut substantially parallel with the threaded interior thereof, a communicating passage between said recess and said threaded interior, and a locking member comprising a main portion arranged in said passage, one side of said branch portion lying at an obtuse angle to said main portion and the interior surface of said branch portion being threaded to conform to the threaded interior of the nut, said locking member being adapted and arranged to be swung into operative position by the movement of the nut, and the body of the nut being extended over said recess at both ends and upset to engage the respective end surfaces of said locking member, said recess being enlarged at one end whereby said swinging movement of said locking member is permitted and a key can be inserted to prevent said swinging movement of said locking member.

1,060,688. GANG CUTTING DEVICE. THOMAS LUND, Beverly, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed May 22, 1909. Serial No. 497,684. (Cl. 29—73.)



1. A gang-saw for machines of the class described; said gang-saw comprising a plurality of saws grouped in approximately annular relation, with their cutting edges presented outwardly, each of said saws being respectively movable bodily into a plurality of parallel positions.

2. A gang-saw for machines of the class described; said gang-saw comprising a plurality of saws grouped in approximately annular relation; means to reciprocate said saws longitudinally; and means to advance automatically the cutting edges of said saws at times.

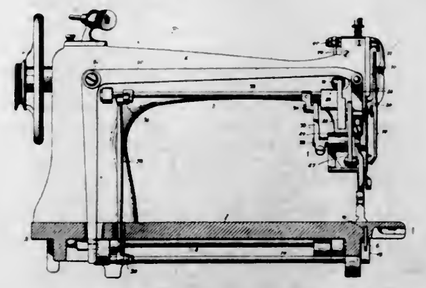
3. A gang-saw for machines of the class described; said gang-saw comprising a plurality of saws grouped in approximately annular relation; means to reciprocate said saws longitudinally; and means to advance automatically the cutting edges of said saws at times, during the cutting stroke.

4. A gang-saw for machines of the class described; said gang-saw comprising a plurality of parallel saws grouped in approximately annular relation, with their cutting edges presented outward radially; means to reciprocate said saws longitudinally; and means to increase automatically and simultaneously the effective cutting radius of said saws.

5. In a machine of the class described; the combination with a gang-saw comprising a plurality of saws; of means to advance automatically the cutting edges of said saws; and means to retract said saws automatically.

[Claims 6 to 30 not printed in the Gazette.]

1,060,689. SEWING-MACHINE. WILLIAM A. MACK, Cleveland, Ohio, assignor to Standard Sewing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 3, 1900. Serial No. 35,395. (Cl. 112—8.)



1. In a sewing machine, a combined reciprocating and vibrating thread-carrying needle, two feed-members operative to engage and clamp the work therebetween and coöperating with said needle to effect the feed of the work while the needle is in the work, and operating means for imparting work feeding movements to both said needle and feed-members.

2. In a sewing machine, a combined reciprocating and vibrating thread-carrying needle, two feed-members operative to engage and clamp the work therebetween and cooperating with said needle to effect the feed of the work while the needle is in the work, operating means for imparting work feeding movements to both said needle and feed-members, and adjusting means common to both said needle and feed-members for effecting a like adjustment of feed movement to the same.

3. In a sewing machine, a feeding mechanism comprising a lower feed-member, an upper feed-member, a driving shaft, means including a device actuated from said shaft for communicating a feeding movement to the feed-members, and means actuated from said device for moving the upper feed-member to and from its operative work gripping position.

4. In a sewing machine, a feeding mechansm comprising a lower feed-member, an upper feed-member, a driving shaft, means including a device actuated from said shaft for communicating a feeding movement of the feed-members, means actuated from said device for moving the upper feed-member to and from its operative work gripping position, and adjusting means for regulating the time of engagement with the work of the upper feed-member.

5. In a sewing machine, a feeding mechanism comprising a lower feed-member, an upper feed-member, means for communicating a feeding movement to said feed-members, a lever for moving said upper feed-member vertically to and from its operative work gripping position relative to the lower feed-member, and adjusting means for regulating the extent of movement of said lever and thereby the time of engagement with the work of the upper feed-member.

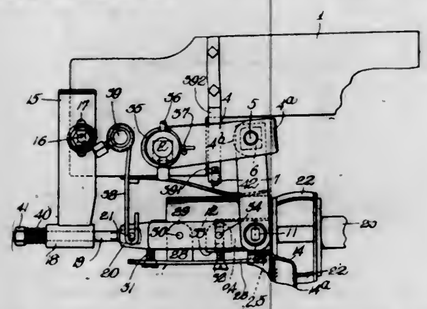
[Claims 6 to 18 not printed in the Gazette.]

1,060,690. COUNTER-GUARD FOR HEEL-TRIMMING MACHINES. ALEXANDER MCDOWELL, Lynn, Mass. Filed Aug. 13, 1912. Serial No. 714,816. (Cl. 12—90.)

1. The combination with a heel trimming cutter, of a counterguard movable longitudinally of the cutter beside the same, and coöperating adjustable guiding means connected with the cutter and with the guard, respectively, controlling the path in which said guard thus moves.

2. The combination with a heel trimming cutter of a guide member connected with said cutter, a guard lying beside the cutter, and a movable support for said guard adapted to travel therewith longitudinally of the cutter and having complemental means coöperating with said guide to control the path in which the guard moves.

3. The combination with a heel trimming cutter of a projection at one end of the cutter co-axial therewith, a counterguard lying beside the cutter and supported with provision for moving longitudinally thereof, and guiding means connected with said guard and engaging with the surface of said projection for controlling the path in which the guard thus moves.

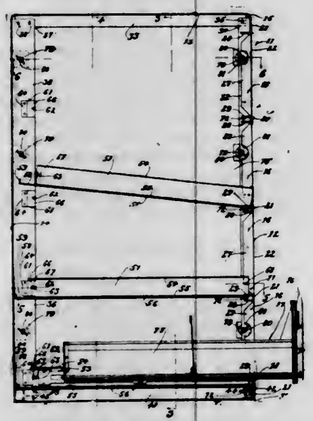


4. A counterguard including a holder, a guard proper secured to said holder, means for supporting said holder with provision for longitudinal movement, an arm movably mounted on said holder extending longitudinally thereof and having a foot, a guide with which said foot coöperates, and means for adjusting said arm transversely of its length to shift the positions of the foot toward or from the longitudinal axis of the holder.

5. In combination with a counter guard, a movable holder therefor, and a foot adjustably connected to said holder, a rotatable cutter having its axis in the line of movement of the guard and partially surrounded by the latter, and a guide element connected to the cutter projecting into the guard holder in position to be engaged by said foot.

[Claims 6 to 12 not printed in the Gazette.]

1,060,691. METAL FILING-CABINET. PAUL S. MILLICE, Hamilton, Ohio, assignor to Fire-Proof Furniture and Construction Company, New York, N. Y., a Corporation of New York. Filed Aug. 18, 1911. Serial No. 644,745. (Cl. 45—2.)



1. An open-sided framing for a filing cabinet comprising a front portion having drawer openings therein and formed with side uprights having outer rearwardly extending flanges between which cross-braces are located which are integral with said side uprights and formed with rearwardly extending flanges bent from the body of said framing.

2. A framing for a filing cabinet commprising a front portion and a top portion integral with each other, the said portions being provided respectively with side flanges which overlap at the upper corners at the respective sides of said framing, the front portion of said framing being provided with drawer openings formed with side flanges which with said first named side flanges thereon form side uprights of said framing, and said front portion being further provided with top and bottom flanges forming cross-braces between said drawer openings integral with said side uprights.

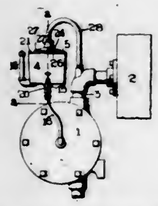
3. An open-sided metal framing for a vertical filing cabinet comprising a front portion and top portion integral with each other, each of said portions formed with a side flange at each side thereof, the said flanges at the respective sides of said framing overlapping each other at the upper front corner of said framing, and the said overlapping portions of said flanges being secured together.

4. In a vertical filing cabinet, a metal framing comprising a front portion and a top portion integral with each other and formed from a blank having laterally extending wings at said front portion and said top portion having a recess therebetween at each side of said portions, said wings being bent back for forming side flanges which overlap at said recesses, and the said overlapping portions being welded together.

5. In a vertical filing cabinet, a framing having a front portion provided with drawer openings at the bottoms whereof an inwardly extending flange is located, the said framing comprising a rear portion, a drawer runway at each side of said framing and a shelf secured to said runways for forming a composite runway and shelf structure, the front end of said shelf arranged to pass the rear edge of said rearwardly extending flange in forward direction, securing means between the rear end of said composite structure and said rear portion of said framing arranged to coact for supporting the rear portion of said composite structure by the rearward movement of the latter after said shelf has been received under said front flange, and securing means between the said front portion and said composite structure.

[Claims 6 to 13 not printed in the Gazette.]

1,060,692. LUBRICATOR. THOMAS W. MITCHELL, Buffalo, and RALPH A. JONES, East Aurora, N. Y., assignors to Taber Pump Co., Buffalo, N. Y., a Corporation of New York. Filed Feb. 9, 1911. Serial No. 607,591. (Cl. 184—72.)

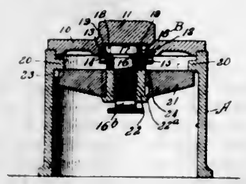


1. In a lubricator, a box or casing for containing lubricant consisting of a body having a raised portion on the upper surface of its bottom provided with a vertical opening and the top surface of said raised portion forming an annular valve seat and longitudinal openings extending through the bottom of said body and communicating at an intermediate point with the vertical opening in the raised portion; said longitudinal openings being adapted to form passage ways for the lubricant and to connect with lubricant discharge pipes, a main cover for said body provided with a concavity and a short vertical depending tubular portion, a smaller supplementary cover attached to the main cover and having a concavity opposed to the concavity in the main cover; said concavities together constituting a diaphragm chamber, a flexible diaphragm in said diaphragm chamber, a vertical valve stem in the box or casing having its upper portion extending through the tubular portion of the main cover and being adapted to slide in said tubular portion, its upper end extending within and attached to the flexible diaphragm and its lower end fitting loosely and being adapted to slide in the vertical opening in the raised portion of the bottom, and a closure valve attached to the stem above its lower end and being adapted to co-act with the annular valve seat on the bottom of the body.

2. In a lubricator, a box or casing for containing lubricant consisting of a body having an annular valve seat, a main cover for said body provided with a concavity and a short depending tubular portion, a smaller supplementary cover attached to the main cover and having a concavity opposed to the concavity in the main cover and a vertical upwardly extending tubular portion which is connected to a source of air suction and has an opening in vertical alinement with the opening in the short depending tubular portion of the main cover; the concavities of the main and supplementary covers together constituting a diaphragm chamber, a flexible diaphragm having its surrounding margin clamped between the main cover and the supplementary cover and its central portion arranged loosely in said diaphragm chamber, a valve stem having its lower end loosely fitting in the opening in the annular valve seat and its upper portion fitting loosely through the tubular portion of the main cover with its upper end projecting within and fastened to the flexible diaphragm, and a valve attached to the valve stem above its lower end and adapted to co-act with the valve seat.

3. In a lubricator, a box or casing for containing lubricant consisting of a body having an annular valve seat formed on its bottom surface and a vertical opening extending downward from the valve seat; said bottom also being provided with two hollow ribs on its under surface, the openings through said ribs communicating with the outlet opening of the valve seat and forming passages for the lubricant, a main cover for said body provided with a concavity and a short depending tubular portion and a smaller supplementary cover attached to the main cover and having a concavity opposed to the concavity in the main cover; said concavities together constituting a diaphragm chamber, a flexible diaphragm in said diaphragm chamber, a valve co-acting with the valve seat in the body and a vertical valve stem in the box or casing on which the valve is mounted; said valve stem extending vertically through approximately the center of said box or casing and having reduced upper and lower end portions which are located respectively above and below the points of attachment of the flexible diaphragm and the valve and project and are adapted to slide in the vertically extending tubular portions of the supplementary cover and the annular valve seat.

1,060,693. CLEAN-OUT FERRULE FOR DRAIN OR SOIL PIPES. PHILIP MUELLER, Decatur, Ill., assignor to H. Mueller Mfg. Co., Decatur, Ill., a Corporation of Illinois. Filed July 8, 1912. Serial No. 708,290. (Cl. 137—13.)



1. Combined with an open body and a closure therefor having a circular recess in its under side and a smaller recess continuous with the circular recess, a bolt sustaining member screwed into said circular recess and formed with a concave depression in its upper side, a bolt the head of which is freely fitted into the smaller recess in the closure and shaped to prevent turning therein, the under surface of the bolt head being convex to permit rocking in the concave depression in the sustaining member, and means threaded on said bolt to interlock with said body for holding the closure in place on the body.

2. Combined with an open body and a closure therefor having a circular recess in its under side and a smaller recess continuous with the circular recess, a bolt sustaining member screwed into said circular recess and formed with a concave depression in its upper side, a bolt the head of which is freely fitted into the smaller recess in the closure and provided with radial lugs to engage indentations extending laterally from said smaller recess to prevent independent rotation of the bolt, the under surface of the bolt head being convex to permit rocking in the concave depression in the sustaining member, and means threaded on said bolt to interlock with said body for holding the closure in place on the body.

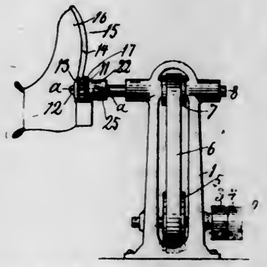
3. Combined with a rotatable closure and an open body to be closed, a headed bolt having oppositely disposed lateral projections fitting loosely into a similarly shaped recess in said closure, the under-surface of the head and said projections being spherically curved, a bolt sustaining member screwed into said closure below the bolt head and formed with a depression similar in curvature to the under side of the bolt head to permit the bolt to rock therein, and a bridge piece threaded to receive the bolt and adapted to engage studs within the open body to prevent rotation of said bridge piece and lock the closure in position.

4. A closure for an open body to be closed comprising a plate, a threaded stem carried centrally on one side of said plate and adapted to rock in said plate to a limited extent, and to rotate when the plate is turned.

5. A closure for an open body to be closed provided with a central, circular recess on its under side, and a smaller non-circular recess continuous therewith, a bolt sustaining member threaded in said circular recess and provided with a concave depression on its upper side and an opening from said depression through said member, and a bolt extending through said opening formed with a head of similar shape to that of the smaller recess into which it loosely fits, the underside of said head being spherically curved to seat in the concave depression in the sustaining member, whereby said bolt may rock to a limited extent with respect to the closure but rotate with said closure.

[Claims 6 to 10 not printed in the Gazette.]

1,060,694. SHOE-SOLE TRIMMER. MERTON S. MUNN, Stillwater, Minn. Filed Aug. 8, 1912. Serial No. 714,020. (Cl. 12—91.)



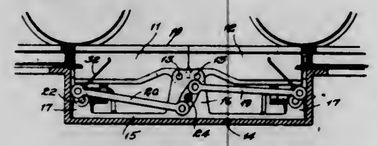
1. In a machine of the class described, the combination of a rotary shaft, a cutter removably secured on one end thereof, a removable ring bearing against the rear side of the cutter, a drum slidable on the shaft near the cutter and having its front end reduced so as to fit in the said ring and hold it in concentric position to the cutter, a spring acting on the drum to hold it against the ring, and means preventing rotation of the drum on the shaft.

2. In a machine of the class described, the combination of a rotary shaft, a cutter removably secured on one end thereof, a removable ring bearing against the rear side of the cutter, a drum slidable on the shaft near the cutter and having its front end reduced so as to fit in the said

ring and hold it in concentric position to the cutter, said drum having in one side a longitudinal slotted aperture, a collar adjustable on the shaft within the drum by a set-screw having its outer end portion guided in the slotted aperture, a helical partly compressed spring encircling the shaft between the collar and the front portion of the drum so as to press the latter against the cutter.

3. In a machine of the class described, the combination with a rotary shaft having a cone-shaped end with a threaded hole in the center thereof, of an internally conic split bushing fitted upon the cone, a rotary cutter having a central cylindrical hole fitting upon the split bushing, a washer on the end of the shaft in concentric position to the cutter and bearing against the outer end of the split bushing, a screw passed through a central hole in the washer and into the threaded hole of the shaft, said washer serving to wedge the bushing tightly into place and serving also as a shield at the forward side of the teeth of the cutter.

1,060,695. RAIL INTERSECTION. FRANK P. MURPHEY, Decatur, Ill. Filed Nov. 7, 1911. Serial No. 658,971. (Cl. 104—116.)



1. In a device of the class described, the combination of a series of rails extending between the main tracks, and means for raising and lowering selected of said rails to form a continuous trackway in the direction desired, substantially as described.

2. In a device of the class described, the combination of a series of rails, and means embodying a rocking member located adjacent the juncture of each of said series of rails and the main tracks for raising a portion of said rails to form a continuous trackway in the direction desired and lowering the remaining rails to break the continuity of track in another direction, substantially as described.

3. In a device of the class described, the combination of a series of rails extending between the main tracks, and means for simultaneously raising a portion of said rails to form a continuous trackway in one direction across the intersection and to lower the remaining rails to break the continuity of trackway the other way of the intersection, substantially as described.

4. In a device of the class described, the combination of a series of rails extending between the main tracks, and a single actuating member operatively connected to throw a portion of said rails into raised position to form a continuous trackway one way of the intersection and to lower the remaining rails to break the continuity of trackway the other way of the intersection, substantially as described.

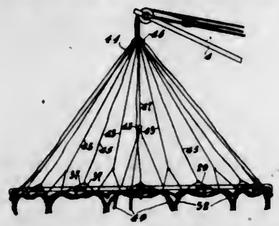
5. In a device of the class described, the combination of a series of rail sections, each section being formed of two rails pivoted at their adjoining ends, and means for swinging selected of said rails to form a continuous trackway over the intersection in the direction desired, substantially as described.

[Claims 6 to 32 not printed in the Gazette.]

1,060,696. APPARATUS FOR RAISING SUNKEN WOOD OR THE LIKE. CARL JULIUS NAUCLÉR, Falun, Sweden. Filed Sept. 27, 1911. Serial No. 651,640. (Cl. 57—9.)

1. In an apparatus for raising sunken wood, the combination of a gripping device comprising a number of tongs placed one at the side of another along a closed line, means for lowering and hoisting the apparatus, and means for opening and closing the tongs.

2. In an apparatus for raising sunken wood, the combination of a gripping device comprising a number of tongs placed one at the side of another along a closed line and the planes of which extend at angles to each other, means for lowering and hoisting the apparatus, and means for opening and closing the tongs.



3. In an apparatus for raising sunken wood, the combination of a gripping device comprising a number of tongs placed one at the side of another along a closed line and adapted to open and close independently of one another, means for lowering and hoisting the apparatus, and means for opening and closing the tongs.

4. In an apparatus for raising sunken wood, the combination of a gripping device comprising a number of tongs placed one at the side of another along a closed line and the planes of which extend at angles to each other, means for lowering and hoisting the apparatus, and means for automatically opening and closing the tongs as the apparatus is lowered and hoisted.

5. In an apparatus for raising sunken wood, the combination of a gripping device comprising a number of tongs placed one at the side of another along a closed line, means for lowering and hoisting the apparatus, and means for automatically opening and closing the tongs as the apparatus is lowered and hoisted.

[Claims 6 to 16 not printed in the Gazette.]

1,060,697. MAIL-BAG. NICHOLAS C. NEWERF, Buffalo, N. Y. Filed Feb. 9, 1911. Serial No. 607,576. (Cl. 83—26.)



1. In a device of the class described, a flexible bag structure adapted to be either wholly carried by an operator or trundled along the surface, and a supporting wheel adjustably extending from said bag structure and adapted to support the device in trundling position to be moved up within the bag structure when the device is carried by the operator.

2. In a device of the class described, a long rectangular bag structure having a handle at its top and an opening in its bottom and a supporting wheel adjustably depending from the lower end of said bag structure and adapted to support the device in trundling position and to be moved up through the bottom opening within the interior of the bag when the device is carried by the operator.

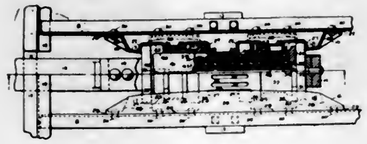
3. In a device of the class described, a flexible bag, a metal supporting frame within said bag and a supporting wheel slidably mounted in the metal frame.

4. In a device of the class described, a flexible bag, a metal supporting frame within the bag, a supporting wheel having a frame slidably mounted in the metal supporting frame.

5. In a device of the class described, a bag structure, a supporting wheel having a frame slidably mounted in the bag structure, spring pressed pins for locking the frame, and means for locking the frame of said supporting wheel in its depending supporting position.

[Claims 6 to 21 not printed in the Gazette.]

1,060,698. FRICTION DRAFT-RIGGING FOR RAILWAY-CARS. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chicago, Ill. Filed Dec. 1, 1911. Serial No. 663,309. (Cl. 213—64.)



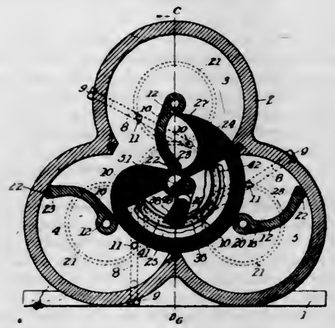
1. In a railway draft rigging, tandem spring side plates, each having front and rear stop shoulders and intermediate said shoulders a middle stop shoulder and a front and a rear limiting stop shoulder, in combination with a longitudinally movable friction shell, said shell having intermediate its ends a pair of transverse stop shoulders spaced apart and rigidly secured to the shell, one of the stop shoulders of said shell being adapted to co-act with the middle stop shoulders of the side plates in pulling movement and with the rear limiting stop shoulders in buffing movement, the other of the stop shoulders of the shell being adapted to engage the front limiting stop shoulders of the side castings in pulling movement and the middle stop shoulders in buffing movement.

2. In a railway draft rigging, tandem spring side plates, each having front and rear stop shoulders and intermediate said shoulders a middle stop shoulder and a front and a rear limiting stop shoulder, in combination with a longitudinally movable friction shell, said shell having intermediate its ends a pair of transverse stop shoulders spaced apart and rigidly secured to the shell, one of the stop shoulders of said shell being adapted to co-act with the middle stop shoulders of the side plates in pulling movement and with the rear limiting stop shoulders in buffing movement, the other of the stop shoulders of the shell being adapted to engage the front limiting stop shoulders of the side castings in pulling movement and the middle stop shoulders in buffing movement, the said stop shoulders of the friction shell being connected by ribs extending longitudinally of said shell.

3. In a railway draft rigging, tandem spring side plates, each having front and rear stop shoulders and intermediate said shoulders a middle stop shoulder and a front and a rear limiting stop shoulder, in combination with a longitudinally movable friction shell, said shell having intermediate its ends a pair of transverse stop shoulders spaced apart and rigidly secured to the shell, one of the stop shoulders of said shell being adapted to co-act with the middle stop shoulders of the side plates in pulling movement and with the rear limiting stop shoulders in buffing movement, the other of the stop shoulders of the shell being adapted to engage the front limiting stop shoulders of the side castings in pulling movement and the middle stop shoulders in buffing movement, the said stop shoulders of the friction shell being connected by ribs extending longitudinally of said shell, and integral with the said shoulders and the shell.

4. In a railway draft rigging, tandem spring side plates, each having front and rear stop shoulders and intermediate said shoulders a middle stop shoulder and a front and a rear limiting stop shoulder, in combination with a longitudinally movable friction shell, said shell having intermediate its ends a pair of transverse stop shoulders spaced apart and rigidly secured to the shell, one of the stop shoulders of said shell being adapted to co-act with the middle stop shoulders of the side plates in pulling movement and with the rear limiting stop shoulders in buffing movement, the other of the stop shoulders of the shell being adapted to engage the front limiting stop shoulders of the side castings in pulling movement and the middle stop shoulders in buffing movement, the shell being further provided along its sides and between the stop shoulders with longitudinal openings.

1,060,699. ROTARY ENGINE. WILLIAM H. OGDEN, Binghamton, N. Y. Filed June 6, 1912. Serial No. 702,081. (Cl. 121—51.)



1. In an engine, the combination with the cylinder and a piston therein, of a combined abutment and steam chest, means to rotate said abutment and steam chest, and means mounted within and turning with said abutment and steam chest and capable of independent movement to regulate the speed of the engine.

2. In an engine, the combination with the cylinders and pistons therein, of a combined abutment and steam chest having port openings, means to rotate said abutment and steam chest, and means mounted within and turning with said abutment and steam chest and coöperating with said port openings to regulate the speed of the engine.

3. In a rotary engine, the combination with the cylinders and pistons therein, of a combined rotary abutment and steam chest coacting with said pistons having a centrifugal governor mounted therein and means controlled by said governor for regulating the speed of the engine.

4. In a rotary engine, the combination with the cylinders and pistons therein, of a combined abutment and steam chest having segmental ports, valves applied to said ports, means to rotate said abutment and steam chest, and means mounted within said abutment and steam chest and connected with said valves and adapted to automatically control the area of said ports.

5. In a rotary steam engine, the combination with the cylinders and pistons therein, of a steam chest having segmental ports, segmental slide valves adapted to slide in ways formed in said ports, a governor adapted to swing on an eccentric axis within said steam chest, a spring tensioning device embodied in said governor, and connections between said governor and said valves, whereby the length of port opening is varied according to the tension of said spring for controlling the admission of steam to the cylinders.

[Claims 6 to 11 not printed in the Gazette.]

1,060,700. SWITCH. GRANVILLE E. PALMER, Hartford, Conn., assignor to The Hart Manufacturing Company, Hartford, Conn., a Corporation of New Jersey. Filed July 6, 1911. Serial No. 637,145. (Cl. 175—281.)



1. In a switch, the combination of two solenoids, a normally open switch arm controlled by one, and in series with the second, a lock for said switch arm, a normally closed switch arm controlled by the second, and in series with the first solenoid, means for releasing said lock when said second solenoid is deënergized.

2. In a switch, the combination of two switch arms, two independent solenoids for actuating the same, respectively, the switch arm actuated by each solenoid controlling the circuit through the other solenoid, one switch arm being opened and the other closed by its respective solenoid when energized, a lock for the switch arm of the switch closing solenoid, and an opening device for said lock controlled by the switch opening solenoid.

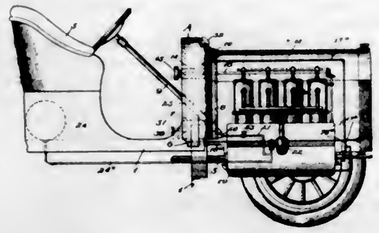
3. In a switch, the combination of a base, terminals thereon, a switch arm for said terminals and normally tending to open, a solenoid for closing said switch arm, a lock for said switch arm, a second solenoid controlled by said switch arm, a core therefor adapted to release said lock when said second solenoid is deënergized, a circuit controller for said first solenoid, opened by said second solenoid when energized, circuit connections for said solenoids and a local circuit controller for said circuit connections.

4. In a switch, the combination of a base, stationary contacts thereon, a switch arm adapted to engage said contacts, but normally tending to move away therefrom, a core connected to said switch arm, a solenoid for said core, a lock for said core, a projection by which said lock can be released, a second solenoid controlled by said switch arm, a core within said second solenoid normally tending to engage said projection so as to release said lock, a circuit controller in series with said first solenoid and opened by said second core when said second solenoid is energized, circuit connections for said solenoids, and a local circuit controller for both of said solenoids.

5. In a switch the combination of a base, stationary contacts thereon, a switch arm adapted to engage said contacts but normally tending to move away therefrom, a core connected to said switch arm, a solenoid for said core, a detent carried by said core, a stationary abutment coöperating with said detent, a projection by which said detent can be released from said abutment, a second solenoid controlled by said switch arm, a core within said second solenoid normally tending to engage said projection so as to release said detent, a circuit controller in series with said first solenoid and opened by said second core when said second solenoid is energized, circuit connections for said solenoids, and a local circuit controller for both of said solenoids.

[Claims 6 and 7 not printed in the Gazette.]

1,060,701. MOTOR-VEHICLE. CHARLES J. PEMBROKE, Rochester, N. Y. Filed Oct. 6, 1909. Serial No. 521,318. (Cl. 21—90.)



1. In a motor vehicle comprising side frame pieces, wheels supporting it, a driver's seat mounted on the frame and an engine also located thereon, vehicle driving devices arranged in rear of the engine and steering mechanism comprising a post extending upwardly and rearwardly into proximity with the driver's seat, of a chambered dash located between said seat and engine for containing fluids for operating the engine, said dash embodying front and rear walls and connecting end and top walls and having a bottom wall provided with portions at its ends adapted to engage the frame pieces, said bottom having its central portion elevated to accommodate the driving mechanism of the engine and also having a slotted opening extending upwardly from the bottom for receiving said steering post, and feed pipes leading from the chambers to the engine.

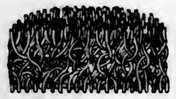
2. The combination with a motor vehicle frame having side pieces, fore and rear wheels supporting said frame, a driver's seat mounted on the frame and an explosive engine arranged in front of the seat having a fly wheel, steering devices for operating the wheels and a steering column extending upwardly and rearwardly into proximity with the driver's seat, of a vehicle dash comprising a hollow body for containing fluid for operating the engine, said body being recessed at its lower side to accommodate the fly wheel of the engine and also provided with a recess to receive the steering column, said recess extending upwardly from the lower side of said body to permit the latter to be applied or removed from the vehicle frame without disturbing the steering column.

3. The combination with a motor vehicle frame having side pieces, fore and rear wheels supporting said frame, a driver's seat mounted on the frame and an explosive engine arranged in front of the seat having a fly wheel, steering devices for operating the wheels and a steering column extending upwardly and rearwardly into proximity with the driver's seat, of a hollow body located between the seat and engine composed of front and rear walls spaced apart and top, bottom and side walls connecting them, and a division wall forming a plurality of compartments in said body for containing the fluids employed for operating the engine, the front wall facing the driver's seat being provided with vertically extending recesses, and said bottom wall being provided with upwardly extending recesses adapted to accommodate the fly wheel and steering column, and gage glasses supported on said body and arranged in the recesses in the front wall in communication with the compartments of the body.

4. The combination with a motor vehicle frame having side pieces, fore and rear wheels supporting said frame, a driver's seat mounted on the frame and an explosive engine arranged in front of the seat having a fly wheel, steering devices for operating the wheels and a steering column extending upwardly and rearwardly into proximity with the driver's seat, of a hollow body located between the seat and engine composed of front and rear walls spaced apart and slotted at their lower edges, and top, bottom and side walls connecting them, said bottom wall being adapted to rest at its ends upon the side pieces of the frame and having portions extending upwardly and co-

operating with said slots in the front and rear walls to form a recess for accommodating the steering column, and lugs depending from the side walls and adapted to be secured to the side pieces of the frame.

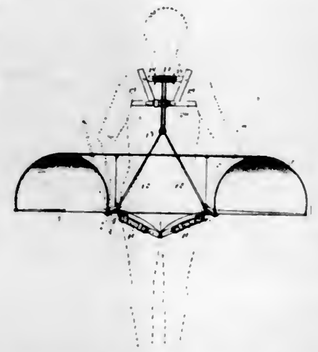
1,060,702. FORM OF FOOD FROM GRAIN AND METHOD OF MANUFACTURING THE SAME. HENRY D. PERKY, Glencoe, Md.; Laban Sparks, administrator of said Henry D. Perky, deceased, assignor, by mesne assignments, to The Shredded Wheat Company, Niagara Falls, N. Y. Filed Mar. 17, 1906. Serial No. 306,690. (Cl. 99—10.)



1. The process of making biscuit, consisting in first, cooking the flour or meal to provide a plastic or semi-solid mass; second, reducing the material to filaments within a mold, filling the same; third, holding the superficial ends of these filaments in separate position normal to the body portion of the biscuit; fourth, heating the mold and its contents in an oven or drier, and finally discharging the product.

2. A molded biscuit having an interior portion consisting of fine convoluted threads connected together in an openwork manner, and an outer portion consisting of normally projecting ends of said threads forming a papillary surface.

1,060,703. PARACHUTE. ADOLPH PERSSON, Greenwich, N. Y. Filed July 13, 1912. Serial No. 709,220. (Cl. 244—21.)

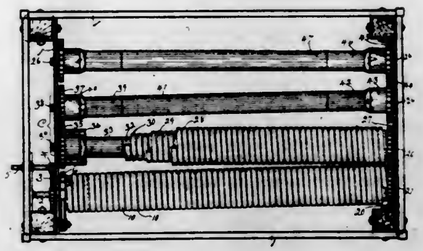


1. In a parachute the combination with the body portion thereof, of levers secured thereto, brackets pivotally carrying said levers, leg straps secured to said brackets and means adapted to be secured to the body of an operator and connected to the said levers whereby the latter may be actuated or locked in an adjusted position.

2. In a parachute the combination with the body portion thereof, of levers formed with apertured heels secured thereto, brackets pivotally carrying said levers, leg straps secured to said brackets, a body girdle, shoulder straps secured to said girdle, a reel supported by said shoulder straps and ropes connecting the said reel and the aforesaid apertured heels.

3. In a parachute the combination with the body portion thereof, of levers formed with apertured heels secured thereto, brackets pivotally carrying the said levers, a flexible stop secured to said brackets for engagement with the said levers, leg straps secured to said brackets, a body girdle, shoulder straps secured to said girdle, a reel supported by said shoulder straps and ropes connecting the said reel and the aforesaid apertured heels.

1,060,704. SPRING-MOTOR. HENRY L. PITMAN, Pineville, Ky. Filed Sept. 6, 1912. Serial No. 718,942. (Cl. 185—9.)



1. A spring motor apparatus comprising a frame, pairs of gear wheels intermeshing alternately mounted in suitable bearings upon opposite sides of the frame, a coiled spring connecting the wheel of one pair upon one side of the frame with another gear wheel of another pair upon the opposite side of the frame, means for preventing the end thrust of the spring bearing against the wheels to which the spring is connected, and means for putting the spring under tension, as set forth.

2. A spring motor apparatus comprising a frame, pairs of gear wheels intermeshing alternately mounted in suitable bearings upon opposite sides of the frame, a coiled spring connecting the wheel of one pair upon one side of the frame with another gear wheel of another pair upon the opposite side of the frame, a core about which spring is mounted, means engaged by the core and adapted to relieve the gear wheel of the end thrust of the spring, and means for putting the spring under tension, as set forth.

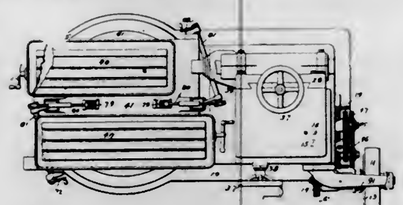
3. A spring motor apparatus comprising a frame, pairs of gear wheels intermeshing alternately mounted in suitable bearings upon opposite sides of the frame, a coiled spring connecting the wheel of one pair upon one side of the frame with another gear wheel of another pair upon the opposite side of the frame, a core about which spring is mounted, shells engaged by the ends of the core and adapted to relieve the gear wheels of the end thrust of the spring, and means for putting the spring under tension, as set forth.

4. A spring motor apparatus comprising a frame, pairs of gear wheels intermeshing alternately mounted in suitable bearings upon opposite sides of the frame, a coiled spring connecting the wheel of one pair upon one side of the frame with another gear wheel of another pair upon the opposite side of the frame, a core about which each spring is mounted, shells engaged by the ends of the core and provided with abutments adapted to receive the end thrust of the spring, and means for putting the spring under tension, as set forth.

5. A spring motor apparatus comprising a frame, pairs of gear wheels intermeshing alternately mounted in suitable bearings upon opposite sides of the frame, a coiled spring connecting the wheel of one pair upon one side of the frame with another gear wheel of another pair upon the opposite side of the frame, a core about which each spring is mounted, shells engaged by the ends of the core and each having a lapping joint connection with a projection of the gear wheel, each of said shells having an abutment adapted to receive the end thrust of the spring, and means for putting the spring under tension, as set forth.

[Claims 6 to 14 not printed in the Gazette.]

1,060,705. MILLING-MACHINE. JAMES CHARLES POTTER, Pawtucket, R. I. Filed June 15, 1912. Serial No. 703,895. (Cl. 90—18.)



1. In a milling machine, the combination of a tool spindle, multiple work tables, a common support for the work tables movable with reference to the spindle to place the tables successively in working relation with the spindle tool and means to reciprocate the tables transversely of the spindle.

2. In a milling machine, the combination of a tool spindle, multiple work tables, a common support for the work tables rotatable with reference to the spindle to place the tables successively in working relation with the spindle tool table feeding means, and a driving shaft for the latter concentric with the axis of the rotation of the table support.

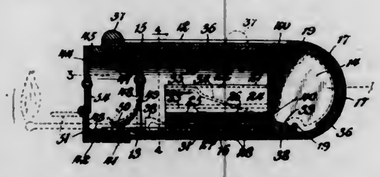
3. In a milling machine, the combination of a tool spindle, a plurality of work tables, a common movable support for said tables by the movement of which the tables are shifted in succession into working relation with the tool spindle, and a feed mechanism for each of said work tables.

4. In a milling machine, the combination of a tool spindle, multiple work tables, a common support for the work tables rotatable with reference to the spindle to place the tables successively in working relation with the spindle tool, and a feed mechanism for each work table.

5. In a milling machine, the combination of a tool spindle, a plurality of work tables, a common movable support for said tables by the movement of which the tables are shifted in succession into working relation with the tool spindle, a feed mechanism for each of said work tables, and means to control each feed mechanism independently of the other.

[Claims 6 to 10 not printed in the Gazette.]

1,060,706. MATCH-BOX. NOAH WEBSTER RASNICK, Dante, Va. Filed Feb. 19, 1912. Serial No. 678,511. (Cl. 206—34.)



1. A match box provided with a match exit and a longitudinal groove in the bottom, a movable cutoff extending over said groove, said cutoff being provided with a depending portion normally positioned at one side of said groove, means for raising said cutoff to lift said depending portion to permit a match to enter said groove for ejection, and a pusher movable in said groove and adapted to push said match through said exit.

2. A match box provided with a match exit and a longitudinal groove in the bottom, and a movable cutoff extending over said groove and adapted to admit and maintain a match at the top of said groove in position for ejection, and a pusher movable in said groove and adapted to push a match through said exit and to engage said cutoff and raise the same to admit a match to said groove.

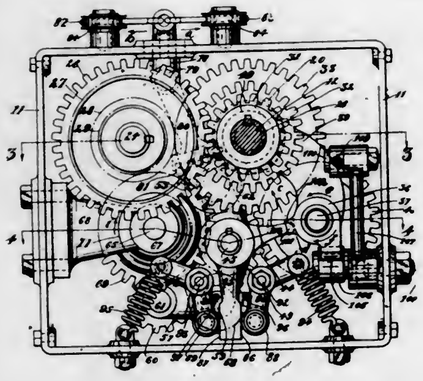
3. A match box provided with a match exit, a movable cut-off adapted to receive and maintain a match in position for ejection, means for actuating said cut-off to receive matches one at a time, a guide positioned over said cut-off and adapted to feed a single line of matches to said cut-off, said guide forming a housing over said cut-off to prevent the matches from interfering with its actuation, and a pusher adapted to push a match held by said cut-off through said exit.

4. A match box provided with a match exit, a pusher adapted to push matches one at a time through said exit, and a movable cutoff continually in contact with the match supply, said cutoff being provided with a depending portion adapted to enter between and separate the matches and means for actuating said cutoff to feed matches one at a time in advance of said pusher.

5. A match box provided with a match exit, a pusher adapted to reciprocate toward and away from said exit, a movable cut-off adapted to position matches one at a time in front of said pusher, said pusher being adapted in its rearward movement to engage the rear end of said cut-off to lift the same and permit another match to pass said cut-off and be positioned in front of said pusher.

[Claims 6 to 19 not printed in the Gazette.]

1,060,707. SPEED-CHANGING MECHANISM. ARTHUR E. REUSS, Cincinnati, and OSCAR SCHNITZLER, Remington, Ohio. Filed Oct. 18, 1911. Serial No. 655,331. (Cl. 74—58.)



1. In speed changing mechanism, the combination of power transmitting mechanism comprising a movable member employed in changing the speed of transmission thereof, a main drive-clutch, and means for moving said movable member comprising a screw-rod and a shifter having threaded connection with said screw-rod, said shifter having operative connection with said movable member for moving the same and operative connection with said main drive-clutch for releasing the same.

2. In speed changing mechanism, the combination of power transmitting mechanism comprising a movable member employed in changing the speed of transmission thereof, and means for moving said movable member comprising a screw-rod, a shifter having threaded connection with said screw-rod, a gear for rotating said screw-rod, tumbler gearing comprising gears for rotating said gear in reverse directions, and connecting means between said tumbler gearing and an element of said power transmitting mechanism for rotating said tumbler gearing.

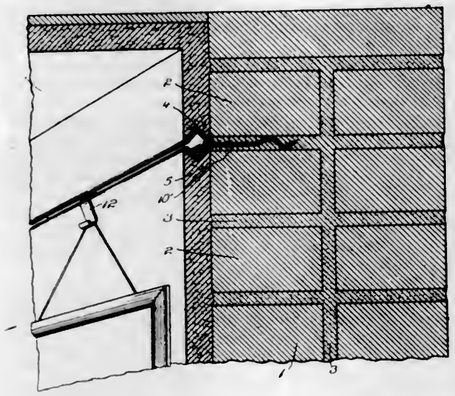
3. In speed changing mechanism, the combination of power transmitting mechanism embracing a movable member employed in changing the speed of transmission thereof, and means for shifting said movable member comprising a screw-rod, a shifter having threaded connection with said screw-rod, a gear for rotating said screw-rod, and tumbler gearing comprising gears for rotating said gear in reverse directions, and yielding driving means between said tumbler gearing and a member of said power transmitting mechanism.

4. In speed changing mechanism, the combination of power transmitting mechanism comprising a movable member employed in changing the speed of transmission thereof, and means for shifting said movable member comprising a screw-rod, a shifter having threaded connection with said screw-rod, and means for rotating said screw-rod in opposite directions, and a lock for said shifter, said lock comprising a keeper operable upon the operation of said last-named means in either direction.

5. In speed changing mechanism, the combination of power transmitting mechanism comprising a movable member employed in changing the speed of transmission thereof, and means for shifting said movable member comprising a screw-rod, a shifter having threaded connection with said screw-rod, and means for rotating said screw-rod in opposite directions, a lock for said shifter, said lock comprising a keeper operable upon the operation of said last-named means in either direction, and means for normally locating said keeper in engagement with said shifter.

[Claims 6 to 17 not printed in the Gazette.]

1,060,708. METAL PICTURE-MOLDING. BERT M. REYNOLDS, North Platte, Nebr., assignor of one-half to Scott Reynolds, North Platte, Nebr. Filed Mar. 19, 1912. Serial No. 684,877. (Cl. 72—125.)

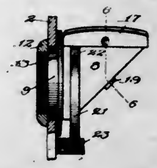


1. A molding of the type described, including a chambered or hollow member, the forming walls of which are each carried back upon and conformed to itself and conjointly forming an extension for anchoring said chambered or hollow member in position, the forward edges of said member being spaced apart.

2. A molding of the type described, including a hollow or chambered member, the forming walls of which are each reversely extended to lie upon and conform to itself and further extended to conjointly form an extension, said extension being waved or fluted, said hollow or chambered member having its forward edges spaced apart to form an opening into its chamber.

3. A molding of the type described, including a chambered or hollow member, the forming walls of which are each reversely extended to lie upon and conform to itself and further extended to conjointly form an extension, said extension being waved or fluted and having a mortar-receiving opening therethrough, said hollow member having its forward edges spaced apart to form an opening into its chamber.

1,060,709. VIEW-FINDER. JOHN A. ROBERTSON, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 8, 1912. Serial No. 682,391. (Cl. 95—52.)



1. The combination with a folding photographic camera comprising a body having a forwardly opening bellows chamber, a front adapted to close the chamber, means for supporting the front in projected position and a bellows connecting the front and body, of a view finder arranged on the rear face of the front so as to be within the bellows chamber when the camera is folded.

2. The combination with a folding photographic camera comprising a body having a forwardly opening bellows chamber, a front adapted to close the chamber, means for supporting the front in projected position and a bellows connecting the front and body, of a view finder rotatably mounted on the rear face of the front so as to be within the bellows chamber when the camera is folded, the axis of movement of the finder being so located as to prevent the latter from projecting beyond the edges of the front in any position of the finder.

3. In a view finder, the combination with a supporting plate having an opening therein, of a finder casing, a lens tube connected therewith and arranged to project through the opening and to rotate therein relatively to the plate and a detachable and replaceable securing member independent of the finder casing and coöperating with the tube on the opposite side of the plate.

4. In a view finder, the combination with a supporting plate having an opening therein, of a finder casing, a lens tube connected therewith and arranged to project through the opening and to rotate therein relatively to the plate, and a ring threaded on the tube on the opposite side of the plate to secure the tube in the latter.

5. In a view finder, the combination with a supporting plate having an opening therein, of a finder casing, a lens tube connected therewith and arranged to project through the opening and to rotate therein relatively to the plate, means connected to the tube and engaging the plate on the opposite side from the finder casing to hold the tube therein and yielding means acting between such movable and fixed parts for maintaining the finder in a position of adjustment.

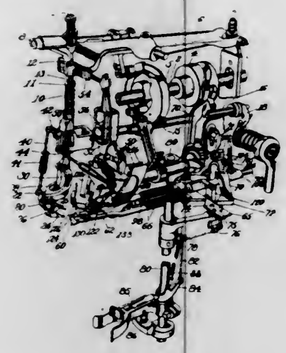
[Claims 6 and 7 not printed in the Gazette.]

1,060,710. MACHINE FOR USE IN THE MANUFACTURE OF BOOTS AND SHOES. ARTHUR L. RUSSELL, Hyde Park, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 21, 1908. Serial No. 468,541. (Cl. 12—2.)

1. In a shoe lasting machine, the combination with grippers, and mechanism adapted to be rendered operative or inoperative to impart plaiting movements to the grippers, of a wiper and mechanism adapted to be rendered operative or inoperative to actuate the wiper, a knee lever and connections therefrom to the gripper mechanism, a knee push bar and connections therefrom to the wiper mechanism.

2. In a shoe lasting machine, the combination with grippers, and mechanism adapted to be rendered operative or inoperative to impart plaiting movements to the grippers, of a wiper and mechanism adapted to be rendered operative or inoperative to actuate the wiper, and devices arranged in proximity to be engaged by the leg of the operator and to be actuated together or separately for controlling the movements of said two mechanisms while the machine continues to operate upon the shoe held by the two hands of the workman.

3. In a shoe lasting machine, the combination with grippers, and mechanism adapted to be rendered operative or inoperative to impart plaiting movements to the grippers, of a wiper, and devices including two parts to which force is to be directly applied by the operator and which are arranged in proximity to each other to permit them to be engaged by the same limb of the operator either together or separately for controlling the movements of the grippers and the position of the wiper.



4. In a shoe lasting machine, the combination with grippers, and mechanism adapted to be rendered operative or inoperative to impart plaiting movements to the grippers, of a wiper, and devices arranged to be actuated together or each separately for controlling the movements of the grippers and the position of the wiper, said grippers controlling device having provision for independent adjustment to vary the movement of the grippers while the machine is running.

5. A shoe lasting machine having in combination, a wiper adapted to be shifted from and toward operative position, an actuator, and means adapted to be manually set with relation to the actuator for causing the actuator to effect the shifting of the wiper.

[Claims 6 to 60 not printed in the Gazette.]

1,060,711. LASTING-MACHINE. ARTHUR L. RUSSELL, Hyde Park, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Original application filed Apr. 22, 1909, Serial No. 491,490. Divided and this application filed June 6, 1910. Serial No. 565,225. (Cl. 12—11.1.)



1. A machine of the class described comprising gripper jaws provided with gripping faces formed with converging ribs which act to increase the grip on the stock automatically if the stock slips between the jaws while being pulled.

2. A machine of the class described, comprising similarly formed coöperating gripping jaws which have gripping surfaces provided with grooves of less depth than the thickness of the jaws and which decrease in depth toward the point of the jaws whereby the stock is compressed vertically if it slips between the jaws.

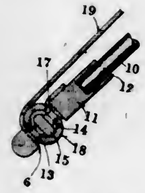
3. A machine of the class described comprising gripper jaws one of which has a gripping surface provided with a groove that becomes shallower toward the point of the jaw.

4. A machine of the class described comprising gripper jaws one of which has a gripping surface provided with a groove diminishing in depth toward the point of the jaw, and the other of which jaws has a rib to hold the upper in the groove.

5. A machine of the class described comprising gripper jaws provided with similarly formed coöperating gripping surfaces each having gripping ribs whose outer edge lines converge laterally toward the point of the jaws, the ribs on one jaw being between the ribs on the other jaw.

[Claims 6 to 8 not printed in the Gazette.]

1,060,712. UMBRELLA CONSTRUCTION. HERMAN E. SCHULTZ, Jr., and FRANK WETTEROTH, St. Louis, Mo., assignors to Zittlosen Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Apr. 17, 1912. Serial No. 691,475. (Cl. 134—36.)



1. The combination with the tip of an umbrella rib, of a clamping member, said tip being provided with a shoulder arranged at the inner end of said clamping member and coöperating therewith, and a cover having a portion inserted between said tip and clamping member, the body of said cover being folded back over the clamping member.

2. The combination with the rib of an umbrella, of a removable tip therefor provided with a clamping surface, of a clamping member movable relatively to said tip and coöperating therewith, and a cover having a portion inserted between said tip and clamping member, the body of said cover being folded back over the clamping member.

3. The combination with the tip of an umbrella rib, said tip being provided with a circumferential groove, of a clamping member situated in said groove, and a cover having a portion inserted from the outer end between said tip and clamping member, the body of said cover being folded back over the clamping member.

4. The combination with the tip of an umbrella rib, said tip being provided with a pair of circumferential grooves, of clamping means situated in said grooves, and a cover having a portion inserted from the outer end between said tip and clamping means, the body of said cover being folded back over the clamping means.

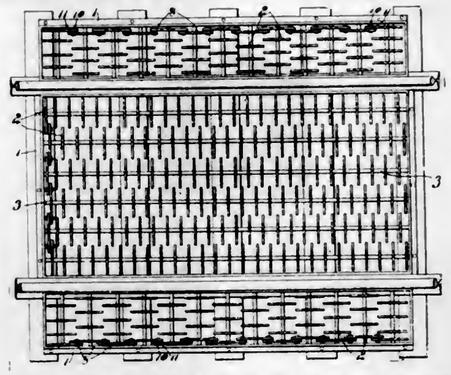
5. The combination with the tip of an umbrella rib, said tip being provided with a pair of circumferential grooves, of a clamping member provided with a pair of internal projections situated in said grooves, and a cover clamped between said member and tip.

[Claim 6 not printed in the Gazette.]

1,060,713. CATTLE-GUARD. ROBERT H. F. SEWALL, New Orleans, La. Filed May 2, 1912. Serial No. 694,772. (Cl. 39—42.)

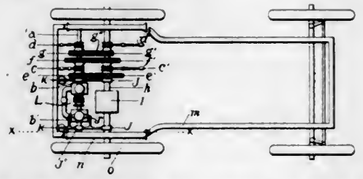
1. A device of the type described, including a supporting frame-member, a series of shaft-supported rocking guard members having upstanding pricking portions, the shafts of said guard members being supported within said supporting frame, and interconnected rocking members secured upon the shafts of said guard-members and having arms adapted to be actuated by an animal stepping thereon, for causing said pricking portions to tilt or incline toward each other to engage the animal's leg.

2. A device of the type described, including a series of guard-members carried by a plurality of shafts, and interconnected rocking members individually connected to said shafts, and adapted to be actuated by an animal stepping



thereon, said series of guard-members being equipped with means for pricking the animal's leg.

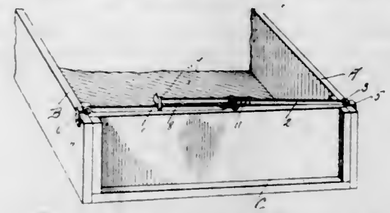
1,060,714. TRANSMISSION OF POWER FOR USE IN VEHICLES. JOHN C. SHERMAN, Brookline, Mass. Filed Apr. 6, 1911. Serial No. 619,421. (Cl. 21—90.)



In a power generating and transmitting apparatus, a plurality of engine cylinders *b b'* and a shaft operated thereby and known as the driving shaft *a*, a second shaft parallel to said driving shaft and herein known as the axle *h*, a plurality of gears *e, f, g* mounted upon said driving shaft, a plurality of gears *e', f', g'* mounted upon said axle in position to make operative contact with the said gears upon the driving shaft, a plurality of clutches *c, c', d, d'* whereby said operative contact may be made and broken between any one of said gears on driving shaft, and the corresponding gear on axle, a rigid frame *m* such as an automobile chassis, and resilient means K for carrying said cylinders; shaft gears and clutches; resilient means *n* for attaching said axle to said frame; rigid connecting arms J secured to said cylinders and shaft and so pivoted to said axle that all motion of displacement undergone by said cylinders and shaft relatively to said axle is constrained to occur in the arcs of circles of which the axial line of said axle is the center; a clutch L carried on said driving shaft whereby a portion of said driving shaft together with the engines thereto connected may be rendered inoperative; and a differential gear I mounted on said shaft.

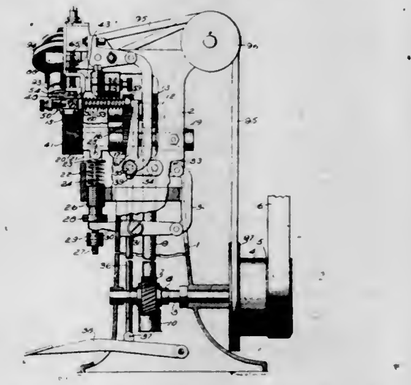
1,060,715. HOLDER FOR END-GATES. SAMUEL E. SIMPSON, Muscoda, Wis. Filed May 4, 1912. Serial No. 695,174. (Cl. 21—21.)

In a device of the character described, the combination of a pair of bars, one of said bars having the opposite ends thereof constructed with hooks, the other of said bars having the outer end thereof constructed with a hook and the inner end thereof constructed with a bifurcated portion, and said bifurcated portion provided with a plurality of registering apertures; an adjustable lever fulcrumed within the bifurcated portion of said bar having a hooked end and provided with an angularly extending portion; a link connecting the extended portion of said lever with the adjacent hooked end of the first-named bar; a pair of angular clamping members loosely connected with the outer hooked ends of said bars and



adapted to engage with the sides of a wagon; and a staple pivotally mounted on said first-named bar and adapted to engage with the hooked end of said lever and hold the same in secured position, substantially as described.

1,060,716. WELT-PREPARING MACHINE. CHARLES P. STANBON, Lynn, Mass., assignor to United Shoe Machinery Company, Boston, Mass., a Corporation of New Jersey. Original application filed Nov. 2, 1908, Serial No. 460,591. Divided and this application filed Aug. 16, 1911. Serial No. 644,379. (Cl. 164—64.)



1. In a machine for preparing welts before they are attached to shoes, the combination of means for feeding the welt, and rotary means for forming in the welt a series of oblique slits extending partially across the welt and partially through the thickness of the same.

2. In a machine for preparing welts before they are attached to shoes, the combination of means for supporting and feeding the welt, and rotary slitting means for forming in the welt while supported by said means a series of oblique slits extending crosswise of the welt and partially through the thickness of the welt.

3. In a machine for preparing welts before they are attached to shoes, the combination of a rotary welt slitting knife constructed and arranged to move in a curved path widthwise of the welt to cut slits obliquely disposed to the surface of the welt and extending partially through the welt, and means to space the slits made by the knife.

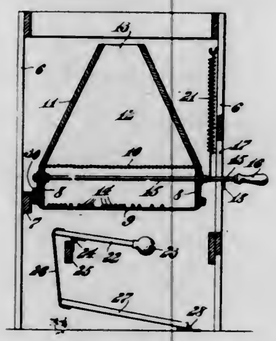
4. In a machine for preparing welts, the combination of means for supporting and feeding the welt, and rotary slitting means movable in a curved path widthwise of the welt for forming a series of slits extending partially across the welt, and partially through the thickness of the same and obliquely disposed to the surface of the welt.

5. A machine for preparing welts having in combination a rotary welt supporting and feeding roll, and a rotary

welt slitting knife for forming transverse slits in the welt extending partially through the welt while the welt is supported on the roll.

[Claims 6 to 16 not printed in the Gazette.]

1,060,717. STAGE-NOISE APPARATUS. IRA L. STANGER, Pensauken, N. J., and CHARLES B. FITHIAN, Philadelphia, Pa. Filed May 8, 1912. Serial No. 695,828. (Cl. 46—70.)



1. In an apparatus of the character described, a stationary frame work, a frame hinged thereto, a membrane stretched across said frame, a quantity of loose particles upon said membrane, and a netting arranged above said membrane to confine said particles.

2. In an apparatus of the character described, a stationary frame work, a frame hinged thereto, a membrane stretched across said frame, a quantity of loose particles upon said membrane, a sound modifying device arranged above said frame, and means for preventing the loose particles from contacting with said sound modifying device.

3. In an apparatus of the character described, a stationary frame work, a frame hinged thereto, a membrane stretched across said frame, a quantity of loose particles upon said membrane, a sound modifying device arranged above said frame, and a netting interposed between said membrane and said sound modifying device.

4. In an apparatus of the character described, a stationary frame work, a frame hinged thereto, a membrane stretched across said frame, a quantity of loose particles upon said membrane, a frusto-pyramidal box mounted above said frame having its small end open at the top.

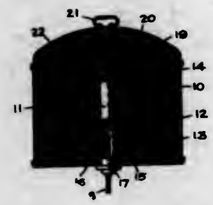
5. In an apparatus of the character described, a stationary frame work, a frame hinged thereto, a membrane stretched across said frame, a quantity of loose particles upon said membrane, a frusto-pyramidal box mounted above said frame having its small end open at the top, and a netting interposed between the membrane and said pyramidal box.

[Claims 6 to 12 not printed in the Gazette.]

1,060,718. ELECTRIC HEATER. WILLIAM STANLEY, Great Barrington, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 7, 1912. Serial No. 719,219. (Cl. 219—19.)

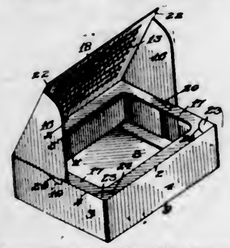
1. In a heat storage stove, a body portion comprising a heat insulating casing and a stationary heat storage mass having high thermal conductivity contained within said casing and having a portion thereof extending so that its end surface is at least substantially flush with one face of said casing and a removable cover adapted to be placed over the end surface of the said portion of the heat storage mass.

2. In a heat storage stove, a storage mass having high thermal conductivity, heat insulation normally surrounding said heat storage mass, a portion of said heat insulation being removable to expose a surface of the said heat storage mass, said surface being substantially flush with the surrounding insulation and in good thermal conductive relation with all portions of the heat storage mass.



3. In a heat storage stove, a body portion comprising a heat storage mass having high thermal conductivity and heat insulation located around the same but leaving the top thereof exposed, said top of the heat storage mass being substantially flush with the top of the body portion of the stove, and a removable cover for the said body portion.

1,060,719. RECEPTACLE. FRANK A. STECHER, Rochester, N. Y., assignor to Stecher Lithographic Co., Rochester, N. Y., a Corporation of New York. Filed Jan. 3, 1910. Serial No. 536,094. (Cl. 229—36.)



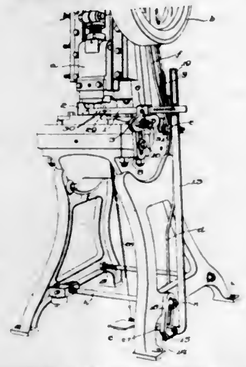
A display carton formed of a blank comprising a top, having a central opening providing inwardly extending horizontal flanges, a bottom panel and front and rear side panels connecting the top and bottom panels, tucking flaps at the ends of the side panels and end panels arranged at the lateral edges of said top forming the ends of the cartou, the end flaps and panel at either end being adapted to be closed after the contents of the carton has been inserted through that end, said blank further comprising a cover portion having supporting flaps at its two lateral edges adapted to coöperate with said top flanges to support the cover in open position and when the latter is closed also coöperating with said flanges for the purpose of holding the flaps in flattened position against the cover to prevent their obstructing the interior of the carton during the filling operation, and means for holding the cover temporarily in closed position.

1,060,720. GUARD FOR PUNCH-PRESSES AND SIMILAR DEVICES. KONSTANTINE THULANDER, Rockford, Ill., assignor to National Lock Company, Rockford, Ill., a Corporation of Illinois. Filed June 13, 1912. Serial No. 703,387. (Cl. 164—107.)

1. The combination, with the starting treadle of a punch press or the like, of a lever having one arm arranged to be moved by said treadle; a reciprocatory guard member connected to the other arm of said lever; and means for guiding said guard member.

2. The combination, with the starting treadle of a punch press or the like, of a vertically-extending lever pivoted adjacent to said treadle and having a relatively short arm arranged to be moved by said treadle; and a reciprocatory guard member connected to the upper end of said lever.

3. The combination, with the starting treadle of a punch press or the like, of a vertically-extending lever pivoted adjacent to said treadle and having a relatively short arm underlying said treadle; a spring tending to move said arm upwardly; a reciprocatory guard member connected to the upper end of said lever; and means for guiding said guard member for horizontal movement.

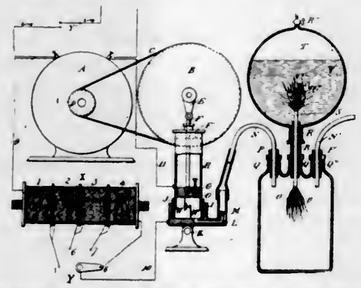


4. The combination of a lever; means for swinging said lever; a guard member pivotally connected to said lever; and a guide for said guard member, said member being withdrawable from said guide and adapted to swing into position alongside said lever.

5. The combination of a vertically-extending lever pivotally supported adjacent to its lower end, of a guard bar pivoted to the upper end of said lever, and a guide for said bar, said bar being withdrawable from the guide and being adapted to swing into position alongside said lever.

[Claims 6 to 13 not printed in the Gazette.]

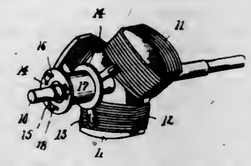
1,060,721. APPARATUS FOR PRODUCING MEDICATED GAS. ANDREW L. VAN PATTEN, Los Angeles, Cal. Original application filed Aug. 21, 1912, Serial No. 716,188. Divided and this application filed Dec. 23, 1912. Serial No. 738,223. (Cl. 167—3.)



1. A device comprising an ozone generator, and a medicator consisting of a receptacle for ozone gas provided with a supply pipe connected to the ozone generator, a discharge pipe, a neck between said pipes, and a receptacle for supplying a medicated solution to the former receptacle, a tubular connection between said receptacle, and means extending through said connection into both receptacles for supplying solution to the gas receptacle in finely divided particles.

2. A device comprising an ozone generator, and a medicator consisting of a receptacle for ozone gas provided with a supply connected to the ozone generator, a discharge pipe, a neck between said pipes, and a receptacle for supplying a medicated solution to the former receptacle, a tubular connection between said receptacles, means extending through said connection into both receptacles for supplying solution to the gas receptacle in finely divided particles, and means for admitting air to the receptacle for containing the solution to regulate the supply of solution to the gas receptacle.

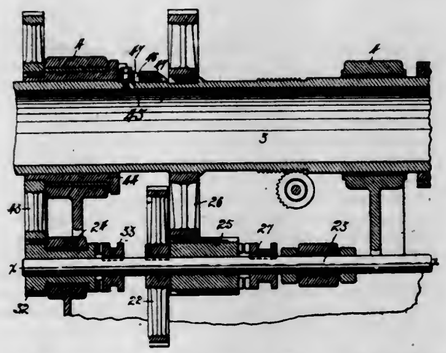
1,060,722. COMMUTATOR. WILLIAM G. VIALL, Bridgeport, Conn., assignor to The Ives Manufacturing Corporation, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 12, 1912. Serial No. 714,550. (Cl. 171—211.)



1. A commutator comprising a pair of end disks of insulating material with a central hole therethrough, and having a series of arc shaped slots, curved sheet metal segments having their ends fitted in the slots of the disks and having extensions passed through the said slots of the disks and bent over upon the outside to securely hold the parts together, said segments being separated one from the other in a way to form an open space between the adjacent edge portions of the segments to prevent dirt from lodging therein.

2. A commutator comprising a pair of insulating disks having a series of arc shaped slots therein curved sheet metal segments having their ends fitted in the slots of the disks and having extensions passed through the said slots and bent over upon the outside to securely hold the parts together, said segments being separated one from the other in a way to form an open space between the adjacent edge portions of the segments and likewise a central hollow space within the hub or cylinder formed by the segments.

1,060,723. POWER TRANSMISSION AND CONTROL MECHANISM. WILLIAM W. VOSPER, Toledo, Ohio, assignor to The Toledo Pipe Threading Machine Company, Toledo, Ohio, a Corporation of Ohio. Original application filed July 5, 1912, Serial No. 707,711. Divided and this application filed Nov. 18, 1912. Serial No. 732,080. (Cl. 74—59.)



1. In combination, a driven shaft, a variable speed power transmission mechanism, a control member for said mechanism, means for communicating rotation to the shaft from said mechanism, a control member for said means, and means for locking the control member of the variable speed mechanism against shifting movements when the control member for such shaft driving means is in one position of its movement.

2. In combination, a shaft, a variable speed power transmission mechanism for said shaft, control means for the speed change gears of said mechanism, means operable to place said mechanism into or out of driving connection with the shaft, and means automatically operable to prevent the movement of said speed change control means when the shaft is being driven.

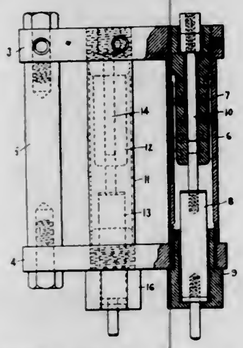
3. In combination, a driven part, a variable speed driving mechanism for said part, a speed control lever for said mechanism, a multiple-way guide means for said lever, means controlling the driving connection between said part and mechanism, and means automatically operable to lock said lever against shifting movements when said part is being driven.

4. In combination, a driven part, a variable speed drive-mechanism for said part, a speed control lever for said mechanism, a multiple-way guide means for said lever, a clutch control lever for said mechanism, and means having a part coacting with said clutch control lever and a part coacting with said speed control lever to lock the latter in shifted position when the clutch control lever is in clutch engaging position.

5. In combination, a driven part, a variable speed power transmission mechanism for said part, a speed control lever for said mechanism, a lever operable to connect or disconnect said mechanism and shaft, slotted guide means for said speed control lever, said guide means having parts which are relatively movable to coöperate to lock the speed control lever against shifting movements, and means controlled by movements of said other control lever for relatively moving said guide parts.

[Claims 6 to 37 not printed in the Gazette.]

1,060,724. REVERSE-CURRENT RELAY. EDMUND B. WEDMORE and WILLIAM P. HAMLYN, Rugby, England, assignors to General Electric Company, a Corporation of New York. Filed June 6, 1908. Serial No. 437,172. (Cl. 175—271.)



1. In a protective device for electric circuits, the combination with two coils and a tripping armature movable into tripping position in response to the magnetic flux of said coils, of means responsive to abnormal magnetic flux from one of said coils for shunting part of the flux from said tripping armature to prevent the tripping of said armature thereby.

2. In a protective device for electric circuits, the combination with a potential coil and a series coil differentially wound with respect to each other in the normal operation of the system, a tripping armature movable into tripping position in response to a combined magnetic flux of both of said coils, and means responsive to abnormal current in said series coil for shunting part of the magnetic flux from said tripping armature.

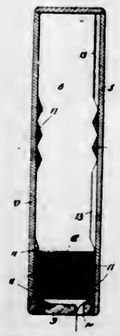
3. In a protective device for electric circuits, the combination with differentially wound potential and series coils having a common magnetic circuit and a tripping armature forming part of said magnetic circuit, of a shunting armature actuated by said series coil to divert part of the magnetic flux of said series coil from said tripping armature.

4. In a protective device for electric circuits, the combination with differentially wound series and potential coils having a common magnetic circuit, of a movable core for said potential coil forming part of said magnetic circuit, and an armature actuated by abnormal current in said series coil to complete a magnetic circuit of low reluctance independent of said core, thereby shunting part of the magnetic flux from said core.

5. In a protective device for electric circuits, the combination with differentially wound coils having a common magnetic circuit, of two armatures forming part of said magnetic circuit, one arranged to shunt part of the magnetic flux of said circuit from the other, and means actuated by either of said armatures to open the circuit to be protected.

[Claim 6 not printed in the Gazette.]

1,060,725. DISPENSING-CABINET. SETH WHEELER, Castleton, N. Y. Filed May 19, 1911. Serial No. 628,332. (Cl. 211—29.)



1. A dispensing cabinet for sheets interfolded into flat units having opposed parallel edges, a base arranged to hold the units in horizontal positions, said base being provided with a transverse slot, the inner walls of said cabinet having vertical surfaces throughout a portion of their length, and parallel rigid surfaces included in opposite directions from the vertical throughout another portion of their length to form a zigzag path for the units, said surfaces being adapted to engage the opposed parallel edges of the units to partially sustain the weight thereof and to move them transversely as they pass down through the cabinet.

2. A dispensing cabinet for folded and interfolded units, of substantially rectangular form, provided with a slot at the base thereof, portions of the opposite inner walls having angular blocks disposed in staggered relation to form a zigzag passage, and other portions of the cabinet having interior vertically disposed ribs, substantially as specified.

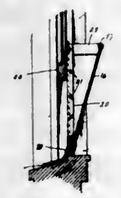
1,060,726. FASTENING DEVICE. PARKER WINEMAN, Chicago, Ill. Filed Nov. 30, 1910. Serial No. 594,924. (Cl. 24—101.)



A fastening device comprising a single piece of metal having a tongue formed therein with an integral bar at each side thereof connecting the end portions of the metal, shoulders formed in said bars at the junctions with the integral end of the tongue, said metal piece being bent to form a U-shaped loop with the ends of the metal extending in a direction opposite the free end of the tongue, substantially as described.

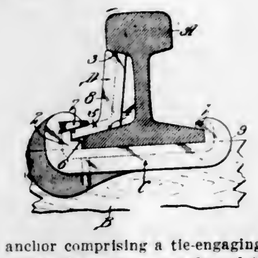
1,060,727. WINDOW-VENTILATOR. CHARLES S. WINN, Rockford, Ill. Filed Feb. 3, 1912. Serial No. 675,383. (Cl. 98—31.)

In a window ventilator, the combination with a window-engaging frame comprising oppositely disposed substantially U-shaped rod sections arranged end to end, of sleeves adjustably connecting the corresponding ends of the rods, a swinging frame comprising substantially L-shaped rod sections, arranged end to end, a sleeve connecting said ends and forming the sections into an inverted substan-



tially U-shaped member, said swinging frame sections having terminal eyes journaled respectively and directly on the lower legs of the window frame sections, and a fabric covering extending across the space within the swinging frame and between the ends of the two frames, leaving the space between the tops of said frames open.

1,060,728. RAIL-ANCHOR. WILLIAM HOWARD WINSWORTH, Youngstown, Ohio, assignor to The Columbus Railway Supply Company, Columbus, Ohio, a Corporation of Ohio. Filed June 24, 1912. Serial No. 705,636. (Cl. 238—4.)



1. A rail anchor comprising a tie-engaging member having a portion that laps over one edge of the base flange of the rail, a rail-gripping member wedged between the head and the base flange of the rail but not touching the web and having a portion which projects under an overlapping portion on said tie-engaging member, means for causing said members to be drawn tightly into intimate engagement with the rail when said rail-gripping member is being moved into operative position, and means on one of said members for locking the rail-gripping member in position.

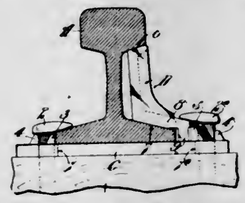
2. A rail anchor comprising a tie-engaging member extending transversely under the base flange of the rail and provided at one end with a portion that laps over said base flange, an upwardly projecting portion on the opposite end of said member provided with a guideway that lies in a higher horizontal plane than the bottom face of the base flange of the rail, a rail-gripping member having a laterally projecting portion that fits in said guideway and a vertically disposed portion that is wedged tightly between the head and the base flange of the rail but does not bear against the web of the rail, and means on one of said members that is adapted to be bent into such a position that said rail-gripping member cannot move out of engagement with the rail.

3. A rail anchor comprising a tie-engaging member arranged transversely under the rail and provided at one end with a portion for engaging the base flange of the rail and at its opposite end with a portion in which a horizontally disposed guideway is formed at a point above the surface on which the base flange of the rail rests, a rail-gripping member having a substantially wedge-shaped portion that is wedged tightly between the head and the base flange of the rail, and a laterally projecting wedge-shaped portion on said rail-gripping member that lies in said guideway.

4. A rail anchor comprising a tie-engaging member that is adapted to be arranged transversely under a rail, a hook-shaped portion on one end of said member for engaging one edge of the base flange of the rail, an upwardly projecting portion on the opposite end of said member having a horizontally disposed tapered guideway formed therein, a rail-gripping member having a wedge-shaped portion that fits between the head and the base flange of the rail and an integral laterally projecting tapered portion that fits in said guideway, and a lip on said tie-engaging member that is adapted to be bent down over the end of the laterally projecting portion on said rail-gripping member to retain it in operative position.

5. A rail anchor comprising a tie-engaging member provided at one end with means for receiving one edge of the base flange of a rail, a rail-gripping member arranged on the opposite side of the rail and having a portion that is wedged tightly between the under side of the head and the top face of the base flange of the rail, interlocking portions on said rail-gripping member and tie-engaging member constructed in such a manner that both of said members will be drawn into intimate engagement with the rail when the rail-gripping member is being driven into operative position, and an integral part on one of said members that is adapted to be bent into such a position that it prevents displacement of said rail-gripping member.

1,060,729. COMBINED TIE-PLATE AND RAIL-ANCHOR. WILLIAM HOWARD WINSWORTH, Youngstown, Ohio, assignor to The Columbus Railway Supply Company, Columbus, Ohio, a Corporation of Ohio. Filed June 24, 1912. Serial No. 705,637. (Cl. 238—2.)



1. A combined tie plate and rail anchor comprising a rail-supporting member having angularly-disposed upwardly projecting lugs which form a pocket, a rail-gripping member wedged between the head and flange of the rail and having a rigid portion that fits loosely in said pocket, and a fastening device for securing both of said members to the tie on which the device is mounted.

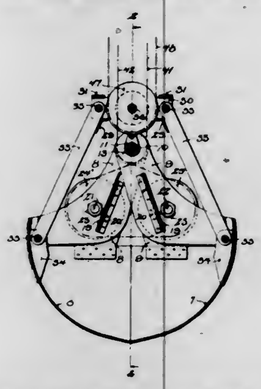
2. A combined tie plate and rail anchor comprising a rail-supporting member on which the rail rests, an open pocket on said member having oppositely inclined walls, a rail-gripping member having a wedge which fits between the head and the flange of the rail but does not engage the web of the rail, a rigid device on said rail-gripping member that fits in said pocket for preventing relative longitudinal movement of same, and means for locking said rail-gripping member in operative position.

3. A combined tie plate and rail anchor comprising a rail-supporting member on which the rail rests, a rail-gripping member having a wedge-shaped portion that is adapted to be wedged between the head and the base flange of the rail and provided with a rigid laterally projecting portion, a depending flange on said laterally projecting portion extending along one edge of the base flange of the rail and having oppositely inclined surfaces, and upwardly projecting lugs on said rail-supporting member that coöperate with said oppositely inclined surfaces to prevent longitudinal movement of the rail.

1,060,730. HOISTING-BUCKET. ANDREW WIRSING, Milwaukee, Wis. Filed Dec. 12, 1912. Serial No. 736,260. (Cl. 37—30.)

1. A separable hoisting-bucket comprising a head-frame, body-sections and links connected to said frame and body sections; arms provided in connection with the body-sections, a spindle extending through all of the arms, a pair

of primary sheaves on the spindle, secondary sheaves carried in connection with arms of said body-sections, and a cable fast at one end in the head-frame from which it extends down under one of the primary sheaves, thence over one of the secondary sheaves, thence back over another secondary sheave, thence up under the other primary sheave and finally up through the said head-frame.



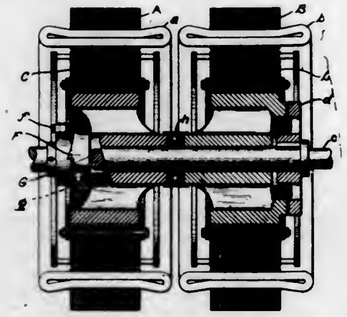
2. A separable hoisting-bucket comprising a head-frame, body-sections and links connected to said frame and body sections; arms provided in connection with the body-sections, a primary spindle extending through all of the arms, a pair of sheaves loose on said spindle, secondary spindles each carried by arms of a body-section, a sheave loose on each secondary spindle, and a closing-cable fast at one end in the head-frame from which it extends down under one of the sheaves on the primary spindle, thence in one direction over the sheave on one of the secondary spindles, thence back over the sheave on the other secondary spindle, thence up under the other sheave on the primary spindle and finally up through said head-frame.

3. A separable hoisting-bucket comprising a head-frame, body-sections and links connected to said frame and body-sections; arms provided in connection with the body-sections, a spindle extending through all of the arms, two pairs of primary sheaves loose on said spindle, secondary sheaves in pairs carried in connection with arms of the body-sections, an equalizer-yoke oscillative in the head-frame, and a pair of closing-cables fast to opposite ends of the yoke from which they extend down oppositely under primary sheaves of the pairs aforesaid, thence over secondary sheaves, thence back over opposite secondary sheaves, thence up under the other primary sheaves, and finally up through said head-frame.

4. A separable hoisting-bucket comprising a head-frame, body-sections and links connected to said frame and body-sections; arms provided in connection with the body-sections, a spindle extending through all of the arms, a pair of primary sheaves on the spindle, secondary sheaves carried in connection with arms of said body-sections, a cable fast at one end in the head-frame from which it extends down under one of the primary sheaves, thence over one of the secondary sheaves, thence back over another secondary sheave thence up under the other primary sheave and finally up through the said head-frame, and hoisting-cable sheaves hung in the aforesaid head-frame.

5. A separable hoisting-bucket comprising a head-frame, body-sections and links connected to said frame and body-sections; a spindle in the head frame, arms in connection with the body-sections, another spindle extending through all of the arms, hoisting-cable sheaves, guide sheaves, an equalizing yoke and spacing-sleeves loose on the spindle first aforesaid; primary sheaves loose on the other of said spindles, secondary sheaves carried in connection with said arms of the body-sections, and closing cables in connection with the ends of said yoke from which they extend down oppositely under primary sheaves, thence over secondary sheaves, back over opposite secondary sheaves and finally up past the guide sheaves.

1,060,731. ALTERNATING-CURRENT MOTOR. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 19, 1911. Serial No. 655,479. (Cl. 172—275.)



1. In combination with a single phase source of supply, a polyphase motor, a phase converter converting single phase current from the source to polyphase current for the motor, and means for mechanically connecting the rotor of the converter to assist the motor in driving the load.

2. In combination with a single phase source of supply, a polyphase motor, a phase converter converting single phase current from the source to polyphase current for the motor, and means controlled by the torque of the motor for mechanically connecting the rotor of the converter to assist the motor in driving the load.

3. In combination with a single phase source of supply, a polyphase motor, a phase converter having its rotor loosely mounted on the motor shaft, and a clutch for connecting said rotor to said shaft.

4. In combination with a single phase source of supply, a polyphase motor, a phase converter having its rotor loosely mounted on the motor shaft, and a clutch for trolled by the torque of the motor for connecting said rotor to said shaft.

5. In combination with a single phase source of supply, a polyphase motor, a phase converter having its rotor loosely mounted on the motor shaft and capable of axial movement thereon, a clutch actuated by the axial movement of said rotor for connecting said rotor to said shaft, and automatic means controlled by the motor torque for moving said motor axially.

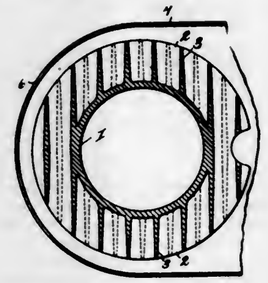
[Claims 6 to 8 not printed in the Gazette.]

1,060,732. NON-REFILLABLE BOTTLE. FERDINAND ANDERSON, Waterbury, Conn. Filed Oct. 14, 1912. Serial No. 725,722. (Cl. 215—62.)

The combination with a bottle having a neck, of a tubular valve-casing inserted tightly within said neck; annular valve-supports, inserted tightly within said valve-casing, respectively, and suitably spaced each from the other; a cylindrical gravity valve, encircled by one of said valve-supports, closed at its opposite ends, having its lower end-closure concaved, and having a lateral intake port adjacent to its lower end, and a lateral outlet port adjacent to its upper end; an additional cylindrical gravity valve, encircled by the other of said valve-supports in axial alinement with the valve first named, closed at its upper end, bridged at its lower end, containing loosely a spherical element, and having a lateral outlet port adjacent to its upper end, said valves being automatically shiftable endwise, each to bring its ontlet port into and out of registry with its coöperating valve-support, upon said bottle being caused to occupy an upright or an inverted position, respectively, and for closing and opening such outlet port, accordingly; and an additional spherical element, the latter loosely confined within the valve-casing aforenamed, between said valves, and aiding in the opening movement of one thereof, upon said bottle being inverted, and the closing movement of the other thereof, upon said bottle being brought to an upright position, the spherical element first above named, coöperating with the valve within which it is confined, accordingly.

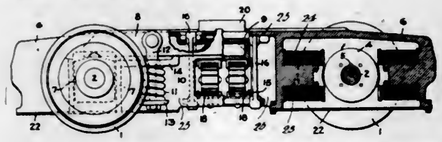


1,060,733. HEAT-RADIATING DEVICE. CURTIS L. BAILEY, Lansing, Mich., assignor to The "New-Way" Motor Co., Lansing, Mich. Filed Nov. 25, 1911. Serial No. 662,338. (Cl. 237—20.)



In a heat radiating device, the combination of a hollow body, a plurality of circumferentially arranged spaced heat radiating flanges on said body having ribs on their sides, said ribs being disposed in substantially parallel planes, the ribs on opposed sides of adjacent flanges being disposed in an alternating relation and with the outer edges of the ribs of one flange projecting between the opposed ribs, said body, flanges and ribs being one integral casting.

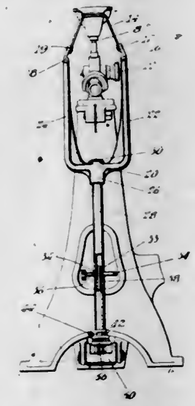
1,060,734. LOCOMOTIVE-TRUCK. ASA F. BATCHELDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 13, 1912. Serial No. 736,534. (Cl. 105—259.)



1. In a locomotive truck, wheels, axles therefor, inside journal boxes for said axles, armatures for electric motors surrounding said axles and mechanically connected thereto, motor frames for said armatures integrally connected together and forming a complete truck frame, said journal boxes being slidably mounted in said motor frames, equalizers mounted on said journal boxes between said wheels and said motor frames, means for supporting said motor frames from said equalizers, a swing bolster, and means for suspending said bolster from said motor frames, said motor frames having a recess for receiving said bolster.

2. In a locomotive truck, wheels, axles therefor, inside journal boxes for said axles, armatures for electric motors surrounding said axles and mechanically connected thereto, motor frames for said armatures integrally connected together and forming a complete truck frame, pedestal jaws integral with said motor frames, said journal boxes being slidably mounted in said jaws, equalizers mounted on said journal boxes between said wheels and said motor frames, means comprising links and springs for supporting said motor frames from said equalizers, a swing bolster, and means for suspending said bolster from said motor frames, said motor frames having a recess for receiving said bolster.

1,060,735. WORK-SUPPORT. ARTHUR BATES and ERNEST ALBERT CRIDLAND, Leicester, England, assignors to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 10, 1913. Serial No. 747,412. (Cl. 12—127.)



1. A jack for turn shoe reforming machines comprising a shoe support, a strap arranged to pass over the shank of the shoe and having one end thicker than the other end to fit the greater lateral inclination at the inside of a shoe shank, a support for the strap located below the shoe, and pivotal sustaining means therefor to permit the strap to be turned around relatively to the shoe support to fit the contour of a right shoe shank or a left shoe shank.

2. A jack for turn shoe reforming machines, comprising a shoe support, a stirrup to pass over the shank portion of a shoe on said support, a yoke carrying the ends of the stirrup, a member having a swiveled connection with the yoke arranged to permit lateral turning movement of the yoke and stirrup independently of the shoe support to adapt the stirrup to varying positions or shapes of shoe shanks, and treadle means for depressing the member to force the stirrup against the shoe shank.

3. A jack for turn shoe reforming machines comprising a shoe support, a strap arranged to pass over the shank of the shoe on said support, a yoke located wholly outside the shoe support and having its arms hinged to the ends of the strap, a post passing freely through the bight of the yoke and having a head to engage the yoke to depress the strap against the shoe, a treadle, a spring connection between the treadle and the post, and a catch for holding the treadle in a predetermined relation of depression.

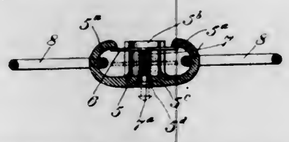
4. A jack for turn shoe reforming machines, comprising a shoe support, a strap arranged to pass over the shank of a shoe, a yoke having its arms secured to the ends of the strap, a post passing freely through the bight of the yoke and having a head to engage the yoke to depress the strap against the shoe, a spring in the post having a block resting thereon, a treadle, a rod connected with the block and passing through the spring to a pivotal connec-

tion with the treadle, and means for locking the treadle in depressed position.

5. A jack for turn shoe reforming machines comprising a support for the shoe and a strap arranged to pass over the shank of the shoe and to bend the shank of the shoe into conformity with the transverse curvature of the shank portion of the last bottom, a support for the strap located below the shoe and sustained for rotation on a vertical axis independently of the shoe support whereby the strap may be turned around to adapt it to varying positions or shapes of shoe shanks without removal from its carrier.

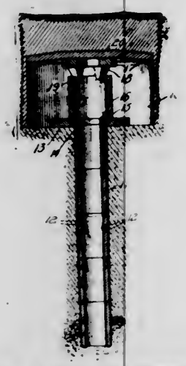
[Claims 6 and 7 not printed in the Gazette.]

1,060,737. SNAP-HOOK. JACOB J. BAYER, Columbus, Ohio. Filed Mar. 20, 1912. Serial No. 684,954. (Cl. 24—239.)



A multiple snap hook including, in combination, a frame having opposing hook members and longitudinally recessed lateral inclosing guiding members extending to the plane of the ends of the hook members, a tongue member engaging the inner sides of said hook members and having lateral projections extending into and permanently inclosed by said guiding members, a pin on said tongue member and a coil spring associated with said pin between the frame and tongue, substantially as described.

1,060,737. DRAINAGE SYSTEM. ALBERT E. BEALL, Clinton, Iowa, assignor to Vertical Drainage Company, Clinton, Iowa. Filed Jan. 30, 1913. Serial No. 745,070. (Cl. 61—9.)



1. In a drainage system, the combination of a main drain composed of tile sections positioned one on top of the other, a platform positioned above the topmost of said tiles, an opening through said platform concentric with the passage through said tiles, a tubuluar member positioned on said platform, a crown member positioned on said tubular member and having openings around its periphery through which the water overflows to the main drain, and a cover positioned on top of said crown member.

2. In a drainage system, a main drain composed of tile sections positioned one above the other, a supporting member located on the topmost tile section to prevent the tiles from sinking, a tubular member disposed on said platform, and a crown member on top of said tubular member having openings through which the water will overflow into the main drain.

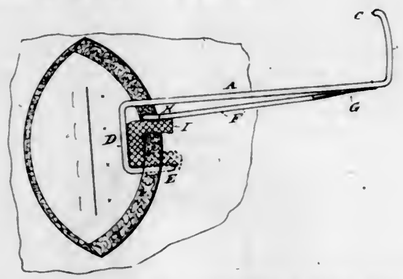
3. In a drainage system, the combination of a main drain, a supporting means above said main drain to prevent sinking of the drain, a tubular member disposed on said supporting means, and a crown member located on top of said tubular member and having openings around its periphery through which the water may overflow into the main drain.

4. A drain head composed of a platform, a length of tile seated on said platform, a crown member on said tile and having openings around its periphery through which the water may overflow into the tile, and a cover supported by said crown.

5. A drain head composed of a platform having a central opening, a groove around the upper side of said central opening, a tubular member seated in said groove, and a crown member located on top of said tubular member, said crown member having lugs on its lower side with spaces between them through which the water may pass, and notches on the outer side of said lugs to engage the upper edge of said tubular member, and a wide cover over said crown.

[Claim 6 not printed in the Gazette.]

1,060,738. COMPRESSION-RETRACTOR. ROBERT WEBSTER BINNEY, Granite City, Ill. Filed May 15, 1912. Serial No. 697,550. (Cl. 128—28.)



1. A surgical retractor, comprising a shank provided with a handle, a hook extending from one end of said shank and having its lower portion substantially parallel therewith, and a compressor adapted to act downward toward the lower portion of said hook, whereby pressure is exerted upon interposed flesh, substantially as described.

2. A surgical retractor, comprising a shank, a handle, a hook extending from one end of said shank, the lower portion of said hook being substantially parallel to the shank and provided with laterally projecting prongs, and a compressor having lips matching said prongs and adapted to compress the interposed flesh and gauze.

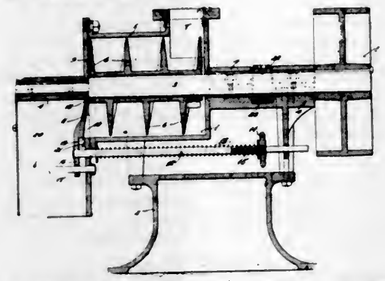
3. A surgical retractor, comprising a shank, a handle, a hook having its lower portion bent backward substantially parallel with the shank, and a spring compressor opposing said lower portion of the hook with a normal spring tendency, whereby the retractor will maintain its adjusted position on interposed gauze and flesh, substantially as described.

4. A self-retaining surgical retractor comprising a shank bent upon itself at one end to provide a hook portion, the free end of which extends substantially parallel to the shank of the retractor and is provided with a relatively wide flat inner surface, and a leaf spring secured to the underside of the shank and provided at its free end with a compressor overlying the wide inner surface of the free end of the hook portion and substantially co-extensive therewith.

1,060,739. DISINTEGRATOR. HARRY BUCKLEY, Louisville, Ky. Filed Aug. 12, 1912. Serial No. 714,548. (Cl. 83—14.)

1. A machine for disintegrating middlings comprising a horizontally mounted cylindrical shell having a feed opening at or near one end and a delivery opening in the lower site end, a shaft extending axially through said shell, and a spiral blade rigidly mounted on said shaft and loosely

fitting said shell, said shell having an automatic normally closed gate for said delivery opening adapted to yield to a predetermined pressure from within, and the end of said spiral blade clearing the delivery end of said shell by a narrow margin as specified.



2. A machine for disintegrating middlings comprising a horizontally mounted cylindrical shell having a feed opening at or near one end and a delivery opening in the opposite end, a shaft extending axially through said shell, means for driving said shaft at high speed, and an imperforate spiral blade rigid on said shaft and loosely fitting said shell, said shell having an automatic normally closed gate for said delivery opening adapted to yield to a predetermined pressure from within, and the end of said spiral blade clearing the delivery end of said shell by a narrow margin as specified.

3. A machine for disintegrating middlings comprising a horizontally mounted cylindrical shell having a feed opening at or near one end and a delivery opening in the lower portion of the opposite end, a shaft extending axially through said shell, and a spiral blade rigidly mounted on said shaft and loosely fitting said shell, said shell having a sharp-edged gate for said delivery opening adapted to yield to a predetermined pressure from within, and thereby uncover the marginal portion of said delivery opening.

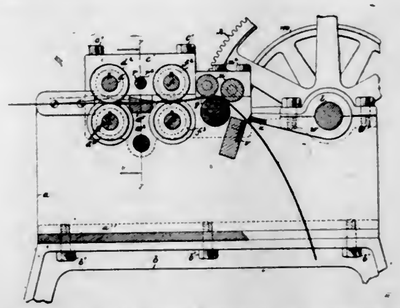
4. A machine for disintegrating middlings comprising a horizontally mounted cylindrical shell having a feed opening at or near one end and a delivery opening in the lower portion of the opposite end, a shaft extending axially through said shell, a spiral blade rigidly mounted on said shaft and loosely fitting said shell, and a gate for said delivery opening movable endwise of said shell and adapted to yield to a predetermined pressure from within, and the end of said spiral blade clearing the delivery end of said shell by a narrow margin as specified, the inner face of said gate being inclined inwardly and upwardly and the upper portion of said gate and the lower portion of the outlet opening having sharp edges.

1,060,740. HAT-PACKING-RING MACHINE. ARTHUR W. CASH, Newark, N. J., assignor, by mesne assignments, to Orange Hat Box Company, a Corporation of New Jersey. Filed Apr. 19, 1909. Serial No. 490,888. (Cl. 93—84.)

1. In a hat ring forming machine, the combination of a pair of rotating shafts, a pair of pressing rolls mounted for rotation upon each of said shafts, one pair of said rolls each being provided with a peripheral groove and a vertical peripheral flange, and the other pair of said rolls each being provided with a peripheral groove for coöperation with the grooves upon the first named pair of rolls.

2. In a hat ring forming machine, the combination of a pair of rotating shafts, a pair of pressing rolls mounted for rotation upon each of said shafts, one pair of said rolls each being provided with a peripheral groove and a vertical peripheral flange, and the other pair of said rolls each being provided with a peripheral groove for coöperation with the grooves upon the first named pair of rolls, and means for adjusting one roll upon each of said shafts toward and away from the other roll of the same shaft.

3. In a hat ring forming machine, the combination of a pair of rotating shafts, a pair of pressing rolls mounted for rotation upon each of said shafts, one pair of said rolls each being provided with a peripheral groove and a vertical peripheral flange, and the other pair of said rolls each being provided with a peripheral groove for coöperation with the grooves upon the first named pair of rolls and means for adjusting the distance between said shafts.



4. In a hat ring forming machine, the combination of a pair of rotating shafts, a pair of scoring rolls mounted upon each of said shafts, one pair of said rolls being provided with a peripheral groove, and a vertical flange and the other pair each being provided with a peripheral bead for coöperation with the grooves upon the first named pair of rolls, a pair of turning cams in advance of said shafts, a second pair of shafts having pressing rolls mounted thereon, means for adjusting the sets of rolls on one end of said shafts toward and away from the corresponding rolls on the other ends of said shafts.

5. In a hat ring forming machine, the combination of a set of vertically flanged turning rolls each having a groove adjacent to the flange thereof, with a set of beaded rolls for coöperation therewith, a pair of turning cams in advance of said set of turning rolls, a set of flanged pressing rolls each having a groove adjacent to the flange thereof a set of grooved rolls for coöperation therewith, and a set of curving rolls, said sets of rolls and cams being arranged in tandem, whereby a strip of paper may be drawn therethrough to produce a hat ring having its margins turned down flat upon the body thereof.

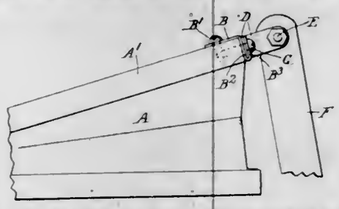
1,060,741. COMBINATION CURTAIN-BRACKET. FRANK A. CHAMBERLAND, Lynn, Mass. Filed Apr. 22, 1912. Serial No. 692,448. (Cl. 156—27.)



A device of the character described, comprising a vertically arranged guide spaced from its support and having extensions at each end, a slide for said guide having U-

shaped ends for embracing the edges of said guide and adapted to engage and be stopped in its downward movement by one of said extensions, the other extension being of less width than the body of the guide to allow of the free passage of the U-shaped ends of said slide, means for adjusting the limit of the upward movement of said slide, and means for securing the slide in its adjusted positions.

1,060,742. BELLOWS ATTACHMENT FOR VACUUM-CLEANERS. GEORGE CLEMENTS, Chicago, Ill., assignor to Clements Mfg. Co., a Corporation of Illinois. Filed Nov. 22, 1912. Serial No. 732,813. (Cl. 230—2.)



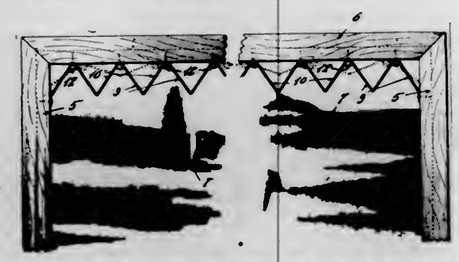
1. A bellows attachment for vacuum cleaners comprising a securing plate consisting of a body and apron and three lips arranged as shown, in combination with two angle bars which lie respectively between the apron and one of the lips and means for attaching the securing plate to the bellows top and the link between the angle bars.

2. A bellows attachment for vacuum cleaners comprising a securing plate consisting of a body and three lips arranged as shown and integral with each other, in combination with two angle bars which lie respectively between the apron and one of the lips and means for attaching the securing plate to the bellows top and the link between the angle bars.

3. A bellows attachment for vacuum cleaners comprising a securing plate consisting of a body and apron and three lips arranged as shown, in combination with two angle bars which lie respectively between the apron and one of the lips and means for attaching the securing plate to the bellows top and the link between the angle bars embracing a screw which passes through a lip and apron between the angle bars and in close proximity to the end of the link.

4. A bellows attachment for vacuum cleaners comprising a securing plate consisting of a body and apron and three lips arranged as shown and integral with each other, in combination with two angle bars which lie respectively between the apron and one of the lips and means for attaching the securing plate to the bellows top and the link between the angle bars embracing a screw which passes through a lip and apron between the angle bars and in close proximity to the end of the link.

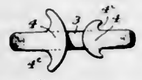
1,060,743. FLY-SCREEN. LEVI S. COUPLIN, South Greenfield, Mo. Filed Nov. 8, 1912. Serial No. 730,240. (Cl. 156—37.)



1. As a new article of manufacture, a fly guide and exit attachment for screened openings constructed of a single piece of material and comprising upwardly converging guides, and an integral tubular exit device at the apex of said guides which projects laterally beyond the guides.

2. In combination with a screen frame having a plurality of alined openings through the screen thereof, a fly guide and exit attachment constructed of a single piece of sheet metal having its ends arranged to be secured to the screen frame, and consisting of a plurality of pairs of upwardly converging guides and integral laterally extended tubular exit devices at the apexes of said pairs of guides which will project through the openings in the screens.

1,060,744. COUPLING MEMBER FOR CHAINS. FRED W. COVERT, Watervliet, N. Y., assignor to Covert Manufacturing Company, Watervliet, N. Y., a Corporation of New York. Filed Nov. 9, 1910. Serial No. 591,502. (Cl. 59—85.)



1. A coupling member for detachably connecting chain links or the like, comprising an intermediate part and laterally extending end hooks, one of which is larger than the other.

2. A coupling for chains or the like comprising a body portion and ends extending back upon the body portion and terminating in transversely extending heads, one of said heads being longer than the other and arranged in a different plane.

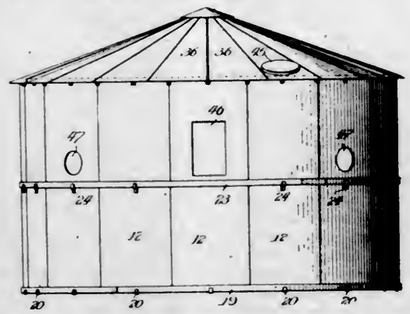
3. A coupling member for chains comprising a body part, the rear surface of which curves outwardly toward its ends and said body part terminating at opposite ends in arrow heads.

4. A detachable coupling member for chains having adjacent links, the same comprising a body part having at opposite ends thin flat heads, which said heads are offset laterally with respect to the body part, and each of which said heads have side extensions projecting beyond the sides of the body part, the said heads being adapted to engage adjacent links of the chain.

5. A coupling member for detachably and adjustably connecting chains having links of different sizes comprising a body part terminating in offset portions having arrow heads, one of said heads being longer than the other substantially as and for the purpose described.

[Claims 6 to 14 not printed in the Gazette.]

1,060,745. METALLIC BUILDING CONSTRUCTION. ASHEL W. CROTSLY, Arlington Heights, Ill., assignor to Wheeling Corrugating Company, Chicago, Ill., a Corporation of West Virginia. Filed Apr. 26, 1911. Serial No. 623,456. (Cl. 189—3.)



1. In a metallic building construction, the combination of vertically disposed sheet-metal sections having the upright edges of the said sections bent back parallel with the main portion of the said sections and spaced apart therefrom, the bent-back portion of one edge being wider than the bent-back portion of the other, the bent back portion being on opposite sides of the sections, the narrow bent-back portion of one section being interlocked with the wider bent-back portion of the section next adjacent, and a plurality of bolts passing through the wider bent-back edge and its main portion and the main portion only of the narrow bent-back edge at the junction of the sections to secure the said sections in interlocked relation.

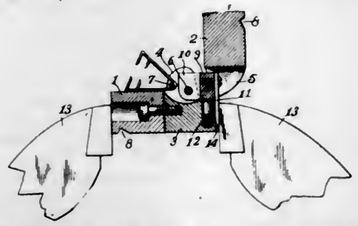
2. In a metallic building construction, the combination of a plurality of interlocked vertically disposed metallic sections, an adjustable hoop surrounding said sections, a pair of vertically disposed angle irons secured to adjacent edges of the said sections with corresponding flanges extending at the inner side of the structure, means adjustably securing the ends of said hoop to the other flanges of said angle irons, and bolts extending through the first-mentioned flanges for drawing the said angle irons together to secure the said sections in position.

3. In a metallic building construction, the combination of a plurality of interlocked vertically disposed sections, an adjustable hoop surrounding said sections, a pair of vertically disposed angle irons each having a flange interposed between the edges of two adjacent sections and extending inwardly of the structure, means securing an edge of one of the said sections and an end of the said hoop to the other flange of each angle iron, and bolts drawing together the inwardly directed flanges of the said angle irons to secure the said sections in position.

4. In a metallic building construction, the combination of side-walls consisting of vertically disposed interlocked metallic sections, an angle iron secured to the inner face of said walls at the bottom thereof, the lower end of said walls being turned inwardly beneath said angle iron, a hoop surrounding said walls adjacent the bottom, and a plurality of clips fixed to the lower inturned ends of said side walls and embracing said hoop to retain the same in position.

5. In a metallic building construction, the combination of a plurality of interlocked vertically disposed side sections, the lower end of each section being turned inwardly, an angle iron arranged around the interior of said construction and resting on said inturned ends, a plurality of clips fixed to said sections and embracing the vertical flange of said angle iron, a plurality of clips fixed to the under portion of the inturned ends of said sections and having their outer ends upturned to form pockets between said ends and the outer faces of the side sections, and a hoop surrounding and embracing said sections, disposed in said pockets adjacent the bottoms of the sections and outside said angle iron.

1,060,746. TOOL FOR CLENCHING BELT-FASTENERS. JAMES K. DIAMOND, Grand Rapids, Mich., assignor to J. B. Stone Co., Grand Rapids, Mich., a Corporation of Michigan. Filed Oct. 24, 1911. Serial No. 656,469. (Cl. 1—50.)



1. A tool of the class described, comprising a clenching die, a receiver attached to the die and having transverse slots therein, a pivot pin and a removable pin extending through the slotted portion of the receiver, a presser bar having projections extending within the slots of the receiver and eccentrically pivoted on the pivot pin, and means for rotating the presser bar about said pin.

2. A tool of the class described, comprising a pair of clenching dies adapted to be engaged by the jaws of a vise, a receiver attached to one of the dies and having a portion recessed transversely, a pivot pin extending through the recesses of the receiver, a removable retaining pin also extending through recesses of the receiver, a presser bar having projections extending into the slots of the receiver and eccentrically pivoted on the pivot pin, and a spring to move the projections of the presser bar toward the removable pin.

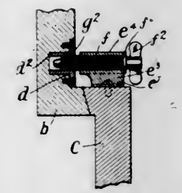
3. In a tool of the class described, a pair of clenching dies pivotally connected, a receiver attached to one of the dies and having transverse recesses therein, a pivot pin and a removable pin extending through the recesses of the receiver, a presser bar having projections extending into the slots of the receiver and mounted on the pivot pin, a spring engaging the presser bar to move the projections toward the removable pin, and an arm on the presser bar to move the projections away from the pin.

4. In a tool of the class described, a pair of clenching dies, a receiver attached to one of the dies and extending above the working surface of the same and also provided with transverse slots and a recess, a pivot pin and a removable pin extending through the walls between the slots, a presser bar having projections extending into the slots and journaled on the pivot pin, an arm attached to the presser bar and adapted to enter the recess and a spring to turn the presser bar toward the removable pin.

5. A tool of the class described comprising a clenching die and a receiver adapted to be held horizontally by the jaws of a vise, a second clenching die pivoted to the receiver to swing freely to vertical position, said dies also provided with shoulders to engage the vise, whereby the dies are suspended between the jaws of the vise in oppositely inclined position, and are closed to vertically parallel position when closed by the vise to clench the fasteners.

[Claims 6 to 9 not printed in the Gazette.]

1,060,747. WINDOW-SASH LOCK. JOHN DRYSDALE, New York, N. Y. Filed Jan. 18, 1913. Serial No. 742,820. (Cl. 16—144.)

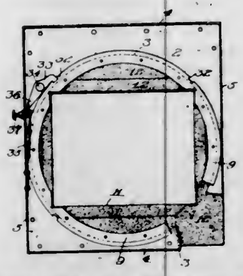


A window sash lock, comprising two parts one of which is adapted to be secured to the top of the bottom sash adjacent to one side thereof and the other to the face of the corresponding side of the top sash, the first named part being provided with a raised transverse interiorly threaded sleeve and a screw-threaded bolt passed therethrough and the last named part with an interiorly threaded sleeve adapted to receive the corresponding end of the bolt, said end of the bolt being also provided with a cushioned nose piece adapted to bear on the side of the top sash when the sashes or either of them is in an open position.

1,060,748. CAMERA-BACK. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Co., Rochester, N. Y., a Corporation of New York. Filed Sept. 14, 1910. Serial No. 581,985. (Cl. 95—48.)

1. In a camera back, the combination with a carrier having a central opening and rearwardly turned flanges and a pair of locking shoulders on the carrier movable one toward and from the other, of a holder for the re-

cording element provided with shoulders coöperating with the flanges on the carrier to prevent a lateral or endwise movement of the holder and having shoulders interlocking with the shoulders on the carrier to prevent disengagement of the holder from the carrier in a rearward direction.

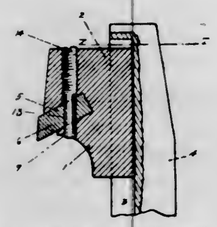


2. In a camera back, the combination with a carrier comprising a plate having a central opening and rearwardly turned flanges, of bolsters arranged on the rear of the plate between the flanges, members forming locking shoulders secured to the bolsters, one of said members being movable toward and from the other, and a holder for the recording element provided with shoulders coöperating with the flanges on the carrier to prevent lateral or endwise movement of the holder and having shoulders interlocking with the shoulders on the carrier to prevent disengagement of the holder from the carrier in a rearward direction.

3. In a camera back, the combination with a carrier having a rearwardly turned flange, of a reversible plate holder having a groove in each of its opposite front and rear faces adapted to coöperate in turn with the flange on the carrier as the holder is reversed to prevent lateral or endwise movement of the holder but allowing its end to project beyond the carrier and interlocking parts on the holder and carrier for preventing disengagement of said members in a rearward direction.

4. In a rotary camera back, the combination with an attaching member comprising a plate having a central opening and provided with a forwardly turned flange forming a means for attaching it to the camera box, of a revoluble carrier having a bearing in the opening and provided with a flanged portion interlocking with the forward side of the plate, a plurality of notches being provided in such flanged portion forming abutments, a latch mounted on the front face of the attaching member and coöperating with the abutments to lock the revoluble carrier in different positions of adjustment, a spring normally tending to throw the latch into engaging position, and an operating device for releasing the latch mounted in the securing flange of the attaching plate.

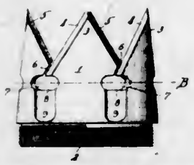
1,060,749. CUTTER FOR KEY-SEATING MACHINES. TILGHMAN G. FREDERICK, Bernbarts, Pa., assignor to Mitts & Merrill, Saginaw, Mich., a Corporation of Michigan. Filed Apr. 9, 1912. Serial No. 689,652. (Cl. 29—96.)



1. A cutter head comprising a block, the front of said block provided with a groove projecting diagonally upward, said block formed with a hole intersecting said groove; a knife received in said groove and projecting beyond the front of said block, said knife formed with a diagonally disposed threaded opening; a clamping bolt loosely received in the hole of said block and threaded at its lower end into the threaded opening of said knife and adapted when tightened to draw said knife upwardly and rearwardly into close engagement with said block at the top and the back of said grooves; and means engaging said block and knife and adapted to maintain said knife in central position with respect to said block.

2. A cutter head comprising a block, the front of said block provided with a groove projecting diagonally upward, said block formed with a hole intersecting said groove; a knife received in said groove and projecting beyond the front of said block, said knife formed with a diagonally disposed threaded opening; a clamping bolt loosely received in the hole of said block and threaded at its lower end into the threaded opening of said knife and adapted when tightened to draw said knife upwardly and rearwardly into close engagement with said block at the top and the back of said groove; and projections on said knife engaging said block to maintain said knife in central position with respect to said block.

1,060,750. CUTTING-TUBE FOR FRUIT-TREATING MACHINES. HENRY GABRIEL GINACA, Honolulu, Hawaii, assignor to Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii, a Corporation of Hawaii. Filed Nov. 14, 1912. Serial No. 731,377. (Cl. 146—6.)



1. A cutting tube provided with knives at its cutting end disposed to form a crotch between the same, said tube having an opening therein rearward of and connected by a slot to the crotch between said knives.

2. A cutting tube provided with knives at its cutting end disposed to form a crotch between the same, said tube having an opening therein rearward of and connected by a slot to the crotch between the knives, the edges of the tube at the rear of said opening being rounded.

3. A cutting tube provided with knives at its cutting end disposed to form a crotch between the same, said tube having an opening therein rearward of the crotch between the knives, and having a slot between the knives connected to said opening, and said tube provided with a longitudinal groove rearward from said opening.

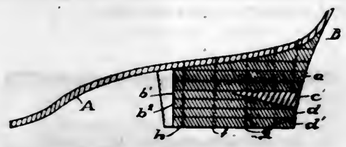
4. A cutting tube provided with V-shaped knives at its cutting end, one edge of each knife being longer than the adjacent edge of the next knife, said tube having an opening therein rearward of each of the longer cutting edges, the latter terminationg in said opening.

5. A cutting tube provided with V-shaped knives at its cutting end, one edge of each knife being longer than the adjacent edge of the next knife, said tube having an opening therein rearward of each of the longer cutting edges with the latter terminating in said opening, and the rear edges of the tube at said opening being rounded.

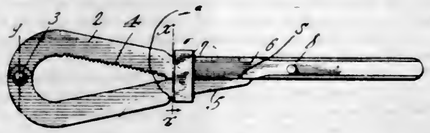
[Claims 6 to 12 not printed in the Gazette.]

1,060,751. CUSHION-HEEL. ROBERT S. GRAHAM and RAYMOND P. MORSE, New York, N. Y., assignors of one-third to William E. Graham, New York, N. Y. Filed Sept. 6, 1912. Serial No. 718,798. (Cl. 36—35.)

A heel embodying an upper member composed of solid material, a layer composed partly of non-yielding material and partly of cushion material, both of said parts being in the same horizontal plane, one or more lifts below the two part layer, and attaching means extending into the bottom lift or lifts and the solid material of the two part lift and also through the forward part of the cushion material, leaving free or unattached that part of the bottom lift or lifts below the cushion material.

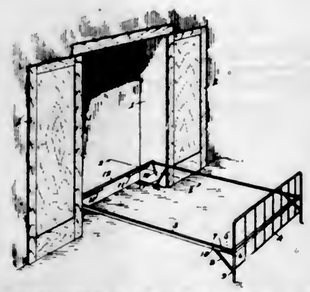


1,060,752. WRENCH. CHARLES GOELZ, Mineral Point, Wis. Filed July 6, 1912. Serial No. 708,008. (Cl. 81—64.)



In a wrench, a primary jaw provided with a handle; a secondary jaw pivoted at one end to the primary jaw and provided at its free end with a tapered extension adapted to abut against the handle; a ring slidably inclosing the extension and the handle, the ring being movable away from the free end of the handle and toward the pivotal connection between the jaws to effect a compression of the jaws; the secondary jaw having a shoulder directly engageable by the ring to prevent a wedging of the ring upon the secondary jaw.

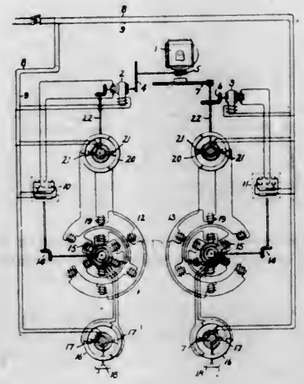
1,060,753. DISAPPEARING WALL-BED. HARVEY H. HALL, Denver, Colo., assignor to The Ideal Disappearing Wall Bed Company, Denver, Colo., a Corporation of Colorado. Filed Dec. 9, 1912. Serial No. 735,806. (Cl. 5—54.)



1. The combination of a bed frame; a pair of swinging links slidingly connected at one of their ends to said frame; oppositely disposed guideways located adjacent the inner end of said frame and inclining upwardly and inwardly to a position substantially in line with the top of the bed frame when opened, and terminating in laterally disposed short slots; and projections carried by the inner end of said frame, riding in said inclined and transverse guideways and slots, substantially as described.

2. The combination of a bed frame having its inner end weighted; inclosing side walls for said frame; oppositely disposed slots formed on the inside faces of said walls and inclining upwardly and inwardly to a position substantially in line with the top of the bed frame when opened, and terminating in short transverse slots slightly inclined downwardly; a pair of links pivotally supported at their lower ends below said inclined slots and slidingly connected at their upper ends with said bed frame; and projections carried by the inner end of said bed frame and operating in said inclined and short slots, the distance from said projections to said sliding connections between the frame and said links, being less than the length of the links, substantially as described.

1,060,754. PROJECTOR CONTROL. JOHN L. HALL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 27, 1912. Serial No. 722,639. (Cl. 172—239.)



1. The combination with a projector, of an electric motor for training the same, a controller for said motor, a synchronous motor for operating said controller, manual devices for setting up a rotating field in one member of said synchronous motor, and means whereby the training motor can establish an opposite rotating field in the other member thereof.

2. The combination with a projector, of an electric motor for training the same, a controller for said motor, a synchronous motor having its rotor arranged to rotate said controller, a manually operated commutating device for setting up a rotating field in said motor, and means whereby the training motor can establish an oppositely rotating field in the stator of said synchronous motor.

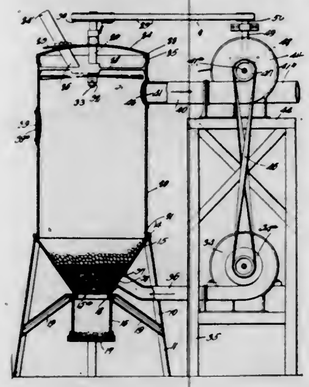
3. The combination with a projector, of an electric motor for training the same, a controller for said motor, a synchronous pilot motor operatively connected to said controller, a manually operated commutating device for setting up a rotating field in one member of said pilot motor, and a second commutating device driven by the training motor and serving to establish an oppositely rotating field in the other member of said pilot motor.

4. The combination with a projector, of an electric motor for training the same, a controller for said motor, a synchronous pilot motor for operating said controller, and two commutating devices controlling respectively the current in the rotor and stator of said pilot motor, one of said devices being actuated by hand and the other by the training motor.

1,060,755. GAS-PRODUCER. WALTER HAMMICK, Pittsburg, Kans. Filed July 16, 1912. Serial No. 709,751. (Cl. 48—76.)

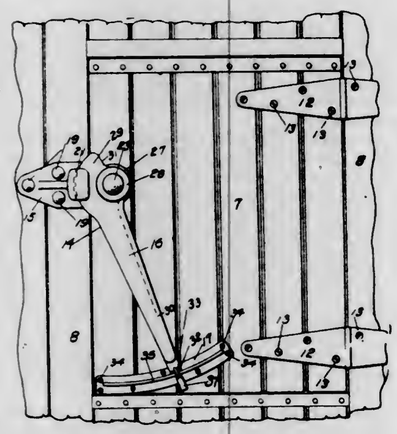
A gas producer comprising a furnace, a fire box connected with the furnace; a spider extended transversely of the furnace; a primary shaft journaled in the spider; a leveler secured to the primary shaft; a frame; a suction fan supported on the frame and including a shaft; a draft fan supported upon the frame; a conduit connecting the draft fan with the fire box; a conduit connecting the suction fan with the furnace; a motor operatively connected with the draft fan; means for connecting the motor

with the suction fan shaft; a secondary shaft disposed parallel to the primary shaft; means for operatively con-



necting the secondary shaft with the suction fan shaft; and a belt connecting the primary and secondary shafts.

1,060,756. HEATER-DOOR FASTENER. STACY B. HASELTINE, Chicago, Ill., assignor to William H. Miner, Chicago, Ill. Filed Oct. 11, 1911. Serial No. 654,195. (Cl. 70—49.)



1. A door fastener comprising a slotted keeper, a lever, a ribbed bar and means of securing said lever to said bar, the said lever being provided at one end with a worm like blade for engagement in the slot of said keeper, and at the other end with a perforated flange; the rib of said bar being perforated for the reception of the said means to secure the said lever to the said bar.

2. A door fastener comprising a slotted keeper, a perforated lever, a thimble within the perforation of said lever, and means of attachment passing through said thimble, the said lever having a worm like blade for engagement in the slot of said keeper.

3. A door fastener comprising a slotted keeper, a lever and a thimble passing through said lever, the said lever being provided with a worm like flange for engagement in the slot of the keeper, and the said thimble being provided with a flange at its inner end.

1,060,757. THERMAL CUT-OUT. CARYL D. HASKINS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 19, 1904. Serial No. 224,998. (Cl. 175—273.)



1. A thermal cut-out comprising a wide sheet of thin leaf like metal which upon blowing produces a wide distribution of the arc, and the terminal strips of thicker metal joined to the opposite ends of said metal sheet.

2. A thermal cut-out comprising a wide sheet of thin leaf like sheet metal inclosed by sheet insulation of greater length, and terminal strips of thicker metal joined to the opposite ends of said metal sheet and projecting beyond the ends of said sheet insulation.

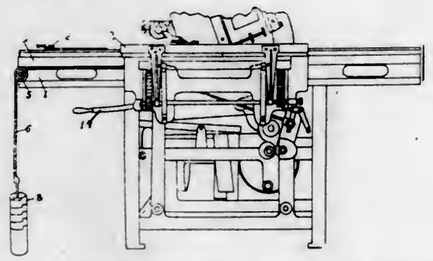
3. A thermal cut-out comprising a sheet of thin metal rolled up transversely with its convolutions out of contact with each other, and means at the ends of said roll of metal for connecting it in circuit.

4. A thermal cut-out comprising a sheet of thin metal rolled up transversely with insulation between the several convolutions, and means at the ends of said roll of metal for connecting it in circuit.

5. A thermal cut-out comprising a sheet of thin metal, a sheet of insulation upon which said metal sheet is disposed, and two strips of sheet metal of greater conductivity lapping the opposite ends of said metal sheet and extending beyond the ends of said insuluating sheet, the several parts being rolled up transversely with sufficient compression to hold said strips in permanent contact with the ends of said metal sheet.

[Claims 6 to 31 not printed in the Gazette.]

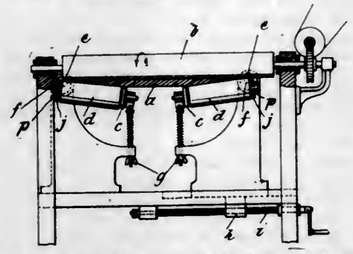
1,060,758. CARRIAGE-RETURN MECHANISM FOR GANG-SAW SHARPENERS. JOHN P. HEDSTROM, Big Rapids, Mich. Filed July 16, 1912. Serial No. 709,669. (Cl. 76—43.)



1. In a gang saw sharpener, the combination with the stationary guide, of a carriage slidingly mounted on said guide, a sheave carried by said guide, a flexible cable secured at one end to said sliding carriage, passing over said sheave and having a counterweight suspended from its end; a clamping gib loosely mounted on said carriage, said gib formed with elongated holes, bolts secured to said carriage and loosely received in said holes, a yielding spring secured to said gib, and a lever pivotally mounted on the carriage and adapted to normally press said spring.

2. In a saw sharpener, the combination with the stationaryy guide and the sliding carriage mounted thereon, of counter-balancing devices for retracting said carriage, a clamping gib loosely mounted on said carriage, and a lever pivotally mounted on said carriage and adapted to normally hold said gib in frictional engagement with said guide.

1,060,759. MACHINE FOR GRINDING TOE-CAPS AND THE LIKE. PETER HELDMANN, Frankfort-on-the-Main, Germany, assignor to Corporation of Maschinenfabrik Moenus A. G., Frankfort-on-the-Main, Germany. Filed Dec. 27, 1910. Serial No. 599,416. (Cl. 51—17.)



1. In a machine for grinding skived toe-caps and the like, the combination of a counter roller, and grinding-rollers inclined to the counter roller adjacent the respective ends of the latter and having cylindrical grinding surfaces by which both ends of the toe-cap or other piece of material are simultaneously ground.

2. In a machine such as described, the combination of a counter roller, and grinding rollers inclined to the counter roller adjacent the respective ends of the latter and having substantially cylindrical grinding surfaces which act simultaneously on the opposite ends of the toe-cap, said grinding rollers being adjustable in inclination, in distance from the counter roller, and in distance from each other.

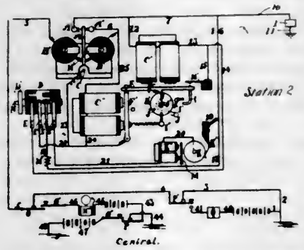
3. In a machine such as described, the combination of a counter roller, a grinding roller inclined to the counter roller and having one end adjacent the end of the counter roller, and means for moving said end of the grinding roller toward and away from the counter roller.

4. In a machine such as described, the combination of a counter roller, a grinding roller, means yieldingly supporting one end of the grinding roller, and means to move the other end of the grinding roller positively toward and away from the counter roller.

5. In a machine such as described, the combination of a counter roller, a grinding roller, means yieldingly and adjustably supporting one end of said grinding roller, and a device for moving the opposite end of the grinding roller toward and away from the counter roller.

[Claims 6 to 11 not printed in the Gazette.]

1,060,760. ELECTRIC SIGNALING APPARATUS AND CIRCUITS. FELIX BENEDICT HERZOG, New York, N. Y.; Henrietta Herzog executrix of said Felix Benedict Herzog, deceased. Filed July 5, 1889. Serial No. 316,643. (Cl. 178—50.)



1. Circuit connections passing through a series of stations, and comprising less than as many wires as there are stations; means at the controlled stations, whereby apparatus at any one of these may be selected at will for operation from one station of the series; signal transmitting elements at such selected station; devices at the controlling station and operating to control the action of the signal transmitting elements at the selected station without affecting the action of these elements at other stations; together with devices at the controlling station responsive to the action of the transmitting elements at the selected station; the whole coöperating to produce the transmission at a selected station only after it has been selected, and its reception at the selecting station.

2. In a system comprising several individualizable stations, the combination at two or more of these, of the individualizer elements with electrically controllable responding signal-transmitting elements, together with connecting devices organized to control the signal transmission through the individualizer.

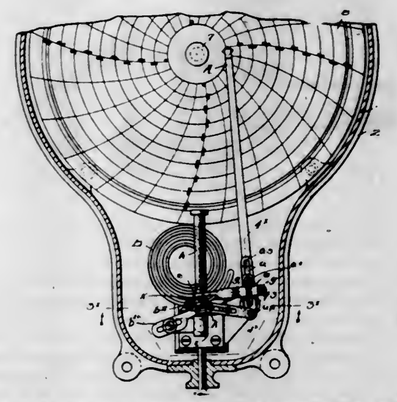
3. In a system comprising several individualizable stations, the combination at two or more of these, of the individualizer elements with electrically controllable responding signal-transmitting elements, together with connecting devices organized to control the signal transmission through the individualizer and at a predetermined stage of its operation.

4. In a system comprising several individualizable stations, the combination at two or more of these, of the individualizer elements with electrically controllable responding signal-transmitting elements, together with connecting devices organized to control the signal transmission through the individualizer, the signal transmitter including a circuit controller adapted to send a location-indicating signal; and, at a controlling station, a receiver adapted to respond to the operated transmitter whereby the responding signal verifies the selection of the proper station.

5. In a system comprising a main controlling and several individualizable stations in series the combination at each of two or more of these stations of the individualizer elements with electrically controllable responding signal transmitting elements together with connecting devices organized to control the signal transmissions through the individualizer the said responding signal transmitting elements, together with connecting devices organized to control the signal transmission through the individualizer, the said responding signal transmitting elements being constructed and adapted to be set to be electrically controllable to transmit the signal for which it has been set, substantially as described.

[Claims 6 to 10 not printed in the Gazette.]

1,060,761. PEN-ARM-ADJUSTING MECHANISM FOR RECORDING INSTRUMENTS. EDWIN HODGKINSON, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Original application filed Oct. 3, 1910, Serial No. 585,014. Divided and this application filed July 5, 1911. Serial No. 637,010. (Cl. 234—19.)



1. In a recording instrument, the combination with a support, a movable chart and a pressore actuated mem-

ber having an active portion, of a pivoted arm having a stylus coöperating with the chart, a member connecting said active portion and said arm for imparting movement from the former to the latter, an adjustable cradle supporting the pivot of the arm and an adjusting member carried on the support and coöperating with the cradle for shifting the position of the pivot and moving the arm relatively to the chart.

2. In a recording instrument, the combination with a support, a movable chart and a pressure actuated member having an active portion, of an arm pivoted to the support having a stylus engaging the chart, an operating connection between the arm and said active portion, a movable cradle carrying the pivot of the arm, a finger on the cradle and an adjusting screw coöperating with the support and finger for shifting the position of the cradle to vary the position of the pivotal point of the arm.

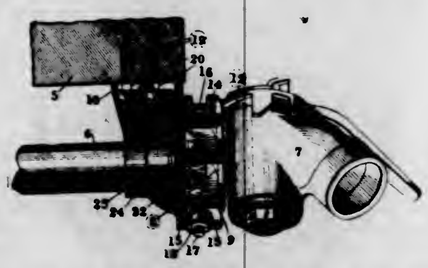
3. In a recording instrument, the combination with a support, a movable chart and a pressure actuated member having an active portion, of a cradle pivoted to the support, a stylus arm pivoted on the cradle, the pivotal points of the cradle and arm being offset relatively to each other, an operating connection between the arm and said active portion and means for adjusting the cradle in its pivot to shift the position of the pivot of the stylus.

4. In a recording instrument, the combination with a support, a movable chart and a pressure actuated member having an active portion, of a carriage movably mounted on the support, a stylus arm pivoted on the carriage, an operating connection between said arm and said active portion, and means for shifting the carriage to adjust the pivotal point of the arm relatively to said active portion to rock the arm in one direction or the other.

5. In a recording instrument, the combination with a support, a chart, an operating member having a part adapted to be actuated by fluid under pressure, of a rocking frame pivoted on the support, an indicating arm pivoted on the frame and coöperating with said chart, a laterally extending arm on said frame, an adjusting screw coöperating with the arm and threaded in the support to shift the arm relatively to the chart, and an operating connection between said member and arm.

[Claims 6 and 7 not printed in the Gazette.]

1,060,762. ANGLE-COCK HOLDER FOR RAILWAY-CARS. LOUIS A. HOERR, St. Louis, Mo. Filed Dec. 11, 1912. Serial No. 736,085. (Cl. 188—8.)



1. The combination with a train pipe, of an angle cock engaging with said train pipe, and a holder embracing a portion of said angle cock and clamping said train pipe, said holder being arranged to allow the inspection of the joint between the train pipe and the angle cock.

2. The combination with a train pipe, of an angle cock engaging with said train pipe and having an angular head, and a holder embracing said head and clamping said train pipe, said holder being arranged to allow the inspection of the joint between said train pipe and angle cock.

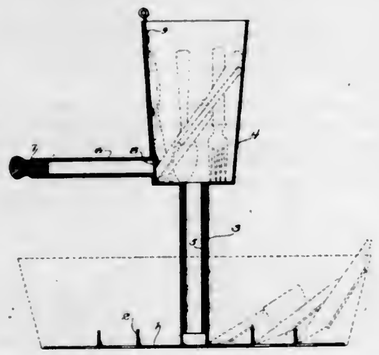
3. The combination with a train pipe, of an angle cock engaging with said train pipe, and a two-part holder embracing a portion of said angle cock and clamping said train pipe, one of the parts of said holder being provided with an opening to allow the inspection of the joint between the train pipe and the angle cock.

4. The combination with a train pipe, of an angle cock engaging with said train pipe and having an angular head, and a two-part holder engaging the head of the angle cock and clamping said train pipe, each of the parts of said holder being provided with an opening to allow the inspection of the joint between the angle cock and the train pipe.

5. The combination with a train pipe, of an angle cock engaging with said train pipe, a clamp comprising two parts, and means for fastening the parts together, each of said parts having a jaw shaped to engage an angle of the head of said cock and to clamp said pipe, said holder being arranged to allow inspection of the joint between the angle cock and the train pipe.

[Claims 6 to 8 not printed in the Gazette.]

1,060,763. COMBINED DISH RINSER AND DRIER. SAMUEL M. HOLTON, Battle Creek, Mich. Filed July 13, 1912. Serial No. 709,155. (Cl. 141—11.)



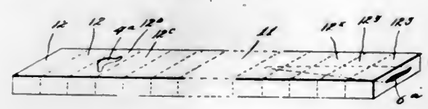
1. A device of the character specified for the purposes set forth comprising a base, a receptacle rotatably mounted upon the base and having a laterally extending spout provided in its length with a plurality of small openings, and means for establishing communication between the receptacle and spout.

2. In an appliance of the character described for the purposes set forth, the combination of a base having an upright, a receptacle provided with a stem adapted to cooperate with said upright of the base to rotatably support the receptacle, a spout projecting laterally from the receptacle and having a plurality of small openings in its length, and a valve for controlling communication between the receptacle and spout.

3. In an appliance of the character set forth a base having portions partly cut therefrom and bent upwardly to form supporting projections, and a receptacle rotatably mounted upon the base and having a spout adapted to discharge a plurality of jets upon the base and the article supported thereon.

4. In a device of the character set forth the combination of a base provided with upwardly extending projections and having a centrally disposed tube, and a receptacle rotatably mounted upon the base having a stem fitted to said tube to hold the receptacle in place and admit of its rotation, said receptacle having a spout provided with openings for delivering jets upon the articles supported upon said base.

1,060,764. METHOD OF MAKING STEEL BARS. HARRY R. JONES, EDWARD L. HANG, and JOHN MCCONNELL, Canton, Ohio, assignors to The United Steel Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 16, 1912. Serial No. 715,334. (Cl. 80—60.)



1. The method of making steel bars which consists in reducing slab-ingots to slabs by pressure on both sides and edges thereof, then transversely severing the slabs into sections of greater length than depth, then cross-edge rolling the slab sections to compress them endwise of the original length of the slab, and then reducing to bars of the desired cross-section.

2. The method of making steel bars which consists in transversely severing longitudinally rolled slabs into sections of greater length than depth, then cross-edge rolling the slab-sections by compressing them endwise of the original length and retaining them flatwise of the original depth of the slab to a substantially square cross-section, and then reducing to bars of the desired cross-section.

3. The method of making steel bars which consists in transversely severing longitudinally rolled slabs into sections of greater length than depth, then cross-edge rolling the slab-sections to compress them endwise of the original length of the slab to a substantially square cross-section, and then reducing to bars of the desired cross-section.

4. The method of making steel bars which consists in transversely severing longitudinally rolled slabs into sections, then cross-edge rolling the slab-sections to compress them endwise of the original length of the slab throughout the extent of its severed faces, and then reducing to the desired cross-section.

5. The method of making steel bars which consists in cross-rolling a slab-section having a grain to compress it endwise of the grain throughout the extent of the section, and then reducing to the desired cross-section.

[Claim 6 not printed in the Gazette.]

1,060,765. ORGANIC ANTIMONY COMPOUNDS AND PROCESS OF MAKING SAME. LUDWIG KAUFMANN, Berlin, Germany. Filed Aug. 14, 1909. Serial No. 512,849. (Cl. 23—24.)

1. A process of producing stibin sulfids containing aromatic radicals which consists in causing a sulfer compound to re-act on an organic stibin compound containing aromatic radicals and a group to be substituted by sulfur and avoiding excess of the sulfurizing compound.

2. A process of producing triarylstibin sulfids, consisting in reacting on a halogenized triarylstibin with sulfureted hydrogen, avoiding an excess of the hydrogen sulfid.

3. The herein described new compounds being sulfids of arylstibins of the following general formula:

$$Y_3SbS$$

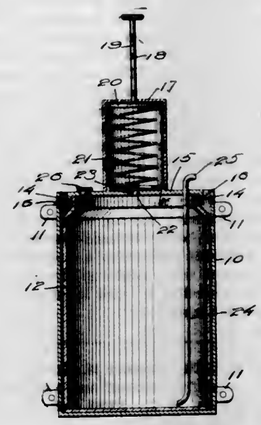
in which Y_3 represents three aromatic radicals.

4. The herein described new compound, triphenylstibin sulfid of the following formula:

$$(C_6H_5)_3SbS,$$

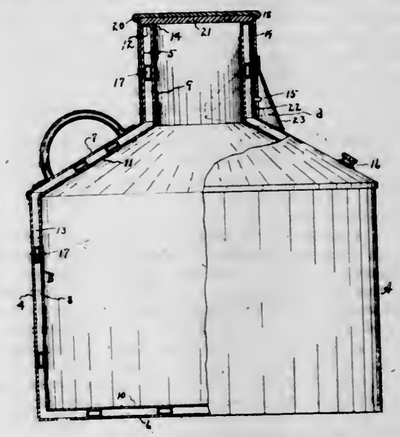
the new compound being a white cristallic body melting at 119° to 120° Cent. easily soluble in benzene, chloroform and glacial acetic acid and being split up into triphenylstibin and sulfur on heating and by the action of diluted acids.

1,060,766. DEODORIZER. CHARLES W. KENNEDY and JOHN J. HERRON, Schenectady, N. Y. Filed May 14, 1910. Serial No. 561,511. (Cl. 137—67.)



An atomizing device for use in connection with a jar having a threaded mouth, comprising an interiorly threaded cap, an exteriorly threaded circular upstanding flange on the upper face thereof, the cap having a central opening arranged concentrically with the said flange, a spring-pressed valve arranged in the said opening, a cylinder threaded on to said flange, a piston in the cylinder, said cylinder having oppositely disposed openings near its upper end, a spring in the cylinder between the piston and the cap, for holding the piston in normal elevated position, the cap having a filling opening exteriorly of the flange, and an outlet tube in the cap.

1,060,767. CAN. ROBERT H. KISSINGER, Omaha, Nebr. Filed Nov. 1, 1912. Serial No. 729,077. (Cl. 62—23.)

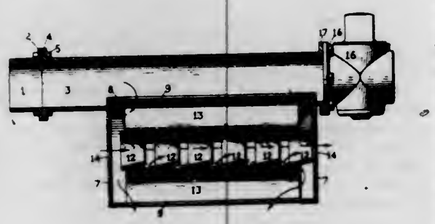


1. A can comprising a body portion and a cylindrical, open ended neck extension, in combination with a combined closure and cup element consisting of a cylindrical body portion closed at one end and adapted to embrace said neck extension, a compressible sealing element in said closed end, a bayonet slot formed in the edge of said cup element, a pin carried by the neck and engaging in said slot, and a spout carried by said cup element and lying outwardly thereof, which embraces that portion of said

cup element in which the bayonet slot is formed and which serves the double function of a spout and to retain that portion of the contents of the cup element which passes through the bayonet slot.

2. A can comprising a body portion and a cylindrical, open ended neck extension, in combination with a combined closure and cup element consisting of a cylindrical body portion closed at one end and adapted to embrace said neck extension, a compressible sealing element in said closed end, a bayonet slot formed in the edge of said cup element, a pin carried by the neck and engaging in said slot, and a spout carried by said cup element and lying outwardly thereof, which embraces that portion of said cup element in which the bayonet slot is formed and which serves the double function of a spout and to retain that portion of the contents of the cup element which passes through the bayonet slot, the top wall of the body portion of the drinking can being inclined downwardly and outwardly and the spout projecting a sufficient distance below the cup element when said cup element is in position upon the neck extension to rest in close fitting engagement with said top wall.

1,060,768. MUFFLER. ERNEST M. KLUCK, Buffalo, N. Y., assignor of one-half to himself and one-half to Nicholas C. Newerf, Buffalo, N. Y. Filed Feb. 23, 1912. Serial No. 679,399. (Cl. 121—116.)



1. In a device of the class described, the combination with an exhaust pipe, of a pipe of substantially the same size as the exhaust pipe detachably fastened to the rear end of the exhaust pipe and forming a removable continuation of said exhaust pipe, and a cylindrical muffler of larger circumference than the detachable pipe connected throughout its length to one side of and having slotted communication with said exhaust pipe.

2. In a device of the class described, the combination with an exhaust pipe, of a cylindrical muffler connected throughout its length to one side of said exhaust pipe and extending parallel with said exhaust pipe; said cylindrical muffler being considerably larger in circumference than the exhaust pipe and having closed ends and a plurality of side slots.

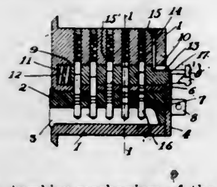
3. In a device of the class described, the combination with an exhaust pipe of a cylindrical muffler connected throughout its length to one side of said exhaust pipe and consisting of a drum having side slots one of which forms a communicating opening between the drum and exhaust pipe and others of which constitute exhaust openings.

4. In a device of the class described, the combination with an exhaust pipe of a muffler connected to one side of said exhaust pipe and consisting of a drum having tapering longitudinal side slots, one of which forms a communicating opening between the drum and exhaust pipe and others of which constitute exhaust openings.

5. In a device of the class described, the combination with an exhaust pipe of a muffler connected to one side of said exhaust pipe and consisting of a drum having tapering longitudinal side slots, one of which forms a communicating opening between the drum and exhaust pipe and others of which constitute exhaust openings and a cut out or free exhaust valve attached to the rear end of said exhaust pipe.

[Claims 6 to 9 not printed in the Gazette.]

1,060,769. PIN-TUMBLER MECHANISM. CHARLES F. KOHLBERGER, New York, N. Y. Filed Oct. 18, 1911. Serial No. 655,342. (Cl. 70—47.)



1. In a pin tumbler mechanism of the class described, a pair of pin tumbler secured barrels, said barrels comprised of a primary and a secondary barrel, said barrels not normally in engagement with one another, actuating means carried by said primary barrel and operative to engage and retract said secondary barrel upon the setting of the pin tumblers, and to hold the said secondary barrel in said retracted position until the return of the said primary barrel to its normal inoperative position, and means in operative connection with said secondary barrel for returning it to its normal inoperative position.

2. In a pin tumbler lock of the class described, a casing, a pair of separately mounted movable barrels in said casing, one of said barrels having a rotary motion, the other of said barrels having a longitudinal motion, means on the first said barrel for causing the second said barrel to move longitudinally in one direction, means between said casing and said second barrel for causing opposite longitudinal movement of the second said barrel, and means between said barrels to mutually obstruct one another.

3. In a pin tumbler lock of the class described, a casing, a pair of separately mounted movable barrels in said casing, one of said barrels having a rotary motion, the other of said barrels having a longitudinal motion, means on the first said barrel for causing the second said barrel to move longitudinally in one direction, means between said casing and said second barrel for causing opposite longitudinal movement of the second said barrel, means between both said barrels to mutually obstruct one another, and means on said second barrel for maintaining the same in operative position.

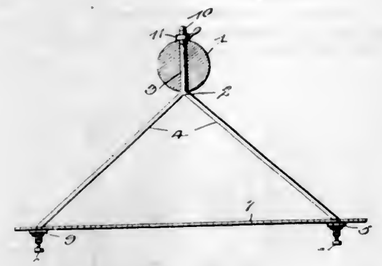
4. In a pin tumbler lock, a casing having a chambered portion, a key-operated pin barrel rotatable in the casing, a set of pin tumblers in the casing arranged to coöperate with the said barrel, a slide mounted to reciprocate in the casing substantially parallel with the axis of the said barrel, the slide having a set of bores coöperating with said pin tumblers to obstruct the slide and to permit its endwise movement upon proper setting of the tumblers by a key in the barrel, means connecting the barrel with the slide for advancing the slide when released by the tumblers, and means independent of said barrel for returning the slide to normal position when the slide is released from the barrel.

5. In a pin tumbler lock, a casing having a chambered portion, a key-operated pin barrel rotatable in the casing, a set of pin tumblers in the casing arranged to coöperate with the said barrel, a slide mounted to reciprocate in the casing substantially parallel with the axis of the said barrel, the slide having a set of bores coöperating with said pin tumblers to obstruct the slide and to permit its endwise movement upon proper setting of the tumblers by a key in the barrel, means connecting the barrel with the slide for advancing the slide when released by the tumblers, and a spring arranged to return the slide to normal position when the slide is released by the barrel.

[Claims 6 to 13 not printed in the Gazette.]

1,060,770. SAW-FRAME. ROBERT J. LAWRENCE, Panola county, Tex. Filed Oct. 26, 1912. Serial No. 727,984. (Cl. 76—78.)

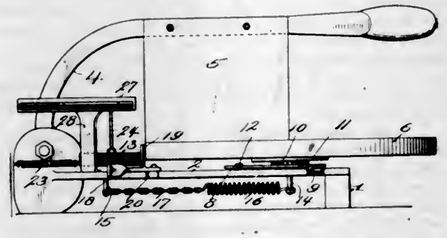
1. In combination with a vertical support, a shank extending transversely through said support, forwardly extending oppositely diverging arms formed on one end of said shank, brackets formed on said arms at their outer ends, clamping means mounted in said brackets, and means for securing said shank to said support, as and for the purpose described.



2. In combination with a vertical support, a shank extending transversely through said support, forwardly extending oppositely diverging arms formed on one end of said shank, said arms being formed with substantial U-shaped brackets at their outer ends, clamping screws disposed through one arm of said brackets, and means formed on the opposite end of said shank whereby said shank may be secured to said support, as and for the purpose described.

3. A device of the character described, comprising a shank, integral laterally diverging arms formed on one end of said shank, brackets formed integrally with said arms at the outer ends thereof, clamping means mounted in said brackets, and the opposite end of said shank being threaded for a portion of its length, whereby the device may be secured to a suitable support.

1,060,771. CHEESE-CUTTER. ISAAC EDWARD LEE, Dayton, Va., assignor of one-third to William F. Bowen, Washington, D. C., and one-third to Charles W. Bane, Hagerstown, Md. Filed July 5, 1912. Serial No. 707,922. (Cl. 31—68.)



1. In a cheese cutter, a rotatable cheese carrying table, a gear segment adjacent thereto and adapted to engage the periphery thereof, the table being movable into and out of engagement with said segment, a movable knife carrying element, and a connection between said knife carrying element and said segment.

2. In a cheese cutter, a rotatable cheese carrying table, a gear segment adjacent thereto and adapted to engage the periphery thereof, the table being movable into and out of engagement with said segment, a movable knife carrying element, a connection between said knife carrying element and said segment, to turn the segment when the knife is raised, and means for returning the segment to initial position when the knife is lowered.

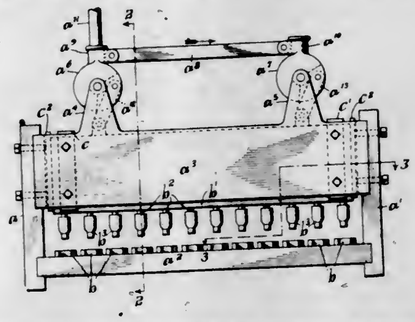
3. In a cheese cutter, a rotatable cheese carrying table, a gear segment adjacent thereto and adapted to engage the periphery thereof, the table being movable into and out of engagement with said segment, a movable knife carrying element, a connection between said knife carrying element and said segment, to turn the segment when the knife is raised, and a spring for returning the segment to initial position when the knife is lowered.

4. In a cheese cutter, a cheese carrying table, a plate on which the table is rotatable, a base on which the table and therewith the plate is slidable, a gear segment adjacent the table and adapted to engage the periphery thereof, means for sliding the table toward and away from the segment, a movable knife carrying element and a connection between said knife carrying element and said segment.

5. In a cheese cutter, a cheese carrying table, a plate on which the table is rotatable, a base on which the table and therewith the plate is slidable, a gear segment adjacent the table and adapted to engage the periphery thereof, a lever for sliding the table away from the segment, a spring for sliding the table toward the segment, a movable knife carrying element and a connection between said knife carrying element and said segment.

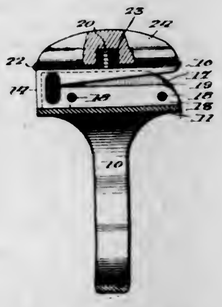
[Claims 6 to 13 not printed in the Gazette.]

1,060,772. METAL-WORKER'S PERFORATING-MACHINE. MICHAEL J. LENIHAN, Philadelphia, Pa. Filed Dec. 5, 1912. Serial No. 735,009. (Cl. 164—91.)



In a machine of the character described, a series of male dies secured to a plunger-head and operable vertically up and down against a series of complemental female dies, the plunger-head of said dies supportingly held by means of links connected with supported rotary members coupled to each other and an operating rod detachably connected with either of said rotary members, for reciprocating the same, substantially as and for the purposes described.

1,060,773. TWINE-CUTTER. STEPHEN LITZMAN, Erie, Pa. Filed June 4, 1912. Serial No. 701,590. (Cl. 30—14.)



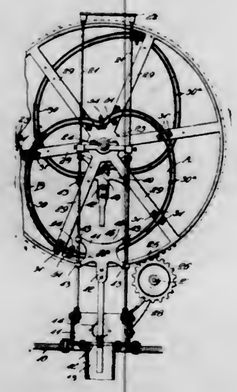
1. As a new article of manufacture, a ring, a recessed head formed therewith, an integral pressure member, a blade mounted in the pressure member, screws for securing the pressure member to the said head and the said blade to the said pressure member, a plate on the said pressure

member, and a cap on the said plate, the upper portions of the said pressure member being of a resilient nature and normally spaced from the said blade.

2. In a device of the class described, the combination with a ring, of a head thereon, a pressure member secured to the said head, a casing formed with the said pressure member, a blade secured in the said casing and normally spaced from the upper portions of the pressure member, a plate having threaded connection with the said pressure member, and a cap secured to the said plate.

3. In a device of the class described, the combination with a ring, of a head thereon, a pressure member formed of a single piece of material and mounted in a recess in the said head, screws mounted to pass through the said head and the pressure member to secure the said pressure member to the head, a blade rigidly secured in spaced portions of the pressure member, a threaded shank formed with the pressure member, a plate on the said shank, and a cap on the said plate.

1,060,774. PUMP-OPERATING MECHANISM. HENRY W. LUPTON, Willcox, Ariz., assignor of one-half to A. I. McAlister, Willcox, Ariz. Filed July 11, 1911. Serial No. 637,878. (Cl. 74—1.)

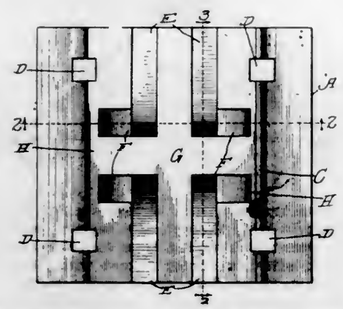


1. In a device of the class described a support, spaced vertical guide ways thereon, a driven gear member revoluble therebetween, cam tracks on each side of the gear each comprising two continuous approximately parallel flexible rails secured thereupon, reciprocable members carried by the guide ways, a wiper device carried thereby and disposed between the rails and adapted to be engaged alternately thereby for reciprocation of the reciprocable members, portions of the rails at the point of change of engagement of the wiper device from one rail to the other being movable relatively, and means for moving the said portions in opposite directions toward each other, for the purpose described.

2. In a device of the class described, the combination of a driven revoluble member, cam devices thereon comprising approximately parallel rails, a reciprocating member, a rocking arm carried pivotally by the reciprocating member, bolts at each end thereof disposed between the rails, roller cylinders revoluble on the bolts, roller bearings between the bolts and cylinders, and heads on the bolts projecting over the roller bearings and partly over the cylinders for retention of each.

3. In a pump mechanism, a driven revoluble body, a plurality of brackets thereon, approximately parallel cam rails carried respectively by respective sets of brackets, certain brackets being adjustable, transversely of the rails a yoke having spaced arms engaged outwardly of respective rails, and a bolt in threaded engagement through one arm to impinge against one rail for flexure and relative inward movement of the rails, whereby a continuous cam track is provided for the reception of a wiper to be reciprocated, and the rails may be adjusted to prevent a knock at the limits of reciprocation, without change of the mean direction of the track.

1,060,775. TIE-PLATE. JOSEPH T. MARKHAM, Chicago, Ill., assignor to Sellers Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 17, 1912. Serial No. 704,084. (Cl. 238—2.)



1. A tie plate formed on that part of its upper surface covered by the base of the rail with recesses extending longitudinally with respect to the rail and terminating at the transverse edges of the plate, and with transversely extending recesses communicating with the longitudinal recesses; said recesses being disposed so as to provide smooth bearings for the edges of the rail base and so as to provide a body of metal of maximum thickness extending crosswise of the plate at the center and intervening between the longitudinal channels which terminate at one edge of the plate and those terminating at the other edge so as to interrupt and make discontinuous the lines of weakness resulting from the provision of the plate with said longitudinally extending recesses.

2. A tie plate formed on that part of its upper surface which is covered by the base of the rail with a recess extending longitudinally with respect to the rail and terminating at one end at the edge of the plate, and with a transverse recess communicating with said longitudinal recess so as to provide a continuous drain channel extending to the edge of the plate and so that a body of metal of maximum thickness is provided extending transversely of the plate beneath the rail base, said drain channel being shallower at its inner end than at the outer end, substantially as described.

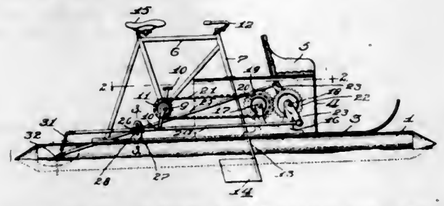
3. A tie plate formed on that part of its upper surface which is covered by the base of the rail with a recess extending longitudinally with respect to the rail and terminating at one end at the edge of the plate, and with a transverse recess communicating with said longitudinal recess so as to provide a continuous drain channel extending to the edge of the plate and so that a body of metal of maximum thickness is provided extending transversely of the plate beneath the rail base, said transverse recess being formed so that it slopes downwardly into the longitudinal recess, substantially as described.

4. A tie plate formed on that part of its upper surface which is covered by the base of the rail with pairs of longitudinal recesses extending from the forward and rear edges of the plate, respectively, toward the center thereof, and with transverse recesses extending from said longitudinal recesses toward the sides of the plate, said recesses being so arranged as to provide a central rib of maximum thickness extending across the plate from side to side.

5. A tie plate formed on that part of its upper surface which is covered by the base of the rail with pairs of longitudinal recesses extending from the forward and rear edges of the plate, respectively, toward the center thereof, and with transverse recesses extending from said longitudinal recesses toward the sides of the plate, said recesses being so arranged as to provide a central rib of maximum thickness extending across the plate from side to side, the depth of said transverse recesses being diminished in the directions toward the edges of the plate.

[Claim 6 not printed in the Gazette.]

1,060,776. PROPELLER FOR BOATS. ABRAHAM MAYER, Red Bud, Ill. Filed July 3, 1911. Serial No. 636,714. (Cl. 115—26.)



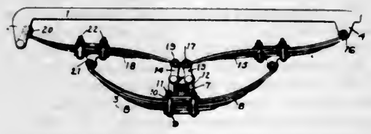
In a propeller for boats, a pedally-operated gear wheel, a shaft in advance of said gear wheel, a gear wheel carried by said shaft in mesh with the pedally-operated gear wheel, a pair of cranks carried by said shaft, a pair of rocking sleeves arranged in a plane beneath said shaft, a pair of rods supported by said sleeves and having their ends connected with said cranks, and paddles carried by said rods and arranged at an angle other than a right angle relative to the rods, whereby the cranks will be rotated in a direction opposite the pedally-operated gear wheel and whereby the paddles will be dipped into the water at an angle relative to the surface of the water, then straightened to a substantially vertical position, and then lifted out of the water at an angle relative to the surface.

1,060,777. NIPPLE FOR NURSING-BOTTLES. HARLAN J. MAYNARD, Newton Highlands, Mass., assignor to Thermolac Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed May 6, 1911. Serial No. 625,553. (Cl. 128—18.)



A nipple for nursing or feeding bottles having a perforation in and through its side wall and having a portion to fit over the neck of a bottle, the said nipple being otherwise imperforate, for the purpose set forth.

1,060,778. SPRING FOR VEHICLES. JOHN A. McANULTY, Indianapolis, Ind. Filed July 27, 1911. Serial No. 640,801. (Cl. 21—101.)



1. In a vehicle, the combination with the body and axle, of a bow spring, one end of which is hinged to the body and its other end connected to the axle by a shackle, a second spring, a shackle connecting one end thereof to the body, and a shackle connecting the other end to the axle, and a third bow spring connected to the axle with its ends hinged to an intermediate point on the first and second springs.

2. In a vehicle, the combination with the body and axle, of a spring secured to the axle and extending rearwardly therefrom with its rear end secured to the body against bodily axial movement, a spring extending forwardly from the axle, and shackles connecting its ends to the axle and body respectively and permitting said spring to move bodily axially independently of a relative movement of the body of the vehicle, and an axle spring secured to the axle at its center with its ends hinged at an intermediate point to the other springs, whereby the temporary stoppage of the wheel of the vehicle due to an obstruction will be taken up by compression on the rearwardly extending spring and by the bodily axial movement of the forwardly extending spring permitted by the shackles.

3. In a vehicle, the combination with the body and the axle, of a central bow spring secured midway of its length transverse to the axle, a bow spring hinged on one end of the central bow, one end of which is secured to the body by a shackle, a shackle securing the other end of said spring to the axle, and a third bow spring hinged at its center to the other end of the central bow, one end of which is hinged to the vehicle body and a shackle securing the other end of the third bow spring to the axle.

1,060,779. TROMBONE. ROBERT MIDDLETON, Elkhart, Ind., assignor to Elkhart Musical Instrument Company, Elkhart, Ind., a Corporation of Indiana. Filed Mar. 19, 1912. Serial No. 684,849. (Cl. 84—8.)

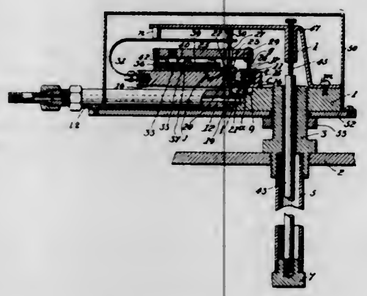


In a tuning device for wind musical instruments, the combination with parallel tubes of the instrument and a tuning slide with its ends slidably mounted in said tubes, of a bridge piece on the tuning slide, an elongated sleeve rigidly secured to and extending from said bridge piece parallel with the tubes of the tuning slide and in the direction of the parallel tubes of the instrument, said sleeve being provided with an interior screw thread, a bridge piece extending between the parallel tubes of the instrument having a transverse opening therethrough with a smooth bore, and an elongated screw threaded rod extending through and swiveled at one end in the said smooth bore opening, the screw threads of the rod being constructed to intermesh with the interior threads of the sleeve, and an enlarged head integral with said rod and positioned on the under side of the second named bridge piece whereby the rod may be revolved to move the tuning slide.

1,060,780. HEAT-REGULATING APPARATUS. NATHAN E. NASH, Toronto, Ontario, Canada. Filed June 23, 1911. Serial No. 635,034. (Cl. 236—8.)

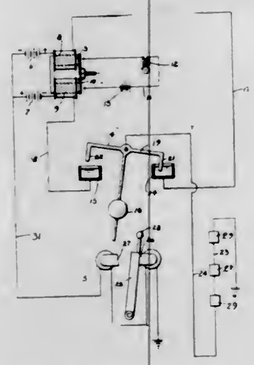
In combination with a water tank, a heat regulating apparatus which consists of a hollow stud which is inserted through the shell of the tank, a body fastened to the said stud having a pair of nozzles one of which leads to a source of air under pressure, and the other to a steam-valve operating device adapted to govern the temperature of the water in the tank, the said body having a pair of intercommunicating chambers open to the said nozzles, a third chamber in communication with the others, a valve chest at all times open to intercommunicating chambers by means of a duct and provided with an aperture leading to the outer air, and a valve to control the said aperture, a valve in the third chamber to close or open communication between the said nozzles, and at times admit of the escape of air from the nozzle leading to the steam-valve-operating device, a flexible diaphragm with its under side constantly open to the valve chest, a trunnioned rocker actuated by the said diaphragm to open and close

the valve in the third chamber, a thermostatic tube closed at the bottom, and at the top screwed into the hollow stud and open to the air, a bar having its lower end fastened to the bottom of the thermostatic tube, and means whereby the movement of the said bar produced



by a change in the temperature of the water in the tank is transmitted to the valve in the valve cheat to control the passage of air from below the diaphragm to the outer air, substantially as specified.

1,060,781. AUTOMATIC ALARM AND SIGNAL DEVICE. JAMES D. NELSON, Cincinnati, Ohio. Filed Feb. 11, 1911. Serial No. 607,929. (Cl. 178—163.)



1. In combination with an alarm circuit, a relay device provided with two electro-magnetic windings, a separate source of direct-current supply delivering current to said windings, an oscillating switch connected to said windings and adapted to deliver current to said circuit, first from one and then the other source of current supply.

2. In combination with an alarm circuit, a relay provided with separate electro-magnetic windings, separate sources of direct current supply delivering current of opposite sign to said windings, an oscillating switch connected to said windings and adapted to deliver current to said alarm circuit, first from one source of current supply and then to the other.

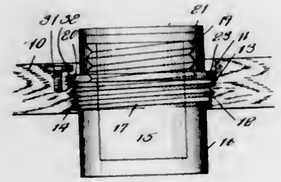
3. In combination with an alarm circuit, two separate sources of direct-current supply connected to one lead of said circuit, and adapted to alternately deliver current of opposite sign thereto, and an oscillating switch connected with the other lead of said circuit, and adapted to alternately connect one and then the other source of supply with said last mentioned lead.

4. In combination with an alarm circuit, an instrument provided with two separate electro-magnet windings, a separate source of direct-current supply connected to each of said windings, and an oscillating switch connected to said windings and to said circuit for delivering current to said circuit, first from one source of supply and then from the other, and for causing the periods of current-flow through the separate windings to overlap.

5. In combination with an alarm circuit, an instrument provided with two separate electro-magnet windings, a separate source of direct-current of opposite sign connected to each of said windings, an oscillating switch connected to each of said windings and to said circuit, and provided with means for delivering current to said circuit, first from one source of supply and then the other, and for causing the periods of flow through said windings to overlap.

[Claims 6 to 11 not printed in the Gazette.]

1,060,782. INK-WELL. ELLSBERRY NEWBY and WARNER NEWBY, Reedley, Cal. Filed Apr. 4, 1912. Serial No. 688,395. (Cl. 120—58.)

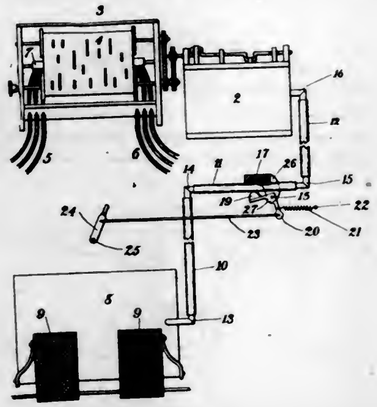


1. The combination with a receptacle having a reduced and threaded end producing a resultant shoulder, of a closure contained within one end of the receptacle and held against rotation, said closure provided with an opening, a cap threaded upon the receptacle for rotation thereon and contact with said shoulder, a sealing disk attached to the cap, the cap and the disk provided with an opening to be brought in registry with the opening in the closure upon rotation of the cap.

2. The combination in an ink-well of a receptacle having attaching threads formed thereon and a reduced end portion producing a resultant shoulder, a non-rotatable closure supported in one end of the receptacle and having one edge cut away to form a passage, a cap threaded on the reduced end portion of the receptacle and provided with an opening adapted to register with the opening in the closure, a flexible sealing member attached to the cap and having an opening registering with the opening in the cap, said member adapted to seal the interior of the receptacle upon rotation of the cap, means for supporting the receptacle and means for limiting the rotation of the cap.

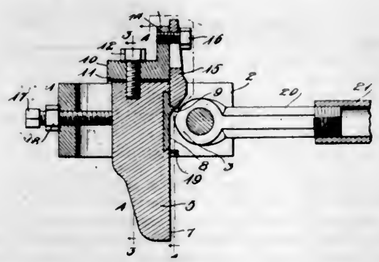
3. The combination in a support having an opening formed therein, said opening being reduced, tapered toward one end and internally threaded, said reduced portion of the opening producing a resultant shoulder, a receptacle disposed within said opening and provided with tapered threads for engagement with the threaded portion of the opening, the upper end of said receptacle being reduced and threaded, said reduced portion producing a resultant shoulder disposed in the plane of the before mentioned shoulder, a closure disposed in the mouth of the receptacle, lugs formed upon said closure and engaging recesses formed in the receptacle, said closure being cut away at one side producing a passage, a cap threaded upon the reduced end of the receptacle, a flange formed upon the lower end of the cap, said flange and adjacent portion of the cap contacting with the shoulders, a flexible sealing member disposed within the cap, said cap and sealing member having alining openings formed therein, said openings adapted to register with the passage, and a set screw threaded in the support and projecting into the major end of the opening formed in the support for contact with the flange of the cap and limiting the upward rotary movement of the latter.

1,060,783. TEMPO-REGULATOR FOR PNEUMATIC PIANO-PLAYERS. JAMES O'CONNOR, New York, N. Y. Filed Nov. 9, 1910. Serial No. 591,421. (Cl. 230—36.)



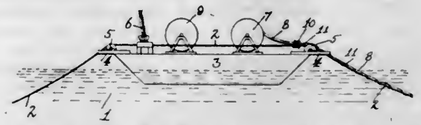
The combination with a pneumatically operated motor for self playing pianos of a flexible tube and manually actuated means for compressing said tube for varying in infinitesimal increments the pressure supplied to said motor.

1,060,784. SAW-SET. PEDRO ANDREW OLSEN, Inglewood, Wash. Filed June 5, 1911. Serial No. 631,254. (Cl. 76—58.)



A saw set comprising a supporting frame having parallel side members, an anvil slidably and adjustably secured between said side members and having a transverse dovetail recess in its face between the upper and lower edges of the side members of the frame, a die located in said dove-tail recess having a beveled rib on its outer face and an extension above said rib, a tapering gage adjustably secured to the anvil and having a lower rounded edge which is slightly wider than the rib over which the teeth of the saw to be set are adapted to ride, said gage having an outer inclined projecting face terminating at the lower rounded edge of the same, whereby the beveled face of the rib of the die substantially forms a continuation of the curved face of the anvil, and an eccentric die pivotally mounted between the side members of the frame and adapted to engage with the teeth of the saw and adjusted between the rib of the die and lower outer inclined surface of the anvil, whereby the teeth of the saw are adapted to be set at the desired angle, and subsequently pointed and drawn by the eccentric die by being forced over the rounded lower edge of the gage.

1,060,785. METHOD OF LAYING SUBMARINE POWER AND OTHER ELECTRIC CABLES. AUGUST JULIUS PAHL, Alameda, Cal. Filed Jan. 29, 1913. Serial No. 744,906. (Cl. 61—2.)



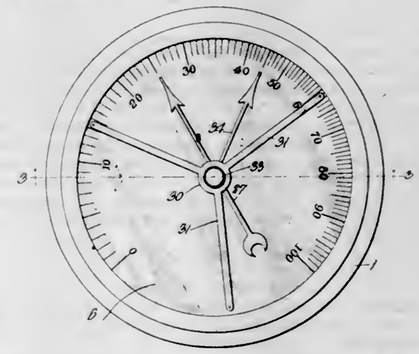
1. The method of laying submarine power and other electric cables which consists in laying in a predetermined course a messenger cable; under-running said messenger cable with a barge; and during said under-running serving the power cable to the messenger cable and paying the connected cables out over the stern of the barge.

2. The method of laying submarine power and other electric cables which consists in laying in a predetermined course a messenger cable; under-running said messenger cable with a barge; controllably connecting said barge with the messenger cable; and during said under-running serving the power cable to the messenger cable and paying the connected cables out over the stern of the barge.

3. The method of laying submarine power and other electric cables which consists in laying in a predetermined course a messenger cable; under-running said messenger cable with a barge and accurately adjusting the position and slack of said cable during said under-running; again under-running said messenger cable with said barge; and during said last named under-running serving the power cable to the messenger cable and paying the connected cables out over the stern of the barge.

4. The method of laying submarine power and other electric cables which consists in laying in a predetermined course a messenger cable; under-running said messenger cable with a barge and accurately adjusting the position and slack of said cable during said under-running; again under-running said messenger cable with said barge, and controllably connecting the barge with the cable; and during said last named under-running serving the power cable to the messenger cable and paying the connected cables out over the stern of the barge.

1,060,786. HUMIDOSTAT. LOUIS F. PERKETT, Traverse City, Mich. Filed Apr. 16, 1912. Serial No. 691,213. (Cl. 73—22.)

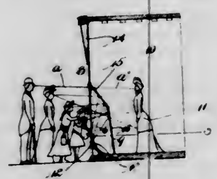


1. A humidostat, having a casing provided with a partition carrying a dial, a removable transparent cover for the casing, an indicating hand, an arbor carried by the partition and carrying the hand, a plurality of humidity expanded strips, means for connecting one end of one strip to the partition, a lever pivoted intermediate of its ends to the partition and having one end pivotally connected to one end of one of the strips, said strips being

connected together for co-action, and a flexible means for connecting the other end of the lever to the arbor.

2. A humidostat, having a casing provided with a partition carrying a dial, a removable transparent cover for the casing, a pointing hand, an arbor carried by the partition and carrying the hand, two humidity expanded strips, adjustable means for connecting one end of one strip to the partition, a lever pivoted intermediate of its ends to the partition and having its terminals pivotally connected to the remaining end of the one strip and one end of the other strip, and adjustable means for connecting the free end of the remaining strip to the arbor.

1,060,787. DEVICE FOR EXHIBITING ARTICLES OF MERCHANDISE. TRON O. PETERSON, New York, N. Y., assignor to Store Improvement Company, Inc., New York, N. Y. Filed June 15, 1912. Serial No. 703,843. (Cl. 88—60.)



1. A device for exhibiting articles of merchandise comprising in its construction a transparent partition and an opaque partition located in front of said transparent partition and extending vertically partly thereacross.

2. A device for exhibiting articles of merchandise comprising in its construction a transparent partition and an opaque partition located in front of said transparent partition and extending vertically partly thereacross, said opaque partition having a non-reflecting surface on the side thereof adjacent to said transparent partition.

3. A device for exhibiting articles of merchandise comprising in its construction a transparent partition and an opaque partition located in front of said transparent partition and extending vertically partly thereacross, said opaque partition having a non-reflecting surface on the side thereof adjacent to said transparent partition, and a reflector located between said non-reflecting surface and transparent partition.

4. A device for exhibiting articles of merchandise comprising in its construction a transparent partition and an opaque partition located in front of said transparent partition and extending vertically partly thereacross, said opaque partition having a non-reflecting surface on the side thereof adjacent to said transparent partition, and a reflecting surface superimposed upon said non-reflecting surface.

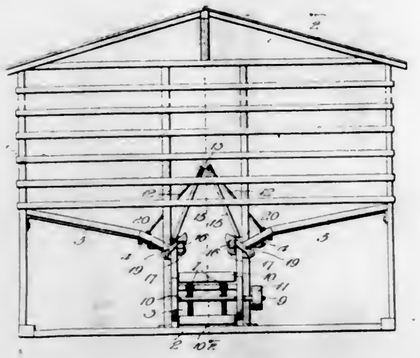
5. A device for exhibiting articles of merchandise comprising in its construction a transparent partition and an opaque partition located in front of said transparent partition and extending vertically partly thereacross, said opaque partition having a surface adjacent to said transparent partition formed partly of reflecting and partly of non-reflecting material.

[Claims 6 to 16 not printed in the Gazette.]

1,060,788. CORN-CRIB. HENRY L. RAHLF, Falls City, Nebr. Filed June 13, 1912. Serial No. 703,482. (Cl. 193—20.)

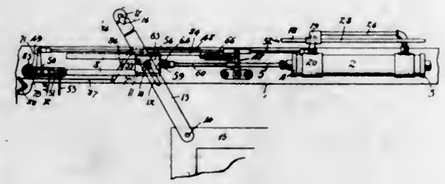
1. In a crib for containing corn or grain, a trough extending through the crib, means located in the trough for receiving the grain deposited therefrom, oppositely positioned inclined floors leading to said trough, grain controlling gates hingedly attached to the crib above the trough, the lower free ends of which are adapted to be moved adjacent to the delivery edges of the floors, locking stop strips loosely attached to the crib thus constructed, and means for locking the strips in an elevated position against said gates.

2. In a crib for containing corn or grain, a trough extending through the crib, means located in the trough for receiving the grain deposited therefrom, oppositely positioned inclined floors leading to said trough, grain controlling gates hingedly attached to the crib above the trough,



the lower free ends of which are adapted to be moved adjacent to the delivery edges of the floors, locking stop strips loosely attached to the crib thus constructed, and pawls pivotally secured to the crib for engagement with notches formed in the strips whereby the same are held in an elevated and locked position.

1,060,789. MOTOR FOR OPERATING DOORS. HORATIO C. RANDALL, San Francisco, Cal. Filed July 13, 1908. Serial No. 443,352. (Cl. 121—45.)



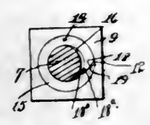
1. In a motor for controlling a movable element, the combination of a cylinder, a piston therein having in each end a radially extending socket terminating at its inner end in a valve seat, a ball check valve on said seat, said piston having a passage leading from said socket above said ball to the end of the piston, and a second passage leading from below the ball to an intermediate point in a side of the piston, the cylinder having a port arranged to communicate with said passage when the piston is at the end of the cylinder, and a piston rod secured to said piston and operatively connected to the movable element, substantially as described.

2. In a motor for controlling a movable element, the combination of a cylinder, a piston therein, and means movable with the piston for shutting off the compressed air from access to the rear end of the piston before the piston reaches the end of its stroke, while maintaining the exhaust open, whereby the piston then operates solely by expansion to move said element to the end of its path, and a piston rod secured to said piston and operatively connected to the movable element, substantially as described.

1,060,790. NUT-LOCK. AUGUST C. ROSENBROOK, Wall, S. D. Filed Sept. 12, 1912. Serial No. 720,008. (Cl. 151—19.)

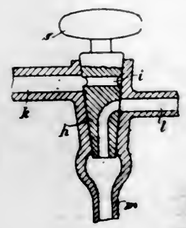
A nut lock comprising a split ring having the ends beveled in opposite directions to produce sharp penetrating

points, one of said points being bent abruptly inwardly of the ring, and the other of said points extending beyond the periphery of the ring and being adapted to be bent



abruptly outwardly by retrograde turning of the nut and penetrate the nut radially with respect to said ring.

1,060,791. STOP-COCK OR VALVE FOR VACUUM PIPE SYSTEMS. OTTO SCHALLER, Südende, near Berlin, Germany. Filed May 13, 1910. Serial No. 561,158. (Cl. 137—7.)



1. In a cock for vacuum conduits, the combination of a housing having a main opening and a plurality of vacuum conduits; and a plug in said opening and provided with a passage adapted to connect together certain of said conduits; an annular groove being provided in one of the faces of contact between the plug and housing and communicating with one of said conduits.

2. In a cock for vacuum conduits the combination of a housing having a central conical opening, and provided with lateral vacuum conduits and a terminal receptacle conduit; and a conical plug rotatably fitting in said opening and provided with a boring adapted to establish communication between the receptacle conduit and one of the vacuum conduits, said plug being also provided, at the end opposite said receptacle conduit, with an annular groove communicating with the other vacuum conduit.

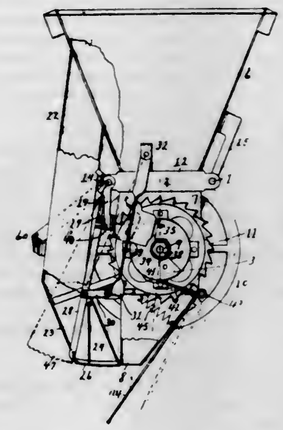
3. In a cock for vacuum conduits, the combination of a housing having a central conical opening, and provided with a high vacuum conduit and a low vacuum conduit opening through the side wall of the conical opening, and a receptacle conduit extending from the smaller end of said opening; and a conical plug rotatably fitted in said conical opening and provided with an L shaped boring adapted, at certain position of rotation of the plug, to establish communication between the high vacuum conduit and the receptacle conduit, the plug being also provided, near the end of the housing farthest from said receptacle conduit, with an annular groove communicating with said low vacuum conduit.

4. A cock for vacuum conduits comprising a housing having therein high and low vacuum passages and a conduit to the receptacles to be evacuated, a plug having means for establishing communication between said conduit and one of said passages, a low vacuum chamber being provided around said plug in constant communication wth the low vacuum passage and located between the high vacuum passage and the outer air.

5. A cock for vacuum conduits comprising a housing having therein high and low vacuum passages located in different vertical planes, and a conduit to the receptacles to be evacuated, a plug in said housing having a port to establish communication between the high vacuum passage and the conduit to the receptacles to be evacuated and an annular chamber around the said plug in constant communication with the low vacuum passage and located between the high vacuum passage and the outer air.

[Claim 6 not printed in the Gazette.]

1,060,792. FEEDER FOR AUTOMATIC WEIGHING-MACHINES. CHARLES D. SCOTT, Topeka, Kans., assignor to Percy E. Ginn, Winchester, Mass. Filed Jan. 10, 1912. Serial No. 670,458. (Cl. 73—183.)



1. The combination with a hopper having a casing and a discharge end and a mechanism within the casing for producing a constant and regular feed from the hopper through the discharge end, said mechanism including a rotating shaft; of an auxiliary chute leading from the hopper around the casing and down and terminating adjacent to the discharge end of the hopper; a regulating wing within said chute; a shutter for said chute, an arm to which the shutter is secured; a lever; a link connecting the arm and lever; a friction disk secured on the shaft, and another friction disk mounted loosely on the shaft; a spring for pressing said disks together, a segment secured to the loosely mounted disk; a spring for holding said shutter, arm, link, and lever with the shutter in closed position, and said segment being adapted on rotation to open the shutter; a lug on the loosely mounted disk; a pawl engaging said lug to hold said loosely mounted member at rest; and a rod for tripping said pawl and freeing it from the lug.

2. The combination with a hopper having a casing and a discharge end and a mechanism within the casing for producing a constant and regular feed from the hopper through the discharge end, said mechanism including a rotating shaft; of an auxiliary chute leading from the hopper to said discharge end; a regulating wing in said chute; a shutter for the chute; a pivoted arm to which the shutter is secured; a spring for normally closing the shutter; a friction clutch, one member of which is secured on the shaft and the other member of which is mounted loosely on the shaft; a segment secured to the loosely mounted member; a stop for said loosely mounted member; a trip for disengaging said stop; a spring for holding the stop and trip in normal position stopping the loosely mounted member; and an element between the shutter and the segment whereby said segment operates the shutter to open it in opposition to the first-named spring.

3. The combination with a hopper having a casing and a discharge end and a mechanism within the casing for producing a constant and regular feed from the hopper

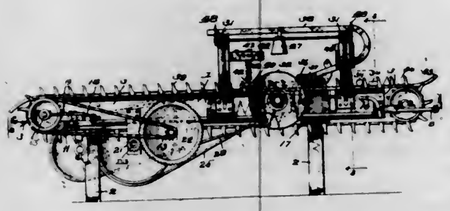
through the discharge end, said mechanism including a rotating shaft; of an auxiliary chute leading from the hopper to the discharge end; a shutter for the chute; a spring for holding the shutter normally closed; a friction clutch, one member of which is secured to said shaft, the other member of which is loosely mounted theeron; a segment coöperating with the loosely mounted member and a stop therefor; devices for operating the stop; and devices between the segment and the shutter whereby the segment operates the shutter in opposition to the spring.

4. The combination with a hopper having a constant and regular feed and including a shaft; of an auxiliary chute leading from the hopper above said mechanism to the exit end of the hopper below said mechanism; a shutter for said chute; a friction clutch mounted on the shaft comprising a rigidly mounted and a loosely mounted member; a stop for stopping and releasing the loosely mounted member; and mechanism between the shutter and the loosely mounted member whereby said shutter is operated by said loosely mounted member.

5. The combination with a hopper having a constant and regular feed and including a shaft; of an auxiliary chute leading to the exit end of the hopper below said mechanism; a shutter for said chute; a friction clutch mounted on the shaft comprising a rigidly mounted and a loosely mounted member; a stop for stopping and releasing the loosely mounted member; and mechanism between the shutter and the loosely mounted member whereby said shutter is operated by said loosely mounted member.

[Claims 6 to 10 not printed in the Gazette.]

1,060,793. SPOKE-EQUALIZING MACHINE. HENRY SEGRAVES, Pikeville, Ky. Filed Jan. 9, 1912. Serial No. 670,148. (Cl. 143—49.)



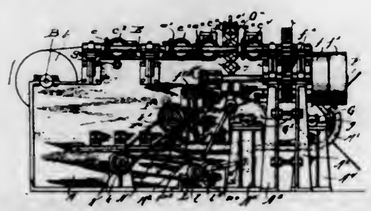
1. A machine of the type described, including an endless carrier, rotary saws arranged for coöperation with said carrier, work-guides paralleling the plane of the upper rim of said carrier, spoke-receivers superposed with respect to said carrier, angular levers for controlling said spoke-receivers, pivotally connected to the latter, near their forward ends, tongues supported in elevated position, said levers being provided with slides received by and vertically movable within said tongues and controlling means for the rear ends of said spoke receivers.

2. A machine of the type described, including an endless carrier, rotary saws arranged for coöperation with said carrier, work-guides paralleling the plane of the upper rim of said carrier, spoke-receivers superposed with respect to said carrier, angular levers having pivotal connection with said spoke-receivers at their forward ends, forks supported in elevated position, tongues similarly supported, said angular levers being received by said forks and having depending slides received by and vertically movable within said tongues, and controlling means for the rear ends of said spoke-receivers.

3. A machine of the type described, including an endless carrier, rotary saws arranged for coöperation with said carrier, work-guides paralleling the upper rim of said carrier, spoke-receivers superposed with respect to said carrier, approximately G-shaped supports arranged fore and aft of said saws, angular levers for controlling said spoke-receivers, pivotally connected to the latter, near their forward ends, tongues supported from said approximately G-shaped supports, said levers being provided with slides received by and vertically movable within said tongues, and controlling means for the rear ends of said spoke-receivers.

4. A machine of the type described, including an endless carrier, rotary saws arranged for coöperation with said carrier, work-guides paralleling the upper rim of said carrier, spoke-receivers superposed with respect to said carrier, upright supports arranged fore and aft of said saws, angular levers for controlling said spoke-receivers, pivotally connected to the forward ends of said spoke-receivers, tongues supported from said upright supports, said levers being provided with slides received by and vertically movable within said tongues, and means for controlling the rear ends of said spoke-receivers, comprising resiliently actuated rods supported from one of said upright supports and pivotally connected to said ends of said spoke-receivers.

1,060,794. MACHINE FOR ASSEMBLING PROTECTING-STRIPS ON FILES. ALFRED SHACKLETON, Chicago, Ill. Filed Oct. 29, 1906. Serial No. 341,172. (Cl. 242—60.)



1. In a machine of the class described a file, means for intermittently feeding a transversely slitted strip, means for directing said strip against the file and impaling the same on the file through said slots, and means for severing the paper after a predetermined length is filed.

2. In a device of the class described a file, means for feeding a transversely slitted strip of paper onto the file at the slits and stationary means for forcing the paper upon the file.

3. In a device of the class described the combination with a table of a file, mechanism to reciprocate the same beneath and equal distances on each side the edge of the table and mechanism feeding a transversely slotted strip over the table so that the slots successively pass upon the file.

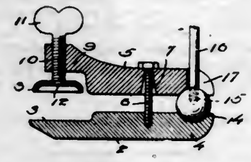
4. In a machine of the class described the combination with a feed table of a file, adapted to reciprocate each side of the table edge, mechanism for reciprocating the file, rolls for feeding a transversely slotted strip over the table to the file and timing the same so that the file successively engages in the slots in said strip and guides acting to press the strip down upon the file.

5. In a machine of the class described the combination with a feed table having a downturned front edge of a guide complemental with said edge, a file, means reciprocating said file beneath said downturned edge of the table, rolls for feeding a transversely slotted strip of paper downwardly between said edge and guide and timed to deliver the slots in said strip onto the file and a guide acting to press the strip down upon the file.

[Claims 6 to 79 not printed in the Gazette.]

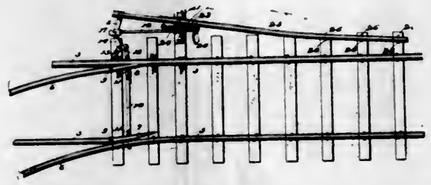
1,060,795. COPY-HOLDER. WILLIAM E. SMITH, Colorado City, Colo. Filed Dec. 12, 1911. Serial No. 665,299. (Cl. 248—3.)

In a copy holding device the combination with a clamp bar broadened at one end and having a hemispherical recess formed in the other end, of a second clamp bar having a hemispherical recess formed in one end and an offset in the other end, a bolt loosely engaged in one of said bars and secured to the other to adjustably connect the bars and permit of their swinging with respect to each other, a clamp screw engaged in the offset of the one bar for securing the clamp in position and forcing the socketed



ends thereof toward each other, a ball engaged in the hemispherical sockets and held in adjusted position by the tightening of the clamp screw, a supporting rod projecting from the ball, adapted to support a copy holder.

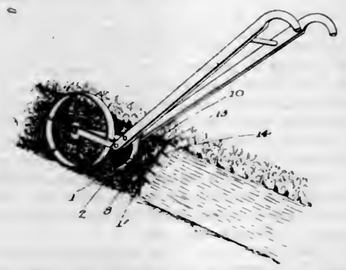
1,060,796. SWITCH. LINDALE E. THOMAS, Kermit, W. Va. Filed Nov. 29, 1912. Serial No. 734,042. (Cl. 104—25.)



1. In a switch the combination with a pair of main line rails, a pair of siding rails, and a pair of switch points pivoted to one of the main line rails and one of the siding rails, of a bar connecting said switch points together, a toggle connected to one end of the bar, a spring rail extending alongside of the main line rails, said toggle being also connected to said spring rail, and a switch operating lever connected to the pivot of said toggle.

2. In a switch the combination with a pair of main line rails, a pair of siding rails, and a pair of switch points pivoted to one of the main line rails and to one of the siding rails, of a bar extending beneath the switch points and connected thereto, a bell crank lever, a link connecting one end of the bar to one arm of the bell crank lever, a spring rail secured alongside the main line rails, a link connecting the free end of the spring rail to the other arm of the bell crank lever, whereby said link and the arm of said bell crank form a toggle, and a switch operating lever connected to the pivot of said toggle.

1,060,797. CULTIVATOR ATTACHMENT. LOUISE C. THOMASON, Del Rosa, Cal. Filed July 30, 1912. Serial No. 712,330. (Cl. 97—42.)

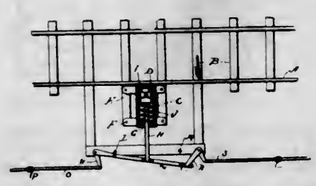


1. A cultivator attachment comprising a lug on the cultivator, a sleeve with a bolt projecting laterally therefrom and revoluble in said lug, a nut on the bolt, a bar vertically adjustable in said sleeve, a lateral bar pivoted to the lower end of said vertical bar and adjustable to various angles with respect to the vertical bar, and cultivating teeth carried by said lateral bar.

2. A cultivator attachment comprising a clamp means adapted to be secured to the cultivator, a bar vertically and angularly adjustable in said clamp means, a lateral bar pivoted to said vertical bar and adjustable to various angles with respect to the vertical bar, cultivating teeth carried by said lateral bar, and a tooth on the lower end of the vertical bar below the joint between the vertical bar and lateral bar.

3. A cultivator attachment comprising a vertical bar, clamp means for angularly and vertically adjustably securing said vertical bar to the cultivator, the vertical bar having a joint member formed with radial serrations, a lateral bar having a joint member formed with radial serrations adapted to interlock with the first mentioned serrations, a bolt through said joint, and teeth projecting down from said lateral bar.

1,060,798. RAILWAY-SIGNAL. CAMILLE TRAHAN, New Bedford, Mass. Filed June 6, 1910. Serial No. 565,363. (Cl. 246—16.)



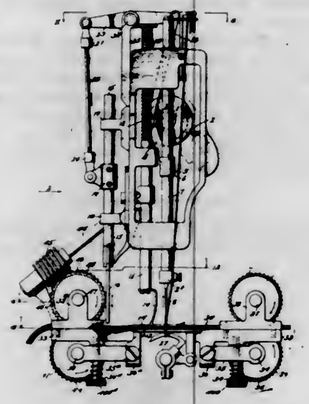
1. In a single track railway, semaphores located at the side of the track for controlling movement of trains in both directions on the track, a single torpedo holder connected to said semaphores and adapted to be operated by each of said semaphores.

2. In a single track railway, a plurality of semaphores located at the side of the track for controlling movement of trains in both directions on the track, a torpedo holder, a rod connected to said torpedo holder, a straight lever pivoted centrally to the end of said rod, pins against which the straight lever is adapted to normally rest, a bell-crank lever connected to said straight lever at each end thereof, each bell-crank lever adapted to move one end of the straight lever about one of said pins as a pivot whereby said rod may be operated to move the torpedo holder, a semaphore located beside the track on each side of the torpedo holder, and means connecting each bell-crank lever with a semaphore whereby one of said semaphores and one end of the straight lever may be operated simultaneously.

3. In a single track railway, a casing having the outer end thereof open and having a perforation in the inner end, said casing adapted to be placed beside a track, a torpedo holder slidably mounted in said casing and adapted to project over the track, a rod connected to said torpedo holder and operating through the perforation in the inner end of the casing, a spring located in the casing and coiled about said rod having its terminal convolutions in contact with the inner end of the casing and the torpedo holder and adapted to normally force the latter outwardly, a straight lever pivoted centrally to the end of said rod, a pin mounted in proximity to each end of the straight lever, said straight lever normally resting against both of said pins, a bell-crank lever connected to said straight lever at each end thereof, each bell-crank lever adapted to move one end of the straight lever away from its pin and about the opposite pin as a pivot whereby the rod may be operated to move the torpedo holder, a semaphore located beside the track on each side of the casing, one of said semaphores controlling movement of trains in one direction and the other in the opposite direction, and means connecting each semaphore with the adjacent

bell-crank lever whereby one end of the straight lever may be moved upon operation of the associated semaphore.

1,060,799. FEED MECHANISM FOR SEWING-MACHINES. VANDIVER J. VAN HORN, Chicago, Ill., assignor of one-half to John W. O'Neill, Chicago, Ill. Filed Aug. 7, 1911. Serial No. 642,762. (Cl. 112—8.)



1. A sewing machine having, in combination, a needle, means for operating it, and feed mechanism, said feed mechanism having a clamp for constantly engaging the work and at all times positively holding it and preventing its retrograde movement, a deflector engaging the work between the needle and clamp, and means for reciprocating the deflector in a direction transverse to the normal plane of the work during intervals while the needle is out of the work.

2. A sewing machine having, in combination, a needle, means for operating it, and feed mechanism, said feed mechanism having a clamp for constantly engaging the work and at all times positively holding it and preventing its retrograde movement, a deflector engaging the work between the needle and clamp, means for reciprocating the deflector in a direction transverse to the normal plane of the work during intervals while the needle is out of the work, and continuously operating means located in rear of the deflector for taking up the slack in the work in rear of the needle.

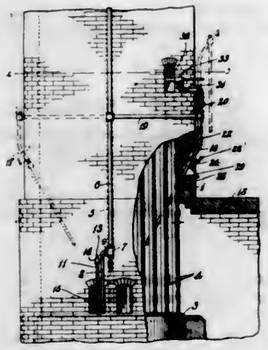
3. A sewing machine having, in combination, a needle, means for operating it, a presser-foot, and feed mechanism independent of the presser-foot, said feed mechanism having a clamp in rear of the presser-foot adapted to constantly engage the work and at all times positively preventing its retrograde movement, a deflector engaging the work between the clamp and presser-foot, and means for reciprocating the deflector in directions transversely to and across the normal plane of the work for deflecting it from said plane and thereby drawing it forward, step by step, during intervals while the needle is out of the work.

4. A sewing machine having, in combination, a needle, means for operating it, a presser-foot, and feed mechanism independent of the presser-foot, said feed mechanism having a clamp in rear of the presser-foot adapted to constantly engage the work and at all times positively preventing its retrograde movement, a deflector engaging the work between the clamp and presser-foot, means for reciprocating the deflector in directions transverse to the normal plane of the work for deflecting it from said plane and thereby drawing it forward, step by step, during intervals while the needle is out of the work, and continuously operating means located in rear of the presser foot for taking up the slack in the work.

5. A sewing machine having, in combination, a needle, means for operating it, and feed mechanism, said feed mechanism having a deflector adapted to engage the work in rear of the needle, means for reciprocating said deflector in directions transverse to the normal plane of the work for deflecting it from said plane and intermittently drawing it forward, step by step, during intervals while the needle is out of the work, a pair of combined clamping and take-up rolls engaging the work in rear of the deflector, and means for continuously revolving at least one of said rolls and thereby taking up the slack in the work in rear of the needle and also preventing its retrograde movement.

[Claims 6 to 17 not printed in the Gazette.]

1,060,800. BLOWER FOR BOILERS. THOMAS S. WALLER, Detroit, Mich., assignor to Diamond Power Specialty Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 14, 1912. Serial No. 677,546. (Cl. 122—390.)



1. In a blower for boilers, the combination with a supply pipe, of a tube section pivotally connected to said pipe to swing upon a horizontal axis, a second tube section pivotally connected to the end of the first section to turn upon an axis extending transversely to the longitudinal axis of the first tube section, and a tubular extension or nozzle section carried by the second section.

2. In a blower for boilers, the combination with a supply pipe, of a tube section pivotally attached to the supply pipe to swing upon an axis extending transversely of the tubes of the boiler toward and from an opening in the boiler setting, a second tube section pivotally attached to the opposite end of said first section to turn to a position parallel therewith and to project into said opening, and means carried by said second section to direct a jet of steam across the boiler tubes.

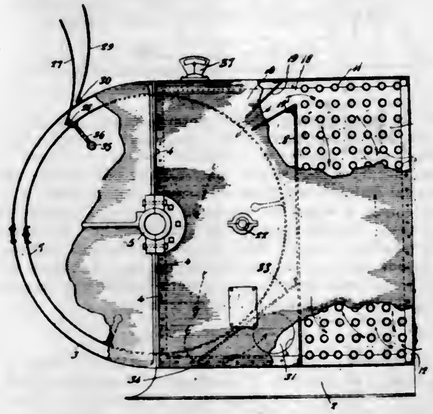
3. In a blower for boilers, the combination with a supply pipe, a tube section pivotally attached at one end to said supply pipe to swing upon an axis extending transversely of the tubes of said boiler to bring its opposite end opposite an opening in the wall of the boiler setting and to turn upon an axis extending longitudinally of said boiler tubes to change its position relative to said supply pipe and bring it in position before a second opening in said wall, and a tube section pivotally attached to the end of the first tube section to turn at an angle thereto and project into said openings.

4. In combination with a boiler setting having two openings in the wall thereof, of a supply pipe, a tube section pivotally attached to said pipe midway between said openings to swing from one opening to the other, and a second tube section pivotally attached to the end of the first section to project into said openings.

5. In combination with a boiler setting having two openings in the wall thereof, of a supply pipe, a tube section pivotally attached at one end to said supply pipe midway between said openings to swing from one to the other of said openings, a second tube section pivotally attached to the end of the first section to turn thereon upon an axis extending at right angles to the longitudinal axis of said tube to project into said openings, and a member carried by said second section for directing jets across the tubes of the boiler.

[Claims 6 to 9 not printed in the Gazette.]

1,060,801. LAUNDRY-DRIER. FRANK M. WATKINS, Cincinnati, Ohio. Filed Dec. 17, 1910. Serial No. 597,844. (Cl. 34—5.)



1. A laundry drier comprising a drying chamber, a perforated cylinder adapted to rotate therein, an air heating chamber adjacent said drying chamber, a passage from said air heating chamber to said drying chamber and cylinder, deflector plates extending toward the center of said cylinder, an air outlet for said drying chamber, an exhauster for said air outlet and a baffle plate extending across the lower part of said drying chamber whereby the air is adapted to be exhausted from said cylinder through a passage between said baffle plate and the wall of said drying chamber, substantially as set forth.

2. A laundry drier comprising a drying chamber, a perforated cylinder adapted to rotate in said drying chamber, a heating chamber having means for admitting air thereto, a passage from said heating chamber to said cylinder, a baffle plate forming an elongated passage between its lower edge and the bottom of said drying chamber to direct the course of the air through said cylinder, and an air outlet and exhauster therefor, substantially as set forth.

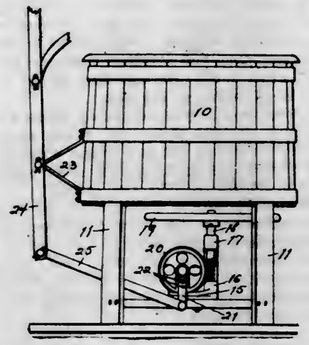
3. A laundry drier comprising a drying chamber, a perforated cylinder adapted to rotate in said drying chamber, parallel perforated ribs extending longitudinally in said cylinder, a heating chamber, an air passage from said heating chamber to said cylinder, an air outlet from said heating chamber and cylinder and an exhauster for said air outlet, substantially as set forth and for the purposes specified.

4. A laundry drier comprising a drying chamber, a perforated cylinder adapted to rotate in said drying chamber, a vertical heating chamber arranged adjacent said drying chamber, means for admitting air to said heating chamber, a passage from said heating chamber at its top to said cylinder, a baffle plate extending from the wall of said drying chamber downwardly toward the bottom thereof whereby an elongated passage is formed between the lower edge of said plate and the bottom of said drying chamber to direct the course of the air through said cylinder and an air outlet and exhauster therefor, substantially as set forth.

5. A laundry drier comprising a drying chamber, a perforated clothes drying cylinder therein, a series of perforated ribs adapted to carry the clothes upwardly in said cylinder and to drop them directly in front of the next rib to prevent any sliding or shearing of the clothes on the surface of the cylinder, a heating chamber adjacent said cylinder, a passage from said heating chamber to said cylinder, an air outlet from said cylinder, and an exhauster for said air outlet whereby a partial vacuum is formed within said heating chamber and said cylinder, substantially as set forth and for the purposes specified.

[Claim 6 not printed in the Gazette.]

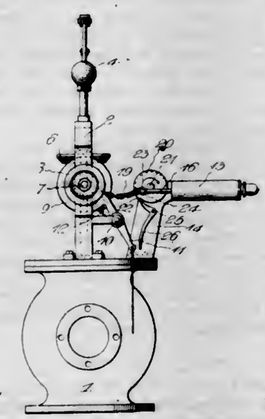
1,060,802. WORM-GEAR DRIVING MECHANISM. ORLA H. WATKINS, Clinton, Iowa, assignor to himself, J. A. Kelly, and W. J. Kelly, Clinton, Iowa. Filed Apr. 1, 1912. Serial No. 687,896. (Cl. 74—36.)



1. Driving mechanism comprising a vertical worm shaft, a balance wheel on said shaft, a worm gear arranged for rotation on a horizontal axis and meshing with the worm shaft, a crank arm arranged radially of the gear, a pitman pivoted at one end to said crank arm, and means for driving said pitman.

2. In a driving mechanism, a gear of spiral type, a crank arm on and adjustable radially of said gear, and a pitman pivoted to said crank arm and arranged to drive said gear.

1,060,803. MECHANISM FOR AUTOMATICALLY CONTROLLING THE SPEED OF AND STOPPING ENGINES. HARRY R. WELCH and CHARLES H. CASE, Logansport, Ind. Filed Apr. 11, 1912. Serial No. 690,013. (Cl. 121—112.)



1. In mechanism for the purpose described, the combination of the stem of a throttling governor, said stem having a circumferentially-grooved portion; a shaft; a bifurcated arm fixed on said shaft and engaging said circumferentially-grooved portion; a lever also fixed on said shaft and having upwardly and downwardly extending

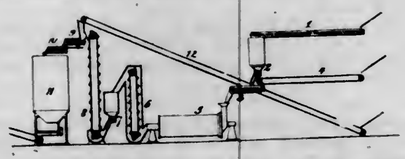
arms; a cylinder; a piston movable in the cylinder and having a forwardly extending rod that extends beyond the forward end of the cylinder; a connection intermediate the piston rod and the upper arm of the lever; a spring incased in the cylinder and interposed between said piston and an abutment in the forward portion of the cylinder; a rotary disk connected off its center with the exposed portion of the piston rod and having a peripheral abutment; and a pivoted trigger having an arm opposed to the disk abutment and also having an arm opposed to the lower arm of the lever.

2. In mechanism for the purpose described, the combination of lever arms, a rotary disk having a peripheral abutment, a spring actuated mechanism connected with the disk off the center thereof and also connected with one arm of the lever and adapted when the disk is released to exert pull on said arm, and a trigger having a portion opposed to the other lever arm and also having a portion opposed to the abutment of the disk.

3. The combination of a cylinder, spring, piston, piston rod, lever, connected with the piston rod, rotary notched disk connected with the piston rod, and trigger normally engaging the disk to hold the spring against action and actuable by the lever to release the disk and spring.

4. In combination with a governor, a stop attachment comprising a cylinder, a disk journaled beyond the cylinder, a spring pressed piston movably mounted in the cylinder, a rod connected to the piston and eccentrically connected to the disk, a trigger for holding the disk, and means adapted to be operated by the governor to move the trigger to release the disk.

1,060,804. MIXING AND MEASURING APPARATUS. SIGURD WIEBE, Brooklyn, N. Y., assignor, by mesne assignments, to M. C. Hathaway, Richmond, Va. Filed Jan. 15, 1910. Serial No. 538,229. (Cl. 83—73.)

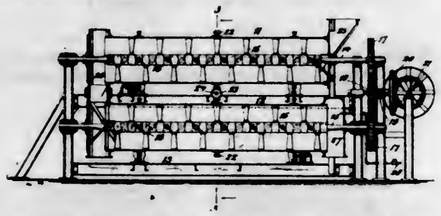


1. The combination with a grinding mill, a mixer discharging thereinto, and a plurality of measuring devices for supplying predetermined quantities of unlike materials to the mixer, of a collector, means for conveying the irregularly discharged product of the grinding mill to the collector, a receiver, means for continuously conveying a uniform amount of the ground mixture from the collector to the receiver and means for simultaneously and continuously conveying a predetermined uniform amount of an unlike material to the collector.

2. The combination with a grinding mill, a mixer discharging thereinto, and a plurality of measuring devices for supplying predetermined quantities of unlike materials to the mixer, of a collector, means for conveying the irregularly discharged product of the grinding mill to the collector, a second mixer, means for continuously conveying a uniform amount of the ground mixture from the collector to the second mixer and means for simulutaneously and continuously conveying a predetermined uniform amount of an unlike material to the second mixer whereby a uniform final mixture is produced.

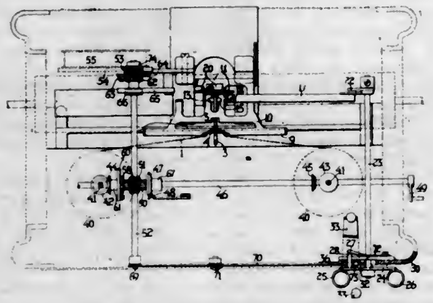
1,060,805. APPARATUS FOR HYDRATING LIME AND THE LIKE. SIGURD WIEBE, Brooklyn, N. Y., assignor, by mesne assignments, to M. C. Hathaway, Richmond, Va. Filed Jan. 15, 1910. Serial No. 538,231. (Cl. 83—73.)

1. In apparatus of the class described, the combination with a mixing apparatus, and means for supplying water thereto, of means for receiving and storing material delivered from the mixer, a vessel for receiving material therefrom, means for feeding the material through the vessel, and means for passing a current of aqueous vapor through the vessel in a direction opposite to that of the material being fed therethrough.



2. In an apparatus of the class described, the combination with a dry mixer, a wet mixer and means for supplying water thereto to partially hydrate the material from the dry mixer, a silo for receiving and storing the material delivered from the wet mixer and allowing it to age therein, a vessel for receiving the partially hydrated and aged material from the silo, agitating means within said vessel arranged to feed the material through said vessel in one direction and means for passing an aqueous vapor through said vessel in the opposite direction to thereby complete the hydration of the material.

1,060,806. TYPE-WRITING MACHINE. FRANK A. YOUNG, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed June 29, 1910. Serial No. 569,510. (Cl. 197—169.)



1. In a ribbon movement, the combination with a carriage-driving spring and ribbon spools, of a shaft, a worm mounted on the shaft, driving means between said spring and shaft, a gear co-acting with said worm, means to connect said gear with said spools alternately, and means for moving said shaft transversely to its length to unmesh said worm from said gear.

2. In a ribbon movement, the combination with a carriage-driving spring and ribbon spools, of a shaft, a worm mounted on the shaft, driving connections between said spring and shaft, a gear meshing with said worm, means to connect said gear with said spools alternately, and a lever provided with a bearing for one end of said shaft to move the worm out of mesh with said gear.

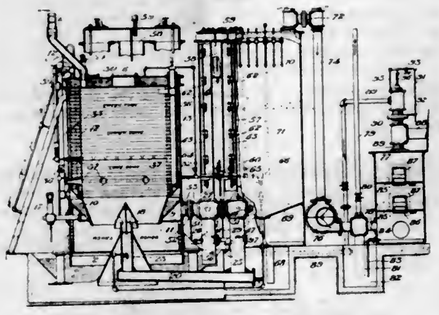
3. In a ribbon movement, the combination with a carriage-driving spring and ribbon spools, of ribbon-feed reversing means, a worm and gear interposed between said spring and spools, driving connections between said spring and worm, said gear being endwise or axially shiftable at the operation of reversing the ribbon feed, and of such length and position as to remain in mesh with said worm during such endwise shifting, and means for separating the worm and gear, to silence the ribbon.

4. In a typewriter ribbon movement, the combination with a carriage-driving spring drum, of a shaft driven by said drum, a worm on said shaft, a gear with which said worm is normally in mesh, a lever provided with a bearing for said shaft, ribbon-spools driven from said gear, a ribbon-vibrator, a second lever, and connections whereby said second lever renders said vibrator inactive and moves the first lever to unmesh said worm and gear.

5. In a typewriter ribbon movement, the combination with ribbon-spools, of an endwise shiftable shaft, gearing whereby said shaft drives said spools one at a time, a long gear or pinion fast on said shaft, a worm meshing with said long gear in all adjustments of the latter, and means to separate said worm and said long gear.

[Claims 6 to 19 not printed in the Gazette.]

1,060,807. GAS-PRODUCER SYSTEM. GUSTAF AKERLUND, Atlanta, Ga., assignor to Standard Gas Power Company, Atlanta, Ga., a Corporation of Georgia. Filed Feb. 2, 1912. Serial No. 675,001. (Cl. 48—135.)



1. In a gas producer system, the combination with a gas cleaner, of means for reintroducing or by-passing the gas after cleaning back into the cleaner, and a valve subject to and adapted to be opened by the pressure of the cleaned gas to automatically regulate or control the by-passing of the cleaned gas to the gas cleaner.

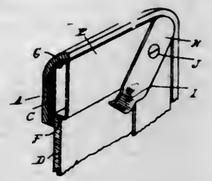
2. In a gas producer system, the combination with a generator and a gas cleaner, of a by-pass up-draft pipe leading to both the generator and gas cleaner, and valve mechanism whereby reversed draft may be admitted to the generator or the cleaned gas may be re-admitted to the gas cleaner.

3. In a gas producer system, the combination with a generator and a gas cleaner, of a by-pass and reverse draft pipe leading to both the generator and the gas cleaner, and a valve controlling the said pipe at the junction of its branches to the generator and cleaner, whereby the cleaned gas may be by-passed into the gas cleaner, or the draft may be reversed in the generator.

4. In a gas produced system, the combination with a gas cleaner, of an exhauster for drawing the gas therethrough, a gas delivery outlet, a by-pass conduit through which the cleaned gas may be forced back into the gas cleaner by the exhauster, and a valve subject to and adapted to be opened by the pressure of the cleaned gas to automatically regulate or control the by-passing of the cleaned gas through the by-pass conduit.

5. In a gas producer system, the combination with a gas generator and a gas cleaner, of an exhauster for drawing the gas through the generator and cleaner, a gas delivery outlet, a by-pass conduit subject to access of the cleaned gas which conduit leads back to the generator and also to the gas cleaner, valve means whereby reversed draft may be admitted from said by-pass conduit into the generator or the cleaned gas may be re-admitted to the gas cleaner, and a valve subject to and adapted to be opened by the pressure of the cleaned gas to automatically regulate or control the by-passing of the cleaned gas through the conduit.

1,060,808. STOVE-DOOR. JOHN A. ALEXANDER and FRANK K. BERRY, Battle Creek, Mich., assignors to A. B. Stove Company, Battle Creek, Mich., a Corporation of Michigan. Filed Mar. 29, 1912. Serial No. 687,036. (Cl. 126—200.)



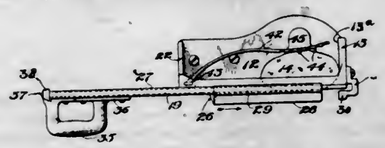
1. In a door, the combination with an outer frame, of a transparent panel seated in said frame, spacer strips between said panel and the outer edge of the frame, and clips for holding said spacer strips in position provided with fingers bearing on said panel to retain the same.

2. In a door, the combination with an outer frame, of a lining therefor of soft heat insulating material, a transparent panel marginally seated upon said lining, spacers between the edge of said panel and the outer edge of the frame, and clips for securing said spacers and bearing against said panel.

3. In a door, the combination with an outer frame, of a panel having a marginal bearing upon said frame, spacer strips upon the opposite sides of the frame between the edge of said panel and the outer edge of the frame, and corner clips for securing said spacers to the frame and provided with fingers bearing against said panel to retain the same.

4. In a door, the combination with a frame, of a panel having a marginal seat on the inner edge of said frame and spacer strips formed of sheet metal bent into a channel section, one flange of said channel forming a shoulder for the edge of said panel and the other flange lying adjacent to the outer edge of said frame, and clips at the corners of said frame overlapping the ends of said strips to secure them from displacement and provided with finger bearings for retaining the panel.

1,060,809. VEGETABLE-SLICER. VICTOR BEAUREGARD, Boston, Mass. Filed Mar. 19, 1910, Serial No. 550,417. Renewed Feb. 21, 1913. Serial No. 750,036. (Cl. 146—7.)



1. A vegetable slicer comprising a frame having means for supporting a vegetable to be sliced, and a slide having means for cutting a vegetable supported by the frame, said frame and slide being provided with complemental stop members which are normally operative to limit the retraction of the slide, one of said members being displaceable to permit the separation of the slide from the frame.

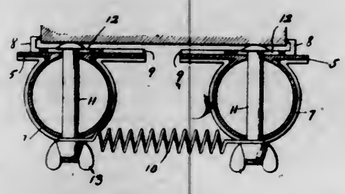
2. A vegetable slicer comprising a frame having means for supporting a vegetable to be sliced, and a slide having means for cutting a vegetable supported by the frame, the frame being provided with a movable stop which is normally in position to limit the retraction of the slide and is displaceable from said position to permit the removal of the slide from the frame.

3. In a vegetable slicer a sheet metal slide having one of its ends formed as a continuous slicing cutter, and having parts of its material adjacent to said cutter partially severed and bent outwardly to form a series of stripping cutters which are integral with the plate and are separated from the slicing cutter by intervening portions of the material, the slide having integral guide-engaging ears at its edges provided with extensions projecting forward from said slicing cutters, and a sheet metal gage plate offset from the slide and having ears embracing said extensions, said gage plate having a transverse stiffening rib extending substantially parallel with its rear edge and with the series of stripping cutters.

4. A vegetable slicer comprising a frame having a bed provided with end walls and a side wall, the latter being provided with guide flanges and an opening between said flanges, a cutter slide mounted to reciprocate upon said flanges, and a presser having one end pivotally supported by said base adjacent one of said end walls, whereby said end wall will limit the movement of said presser in one direction, the free end of said presser being provided with teeth having short sides arranged at substantially right angles with relation to the side wall and long obliquely arranged sides extending backwardly toward the pivot end of said presser.

5. A vegetable slicer comprising a frame having a bed provided with end walls and a side wall, the latter being provided with guide flanges and an opening between said flanges, a cutter slide mounted to reciprocate upon said flanges, and a presser having one end pivotally supported by said base adjacent one of said end walls, whereby said end wall will limit the movement of said presser in one direction, the other end wall of said bed being widened and provided with a roughened surface, the free end of said presser being provided with teeth having short sides arranged at substantially right angles with relation to the side wall and long obliquely arranged sides extending backwardly toward the pivot end of said presser.

1,060,810. PLASTERER'S IMPLEMENT. CHARLES O. BLEE, Fort Wayne, Ind., CHARLES BLACK, Westminster, Md., and CHARLES PALMER, Fort Wayne, Ind. Filed Apr. 27, 1912. Serial No. 693,520. (Cl. 72—128.)

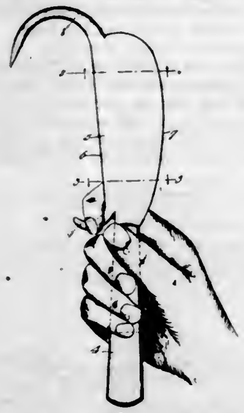


1. A plasterer's implement comprising laterally spaced parallel strips having opposite jaws at their outer longitudinal edges, and springs connected at their ends to the strips for drawing the same together.

2. A plasterer's implement comprising laterally spaced parallel strips composed of telescoping sections, opposite jaws mounted on the face of the sections outside the telescoping portions thereof, said jaws having slotted shanks, bolts passing through the sections and the slots of the shanks, and springs connected at their ends to the strips for drawing the same together.

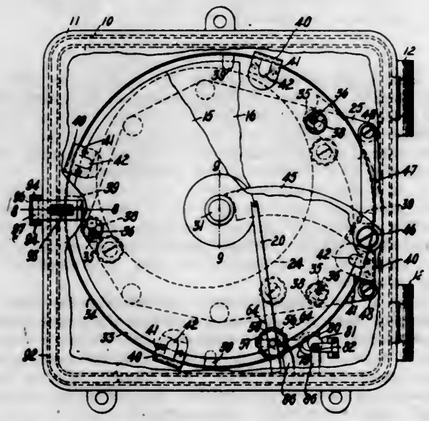
1,060,811. COTTON KNIFE AND HOOK. JACOB R. BOWMAN, Waelder, Tex. Filed Oct. 8, 1912. Serial No. 724,665. (Cl. 30—9.)

A knife including a handle and a blade having a flat tang entering the handle, one edge of the blade being sharpened and the other edge being thickened and offset outwardly from the respective edge of the tang, the outer end of the thickened edge merging into a hook and the



shoulder provided at the inner end of the thickened edge merging into an outwardly curved projection forming a finger hold.

1,060,812. MEASURING OR CONTROLLING INSTRUMENT. EDGAR H. BRISTOL and WATSON E. GOODYEAR, Naugatuck, Conn., assignors to The Industrial Instrument Company, Waterbury, Conn., a Corporation of Connecticut. Filed May 7, 1908. Serial No. 431,468. (Cl. 234—11.)



1. In a recording thermometer, the combination of a thermo-responsive member comprising a plurality of nested cumulatively acting tubes; a shaft governed by the responsive member; a plurality of rigidly connected pen indices mounted rotatively on the shaft; means to connect the pen indices yieldingly to the shaft for governing the former; a stationary stop to limit the movement of the indices; a plurality of rotatable charts to coöperate with the pen indices respectively; means to support said charts removably; and means to sustain part of each chart against the action of its pen index.

2. In a recording thermometer, the combination of a thermo-responsive member; a shaft governed by said member; a plurality of rigidly connected pen indices mounted rotatively on the shaft; means to connect the pen indices to the shaft for governing the former; a plurality of rotatable charts to coöperate with the pen indices respectively; means to support said charts removably; and means to sustain part of each chart against the action of its pen index.

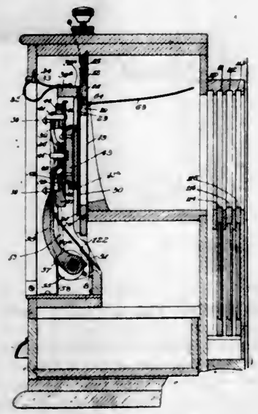
3. In a recording thermometer, the combination of a thermo-responsive member; a plurality of rigidly connected pen indices; means to connect the pen indices yieldingly to said member for governing the indices; means to limit the movement of the indices; a plurality of charts to coöperate with the pen indices respectively; and means to sustain part of each chart against the action of its pen index.

4. In a recording thermometer, the combination of a thermo-responsive member; recording means; a plurality of record-receiving means; and supports for the same, including a supporting device for one of said means movable to facilitate access to the other.

5. In a recording thermometer, the combination of a casing; a thermo-responsive member comprising nested, cumulatively-acting helical tubes; a shaft disposed along the axis of the helix and governed by the tubes; a movable base supporting the tubes, having a bifurcated arm; a pivot for the base co-axial with the helix and said shaft; an eccentrically pivoted disk between the bifurcations of the base; an operating shaft for the disk extending to an opening in the casing; a pen index mounted rotatively on the shaft; means to govern the index yieldingly from the shaft; and a chart to coöperate with the pen index to receive a record therefrom.

[Claims 6 to 13 not printed in the Gazette.]

1,060,813. PHOTOGRAPHIC-PRINTING DEVICE. FRANK A. BROWNELL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Mar. 30, 1906. Serial No. 308,994. (Cl. 95—73.)



1. In a photographic printing device, the combination with a platen for holding the sensitized material in printing position, and an actuating device therefor, of a shutter, connections between the latter and one of said members for setting the shutter in open or exposed position by the actuation of that member, a latch for retaining the shutter in open or exposing position, devices coöperating with said latch for automatically timing the release of the shutter, and means for disconnecting said devices from operative relationship with the latch.

2. In a photographic printing device, the combination with a platen for positioning the photographic material, and a shutter for determining the exposure of the material, of a reciprocatory-operating member, a latch thereon for operatively connecting it to the shutter when the member is operated in one direction, a crank operatively connected to the platen having a cam thereon, and a projection on said member coöperating with the cam on said crank to cause relatively timed movements of the shutter and platen.

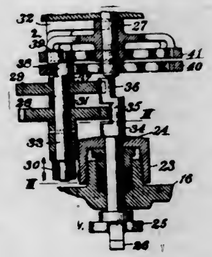
3. In a photographic printing device, the combination with a device for positioning photographic material in printing position, and a shutter for controlling the exposures of the material, of an operating member, a pivoted latch carried on said member arranged to set the shutter in exposing position when the member is moved in one direction, and a tripping device adjustable into and out of operative position to disconnect the latch and shutter.

4. In a photographic printing device, the combination with a device for holding the photographic material in printing position, and a shutter for controlling the exposures of the material, of a latch for holding the shutter in exposing position, a retarding device serving to operate the latch into releasing position, an operating member independent of the latch serving to set the shutter and retarding device in exposing position, and means for temporarily disconnecting the operating member from operative relation with the retarding device to enable the operating member to set the shutter without affecting the retarding device.

5. In a photographic printing device, the combination with a device for holding the photographic material in printing position, and a shutter for controlling the exposures, of a latch for retaining the shutter in exposing position, a retarding device arranged to coöperate with said latch to release the shutter, an operating member having a latch thereon for setting the shutter in exposing position, a latch connected to the retarding device and operated by the movement of the operating member to set the retarding device, and a device for simultaneously tripping the latches which serve to set the shutter and retarding device.

[Claims 6 to 27 not printed in the Gazette.]

1,060,814. GEARING. WILLIAM CHARLES BURGUM, Pittsburgh, Pa., assignor of two-eighths to David R. McCreedie, one-eighth to Karl W. Runser, and two-eighths to Edwin S. Fownes, Pittsburgh, Pa. Filed Dec. 18, 1909. Serial No. 533,808. (Cl. 74—41.)



1. In a speed reducing gearing, a rotatable shaft provided with a driving member having an arcuate face curved concentric with the axis of the shaft, a rotatable member arranged in driving relation to the driving member and provided with teeth and intervening notches, said driving member engaging said notches, and the walls of said notches conforming in curvature to the arcuate face of the driving member.

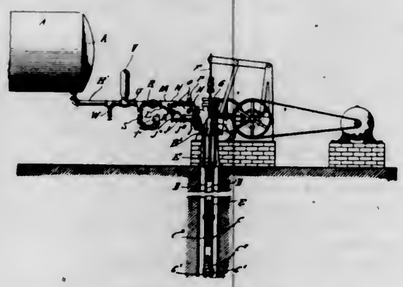
2. In a speed reducing gearing, a rotatable shaft provided with a driving member having a substantially semi-circular face curved concentric with the axis of the shaft and a substantially flat face, a rotatable member arranged in driving relation to the driving member and provided with teeth and intervening notches, said driving member engaging said notches and the walls of said notches conforming in curvature to the substantially semi-circular face of the driving member.

3. In speed-reducing gearing, a rotatable shaft provided with a plurality of driving members, each member having an arcuate face, a rotatable member arranged in driving relation to said driving members and having teeth in the planes of said driving members providing intervening notches, said driving members engaging said

notches, and the walls of said notches conforming in curvature to the arcuate faces of the driving members.

4. In speed-reducing gearing, a rotatable shaft provided with a plurality of driving members, each member having a substantially semi-circular face, a rotatable member arranged in driving relation to the driving members and having teeth in the planes of said driving members providing intervening notches, the teeth in the several planes being out of alinement with each other, said driving members engaging said notches, and the walls of said notches conforming in curvature to the substantially semi-circular faces of the driving members.

1,060,815. PUMP. RALPH B. CARTER, Haworth, N. J. Filed Aug. 10, 1910. Serial No. 576,563. (Cl. 103—79.)



1. The combination with a tank of a pump comprising an upper cylinder provided with a slideway opening, a lower cylinder of lesser capacity communicating with the first named cylinder, a water lifting piston in the smaller one of said cylinders, a water displacing plunger in the larger cylinder, said piston and plunger being of different transverse areas and reciprocating in unison, a water outlet from said pump, a water and air main connected to said tank having means for admitting air thereto and located above said water outlet, a valve in said main to prevent back flow of fluids from said tank, a drop connection from said main to said pump adapted to permit, on the suction stroke thereof, a fall of water from said main to seal the latter against the admission of air thereto, said main being so disposed and arranged relative to the tank and check valve as to enable the water in said main to seal said valve against back leakage of air through the latter.

2. The combination with a tank of a pump comprising an upper cylinder provided with a slideway opening, and a lower cylinder of lesser capacity communicating with the first named cylinder, a water lifting piston in the smaller one of said cylinders, a water displacing plunger in the larger cylinder, said piston and plunger being of different transverse areas and reciprocating in unison, a water outlet from said pump, a water and air main connected to said tank located above said water outlet and provided with means for admitting air thereto, a trap valve in said main to prevent back flow of fluids from said tank, a drop connection from said main to said water outlet and communicating and forming with a portion of said main, a waterfall and air chamber, said waterfall acting, with the water in the pump to seal the latter against the admission of air thereto, and means interposed between the storage tank and said trap valve whereby an accumulation of air in said valve and back leakage of same therethrough is avoided.

3. The combination with a tank of a pump comprising an upper cylinder provided with a slideway opening, and a lower cylinder of lesser capacity communicating with the first named cylinder, a water lifting piston in the smaller one of said cylinders and a water displacing plunger in the larger cylinder, said piston and plunger being of different transverse areas and reciprocating in unison, a water outlet from said pump, a water connection to said outlet provided with an air inlet, a trap valve in said connection, said trap valve and a portion of said water connection being located above the pump outlet, said portion being adapted to form an air chamber on the suction stroke of the pump, and a pipe extension of said connection from said trap valve to said tank level with or higher than said trap valve.

4. The combination with a tank of a pump comprising an upper cylinder provided with a slideway opening, and a lower cylinder of lesser capacity communicating with the first named cylinder, a water lifting piston in the smaller one of said cylinders and a water displacing plunger in the larger cylinder, said piston and plunger being of different transverse areas and reciprocating in unison, a water outlet from said pump, a water connection to said outlet provided with an air inlet, a trap valve in said connection, said trap valve and a portion of said water connection being located above the pump outlet, said portion being adapted to form an air chamber on the suction stroke of the pump, a pipe extension of said connection from said trap valve to said tank, level with or higher than said trap valve and a member communicating with said connection, trap valve and pipe extension adapted to receive accumulations of air not discharged into the tank on the displacement stroke of the pump.

1,060,816. PUMP. RALPH B. CARTER, Haworth, N. J. Filed Aug. 10, 1910. Serial No. 576,564. (Cl. 103—79.)



1. The combination with a storage tank of a pump comprising an upper cylinder and a lower cylinder of different capacities, pistons in said cylinders working in unison, an air inlet in the upper cylinder, a connection from the upper cylinder to the tank, and means connected with said air inlet for trapping the air against escape through the top of said cylinder.

2. The combination with a storage tank of a pump comprising an upper cylinder and a lower cylinder of different capacities, pistons of different transverse areas in said cylinders working in unison, an air inlet in the upper cylinder, a pipe connecting the upper cylinder to the tank, and a trap connected with the air inlet for preventing the escape of the air through the top of said cylinder.

3. The combination with a storage tank of a pump comprising an upper cylinder and a lower cylinder of different capacities, pistons of different transverse areas in said cylinders working in unison, a valved air inlet to the upper cylinder, a valved connection from the upper cylinder to the tank, and a trap connected with the air inlet for preventing the escape of the air through the top of said cylinder.

4. The combination with a storage tank of a pump comprising an upper cylinder and a lower cylinder, the upper cylinder being of larger capacity than the lower cylinder, a valved inlet to said lower cylinder, a pipe connecting the two cylinders, a piston in the lower cylinder, a piston in the upper cylinder of greater transverse area than the piston in the lower cylinder, a rod connecting the two pistons, means for operating said pistons, a valved air inlet to said upper cylinder, an annular trap in the upper cylinder connected to said air inlet and a valved connection from said upper cylinder to the storage tank.

5. The combination with a storage tank of a pump, comprising an upper cylinder and a lower cylinder, the upper cylinder being of larger capacity than the lower cylinder, a valved inlet to said lower cylinder, a pipe connecting the two cylinders, a piston in the lower cylinder and a piston in the upper cylinder of greater transverse area than the piston in the lower cylinder, a rod connecting the two pistons, means for operating said pistons in unison, a valved air inlet to said upper cylinder and a piston in the upper cylinder of greater transsaid air inlet to prevent the escape of air through the top of said cylinder, an air and water outlet connected to said annular trap, a pipe connected to said outlet and to said tank and a valve in said pipe.

[Claims 6 to 9 not printed in the Gazette.]

1,060,817. CARTRIDGE. ROBERT G. CLYNE, Alton, Ill., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of New Jersey. Filed Nov. 25, 1912. Serial No. 733,276. (Cl. 102—17.)

1. In a paper shell cartridge, a metallic base cap having its edges curled into a scalloped inwardly curled anchor beading.

2. In a paper shell cartridge, a metallic base cap provided with a battery cup receiving receptacle and a peripheral flange and having the upper marginal edges of its cylindrical side walls curled into an annular anchor beading and baffle member.

3. A cartridge, comprising a tubular member provided with an annular recess and an interlocking rib or baffle portion, a base wad provided with an annular recess portion in interlocking engagement with said interlocking rib or baffle portion, and a metallic base cap provided at its mouth with an inwardly extending annular beading seated in said annular recess of said tubular member.

1,060,818. CARTRIDGE. ROBERT G. CLYNE, Alton, Ill., assignor to Western Cartridge Company, East Alton, Ill., a Corporation of New Jersey. Filed Nov. 25, 1912. Serial No. 733,277. (Cl. 102—17.)

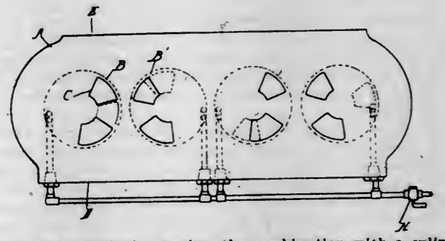
1. In a cartridge, a base cap comprising an inner wall of ferrous metal and an outer wall of non-ferrous metal having an inwardly extending hooked beading extending over and interlocking with the upper marginal edges of said inner wall.

2. In a cartridge, a base cap made up of inner and outer shells of ferrous and non-ferrous metals, respectively, said outer shell having an annular hooked flange



taking over and engaging the rim portion of said inner shell.

1,060,819. EXPLOSION-ENGINE. HOWARD E. COFFIN, Detroit, Mich. Filed Feb. 4, 1911. Serial No. 606,532. (Cl. 123—181.)



1. In an explosion engine, the combination with a cylinder having inlet and exhaust ports, of a rotary valve having a port adapted for successive registration with the exhaust and inlet ports, and an admission port for compressed air arranged to register with the port in said valve when the latter is out of registration with said inlet and exhaust ports.

2. In an explosion engine, the combination with a cylinder member ported for inlet and exhaust, of a ported rotary valve member controlling the inlet and exhaust, one of said members having a plurality of ports adapted to successively register with a port in the other member, said plurality of ports including a port communicating with a storage for compressed gases for starting.

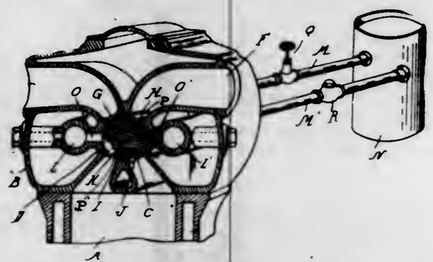
3. In an explosion engine, the combination with a ported cylinder member, of a ported rotary valve member controlling communication therewith, one of said members having a port utilized in the normal operation of the engine, and a second port communicating with a storage for compressed gases for starting, the other member having a port with which the ports of the first mentioned member successively engage upon the rotation of the valve.

4. In an explosion engine, the combination with a cylinder member ported for inlet and exhaust, of a ported rotary valve member controlling the inlet and exhaust, one of said members having a port utilized in the normal operation of the engine, the other member having a port communicating with a storage for compressed gases adapted to register with the first mentioned port during the power stroke of the engine.

5. In an explosion engine, the combination with a cylinder having inlet and exhaust ports and a port for the admission of compressed air for starting, of a rotary valve having a port adapted for successive registration with said inlet, exhaust and compressed air ports.

[Claims 6 to 9 not printed in the Gazette.]

1,060,820. STARTING DEVICE FOR EXPLOSION-ENGINES. HOWARD E. COFFIN, Detroit, Mich. Filed Apr. 7, 1911. Serial No. 619,592. (Cl. 123—181.)



1. In an explosion engine, the combination with a rotary valve having a port extending therethrough utilized in the normal operation of the engine, of a port out of the path of movement of said first mentioned port, a valve case having a port leading to the engine cylinder with which both of said valve ports register, and a port communicating with a storage tank adapted to be connected to said cylinder port by said second mentioned valve port.

2. In an explosion engine, the combination of a rotary valve having a port therethrough utilized in the normal operation of the engine, and a recess port out of the path of movement of said first mentioned port, a valve case having a port leading to the engine cylinder and with which both of said valve ports register, and a port communicating with a reservoir for compressed gases positioned to be coupled by said second mentioned valve port with the engine cylinder.

3. In a multi-cylinder explosion engine, a rotary valve for controlling a plurality of cylinders and having ports therethrough utilized in the normal operation of the engine by the respective cylinders, and a port intermediate said first mentioned ports, a valve case having a cylinder connecting port adapted to register with said last mentioned valve port and one of the first mentioned ports, and connecting with a storage for compressed gases coupled by said last mentioned valve port with said cylinder port.

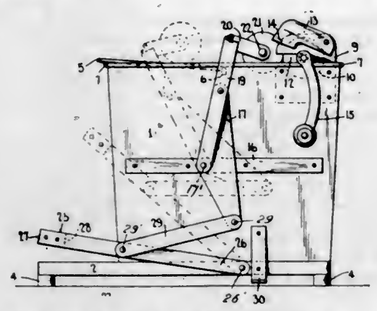
4. In a multi-cylinder explosion engine, a cylindrical valve and corresponding valve case having successively registering ports utilized by the several cylinders of the engine in the normal operation thereof, recess ports in the valve adjacent to said first mentioned valve ports and intermediate the same, and ports out of the path of movement of said first mentioned valve ports connected with the storage for compressed gases and adapted to be coupled by said recessed valve ports with the ports of the respective cylinders.

5. In an explosion engine, the combination with a rotary valve having a port utilized in the normal operation of the engine, a second port out of the path of movement of said first mentioned port, a cylinder port with which both of said valve ports register, and a port communicating with a storage for compressed gases, positioned to be connected to said cylinder port by said second mentioned valve port.

[Claim 6 not printed in the Gazette.]

1,060,821. MOP-WRINGER. WILLIAM ALLEN CROMWELL, White Plains, N. Y. Filed Mar. 22, 1912. Serial No. 685,596. (Cl. 15—12.)

1. A mop wringer comprising a bucket, supporting bars secured thereto, a stationary wringer roller revolubly and detachably secured to said bucket, means to turn said stationary roller, a movable roller adapted to co-act with said stationary roller to wring the water from a mop drawn between the rollers, roller operating levers pivotally connected to the bucket, a bail shaped bar secured to the upper ends of said levers, a roller bearing frame secured to said bar and adapted to detachably and revolubly support said movable roller, a foot treadle pivotally connected at its inner end to the supporting bars of the bucket, and links to connect said treadle with the lower ends of said roller operating levers whereby when the treadle is depressed the levers will move said roller away from the operator and into engagement with the stationary roller.



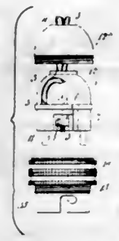
2. In a mop wringer, a bucket, supporting bars secured to the bucket bottom, roller bearing plates secured to the sides of the bucket near one end, one of said plates having therein a roller bearing aperture and the other plate a roller bearing notch adapted to receive the ends of the roller shaft, a keeper plate pivoted to said notched bearing plate and adapted to be swung down across the notch in the plate and in engagement with the shaft of the roller whereby the latter is revolubly and detachably secured to said plates, a movable wringer roller, roller operating levers pivotally connected to the sides of the bucket, and means attached to the lower ends of said levers whereby the latter are actuated to swing the movable wringer roller away from the operator and into operative engagement with the stationary roller.

3. A mop wringer comprising a bucket, supporting bars secured to the bottom thereof, a stationary wringer roller revolubly and detachably secured to the upper edges of the bucket, a crank handle engaged with one end of the shaft of said roller, reinforcing bars secured to the sides of the bucket, roller operating levers pivotally secured to said bars, a movable wringer roller revolubly and detachably mounted in said frame, and adapted to be brought into position to coact with said stationary roller for wringing the water from a mop, a foot treadle comprising a frame having its side members pivotally connected to the supporting bars of the bucket and a brace bar, links to connect the side bars of said treadle frame with the lower ends of the roller operating levers whereby the latter are actuated to move said roller away from the operator and into engagement with the stationary roller, and a foot plate secured to one side of the bucket and one of said supporting bars whereby the bucket is firmly held while the mop is being wrung out.

1,060,822. METHOD OF CONNECTING ELECTRIC WIRES TO LAMP-HOLDERS, PLUGS, AND THE LIKE. ARCHIBALD THORPE CROSHER, Te Aroha, New Zealand. Filed Jan. 18, 1911. Serial No. 603,375. (Cl. 173—322.)

1. In a lamp holder, an insulating block having a central hole adapted to receive both wires of an electrical circuit and two holes, one for each of said wires independently, and diagonal recesses in the periphery of the block, said recesses severally communicating with the bottom of the central hole and with the top of one of the other holes, substantially as and for the purpose herein specified and illustrated.

2. In a lamp holder an insulating block in two parts, a dome and socket receiving said block, a central hole corresponding in the two parts of the block, curved recesses, one for each wire, and communicating with said central hole, holes one from the top of each of said recesses passing through the upper part of the block, plunger terminals on the lower part of the block and recesses in the face of one of the blocks to receive the binding screws of the terminals and to give access thereto substantially as herein specified and illustrated.



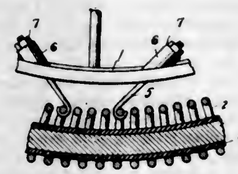
3. In a lamp holder, the combination of an insulating block comprising two coöperating parts, each part having a corresponding centrally arranged hole to receive both wires of an electrical circuit, two holes in one of said parts, one for each of said wires independently, and lamp terminals on the other part projecting into said holes and to which said wires are adapted to be connected.

4. In a lamp socket, the combination of an insulating block having a centrally arranged opening therethrough and strain relief passages communicating with the centrally arranged opening, one passage for each of said wires independently, and spaced lamp terminals on one face of said insulating block having wire terminals adapted to be electrically connected with the wires extending through said passages.

5. In a pendent electric appliance, the combination of an insulating body comprising two coöperating parts each having a central opening therein arranged to receive both wires of an electrical circuit, other openings in said block and extending through both parts, passageways connecting said central opening with said other openings, lamp terminals seated in said other openings, the circuit wires being adapted to extend into said openings at the opposite ends and be secured to the lamp terminals.

[Claim 6 not printed in the Gazette.]

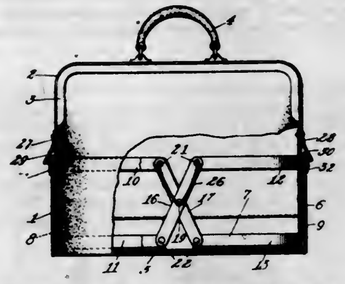
1,060,823. SPRING-WHEEL. MICHAEL H. CRUISE, Hebron, Nebr. Filed Oct. 31, 1911. Serial No. 657,741. (Cl. 152—29.)



1. In a vehicle wheel, the combination of a wire coil encircling the rim of the wheel and spaced therefrom, bolts having hooks at their outer ends engaging elements of the wire coil and having their inner portions passing loosely through openings formed in the rim of the wheel, yieldable elements mounted upon the inner ends of the bolts, and nuts threaded upon the bolts for confining said yieldable elements thereon and against the inner side of the rim of the wheel.

2. In a vehicle wheel, the combination of a wire coil encircling the rim of the wheel and spaced therefrom, an annular core arranged within the wire coil to stiffen and reinforce the same, bolts provided in pairs and having an opposite inclination, the outer ends of the bolts engaging elements of the wire coil and the inner ends of the bolts passing loosely through openings formed in the rim of the wheel and receiving nuts.

1,060,824. BAG, SATCHEL, AND SIMILAR RECEPTACLE. MICHAEL JOSEPH H. CUNNINGHAM, Lynn, Mass. Filed Mar. 6, 1909. Serial No. 481,836. (Cl. 190—45.)



1. The combination of a flexible bag, with a pair of devices secured respectively to the upper and lower portions of the bag for holding the walls thereof distended and capable of telescoping movement, one of the devices being of fixed dimensions and the other of variable dimensions to permit of the telescoping of the devices.

2. The combination of a bag capable of being increased or reduced in size, with an internal structure for holding the walls of the bag distended, said structure consisting of a box secured in the bottom of the bag, and a frame arranged in the upper portion of the bag and capable of expanding and contracting both longitudinally and transversely to permit of telescoping of the frame and box.

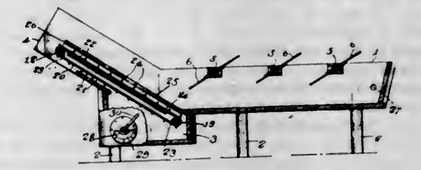
3. The combination of a bag, a box arranged in the bottom of the bag and having an open top, a frame disposed in the bag above the box to coöperate with the latter for holding the walls of the bag distended and each wall flat, said frame being contractible and expandible in a horizontal plane to permit the box and frame to telescope, and means exterior to the bag and fastened thereon for holding the frame and box in telescoping relation.

4. The combination of a bag, with upper and lower frames secured respectively to the upper and lower portions of the bag and arranged to telescope, one frame consisting of oppositely-disposed U-shaped members and yielding means operatively connected with both members for permitting them to move toward or away from each other for changing the horizontal dimensions of such frame to permit the frames to telescope.

5. The combination of a bag, with telescoping frames mounted within the bag and forming supports for the walls thereof to prevent inward collapsing, one frame being expandible and contractible and consisting of sets of oppositely-disposed bowed members, means connecting and holding the members of each set in spaced relation, and means for connecting the inner ends of the members of one set with the members of the opposite set for permitting the frame to expand or contract.

[Claims 6 to 8 not printed in the Gazette.]

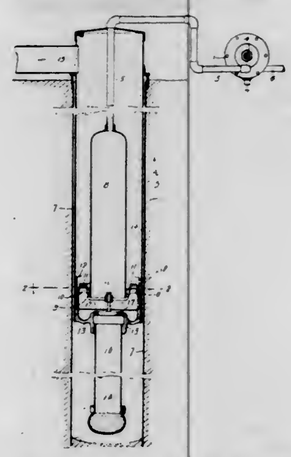
1,060,825. DEVICE FOR CLEANING FRUIT AND VEGETABLES. WILLIAM H. DAVIES, Quinton, N. J., assignor of one-half to Lucius E. Hires, Salem, N. J. Filed Nov. 4, 1912. Serial No. 729,438. (Cl. 146—14.)



A fruit and vegetable cleaning apparatus, including a tank, a plurality of agitators mounted therein, the tank

being provided at one end of the series of agitators with a depressed floor, a conveyer extending upwardly and rearwardly within the tank from the series of agitators and having its receiving end extending down into the depressed portion of the tank, the tank being formed with inlet and outlet openings for water, the outlet opening being located in the depressed portion of the tank underneath the conveyer.

1,060,826. COMBINED PNEUMATIC LIFT AND FORCE PUMP. FRANKLIN OSCAR DE HYMEL, San Antonio, Tex., assignor, by direct and mesne assignments, of one-fourth to Bart C. De Witt, Sutton county, Tex., one-half to Catherine De Witt De Hymel, San Antonio, Tex., one-eighth to James Cornell, Sutton county, Tex., and one-eighth to O. F. Seargeant, Kinney county, Tex. Filed May 14, 1912. Serial No. 697,183. (Cl. 103—52.)



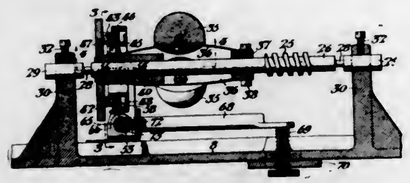
1. In an apparatus for the purpose specified, the portion adapted for use in a well, the same comprising a suspended and removable water pipe, a hollow casting attached to the lower end of the pipe and having a valve seated downward, a vacuum and water cylinder arranged within the said water pipe, and a hollow valved casting secured to the bottom of the latter, the two castings being connected by a separable joint which permits the vacuum and water cylinder and its attachments to be lifted clear, as described.

2. In an apparatus for the purpose specified, the portion adapted for use in a well, the same comprising a suspended and removable water pipe, a valved casting attached to the lower end of the same, a vacuum and water-receiving cylinder arranged within said water pipe and a hollow casting secured to the bottom of the same and having a check valve that forms an attachment of the upper casting, the latter with the attached cylinder and its valve being supported detachably upon the lower casting, as described.

3. In an apparatus for the purpose specified, a water pipe adapted to be located in a well and having a water inlet at its lower end provided with a downwardly seated valve, a vacuum and water-receiving cylinder provided with a downwardly seated valve, the aforesaid valve seated in the water inlet being connected with said vacuum cylinder and the latter and all its attachments being separable from the water pipe, so that they may be raised for removal of sediment, as described.

4. In an apparatus for the purpose specified, the combination with a water pipe having an inlet valve at its lower end, of a vacuum and water cylinder provided with a downwardly seated valve and supported detachably on the lower head of said water pipe, whereby the vacuum cylinder and its attachments may be raised, as described.

1,060,827. GOVERNOR FOR MOTORS. WILBUR N. DENNISON, Merchantville, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Apr. 9, 1910. Serial No. 554,453. (Cl. 74—45.)



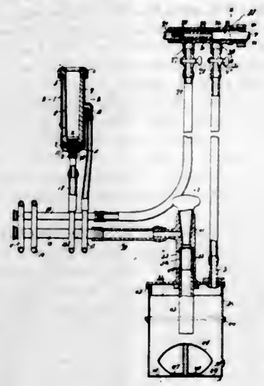
1. In a governor, the combination with a rotatable member, of a friction pad arranged to engage said member, to control the speed thereof, and having a universal jointed support, comprising relatively rotatable ball and socket members, one of which comprises an internal conical surface and the other having a pair of flanges and an interposed groove, one of said flanges comprising a spherical zone arranged to engage said conical surface, and capable of shifting in variable angular positions relative to said conical surface, members connecting said flanges and means extending from the first-named of said ball and socket members into an annular path of said last-named member, to limit the relative rotary movement of said ball and socket members.

2. In a governor, the combination with a rotatable member, of a friction pad arranged to engage said member, to control the speed thereof, and having a universal jointed support, comprising relatively rotatable ball and socket members, one of which comprises an internal conical surface and the other having a pair of flanges and an interposed groove, one of said flanges comprising a spherical zone arranged to engage said conical surface, and capable of shifting in variable angular positions relative to said conical surface, members connecting said flanges and means extending from the first-named of said ball and socket members into an annular path of said last-named member, to limit the relative rotary movement of said ball and socket members, said rotary movement being distinct from and independent of the gyration of said universal joint.

3. In a governor, the combination with a rotatable member, of a friction pad arranged to engage said member, to control the speed thereof, and having a universal jointed support, comprising relatively rotatable ball and socket members, one of which comprises an internal conical surface and the other having a pair of flanges and an interposed groove, one of said flanges comprising a spherical zone arranged to engage said conical surface, and capable of shifting in variable angular positions relative to said conical surface, pins bridging said groove and pins projecting inwardly from the first-named of said ball and socket members, adjacent to and in the annular path of said first-named pins to limit the relative rotary movement of said ball and socket members.

4. In a governor, the combination with a rotatable member, of a friction pad arranged to engage said member, to control the speed thereof, and having a universal jointed support, comprising relatively rotatable ball and socket members, one of which comprises an internal conical surface and the other having a pair of flanges and an interposed groove, one of said flanges comprising a spherical zone arranged to engage said conical surface, and capable of shifting in variable angular positions relative to said conical surface, pins bridging said groove and pins projecting inwardly from the first-named of said ball and socket members, adjacent to and in the annular path of said first-named pins to limit the relative rotary movement of said ball and socket members, said rotary movement being distinct from and independent of the gyration of said universal joint.

1,060,828. MILKING-MACHINE. HENRY DROUTLEGE, Ponsonby, Auckland, New Zealand. Filed Apr. 6, 1911. Serial No. 619,371. (Cl. 31—101.)



1. A pulsator comprising in combination a cylinder open at one end, a piston valve reciprocable therein, two piston heads upon said valve, a vacuum port in said cylinder leading to a vacuum pump, two ports one upon each side of said vacuum port, a closure for one end of said cylinder, and means for admitting a regulatable quantity of air to that end, substantially as herein specified and illustrated.

2. In a pulsator, means for admitting a regulatable quantity of air to the interior of the cylinder comprising in combination the cylinder, a port therein, a split rotatable ring upon said cylinder, holes through said ring adapted to coincide with said port, and a clamping screw for the ring, substantially as herein specified and illustrated.

3. A pail head comprising in combination a cylindrical casing, an air tight cover therefor, a milk pipe projecting through said cover, a connection for a vacuum pipe, ports in the bottom of the casing, a guided float valve controlling said ports, and perforations through the bottom of the casing outside the seat of said float valve, substantially as herein specified and illustrated.

4. In milking machines, means for partially closing communication between the pail head and the vacuum pail, comprising in combination a cylindrical casing, ports in the bottom thereof communicating with the vacuum milk pail, a float valve adapted to close said ports, and perforations through the bottom of said casing outside the seat of said valve, substantially as herein specified and illustrated.

1,060,829. CURTAIN-STRETCHER. JOHN EDMAN, Minneapolis, Minn., assignor, by direct and mesne assignments, of one-half to Caleb M. Larson and one-half to Carl H. Olson, Minneapolis, Minn. Filed Mar. 20, 1912. Serial No. 685,079. (Cl. 45—24.)

1. In a frame of the kind described, the combination with bars in angular adjustment, of corner brackets connecting said bars, and a pair of latches carried by each of said brackets, certain of said latches having adjustable and positive locking engagement with said bars and certain of said latches having a ratchet-like engagement with said bars, one of said brackets being equipped with the positively locking latches and the other of said brackets being each equipped with one of the positively locking latches and with one of the ratchet acting latches.

2. In a frame of the kind described, the combination with bars in angular arrangement, of corner brackets connecting said bars, spring latches carried by said brackets, the latches at one of the ends of said bars having positive locking engagement therewith and the latches at the other ends of said bars having a ratchet-like engagement therewith, and means for holding said latches in in-operative positions.

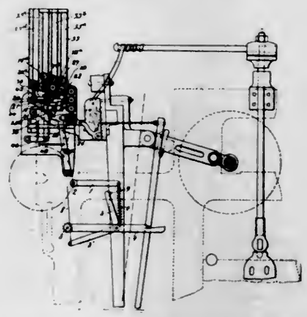
3. In a frame of the kind described, the combination with bars in angular arrangment, of corner brackets connecting said bars, spring latches pivotally connected to said brackets, the latches at one of the ends of said bars having positive locking engagement therewith and the latches at the other ends of said bars having a ratchet-like engagement therewith, rest lugs on said brackets for holding said latches in in-operative positions.



4. In a frame of the kind described, the combination with bars in angular arrangement, of corner brackets connecting said bars, and latches carried by said brackets, certain of said latches having adjustable and positively locking engagement with said bars, and certain of said latches having a ratchet-like engagement with said bars, said latches being arranged to permit opposite bars to be moved away from each other with a ratchet-like movement, but positively holding said bars against endwise movement.

5. In a frame of the kind described, the combination with bars having longitudinally spaced lock pockets, of corner brackets having guide sleeves in which said bars are slidably mounted, spring latches pivotally connected to said sleeves for limited lateral movements and coöperating with said lock pockets to hold the bars in different adjustments, and rest lugs for holding said spring latches in in-operative positions.

1,060,830. AUTOMATIC WEFT-REPLENISHING MECHANISM FOR LOOMS. BERNHARD ELMENDORF and JOHANNES GABLER, Isselhorst, Germany. Filed Dec. 19, 1910. Serial No. 598,055. (Cl. 139—85.)



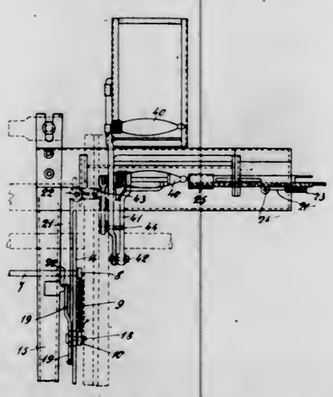
1. An automatic weft replenishing mechanism for looms comprising a magazine, a plurality of compartments in said magazine for the weft carriers, a plurality of pivoted locking catches for separately locking said compartments so as to retain the weft carriers therein and for successively unlocking said compartments so as to release the weft carriers, an apertured front compartment fixed on the loom and communicating with said magazine, a spring actuated feeler passing through the aperture in said front compartment so as to bear against a weft carrier therein,

means for connecting said catches with said feeler, said feeler passing through said front compartment when no weft carrier is in front of the feeler so as to release said catches successively, and a shuttle weft replenishing device for passing the weft carriers from said front compartment into the shuttle.

2. An automatic weft replenishing mechanism for looms comprising a magazine, a plurality of compartments therein for the weft carriers, a plurality of gravity catches adapted, when raised, to retain the weft carriers in said compartments, a spring-actuated slide for supporting said catches in raised position, an apertured front compartment fixed on the loom and communicating with said magazine, a spring-actuated feeler passing through the aperture in said front compartment so as to bear against a weft carrier therein and to pass through said front compartment when no weft carrier is in front of the feeler, means for returning said feeler after moving through said front compartment, means for coupling said feeler and slide during the return movement of said feeler so as to remove said slide from beneath said catches and allow the latter to fall successively and thereby successively release the weft carriers in the compartments of the magazine, and a shuttle weft replenishing device for passing the weft carriers from said front compartment into the shuttle.

3. An automatic weft replenishing mechanism for looms comprising a magazine having a sloped and apertured bottom, a plurality of compartments in said magazine for the weft carriers, said compartments communicating with one another at the bottom so as to enable the lowermost weft carriers to roll down the sloping bottom, a chamber receiving the weft carriers from the lower end of said sloping bottom, a shuttle weft replenishing device for passing the weft carriers from said chamber into the shuttle, a plurality of gravity catches having projections adapted to pass through the apertures in said sloping bottom when the catches are raised, so as to retain the weft carriers in the compartment of the magazine, and means for normally supporting said catches in raised position and for releasing said catches in succession.

1,060,831. AUTOMATIC WEFT-REPLENISHING MECHANISM FOR LOOMS. BERNHARD ELMENDORF and JOHANNES GABLER, Isselhorst, Germany. Original application filed Dec. 19, 1910, Serial No. 598,055. Divided and this application filed Jan. 11, 1912. Serial No. 670,612. (Cl. 139—85.)



1. In combination with the weft replenishing mechanism of a loom, a single slidable and pivoted weft-end detacher for the whole of the weft carriers, means actuated by the weft replenishing mechanism previous to the actual weft replenishing action to slide said detacher away from and in alinement with the weft carrier, means for rotating said detacher on its pivot to bring it into contact with the lay and to hold it in contact therewith during the backward movement of the lay and means for returning the detacher to normal position.

2. In combination with the weft replenishing mechanism of a loom, a single slidable and pivoted weft-end detacher for the whole of the weft carriers, said detacher comprising a plurality of spring arms and gripping elements carried at one end thereof, means actuated by the weft replenishing mechanism previous to the actual weft replenishing action to slide said detacher away from and in alinement with the weft carrier, means for rotating said detacher on its pivot to bring it into contact with the lay and to hold it in contact therewith during the backward movement of the lay and means for returning the detacher to normal position.

3. In combination with the weft replenishing mechanism of a loom, a single slidable and pivoted weft-end detacher for the whole of the weft carriers, said detacher comprising a plurality of spring arms and resilient gripping pieces carried at one end thereof, means actuated by the weft replenishing mechanism previous to the actual weft replenishing action to slide said detacher away from and in alinement with the weft carrier, means for rotating said detacher on its pivot to bring it into contact with the lay and to hold it in contact therewith during the backward movement of the lay and means for returning the detacher to normal position.

4. In combination with the weft replenishing mechanism of a loom, a single slidable and pivoted weft-end detacher for the whole of the weft carriers, means actuated by the weft replenishing mechanism previous to the actual weft replenishing action to slide said detacher away from and in alinement with the weft carrier, means for rotating said detacher on its pivot to bring it into contact with the lay and to hold it in contact therewith during the backward movement of the lay, means for returning the detacher to normal position, and means for removing the remaining weft end on the return movement of said detacher.

5. In combination with the weft replenishing mechanism of a loom, a weft-end detacher comprising a plurality of spring arms secured together at one end and carrying gripping elements at their other ends, a lever carrying said arms, a slide piece to which said lever is pivoted, a guide for said slide piece in alinement with the weft carrier, a spring coacting with said guide to normally hold said arms in alinement with and so as to grasp the weft end of said weft carrier, and means actuated by the weft replenishing mechanism for sliding said slide-piece, said spring thereupon turning said lever about its pivot to bring said arms into contact with the lay and hold same in contact therewith during the backward movement of the lay and said spring returning said arms to normal position on the next forward movement of the lay.

[Claims 6 and 7 not printed in the Gazette.]

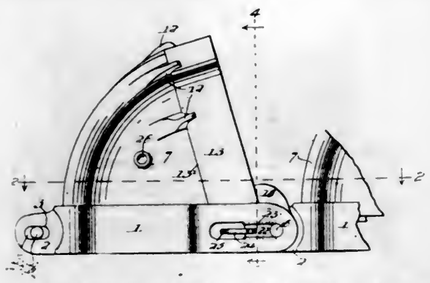
1,060,832. STORAGE-BATTERY COMPOUND. NATHAN FALLEK, Denver, Colo., assignor to The Cook Railway Signal Company, Denver, Colo., a Corporation of Colorado. Filed June 17, 1912. Serial No. 704,095. (Cl. 204—29.)

1. A storage battery compound composed of cleansed asbestos; a solution of sulfuric acid and distilled water, whose specific gravity is 1.230; and a solution of sodium silicate whose specific gravity is 1.180, the said elements being combined in the proportion of 12 parts by weight of the solution of sulfuric acid; 3 parts by weight of the asbestos; and one part by weight of the sodium silicate.

2. A storage battery compound composed of asbestos, a solution of sulfuric acid and water having a specific gravity of approximately 1.230, and a solution of sodium silicate and water having a specific gravity of approximately 1.180, the said elements being combined in the proportion, substantially, of twelve parts by weight of the sulfuric acid solution and three parts by weight of the asbestos, and one part by weight of the sodium silicate solution.

3. A storage battery compound composed of asbestos, dilute sulfuric acid and a solution of sodium silicate and water combined in the proportions, substantially, of twelve parts by weight of sulfuric acid, three parts by weight of asbestos, and one part by weight of sodium silicate solution.

1,060,833. ELEVATOR-BUCKET. OLIVER B. FINN, Colorado Springs, Colo. Filed May 9, 1911. Serial No. 626,084. (Cl. 37—23.)



1. In an elevator bucket, a link, said link being formed with a hollowed out seat, a hood having a bottom arranged in said seat, said hood being formed with a circumferential cut-out portion, a lip engaging in said cut-out portion, fingers carried by the hood and engaging over said lip to clamp the latter in said cut-out portion, said lip having its free ends turned inwardly and underlying the bottom of the hood, and hook-shaped lugs carried by the link and engaging over the bottom of the hood to hold the latter in position.

2. In combination with a link, a hood secured thereto, a lip secured to the forward edge of the hood and having right angular ends which extend beneath the hood bottom and between the latter and the link, and means to secure the hood bottom to the link.

3. In an elevator bucket, a link having a plate formed integral therewith, said plate having its upper face shaped to form a seat and having a shoulder, a hood having its bottom engaging in said seat and having its rear end abutting said shoulder, and lugs formed on the link and engaged on the top face of the bottom of the hood at the front thereof.

4. In combination with a link, a hood secured thereto, said hood having a shouldered portion at its open end, a lip abutting the shouldered portion, said lip having its free ends extending between the link and hood bottom, and being received in the cut-away portions provided therefor in the upper face of the link, and means to clamp the hood bottom onto said lip ends.

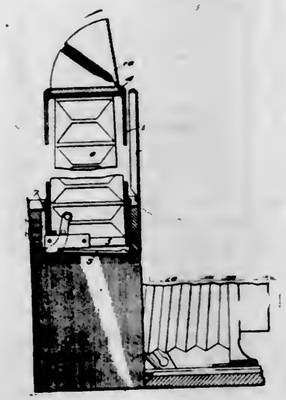
5. An elevator bucket including a link, a hood secured thereto, a lip secured to the hood and having portions interposed between the link and the bottom of the hood, and means to clamp the hood bottom to the link.

[Claims 6 to 9 not printed in the Gazette.]

1,060,834. FOCUSING-HOOD FOR CAMERAS. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Co., Rochester, N. Y., a Corporation of New York. Original application filed Mar. 26, 1909, Serial No. 485,912. Divided and this application filed Sept. 14, 1910. Serial No. 581,987. (Cl. 95—47.)

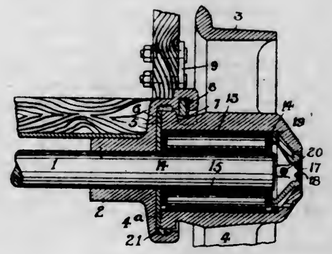
1. The combination with a focusing hood for cameras comprising relatively movable end portions and a collapsible intermediate portion, of a plurality of pivoted levers connecting said end portions to support them in separated positions and locking means for the levers comprising a relatively yielding slotted element and a coöperating pin on one of the levers and one of the end portions, respectively, said slotted element being provided with a recess communicating with the slot within which recess the pin is adapted to spring.

2. The combination with a focusing hood for cameras comprising relatively movable end portions and a collapsible intermediate portion, and a plurality of pivoted levers connecting said end portions to support them in separated positions, of a fixed but resilient element on one of the end portions having a slot therein inclined to the direction of relative movement of the parts, said slot being formed with a communicating recess and a pin carried with the levers in coöperation with the slot and adapted to automatically engage within the recess.



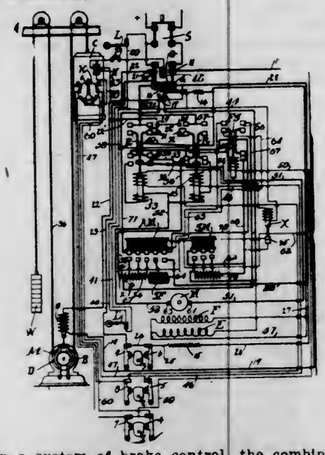
3. The combination with a focusing hood for cameras comprising relatively movable end portions and a collapsible intermediate portion, of a pair of levers movably connected with the end portions at their extremities and pivoted to each other at intermediate points to support the end portions in separated positions, a resilient element having a fixed position on one of the latter provided with a slot and with a recess communicating therewith and an extension on the pivot connecting the levers arranged to travel in the slot and engage the recess, the slot being inclined relatively to the path of movement of said pivot when the end portions are moved apart.

1,060,835. WHEEL. WILLIAM C. FOWNES, Jr., Pittsburgh, and FRITZ HOFWING, Midland, Pa., assignors to Pittsburgh Iron & Steel Foundries Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 31, 1912. Serial No. 728,906. (Cl. 105—67.)



The combination of a bearing, an axle projecting therefrom, a wheel-hub rotatable on the axle, having its inner end adjacent to the said bearing, and provided with an annular flange, a slidable locking key normally lying across the path of movement of the flange toward the outer end of the axle, and means beyond the periphery of the wheel for locking the key in its normal position.

1,060,836. BRAKE CONTROL FOR ELEVATORS. ERNEST L. GALE, Sr., Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Dec. 23, 1909. Serial No. 534,695. (Cl. 172—152.)



1. In a system of brake control, the combination of a brake magnet winding, a motor, reversing switches therefor, electrical connections whereby the brake magnet winding is energized when either reversing switch is closed, a discharge resistance connected in parallel with the brake winding, and automatic means for opening the circuit through said resistance.

2. In a system of electro-responsive brake control, the combination of a brake magnet winding, a motor, reversing switches therefor, an automatic switch to admit current through a closed reversing switch to the motor, connections from the brake magnet winding, one through the closed reversing switch and the other through the automatic switch to energize the brake magnet winding, and a discharge circuit for the brake magnet winding including said last-named connection.

3. In a system of electro-responsive brake control, the combination of a brake magnet winding, a motor, reversing switches therefor, an automatic switch, a contact associated with the automatic switch, circuit connections from the brake magnet winding to the said contact and from the brake through a reversing switch and thence through the automatic switch, and a discharge circuit for the brake magnet including said automatic switch.

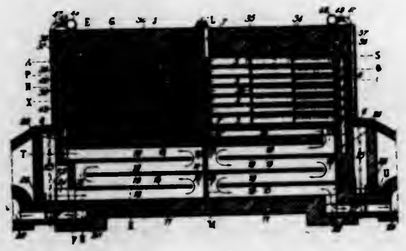
4. In a brake control system, the combination of a brake magnet winding, a motor, reversing switches therefor, auxiliary contacts carried by the reversing switches, electrical connections with said contacts whereby an energizing circuit is closed through the said magnet winding only when a reversing switch is closed, a discharge circuit in parallel with the brake magnet winding, and an automatic switch in said discharge circuit.

5. In a system of brake control, the combination of a brake magnet winding, a motor, reversing switches for the motor, brake discharge resistance, auxiliary contacts on the reversing switches, means whereby the said resistance and the brake magnet winding receive current through an auxiliary contact when either reversing switch is closed, and an automatic circuit breaker in circuit with the discharge resistance between the latter and the brake magnet winding.

[Claims 6 to 26 not printed in the Gazette.]

1,060,837. GAS-PRODUCING OVEN. ARTHUR GOHMANN, Stettin, Germany, assignor to Stettiner Chamotte-Fabrik Actien-Gesellschaft vorm. Didier, Stettin, Germany, a Corporation of Germany. Filed Nov. 15, 1910. Serial No. 592,475. (Cl. 202—9.)

1. An oven provided with chambers and partitions separating them, said partitions containing superposed longitudinal heating flues provided with air inlets, each individual heating flue being also provided with a plurality of fuel inlets arranged at different distances from the respective air inlets and from the ends of the oven, the outlets of the products of combustion being farther away from the air inlets than the last fuel inlets, so that the combustion gases produced at the first fuel inlets are compelled to travel past all the other fuel inlets of the same heating flue before reaching the outlets, and upright collecting channels into which the combustion gases pass directly from each of the several superposed heating flues.



2. An oven provided with chambers and partitions separating them, each of said partitions containing two vertical series of heating flues provided with air inlets and two vertical series of adjoining gas supply channels in the wall between said heating flues, the outlets from said gas channels to the heating flues being located at different distances from the air inlets of said flues.

3. An oven provided with chambers and partitions separating them, each of said partitions containing two vertical series of heating flues and provided with air inlets and two vertical series of adjoining gas supply channels in the wall between said heating flues, the outlets from said gas channels to the heating flues being located at different distances from the air inlets of said flues, and being made of different heights, such height increasing toward the outlets of the heating flues so as to secure an increasingly better mixture of the gas supplied, with the excess of air admixed to the combustion products flowing through the heating flues, as the amount of the excess diminishes.

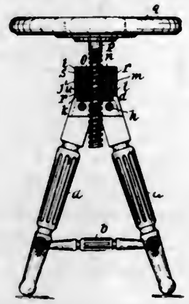
4. An oven provided with chambers and partitions separating them, said partitions containing heating flues and channels for supplying gas thereto, gas-distributing chests at the ends of said channels and of the oven, and gas-regulating valves removable from said chests lengthwise of the gas channels, so that the gas channels are accessible from the end of the oven after removal of the regulating valves.

5. An oven provided with chambers and partitions separating them, each of said partitions containing two sets of heating flues and two sets of gas supply channels leading thereto, and a gas-distributing chest subdivided by a partition into two compartments each connected with with one of the said sets of gas supply channels.

[Claims 6 to 9 not printed in the Gazette.]

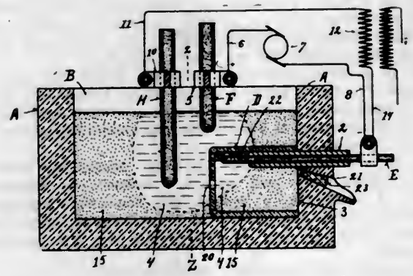
1,060,838. SEAT OR STOOL. WILLIAM GROENENDYKE, Passaic, N. J., assignor of one-half to John Groenendyke, Passaic, N. J. Filed June 11, 1912. Serial No. 702,995. (Cl. 155—22.)

The combination, with the seat, of a carriage sustaining the seat and consisting of a substantially rectangular block having on each of two opposite sides thereof parallel horizontal upper and lower flanges forming a horizontal groove in the block, one on each of said sides thereof, a frame supporting said block and including spaced flat horizontal rails respectively received in said grooves and having their broader sides facing laterally, each rail conforming in cross sectional dimension and form to the cross-sectional dimension and form of the corresponding groove, an upper set of anti-friction bearing means arranged between each rail and the corresponding upper flange of the block, and a lower set of anti-friction bearing



means arranged between a laterally facing surface of the block and each rail, substantially as described.

1,060,839. ELECTRIC FURNACE. DAVID J. HAUSS, Aurora, Ind. Filed Sept. 8, 1911. Serial No. 648,264. (Cl. 204—19.)



1. An electric furnace comprising a container to hold a body of material to be treated, one or more metallic electrodes to serve as anodes and connected to a source of direct current, an electrode connected to a source of alternating current, an electrode connected to serve as a cathode and connected to said source of direct current and to said source of alternating current, the action of said direct and alternating currents serving to fuse the material to be treated and said direct current between said anode and cathode serving to electrolyze the material to be treated and to deposit one of its components at said cathode and also to transfer the anode material to and alloy it with said cathode deposit.

2. An electric furnace comprising a container to hold a body of material to be treated, one or more metallic electrodes to serve as anode and connected to a source of direct current, an electrode connected to a source of alternating current, an electrode connected to serve as a cathode and connected to said source of direct current and to said source of alternating current, the action of said direct and alternating currents serving to fuse the material to be treated and said direct current between said anode and cathode serving to electrolyze the material to be treated and to deposit one of its components at said cathode and also to transfer the anode material to and alloy it with said cathode deposit, and means to retain said alloy beneath the surface of the electrolyte.

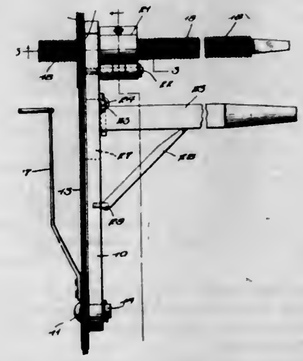
3. An electric furnace comprising a container to hold a body of material to be treated, a metallic electrode to serve as anode and connected to a source of direct current, an electrode to serve as a cathode and connected to said source of direct current, an alternating current passing from one electrode to another through the material to be treated, and means to control the relative amount of direct and alternating current passing through the material to be treated, the action of said direct and alternating currents serving to fuse the material to be treated and said direct current between said anode and cathode serving to electrolyze the material to be treated and to deposit one of its components at said cathode and also to transfer the anode material to and alloy it with said cathode deposit.

4. An electric furnace comprising a container adapted to hold a body of material to be treated, an accumulator compartment located within said container and adapted to be embedded in the material to be treated and to accumulate and hold the product beneath the surface of the material to be treated, an electrode connected to a source of direct current, an electrode connected to a source of alternating current, and an electrode connected to both said source of direct and alternating current, one of said electrodes carrying direct current being located within said accumulator compartment.

5. An electric furnace comprising a container for a body of material to be treated, an accumulator located in said container beneath the surface of the material to be treated and communicating through a substantially horizontal opening with the interior of said container, a metallic electrode located in said container outside of said accumulator to serve as an anode and connected to a source of direct current, an electrode to serve as a cathode located within said accumulator and connected to said source of direct current, the action of the current from one of said electrodes to the other serving to fuse and electrolyze the material to be treated and to deposit one of its components at said cathode and also to transfer the material of said anode to and alloy it with said cathode deposit.

[Claims 6 to 8 not printed in the Gazette.]

1,060,840. COAL-BORING MACHINE. WILLIAM J. HINES, Grant Town, W. Va., assignor of one-fourth to Mathaeu M. Connors and one-fourth to August E. Rothlisberger, Grant Town, W. Va. Filed June 29, 1912. Serial No. 706,767. (Cl. 125—10.)



1. In a coal boring machine, the combination with a frame, of a pair of spaced sprocket wheels journaled thereupon, a sprocket chain connecting said sprocket wheels, an internally threaded bearing hingedly secured upon the opposite face of the said frame, a boring tool having a slotted threaded shank mounted within said bearing and in one of said sprocket wheels, a key formed upon said sprocket wheel and extending into the slot of the shank of the tool, and means for rotating the other said sprocket wheel whereby the said boring tool may be operated, substantially as described.

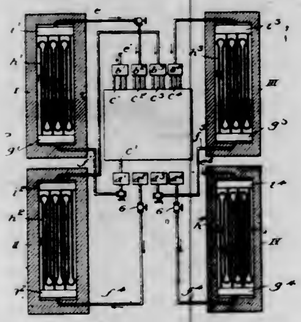
2. In a device of the class described, comprising a frame cast of a flat piece of metal, an elongated opening formed therein, a T-shaped member journaled upon one face of

said frame adjacent said opening, a squared jack having an opening formed in one end thereof for receiving one arm of the said T-shaped member, means for holding said frame in adjusted position relative to said jack, and boring mechanism mounted in said frame, substantially as described.

3. In a coal boring machine, the combination of a frame, gear wheels journaled upon one face of said frame, an internally threaded bearing block mounted upon the opposite face of said frame, a boring tool having a threaded shank adapted to extend through said bearing block and one of said gear wheels, the last said gear wheel having a keyed extension adapted to operate within a longitudinally extending slot formed within the shank of the boring tool, means for connecting the said sprocket wheels, a handle secured to the other said sprocket wheel, a jack, and means for hingedly securing said jack adjacent the central portion of said frame, substantially as described.

4. In a coal boring machine, the combination with a frame, of a pair of spaced sprocket wheels journaled therefrom, means for connecting said sprocket wheels, an internally threaded bearing pivotally mounted upon the said frame, a boring tool, a threaded shank formed integral with said boring tool and extending through said threaded bearing and one of said sprocket wheels, an internally extending key formed upon the last mentioned sprocket wheel and operatively mounted within a longitudinally extending slot formed within the shank of the boring tool, the said frame having an opening formed therein, bearings mounted upon said frame adjacent said opening, a jack having one end extending within said opening, means for hingedly connecting said jack to the bearings, and means for adjustitng the said jack substantially as described.

1,060,841. BAKER'S OVEN AND THE LIKE. GEORGE FREDERICK HUMPHREY, London, England. Filed Jan. 2, 1913. Serial No. 739,725. (Cl. 107—63.)

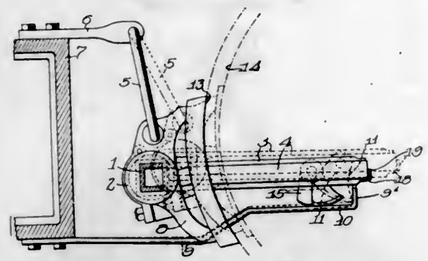


1. The combination with an oven provided with a plurality of fluid heated radiators arranged in series of independent means for superheating the fluid between successive radiators.

2. In oven construction, the combination with two radiators located in the baking space and adapted to be heated by fluid flowing through them, of two fluid superheaters without said space and having their cross-sectional fluid-passage areas materially less than those of said radiators, a conduit from the first superheater to the first radiator, a conduit leading from the first radiator to the second superheater, a conduit leading from the second superheater to the second radiator, and a conduit leading from the second radiator out of said space.

3. The combination with a plurality of ovens provided with internal radiators, of conduits connecting all the radiators in series with a source of low pressure steam, and superheaters interposed in said conduits between successive ovens and having fluid passages of less cross-sectional area than the passages of the radiators.

1,060,842. THIRD SUSPENSION FOR BRAKE-BEAMS. CHARLES F. HUNTOON, Chicago, Ill., assignor to Elmyr A. Laughlin, Chicago, Ill. Filed Apr. 20, 1912. Serial No. 692,077. (Cl. 188—70.)



1. In a third suspension for brake beams, the combination of a brake beam, a supporting member, and a cam interposed between said brake beam and said supporting member for the purpose specified.

2. In a third suspension for brake beams, the combination of a brake beam, a substantially horizontally disposed supporting member, and a cam interposed between said brake beam and said supporting member for the purpose specified.

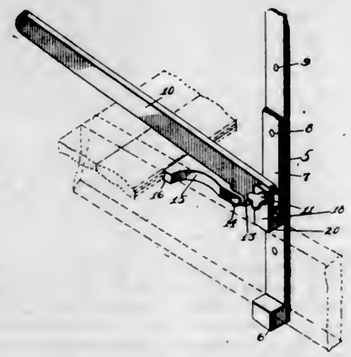
3. In a third suspension for brake beams, the combination of a brake beam, a resilient supporting member, and a cam interposed between said brake beam and said supporting member, for the purpose specified.

4. In a third suspension for brake beams, the combination of a brake beam, a substantially horizontally disposed supporting member, and a cam carried by said brake beam and adapted to coact with said supporting member, for the purpose specified.

5. In a third suspension for brake beams, the combination of a brake beam having a transversely disposed strut, a substantially horizontally disposed supporting member, and a cam interposed between said supporting member and the end of said strut, for the purpose specified.

[Claims 6 to 9 not printed in the Gazette.]

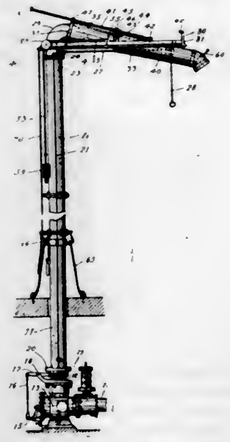
1,060,843. FLOOR-JACK. ROBERT M. HUSTON, Fall River, Kans. Filed Aug. 1, 1912. Serial No. 712,805. (Cl. 57—117.)



1. In a device of the character described, the combination with a supporting body bar having a joist engaging foot at its lower end, of a bearing block of L-shaped form, an operating lever and pivot member for mounting said operating lever in said L-shaped bearing block, said pivot member passing through said L-shaped bearing block and through said body bar, a fixed member carried by said bearing block and adapted to engage in any one of a number of openings formed in said body bar, the distance between said openings being equal to the distance between said fixed member and said pivot member and a presser foot pivotally connected to said lever.

2. In a device of the character described, the combination with a supporting body bar having a joint engaging foot at its lower end, a bearing block of L-shaped form, an operating lever and pivot member for mounting said operating lever in said L-shaped bearing block, said pivot member passing through said L-shaped bearing block and through said body bar, a fixed member carried by said bearing block and adapted to engage in any one of a number of openings formed in said body bar, the distance between said openings being equal to the distance between said fixed member and pivot member, a presser foot pivotally connected to said lever, a lug carried by said lever which contacts with the transverse portion of said L-shaped bearing block to limit the downward movement of said lever, the pivot of said presser foot passing through said lug and said pivot lying below the center of movement of said lever from inoperative to operative position when the device is in operative position.

1,060,844. STAND-PIPE OR WATER-COLUMN. EDWARD E. JOHNSON, St. Paul, Minn. Filed Feb. 5, 1912. Serial No. 675,523. (Cl. 137—21.)



1. A water column comprising a stand-pipe terminating in a short curved nozzle, a sectional telescoping spout having the open end of the inner section surrounding said nozzle and hinged to the stand-pipe, and means to hold the sections of the spout in alinement and with the walls thereof out of contact throughout their range of relative telescopic movement.

2. A water column comprising a stand-pipe terminating in a short curved nozzle, a sectional telescoping spout having the open end of the inner section surrounding said nozzle and hinged to the stand-pipe and means independent of the contiguous walls of the sections to hold the sections in alinement.

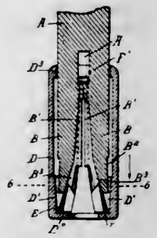
3. A water column comprising a stand-pipe terminating in a short curved nozzle, a sectional telescoping spout having the open end of the inner section surrounding said nozzle and hinged to the stand-pipe, and a bar rigidly secured to one of said sections and connected to the other section so that said other section and bar may be moved relatively to hold the sections of the spout in alinement and with the walls thereof out of contact while one is telescoped over the other.

4. A water column comprising a stand-pipe terminating in a short curved nozzle, a sectional telescoping spout having the open end of the inner section surrounding said nozzle and hinged to the stand-pipe, and a bar rigidly secured to the outer section and slidably connected to the inner section to hold the sections of the spout in alinement and with the walls thereof out of contact while one is telescoped over the other.

5. A water column comprising a stand-pipe terminating in a short curved nozzle, a sectional telescoping spout having the open end of the inner section surrounding said nozzle and hinged to the stand-pipe, and a bar rigidly secured in a plurality of places to the top of the outer section and slidably mounted in a plurality of bearings secured to the top of the inner section to hold the sections of the spout in alinement and with the walls thereof out of contact while one is telescoped over the other.

[Claims 6 to 13 not printed in the Gazette.]

1,060,845. BIT-HOLDER. JOHN W. JOHNSON, Leavenworth, Kans. Filed July 5, 1912. Serial No. 707,742. (Cl. 145—96.)



1. A bit holder, comprising a split socket for the reception of a bit shank, means for clamping the socket on the bit shank, and jaws at the outer end of the socket, forming inward projections and adapted to be wedged between the socket and bit shank to prevent the bit from being pulled out of the said socket.

2. A bit holder, comprising a head having a split socket for the reception of the bit shank, a sleeve mounted to turn on the said head and adapted to close the members of the socket on turning the sleeve, and jaws adapted to wedge between the socket member and the bit shank and moving lengthwise with the said sleeve.

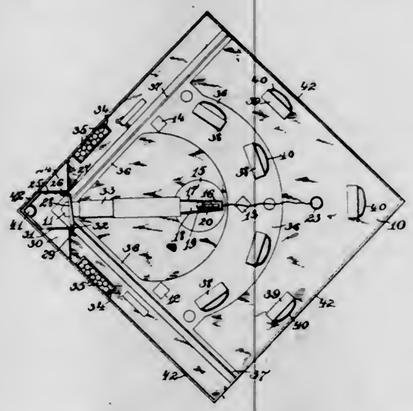
3. A bit holder, comprising a head having a split socket for the reception of the bit shank and provided with tapering guideways, spring-supported jaws adapted to engage the said guideways, and a sleeve mounted to turn on the said head and to slide lengthwise thereon, the said sleeve having means engaging the said jaws and moving the same lengthwise and the sleeve having means engaging the said split socket to tighten the same on the bit shank or to release the same on turning the sleeve.

4. A bit holder, comprising a head having a socket split lengthwise to form spring members for receiving a bit shank between them, the forward ends of the said socket members being provided at the inner faces with outwardly tapering guideways and the said socket members having their forward ends provided exteriorly with cam faces, a sleeve mounted to turn and to slide on the said head and provided at its ends with interior annular shoulders, the said sleeve being provided adjacent the forward shoulder with cam faces adapted to engage the cam faces on the said socket members to close the same, and wedging jaws engaging the said socket guideways and having their rear ends provided with tapering clamping edges adapted to engage the bit shank, the said jaws being provided with rearwardly-extending spring arms terminating in transversely-extending lugs abutting against the inner shoulder of the said sleeve, the forward ends of the jaws abutting against the forward shoulder of the sleeve to cause the jaws to move lengthwise.

5. A bit holder comprising a head having a socket split lengthwise to form spring members for receiving a bit shank between them, the forward ends of the said socket members being provided at the inner faces with outwardly-tapering guideways, and the said socket members

having their forward ends provided exteriorly with cam faces, a sleeve mounted to turn and to slide on the said head and provided at its ends with interior annular shoulders, the said sleeve being provided adjacent the forward shoulder with cam faces adapted to engage the cam faces on the said socket members to close the same, wedging jaws engaging the said socket guideways and having their rear ends provided with tapering clamping edges adapted to engage the bit shank, the said jaws being provided with rearwardly-extending spring arms terminating in transversely-extending lugs abutting against the inner shoulder of the said sleeve, the forward ends of the jaws abutting against the forward shoulder of the sleeve to cause the jaws to move lengthwise with the sleeve, and rear guideways on the said head engaged by the said lugs of the spring arms limiting the forward and backward sliding movement of the said sleeve and the wedging jaws.

1,060,846. GAME APPARATUS. ANTHONY J. KRUMEICH, Newark, N. J. Filed Nov. 4, 1912. Serial No. 729,348. (Cl. 46—61.)



1. A game apparatus comprising a board to represent a base-ball field, stations to represent first base, second base, third base and home plate, a base path connecting the stations, pockets to represent the infield and outfield players in their playing positions, a manually operated propelling device in the pitcher's position, a spring-actuated, manually operated snapping device at the home plate, the snapping device being elevated from the plane of the board, an inclined plate in front of the snapping device, counters to be used on the stations, and a ball of a size to be used in the snapping device and in the pockets.

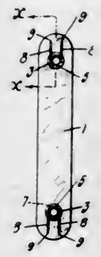
2. A game apparatus comprising a board to represent a base-ball field, stations to represent first base, second base, third base and home plate, a base path connecting the stations, pockets to represent the infield and outfield players in their playing positions, a manually operated propelling device in the pitcher's position, a spring-actuated, manually operated snapping device at the home plate, the snapping device being elevated from the plane of the board, an inclined plate in front of the snapping device, counters to be used on the stations, a ball of a size to be used in the snapping device and in the pockets, and a cup behind the snapping device and approximately at the catcher's station.

3. A game apparatus comprising a board having a marginal flange to form a boundary, the board being marked to represent a base-ball field, stations to represent first base, second base, third base and home plate, blocks flanking the home plate, a snapping device mounted on the blocks and being elevated from the board, the snapping device having a spring arm to represent a bat, an inclined plate in front of the home plate, a chute in the pitcher's box, a spring in the chute, means for tripping the spring, a ball adapted to be placed in the chute and to be propelled by the spring, pockets disposed to represent the infield and outfield players, each pocket comprising an arch with an open front and a back on each pocket of pliable material, and counters for use on the stations.

4. A game apparatus comprising a board having a marginal flange to form a boundary, the board being marked to represent a base-ball field, stations to represent first base, second base, third base and home plate, blocks flanking the home plate, a snapping device mounted on the blocks and being elevated from the board, the snapping device having a spring arm to represent a bat, an inclined plate in front of the home plate, a chute in the pitcher's box, a spring in the chute, means for tripping the spring, a ball adapted to be placed in the chute and to be propelled by the spring, pockets disposed to represent the infield and outfield players, each pocket comprising an arch with an open front and a back on each pocket of pliable material, counters for use on the stations, and a cup in rear of the snapping device and between the blocks.

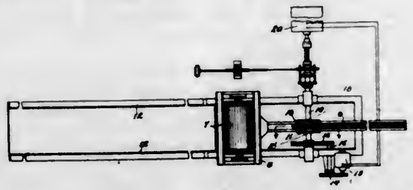
5. A game apparatus comprising a board marked to resemble a base-ball field, pockets resting on the board in the fielders' positions, each pocket consisting of an arch with an open front, and a back on each pocket, the back being made of pliable material.

1,060,847. COLLAR-SUPPORTER. LOUISE B. LARIDON, New York, N. Y. Filed Feb. 8, 1912. Serial No. 676,249. (Cl. 2—91.)



A supporter comprising a flexible body and a fastening member rigidly connected with the body and comprising a coil rigidly affixed to the body portion, and pliable arms extending from said coil for engagement with the fabric and adapted to be bent in the plane of said body and then crossed and depressed into alinement with each other.

1,060,848. ROLL-RAMMING MECHANISM. HARRY P. MACDONALD, Montclair, N. J., assignor to The Snead and Company Iron Works, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 22, 1912. Serial No. 672,645. (Cl. 22—40.)



1. In a roll ramming molding apparatus the combination of a roll, means for reciprocating the roll, a motor for operating the reciprocating means, means for automatically reversing the motor when the roll reaches extremes of movement, and yielding means for stopping the roll adjacent the extremes of movement when the motor is reversed.

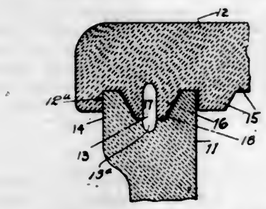
2. In a roll ramming molding apparatus the combination of a roll, means for reciprocating the roll, a motor for operating the reciprocating means, means for automatically reversing the motor, and yielding means for stopping the movement of the roll and giving it an initial impulse on its reverse movement when the motor is reversed.

3. In roll ramming molding apparatus the combination of a roll, means for reciprocating the roll, a motor for operating the reciprocating means, means for automatically reversing the motor when the roll reaches a predetermined point in its movement, and a positive means for stopping the roll adjacent such point.

4. In roll ramming molding apparatus the combination of a roll, means for reciprocating the roll, a motor for operating the reciprocating means, means for automatically reversing the motor when the roll reaches a predetermined point in its movement, and a positive yielding means for stopping the roll adjacent such point.

5. In roll ramming mold apparatus the combination of a roll, means for reciprocating the roll, a motor for operating the reciprocating means, means for automatically reversing the motor when the roll reaches one extreme of movement, means for stopping the motor when the roll reaches the other extreme of movement, and positive means for stopping the roll adjacent to either extreme of movement when the motor is reversed, or stopped.

1,060,849. BURIAL-VAULT. CHARLES A. MASON, Juniata, Pa. Filed May 14, 1912. Serial No. 697,273. (Cl. 72—7.)

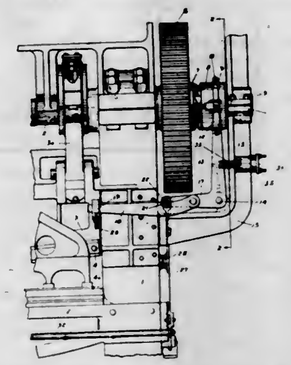


A burial vault comprising a body whose upper edges have a recess formed with converging walls, and a flat bottom provided with a groove, a lid member having a recess, a converging tongue projecting downwardly from the central portion of the recess in the lid, said tongue having a groove in the under side thereof, and adapted to seat in the recess of the vault body, the groove of the downwardly projecting tongue registering with the groove in the bottom of the recess formed in the body to form a passageway for a sealing agent.

1,060,850. CLUTCH MECHANISM FOR SHEARING-MACHINES AND THE LIKE. JAY T. OSLER, Coraopolis, Pa., assignor to Lewis Foundry and Machine Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1912. Serial No. 726,167. (Cl. 192—9.)

1. In a construction of the character described, the combination of a movable head, driving mechanism therefor, mechanism for controlling the operating connections between said head and its driving means comprising clutch members, a lever operated in timed relation with said head and connected to said clutch for disconnecting the same, yielding means between said lever and clutch and arranged to permit movement of the lever relative to the clutch before movement of the clutch, and adjustable means for varying the amount of relative movement between the lever and clutch.

2. In a construction of the character described, the combination of a movable head, driving mechanism therefor, mechanism for controlling the operating connections between said head and its driving means comprising clutch members, a lever operatively connected to said driving mechanism, a movable yielding member carried by said lever and connected to said clutch for disconnecting the same, and means on said lever for adjusting the amount of movement of said member to thereby vary the clearance between said clutch members when disconnected.



3. In a construction of the character described, the combination of a movable head, driving means therefor, a clutch controlling the operating connection between said head and its driving means, a lever having means for moving the same to operate said clutch, a trip lever, and movable means for operatively connecting said levers and arranged when moved in one direction to disconnect the same to thereby permit movement of the clutch operating lever to connect said clutch.

4. In a construction of the character described, the combination of a movable head, driving means therefor, a clutch controlling the operating connection between said head and its driving means, a lever having means for moving the same to operate said clutch, a trip lever, movable means for operatively connecting said levers and arranged when moved in one direction to disconnect the same to thereby permit movement of the clutch operating lever to connect said clutch, means for moving said movable means, and a spring for moving said movable means in the opposite direction to thereby operatively connect said levers.

5. In a construction of the character described, the combination of a movable head, driving means therefor, a clutch controlling the operating connection between said head and its driving means, a lever arranged to operate said clutch, a spring for moving the same, in one direction, a trip lever controlled by said head, and movable means for operatively connecting said levers and arranged when moved in one direction to disconnect the same and permit said lever operating means to connect said clutch.

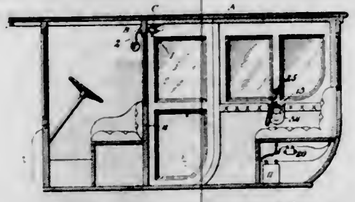
[Claims 6 to 12 not printed in the Gazette.]

1,060,851. PASSENGER-DRIVER TELEPHONE SIGNAL SYSTEM FOR VEHICLES. HERMAN G. PAPE, Buffalo, N. Y. Filed Jan. 27, 1910. Serial No. 540,409. (Cl. 179—1.)

1. In a vehicle having a passenger compartment and a driver's seat exterior thereto, a means for intercommunication between the passenger and driver comprising a direct voice conducting device having separate amplifying means one within the passenger compartment and the other adjacent the driver's seat, and a one-way telephonic means provided with a transmitter within the passenger compartment in ready reach of a passenger, and a receiver communicating with the sound amplifying means adjacent the driver's seat.

2. In a vehicle provided with a passenger compartment and an operator's seat, means for acoustical communication between the operator's seat and the passenger com-

partment, and a telephone system having a transmitter within the passenger compartment and a receiver in operative relation to the portion of the acoustical communicating means extending into operative relation to the operator's seat.



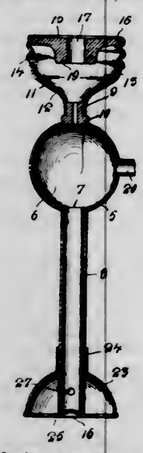
3. In a vehicle provided with a passenger compartment and an operator's seat divided one from the other by a partition, a speaking tube extending through the partition and on each side thereof adjacent to the partition provided with a sound amplifying terminal member, and a telephone system provided with a transmitter within the passenger compartment and a receiver in operative relation to the portion of the speaking tube directed toward the operator's seat.

4. In a vehicle provided with a passenger compartment and an operator's seat divided one from the other by a partition, a speaking tube extending through the partition and on each side thereof adjacent the partition provided with a bell-shaped, sound-amplifying terminal portion, and a telephone system having a transmitter in the passenger compartment and a receiver communicating with the portion of the speaking tube directed toward the driver's seat.

5. In a vehicle provided with a passenger compartment and an operator's seat divided one from the other by a partition, a telephone system having a transmitter within the passenger compartment and a receiver adjacent the partition, a sound conduit leading from the receiver and terminating in a sound amplifier adjacent the operator's seat, and another sound conduit branched off from the first named sound conduit and in free communication therewith, said second named sound conduit terminating in an amplifier within the passenger compartment.

[Claims 6 to 13 not printed in the Gazette.]

1,060,852. VACUUM MASSAGE DEVICE. FRANK O. PARKER, Washington, D. C., assignor of two-fifths to Frederick C. Smith, Waterbury, Conn. Filed Feb. 29, 1912. Serial No. 680,641. (Cl. 230—13.)



1. In a massage device a water outlet pipe having a spherical vacuum chamber, means located wholly outside and communicating with the chamber for reducing the water column supply when admitted thereto, means for detachably connecting said means to a water pressure delivery element, a semi-spherical shaped cap on the lower end of the outlet pipe and having a perforated outer end, the said outlet pipe being provided with outlet ports opening into the cap, and a depression struck in from the outer end of the cap for closing the lower open end of the pipe.

2. In a massage device, a spherical vacuum chamber, an injector in communication therewith, an outlet pipe in communication with the chamber, and an air inlet pipe in communication with the said chamber, all of said points of communication being beyond the inner wall of the vaccum chamber, whereby to present an uninterrupted spherical surface for the air and water currents.

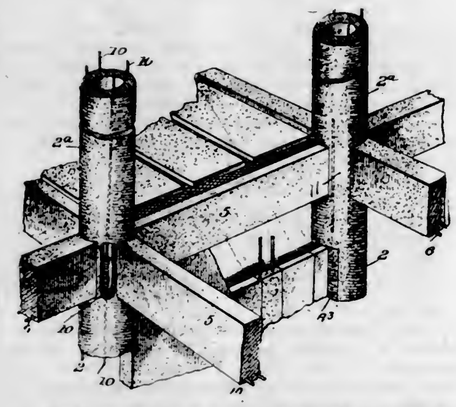
3. In a massage device, a spherical vacuum chamber, an injector in communication therewith, an outlet pipe in communication with the chamber and in alinement with the injector, and an air inlet pipe in communication with the chamber, the injector, outlet pipe, and air inlet pipe being connected to the wall of the spherical vacuum chamber and inwardly terminating in alinement with the inner surface of said wall to avoid interruption of the spherical surface of said chamber.

4. A massage device including a spherical vacuum chamber, an injector and an outlet pipe communicating with said chamber and diametrically opposed to each other, an air inlet pipe leading into the chamber intermediate the injector and outlet pipe, the connection of the injector, outlet pipe, and inlet pipe avoiding projection within the vacuum chamber, whereby the currents therein are uninterrupted in their free rotary movement.

5. A massage device including a spherical vacuum chamber, an air inlet pipe communicating with but not extending into the chamber, an outlet pipe communicating with but not extending into the chamber, and an injector communicating with but not extending into the chamber, said injector having an admission channel in communication with the chamber of materially reduced diameter as compared with the diameter of the channel of the outlet pipe.

[Claim 6 not printed in the Gazette.]

1,060,853. REINFORCED CONCRETE CONSTRUCTION. ROBERT T. PEIRCE, Newport News, Va. Filed Mar. 12, 1910. Serial No. 548,978. (Cl. 72—15.)

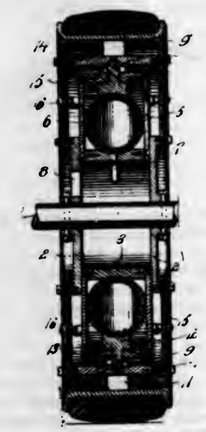


1. In a concrete construction, a vertical column, said column being hollow and provided with reinforcing bars extending beyond the ends of the column, the interior face of the column being provided with an inwardly projecting shoulder, in combination with beams of concrete having reinforcing bars extending therethrough and projecting beyond the ends thereof, the projecting ends of said reinforcing members of abutting beams being tied together above the hollow interior of the column, a column superposed upon the abutting ends of adjoining beams and in alinement with the column below, and concrete filling disposed in the interior of both columns and joining the ends of the beams, said filling being supported on the shoulder formed in the column, and reinforcing members passing through said concrete filling.

2. In a concrete construction, a supporting beam recessed upon its upper face and its sides, subsidiary beams abutting on either side of the main supporting beam and in alinement with said recess, reinforcing members projecting out of the ends of the subsidiary beams and over the recessed portion of the main beam, means for interlocking the lower portion of the subsidiary beams with the main beam, and a filling of concrete filling the cut-away portion of the main beam and surrounding the reinforcing members of the subsidiary beams.

3. In concrete construction, a main beam recessed upon its upper face, beam hangers supported upon said main beam adjacent to said recess, and bolted to the same, subsidiary beams of concrete supported with their ends in said hangers, on either side of the main beam, reinforcing members located in said subsidiary beams, projecting into the cut-away portion in the upper face of the main beam, said reinforcing member of one subsidiary beam being tied to the reinforcing member of the opposed subsidiary beam, transverse bolts passing through the beam hangers and through the subsidiary beams, and a filling of cement filling the space between the subsidiary beams and the main beam and inclosing said reinforcing members.

1,060,854. PNEUMATIC WHEEL. NIELS PETERSON, Teton, Idaho. Filed Dec. 27, 1911. Serial No. 668,021. (Cl. 152—46.)



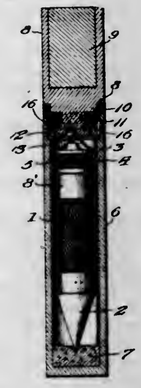
1. In a vehicle wheel, the combination of transversely spaced disks having their inner faces parallel, an inner ring movable between said disks, an annular cushioning device mounted upon the inner ring, a plurality of shoes placed against the outer side of the annular cushioning device, an outer ring concentric with the inner ring and connected therewith and constituting guide and spacing means for the said shoes, cross bars exterior to the outer ring and having connection with the shoes, flexible connections between the outer ends of the cross bars and the said disks, guides having connection with the inner and outer rings to move therewith and engaging the flexible connections between their inner and outer ends, and a rim exterior to the cross bars and connected with the before mentioned outer ring.

2. In a vehicle wheel, the combination of tranversely spaced disks having their inner faces parallel, an inner ring movable between the said disks, an outer ring concentric with the inner ring, connections between the edges of the concentric rings, an annular cushioning device mounted upon the inner ring, shoes placed against the outer side of the annular cushioning device and having stems passing loosely through said outer ring, cross bars at the outer ends of said stems, flexible connections between the ends of the cross bars and the said disks, guides mounted upon the connections between the concentric rings and engaging the flexible connections intermediate of their ends, and a rim exterior to the cross bars and connected with the before mentioned outer ring.

3. In combination transversely spaced disks having their inner faces parallel, an inner ring movable between the disks, an outer ring concentric with the inner ring, side rings connecting the concentric rings, pairs of guides projecting outwardly from the side rings, an annular cushioning device supported upon the inner ring, shoes placed against the outer side of the annular cushioning device and having atems passing loosely through the outer ring, cross bars secured to the outer ends of the stems, flexible connections between the ends of the cross bars and the before mentioned disks and passing between the elements of the respective pairs of guides, and a rim exterior to the cross bars and connected with the before mentioned outer ring.

4. In combination an axle, parallel disks secured to the axle and having outer flanges at their outer edges, an inner ring movable between the disks, an outer ring concentric with the inner ring, side rings connecting the concentric rings, an annular pneumatic cushioning device mounted upon the inner ring, shoes placed against the outer side of the cushioning device and having stems passing loosely through openings in the outer ring, cross bars secured to the outer ends of the stems, flexible connections between the outer ends of the cross bars and the outer flanges of the disks, pairs of guide rollers carried by the side rings and engaging the flexible connections, and a rim encircling the outer ring and connected thereto.

1,060,855. PLUMB-BOB. ELLIS E. PIPHER, Milton, Ohio. Filed Oct. 12, 1911. Serial No. 654,297. (Cl. 73—72.)



1. In an instrument of the class described, a bob, a casing within which the bob is removably housed, a counterweight removably fitted in the open end of the casing and serving as a closure therefor, and connection between the bob and counterweight.

2. In an instrument of the class described, a bob, a casing within which the bob is removably housed, a counterweight removably fitted within the open end of the casing and serving as a closure therefor, and a flexible connection between the bob and counterweight, the said counterweight being provided with a reduced neck in its portion fitting within the said end of the casing upon which neck the said flexible connection is adapted to be wound.

3. In an instrument of the class described, a casing, a cushion in the bottom of the casing, a bob removably fitted

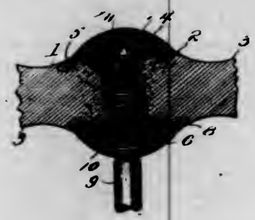
within the casing and having its point resting on the said cushion, a closure for the casing, and a flexible connection between the bob and closure adapted to be wound upon the said closure.

4. In an instrument of the class described, a bob, a counterweight therefor comprising a head formed with a recess, the said counterweight having a portion spanning the said recess and formed with a retrorse slot, and a flexible connection between the bob and counterweight adapted for engagement in the said slot and to seat at the inner end thereof, the said inner end of the slot being located at the vertical axis of the counterweight.

5. In an instrument of the class described, a bob, a counterweight therefor formed with a recess and having a portion spanning the recess and formed with a slot having its inner end located at the vertical axis of the counterweight, and a flexible connection between the bob and the counterweight adapted for engagement in the slot at the inner end thereof.

[Claim 6 not printed in the Gazette.]

1,060,856. HANDLE. MARION W. PITNER, Chicago, Ill. Filed June 29, 1912. Serial No. 706,683. (Cl. 230—27.)



1. The combination of a wooden handle having a bore, an inclosing sleeve, and a rod having a direct threaded engagement with a wall of the sleeve and the bore of the handle, the wall of said bore being expanded and compacted, whereby the threaded surfaces of the rod and handle are bound by the contractile tendency of the wall of the bore.

2. The combination with a handle, of an inclosing sleeve, and a rod having a threaded engagement with the base of the sleeve and extending through the handle and impinging against the top of the sleeve.

3. The combination with a handle, of a substantially spherical inclosing sleeve, and a rod extending through and having a threaded engagement with the handle and base of the sleeve and impinging against the top of the sleeve.

4. The combination with a sleeve having a tapered bore, of a handle having a tapered portion fitted in said bore, and a rod having a threaded engagement with the sleeve and inclosed portion of the handle.

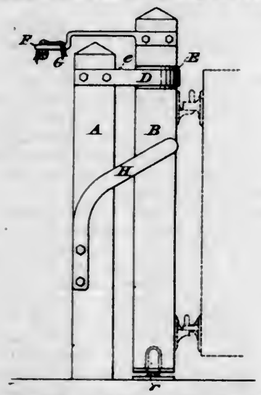
5. The combination of a wooden handle having a transverse bore, an inclosing sleeve provided with an opening in its base in line with the bore, and a rod having a threaded engagement with said bore and opening, the wall of the bore being expanded and compacted from an initial diameter less than that of the opening and rod and formed with threads cut by the threads of the rod on the insertion of the latter, whereby the threaded surfaces of the handle and rod are bound by the contractile tendency of the wall of the bore.

[Claims 6 to 12 not printed in the Gazette.]

1,060,857. GATE. ALBERT ORLANDO QUINBY, Fresno, Cal. Filed Jan. 26, 1911. Serial No. 604,753. (Cl. 39—14.)

1. The combination with a gate post mounted to rotate in a fixed axis, of a gate, and means connecting said gate and gate post constructed and arranged to permit said gate to swing on said post about an axis substantially parallel to and closely adjacent the axis of rotation of said post.

2. The combination with a fixed gate post, of a post mounted to rotate on a fixed axis adjacent said fixed post, a gate disconnected from said fixed post, means connecting said gate and rotatably mounted post constructed and arranged to permit said gate to swing on said post about



an axis substantially parallel to the axis of rotation of said post and to prevent swinging of said gate about any other axis, and means for rotating said last named post to release and open said gate.

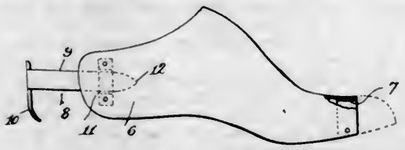
1,060,858. METAL SHEET-PILING. CHARLES H. QUIMBY, Jr., Mount Vernon, N. Y. Filed Sept. 8, 1911. Serial No. 648,393. (Cl. 61—52.)



1. A metal sheet piling composed of piles or sections having a curved web with like flanges at each of its vertical edges, one of the said flanges being a curved hook lateral to the web, the other said flange being of a T shape and alined with the web produced, said hook flanges and the near leg of the T flange forming a groove adapted to receive a like T flange of the adjoining pile.

2. A metal sheet piling composed of piles or sections having a web with like flanges at each of its vertical edges, one of the said flanges being a curved hook lateral to the web, the other said flange being of a T shape and alined with the web produced, said hook flange and the near leg of the T flange forming a groove adapted to receive a like T flange of the adjoining pile.

1,060,859. EXPANDING SHOE-FORM. WILLARD C. RICHARDSON, Saugus, Mass. Filed June 8, 1912. Serial No. 702,446. (Cl. 12—128.)



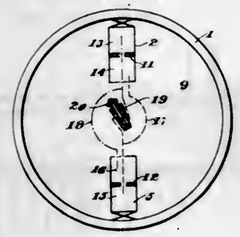
1. A shoe form, comprising an expansible body-portion having rearwardly extending integral wings, and an extension for engaging the heel and provided with integral arms slidably connected to said wings and adapted to expand and contract them during its backward and forward movement.

2. A shoe form comprising an expansible body portion, and a U shaped heel engaging means having its free ends slidably and directly connected thereto for positively expanding and contracting said body portion during its adjustment.

3. A shoe form, comprising an expansible body-portion having rearwardly extending integral wings and an extension for engaging the heel and having integral arms with pointed terminals slidably connected to said wings and adapted to expand and contract them during its backward and forward movement, said pointed terminals adapted to engage the inner surfaces of said wings to retain said extension in its adjusted positions.

4. A shoe form, comprising an expansible body-portion, having rearwardly extending integral wings, an extension for engaging the heel and having integral arms and means for slidably connecting said arms to the wings, said arms being provided with means at their free ends to engage said wings to retain said extension in its adjusted positions.

1,060,860. ELASTIC WHEEL. ALBERT SAUVERT, Paris, France. Filed Apr. 25, 1912. Serial No. 693,187. (Cl. 152—47.)



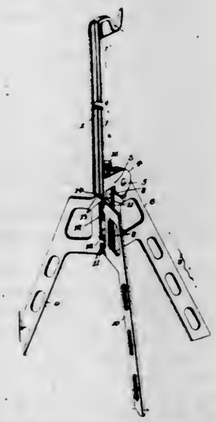
1. An elastic vehicle wheel comprising in combination with the felly and the hub, radially arranged cylinders closed at both ends pivotally fixed with the outer end to the felly, pistons in said cylinders dividing the same into two equal compartments, piston rods pivotally connected with the hub, tubes connecting the inner chamber of one piston with the outer chamber of the opposite piston and means for connecting said tubes with a common channel for the supply of air under pressure to the cylinder chambers, substantially as described and shown and for the purpose set forth.

2. An elastic vehicle wheel comprising in combination with the felly and the hub, radially arranged cylinders closed at both ends pivotally fixed with the outer end to the felly, pistons in said cylinders dividing the same into two equal compartments, piston rods pivotally connected with the hub, tubes connecting the inner chamber of one piston with the outer chamber of the opposite piston, a cock to which all the connecting tubes are connected and an air valve upon one end of the central boring of the plug of said cock, substantially as described and shown and for the purpose set forth.

3. An elastic vehicle wheel comprising in combination with the felly and the hub, radially arranged cylinders closed at both ends pivotally fixed with the outer end to the felly, pistons in said cylinders dividing the same into two equal compartments, piston rods pivotally connected with the hub having two air channels and a lubricating channel, the air channels communicating with the outer chamber of its cylinder and with the inner chamber of the opposite cylinder, tubes connecting the inner chamber of one piston with the outer chamber of the opposite piston and means for connecting said tubes with a common channel for the supply of air under pressure to the cylinders, substantially as described and shown and for the purpose set forth.

4. An elastic vehicle wheel comprising in combination with the felly and the hub, radially arranged cylinders closed at both ends pivotally fixed with the outer end to the felly, pistons in said cylinders dividing the same into two equal compartments, piston rods pivotally connected with the hub, tubes connecting the inner chamber of one piston with the outer chamber of the opposite piston, and means for connecting said tubes with a common channel for the supply of air under pressure to the cylinder chambers, a nut screwed upon the piston rod and a bell-shaped extension of said nut telescoped over the inner end of the cylinder, said nut serving to lock the piston with its cylinder, substantially as described and shown and for the purpose set forth.

1,060,861. SUPPORT. EDWARD D. N. SCHULTE, Troy, N. Y., assignor to W. & L. E. Gurley, a Corporation of New York. Filed Oct. 21, 1910. Serial No. 588,384. (Cl. 248—4.)



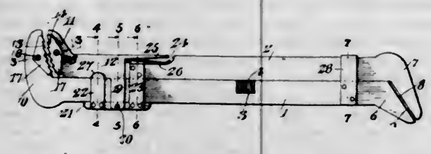
1. In a folding support the combination of a plurality of leg members; a hinge connecting said leg members, the axis of said hinge making approximately equal angles with the center lines of said leg members; a standard hinged to one leg member; a lug carried by the standard and adapted to enter into wedging engagement with the leg members to hold the latter extended when the standard is extended; and a screw engaging the standard and one of said leg members to clamp said standard in extended position.

2. The combination of a leg member; a pair of similar leg members hinged thereto, the axis of such hinging making approximately equal angles with the several leg members; a leg clamp movably mounted on the first leg member and having a beveled lug adapted to enter into wedging engagement with the other leg members to hold them in extended position; and a screw for forcing said clamp against said leg members.

3. In a support the combination of a pair of leg members having beveled ear portions; a third leg member having a limit stop to limit the movement of said first two leg members with reference to said third leg member; a hinge pin engaging said three leg members and making approximately equal angles with the center lines thereof; a standard hinged to said third leg member and having a beveled lug to engage said beveled ears to urge their respective leg members against said limit stop; and means for clamping the standard and its lug to the third leg member.

4. In a support the combination of a plurality of leg members; a hinge connecting said leg portions, the axis of said hinge making equal angles with said leg members; a standard hinged to one leg member; means carried by said standard to engage the leg members and hold the latter extended when the standard is extended; and clamping means for locking the standard in extended position.

1,060,862. WRENCH. JEFFERSON W. SEALE, Mineral Wells, Tex. Filed Nov. 23, 1912. Serial No. 733,126. (Cl. 81—97.)



1. A wrench comprising two elongated members of substantially equal length and slidable longitudinally one on the other, one member including a jaw in fixed relation thereto, and the other member including a jaw pivoted thereto and provided with a shank in normal alinement with the remainder of said second-named member, the pivot connection of the pivoted jaw to the second-named member being on the side of the first named member remote from said second-named member.

2. A wrench comprising two elongated members connected together and movable one on the other in the direction of the length of the wrench, one of said members having a jaw in fixed relation thereto and the other member having a jaw with a shank on the same side of the first-named member as said second-named member, the shank of the jaw, and the corresponding end of the second-named member being each provided with a member individual thereto and extending to the side of the first-named member remote from the second-named member and jaw carried thereby and there pivotally united one to the other.

3. A wrench comprising an elongated member having a jaw formed on one end thereof, another elongated member connected to the first named member and slidable lengthwise thereof, another jaw in operative relation to the first-named jaw and provided with a shank having pivotal connections to the second named member on the side of the first named member remote from the second named member, and a manipulating member extending from the shank of the movable jaw along the second named member in the direction of the length thereof and from the end of the shank remote from the jaw carried by it.

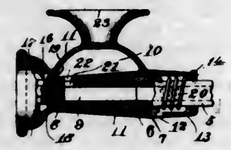
4. A wrench comprising an elongated member having a jaw formed on one end thereof, another elongated member connected to the first-named member and slidable lengthwise thereof, another jaw in operative relation to the first-named jaw and provided with a shank having pivotal connections to the second named member on the side of the first named member remote from the second named member, and a manipulating member extending from the shank of the movable jaw along the second named member in the direction of the length thereof and from the end of the shank remote from the jaw carried by it, the wrench being provided with a spring between the finger and the second named member and tending normally to hold the jaw end of the shank in engagement with the first named member.

5. A wrench comprising two elongated body members one of which is provided with a fixed jaw and the other of which is of shorter length than the first-named member, means for adjusting the two members lengthwise of the wrench, a jaw carried by the shorter one of the two members and pivoted thereto to move with relation to the jaw of the longer member in a direction from and toward said longer member, and means associated with the pivoted jaw and having a normal tendency to hold it against the said longer member.

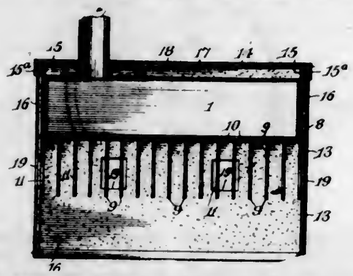
[Claims 6 to 8 not printed in the Gazette.]

1,060,863. SANITARY DRINKING-CUP. GEORGE C. STEARNS, Jr., Jackson, Mich. Filed Mar. 29, 1912. Serial No. 686,985. (Cl. 137—11.)

A drinking cup comprising an outwardly tapering plug provided with a central bore opening through its top and the inner end thereof, an inlet pipe threaded in the open end of the bore, a hollow body formed with a sleeve correspondingly shaped to and surrounding the said plug, an inturned annular shoulder formed on the sleeve and abutting against the inner end of the plug, a flared mouth formed on the body, the said sleeve being provided with a slot adapted to register with the opening in the top of the plug, a hand grip extending outwardly from the forward end of the sleeve, means engaged with the outer end of the plug and acting against the sleeve to sustain the sleeve fastened upon the plug, a cap surrounding the inlet pipe and abutting against the inner end of the sleeve, a coiled expansion spring surrounding the pipe and working against the cap and the inturned shoulder on the sleeve, and means locking the said cap upon the inlet pipe.



1,060,864. COOKER. LLOYD W. STEIN, Lancaster, Ohio. Filed Oct. 31, 1911. Serial No. 657,900. (Cl. 122—4.)



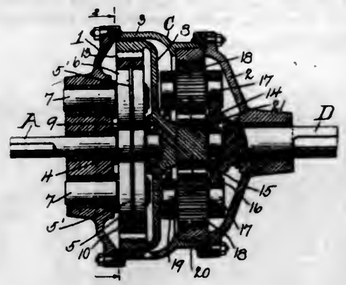
1. A water heater for cookers arranged exteriorly of the same and including a reservoir, pipes connected with the reservoir and supporting the same at an elevation, plates secured to and depending from the bottom of the reservoir and spaced apart to form intervening heat collecting spaces, said plates being also adapted to have the flame of a burner impinge against them and form heat conductors, and a hood supported at an elevation by the reservoir and having side walls extending below the plane of the plates, said hood being open at the bottom to permit a burner to be placed beneath the reservoir.

2. A water heater of the class described including a reservoir supported at an elevation and provided with heat collecting and conducting plates connected to and depending from the bottom of the reservoir and spaced apart to form intervening heat collecting spaces, and a protecting hood comprising vertical walls provided at their upper edges with horizontal flanges projecting from their inner faces and engaging the top of the reservoir to support the vertical walls, and a top spaced from the top of the reservoir and having depending marginal flanges embracing the upper edges of the vertical walls and retaining the latter in engagement with the reservoir, said hood being open at the bottom to permit a burner to be placed beneath the reservoir and forming a shield for the burner and confining the heat.

1,060,865. COMBINED FRICTION AND SPUR GEARING. AUGUST SUNDH, Hastings-upon-Hudson, N. Y. Filed Nov. 16, 1911. Serial No. 660,626. (Cl. 74—34.)

1. The combination of friction rollers, an annular member surrounding and holding said rollers in frictional contact, and a gear surrounding said annular member and having a driving connection therewith.

2. The combination of friction driving elements, an annular member surrounding and in frictional contact with said elements, and an annular gear surrounding and in driving engagemet with the said anular member.



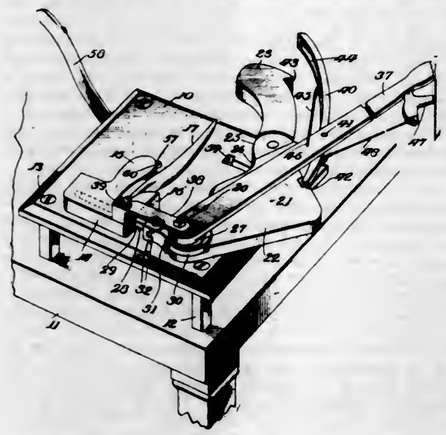
3. The combination of concentric intermeshing spur gear rings, friction gearing in driving connection with one of said rings, and gearing having a positive driving connection with the other of said rings.

4. The combination of concentric rings having intermeshing spur gear teeth, friction gearing within the inner ring, and gearing having a positive driving connection with the outer ring.

5. The combination of a friction driving roller, friction rollers in contact therewith, a ring surrounding said rollers and in frictional contact therewith and having spur gear teeth formed on its periphery, and spur gearing driven by said spur gear teeth.

[Claims 6 to 13 not printed in the Gazette.]

1,060,866. MACHINE FOR BENDING AND PUNCHING EYES IN HOOKS. XAVIER T. TARDIF, St. Agatha, Me. Filed June 29, 1912. Serial No. 706,764. (Cl. 29—7.)



1. A hook forming machine, including a form block, a compound jaw, actuating means for said jaw, a punch, and means operable by the movement of the jaw for moving the punch.

2. A hook forming machine, including a form block, a shaping jaw, means for actuating said jaw, a punch, and cam operated means actuated by the jaw for moving said punch.

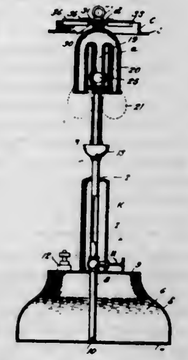
3. A hook forming machine, including a form block, a shaping jaw, means for actuating the jaw, a cam carried by the jaw, a punch, and an operative connection between the cam and punch.

4. A hook forming machine, including a form block, a shaping jaw, a punch, an operative connection between the jaw and punch, and a lever for actuating said jaw.

5. A hook forming machine, including a form block, a shaping jaw, a lever for actuating said jaw, a punch, and a pivot joint connection between the jaw and punch.

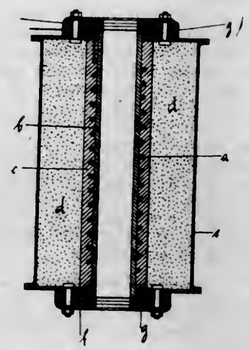
[Claims 6 to 40 not printed in the Gazette.]

1,060,867. VAPOR-BURNER. JESSE C. THOMPSON, Westfield, Mass. Filed Aug. 29, 1911. Serial No. 646,658. (Cl. 67—50.)



In a vapor burner, the combination with a generator, of a burner head detachably connected to the generator, said burner head comprising a casing interiorly formed to provide a central mixing chamber having a lateral opening adjacent its point of connection with the generator and gas passages disposed on opposite sides of said mixing chamber in depending spaced parallel relation thereto, and communicating therewith, a lug formed on the exterior of said mixing chamber directly above the lateral opening, an air conduit consisting of an elbow pivotally connected to the lug and disposing the former in registration with the lateral opening.

1,060,868. ELECTRIC-RESISTANCE FURNACE. LEO UBBELOHDE, Karlsruhe, Germany. Filed Dec. 22, 1911. Serial No. 667,358. (Cl. 219—36.)



1. In an electric furnace, the combination of a central tubular member said member consisting of a non-conducting substance, a spiral wire around said member, a layer of carbon surrounding the wire and the tubular member, a non-conducting member disposed between the tubular member and the layer of carbon; and a metal casing surrounding the layer of carbon.

2. In an electric furnace the combination of a central tubular member, said member consisting of a non-conducting substance, a spiral wire around said member, a layer of carbon surrounding the wire and the tubular member, a porous insulator between the said wire and the layer of carbon, the spiral wire being embedded in said porous insulator, and a metal casing surrounding the layer of carbon.

3. In an electric furnace, the combination of a central tubular member, said member consisting of a non-conducting substance, a spiral wire around said member, a leyer of carbon surrounding the wire and the tubular member, and a metal casing surrounding the layer of carbon, a porous insulator between the tubular member and the layer of carbon, the spiral wire being embedded in said porous insulator, and means for protecting the resistance wire and the porous insulator and tubular member from the action of the atmospheric air.

4. In an electric furnace the combination of a central tubular non-conducting member, a spiral wire around said member, a layer of carbon surrounding the wire and the tubular member, a porous insulating member disposed between the central tubular member, and the carbon layer consisting of a mixture of asbestos, kaolin, alumina, and water-glass, and a metal casing, surrounding the layer of carbon.

1,060,869. PROCESS FOR THE EXTRACTION OF TARTARIC SALTS FROM WASTE TARTROUS MATERIALS. GEORGES VIGNEAUX, Paris, France. Filed May 31, 1912. Serial No. 700,894. (Cl. 204—9.)

1. A process for the extraction of tartaric salts from waste tartrous materials in which the materials are treated with a dilute mineral acid, the solution obtained brought into contact with a metal which reacts to decompose the free acid of the solution, and the deposit of tartaric salts formed thereby removed by filtration or decantation.

2. A process for the extraction of tartaric salts from waste tartrous materials in which the materials are treated with a dilute mineral acid, the solution obtained brought in the hot into contact with a metal which reacts to decompose the free acid of the solution, and the deposit of tartaric salts formed thereby removed by filtration or decantation.

3. A process for the extraction of tartaric salts from waste tartrous materials in which the materials are treated with a dilute mineral acid, the solution obtained subjected to electrolysis using electrodes of a metal which reacts to decompose the free acid of the solution, and the deposit of tartaric salts formed thereby removed by filtration or decantation.

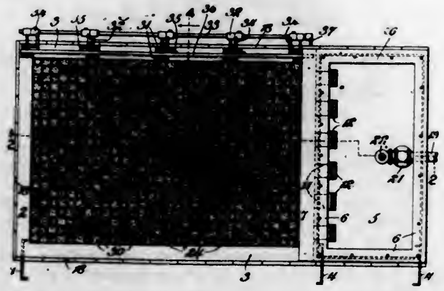
4. A process for the extraction of tartaric salts from waste tartrous materials in which the materials are treated with a dilute mineral acid, the solution obtained subjected to simultaneous heating and electrolysis using electrodes of a metal which reacts to decompose the free acid of the solution, and the deposit of tartaric salts formed thereby removed by filtration or decantation.

5. A process for the extraction of tartaric salts from low grade tartrous materials in which the materials are washed in the cold with a small quantity of acidulated water, the solution obtained brought into contact with a metal which reacts to decompose the free acid in the liquid, and the deposit of tartaric salt formed thereby removed by filtration or decantation.

1,060,870. FILTER PLANT. EDGAR CLARENCE WILEY, Lynchburg, Va. Filed Oct. 2, 1912. Serial No. 723,619. (Cl. 210—17.)

1. A filter bed having numerous upright containers for filtering material, a support for the containers having a relatively small aperture or hole therethrough for each container, and a well common to all the containers and communicating with each container through said relatively small aperture.

2. A filter bed having numerous upright containers for filtering material, a support for the containers having a relatively small aperture or hole therethrough for each container, and a well common to all the containers and communicating with each container through said relatively small aperture, said well extending to a greater height than the top of the filter bed and provided with means for extracting water therefrom or delivering water thereinto at will.



3. A filter system for use in running streams comprising a group of filter units each designed to contain filtering material, a support for the filter units sunk in the bed of the stream to a distance to bring the tops of the filter units substantially level with the bottom of the stream, ducts leading from the bottoms of the filter units, and a well rising to a greater height than the level of the stream and to the depth of the ducts and communicating therewith, said well being provided with controlling means for the ducts for placing one or more of said ducts in communication with the well at will.

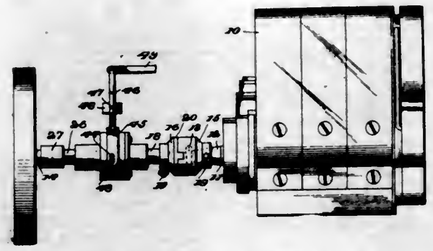
4. A filter system for use in running streams comprising a group of filter units each designed to contain filtering material, a support for the filter units sunk in the bed of the stream to a distance to bring the tops of the filter units substantially level with the bottom of the stream, ducts leading from the bottoms of the filter units, and a well rising to a greater height than the level of the stream and to the depth of the ducts and communicating therewith, said well being provided with controlling means for the ducts for placing one or more of said ducts in communication with the well at will, each filter unit having a single relatively small aperture for communication with a respective duct and the well being provided with means for removing filtered water therefrom or supplying water thereto from another source than the filter bed.

5. A filter plant for installation in running streams comprising a pit sunk in the bed of a stream with the surface of the pit substantially on a level with the bottom of the stream, a well at one end of the pit rising to a height greater than the level of the stream and communicating with the pit near the lower end thereof, a base or support within the pit and having chambers or channels extending to the well, sluice gates for controlling communication between the pit and the well by way of the channels or chambers, and filter units lodged in the pit to substantially the capacity thereof, each filter unit being adapted to contain filtering material and of a height to extend to the top of the pit to a point substantially coincident with the bottom of the stream.

[Claims 6 to 16 not printed in the Gazette.]

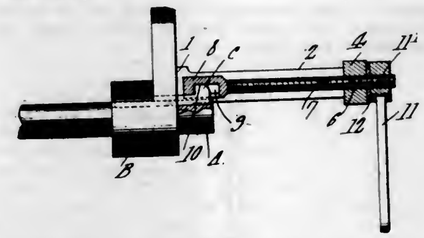
1,060,871. IGNITION-TIMING DEVICE FOR MAGNETOS. DENNIS M. WILSON, Muncie, Ind., assignor of one-half to Frederick S. Saunders, Muncie, Ind. Filed Apr. 21, 1911. Serial No. 622,558. (Cl. 123—149.)

In a device of the class described, coacting shafts arranged end to end and each having a stud extending laterally therefrom, a sleeve slidable over the contiguous portions of said shafts and provided with interior grooves engaging respectively over said studs, said grooves extending obliquely to the longitudinal plane of the shafts and reversely arranged, an annular rib carried by said sleeve, a collar mounted upon said sleeve and including an annular channel engaging over said rib, means for moving said collar longitudinally of the shafts to cause the sleeve to impart a partial rotation to one of said shafts relative to the other shaft, a clutch member connected to one of



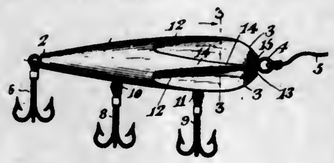
said shafts, another clutch member adapted to be coupled to the mechanism to be actuated, and a compensating member located between the clutch members and including oppositely directed clutch faces engaging both of said clutch members.

1,060,872. KEY-PULLER. JOSEPH O. WILSON, Chester, Pa. Filed May 16, 1911. Serial No. 627,589. (Cl. 29—86.1.)



A key-puller, comprising a yoke having two spaced terminals, the inner walls of which are palallel and the extreme ends of which are wider than the body portion, the yoke end being provided with a cylindrical bore centrally of the space between the terminals, a stem screw threaded in said bore, a washer surrounding the stem exteriorly of the yoke, a handled nut mounted upon the threaded stem beyond the washer, and a key-engaging head carried upon the other end of the threaded stem and within the space between the terminals of the yoke, said head having parallel sides contacting in parallel walls of the space between the terminals to prevent the head and stem from rotating when the handled nut is rotated, said head and stem adapted to have a sliding motion within the terminals, and said head having at one side thereof a key-engaging socket.

1,060,873. ARTIFICIAL BAIT. RICHARD T. WILSON, Hastings, Mich., assignor of one-half to Aben E. Johnson, Hastings, Mich. Filed Nov. 22, 1911. Serial No. 661,754. (Cl. 43—30.)

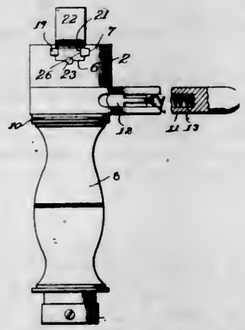


1. An artificial bait comprising a conical flotative body having formed in its surface a plurality of longitudinal flutes with their axes extending in a general direction parallel to the axis of the body, said flutes symmetrically spaced about the body and extending from the medial portion to and merging into the front face of the body and adapted to cause the latter to move in a zig-zag course when drawn through the water, and hooks carried by the body.

2. An artificial bait comprising a conical flotative body having a tapered tail portion and a blunt rounded head portion, said body having formed in its front face a plurality of longitudinal flutes with their axes extending in a general direction parallel to the axis of the body and lying within planes including said body axis, said flutes symmetrically spaced about the body and extending from the medial portion to and merging into the front face of the head portion, the flutes gradually widening and deepening toward the head and spaced apart by fillets of a width diminishing toward the head end of the body, which is caused to move in a zig-zag course when drawn through the water, and hooks carried by the body.

3. An artificial bait comprising a conical flotative body having a tapering tail portion and a blunt rounded head portion, said body having formed in its surface a plurality of longitudinal flutes with their axes extending in a general direction parallel to the axis of the body and lying substantially within planes including said body axis, said flutes symmetrically spaced about the body and extending from the medial portion toward and merging into the front face of the head portion, the flutes gradually widening toward the head and also deepening toward the head to form in section a reverse curve, said flutes being spaced apart by fillets of a width diminishing toward the head and losing themselves in the merging walls of the flutes, which cause the body to move in a zig-zag course when drawn through the water, and hooks suspended beneath the body along the line of one of the fillets.

1,060,874. RATCHET-WRENCH. WILLIAM WINKLE, Waitsburg, Wash. Filed May 13, 1912. Serial No. 697,021. (Cl. 81—128.)



1. A wrench comprising a tubuular member having a socket portion, guide members detachably mounted in the socket portion, jaws slidably mounted between the said guide members and provided at their inner faces with spiral grooves, and a member rotatably mounted in the tubular member and having a head provided upon its face with spiral grooves engaging the grooves in the jaws.

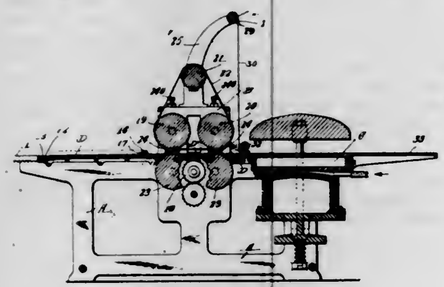
2. A wrench comprising a tubular member having an enlarged socket portion provided at its opposite sides with recesses, guide plates detachably mounted in the socket portion of the tubular member and having flanges which extend across said portion, jaws slidably mounted upon the flanges of said plates and having at their inner faces spiral grooves, and a shaft journaled in the tubular member and having a head which fits in the socket portion thereof, said head having upon its face a spiral groove which engages the grooves upon the jaws.

3. A wrench comprising a tubular member having an enlarged socket portion provided at its sides with recesses

and having grooves which communicate at their ends with the recesses, guide plates having flanges which fit in said grooves, said plates also having straight flanges which extend across the socket portion in parallel relation to each other, jaws slidably mounted upon the last-mentioned flanges and having spiral grooves, and a shaft journaled in the tubular member and having an enlarged head which fits in the socket portion thereof, said head having a spiral groove which engages the grooves upon the jaws.

4. A wrench comprising a tubular member having an enlarged socket portion, a grip journaled upon the tubular member, a handle journaled upon the tubular member and having a pawl adapted to engage the same, guide plates carried by the tubular member, jaws slidably mounted upon said plates and having spiral grooves, and a shaft journaled in the tubular member and having a head provided with a spiral groove which engages the grooves of the jaws.

1,060,875. COMBINED MOLDING-MACHINE AND STEAM-TABLE. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to The Autoplate Company of America, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 20, 1906. Serial No. 312,887. (Cl. 198—3.)



1. The combination of means for molding a stereotype matrix, a drying device adapted to receive the entire matrix at a time, means for feeding the molded articles from the molding means and depositing them in the drying device, and a table supported by the drying device on the side thereof opposite the molding means.

2. The combination of means for molding stereotype matrices on forms, means for receiving the entire matrix while in contact with the form holding it in stationary position and drying it as a whole, uniformly, and means connected with the molding means for automatically feeding the molded matrices therefrom to the drying means.

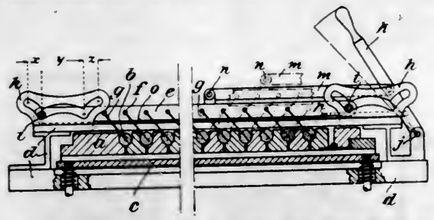
3. The combination of means for molding stereotype matrices on forms, means for receiving the entire matrix while in contact with the form and drying it, means connected with the molding means for automatically feeding the molded matrices therefrom to the drying means, and a table supported by the drying means for receiving the forms of molded articles.

4. The combination with means for molding matrices, of means located adjacent to the molding means and in position to receive matrices therefrom for drying matrices, means automatically operated from the molding means for feeding the molded matrices from the molding means to the drying means and out of the drying means, and a table mounted adjacent to the drying means for receiving the matrices therefrom.

5. The combination with means for molding matrices, of means for drying matrices located adjacent thereto, means for feeding the molded matrices from the molding means to the drying means, and means for supporting a blanket in position to move with each matrix to the drying means.

[Claims 6 to 34 not printed in the Gazette.]

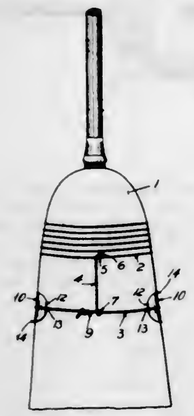
1,060,876. MEANS FOR MAKING CIGAR-FILLERS. FRIEDRICH ZAHN, Hanau, Germany. Filed Nov. 22, 1912. Serial No. 732,978. (Cl. 131—9.)



1. In a device for molds for making cigar-fillers, in combination, a bar movable along the mold, pins articulated to this bar and adapted to project into the excavations of the said mold, and means for displacing the said bar longitudinally of the mold while lowering and raising the bar, substantially as and for the purpose set forth.

2. In a device for molds for making cigar-fillers, in combination, a bar movable along the mold, pins articulated to this bar and adapted to project into the excavations of the said mold, means for displacing the said bar longitudinally of the mold while lowering and raising the bar, and means for guiding this bar, substantially as and for the purpose set forth.

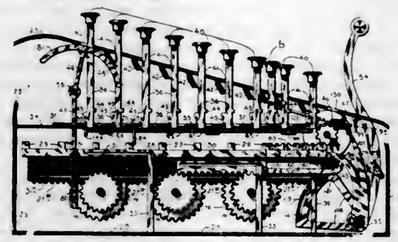
1,060,877. BROOM-BRIDLE. MARCELLIN C. ADAMS, Pittsburgh, Pa. Filed June 13, 1910. Serial No. 566,562. (Cl. 15—23.)



1. A bridle attachment for brooms comprising a single integral metal member arranged for vertical disposition against a side face of the broom, said member being provided at its upper end with an open loop or hook for engaging the broom stitching and at its lower end being bent laterally to one side and then to the other to cross itself and thereby form a loop for the attachment of one end of the bridle band, the crossing portion of the member lying close to the main portion and, in use of the bridle, between said main portion and the side face of the broom, said crossing portion being bent back upon itself to form an integral hook having a V-shaped throat for the adjustment and securement of the free end of the bridle band.

2. A bridle for brooms comprising a flexible band, means for holding the same against displacement on the broom brush, and shields comprising a pair of plain U-shaped sheet metal members arranged to embrace the edges of the broom, said members having their edges turned slightly outwardly, and said outwardly turned edges being provided with openings therethrough for the passage of said band.

1,060,878. CALCULATING-MACHINE. JOHN OTTO ALMEN, Spokane, Wash., assignor to Continental Computing Cash-Register Company, Spokane, Wash., a Corporation. Filed Apr. 13, 1912. Serial No. 690,581. (Cl. 235—82.)



1. In a calculating machine, the combination of a plurality of pairs of bars, paralleling each other across the machine and having racks attached thereto mounted on gears, the gears adapted to rotate independently of each other, the said bars adapted for longitudinal movement along with the racks over said gears, the length of such movements being gaged by the locking means effected by stops on the key bars engaging stops on the paralleling bars, a third system of bars paralleling the said sets of bars across the machine carrying racks mounted on gears, one side of said first mentioned bars together with its accompanying gears representing the minuend in a problem in subtraction, the other side thereof together with its accompanying gears representing the subtrahend and the third system of bars together with its accompanying gears representing the remainder, each of such bars being so connected up with disks having curved peripheral extensions divided into numbered registering spaces, that such disks will register before a face plate on the machine the minuend, subtrahend and remainder respectively when the bars are operated to meet the locking means with the respective numbers on the keys.

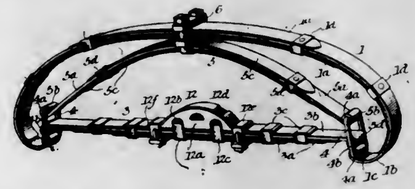
2. In a calculating machine, the combination of a plurality of pairs of bars, paralleling each other across the machine and having racks attached thereto mounted on gears, the gears adapted to rotate independently of each other, the said bars adapted for longitudinal movement along with the racks over said gears, the length of such movements being gaged by locking means effected by stops in the key bars engaging stops on the paralleling bars, a third system of bars paralleling the said sets of bars across the machine carrying racks mounted on gears, and means for changing the relative longitudinal positions of each bar with its corresponding rack.

3. In a calculating machine, the combination of a plurality of pairs of bars, paralleling each other across the machine and having racks attached thereto mounted on gears, the gears adapted to rotate independently of each other, the said bars adapted for longitudinal movement along with the racks over said gears, the length of such movements being gaged by locking means effected by stops in the key bars engaging stops on the paralleling bars, a third system of bars paralleling the said sets of bars across the machine carrying racks mounted on gears, and means for changing the relative longitudinal positions of each bar with its corresponding rack together with means for retaining said bars in relative neutral positions to register o in each the minuend, subtrahend and remainder systems on the numbered spaces of the registering disks, means for releasing the same and means for changing the relative longitudinal positions of each of the bars, and means for returning all bars to relative neutral positions.

4. In a calculating machine, the combination of a plurality of pairs of bars, paralleling each other across the machine and having racks attached thereto mounted on gears, the gears adapted to rotate independently of each other, the said bars adapted for longitudinal movement along with the racks over said gears, the length of such movements being gaged by locking means effected by stops on the key bars engaging stops on the paralleling bars, a third system of bars paralleling the said sets of bars across the machine carrying racks mounted on gears, one side of said first mentioned bars together with its accompanying gears representing the minuend in a problem in subtraction, the other side thereof together with its accompanying gears representing the subtrahend and the third system of bars together with its accompanying gears representing the remainder, each of such bars being so connected up with disks having curved peripheral extensions divided into numbered registering spaces, that such disks will register before a face plate on the machine the minuend, subtrahend and remainder respectively when the bars are operated to meet the locking means with the respective numbers on the keys, together with a shaft mounted transversely of the machine carrying wheels having peripheries divided into numbered registering spaces, such wheels carrying gears meshing with racks attached to the first above mentioned sets of bars in such a manner that with the movements of the bars in registering the minuend and subtrahend such wheels register before openings in the top of the casing, duplicates of the minuend and subtrahend of the first problem in subtraction worked in a given series and adds to the same the amount of each succeeding minuend and subtrahend and registers the same as aforesaid.

5. In a calculating machine, the combination of a plurality of pairs of bars, paralleling each other across the machine and having racks attached thereto mounted on gears, together with a third system of bars, paralleling the said sets of bars across the machine, carrying racks mounted on gears, one side of said sets of gears representing the minuend side of the machine mechanism and coöperating therewith, the other side thereof representing the subtrahend side thereof and coöperating therewith and the third set representing the remainder mechanism thereof and coöperating therewith, all of the gears so connected that the minuend and subtrahend gears may rotate together in the same direction while the remainder gears stand still, and when the subtrahend gear ceases to rotate and the minuend gears continue to rotate, that the remainder gears will rotate in an opposite direction to the full extend that the minuend gears rotate after the subtrahend gears cease to rotate.

1,060,879. SPRING STRUCTURE. WILLIAM E. ANDREW, Atlantic Highlands, N. J. Filed Feb. 21, 1912. Serial No. 679,193. (Cl. 21—50.)



1. A spring-structure for vehicles and the like, including in combination, a supporting-member, a spring-member overlying and disposed in movable relation to said supporting-member, and an intermediate resilient spring-controlling instrumentality connected to said spring-member and constantly under tension whereby recoil of the vehicle-body is controlled in any position it may assume and having a normal tendency to effect a downward pulling movement upon said spring-member, said controlling-instrumentality having a movement toward and away from said supporting-member.

2. A spring-structure for vehicles and the like, including in combination, a supporting-member, a spring-member disposed above and longitudinally of said supporting-

member and in substantially the same vertical plane therewith, and a resilient spring-controlling instrumentality connecting with said spring-member above said supporting-member and connecting also with said supporting-member and adapted to control the action of said spring-member and constantly under tension whereby it may have a normal tendency to effect a downward pulling movement upon said spring-member whereby recoil of the vehicle-body and upward movement of the same away from said supporting-member may be controlled in any position which said body may assume, said controlling instrumentality having a movement toward and away from said supporting-member in unison with said spring-member.

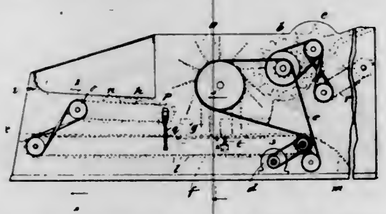
3. A vehicle-spring including in combination, a sustaining-instrumentality attached to the body of a vehicle, a spring-device extending longitudinally of said sustaining member, and in practically the same vertical plane therewith, and a constantly tensioned-spring-controlling member connected to and having a movement toward and away from, said sustaining-instrumentality and operating upon said spring-device for controlling its movement in one direction and whereby recoil of the vehicle-body is controlled in any position it may assume.

4. A vehicle-spring comprising a sustaining-instrumentality, a spring-device connecting therewith and comprising a plurality of elements, one at least of which is normally under tension, and a resilient spring-controlling device interposed between the aforementioned parts, at all times when in operative position under tension, and adapted to control the action of said spring-device and comprising a plurality of parts, one at least of which is normally under tension.

5. A vehicle-spring comprising two spring-devices connected at one end, and an interposed spring-controlling instrumentality comprising a plurality of parts, one at least of which is formed to have a reversed tension with respect to the part which it engages and adapted to produce in said controlling instrumentality a constantly tensioned condition, whereby its normal tendency is to effect a pulling action upon at least one of said two spring-devices.

[Claims 6 to 22 not printed in the Gazette.]

1,060,880. COTTON-EXTRACTING MACHINE. JOHN F. APPLEBY, Beaver county, Okla., assignor to Dixie Cotton Picker Company, Chicago, Ill., a Corporation of South Dakota. Filed Sept. 26, 1908. Serial No. 454,863. (Cl. 13—12.)



1. A cotton extracting machine having a cotton plant portion receiving channel, conveyer belt mechanism for effecting the passage of cotton plant portions through said channel, cotton extracting finger mechanism adapted to remove cotton from the plant portions passing through said channel and opposing a stretch of the belt, a wall of said channel consisting of a belt stretch, mechanism for pressing the belt stretch opposing the cotton extracting finger mechanism toward said cotton extracting finger mechanism, and additional plant portion feeding mechanism consisting of a belt coöperating with the aforesaid conveyer belt to promote the passage of the plant portions.

2. A cotton extracting machine having a cotton plant receiving channel that includes two opposed channel walls in its formation, cotton extracting mechanism including fingers that are projected through one of the walls of the channel toward the second, the first wall being slotted for this purpose, and mechanism for effecting travel of the second wall with respect to the first and for effecting passage of cotton plant portions through said channel.

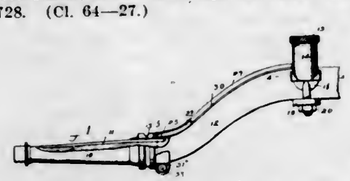
3. A cotton extracting machine having a cotton plant receiving channel that includes two opposed channel walls in its formation, cotton extracting mechanism including fingers that are projected through one of the walls of the channel toward the second and which are rotated about their individual axes when projected within the channel, the first wall being slotted for this purpose, means for yieldingly pressing the second wall toward the fingers and mechanism for effecting travel of the second wall with respect to the first and for effecting passage of cotton plant portions through said channel.

4. A cotton extracting machine having a cotton plant receiving channel that includes two opposed channel walls in its formation, cotton extracting mechanism including fingers that are projected through one of the walls of the channel toward the second and which are rotated about their individual axes when projected within the channel, the first wall being slotted for this purpose, means for yieldingly pressing the second wall toward the fingers and mechanism for effecting travel of the second wall with respect to the first and for effecting passage of cotton plant portions through said channel, the fingers moving bodily in the direction of travel of the traveling channel wall while projected within the channel.

5. A cotton extracting machine including cotton extracting mechanism having cotton extracting fingers, and means for presenting cotton plant portions to and carrying them by the cotton extracting mechanism, the cotton extracting mechanism including means whereby the fingers are rotated about their individual axes and are caused bodily to travel in the same direction together with the cotton plant portions in which the fingers are rotating.

[Claims 6 to 8 not printed in the Gazette.]

1,060,881. SPINDLE-OILER. CHARLES N. ARMFIELD, Guthrie Center, Iowa. Filed Apr. 23, 1912. Serial No. 692,728. (Cl. 64—27.)

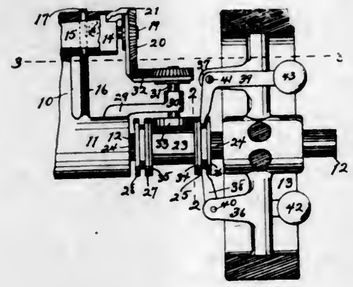


1. In a device of the class described, the combination of an axle having a spindle thereon, with a grease cup on said axle, with a tube leading from the cup to the spindle and a protecting shield for said tube, comprising a substantially rectangular plate of strong and somewhat flexible material, said plate having a longitudinal upwardly extending groove formed therein, to receive said tube and opposite laterally extending side wings formed on said protector at one end thereof designed to be extended around an axle, said plate being formed with longitudinal slits at its other end, spaced inwardly from the outer edges of said plate and located on opposite sides of said groove, the portion of said plate between said slits being cut away.

2. In a device of the class described, the combination of an axle having a groove therein with a shield for said groove comprising a substantially rectangular plate of strong and somewhat flexible material, said plate having a longitudinal upwardly extending groove formed therein, and opposite laterally extending side wings formed on said shield at one end thereof, said plate being formed with longitudinal slits at its other end, spaced inwardly from the outer edges of said plate and located on opposite sides of said groove, the portion of said plate between said slits being cut away, the tongues or extensions thereby formed being bent to form downwardly extending shoulders at the point where they are joined to said plate, and extending from said shoulders in a plane parallel with that in which the plate lies.

3. In a device of the class described, the combination of an axle having a groove therein with a shield for said groove comprising a substantially rectangular plate of strong and somewhat flexible material, said plate having a longitudinal upwardly extending groove formed therein, and opposite laterally extending side wings formed on said shield at one end thereof, said plate being formed with longitudinal slits at its other end, spaced inwardly from the outer edges of said plate and located on opposite sides of said groove, the portion of said plate between said slits being cut away, the tongues or extensions thereby formed being bent to form downwardly extending shoulders at the point where they are joined to said plate, and extending from said shoulders in a plane parallel with that in which the plate lies.

1,060,882. GOVERNOR FOR EXPLOSIVE-ENGINES. ROBERT B. BALLARD, Fort Dodge, Iowa. Filed Sept. 13, 1911. Serial No. 649,172. (Cl. 123—97.)



1. In a governor for explosive engines, a friction wheel adapted to be driven successively in opposite directions, a valve mounted for rotary oscillation, stops limiting oscillation of said valve in either direction, and mutilated gear connections between said friction wheel and rotary valve.

2. In an explosive engine having a crank case, cylinder, shaft and gas communication between said crank case and cylinder, the combination of a sleeve feathered to said shaft, centrifugal devices mounted on said shaft and adapted to shift said sleeve, a valve mounted in and controlling said gas communication, a friction wheel adapted to be driven successively in opposite directions by said sleeve, and mutilated gear operating connections between said friction wheel and valve.

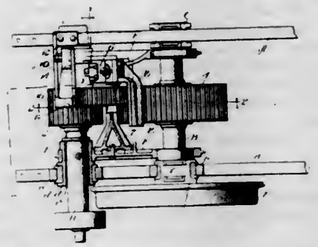
3. In an explosive engine having a crank case, cylinder, shaft and gas communication between said crank case and cylinder, the combination of a flanged sleeve feathered to said shaft, centrifugal devices mounted on said shaft and adapted to shift said sleeve, a rotary valve mounted in and controlling said gas communication, a friction wheel adapted to be oscillated by the flanges of said sleeve, mutilated gear connections between said friction wheel and rotary valve, and stops limiting rotation of said valve in each direction.

4. In an explosive engine having a crank case, cylinder, shaft and gas communication between said crank case and cylinder, the combination of a rotary valve mounted in and controlling said gas communication, a bevel gear fixed to said valve, a driven friction wheel, a bevel gear fixed to said friction wheel and meshing with said first bevel gear, and stops limiting rotation of said valve in each direction.

5. In an explosive engine having a crank case, cylinder, shaft, balance wheel and gas communication between said crank case and cylinder, a friction wheel adapted to be driven alternately in opposite directions, a rotary valve in and controlling said gas communication, and mutilated bevel gear connections between said friction wheel and rotary valve.

[Claim 6 not printed in the Gazette.]

1,060,883. ARTICULATED ENGINE. LORIN W. BARGER, Davenport, Iowa, assignor to Davenport Locomotive Works, Davenport, Iowa, a Corporation of Iowa. Filed Feb. 3, 1913. Serial No. 745,780. (Cl. 105—220.)



1. A locomotive-truck comprising suitable side-frames, drive-wheels and axle, a transverse crank-shaft the ends of which extend through and beyond said side-frames, gearing connecting said crank-shaft and axle, and means for resiliently supporting the crank-shaft and gears.

2. A locomotive-truck comprising suitable side-frames, drive-wheels and axle and cushioned bearings for said axle, a transverse crank-shaft the ends of which extend through and beyond said side-frames, gearing connecting said crank-shaft and axle, and means for resiliently supporting said crank-shaft and gears.

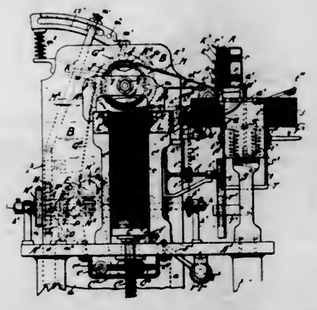
3. A locomotive-truck comprising drive-wheels and axle, journal-boxes therefor, side-frames having pedestals for said boxes, a crank-shaft, journal-boxes for said shaft capable of vibratory movement in said side-frames, gearing connecting crank-shaft and axle, and means for resiliently supporting said crank-shaft bearings and gears.

4. A locomotive-truck comprising suitable side-frames, drive-wheels and axle, a transverse crank-shaft the ends of which extend through and beyond said side-frames, gearing connecting said crank-shaft and axle, a transom connecting said side-frames, and means for resiliently supporting said crank-shaft and gears therefrom.

5. A locomotive-truck comprising suitable side-frames, drive-wheels and axle and cushioned bearings for said axle, a transverse crank-shaft the ends of which extend through and beyond said side-frames, gearing connecting said crank-shaft and axle, a transom connecting said side-frames, and means for resiliently supporting said crank-shaft and gears therefrom.

[Claims 6 to 19 not printed in the Gazette.]

1,060,884. COUNTING-MACHINE. ARTHUR VON BARTH, New York, N. Y. Filed Oct. 6, 1908. Serial No. 456,503. (Cl. 93—93.)



1. In a counting machine, a support adapted to receive and sustain a column of uncounted sheets, means adjacent to the top of said column whereby said sheets are adapted to be removed therefrom one at a time, a suction box adjacent to and below the top of said column whereby the removal of more than one sheet at a time

is prevented, and a counting mechanism actuated by said sheet removing device.

2. In a counting machine, a support adapted to receive and sustain a column of uncounted sheets, a suction device adjacent to the top of said column whereby said sheets are adapted to be removed therefrom one at a time, a suction box adjacent to and below the top of said column whereby the removal of more than one sheet at a time is prevented, and a counting mechanism actuated by said sheet removing device.

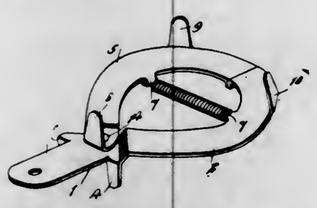
3. In a counting machine, a support adapted to receive and sustain a column of uncounted sheets, means adjacent to the top of said column whereby said sheets are adapted to be removed therefrom one at a time, a suction box adjacent to and below the top of said column whereby the removal of more than one sheet at a time is prevented, means constantly evacuating air from said suction box, and a counting mechanism actuated by said sheet removing device.

4. In a counting machine, a support adapted to receive and sustain a column of uncounted sheets, a suction device adjacent to the top of said column whereby said sheets are adapted to be removed therefrom one at a time, a suction box adjacent to and below the top of said column whereby the removal of more than one sheet at a time is prevented, means constantly evacuating air from said suction box, and a counting mechanism actuated by said sheet removing device.

5. A counting and segregating machine for currency bills or the like having a counting mechanism driven by, and assembled in combination with, the following mechanism; a hollow member adapted to be continuously driven, a support for supporting a quantity of uncounted objects with the foremost object in proximity to said hollow member, said member having a slot, and means for maintaining suction within said member whereby the suction may act upon the foremost object through such slot and such object be conveyed with said member from the said support, and a pair of auxiliary suction boxes acting substantially as described at opposite edges of uncounted objects to insure that none but the foremost be removed.

[Claims 6 to 8 not printed in the Gazette.]

1,060,885. OIL-CAN HOLDER. CHARLES W. BECK, Rockville Center, N. Y., assignor, by mesne assignments, to Michigan Motor Specialties Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 19, 1911. Serial No. 655,452. (Cl. 248—41.)

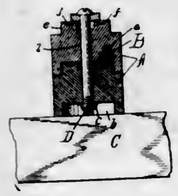


1. An oil can holder comprising a supporting lug, a pair of holding arms pivotally connected together and carrying upstanding holding lugs, the said arms being depressed at their pivotal points to depress the pivot below the upper surface of said arms and a spring connecting said arms together, and a stop carried by the holding lug and adapted to prevent the rotation of the said lug.

2. An oil can holder formed of sheet metal comprising a main holding arm and a supporting lug integral therewith, the said supporting lug being depressed and carrying a pair of depending stops, a swinging holding arm pivoted on the depressed part of the holding lug, the main portion of said swinging arm being in the same plane with the main holding arm, the two ends of said arms abutting together on a radial line diametrically opposite the pivot of the swinging arm, a spring connecting said two arms together, and upstanding lugs carried by said arm and adapted to engage an oil can.

3. An oil can holder comprising a supporting lug having an integral rigid horizontal can receiving and supporting arm, a corresponding can receiving and supporting arm pivoted to the rigid arm adjacent the supporting lug and lying in the same plane with the rigid arm, the pivoted arm being formed with an upstanding holding lug adjacent the pivot and with a similar holding lug near its free end, the rigid arm being also formed with an upstanding holding lug near its free end, both of said arms being formed with depending lugs near their outer ends, a spring connecting said lugs together and drawing the pivoted arm toward the rigid arm, the ends of the arms abutting together in their closed position.

1,060,886. INSULATOR. JOHN E. BICKNELL, Findlay, Ohio, assignor to The Findlay Electric Porcelain Company, Findlay, Ohio, a Corporation of Ohio. Filed Oct. 30, 1911. Serial No. 657,540. (Cl. 173—314.)



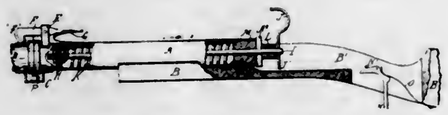
1. An insulator having a plurality of sections each of which has one end provided with a counter-sink and a transverse groove and its other end provided with a projection for fitting within the counter-sink of another section and coöperating with the groove thereof to clamp a wire therebetween.

2. An insulator having a plurality of duplicate sections having self-centering telescoping parts and a groove at the inner end of each section for coöperating with the telescoping part of the adjacent section to clamp a wire therebetween.

3. An insulator having a plurality of self-centering telescoping parts, each having a longitudinal bore therethrough for receiving a fastening member and having a recess and a transverse groove at one end and a projection at its other end for fitting into the recessed end of an adjoining block and coacting with the groove therein to clamp the wires.

4. An insulator having a plurality of duplicate sections, each having a fastener-receiving hole therethrough and a circular recess at one end concentric to said hole and a transverse groove at one side of said hole and intersecting a portion of such recess, and having at its opposite end an annular ridge concentric to said hole and adapted to fit within the recessed end of an abutting section and to coöperate with the groove thereof to clamp wires therebetween.

1,060,887. TOY GUN. JAMES ELBERT BIRDSALL, Philadelphia, Pa., assignor to Worthington E. Dotts, Philadelphia, Pa. Filed May 23, 1912. Serial No. 699,194. (Cl. 46—46.)



1. In a toy gun, in combination, a two piece barrel, a rod in said barrel, a piston fixed to said rod, a plug freely centered on said rod, a helical spring about said rod and attached to said plug, a cushion spring about said rod, a shoulder on said rod adapted to be engaged by said spring, a fixed guide piece adapted to steady said rod between said plug and said cushion spring.

2. In a toy gun, in combination, a two piece barrel adapted to be separated and rejoined, a rod in said barrel, a piston fixed on said rod, a longitudinally movable plug centered on said rod, a helical spring attached to said plug and normally extending to and touching said piston, a guide piece adapted to guide said rod and to limit the play of said plug, a hammer on said rod, a cushion spring about said rod between said guide piece and said hammer.

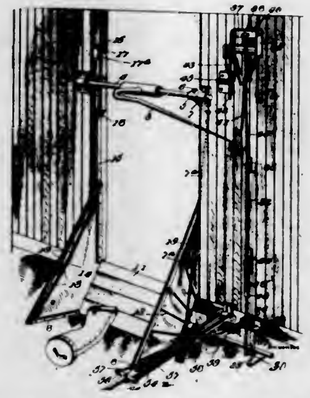
3. In a toy gun, in combination, a two-part barrel, one or more compressible gaskets interposed between said two parts, a powder coated film, means for separating and rejoining said parts so as to permit of the insertion and securing of said film between the same, a rod within said barrel, a piston fixed on said rod, a longitudinally movable member freely centered on said rod, a helical expansion spring between said piston and said member attached to said member, means for retracting said piston and rod and for holding and releasing same, substantially as described.

4. In a toy gun, the combination of a barrel, a powder-shedding film fixed across said barrel adjacent to one end, a head at the other end of said barrel, a rod penetrating said head and extending within said barrel, a stop at the outer end of said rod, a piston fixed at the inner end thereof, a longitudinally movable element within said barrel, a helical spring attached to said movable element and normally touching said piston, means for retracting, holding and releasing said rod substantially as described.

5. In a toy gun, in combination, a barrel provided with a film holder, a film therein, an air compression piston in said barrel, means to actuate said piston and means to jolt said piston at time of highest air compression.

[Claim 6 not printed in the Gazette.]

1,060,888. MAIL-HANDLING APPARATUS. NEWTON K. BOWMAN, North Lawrence, Ohio. Filed July 11, 1910, Serial No. 571,534. Renewed Oct. 3, 1912. Serial No. 723,814. (Cl. 104—261.)



1. Mail handling mechanism, including a collapsible bag discharging basket, means for automatically extending the basket to discharge a bag therefrom, and means for automatically collapsing the basket again and returning it to its normal position after the discharge of the bag.

2. Mail handling mechanism, including a collapsible bag discharging basket, and automatic means for extending and tipping said basket.

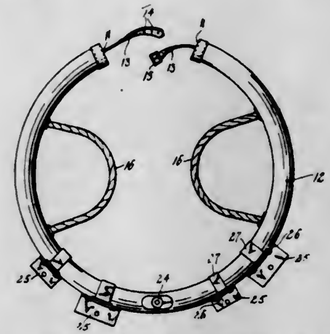
3. Mail handling mechanism including a collapsible bag discharging basket, and means for simultaneously distending and tipping said basket to discharge a bag therefrom.

4. Mail handling mechanism including a collapsible bag discharging basket arranged to be extended within the doorway of a car to receive a bag, and means for automatically tipping said basket out of the door-way of the car and for subsequently collapsing the basket into the door-way.

5. Mail handling mechanism including a bag discharging apparatus, fluid pressure means for operating said bag discharging apparatus, and means arranged along a track adapted to start the fluid pressure means in operation for first actuating the bag discharging apparatus and for subsequently returning the same to its normal inoperative position.

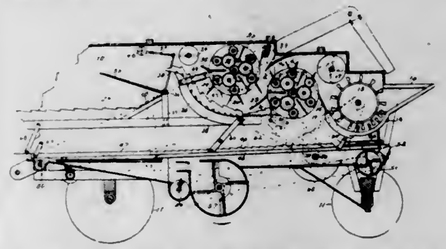
[Claims 6 to 17 not printed in the Gazette.]

1,060,889. LIFE-PRESERVER. KARL BRAUER, Lyndhurst, N. J. Filed Dec. 6, 1912. Serial No. 735,257. (Cl. 9—17.)



A life preserver comprising a plurality of inflatable tubes arranged on top of one another and provided with closed ends, a casing of flexible water-proof material covering said tubes, means for separably securing together the ends of said casing, a valve mechanism common to all of said tubes through which the later may be inflated, said valve mechanism affording means through which all of said tubes communicate with each other, and a plurality of receptacles shiftably mounted on said casing, said receptacles being fixed in position by the pressure of the fully inflated tubes.

1,060,890. THRESHING-MACHINE. WILLIAM W. BROWER, Olds, Alberta, Canada, assignor, by mesne assignments, to The Sattley Stacker Company, Indianapolis, Ind., a Corporation of Maine. Filed Feb. 1, 1908. Serial No. 413,859. (Cl. 130—22.)



1. The combination, in a threshing machine, of threshing means, rotary separating devices, straw guiding means passing around a portion of each of said separators, a reciprocating rack located in rear of the threshing means, strippers mounted on the forward end of said reciprocating rack adapted to pass between the straw guide members of the forward rotary separator, and an oscillatory rack in the rear of said separators.

2. The combination, in a threshing machine, of threshing means, rotary separating devices, straw guiding means passing around a portion of each of said separators, a reciprocating rack located in rear of the threshing means, strippers adapted to pass between the straw guide members of the forward rotary separator, an oscillatory rack in the rear of said separators, and an agitator in the rear of said separators for intercepting and separating material delivered from said rack.

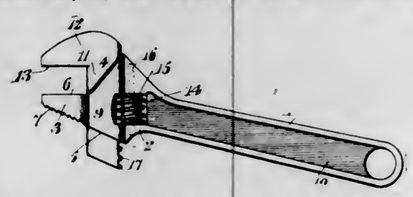
3. The combination, in a threshing machine, of threshing means, rotary separating devices, straw guiding means passing around a portion of each of said separators, a reciprocating straw rack located in rear of the threshing means, strippers at the forward end of said rack adapted to pass between the straw guide members of the forward rotary separator, and an oscillating rack mounted upon said reciprocating rack in the rear of said strippers.

4. In a threshing machine, a reciprocating straw rack, strippers thereon, an oscillating rack pivotally connected to said reciprocating rack, a grain pan beneath said elements, a grain chute associated with said grain pan, means for pivotally connecting said reciprocating rack and said grain pan, and means for imparting motion to said reciprocating rack whereby said grain pan is given reciprocating action.

5. The combination, in a threshing machine, of the threshing cylinder, a concave therefor, a toothed rotary separator in rear of said cylinder, means for stripping said cylinder and directing material toward said separator, straw guiding means about said separator through which the teeth thereof project and move, a toothed rotary separator in rear of said first mentioned rotary separator, straw guiding means around said rear separator through which the teeth thereof project and move, and means beneath said rear rotary separator for receiving and retaining the moving material in position to be separated by the teeth of said rear rotary separator.

[Claims 6 to 8 not printed in the Gazette.]

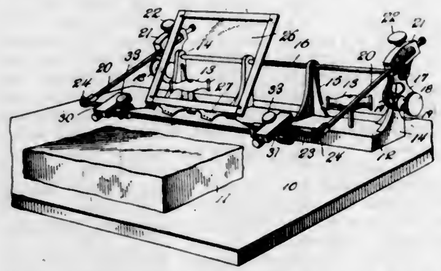
1,060,891. WRENCH. ADDISON B. CARLL, Boothwyn, Pa. Filed July 16, 1912. Serial No. 709,767. (Cl. 81—165.)



A wrench terminating at one end in a fixed jaw extending in the same general direction as the handle of the wrench and provided with a movable jaw having a shank in laterally traversing relation to the wrench and to the fixed jaw, the fixed jaw having oppositely disposed active edges and the movable jaw being insertible into and removable transversely of the wrench from either side to bring the movable jaw into operative relation to either active edge of the fixed jaw, at will, the movable jaw having a laterally extending bearing for its rear edge in the body of the wrench and said rear edge being toothed, and a nut mounted in engagement with the teeth of the movable jaw substantially intermediate of the rearward projection of the base of the fixed jaw faces perpendicular to said base, the fixed jaw having one active edge perpendicular to the transversely elongated bearing and approximately intermediate thereof, and the other active edge inclined toward the corresponding end of the laterally elongated bearing.

1,060,892. FILM APPARATUS. BENJAMIN DAY, Summit, N. J., assignor to Ben. Day, Inc., a Corporation of New Jersey. Filed Mar. 28, 1912. Serial No. 686,750. (Cl. 101—162.)

1. Micrometric apparatus for pivotally holding and micrometrically adjusting a printing film frame, comprising, in combination, a pintle holder, a pintle slidable endwise in said pintle holder, one end of said pintle being screw-threaded, a micrometric screw-threaded sleeve for adjusting said pintle longitudinally, a one piece removable screw-threaded centralizing bearing in said pintle holder encircling said pintle, and a fixed screw-threaded socket for circularly compressing said bearing to clamp the pintle.



2. Micrometric apparatus for pivotally holding and micrometrically adjusting a printing film frame, comprising, in combination, a pintle holder having an internally-threaded and tapered socket, a slotted centralizing bearing with external screw threads engaged in and adapted to be compressed by said socket, a handle on said bearing, a pintle slidable and clampable in said bearing, and micrometric means for adjusting said pintle longitudinally.

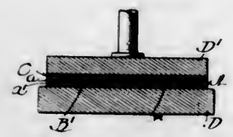
3. Micrometric apparatus for pivotally holding and micrometrically adjusting a printing film frame, comprising, in combination, a pintle holder having a socket with a threaded outer portion and a plain tapered inner portion, a centralizing bearing engaged in said socket, having a head or collar at its outer end, a longitudinally slotted and externally-threaded sleeve portion, an annular groove at the junction of said sleeve portion with the head, and a rounded end coöperating with said tapered portion of the socket, a pintle slidable and clampable in said bearing, and micrometric means for adjusting said pintle longitudinally.

4. In a micrometric apparatus for holding and adjusting printing film frames, in combination with a base and a pintle, mechanism for micrometrically adjusting said pintle relatively to the base comprising a screw-threaded shaft and a nut member thereon, and means acting with substantially uniform force to take up back-lash between said screw-threaded shaft and nut member.

5. In a micrometric apparatus for holding and adjusting printing film frames, in combination with a base and a pintle, mechanism for micrometrically adjusting said pintle relatively to the base comprising a screw-threaded shaft and a nut member thereon, a second nut member on the shaft, and a spring for taking up back-lash interposed between said nut members.

[Claims 6 to 23 not printed in the Gazette.]

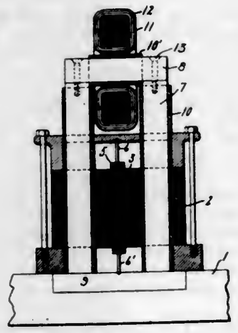
1,060,893. METHOD OF PRODUCING PRINTING-SURFACES. SAMUEL E. DITTMAN, New York, N. Y. Filed May 20, 1912. Serial No. 698,477. (Cl. 101—178.)



1. The method of preparing the printing surface of metal printing plates, which consists in preparing an overlay of paper, or like thin, flexible material, pressing said overlay against a sheet of plastic material capable of being or becoming hardened, when said material is in a soft or yielding condition, to form a hard or unyielding matrix or reverse overlay, applying the said reverse overlay to the printing face of the plate, and a corresponding overlay of thin, flexible material to the rear face of said plate, and then subjecting the plate and the overlays to pressure between flat surfaces.

2. The method of preparing the printing surface of metal printing plates, which consists in preparing an overlay of paper, or like thin, flexible material, pressing said overlay against a sheet of plastic material capable of being or becoming hardened, when said material is in a soft or yielding condition, to form a hard or unyielding matrix or reverse overlay, applying the said reverse overlay to the printing face of the plate, and a corresponding overlay of thin flexible material to the rear face of said plate, subjecting the plate and overlays to pressure between flat surfaces, removing the reverse overlay or matrix, and leaving the said overlay of thin flexible material in place against the rear face of the plate to form a backing for said plate in the use of the same in printing, or in molding duplicates.

1,060,894. DYNAMOMETER-WATTMETER. MICHAEL DOLIVO-DOBROWOLSKY, Wilmersdorf, Germany, assignor to General Electric Company, a Corporation of New York. Filed Aug. 18, 1910. Serial No. 577,862. (Cl. 171—95.)



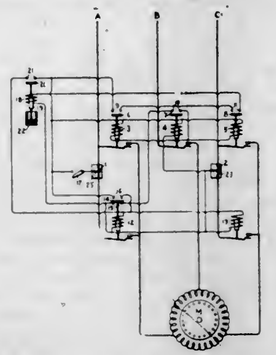
1. An electro dynamometer wattmeter comprising in combination a movable voltage coil, a stationary short circuited current coil in inductive relation therewith, a magnetic core surrounding a portion of the current coil, a third coil in inductive relation with the core and the current coil, and means permitting the removal of the core and the third coil from the current coil.

2. An electro dynamometer comprising in combination two concentric cores of magnetic material spaced apart, a movable coil passing between the cores, a stationary short circuited coil in inductive relation to the movable coil and the cores, and a third coil in inductive relation to the short circuited coil.

3. An electro dynamometer wattmeter comprising in combination two concentric cores of magnetic material spaced apart, a voltage coil movable between the cores, a stationary current coil comprising a single short circuited turn in inductive relation to the cores and the voltage coil, a magnetic core surrounding a portion of the current coil in inductive relation thereto, and a third coil in inductive relation with said core and the current coil.

4. An electro dynamometer wattmeter comprising in combination two concentric cores composed of magnetic material of high electric resistance spaced apart, a voltage coil movable between the cores, a stationary current coil comprising a single short circuited turn in inductive relation to the cores and the voltage coil, a core surrounding a portion of the current coil, a third coil surrounding said core in inductive relation to it and the current coil and means permitting the removal of said core and coil from the current coil.

1,060,895. MOTOR STARTING AND PROTECTIVE DEVICE. GEORGE T. EAGAR, Ballston Spa, and CHARLES H. WILLIAMS, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed July 9, 1910. Serial No. 571,124. (Cl. 172—289.)

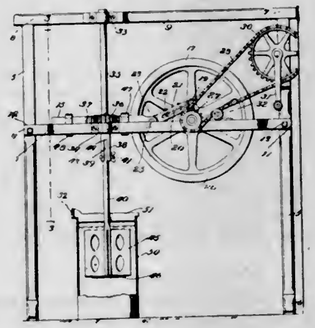


1. The combination with a three phase supply circuit, of an electric motor, a fuse for each of two phases of said circuit, a plurality of electromagnetic switches for first connecting the motor directly to the supply circuit and then connecting the motor to the supply circuit through the fuses after a predetermined interval, and connections whereby the opening of one fuse opens the phase of the circuit containing the other fuse.

2. The combination with a three phase supply circuit, of an electric motor, a fuse for each of two phases of said circuit, a plurality of electromagnetic switches for first connecting the motor directly to the supply circuit and then connecting the motor to the supply circuit through the fuses after a predetermined interval, and connections whereby the opening of a fuse in one phase opens the circuit of one of the other phases.

3. The combination with a polyphase supply circuit, an electric motor, a plurality of fuses for certain of the phases of said circuit, a plurality of electromagnetic switches for first connecting the motor directly to the supply circuit and then connecting the motor to the supply circuit through fuses after a predetermined interval, and connections whereby the opening of a fuse in one phase opens the circuit of another phase.

1,060,896. COMBINED CHURN AND WASHER. JOHN D. ELDER, Watisboro, and POMPEY LAFFOON, Oral Oaks, Va. Filed Sept. 13, 1912. Serial No. 720,296. (Cl. 31—17.)



1. A device of the class described including a main frame comprising spaced uprights having seating recesses formed therein, an auxiliary frame formed of

spaced longitudinal bars having their opposite ends seated in the recesses in the uprights, a rack mounted for reciprocation between the bars of the auxiliary frame, a vertical shaft journaled on the main frame and one of the bars of the auxiliary frame, a pinion carried by the vertical shaft, an agitator carried by the vertical shaft, and means operatively connected with the rack for reciprocating the latter, thereby to oscillate the dasher.

2. A device of the class described including a main frame formed of spaced uprights connected by a top bar, said uprights being provided with recesses, an auxiliary frame formed of spaced longitudinal bars having their opposite ends seated in the recesses in the uprights, bearings secured to the top bar and one of the longitudinal bars of the auxiliary frame, respectively, a rack bar mounted for reciprocation between the longitudinal bars of the auxiliary frame, a vertical shaft journaled in said bearings, a pinion carried by the vertical shaft and engaging the rack bar, an agitator depending from the vertical shaft, a crank shaft operatively connected with the rack bar, a fly wheel secured to one end of the crank shaft, a sprocket wheel secured to the other end of said crank shaft, a relatively large sprocket wheel mounted on one of the uprights, a sprocket chain extending over said sprocket wheels, and a crank secured to said large sprocket wheel.

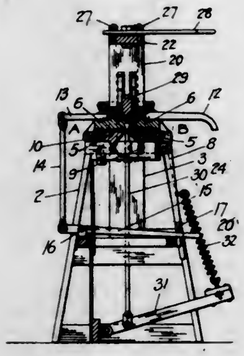
3. A device of the class described including a main frame, an auxiliary frame detachably secured to the main frame and including spaced longitudinal bars, keepers secured to the upper faces of said bars, transverse bars secured to the lower faces thereof and provided with spacing blocks extending between said bars, a rack mounted for reciprocation between the longitudinal bars and resting on the spacing blocks, a vertical shaft having a pinion meshing with the rack, an agitator detachably secured to the vertical shaft, and means for reciprocating the rack, thereby to oscillate the agitator.

4. A device of the class described including a main frame, an auxiliary frame detachably secured to the main frame and including spaced longitudinally disposed bars, a rack mounted for reciprocation in a horizontal plane between said bars, a crank shaft journaled on the bars, a fly wheel carried by one end of the shaft, a relatively small sprocket wheel secured to the other end of the shaft, the inner walls of the longitudinal bars at the crank shaft being cut-away, a vertical shaft journaled in the main frame and auxiliary frame, respectively, and provided with a pinion meshing with the teeth on the rack, an agitator carried by the vertical shaft, a relatively large sprocket wheel mounted on the main frame, an idler spaced from the small sprocket wheel, a pitman forming a connection between the crank shaft and rack, and a sprocket chain passing over the idler and engaging said sprocket chain.

5. A device of the class described including a knock down main frame formed of spaced uprights having their upper ends provided with tenons, a top bar forming a part of the main frame and provided with mortises for the reception of said tenons, said uprights having their opposite sides provided with recesses, an auxiliary frame detachably secured to the main frame and formed of spaced longitudinal bars having their ends reduced and fitting in said recesses, fastening devices extending through the reduced ends of the longitudinal bars and engaging the uprights, a rack mounted for reciprocation in a horizontal plane between the longitudinal bars of the auxiliary frame, a vertical shaft journaled on the main and auxiliary frames, respectively, and provided with a pinion meshing with the rack, an agitator carried by the vertical shaft, and means for reciprocating the rack.

1,060,897. WEATHER-STRIP-FORMING MACHINE. CARL ENGDAHL, Gunnison, and THEODORE MATSON, Denver, Colo.; said Engdahl assignor to said Matson. Filed July 31, 1912. Serial No. 712,585. (Cl. 153—13.)

1. A machine of the class described comprising two normally spaced clamping elements mounted to be closed together, and a plunger movable between them, each of the said elements comprising a pair of hinged jaws, means for moving one jaw of each pair with relation to the other, and means for locking the jaws of the two pairs in their clamping position.



2. A machine of the class described comprising two normally spaced clamping-elements mounted to be closed together, and a plunger movable between them, each of the said elements comprising a pair of hinged jaws, means for moving a jaw of each pair with relation to the other, and stops connected with the two clamping elements to determine the position of a strip of metal placed between the jaws thereof.

3. A machine of the class described comprising two normally spaced clamping elements mounted to be closed together, and a plunger movable between them, each of the said elements comprising a pair of hinged jaws, means for moving a jaw of each pair with relation to the other, and stops connected with the two clamping elements to determine the position of a strip of metal placed between the jaws thereof, one of said stops being adjustable with relation to an edge of the element with which it is connected.

4. A machine of the class described comprising two normally spaced clamping elements mounted to be closed together, and a plunger movable between them, each of the said elements comprising a pair of hinged jaws, means for moving a jaw of each pair with relation to the other, the jaws of one of said elements having in their inner surfaces a plurality of parallel grooves, and a stop adapted to be inserted in any one of said grooves to determine the position of a strip of metal placed between said jaws.

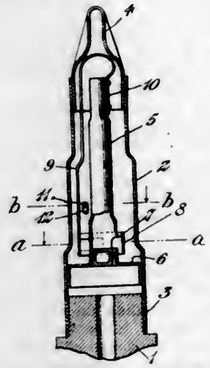
5. A machine of the class described comprising a supporting structure, a pair of normally spaced clamping elements mounted thereon to be closed together, each clamping element comprising two hinged jaws placed one upon the other, a plunger movable between said elements, handles on the upper jaw of one of said elements to move the same about its hinges, and a lever connected with a jaw of the other element for moving it about its hinges.

[Claims 6 to 9 not printed in the Gazette.]

1,060,898. SIGNALING APPARATUS. HARRIS EPSTEIN, Brooklyn, N. Y. Filed Jan. 26, 1911. Serial No. 604,709. (Cl. 116—1.)

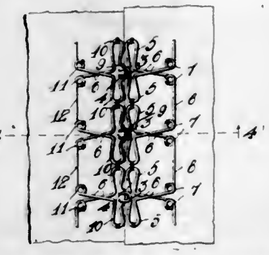
1. A device of the character described comprising a pillar having an alarm device, a spring carried by the pillar for controlling the alarm device, said spring being capable of expansion by the action of heat to cause the alarm device to become inoperative, and manually operated means engageable with the spring to cause the alarm device to become inoperative.

2. A device of the character described comprising a pillar having a signaling device, a spring for controlling the signaling device, a cam rotatably held by the pillar to contact with the spring to impart movement thereto in one direction and means for rotating the cam in the opposite direction.



3. A device of the character described comprising a pillar having a signaling device, a spring for controlling the operation of the signaling device, a cam rotatably carried by the pillar engageable with the spring to impart movement thereto in one direction, and automatic means for imparting movement to the cam in the opposite direction.

1,060,899. HOOK-AND-EYE FASTENING. MINNA FROESÉ, New York, N. Y. Filed Aug. 29, 1910. Serial No. 579,479. (Cl. 24—204.)



A garment fastener comprising continuous metallic flexible binding strips, each of which is adapted to be secured to the edges of the garment to be connected, whereby said edges are flexibly and uniformly strengthened, said strips consisting of a plurality of loops arranged in parallel relation to one another and secured to the garment adjacent to the edges thereof, connecting crossing bars forming a continuation of the loops and provided with eyes for further securing the strips to the garment beyond the edges thereof, the eyes of one section being united to the eyes of the adjacent section, the medial portion of the loops of said strips opposite the crossing bars thereof being constructed for interlocking engagement.

1,060,900. CARD GAME. JAMES JOSEPH HOBBS, Mathis, Tex. Filed July 12, 1912. Serial No. 709,099. (Cl. 46—25.)

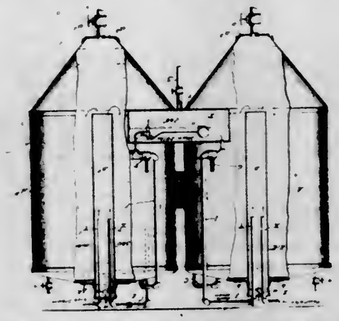
1. A deck of cards comprising a plurality of books, the cards of each book being distinguished from the cards of the other books by the picture of an object peculiar to one book only, the name of the object being inscribed on the card, the cards of each book being numbered serially, and all of the cards being numbered serially, thereby to ascribe gradated values to the cards of each book, and to ascribe gradated values to the books; and an odd card bearing a picture and a title different from those of the other cards.

2. A deck of cards comprising a plurality of books, the cards of each book being distinguished from the cards of the other books by the picture of an object peculiar to one book only, the name of the object being inscribed on each card, the cards of each book being numbered serially, and all of the cards being numbered serially, thereby to ascribe



gradated values to the cards of each book, and to ascribe gradated values to the several books, each of the cards being provided in its corners with the names and titles of objects different from those which characterize the books; and an odd card bearing a distinctive picture and title.

1,060,901. PROCESS FOR THERMAL WATER PURIFICATION. HORACE F. HODGES, Philadelphia, Pa. Filed June 25, 1912. Serial No. 705,714. (Cl. 210—1.)



1. The process of continuously purifying water by thermal precipitation, which consists in elevating its temperature within a central zone of limited cross section, automatically venting the gases from the top of this limited zone, continuously moving the water first downwardly in this limited zone and then upwardly in a surrounding zone of larger cross section to allow time and sufficient quiesence for subsidence of the precipitate and removing the precipitated sediment from the bottom of both zones.

2. The process of continuously purifying water by thermal precipitation, which consists in introducing steam directly into a central zone of water of limited cross section, automatically venting the gases from the top of this limited zone, continuously moving the water first downwardly in this limited zone and then upwardly in a surrounding zone of larger cross section to allow time and sufficient quiesence for subsidence of the precipitate, and removing the precipitated sediment from the bottom of both zones.

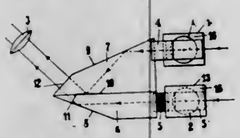
3. A thermal water purifying process, comprising the treatment of water by heat in two stages of temperature and pressure, the first stage being a relatively low one sufficient to precipitate the carbonates, and the second stage being a higher one to precipitate the sulfates, then reducing automatically in continuous operation the temperature and pressure by evaporation within a closed chamber.

4. A thermal water purifying process, comprising the treatment of the water by steam in two stages of temperature and pressure, the first stage of temperature and pressure, the first stage being a relatively low one sufficient to precipitate the carbonates and the second stage being a higher one as to temperature and pressure to precipitate the sulfates, then reducing automatically the temperature and pressure, drawing off the purified water and returning the surplus steam to the treatment of the water in the first stage.

5. A thermal water purifying process, comprising the treatment of the water by steam in two stages of temperature and pressure, the first stage being a relatively low one sufficient to precipitate the carbonates, and the second stage being a higher one as to temperature and pressure to precipitate the sulfates, drawing off automatically the liberated gases, then reducing automatically the temperature and pressure of the second stage, drawing off the purified water and returning the surplus steam to the treatment of the water in the first stage.

[Claims 6 and 7 not printed in the Gazette.]

1,060,902. BASE-LINE TELEMETER. CHRISTIAN VON HOFE, Wilmersdorf, near Berlin, Germany, assignor to The Firm of Optische Anstalt C. P. Goerz Aktiengesellschaft, Friedenau, near Berlin, Germany. Filed Nov. 4, 1911. Serial No. 658,475. (Cl. 88—3.)



In a base line telemeter in combination with two objectives and one ocular an ocular prism device comprising two prisms contacting with each other in a surface crossing the field of view of the ocular, a reflecting layer provided in a part of said contact surface and having a limiting edge arranged parallel to the plane of the measuring triangle and at right angles to the axis of the rays which penetrate that part of said contact surface which is not provided with the reflecting layer, the prisms of the ocular prism device contacting with said reflecting layer being provided with reflecting surfaces converging toward each other and including the reflecting layer within the angular space formed by them, reflecting means adapted to throw the rays coming from said two objectives on said converging reflecting surfaces of the ocular prism device and an exit surface provided at the ocular prism device said exit surface crossing the path of the rays coming from said two converging prism surfaces and advancing toward the ocular and arranged at right angles both to the rays reflected from one of said two converging surfaces of the ocular prism and to the rays reflected from the reflecting layer after reflection from the second of said two converging prism surfaces.

1,060,903. RAILWAY-RAIL TIE AND RAIL-FASTENER. FRANK HOLIK, Prague, Okla. Filed Aug. 6, 1912. Serial No. 713,655. (Cl. 238—4.)



1. A railway tie formed of plastic material and having vertical recesses extending therethrough and arranged in pairs corresponding in distance apart to the width of the tie flange of a railway rail, the lower portions of the recesses being enlarged laterally to provide an intermediate stop shoulder, a bearing plate having down-turned ends and embedded in the upper face of the body of the tie, said plate having apertures registering with the recesses of the tie and a fastening device comprising a stock extending through the plate aperture and into the tie recess and having a lateral lug near one end and a laterally extending extension near the other end, the extension having its lower face in screw form and adapted to bear over the tie flange of a rail and the lateral lug engaging beneath the stop shoulder of the tie.

2. A railway tie formed of plastic material and having vertical recesses extending therethrough and arranged in pairs corresponding in distance apart to the width of the flange of a railway rail, the lower portions of the recesses being enlarged laterally to provide an intermediate stop shoulder, a bearing plate upon the upper face of the body of the tie and provided with apertures registering with the recesses of the tie, each of the plate apertures having a lateral extension, a fastening device comprising a stock extending through the aperture of the plate and into the reces of the tie and having a lateral lug near one end and a laterally extending extension at the other end, the extension having its lower face in screw-form and adapted to bear over the flange of a rail, and the lateral lug engaging beneath the stop shoulder of the tie, said lateral extension having a plurality of apertures, and a bolt extending through one of said apertures and into the aperture extension of the plate.

1,060,904. SAFETY-RAZOR. ERNEST N. HUMPHREY, New Britain, Conn., assignor to The Traut & Hine Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Dec. 1, 1911. Serial No. 663,388. (Cl. 30—12.)

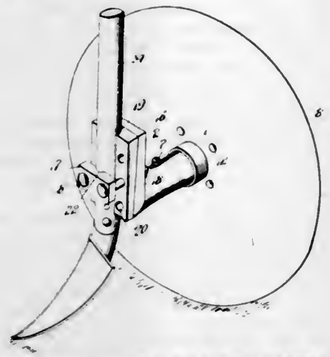


1. In a safety razor, a frame comprising a main body portion, a guide arm at each end thereof, the upper end of each guide arm being turned inwardly to form a blade keeper, said guide arms being provided with supporting shoulders at their forward vertical edges, a blade supporting plate carried by said frame, the ends of said plate being notched to slide on said guide arms, blade stops to hold a blade in proper position upon the supporting plate, and a screw threaded clamping device coacting with the main body of the frame for controlling the supporting plate, said supporting plate having parts of its front portion engaged by and supported by said supporting shoulders, and its rear portion free to fall when said clamping device is released.

2. In a safety razor, a frame comprising a main body portion, a guide arm at each end thereof, the upper end of each guide arm being turned inwardly to form a blade keeper in a plane oblique to the plane of said main body portion, said guide arms being provided with supporting shoulders at their forward vertical edges, a blade supporting plate carried by said frame, the ends of said plate being notched to slide on said guide arms, blade stops to hold a blade in proper position upon the supporting plate, a screw threaded clamping device coacting with the main body of the frame for controlling the supporting plate, and a handle extension on said screw threaded clamping device, said supporting plate having parts of its front portion engaged by and supported by said supporting shoulders, and its rear portion free to fall when said clamping device is released.

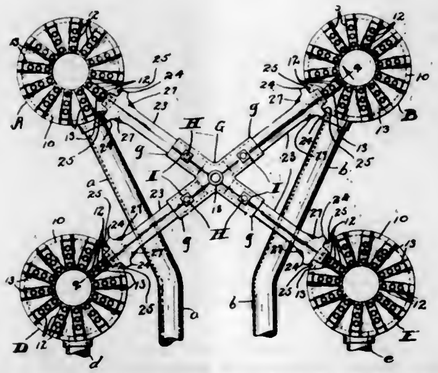
3. In a safety razor, a frame comprising a main body portion, a guide arm at each end thereof, the upper end of each guide arm being turned inwardly to form a blade keeper, said guide arms being provided with supporting shoulders at their forward vertical edges, a blade supporting plate carried by said frame, the ends of said plate being notched to slide on said guide arms, front blade stops and plain faced rear stops to hold a blade in proper position upon the supporting plate, and a screw-threaded clamping device co-acting with the main body of the frame for controlling the supporting plate, said supporting plate having parts of its front portion engaged by and supported by said supporting shoulders, and its rear portion free to fall when said clamping device is released.

1,060,905. DISK ATTACHMENT FOR CULTIVATORS. EDWIN JONES, Troy, Kans. Filed Feb. 28, 1912. Serial No. 680,381. (Cl. 97—37.)



A disk attachment comprising a bearing having counterbores in its outer and inner ends and a detachable cap covering the said counterbore of the inner end, a disk axle spindle mounted in the bearing, having an enlarged portion arranged in the outer counterbore and also having an enlarged head, a disk attached to the inner side of the said head and arranged at the outer end of said bearing, securing means for the axle spindle arranged in the inner counterbore to prevent endwise movement of said spindle, a wedge plate at the inner end of the bearing and covering the said cap and a standard to which the bearing is secured, the said wedge plate being arranged between the standard and the inner end of the bearing.

1,060,906. IGNITION DEVICE. ADAM S. KIEFER, Lakewood, Ohio. Filed Jan. 23, 1911. Serial No. 604,082. (Cl. 158—115.)



1. The combination, with a plurality of top burners of a gas-range, each of said burners having an interior fuel-chamber and a fuel-outlet communicating with the chamber at one side of the burner and discharging laterally of the burner, of an ignition device having a central chamber, and laterally and outwardly projecting arms which are spaced circumferentially of the said central chamber and are each provided interiorly with a passageway which extends longitudinally of the respective arm and is open at the outer extremity of the arm, which passageway is in communication with the aforesaid central chamber, each arm having side walls, and the passageways in the different arms being alined at the outer ends of the arms with the aforesaid outlet of the different burners respectively and being in communication at the bottom of the passageways with the air externally of the arms.

3. The combination, with a plurality of top burners of a gas-range, each of said burners having an interior fuel-chamber and a fuel-outlet communicating with the chamber at one side of the burner and discharging laterally of the burner, of an ignition-device having a central chamber and laterally and outwardly projecting arms which are spaced circumferentially of the said central chamber, each arm being provided interiorly with a passageway and having side walls, which passageway extends longitudinally of the arm and is open at the outer extremity of the arm and in communication with the aforesaid central chamber, the passageways in the different arms being alined at the outer ends of the arms with the aforesaid outlet of the different burners respectively and being in communication at the bottom of the passageways with the air externally of the arms, and the passageway in each arm having a lateral and outward enlargement at a point in suitable proximity to the outer extremity of the said arm.

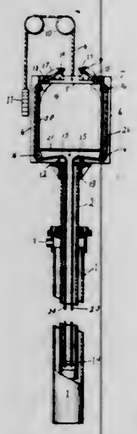
4. The combination, with a plurality of top burners of a gas-range, each of said burners having an interior fuel-chamber and a fuel-outlet communicating with the chamber at one side of the burner and discharging laterally of the burner, of an ignition-device having a body which is arranged centrally of the ignition-device and has an interior chamber, which body has a top wall provided with an upwardly discharging flue communicating with the last-mentioned chamber, said ignition-device also having laterally and outwardly projecting arms which are spaced circumferentially of the said body, each arm being provided interiorly with a passageway which extends longitudinally of the respective arm and is in communication with the last-mentioned chamber, the passageways in the different arms being open at the outer ends of the arms and alined at the said ends of the arms with the aforesaid outlet of the different burners respectively.

5. The combination, with a plurality of top burners of a gas-range, each of said burners having an interior fuel-chamber and a fuel-outlet communicating with the chamber at one side of the burner and discharging laterally of the burner, of an ignition-device having a body which is arranged centrally of the ignition-device, which body has a top wall and an interior chamber which is in communication at the bottom of the chamber with the air externally of the chamber, said ignition-device also having lateraly and outwardly projecting arms which are spaced circumferentially of the said body, each arm being provided interiorly with a passageway which extends longitudinally of the arm and is in communication with the

last-mentioned chamber, said arm comprising a section which is integral with the aforesaid body and having another section which is straddled by nad removably secured to the first-mentioned and straddling arm-section, and the said straddling arm-section and the aforesaid body depending below the said straddled arm-section, the passageways in the different arms being arranged at the outer ends of the arms and alined at the said ends of the arms with the aforesaid outlet of the different burners respectively.

[Claims 6 to 10 not printed in the Gazette.]

1,060,907. PLUNGER-ELEVATOR. THEODORE J. KIEN, Louisville, Ky. Filed Aug. 19, 1912. Serial No. 715,718. (Cl. 138—8.)



1. In a hydraulic elevator, the combination of a frame comprising sills and head-rails spaced apart, a depending plunger secured to the sills, a flexible connection between the plunger and the head-rails independent of the structural connection therebetween.

2. In a hydraulic elevator, the combination of spaced sills and head-rails, a depending plunger attached to the sills, a connection between said plunger and head-rails independent of the connection between said sills and rails.

3. The combination with sills and head-rails and spacing members connecting the same of a depending plunger attached to the sills, of connecting means between said plunger and head-rails independent of said spacing members.

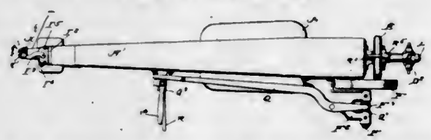
4. A frame comprising sills and head-rails in spaced relationship, a depending plunger attached to said sills, means of connection within said plunger and a cable extending from said means to a connection with said head-rails.

5. A frame comprising sills and head-rails in spaced relationship, a depending plunger attached to said sills, a means of connection within said plunger, guide members associated with said sills, means of connection associated with said head-rails, a cable connecting said means and passing over said guide members.

[Claims 6 to 9 not printed in the Gazette.]

1,060,908. ROTARY CUTTING-MACHINE. GEORGE L. KNIGHTS, Amesbury, Mass., assignor to Pettingell Machine Company, Amesbury, Mass., a Corporation of Massachusetts. Filed June 28, 1912. Serial No. 706,535. (Cl. 164—63.)

1. In a rotary cutter of the kind described, the combination with the cutters, of the shafts carrying said cutter and means for rotating said shafts, said shafts being inclined and in parallel planes, said shafts also being in intersecting vertical planes whereby the cutting edges of the cutters cross each other as set forth.



2. In a rotary cutter of the kind described, the combination with a metallic casing with the upper and lower shafts journaled therein, and means for rotating said shafts, the upper and lower cutter shafts and intervening means for operating said shafts, the upper cutter shafts being vertically adjustable and the lower cutter shaft being longitudinally adjustable, said cutter shafts being inclined and paralleled, their adjacent ends overlapping.

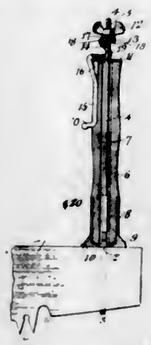
3. In a rotary cutter of the kind described, the combination with a metallic casing with the upper and lower shafts journaled therein, and means for rotating said shafts, the upper and lower cutter shafts and intervening means for operating said shafts, the upper cutter shafts being vertically adjustable and the lower cutter shaft being longitudinally adjustable, said cutter shafts being inclined and paralleled, their adjacent ends overlapping, said cutter shafts being in intersecting vertical planes whereby the cutters have their cutting edges cross each other as set forth.

4. In a rotary cutter of the kind described, the combination with a metallic casing having the upper and lower rotary shafts together with means for rotating the same, the inclined cutter shaft and intervening means for rotating the same, the vertically adjustable block arranged at the forward end of the metallic casing, a cutter shaft carried thereby together with means for rotating said cutter shaft and the rotary cutters arranged upon the adjacent ends of said cutter shafts, the cutting edges of said cutters crossing each other as set forth.

5. In a rotary cutter of the kind described, the combination with the upper arm of a casing, of the grooved guideway attached to the forward end thereof, the adjustable block or casting movable in said guide-way together with means for adjusting the same, the upper rotary shaft, the stub shaft, the inclined cutter shaft and cutter, together with means for transmitting the rotary motion of the rotary shaft to the inclined cutter shaft and cutter as set forth.

[Claims 6 and 7 not printed in the Gazette.]

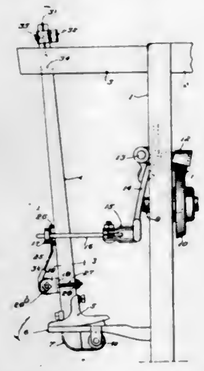
1,060,909. DETACHABLE SAW-HANDLE. GEORGE HENDRICKSON KNUCKLES, Slusher, Ky. Filed Jan. 20, 1912. Serial No. 672,447. (Cl. 145—112.)



1. A detachable handle for saw blades comprising a tubular member adapted to be grasped by the hand of an operator, a clamping rod extending through the tubular handle and having one end formed to coact with the corresponding end of the handle to clamp a saw blade, said rod being of a length to extend through the handle and beyond that end remote from the blade engaging end, and a cam lever carried by the rod at the end remote from the saw engaging end thereof, said handle having an exterior recess in that portion remote from the saw engaging end and the lever being provided with a manipulating arm movable into and out of the recess and when in the recess holding the cam in operative position and adapted to be retained in the recess by the hand of the operator when grasping the handle.

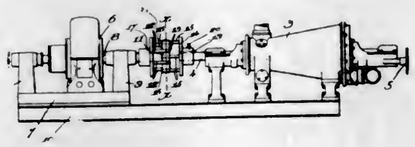
2. A handle for saw blades comprising a tubular member adapted to be grasped by the hand of an operator, a clamping rod extending through the tubular member and beyond both ends thereof, said rod being formed at one end to engage over the saw blade and at the other end provided with an adjusting nut, and a cam lever having a Z-shaped head traversed by the rod with one end of the Z portion adapted to bear against the nut and the other end of the Z portion adapted to engage the handle and the head being also provided with an open slot to embrace the rod when the lever is in clamping position.

1,060,910. PICKING MECHANISM FOR LOOMS. MOSES M. LAHUE, Lowell, Mass. Filed May 21, 1910. Serial No. 562,596. (Cl. 139—48.)



In picking mechanism for looms, the combination with the picker-stick and the lug-strap, of a stand secured to the picker-stick, a spring-actuated member carried by said stand, engaging with the lug-strap and supporting the same, and tending to produce outward movement of the lug-strap relative to the picker-stick, a hub with which the actuating spring for the said member is connected, and a bolt applied to said stand, supporting the said hub and in positive engagement therewith, rotary adjustment of said bolt effecting similar adjustment of the hub and thereby adjusting the tension of the said spring.

1,060,911. MOTOR-DRIVE FOR JORDAN ENGINES. JAMES F. LANIGAN, Jr., Lawrence, Mass. Filed Dec. 20, 1910. Serial No. 598,446. (Cl. 92—27.)



1. The combination with a Jordan engine having a longitudinally-adjustable plug shaft and means to effect the adjustment thereof, of a motor having a motor shaft in alinement with the plug shaft, a head on the plug shaft, fingers extending therefrom parallel to the axis of the shaft, another head on the motor shaft, fingers extending therefrom parallel to the first-named fingers, and a flexible connection passing around said fingers, the fingers on one of said heads being free to slide through the connection and having a length sufficiently greater than the width of the connection to permit of the desired adjustment of the plug shaft without disturbing the driving connection.

2. The combination with a Jordan engine having a longitudinally-adjustable plug shaft, of a motor having a motor shaft in alinement with the plug shaft, a head fast on the motor shaft and having fingers extending therefrom, a second head mounted on the plug shaft and capable of adjustment longitudinally thereof and also having fingers extending therefrom, a flexible connection passing around the fingers on both heads and having a width sufficiently less than the length of the fingers to permit of the desired adjustment of the plug shaft without disturbing the driving connections.

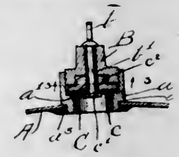
3. The combination with a Jordan engine having a longitudinally-adjustable plug shaft, and means to effect the adjustment thereof, of a head sustained by said plug shaft, headed pins extending therefrom, a motor having a motor shaft in alinement with the plug shaft, a head on the motor shaft, pins extending from said latter head overlapping the first-named pins, one of said heads being adjustable longitudinally on its shaft, and a flexible connection passing about said pins, all of said pins being sufficiently longer than the width of the connection to permit of the desired longitudinal adjustment of the plug shaft without disturbing the driving connection.

1,060,912. FOOD COMPOUND. EDWIN W. LASBY, St. Louis, Mo. Filed Nov. 3, 1910. Serial No. 590,582. (Cl. 99—11.)

1. A confection paste consisting of dried albumen, a vegetable gum, a desiccated farinaceous substance, and a nut paste.

2. A confection paste consisting of dried albumen, a vegetable gum, ground desiccated corn flakes, and a nut paste.

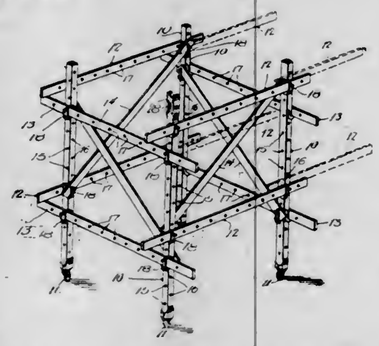
1,060,913. STOPPER. JAY F. LAWRENCE, Chicago, Ill. Filed Mar. 18, 1909, Serial No. 484,183. Renewed Aug. 31, 1911. Serial No. 647,062. (Cl. 220—74.)



1. A stopper embracing a filling member provided with a seat, an axially apertured plug threaded into said member, lateral wings thereon, and a flat inner end, a closure adapted to seat on said seat and having a flat under face and a spherically convex upper face adapted to bear against the flat end of the plug, a bolt extending through both the washer and plug and uniting the same permanently but yieldingly together and packing material on the inner side of ssid washer.

2. In a device of the class described a filling tube having an external seat and an internal seat, said external seat adapted to bear on a container, a plug provided with a central recess in its lower side and an aperture extending centrally through the plug from the recess, a closure adapted to seat on the internal seat in the tube having a central boss to fit loosely in the recess and having a convex bearing face, a washer on the under face of the closure, said closure, boss and washer apertured in alinement with the aperture in the plug and a pivot bolt securing the parts together.

1,060,914. SCAFFOLD. CHARLES E. LILLOW, Chicago, Ill., assignor to James M. Lillow, Stratford, Ontario, Canada. Filed Apr. 19, 1912. Serial No. 691,883. (Cl. 20—81.)



1. In a scaffold, the combination with an upright having two series of equidistant holes therein, the one series disposed at right angles to the other and midway therebetween, and a cross member to be secured to said upright, of a bracket for connecting together said upright and cross member, comprising a vertical arm having a horizontal pin, rigid thereon, and adapted to enter and seat in any of said holes in the upright, and a ledge portion projecting out from the lower end of said arm and having a pin, rigid thereon, and adapted to enter and seat in the next adjacent hole below the one that receives the first named pin, said ledge being adapted to receive and support said cross member and having clamping means for clamping the cross member upon the upright.

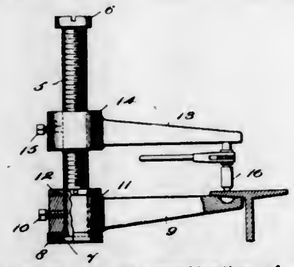
2. In a scaffold, the combination with an upright having two series of equidistant holes therein, the one series disposed at right angles to the other and midway therebetween, and a cross member to be secured to said upright, of a bracket for connecting together said upright and cross members, comprising a vertical arm and flange of right angle formation arranged to embrace a corner of the upright, two horizontal pins, rigid on said bracket and disposed at right angles to each other, said pins being arranged to enter and seat in two adjacent, angularly disposed holes in the upright, a horizontal ledge formed upon the lower part of the bracket for receiving and supporting the cross member, an upright post extending up from said ledge and a screw, threaded in said post and adapted to bear against the cross member to clamp the same to the upright.

3. In a scaffold, the combination with an upright having two series of equidistant holes therein, the one series disposed at right angles to the other and midway therebetween, and a cross member to be secured to said upright, of a bracket for connecting together said upright and cross members, comprising a vertical arm and flange of right angle formation, arranged to embrace one corner of the upright, a horizontal pin, rigid with and projecting from said arm, and a horizontal pin, rigid with and projecting from said flange, said pins being disposed at right angles to each other and spaced apart a distance equal to the distance between any two adjacent, angularly disposed holes in the upright, and adapted to enter and seat therein, the lower pin having its upper edge cut away on an arc of a circle struck from the axis of the upper pin as a center, a horizontal supporting ledge, for the cross member, formed on said flange, an upstanding post formed on said ledge, and a screw, threaded in the post and adapted to bear against said cross member to clamp the same to the upright.

4. In a scaffold, the combination with two upright members, set end to end, and each having two series of equidistant holes formed therein, one series beginning at the extreme or meeting ends of the uprights, and the other series being disposed at right angles to the first series and located midway therebetween, and each upright being further provided at its extreme or meeting end with a hole in line with the holes of the second series, of two oppositely arranged plates arranged at the meeting ends of the uprights, said plates having vertical side flanges arranged to embrace the sides of the uprights and having three bolt holes arranged in vertical alinement, and bolts and nuts for clamping together the plates and uprights, of which the bolts extend through the holes in the plates and the three nearest holes in the uprights, including one at the meeting edges thereof.

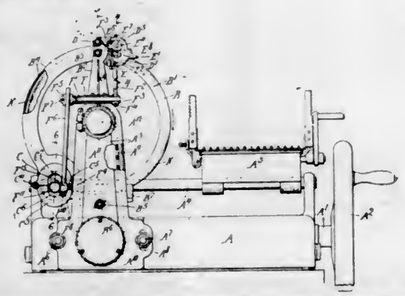
5. In a scaffold, a joint between two upright members, placed end to end, said joint comprising two vertical plates, arranged to lie on opposite sides of the uprights at their adjacent ends, and having vertical flanges embracing the other sides of said uprights, each plate being formed with a central bolt hole, and a notch at each end extending toward said bolt hole, and being further provided with shouldered portions adjacent said notches, and bolts extending through said bolt holes and notches, and through bolt holes in the uprights.

1,060,915. ADJUSTABLE DOG. GEORGE C. LUDGATE, Brooklyn, N. Y. Filed June 4, 1912. Serial No. 701,599. (Cl. 77—60.)



In an adjustable dog, the combination of a screw-threaded shaft having a head at each end, the upper of said heads being provided with a slot, a counter-sunk collar mounted on the lower of the heads, a jaw journaled on the shaft and resting on the said lower head, means for preventing longitudinal movement of the said jaw and including a second collar mounted on the shaft and bearing against the said jaw, a second jaw screw threaded on the shaft and positioned by being rotated on the screw-threads of the said shaft, and a set screw inserted in each jaw to prevent the angular movement of each jaw when spaced with relation to each other.

1,060,916. SHARPENING DEVICE FOR ROTARY CUTTERS. AUGUST R. LUSCHKA, Chicago, Ill., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed Apr. 15, 1912. Serial No. 690,696. (Cl. 51—7.)



1. A sharpening device for rotary cutters having grinding wheels in opposition to the cutting edge and a peripherally disposed combined guard and housing inclosing the cutting edge and the grinding wheels.

2. A sharpening device for rotary cutters and grinding wheels in opposition to the cutting edge and a peripherally disposed guard therefor and pockets continuous with said guard to inclose the grinding wheels.

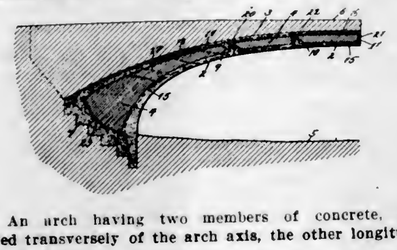
3. A sharpening device for rotary cutters having grinding wheels in opposition to the cutting edge and a substantially semi-circular guard inclosing the cutting edge of the cutter for substantially half its length and pockets in said guard for the grinding wheels, said pockets being disposed one at either end of the guard.

4. A sharpening device for rotary cutters having grinding wheels in opposition to the cutting edge and a peripherally disposed guard, a pocket pivotally mounted on one end of said guard to inclose one of said grinding wheels.

5. A sharpening device for rotary cutters having grinding wheels in opposition to the cutting edge of a peripherally disposed guard, a pocket pivotally mounted on one end of said guard to inclose one of said grinding wheels, said pocket having a removable cover said cover being pivotally mounted on the pocket.

[Claims 6 to 8 not printed in the Gazette.]

1,060,917. ARCH. DANIEL B. LUTEN, Indianapolis, Ind. Filed Apr. 24, 1905. Serial No. 257,165. (Cl. 72—56.)



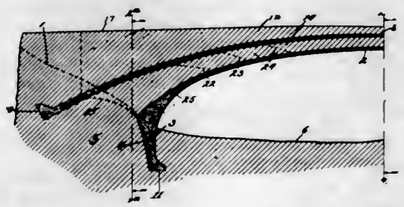
1. An arch having two members of concrete, one curved transversely of the arch axis, the other longitudinally thereof.

2. An arch having an inner surface concave transverse to the axis of the arch and an outer surface concave longitudinally of the said axis.

3. An arch comprising two continuous drums of concrete, one curved transversely of the arch axis, the other curved longitudinally and transversely of the said axis.

4. An arch comprising two continuous drums of concrete, one curved transversely of the arch axis, the other curved longitudinally and transversely of the said axis, and each of said drums reinforced with embedded members transverse to the reinforcement of the other drum.

1,060,918. ARCH. DANIEL B. LUTEN, Indianapolis, Ind. Filed Apr. 24, 1905. Serial No. 257,166. (Cl. 72—56.)



1. An arch comprising an inner drum supported on footings and an outer drum with ends extended back of the footings of the inner drum and separated from them by the material of the embankment.

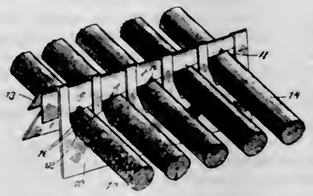
2. A concrete arch comprising an intradosal and extradosal drum, supported at each end upon footings and separated by a filling of granular material extending between and separating the corresponding footings of both drums.

3. An arch having an inner drum and outer drum, the ends of the outer drum being extended beyond the inner drum and having an independent footing, substantially as described.

4. An arch comprising a plurality of gradually diverging drums embracing a granular mass projecting between the ends of the drums, whereby the thrust of the arch is transmitted through said drums to the granular mass.

5. An arch comprising diverging compression members of hardened plastic embracing a granular mass extending between the ends of the diverging members and forming part of the supporting foundations for the arch, whereby the thrust of the arch is transmitted through the said members to the granular mass and thus to the supporting granular foundations.

1,060,919. CLAMP FOR CONCRETE-REINFORCING MEMBERS. DANIEL B. LUTEN. Indianapolis, Ind. Filed June 7, 1907. Serial No. 377,692. (Cl. 72—122.)



1. A clamping holder to space and retain reinforcing bars, comprising a sheet having a plurality of substantially parallel perforations of varying length transverse to the sheet and arranged throughout the length of the sheet and longitudinally folded upon a line transverse to the perforations, and a retaining member of varying width adapted to be projected across the perforations in the plate at the line of fold.

2. A clamp comprising a member having a plurality of integral separated fingers of gradually increasing length, with means at their ends for engaging a retaining member of gradually increasing width adapted to be projected transversely across the fingers and coöperate therewith.

3. A clamp comprising a sheet having a series of medial substantially parallel perforations therethrough of increasing length, said plate being folded upon a medial line of the lengths of the perforations, and a coöperating retaining wedge adapted to be projected across the fingers in the crotch of the plate.

4. A clamp comprising a sheet having a series of medial substantially parallel perforations therethrough of increasing length, said plate being folded upon a medial line of the lengths of the perforations, and a coöperating sheet-metal wedge doubled upon a medial line to substantially conform to the crotch of the main plate, substantially as and for the purpose set forth.

5. A clamp for holding a plurality of members together, comprising a longitudinally grooved plate with receiving openings of varying depths transverse to the groove, and a coöperating wedge receivable in the groove, and projectable across a plurality of the transverse openings.

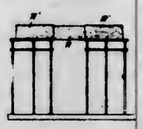
[Claim 6 not printed in the Gazette.]

1,060,920. CONCRETE BRIDGE. DANIEL B. LUTEN, Indianapolis, Ind. Original application filed Nov. 1, 1906, Serial No. 341,605. Divided and this application filed Mar. 29, 1909. Serial No. 486,643. (Cl. 72—56.)

1. That improvement in the art of building a concrete arch, comprising erecting on supports an intermediate longitudinal section, permitting it to harden, then lowering the supports under that section, and subsequently constructing longitudinal sections contiguous to said intermediate section and on opposite sides thereof.

2. That improvement in the art of building an arch, comprising erecting on supports an intermediate longitu-

dinal section, permitting it to harden, then lowering the supports under that section, and subsequently constructing longitudinal sections and bonding them to the first sections contiguous to said intermediate section and on opposite sides thereof.



3. That improvement in the art of erecting concrete arches, which consists in separately erecting upon supports three contiguous arch rings in two sets, one set comprising two rings and the other set comprising one ring, one of the sets being allowed to harden and its supports being removed before the erection of the other set, thereby balancing the effect of one set in its hardened condition against the effect of the other set.

4. That improvement in the art of building a concrete arch, comprising erecting on false-work supports an intermediate longitudinal section between proposed end sections, permitting it to harden, then lowering the false-work supports under that section, and subsequently constructing on false-work supports the proposed end sections and bonding them to the intermediate section.

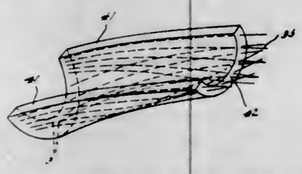
5. That improvement in the art of building an arch, comprising erecting on false-work supports an intermediate longitudinal section between proposed end sections, then lowering the false-work supports under that section, subsequently constructing on false-work supports the proposed end sections and bonding them to the intermediate section, and erecting superstructures on said end sections.

1,060,921. CONCRETE BRIDGE. DANIEL B. LUTEN, Indianapolis, Ind. Original application filed Nov. 1, 1906, Serial No. 341,605. Divided and this application filed Mar. 29, 1909. Serial No. 486,645. (Cl. 72—56.)



That improvement in the art of concrete arch construction, comprising the erection of a spandrel wall integral with the arch ring and ending near the end of the span, and after hardening, the subsequent erection of a spandrel end resting upon but not integral with, the abutment of the arch.

1,060,922. ARCH. DANIEL B. LUTEN, Indianapolis, Ind. Original application filed Apr. 24, 1905, Serial No. 257,165. Divided and this application filed July 8, 1911. Serial No. 637,454. (Cl. 72—56.)



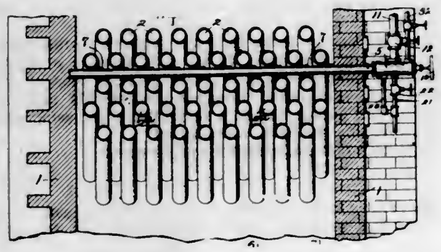
1. A reinforced concrete arch comprising a concrete body having a cross-section of an inverted arch shape, and reinforcing members embedded in the arch and crossing each other diagonally.

2. A reinforced concrete arch having a cross-section of inverted arch form, and with embedded reinforcing members concentrated near the middle at the crown and near the sides over the abutments.

3. A concrete arch having a cross-section of inverted arch form, and reinforcing members embedded in the arch and substantially straight through the tension regions at crown and haunches.

4. A reinforced concrete arch having a cross-section of inverted arch form, and with embedded reinforcing members concentrated near the middle at the crown.

1,060,923. WATER-TUBE BLOWER. JOHN MAGEE, Detroit, Mich., assignor to Diamond Power Specialty Company, Detroit, Mich., a Corporation of Michigan. Filed May 16, 1912. Serial No. 697,762. (Cl. 122—391.)



1. In a boiler, the combination with the combustion chamber and the boiler-tubes, of a soot-blower arranged in said chamber adjacent to the boiler-tubes to remove the soot therefrom, and means for supplying a cooling liquid to the blower.

2. In a boiler, the combination with the combustion chamber and the boiler-tubes, of a soot-blower arranged in said chamber adjacent to the boiler-tubes to remove the soot therefrom, a jacket inclosing the blower, and means for supplying a cooling agent to said jacket.

3. The combination with the boiler setting, the combustion chamber and the boiler-tubes, of a soot-blower comprising a blower-tube permanently arranged in the combustion chamber adjacent to the boiler-tubes to remove the soot therefrom, a cooling-conduit adjacent to said blower-tube, and a connection arranged on the outer side of the boiler-setting for supplying a cooling agent to said cooling conduit.

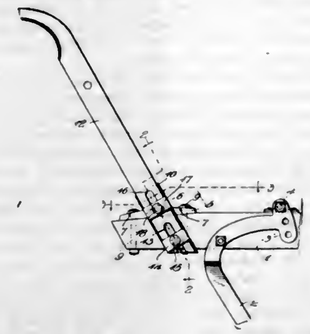
4. The combination with the boiler setting, the combustion chamber and the boiler-tubes, of a soot blower comprising a casing arranged on the outer side of the setting and having separate inlet chambers for steam and a cooling agent, a blower tube permanently arranged in the combustion chamber adjacent to the boiler-tubes to remove the soot therefrom, said blower-tube being connected with said steam inlet chamber, and a cooling conduit associated with said blower-tube and connected with said cooling-agent chamber.

5. In a boiler, the combination with the combustion chamber and the boiler-tubes, of a soot-blower arranged in said chamber adjacent to the boiler-tubes to remove the soot therefrom, and cooling means associated with said blower and independent of and disconnected from the water space of the boiler.

[Claims 6 to 24 not printed in the Gazette.]

1,060,924. HANDLE-MOUNT FOR PLOWS. THOMAS M. MANNING, Rome, Ga. Filed July 10, 1912. Serial No. 708,598. (Cl. 97—15.)

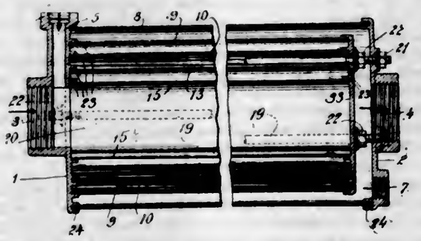
1. In combination with a plow beam, a handle mount comprising a plate having teeth and provided with wedge-shaped end portions having slots, securing bolts passing through the slots and having their heads engaging the inclined surfaces of the wedge-shaped end portions of the plate, said bolts also passing through the beam, handles located at the sides of the beam, a pivot bolt passing through the handles and the beam and a securing bolt passing through the handles and having its intermediate portion lying between the teeth of the plate.



2. In combination with a plow beam, a handle mount comprising a plate having teeth and provided with wedge-shaped end portions having slots, bolts passing through the slots of the plate and passing through the beam and having their heads in engagement with the inclined surfaces of the wedge shaped portions of the plate, handles located at the opposite sides of the beam and provided at their lower ends with slots and having at points between their ends other slots, a pivot bolt passing through the first mentioned slots of the handles and through the beam and the bolt passing through the last mentioned slots of the handles and having its intermediate portion lying between the teeth of the plate.

3. In combination with a plow beam, a handle mount comprising a plate having teeth and provided with wedge-shaped end portions having slots, bolts passing through the slots of the plate and also passing through the beam and having their heads bearing against the inclined surfaces of the wedge-shaped end portions of the plate, cuffs located at the opposite sides of the beam and provided at their lower ends with slots, handles received within the cuff and provided at their lower ends with slots and at points between their ends with other slots, a pivot bolt passing through the lower slots of the handles and also passing through the slots of the cuffs and passing through the beam, a securing bolt passing through the intermediate slots of the handle and also passing through the cuffs and having its intermediate portion lying between the teeth of the plate.

1,060,925. SILENCER FOR GAS-ENGINES, &c. HIRAM PERCY MAXIM, Hartford, Conn. Filed Nov. 25, 1912. Serial No. 733,334. (Cl. 121—116.)



1. The silencer for gas engines and the like comprising a reversely directed, eccentrically arranged, nested series of wide cylindro-spiral shells having slightly lapping ends and forming a compounded series of wide alternately reversing spiral whirl chambers, each gradually expanding radially from its admission end and gradually contracting toward its constricted discharge throat, each discharge throat being angularly advanced in its discharging direction beyond the admission end of the succeeding outer chamber receiving material therefrom, a casing within which said shells are arranged, grooved supports in which said shells and casing are mounted and provided with admission and discharge connections suitable for exhaust gases and for cooling fluid, said supports comprising an independently adjustable intermediate support within said casing for one end of each of said shells and connecting means cooperating with said supports.

2. The silencer for gas engines and the like comprising a reversely directed, eccentrically arranged nested series of wide cylindro-spiral shells having slightly lapping ends and forming a compounded series of wide alternately reversing spiral whirl chambers, each gradually expanding radially from its admission end and gradually contracting toward its constricted discharge throat each discharge throat being angularly advanced in its discharging direction beyond the admission end of the succeeding outer chamber receiving material therefrom, a casing within which said shells are arranged, grooved supports in which said shells and casing are mounted and provided with admission and discharge connections suitable for exhaust gases and for fluid, and connecting means coöperating with said supports.

3. The silencer for gas engines and the like comprising a reversely directed, eccentrically arranged nested series of wide cylindro-spiral shells having lapping ends and forming a compounded series of wide alternately reversing spiral whirl chambers, each expanding radially from its admission end and gradually contracting toward its constricted discharge throat, each discharge throat being angularly advanced in its discharging direction beyond the admission end of the succeeding outer chamber receiving material therefrom, a casing within which said shells are arranged, grooved supports in which said shells and casing are mounted and provided with admission and discharge connections suitable for exhaust gases and for fluid.

4. The silencer for gas engines and the like comprising a reversely directed, nested series of wide cylindro-spiral shells having lapping ends and forming a compounded series of wide alternately reversing spiral whirl chambers, each expanding radially from its admission end and contracting toward its constricted discharge throat, each discharge throat being angularly advanced in its discharging direction beyond the admission end of the succeeding outer chamber receiving material therefrom, a casing within which said shells and casing are mounted and provided with admission and discharge connections suitable for exhaust gases.

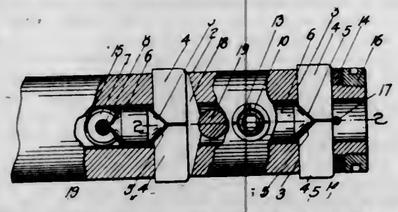
5. The silencer for gas engines and the like comprising a reversely directed, nested series of spiral shells having lapping ends and forming a compounded series of wide alternately reversing spiral whirl chambers, each expanding radially from its admission end and contracting toward its constricted discharge throat, each discharge throat being angularly advanced in its discharging direction beyond the admission end of the succeeding chamber receiving material therefrom, a casing within which said shells are arranged, grooved supports in which said shells and casing are mounted and provided with admission and discharge connections suitable for exhaust gases.

[Claims 6 to 21 not printed in the Gazette.]

1,060,926. BORING-BAR. WILBER E. MCELDOWNEY, Denver, Colo., assignor of one-half to William H. McAloney, Denver, Colo. Filed Feb. 14, 1912. Serial No. 677,605. (Cl. 77—56.)

1. In a device of the class described, a bar having an axial opening and slots extending radially from a common point in its axis, cutting-tools movable in said slots and having beveled faces at their inner ends, a wedge whose opposite ends are cone-shaped, movable in said opening to engage the beveled faces on said tools at one of its ends, driving members movable in a transverse opening in said

bar, in engagement with the opposite end of said wedge, and means for moving said members simultaneously in opposite directions toward the said wedge.

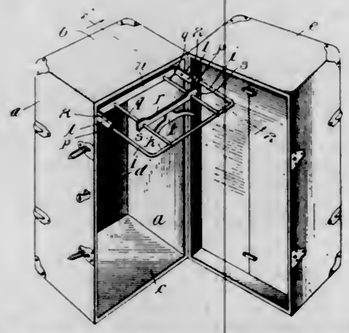


2. In a device of the class described, a bar having an axial opening and slots extending radially from a common point in its axis, cutting-tools movable in said slots and having beveled faces at their inner ends, a wedge, whose opposite ends are cone-shaped, movable in said opening to engage the beveled faces on said tools at one of its ends, nuts slidable in a transverse opening in said bar, and respectively provided with right-hand and left-hand screw-threads, and an adjusting screw rotatable in said transverse opening and having threads in coöperative engagement with those on the nuts.

3. In a device of the class described, a bar having an axial opening and slots extending radially from a common point in its axis, cutting tools movable in said slots and having beveled faces at their inner ends, a wedge movable in said opening, in engagement with said beveled faces, means for effecting a movement of said wedge whereby to adjust the position of said tools relative to the axis of the bar, and adjustable means for holding said tools against displacement in the direction of said axis, including a key in engagement with said tools, and a screw rotatable in a transverse opening in said bar and having a beveled portion in engagement with a corresponding face on said key.

4. In a device of the class described, a bar having an axial opening and slots radiating from its axis, cutting tools movable in said slots and having beveled faces at their inner ends, a wedge engaging said faces, a nut slidable in a transverse opening in said bar in driving engagement with said wedge, and a screw rotatably mounted in threaded engagement with said nut.

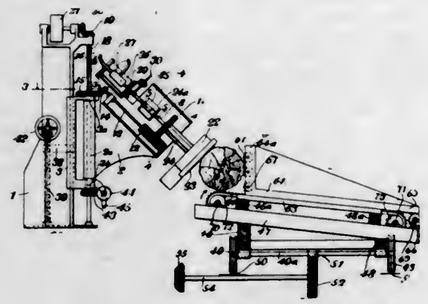
1,060,927. GARMENT-SUPPORTING FIXTURE. FRANK W. MEYER, Oshkosh, Wis., assignor to The Oshkosh Trunk Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed June 8, 1912. Serial No. 702,382. (Cl. 211—16.)



1. In an extensible supporting device, the combination of two endwise movable tubular members, provided with inwardly and oppositely facing, longitudinal slots, guide brackets for supporting said tubular members, located inwardly from the ends of the paths of movement thereof, and provided with slots coinciding with those of the tubular members, rods slidably mounted in said tubular members, and horizontal transverse members extending between and rigidly connecting the extremities of said rods; said transverse members being located in the same horizontal plane with said rods and one of said transverse members having its end portions extended horizontally through the slots of said tubular members and attached to the said rods inside of the same.

2. In an extensible supporting device, the combination of two endwise movable tubular members, provided with inwardly and oppositely facing slots extending substantially the entire length thereof, guide brackets supporting and limiting the movement of said tubular members, and provided with transverse slots corresponding to the slots of said tubular members, and a slidable frame member comprising a rectangularly bent U-shaped rod, having its parallel side portions slidably mounted in said tubular members, and a horizontal, transverse bar member provided with end portions bent at right angles thereto, said transverse bar member extending between the extremities of the parallel side portions of said rod, and provided with pins extending through the slots of said tubular members and rigidly secured in the end portions of said transverse bar member and of the rod.

1,060,928. ROSSING APPARATUS FOR REMOVING BARK FROM LOGS. ORRIE J. MILLS, Hudson Falls, N. Y.. Filed Sept. 1, 1911. Serial No. 647,138. (Cl. 144—208.)



1. In a log-barking machine in combination, a supporting bed for said log, a rotatable knife-carrier and a supporting frame therefor, means under the control of the operator for moving said knife-carrier in said frame toward and away from said log comprising a reciprocating piston and a yielding buffer connection between said piston and knife-carrier, means for rotating said carrier during its reciprocation, and means for moving said log past said knife-carrier.

2. In a log-barking machine in combination, a supporting bed for said log, a rotatable knife-carrier and a supporting frame therefor, means under the control of the operator for moving said knife-carrier in said frame toward and away from said log comprising a reciprocating piston and a yielding buffer connection between said piston and knife-carrier, said yielding connection provided with means for allowing said knife-carrier to rotate without rotating said piston, means for rotating said knife-carrier during its reciprocation, and means for moving said log past said knife-carrier.

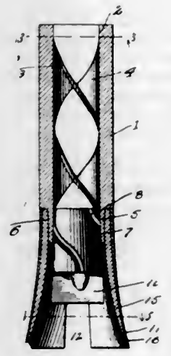
3. In a log-barking machine in combination, a supporting bed for said log, a rotatable knife-carrier and a swinging frame for supporting the same, means for adjusting said frame and carrier at different angles relative to the axis of said log, means for reciprocating said knife-carrier in said frame toward and away from said log, means for rotating said carrier during its reciprocations, and means for moving said log past said knife-carrier.

4. In a log-barking machine in combination, a supporting bed for said log, a rotatable knife-carrier and a vertically-adjustable and laterally-swinging frame for supporting the same, means for adjusting said frame and carrier at different angles relative to the axis of said log and also vertically with respect to said log, means for reciprocating said knife-carrier in said frame toward and away from said log, means for rotating said carrier during its reciprocations, and means for moving said log past said knife-carrier.

5. In a log barking machine in combination, a supporting bed for the log, bumpers mounted on said log bed arranged to move transversely thereon, a rotatable rossing tool and an adjustable supporting frame therefor holding said rossing tool opposite to said bumpers and arranged so that the line of thrust of said tool on the log passes between the points of support of the log on said bed and said bumpers, and means for moving said log past said rossing tool.

[Claims 6 to 14 not printed in the Gazette.]

1,060,929. CUTTING-TOOL. SOREN C. MONBERG, Leadville, Colo. Filed May 15, 1912. Serial No. 697,542. (Cl. 166—3.)



1. A cutting tool comprising a hollow shank having a spiral passage way therein, a nozzle disposed within one end of said shank and provided with spiral passages, and a cutter secured to the nozzle end of such shank and surrounding said nozzle and extending outwardly thereof.

2. A cutting tool comprising a hollow shank having a spiral passage way therein, a partition having a helical pitch with respect to the axis of the shank and forming said passage way, a nozzle disposed within one end of said shank and provided with spiral passages in communication with the shank, and a cutter secured to the nozzle end of said shank and surrounding said nozzle and extending downwardly thereof.

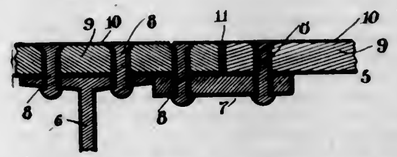
3. A cutting tool comprising a hollow shank having a spiral passage way therein, a nozzle disposed within one end of said shank and provided with spiral passages in communication with said shank, an auxiliary cutter detachably connected to said nozzle head and arranged transversely thereof, and a cutter head secured to the nozzle end of said shank and surrounding said nozzle and extending outwardly thereof.

4. A cutting tool comprising a hollow shank having a spiral passage way therein adapted to receive a fluid under pressure to rotate the tool, a cutter head rigidly secured to said shank and provided with side and end cutting edges and comprising a body having a lining of soft metal and a covering of relatively hard metal.

5. A cutting tool comprising a hollow shank having a spiral passage way therein adapted to receive a fluid under pressure to rotate the tool, and a cutter head on said shank.

[Claim 6 not printed in the Gazette.]

1,060,930. SHIP PLATE AND HULL. JOHN FERREOL MONNOT, New York, N. Y., assignor to Duplex Metals Company, New York, N. Y., a Corporation of New York. Filed Nov. 27, 1907. Serial No. 404,154. (Cl. 22—219.)



1. A ship plate comprising a core or base of one metal weld-coated with a less corrodible cupriferous metal, said metals having been co-extended and said cuperferous metal having throughout its mass a hard, dense and compact structure.

2. A ship plate comprising a core or base of one metal weld-coated on both sides with a less corrodible cupriferous metal, said metals having been co-extended and said cupriferous metal having throughout its mass a hard, dense and compact structure.

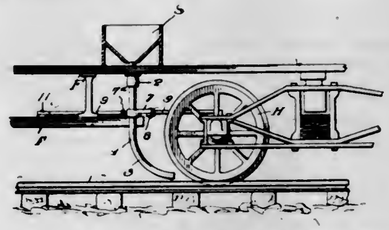
3. A ship plate comprising a core or base of one metal weld-coated on its exposed face and on its edges with a less corrodible cupriferous metal, said metals having been co-extended and said cupriferous metal having throughout its mass a hard, dense and compact structure.

4. A ship plate comprising a core or base of steel weld-coated with cupriferous metal, the united metals having been co-extended and said cupriferous metal having throughout its mass a hard, dense and compact structure

5. A ship plate comprising a core or base of steel weld-coated on both sides with cupriferous metal, the united metals having been co-extended and said cupriferous metal having throughout its mass a hard, dense and compact structure.

[Claims 6 and 7 not printed in the Gazette.]

1,060,931. TRACK-SANDING DEVICE. WILLIAM A. MOONEY, Nashville, Tenn. Filed Sept. 12, 1911. Serial No. 648,936. (Cl. 105—60.)



1. The combination with a vehicle frame and sand hopper, of a sand conductor mounted to turn on the vehicle frame and communicating with the hopper, and means operatively connected with the vehicle axle for swinging the conductor with the vehicle wheels.

2. The combination with a vehicle frame and sand hopper, of swiveled sand conductors mounted on the frame and communicating with the hopper, vertically adjustable arms mounted on the conductors and extending horizontally therefrom, a pivoted connection between the arms, and means operatively connected with the arms and actuated by contact with the vehicle axle for moving said arms simultaneously and in the same direction.

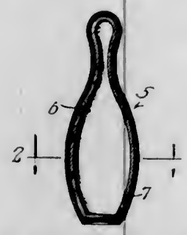
3. The combination with a vehicle frame and sand hopper, of spaced swiveled sand conductors attached to the frame and communicating with the hopper, a connection between said conductors, an actuating member connected thereto, and a collar mounted on the vehicle axle and bearing against the actuating member.

4. The combination with a vehicle frame and a sand hopper, of spaced swiveled sand conductors attached to the frame and communicating with the hopper, a pivoted connection between the conductors, and a rod having one end thereof pivoted to the vehicle frame and the other end bifurcated for engagement with the vehicle axle, said rod being pivotally attached to the connecting means of the conductors.

5. The combination with a vehicle frame and sand hopper, of spaced swiveled sand conductors secured to the frame and communicating with the hopper, arms detachably mounted on the conductors and capable of vertical adjustment thereon, a rod pivotally attached at each end to the detachable arms, and means for actuating the rod from the vehicle axle to cause said conductors to move simultaneously with the wheels and in the same direction.

[Claim 6 not printed in the Gazette.]

1,060,932. BOWLING-PIN. WILLIAM P. MUSSEY, Chicago, Ill. Filed Nov. 29, 1912. Serial No. 734,040. (Cl. 46—66.)

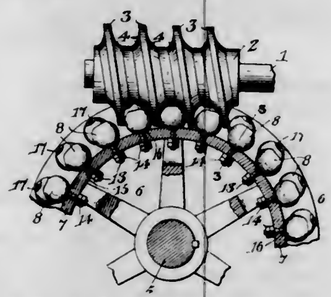


1. A bowling pin comprising an inner hollow core and an outer shell of a hard, tough, homogeneous composition.

2. A bowling pin comprising an inner hollow metallic core and an outer shell of a hard, tough, homogeneous composition.

3. A bowling pin comprising an inner hollow metallic core having the approximate form of a bowling pin, the wall of the core being of the same general thickness throughout, and an outer shell of a hard, tough, homogeneous composition.

1,060,933. WORM-GEARING. CHARLES H. MYERS, Buffalo, N. Y. Filed Mar. 1, 1912. Serial No. 680,798. (Cl. 74—36.)

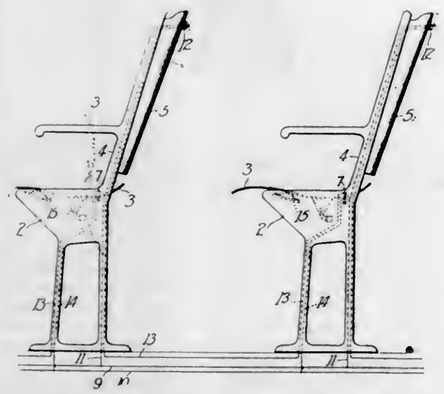


1. A worm gearing comprising a worm and a worm gear wheel, the latter being provided with teeth composed of spheres bored diametrically with a counter-bore at each end of the diametric bore, a screw traversing the bore of each sphere and carried by the gear wheel, and anti-friction balls lodged in the counter-bores at the ends of the main bore of the sphere.

2. A worm gearing comprising a worm and a worm gear wheel having a peripheral series of spheres mounted thereon, each sphere having a diametric bore therethrough with counter-bores at the opposite ends, and a screw having a head adapted to one counter-bore in the sphere and a smooth portion traversing the main bore of the sphere, said screw having a threaded portion, and the gear wheel having a rim with a tapped passage therethrough for said threaded portion of the screw and also a counter-bore about said tapped passage, and anti-friction balls lodged in the counter-bores of the sphere and in the corresponding counter-bore in the rim of the gear wheel, the threaded portion of the screw being of a length to extend through the rim and beyond that face of the rim remote from the counterbore and there provided with lock nuts.

3. A worm gear comprising a worm having a helical flange with hollowed side walls and a gear wheel with a laterally curved periphery forming a circumferential channel about the gear wheel, and series of spheres carried by the rim of the gear wheel within the channel, each sphere having a diametric bore with counter-bores at opposite ends, the counter-bore at one end being larger than that at the other, a screw traversing each sphere and provided with a head at one end adapted to the larger counter-bore, a smooth shank adapted to the main bore of the sphere, and a threaded end for engaging and traversing the rim of the gear wheel, the said rim where traversed by the screw being counter-bored to match the corresponding counter-bore in the sphere, and anti-friction balls lodged in the counter-bores of the sphere, being confined therein at one end by the head of the screw and at the other end by coacting parts of the sphere and rim of the gear wheel, said screw having the threaded end of a length to extend through and beyond the rim of the wheel and there provided with lock nuts.

1,060,934. ATTACHMENT FOR OPERA-CHAIRS. JOHAN AXEL NORDGRÉN, Worcester, Mass. Filed July 15, 1910. Serial No. 572,174. Renewed July 29, 1912. Serial No. 712,181. (Cl. 240—4.)

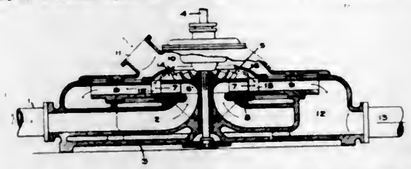


An attachment for opera chairs serially arranged comprising in combination, a lamp in the back of one chair, said lamp having feed and return wires 11 and 13, a switch arranged upon the frame of the next chair of the series and in contact with wire 13, said switch being further provided with a return wire 14, a lever 7 for opening and closing said switch and an arm 8 secured to the seat of the last named chair for raising and lowering lever 7.

1,060,935. CENTRIFUGAL AIR-PUMP. FRANZ JOSEF PETERMÖLLER, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 17, 1910. Serial No. 544,519. (Cl. 230—14.)

1. In a centrifugal throwing pump, the combination of a casing, a runner within the casing having buckets for imparting velocity to the throwing liquid, an annulus that surrounds the runner and is separated therefrom by

a relatively large gap, an air chamber in the casing that is in communication with the gap, and buckets also carried by the runner and arranged in the passage between the chamber and the gap which receive air or vapor from said chamber separate from the liquid supply, impart velocity to said air or vapor and deliver it to the gap before it is acted upon by the liquid issuing from the runner.



2. In a centrifugal throwing pump, the combination of a casing to which the air or vapor and the throwing liquid are admitted by separate conduits, means, including a runner surrounded by a gap, for imparting velocity to the liquid and also for separating the air or vapor from the liquid before they enter the gap, an annulus separated from the periphery of the runner by said gap and having passages which receive the mixture of air or vapor and liquid and in which said air or vapor is compressed by the liquid, a chamber surrounding the annulus which receives the mixture of water and compressed air after it is discharged from said annulus, and conduit means for conveying the air and water from the casing.

3. In a centrifugal throwing pump, the combination of a casing, an air chamber in the casing, a runner to which the throwing liquid alone is admitted on one side and by which velocity is imparted to the liquid, said runner being surrounded by a gap which is in communication with the air chamber, buckets carried by the opposite side of the runner and arranged in the passage between the chamber and the gap which bucket receives the air or vapor from said chamber unmixed with the throwing liquid and after imparting velocity thereto discharge it into the gap to be acted upon by the liquid issuing from the runner, an annulus between which and the runner said gap is formed, said annulus receiving the mixture of liquid, and air or vapor, inlets for the liquid and air or vapor, and conduit means for conveying the liquid and air or vapor from the casing.

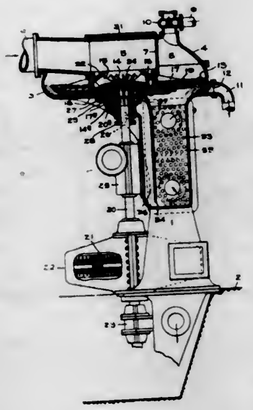
4. In a centrifugal throwing pump, the combination of a casing containing an annular inlet chamber for water, and an annular outlet chamber for water and compressed air, inlet and outlet conduits for the chambers, a runner arranged to receive water from the inlet chamber, buckets on the runner that are out of the path of the water and which receive air from a suitable inlet and impart velocity thereto, a stationary annulus provided with passages through which water and air flow and in which the air is compressed by the water, said annulus being separated from the runner by a relatively large gap into which the air is directed by the said buckets and located between the runner and the annular outlet chamber.

5. In a centrifugal throwing pump, the combination of a casing containing inlet and outlet chambers, conduits connected therewith, an air chamber, an inlet therefor, a runner that receives water from the inlet chamber, buckets on the opposite side of the runner from those which act on the water, said buckets receiving air from the air chamber and delivering it to the streams of water after they have been discharged by the runner, an annulus containing passages which receive water from the runner and air from the buckets and in which the air is compressed by the water, said annulus discharging water and compressed air into the outlet chamber.

[Claims 6 and 7 not printed in the Gazette.]

1,060,936. CENTRIFUGAL THROWING AIR-PUMP. FRANZ J. PETERMÖLLER, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 29, 1910. Serial No. 558,401. (Cl. 230—14.)

1. In an apparatus of the character described, the combination of a support, a pump casing carried by the support and extending to one side thereof, a motor having a casing which is split in a plane parallel to the vertical plane of the support, a shaft driven by the motor, one end of which extends into close proximity to but does not enter the pump casing whereby it can be removed by a sidewise movement without disturbing said casing, an impeller located in the casing and having a hub with a socket that extends through the wall of the casing and receives the end of the shaft, and a removable housing for the end of the shaft and socket.



2. In an apparatus of the character described, the combination of a vertical column, a pump casing mounted thereon and overhanging it on one side, a motor mounted on the column, a casing therefor that is split in an axial plane of the motor shaft, a vertically disposed shaft that is driven by the motor, the upper end of the shaft terminating at a point below the overhanging portion of the pump casing, an impeller having an elongated hub which is mounted on the shaft, and a housing that incloses the upper end of the shaft and the hub which is detachable to permit of removing the shaft by a sidewise movement.

3. In an apparatus of the character described, the combination of a vertical column, a pump casing, one portion of which is formed integral with and overhangs the column on one side, and impeller in the casing whose body is located above and whose hub extends below the bottom wall of the casing, an upright shaft to the upper end of which is secured the impeller, said shaft being removable by a sidewise movement, a driving motor rigid with the column, the casing of which is split in an axial plane of the motor shaft, bearings for the shaft that are split in an axial plane, a housing that is split axially and incloses the upper end of the shaft and the hub of the impeller, and a packing for the shaft carried by the housing.

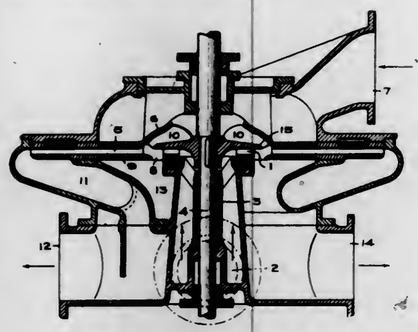
4. In an apparatus of the character described, the combination of a hollow upright column, a centrifugal throwing pump supported thereby, an impeller for the pump, communicating chambers formed in said column to receive the throwing medium, one of which communicates with the suction side of the impeller and the other with the discharge side thereof, cooling means which act on the fluid medium as it flows from the discharge to the suction side of the impeller, an inlet for the air or other gas to be pumped, and an outlet therefor.

5. In an apparatus of the character described, the combination of a hollow upright column, a centrifugal throwing pump supported thereby, an impeller for the pump, a chamber in the column that receives the heated medium discharged by the impeller, a cooling means in said chamber, a second chamber also in the column communicating with and receiving the cooled medium from the first, the second chamber communicating with the suction side of the impeller, the level of the fluid in the chambers being such that the inlet of the impeller is submerged, an inlet

for the air or other gases, and a discharge conduit therefor which receives said gases after their pressure has been raised.

[Claims 6 to 10 not printed in the Gazette.]

1,060,937. CENTRIFUGAL PUMP. FRANZ J. PETERMÖLLER, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 25, 1910. Serial No. 568,801. (Cl. 230—14.)



1. In a centrifugal pump, the combination of a running wheel, a horizontally disposed directing ring surrounding the wheel and having upper and lower plates, there being a gap between the edge of the wheel and the lower plate of the ring, and a chamber with which the gap communicates, said chamber being provided with an escape pipe.

2. In a centrifugal pump, the combination of a running wheel, a horizontally disposed directing ring surrounding the wheel and having upper and lower plates, there being a gap between the edge of the wheel and the lower plate of the ring and an overhanging member on the wheel above said gap, and a chamber communicating with the gap, said chamber being provided with an escape pipe.

3. In a centrifugal pump, the combination of a running wheel, a horizontally arranged directing ring surrounding the wheel and having top and bottom walls, there being a gap between the wheel and the edge of the lower wall of the directing ring, and buckets on the upper part of the wheel in the space through which the medium to be moved enters.

4. In a centrifugal pump adapted to operate with hot throwing water, the combination of a rotary impeller, a directing ring surrounding the impeller, there being a gap between the periphery of the impeller and the inner edge of the ring, and means arranged adjacent one side of the gap for removing from said gap the steam given off by the throwing water.

5. In a centrifugal pump adapted to operate with hot throwing water, the combination of a rotary impeller, a directing ring surrounding the impeller, there being a gap between the periphery of the impeller and the inner edge of the ring, means supplying gas or other medium to be moved to one side of the gap, a device for preventing steam given off by the throwing water from entering the space through which said gas or medium flows on its way to the gap, and means for removing said steam from the other side of the gap.

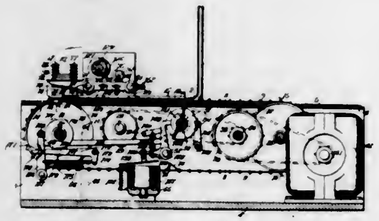
[Claims 6 to 8 not printed in the Gazette.]

1,060,938. METHOD FOR TINNING AND LEADING METALS. FRITZ PLATHNER and VICTOR DORN, Berlin, Germany. Filed July 20, 1906. Serial No. 327,030. (Cl. 91—70.1.)

1. A method of coating metal surfaces with a thin coating of adherent metal which consists in mixing coating metal in powdered condition with a suitable flux and with a liquid vehicle completely volatile at a temperature below the melting point of the coating metal and thereby forming a thin spreading mixture, spreading this mixture on the metal surface to be coated, and then heating the metal thus coated until the volatile vehicle is driven off and the powdered metal melted and fluxed to a thin and substantially uniform adherent coating.

2. A method of coating metal surfaces with a thin coating of adherent metal comprising tin, lead or tin and lead alloy, which consists in mixing the coating metal in the form of fine powder with a fluxing chlorid and a liquid vehicle completely volatile at a temperature below the coating metal and in which vehicle the chlorid is soluble and thereby forming a thin spreading mixture, spreading the mixture on the metal to be coated, and then heating the metal thus coated until the volatile vehicle is driven off and the coating metal melted and fluxed to a thin, substantially uniform adherent coating.

1,060,939. AUTOMATIC TELEGRAPH-TRANSMITTER. LOUIS MAXWELL POTTS, Baltimore, Md., assignor, by mesne assignments, to Austin McLanahan, Baltimore, Md. Original application filed June 17, 1909, Serial No. 502,785. Divided and this application filed June 2, 1910. Serial No. 564,587. (Cl. 178—69.)



1. An automatic transmitter comprising, in combination transmitting mechanism and a prepared form for controlling the same, and mechanism controlled by said form itself to effect relative movement between the said form and transmitting mechanism.

2. An automatic telegraph transmitter comprising, in combination, a prepared sending form, transmitting mechanism comprising a plurality of electrical contacts arranged for operation in combinations, and mechanism to effect relative movement between said form and said transmitting mechanism, both said movement imparting mechanism and said transmitting contacts being controlled by the said form itself.

3. An automatic telegraph transmitter comprising, in combination, a perforated sending form, transmitting mechanism comprising a plurality of electrical contacts arranged for operation in combination, and mechanism to effect relative movement between said form and said transmitting mechanism, both said movement imparting mechanism and said transmitting contacts being controlled by the same perforations in said form itself.

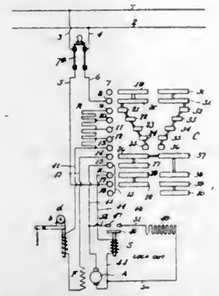
4. An automatic transmitter comprising, in combination, transmitting mechanism, a prepared sending form, and mechanism controlled by said form itself to effect selective movement of said form in said transmitter.

5. An automatic telegraph transmitter comprising, in combination, transmitting contacts, a prepared sending form for controlling said contacts, mechanism to move said form in said transmitter, power mechanism, and means controlled by said form itself to couple the form moving mechanism to the said power mechanism.

[Claims 6 to 35 not printed in the Gazette.]

1,060,940. SYSTEM OF ELECTRIC-MOTOR CONTROL. JOHN C. REED, Steelton, Pa. Filed June 4, 1912. Serial No. 701,561. (Cl. 172—179.)

1. In a motor control system, a motor having an armature, and a field winding in series therewith, a resistance, and means to automatically connect said resistance in parallel with the armature by drop of current in the armature circuit to a pre-determined value.



2. In a motor control system, a motor having an armature, and a field winding in series therewith, a resistance, and means to automatically connect said resistance in parallel with the armature when the armature reaches a predetermined speed.

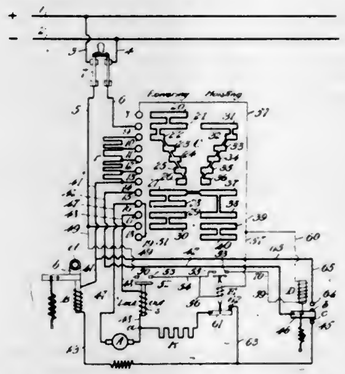
3. In a motor control system, a motor having an armature, and a field winding in series therewith, a resistance, and means operated by the drop in current through the armature to automatically connect said resistance in parallel to the armature and simultaneously strengthen the field.

4. In a motor control system, a motor having an armature and a field winding, a controller arranged to connect said armature and field winding in series, a resistance, means operated by the drop of current through the armature to automatically connect the resistance in parallel with the armature and in series with the field winding, thereby increasing the current in said field winding.

5. In a motor control system, a motor having an armature and a field winding, a resistance, and means dependent upon the speed of rotation of the armature to automatically connect said resistance in parallel to the armature and in series with the field.

[Claims 6 to 8 not printed in the Gazette.]

1,060,941. SYSTEM OF ELECTRIC-MOTOR CONTROL. JOHN C. REED, Steelton, Pa. Filed Jan. 4, 1913. Serial No. 740,160. (Cl. 172—179.)



1. In a motor control system, a motor having a rotor and a stator, means to supply current to the rotor and stator in series and means dependent upon the speed of the rotor to automatically connect the rotor and stator in parallel.

2. In a motor control system, a motor having an armature and a field and means to supply current to the armature and field in series, and means operated by a drop of current through the armature to automatically connect the armature and field in parallel.

3. In a motor control system, a motor having a rotor and a stator, means to supply current to the rotor and stator in series and electrical means, dependent upon the speed of the rotor to automatically connect the rotor and stator in parallel.

4. In a motor control system, a motor having a rotor and a stator, means to supply current to the rotor and and stator in series, an electrical resistance, and means dependent upon the speed of the rotor to automatically connect the rotor and stator in parallel, and simultaneously establish a local circuit containing said resistance rotor and stator in series and through which local circuit passes a counter current generated by the motor upon the assumption of the increased speed of the rotor.

5. In a motor control system, a motor having a rotatable armature and a stationary field, means to supply current to said armature and field in series, an electrical resistance and electrical means dependent upon the speed of the armature to automatically connect said armature and field in parallel and simultaneously establish a local circuit containing said resistance, field and armature in series and through which local circuit passes a counter current generated by the motor upon the assumption of increased speed of the armature.

[Claims 6 and 7 not printed in the Gazette.]

1,060,942. SWINGLETREE. WILLIAM REEVES and HAROLD BEADNELL LA TROBE, Henderson, New Zealand. Filed May 4, 1911. Serial No. 625,081. (Cl. 21—78.)



1. An improved swingletree, comprising in combination a spreader bar, a draft band formed in two parts each connected at one end to an end of the spreader bar, and a triangular link connecting the other ends of said band parts, the sides of said link being of different lengths and said link serving to connect the band to a draft hook.

2. An improved swingletree, comprising in combination a spreader bar, thimbles at the ends of said bar, a strip of hoop steel passing along the side of said bar and around the ends thereof and holding said thimbles in place, a draft band of hoop steel, formed in two parts each having one end passed around an end of the spreader bar, loops carried by the other ends of said band parts, a triangular link having sides of different lengths passing through said loops and serving to connect the draft band to a draft hook, and means for securing the ends of said strip and draft band to the ends of the spreader bar.

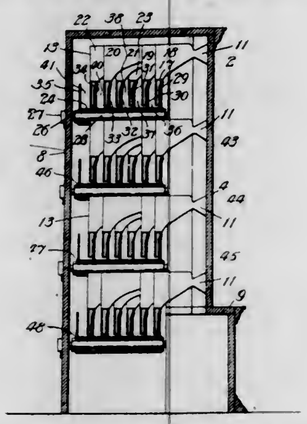
1,060,943. MAIL-CLASSIFYING MACHINE. JAMES REHAK, Cicero, Ill., assignor to The B. F. Cummins Company, Chicago, Ill., a Corporation of Illinois. Filed June 5, 1911. Serial No. 631,235. (Cl. 193—4.)

1. In a mail classifying apparatus, the combination with a conveying belt, of a chute having a downward discharge portion narrowed at the mouth in a plane substantially parallel to the direction of movement of said conveying belt, the width of said discharge portion being less than that of the space upon the belt to be utilized as a conduit, said chute having a relatively narrow discharge opening leading in the direction of said movement and a shield in the rear of said chute for laterally guiding articles moving upon said belt past said chute.

2. In a mail classifying apparatus, the combination with a substantially horizontal conveying belt and means for actuating the same, of a chute arranged above and adjacent to said belt, said chute having a narrow, downwardly directed delivery opening arranged to discharge upon said belt, a space being provided upon said belt for the passage of mail pieces, and a substantially vertical

rearwardly extended deflector arranged at an angle to the edge of said belt to deflect mail-matter past said chute.

3. In a mail classifying apparatus, the combination with a conveying channel having substantially vertical parallel walls for supporting mail-pieces upon their edges and a conveying belt forming the bottom of said channel, of a chute having a delivery portion comprising walls arranged to extend downwardly into said conveying channel in close proximity to the surface of said belt, the width of said delivery portion being less than that of said channel and a diagonally arranged deflector at the rear of said chute extending from one wall of the channel to the edge of the chute to guide mail-pieces past said chute.



4. In a mail classifying apparatus, the combination with a conveying channel having substantially vertical parallel walls for supporting mail-pieces upon their edges and a conveying belt forming the bottom of said channel, of a plurality of chutes common to said channel, each chute having a delivery portion comprising walls arranged to extend downwardly into said conveying channel in close proximity to the surface of said belt, the width of said delivery portion being less than that of said channel and means at the rear of each of said chutes except the first, for deflecting mail pieces into the channel past said chutes.

5. In a mail classifying apparatus, the combination with a conveying channel having substantially vertical parallel walls for supporting mail-pieces upon their edges and a conveying belt forming the bottom of said channel, of a plurality of chutes common to said channel, each chute having a delivery portion extending downwardly into said conveying belt, the side walls of the portion within said channel being substantially parallel, the width of said delivery portion being less than the width of said channel, the forward part of said delivery portion being cut away to permit the free passage of the mail-pieces upon their edges and means at the rear of each of said chutes, except that at the beginning of the series, for guiding mail-pieces through the channel past said chutes.

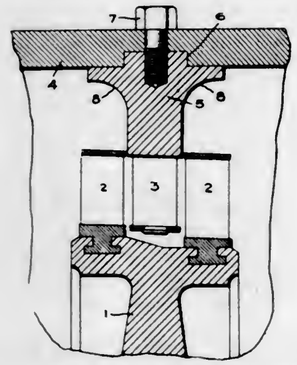
[Claim 6 not printed in the Gazette.]

1,060,944. BUTTON-FASTENER. JOHN ALBERT TELL REYMOND, Ottawa, Ontario, Canada. Filed Mar. 21, 1910, Serial No. 550,813. Renewed Mar. 28, 1913. Serial No. 757,484. (Cl. 24—104.)



A device of the class described comprising a head having perforations therethrough, a staple member provided with annular grooves, a base plate formed with tongues struck up and turned over to form a guide way, and a third tongue struck up in the plate and out of alinement with the other tongues, a sliding locking plate held between the tongues and having a slot to receive the third tongue, said locking plate being provided with two parallel slots, each enlarged at one end, said slots being adapted to receive and lock in the grooves on the staple member, said locking plate being formed on one end with a flange having a curved upper surface, dome shaped cover member fitting over the base plate and formed with a cutaway portion which is adapted to be filled by the flange on the locking plate, all substantially as herein set forth and described.

1,060,945. PREVENTING EROSION IN STEAM-TURBINES. RICHARD H. RICE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 7, 1912. Serial No. 719,097. (Cl. 121—57.)



1. An intermediate bucket for a steam turbine having a base provided with curved sides to divert the water coming from the wheel buckets.

2. An intermediate bucket for a steam turbine having a base wide enough to receive the water coming from two adjacent rows of wheel buckets, and concavely curved to divert said water.

3. In a steam turbine, intermediate buckets united to the casing by a rabbeted joint and having a wide base to protect said joint from the erosive and corrosive effects of water thrown off by the wheel buckets.

4. In a steam turbine, intermediate buckets united to the casing by a rabbeted joint and having a wide base to protect said joint from the erosive and corrosive effects of water thrown off by the wheel buckets, said base having its sides concavely curved to divert said water.

1,060,946. CLARINET. ROBERT E. RIDAY, Chester, Pa. Filed Aug. 10, 1912. Serial No. 714,321. (Cl. 84—7.)



1. In a reed-instrument the combination of a mouthpiece having an inlet opening therein and provided with spaced supporting parts arranged one forwardly of the other and having an open space therebetween, a reed having a forward free end portion arranged adjacent said opening and a rearward portion extending across said space and engaging said supporting parts, and means operative to adjust said reed within said space and thereby vary the interval between the said free end of the reed and said opening.

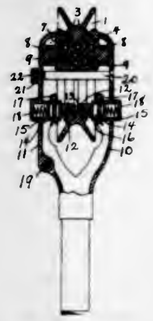
2. In a reed-instrument the combination of a mouthpiece having an inlet opening therein and provided with spaced supporting parts arranged one forwardly of the other and having an open space therebetween, a reed having a forward free end portion arranged adjacent said opening and a rearward portion extending across said space and engaging said supporting parts, and an adjustable band extending around said space and surrounding said mouthpiece and said reed.

3. In a reed-instrument the combination of a mouthpiece having an inlet opening therein and provided with spaced supporting parts arranged one forwardly of the other and having an open space therebetween, the rearward supporting part being formed of yielding material, a reed having a forward free end portion arranged adjacent said opening and a rearward portion extending across said space and engaging said supporting parts, and means operative to adjust said reed within said space and thereby vary the interval between the said free end of the reed and said opening.

4. In a reed-instrument the combination of a mouthpiece having an inlet opening therein and provided with spaced supporting parts arranged one forwardly of the other and having an open space therebetween, the rearward supporting part being formed of yielding material, a reed having a forward free end portion arranged adjacent said opening and a rearward portion extending across said space and engaging said supporting parts, and an adjustable band extending around said space and surrounding said mouthpiece and said reed.

5. In a reed-instrument the combination of a mouthpiece having an inlet opening therein, a reed having a forward free end portion arranged adjacent said opening and bearing intermediate its ends upon a part of the mouthpiece, a yielding pad having its bottom engaging said mouthpiece and its top supporting the rearward portion of the reed, and an adjustable band surrounding the mouthpiece and the rearward portion of the reed.

1,060,947. TROLLEY. JOHN RISBRIDGER, North East, Pa., assignor of fifty-five one-hundredths to Eureka Tempered Copper Works, North East, Pa., a Corporation of Pennsylvania. Filed May 12, 1911. Serial No. 626,724. (Cl. 191—39.)



1. In a trolley, the combination of a trolley wheel having a central opening therein; a bearing block arranged at the top of the opening supporting the wheel; and a bearing lug of conducting material engaging the wheel and acting as a brush for taking the current from the wheel at a part of the opening opposite the bearing block.

2. In a trolley, the combination of a trolley wheel having a central opening therein; a bearing block arranged at the top of the opening supporting the wheel, said block having a cavity opening toward the wheel for a lubricant; and a bearing lug of conducting material engaging the wheel and acting as a brush for taking the current from the wheel at a part of the opening opposite the bearing block.

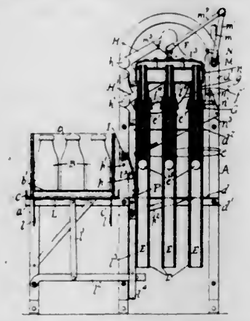
3. In a trolley, the combination of a trolley wheel having a central opening therein; a bearing block arranged at the top of the opening supporting the wheel, said block having a cavity opening toward the wheel for a lubricant; a felt in the cavity for carrying the lubricant; and a bearing lug of conducting material engaging the wheel and acting as a brush for taking the current from the wheel at a part of the opening opposite the bearing block.

4. In a trolley, the combination of a trolley wheel having a central opening therein; a bearing block arranged at the top of the opening supporting the wheel, said bearing block having a cavity opening toward the wheel with supporting partitions extending across the cavity; and a bearing lug of conducting material engaging the wheel and acting as a brush for taking the current from the wheel at a part of the opening opposite the bearing block.

5. In a trolley, the combination of a trolley wheel having a central opening therein; a bearing block arranged at the top of the opening supporting the wheel; and a yielding bearing lug of conducting material engaging the wheel and acting as a brush for taking the current from the wheel at a part of the opening opposite the bearing block.

[Claims 6 to 13 not printed in the Gazette.]

1,060,948. BOTTLE-CAPPING MACHINE. FRANK B. SCHUSTER, Buffalo, N. Y., assignor, by mesne assignments, to Sanitary Dairy Machine Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed June 15, 1911. Serial No. 633,248. (Cl. 226—5.)



1. In a bottle capping machine, the combination of a support for the bottles, magazines adapted to contain caps, a movable capping device having a plurality of suction tubes which are adapted to take the caps from the magazines and to place them in the bottles, means for moving the capping device from the cap magazines to the bottles, said suction tubes being independently movable on said capping device to accommodate bottles of different heights, and suction controlling means for causing said suction tubes to take the caps from the magazines, carry them to the bottles and release the caps, substantially as set forth.

2. In a bottle capping machine, the combination of a support for the bottle, a magazine adapted to contain caps, a movable suction capping device, a suction tube yieldingly mounted in said capping device which is adapted to take a cap from the magazine and which is shaped to enter the mouth of the bottle and to force the cap into the mouth of the bottle, means for moving the capping device from the magazine to the bottle, and suction controlling means for causing the capping device to take a cap from the magazine, carry it to the bottle and release the cap, substantially as set forth.

3. In a bottle capping machine, the combination of a support for the bottle, a magazine adapted to contain caps, a movable suction capping device having a suction tube which is adapted to take the cap from the magazine and to force the cap into the mouth of the bottle, a bottle guide which is adapted to engage the end of the bottle

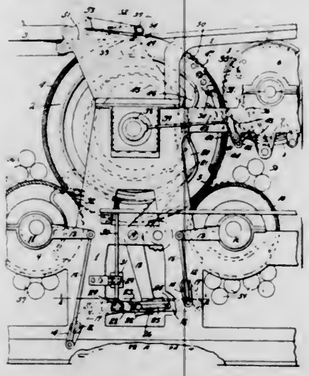
and center it with regard to said suction tube, said suction tube being movable with respect to said bottle guide, means for moving the capping device from the magazine to the bottle, and suction controlling means for causing the capping device to take a cap from the magazine, carry it to the bottle, and release the cap, substantially as set forth.

4. In a bottle capping machine, the combination of a support for the bottle, a magazine adapted to contain caps, a suction capping device for taking the caps from the magazine, means for operating the capping device to place the caps in the bottles, and a follower which is moved vertically in the magazine by the suction of the capping device and supports the caps in the magazine by engagement with the magazine, substantially as set forth.

5. In a bottle capping machine, the combination of a support for the bottle, a magazine containing caps, a capping device, a suction connection for the capping device and means for controlling the suction for withdrawing the caps from the magazine and releasing them from the capping device, a follower which is moved vertically in the magazine by the suction of the capping device and supports the caps in the magazine by frictional engagement with the walls of the magazine, and means for moving the capping device to place the caps in the bottles, substantially as set forth.

[Claims 6 to 19 not printed in the Gazette.]

1,060,949. PRINTING-MACHINE. WALTER SCOTT, Plainfield, N. J.; Isabella Scott and David John Scott executors of said Walter Scott, deceased. Filed May 10, 1906. Serial No. 316,056. (Cl. 101—89.)



1. In a printing machine, an impression cylinder having a relatively stationary impression surface and a relatively movable transfer surface, a transfer cylinder coöperating with the impression cylinder, and means for bringing the movable transfer surface of the impresison cylinder into operative relation to the transfer cylinder.

2. In a printing machine, the combination with an impression cylinder making one revolution to each impression, an impression surface on the said impression cylinder, a transfer surface on the said impression cylinder but below the level of the pitch circumference of the cylinder, a form member, a transfer cylinder for transferring the sheet from one surface to the other on the impression cylinder, and a movable portion on the transfer surface adapted to be below the level of the pitch circumference of the impression cylinder when it moves past the form member, and adapted to be moved outward into contact with the transfer cylinder when it moves past the said transfer cylinder.

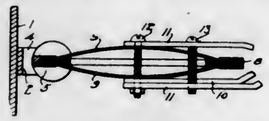
3. In a printing machine, the combination with an impression cylinder making one revolution to each impression, an impression surface on the said cylinder, a transfer surface also on the said cylinder but below the level of the pitch circumference of the cylinder, a transfer cylinder for transferring the sheet from the impression surface to the transfer surface, and a hinged portion on the transfer surface adapted to be below the level of the pitch circumference of the impression cylinder when it moves past the form member, and adapted to be moved out so as to coact with the transfer cylinder when it moves past the said transfer cylinder.

4. In a printing machine, the combination with an impression cylinder making one revolution to each impression, an impression surface on the said impression cylinder, a transfer surface also on the said impression cylinder but below the level of the pitch circumference of the said cylinder, a form member, a transfer cylinder for transferring the sheet from one surface to the other on the impression cylinder, a hinged portion on the transfer surface adapted to be below the level of the pitch circumference of the impression cylinder when it moves past the form member, and adapted to be moved outward so as to coact with the transfer cylinder when it moves past the said transfer cylinder, and means for tripping the impression.

5. In a printing machine, the combination with an impression cylinder making one revolution to each impression, an impression surface on the said cylinder, a transfer surface also on the said cylinder but below the level of the pitch circumference of the cylinder, a transfer cylinder for transferring the sheet from the impression surface to the transfer surface, a hinged portion on the transfer surface adapted to be below the level of the pitch circumference of the impression cylinder when it moves past the form member, and adapted to be moved out into contact with the transfer cylinder when it moves past the said transfer cylinder, and means for tripping the impression.

[Claims 6 to 10 not printed in the Gazette.]

1,060,950. ELECTRIC-LIGHT BRACKET. EMIL SCHWARZ and AUGUST E. SCHWARZ, Tacoma, Wash. Filed Nov. 20, 1912. Serial No. 732,576. (Cl. 248—8.)



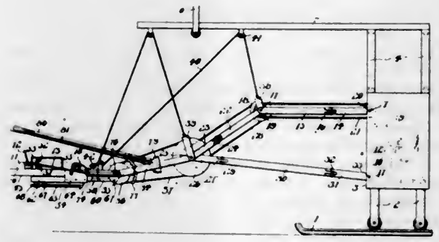
1. In an electric light bracket, the combination with a wall plate; a frame pivoted thereto on a vertical axis; a circular recess in said frame; a circular plate held within said recess; adjustable means for regulating the friction between the plate and the frame; an arm secured to said plate and adapted to turn the plate in the recess; a complementary arm pivoted to the center of said plate; an extensible bracket pivoted to the extremities of said arms and comprising pairs of cross links, each pair pivoted together at their centers and to the adjacent pairs at their extremities; and a lamp holder secured to the extremity of said bracket.

2. In an electric light bracket, the combination with a wall plate; a frame pivoted thereto on a vertical axis; a pair of concentric circular recesses on the two sides of said frame; a pair of circular plates held within said recesses; adjustable means for regulating the friction between the plates and the frame; an arm secured to the plates and adapted to turn them in the recesses; a complementary arm pivoted to the center of the plate; an extensible bracket pivoted to the extremities of said arms and comprising pairs of links, each pair pivoted together at their centers and to the adjacent pairs at their extremities; and a lamp holder secured to the end of said bracket.

3. In an electric light bracket, the combination with a wall plate; a frame pivoted thereto on a vertical axis; a pair of concentric circular recesses on the two sides of said frame; a pair of circular plates held within said recesses; an arm secured to the plates and adapted to turn them in the recesses; a screw pin passing through the centers of said plates and adapted to draw them together to regulate the friction between the plates and the frame; a complementary arm pivoted on said pin; an extensible bracket pivoted to the extremities of said arms and comprising pairs of links, each pair pivoted together at their centers and to the adjacent pairs at their extremities; and a lamp holder secured to the end of said bracket.

4. In an electric light bracket, the combination with a wall plate; a frame pivoted thereto on a vertical axis; a pair of concentric circular recesses on the two sides of said frame; a pair of dished circular plates fitting in said recesses and having their convex sides outermost; an arm secured to the plates and adapted to turn them in the recesses; a screw pin passing through the centers of said plates and adapted to draw them together to regulate the friction between the plates and the frame; a complementary arm pivoted on said pin; an extensible bracket pivoted to the extremities of said arms and comprising pairs of links, each pair pivoted together at their centers and to the adjacent pairs at their extremities; and a lamp holder secured to the end of said bracket.

1,060,951. FILING-MACHINE. IGNAC SEWERYN, Pittsburgh, Pa. Filed June 28, 1912. Serial No. 706,385. (Cl. 29—76.)

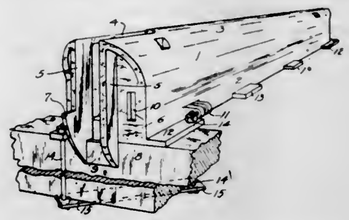


1. A filing machine comprising a movable housing, a guide rail carried by the top thereof, a source of power located in said housing, an adjustable arm having the inner end thereof movably connected to said housing and the outer end thereof suspended from said guide rail, a reciprocatory file holder carried by the outer end of said arm, and means carried by said arm and actuated from the source of power within said housing to impart a reciprocatory movement to said file holder.

2. A machine of the type described comprising a movable housing, a source of power carried thereby, an adjustable arm having the inner end thereof movably connected to said housing, a reciprocatory file holder carried by the outer end of said arm, a file clamp connected to said holder, means for counter-balancing one part of said arm relatively to another part thereof, and means arranged longitudinally of said arm, and operated from said housing for imparting a reciprocatory movement to said file holder.

3. A machine of the type described comprising a movable housing, a guide rail supported by the top thereof, a source of power within said housing, an adjustable sectional arm having the inner end thereof movably supported by said housing, a file holder movably supported by the outer end of said arm, a file clamp carried by said holder, means supported from said guide rail for counter-balancing sections of said arm, means whereby the outer end of said arm can be adjusted relatively to the remainder of said arm, and means arranged longitudinally of said arm and operated from the source of power within said housing for moving said file holder lengthwise of the outer end of said arm.

1,060,952. LOG-BUNK. EDWARD B. SHIELDS, Tacoma, Wash., assignor to Turtle-Back Log Bunk and Car Stake Company, Tacoma, Wash., a Corporation of Washington. Original application filed Mar. 25, 1912, Serial No. 686,006. Divided and this application filed Jan. 9, 1913. Serial No. 741,017. (Cl. 105—183.)



1. A device of the class described comprising a bunk extending across the car and having a semicylindrical top adapted to receive the logs.

2. A device of the class described comprising a bunk extending across the car and having a semicylindrical top adapted to receive the logs, and an open bottom whereby no dirt is retained therein.

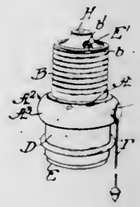
3. A device of the class described comprising a bunk extending across the car and having two vertical parallel walls, joined by a semicylindrical top integral therewith and adapted to receive the logs.

4. A device of the class described, comprising a bunk extending across the car and having two vertical parallel walls, separated at their base, but joined together by a semicylindrical top integral therewith and adapted to receive the logs.

5. A device of the class described, comprising a bunk extending across the car and having a semicylindrical top adapted to receive the logs, and having extensions to the ends of said arched top to protect the sides of the car.

[Claims 6 to 10 not printed in the Gazette.]

1,060,953. ADAPTER FOR ELECTRIC-LAMP SOCKETS. GUSTAF I. SILBERT, Chicago, Ill., assignor to Federal Electric Company, a Corporation of Illinois. Filed Aug. 25, 1910. Serial No. 578,949. (Cl. 173—357.)

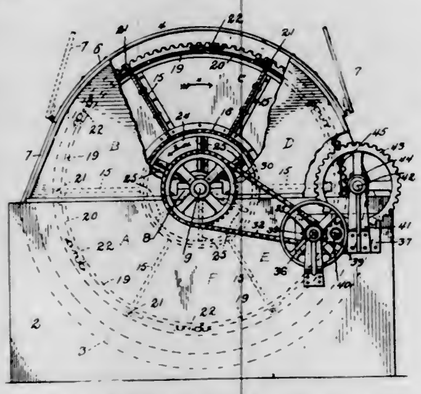


1. In an electric lamp socket, a body of insulating material inclosing a flat substantially circular chamber, arcuate contacts located on opposite sides of the peripheral wall of said chamber, one of said contacts being connected with a line terminal and the other being connected with one of the lamp contacts, a non-rotatable transverse shaft fixed in said chamber walls, a pulley loosely mounted on said shaft, spring-controlled pawls carried at the ends of said arm and provided with contacts adapted for engagement with said arcuate contacts, means interposed between said arm and said pulley adapted to rotate said arm when said pulley rotates in one direction but to permit said pulley to rotate freely in the opposite direction without affecting said arm, offsets formed in the peripheral wall of said chamber at the ends of one of the said arcuate contacts, against which offsets said pawls are adapted to engage to prevent backward rotation of the same, and a flexible member attached at one end to said

pulley and projecting at its other end through a passage provided in said insulating body.

2. In a lamp fixture, in combination with a block provided with an annular face, an annular recess in its face, a metallic shell fitting in said recess, longitudinal apertures in said plug radially beyond said recess, said apertures terminating in shoulders, and tongues punched in the walls of said metallic shell adapted to be forced into said recess and to spring beyond the walls of said shell and engage said shoulders at the ends of said longitudinal apertures.

1,060,954. CIRCULATING ROTARY DYEING-MACHINE. JAMES H. SKITT, Philadelphia, Pa., assignor to Robert P. Smith and George E. Drum, Philadelphia, Pa., Copartners trading under the firm-name of Smith, Drum and Company. Filed Oct. 27, 1911. Serial No. 657,084. (Cl. 8—18.)



1. In a dyeing machine, the combination of a vat, a rotatable carrier therein having imperforate end walls, and means within the carrier for circulating the dye liquor through a portion of the carrier in one direction at one point in the travel of the carrier and in a reverse direction through the same portion of the carrier at another point in the travel of the carrier.

2. In a dyeing machine, the combination of a vat, a rotatable carrier therein, said carrier including walls forming a compartment with imperforate end walls to receive the articles to be dyed, and means within the carrier for circulating the dye liquor through the compartment in one direction when the carrier is in one position and through the compartment in a reverse direction when the carrier is in another position.

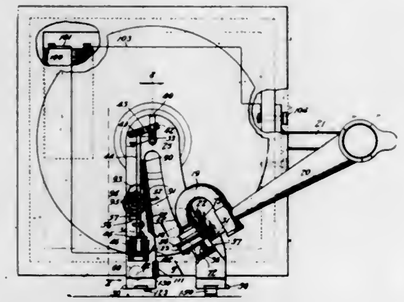
3. In a dyeing machine, the combination of a vat, a rotatable carrier therein, and rotating circulating means for the dye liquor located within the carrier, the carrier having perforated walls and imperforate end walls which cause the dye liquor to flow through a portion of the carrier in one direction when the carrier is in one position and to flow through the same portion in a reverse direction when the carrier is in another position.

4. In a dyeing machine, the combination of a vat, a rotatable carrier therein, the carrier including walls forming a compartment with imperforate end walls to receive the articles to be dyed, and rotating circulating means for the dye liquor located within the carrier for circulating the dye liquor through the compartment in one direction when the carrier is in one position and through the compartment in a reverse direction when the carrier is in another position.

5. In a dyeing machine, the combination of a vat for the dye liquor, a shaft, a cylindrical carrier thereon and being rotatable in the vat, a circulating means on the shaft comprising radial blades extending longitudinally of the shaft and being rotatable within the carrier oppositely thereto to circulate the liquor in one direction within the vat and in a reverse direction radially through the carrier toward and from the axis thereof, the carrier rotating in the direction of the circulation of the liquor in the vat, said carrier comprising radial longitudinal partitions, imperforate end walls and perforated peripheral wall.

[Claim 6 not printed in the Gazette.]

1,060,955. SOUND-REPRODUCING INSTRUMENT. BEN R. SMITH, Chicago, Ill., assignor to Smith Repeatostop Company, Chicago, Ill., a Corporation. Filed June 5, 1911. Serial No. 631,347. (Cl. 181—3.)



1. The combination with a sound-reproducing instrument of the gramophone type, of a repeating device adapted for attachment to such instrument without substantial alteration of the latter and comprising a horizontal shelf and means for inclining it, and a braking device actuated by a weight of said shelf.

2. The combination with a sound-reproducing instrument including a sound box, a sound-reproducing record and means for rotating the same, of a repeating attachment comprising a shelf arranged below the path of travel of said sound-box, a screw engaging with said record-rotating means and rotated thereby, a member carried by said shelf for engaging with said screw, and means controlled by the travel of said sound-box over the sound-reproducing record for bringing said member and said screw into engagement and inclining said shelf.

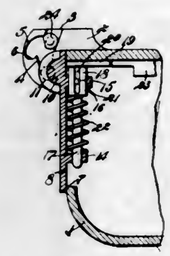
3. The combination with a sound-reproducing instrument including a sound-reproducing record, of a repeating and braking attachment therefor, comprising a shelf arranged over the surface of the sound-reproducing record, means for including said shelf, and a braking device arranged beneath said shelf and actuated by the weight of the latter to arrest the operation of the sound-reproducing instrument.

4. The combination with a sound-reproducing instrument including a sound box, a sound-reproducing record and means for rotating the same, of a repeating attachment comprising a shelf arranged below the path of travel of said sound box, a part fixed to such record-rotating means and rotated thereby, another part carried by said shelf for engaging with said first part, means controlled by the travel of said sound box over the sound-reproducing record for bringing said parts into engagement and inclining said shelf, and means for supporting said shelf in its inclined position.

5. The combination with a sound-reproducing instrument including a sound box, a sound-reproducing record and means for rotating the same, of a shelf arranged below the path of travel of said sound box, a part fixed to the center of said record rotating means and rotated thereby, another part carried by said shelf for engaging with said first part, means controlled by the travel of said sound box over the sound-reproducing record for bringing said parts into engagement and inclining said shelf to permit said sound box to travel backward upon it, and adjustable means for arresting the backward travel of said sound box and operating upon the restoration of said shelf to its horizontal position to impel said sound box in the direction of its forward travel over said sound-reproducing record.

[Claims 6 to 11 not printed in the Gazette.]

1,060,956. JOURNAL-BOX FOR CARS. THOMAS SMITH, San Luis Potosi, Mexico, assignor of one-half to George T. Sharpton, San Luis Potosi, Mexico. Filed Jan. 30, 1912. Serial No. 674,329. (Cl. 64—23.)



1. In a device of the class described, a box; a bearing holder in the box; a lid for the box; a movable member carried by the lid; and resilient means operatively connected with the movable member to cause the same to engage the box when the lid is closed, to dispose the member in the path of the bearing holder, when the lid is closed, whereby to prevent a displacement of the bearing holder.

2. In a device of the class described, a box; a bearing holder in the box; a lid for the box; a pivotal connection between the lid and the box, comprising coöperating parts effective to move the lid transversely against the box when the lid is moved longitudinally; a member movable upon the lid; and resilient means connected with the lid and with the movable member, to move the lid longitudinally, and to dispose the movable member in the path of the bearing holder, when the lid is closed, thereby to prevent a displacement of the bearing holder.

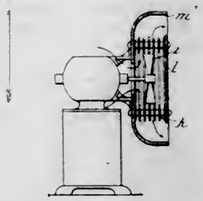
3. In a device of the class described, a box having a slot, the outer extremity of which is open, the inner extremity of which is inclined toward the face of the box, the slot being provided, intermediate its ends, with a lateral pocket; a lid having a projection insertible into the outer extremity of the slot and adapted to register in the inner extremity of the slot when the lid is closed, the projection being seated in the pocket when the lid is open; a spring-actuated member carried by the lid and engaging the box, to hold the projection in the inner extremity of the slot when the lid is closed, the spring-actuated member moving the lid transversely, away from the box when the lid is open, thereby to cause the projection to enter the pocket; and a removable detent protruding into the outer extremity of the slot, and engageable by the projection, to prevent a displacement of the bearing from the slot.

4. In a device of the class described, a box provided with a slot including an open, entering channel and an angularly disposed receiving channel, there being a lateral pocket opposite the apex of the channels; a lid having a projection adapted to be received in the entering channel, and to fit within the receiving channel when the lid is closed, the projection being receivable by the pocket, when the lid is open, there being spaced brackets secured to the rear face of the lid; a member slidable in the brackets; a spring engaging the slidable member and one bracket, to cause the slidable member to engage with the box, thereby to cause the projection to move into the receiving channel, when the lid is closed, and to move into the pocket, when the lid is open; and inter-engaging elements upon the movable member and upon one bracket, to prevent a displacement of the movable member from the bearings, when the lid is open.

5. In a device of the class described, a box having a slot, the inner extremity of which is inclined toward the face of the box, the slot being provided intermediate its ends with a lateral pocket; a lid having a projection seated in the extremity of the slot, when the lid is closed, and seated in the pocket when the lid is opened; a spring-actuated member carried by the lid and engageable by the box, to hold the projection in the extremity of the slot when the lid is closed, the spring-actuated member moving the lid transversely, when the lid is opened, thereby to cause the projection to enter the pocket; and a bearing holder in the box, the spring-actuating member being interposed in the path of the bearing-holder, when the lid is closed, thereby to prevent a displacement of the bearing-holder.

[Claim 6 not printed in the Gazette.]

1,060,957. APPARATUS FOR PRODUCING ELECTRICAL DISCHARGES. RUSSELL SPAULDING, Chicago, Ill., assignor to Marguerite Spaulding, New York, N. Y. Filed June 27, 1910, Serial No. 568,987. Renewed Feb. 17, 1913. Serial No. 749,026. (Cl. 204—32.)



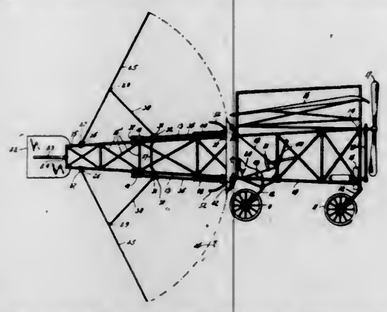
1. An apparatus for producing electrical discharges, including a main channel for the passage of air or other fluid; spaced apart electrodes distributed about said channel in planes transverse to the general direction of said channel and thereby affording passages for the air or other fluid that are in planes transverse to the general direction of said channel, each said passage being free at one termination from direct communication with said channel except by means of such passage whereby the fluid flowing in each passage after having once been subjected to electrical discharge is not subject to further electrical discharge before it is passed from the apparatus; and means for forcing the passage of the air or other fluid through said channel.

2. An apparatus for producing electrical discharges, including a main channel for the passage of air or other fluid; spaced apart electrodes disposed in planes transverse to the general direction of said channel and thereby affording passages for the air or other fluid that are in planes transverse to the general direction of said channel, each said passage being free at one termination from direct communication with said channel except by means of such passage whereby the fluid flowing in each passage after having once been subjected to electrical discharge is not subject to further electrical discharge before it is passed from the apparatus; and means for forcing the passage of the air or other fluid through said channel.

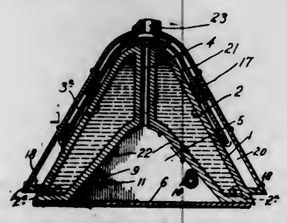
1,060,958. ATTACHMENT FOR AEROPLANES. PAUL TICHAY, New York, N. Y. Filed Nov. 12, 1912. Serial No. 730,940. (Cl. 244—21.)

In a safety attachment for aeroplanes, the combination with the main frame of an aeroplane, of a plurality of ribs pivotally attached in pairs thereto, a cover of impervious material secured to said ribs, a plurality of guide rods fastened to said main frame, a runner slidably arranged upon each guide rod, the number of said runners corresponding to half of that of said ribs, two braces connecting each pair of said ribs to one of said runners, a plurality of springs adapted to bear against said runners to extend by the intermediary of said braces said ribs,

means for holding said ribs against the action of said springs in their closed positions, and means for disengaging said holding means from said ribs, substantially as and for the purpose specified.

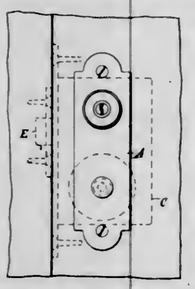


1,060,959. WATER-HEATER. GERHART E. TOEPPER, Washington, D. C. Filed Feb. 23, 1912. Serial No. 679,220. (Cl. 122—135.)



In a water heating boiler, the combination of a main cast unit of substantially triangular design in cross section and providing communicating water chambers; a plate secured to the underside of said cast unit and providing a closed heating chamber, with the inner side walls thereof; gas burner pipes located within said heating chamber; the outer side walls of said main section being provided with flanges; a hood overlying the outer side walls of the unit and secured to said flanges and providing a closed chamber; a second hood located within said chamber and spaced from said hood and the outer side walls of said unit and providing baffle plates for retarding the progress of the heating gases; means associated with said main section for providing a hot water heating system; and auxiliary means associated therewith for providing a domestic boiler, substantially as described.

1,060,960. LOCK. NIKOLAUS WAING, New York, N. Y. Filed Nov. 20, 1911. Serial No. 661,318. (Cl. 70—29.)



1. A double safety lock for doors comprising a casing with guides in its upper portion, a reversible bolt sliding on one guide, a rectangular support directly connected to said bolt with a horizontal portion sliding in the second guide, a lever pivoted to the corner of said support, cooperating downwardly extending noses on said support and lever, a spring mounted directly on said lever, and bolt, a tail-piece at the end of said lever, means for operating said noses to move the bolt to its usual extent, and means engaging the tail-piece of the lever to further move the bolt to double the usual extent.

2. A double safety lock for doors comprising a casing with guides in its upper portion, a reversible bolt sliding on one guide, a rectangular support directly connected to said bolt with a horizontal portion sliding in the second guide, a lever pivoted to the corner of said support, cooperating downwardly extending noses on said support and lever, a spring mounted directly on said lever and bolt, a tail-piece at the end of said lever, a cam operated vertical lever pivotally mounted in the bottom portion of the casing resting with its top end against the tail-piece and adapted to operate the bolt after the same has been moved to the usual extent, and a spring returning said vertical lever to its normal position.

3. In a double safety lock, a casing, guides in its upper portion, a reversible bolt sliding on one guide, a rectangular support directly on the inner portion of the bolt with a horizontal portion sliding in the second guide, two downwardly extending noses on the latter, a horizontal lever pivoted to the corner of the support having a nose located between the noses of the support, a spring secured to said lever and the bolt, and means for operating said noses to move the bolt to double the usual extent in either direction.

4. In a double safety lock for doors inner active mechanism for moving the bolt to twice the usual extent comprising a tail piece on one member of said inner mechanism, a cam operated vertical lever pivotally mounted in the lower portion of the casing resting with its top portion against the tail-piece when the bolt is moved to its usual extent and adapted to operate the latter for opening the door, two projections in the top portion of said vertical lever forming a recess into which the tail-piece drops when the bolt has been moved to twice the usual extent, a spring returning the said lever into its normal position, and a small stop on the casing limiting the action of said spring.

5. In a double safety lock for doors a cam operated vertical lever pivotally mounted in the lower portion of the casing and adapted to be moved by a knob said lever having two projections on its top portion which form a recess, a shoulder adjoining the projections, a stop in the casing limiting the movement of said lever, a curved arm movable on the cam operated lever and resting against the rear surface of the bolt when same is moved out to the usual extent, and a spring connected to said arm and the casing drawing said lever and said curved arm normally toward the bolt.

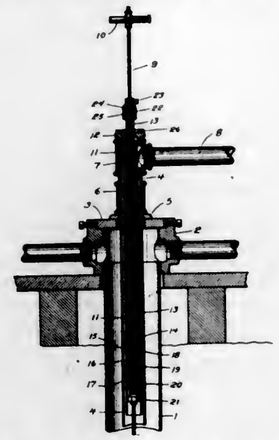
[Claim 6 not printed in the Gazette.]

1,060,961. SUCKER-ROD PACKING FOR OIL-WELL TUBINGS. CHARLES A. WAITZ, Rouseville, Pa. Filed Feb. 24, 1912. Serial No. 679,590. (Cl. 166—14.)

1. In a sucker rod packing for oil well tubings, the combination of a well tubing; a polished tube extending downwardly into the tubing; a sucker rod extending through the polished tube; and a packing secured to the sucker rod and operating in the polished tube to form a sucker rod closure for the tubing.

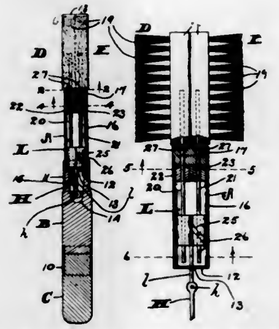
2. In a sucker rod packing for oil well tubings, the combination of a well tubing; a polished tube extending downwardly from the upper end of the tubing and leaving a space between the polished tube and the well tubing for the discharge of oil from the tubing; a sucker rod extending through the polished tube; and a packing secured to the sucker rod and operating in the polished tube to form a sucker rod closure for the tubing.

3. In a sucker rod packing for oil well tubings, the combination of a well tubing; a polished tube extending downwardly into the tubing; a bushing screwed into the tubing and on to the polished tube for securing the polished tube in place in the well tubing; a sucker rod extending through the polished tube; and a packing secured to the sucker rod and operating in the polished tube for forming a sucker rod closure for the well tubing.



4. In a sucker rod packing for oil well tubings, the combination of a well tubing; a polished rod extending into the well tubing; a bushing screwed into the well tubing and on to the polished tube for securing the polished tube in place in the well tubing; a sucker rod extending through the polished tube; a packing secured to the sucker rod and operating in the polished tube for forming a sucker rod closure for the well tubing; and a floating washer arranged on the sucker rod and over the bushing.

1,060,962. TOOTH-BRUSH. DAVID WEISS, Cleveland, Ohio. Filed Apr. 29, 1912. Serial No. 693,809. (Cl. 15—39.)



1. In a tooth-brush, the combination, with a handle, and two suitably supported brushing sections arranged at the forward end of the handle and adapted to be swung laterally, said brushing-sections being in position side by side when ready for use and adapted in said position to be locked against swinging laterally and outwardly but free when unlocked to be swung laterally and outwardly into a position back to back, of mechanism for swinging said brushing sections laterally, and means for positively locking said mechanism against swinging the brushing sections laterally and outwardly into their last-mentioned position, said locking means being adapted to be rendered inoperative preparatory to swinging said brushing sections into said last-mentioned position.

2. In a tooth-brush, the combination, with a handle, and two suitably supported brushing-sections arranged at the forward end of the handle adapted to be swung laterally said brushing sections being in position side by side when ready for use and adapted to be locked in said position but free when unlocked to be swung laterally and outwardly into a position back to back, and mechanism for swinging said brushing sections laterally, of means for positively locking said mechanism against swinging the brushing sections laterally and outwardly into their last-mentioned position, said locking means being arranged within the handle and adapted to be rendered inoperative preparatory to swinging said brushing-sections into said last-mentioned position.

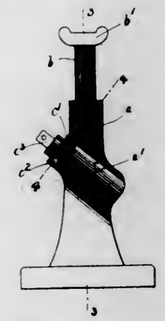
3. In a tooth-brush, the combination, with a handle having an interior chamber extending longitudinally of said handle, and two suitably supported brushing sections arranged at the forward end of said handle, said brushing sections being in position side by side when ready for use and adapted in said position to be swung laterally and outwardly, of a slide arranged within the aforesaid chamber and movable endwise of the handle, and means whereby said brushing sections are swung laterally and outwardly during the movement of the slide endwise of the handle in the required direction.

4. In a tooth-brush, the combination, with a handle, two suitably supported brushing sections arranged at the forward end of said handle, said brushing sections being in position side by side when ready for use and adapted in said position to be swung laterally and outwardly; a slide normally movable endwise of the handle, and means whereby said brushing sections are swung laterally and outwardly during the movement of the slide endwise of the handle in the required direction, of means for locking said slide against movement in said direction.

5. In a tooth-brush, the combination, with a handle-section having an interior chamber extending longitudinally of said handle-section; two suitably supported brushing sections arranged at the forward end of said handle-section, said brushing sections being in position side by side when ready for use and adapted in said position to be swung laterally and outwardly; a slide arranged within and movable endwise of the aforesaid chamber, means whereby the said brushing sections are swung laterally and outwardly during the movement of the slide toward said sections, and means for locking said slide against movement toward said brushing sections.

[Claims 6 to 20 not printed in the Gazette.]

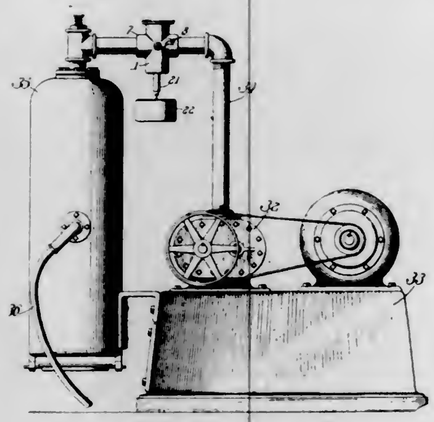
1,060,963. LIFTING-JACK. GEORGE EMANUEL WILKINS and JOHN CHARLES BURTON RICHARDS, Wednesbury, England. Filed Mar. 9, 1912. Serial No. 682,625. (Cl. 57—102.)



1. In a lifting jack, the combination of a standard; a movable rack disposed longitudinally within the standard, there being inclined teeth cut upon said movable rack; an inclined bearing part on said standard disposed tangentially in relation to the movable rack; and a worm located in said inclined bearing having its screw thread formed upon its periphery and engaging the said rack; all for the purpose specified and substantially as set forth.

2. In a lifting jack, the combination of a standard; a movable rack disposed longitudinally within the standard; inclined teeth cut upon said movable rack, there being an inclined bearing part on said standard disposed tangentially in relation to the movable rack; a worm located in said inclined bearing having its screw thread formed upon its periphery and engaging the said rack; and means for restraining the worm against bodily movement relative to the rack when said worm is rotated, so arranged that when the worm is rotated the rack is moved; all for the purpose specified and substantially as set forth.

1,060,964. VACUUM-CLEANER. JAMES T. ATWOOD, Rockford, Ill. Filed Aug. 30, 1912. Serial No. 717,903. (Cl. 230—24.)



1. The combination of an air-suction pump, a separating tank, a distributing pipe leading therefrom, a connection between the pump and tank, a valve located in said connection, an air-opening leading from the valve, said valve adapted to close the connection between the pump and tank when a maximum vacuum has been reached in said tank, and simultaneously open said air-opening, thereby allowing the pump to draw in free air.

2. The combination of an air-suction pump, a separating tank, a distributing pipe leading therefrom, a connection between the pump and tank, a valve located in said connection, said pump adapted to maintain a normal vacuum in said tank, said valve adapted to automatically close the connection between the tank and pump when a maximum vacuum is produced in the tank.

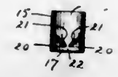
3. The combination of an air-suction pump, a separating tank, a distributing pipe leading therefrom, a connection between the pump and tank, a valve located in said connection, said pump adapted to maintain a normal vacuum in said tank, said valve adapted to automatically close the connection between the tank and pump when a maximum is produced in the tank, an air-opening leading from the valve adapted to be simultaneously connected with the pump when said connection is closed, thereby allowing the pump to run idly, drawing in unobstructed air.

4. The combination of an air-suction pump, a separating tank, a distributing pipe leading therefrom, a connection between the pump and tank, the pump adapted to create a partial vacuum in said tank, a valve suitably located so that should the vacuum in said tank reach a predetermined point, said valve would automatically close the connection between the pump and tank, and simultaneously cause the pump to draw in free air, thus running with little exertion.

5. The combination of an air-suction pump, a valve having a suitable exhaust passage communicating therewith, suction and air intakes, said valve adapted to automatically close said suction exhaust passage and connect said air-intake with the pump, thereby allowing the pump to take in free air.

[Claims 6 to 15 not printed in the Gazette.]

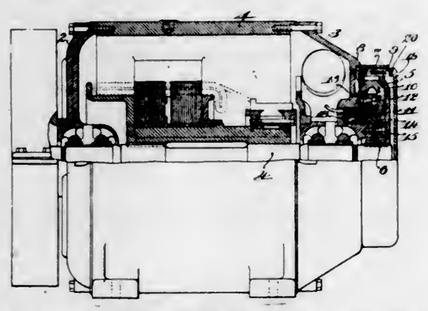
1,060,965. PRIMER. CHARLES A. BAILEY, Cromwell, Conn. Filed June 12, 1912. Serial No. 703,358. (Cl. 102—18.)



1. A primer comprising a cylindrical side wall having an indentation in the said side wall the material of the said indentation being compressed together so as to provide an anvil member extending inwardly into the interior space inclosed by the said side wall.

2. A primer comprising a cylindrical side wall and an anvil inclosed by the said side wall and the said anvil composed of a double thickness of the material of the said side wall.

1,060,966. ELECTRIC MOTOR AND BRAKE. HERBERT A. BALCOME, Boston, Mass., assignor to B. F. Sturtevant Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 28, 1905. Serial No. 242,994. (Cl. 74—70.)



1. A brake for an electric motor having a shaft, having, in combination, axially balanced disks mounted to move longitudinally upon the motor shaft, radially movable brake members, an electro-magnet for holding said brake members from, and means for forcing them into contact with said brake disks, and means for holding the brake members from rotative movement, substantially as described.

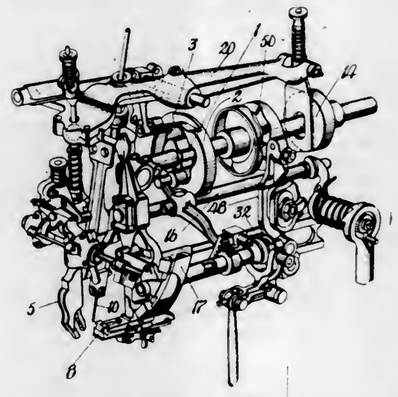
2. A brake for an electric motor having a shaft, having, in combination, friction disks mounted to slide longitudinally upon the motor shaft, radially movable brake members adapted, when moved radially, to engage and apply braking force to said disks, a spider for holding said brake members from rotative movement, an electro-magnet for holding the brake members from engagement with the friction disks, and spring for forcing the brake members into engagement with the friction disks, substantially as described.

3. A brake for an electric motor having a shaft, having, in combination, friction disks mounted to slide longitudinally upon the motor shaft, radially movable brake members, a spider for holding the brake members from rotative movement, means for forcing the brake members into engagement with the friction disks, and an electro-magnet for withdrawing them from engagement therewith, substantially as described.

4. An electrically released brake for an electric motor which has a shaft and a casing, having, in combination, a rotatable friction member mounted on the shaft, a radially movable brake shoe mounted on the casing for engaging the rotatable friction member, a magnet winding in a recess formed in the outer face of the end of the casing, a pole face on the end of the casing facing radially outward, a pole plate secured to the end of the casing over the winding and having a pole face facing radially outward and coöperating with the pole face of the casing to hold the brake shoe from engagement with the rotatable friction member, and a spring for forcing the brake shoe into engagement with the rotatable friction member, substantially as described.

5. An electrically released brake for an electric motor which has a shaft and a casing, having, in combination, a rotatable friction member mounted on the shaft, a radially movable brake shoe for engaging the rotatable friction member, a pole piece secured to the end of the motor casing, a magnet having pole faces facing radially outward for holding the brake shoe from engagement with the rotatable friction member, one of said pole faces being formed on the end of the casing and the other of the said pole faces being formed on the pole piece, and a spring for forcing the brake shoe into engagement with the rotatable friction member, substantially as described.

1,060,967. LASTING-MACHINE. ARTHUR BATES, Leicester, England, assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed July 18, 1912. Serial No. 710,227. (Cl. 12—2.)



1. A pincer-lasting machine that is adapted to operate successively upon different portions of the margin of a shoe upper and that comprises pincers and operating mechanism for imparting to the pincers an updraw motion, an overdraw motion, and a plaiting motion which is initiated prior to the overdraw motion or both prior to the overdraw motion and during the updraw motion.

2. A pincer-lasting machine that is adapted to operate successively upon different portions of the margin of a shoe upper and that comprises pincers and operating mechanism for imparting to the pincers an updraw motion, an overdraw motion, and a plaiting motion which is initiated prior to the overdraw motion.

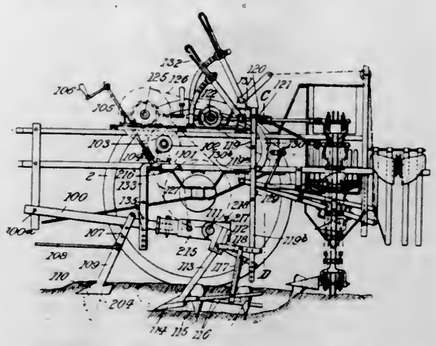
3. A pincer-lasting machine that is adapted to operate successively upon different portions of the margin of a shoe upper and that comprises pincers and operating mechanism for imparting to the pincers an updraw motion, an overdraw motion, and a plaiting motion which continues after the overdraw motion is completed.

4. A pincer-lasting machine that is adapted to operate successively upon different portions of the margin of a shoe upper and that comprises pincers and operating mechanism for imparting to the pincers an updraw motion, an overdraw motion, and a plaiting motion which is repeated a plurality of times during each cycle of the operation of the machine for the purpose described.

5. A pincer-lasting machine that is adapted to operate successively upon different portions of the margin of a shoe upper and that comprises pincers and operating mechanism including an updraw cam, an overdraw cam and a plaiter cam relatively arranged for the plaiting motion to begin during the updraw motion and to continue relatively slowly through and until after the termination of the overdraw motion.

[Claims 6 to 12 not printed in the Gazette.]

1,060,968. BEET-HARVESTER. JACOB BÖCKER, Caster, near Bedburg, Germany, assignor of one-half to Theodor Wassenberg, Elsen, near Grevenbroich, Germany. Original application filed July 31, 1912, Serial No. 712,456. Divided and this application filed Dec. 10, 1912. Serial No. 735,932. (Cl. 55—106.)



1. In a beet-harvester, the combination with a frame, of two plowshares in said frame adapted to loosen the soil on both sides of a row of beets, two bars pivotally connected with said two plowshares and adapted to vertically reciprocate in the soil behind the shares, and means for rocking said two bars in opposite directions so as to repeatedly push the beet from both sides in alternating directions for loosening and gradually lifting it.

2. In a beet-harvester, the combination with a frame, of two front plowshares in said frame adapted to preliminarily loosen the soil on both sides of a row of beets and to heap up the earth in this row, two rear plowshares in said frame adapted to plow the soil for further loosening and heaping it up, two bars pivotally connected with said two rear plowshares and converging rearward, and means for rocking said two bars in opposite directions so as to repeatedly push the beet from both sides in alternating directions for loosening and gradually lifting it, the loosened and heaped-up earth filling up the space left by the beet.

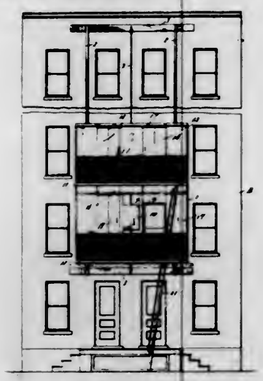
3. In a beet-harvester, plow shares for loosening the soil at both sides of a row of beets, beet-lifting members pivoted to said plow shares, and means for rocking said members.

1,060,969. FIRE-ESCAPE APPARATUS. TEOBALDO BOLDIZZONI, New York, N. Y., assignor of one-half to Louis Bujese, Brooklyn, N. Y. Filed Feb. 7, 1911. Serial No. 607,012. (Cl. 227—12.)

1. A fire escape apparatus consisting of a car or carriage arranged to move in guideways upon the surface of a wall of a building, said car or carriage having a floor, the rear edge of which moves adjacent the wall of said building and a pivoted section hinged to the rear edge of the said floor, said car having means for supporting said section in a horizontal position, said section being designed to yield upward on encountering an obstruction.

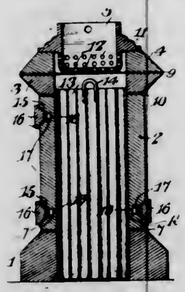
2. A fire escape apparatus consisting of a car or carriage, said car or carriage comprising a floor and a closed rear wall extending over the height thereof and having an opening therein, sliding doors for opening and closing said opening, a pivoted section hinged to the rear edge of the floor of the car adjacent said opening, means carried by the car for supporting said section in a horizontal position, said section being designed to yield upward on encountering an obstruction, the floor of said car having an

opening formed therein, a ladder attached to the said car and extending beneath the same, and guideways arranged upon the surface of a wall of a building to permit the car to move up and down along the same, whereby when the car reaches the end of its descent the occupants can descend by means of the ladder to the ground.



3. A fire escape apparatus consisting of a car or carriage, said carriage having upper and lower floors therein forming separate compartments, a closed rear wall carried by said car or carriage and extending over the entire height thereof, said rear wall having openings therein and sliding doors for opening and closing said openings, pivoted sections hinged to the rear edges of the floors of said car or carriage adjacent said openings and supported in a horizontal position, said sections being designed to yield upward on encountering an obstruction, the upper and lower floors of said car having openings formed therein, a ladder attached to the floors of said car at the edges of said openings, said ladder extending beneath said car a distance substantially equal to the height of one story of the building on which the fire escape apparatus is used, and guideways arranged upon the surface of the wall of the said building and terminating at the top of the lower story, whereby when the car reaches the end of its descent the occupants thereof can descend by way of the ladder to the ground.

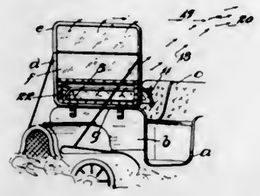
1,060,970. MONUMENT. CHARLES BROWN, Albert Lea, Minn., assignor of one-half to Alfen P. Sawyer, Glenville, Minn. Filed July 11, 1912. Serial No. 708,898. (Cl. 125—15.)



1. A hollow monument comprising a plurality of separate hollow sections supported upon one another and having registering openings forming a vertical chamber, a tank or reservoir arranged within the chamber of the hollow monument and fitting the interior thereof and overlapping the joints of the sections, and a plant receptacle constituting the top of the monument and having an intermediate exterior flange resting upon the top section, said plant receptacle having its lower portion extending into the said vertical chamber and provided with openings.

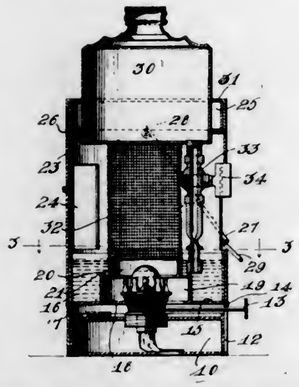
2. A hollow monument comprising a plurality of separate hollow sections supported upon one another and having registering openings forming a vertical chamber extending entirely through the monument and open at the top, a tank or reservoir arranged snugly within the hollow chamber of the monument and fitting the interior thereof and overlapping the joints of the sections and extending from the upper portion of the monument to the bottom thereof and adapted to rest upon the ground, said tank being removable through the open upper end of the vertical chamber, and a plant receptacle constituting the top of the monument and closing the chamber above the tank, said receptacle being supported by the top section and having its lower portion extended within the vertical chamber and provided with openings.

1,060,971. WIND-SHIELD FOR VEHICLES. GEORGE J. CAPEWELL, Jr., Hartford, Conn. Filed Oct. 3, 1910. Serial No. 584,975. (Cl. 21—81.)



A wind shield for vehicles including a frame inclosing a glass with an opening between the glass and the lower edge of the frame, a supplemental frame fitting within a groove in the bottom of the main frame, said supplemental frame supporting the glass of the main frame, and a deflector pivotally mounted to close the opening in the supplemental frame.

1,060,972. DRINKING-FOUNTAIN. FRANK K. CROCKFORD, Bristol, R. I. Filed May 8, 1912. Serial No. 696,016. (Cl. 119—73.)



1. A fountain comprising a heating member, a liquid receptacle carried by said heating member, and provided with a passageway communicating with said heating member, a heating drum carried by said liquid receptacle and inclosing the same, a liquid reservoir carried by said heating drum, and a fabric conductor leading from said passageway to said reservoir.

2. A fountain comprising a heating member, a liquid receptacle carried by said heating member and provided with a well through which a portion of said heating member passes, a heating drum carried by said liquid receptacle and inclosing the same, a liquid reservoir carried by said heating drum, and a fabric conductor leading from said well to said reservoir.

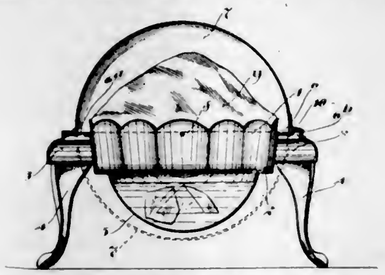
3. A fountain comprising a heating member, a liquid receptacle carried by said heating member, a heating drum carried by said liquid receptacle and provided with side openings through which access may be had to said liquid receptacle, said liquid receptacle being provided with a well through which heated air may pass into said heating drum, a liquid reservoir carried by said heating drum, and a fabric conductor leading from said well to said reservoir.

4. A fountain comprising a heating member, a liquid receptacle carried by said heating member and provided with a well through which heated air may pass through said liquid receptacle, a heating drum carried by said liquid receptacle and inclosing the same, a liquid reservoir supported within said drum, and a fabric wall leading from said reservoir and inclosing the mouth of said well.

5. A fountain comprising a heating member, a liquid receptacle carried by said heating member, a heating drum carried by said liquid receptacle and inclosing the same, a liquid reservoir carried by said drum, a fabric conductor leading from said heating member to said reservoir, and a feed pipe leading fom said reservoir through said drum and into said liquid receptacle to a point below the normal level of the liquid contained therein.

[Claims 6 and 7 not printed in the Gazette.]

1,060,973. BUTTER-DISH. JOHN EDMAN, Minneapolis, Minn., assignor of one-sixth to Charles Standiford and one-sixth to Charles W. Tarbox, Minneapolis, Minn. Filed Jan. 22, 1912. Serial No. 672,547. (Cl. 65—60.)

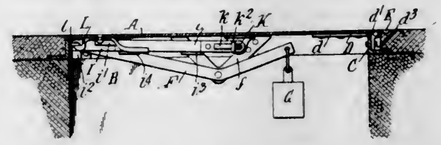


1. In a dish of the kind described, the combination with a body having spring acting trunnion seats, of a cover having flattened trunnions working in said trunnion seats, the said trunnion seats being arranged to exert a maximum tension on said trunnions when said cover is in an intermediate position, and serving to complete the closing movement of said cover when said cover is moved to one side of said intermediate position, and serving to complete the opening movement of said cover when said cover is moved to the opposite side of said intermediate position.

2. A dish of the kind described, comprising a body having a seat for the reception of a tray having a depression below said seat for the reception of ice, and having a rim formed with an approximately semi-circular slot, a pair of diametrically opposite prong spring seats secured to said rim at the extremities of said segmental slot, an approximately semi-spherical cover working through said segmental slot and having flattened trunnions mounted for oscillatory movements of 180 degrees in said spring seats, a spring clip on said cover engageable with a shoulder on said rib to yieldingly secure said cover in a closed position, and a finger actuated releasing device pivoted to said rim and operative on said cover to positively impart initial opening movement thereto.

1,060,974. TRAP-DOOR. CHARLES K. ERNST, Buffalo, N. Y. Filed May 23, 1910. Serial No. 562,800. (Cl. 94—7.)

1. The combination with a tilting trap door, of means for holding the door open comprising levers mounted at opposite sides of the door opening, connections between the levers and door, guard members attached to the levers, and means for supporting the guard members in positions in which they form guards for the opposite sides of the door opening, substantially as set forth.



2. The combination with a tilting trap door, of means for holding the door open comprising levers mounted at opposite sides of the door opening and links connecting said levers to the door, guard members attached to the levers, and means for supporting the guard members in positions in which they coöperate with said links to form guards for the opposite sides of the door openings, substantially as set forth.

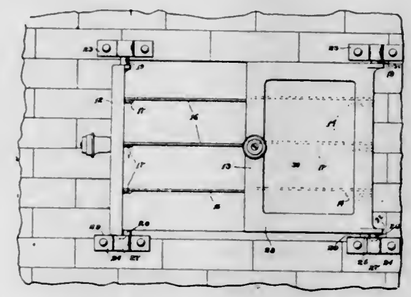
3. The combination with a tilting trap door, of means for holding said door open, comprising levers pivotally supported at opposite sides of the door opening, links connecting said levers with said door, said links occupying substantially horizontal positions when the door is open, guard members attached to the door holding means, and means for supporting said guard members in substantially horizontal positions in which they coöperate with said links to form guards for the opposite sides of the door opening, substantially as set forth.

4. The combination with a tilting trap door, of means for holding the door open comprising counterweighted levers pivotally mounted at opposite sides of the door opening, and links connecting the ends of said levers with said door, guard members attached to said door holding means, and means for supporting said guard members in positions in which they coöperate with said links to form guards for the opposite sides of the door opening, substantially as set forth.

5. The combination with a trap door hinged at one end, of movable supports arranged at opposite sides of the door opening for holding the door open, said supports being concealed beneath the door when closed, guard members movably secured to said supports, and means for supporting said guard members in positions to form guards for the opposite sides of the door opening, substantially as set forth.

[Claims 6 to 19 not printed in the Gazette.]

1,060,975. HEATING APPARATUS. JAMES ERSKINE, Jersey City, N. J., assignor to William M. Crane Company, a Corporation of New York. Filed July 27, 1912. Serial No. 711,891. (Cl. 126—340.)



1. The combination of an oven having racks arranged on opposite inner sides, and a door having racks thereon arranged to register with racks in the oven, when said door is in open position, and said door being mounted to

throw its racks out of said register when the door is brought into closed position.

2. The combination of an oven having racks arranged on opposite inner sides, and a door having racks thereon arranged each above a corresponding rack in the oven when the door is in closed position, and said door being mounted to drop when brought into open position, whereby its racks are brought into register with racks in the oven.

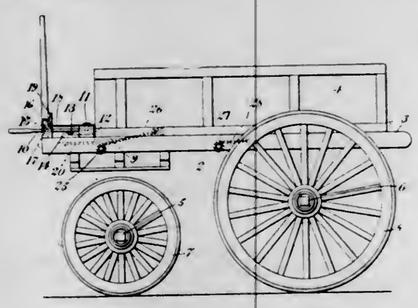
3. The combination of an oven having racks arranged on opposite inner sides, and a pair of doors, each door having racks thereon arranged to register with racks on a side of the oven when said door is in open position, and each said door being mounted to throw its racks out of register when the said door is brought into closed position.

4. The combination of an oven having racks arranged on opposite inner sides, and a door comprising an outer panel and a lining spaced apart to form an insulating chamber and said door having racks thereon arranged to register with racks in the oven when said door is in open position, and said door being mounted to throw its racks out of said register when the door is in closed position.

5. The combination of an oven having racks arranged on opposite inner sides, and a pair of doors, each door comprising an outer panel and a lining spaced apart to form an insulating chamber and having racks arranged on said lining to register with racks on a side of the oven when said door is in open position and each said door being mounted to throw its racks out of said register when the door is brought into closed position.

[Claims 6 to 8 not printed in the Gazette.]

1,060,976. LOCKING DEVICE FOR DUMP-WAGONS OF THE END-DUMP TYPE. CHARLES J. FIENHOLD, Brooklyn, N. Y. Filed Mar. 30, 1912. Serial No. 687,407. (Cl. 21—20.)



1. In a locking device for a dump-wagon, a pair of latch members secured respectively to the dump-section of the wagon and to the wagon-frame and having substantially vertical locking faces positioned and adapted when in engagement to prevent lengthwise movement of the dump-section toward the rear of the wagon-frame, and one of which latch members is pivoted at one end and extends away from the element of the wagon to which the other latch member is secured, said pivoted latch member being shiftable crosswise of the wagon into and out of locking engagement with the other member, and means for securing said latch members in their latched position.

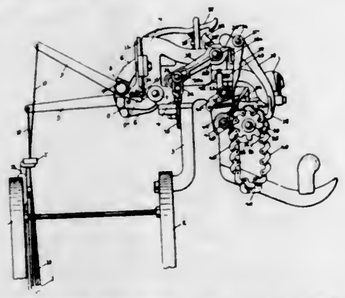
2. In a locking device for a dump-wagon, a pair of substantially horizontal latch members one of which is secured to the forward end of the dump-section of the wagon and has an upwardly projecting hook and the other of which is a lever pivoted on the wagon-frame substantially at the transverse center of the forward end thereof and having a hook between its ends which hook projects below the horizontal plane of the body of said lever and is shiftable into and out of engagement with said first hook by a movement crosswise of the wagon, and means for securing the latch members in their latched position.

3. In a locking device for a dump-wagon, a pair of substantially horizontal latch members the first of which is secured to the forward end of the dump-section of the wagon and is movable with it lengthwise of the wagon-frame relatively to the other and has an upwardly projecting hook and the second of which is a lever pivoted on the wagon-frame substantially at the transverse center of the forward end thereof and having a hook between its ends which hook projects below the horizontal plane of the body of said lever and is shiftable into and out of engagement with said first hook by a movement crosswise of the wagon, means for securing the latch members in their latched position, and means for preventing tilting of the dump-section until it is run out to the limit of its longitudinal movement.

4. In a locking device for a dump-wagon, a pair of substantially horizontal latch members one of which is secured to the dump-section of the wagon and the other of which is pivotally mounted on the wagon-frame and is disposed above said first-mentioned latch member and is shiftable into and out of engagement therewith by a movement crosswise of the wagon, the fixed parts of the wagon-frame being in engagement with the upper side of said pivoted latch member at opposite sides of the laching point in all positions of the pivoted latch member, and means for securing the latch members in their latched position.

5. In a locking device for a dump-wagon, a pair of latch members the first of which is an elongated U-shaped guide and latch secured to the dump-section of the wagon and movable with it lengthwise of the wagon and normally straddling a fixed member of the wagon-frame and adapted to engage the upper and lower sides thereof and the second of which latch members is movable on and crosswise of the wagon-frame at the forward end thereof into and out of engagement with said first member of the latch, and means for securing the latch members in their latched position.

1,060,977. SHEDDING MECHANISM FOR LOOMS. ALBERT A. GORDON, Jr., Worcester, Mass., assignor to Crompton & Knowles Loom Works, a Corporation of Massachusetts. Filed June 22, 1911. Serial No. 634,735. (Cl. 139—79.)



1. In shedding mechanism for looms, a series of harness levers, and jack levers having their fulcra on said harness levers, harness connections from said jack levers, a rod or bar to be engaged by the inner ends of the jack levers, and adjustable with reference to the fulcrums of the jack levers, whereby the shed formed by the movement of the jack levers may be increased or diminished.

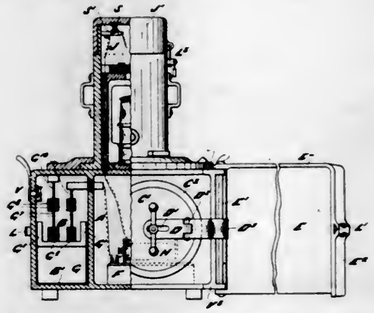
2. In shedding mechanism for looms, a series of harness levers, and jack levers having their fulcra between their ends upon projections on said harness levers, harness connections from said jack levers, a rod or bar having one end in a fixed position nearer the fulcrums of said jack levers than the other end, whereby when the fulcrums are moved upward to form sheds, the increased movement of the outer end of a jack lever will be at the end of said rod or bar, which is nearest the fulcrum of said lack lever.

3. In shedding mechanism for looms, the combination with a dobby, having harness levers, hook levers, abutments for the ends of the hook levers, lifting hooks, and lifter bars, of jack levers for the harnesses, having their fulcra on said harness levers, and a stationary abutment to be engaged by the inner end of said jack levers.

4. In shedding mechanism for looms, a harness lever, a jack lever, having its fulcrum on said harness lever, harness connections from one end of said jack lever, a stationary abutment to contact with the inner end of said jack lever, means to move said harness lever, consisting of a hook lever centrally pivoted on a projection on the harness lever, lifting hooks, pivoted one at each end of said hook lever, outwardly moving lifter bars for the lifting hooks, and fixed abutments for each end of said hook lever, one of said abutments to engage one end of said hook lever, as its opposite end is moved outwardly.

5. The combination with a shedding mechanism for weaving names in the border of fabrics, with spaces between the names, and having harness levers, hook levers, fixed abutments, lifting hooks, and lifter bars, and pattern indicating mechanism, of jack levers for the harnesses, having their fulcra upon the harness levers, and an adjustable abutment, by which the warps may be regulated when weaving between the names, to carry the warps on the back of the fabric.

1,060,978. APPARATUS FOR IGNITING MINERS' SAFETY-LAMPS. ERNEST ARTHUR HAILWOOD, Morley, England. Filed Sept. 3, 1909. Serial No. 516,146. (Cl. 175—91.)



1. In apparatus for igniting miners' safety lamps underground, a chamber comprising two portions one of which is provided with a circular recess and a circular door to fit such recess and to make when closed a flame tight joint, an outer door, said circular door being arranged so that only when same is firmly closed can said outer door be closed and locked, substantially as described.

2. In apparatus for igniting miners' safety lamps, in combination with a generator or coil chamber provided with a circular door, an outer door which may only be closed and fastened when the said circular door is firmly closed, substantially as described.

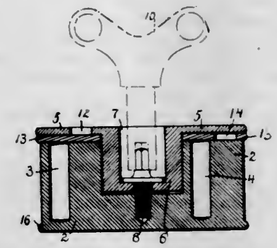
3. In apparatus for igniting miners' safety lamps, a chamber having a circular opening provided for the reception of a circular door, a circular door coöperating with said opening, in combination with an outer door which may be closed and fastened only when the circular door is home in the said opening, substantially as described.

4. In apparatus for igniting miners' safety lamps, a casing having a circular opening a circular door coöperating therewith, a retaining device, said device being operatively attached to such door, the other end of the device being secured to the framework of the apparatus, the whole being so arranged as to allow of the opening and closing of the said door without detaching same from the framework of the apparatus, substantially as described.

5. In apparatus for igniting miners' safety lamps, a casing comprising coil and generator chambers, an outer door associated with one of said chambers, and an outer door E to act as a door to both coil and generator chambers, said outer door being adapted to be closely fastened only when the inner door is shut, substantially as described.

[Claim 6 not printed in the Gazette.]

1,060,979. DETONATOR-MAGAZINE. ABRAM S. HAMILTON, Nanaimo, British Columbia, Canada. Filed Aug. 20, 1912. Serial No. 715,972. (Cl. 206—3.)



1. A detonator magazine, comprising the combination with a cylindrical box having detonator receptacles drilled from one end face, of a cover plate and a shutter plate each rotatably mounted on the end face, each having an aperture radially corresponding to the apertures in the box each of said plates projecting beyond the wall of the box to afford a finger engagement.

2. A detonator magazine, comprising the combination with a cylinder having cap holding receptacles drilled from one face and parallel to its axis, of a cover plate and a shutter plate each rotatably mounted concentric with the cylinder, each plate having an aperture radially corresponding to each circle of cap receptacles and means for securing the plates to the cylinder each of said plates projecting beyond the wall of the box to afford a finger engagement.

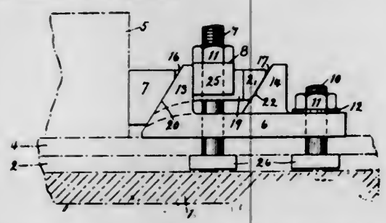
3. A detonator magazine, comprising the combination with a cylinder having cap holding receptacles, of a cover plate rotatably mounted over the receptacles said cover plate having a hub fitting a corresponding recess in the cylinder and apertures drilled to radially correspond with each circle of cap receptacles in the cylinder, a second plate freely rotatably mounted on the hub of the cover plate between it and the face of the cylinder and having apertures corresponding with those of the cover plate but at different angular distances apart, and means for securing these plates together and on the face of the cylinder.

4. A detonator magazine, comprising the combination with a cylinder having cap holding receptacles, of a cover plate rotatably mounted on the face in which are the receptacles, said cover plate having a hub fitting a corresponding recess in the cylinder and the hub recessed for the head of an axial securing screw and provided with apertures radially corresponding to the cap receptacles, a shutter plate freely rotatable on the hub of the cover plate between that plate and the face of the cylinder and provided with apertures registering radially with those of the cover plate but at a different angular distance apart, and an axial screw by which the plates may be clamped to the face of the box.

1,060,980. MACHINE-VISE. JOHN HAMMANN, Northampton, Mass. Filed Mar. 21, 1912. Serial No. 685,184. (Cl. 90—60.)

1. The combination, in a machine vise, with a holder having front and rear lugs the front faces of which are inclined in the same direction, of integral jaw members

having inclined faces to bear against and ride on said first-mentioned inclined faces, and means to force said jaw members downwardly.



2. The combination, in a machine vise, with a holder having front and rear lugs the front faces of which are inclined in the same direction, of integral jaw members having inclined faces to bear against and ride on said first-mentioned inclined faces, and clamping means for said holder and jaw members, whereby the latter are forced downwardly and the parts secured to a machine bed or support.

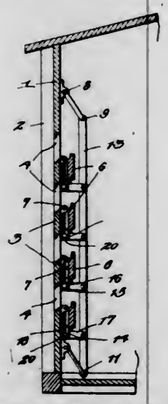
3. The combination, in a machine vise, with a holder having front and rear lugs the front faces of which are inclined, of a jaw having a slotted shank mounted on said inclined faces, an anchor bolt passing through said holder and the slot in said shank, and a nut on said bolt above said shank.

4. The combination, in a machine vise, with a holder having front and rear lugs the front faces of which are inclined, of a jaw having a slotted shank mounted on said inclined face, a saddle on said shank, an anchor bolt passing through said holder, the slot in said shank and said saddle, and a nut on said bolt above said saddle.

5. The combination, in a machine vise, with a holder having front and rear lugs the front faces of which are inclined in the same direction, said front lugs being arranged with a space between them, of a jaw having a shank mounted on said inclined faces, said shank operating in said space, and means to force said jaw members downwardly.

[Claim 6 not printed in the Gazette.]

1,060,981. COMBINATION STOCK AND BOX CAR. ELMER R. HAYMES, Marshfield, Mo. Filed May 4, 1912. Serial No. 695,210. (Cl. 119—8.)

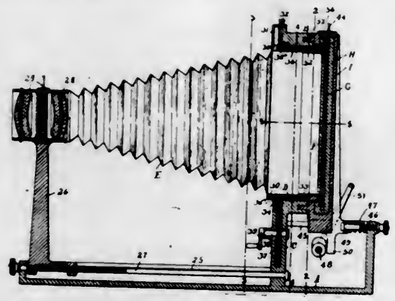


1. In a combination stock and box car, vertically spaced relatively fixed slats, movable slats interposed between the fixed slats and hingedly connected thereto, crank rods, a shaft to which the crank rods are connected, means for turning said shaft to move the crank rods, link members pivotally connected to the crank rods, slotted link members connected to the movable slats, and pins connected to the first named link members and movable in the slots of the second named link members.

2. In a combination stock and box car, spaced relatively fixed slats, movable slats interposed between the fixed slats and hingedly connected thereto, slotted link members carried by the movable slats, link members having a sliding connection with the first named link members in the slots of the latter, link rods pivotally connected to the second named link members, a crank shaft connected to the link rods, and means for turning said crank shaft, for the purpose specified.

3. In a combination stock and box car vertically spaced fixed slats forming the car side, other slats having a width corresponding substantially to the space between the fixed slats and hinged along their lower edges to the fixed slats, and means to swing the movable slats in unison to and from a position to close the interspaces, said means comprising a rock shaft mounted on the car side above the slats, crank arms carried by said shaft, other crank arms mounted on the car below the slatted space and in vertical alinement with the upper crank arms, crank rods connecting the vertically alined crank arms and bridging the space between the same above the hinged slats, links connecting the hinged slats and crank rods and comprising one member secured to the slat and having upturned slotted marginal flanges and a second member hinged to the rod and having perforated marginal flanges taking into the space between the flanges of the first member, and a pin disposed within the perforations and slots to connect the said members, and an operating lever arranged to rock the shaft to open and close the slats.

1,060,982. PHOTOGRAPHIC SCREEN. WILLIAM C. HUEBNER, Buffalo, N. Y., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y. Filed Dec. 5, 1911. Serial No. 664,017. (Cl. 95—11.)



1. The combination of a screen for the fractional exposure of a sensitized surface which screen has its area composed of transparent units and opaque units arranged in such order about a common center that by rotating the screen about this center from one position to another a set of transparent units and a set of opaque units are caused to exchange positions, and a support in which said screen is rotatable about said center, substantially as set forth.

2. The combination of a screen for the fractional exposure of a sensitized surface which screen has its area composed of transparent units and opaque units arranged in such order about a common center that by rotating the screen about this center from one position to another a set of transparent units and a set of opaque units are caused to exchange positions, a support in which said screen is rotatable about said center, and means for rotating said screen, substantially as set forth.

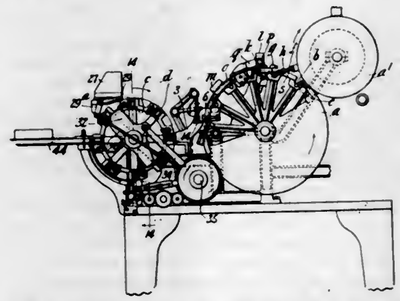
3. The combination with a screen having its area composed of transparent units and opaque units arranged in such order about a common center located in the optical axis that by rotating the screen about this axis from one position to another a set of transparent units and a set of opaque units are caused to exchange positions, of a camera provided with a bearing in which said screen is rotatably mounted, and means for rotating said screen from one position to another, substantially as set forth.

4. The combination of a screen for the fractional exposure of a sensitized surface having its area composed of transparent units and opaque units arranged in such order about a common center that by rotating the screen about this center from one position to another a set of transparent units and a set of opaque units are caused to exchange positions, a bearing in which said screen is rotatable about said center, and a support for a sensitized plate which is adjustable toward and from the screen, substantially as set forth.

5. The combination with a camera, of a rotatable screen having its area composed of transparent and opaque units arranged in a regular order around the center about which the screen is rotatable, a holder for a sensitized plate arranged in rear of the screen and movable toward and from the same, a stop which limits the movement of said holder toward the screen, and a spring which holds the holder yieldingly against said stop, substantially as set forth.

[Claims 6 and 7 not printed in the Gazette.]

1,060,983. GUM-WRAPPING MACHINE. HENRY J. KEMPF, Springfield, Mass., assignor to Berger Machine Company, Springfield, Mass., a Corporation. Filed July 22, 1911. Serial No. 639,917. (Cl. 93—7.)



1. In a wrapping machine, mechanism to successively fold a wrapper around articles fed into the machine, together with end-folding mechanism interposed in the path of the articles passing through the machine, means to move said end folding mechanism across the path of the articles first in one direction and then in the other, all constructed and arranged so that the ends of the wrappers inclosing said articles are folded over the ends of certain of them in one direction and over the ends of certain other of said articles in the opposite direction.

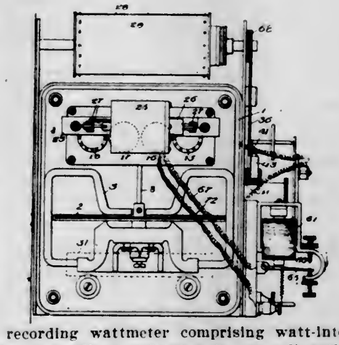
2. In a wrapping machine, mechanism to successively fold a wrapper around articles fed into the machine, other mechanism for bunching together a predetermined number of such articles to constitute a package, together with end-folding mechanism interposed between the wrapping and bunching mechanisms and comprising a member having a swinging movement across the path of the articles passing through the machine, means for folding the ends of the wrappers in opposite directions over the ends of the articles being located in different parts of said swinging member, means being provided to swing said member at predetermined intervals.

3. In a wrapping machine, a wheel having open peripheral pockets to receive articles of uniform size, and wrapping mechanism associated therewith to fold a wrapper around said articles in one direction; end-folding devices to fold the ends of the wrappers, certain of them over, and certain of them under, the ends of the articles, and a mechanism, operable during the rotation of the wheel, to collect said articles into groups having the same number of units, together with mechanism to inclose each of said groups in a wrapper.

4. In a wrapping machine, a wheel having peripheral pockets therein to receive single articles, another wheel having peripheral pockets therein to receive a group of said single articles, said wheels being rotatable in the same plane, and said second wheel having a step-by-step movement, means interposed between the two wheels to group together a certain number of said single articles, and means to transfer said group to a pocket in the second wheel, said means comprising two oppositely located members provided with like oppositely facing channels to receive the opposite ends of said grouped articles, and a member movable between said channeled members to move said group into the pocket of said second wheel, together with wrapping mechanism associated with said second wheel to inclose said group in a band wrapper.

5. In a wrapping machine, a wheel having open peripheral pockets to receive articles of uniform size, and wrapping mechanism associated therewith to fold a wrapper around said articles in one direction, end-folding devices to fold the ends of the wrapper, certain of them over and certain of them under the ends of the articles; another wheel having an intermittent rotative movement, and open peripheral pockets to receive a group consisting of a predetermined number of said articles, a transfer mechanism located between the two wheels and comprising channeled members, the opposite open ends of which are located respectively opposite a pocket in each of said wheels when said second wheel is at rest, and spring-clips projecting into said channels to support said articles during the grouping thereof; means associated with said first wheel to transfer the articles from the pockets thereof into the open end of said channeled members, and other mechanism, periodically operable, to move a group of said articles past said supporting clips and through the channeled members into a pocket of the second wheel, together with mechanism associated with the latter to inclose said group in a band wrapper.

1,060,984. RECORDING-WATTMETER. FRANK F. KINNEY, Chicago, Ill., assignor, by mesne assignments, to Chicago Electric Meter Company, Chicago, Ill., a Corporation of Illinois. Filed May 13, 1907. Serial No. 373,523. (Cl. 234—35.)



1. A recording wattmeter comprising watt-integrating mechanism, recording mechanism for recording the registrations of the wattmeter, time keeping mechanism combined with means for electrically actuating the recording mechanism, and means whereby said time-keeping mechanism controls at two points said means for actuating the recording mechanism.

2. A recording wattmeter, comprising an integrating wattmeter provided with type wheels for indicating the integrations of the meter, a solenoid combined with a printing platen for coöperating with said type wheels, and a time-keeping mechanism combined with means for energizing said solenoid at predetermined periods of time.

3. A recording wattmeter, comprising an integrating wattmeter provided with type wheels to indicate the integrations of the meter, printing mechanism coöperating with said type wheels, a time-keeping mechanism, and electrically operated means for actuating said printing mechanism by said time-keeping mechanism.

4. A recording wattmeter, comprising an integrating wattmeter provided with type wheels to indicate the integrations of the meter, an electromagnet combined with a platen to coöperate with said type wheels for printing the meter integrations, a circuit including the electromagnet, a relay for closing said circuit, a battery circuit connected with said relay, and a time-keeping mechanism combined with devices for closing said battery circuit.

5. A recording wattmeter, comprising an integrating wattmeter provided with type wheels to indicate the integrations of the meter, an electromagnet combined with a platen to coöperate with said type wheels for printing the meter integrations, a circuit including the electromagnet, a relay for closing said circuit, a battery circuit connected with said relay, and a time-keeping mechanism combined with devices for closing said battery circuit at predetermined periods of time.

[Claims 6 to 15 not printed in the Gazette.]

1,060,985. SHIP'S HULL. LOTHAR VON KÖPPEN, Hanover, Germany. Filed Feb. 23, 1910. Serial No. 545,339. (Cl. 114—62.)



1. A ship's hull comprising a midships section the bottom of which is shaped to provide a longitudinally extending recess the longitudinal central line of which rises continuously from its forward to its rear end, the latter being in advance of the stern post, and a downwardly directed wedge shaped portion that closes the forward end of said recess.

2. A ship's hull comprising a midships section the bottom of which is shaped to provide a longitudinally extending recess the longitudinal central line of which rises continuously from its forward to its rear end, the latter being in advance of the stern post, and the maximum area of the recess being approximately amidships, and a downwardly directed wedge shaped portion substantially closing the forward end of said recess.

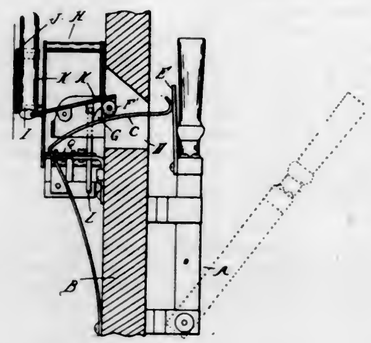
3. A ship's hull comprising a midships section the bottom of which is shaped to provide a longitudinally extending recess, the longitudinal central line of which rises continuously from its forward to its rear end, the latter being in advance of the stern post, and a downwardly directed wedge shaped portion substantially closing the forward end of said recess, the apex angle of which increases aft until the apex vanishes.

1,060,986. SAFETY-SWITCH FOR ELECTRIC HEATERS AND OTHER ELECTRICAL APPARATUS. FRANK KUHN, Detroit, Mich., assignor to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 15, 1911. Serial No. 665,887. (Cl. 161—27.)

1. The combination with an automatically opening switch, of a detent for holding said switch in closed position, constantly operating timed mechanism for periodically releasing said detent and permitting reëngagement upon the closing of the switch, and means operating when the timed mechanism is not in condition to operate for preventing the engagement of said detent with the switch.

2. The combination with a knife switch, of a base upon which said switch is mounted, a spring arm mounted on the rear of said base and projecting through an aperture therein into the path of the switch handle, a latch dog for engaging said spring arm when said switch is manually closed and holding the same from movement, a clock mechanism, and a gravity arm periodically released by said clock mechanism to strike against said latch dog and release the same.

3. The combination with an electric switch, of a spring arm for opening said switch, a latch dog for engaging said spring arm when the switch is manually closed, a clock mechanism, an arm actuated by said clock mechanism to periodically complete a revolution, a gravity arm raised by said revolnble arm, and periodically released, said gravity arm being adapted in its movement to disengage said latch dog and instantly release the same.

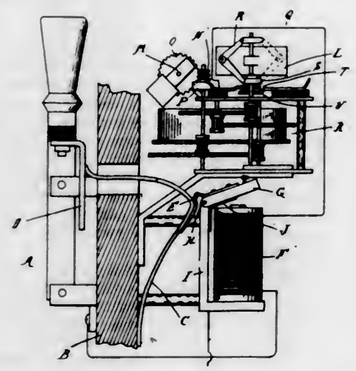


4. The combination with an electric switch, of a spring operating to open said switch, a latch dog for engaging said spring in the closed position of the switch, a clock mechanism, a gravity dog periodically released by said clock mechanism to engage said latch dog and release said spring, a lever projecting into the path of the spring of said clock mechanism and actuated thereby when in expanded condition to release said dog and prevent engagement of the same with said spring.

5. The combination with a manually closable switch, of mechanism for automatically opening the switch, including timed mechanism for periodically releasing said switch, and means operating when the timed mechanism is not in condition to operate for preventing the retaining of the switch in closing position.

[Claims 6 to 8 not printed in the Gazette.]

1,060,987. AUTOMATICALLY-OPERATING SWITCH FOR ELECTRIC CIRCUITS. FRANK KUHN, Detroit, Mich. Filed May 4, 1912. Serial No. 695,038. (Cl. 161—27.)



1. The combination with an automatically opening switch, of a detent for holding said switch in closed position, electromagnetic means adapted upon the energizing thereof to release said detent, a circuit for said electromagnetic means and a time mechanism controlling said electromagnetic means acting to automatically close the circuit upon the stopping of the mechanism, whereby the electromagnetic means is energized and the detent released.

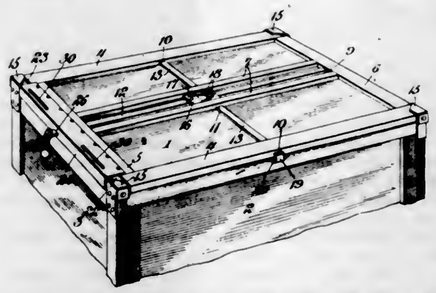
2. The combination with an automatically opening electric switch, of a detent for holding said switch in closed position, an electromagnet for releasing said detent, an electric circuit for said magnet, a time mechanism, and a plurality of circuit closers for said circuit controlled by said time mechanism, one operating after a predetermined movement of said mechanism and another upon the cessation of movement.

3. The combination with an automatically opening electric switch, of a detent for holding said switch in closed position, an electromagnet for releasing said detent, a time mechanism, an electric circuit for said magnet, a centrifugal mechanism driven by said time mechanism for opening the circuit of said magnet when said mechanism is in motion adapted on the stopping of said mechanism to close the circuit energizing said magnet, whereby the detent is released and said switch opened.

4. The combination with a knife switch, of a spring arm engaging said switch to open the same, a latch detent for engaging with said spring arm to hold the same in retracted position, an electromagnet adapted upon the energizing thereof to release said latch detent, a time mechanism, a circuit for said magnet and means controlled by said time mechanism for energizing said magnet alternatively upon the abnormal stopping of said mechanism or the normal completion of movement thereof.

5. The combination with an electric switch, means for automatically opening said switch, a latch detent for engaging said switch operating means upon the closing of the switch and holding the same in retracted position, an electromagnet for releasing said latch detent, a time mechanism, a circuit for said electromagnet, a plurality of circuit closers one being operated by said time mechanism after a predetermined interval, and centrifugal means operated by said time mechanism controlling the other circuit breaker and adapted to close the same upon the stopping of the mechanism.

1,060,988. LOCKING MECHANISM FOR COLLAPSIBLE RECEPTACLES. ANDREW E. LOCKHART, Jonesboro, Ark. Filed Apr. 23, 1912. Serial No. 692,709. (Cl. 70—3.)



1. In a locking device of the class described, the combination with a lid or cover, of a longitudinally movable operating bar extending along the lid or cover from one end of the same to the other end thereof and having a depending engaging portion at one end and provided at an intermediate point with a slide having converging slots, and laterally movable operating bars slidably connected with the slots and actuated by the same, said locking bars extending from the slide to the opposite edges of the cover and provided with depending approximately L-shaped engaging portions having inwardly extending terminals.

2. A locking device of the class described including laterally movable locking bars, a longitudinally movable operating bar connected with and actuating the laterally movable locking bars and provided at one end with engaging means, and transverse bolts located adjacent to the other end of the locking bar, the latter being movable into and out of the path of the transverse bolts for holding the same in an extended engaging position and for permitting the bolts to be moved inward.

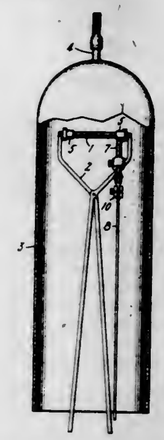
3. A locking device of the class described including laterally movable locking bars, a longitudinally movable operating bar connected with and actuating the locking bars and provided at one end with engaging means, a transverse casing located at the other end of the operating bar and having an opening to permit the operating bar to extend through it, and transverse bolts mounted in the casing and arranged to be locked in an extended engaging position by the operating bar, the latter being provided with a seal receiving opening adapted to be carried beyond the casing.

4. A locking device of the class described including laterally movable locking bars, a longitudinally movable operating bar connected with and actuating the laterally movable bars, a transverse casing arranged at one end of the longitudinally movable bar and provided with slots, and transverse bolts slidable in the casing and arranged to be locked in an extended position by the operating bar, the bolts being provided at the said slots with openings adapted to be engaged by an instrument for operating the bolts.

5. A locking device of the class described including a transverse casing having an opening, bolts slidable in the casing and arranged in overlapping relation and movable inwardly on each other, one of the bolts having an opening and the other terminating at its inner end at the opening when the bolts are in their extended engaging position, and an operating bar slidable in the casing and through the bolt opening for locking the bolts in their extended position.

[Claims 6 to 10 not printed in the Gazette.]

1,060,989. ELECTRIC TERMINAL. FRED W. LYLE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 30, 1911. Serial No. 657,516. (Cl. 219—63.)



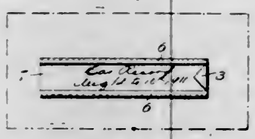
1. An electrical resistance consisting largely of elemental boron having a terminal consisting of a metal or the chromium group in intimate conducting relation thereto.

2. An electrical resistance composed largely of boron and having a tungsten terminal welded thereto.

3. An electrical resistance composed of boron, and having a tungsten terminal chemically united therewith.

4. An electrical resistance unit composed largely of boron, a terminal welded thereto consisting of a refractory material and an intermediate refractory alloy of said material and boron integrally joining the terminal to the boron.

1,060,990. TITLE-CARD HOLDER. CHARLES C. LYNCH, Wanette, Okla. Filed Oct. 6, 1911. Serial No. 653,110. (Cl. 40—17.)



A card holder comprising a flat body portion having its longitudinal edges provided with card engaging grooves said body having opposite corners of one end provided with flaps that are inturned and disposed within the grooves to form card stops, the opposite end of the body being cut-away between the grooves to provide a shank seat, said body having an elongated shank projecting from between the stops, the shank being adapted to be bent around the back of the body with its end portion lying in the seat flush with the end of the body, the free end of the shank being pointed and adapted to overlap the body and lie between the grooves and flush with the top walls thereof.

1,060,991. VARIABLE-RESISTANCE ELECTRIC-LAMP SWITCH. FRED C. MAPES and WILMER M. OWEN, Chelsea, Mich. Filed Aug. 21, 1912. Serial No. 716,325. (Cl. 219—49.)



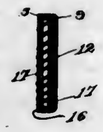
1. An electric lamp switch comprising a body of insulating material having a longitudinal groove therein, a resistance coil wrapped about the body and overlying the groove, and a spiral switch element rotatably mounted within the groove and adapted to engage the turns of the coil to regulate the flow of current.

2. An electric lamp switch comprising a body of insulating material having a longitudinal groove therein, a resistance coil wrapped about the body and overlying the groove, a socket secured to one end of said body, a spiral switch element rotatably mounted within the groove and adapted to engage the turns of the coil to regulate the flow of current, means for rotating said switch element, and a casing inclosing the body of insulating material and the socket.

3. An electric lamp switch comprising a body of insulating material having a longitudinal groove therein, a socket secured to one wall of said body, an actuating shaft rotatably mounted within the groove, a manipulating handle for said shaft, and a spiral switch element connected to the shaft and rotatable therewith to engage the turns of the coil successively to regulate the flow of current.

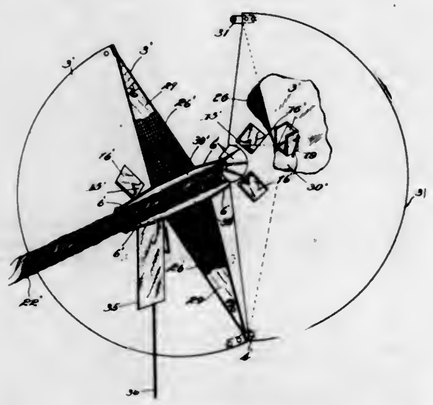
1,060,992. HEATER FOR AUTOMOBILE-RADIATORS. LOUIS H. MAYER, Johnstown, Pa. Filed July 29, 1912. Serial No. 712,102. (Cl. 219—19.)

1. In a radiator heater, a receptacle having end flanges, a heating element therein, a retaining member for the heating element comprising a frame fitting in the receptacle, ribs having their ends secured to the frame, said ribs lying obliquely in the said frame and having their inner edges in contact with the heating element and means for securing the heater to a radiator of an automobile.



2. In a radiator heater, a receptacle having end flanges, a heating element therein, a retaining member for the heating element comprising a frame fitting in the receptacle having recesses in its edge for the passage therethrough of conductors for the heating element, ribs having their ends secured to the frame, said ribs lying obliquely in the said frame and having their inner edges in contact with the heating element, and means for securing the heater to a radiator of an automobile.

1,060,993. TRAP-GUARD. FREDERICK E. MAYNARD, Berkeley, Cal. Filed Apr. 7, 1908. Serial No. 425,775. (Cl. 43—24.)



1. In a guard-trap, the combination of a pair of barrier members inclosing between them a prison chamber, said barriers and prison chamber having a central opening for the passage of a cable, with spring clamping devices proximate the passageway for supporting the device on the cable, said chamber having ingress openings, and means for normally preventing egress through said openings.

2. A rat guard comprising suitable barriers, clamps for mounting said barriers upon a support, and means by which said clamps are made to snugly inclose the support.

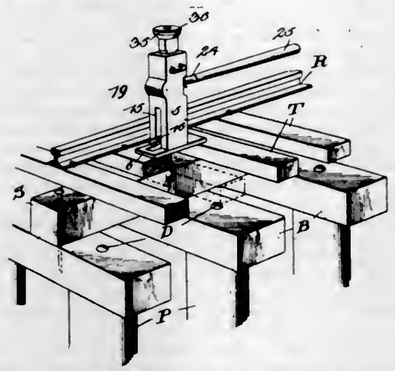
3. A guard-trap comprising a pair of conical disks centrally perforated to pass a cable, said disks coöperating to inclose an entrapping chamber, said chamber having ingress passages.

4. An animal trap for hawsers comprising end disks with a cage chamber between the disks, and said chamber having normally closed ingress openings proximate to the hawser, and means for mounting the trap upon hawsers of various diameters.

5. A trap embodying suitable barriers disposed to inclose a prison chamber, means for mounting the trap upon a support, and automatically closable gates opening inwardly in said barrier members to permit ingress from either side of the trap.

[Claims 6 to 15 not printed in the Gazette.]

1,060,994. NAIL-EXTRACTOR. BURDETTE W. MCCULLEY, Woodston, Kans. Filed June 15, 1912. Serial No. 703,906. (Cl. 145—37.)



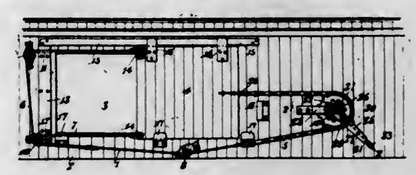
1. A nail extractor of the character described, comprising a tubular case open at both ends, a bar longitudinally movable in the case and provided with a longitudinal opening extending therethrough, the opposed walls of said opening being recessed near one end thereof, a gripping dog pivotally mounted at its lower end in each of said recesses and means for moving said bar in the case to extract a pin, the pin being adapted to extend into the longitudinal opening of the bar to permit of the movement of said bar with relation to the pin.

2. A nail extractor of the character described, comprising a tubular case open at both ends, a bar longitudinally movable in the case and provided with a longitudinal opening extending entirely therethrough, the opposed walls of said opening being longitudinally recessed, a dog pivotally secured at its lower end within each of said recesses and adapted for engagement with a pin to be extracted, means for moving the free ends of said dogs into engagement with the pin, said means comprising a lever pivoted intermediate its ends and projecting into the longitudinal opening in said bar and link members pivotally connected to the inner ends of said lever and to the dogs, and means for moving said bar in the case to extract the pin, the pin being adapted to extend into the longitudinal opening of the bar to permit movement of said bar with relation to the pin.

3. A nail extractor of the character described comprising an apertured base plate, a tubular case carried by said base plate, a hollow bar longitudinally movable in said case, dogs pivotally mounted within said bar, a yoke journaled in the opposed walls of the case for oscillatory movement, the case being formed with an opening through which one end of the yoke projects, pivoted spring pressed pawls mounted in the yoke, said bar being provided with teeth for engagement by said pawls, an angular lever fulcrumed upon the yoke and having a handle portion, spring plates carried by the pawls and engaged with one end of said lever, and means removably mounted in the yoke to hold the lever against movement when the pawls are disposed in their operative or inoperative position.

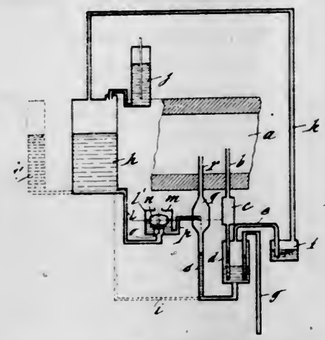
1,060,995. DOOR-OPERATING DEVICE. WALTER A. MCKENNEY and STANLEY BEATHAM, Lincoln, Me. Filed Oct. 28, 1912. Serial No. 728,307. (Cl. 39—92.)

1. In a door operating device, the combination with a car body having a door opening and provided with a sliding door, of spaced upper and lower guides located in advance of the door opening, a flexible connection extending along the car beyond the sliding door and provided at the front with upper and lower branches arranged in the said guides and extending horizontally therefrom and connected to the upper and lower portions of the sliding door at the front thereof, a sprocket wheel mounted on the car body in rear of the car door, a sprocket chain arranged on and meshing with the sprocket wheel and having upper and lower portions, one of the said portions being connected to the said flexible connection and the other of said portions extending horizontally from the sprocket wheel to the sliding door and secured to the same at the center of the rear edge thereof, and means for rotating the sprocket wheel.



2. In a door operating device, the combination with a car body having a door opening and provided with a sliding door, of spaced upper and lower guide pulleys arranged in advance of the door opening, a flexible connection extending along the car at a point below the car door and having front branches arranged on the said guide pulleys and extending horizontally from the same to the upper and lower portions of the sliding door and secured to the latter, a bottom guide mounted on the car body and receiving the said flexible connection and maintaining the same in spaced relation with the sliding door, a sprocket wheel mounted on the car body in rear of the sliding door and having a notched flange, a sprocket chain secured to the rear edge of the car door at the center thereof and extending horizontally therefrom in a rearward direction and passing around the sprocket wheel and connected to the said flexible connection, and an oscillatory operating lever having a pawl or dog arranged to engage the notched flange of the sprocket wheel.

1,060,996. AUTOMATIC GAS-ANALYZER. ALBERT MERTENS, Cruybeke, Belgium. Filed May 16, 1911. Serial No. 627,429. (Cl. 23—3.)



1. In an automatic gas analyzer, a gas sampling tube, a gas measuring vessel, a gas absorber, connected with the gas measuring vessel, a closed receptacle containing a liquid, said receptacle being connected with the absorber and with the gas measuring vessel and a Mariotte bottle also connected to said receptacle whereby the non absorbed gases can be sent into said receptacle and the Mariotte bottle is adapted to furnish a volume of liquid corresponding to the volume of gas absorbed.

2. In an automatic gas analyzer, in combination with a flue, a gas measuring vessel connected to said flue, means for sucking gas from the flue into the gas measuring vessel, a gas absorber connected to the gas measuring vessel, means for forcing the gas contained in the gas measuring vessel into the gas absorber, a closed receptacle adapted to contain a suitable liquid, a connection between said receptacle and the gas measuring vessel whereby the liquid contained in said receptatcle is adapted to flow into the

gas measuring vessel, a connection between said receptacle and the gas absorber, whereby the non-absorbed gas can be sent into said receptacle and a Mariotte bottle connected to said receptacle.

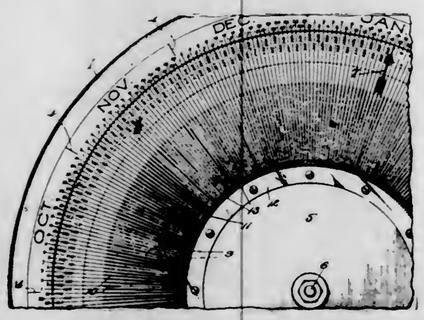
3. In an automatic gas analyzer in combination with a flue, a gas measuring vessel connected to said flue, means for sucking gas from the flue into the gas measuring vessel, a gas absorber connected to the gas measuring vessel, means for forcing the gas contained in the gas measuring vessel into the gas absorber, a closed receptacle adapted to contain a suitable non-absorbent liquid, a pipe connecting the lower part of said receptacle with the gas measuring vessel, whereby the liquid contained in said receptacle is adapted to flow into the gas measuring vessel, a second pipe connecting the upper part of said receptacle with the gas absorber whereby the non-absorbed gas can be sent into said receptacle and a Mariotte bottle connected to the upper part of said closed receptacle.

4. In an automatic gas analyzer, in combination with a flue, a gas measuring vessel counected to said flue, means for sucking gas from the flue into the gas measuring vessel, a gas absorber connected to the gas measuring vessel, means for forcing the gas from the gas measuring vessel into the gas absorber, a closed receptacle adapted to contain a suitable liquid, a pipe connecting the lower part of said receptacle with the gas measuring vessel, a second pipe connecting the upper part of said receptacle with the gas absorber, a Mariotte bottle connected to the upper part of said closed receptacle and means for compensating the clearances in the several parts and pipes.

5. In an automatic gas analyzer, in combination with a flue, a gas measuring vessel connected to said flue, means for sucking gas from the flue into said gas measuring vessel, a gas absorber connected to the gas measuring vessel, means for forcing the gas from the gas measuring vessel into the gas absorber, a closed receptacle adapted to contain a suitable liquid, a pipe connecting the lower part of said receptacle with the gas measuring vessel, a second pipe connecting the upper part of said receptacle with the gas absorber, a Mariotte bottle connected to the upper part of said closed receptacle and a compensating vessel connected with said closed receptacle, and designed to furnish the necessary liquid for compensating for clearances.

[Claim 6 not printed in the Gazette.]

1,060,997. INTEREST-CALCULATOR. JASON B. MOODY, Dallas, Tex. Filed Oct. 25, 1911. Serial No. 656,724. (Cl. 235—78.)

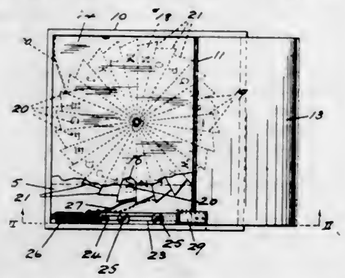


1. An interest calculator comprising an annular support, divisions on said annular support representing the months, and designations of the months and the number of days of the various months in said divisions, in combination with a member within said annular support and having in its upper side a recess for each day of the year, an interest table movably mounted in each of said recesses, designations of the days of the year opposite said recesses, respectively, and means preventing removal of said interest tables from said member, substantially as specified.

2. An interest calculator comprising an annular support having on its upper flat side divisions representing the months, and designations of the months and the numbers of the days of the various months in said divisions, respectively, in combination with another member movably mounted on said support and having its upper side in the same plane or flush with the upper side of said support and having in its upper side a recess for each day of the year, designations of the days of the year on said second-named member opposite said recesses and arranged to register with the divisions of the days of the months on said support, an interest table movably supported in each of said recesses, and means preventing detachment of said interest tables from said member, substantially as specified.

3. An interest calculator comprising two members adjustable in connection with each other effectively to make a visual indication of the number of days between two selected dates, interest tables containing calculations of interest on various sums of money for various selected periods of time at various rates of interest, compartments in one of said members in which said tables are mounted, a pivot holding said tables in said compartments, guides for said tables and manually engageable projections on said tables whereby said tables may be rotated on their pivot and raised from said compartments, substantially as specified.

1,060,998. TOY. LOUIS MOSS, New York, N. Y. Filed Aug. 1, 1912. Serial No. 712,687. (Cl. 46—37.)



1. A toy of the character described, comprising a box, a cover inclosing the top of the box whereby a chamber is provided in the box, said cover having a peep opening therethrough, a disk rotatable in the chamber and having a plurality of spaced characters upon its top surface, a spring controlled bar movable within the chamber, means provided upon the bar and adapted to engage the disk whereby said disk may be partially rotated for registering in succession each of the characters thereon with the peep opening of the cover when the bar is moved against the tension of its spring, a lid hinged to the box, and means provided upon the lid and adapted when closed upon the box to move the bar for partially rotating the disk.

2. A toy of the character described, comprising a box, a cover inclosing the top of the box whereby a chamber is provided in the box, said cover having a peep opening therethrough, a circular disk rotatable in the chamber and having a plurality of spaced characters upon its top surface, a plurality of teeth provided upon the peripheral edge of the disk, a spring controlled bar movable within the chamber, means provided upon the bar and adapted to engage the teeth of the disk whereby said disk may be partially rotated for registering in succession each of the characters thereon with the peep opening of the cover when the bar is moved against the tension of its spring, a lid hinged to the box, and means provided upon the lid and adapted when closed upon the box to move the bar partially rotating the disk.

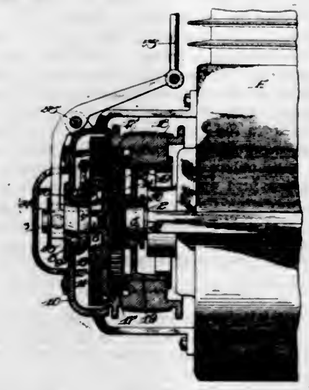
3. A toy of the character described, comprising a box, a cover inclosing the top of the box whereby a chamber is provided in the box, said cover having a peep opening therethrough, a toothed circular disk rotatable in the chamber and having a plurality of spaced characters upon its top surface, a bar movable within the chamber, a spring fastened to the bar and to the front wall of the box, said spring normally serving to force the bar toward said wall, means provided upon the bar and adapted to engage the teeth of the disk whereby said disk may be partially rotated for registering in succession each of the characters thereon with the peep opening of the cover when the bar is moved toward the rear wall of the box and against the tension of the spring, a lid hinged at the rear of the box, and means provided upon the lid and adapted when closed upon the box to move the bar for partially rotating the disk.

4. A toy of the character described, comprising a box, a cover inclosing the top of the box whereby a chamber is provided in the box, said cover having a peep opening therethrough, a toothed circular disk rotatable in the chamber and having a plurality of spaced characters upon its top surface, a bar movable within the chamber, a spring fastened to the bar and to the front wall of the box, said spring normally serving to force the bar toward said wall, means provided upon the bar and adapted to engage the teeth of the disk whereby said disk may be partially rotated for registering in succession each of the characters thereon with the peep opening of the cover when the bar is moved toward the rear wall of the box and against the tension of the spring, a lid hinged to the box, means provided upon the lid and adapted when closed upon the box to move the bar for partially rotating the disk, and a stop within the chamber, said stop serving to limit the rotation of the disk.

5. A toy of the character described, comprising a box, a cover inclosing the top of the box whereby a chamber is provided in the box, said cover having a peep opening therethrough, a toothed circular disk rotatable in the chamber and having a plurality of spaced characters upon its top surface, a bar yieldingly movable within the chamber, between the front and rear walls of the box, a catch provided upon the bar and adapted to engage the teeth of the disk whereby said disk may be partially rotated for registering in succession each of the characters thereon with the peep opening of the cover when the bar is moved toward the rear wall of the box, a lid hinged at the rear wall of the box, and means provided upon the lid and adapted when closed upon the box to move the bar for partially rotating the disk.

[Claims 6 to 8 not printed in the Gazette.]

1,060,999. CHANGE-SPEED-TRANSMISSION MECHANISM FOR MOTOR-CYCLES. EDGAR W. MYERS, San Jose, Cal., assignor, by direct and mesne assignments, to Rudolph-Myers Manufacturing Co., a Corporation of California. Filed Mar. 14, 1912. Serial No. 683,725. (Cl. 74—34.)

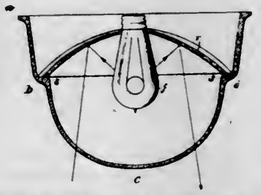


1. A variable speed transmission gearing for motorcycles, including a crank-shaft, a pinion carried thereby, a plate or disk turnable upon a hub or shoulder of said pinion and having dogs fulcrumed thereto, a slidable cone upon the outer end of the hub, a stationary housing with which the cone is engageable, a transmission pulley and a multiple disk clutch carried thereby, an internal gear in the pulley, and intermediate pinions engaging said gear and the crank-shaft pinion.

2. A variable speed transmission gearing for motorcycles, consisting of an engine crank-shaft, a pinion at the end of the shaft, a bearing upon the shaft, a transmission pulley turnable upon the bearing and having an internal gear, pinions between and engaging said gear and the crank-shaft pinion, a shaft in line with the crank-shaft, a cone slidable on said shaft, having a frictional surface, a housing with a frictional surface with which that of the cone is engageable, a multiple disk clutch upon the side of the transmission pulley, a disk turnable upon the hub of the crank-shaft pinion, having cam dogs fulcrumed thereto, with one end adapted to press against the clutch disks, and the other engageable by the sliding cone, and a manually operated lever by which the cone is shifted to engage the housing or the cones.

3. A variable speed transmission gearing for motorcycles, comprising an engine crank shaft, a pinion thereon, a transmission pulley looscly mounted concentric with the shaft, an extension in line with the shaft, a cone slidably mounted upon said extension, a stationary housing having a surface to be engaged by the cone, a clutch member carried by the pulley, an internal gear in the pulley, intermediate pinions engaging said gear and the first-named pinion, and a disk within the pulley having cam dogs with one part adapted to be engaged by the sliding cone and another part adapted to press against said clutch member.

1,061,000. ILLUMINATING APPLIANCE. OTIS A. MYGATT, New York, N. Y. Filed Sept. 22, 1910. Serial No. 583,213. (Cl. 240—92.)



1. An illuminating appliance comprising a glass inclosure having below its upper edge an interior support and a reflector within the same held by said support.

2. An illuminating appliance comprising a glass inclosure having below its upper edge an interior support and a prismatic reflector within the same held by said support.

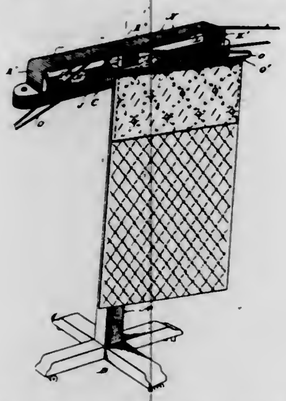
1,061,001. DISPLAY-RACK. LEWEN RUSSELL NELSON, Peoria, Ill., assignor, by mesne assignments, to Nickerson Wall Paper Exhibitor Co., Fairbury, Ill., a Corporation of Illinois. Filed Sept. 12, 1910. Serial No. 581,719. (Cl. 211—14.)

1. A display rack comprising a support having an extension, an arm mounted to swing thereon and adapted to lie normally in one of two positions each of said positions being at one side of a central one, said arm having a recurved extension co-acting with the support to hold said arm in one of its said extreme positions.

2. A display rack comprising a support, a member having pivotal support thereon and adapted for a swinging movement to two extreme positions, and a second member with which the first is adapted to have contact in a part of its movement and for positively holding said first member in one of its extreme positions, one of said members adapted to flex.

3. A display rack comprising a support, a swinging arm mounted thereon adapted to have two extreme posi-

tions, and means located in the path of the arm substantially midway of said positions with which the arm engages and by which it is positively held in said extreme positions.

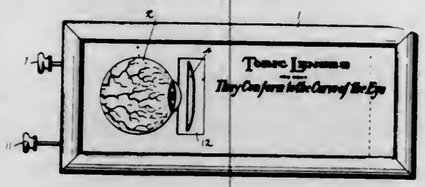


4. A display rack comprising a support, an arm mounted thereon adapted to swing to two extreme positions, and means located between said positions and adapted for controlling the arm and to positively but yieldingly hold it in either of its said two extreme positions.

5. A display rack comprising an upper and a lower member, one of them having a hole and also having a depending flexible portion, a swinging arm having an extension to enter said hole, said extension being bent in the direction of the free end of the arm to engage the said flexible portion, said arm also including a second extension to engage the other of the described members.

[Claim 6 not printed in the Gazette.]

1,061,002. DEVICE FOR ADVERTISING SPECTACLE-LENSES AND THE LIKE. BUELL NUTT, Cleveland, Ohio, assignor to The Strong-Kennard & Nutt Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 19, 1912. Serial No. 691,811. (Cl. 35—12.)



1. In a device of the character described, the combination of two relatively movable plates, one having an aperture and the other bearing a plurality of indicia respectively adapted to register with such aperture, and an indicating member movable relatively to said first plate adjacent to the aperture therein so as to complement the indicia appearing through such aperture in producing a predetermined effect.

2. In a device of the character described, the combination of an apertured plate, an indicating member movably mounted on one side of said plate adjacent to the aperture therein, and a second plate movably mounted on the opposite side of said first plate and bearing a plurality of indicia respectively adapted to register with such aperture to complement said indicating member in producing a predetermined result.

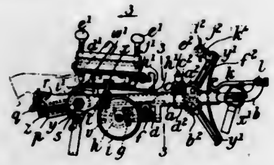
3. In a device of the character described, the combination of a frame, a slotted plate mounted in said frame, an indicating member movably mounted on said plate, a second plate movably mounted in said frame and bearing indicia adapted to register with such slot in one position of said second plate, whereupon said indicating member is adapted to be moved, thereby complementing such indicia to produce a predetermined effect.

4. In a device of the character described, the combination of two relatively movable plates, one having an aperture and the other bearing representations of various types of lenses respectively adapted to register with such aperture, and a member representing an eyeball movable relatively to said first plate adjacent to the aperture therein so as to illustrate the adaptability of the lens appearing through such aperture to the eyeball.

5. In a device of the character described, the combination of a frame, a slotted plate mounted in said frame, a member representing an eyeball mounted adjacent such slot in said plate, a second plate movably mounted in said frame and bearing at spaced intervals representations of various types of lenses, and means for moving said second plate, whereby said lenses are successively brought into register with said slot, thereby illustrating the adaptability of such lenses to the eyeball.

[Claim 6 not printed in the Gazette.]

1,061,003. APPARATUS FOR PROMOTING THE FLEXIBILITY OF THE JOINTS OF THE HANDS. HARRY OSTROVSKY, London, England, assignor to Ostrovsky Musicians Hand Development Company, Ltd., London, England. Filed Feb. 26, 1912. Serial No. 680,050. (Cl. 128—16.)



1. Apparatus for promoting flexibility of the joints of the hands, comprising a slide mounted in a frame and adapted to have movement imparted thereto by suitable mechanism, and means for holding and compressing the fingers mounted upon said slide.

2. An apparatus for promoting flexibility of the joints of the hands comprising a frame, a slide mounted therein, suitable mechanism for imparting movement to said slide, means provided upon said slide for gripping the fingers and means for holding the palm of the hand.

3. An apparatus for promoting flexibility of the joints of the hands comprising a slide mounted in a frame and adapted to have movement imparted thereto by suitable mechanism, means for holding and compressing the fingers mounted upon said slide, and means for producing a lateral stretching of the joints and ligaments.

4. An apparatus for promoting flexibility of the joints of the hands comprising a frame, a slide mounted therein, suitable mechanism for imparting movement to said slide, means provided upon said slide for holding the fingers and for compressing them at the joints.

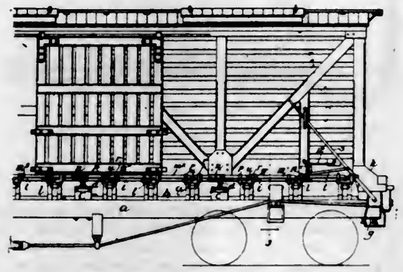
5. An apparatus for promoting flexibility of the joints of the hands, comprising a frame, a slide mounted therein, suitable mechanism for imparting movement to said slide, means provided upon said slide for holding the fingers and compressing them at the joints, and means provided upon said frame against which the palm of the hand is adapted to rest.

[Claims 6 to 13 not printed in the Gazette.]

1,061,004. DUMP-CAR. SPENCER OTIS, Chicago, Ill., assignor, by mesne assignments, to National Dump Car Company, a Corporation of Maine. Filed July 22, 1905. Serial No. 270,771. (Cl. 105—14.)

1. In a car of the class described, a series of dumping doors with respective latches therefor, and latch-supporting bars connected in series by lost motion joints.

2. In a car of the class described, a series of dumping doors with latches for each door, a series of latch supporting bars, means connecting successive bars permitting limited movement of one of them without moving the others.



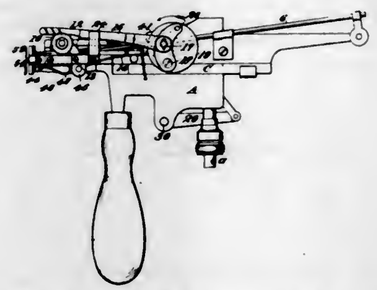
3. In a car of the class described, a series of dumping doors with latches for each door, a series of latch supporting bars, and joints for said bars, each joint consisting of a pin on one bar and a co-acting slot on another bar.

4. In a car of the class described, a series of dumping doors with latches for each door, and a series of latch supporting members with joints between successive members, each joint being so constructed as to permit limited movement of any member in either direction without movement of an adjacent member.

5. In a car of the class described, a series of dumping doors with respective latches therefor, latch supporting bars connected in series by lost motion joints, and means connected to a terminal bar for operating said bars.

[Claims 6 to 8 not printed in the Gazette.]

1,061,005. HAIR-PLANTING INSTRUMENT. JACOB H. PARSEGAN, San Francisco, Cal. Filed Feb. 3, 1913. Serial No. 745,954. (Cl. 128—28.)



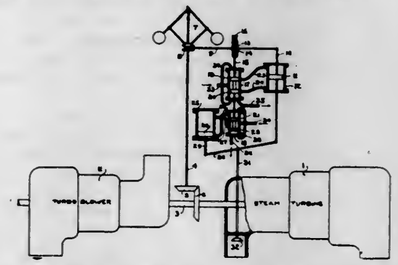
1. A hair planting instrument, comprising in combination a frame, a perforating implement mounted on said frame, means for projecting and retracting said implement, means for supporting a hair, means for inserting said hair into the opening produced by the perforating implement, and means for severing the section of hair inserted.

2. A hair planting instrument comprising in combination a frame, a perforating implement reciprocally mounted on said frame, means for projecting and retracting said implement, means for supporting a hair, means for inserting said hair into the opening produced by the perforating implement, means for severing the section of hair inserted, and means for adjusting the depth of the perforation made by the perforating implement.

3. A hair planting instrument comprising in combination a frame, a perforating implement reciprocally mounted on said frame, means for projecting and retracting said implement, means for feeding and inserting a hair into the opening produced by the perforating implement, means for severing the section of hair inserted, means for adjusting the depth of the perforation made by the perforating implement, and means for adjusting the feeding mechanism.

4. A hair planting instrument, comprising in combination a frame, a reciprocating frame mounted on said frame, a pair of flexible normally contacting arms mounted on said frame, needle points formed on the ends of said arms, adapted to unite and form one needle, means for projecting and retracting the perforating implement consisting of the reciprocating frame, flexible arms and needles, means for spreading the needles in the projected position, means for feeding and inserting a hair into the opening between the needles and means for severing the section inserted.

1,061,006. GAS-PRESSOR. JOHANN F. M. PATITZ, Milwaukee, Wis., assignor to Allis-Chalmers Company, Milwaukee, Wis., a Corporation of New Jersey. Filed Jan. 3, 1910. Serial No. 536,003. (Cl. 230—24.)

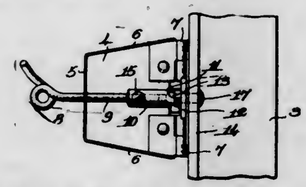


1. In a pressor of the impositive displacement type, the combination of a motor, means connecting the motor to the pressor for driving same, means for varying the power of the motor, and means controlled by the discharge pressure developed by the pressor for actuating the power varying means to vary the power directly as said pressure varies.

2. In a pressor of the impositive displacement type, the combination of a motor, means connecting the motor to the pressor for driving same, means for varying the power of the motor, and means actuated directly by the discharge pressure developed by the pressor for actuating the power varying means to increase the power when the said pressure increases.

3. In a pressor of the impositive displacement type, the combination of a motor, means connecting the motor to the pressor for driving same, means for varying the power of the motor, means controlled by the discharge pressure developed by the pressor for actuating the power varying means to vary the power directly as said pressure varies, and means for actuating the power varying means to decrease the power upon an abnormal increase in said pressure.

1,061,007. THREAD-GUIDE FOR SPINNING-MACHINES. GEORGE L. PIERCE and NORVEN PROVENCHER, Manchester, N. H., assignors to Lewis T. Houghton, Worcester, Mass. Filed Oct. 10, 1910. Serial No. 586,143. (Cl. 118—16.)



1. In a device of the class described, the combination with a doffing rail, of a thread guide pivoted directly thereto to swing up and down about an axis extending trans-

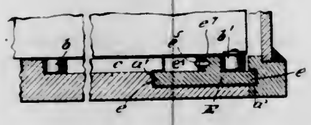
versely thereof, a cover or shield associated with the thread guide and pivoted to the dofling rail independently thereof, said shield protecting the spindle from lint, and a connection between said thread guide and cover to cause them to move in unison as they turn about their axes.

2. In a device of the class described, the combination with a dofling rail, of a thread guide pivoted to the dofling rail, a cover or shield also pivoted to the dofling rail independently of the thread guide and provided with a slotted flange at its front edge through which the thread guide shaft passes whereby said thread guide and cover will move in unison.

3. In a device of the class described, the combination with a dofling rail, of a hinge member secured to the front edge thereof for adjustment longitudinally thereof, a thread guide pivoted to said hinge member, and a cover or shield pivoted to the dofling rail independently of the thread guide.

4. In a device of the class described, the combination with a dofling rail, of a hinge plate secured to the front edge thereof, a thread guide pivotally sustained by said hinge plate, and a stop projection associated with the thread guide and adapted to engage the front face of the plate thereby to limit the downward swinging movement of said thread guide.

1,061,008. DOOR FOR SHOW-CASES AND OTHER INCLOSURES. RAFFORD PITT, New Rochelle, N. Y. Filed July 24, 1911. Serial No. 640,111. (Cl. 45—37.)

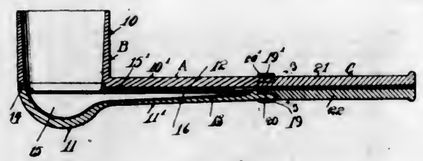


1. The combination with a suitable inclosure, of a door therefor pivoted intermediate its vertical edges, the said pivoted point of the door being guided to traverse a line transverse the doorway, and the rear edge of the door being guided to traverse a line parallel to the side of the inclosure; and a carrier movable to intersect the path of travel of the intermediate pivotal point and engaging and supporting the door at said point during the housing of the same after it has reached its open position.

2. The combination with a suitable inclosure of a door pivoted intermediate its vertical edges on vertical pivots moving in grooved tracks, extending transverse the doorway; means for guiding one vertical edge of the door parallel to the side of the inclosure; slides movable rearwardly and forwardly for independently housing the door after it has reached its extreme open position, and pockets in said slide registering with the grooves in the aforesaid tracks for receiving the intermediate pivots of the door, substantially as specified.

3. The combination with a suitable inclosure, of a door pivoted intermediate its vertical edges on vertical pivots above and below the same, which pivots are provided with suitable anti-friction devices and move in grooved tracks extending transverse the door way; means for guiding one vertical edge of the door parallel to the side of the inclosure; slides movable forwardly and rearwardly for independently housing the door after it has reached its extreme open position, said slides being located above and below the door and moving in tracks extending parallel to the side of the case and intersecting the aforesaid transverse tracks at right angles; pockets in said slides in alinement with the tracks for receiving the pivots of the door when it has reached its limit of lateral movement and means adapted to be released by engagement with the intermediate axial pivots for retaining such slides in alinement with the tracks.

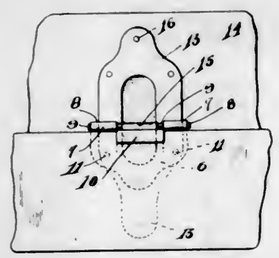
1,061,009. SMOKING-PIPE. ALFRED F. RIPPEL, Greenwich, Conn. Filed Jan. 30, 1912. Serial No. 674,265. (Cl. 131—12.)



1. A smoking pipe comprising a bowl and a stem provided with a draw channel passing through the stem and communicating with the interior of the bowl, a receptacle seated in the bottom of the bowl and having a stem extending into the draw channel, said stem being provided with openings affording communication between the interior thereof and the draw channel, and a plurality of deflector plates carried by the stem forward of each opening and inclined toward the bowl and projecting into the draw channel exteriorly of the stem.

2. A smoking pipe comprising a bowl and a stem provided with a draw channel passing through the stem and communicating with the interior of the bowl, a receptacle seated in the bottom of the bowl and having a stem extending into the draw channel, said stem and receptacle having open top portions, a plate removably seated over the open top portion of the receptacle and the stem portion of said plate being provided with openings affording communication between the interior thereof and the draw channel and a plurality of deflector plates carried by the stem portion of the plate forward of each opening and inclined toward the bowl and projecting into the draw channel.

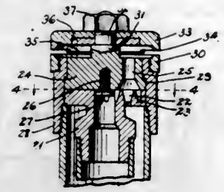
1,061,010. SUPPORT FOR TRAYS OF TRUNKS. EDWARD F. ROSE and IRA E. CASTEEL, Atchison, Kans. Filed Oct. 29, 1912. Serial No. 728,419. (Cl. 190—29.)



1. In a support for trays of trunks, a plate having straps, said straps being shaped to form loops, means for securing the plate to the trunk, a rod in the loops, a tongue projecting from the plate and embracing the edge of the trunk, a hanger comprising a plate and a tongue on the plate adapted to embrace and engage the rod of the support, the said support and hanger having metallic contacting surfaces for protecting the tray and trunk.

2. In a support for trays of trunks, a plate having straps, said straps being shaped to form loops, means for securing the plate and straps to the trunk, a rod in the loops, a tongue formed integral with the plate and embracing the edge of the trunk, a hanger comprising a plate, a tongue integral with the plate adapted to embrace and engage the rod of the support, the said support and hanger being arranged on their respective members in such relation to each other as to engage when said members are in their assembled relation.

1,061,011. OIL-BURNER. HIRAM C. RUGGLES, Phoenix, Ariz. Filed Nov. 13, 1911. Serial No. 659,971. (Cl. 58—75.)



1. A hydro-carbon burner, having pipes connected to a source of oil supply and a fluid under pressure supply, an atomizer formed of two parts, one carried by the oil supply pipe extending over the fluid under pressure supply pipe, said first part of said atomizer having a series of inverted coned nozzles connecting with the fluid under pressure pipe formed with annular oil holding chambers around the base of each of said nozzles, the said chambers communicating with the oil supply pipe, and said second atomizer part having a series of mixing passages formed coinciding with and extending beyond said inverted nozzles and each passage communicating with an adjacent nozzle and its annular oil chamber.

2. An oil burner, comprising an atomizer having a central passage and a series of nozzles formed outside the same, an oil supply pipe connected with said central passage, a steam supply pipe connected with said nozzles, the atomizer being formed with annular grooves around each of said nozzles, the inner portions of said grooves being open to said central passage of the atomizer, an adjustable member controlling the size of said openings, and a piece carrying the same having mixing passages formed therein for receiving the mixed materials from the said nozzles.

3. A burner comprising an atomizer having a central passage and nozzles arranged outside the same, each of said nozzles being formed with tapering walls and having an annular groove around it, the said grooves intersecting the central passage of the atomizer for admitting oil thereto, an oil supply pipe connected with said central passage, a steam supply pipe connected with the said nozzles, an upper atomizer piece having mixing passages for receiving materials from each nozzle, and a cap plate having depending edges, portions of which project inwardly to a greater extent than other portions, whereby an elongated flame will be produced.

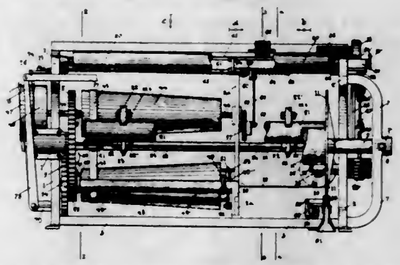
4. A burner, comprising an oil supply pipe and a steam supply pipe, an atomizing member connected with said oil supply pipe having a series of jet openings formed with tapered flanges surrounding the same, the said atomizing member having oil containing troughs around the said jet openings, a nozzle piece having openings with flaring collecting edges overhanging the said jet openings, and a spreading cap plate arranged above said openings.

5. A burner, comprising an inner oil feed pipe, an outer steam pipe inclosing the same and spaced below to allow for the expansion and contraction of the parts, an atomizing member connected with the end of the oil pipe having a central bore and laterally arranged troughs connected therewith for receiving the oil, nozzles having outlets within said troughs, an upper atomizer plate above said atomizer, and a spreading plate carried by the upper atomizer plate, and having irregular spreading edges for controlling the delivery of the atomized oil for producing an elongated flame.

[Claim 6 not printed in the Gazette.]

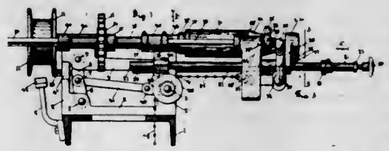
1,061,012. WARPER. EPPA H. RYON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, a Corporation of Massachusetts. Filed June 16, 1909. Serial No. 502,450. (Cl. 28—14.)

1. In a warper, a pressure roll for the yarn on the beam being wound, pivotally mounted arms to coöperate with said pressure roll, manually controlled means to vary the pressure on said roll, a pair of cones, a driving belt connecting said cones, and connections from said pressure roll to said belt, said connections including a pivotally mounted segment arm having teeth thereon, a pinion to mesh with said teeth, and having a drum fast thereto, a second rotatable drum, a cord passing around said drums and connected to said belt.



2. In a warper, a beam upon which the warp is wound, a pressure roll to bear against the yarn on said beam, means to vary the pressure of said roll, a pair of cones, a driving belt connecting said cones, and connections from said pressure roll to said belt, said connections including a segment arm, a pinion, two drums, and a flexible connection between said drums and said belt.

1,061,013. COP OR BOBBIN WINDING MACHINE. EPPA H. RYON, Waltham, Mass., assignor to Crompton & Knowles Loom Works, a Corporation of Massachusetts. Filed May 8, 1912. Serial No. 695,842. (Cl. 242—34.)



1. In a winding machine of the class described, a spindle mounted to rotate on a spindle bed, and said bed, mounted to turn on a pivotal center, a trumpet or shaper, adapted to be moved by the yarn wound on a bobbin or carrier, and said bobbin or carrier, connected with said spindle to rotate therewith, and a guide to control the movement of said trumpet or shaper in a direction parallel to said spindle, said guide being attached to and movable with said spindle bed.

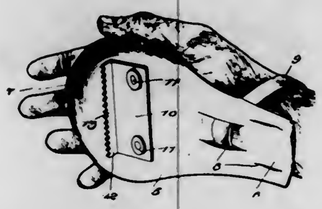
2. In a winding machine of the class described, a spindle to cause the rotation of a bobbin or carrier, a trumpet or shaper adapted to be moved by the increased mass of yarn wound on said bobbin or carrier, a traverse guide mounted to move with said trumpet or shaper, a crank device also mounted to move with said trumpet or shaper, a rotatable and slidable shaft connected to said crank device, to operate the same, and means to rotate said shaft.

3. In a winding machine of the class described, a spindle to cause the rotation of a bobbin or carrier, a trumpet or shaper adapted to be moved by the increased mass of yarn wound on said bobbin or carrier, a traverse guide mounted to move with said trumpet or shaper, a crank device also mounted to move with said trumpet or shaper, said crank device comprising an eccentrically located tapered head, having a cap having a taper corresponding to the taper of said head, and a crank pin on said cap, and means to hold the cap on said head.

4. In a winding machine of the class described, a spindle to cause the rotation of a bobbin or carrier, a trumpet or shaper adapted to be moved by the increased mass of yarn wound on said bobbin or carrier, a traverse guide mounted to move with said trumpet or shaper, a crank

device also mounted to move with said trumpet or shaper, said crank device, comprising an eccentrically located tapered head, having a cap having a taper corresponding to the taper of said head, and a crank pin on said cap, and means to hold the cap on said head, and a connection from said crank pin to the traverse guide, said connection including a connector with ball and socket joints.

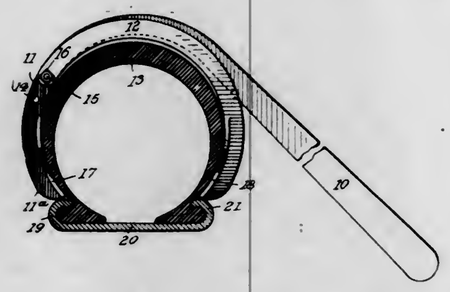
1,061,014. BAG-HANDLER. CHARLES L. SAWYER, Grand Valley, Colo. Filed Sept. 17, 1912. Serial No. 720,829. (Cl. 2—104.)



1. A bag handler comprising a body adapted to fit snugly in the palm of the hand, said body tapering at one end and being provided with spaced pairs of slits, a wrist strap adapted to be disposed through either pair of slits to attach the device to the wrist, and a bag gripping plate secured upon said body adjacent to its other end and provided with a serrated edge.

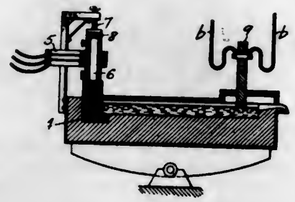
2. A bag handler comprising a leather body tapering at one end, the other end of said body being comparatively broad and longitudinally curved to fit snugly against the palm of the hand, said tapering end of the body being provided with spaced pairs of longitudinal slits, a wrist strap adapted to be disposed through either pair of the slits, and a bag gripping plate arranged upon one side of the broad end portion of the body and riveted thereto, said plate being provided on one edge with a longitudinal flange having teeth formed thereon for gripping engagement with a bag.

1,061,015. TIRE-TOOL. GUSTAV SCHAEFER, New York, N. Y. Filed Dec. 26, 1911. Serial No. 667,626. (Cl. 157—6.)



A tire tool comprising a flat bar having one end curved in the plane of the bar to approximate the circumference of a tire to embrace approximately one half thereof, and having at its free end a lateral flange flush with the inner edge of the curved portion to provide a wide jaw to engage the tire on one side, a flat arm pivoted to the said bar at approximately the middle of the curve and curved also to approximate the circumference of the tire and embracing approximately the other half thereof and also having at its free end a flange flush with the inner curved edge to afford an opposing jaw face.

1,061,016. PROCESS OF MELTING FERRO-ALLOYS AND KEEPING THEM IN LIQUID STATE. WILHELM SCHEMMANN and JEGOR BRONN, Rombach, Germany, assignors to Rombacher, Hüttenwerke, Rombach, Germany, a Corporation of Germany. Filed Dec. 30, 1912. Serial No. 739,288. (Cl. 204—64.)



1. The process herein described of melting ferro-manganese and similar alloys which consists in melting the alloys by means of contact resistance heating using a voltage drop between each of the movable block electrodes and a bath of molten material which is less than thirty volts.

2. The process herein described of melting ferro-manganese and similar alloys which consists in melting the alloys by means of contact resistance heating in conjunction with ordinary resistance heating using a voltage drop between each of the movable block electrodes and the bath of molten material which is less than thirty volts.

3. The process herein described of melting ferro-manganese and similar alloys which consists in so disposing the movable electrode that the drop or difference of tension between the electrodes and the bath is less than 30 volts.

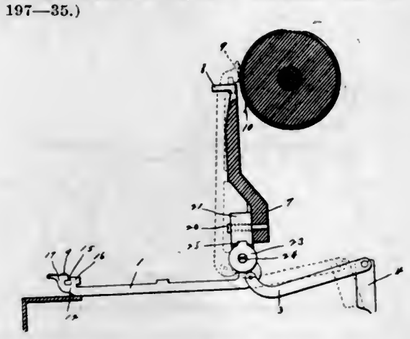
1,061,017. HOSE-SUPPORTER. MEYER W. SCHLOSS, New York, N. Y. Filed Sept. 28, 1910. Serial No. 584,221. (Cl. 241—1.)



1. In a hose supporter, the combination of a supporting member having a loop with a supporting strap and a clamping device having a biting part, the said strap comprising two distinct sections connected end to end, one of relatively strong, thick material and the other of said sections being of thin and more flexible material, the latter section normally extending through said loop and being bent therearound in looped engagement therewith, said thin, flexible material being attached to the clamping device independent of the biting part of said device, and the line of engagement between said thin, flexible material and said loop being displaceable longitudinally of said material in accordance with the position of said biting part upon said first section, said first or thickened section being of a length to co-act with said biting part throughout the normal range of adjustment of the clamping device.

2. In a hose supporter, the combination of a supporting member having a loop with a supporting strap and a clamping device having a biting part, the said strap comprising two distinct sections connected end to end, one of relatively strong, thick, extensible material and the other of said sections being of thin, inextensible and more flexible material, the latter section normally extending through said loop and being bent therearound in looped engagement therewith, said thin, flexible material being attached to the clamping device independent of the biting part of said device, and the line of engagement between said thin, flexible material and said loop being displaceable longitudinally of said material in accordance with the position of said biting part upon said extensible section, said extensible section being of a length to coact with said biting part throughout the normal range of adjustment of the clamping device.

1,061,018. TYPE-BAR FOR TYPE-WRITING MACHINES. AUGUST SCHNEELOCH and JOHN L. SMITH, Syracuse, N. Y., assignors, by direct and mesne assignments, of two-thirds to E. C. Stearns & Co., Syracuse, N. Y., a Corporation of New York, and one-third to The Oliver Typewriter Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 14, 1905. Serial No. 291,669. (Cl. 197—35.)



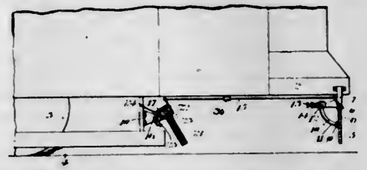
1. A type-bar for typewriting machines having in combination a shank, an integral head on the end of the shank, a type-bearing end and a guide piece on the head, said type-bearing end having an elongated and widened extremity for the type and said guide-piece having an elongated guiding extremity, said end and said guide-piece being supported on said head by independent goose-necks, and said necks being narrow in comparison to the respective extremities to permit easy bending and angular adjustment of the end and the guide piece, substantially as described and shown.

2. In a type-bar for typewriting machines, the combination of a shank and a head arranged at a suitable angle to the shank, a type-bearing end and an enlarged guide-piece on said head, said end and guide-piece being separated by a slot having an inner enlargement whereby they are separated from the head by gooseneck portions to facilitate their independent adjustment.

3. In a typewriting machine, the combination with the type-bar, of a hanger therefor, and a segment to support the hanger, said hanger being composed of a solid main piece secured on edge on the segment and having a hole for the securing screw, an integral circular clamping portion, and a corresponding clamping-plate, said clamping portion and clamping-plate having circular grooves to engage with corresponding ridges on the heel of the type-bar, and means to secure the clamping-plate on the main portion.

4. In a typewriting machine a type-bar having a substantially circular heel provided with a central hole and an annular ridge on each side around the hole and a hanger for said type-bar having in combination a main portion provided with a circular clamping portion at one end and a hole in said clamping portion and a circular clamping piece corresponding to said circular clamping portion, said clamping piece having a tongue fitting a slot formed in the main portion and a screw hole corresponding to the clamping piece screw hole, and a screw to secure the clamping plate on the clamping portion with the type bar heel arranged between them, said clamping portion and clamping plate having on their inner surfaces annular grooves fitting the annular ridges on the sides of the heel and circular shanks substantially fitting the hole in the heel substantially as described and shown.

1,061,019. CAR-FENDER. JACOB SCHNEIDER, Philadelphia, Pa. Filed July 24, 1911. Serial No. 640,228. (Cl. 105—130.)



1. In a railway car, the combination with a swing frame pivotally supported at the front of the car so as to depend vertically therefrom; of a sector having a serrated edge, pivotally connected with said swing frame and arranged to slide circumferentially in a bracket rigidly connected with said car; a detent slide bolt in said bracket arranged to engage the serrations in said sector; a spring normally pressing said slide bolt into engagement with said sector; a wheel guard comprising a frame pivotally supported beneath said car in front of the wheels thereof so as to depend vertically when set in operative position; said wheel guard having at the lower edge thereof a series of flexible brush like members adapted to resiliently engage a body impinging thereon; a link pivotally connecting said swing frame with said wheel guard, whereby said wheel guard is raised to inoperative position when said swing frame is lowered to its operative position and vice versa; brake mechanism adapted to arrest the progress of said car, including pipes leading to and from the front of said car, a valve at the front of said car; adapted to be manually operated to control said brake; a cross connection between said pipes including an auxiliary valve adapted to control said brake; an operating lever on said auxiliary valve; an arm on said link; and a pivotal connection between said arm and the lever of said auxiliary valve; whereby movement of said swing frame to set said wheel guard in operative position automatically operates said auxiliary brake valve to arrest the movement of the car.

2. In a railway car, the combination with a swing frame pivotally supported at the front of the car so as to depend vertically therefrom! of a sector connected with said swing frame and arranged to slide circumferentially in a bracket connected with said car; a detent in said bracket arranged to engage said sector; a spring normally pressing said detent into engagement with said sector; a wheel guard comprising a frame pivotally supported beneath said car in front of the wheels thereof so as to depend vertically when set in operative position; said wheel guard having at the lower edge thereof a series of flexible brush like members adapted to resiliently engage a body impinging thereon; a link pivotally connecting said swing frame with said wheel guard, whereby said wheel guard is raised to inoperative position when said swing frame is lowered to its operative position and vice versa; brake mechanism adapted to arrest the progress of said car, including a valve adapted to control said brake; an operating lever on said valve; and means operatively connecting said frame and said valve lever; whereby movement of said swing frame to set said wheel guard in operative position automatically operates said brake valve to arrest the movement of the car.

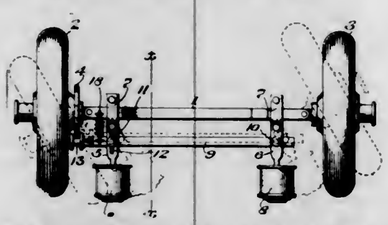
3. In a railway car, the combination with a swing frame pivotally supported at the front of the car so as to depend vertically therefrom; of a sector having a serrated edge, pivotally connected with said swing frame and arranged to slide circumferentially in a bracket rigidly connected with said car; a detent slide bolt in said bracket arranged to engage the serrations in said sector; a spring normally pressing said slide bolt into engagement with said sector; a wheel guard comprising a frame pivotally supported beneath said car in front of the wheels thereof so as to depend vertically when set in operative position; said wheel guard having at the lower edge thereof a series of flexible brush like members adapted to resiliently engage a body impinging thereon; and a link pivotally connecting said swing frame with said wheel guard whereby said wheel guard is raised to inoperative position when said swing frame is lowered to its operative position and vice versa.

4. In a railway car, the combination with a swing frame pivotally supported at the front of the car so as to depend vertically therefrom; of a sector connected with said swing frame and arranged to slide circumferentially in a bracket connected with said car; a detent in said bracket arranged to engage said sector; a spring normally pressing said detent into engagement with said sector; a wheel guard comprising a frame pivotally supported beneath said car in front of the wheels thereof so as to depend vertically when set in operative position; said wheel guard having at the lower edge thereof a series of flexible brush like members adapted to resiliently engage a body impinging thereon; and a link pivotally connecting said swing frame with said wheel guard whereby said wheel guard is raised to inoperative position when said swing frame is lowered to its operative position and vice versa.

5. In a railway car, the combination with a swing frame pivotally supported at the front of the car; of a sector connected with said swing frame and arranged to slide circumferentially in a bracket connected with said car; a detent in said bracket arranged to engage said sector; a spring normally pressing said detent into engagement with said sector; a wheel guard comprising a frame pivotally supported beneath said car in front of the wheels thereof so as to depend vertically when set in operative position; said wheel guard having at the lower edge thereof a series of flexible brush like members adapted to resiliently engage a body impinging thereon; and means connecting said swing frame with said wheel guard whereby said wheel guard is set in operative position when said swing frame is raised.

[Claims 6 to 9 not printed in the Gazette.]

1,061,020. ATTACHMENT FOR VEHICLE-LAMPS. ELWOOD H. SHINN, Masonville, N. J. Filed Dec. 18, 1912. Serial No. 737,423. (Cl. 240—62.)



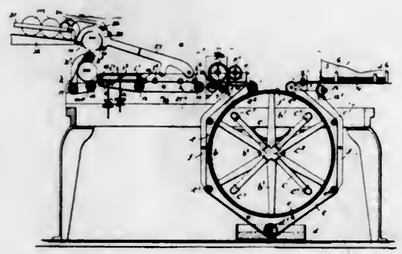
1. In a device of the character stated, an axle, steering wheels pivoted to said axle, arms pivotally supported adjacent said axle, lamps carried by said arms, a bar movably connected with said arms, a disk rotatable and movable with one of said wheels and means carried by said bar and in engagement with the opposite sides of said disk for connecting the latter with said bar.

2. In a device of the character stated, an axle, arms pivotally supported adjacent said axle, lamps carried by said arms, a bar movably connected with said arms, a disk rotatable and movable with one of said wheels, means carried by said bar and in engagement with the opposite sides of said disk for connecting the latter with said bar and means for assisting in holding the said means and disk in engagement.

3. In a device of the character stated, an axle, steering wheels pivoted to said axle, arms pivotally supported adjacent said axle, lamps carried by said arms, a bar movably connected with said arms, a disk rotatable and movable with one of said wheels and offset thereupon, and a rotatable engaging means carried by said bar and in engagement with opposite sides of said disk for connecting the latter with said bar.

4. In a device of the character stated, an axle, steering wheels pivoted to said axle, an arm pivotally supported adjacent said axle, a lamp carried by said arm, a bar movably connected with said arm, a member rotatable and movable with one of said wheels, and means in suitable connection with said member to be controlled by lateral movement of said member in either direction, to impart similar movement to said bar whereby said lamp is turned to correspond to the positions of said wheel.

1,061,021. CAN-LABELING MACHINE. JAMES C. SHULTS, Meadville, Pa., assignor to Russ Automatic Labeling Co., New York, N. Y., a Corporation of Delaware. Filed Sept. 2, 1911. Serial No. 647,428. Renewed Aug. 12, 1912. Serial No. 714,707. (Cl. 216—59.)



1. In a can labeling machine, devices for forwarding labels one at a time from the bottom of a superposed pile, revoluble devices for moistening the labels, devices for pasting the unprinted surface of each label, conveyer devices receiving and for moving the pasted labels from the pasting devices, auxiliary devices for applying tension in transit to the pasted labels, devices receiving, holding, and for revolving cans to be labeled one at a time, an endless apron having a part running in proximity to the revolving can and receiving the label to be pasted thereon, swinging devices associated with the endless apron for diverting the path of part of the apron and wrapping the same partly around the can in the labeling operation and so pressing the label firmly upon the can.

2. In a can labeling machine, devices for forwarding labels one at a time from the bottom of a superposed pile, revoluble devices for moistening the labels, devices for pasting the unprinted surface of each label, conveyer devices receiving and for moving the pastel labels from the pasting devices, auxiliary conveyer devices for applying tension in transit to the pasted labels, devices receiving, holding and, for revolving cans to be labeled one at a time, an endless apron having a part running in proximity to the revolving can and receiving the label to be pasted, thereon, devices for moistening the surface of said apron and removing therefrom any surplus adhesive material, swinging devices associated with the endless apron for diverting the path of part of the apron and wrapping the same partly around the can in the labeling operation and so pressing the label firmly upon the can.

3. In a can labeling machine, devices for forwarding labels one at a time from the bottom of a superposed pile, revoluble devices for moistening the labels, devices for pasting the unprinted surface of each label, conveyer devices receiving and for moving the pasted labels from the pasting devices, auxiliary conveyer devices for applying tension in transit to the pasted labels, devices receiving, holding, and for revolving cans to be labeled one at a time, an endless apron having a part running in proximity to the revolving can and receiving the label to be pasted thereon, swinging devices associated with the endless apron for diverting the path of part of the apron and wrapping the same partly around the can in the labeling operation and so pressing the label firmly upon the can in the labeling operation and so pressing the label firmly upon the can.

4. In a can labeling machine, the combination with a receptacle for holding a superposed pile of labels and means for forwarding the labels one at a time from the bottom of the pile, of a wheel or drum, devices within the same receiving steam for heating the drum, a series of endless belts in parallel extending around the larger portion of said drum, rollers around which the belts pass and for moving the same, a receptacle for water through which said belts pass, a weighted roller in said receptacle for holding said belts taut and beneath which they pass, and guide blades above said drum whereby the labels one at a time pass between said drum and said belts and are deflected into and carried around between the belts and the drum and delivered from the opposite side.

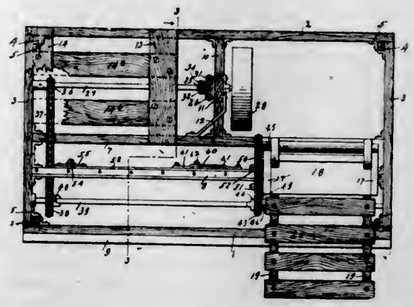
5. In a can labeling machine, and in combination, a receptacle for holding a superposed pile of labels and means for forwarding the labels one at a time from the bottom of the pile, a wheel or drum having a solid periphery, hollow trunnions, intermediate spokes and bearings therefor, a felt strip around the periphery of said wheel or drum, a pipe for steam passing through one of said hollow trunnions and provided with branching arms and discharge arms for the steam at right angles thereto within said wheel or drum whereby the drum and the felt covering are heated, plates at the sides of said drum, rollers spaced around the drum and bearings in said plates, a tank for water beneath the drum, a loose vertically movable weighted roller in said tank, rollers in the upper part of said drum spaced apart and having bearings in said plates, a series of guide blades between the latter rollers extending over the drum and its felt covering, and a series of endless belts arranged parallel and passing around all of the said rollers through said tank beneath the weighted roller and with their inner portions in contact with the felt covering of the drum, whereby the felt covering is moistened and heated and the endless belts are moistened and labels passed one at a time between the moistened belts and the moistened and heated felt covering for preparing the labels for the pasting operation.

[Claims 6 to 15 not printed in the Gazette.]

1,061,022. DRIVING MECHANISM AND SUPPORT THEREFOR. JOHN H. SPEAS, Cazenovia, Ill., assignor, by mesne assignments, to Power Washing Machine Co., Peoria, Ill., a Corporation of Illinois. Filed July 6, 1908. Serial No. 441,982. (Cl. 74—59.)

1. In a machine of the character described, in combination, a main frame, a shaft journaled therein, a counter shaft journaled in said main frame and means for operating the same from said first mentioned shaft, a supplemental supporting frame mounted on said main frame, said supplemental supporting frame being manually movable relatively to said main frame, driving mechanism movable with said supplemental supporting frame and adapted to be operated from the counter shaft, and clutch devices forming an operative connection between said last mentioned mechanism and said counter shaft, and means for holding said clutch devices in operative relation, and a lever for braking said clutch connection.

2. In a machine of the character described, in combination, a main frame, a shaft journaled therein, a counter shaft journaled in said main frame and means for operating said counter shaft from said first mentioned shaft, a supplemental supporting frame mounted on said main frame, said supplemental supporting frame being manually movable relatively to said main frame, a driving mechanism mounted on said supplemental frame and a chain and sprocket connection between said driving mechanism and said counter shaft movable with said supplemental supporting frame.



3. In a machine of the character described, in combination, a main frame, a shaft journaled therein, a counter shaft journaled in said main frame and means for operating said counter shaft from said first mentioned shaft, a supplemental supporting frame mounted on said main frame, said supplemental supporting frame being manually movable relatively to said main frame, a driving mechanism mounted on said supplemental frame and a chain and sprocket connection between said driving mechanism and said counter shaft movable with said supplemental supporting frame, and clutch devices forming operative connection between said chain and sprocket connection and said main shaft.

4. In a machine of the character described, in combination, a main frame, an operating shaft, clutch members on said shaft, one near each end thereof, a supplemental frame slidable longitudinally of said operating shaft, a driving member movable with said frame and capable of having a clutch connection with either of said clutch members when said supplemental frame is disposed at opposite ends of said shaft, and driving mechanism movable with said supplemental frame and adapted to be operated by said driving member.

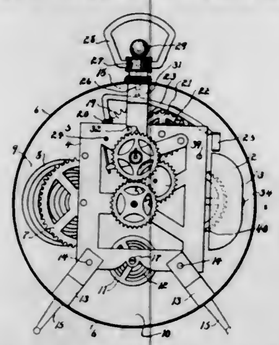
5. In a machine of the character described, in combination, a main frame, an operating shaft, a counter shaft, means for operating the same from the operating shaft, a driving member slidable on said counter shaft and adapted to have a clutch connection with said shaft, a supplemental supporting frame slidable on said main frame, operating means movable with said supplemental supporting frame and adapted to be operated from said driving member, and means for holding the driving member in clutch engagement with said counter shaft.

[Claims 6 to 27 not printed in the Gazette.]

1,061,023. ALARM-CLOCK. ELMER E. STOCKTON, Bristol, Conn., assignor to The E. Ingraham Co., Bristol, Conn., a Corporation. Filed July 29, 1912. Serial No. 712,115. (Cl. 58—16.)

1. In an alarm-clock, the combination with a case having a circular sheet-metal band, of a time-alarm movement located within the said band in position to form an upper space, a lower space, and two side spaces, respectively situated between the said band and the edges of the movement-plates, and a bell located in one of the said side spaces at a point entirely outside of the movement, with its open side inward and extending edgewise from front to rear across the planes of both of the said plates at a right angle thereto, the hammer-tail of the said time alarm movement being arranged horizontally in the said upper

space and terminating in a hammer located directly over the upper edge of the said inwardly opening bell.



2. In an alarm-clock, the combination with a case having a circular sheet-metal band, of a time-alarm movement located within the said band in position to form an upper space, a lower space, and two side spaces, respectively situated between the band and the edges of the movement, and a bell located in one of the said side spaces at a point entirely outside of the said movement, with its open side inward and extending edgewise from front to rear across the planes of both of the said plates at a right angle thereto, the other of the two side spaces being entered by the main time-wheel and the main time-spring of the said movement the third wheel of which is housed by the said inwardly opening bell, and the said upper and lower spaces being respectively entered by projecting portions of the balance-wheel and balance-spring, and of the alarm-train.

3. In an alarm-clock, the combination with a case having a circular sheet-metal band, of a time-alarm movement located within the said band in position to form between the edges of its front and rear plates and the said band, two side spaces, and an upper and a lower space, a bell located in one of the said side spaces at a point entirely outside of the said movement, with its open side inward and extending edgewise from front to rear across the planes of both of the said plates at a right angle thereto so as to project in front of the movement and back of the movement parts of which extend into the said upper and lower and side spaces which are thus utilized in economizing space.

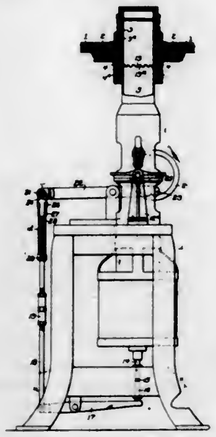
4. In an alarm clock, the combination with a case having a circular sheet metal band, of an alarm movement located within the said case and comprising an alarm-mechanism having a hammer-tail arranged horizontally between the upper edges of the movement-plates and the upper portion of the said band, and a plunger located above the said hammer-tail and co-acting directly therewith for stopping the alarm train.

5. In an alarm clock, the combination with a case having a circular sheet metal band, of an alarm-movement located within the said case and having an alarm train, the hammer-tail of which is arranged horizontally in the space between the upper edges of the movement plates and the upper portion of the said band, a ring-head located in the center of the top of the case, and a plunger mounted in the said ring-head and having its lower end engaged directly with the hammer-tail for stopping the alarm-train.

[Claims 6 and 7 not printed in the Gazette.]

1,061,024. WEB RECEIVER AND TAKE-UP MECHANISM FOR KNITTING-MACHINES. HARRY SWINGLEHURST, Boston, Mass., assignor to Scott & Williams, Incorporated, Camden, N. J., a Corporation of New Jersey. Filed Jan. 25, 1912. Serial No. 673,391. (Cl. 66—9.)

1. The combination of a knitting machine having a rotating and reciprocating needle cylinder with a toothed member thereon, a web receiver also having a toothed member, and means whereby the toothed member of the needle cylinder is put in or out of driving connection with the toothed member of the web receiver.



2. The combination of a knitting machine having a rotating and reciprocating needle cylinder with toothed member thereon, a web receiver also having a toothed member, a member interposed between said toothed members and having teeth for engaging with each, and means for moving said intermediate toothed member so as to cause it to connect or disconnect the cylinder member and receiver.

3. The combination of a knitting machine having a rotating and reciprocating needle cylinder with toothed member thereon, a web receiver also having a toothed member, a member interposed between said toothed members and having teeth in permanent engagement with one of the aforesaid toothed members but susceptible of movement so as to carry its teeth into or out of engagement with the other of said toothed members.

4. The combination of a knitting machine having a rotating and reciprocating needle cylinder with toothed member, a web receiver likewise having a toothed member, mechanism for effecting change in the movements of the needle cylinder and mechanism coöperating with that which effects change in the movements of the needle cylinder and serving to operatively connect said toothed members during the rotating movements of the needle cylinder and disconnect them during the reciprocating movements of the needle cylinder.

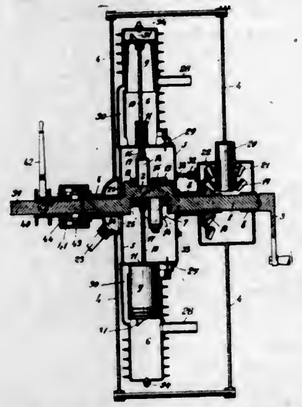
5. The combination of a knitting machine having a rotating and reciprocating needle cylinder with toothed member thereon, a web receiver also having a toothed member, and means for operatively connecting and disconnecting said toothed members, the teeth of both members having straight sides.

[Claims 6 and 7 not printed in the Gazette.]

1,061,025. ROTARY COMBUSTION-ENGINE. CORNELIUS H. TANGEMAN, New York, N. Y. Filed Mar. 10, 1910. Serial No. 548,475. (Cl. 123—44.)

1. The combination in an explosion engine having rotating cylinders, pistons therein, a crank shaft connected to said cylinders by gearing to be driven by said pistons in the same direction at a different speed, a driven shaft, and means for driving said shaft from either said cylinders or said crank shaft.

2. The combination in an explosion engine with opposite rotatably mounted cylinders, of pistons therein connected by a rigid connecting rod, a crank shaft mounted concentrically with the axis of rotation of said cylinders and having cranked connection with said connecting rod, gearing between said cylinders and said crank shaft for driving the latter in the same direction at double speed, a driven shaft and means for connecting said shaft to said cylinders or to said crank shaft.



3. The combination with an explosion engine comprising cylinders rotating at one speed and a crank shaft rotating at a different speed in the same direction, of a driven shaft, and means for effecting a driving engagement between said shaft and said cylinders or said crank shaft to obtain two speeds for power purposes in the same direction.

4. The combination with an explosion engine comprising cylinders rotating at one speed and a crank shaft concentric with the axis of rotation of said cylinders rotating at a different speed in the same direction, of a driven shaft, and means for effecting a driving engagement between said shaft and said cylinders or said crank shaft to obtain two speeds for power purposes in the same direction.

5. The combination with an explosion engine comprising cylinders rotating at one speed and a crank shaft rotating at twice the speed in the same direction, of a driven shaft, and means for effecting a driving engagement between said shaft and said cylinders or said crank shaft to obtain two speeds.

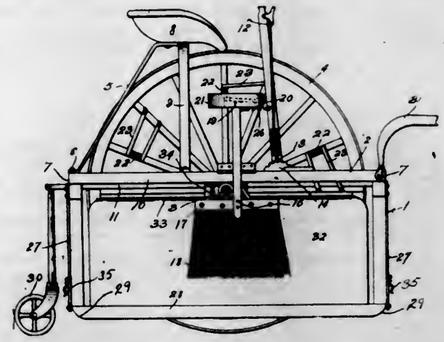
[Claim 6 not printed in the Gazette.]

1,061,026. COMMUNION-SERVICE TRAY. JOHN G. THOMAS, Lima, Ohio. Filed Mar. 12, 1912. Serial No. 683,250. (Cl. 65—53.)



A tray comprising a body having a side wall and a bottom, the bottom being disposed above the lower edge of the side wall, the side wall below the bottom wall being flared outward, the side wall being greater in diameter at its upper and lower edges than at its intermediate portion and provided above the bottom with an upper and a lower ledge, the diameter of the upper ledge being approximately the same as the greatest diameter of the flared portion of the side wall, an apertured plate having a depending peripheral flange, said flange resting upon the lower ledge whereby the plate is supported in the body below the upper ledge and spaced from the bottom, the plate when in position in a tray having its apertured portion lying in a plane at a distance from the plane in which the upper edge of the tray lies approximately equal to the distance from the bottom of the tray to the plane in which the lower edge thereof lies.

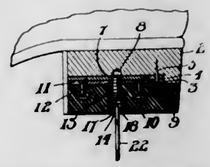
1,061,027. POTATO-BUG CATCHER AND KILLER. FRIEDRICH ULRICH, Sr., and FRIEDRICH ULRICH, Jr., Dorchester, Wis. Filed Dec. 28, 1911. Serial No. 668,378. (Cl. 43—1.)



1. A device such as described consisting of a frame, wheels supporting said frame, arms pivoted to the said frame, cam plates carried by the arms, brooms carried by the arms, springs carried by the brooms, rollers carried by the wheels and engaging said cam plates for the purpose of operating the arms, a lever pivoted to the frame and means connecting the lever with the arms for the purpose of throwing the cam plates out of engagement with the rollers and pans movably supported in said frame, substantially as described.

2. A device such as described consisting of a frame, a seat supported upon said frame, an axle journaled in said frame, wheels mounted upon said axle and supporting the frame, rollers carried by the wheels, arms pivoted to said frame, cam plates secured to the arms, springs engaging the arms and the cam plates for the purpose of throwing said plates into engagement with said rollers, brooms carried by the arms, springs normally holding the brooms inwardly, a lever mounted upon the frame, flexible means connecting the levers with the arms for the purpose of moving them out of engagement from the rollers, hangers carried by the frame, pans movably supported in said hangers, and a balancing wheel secured to said frame, substantially as and for the purposes set forth.

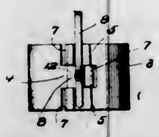
1,061,028. INTERCHANGEABLE HEEL FOR SHOES. CHARLES WEIS, Huntingdon, Pa. Filed Jan. 25, 1913. Serial No. 744,102. (Cl. 36—36.)



1. In an interchangeable heel for shoes, the combination with a fixed heel, of a socket plate carried thereby, a cushion heel, a tongue plate carried thereby and adapted to be detachably connected to said socket plate, a screw bolt for locking said cushion heel relatively to said fixed heel, and an ice creeper capable of being arranged for attachment to said screw bolt.

2. In an interchangeable heel, a fixed heel, a socket plate attached thereto, a cushion heel, a tongue carried by said cushion heel and adapted to fit in said socket plate, said plate having a countersunk portion, a screw bolt extending in said countersunk portion to lock said tongue relatively to said socket plate, said bolt provided with a threaded opening, and an ice creeper having a stem engaging in said threaded opening.

1,061,029. ATTACHMENT FOR UMBRELLAS AND THE LIKE. MARY J. WHITEHEAD, Philadelphia, Pa. Filed Nov. 18, 1912. Serial No. 731,930. (Cl. 24—84.)

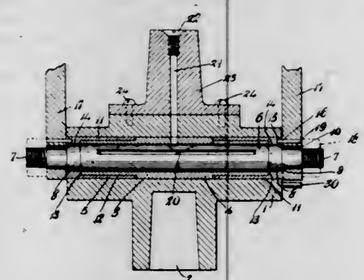


1. An attachment of the character described, comprising a band, tongues on one end of the band, a tongue on the other end of the band and adapted to be positioned between the first mentioned tongues, guides on all of the tongues and a wedge plate adapted to be secured between the guides, substantially as described.

2. An attachment of the character described, comprising a band, tongues on one end of the band, a tongue on the other end of the band and adapted to be positioned between the first mentioned tongues, guides on all of the tongues, a wedge plate adapted to be secured between the guides, and a hook on the wedge plate, substantially as described.

3. An attachment of the character described, comprising a band, tongues on the end of the band spaced apart, a centrally positioned tongue on the other end of the band adapted to be positioned between the first mentioned tongues and having a slot therein, guides on all the tongues, a wedge plate adapted to be secured between the guides and having a screw receiving opening therein adapted to register with the slot, a screw positioned in the opening and projecting through the slot and a hook on the wedge plate, substantially as described.

1,061,030. BEARING FOR LENS-GRINDING MACHINES. FREDERICK ZETTEL, Cincinnati, Ohio. Filed Mar. 28, 1912. Serial No. 686,784. (Cl. 64—22.)

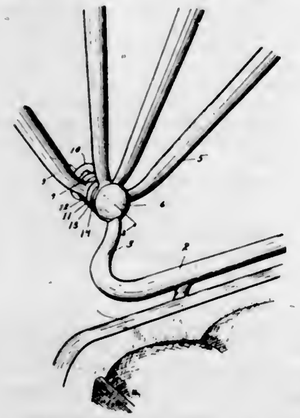


1. In lens grinding machines, a body having a horizontal bearing, a replaceable bearing sleeve held therein and reduced or cut away upon its periphery adjacent each end forming in connection with the body a tubular cavity between the ends of said replaceable bearing sleeve and horizontal bearing, a rock shaft mounted and adapted to oscillate within said replaceable bearing sleeve and having its periphery tapered near each end, a shell mounted upon each reduced end of said replaceable bearing and having its bore reduced at one end to form a shoulder which abuts the end of said replaceable bearing and also having a tapered surface to form a wedging engagement between said rock shaft and said shells, respectively, whereby an absolutely tight joint is obtained between said parts, operating means secured against the ends of said shells respectively whereby said shells are firmly held and moved with the shaft, and means for holding said operating means in fixed relation with said shells and with said shaft respectively.

2. In a device of the character described, a body having a horizontal bearing, a replaceable bearing sleeve held therein by friction, and having its periphery reduced or cut away adjacent each end to form a tubular cavity between the ends of said replaceable bearing sleeve and horizontal bearing, a rock shaft mounted in said replaceable bearing sleeve and having its periphery tapered near one end, a shell mounted upon each reduced end of said replaceable bearing and filling said tubular cavity, said shell having its bore reduced at its outer end to form a shoulder which abuts the end of said replaceable bearing and also having a tapered surface to form a wedging engagement between said shaft and said shells respectively and means for holding said parts in engagement with each other, substantially as set forth and for the purposes specified.

3. In a device of the character described, a body having a horizontal bearing, a replaceable bearing sleeve therein and reduced or cut away upon its periphery adjacent each end to form a connection with the body a tubular cavity between the end of said replaceable bearing sleeve and horizontal bearing, a rock shaft mounted and adapted to oscillate within said replaceable bearing sleeve and having its periphery tapered near one end, a shell mounted upon each reduced end of said replaceable bearing and having its bore reduced at one end, to form a shoulder which abuts the end of said replaceable bearing and also having a tapered surface to form a wedging engagement between said rock shaft and said shells respectively whereby an absolutely tight non-leakable joint is obtained between said parts, said shells each being provided with a socket, operating means secured upon said shaft in engagement with said shells respectively and each operating means provided with a pin engaging the sockets in said shells, substantially as set forth and for the purposes specified.

1,061,031. CARRIAGE-TOP. JOSEPH B. AMBLER, Cadillac, Mich. Filed Nov. 15, 1909. Serial No. 528,125. (Cl. 21—60.)



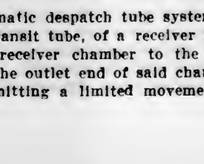
1. In a carriage top, the combination with the seat rail, of a longitudinally-grooved threaded stud having a concaved head integral with said rail; a nut for said stud; a concaved washer having a groove-engaging lug thereon; and bows with stud-engaging joint members, one of the stud-engaging members being double convex, the others being concavo-convex to coact therewith and with each other and the stud head and washer, one of said stud-engaging members being a cam member the contact surface of the adjacent member corresponding to said cam whereby a tightening action of the joint is secured by the extending of the bows.

2. In a carriage top, the combination with a longitudinally-grooved threaded stud having a concaved head associated with a suitable support; a nut for said stud; a concaved washer having a groove-engaging lug thereon; and bows with stud-engaging joint members, one of the stud-engaging members being double convex, the others being concavo-convex to coact therewith and with each other and the stud head and washer, one of said stud-engaging members being a cam member the contact surface of the adjacent member corresponding to said cam whereby a tightening action of the joint is secured by the extending of the bows.

3. In a carriage top, the combination with a longitudinally-grooved threaded stud having a concaved head associated with a suitable support; a nut for said stud; a concaved washer having a groove-engaging lug thereon; and bows with stud-engaging joint members, one of the stud-engaging members being double convex, the others being concavo-convex to coact therewith and with each other and the stud head and washer.

4. In a carriage top, the combination of a stud; bows; and stud-engaging joint members for said bows, at least one of said joint members being a cam member the contact surface of the adjacent member corresponding to said cam whereby a tightening or clamping action is secured when the bows are extended and loosened when said bows are collapsed; a washer adapted to engage said stud; and a screw nut to retain said parts.

1,061,032. HASP-FASTENER. HARVEY C. BAKER, Chicago, Ill., assignor to National Clinch Hinge Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1910. Serial No. 591,124. (Cl. 70—83.)



In a fastener, the combination of a carrier plate having a hasp hinged thereto, said hasp being provided with a slot; a keeper plate formed from sheet metal and having at one edge spaced clench points disposed at an angle to the plane of the plate, the material between the points being curled up from the edge of the said ear plate with its end disposed over the intermediate portion of the plate, the said curled portion being adapted to frictionally engage the edge of the said slot.

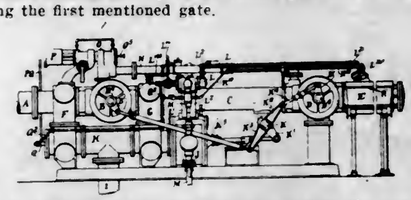
1,061,033. HINGE. HARVEY C. BAKER, Chicago, Ill., assignor to National Clinch Hinge Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1910. Serial No. 591,205. (Cl. 16—104.)



A hinge comprising two equiformed members each having two knuckles extending from one edge, a pintle passing through said knuckles to hingedly connect said members, two clench points extending from each member along the edge opposite said knuckles, a bracing plate portion extending in alinement with each hinged member between its clench points as and in the manner shown.

1,061,034. PNEUMATIC-DESPATCH-TUBE RECEIVING-TERMINAL. BIRNEY C. BATCHELLER, New York, N. Y. Filed Sept. 23, 1911. Serial No. 650,917. (Cl. 243—21.)

1. In a pneumatic despatch tube system, the combination with the transit tube, of a receiver chamber, a gate connecting the receiver chamber to the transit tube, a second gate at the outlet end of said chamber, said gates having lap permitting a limited movement of the gates when closed without opening the gateways controlled by them, and operating means for said gates comprising an oscillating member and links pivotally connected to said member and to said gates and so set that a single movement of said member in one direction will move the first mentioned gate from the open to the closed position and thereafter open said second gate without reopening the first mentioned gate.



2. In a pneumatic despatch tube system the combination with a transit tube, of a receiver chamber, a rotary gate connecting the transit tube and receiver chamber, a second rotary gate at the outlet end of said chamber, said gates having lap, permitting a limited movement of the gates when closed without opening the gateways controlled by them, and operating connections for said gates comprising a rocking member and links pivotally connected to said member and to said gates and so arranged that the first mentioned gate is moved from the open position into the closed position and the second gate is thereafter moved from the closed position into the open position without reopening the first mentioned gate on a single turning movement of said member in one direction.

3. In a pneumatic despatch tube system the combination of a transit tube, a receiver chamber, a gate connecting the transit tube and receiver chamber, a second gate controlling the outlet end of the receiver chamber, an outgoing conduit, separate pipes connecting said outgoing conduit to the transit tube and receiver chamber, respectively, adjacent the first mentioned gate, a valve mechanism for alternately opening one of said connections and closing the other, when the first mentioned gate is shifted from the open to the closed position, a gate operating motor comprising an actuating member and positive operating connections between said member and said gates and said valve mechanism.

4. In a pneumatic despatch tube system, the combination with a transit tube, of a receiver chamber, a gate connecting said transit tube and receiver chamber, a second gate controlling the outlet from said receiver chamber, means for successively closing the first mentioned gate and opening said second gate on the passage of a carrier into said chamber, and provisions for simultaneously opening both ends of said chamber to exhaust prior to the discharge of the carrier from said chamber.

5. In a pneumatic despatch tube system, the combination with a transit tube of a receiver chamber, a gate connecting said transit tube and receiver chamber, a second gate controlling the outlet from said receiver chamber, means for successively closing the first mentioned gate and opening said second gate on the passage of a carrier into said chamber, and bypass provisions connecting the ends of said chamber and permitting both ends to exhaust simultaneously when said second gate opens.

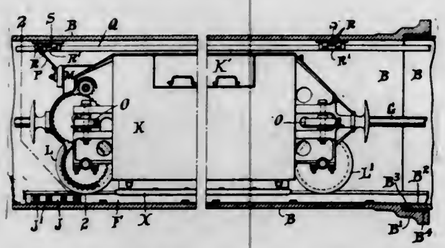
[Claims 6 to 8 not printed in the Gazette.]

1,061,035. TRANSIT-TUBING FOR CARRIER SYSTEMS. BIRNEY C. BATCHELLER, New York, N. Y. Filed Feb. 20, 1912. Serial No. 678,892. (Cl. 104—4.)

1. In a transit system of the character described a subsurface transit tubing for wheeled carriers formed of integral lengths of metal pipe jointed together and having carrier track rails extending longitudinally of the tubing and secured to said pipe.

2. In a transit system of the character described a subsurface transit tubing for wheeled carriers formed of integral lengths of metal pipe jointed together and having

carrier track rails extending longitudinally of the tubing and secured to said pipe, and formed in sections which break joints with said pipe lengths.

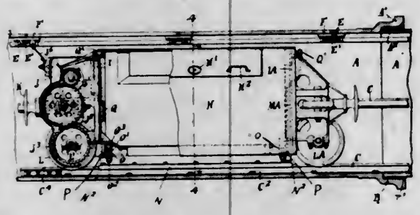


3. In a transit system of the character described a sub-surface transit tubing for wheeled carriers formed of cast metal pipe sections connected by calked bell and spigot joints and having carrier track rails extending longitudinally of the tubing and bolted to the pipe sections.

4. In a transit system of the character described, a guide way for wheeled carriers comprising a sub-surface transit tubing formed of lengths of metal pipe jointed together, and track rails running through said tubing and secured to said pipe and projecting out of the tubing at one end thereof to provide an open terminal portion and supports for the projecting track rail ends.

5. In a transit system of the character described a sub-surface transit tubing for wheeled carriers formed of integral lengths of cast metal pipe jointed together, and a track therein formed of three rails secured to said pipe sections.

1,061,036. CARRIER SYSTEM. BIRNEY C. BATCHELLER, New York, N. Y. Filed Feb. 20, 1912. Serial No. 678,893. (Cl. 188—47.)



1. In an automatic carrier system, the combination with the carrier supporting track and a carrier having wheels running on said track, of means for automatically arresting the motion of the carrier at a determined point along the track comprising a stationary element located at said point, a coöperating element mounted on said carrier and movable relative to the carrier into and out of a position in which it will engage said stationary element and thereby frictionally retard said carrier when the latter reaches said point in moving along said track and means mounted on the carrier for releasably locking said coöperating element in said position.

2. In an automatic carrier system, the combination with the carirer supporting track and a carrier having wheels running on said track, of means for automatically arresting the motion of the carrier at a determined point along the track comprising a stationary element located at said point, a coöperating element mounted on the car and means mounted on the carrier for releasably locking said last mentioned element in a position in which it is adapted to engage the stationary element and thereby transfer a considerable portion of the weight of the carrier from the track to said stationary element when the carrier reaches said point in moving along said track.

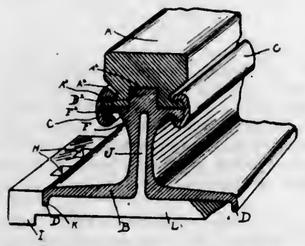
3. In an automatic carrier system, the combination with the carrier supporting track and a carrier having wheels running on said track, of means for automatically arresting the motion of the carrier at a determined point along the track comprising a stationary element located at said point, a coöperating element, links by which said coöperating element is suspended from said carrier, said links being adapted to swing both forward and backward relative to the length of the carrier to swing said co-operating element upward from a normal position in which it is adapted to engage said stationary element and thereby transfer a considerable portion of the weight of the carrier from the track to said stationary element as the carrier reaches said point in moving along said track, means mounted on the carrier at one end for releasably locking said coöperating element against swinging upward in one direction and means mounted on the carrier at its opposite end for releasably locking said coöperating element from swinging upward in the opposite direction from said normal position.

4. In an automatic carrier system, the combination with the carrier supporting track and a carrier having wheels running on said track, of means for automatically arresting the motion of the carrier at a determined point along the track comprising a stationary element located at said point, a coöperating element extending longitudinally of the carrier, links by which said coöperating element is suspended from said carrier, said links being adapted to swing both forward and backward about axes transverse to the length of the carrier to thereby lift the said coöperating element relative to the carrier upward from a position in which it is adapted to engage said stationary element as the carrier reaches said point, and a pair of locking bars mounted on said carrier and separately movable transversely to the carrier into and out of positions in which they engage said links and thereby hold said coöperating element in said position, one of said bars then serving to prevent the links from swinging in the opposite direction.

5. In a carrier system the combination with a carrier supporting track comprising a single main supporting track rail, of a carrier having a single wheel at each end adapted to engage said track rail, and means for checking the motion of the carrier comprising a pair of stationary skids located one at each side of said rail, a coöperating pair of skids, suspension links connecting the last mentioned skids to the carrier and adapted to swing to permit the suspended skids to move up out of a normal position in which they are adapted to engage the stationary skids and lift the weight of the carrier off of said rail, and releasable locking devices at each end of the carrier for locking said coöperating skids in said normal position.

[Claims 6 to 8 not printed in the Gazette.]

1,061,037. COMPOUND RAIL. CLARENCE H. BEASECKER, Sparta, Mich., assignor of one-half to J. B. Symes, Sparta, Mich. Filed Feb. 20, 1913. Serial No. 749,680. (Cl. 239—16.)

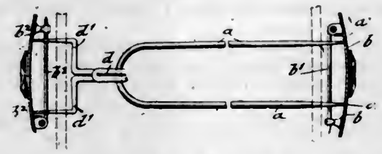


1. A compound rail comprising a web portion having a central projecting portion at the top thereof, a tread portion of the rail having a channel in its under side adapted to receive the projection of said web, the opposite sides of the tread section having downwardly inclined grooves formed therein, and said web having laterally projecting portions with downwardly extending edges, locking blocks having their opposite longitudinal edges bent to form inclined flanges for engagement with the inclined edges of said grooves and the under edges of the downwardly projecting portion of said web, as set forth.

2. A compound rail comprising a web portion having a central projecting portion at the top thereof, a tread portion of the rail having a channel in its under side adapted to receive the projection of said web, the opposite sides of the tread section having downwardly inclined grooves formed therein, said web having laterally projecting portions with downwardly extending edges, locking blocks having their opposite longitudinal edges bent to form inclined flanges for engagement with the inclined edges of said grooves and the under edges of the downwardly projecting portion of said web, the edges of the flanges of the web being bent at an angle, and a base plate having grooves for engagement with said angled portions of the flanges, as set forth.

3. A compound rail comprising a web portion having a central projecting portion at the top thereof, a tread portion of the rail having a channel in its under side adapted to receive the projection of said web, the opposite sides of the tread section having downwardly inclined grooves formed therein, said web having laterally projecting portions with downwardly extending edges, locking blocks having their opposite longitudinal edges bent to form inclined flanges for engagement with the inclined edges of said grooves and the under edges of the downwardly projecting portion of said web, the edges of the flanges of the web being bent at an angle, a base plate having grooves for engagement with said angled portions of the flanges, said base plate having a rib rising therefrom, the web of the rail being longitudinally recessed for the reception of said rib, as set forth.

1,061,038. HAT-PIN. SELMA BERLINER, New York, N. Y. Filed Oct. 23, 1912. Serial No. 727,408. (Cl. 132—25.)



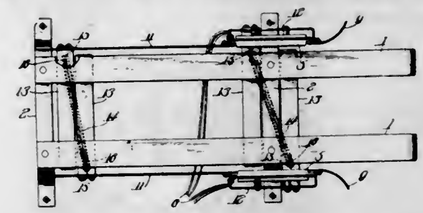
1. A hatpin, comprising a two-pronged pin having holes near the points of the prongs, a fastening device adapted to be attached to the points of the prongs after they have passed through the hat-body, and a hook adapted to interlock with the inner curved or butt-end of the pin adapted to be attached to the hat-body at a point opposite to the connection of the prongs of the hatpin with the hat-body.

2. A hatpin, comprising a two-pronged pin having holes near the points of the prongs, a fastening device adapted to be attached to the points of the prongs after they have passed through the hat-body, a hook adapted to interlock with the curved inner or butt-end of the hatpin, and means for attaching said locking hook to the hat-body at a point opposite to the connection of the prongs with the hatpin.

1,061,039. DEVICE FOR SEALING WRAPPED PACKAGES. WILLIAM BORCHERT, Rockford, Ill., assignor of one-half to William A. McPherson, Rockford, Ill. Filed Dec. 26, 1912. Serial No. 738,625. (Cl. 93—2.)

1. A device for sealing wrapped packages comprising supports carrying two oppositely positioned side walls having longitudinal continuous faces forming a passage having an entrance and discharge end, and a heating member carried by each of the side walls, oppositely positioned, and at a point intermediate the entrance and discharge ends of the walls, the heating face of each member being substantially in the plane of said side wall faces, and the outer edges of the heating members adjacent the side walls being heat insulated from said side walls.

2. A device for sealing wrapped packages comprising supports carrying two oppositely positioned side walls, each comprising a spaced entrance and body end lying substantially in the same plane, a heating member interposed between each of said entrance and body portions and connected thereto, the face of the heating member forming with the faces of its adjacent side walls, a continuous wall, and means connecting the opposite side walls and the base for holding said walls yieldingly in position.



3. A device for sealing wrapped packages comprising supports, two oppositely positioned side walls having longitudinal continuous faces forming a passage, the entrance end of the walls having diverging wing sections, an opening in each wall, the openings oppositely positioned and at a point intermediate said entrance end and the opposite end of the walls, a heating member positioned in each of said openings having its heating face substantially in the same plane as that of its side wall and forming with its side wall a continuous face, and means connecting the two opposite walls and the supports and adapted to hold the walls yieldingly in position.

4. A device for sealing wrapped packages, comprising supports, two oppositely positioned side walls having longitudinal continuous faces forming a passage, the entrance end of the walls having diverging wing sections, an opening in each wall, the openings oppositely positioned and at a point intermediate said entrance end and the opposite end of the walls, a heating member positioned in each of said openings having its heating face substantially in the same plane as that of its side wall and forming with its side wall a continuous face, the heating members being secured to the side walls by heat insulating connections, and means connecting the two opposite walls and the supports and adapted to hold the walls yieldingly in position.

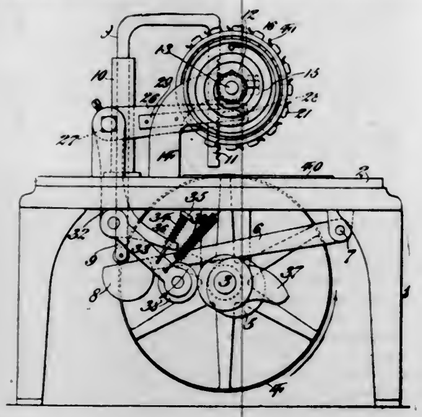
5. A device for sealing wrapped packages comprising a support, two oppositely positioned side walls having longitudinal continuous faces forming a passage having an entrance and discharge end, an opening in each side wall, oppositely positioned and at a point intermediate the entrance and discharge ends thereof, a heating member positioned in each opening having its heating face in a plane substantially with that of its side wall, a transversely disposed carrying member attached to each side wall adjacent each end thereof and being slidably held by said support, and means connecting the adjacent carrying member for holding the side walls yieldingly in position.

[Claims 6 and 7 not printed in the Gazette.]

1,061,040. AUTOMATIC STAMPING-MACHINE. HENRY C. BROWN, Brooklyn, N. Y., assignor to Henry Stockman, Englewood, N. J. Filed Mar. 6, 1912. Serial No. 681,992. (Cl. 73—145.)

1. In a device of the character stated, a set of stamps, a holder for said stamps, a gaging element, means operatively connecting said element with said holder for moving the same to control the same to locate a stamp in accordance with the thickness of the material to be stamped, and means independent of the material to move said gaging element out of gaging position, said means being adapted to be actuated to permit said element to move into contact with and rest against the material whereby the said element as well as the stamps are arrested in their movement and the proper stamp thus located and held in operative position.

2. In a device of the character stated, a set of stamps, a holder for carrying said stamps, a gaging element, means operatively connecting said element with said holder to control the same to locate a stamp in accordance with the thickness of the material to be stamped, means independent of the material to move said gaging element out of gaging position, said means being adapted to be actuated to permit the said element to move into contact with and rest against said material, and automatic means operating while the said gaging element is in rest position to effect a proper stamping action.



3. In a device of the character stated, a stamp holder, a series of stamps resiliently supported thereby, a bar, for actuating said stamp holder, means to move said bar out of gaging position, said means being adapted to be actuated to permit said bar to move into contact with and rest against the material for locating a stamp in operative position, a main driving shaft, and means operated by said shaft for actuating said located stamp to make an impression.

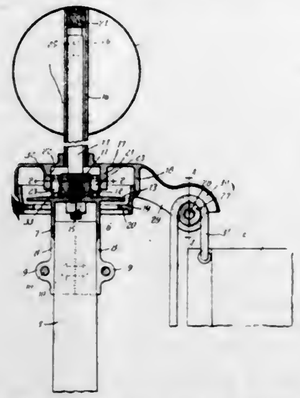
4. In a device of the character stated, a stamp holder, a series of stamps resiliently supported thereby, a bar for actuating said stamp holder, means to move said bar out of gaging position, said means being adapted to be actuated to permit said bar to move into contact with and rest against the material, whereby said bar is arrested for locating the proper stamp in operative position, a hammer lever having a spring relieving action, and means for actuating said hammer lever during the rest position of the said located stamp to operate the same to make an impression.

5. In a device of the character stated, a stamp holder, a series of stamps resiliently supported thereby, a bar for actuating said stamp holder, means to move said bar out of gaging position, said means being adapted to be actuated to permit said bar to move into contact with and rest against the material, whereby the said bar is arrested for locating the proper stamp in operative position, a hammer lever having a spring relieving action, a spring pressed latch on said hammer, and means for actuating said hammer and latch for operating said located stamp to make an impression.

[Claims 6 to 8 not printed in the Gazette.]

1,061,041. ROTATABLE TRUCK FOR FLAGSTAFFS. JOHN J. BUCKLEY, Lynn, Mass., assignor to Buckley Automatic Flag-Pole Company, a Corporation of Massachusetts. Filed June 26, 1912. Serial No. 705,919. (Cl. 116—12.)

1. A truck for flagstaffs and the like having, in combination, a cap adapted to be fastened to the top of a pole having an external race and constituting an inner member of an annular bearing, a spindle fast to said cap and projecting upwardly therefrom, a sleeve surrounding said spindle, a pivot on the upper end of said sleeve adapted to bear against the upper end of said spindle, an annular casing on the lower end of said sleeve constituting an outer member of said annular bearing and having an internal race, a series of rollers interposed between said races and means to connect flag halyards to said outer member.



2. A truck for flagstaffs and the like having, in combination, an annular bearing comprising one member adapted to be fastened to the top of a pole and constituting a cap therefor, another member consisting of an annular casing and a series of rollers interposed between said members to prevent the lateral movement of said members relatively to each other, a spindle fast to said cap member extending upwardly therefrom, a sleeve extending upwardly from said annular casing, a pivot on the upper end of said sleeve adapted to bear against the upper end of said spindle and means to connect flag halyards to said annular casing.

3. A truck for flagstaffs and the like having, in combination, an annular bearing comprising one member adapted to be fastened to the top of a pole and constituting a cap therefor, another member consisting of an annular casing and a series of rollers interposed between said members to prevent the lateral movement of said members relatively to each other, a spindle fast to said cap member extending upwardly therefrom, a sleeve extending upwardly from said annular casing, a pivot on the upper end of said sleeve adapted to bear against the upper end of said spindle and a sheave rotatably mounted on said annular casing.

4. A truck for flagstaffs and the like having, in combination, an annular bearing comprising one member consisting of a cap adapted to fit over the upper end of a pole and terminating at its upper end in a cylindrical hub, the periphery of said hub constituting a roller race and a spindle fast to and projecting upwardly from said hub, another member consisting of an annular casing having an interior roller race and a series of rollers interposed between said races to prevent lateral movement of said members relatively to each other, a sleeve extending upwardly from said annular casing, a pivot on the upper end of said sleeve adapted to bear against the upper end of said spindle and means to connect flag halyards to said annular casing.

5. A truck for flagstaffs and the like having, in combination, an annular bearing comprising one member consisting of a cap adapted to fit over the upper end of a pole, said cap split from its lower end upwardly for a portion of its length, means to clamp said split portion to said pole, said cap terminating at its upper end in a cylindrical hub, the periphery of said hub constituting a roller race and a spindle fast to and projecting upwardly from said hub, another member consisting of an annular casing having an interior roller race and a series of rollers interposed between said races to prevent lateral movement of said members relatively to each other, a sleeve extending upwardly from said annular casing, a pivot on the upper end of said sleeve adapted to bear against the upper end of said spindle and means to connect flag halyards to said annular casing.

[Claim 6 not printed in the Gazette.]

1,061,042. FLAG-HALYARDS CLEAT AND CARRIER. JOHN J. BUCKLEY, Lynn, Mass., assignor to Buckley Automatic Flag-Pole Company, a Corporation of Massachusetts. Filed June 26, 1912. Serial No. 705,920. (Cl. 116—12.)



1. In combination, a carrier adapted to be mounted upon a flagstaff, a cleat for flag halyards with a stem extending downwardly therefrom into said carrier, said stem slidable in said carrier, means to prevent said stem from rotating on said carrier and a spring interposed between said stem and carrier adapted to exert a downward pressure on said stem.

2. In combination, a carrier adapted to be mounted upon a flagstaff, a tube fast to said carrier, a cleat for flag halyards, a stem extending downwardly from said cleat into said tube, a portion of said stem being rectangular in cross section and having sliding engagement with said carrier and a spring encircling said stem, one end engaging said stem, the other end engaging said carrier.

3. In combination, a flagstaff, a carrier rotatably mounted thereon, a cleat for flag halyards slidably mounted on said carrier and means to move said cleat downwardly on said carrier.

4. In combination, a flagstaff, a carrier rotatably mounted thereon, a cleat for flag halyards slidably mounted on said carrier, a spring interposed between said carrier and cleat and adapted to exert a downward pressure on said cleat and a vane on said carrier.

5. In combination, a flagstaff, an annular track fast thereto, an annular carrier, a series of rolls rotatably mounted on said carrier and projecting into an annular groove in said tract, a cleat slidably mounted on said carrier and a spring interposed between said cleat and carrier adapted to exert a downward pressure on said cleat.

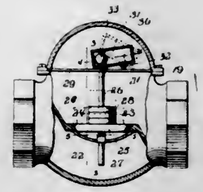
[Claims 6 to 10 not printed in the Gazette.]

1,061,043. CURTAIN-POLE. MAUD M. BURK, Rices Landing, Pa. Filed Oct. 14, 1911. Serial No. 654,605. (Cl. 156—19.)



A curtain pole comprising a solid cylindrical rod having a part of its periphery provided with a longitudinally extending flattened portion of the same length as the length of the rod, a screw extending in one end of said flattened portion and having that portion of its shank in proximity to its head reduced in diameter to provide a shoulder, a curtain clamping bar having one end apertured and loosely mounted upon that portion of enlarged diameter of the shank of the screw, said bar opposing said flattened portion, a resilient clip of ogee curvature having one end fixedly secured to said flattened portion and its other end extending over and engaging one end of the bar for maintaining said end in clamping position, and a resilient clip of ogee curvature having one end positioned against the shoulder of the screw and extending upon the other end of the bar and coöperating with the first mentioned clip for frictionally holding said bar in clamping position.

1,061,044. VALVE. JOHN W. CALHOUN, Huntington, W. Va. Filed Aug. 21, 1912. Serial No. 716,258. (Cl. 137—32.)



1. In a valve, the combination with a casing, of a partition therein and forming compartments in the casing, the said partition being provided with an opening connecting the compartments, a valve seat on the partition, a guide plate on the partition adjacent the said valve seat, a valve stem mounted to slide on the said guide plate, a valve on the valve stem and adapted to normally repose on the said valve seat, a weight on the said valve, a plate mounted to close the upper compartment in the casing, a hood on the said plate, the upper end of the said valve stem being arranged to slidably pass through the said plate, a knob on the plate, a hollow body mounted to rock on the said knob and having pivotal connection with the upper end of the valve stem, and a ball weight loosely mounted within the said body.

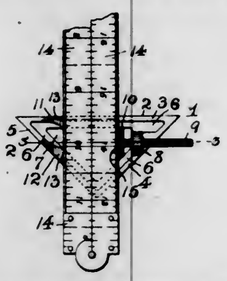
2. In a valve, the combination with a casing, of a partition therein and provided with an opening connecting compartments formed by the partition, a valve seat on the partition, a valve stem, a valve member on the valve stem and adapted to normally repose on the said valve seat, a plate on the said casing, a knob on the said plate, a hollow body mounted to rock on the said knob and having pivotal connection with the said valve stem, and a ball weight loosely mounted in the said body.

3. In a valve, the combination with a casing, of a partition therein and provided with an opening connecting compartments formed by the partition, a valve seat on the partition, a valve stem, a valve member on the valve stem and adapted to normally repose on the said valve seat, a plate on the said casing, a knob on the said plate, a hollow body mounted to rock on the said knob and having pivotal connection with the said valve stem, a ball weight loosely mounted in the said body, and a guide plate secured to the said partition and having the said valve stem slidably passed therethrough to guide the said valve member into or out of engagement with the said valve seat.

1,061,045. RULE ATTACHMENT. ROBERT CAMPBELL, Elizabeth, N. J. Filed Jan. 23, 1911. Serial No. 604,130. (Cl. 73—188.)

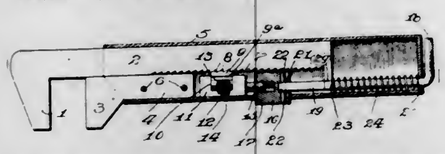
The herein described stock for use as a try square in connection with a rule or straight-edge, comprising a triangular body having an opening, flanges extending from the sides into said opening, an internally screw-threaded boss connected with one of the sides of said triangular body, upwardly extending projections upon the other two sides of said body and opposite the said boss each projection being provided with a vertical face, and a screw-threaded pin adjustably arranged in said boss, said pin

having a head serving as a fingerpiece to operate said pin and to force said head against one edge of the rule or straight-edge for forcing the opposite edge of the rule or



straight-edge into retaining engagement with the vertical faces of said projections, substantially as and for the purposes set forth.

1,061,046. QUICK-ADJUSTING WRENCH. ARTHUR CARP, St. Louis, Mo. Filed Mar. 28, 1912. Serial No. 686,879. (Cl. 81—144.)

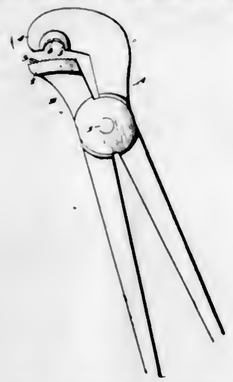


1. The improved quick-adjusting wrench, comprising two jaws adjustably mounted relative to each other, a sliding toothed-shank to which one of said jaws is connected, a dog-carrier mounted to slide parallel with said shank and having a dog-retaining recess, a toothed-dog mounted in said recess to be projected and retracted laterally for co-operation with the teeth of said sliding-shank, a spring for quickly projecting said shank in separating the jaws, and means for retracting said toothed-dog to release said spring, in combination with a screw and nut for sliding and locking said dog-carrier to alter the relation of the teeth of said dog and those of said sliding-shank, a jaw-clamping nut-handle at the end of the wrench opposite that at which the jaws are located, and a suitable connection extending from said nut-handle to said nut.

2. The improved quick-adjusting wrench, comprising a casing, two jaws adjustably mounted relative to each other, a sliding toothed-shank to which one of said jaws is connected, a shank fixed in said casing and carrying the other jaw, a dog-carrier mounted to slide parallel with said toothed-shank in the space at the inner end of said fixed shank and having a dog-retaining recess, a toothed-dog mounted in said recess to be projected and retracted laterally for coöperation with the teeth of said sliding-shank, a screw extending from the inner end of said dog-carrier also in said space at the inner end of said fixed-shank, a nut on the inner end of said screw, a spring for quickly projecting said shank in separating the jaws, and means for retracting said toothed-dog to release said spring.

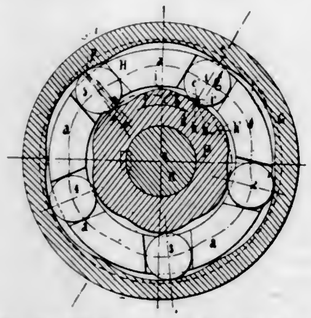
1,061,047. CALK-TONGS. JOSEPH CASPERS, Lancaster, Wis. Filed Jan. 27, 1911. Serial No. 605,090. (Cl. 81—80.)

A tool for removing calks from horse shoes consisting of two members each, composed of a handle and a jaw, said handles crossing each other and pivoted together, and said jaws having their working faces disposed in an oblique line from the line of pivot, the general working face of one of said jaws made curved, and provided with a rounded cavity, in which the calk is received, the working face of the second jaw made to conform to the curve of the general working face of said first jaw, and teeth formed on the working face of said second jaw, all of said parts so arranged that as the jaws are brought to bear against the calk and a turning pressure is exerted, the calk rolls in the cavity, the teeth of the opposing jaw



grip the calk, and the calk in its rolling course jams between the jaws.

1,061,048. CLUTCH. LOUIS EUGÈNE CLÉMENCET, Paris, France. Filed Feb. 25, 1908. Serial No. 417,725. (Cl. 192—22.)



1. In an automatic clutch, two relatively movable clutch-members provided with opposite and equal surfaces, coupling means adapted to be clamped between said members and carried by one of the same, a driving-member engaging said coupling means, and means for moving said clutch-members relatively to each other into and out of clamping connection with said coupling means.

2. In an automatic clutch, the combination of a pair of relatively movable cams together forming, when in one position, a groove of constant width and when in another position of varying width, and engaging means within said groove, said means being of less than said constant width but greater than the smallest varying width of said groove.

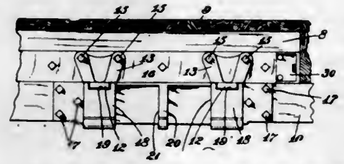
3. In an automatic clutch, the combination of a pair of relatively movable cams together forming, when in one position, a groove of constant width and when in another position of varying width, engaging means within said groove, said means being of less than said constant width but greater than the smallest varying width of said groove, and means for limiting the relative movement of said cams.

4. In an automatic clutch, the combination of a pair of relatively movable cams together forming, when in one position, a groove of constant width and when in another position of varying width, engaging means within said groove, said means being of less than said constant width but greater than the smallest varying width of said groove, and means carried by said cams for limiting the relative movement thereof.

5. In an automatic clutch, the combination of a pair of relatively movable cams together forming, when in one relative position, a groove of constant width, and forming when in another relative position, a groove of varying width, engaging means within said groove, said means being of less than said constant width but greater than the smallest varying width of said groove, an additional moving part, and means for communcating motion between said additional part and said engaging means.

[Claims 6 and 7 not printed in the Gazette.]

1,061,049. DRAW-BAR EQUIPMENT. WILLIAM H. COWELL, Columbus, Ohio. Filed Aug. 13, 1909. Serial No. 512,634. (Cl. 213—42.)



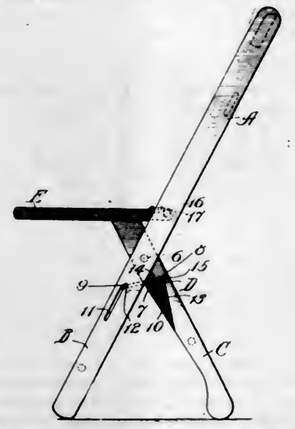
1. In a draw bar equipment, the combination with the longitudinal car sills and draft timbers, of a key between the timbers and sills consisting of a metallic member of clip form to straddle the sill and having its central portion provided with a hollow dowel to enter the sill and for the reception of a bolt.

2. In a draw bar equipment the combination with the longitudinal car sills and draft timber, of a key between the timber and the sills consisting of a metallic member of clip form to straddle the sill and having its central portion provided with a hollow dowel to enter the sill and for the reception of a bolt said dowel provided with external ribs or feathers.

3. In a draw bar equipment, the combination with the longitudinal car sills and draft timbers, a notched reinforcing plate on the sills, a cheek piece on the draft timbers and a timber key between the sills and draft timbers said timber key engaging the notched portion of the reinforcing plate and the cheek piece engaging the timber key

4. In a draw bar equipment, the combination with the longitudinal car sills and draft timbers and a metallic cheek piece, of a key between the timbers and sills consisting of a metallic member of clip form including ears having bolt holes, said metallic member to straddle the sills and having its central portion provided with a hollow dowel to enter the sill and for the reception of a bolt.

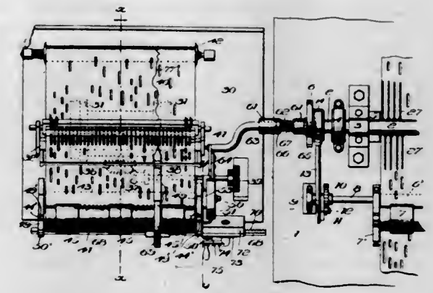
1,061,050. FOLDING CHAIR. CHARLES F. DAVIS, Downers Grove, Ill. Filed June 11, 1909. Serial No. 501,535. (Cl. 155—32.)



1. In a folding chair, the combination with the hind legs provided with approximately triangular recess presenting a top shoulder wall and a longer side wall, of the front legs having slots therein, and the connecting movement links having the inner angle ends loosely inserted through the hind legs at the junction of said side and top shoulder wall bounding said recesses, and the outer angle ends loosely inserted in and traversing said slots.

2. In a folding chair, the combination with the hind legs provided with recesses, of the front legs slotted longitudinally the connecting movement links having their respective angular ends in loose engagement with said legs, the bar part of said links coming to a stop against the top shoulder wall of said recesses when the chair is opened out and moving to parallel position with the side wall of said recesses when the chair is folded.

1,061,051. PERFORATING-MACHINE. GEORGE HOWLETT DAVIS, West Orange, N. J., assignor to Standard Music Roll Company, Orange, N. J., a Corporation of New Jersey. Filed Feb. 3, 1908. Serial No. 413,968. (Cl. 164—114.)



1. In a perforating machine, the combination of a pattern sheet having a sinuous tempo line thereon, mechanism for simultaneously feeding said pattern sheet and a blank or unperforated sheet through said machine, a pointer for following said line and means connected with said pointer for varying the relative rates at which said sheets are fed through said machine, in accordance with the deviations of said pointer in following said sinuous tempo line.

2. In a perforating machine, the combination of a pattern sheet having a sinuous tempo line running longitudinally thereof, feeding mechanism for feeding said pattern sheet through said machine, feeding mechanism for feeding a blank or unperforated sheet through said machine, a pointer for following said line and means connected with said pointer for varying the speed of one of said feeding mechanisms relative to the feeding of the other, in accordance with the deviations of said pointer in following said sinuous tempo line.

3. In a perforating machine, the combination of a pattern sheet having a sinuous tempo line thereon, automatic feeding mechanism for feeding said sheet through said machine, a pointer for following said line, manually operated means interconnecting said pointer and said feeding mechanism for varying the rate of speed of said feeding mechanism, in accordance with the deviations of said pointer in following said sinuous tempo line.

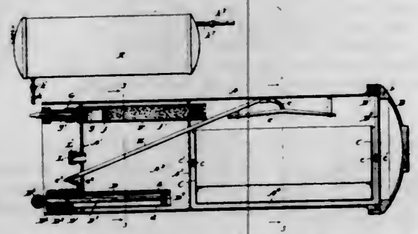
4. In a perforating machine, the combination of a pattern sheet having a sinuous tempo line thereon with automatic feeding mechanism for feeding said sheet through said machine at a normal uniform rate of speed, a pointer for following said line and manually operated means connected with said pointer for varying said rate of speed to correspond to the deviations of said pointer in following said sinuous tempo line.

5. In a perforating machine, the combination of a pattern sheet having a sinuous tempo line delineated thereon throughout its length, automatic step by step feeding mechanism for feeding said sheet through said machine, a pointer for following said line, manually operated means connected with said pointer for accelerating or retarding

said rate of speed to correspond with the deviations of said pointer in following said sinuous tempo line.

[Claims 6 to 23 not printed in the Gazette.]

1,061,052. ACETYLENE-GAS GENERATOR. GEORGE H. DAVIS, Portland, Me. Filed Feb. 20, 1912, Serial No. 678,929. Renewed Apr. 5, 1913. Serial No. 759,198. (Cl. 48—4.)



1. In an acetylene gas generator, a horizontally disposed casing divided by a partition intermediate its ends into a water chamber and a gas generating chamber adapted to contain carbid, the front end wall of said casing being provided with a fill opening therein for the water chamber, a constantly open pipe extending from below the water level of the water chamber to the upper portion of the carbid chamber and constituting the sole connection between the water and generating chambers during the normal operation of the generator, said pipe having a loop formed therein intermediate its ends and extending without front end of the water chamber, and means for initially supplying water to said generating chamber to prime the generator.

2. In an acetylene gas generator, a water chamber, a gas generating chamber adapted to contain carbid, a constantly open pipe extending from below the water level of the water chamber to the upper portion of the carbid chamber, said pipe constituting the sole connection between the water and generating chamber during the normal operation of the generator, and means directly connected to said pipe for initially forcing water therethrough from the water chamber through the pipe to the generating chamber to prime the generator.

3. In an acetylene gas generator, a water chamber, a gas generating chamber adapted to contain carbid, a constantly open pipe extending from below the water level of the water chamber to the upper portion of the carbid chamber, said pipe constituting the sole connection between the water and generating chambers during the normal operation of the generator, and a manually operable pump directly connected to said pipe for initially forcing water from the water chamber through said pipe to the generating chamber to prime the generator.

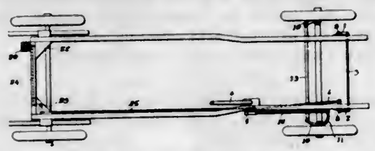
4. In an acetylene gas generator, a water chamber, a gas generating chamber adapted to contain carbid, a pipe extending from below the water level of the water chamber to the upper portion of the carbid chamber, a pump cylinder in direct communication with said pipe and the water chamber, a piston for said pump cylinder, and an operating handle for said piston located without the water chamber.

5. In an acetylene gas generator, a water chamber, a gas generating chamber adapted to contain carbid, a pipe extending from below the water level of the water chamber to the upper portion of the carbid chamber, a pump cylinder in direct communication with said pipe and the water chamber, a piston for said cylinder, means for actuating said piston to force water from the water chamber through said pipe into the generating chamber, and means for locking said piston against movement.

[Claims 6 to 14 not printed in the Gazette.]

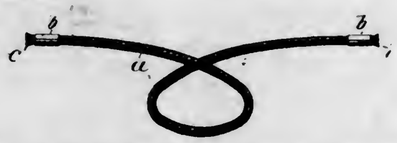
1,061,053. HEAD AND TAIL LIGHT CONTROL. WILLARD G. DAVIS, Nicholasville, Ky. Filed Apr. 13, 1912. Serial No. 690,552. (Cl. 240—62.)

In headlight operating mechanism for automobiles and like vehicles, the combination of an arm connected with one of the side headlights, a bell crank connected with the support of the other side headlight, a rod connecting the arm with a member of the bell crank, a second rod connected with the other member of the bell crank, means for detachably connecting the second rod with the crank



of the steering post or a pin mounted upon the main frame, and other means connecting the tail lamp with the steering post, such means embodying an arm, bell crank and connecting rods.

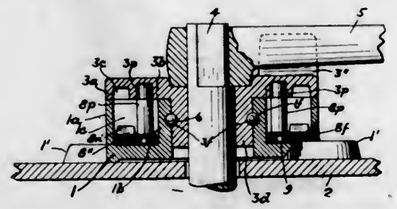
1,061,054. CLOTHES-STOP. GEORGE PALMER DYER, Washington, D. C., assignor to I. E. Bell, Washington, D. C. Filed Jan. 22, 1908. Serial No. 412,207. (Cl. 24—143.)



1. A mariner's clothes stop comprising a length of cylindrical line having adjacent to each end an encircling band of non-rusting sheet metal attached to the line, the ends of the line projecting beyond the bands and being frayed to form tufts for guarding the ends of the bands, substantially as set forth.

2. A mariner's clothes stop comprising a length of cylindrical line having adjacent to each end an encircling band of non-rusting sheet metal bent around the line and crimped thereon, such band having one longitudinal edge turned inwardly and entering the fabric of the line and its other longitudinal edge meeting the body of the band and making a smooth joint therewith, the ends of the line projecting beyond the bands and being frayed to form tufts for guarding the ends of the bands, substantially as set forth.

1,061,055. CONTROLLER-REGULATOR. CYRUS P. EBERSOLE, Philadelphia, Pa., assignor to American Automotoneer Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 30, 1911. Serial No. 668,704. (Cl. 172—179.)



1. In a controller regulator, a stationary member, a revoluble member, cams and stops revolved by one of said members, and a longitudinally movable bolt, disposed in a way in the other of said members, said cams being adapted for moving said bolt into position for engaging said stops.

2. In a controller regulator, a base, a bearing fixed thereto, a vertically reciprocating plunger movable longitudinally in said bearing, a hood, cams, and stops carried by said hood, said cams being operated by said hood to engage said plunger and lift it into the path of said stops.

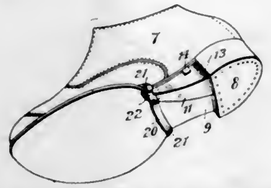
3. In a controller regulator, a base, a locking device carried thereby, a hood having stops thereon for engagement with said device, a ring carried by said hood, and cams on said ring for lifting said device into engagement with said stops.

4. In a controller regulator, a stationary member, a revoluble member, a reciprocating bolt connected with one of said members, and cams and stops connected with the other of said members, said cams engaging said bolt and moving it into position for engaging said stops.

5. In a controller regulator, a base, a hood revoluble thereon, a reciprocating plunger connected with said base, stops carried by said hood over said plunger and adapted to be engaged thereby, a ring carried by said hood, and cams carried by said ring and adapted for moving said plunger into position for engaging said stops.

[Claims 6 to 10 not printed in the Gazette.]

1,061,056. ARCH-SUPPORT. ELIAS J. EMERY, Portsmouth, N. H. Filed Oct. 19, 1912. Serial No. 726,731. (Cl. 36—71.)



1. An arch-support comprising a pad arranged to be secured outside of footwear and under the instep portion of the sole, on the upper surface of the pad a plate having thereon clips with portions thereof projecting into the material of the pad, means on the plate whereby the pad is secured in place at its rear end, and means for attaching the pad at its front end.

2. An arch-support comprising a pad arranged to be secured outside of footwear and under the instep portion of the sole, a clamp arranged to span the sole and embrace the front end of the pad, and means for attaching the pad at its rear end.

3. An arch support comprising a pad arranged to be secured outside of footwear and under the instep portion of the sole, a clamp of spring material arranged to embrace the front end of the pad and having inturned ends arranged to engage over the sole, and means for attaching the pad at its rear end.

4. An arch-support comprising a pad arranged to be secured outside of footwear and under the instep portion of the sole, a clamp of spring material arranged to span the sole and having an offset portion arranged to embrace the front end of the pad, and means for attaching the pad at its rear end.

5. An arch-support comprising a pad arranged to be secured outside of footwear and under the instep portion of the sole, a clamp of spring material formed with an offset portion adapted to embrace the front end of the pad and having inturned ends arranged to engage over the sole, and means for attaching the pad at its rear end.

[Claims 6 and 7 not printed in the Gazette.]

1,061,057. HOE. JOHN BLAKELEY ETHERIDGE, Hallsville, Tex. Filed Nov. 20, 1912. Serial No. 732,557. (Cl. 111—22.)

1. In a garden hoe the combination of a handle having an opening therethrough, a lever mounted upon the handle, a cut-off having connection with the lever and adapted to operate through a lateral opening of the handle, a second cut-off arranged to operate through another opening in the side of the handle and provided with a slot through which the before mentioned lever passes, and a spring interposed between the said lever and the slotted cut-off to form a yielding connection between the two.

2. In combination with a hollow handle having an opening and a slot in a side thereof, means for covering the slot and having an opening therein and adapted to be secured to the handle in adjusted positions, cut-offs adapted to operate through the opening of the handle and the opening of the covering means, the distance between the cut-offs being adjustable to vary the discharge, and an operating lever for actuating the cut-offs.



1,061,058. PROCESS OF PRODUCING FINE TUNGSTOUS OXIDS. KARL FARKAS, New York, N. Y., assignor of one-half to Guy V. Williams, New York, N. Y. Filed Aug. 10, 1909. Serial No. 512,145. (Cl. 23—13.)

1. The process of producing fine impalpable powder of tungstous oxids from yellow tungstic anhydrid by contact action consisting in heating the tungstic anhydrid in a constantly renewed atmosphere of carbon dioxid until black tungstous oxids are produced in form of fine powder imperceptible to touch.

2. The process of producing fine impalpable powder of tungstous oxids from the yellow tungstic anhydrid by contact action consisting in subjecting said yellow tungstic anhydrid to a high heat in a constantly renewed atmosphere of carbon dioxid until black tungstous oxids are produced in form of fine powder imperceptible to touch, and separating the finest powders by means of fine silk sieves.

1,061,059. METHOD OF PRODUCING PLACARDS WITH SUNK CHARACTERS OR IMPRINTS. HERMANN FLOCK, Leipzig, Germany. Filed Aug. 19, 1911. Serial No. 644,953. (Cl. 101—182.)



1. The process of producing placards with sunk imprints consisting in preparing the base plate with sunk characters thereon in positive form, producing therefrom a

male plate with raised characters, gluing pieces of fine sheeting of a striking color upon those portions of the placard to be imprinted, placing the placard thus prepared between the base plate and the male plate, producing the imprint, applying color to the base plate, printing therefrom on a transparent sheet, and securing said transparent sheet as a top cover to the placard so that its transparent portions coincide with the imprints on said placard.

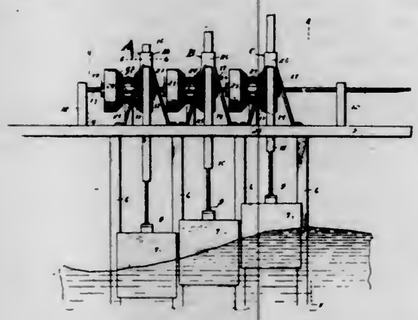
2. The process of producing placards with sunk imprints consisting in preparing the base plate with sunk characters thereon in positive form, producing therefrom a male plate with raised characters, gluing pieces of metal foil upon those portions of the placard to be imprinted, placing the placard thus prepared between the base plate and the male plate, producing the imprint, applying color to the base plate, printing therefrom on a transparent sheet, and securing said transparent sheet as a top cover to the placard so that its transparent portions coincide with the imprints on said placard.

1,061,060. TURNBUCKLE. BERTRAM L. FORD, Seattle, Wash. Filed Sept. 20, 1912. Serial No. 721,485. (Cl. 85—36.5.)



A turn buckle lock comprising a turn buckle, a pair of rods adjustably threaded in opposite ends of the turn buckle, a resilient member integrally formed with one of the rods and having a right angularly disposed locking lip adapted to engage in the turn buckle for sustaining the same in adjusted position, and a hook-like terminal formed on the lip and having its free end spaced from one side of the turn buckle whereby the said locking lip can be manually disengaged from the turn buckle.

1,061,061. WAVE-MOTOR. JOHN FRAME, Searsport, Me. Filed July 2, 1912. Serial No. 707,330. (Cl. 253—10.)



In a wave motor, the combination with a reciprocatory rack bar, of a shaft, a gear wheel loose on the shaft and continuously engaged with said rack bar, said gear wheel being formed on its inner face with a bevel gear, means connecting the gear wheel and shaft for rotating the latter in one direction upon the upstroke of said bar and for releasing the gear wheel from the shaft upon the down stroke of said bar, a bevel gear loose on the shaft and disposed in spaced relation to the first mentioned bevel gear, a bevel pinion connecting said bevel gears, the means connecting the last mentioned bevel gear and the shaft for continuously rotating the latter in the same direction upon the down stroke of said bar.

1,061,062. MEASURING-PUMP. LLOYD D. FREELAND, Portage, Wis. Filed Apr. 3, 1911. Serial No. 618,538. (Cl. 73—161.)



1. In a measuring device, the combination of a standard, a reversibly acting pump mounted on said standard, a measuring receptacle, a supporting bracket therefor mounted on said pump, a delivery pipe connecting said pump and receptacle, said receptacle being provided with a vent valve and with vertical partitions disposed one at each side of said delivery pipe there being openings at the tops and bottoms of said partitions; a faucet connected to said delivery pipe, and a valve in said delivery pipe adapted to connect said pump and receptacle or said receptacle and faucet, or said faucet and pump, all coacting for the purpose specified.

2. In a measuring device, the combination of a standard, a reversibly acting pump mounted on said standard, a measuring receptacle, a supporting bracket therefor mounted on said pump, said receptacle being provided with a vent valve and with vertical partitions disposed one at each side of said delivery pipe, there being openings at the tops and bottoms of said partitions, a faucet connected to said delivery pipe and a valve in said delivery pipe adapted to connect said pump and receptacle or said receptacle and faucet, all coacting for the purpose specified.

3. In a measuring device, the combination of a standard, a pump mounted on said standard, a measuring receptacle, a supporting bracket therefor mounted on said pump, a delivery pipe connecting said pump and receptacle, said receptacle being provided with a vent valve and with vertical partitions disposed one at each side of said delivery pipe there being openings at the tops and bottoms of said partitions, a faucet connected to said delivery pipe, and a valve in said delivery pipe adapted to connect said pump and receptacle or said receptacle and faucet, or said faucet and pump, all coacting for the purpose specified.

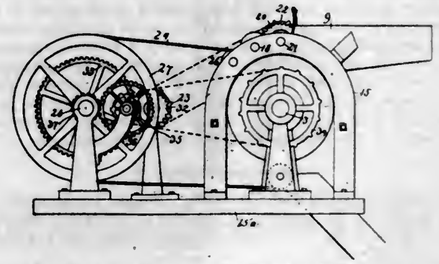
4. In a measuring device, the combination of a standard, a pump mounted on said standard, a measuring receptacle, a supporting bracket therefor mounted on said pump, a delivery pipe connecting said pump and receptacle, said receptacle being provided with a vent valve and with vertical partitions disposed one at each side of said delivery pipe there being openings at the tops and bottoms of said partitions, a faucet connected to said delivery pipe and a valve in said delivery pipe adapted to connect said pump and receptacle or said receptacle and faucet, all coacting for the purpose specified.

5. In a measuring device, the combination of a standard, a pump mounted on said standard, a measuring receptacle, a delivery pipe connecting said pump and receptacle, said receptacle being provided with a vent valve and with vertical partitions disposed one at each side of said delivery pipe there being openings at the tops and bottoms of said partitions, a faucet connected to said delivery pipe,

and a valve in said delivery pipe adapted to connect said pump and receptacle or said receptacle and faucet, all coacting for the purpose specified.

[Claims 6 to 9 not printed in the Gazette.]

1,061,063. MACHINE FOR ROUNDING TOOTHPICKS AND OTHER SPLINTS. CHARLES C. FREEMAN and WILLIS W. TAINTER, Dixfield, Me. Filed Sept. 11, 1912. Serial No. 719,768. (Cl. 51—5.)



1. In a machine for rounding square splints, the combination of a grinding wheel, a rotatable cylindrical shell inclosing said grinding wheel and provided at its periphery with a series of transverse splint holding pockets having open bottoms to allow the splints to rest directly on the grinding wheel and means for pressing the splints while in said pockets against the grinding wheel and rotating them at the same time.

2. In a machine for rounding square splints, the combination of a grinding wheel, a rotatable cylindrical shell inclosing said grinding wheel and provided at its periphery with a series of transverse splint holding pockets, and an endless band conforming to the shell for pressing the splints while in the pockets against the periphery of the grinding wheel and rotating them at the same time.

3. In a machine for rounding square splints, the combination of a grinding wheel, a rotatable cylindrical shell inclosing said grinding wheel and provided at its periphery with a series of transverse lags spaced apart to form a series of transverse splint holding pockets, a central recess being formed in each of said lags forming an annular groove in the periphery of said shell and means positioned within said groove for bearing on and rotating the splints.

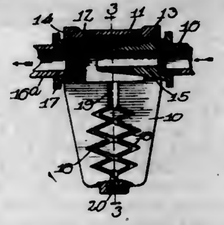
4. In a machine for rounding square splints, the combination of a grinding wheel, a rotatable cylindrical shell inclosing said grinding wheel and provided at its periphery with a series of transverse lags spaced apart to form a series of transverse splint holding pockets, a central recess being formed in each of said lags forming an annular groove in the periphery of said shell and an endless band within said groove for bearing on and rotating the splints.

5. In a machine for rounding square splints, the combination of a grinding wheel, a feeding hopper, a rotatable cylindrical shell inclosing said grinding wheel and provided at its periphery with a series of lags spaced apart to form a series of transverse splint holding pockets, a central recess being formed in each of said lags forming an open annular groove around the periphery of the shell, each of said lags having a horizontal recess extending from said groove outward dividing the lags and pockets into upper and lower portions, a fixed apron fitting in said horizontal grooves and extending beneath the feeding hopper, whereby the splint holding pockets beneath the hopper are provided with a fixed bottom and means positioned within said open groove for bearing on and rotating the splints.

[Claims 6 to 9 not printed in the Gazette.]

1,061,064. DRAINAGE-FITTING. EGBERT H. GOLD, Chicago, Ill. Filed Mar. 2, 1912. Serial No. 681,183. (Cl. 137—103.)

1. A drainage fitting for a steam pipe consisting of a plate formed with a hollow cylindrical part having openings at opposite ends, said plate being also formed with two zigzag grooves which intersect each other at intervals with a port leading from the interior of the cylinder to said grooves and with a port leading from the opposite ends of the grooves to the edge of the plate; a nozzle fitted into one of the openings in the cylindrical part and a cover plate secured to the first named plate over the grooved portions thereof.

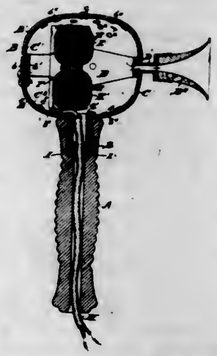


2. A drainage fitting for a steam system formed with a steam passageway therethrough and with a nozzle projecting thereinto from the inlet end, said fitting being formed with a water outlet communicating with the steam passageway comprising two circuitous channels which intersect at intervals.

3. A drainage fitting for steam pipes formed with a steam passageway of greater cross sectional area than the cross sectional area of the sections of pipe connected thereby and provided with a nozzle extending into said passageway pointing in the direction of the flow of the steam, the cross sectional area of which is smaller than that of the pipe sections, said fitting being formed with a water outlet, the cross sectional area of which is small relative to that of the said pipe sections.

4. A drainage fitting adapted to be interposed in a steam conduit formed with a steam passageway therethrough and with a water outlet leading from the bottom of said passageway comprising circuitous channels which intersect at intervals, and means for directing the steam through the passageway in a stream of relatively small cross sectional area in comparison to the cross section of the steam passageway.

1,061,065. ELECTRIC VIBRATOR. MAXIMILIAN K. GOLDEN, Detroit, Mich. Filed Feb. 13, 1913. Serial No. 748,073. (Cl. 128—16.)



1. In a device of the class described, a chambered shell, an electro-magnet, an armature, means for adjusting the electro-magnet with respect to the armature, an applicator adapted to be vibrated through the action of the magnet, and a port through the applicator leading into the shell adapted to direct the warm air to the part manipulated.

2. In a device of the class described, a chambered shell, an electro-magnet, an armature, a resilient arm for sup-

porting the magnet, and a projecting applicator supported by the resilient arm provided with a port communicating with the chambered shell.

3. In a device of the class described, a chambered shell provided with a plurality of ports, an electro-magnet supported in the shell, a fixed armature, a resilient arm for supporting the magnet, means for adjusting the magnet with respect to the armature, a projecting applicator provided with a central port communicating with the interior of the shell, and means for closing and reducing the ports leading into the shell.

4. In a device of the class described, a chambered shell provided with a plurality of ports for the passage of air, a concentric rotatable shell housed within the chambered shell provided with a plurality of ports adapted to register with the ports in the outer shell, means for rotating said inner shell whereby the air ports through the chambered shell may be reduced or closed, an electro-magnet housed within the shell supported on a resilient arm, a projecting applicator mounted on one end of the resilient arm provided with a port communicating with the interior of the shell, a fixed armature, and means for adjusting the electro-magnet with respect to the armature.

5. In a device of the class described, a chambered shell formed in two parts, the abutting ends of which overlap, indentations in the wall of the overlapping portion adapted to receive projecting lugs formed on the connecting portion whereby the parts are locked together, a concentric rotatable shell also formed in sections and pivoted to the respective portions of the outer shell, an electro-magnet housed within the chambered shell, a resilient arm supporting the electro-magnet secured at one end of the shell, a fixed armature secured to the chambered shell, means for rotating the sections of the inner shell, means for adjusting the magnet with respect to the armature, and an applicator carried by a tubular stem mounted on the end of the resilient arm and communicating with the interior of the chambered shell.

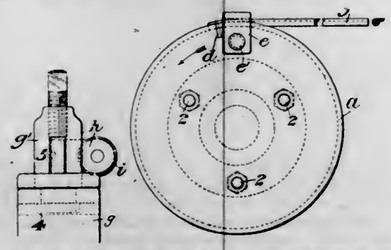
[Claims 6 and 7 not printed in the Gazette.]

1,061,066. PLATED METALLIC BODY. GEORGE A. GOODSON, Minneapolis, Minn. Filed Mar. 11, 1907. Serial No. 361,829. (Cl. 29—181.)



A metallic body plated with a homogeneous metal alloy containing ninety per cent. or more of lead and ten per cent. or less or zinc, the said zinc being sufficient to render said alloy electro positive in respect to the body plated thereby.

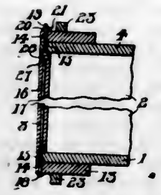
1,061,067. BENDING-MACHINE. JAMES GRADY, New York, N. Y., assignor to The Columbia Machine Works & Malleable Iron Co., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 27, 1911. Serial No. 617,014. (Cl. 153—40.)



1. In a rod bending device and in combination a suitable revoluble support, a circular and revoluble mandrel having a peripheral groove, a device for engaging the initial or advancing end of the rod with the mandrel, a removable device for initially holding the end of the rod in the groove of the mandrel and a roller device for pressing the rod into the groove of the mandrel while being bent through continuous revolutions.

2. A forming mandrel comprising the disks *a b* with a peripheral groove in the adjacent edges of each disk, together forming a groove of predetermined form, a head stock and lathe arbor and tap bolts for simultaneously connecting the said head stock and disks removably together, a key of tapering form adapted to be seated in a tapering aperture across the periphery of the disks forming the mandrel and across said groove, a yoke-bar adapted to straddle the said disks at their peripheries and adjacent to said key, and a pin adapted to pass through the free ends of the yoke-bar and through apertures in the disks to hold the yoke-bar in a removable and replaceable relation to the mandrel disks adjacent to the said key.

1,061,068. KNOCKDOWN BOX. FRANK L. HAMILTON, Ford City, Pa., assignor of one-half to William E. Gregg, Ford City, Pa. Filed July 29, 1912. Serial No. 712,004. (Cl. 217—12.)



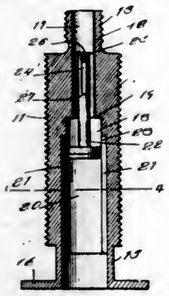
1. A knock-down box comprising a detachable bottom, side walls, end walls, and a cover, said walls having their top edges provided with pockets and further provided with vertical openings extending from the lower edge thereof and opening into said pockets, vertical bolts extending through said bottom, said openings, said pockets, and through and projecting above the cover, means mounted upon the upper portions of the bolts and lying in said pockets for fixedly securing said walls to the bottom prior to the securing of the cover in position, and nuts mounted upon the projecting ends of the bolts and engaging the cover for securing the latter to said walls.

2. A knock-down box comprising a detachable bottom, side walls, end walls, and a cover, said walls having their top edges provided with pockets and further provided with vertical openings extending from the lower edge thereof and opening into said pockets, vertical bolts extending through said bottom, said openings, said pockets, and through and projecting above the cover, means mounted upon the upper portions of the bolts and lying in said pockets for fixedly securing said walls to the bottom prior to the securing of the cover in position, nuts mounted upon the projecting ends of the bolts and engaging the cover for securing the latter to said walls, and strips secured to the outer face of the cover and lying adjacent to the upper ends of the bolts and the nuts mounted thereon to protect said nuts and the upper ends of the bolts.

1,061,069. INNER-TUBE VALVE. JOHN. S. HARBER, Youngstown, Ohio. Filed Feb. 29, 1912. Serial No. 680,571. (Cl. 152—12.)

A valve of the class described comprising a casing adapted for attachment to a wheel rim, said casing having one end open and provided with a counter-bore, the main bore of the casing terminating at a point intermediate of the ends of the casing, and the casing being provided with a reduced bore extending from the inner end of the main bore to the end of the casing, the face of the main bore being provided with a plurality of feed grooves, a valve having a cushion head and a stem slidable in the reduced bore, the inner end of the main bore forming a valve

seat, the upper end of the valve stem being slotted, a transverse retaining member engaged in the wall of the casing and passing through said slot and a stop pivoted



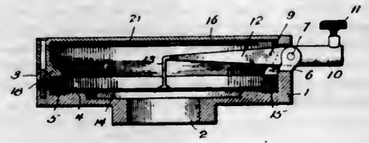
to the top of the stem to close the slot and thus prevent displacement of the valve when air is forced inwardly through the same.

1,061,070. NEEDLE OR STYLUS. ALBERT HAYES, Salt Lake City, Utah. Filed Mar. 8, 1913. Serial No. 752,884. (Cl. 181—11.)



A needle of the character described having a shank of relatively large diameter and an end portion of relatively small diameter and a relatively broad flattened portion between the shank and the end portion, the end portion being blunt at its extreme end, cylindrical throughout its length and extending directly from the lower end of the flattened portion.

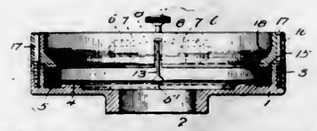
1,061,071. SOUND-BOX. ALBERT HAYES, Salt Lake City, Utah. Filed Mar. 8, 1913. Serial No. 752,886. (Cl. 181—11.)



In a sound box the combination with a box body having a central opening therein, a diaphragm within the box body and means for vibrating it, of a sound board extending over and closing the box body, having openings therein, and strings under tension extending across the sound box between the sounding board and the diaphragm, the sound board and strings being arranged on the side of the diaphragm opposite to that which faces the central opening in the sound box body.

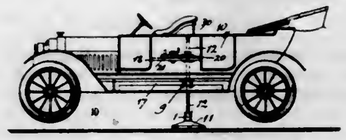
1,061,072. METHOD OF MOUNTING A VIBRATING DIAPHRAGM. ALBERT HAYES, Salt Lake City, Utah. Filed Mar. 13, 1913. Serial No. 754,063. (Cl. 181—11.)

1. The herein described method of mounting a vibrating diaphragm which consists in clamping a diaphragm at its periphery against a surface one portion of which is out of the plane of another portion so that a part of the central portion of the diaphragm is forced out of the plane of another portion of said central portion along a diametrical line, and applying vibrating means to the central portion of the diaphragm.



2. The herein described method of mounting a vibrating diaphragm which consists in so clamping a diaphragm at its periphery that one portion thereof will be out of the plane of the other portion with a kink, bend or upset between the two portions extending across the central portion of the diaphragm and applying vibrating means to the center of the diaphragm.

1,061,073. TURN-TABLE ATTACHMENT FOR AUTOMOBILES. FERDINAND HELDER, New York, N. Y. Filed Jan. 24, 1912. Serial No. 673,227. (Cl. 57—15.)



1. An improved turn-table attachment for automobiles, comprising a foot-piece, a supporting-post rotatable in said foot-piece, means for lowering the foot-piece to the ground and simultaneously raising the automobile in respect to the foot-piece, means for locking the supporting-post to the foot-piece, and a planetary gear for rotating the automobile around the supporting-post after the same is interlocked with the foot-piece.

2. An improved turn-table attachment for automobiles, comprising a foot-piece provided with an interiorly-recessed socket, a tubular supporting-post rotatable in said foot-piece and provided with a screw-threaded middle portion, an interiorly-threaded sleeve secured to the bottom-frame of the automobile for engaging said screw-threaded portion, a key-actuating rod arranged in the bore of the post, a key swiveled to the lower end of said key-rod and adapted to engage the interior recesses of said socket, means for raising or lowering the key-rod and placing the key into or out of mesh with the socket of the foot-piece, and a planetary gear for rotating the automobile around the supporting-post after the same is locked to the foot-piece.

3. A turn-table attachment for automobiles and other vehicles, comprising a foot-piece, provided with a socket having interior recesses, a tubular supporting-post rotatable in said socket, said post being provided with a screw-threaded middle portion and square upper portion, an interiorly-threaded sleeve attached to the bottom-frame of the vehicle and adapted to engage said screw-threaded portion of the post, a key-operating rod in the bore of the post, a key swiveled to the lower end of said rod, means for raising or lowering said rod and placing the key in or out of locking connection with the recesses in the socket of the foot-piece, a pinion on the square upper end of said supporting-post, a gear-wheel meshing with said pinion, and a second pinion intermeshing with the gear-wheel for turning the automobile after the same is lifted above the ground around the supporting-post and reversing its direction of motion.

1,061,074. CIGAR-LIGHTER. WILHELM HEYM, Berlin, Germany. Filed Feb. 15, 1912. Serial No. 677,764. (Cl. 67—8.)

1. In a pyrophoric lighter, a movable member having a friction surface, a holder for the pyrophoric material, and

porting the magnet, and a projecting applicator supported by the resilient arm provided with a port communicating with the chambered shell.

3. In a device of the class described, a chambered shell provided with a plurality of ports, an electro-magnet supported in the shell, a fixed armature, a resilient arm for supporting the magnet, means for adjusting the magnet with respect to the armature, a projecting applicator provided with a central port communicating with the interior of the shell, and means for closing and reducing the ports leading into the shell.

4. In a device of the class described, a chambered shell provided with a plurality of ports for the passage of air, a concentric rotatable shell housed within the chambered shell provided with a plurality of ports adapted to register with the ports in the outer shell, means for rotating said inner shell whereby the air ports through the chambered shell may be reduced or closed, an electro-magnet housed within the shell supported on a resilient arm, a projecting applicator mounted on one end of the resilient arm provided with a port communicating with the interior of the shell, a fixed armature, and means for adjusting the electro-magnet with respect to the armature.

5. In a device of the class described, a chambered shell formed in two parts, the abutting ends of which overlap, indentations in the wall of the overlapping portion adapted to receive projecting lugs formed on the connecting portion whereby the parts are locked together, a concentric rotatable shell also formed in sections and pivoted to the respective portions of the outer shell, an electro-magnet housed within the chambered shell, a resilient arm supporting the electro-magnet secured at one end of the shell, a fixed armature secured to the chambered shell, means for rotating the sections of the inner shell, means for adjusting the magnet with respect to the armature, and an applicator carried by a tubular stem mounted on the end of the resilient arm and communicating with the interior of the chambered shell.

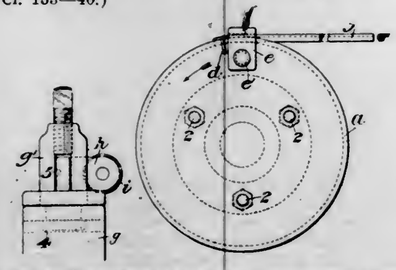
[Claims 6 and 7 not printed in the Gazette.]

1,061,066. PLATED METALLIC BODY. GEORGE A. GOODSON, Minneapolis, Minn. Filed Mar. 11, 1907. Serial No. 361,829. (Cl. 29—181.)



A metallic body plated with a homogeneous metal alloy containing ninety per cent. or more of lead and ten per cent. or less or zinc, the said zinc being sufficient to render said alloy electro positive in respect to the body plated thereby.

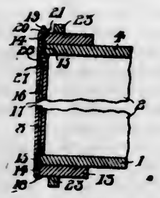
1,061,067. BENDING-MACHINE. JAMES GRADY, New York, N. Y., assignor to The Columbia Machine Works & Malleable Iron Co., Brooklyn, N. Y., a Corporation of New York. Filed Mar. 27, 1911. Serial No. 617,014. (Cl. 153—40.)



1. In a rod bending device and in combination a suitable revoluble support, a circular and revoluble mandrel having a peripheral groove, a device for engaging the initial or advancing end of the rod with the mandrel, a removable device for initially holding the end of the rod in the groove of the mandrel and a roller device for pressing the rod into the groove of the mandrel while being bent through continuous revolutions.

2. A forming mandrel comprising the disks *a b* with a peripheral groove in the adjacent edges of each disk, together forming a groove of predetermined form, a head stock and inthe arbor and tap bolts for simultaneously connecting the said head stock and disks removably together, a key of tapering form adapted to be seated in a tapering aperture across the periphery of the disks forming the mandrel and across said groove, a yoke-bar adapted to straddle the said disks at their peripheries and adjacent to said key, and a pin adapted to pass through the free ends of the yoke-bar and through apertures in the disks to hold the yoke-bar in a removable and replaceable relation to the mandrel disks adjacent to the said key.

1,061,068. KNOCKDOWN BOX. FRANK L. HAMILTON, Ford City, Pa., assignor of one-half to William E. Gregg, Ford City, Pa. Filed July 29, 1912. Serial No. 712,004. (Cl. 217—12.)

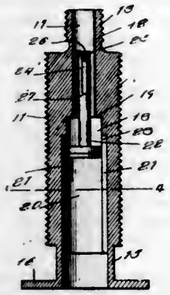


1. A knock-down box comprising a detachable bottom, side walls, end walls, and a cover, said walls having their top edges provided with pockets and further provided with vertical openings extending from the lower edge thereof and opening into said pockets, vertical bolts extending through said bottom, said openings, said pockets, and through and projecting above the cover, means mounted upon the upper portions of the bolts and lying in said pockets for fixedly securing said walls to the bottom prior to the securing of the cover in position, and nuts mounted upon the projecting ends of the bolts and engaging the cover for securing the latter to said walls.

2. A knock-down box comprising a detachable bottom, side walls, end walls, and a cover, said walls having their top edges provided with pockets and further provided with vertical openings extending from the lower edge thereof and opening into said pockets, vertical bolts extending through said bottom, said openings, said pockets, and through and projecting above the cover, means mounted upon the upper portions of the bolts and lying in said pockets for fixedly securing said walls to the bottom prior to the securing of the cover in position, nuts mounted upon the projecting ends of the bolts and engaging the cover for securing the latter to said walls, and strips secured to the outer face of the cover and lying adjacent to the upper ends of the bolts and the nuts mounted thereon to protect said nuts and the upper ends of the bolts.

1,061,069. INNER-TUBE VALVE. JOHN S. HARBER, Youngstown, Ohio. Filed Feb. 29, 1912. Serial No. 680,571. (Cl. 152—12.)

A valve of the class described comprising a casing adapted for attachment to a wheel rim, said casing having one end open and provided with a counter-bore, the main bore of the casing terminating at a point intermediate of the ends of the casing, and the casing being provided with a reduced bore extending from the inner end of the main bore to the end of the casing, the face of the main bore being provided with a plurality of feed grooves, a valve having a cushion head and a stem slidable in the reduced bore, the inner end of the main bore forming a valve seat, the upper end of the valve stem being slotted, a transverse retaining member engaged in the wall of the casing and passing through said slot and a stop pivoted



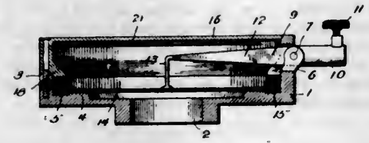
to the top of the stem to close the slot and thus prevent displacement of the valve when air is forced inwardly through the same.

1,061,070. NEEDLE OR STYLUS. ALBERT HAYES, Salt Lake City, Utah. Filed Mar. 8, 1913. Serial No. 752,884. (Cl. 181—11.)



A needle of the character described having a shank of relatively large diameter and an end portion of relatively small diameter and a relatively broad flattened portion between the shank and the end portion, the end portion being blunt at its extreme end, cylindrical throughout its length and extending directly from the lower end of the flattened portion.

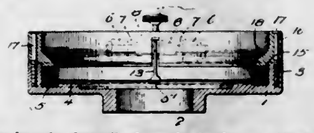
1,061,071. SOUND-BOX. ALBERT HAYES, Salt Lake City, Utah. Filed Mar. 8, 1913. Serial No. 752,886. (Cl. 181—11.)



In a sound box the combination with a box body having a central opening therein, a diaphragm within the box body and means for vibrating it, of a sound board extending over and closing the box body, having openings therein, and strings under tension extending across the sound box between the sounding board and the diaphragm, the sound board and strings being arranged on the side of the diaphragm opposite to that which faces the central opening in the sound box body.

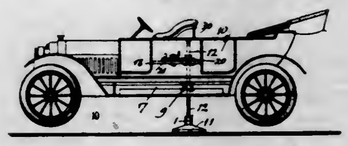
1,061,072. METHOD OF MOUNTING A VIBRATING DIAPHRAGM. ALBERT HAYES, Salt Lake City, Utah. Filed Mar. 13, 1913. Serial No. 754,063. (Cl. 181—11.)

1. The herein described method of mounting a vibrating diaphragm which consists in clamping a diaphragm at its periphery against a surface one portion of which is out of the plane of another portion so that a part of the central portion of the diaphragm is forced out of the plane of another portion of said central portion along a diametrical line, and applying vibrating means to the central portion of the diaphragm.



2. The herein described method of mounting a vibrating diaphragm which consists in so clamping a diaphragm at its periphery that one portion thereof will be out of the plane of the other portion with a kink, bend or upset between the two portions extending across the central portion of the diaphragm and applying vibrating means to the center of the diaphragm.

1,061,073. TURN-TABLE ATTACHMENT FOR AUTOMOBILES. FERDINAND HELDER, New York, N. Y. Filed Jan. 24, 1912. Serial No. 673,227. (Cl. 57—15.)



1. An improved turn-table attachment for automobiles, comprising a foot-piece, a supporting-post rotatable in said foot-piece, means for lowering the foot-piece to the ground and simultaneously raising the automobile in respect to the foot-piece, means for locking the supporting-post to the foot-piece, and a planetary gear for rotating the automobile around the supporting-post after the same is interlocked with the foot-piece.

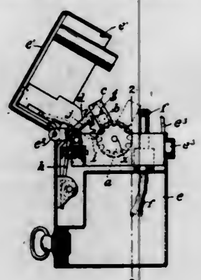
2. An improved turn-table attachment for automobiles, comprising a foot-piece provided with an interiorly-recessed socket, a tubular supporting-post rotatable in said foot-piece and provided with a screw-threaded middle portion, an interiorly-threaded sleeve secured to the bottom-frame of the automobile for engaging said screw-threaded portion, a key-actuating rod arranged in the bore of the post, a key swiveled to the lower end of said key-rod and adapted to engage the interior recesses of said socket, means for raising or lowering the key-rod and placing the key into or out of mesh with the socket of the foot-piece, and a planetary gear for rotating the automobile around the supporting-post after the same is locked to the foot-piece.

3. A turn-table attachment for automobiles and other vehicles, comprising a foot-piece, provided with a socket having interior recesses, a tubular supporting-post rotatable in said socket, said post being provided with a screw-threaded middle portion and square upper portion, an interiorly-threaded sleeve attached to the bottom-frame of the vehicle and adapted to engage said screw-threaded portion of the post, a key-operating rod in the bore of the post, a key swiveled to the lower end of said rod, means for raising or lowering said rod and placing the key in or out of locking connection with the recesses in the socket of the foot-piece, a pinion on the square upper end of said supporting-post, a gear-wheel meshing with said pinion, and a second pinion intermeshing with the gear-wheel for turning the automobile after the same is lifted above the ground around the supporting-post and reversing its direction of motion.

1,061,074. CIGAR-LIGHTER. WILHELM HEYM, Berlin, Germany. Filed Feb. 15, 1912. Serial No. 677,764. (Cl. 67—8.)

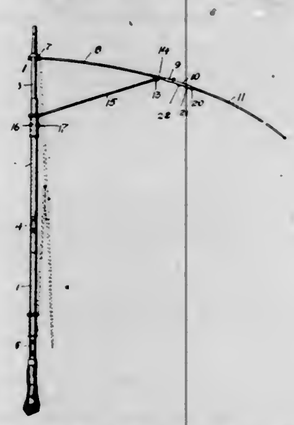
1. In a pyrophoric lighter, a movable member having a friction surface, a holder for the pyrophoric material, and

a spring-pressed follower for forcing said material against said friction surface, said holder and said follower being movable in different paths of movement.



2. In a pyrophoric lighter, a wheel having a friction surface, a pivoted holder for the pyrophoric material, and a pivoted spring-pressed follower for forcing said material against said friction surface, said holder being pivoted independently of the follower.

1,061,075. FOLDING UMBRELLA. FRANCIS F. HILDITCH, Georgetown, Pa. Filed Dec. 18, 1912. Serial No. 737,504. (Cl. 135—25.)



In a folding umbrella the combination with a stick, and a runner movable upon said stick, of an outer and inner rib section supported by said stick, said outer and inner rib sections being hinged together whereby said outer rib section can fold against said inner rib section, a spreader supported by said runner, a strap open to provide a loop slidably mounted in said inner rib section and having its ends pivotally connected to said spreader to provide a geat connection whereby the outer end of said spreader can be shifted toward the inner end of said inner rib section, a connecting bar connected to the inner end of the loop of the strap, a latch supported by said bar and provided with a tooth adapted to engage said outer rib section, and a handle carried by said latch to facilitate moving said latch out of engagement with said outer rib section.

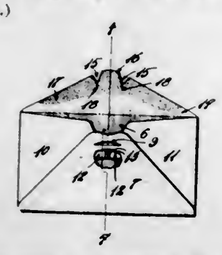
1,061,076. HAT-PIN-POINT PROTECTOR. FRANCIS F. HILDITCH, Georgetown, Pa. Filed Dec. 18, 1912. Serial No. 737,505. (Cl. 24—155.)

A hat pin point protecting device comprising a resilient metallic strap bent upon itself to provide arms having the ends bent inwardly to form gripping members, both of which are apertured and adapted to receive the pointed end of a pin, a tube arranged longitudinally between said arms and connected to one of the members thereof, a plate carried by the outer end of said tube and loosely connected to said arms, a yieldable block ar-



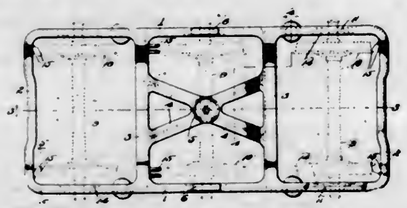
ranged between said arms and said plate, and an elastic piece of material interposed between said tube and said arms adjacent to the members thereof.

1,061,077. SAFETY-ENVELOP. FERDINAND HOFFMANN, St. Louis, Mo. Filed Aug. 5, 1912. Serial No. 713,402. (Cl. 229—82.)



The improved envelop, comprising a body portion, an integral bottom flap, gummed lines on said bottom flap extending to points near the apex of the flap, there being a single straight-edged longitudinal slot in said bottom flap adjacent the apex thereof, a pair of side flaps, two integral detector-strips carried by said side flaps which, when the envelop is formed, aline with said slot, a sealing flap having two parallel tearing-notches formed in the margin of the sealing-flap adjacent its apex and two tearing-cuts extending from the bottoms of said notches, and a gummed sealing tongue between said notches and adapted to be inserted in said slot to seal the abutting ends of said side flaps to the said parallel detector-strips, the ends of said slot acting as guides to limit the lateral movement of said tongue.

1,061,078. CAR-TRUCK. CLARENCE H. HOWARD and HARRY M. PFLAGER, St. Louis, Mo., assignors to Commonwealth Steel Company, St. Louis, Mo., a Corporation of New Jersey. Filed June 10, 1912. Serial No. 702,744. (Cl. 105—244.)



1. A truck frame of the class described, comprising wheel pieces, a pair of transoms, the central portions of

which are depressed with respect to the wheel pieces and a center bolster connecting the depressed center portions of the transoms all of which parts are cast integral.

2. A truck frame, comprising wheel pieces, end rails, transoms, the central portions of which are depressed with respect to the wheel pieces and a center bolster connecting the depressed center portions of said transoms all of which parts are formed integral.

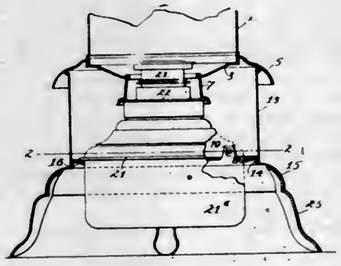
3. A truck frame comprising wheel pieces, end rails, a pair of transoms, the central portions of which are depressed with respect to the wheel pieces and an X-shaped center bolster connecting the depressed center portions of said transoms all of which parts are cast integral.

4. In a car truck, a rectangular frame, a pair of transoms cast integral therewith, the central portions of which transoms are depressed with respect to the said members of the frame, and a substantially X-shaped center bolster connecting the depressed center portions of said transoms.

5. A car truck frame comprising wheel pieces, end rails, a pair of transoms, a center bolster connecting the central portions of the transoms, all of which parts are cast integral, and pedestals depending from the wheel pieces between the transoms and between the end rails and transoms.

[Claims 6 to 17 not printed in the Gazette.]

1,061,079. HEATER. WILLIAM R. JEAVONS, Cleveland, Ohio. Original application filed July 22, 1911, Serial No. 639,991. Divided and this application filed Oct. 26, 1912. Serial No. 727,864. (Cl. 126—93.)



1. In a stove, the combination of a flexible base ring, legs connected thereto, and a drum base movably connected to the base ring.

2. The combination of a stove body, legs therefor, and means flexibly connecting the said legs and body.

3. In a stove, the combination of a base ring of flexible metal, legs projecting from said ring, a drum base adapted to be seated upon said ring, and a pin-and-slot connection between said base and said ring.

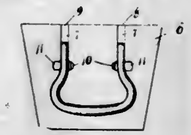
4. In a stove, the combination of a flexible base ring, legs projecting from said ring, a drum base adapted to be supported by said ring, and a lost-motion connection between said base and said ring.

5. In a stove, the combination of a base ring of flexible metal, a drum base, legs secured to and depending from said ring, upwardly extending lugs carried by said ring and located adjacent to the drum base, said lugs being provided each with an aperture, and connecting devices carried by the drum base and securing the same to said lugs, said apertures being larger than said devices, whereby relative movement between the drum base and ring is permitted.

[Claims 6 to 10 not printed in the Gazette.]

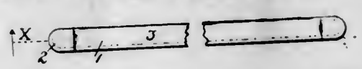
1,061,080. METHOD OF PRODUCING WATCHCASE-BOWS. HAROLD L. JEFFERY, Fort Thomas, Ky., assignor to The Wadsworth Watch Case Company, Dayton, Ky., a Corporation of Kentucky. Filed Nov. 10, 1911. Serial No. 659,597. (Cl. 29—148.)

The herein described method of forming a watch case bow which consists in making a filled wire, counter-sinking its ends, swaging said ends to entirely cover the filling, bending said wire, placing it into a die and exerting pressure upon the ends of said wire whereby the metal is



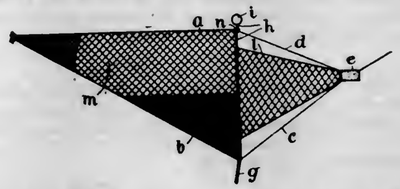
caused to flow into the shape of the cavity of the die and forming the bow, cross bars and nibs at a single operation, substantially as set forth and for the purposes specified.

1,061,081. CORSET-STIFFENER. LAWRENCE JOHN JOHNSON, Akron, Ohio, assignor to The Summit Rubber Company, Barberton, Ohio, a Corporation of Ohio. Filed Feb. 16, 1912. Serial No. 678,143. (Cl. 2—76.)



A stiffener for corsets and like wearing apparel embodying a resilient metallic strip having the ends thereof covered by reinforced portions of vulcanized hard rubber and a continuous uninterrupted covering of hard rubber completely covering said strip, and united with said reinforced portions to form a water proof covering for said strip, and provide thickened portions at the ends thereof.

1,061,082. TRAWLING-NET. CHRISTEN HEIBERG KAHRS, Christiania, Norway. Filed May 24, 1912. Serial No. 699,412. (Cl. 43—9.)



1. In trawling nets the combination with a closely woven bottom portion sloping down in the direction of draft, of a pole made of light material and having a heavy end and secured with its light end to the front part of the sloping bottom.

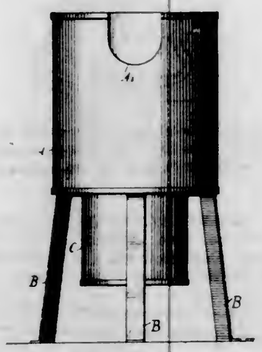
2. In trawling nets the combination with a closely woven bottom portion sloping in the direction of draft, of a pole made of light material and having a heavy end and secured with its light end to the front part of the sloping bottom, and a rope also secured to the front part of the sloping bottom, and a thimble in the upper part of the trawl for guiding said rope.

3. In trawling nets the combination with a closely woven bottom portion sloping in the direction of draft, of a pole made of light material and having a heavy end and secured with its light end to the front part of the sloping bottom, and a rope also secured to the front part of the sloping bottom, and a thimble in the upper part of the trawl for guiding said rope, and a float attached to the rope above the said thimble.

1,061,083. HEAD-STEAMING APPARATUS. AUGUST FERDINAND KNIESCHE, Baltimore, Md. Filed July 24, 1912. Serial No. 711,217. (Cl. 4—13.)

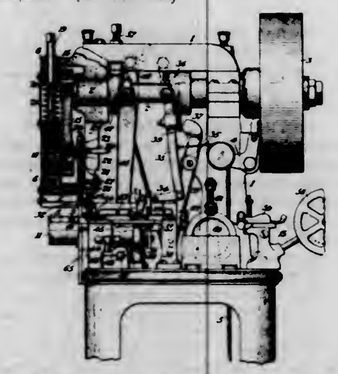
1. A head steaming apparatus comprising a steaming chamber open at the top and cut out at the front to receive the neck of a person, said steaming chamber being provided with an annular bottom, a steam generating vessel extending through said annular bottom and depending therefrom, said steam generating vessel being pro-

vided with an annular flange engaging said annular bottom for the purpose of supporting said stem generating vessel, and a deflector located within said steaming chamber and extending entirely over said steam generating vessel.



2. A head steaming apparatus comprising a steaming chamber open at the top and cut out at the front to receive the neck of a person, said steaming chamber being provided with an annular bottom, a steam generating vessel extending through said annular bottom and depending therefrom, said steam generating vessel being provided with an annular flange engaging said annular bottom for the purpose of supporting said steam generating vessel, and a deflector located within said steaming chamber and provided with legs resting upon said annular bottom for the purpose of spacing said deflector therefrom, said deflector being provided with depending brackets engaging the inner surface of said steam generating vessel in order to maintain said deflector in a determined position relatively to said steam generating vessel.

1,061,084. **MACHINE FOR ATTACHING BOX-CORNER STAYS.** ANNIE D. KNOWLTON and FREDERIC K. KNOWLTON, Rochester, N. Y., administrators of Mark D. Knowlton, deceased. Filed Apr. 27, 1906. Serial No. 314,106. (Cl. 93—56.)



1. In a machine for attaching box corner stays, the combination of a plunger, operating means yieldingly connected thereto, a stay cutter serving also as an auxiliary stay pressing means, yieldingly actuating means between the stay cutter and the plunger, a box support, and a combined tucker and presser device carried upon said box support and movable independently thereof.

2. In a machine for attaching box corner stays, the combination of a box support, a plunger, a stay cutter adjacent the inner end of said plunger and adapted to cooperate with the same as a stay-pressing means, an arm projecting from the plunger, a yielding connection between the arm and the stay-cutter for actuating the latter, a combined tucker and presser device carried by the box support and adapted to turn in the end of a stay and assist in sustaining a box to be stayed, said tucker being movable on said box support, and a removable gage plate to regulate the position of the box when turned-in stays are to be applied thereto, said plate being of a thickness equal to the length of the turned-in stay.

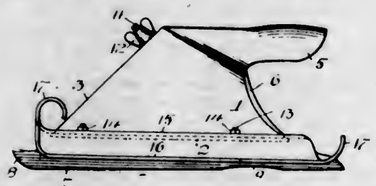
3. In a machine for attaching box-corner stays, the combination with stay affixing means including a yielding stay cutter adapted to serve as a folder for turned-in stays and as a presser for plain stays, and a sliding bed die also serving as a tucker for turned-in stays, of a removable gage plate to be fastened on the frame of the machine for regulating the position of a box when turned-in stays are to be applied, said gage plate being of a thickness equal to the length of the turn-in stay end.

4. A machine for attaching box-corner stays, comprising a yielding stay-cutting means adapted to serve also as an auxiliary stay-pressing means, and stay-affixing means including opposing pressing dies and a movable stay turn-in die having its operative portion of a substantially right-angled shape, said parts being adapted to apply "turned-in" and "plain" stays to the box-corners; and an outer box-gage detachable from an inner box gaging wall or part of the machine and when in operative position arranged relatively to said stay-cutting and stay-affixing means to limit the position of the box when attaching "turned-in" stays to the box-corners.

5. A machine for attaching box-corner stays, comprising a yielding stay-cutting means adapted to serve also as an auxiliary stay-pressing means, and stay-affixing means including opposing pressing dies and a movable stay turn-in die having its operative portion of a substantially right-angled shape, said parts being adapted to apply "turned-in" and "plain" stays to the box-corners; and an outer box-gage comprising a plate detachable from an inner box gaging wall or part of the machine and when in operative position arranged relatively to said stay-cutting and stay-affixing eans to limit the position of the box when attaching "turned-in" stays to the box-corners, and when removed enabling the box to be fed farther in so that "plain" stays may be applied to the box-corners.

[Claims 6 to 8 not printed in the Gazette.]

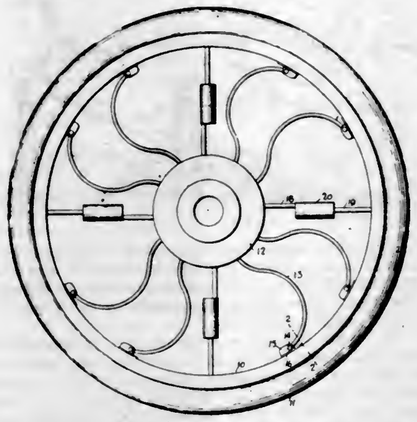
1,061,085. **COMBINED SCRAPER AND SMOOTHER.** FRANK J. KOLSON, McKeesport, Pa. Filed Feb. 17, 1913. Serial No. 748,976. (Cl. 72—138.)



A tool of the type described comprising a saddle having an inclined slotted front wall, a handle carried by the top of said saddle, a shaping member having a blade extending into said saddle, means connected to said blade and extending through the slot in the front wall of said saddle for adjustably holding said blade whereby said member can be correctly positioned relatively to the lower edges of said saddle, and longitudinal guide members connected to the lower edges of said saddle and having upturned ends.

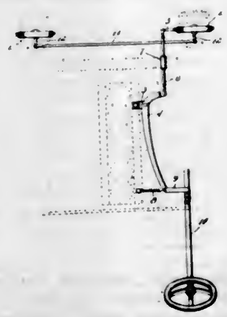
1,061,086. **RESILIENT WHEEL.** HORMIDAS LAFLEUR, Leominster, Mass. Filed Nov. 27, 1912. Serial No. 733,777. (Cl. 152—51.)

A resilient wheel comprising a hub, a rim, resilient spokes between the hub and rim, said spokes comprising a spoke section connected with the hub and a spoke section connected with the rim, one of said sections being provided with a tubular member which slidably receives the end of the other spoke section, additional resilient spokes alternating with the first mentioned spokes, said additional spokes being curved, and blocks



slidably engaging the rim, the said blocks being rabbeted at one end and formed with ears in the rabbeted portion, between which ears the outer ends of the mentioned additional spokes are pivoted, the said blocks, radially outside of the ears, having extensions projecting annularly.

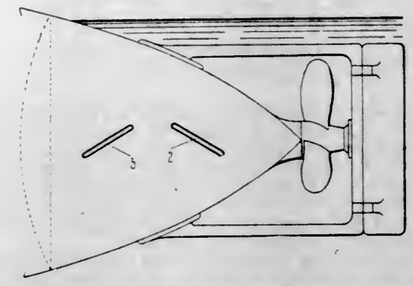
1,061,087. **AUTOMOBILE LIGHT-CONTROLLING DEVICE.** BENJAMIN D. LAKE and NATHANIEL G. MARKS, Springfield, Ky. Filed Aug. 28, 1912. Serial No. 717,553. (Cl. 240—62.)



1. In combination with the main frame of a machine or vehicle, a headlight mounted on such frame and free to turn about a vertical axis, a steering post, an elbow lever having arms of different lengths pivoted to said frame with the short arm projecting laterally and the long arm extending lengthwise of the frame, a flexible connection attached at one end to the long arm of the elbow lever and having its opposite end portion wound around the steering post, a contractile spring connecting the long arm of the elbow lever with the main frame, and connecting means between the short arm of the elbow lever and the headlight.

2. In combination a main frame of a machine or vehicle, headlight supports mounted at opposite sides of the main frame to turn about vertical axes, arms projecting from the headlight supports, a rod connecting such arms, an elbow lever pivoted to the main frame and having one arm projecting laterally and its other arm extending lengthwise of the frame, a second arm projecting from one of the headlight supports, a rod connecting such second arm with the lateral arm of the elbow lever, a steering post, a flexible connection between the steering post and the longitudinal arm of the elbow lever, and a contractile spring between the frame and longitudinal arm of the lever.

1,061,088. **RUDDERS FOR THE SUBMERSION AND THE NAVIGATION OF SUBMARINE VESSELS UNDER WATER.** CESARE LAURENTI, Spezia, Italy, assignor to Fiat-San Giorgio, Società Anonima, Spezia, Italy. Filed Oct. 14, 1910. Serial No. 587,042. (Cl. 114—16.)



1. A submergible vessel, comprising a hull and a depth controlling rudder having a fixed angle of inclination less than a right angle from a horizontal plane, said rudder being adapted to be drawn within or protruded out of said hull.

2. A submergible vessel, comprising a hull and a depth controlling rudder having a fixed angle of inclination less than a right angle from a horizontal plane, and means for moving said rudder within or protruding it from said hull.

3. A submergible vessel, comprising a hull and depth controlling rudders on each side thereof, said rudders having fixed angles of inclination less than a right angle from a horizontal plane, and being adapted to be simultaneously drawn within or protruded out of said hull.

4. A submergible vessel, comprising a hull and depth controlling rudders on each side thereof, said rudders having fixed angles of inclination less than a right angle from a horizontal plane, and means for simultaneously moving said rudders within or protruding them from said hull.

5. A submergible vessel, comprising a hull, and an emergence and a submergence rudder on each side thereof, said rudders having fixed angles of inclination less than a right angle from a horizontal plane, and being adapted to be drawn within or protruded out of said hull.

[Claims 6 to 17 not printed in the Gazette.]

1,061,089. **ELECTROLYTIC SOLUTION FOR CLEANING METALLIC ARTICLES.** ALFRED LEVY, Paris, France, assignor to Alexandre Waldberg, Paris, France. Filed Dec. 4, 1912. Serial No. 734,895. (Cl. 204—7.)

1. An electrolytic solution for cleaning metallic articles, comprising a prussiate of potash.

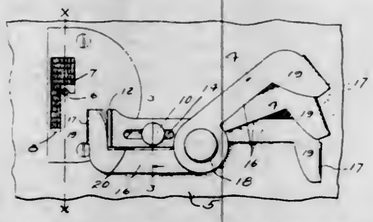
2. An electrolytic solution for cleaning metallic articles, comprising a prussiate of potash, with the addition of chalk, as and for the purpose set forth.

3. An electrolytic solution for cleaning metallic articles, comprising a prussiate of potash, caustic soda and chalk, as and for the purpose set forth.

1,061,090. **PLATE-GAGE FOR SEWING-MACHINES.** ISAAC LEVY, Oakland, Cal. Filed July 26, 1912. Serial No. 711,643. (Cl. 112—9.)

1. A gage of the character described comprising in combination, a base plate having an elongated slot, a plurality

of juxtaposed elements having guide faces, and means pivoting said elements to said plate with an axis of oscillation common to all of the said elements, the said guide faces of said elements being positioned at different distances from said axis, and at a right angle to the axis of said slot in said plate, and adapted to lie in planes parallel to each other, or to be swung out of such position, about the said axis of oscillation.



2. A gage of the character described comprising in combination, a base plate, a plurality of juxtaposed elements having guide faces, and means pivoting said elements with an axis of oscillation common to all of the said elements, said guide faces of said elements being positioned at different distances from the said axis and adapted to lie in planes parallel to each other, or to be swung out of such position, about the said axis of oscillation.

3. A gage of the character described comprising in combination, a base plate, a plurality of juxtaposed elements having guide faces, means pivoting said elements to said base plate with an axis of oscillation common to all of the said elements, said guide faces of said elements being positioned at different distances from the said axis and adapted to lie in planes parallel to each other, or to be swung out of such positions, about the said axis of oscillation, and means carried by said base plate for limiting oscillation of said elements in one direction, to position the said guide faces thereof in parallelism, substantially as and for the purpose set forth.

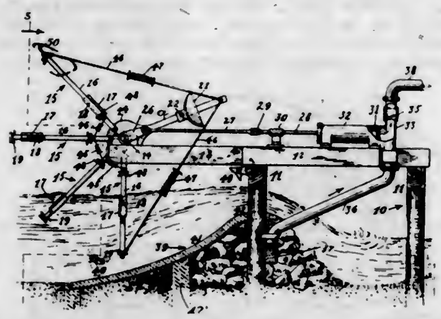
4. A gage of the character described comprising in combination, a base plate provided with a guide face and having an elongated slot with its axis disposed at right angles to the plane of said base, a plurality of juxtaposed elements having guide faces, and means pivoting said elements to said plate with an axis of oscillation common to all of the said elements, the said guide faces of each element being positioned at different distances from the said axis and adapted to lie in planes parallel to the plane of the said guide face of the base plate, or to be swung out of such position about the said axis of oscillation.

5. A gage of the character described comprising in combination, a base plate, a plurality of elements including a stem portion, an angular extension at one end thereof and a guide face carried by said extension, means pivoting said elements to said base plate, at their ends opposite from said guide face, and in juxtaposed relation with each other with the said stem portion to one side of said base plate and with said faces positioned in planes parallel to each other, said stems being adapted to be swung about said pivot out of said position, and an abutment carried by said base plate to engage with said stem portions of said elements to limit movement thereof in one direction, to position the said guide faces thereof in parallelism, substantially as and for the purposes set forth.

1,061,091. WAVE-MOTOR. JAMES C. LEWIS, Los Angeles, Cal. Filed May 13, 1909, Serial No. 495,798. Renewed Dec. 12, 1911. Serial No. 665,379. (Cl. 253—11.)

1. In a wave motor, the combination of a pivoted motor element suspended in the path of wave travel, and a curved wave deflector, the principal curve thereof approximating the arc of the radius of swing of said motor element.

2. In a wave motor, the combination of a pivoted buoyant motor element suspended in the path of wave travel, and a curved wave deflector, the principal curve thereof approximating the arc of the radius of swing of said motor element.



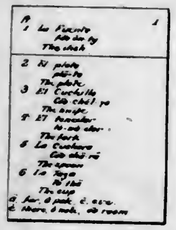
3. In a wave motor, the combination of pivoted arms, a buoyant motor element slidingly mounted on said arms in the path of wave travel, and a curved wave deflector, the principal curve thereof approximating the arc of the radius of swing of said arms.

4. In a wave motor, the combination of a plurality of motor arms rigidly secured to a pivoted shaft, said arms each having a buoyant motor element slidingly mounted thereon and adapted to be suspended in the path of wave travel, and a curved wave deflector, the principal curve thereof approximating the arc of the radius of swing of said arms.

5. In a wave motor, the combination of a pivoted motor element suspended in the path of wave travel, and a wave deflector comprising a surface curved to approximately the arc of the radius of swing of said motor element and terminating in a seaward surface substantially tangential thereto.

[Claims 6 and 7 not printed in the Gazette.]

1,061,092. CARDS FOR GAMES. ANDREW M. LOCKETT, New Orleans, La. Filed July 20, 1911. Serial No. 639,590. (Cl. 46—25.)

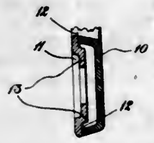


A set of playing cards designed to facilitate the study of a foreign language, comprising a plurality of cards having upon one face a master word or sentence, a series of words or sentences of a foreign language, the phonetic spelling of the correct pronunciation of the words being set thereunder and under such phonetic spelling the English meaning of said words, the set of cards being divided into groups forming books or suits, each of the cards of such groups having a common designating character and each card of each group having distinguishing characters.

1,061,093. COIN-CHUTE. GEORGE A. LONG, Hartford, Conn., assignor to The Gray Telephone Pay Station Company, Hartford, Conn., a Corporation of Connecticut. Filed July 22, 1912. Serial No. 710,783. (Cl. 194—1.)

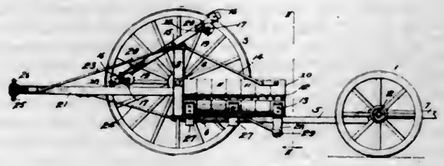
1. A coin chute comprising a channeled body member, and a cover member fitted against the sides of said channeled body member, having inwardly projecting fins extending across the cracks between said body and cover member substantially from end to end of the chute.

2. A coin chute comprising a channeled body member, and a cover member fitted against the sides of said channeled body member having inwardly projecting integral fins extending across the cracks between said body and cover members for approximately the complete length of the chute.



3. An irregular coin chute comprising a channeled body member, and a cover member fitted against the sides of said body member, having inwardly extending rigid fins projecting across the cracks between said body and cover members for approximately the entire length of the chute.

1,061,094. TREE-REMOVER. JAMES H. MACWILLIAM, New York, N. Y., assignor to Siebrecht & Son, New York, N. Y. Filed Jan. 27, 1912. Serial No. 673,845. (Cl. 55—120.)



1. In a tree remover, the combination of a pair of wheels with an axle, a board pivotally mounted upon said axle, a cradle carried by said board and adapted to engage the roots of the tree, and a bolster pivotally connected to said board and adapted to engage the trunk of the tree, and means whereby said board may be swung upon its pivot.

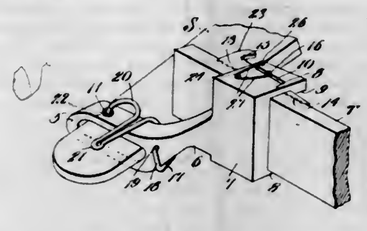
2. In a tree remover, the combination of a pair of wheels and an axle, a board pivotally mounted upon the axle, a cradle carried by said board upon one side of the axle and adapted to receive the roots of a tree, and a support under the free end of said cradle, substantially as described.

3. In a tree remover, the combination of a pair of wheels and an axle, a cradle supported by and extending in one direction from said axle, a lever supported by and extending in the opposite direction from said axle, and a bolster also carried by said axle but pivotally mounted with respect to the cradle and lever and having means for securing the trunk of the tree thereto, substantially as described.

4. In a tree mover, the combination of a pair of wheels and an axle, a board carried by and extending above and below the axle, a cradle attached to the board below the axle and extending substantially beyond the rim of the wheels and a bolster pivotally connected with the board above the axle and having means at each end for securing it to the trunk of a tree, substantially as described.

1,061,095. TRACE-HOLDER. THOMAS C. MARTIN, Nashville, Tenn. Filed Apr. 9, 1912. Serial No. 689,611. (Cl. 54—53.)

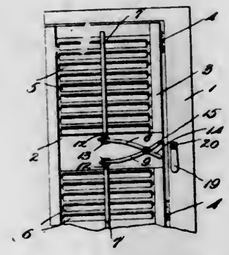
1. A trace holder embodying a jaw provided with a cockeye and provided with ears projecting from the upper and lower ends of the jaw having inner tapered lugs at their outer ends, a clamping jaw arranged between said ears and having tapered ribs at its upper and lower ends contacting with the said lugs, so that the clamping jaw is moved toward the aforementioned jaw when the clamping jaw is moved forwardly, the adjacent faces of the jaws being toothed and being adapted to receive a trace, the ears having elongated slots therein, and pins carried by the upper and lower ends of the clamping jaw and working in the said slots to hold the ribs in continual contact with the lugs.



2. A trace holder embodying a cockeye having an aperture through its sides adjacent its rear end, an arm projecting from the forward end of the cockeye, means carried by the arm for engaging a trace, and a latch for locking the cockeye to a swingle tree and comprising a wire bent to form a portion journaled through said arm, a downwardly projecting portion at one end of the journaled portion and having a finger bent from its outer end to contact with the bottom of the arm, an arm projecting from the other end of the journaled portion and having a double portion forming a finger piece adapted to seat on the upward side of the cockeye, and a finger bent from the free end of the latter arm projectable through the aperture in the sides of the cockeye to engage the swingle tree.

3. A trace holder embodying a jaw provided with a cockeye and provided with two ears, a clamping jaw slidable between the said ears and operably engaged thereto so that when the said jaw is moved forwardly, the same is moved toward the aforementioned jaw, the jaws being adapted to receive a trace, the ears having elongated slots therein, pins carried by the clamping jaw and working in the said slots to hold the clamping jaws in operative position, and a spring connecting one of the ears and the corresponding pin together for pressing the clamping jaw forwardly.

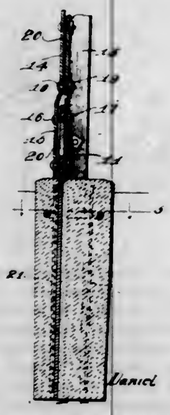
1,061,096. DEVICE FOR OPERATING BLINDS OF WINDOW-SHUTTERS. FREDERICK L. MCCULLOCH and WATSON E. DORCHESTER, Tampa, Fla. Filed Sept. 7, 1912. Serial No. 719,150. (Cl. 16—1.)



1. The combination with a shutter having independent sets of blinds, and a shutter support, of means for operating each set of said blinds comprising a lever pivotally mounted on the shutter; and a common actuating device for said levers mounted on said support and shiftable thereon to engage with either of said levers, substantially as described.

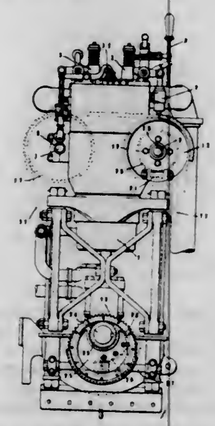
2. The combination with a shutter having independent sets of blinds, and a shutter support, of means for operating each set of said blinds comprising a lever pivotally mounted on the shutter; and a shiftable shaft journaled on said support and having one end thereof constructed to engage with either of said levers; and a handle for actuating said shaft, substantially as described.

1,061,097. FENCE-POST. DANIEL J. MCGILL, Davison, Mich. Filed Nov. 18, 1912. Serial No. 732,067. (Cl. 72—83.)



In a device of the class described, the combination with a plurality of strands, a fence post comprising a concrete base, an angle iron extending into said base and projecting thereabove, a second angle iron fixed upon the first angle iron, a cover plate extending along the side of said second angle iron and provided with an offset portion extending over one flange of the first angle iron, means securing said first angle iron to said second angle iron, means for holding said cover plate to said second angle iron, said plate adapted to engage said strands of wire for holding the same upon the second angle iron, said offset portion adapted to engage said strands for holding the same, whereby the strands may be placed so as to rest upon the top portion of the base of the post and to be clamped thereon by said offset portion.

1,061,098. VALVE-GEAR. WILLIAM R. MCKEEN, Jr., Omaha, Nebr., assignor, by mesne assignments, to McKeen Motor Car Company, Omaha, Nebr., a Corporation of New Jersey. Filed Jan. 17, 1907. Serial No. 352,727. (Cl. 123—96.)



1. In apparatus of the class described, in combination, an internal combustion engine, valve mechanism connected therewith, a shaft adapted to drive said valve mechanism, a pair of sprockets, one of which is mounted upon said shaft and the other of which is adjacent and driven from the crank shaft of the engine, a chain passing over both of said sprockets, and means adapted to adjust the distance between said sprockets and maintain said second sprocket in operative relation to the crank shaft.

2. In apparatus of the class described, in combination, an internal combustion engine, valve mechanism connected therewith, a shaft adapted to drive said valve mechanism, a sprocket mounted upon said shaft, a sprocket mounted adjacent and driven from the crank shaft of the engine, a chain passing over both of said sprockets, and means adapted to swing said second sprocket about said crank shaft and adjust its distance from said first sprocket and maintain the same in operative relation to said crank shaft.

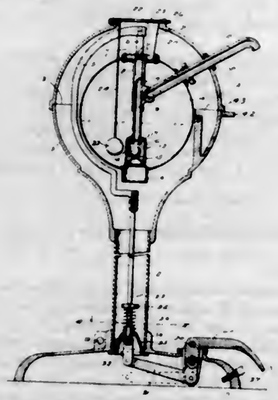
3. In apparatus of the class described, in combination, an internal combustion engine, valve mechanism connected therewith, a shaft adapted to drive said valve mechanism, a sprocket mounted upon said shaft, a sprocket mounted adjacent and driven from the crank shaft of the engine, a chain passing over both of said sprockets, an eccentric controlling the position of said second sprocket, a gear connected with said sprocket, a gear upon said crank shaft intermeshing with said first gear, and means adapted to swing said eccentric to vary the distance between said sprockets and maintain said gears in mesh.

4. In apparatus of the class described, in combination, an internal combustion engine, valve mechanism connected therewith, a shaft adapted to drive said valve mechanism, a sprocket mounted upon said shaft, a sprocket mounted adjacent and driven from the crank shaft of the engine, a chain passing over both of said sprockets, an eccentric controlling the position of said second sprocket, a gear upon said second sprocket, a gear upon the crank shaft co-acting therewith, a fixed member, and a worm and toothed sector or rack interposed between said eccentric and said fixed member adapted to swing said eccentric to vary the distance between said sprockets and maintain said gears in mesh.

5. In apparatus of the class described, in combination, an internal combustion engine, valve mechanism connected therewith, a shaft adapted to drive said valve mechanism, a sprocket mounted upon said shaft, a sprocket mounted adjacent and driven from the crank shaft of the engine, a chain passing over both of said sprockets, a gear connected with said second sprocket, an eccentric upon which said second sprocket and said gear are journaled, a gear upon the crank shaft of the engine co-acting with said first gear, and means adapted to swing said eccentric to vary the distance between said sprockets and maintain said gears in mesh.

[Claims 6 to 26 not printed in the Gazette.]

1,061,099. SOAP-DISPENSER. JACOB G. MILLER, Lancaster, Pa. Filed Mar. 6, 1911. Serial No. 612,486. (Cl. 221—94.)



1. In a liquid soap dispenser, the combination, with a pedestal and a casing supported thereon, of a reservoir in said casing, a discharge spout leading from said reservoir, a foot lever mounted on the base of the pedestal, and means connected to said lever and extending up the pedestal for discharging a predetermined quantity of the contents of the reservoir through the spout when said foot lever is depressed.

2. In a liquid soap dispenser, the combination, with a pedestal and a casing supported thereon, of a reservoir in said casing, a discharge spout leading from said reservoir, a foot lever mounted on the base of the pedestal, and means connected to said lever and housed in the pedestal for discharging a predetermined quantity of the contents of the reservoir through the spout when said foot lever is depressed.

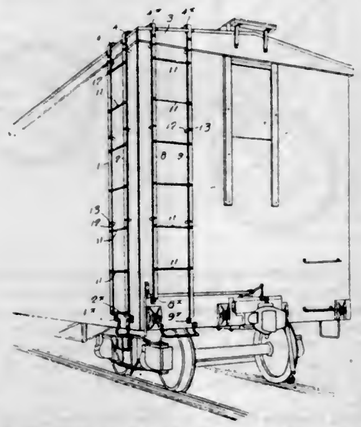
3. In a liquid soap dispenser, the combination, with a pedestal comprising a base plate and restricted column, of a casing supported on said column, a reservoir in said casing, a discharge spout leading from said reservoir, a foot lever mounted on the base of the pedestal, means connected to said lever and extending up the pedestal for discharging a predetermined quantity of the contents of the reservoir through the spout when said foot lever is depressed, and means for adjustably securing the base plate to the column whereby the former may be turned upon the latter to bring the foot lever into various positions relative to the spout for the purpose specified.

4. In a liquid soap dispenser, the combination, with a pedestal and a casing supported thereon, of a reservoir in said casing, a discharge spout leading from said reservoir, an intermediately pivoted foot lever mounted on the base of the pedestal, a second intermediately pivoted lever also mounted on said base and pivotally connected to the foot lever, and means connected to the second lever and extending up the pedestal for discharging a predetermined quantity of the contents of the reservoir through the spout when said foot lever is depressed.

5. In a liquid soap dispenser, the combination, with a casing, of a reservoir therein spaced away from the casing, said reservoir and casing having registering openings, a funnel housed in the casing and extending from the opening in the reservoir to the opening in said casing, and a cover for said last mentioned opening.

[Claims 6 to 12 not printed in the Gazette.]

1,061,100. FREIGHT-CAR LADDER. WILLIAM A. MITCHELL, Sedalia, Mo. Filed Aug. 22, 1912. Serial No. 716,421. (Cl. 105—195.)



1. The combination with a freight car body, of a side ladder and an end ladder therefor, the stiles of said ladders being bent over the roof of the car, means for securing the bent over portions of the side ladder to the bent over portions of the end ladder, and a brakeman's platform secured to the bent over portions of certain of said stiles.

2. The combination with a freight car body, of a side ladder and an end ladder therefor, the stiles of said ladders being bent over the roof of the car, means for securing the bent over portions of the side ladder to the bent over portions of the end ladder, and a brakeman's platform extending above the roof of the car, one end of said brakeman's platform being contiguous to the running board of the car, and the other end being secured to the bent over portions of the stiles of one of said ladders.

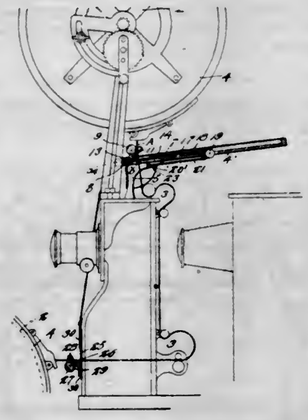
3. The combination with a freight car body, of a side ladder and an end ladder therefor, the stiles of said ladders being bent over the roof of the car, means for securing the bent over portions of the side ladder to the bent over portions of the end ladder, a brakeman's platform extending above the roof of the car, one end of said brakeman's platform being contiguous to the running board of the car, and the other end being secured to the bent over portions of the stiles of one of said ladders, and roof grab irons for each of said ladders, said roof grab irons being secured to certain of said stiles.

4. The combination with a freight car body, of a side ladder and an end ladder therefor, the stiles of said ladders being bent over the roof of the car, means for securing the bent over portions of the side ladder to the bent over portions of the end ladder, a brakeman's platform extending above the roof of the car, one end of said brakeman's platform being contiguous to the running board of the car, and the other end being secured to the bent over portions of the stiles of one of said ladders, and grab irons for both ladders, the grab iron of one ladder being secured to the stiles of the other ladder.

5. The combination with a freight car body having a running board, of an end ladder and a side ladder secured to said car body, the stiles of each of said ladders being bent over the roof of the car, means for securing the bent over portion of the stiles of one ladder to the bent over portion of the stiles of the other, a brakeman's platform disposed above the roof of the car, said platform comprising boards disposed beneath the bent over portion of the stiles of said side ladder, and means for securing the platform to said bent over portions.

[Claim 6 not printed in the Gazette.]

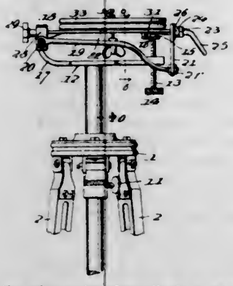
1,061,101. SAFETY ATTACHMENT FOR MOVING-PICTURE MACHINES. CHARLES E. MORTON, Edwardsville, Ill. Filed Mar. 26, 1910, Serial No. 551,725. Renewed Nov. 5, 1912. Serial No. 729,658. (Cl. 88—17.)



In a safety attachment for moving picture machines, a moving picture machine including the film magazine and winding reels, a support pivotally mounted to the machine beneath the magazine reel and provided with a film guiding slot therein, a second support mounted on the front of the machine below the plane of the first sup-

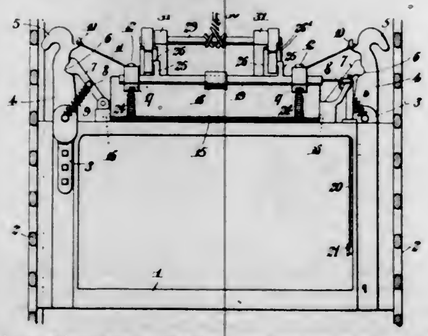
port and in line with the winding reel, the second support having a film guiding slot therein, a movable knife on each support, springs operatively connected with the knives and tending to move them across the film guide slots, a hook located beneath the first support and located in rear of the film as the latter leaves the guiding slot in said first support, a fuse disposed beneath the first support and having one of its ends fitted to the said hook, and a flexible element having one of its ends secured to the opposite end of the fuse, the said element being movably extended over the first support and connected with the knife thereon and then extended downwardly over the first support and connected with the knife of the second support whereby both of the knives are held against the tension of the said springs.

1,061,102. TRIPOD. JOSEPH C. MORTON and ALBERT S. RUPARD, Eldorado Springs, Mo. Filed May 6, 1912. Serial No. 695,549. (Cl. 88—61.)



In a device of the character described, a camera attaching mechanism mounted upon supporting legs, said mechanism comprising a fixed and a movable member, the latter being capable of adjustment, parallel rods carried by the movable member having their forward ends pivoted to the stationary member, a bracket secured to the rear ends of said rods and projecting upwardly therefrom, a camera attaching plate forming a part of the movable member, a projecting threaded bolt forming a part of said plate and passing loosely through the bracket, a clamping lever mounted upon said bolt for holding the movable member rigidly to the bracket, an adjusting screw mounted in the fixed member, the upper end of which is in detachable contact with the plate of the movable member, and a lever carried by said plate and adapted for interlocking engagement with an annular groove formed in the adjusting screw for the purpose described.

1,061,103. SAFETY-STOP FOR ELEVATORS. JOSEPH MOSKAL, Chicago, Ill. Filed June 4, 1912. Serial No. 701,550. (Cl. 187—82.)



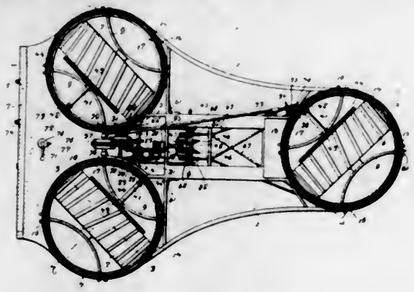
1. A safety stop mechanism for elevator cars comprising spring actuated latches, retaining devices for holding the same retracted, detents for maintaining said retaining devices in latch retracting position, retaining members, means for connecting said detents with and disengaging the same from said retaining members, means for retracting said detents when released, means for operating the first-named means for manually throwing the safety catches into operation, and means for permitting movement of said retaining members for retracting the detents for automatic projection of the latches upon derangement of the hoisting mechanism.

2. A safety stop mechanism for elevator cars comprising spring actuated catches, means for automatically projecting the same, retaining members connected with the catches, pivoted detents for normally holding said retaining members in catch retracting position, retaining elements, a movable member adjustable into and out of engagement with said retaining elements to hold or release the detents, and means for manually or automatically adjusting said movable member.

3. A safety stop mechanism for elevator cars comprising spring actuated latches, retaining members connected therewith, detents for normally holding said retaining members in latch retracting position, springs for retracting said detents, retaining elements, a sliding rod engaging said detents and provided with locking members movable into and out of engagement with the retaining elements to hold the detents in normal position or release them for retraction, and means for operating said sliding rod.

4. A safety stop mechanism for elevator cars comprising spring actuated latches, retaining elements connected therewith, detents for normally holding said retaining elements in catch retracting position, springs for retracting said detents, a rod slidably engaging said detents, supports, a hoisting cable, retaining elements normally held in engagement with said supports by the hoisting cable and adapted to be released therefrom when said cable breaks, locking devices on the rod adapted to engage said retaining members to hold the detents in normal position and releasable therefrom to permit of their retraction and means for sliding said rod.

1,061,104. TRACTION-ENGINE. FRED H. NETT and FRANK W. NETT, Rialto, Cal. Filed Sept. 20, 1911. Serial No. 650,328. (Cl. 21—114.)

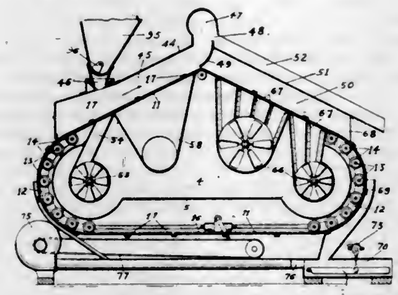


1. In a traction engine, a frame having circular tracks, turn tables supported for rotation with reference to said tracks, transporting wheels associated with the turn tables, gear rings supported for rotation upon the circular tracks, a driven shaft, means for transmitting motion from the shaft to the gear rings, and means for transmitting motion from the gear rings to the transporting wheels.

2. In a traction engine, a frame structure having circular tracks, turn tables associated therewith, traction wheels carried by the turn tables, a driven shaft, and means for transmitting motion from the driven shaft to the traction wheels including gear members supported for rotation upon the turn tables concentrically with the latter, shafts supported for rotation upon the turn tables and having spur wheel meshing with said gear members, and transmission means connecting said shafts with the traction wheels.

3. In a traction engine, a frame structure including a circular track at the front end thereof and two circular tracks at the rear end thereof, turn tables supported for rotation with reference to said tracks, traction wheels associated with the turn tables, gear rings supported for rotation upon the turn tables, means for transmitting motion from the gear rings to the traction wheels, a longitudinal shaft, a stub shaft supported for rotation upon the circular track at the front end of the frame and having a pinion meshing with the gear ring on said track, bevel gearing connecting the stub shaft with the longitudinal shaft, a motor driven shaft, a transverse shaft, means for transmitting motion from the motor driven shaft to the transverse shaft and for reversing said motion, a differential gear having stub shafts provided with spur wheels engaging the gear rings supported upon the rear circular tracks, means including a second differential gear for transmitting motion from the transverse shaft to the differential gear having the stub shafts, and bevel gearing transmitting motion from the second differential gear to the longitudinal shaft.

1,061,105. CONCENTRATOR. HOLGER J. NIELSEN and CHARLES J. BORGLIN, San Francisco, and LUDVIG C. A. SOEBORG, Alameda, Cal., assignors to Bear Milling and Mining Company, San Francisco, Cal., a Corporation of California. Filed Nov. 25, 1911. Serial No. 662,296. (Cl. 83—54.)



1. An ore condenser comprising in combination, a screen movable longitudinally crosswise of a vertical plane, means forming a plurality of chambers, provided with outlets, above said screen and disposed successively with respect to the direction of movement thereof, the first of said chambers being provided with ingress means for the material to be treated, mechanism delivering air currents, separated one from another, upwardly through said screen and into said chambers, means disposed intermediate two of the said delivered air currents for receiving material passing through said screen, and means disposed in succeeding relation to said chambers with respect to the direction of travel of said screen for receiving the material remaining on the latter after having passed through the said chambers.

2. An ore condenser comprising in combination, a screen movable longitudinally crosswise of a vertical plane, a device for reciprocating said screen laterally, means forming a plurality of chambers, provided with outlets, above said screen and disposed successively with respect to the direction of movement thereof, the first of said chambers being provided with ingress means for the material to be treated, mechanism delivering air currents, separated one from another, upwardly through said screen and into said chambers, means disposed intermediate two of the said delivered air currents for receiving material passing through said screen, and means disposed in succeeding relation to said chambers with respect to the direction of travel of said screen for receiving the material remaining on the latter after having passed through said chambers.

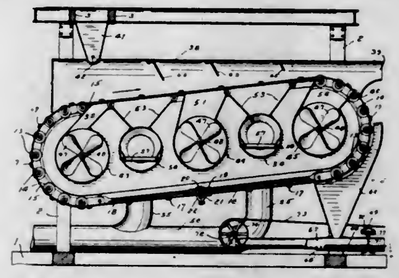
3. An ore condenser comprising in combination, a screen movable longitudinally crosswise of a vertical plane, means forming a plurality of chambers, provided with outlets, above said screen and disposed successively with respect to the direction of movement thereof, the first of said chambers being provided with ingress means for the material to be treated, air current generating means delivering to said chambers, upwardly through said screen and separated one from another, a means for agitating the air current in the said first chamber adjacent the outlet thereof, means disposed intermediate two of the said delivered air currents for receiving material passing through the screen, and means disposed in succeeding relation to said chambers with respect to the direction of travel of said screen for receiving the material remaining on the latter after having passed through said chambers.

4. In an ore condenser the combination, of a screen movable longitudinally crosswise of a vertical plane and having an ascending and descending path of movement, means forming two chambers one above the said ascending portion and one above the said descending portion of said screen, said chambers being provided with outlets adjacent their ends disposed farthermost with respect to the direction of movement of said screen the first of said chambers being provided with ingress means for the material to be treated, mechanism delivering air currents, separated one from another, upwardly through said screen and into said chambers and in advance of the openings therein, means disposed intermediate two of the said delivered air currents for conveying material passing through said screen, and means disposed in succeeding relation to said chambers with respect to the direction of travel of said screen for receiving the material remaining on the latter after having passed through said chambers.

5. In an ore condenser the combination, of a screen moving longitudinally crosswise of a vertical plane and having an ascending and descending path of movement, means forming chambers, provided with outlets, above the ascending and descending portions of said screen and disposed successively with respect to the direction of movement thereof, the first of said chambers being provided with ingress means for the material to be treated, mechanism delivering air currents, separated one from another, upwardly through said screen and into said chambers, means disposed in succeeding relation to one of the said delivered air currents and open to the chamber above the ascending portion of the screen for conveying material passing through the latter and means disposed in succeeding relation to the chamber over the ascending portion of said screen for receiving the material remaining upon the latter after having passed through said chamber.

[Claim 6 not printed in the Gazette.]

1,061,106. CONCENTRATOR. HOLGER J. NIELSEN and CHARLES J. BORGLIN, San Francisco, and LUDVIG C. A. SOEBORG, Alameda, Cal. Filed May 11, 1912. Serial No. 696,744. (Cl. 83—54.)



1. An ore concentrator comprising in combination, a movable screen belt adapted to receive the material to be treated upon its upper plane surface, means forming an agitating chamber above said belt and having a discharge opening adjacent the discharge end of said belt, instru-

mentalities for delivering a plurality of air currents upwardly through said screen belt toward said discharge opening of said agitating chamber, and means disposed below said belt intermediate said air current delivering instrumentalities for receiving material passing through said belt.

2. An ore concentrator comprising in combination, a movable screen belt adapted to receive the material to be treated upon its upper plane surface and inclined with its discharge end uppermost, means forming an agitating chamber above said belt and having a discharge opening adjacent the discharge end of said belt, instrumentalities for delivering a plurality of air currents upwardly through said screen belt toward said discharge opening of said agitating chamber, and means disposed below said belt intermediate said air current delivering instrumentalities for receiving material passing through said belt.

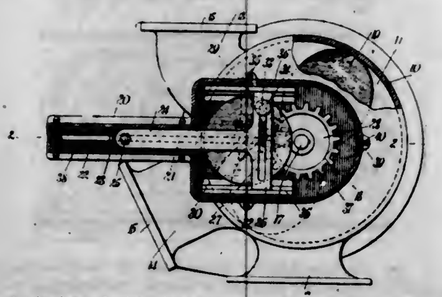
3. An ore concentrator comprising in combination, a movable screen belt adapted to receive the material to be treated upon its upper plane surface, means forming an agitating chamber above said belt constricted toward the discharge end of said belt and having a discharge in proximity thereto, instrumentalities for delivering a plurality of air currents upwardly through said screen belt toward said discharge opening of said agitating chamber, and means disposed below said belt intermediate said air current delivering instrumentalities for receiving material passing through said belt.

4. An ore concentrator comprising in combination, a movable screen belt adapted to receive the material to be treated upon its upper frame surface, means forming an agitating chamber above said belt and having a discharge opening adjacent the discharge end of said belt, conduits for delivering air currents upwardly through said screen belt toward said discharge opening of said agitating chamber and with their axes more nearly approaching a perpendicular to said belt as they are disposed near the discharge end of said chamber, and means disposed below said belt intermediate said conduits for receiving material passing through said belt.

5. An ore concentrator comprising in combination, a movable screen belt adapted to receive the material to be treated upon its upper plane surface, means forming an agitating chamber above said belt and having a discharge opening adjacent the discharge end of said belt, instrumentalities for delivering a plurality of air currents upwardly through said screen belt toward said discharge opening of said agitating chamber, baffle plates disposed within said agitating chamber in relative proximity to the said air currents delivered by said instrumentalities, to agitate the material floated thereby, and means disposed below said belt intermediate said air current delivering instrumentality for receiving material passing through said belt.

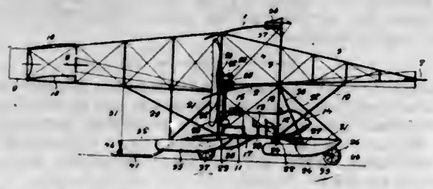
[Claim 6 not printed in the Gazette.]

1,061,107. PUMP AND PRIME MOVER. CARL F. NORDMARK, Lynn, Mass. Filed Dec. 19, 1911. Serial No. 666,644. (Cl. 103—44.)



A device of the class described comprising a casing having an inlet and an outlet, a main shaft extending through said casing, a rotor within said casing, on said shaft, an extension casing connected with said first casing an abutment slidably mounted in said extension casing and movable into and out of said first casing, said extension casing being located between said inlet and said outlet, a gear mounted upon said shaft, at the outside of said casing, a pinion in mesh with said gear, a crank disk rigid with said pinion and having a wrist pin, and a connecting rod located at the outside of said casing and operatively connected with said abutment, said connecting rod having a slotted head, said crank disk having a wrist pin received in said slotted head.

1,061,108. FLYING-MACHINE. AXEL R. NORDSTROM, West Lynn, Mass., assignor of one-fourth to Gustaf F. Hellstrom, Sr., and Gustaf F. Hellstrom, Jr., West Lynn, Mass., and three-sixteenths to Martin Bowman, Rockport, Mass., and one-sixteenth to Carin E. Norwall, West Lynn, Mass. Filed Dec. 27, 1911. Serial No. 668,046. (Cl. 244—14.)

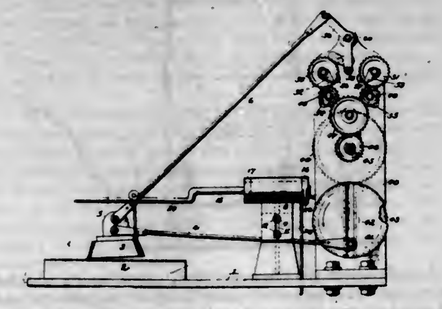


1. A flying machine including a platform, a housing carried by said platform and forming a car body, a motor mounted upon the platform, an aviator's seat mounted upon the platform in front of the motor, a main frame rising from said platform, superposed supporting surfaces carried by said frame and arranged above the platform, head and tail frames extending from the main frame on a line between said supporting surfaces, rudder planes supported by said head and tail frame extensions, a driving propeller arranged to operate in a plane substantially between said supporting surfaces and at the rear of the main frame, gearing between said propeller and the motor extending through the lower supporting surface, extensions at the front and rear of the platform having reinforcing connections with the main frame and head and tail frames, and a suitable launching and landing gear supported by said latter-named extensions.

2. In a flying machine, the combination of a car or platform, a main frame rising therefrom, superposed supporting surfaces carried by said main frame above said car or platform, head and tail extensions from the main frame on a line between said supporting surfaces, rudder planes carried by said head and tail extensions, a motor mounted upon the platform, one or more driving propellers operated by gearing from the motor, said propellers being arranged to revolve vertically on horizontal longitudinal axes on a line between the supporting surfaces, extensions from the front and rear of the platform having reinforcing connections with the main frame and head and tail frames, transverse rods forming a part of the main frame and extending laterally beyond the opposite sides of the car to form supporting outriggers, cushioned launching and landing wheels supported by said front and rear extensions from the car or platform, and front and rear pairs of hydroplanes supported by the outriggers.

3. A flying machine including a platform, a car body carried thereby, a main frame rising from said platform and car body, front and rear extensions from the main frame in line with the platform, outriggers projecting laterally from said extensions, hydroplanes supported by said outriggers, superposed supporting planes upon the main frame above the platform and car, head and tail frames projecting from the main frame on a line between the supporting planes, braces reinforcing the same from the car or platform, rudder planes supported by said head and tail frames, a motor mounted upon the platform, and suitable propelling mechanism driven from said motor.

1,061,109. IRONING-MACHINE. EUGENE E. NORTON and ALBERT U. LANGENBECKER, Bridgeport, Conn., assignors to The King Machine Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 20, 1912. Serial No. 692,002. (Cl. 68—9.)



1. In an ironing machine, the combination of an iron whose smoothing face has varying widths, power driven means for automatically moving said iron forward and backward along the surface to be ironed, and means connected to one end of the iron for holding the iron in a tilted position during its forward and backward movements whereby the smoothing face of the iron has a limited contact with the surface to be ironed.

2. In an ironing machine, the combination of an iron having its smoothing face pointed at the ends and increasing in width toward the center, power driven means pivotally connected to the iron for automatically moving said iron forward and backward along the surface to be smoothed, and means controlled by the operator and connected to one end of said iron for lifting said end and retaining it elevated during said forward and backward movements whereby an ironing contact of a limited degree is afforded.

3. In an ironing machine, the combination of an iron whose smoothing face gradually increases in width from the ends to the middle, power driven means for automatically and continuously moving said iron forward and backward along the surface to be smoothed, and means controlled by the operator for holding one end of said iron elevated to a predetermined degree during said forward and backward movements whereby the other end is limited in its contact with said surface.

4. An ironing machine comprising an iron, means for reciprocating the same, a roller carried by the iron, a rod having an offset portion that is engaged by the roller to guide the iron in its reciprocatory movements, and means for rotating the rod to tilt the iron.

5. An ironing machine comprising an iron, an iron guide, means carried by the iron for engaging the guide, means for operating the iron while engaged with the guide, and means for actuating the guide to retain the iron tilted while being operated.

[Claims 6 to 10 not printed in the Gazette.]

1,061,110. PROPELLING MECHANISM. CHRISTIAN OLIVER and OLAF G. JACOBSON, Baltimore, Md. Filed Apr. 13, 1912. Serial No. 690,612. (Cl. 115—4.)



1. In a device of the class described, a hull, a casing mounted in the hull, valved tubes leading into the casing and exposed through the hull, an air tank connected to the casing, and a propelling engine connected to the receiving tank and adapted to be operated by the compressed air therefrom.

2. In a device of the class described, a hull, casing mounted in the hull, valved tubes projecting into the casing and exposed through the hull, an air tank, a valved tube connecting the casing to the receiving tank, a water outlet for the tank, a steam engine mounted in the hull and adapted to be operated by the compressed air from the tank, a valve connection between the receiving tank and the engine, and a propelling shaft operated by the engine.

1,061,111. MANUFACTURE OF ELASTIC MATERIALS. ZACHARIAS OLSSON, River View, Hampton Hill, England, assignor to Gummi (U. S. A.) Limited, London, England. Filed Dec. 10, 1912. Serial No. 735,952. (Cl. 106—23.)

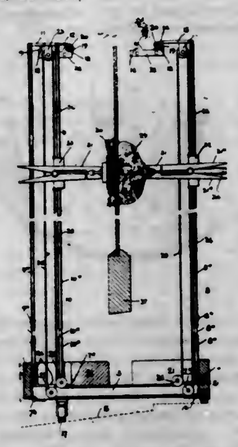
1. A process for the manufacture of an elastic material consisting in mixing together gelatinous and hygroscopic substances in liquid form and in adding to such liquid mixture mineral oil and a carbohydrate adapted to take up the water in the mixture and to permit the mineral oil to permeate the mixture and in afterward adding a bichromate adapted to harden the mixture.

2. A process for the manufacture of an elastic material consisting in mixing together gelatinous and hygroscopic substances in liquid form, adding a quantity of fibrous strengthening material thereto and incorporating in such liquid mixture mineral oil and a carbohydrate mixed with such oil and adapted to take up the water in the mixture and to permit the mineral oil to permeate the mixture and in afterward adding a bichromate adapted to harden the mixture.

3. An elastic material composed of a mixture of gelatinous and hygroscopic substances, mineral oil and a carbohydrate adapted to take up the water in the mixture and to permit the mineral oil to permeate the mixture, to which is added a bichromate adapted to harden the mixture.

4. An elastic material composed of a mixture of gelatinous and hygroscopic substances, fibrous strengthening material, opaque coloring matter, mineral oil and a carbohydrate adapted to take up the water in the mixture and to permit the mineral oil to permeate the mixture, to which is added a bichromate adapted to harden the mixture under the control of the coloring matter.

1,061,112. WINDOW-CLEANER. HENRIETTA KATE PARKE, Chicago, Ill. Filed May 31, 1912. Serial No. 700,670. (Cl. 15—58.)



1. In a window cleaner, two upper pulleys spaced apart, two sets of lower pulleys, two cleaner members spaced apart, a cord secured to one of the cleaner members, the cord being disposed upward and over one of the upper pulley members, the cord then extending down and under one pulley in each set of the lower pulleys, the cord then ex-

tending up and being secured to the other cleaner member, a second cord secured to the last-mentioned cleaner member, and extending up and over the other upper pulley, the second cord then extending down and under the other lower pulleys, one in each set and up to a point where it is secured to the first-mentioned cleaner member.

2. In a window cleaner, a base, two standards hinged relatively to the base, two upper pulleys, one secured to each standard, two sets of lower pulleys, one set secured relatively to the bottom of each standard, guides disposed for sliding on the standards, cleaner members carried by the guides, a cord secured to one of the cleaner members, the cord being disposed upward and over one of the upper pulley members, the cord then extending down and under one pulley in each set of the lower pulleys, the cord then extending up and being secured to the other cleaner member, a second cord secured to the last-mentioned cleaner member, and extending up and over the other upper pulley, the second cord then extending down and under the other lower pulleys, one in each set and up to a point where it is secured to the first-mentioned cleaner member.

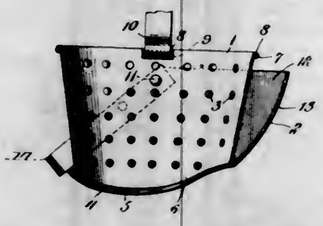
3. In a window cleaner, a base, two standards hinged at one set of ends relatively to the base, and at points spaced apart, guides for traveling on the standards, cleaners carried by the guides, members secured to move with the standards extending in the direction of each other and adapted to engage the opposite sides of a window sash, and means extending from one standard to the other at their hinged ends for operating the guides simultaneously.

4. In a window cleaner, a base, standards hinged relatively to the base, pulleys secured to the standards, guides for traveling on the standards, cleaner members carried by the guides, and flexible means disposed around the pulleys, the flexible means being secured to the guides for operating the device.

5. In a window cleaner, a base, standards hinged relatively to the base at one set of ends, pulleys spaced from the hinges and secured to the standards, additional pulleys adjacent the hinges, guides for traveling on the standards, cleaners carried by the guides, and flexible means disposed over the first-mentioned pulleys, the flexible means being secured to the guides and extending under the second-mentioned pulleys and from one standard to the other.

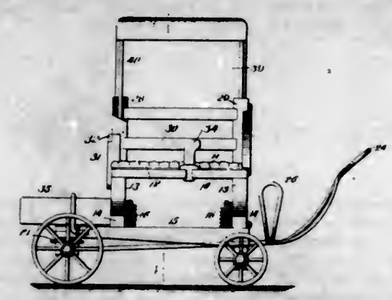
[Claims 6 to 9 not printed in the Gazette.]

1,061,113. COLT OR CALF WEANER. CHARLES H. PATTERSON, Trinidad, Colo. Filed Sept. 21, 1912. Serial No. 721,590. (Cl. 119—131.)



An animal weaner comprising a foraminous muzzle-receiving member, tubular in form and having a lip extending forward from the rear portion of its lower end, and an opening between said lip and its forward portion; and a guard member having side walls pivoted to and receiving the muzzle-receiving member and also having a transverse guard portion constructed and arranged to bring up against the lip of the muzzle receiving member when the animal raises its head to nurse, the portion of the guard member in rear of the center of movement thereof being heavier than its portion in front of said center, and the guard member being arranged to depend below the muzzle-receiving member when the animal puts its head down to grase, substantially as and for the purpose set forth.

1,061,114. GARDENER'S WHEELED CHAIR. IDA MARY PETERS, Pleasant Valley, N. Y. Filed Oct. 17, 1912. Serial No. 726,273. (Cl. 21—65.)

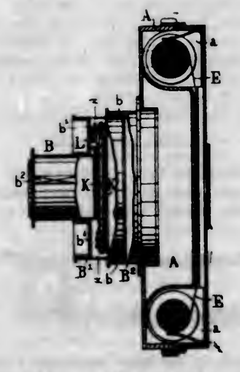


1. A device of the class described, comprising a wheeled base, removable receptacles positioned on the forward end of said base and having a handle, means positioned on said base and coacting with said handle, whereby said receptacles are firmly held on said base, a seat having rocking bearings on said base and rocking in a plane normal to the longitudinal axis of said base, and means associated with said wheel base for guiding the same when propelled.

2. A device of the class described, comprising a wheeled base having removable receptacles and a rocking seat, said seat rocking in a plane normal to the longitudinal axis of the base, resilient means connecting said seat and base to maintain said seat normally in a horizontal position, a removable standard positioned at the forward end of said seat and near the middle of same and adapted to project between the legs of a person occupying said seat, and means associated with said base for guiding the same when said base is propelled.

3. A device of the class described, comprising a wheeled base having a pair of forward pivotally-attached wheels and a pair of fixed wheels at its rear end, removable receptacles on said base and a rocking seat above said base, a handle positioned in back of said base having an extension extending axially with same and attached to the forward pair of said wheels, an additional handle on said extension intermediate said base and the first handle, and means on said base associated with said extension of said handle, whereby said forward wheels can be prevented from pivoting.

1,061,115. PHOTOGRAPHIC CAMERA. ARTHUR GRAY PICKARD, Altrincham, England. Filed Sept. 13, 1912. Serial No. 720,242. (Cl. 95—39.)



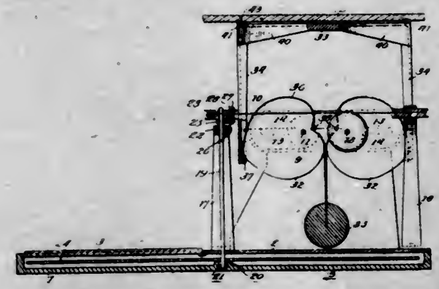
1. In a photographic hand camera the combination with a narrow camera body, a series of concentric telescopic tubes fitted thereto, and a lens carried by the center tube of an oscillating shutter formed in two separate parts the oscillating leaves being carried upon the lens tube and the controlling slide and connecting pin carried on the back of the second concentric ring substantially as described.

2. In a photographic hand camera the combination with a narrow camera body, a series of concentric telescopic tubes fitted thereto, and a lens carried by the center tube of the shutter leaves K and operating and releasing mechanism mounted on the lens tube and a key on the tube to prevent rotation, a controlling slide L on the second tube to engage the operating lever M of the lens tube and a key-way-slot to receive the key K substantially as described.

3. In a photographic hand camera the combination with a narrow camera body, a series of concentric telescopic tubes fitted thereto, and a lens carried by the center tube of oscillating shutter leaves anad operating levers mounted on the lens tube, a movable actuating slide or mechanism on a concentric ring through which the lens tube slides to engage the operating levers and means to prevent rotation of the lens tube relative to the concentric ring substantially as described.

4. In a photographic hand camera the combination with a narrow camera body, a series of concentric telescopic tubes fitted thereto, and a lens carried by the center tube of oscillating shutter leaves K, a lever M provided with a pin *m*, and two levers N N' one at either side thereof to operate and release the shutter leaves and a lever C' to which the oscillating leaves K are pivoted on the lens tube and facing the lens, and a sliding controlling piece L fitted to the flange *b'* of the ring B' with slot *l* to engage the pin *n* when the lens is extended and a pin *l'* projecting to the exterior by which the slide L is moved to operate the lever L and by it the shutter substantially as described.

1,061,116. ECCENTRIC-BALANCE COMPUTING-SCALE. EDWARD PIERSON, Rollwitz, Nebr. Filed Nov. 26, 1912. Serial No. 733,614. (Cl. 73—104.)



1. In combination, a hollow base having an opening in its top, a trackway at each side of the base, each trackway consisting of an inclosing casing for containing a lubricant and having a horizontal slot at its inner side, a pair of parallel shafts, the ends of the shafts extending through the slots of the adjacent trackways, a roller on each shaft in the trackway, a pair of heart-shaped members secured to each shaft, the said members being near the ends of the shafts and the adjacent members of the two shafts being in the same plane and arranged with their apices outward, a platform having a depending arm adjacent to each of the said members, a weight between and below the shafts, a flexible connection between the lower end of each arm and the weight, each connection passing over the periphery of the adjacent member to the reëntrant portion thereof and being secured to the said member at the said reëntrant portion, the said base being hollow and having an opening in its top, a shaft journaled vertically in the base, a pulley on the upper end of the shaft, means for adjustably securing the pulley to the shaft, a wheel journaled at the opposite side of the transverse shafts from the vertical shaft, an endless belt supported by the said wheel and the wheel of the vertical shaft, and a pulley on each shaft at the belt, said pulleys engaging opposite runs of the belt.

2. In combination, a hollow base having an opening in its top, a trackway at each side of the base, each trackway consisting of an inclosing casing for containing a lubricant and having a horizontal slot at its inner side, a pair of parallel shafts, the ends of the shafts extending through the slots of the adjacent trackways, a roller on each shaft in the trackway, a pair of heart-shaped members secured to each shaft, the said members being near the ends of the shafts and the adjacent members of the two shafts being in the same plane and arranged with their apices outwardly, a platform having a depending arm adjacent to each of the said members, a weight between and below the shafts, a flexible connection between the lower end of each arm and the weight, each connection passing over the periphery of the adjacent member to the reëntrant portion thereof and being secured to the said member at the said reëntrant portion, the said base being hollow and having an opening in its top, a shaft journaled vertically in the base, a pulley on the upper end of the shaft, means for adjustably securing the pulley to the shaft, a wheel journaled at the opposite side of the transverse shafts from the vertical shaft, an endless belt supported by the said wheel and the wheel of the vertical shaft, and a pulley on each shaft at the belt, said pulleys engaging opposite runs of the belt.

3. In combination, a hollow base having an opening in its top, a trackway at each side of the base, a pair of parallel shafts, each having a roller at each end for engaging the trackways, a pair of heart-shaped members secured to each shaft, the said members being near the ends of the shafts and the adjacent members of the two shafts being in the same plane and arranged with their apices outwardly, a platform having a depending arm adjacent to each of the said members, a weight between and below the shafts, a flexible connection between the lower end of each arm and the weight, each connection passing over the periphery of the adjacent member to the reëntrant portion thereof and being secured to the said member at the said reëntrant portion, the said base being hollow and having an opening in its top, a shaft journaled vertically in the base, a pulley on the upper end of the shaft, means for adjustably securing the pulley to the shaft, a wheel journaled at the opposite side of the transverse shafts from the vertical shaft, an endless belt supported by the said wheel and the wheel of the vertical shaft, and a pulley on each shaft at the belt, said pulleys engaging opposite runs of the belt.

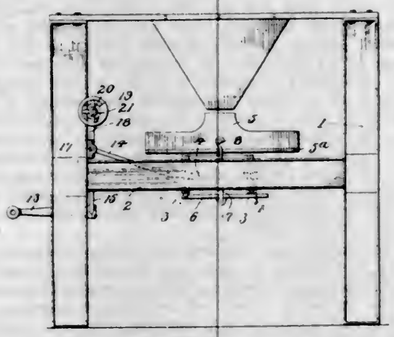
4. In combination, a hollow base, a dial in the base, the base having an opening in its top to permit inspection of the dial, a shaft journaled vertically in the base and to which the dial is secured, a track at each side of the base, a pair of parallel shafts arranged transversely of the vertical shaft, each of the said parallel shafts having a roller secured to each end and running on the track, a pair of heart-shaped members secured to each of the parallel shafts, the members of each shaft being similarly arranged and oppositely arranged to the members of the other shaft, a platform having a depending arm adjacent to each member, a flexible strand secured at one end to each arm and passing over the adjacent member, a weight between and below the shafts to which the other ends of the strands are connected, a connection between each strand and the member it engages at the reëntrant portion of the said member, and a driving connection between the shafts and the vertical shaft for rotating the said vertical shaft when the parallel shafts are rotated.

5. In combination, a base, a trackway at each side of the base, a pair of parallel shafts, each having a roller secured to each end thereof and running on the trackways, a pair of heart-shaped members secured to each of the parallel shafts near the ends thereof, the said members of each shaft being similarly arranged and having their apices outward, a platform having a depending arm adja-

cent to each of the said members, a weight between and below the shafts, a flexible connection between the lower end of each arm and the weight, each connection passing over the adjacent member and being secured thereto at the reëntrant portion thereof, said base being hollow and having an opening, a computing dial in the base and visible through the opening, a vertical shaft secured to the dial, and a driving connection between the parallel shafts and the vertical shaft, said connection being adjustable for the purposes specified.

[Claims 6 to 10 not printed in the Gazette.]

1,061,117. APPARATUS FOR FORMING CONCRETE BLOCKS. ARON B. PINNEY and OVID L. PINNEY, Arlington, N. J. Filed Aug. 13, 1908. Serial No. 448,397. (Cl. 25—41.)



1. In an apparatus for forming concrete blocks by a constant reciprocation of the materials in a horizontal plane, a frame having a horizontally disposed track, a carrier movable on said track, means for maintaining said carrier in a constant horizontal plane during its movement, a mold fixedly secured to said carrier, and means for constantly reciprocating said carrier during each molding operation.

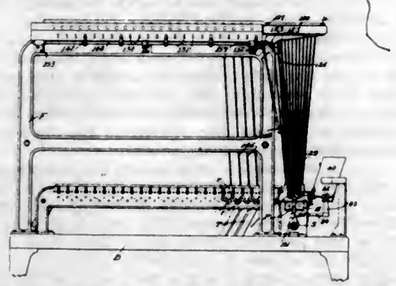
2. In an apparatus for forming concrete blocks by a constant reciprocation of the materials in a horizontal plane, a frame having a horizontally disposed track, a carrier movable on said track, means for maintaining said carrier in a constant horizontal plane during its movement, a mold fixedly secured to said carrier, means for reciprocating said carrier, and means for regulating the amplitude of the reciprocations.

3. In an apparatus for forming concrete blocks by a constant reciprocation of the materials in a horizontal plane, the combination with the frame, the horizontally disposed way or track mounted therein, the mold carrier movable on said track, and means for securing a mold to said carrier, of a lever fulcrumed on said frame and adapted to have one of its arms connected to an engine shaft, a rod secured to said carrier, and means for attaching said rod to the other arm of said lever, said means being capable of gradual adjustment with relation to the fulcrum of said lever while the apparatus is in operation, whereby the reciprocation of said carrier may be regulated during the formation of the composition articles.

4. Apparatus for forming composition blocks comprising a frame having a horizontally disposed way or track, a carrier movable thereon, means for maintaining said carrier in a constant plane, a mold secured to said carrier, a lever having a U-shaped portion pivoted in said frame, means for rocking said lever, a slide movable in said U-shaped portion, and a rod secured to said slide and to said carrier.

5. Apparatus for forming composition blocks comprising a frame having parallel, horizontally disposed guides, cross heads movably mounted on said guides, a plate pivoted to one of said cross heads, a spring tending to hold the free end of said plate to the other cross head, a stirrup pivoted to said plate, a mold carried upon said cross heads and having a lug engaged by said stirrup, and adjusting means acting against the tension of said spring for binding said mold to said cross heads.

1,061,118. MACHINE FOR COMPILING AND SORTING STATISTICS. JAMES POWERS, Washington, D. C., assignor to Powers Accounting Machine Company, New York, N. Y., a Corporation of Maine. Filed Apr. 28, 1909. Serial No. 492,713. (Cl. 235—91.)



1. The combination of a support for a record card, controlling means arranged adjacent the support for engagement with a card thereon, a series of counters, a series of latches including a plurality of latches for each of the counters, and mechanically operative means including the latches connecting the controlling means with the counters for positively actuating the counters from the controlling means according to different predetermined groups of records on the cards.

2. The combination of a support for a record card, controlling means arranged adjacent the support for engagement with a card on the support, a series of counters, mechanically operative means connecting the controlling means with the counters for positively actuating the counters from the controlling means according to different predetermined groups of records on the cards, said connecting means for each of the counters including an individual latch member for each unit of the group corresponding to such counter, the connecting means and latch members being organized for adjustment of the latch members to vary the individuals comprising the groups.

3. The combination of a support for a record card, controlling means arranged adjacent the support for engagement with a card on the support, a series of counters, mechanically operative means connecting the controlling means with the counters for positively actuating the counters from said controlling means according to different records on the cards, said connecting means including a bar for each of the counters, and latch members adjustable along the bar.

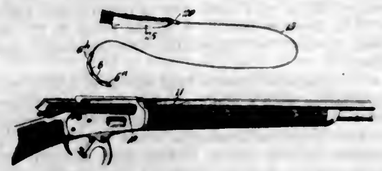
4. The combination of a support for a record card, controlling means arranged adjacent the support for engagement with a card on the support, a series of counters, mechanically operative means connecting the controlling means with the counters for positively actuating the counters from said controlling means according to different predetermined groups of records on the cards, said connecting means including a bar for each of the counters, latch members for each bar corresponding to the individuals of the group counted by such bar, the latch members being adjustable to thereby vary the grouping corresponding to such bar.

5. The combination of a support for a record card, controlling means arranged adjacent the support for engagement with a card on the support, a series of counters, mechanically operative means connecting the controlling means with the counters for positively actuating the counters from the controlling means according to different predetermined groups of records on the cards, said connecting means including a bar for each of the counters, latch members for each bar corresponding to the individuals of the group counted by such bar, the latch members being

adjustable to thereby vary the grouping corresponding to such bar, the latch members being also interchangeable on different bars.

[Claims 6 to 67 not printed in the Gazette.]

1,061,119. CLEANER FOR FIREARM-BARRELS. MATTHEW WALL P'POOL, Winters, Tex. Filed Oct. 22, 1912. Serial No. 727,167. (Cl. 42—91.)



1. In a cleaner for firearm barrels, a member constructed of rigid sections articulated together, a cord secured to one of the sections, and a cleaner member secured to the cord.

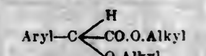
2. In a cleaner for firearm barrels, a weighted member constructed of sections having adjacent ends articulated together, a cord secured to one of the sections, and a cleaner member secured to the cord.

3. In a cleaner for firearm barrels, a weighted member constructed of sections having adjacent ends connected by ball and socket joints, a cord secured to one of the sections, and a cleaner member secured to the cord.

4. In a cleaner for firearm barrels, a weighted member constructed of sections having adjacent ends connected by ball and socket joints, a cord secured to one of the sections, a member secured to the cord and having a transverse slot, and a cleaner member disposed in the slot.

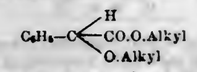
1,061,120. AMIDS OF THE ARYLALKYLOXYACETIC ACIDS AND PROCESS OF MAKING SAME. ERNST PREISWERK and WALTER BERNOULLI, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 24, 1912. Serial No. 727,594. (Cl. 23—24.)

1. The herein described process for the manufacture of amids of the arylalkyloxyacetic acids consisting in treating the ester of the formula



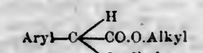
with a basic compound having the radical $-NH_2$.

2. The herein described process for the manufacture of amids of the phenylalkyloxyacetic acids, consisting in treating the ester of the formula



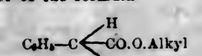
with a basic compound having the radical $-NH_2$.

3. The herein described process for the manufacture of amids of the arylalkyloxyacetic acids consisting in treating the ester of the formula



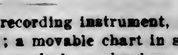
with ammonia.

4. The herein described process for the manufacture of amids of the phenylalkyloxyacetic acids, consisting in treating the ester of the formula



with ammonia.

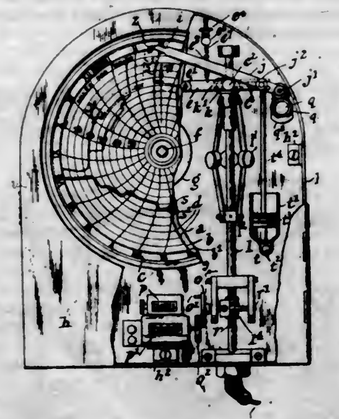
5. The herein described process for the manufacture of phenylethoxyacetamid consisting in treating the ethylester of phenylethoxyacetic acid



with ammonia.

[Claims 6 and 7 not printed in the Gazette.]

1,061,121. TIME AND SPEED INDICATING AND RECORDING MEANS. HILARY QUARTIER, Melbourne, Victoria, Australia. Filed Mar. 8, 1912. Serial No. 682,489. (Cl. 234—31.)



1. In a speed recording instrument, the combination of a suitable casing; a movable chart in said casing adapted to be driven by a clock mechanism; an arm pivotally mounted on said casing and having a member adapted to engage with and mark the chart; a shaft adapted to be driven from an external source; a governor connected to be actuated by said shaft; operative connections between said governor and the movable arm to actuate the latter; a cam engaging with the pivotal end of said pivoted arm; and a device for adjusting said cam whereby to bodily move said arm to remove the marking member thereof from engagement with the chart, substantially as described.

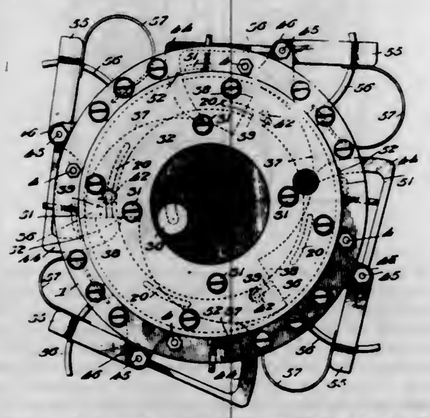
2. In a speed recording instrument, the combination of a suitable casing; a movable chart in said casing adapted to be driven by a clock mechanism; an arm pivotally mounted on said casing; a second arm pivotally mounted on the casing and engaging with the first named arm; a marker carried by the second arm for contacting with and marking said chart; a shaft adapted to be driven from an external source; a governor connected to be actuated by said shaft and connected with the first named pivoted arm to move the same; and a dash-pot mounted on said casing and having engagement with the first named arm, substantially as described.

3. In a speed recording instrument, the combination of a suitable casing; a movable chart in said casing adapted to be driven by a clock mechanism; an arm pivotally mounted on said casing; a second arm pivotally mounted on the casing and engaging with the first named arm; a marker carried by the second arm for contacting with and marking said chart; a shaft adapted to be driven from an external source; a governor connected to be actuated by said shaft, and connected with the first named pivoted arm to move the same; a screw adjustably mounted on said casing; and a spring connecting said screw with the first named arm for holding the same under variable tension, substantially as described.

4. In a speed recording instrument, the combination of a suitable casing; a movable chart in said casing

adapted to be driven by a clock mechanism; an arm pivotally mounted on the casing; a second arm pivotally mounted on the casing; a shaft adapted to be driven from an external source; a governor mounted on said shaft and connected to actuate the first named pivoted arm; a pin carried by the first named arm and passing through the second named arm; a marker carried by the second named arm for contacting with the chart and marking the same; a spring on the pivotal support of the marker carrying arm engaging with said arm and holding the marker thereof normally in contact with the chart; a cam engaging with the pivoted end of the marker carrying arm; a device for turning said cam to move the arm against the tension of the spring and remove the marker from engagement with the chart; and a dash-pot mounted on the casing and engaging with said first named pivoted arm, substantially as described.

1,061,122. ROTARY ENGINE. JOHN G. QUINBY, Norfolk, Va. Filed Dec. 1, 1909, Serial No. 530,853. Renewed Oct. 2, 1912. Serial No. 723,590. (Cl. 121—85.)



1. In an expansive motive fluid operated rotary engine, the combination with a casing, of a piston having a plurality of vanes, each provided with a cam and face or shoulder and with independent open conduits or ducts for the admission of the expansive motive fluid pressure, freely movable abutments adapted to ride on said cams and to receive the expansive motive fluid pressure issuing from the faces or shoulders of the pistons, said casing being provided with a plurality of open expansive motive fluid pressure admission ports having a common supply and adapted to direct the pressure to the independent admission means on the piston when said admission means come into register therewith, whereby the admission of the expansive motive fluid pressure to the vanes of the piston and the discharge therefrom is intermittent.

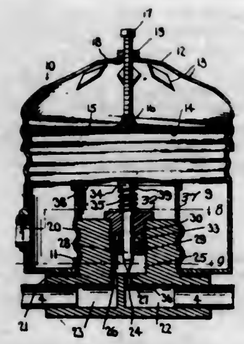
2. In an expansive motive fluid operated rotary engine, the combination with a casing, of a piston having a plurality of vanes, each provided with a cam and face or shoulder and with independent open conduits or ducts for the admission of the expansive motive fluid pressure, freely movable abutments adapted to ride on said cams and to receive the expansive motive fluid pressure issuing from the faces or shoulders of the pistons, said casing being provided with a plurality of open expansive motive fluid pressure admission ports having a common supply and adapted to direct the pressure to the independent admission means on the piston when said admission means come into register therewith, whereby the admission of the expansive motive fluid pressure to the vanes of the piston and the discharge therefrom is intermittent, and means for simultaneously regulating at will the admission of the motive fluid pressure to the open admission ports aforesaid.

3. In an expansive motive fluid operated rotary engine, the combination with a piston, and a casing, said piston having vanes provided with cams and faces or shoulders and with ports opening through the said faces or shoulders, of spring-actuated intake tubes on the piston for the admission of the expansive motive fluid pressure to the ports aforesaid, ports with which the intake tubes successively register during the relative rotation of the piston and casing, means for supplying expansive motive fluid pressure to the said admission ports aforesaid, abutments adapted to ride on said cams and to receive the expansive motive fluid pressure issuing from the ports in the shoulders, and means for exhausting the expansive motive fluid pressure.

4. In an expansive motive fluid operated rotary engine, the combination with a piston, and a casing, of abutments adapted to coact with the piston, a plurality of expansive motive fluid pressure admission slots adapted to direct the pressure to the piston, independent movable valves on the casing having slots adapted to be brought more or less into register with the slots aforesaid to regulate the volume of expansive pressure, and means for simultaneously moving said regulating valves.

5. In an expansive motive fluid operated rotary engine, the combination with a piston, and a casing, of abutments adapted to coact with the piston, a plurality of expansive motive fluid pressure admission slots adapted to direct the pressure to the piston, pivoted valves having slots adapted to be brought more or less into register with the slots aforesaid to regulate the volume of expansive pressure, a movable star cam adapted to simultaneously shift the regulating valves aforesaid, and means for turning said star cam.

1,061,123. AUTOMATIC HEAT-REGULATOR. JOHN PAUL QUINN, Lawton, Iowa. Filed Oct. 31, 1912. Serial No. 728,897. (Cl. 236—6.)



1. In an automatic heat regulator, the combination with a cylindrical body externally threaded at its upper end, a cap engaging said threads and having a threaded aperture through its center, a screw adjustable through said aperture, a plate having a socket in which the tip of said screw rests, and a diaphragm beneath said plate and closing the upper end of said body within the cap; of a threaded collar rising from the bottom of said body, a diaphragm closing the upper end of said collar, a thermostatic coil connected with the space between said diaphragms, a threaded plug screwed upwardly into said collar and having inlet and outlet passages connecting with inlet and discharge ports, and a valve regulated by the movements of said lowermost diaphragm for controlling the size of one of said ports.

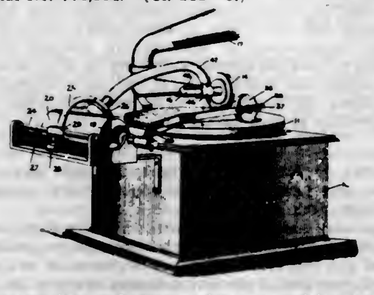
2. In an automatic heat regulator, the combination with a cylindrical body, a cap adjustably mounted thereon and having an aperture through its center, a screw adjustable through said aperture, a nut on the screw above said cap, a plate having a socket in which the tip of said screw rests, and a diaphragm beneath said plate and closing the upper end of said body within the cap; of a threaded collar rising from the bottom of said body, a diaphragm closing the upper end of said collar, a thermostatic coil connected with the space between said diaphragms, a threaded plug screwed upwardly into said collar and having inlet and discharge ports, a valve regulated by the movements of said lowermost diaphragm for controlling the size of one of said ports, and connections between said ports and the fluid to be regulated.

3. In an automatic heat regulator, the combination with an upright cylindrical body having a threaded collar rising from its bottom and a sleeve rising from the upper end of the collar, a diaphragm secured to the upper end of said sleeve and of lesser diameter than said body, another larger diaphragm closing the top of the body, manually controllable means for adjusting the position of this diaphragm, and a thermostatic coil in communication with the interior of said body; of a plug screwed upward into said sleeve, said plug having lateral passages communicating with the fluid to be regulated and upright ports communicating with said passages and one of the ports having a valve seat at its upper end and a nick in one side of the seat, and a valve actuated by the movements of said smaller diaphragm and coacting with said seat.

4. In an automatic heat regulator, the combination with an upright cylindrical body having a threaded collar rising from its bottom and a sleeve rising from the upper end of the collar, a diaphragm secured to the upper end of said sleeve and of lesser diameter than said body, another larger diaphragm closing the top of the body, manually controllable means for adjusting the position of this diaphragm, and a thermostatic coil in communication with the interior of said body; of a plug screwed upward into said collar, the plug having passages communicating with the fluid to be regulated, upright ports respectively communicating with said passages, and a bore into which one of said ports lead; guide rings mounted in said bore, packing between them, a valve whose stem projects through said rings and packing and whose lower end engages one of said ports while its upper end is engaged by the lowermost diaphragm, and a spring for normally opening said valve.

5. In an automatic heat regulator, the combination with an upright cylindrical body having a threaded collar rising from its bottom and a sleeve rising from the upper end of the collar, a diaphragm secured to the upper end of said sleeve and of lesser diameter than said body, another larger diaphragm closing the top of the body, manually controllable means for adjusting the position of this diaphragm, and a thermostatic coil in communication with the interior of said body; of a plug screwed upwardly into said collar, the plug having an internal chamber and inlet and discharge openings communicating with said chamber and with the fluid to be regulated, packing closing the top of said chamber, and a valve controlling one of said openings and having its stem passing through said packing and engaged by the lowermost diaphragm.

1,061,124. SOUND-REPRODUCING MACHINE. CARL RAMUS, Port Townsend, Wash. Filed June 17, 1912. Serial No. 704,134. (Cl. 181—3.)

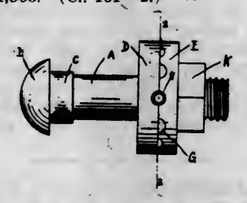


1. A sound reproducing machine, comprising a rotary record-disk supporting table; a record-cylinder supporting mandrel; a plurality of sound boxes, one adapted for operation by a record disk on said table and the other for operation by a record cylinder on said mandrel; a resonator permanently in open communication with one of said boxes; means for temporarily establishing the communication between said resonator and the other of said boxes; a friction wheel adapted to engage said table or disk mounted thereon; a pulley operatively connected with said wheel; and transmission means operatively connecting said pulley and mandrel.

2. A sound reproducing machine, comprising a rotary record-disk supporting table; a record-cylinder supporting mandrel; a plurality of sound-boxes, one adapted for operation by a record disk on said table and the other for operation by a record cylinder on said mandrel; a resonator permanently in open communication with one of said boxes; means for temporarily establishing communication between said resonator and the other of said boxes; a friction wheel adapted to engage said table or disk mounted thereon; a pulley operatively connected with said wheel; transmission means operatively connecting said pulley and mandrel; and a supporting arm for said wheel, adapted to be moved to vary the operating distance of said wheel relatively to the center of said table.

3. A sound reproducing machine, comprising a rotary record-disk supporting table; a record-cylinder supporting mandrel; a plurality of sound boxes, one adapted for operation by a record disk on said table and the other for operation by a record cylinder on said mandrel; a resonator permanently in open communication with one of said boxes; means for temporarily establishing communication between said resonator and the other of said boxes; a friction wheel adapted to engage said table or disk mounted thereon; a pulley operatively connected with said wheel; transmission means operatively connecting said pulley and mandrel; a supporting arm for said wheel adapted to be moved to vary the relative rotation of said table and mandrel and means for locking said arm to prevent lateral movement.

1,061,125. NUT OR BOLT LOCKING DEVICE. WILLIAM H. REIGHARD, Akron, Ohio. Filed Nov. 30, 1912. Serial No. 734,363. (Cl. 151—2.)

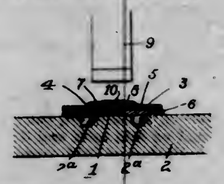


A nut lock comprising a bolt having a longitudinal groove formed transversely of the threads of the bolt, a disk with a central aperture having a lug projecting from the marginal edge thereof and adapted to engage said groove in the bolt, said disk having a radial groove extending from its central opening to the circumference thereof, a bolt with threaded opening for engagement with the threads of the bolt, the inner face of said bolt having radial grooves adapted to register with the groove in said disk, and a key adapted to engage registering grooves in said disk and nut to hold the latter from rotation, as set forth.

1,061,126. UNIVERSAL COUNTER. LESTER S. RILEY, Boston, Mass., assignor to Progress Manufacturing Company, a Corporation of Massachusetts. Filed May 24, 1912. Serial No. 699,519. (Cl. 101—13.)

1. In combination a carrier plate, a holding plate having a detachable edge connection with the carrier plate and having a central opening, a layer of flexible material between said holding plate and carrier and extending across the opening, and a member of elastic material beneath the layer of flexible material, said member corresponding in size and shape to said opening and being located in line with said opening.

2. In combination with a base, a carrier plate detachably connected thereto, a holding plate having its edges detachably connected to the carrier plate and having a central opening, a layer of flexible material between said plates and extending across the opening, a cushion member beneath said layer and in line with the opening.



3. In combination a carrying plate, a holding plate detachably connected thereto and having a central opening, a layer of kid between said plates and extending across the opening, a layer of fabric extending beneath the layer of kid, a rubber member or square beneath the fabric and in line with the opening and a fiber member forming a support to said rubber member or square, substantially as described.

4. In combination a holding plate having a central opening, a layer of kid extending beneath the holding plate and across the opening, a cushion member beneath said layer and in line with the opening for causing the kid to project through the opening and a deflecting tongue carried by said holding plate, substantially as described.

1,061,127. COUNTER-PAD. LESTER S. RILEY, Boston, Mass., assignor to Progress Manufacturing Company, a Corporation of Massachusetts. Filed Oct. 7, 1912. Serial No. 724,271. (Cl. 101—13.)



A pad for the purpose described comprising a cushion body, a fabric base layer beneath and supporting the same, and having projecting marginal edges lying in the same plane with the main portion of said base layer, and an upper textile covering having its outer portion pressed down around said body and having its edges cemented to the marginal portions of the base layer, substantially as described.

1,061,128. SASH-HOLDER. ERNEST C. RODWICK, Ukiah, Cal. Filed Mar. 2, 1912. Serial No. 681,034. (Cl. 16—19.)



A sash holder comprising a spring arm adapted to be secured at one end to the side of the sash and having its free end normally spaced outwardly from the sash, a friction knob carried by the free end of the spring arm, a spring pressure means interposed between said arm and the sash and reinforcing the inherent spring tendency of the arm to move its free end from the sash, an operating means carried by the sash including a slide, a flexible connection between the slide and the free end of the spring arm, a spring for operating the slide to relieve the pull upon the flexible connection, said slide being formed with an opening whereby it may be operated against the tension of the spring, a lever pivotally mounted adjacent the slide, and a connection between said lever and slide whereby to operate the slide in the movement of the lever.

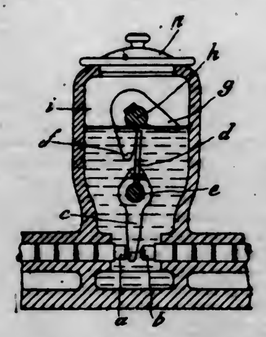
1,061,129. SCREW-PLATE. CHARLES C. RUSSELL, Greenfield, Mass. Filed June 21, 1912. Serial No. 705,148. (Cl. 10—117.)



1. The combination of a collet provided with an integral guide on its front face and with undercut recesses extending from its rear face, adjustable die members removably mounted in such recesses, and adjustable means accessible at the front face of said collet for maintaining said die members in snug engagement with the undercut walls of such recesses.

2. The combination of a collet provided with an integral guide on its front face and with undercut recesses extending from its rear face, adjustable die members removably mounted in such recesses, adjustable means accessible at the front face of said collet for maintaining said die members in snug engagement with the undercut walls of such recesses, a common means engaging said die members for spacing the latter to gage, and tapered means between said collet and die members for wedging the latter against said spacing means.

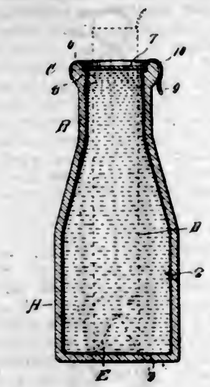
1,061,130. VALVE-GEAR. ERICH SCHWEITER, Golutwin, Russia. Filed Feb. 20, 1913. Serial No. 749,628. (Cl. 121—97.)



A valve gear comprising in combination valve spindles coaxial with each other and parallel to the axis of the cylinder, a rocking lever having two arms in substantially vertical alinement above and below its fulcrum, the lower arm being rigid and extending between the valve spindles, the upper arm being of a resilient nature, a second two-armed rocking lever of substantially inverted V-shape, adapted to have the curved inner surfaces of its depending arms engage said resilient arm of the first mentioned lever, and means for oscillating the inverted two-armed lever, substantially as described.

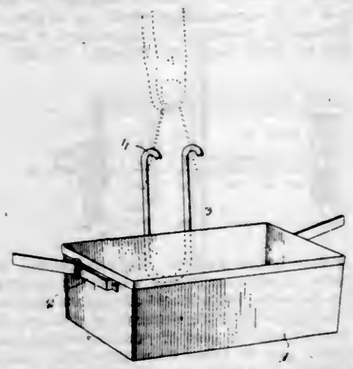
1,061,131. LINING FOR MILK-BOTTLES. MERRITT G. SEAMANS, Atlanta, Ga. Filed Nov. 25, 1911. Serial No. 662,368. (Cl. 215—14.)

The combination with a bottle having a lining removably fitting therein, and a wafer-like closure closing one end of the bottle and embraced by the walls of the lining, of a portion of the lining extending above the plane of the closure and then laterally over the neck of the bottle and then downwardly against the outside of the neck and provided with a tab folded on itself and terminally underlying the downwardly-extending portion of the lining



and interposed between said portion and the neck and then terminally extending into the neck to underlie the closure.

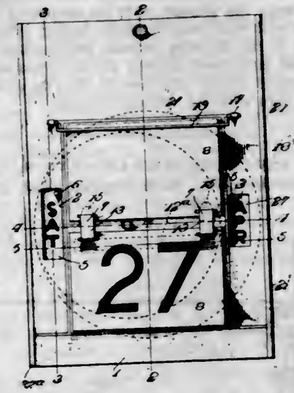
1,061,132. GRAPE-TIE HOLDER. JOHN SHEARER, Forestville, N. Y. Filed Apr. 12, 1912. Serial No. 690,436. (Cl. 153—10.)



A grape-tie holder and bender, comprising a receptacle, strap-supporting loops carried thereby, and a U-shaped tie-bending member secured to one side of the receptacle and having its terminals bent inwardly and downwardly over the receptacle, said member having its legs separated sufficiently to permit the insertion of the fingers therebetween.

1,061,133. CALENDAR. HUGH E. SHEDD, Minneapolis, Minn. Filed May 25, 1912. Serial No. 699,763. (Cl. 40—113.)

1. A calendar comprising two sheets spaced apart to form a pocket, the front sheet having two openings, the sheets being secured together at their edges, a disk pivoted to the front sheet and operating in the pocket and provided with data to indicate certain periods of the year, the data being exposed through one of the openings in the front sheet, openings formed in the disk to insert a device to partially rotate said disk, a second disk mounted in the pocket and pivoted to the rear sheet and having data printed on its face which is exposed through one of the openings in the front sheets, the second mentioned disk having openings for the insertion of a device to partially rotate said disk, the two disks overlapping each other, and a dividing strip interposed between the two disks, said dividing strips being in alinement with the openings through which the data on the first mentioned disk is exposed.



2. A calendar comprising a sheet, a pair of leaf supports attached to the sheet, each leaf support having a bent portion extending through to the rear of the sheet and then rebent and extended through to the front of the sheet, the end of the bent portion being rebent to clamp against the front surface of the sheet, a brace bar extending across the back of the sheet and passing through the spaces formed by the first mentioned rebent portions of both the leaf supports and the sheet, whereby to form a brace for said leaf supports, and leaves mounted on the leaf support.

1,061,134. ROPE-SOCKET. FRANK W. SHIREY and JOHN W. DODD, Tulsa, Okla. Filed June 21, 1912. Serial No. 705,086. (Cl. 255—26.)

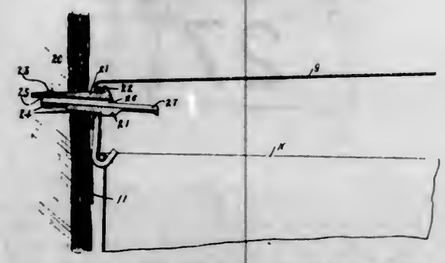


1. A rope socket comprising a coupling member having a longitudinal bore, a plunger reciprocally mounted in said bore, said plunger having a longitudinal bore, a head formed on the lower end of said plunger and provided with a downwardly diverging tapered socket, a cone reciprocally mounted in said socket, a rope extending downwardly through said plunger with its lower end attached to said cone, and cushioning means normally maintaining said plunger in its lowermost position in the bore of the coupling member.

2. A rope socket comprising a one-piece coupling member having a longitudinal bore, the lower portion of said bore being enlarged, a plunger including a body portion and an enlarged head on the lower end thereof, said plunger being reciprocally mounted in the bore of said member, the head being received by the enlarged portion of the bore, said plunger adapted to be removed through the

lower end of said bore, said plunger having a central bore terminating downwardly in a tapered socket, a cone reciprocally mounted in said socket, a rope extending downwardly through the plunger with its extremity secured to the apex of said cone, and a helical spring within the enlarged bore of the coupling member surrounding the plunger body and interposed between the head thereof and the shoulder formed at the juncture of the said enlarged portion of the bore with the reduced portion.

1,061,135. SAP-COLLECTING APPARATUS. GEORGE H. SOULE, Fairfield, Vt. Filed Aug. 21, 1912. Serial No. 716,155. (Cl. 47—29.)



1. A sap-collecting apparatus, comprising a spout; a cover rotatively mounted on said spout and having an extension below said spout; and a bucket attached to said extension below said spout.

2. A sap-collecting apparatus, comprising a spout; supporting means rotatively mounted upon and supported by said spout; a bucket operatively connected with said supporting means below said spout; and a cover for said bucket, connected with said supporting means to extend above said spout and said bucket.

3. A sap-collecting apparatus, comprising a sap-collecting spout having at the inner end thereof means for engaging the body of a tree to prevent the withdrawal of said spout when the outer end thereof is depressed; bucket-supporting means rotatively mounted upon said spout adjacent the outer end thereof; a collecting bucket operatively connected with said supporting means below said spout; a cover having a flat body extension disposed above said spout and said bucket; and means for rigidly connecting said supporting means and said cover.

4. In a sap-collecting apparatus such as described; a bucket cover having a flat body portion and a tab portion bent from said body portion at an angle thereto, said tab portion being perforated to receive a sap-collecting spout; a wire hook having an eyelet to register with said perforation; and means for rigidly securing said hook upon said tab portion.

5. In a sap-collecting apparatus such as described; a bucket cover having a flat body portion and a tab portion bent from said body portion at an angle thereto, said tab portion being perforated to receive a sap-collecting spout; a wire hook having an eyelet to register with said perforation; and a ridge-like member mounted on said tab portion to receive the shank of said hook, to fixedly connect said hook and said cover.

[Claims 6 and 7 not printed in the Gazette.]

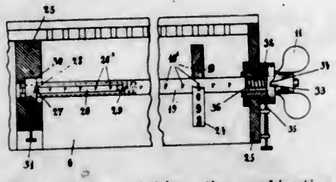
1,061,136. WELL-BUCKET. FRANK A. STEARNS, Hot Springs, Ark. Filed June 21, 1911, Serial No. 634,451. Renewed Dec. 24, 1912. Serial No. 738,475. (Cl. 103—35.)

A well bucket, comprising a tubular body having contracted opposite ends, a convex dome-like supplemental bottom mounted securely within the said tube spaced from the contracted lower end thereof and having a central opening, a bridge piece fixed to the opposite contracted end of the tube, a valve rod slidable through the bridge piece and extending centrally through a greater portion of the length of the tube, and a spherical shaped resilient valve fixed to the inner end of the rod and adapted to



become seated in the opening in the supplemental bottom on pulling upon said valve rod.

1,061,137. RESETTING MECHANISM FOR CALCULATING-MACHINES. FERDINAND STEMMLER and CARL SCHALLER, Brunswick, Germany, assignors to Grimme, Natalis & Co. Commanditgesellschaft auf Actien, Brunswick, Brunswick, Germany, a Corporation of Germany. Filed Oct. 15, 1912. Serial No. 725,862. (Cl. 235—144.)



1. In a calculating machine, the combination with a registering mechanism comprising a plurality of groups of registering elements, and a single continuous member carrying all the said registering elements, of resetting devices on said member one for each of said registering elements and normally out of cooperation therewith, means for moving said member bodily in one direction to shift the resetting devices of one group of registering elements into resetting engagement with their registering elements independently of the resetting devices of another group, and means to simultaneously shift the resetting devices of all the registering elements into resetting position.

2. In a calculating machine, the combination with the registering mechanism comprising two sets of numeral wheels, of a single, continuous rotary shaft carrying all the said numeral wheels, resetting devices on said shaft one for each of the numeral wheels, means for moving said shaft bodily in one direction to shift the resetting devices of the numeral wheels of one set into resetting engagement with their numeral wheels independently of the resetting means of the numeral wheels of the other set, and means to simultaneously shift the resetting devices of all the numeral wheels into resetting position.

3. In a calculating machine, the combination with the registering mechanism comprising two sets of numeral wheels, of a rotary shaft carrying the numeral wheels of both sets, resetting devices on said shaft arranged for cooperation with the numeral wheels of one set, a member shiftable in said shaft and carrying resetting devices for the other set of numeral wheels, means to shift said shaft with its resetting devices into resetting position, means to shift said member with its resetting devices into resetting position, and means independent of each other to throw said shifting means for the resetting devices of both sets of numeral wheels into inoperative positions.

4. In a calculating machine, the combination with the registering mechanism comprising two sets of numeral wheels, of a rotary shaft carrying the numeral wheels of both sets and having a hollow or tubular part, resetting devices on said shaft arranged for coöperation with the numeral wheels of one set, a member shiftable within said hollow or tubular part of said shaft and carrying resetting devices for the other set of numeral wheels, cams to shift said shaft and member with their resetting devices into resetting positions, and means independent of each other to throw said cams into inoperative positions.

5. In a calculating machine, the combination with the registering mechanism comprising two sets of numeral wheels, of a rotary shaft carrying the numeral wheels of both sets, resetting devices on said shaft arranged for cooperation with the numeral wheels of one set, a spring actuated member shiftable in said shaft and carrying resetting devices for the other set of numeral wheels, means to shift said shaft with its resetting devices into resetting position, means to shift said member with its resetting devices into resetting position, and means independent of each other to throw said shifting means for the resetting devices of both sets of numeral wheels into inoperative positions.

1,061,138. FRUIT-PICKER. EDWARD R. STODDART, Markesan, Wis. Filed July 2, 1912. Serial No. 707,261. (Cl. 56—99.)



1. A fruit picker comprising a tube, a horizontally disposed cutting device at one end of the tube, the other end of the tube having spaced portions defining therebetween a concentric groove, a support having its upper end formed with a flange, and its lower end formed with a series of annular hooks, the said flange being disposed within the concentric groove of the tube, and a member detachably engaged with the series of annular hooks of the support.

2. A fruit picker comprising a tube, a cutting device at one end of the tube, the other end of the tube having spaced portions defining therebetween a concentric groove, and a bag support disposed within the said groove and comprising a strand of wire having its upper end bent at right angles to form an annular flange, and its lower end bent upwardly and outwardly in opposite directions to its upper end to provide a series of annular hooks for detachably receiving the bag.

1,061,139. ART OF PREPARING ALKALOID SALTS. WALTHER STRAUB, Freiburg, Germany, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Berlin, Germany. Filed June 15, 1912. Serial No. 703,924. (Cl. 23—24.)

1. The process of preparing a double salt of morphin and narcotin which consists in reacting on a polybasic acid with morphin and narcotin.

2. The process of preparing a double salt of morphin and narcotin which consists in reacting on a polybasic acid with morphin and narcotin in molecular quantities, respectively.

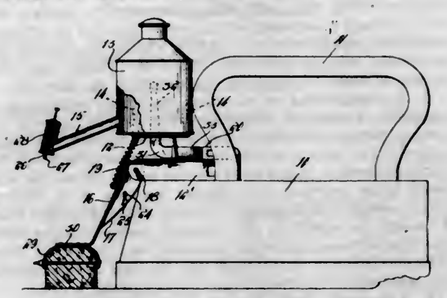
3. The process of obtaining a double salt of morphin and narcotin, which consists in reacting on a polybasic acid with morphin and narcotin, and then separating the double salt from the mixture of the reaction.

4. The process of obtaining a double salt of morphin and narcotin, which consists in dissolving meconic acid in alcohol and adding thereto morphin and narcotin, filtering and adding ether to the filtrate to precipitate the double salt.

5. As a new composition of matter, a double salt in which morphin and narcotin are combined with a polybasic acid in respectively molecular quantities, said salt being soluble in alcohol and insoluble in ether.

[Claims 6 and 7 not printed in the Gazette.]

1,061,140. TAILOR'S-GOOSE ATTACHMENT. THURMON H. TALLEY, Crowell, Tex. Filed Apr. 17, 1912. Serial No. 691,337. (Cl. 68—26.)



1. An attachment for a tailor's goose, comprising a bracket detachably mounted on the handle thereof, a water tank on the bracket, a nozzle on the tank, a spring-pressed valve on the nozzle, a stem on the valve projecting beyond the nozzle, a member attached to the bracket, a pivoted arm mounted on the said member, said arm carrying absorbent material on its free end, a spring on the bracket engaging with the arm to throw the arm normally upward into engagement with the stem of the valve, and an operating stem vertically slidable in the bracket and connected with said arm, whereby upon depression of the operating stem the arm will be moved downwardly to bring the absorbent material in contact with the cloth to be moistened.

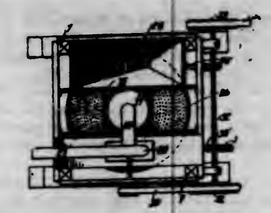
2. An attachment for a tailor's goose comprising a bracket mounted on the handle thereof, a water tank on the bracket, a member on the goose, a spring-actuated pivoted arm on the said member, absorbent material on the free end thereof, said spring holding the arm normally upward, and operating means connected to the arm for depressing the arm.

3. An attachment for a tailor's goose, comprising a water receptacle having a spring-pressed valve, a member mounted on the goose movable toward and away from the spring-pressed valve, said member having absorbent material thereon, said member being disposed normally against said valve to receive water from the tank, and means for moving the absorbent material into engagement with the cloth being pressed.

1,061,141. SEPARATING-MACHINE. MARIO W. TEBYRIÇÁ, Sao Paulo, Brazil. Filed Oct. 8, 1912. Serial No. 724,521. (Cl. 130—15.)

1. A separating machine comprising a drum, a trough spirally wound thereon, a screen spirally wound on the drum and spaced from the trough, means for rocking the drum, the trough and the screen in order to separate material traveling upon the said screen and around the drum, a suction fan, the drum being provided with a

number of chutes communicating with the fan, and means for directing into the said chutes the material assorted into different sizes.



2. A separating machine comprising a drum, a tubular member mounted thereon, a number of partitions extending from the said tubular members to the said drum and disposed radially so as to form a number of separate chutes, a spiral trough having an inclined bottom mounted on the drum, a screen carried by the said trough, the said drum being provided with a number of openings communicating with different portions of the trough, the said openings being adapted to receive material of different sizes and convey it to the various chutes, and means for imparting movement to the drum the trough and the screen in order to facilitate separation of the material.

3. A construction of the class described, comprising a vertically extending drum provided with a number of compartments extending longitudinally thereof, openings adjacent the bottom of the drum communicating with the compartments, a spiral sieve carried by the drum, the said sieve being provided with means whereby it is divided into a number of sections, the drum being provided with a number of openings, one opening communicating with one compartment, whereby material may be passed from different portions of the sieve into the said compartments, the material being thereby graded according to size.

4. A separating machine comprising a drum, the interior thereof being provided with a number of chutes extending longitudinally thereof, openings adjacent the bottom of the drum communicating with the chutes, a spiral trough carried on the drum, the trough being provided with a sieve, partitions carried by the trough at different portions thereof, and openings carried by the drum adjacent the partitions, one opening communicating with one chute, whereby material of the same size is collected in one chute.

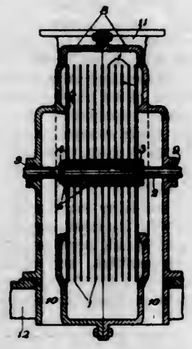
5. A separating machine, comprising a drum movably mounted in position and provided with a number of chutes extending longitudinally thereof, a trough spirally encircling the drum and fixed thereto, a sieve carried by the trough and spaced from the bottom thereof, the sieve being made up of a number of portions having perforations of different sizes, the drum being provided with a number of openings, one opening communicating with one chute, the said openings being positioned on the drum adjacent the different portions of the sieve, whereby when a shaking movement is imparted to the machine material entered on the top of the sieve will be separated according to size, material of the same size being received in the same chute.

[Claims 6 to 8 not printed in the Gazette.]

1,061,142. FLUID PROPULSION. NIKOLA TESLA, New York, N. Y. Filed Oct. 21, 1909. Serial No. 523,832. (Cl. 103—43.)

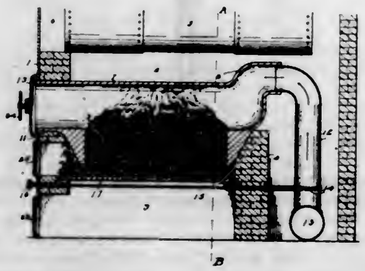
1. A machine for propelling or imparting energy to fluids comprising in combination a plurality of spaced disks rotatably mounted and having plane surfaces, an inclosing casing, ports of inlet at the central portion of said casing and through which the fluid is adapted to be introduced to the axial portions of the disks, and ports of outlet at the peripheral portion of the casing through which the fluid when the machine is driven by power, is adapted to be expelled, as set forth.

2. A machine for propelling or imparting energy to fluids, comprising in combination a volute casing provided with ports of inlet and outlet at its central and peripheral portions, respectively, and a runner mounted within the casing and composed of spaced disks with plane surfaces having openings adjacent to the axis of rotation.



3. A rotary pump, comprising in combination a plurality of spaced disks with plane surfaces mounted on a rotatable shaft and provided with openings adjacent thereto, a volute casing inclosing the said disks, means for admitting a fluid into that portion of the casing which contains the shaft and an outlet extending tangentially from the peripheral portion of said casing.

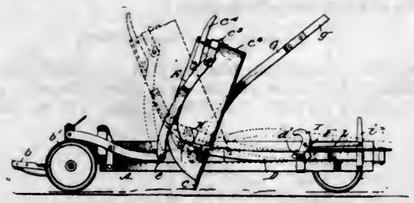
1,061,143. SMOKE-CONSUMER. ISIDORE THERRIEN, Quebec, Quebec, Canada. Filed June 15, 1912. Serial No. 703,818. (Cl. 110—24.)



1. In a smoke consumer, the combination with furnace walls of a retort consisting of an open ended tube having downwardly extending solid flanges intermediate of its length forming a tubular branch adapted to hold the burning fuel, the rear open end of said tube being upwardly offset, removable means for tightly closing the front end, means for supplying a current of air through said rear end into the tube, means for supporting said retort within said furnace walls, and a flat plate suitably supported beneath and partially closing in the lower end of said branch and supporting the fuel.

2. In a smoke consumer, the combination with furnace walls, of a pair of open ended retorts longitudinally supported side by side within said walls and each comprising a tube having depending solid walls intermediate of its length forming a fuel holder, the rear open end of said tube being offset upwardly means for closing the front ends of said tubes, adjoining flat plates supported beneath and partly closing the lower ends of said branches respectively, said plates being solid beneath said lower ends and supporting the fuel and gridded therebeyond at the sides, a main air pipe arranged at the rear of the furnace, and upwardly extending branch pipes within the furnace respectively communicating with said offset ends, dampers in said branch pipes operable from the outside, and means for supplying forced draft to said main pipe.

1,061,144. GRADING-SCRAPER. JAMES F. THOMAS and JOHN HANEY, Odessa, Minn. Filed Dec. 13, 1912. Serial No. 736,510. (Cl. 37—33.)



1. In a scraper and grader, the combination of a wheeled frame, a shovel scraper disposed in the frame and having side extensions at its rear end resting on the frame sides, a latch mechanism movable to engage and disengage said shovel extensions, means for raising and lowering the forward portion of the scraper, and braces pivotally connecting the scraper to the frame and upon which the scraper may be wholly or partially inverted for dumping when the latch mechanism is released.

2. In a scraper and grader, the combination of a wheeled frame, a shovel scraper disposed in the frame and having side extensions at its rear end resting on the frame side, a latch mechanism movable to engage and disengage said shovel extensions, a lever mounted on the frame and having a pivotal connection with the said shovel scraper adjacent its forward end, braces pivotally connecting the scraper to the frame and handles carried by the scraper.

3. In a scraper and grader, the combination of a wheeled frame, a shovel scraper disposed in the frame and having side extensions at its rear end resting on the frame sides, vertical latch members pivoted in the frame, a lever mounted on the frame and having connection with said latch members whereby to cause the same to engage and disengage said shovel extensions, means for raising and lowering the forward portion of the scraper, and braces pivotally connecting the scraper to the frame.

4. In a scraper and grader, the combination of a wheeled frame embodying slotted side members, a shovel scraper mounted in the frame, latching means movable to engage and disengage the rear portion of the scraper, braces pivotally connecting the scraper to the frame, and a lever having connections working in the said frame side slots and pivotally connected with the forward portion of the scraper whereby to raise and lower the same.

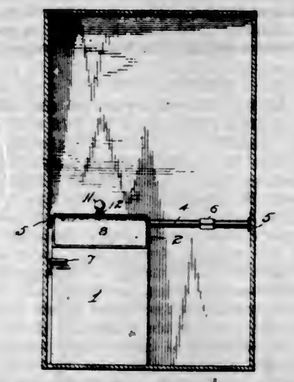
5. In a scraper and grader, the combination of a wheeled frame having slotted sides, studs working in the said side slots, a shovel scraper disposed in the frame, lever arms pivotally connected at one end to the forward portion of the said scraper and rigidly connected at their opposite ends to the said studs, braces pivotally connecting the scraper with the frame, latching means mounted on the frame and movable to engage and disengage the rear portion of the scraper, and a U-shaped lever having its extremities rigidly connected to the said studs.

[Claim 6 not printed in the Gazette.]

1,061,145. CASH-BOX. SHIRLEY THOMAS, Marion, Ind. Filed May 24, 1912. Serial No. 699,471. (Cl. 232—17.)

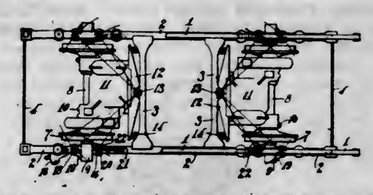
1. A device of the class described comprising an open ended casing, a closed receptacle removably mounted in the casing, and an expanding screw carried by the casing for attaching the same in a box.

2. In combination an open ended casing, a loop or sleeve carried by the top thereof and an expanding screw loosely



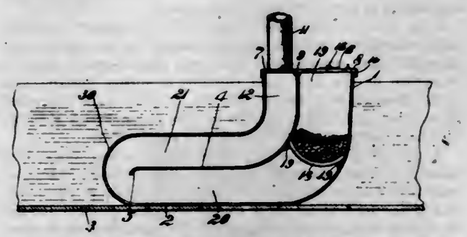
mounted in the sleeve and adapted to engage separated walls to removably support the casing.

1,061,146. CAR-TRUCK. GEORGE C. TOWLE, Dayton, Ohio. Filed July 20, 1912. Serial No. 710,582. (Cl. 105—137.)



In a car truck, the combination with the main frame thereof, of sub-frames including journal boxes pivoted to said main frame, flexible connections between the main frame and the journal boxes whereby said journal boxes may have vertical movement relative to the main frame, and guides mounted on said main frame and engaging said journal boxes and adapted to prevent lateral movement of said main frame relative to the sub-frame.

1,061,147. TANK-HEATER. ARTHUR F. TRACHTE and GEORGE A. TRACHTE, Madison, Wis. Filed Mar. 11, 1912. Serial No. 682,900. (Cl. 126—367.)



A tank heater comprising a tubular body having an angular extension, the extension being closed at its end and being adapted to lie along the bottom of a tank, entirely below the surface of the contents of the tank; a division plate located in the body and prolonged into the extension; the end of the division plate terminating short of the end of the extension; a grate located in the body and connecting the division plate with one side of the body, to define a combustion chamber, the space between the divi-

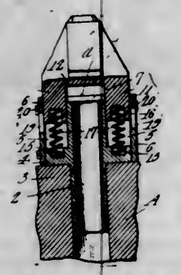
sion plate and the other side of the body constituting a draft compartment; a closure mounted upon the upper end of the body and supported by one end of the division plate; a damper in the closure, communicating with the combustion chamber; and a stack carried by the closure, the stack communicating with the draft compartment.

1,061,148. METALLIC DERIVATIVE OR COMPOUND OF THE ACTIVE PRINCIPLE OF THE SUPRARENAL GLANDS. JOSEPH L. TURNER, Philadelphia, Pa., assignor to The H. K. Mulford Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1912. Serial No. 674,032. (Cl. 167—7.)

1. A metallic derivative or compound of the active principle of the suprarenal gland, being a compound with said principle of the metallic element of a water-soluble but alcohol-insoluble salt of a metal, said compound possessing the blood-pressure-raising, astringent and hemostatic characteristics and properties of said glands, being readily soluble in water, and capable of forming therein substantially colorless solutions of commercially useful strength.

2. The within described aluminum derivative or compound of the active principle of the suprarenal gland, possessing the active blood-pressure-raising, astringent and hemostatic characteristics and properties of said glands, and being a yellowish-white amorphous powder readily soluble in water at ordinary temperatures, and forming therein a substantially colorless solution.

1,061,149. COAL-BIT SHARPENER. ALVA T. UPTON, Mount Vernon, Ill. Filed Aug. 5, 1912. Serial No. 713,424. (Cl. 78—7.)



1. A coal bit sharpener, comprising a support, a spring elevated member slidably mounted in the support to be depressed by a blow, blades carried by the support and member respectively, and for co-action when the member is depressed by a blow, said support being provided with a bore therethrough to receive the cut portion of the bit and direct it away from the sharpener.

2. A coal bit sharpener, comprising a support provided with a reduced portion for connection to an anvil, said support being provided with a bore therethrough for the reception of the cut from the bit, a spring slidable elevated member mounted within the support to be depressed by a blow, and blades carried by the support and elevated member and in co-active relation to each other.

3. A coal bit sharpener, comprising a hollow supporting shank, a casing carried thereby, a stationary blade attached to the casing with its cutting edge above the upper end of the hollow shank, a spring elevated member mounted in the casing and disposed to be depressed by a blow, and a blade carried thereby for co-action with the blade of the casing.

4. A coal bit sharpener, comprising a hollow supporting shank, a casing carried thereby, a stationary blade attached to the casing with its cutting edge above the upper end of the hollow shank, said casing being provided with two oppositely disposed open-ended recesses therein, a movable member having two spaced terminals mounted within the recesses of the casing carried thereby, a spring to each terminal disposed within the casing for holding the movable member elevated, means for limiting the upward movement of said movable member, and a blade carried by said movable member for co-action with the blade of the casing.

5. A coal bit sharpener, comprising a hollow supporting shank, a casing carried thereby, a stationary blade attached to the upper portion of the shank and in opposed relation to each other, the respective cutting blades being adjacent to the end of the hollow portion of the shank, a spring elevated movable member mounted in the casing to be depressed by a blow, and a blade having two cutting edges carried by the movable member, said cutting edges being disposed for co-action with the respective cutting edges of the blades of the casing.

1,061,150. COMBINED BROOM AND CLOTH HANGER. WALTER R. USSERY and ENOCH J. COOK, Cookville, Tex. Filed July 11, 1910. Serial No. 571,431. (Cl. 24—249.)

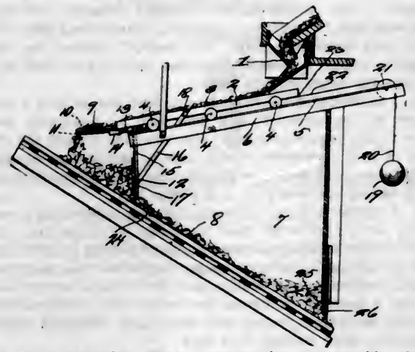


A combined broom and cloth hanger comprising a rectangular shaped block adapted to be secured to a support, a skeleton hanger forming the movable part of the device, said hanger consisting of a pair of straight spaced parallel bars, a pair of spaced rods connecting the lower ends of said bars and in a position to be freely moved under the lower end of the block, the opposite ends of said bars being hingedly attached to the upper opposite sides of said block adjacent to the support, whereby a broom is adapted to be arranged between the said bars when the hanger is swung outwardly, the position of said bars being so arranged as to freely receive between them a cloth adapted to be folded over the upper rod and brought into binding contact with the lower projecting end of the block when the hanger is forced against the support.

1,061,151. TRAVELING CHUTE FOR COAL-POCKETS. WILLIAM N. WHITE, Fortyfort, Pa. Filed Oct. 10, 1912. Serial No. 724,987. (Cl. 57—37.)

1. In combination, a coal pocket having an inclined bottom, a track in the upper portion of the pocket disposed on an incline in a reverse direction to that of the floor of the pocket, a traveling chute mounted upon the inclined track having a counterbalance weight connected to the upper rear end of the chute, and a plate projecting downwardly from and transversely of the under portion of the forward end of the chute, against which the coal from the chute is deposited, to automatically move the chute up the inclined track, the counterbalance weight constituting means assisting in imparting this movement to the chute.

2. In combination, a coal pocket having an inclined bottom, a track in the upper portion of the pocket disposed on an incline in a reverse direction to that of the floor of the pocket, a traveling chute mounted upon the inclined track having a counterbalance weight connected to the upper rear end of the chute, and a plate projecting downwardly from and transversely of the under portion of the forward end of the chute, against which the coal from the chute is deposited, to automatically move the chute up the inclined track, the counterbalance weight constituting means assisting in imparting this movement to the chute, the traveling chute having a spreader plate at its lower end, said spreader plate being constructed with a centrally raised portion with a V-shaped gulley on each side thereof, whereby the coal may be evenly distributed against the plate.



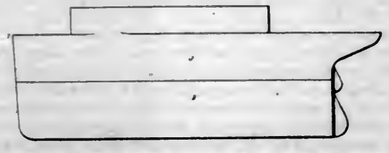
3. In a traveling chute construction, a movable chute disposed on an incline and having a vertically and transversely arranged plate thereunder at the forward end, a spreader plate carried by the lowest end and arranged at an angle to the chute, said spreader plate being constructed with a centrally raised portion with a V-shaped gulley on each side thereof, whereby the coal may be evenly distributed or spread against the regulating plate, and an inclined track on which said traveling chute is operable.

1,061,152. BOTTLE-HOLDER AND TRAY. WILLIAM GEO. WINTER, St. Louis, Mo. Filed Oct. 3, 1911. Serial No. 652,601. (Cl. 120—73.)



A device of the class described comprising a base having an upwardly turned marginal flange and formed centrally with an annular row of apertures, a bottle supporting ring mounted centrally of the base whereby a space is left between the flange of the base and ring, said ring having an inwardly extending flange, lugs formed on the free edge of said flange and adapted to project through the apertures in the base to secure the ring thereto, and a plurality of spring fingers carried by the ring and adapted to engage a bottle.

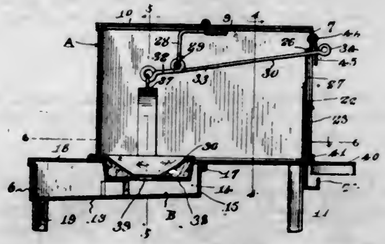
1,061,153. SHIP STRUCTURE. DAVID ACON WOLFE, Turin, Iowa. Filed Oct. 22, 1912. Serial No. 727,234. (Cl. 114—77.)



1. A ship comprising a longitudinally and transversely divided body, forming superposed sections, the lower section having spaced inner and outer walls connected at their upper edges by a concaved bridge portion forming a seat, the said upper section having rounded surfaces to engage said seat, whereby the sections are held detachably assembled.

2. A ship comprising a longitudinally and transversely divided body, forming superposed sections, each having a hull closed at its base, the hull of the lower section embodying inner and outer walls connected at their upper marginal edges by a concaved bridge forming a seat, and the hull of the upper section having rounded portions to engage said seat and provided with openings and doors for closing the same, whereby communication between the hulls of the two sections is afforded.

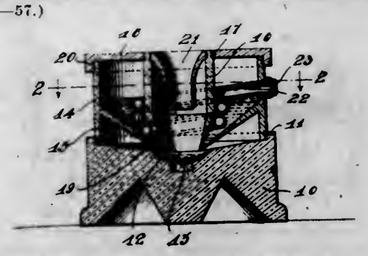
1,061,154. HEN'S NEST. EDWIN A. YOUNG, Lander, Wyo., assignor of one-half to Daniel K. Young, Lander, Wyo. Filed Aug. 13, 1912. Serial No. 714,899. (Cl. 119—50.)



1. In a hen's nest, the combination with a box including a front wall having an entrance opening formed therein, said wall being further formed with an upwardly extending slot communicating with the opening, of a gravity door normally disposed below the opening, a gravity nest arranged within the box and normally disposed in an elevated position, a lever fulcrumed intermediate its ends to the box and having one end connected to the nest, the other end projecting through the slot of the front wall, and an inverted U-shaped frame connected to the door and engaged with the last mentioned end of the lever for elevating said door upon descent of the nest.

2. In a hen's nest, the combination with a box including a front wall having an entrance opening formed therein, said wall being further formed with an upwardly extending slot communicating with the opening, of a gravity door normally disposed below the opening, a gravity nest arranged within the box and normally disposed in an elevated position, a lever fulcrumed intermediate its ends to the box and having one end connected to the nest, the other end projecting through the slot of the front wall, an inverted U-shaped frame connected to the door and engaged with the last mentioned end of the lever for elevating said door upon descent of the nest, and a stop element secured to the front wall and extending across the slot thereof below the lever to limit the downward movement thereof.

1,061,155. INK-WELL. LINUS H. ALLEN, Battle Creek, Mich. Filed June 15, 1912. Serial No. 703,892. (Cl. 120—57.)

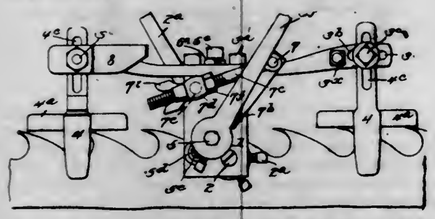


1. An ink well comprising a base having an ink cup formed in its center, an ink reservoir having its walls removably connected with said base, a conical partition mounted in said reservoir, and provided with an opening communicating with the ink cup formed in said base, a

cover removably connected with the walls of said reservoir and provided with a central opening, a tube removably connected with said cover and provided with a tapered inner end passing through the opening formed in said partition, a guard removably mounted within said tube to prevent ink from flowing out through the tube, and an ink inlet pipe entering through the wall of said reservoir and removably connected therewith and having its inner portion coiled about said tube to support said tube in said reservoir.

2. An ink well comprising a base having an ink cup formed therein, an ink reservoir carried by said base, a partition mounted in said reservoir and provided with an opening communicating with the ink cup formed in said base, a cap carried by said reservoir and provided with a central opening, a tube extending from the opening of said cover through the opening formed in said partition, and a guard collar mounted in said tube to prevent ink flowing out through said tube.

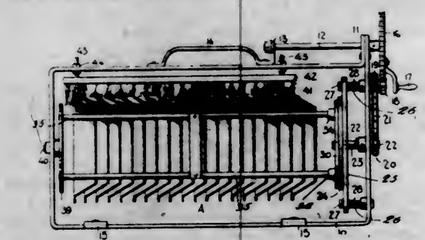
1,061,156. SAW-SWAGE. DAVID H. BALL, South Williamsport, Pa. Filed Oct. 1, 1912. Serial No. 723,425. (Cl. 76—54.)



1. In a swaging machine, the combination of a block provided with a slot for the entrance of the saw tooth to be swaged, means for clamping the saw, an anvil adapted to engage one edge of a saw tooth, and a transverse swaging shaft adapted to engage the other edge of the tooth; with a lever for operating said shaft; and means for limiting the swaging movement of said lever consisting of a stop pin, a pivoted lever carrying the stop pin, a lever adjusting bolt pivotally connected to the said pin, and means for adjusting said lever adjusting bolt.

2. In a swaging machine, the combination of a block provided with a slot for the entrance of the saw teeth to be swaged, means for clamping the saw, an anvil in said block, a transverse swaging shaft in said block below the anvil, a lever for operating said shaft, a stop pin, a pivoted lever carrying the stop pin, a bolt pivotally connected to the said pin, an eye-bolt attached to the block engaged by said lever adjusting bolt, and nuts on said lever adjusting bolt at opposite sides of the eye-bolt.

1,061,157. WASHING-MACHINE FOR MILK-SEPARATOR DISKS. HERBERT G. BUMIS, Riceville, Iowa. Filed Jan. 11, 1913. Serial No. 741,435. (Cl. 141—9.)



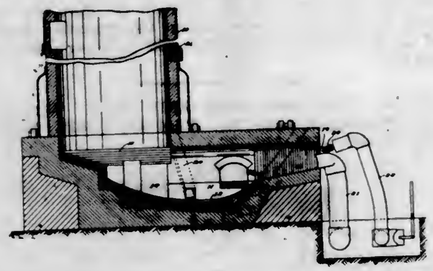
1. A machine of the character named, comprising a frame; a driving mechanism mounted on said frame, embodying a short driven shaft; a head slidably mounted on said shaft, to rotate therewith; a disk coaxial with said shaft, rotatively mounted at the opposite end of said frame; a disk rack adapted to extend between said head and said disk; and means for operatively connecting said rack with said head and disk.

2. A machine of the character named, comprising a frame; a driving mechanism mounted on said frame, embodying a short driven shaft; a head slidably mounted on said shaft, to rotate therewith; a disk coaxial with said shaft, rotatively mounted at the opposite end of said frame; a disk rack adapted to extend between said head and said disk; means for operatively connecting said rack with said head and disk; and means mounted on said frame to extend between disks when mounted on said rack, to wipe the edges of said disks.

3. A machine of the character named, comprising a rack frame having parallel rack rods and a connecting base plate rigidly secured thereto; a rotary disk to hold the free ends of said rack rods; and a driving mechanism for said rack frame, embodying a yielding face plate and a rotary head having a bearing on said plate.

4. A machine of the character named, comprising a rack frame having parallel rack rods and a connecting base plate rigidly secured thereto; a rotary disk to hold the free ends of said rack rods; a driving mechanism for said rack frame, embodying a yielding face plate and a rotary head having a bearing on said plate; means for non-rotatively holding said face plate; and springs to normally extend said face plate toward said rack.

1,061,158. CUPOLA-FURNACE. WILLIAM NEWTON BEST, New York, N. Y. Filed Sept. 12, 1911. Serial No. 648,958. (Cl. 75—109.)

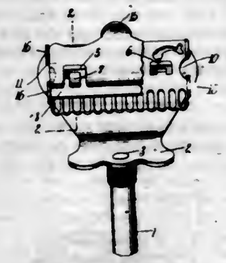


In combination, a cupola furnace having a substantially closed chamber in open communication therewith and into which the molten metal may flow, a combustion chamber at the end of said metal-receiving chamber opposite to said cupola and flaring inwardly and downwardly to substantially the full width of said first-mentioned chamber and to the upper surface of the normal metal level in the latter, means at the outer end or apex of said combustion chamber for spraying the liquid fuel into said combustion chamber, and a separate conduit delivering combustion-supporting air to said chamber below said spraying means.

1,061,159. SAFETY-RAZOR. CHARLES G. BLUH, New York, N. Y. Filed Jan. 15, 1912. Serial No. 671,143. (Cl. 30—12.)

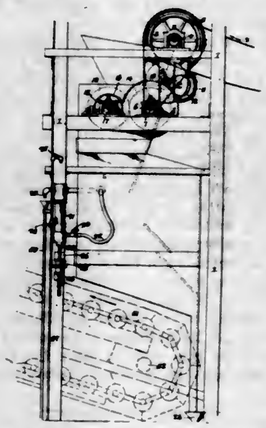
In a safety razor, a flat guard plate formed with a pair of spaced eyelets projecting therefrom, a flat razor blade adapted to rest against said guard plate, said razor blade being formed with a pair of spaced apertures so arranged as to permit said eyelets to project therethrough when said blade is positioned on said guard plate, and a bowed pressure plate of resilient material having a body formed with a plurality of notches extending inwardly from one edge of the plate whereby a pair of spaced tongues are presented normally in the same plane as the body of the pressure plate, said tongues being adapted to project through said eyelets and to be brought under tension and to bring under tension the body of the pressure plate for locking said razor blade to said guard and

for causing the front and rear edges of the pressure plate to press the front and rear edges of said razor blade



against said guard plate, for the full length of the razor blade.

1,061,160. SAND-TEMPERING APPARATUS. JOHN WILSON BROWN, Jr., Philadelphia, Pa., assignor to The Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 4, 1910. Serial No. 559,291. (Cl. 22—89.)



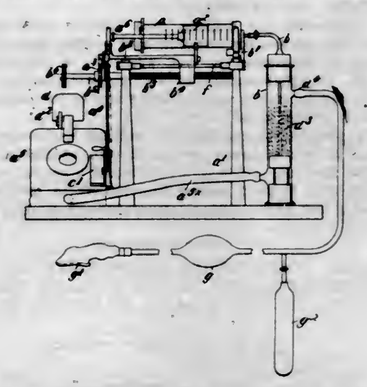
The combination in an apparatus for tempering or moistening sand or other granular material, of an endless belt conveyer for carrying the sand, a hopper in which the sand is discharged from the conveyer, a pair of crushing rolls at the base of the hopper for crushing and discharging the sand in a thin film, an endless conveyer on which the sand is discharged, and an atomizer for spraying water onto the sand as it passes from the hopper to the last mentioned conveyer so as to moisten the sand to the degree required.

1,061,161. APPARATUS FOR USE IN ADMINISTERING ANESTHETICS. SIDNEY GEORGE BROWN, London, England. Filed May 26, 1910. Serial No. 563,630. (Cl. 128—13.)

1. Apparatus for administering anesthetics, comprising a container for the anesthetic, a piston working therein, a ratchet device, an air bellows, a notched regulator on said bellows, and means for connecting said regulator with the aforesaid ratchet device so as to impart an intermittent movement to the aforesaid piston.

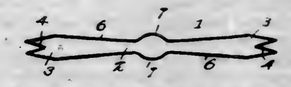
2. Apparatus for administering anesthetics comprising a container for the anesthetic, a piston working therein, a ratchet device, an air bellows, a notched regulator on the said bellows, means for connecting said regulator with the aforesaid ratchet device, and a chamber for mixing the anesthetic and air.

3. Apparatus for administering anesthetics, comprising a container for the anesthetic, a piston working therein, a ratchet device, an air bellows, a notched regulator



on the said bellows, means for connecting the said regulator with the aforesaid ratchet device, a chamber for mixing the anesthetic and air and means for delivering the said mixture to the patient.

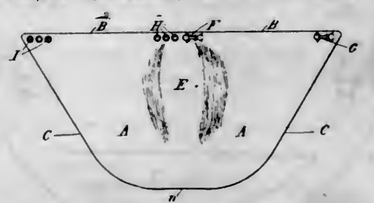
1,061,162. POCKET-GUARD. CHARLES J. BUKOUSKI, Pasadena, Cal. Filed June 26, 1912. Serial No. 706,019. (Cl. 2—151.)



1. A pocket having a spring guard extending across the same near the mouth and secured to opposite sides thereof, the said spring guard comprising a pair of side members and a pair of W-shaped arms connecting the ends of the side members and arranged with the apices formed by their central portions extending inwardly in the ends of the guard and opposed to each other.

2. A pocket having a spring guard extending across the same near the mouth and secured to the sides thereof, the said spring guard comprising a pair of side members which diverge toward the ends of the guard and a pair of W-shaped arms connecting the ends of the said side members and extending inwardly in the ends of the guard and arranged with the apices formed by their central portions opposed to each other, the sides of the guard being also provided at their centers with outwardly curved portions forming in effect an opening at the center of the guard.

1,061,163. LEGGING. THOMAS BURBERRY, London and county of Hants, England. Filed Oct. 5, 1912. Serial No. 724,168. (Cl. 36—2.)



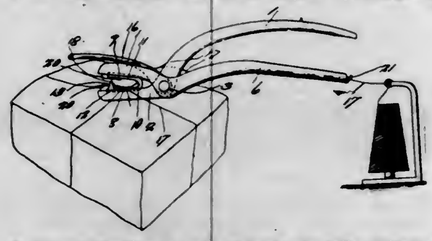
A legging having straight upper and lower edges, sides gradually sloping toward said lower edge, fastening means positioned near the top edge on each side of its center, and other fastening means near the extremities of said top edge adapted for coöperation with said first named fastening means.

1,061,164. PROCESS FOR COATING METAL ARTICLES WITH OTHER MINERALS. WILLIAM GEORGE CLARK, London, England. Filed Oct. 27, 1911. Serial No. 657,076. (Cl. 91—70.1.)

1. A process for coating iron articles with another metal and adherently securing said coating thereto, consisting in immersing the iron article in a solution of a salt of said other metal and heating said thereby coated iron article in molten non-oxidizing flux to the fusion temperature of said other metal.

2. A process for coating iron articles with copper and adherently securing said coating thereto, consisting in immersing the iron article in a solution of a copper salt and heating said thereby coated iron article in molten non-oxidizing flux to the fusion temperature of copper.

1,061,165. COMBINATION CORD-HOLDER AND FASTENER-CLENCHER. WILLIAM A. COATES, Sidell, Ill. Filed Aug. 30, 1912. Serial No. 717,862. (Cl. 101—66.)

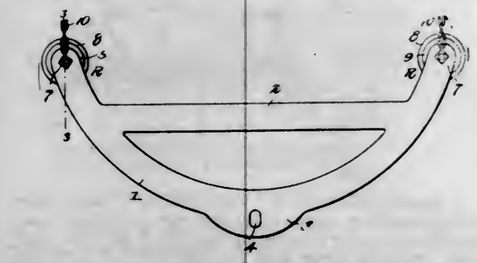


1. In combination, a pair of jaws pivotally united and terminating in handle members, the jaws having grooves adapted to receive the arms of a fastener, an arm secured to the pivot of the jaws and through which a strand of cord is adapted to pass, one of the handle members having an eye through which the cord passes prior to passing through said arm.

2. In combination, a pair of jaws pivotally united and terminating in handle members, the jaws having grooves adapted to receive the arms of a fastener, an arm secured to the pivot of the jaws and through which a strand of cord is adapted to pass, and means extending through said arm to clamp the cord against the inner portion of said arm.

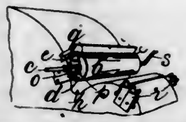
3. In combination, a pair of jaws pivotally united and terminating in handle members, the jaws having grooves adapted to receive the arms of a fastener and provided with severing knives, an arm secured to the pivot of the jaws and through which a strand of cord is adapted to pass, a member extending laterally and partially into said arm to clamp said cord against the inner portion of said arm, means for withdrawing said member, and a spring coöperating with said means for holding the member clamped against said cord.

1,061,166. WHIFFLETREE. GEORGE CULLI, Millstadt, Ill. Filed Sept. 6, 1911. Serial No. 647,844. (Cl. 21—78.)



A whiffletree comprising an arcuate body having terminal horizontal recesses intersected by vertical apertures, bolts mounted within said apertures, a rotary buffer member mounted upon the bolt within each terminal recess, the outer periphery of each of said buffer members projecting outwardly past the side faces and corresponding end face of the whiffletree body, and draft attaching means connected to the extremities of each pivot bolt and adapted to extend forwardly therefrom.

1,061,167. STRIPPING-ROLLER OF CARDING-ENGINES. JAMES EDGE, Gorton, England. Filed May 14, 1912. Serial No. 697,298. (Cl. 19—15.)

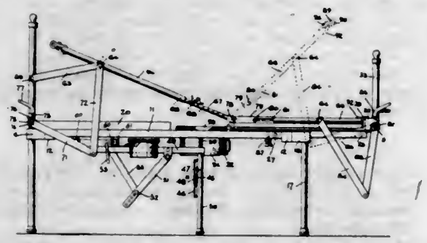


1. The combination, with a carding engine casing having an opening, and shaft bearings secured at the ends of the opening; of a stripping roller provided with a driving shaft which is journaled in the said bearings, a casing for the stripping roller mounted loosely on the said shaft and adapted to cover the said opening, slotted brackets on the stripping roller casing, and a packing roller slidable in the said slotted brackets and adapted to form a dust-proof joint between the two casings.

2. The combination, with a carding engine casing having an opening, and shaft bearings secured at the ends of the opening; of a stripping roller provided with a driving shaft which is journaled in the said bearings, a casing for the stripping roller mounted loosely on the said shaft and adapted to cover the said opening, and a stop projecting from the stripping roller casing and adapted to regulate its position with respect to the carding engine casing when the said shaft is placed in its said bearings.

3. The combination, with a carding engine casing having an opening, and shaft bearings secured at the ends of the opening; of a stripping roller provided with a driving shaft which is journaled in the said bearings, a casing for the stripping roller mounted loosely on the said shaft and adapted to cover the said opening, two arms projecting from the stripping roller casing at different points and adapted to regulate its positions with respect to the carding engine and the said opening when the shaft is placed in the said bearings and is moved from one pair of bearings to another.

1,061,168. INVALID-BED. WILLIAM CLARK FEELY, New York, N. Y. Filed June 29, 1912. Serial No. 706,604. (Cl. 5—12.)



1. An invalid bed having, in combination; a fixed bed structure provided with side bars and supporting legs therefor; an extension frame having mounted thereon laterally-extending members to engage said side bars above and below the same; and a foot-board removably mounted on said extension frame.

2. An invalid bed, having, in combination; a fixed frame provided with side bars; a plurality of supporting legs for said frame, removably secured thereto; an extension frame slidably mounted on said side bars, said extension frame having laterally-projecting members to rest above and below said side bars, and said extension frame being removably adapted for disengagement from said fixed frame; and a foot-board removably mounted upon said extension frame.

3. An invalid bed, having, in combination; a fixed frame provided with side bars, a head-board and supporting legs; an extensible frame slidably mounted thereon, provided with side bars having lateral extensions to rest above and below the side-bars of said fixed frame, removably connected therewith; a foot-board removably mounted upon said extension frame; a plurality of spring mattress-supporting plates, the combined length of which equals the normal length of the bed, said plates being adapted to separate at the median section of said bed, one of said plates being attached to the fixed frame, and the other to the extension frame; a commode-supporting frame movably attached to said fixed frame, in supported relation thereto; and means for elevating a part of said commode-supporting frame to above the normal level of said plates and mattresses supported thereon.

4. An invalid bed having, in combination; a fixed frame provided with side bars, a head-board and supporting legs; an extension frame slidably mounted thereon, provided with side bars having lateral extensions to rest above and below the side bars of said fixed frame, removably connected therewith; a foot-board removably mounted upon said extension frame; a plurality of spring mattress-supporting plates, the combined length of which equals the normal length of the bed, said plates being adapted to separate at the median section of said bed, one of said plates being attached to the fixed frame and the other to the extension frame; a movable commode-supporting frame movably attached to said fixed frame, in supported relation thereto; means for elevating a part of said commode-supporting frame to above the normal level of said plates and mattresses supported thereon; and means extending beyond the side of said bed for moving said supporting frame lengthwise said bed, to register the commode with the open section of said fixed and extension frames, when parted.

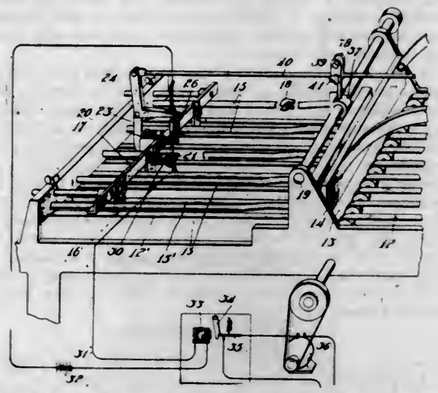
5. In a bed such as described, having a fixed frame and an extensible frame adapted to be separated intermediate the ends thereof; a commode-supporting frame, comprising a plurality of track members mounted on, and extending transverse, said fixed frame; a truck, having rollers mounted on said track members and supporting one end of said frame; a plurality of legs supporting the opposite ends of said frame; an extension mechanism having pivotally connected link members, one definitely mounted upon the supporting frame and the other mounted upon said truck frame; and a crank extensible beyond the side of the bed and rigidly connected to one of said link members, to swing the same about the center of said crank when said crank is rotated to move said supporting frame lengthwise said bed, said crank being adapted to shift said supporting frame and supporting truck thereof transversely of said bed.

[Claims 6 and 7 not printed in the Gazette.]

1,061,169. AUTOMATIC STOP DEVICE FOR AUTOMATIC MACHINES. ROBERT L. FOLZ and PHILIP A. ZACE, Chicago, Ill. Filed Apr. 22, 1912. Serial No. 692,319. (Cl. 101—36.)

1. The combination of an automatic machine for operating upon successively presented articles, comprising a gage to which each article should be presented and a timing part movable in definite time-relation to the presentation of said article, of an explorer mounted on said gage part, means timed by said timing part of the machine to occasion movement of said explorer to intersect a portion of the path of travel of said article and means responsive to uninterrupted movement of said explorer to stop the machine.

2. The combination of an automatic machine comprising a gage, means to move successive articles to said gage, and a working part timed intermittently to operate upon presentation of each article to said gage, of an explorer mounted on said gage and movable to intersect the path of said article, operating connections between said explorer and said timed working part and means operable by uninterrupted excursion of the explorer to stop the machine.



3. The combination with a machine for handling separate paper sheets, comprising frictional paper feed mechanism, a gage to which each sheet of paper should be squarely presented, and a part timed for operation while the paper sheet should be in contact with the gage, of an explorer part mounted on said gage approximately centrally of the gage, connections between said explorer and said timed part of the machine whereby the explorer moves through a path which may be interrupted by the central portion of the paper sheet if said sheet be squarely presented to the gage, and means responsive to uninterrupted movement of the explorer to stop the machine.

4. The combination with a machine for handling separate paper sheets, comprising frictional paper feeding mechanism, a gage to which each sheet of paper should be squarely presented, and a part timed for operation while the paper sheet should be in contact with the gage, of an insulating frame mounted on said gage, a movable explorer and a stationary contact supported by said frame respectively above and below a paper sheet, and connections between said explorer and timed part of the machine for intermittently moving said explorer toward the stationary contact.

5. The combination of an automatic machine comprising a gage, means to move successive articles to said gage, and a working part timed intermittently to operate upon presentation of each article to said gage, of means to stop the machine, an explorer movable across the path of said article for control of said stopping means, and means so to move said explorer comprising a pivoted lever associated with the gage having connections respectively with the explorer and with the timed means of the machine, said connections including parts connected for lost motion, said explorer mounted on the gage to tend to move across the path of said article under control of said lost-motion connections.

[Claim 6 not printed in the Gazette.]

1,061,170. ELECTRIC SOLDERING-IRON. FRANK M. GIFFEN, San Antonio, Tex. Filed July 17, 1912. Serial No. 709,893. (Cl. 219—27.)

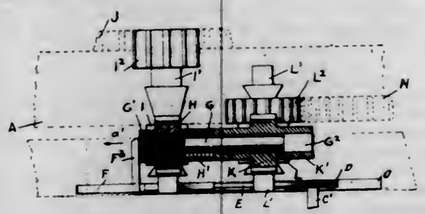


1. In an electric soldering iron, a receptacle for a bar of solder provided with a hinged end, a copper soldering point or end, a heating element disposed between said copper end and said receptacle, said heating element comprising a metal body portion having a recess, and resistance

elements disposed within said recess, said copper end being provided with a passage arranged to communicate with the interior of said receptacle, a valve carried by said heating element, a spring for keeping the valve normally closed, a handle, a thumb lever carried by said handle, and connections between said thumb lever and said valve for operating the latter.

2. In an electric soldering iron, a receptacle for a bar of solder provided with a hinged end, a metal heating element adjacent one end of said receptacle, a copper soldering point adjacent to the metal heating element, said metal heating element and said copper point being provided with registering passages for conducting the liquid solder to the exterior of the soldering iron, a rotary valve carried by said heating element and provided with an opening adapted to register with the openings in the heating element, a spring for keeping the valve normally closed, a handle, a thumb lever carried by said handle, and a rod connected with said thumb lever at one end and said valve at the other end for operating the valve to permit the flow of the melted solder.

1,061,171. INDICATING MECHANISM FOR TIMEPIECES. OLAF EIVIND GISBT, New York, N. Y., assignor to A. Wittnauer & Co., New York, N. Y. Filed May 9, 1912. Serial No. 696,083. (Cl. 58—85.)



1. An indicating mechanism for timepieces, comprising a time graduation indicating consecutive hours, an oscillating pointer indicating on the said graduation, a spring-pressed arm on the shaft of the pointer, a lever one end of which is engaged by the said arm, and a screw rod mounted to turn and to travel in the direction of its axis and engaging with one end the other end of said lever, the said screw rod being controlled in one direction by the winding up mechanism of the timepiece to move the pointer in the direction of zero of the said graduation and controlled in the opposite direction by the unwinding mechanism of the timepiece.

2. An indicating mechanism for timepieces, comprising a time graduation representing consecutive hours and beginning with zero, an oscillating pointer indicating on the said graduation, a screw rod mounted to turn and to travel in the direction of its axis, actuating means connecting the said screw rod with the said pointer, a gear wheel controlled by the winding up mechanism of the timepiece and connected with the screw rod to cause the same to travel in one direction on winding up the timepiece to move the pointer toward zero position on the said graduation, and a second gear wheel controlled by the unwinding mechanism of the timepiece and connected with the screw rod to cause the same to travel in the opposite direction to move the pointer from the zero position toward the other end of the graduation.

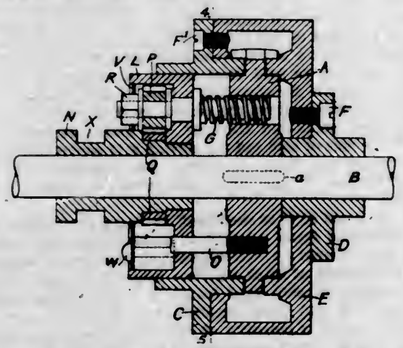
3. An indicating mechanism for timepieces, comprising a screw rod mounted to turn and to travel in the direction of its axis, an actuating lever controlled by the said screw rod, a pointer controlled by the said actuating lever, a gear wheel in which screws the said screw rod, means for turning the said gear wheel to move the screw rod lengthwise in one direction on winding up the main spring of the timepiece, a second gear wheel, the said screw rod being mounted to turn with the said second gear wheel and having a sliding connection therewith, and means for turning the said second gear wheel to move the screw rod lengthwise in the opposite direction on the running down of the main spring of the timepiece.

4. An indicating mechanism for timepieces provided with a screw rod having a threaded portion and a polygonal portion, an index controlled by the said screw rod, and gear wheels of which one is driven by the winding up gearing of the timepiece and the other is driven by the unwinding gearing of the timepiece, one of the said gear wheels having a hub provided with an interior thread in which screws the said threaded portion of the screw rod and the other gear wheel having a hub provided with a polygonal bore into which fits slidingly the said polygonal portion of the said screw rod.

5. An indicating mechanism for timepieces, comprising a screw rod having a threaded portion and a polygonal portion, a gear wheel driven from the winding up gearing of the timepiece and having a threaded hub in which screws the threaded portion of the said screw rod, and a gear wheel driven from the unwinding gearing of the timepiece and having a hub provided with a polygonal bore in which slidingly fits the said polygonal portion of the screw rod.

[Claims 6 to 10 not printed in the Gazette.]

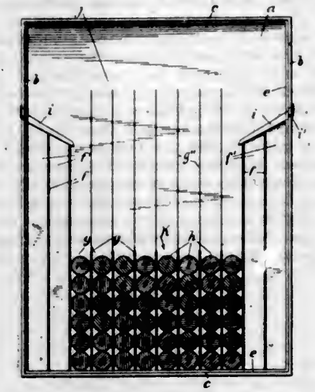
1,061,172. FRICTION-CLUTCH. BENJAMIN GODWIN, Marple, England. Filed Mar. 1, 1912. Serial No. 680,919. (Cl. 192—12.)



1. A friction clutch comprising in combination, a shaft, a disk like member keyed to said shaft and provided with sets of clutch members movable radially with respect to said shaft and having rim engaging portions on opposite sides of said disk like member and concentrically arranged with respect to said shaft, a clutch member rotatively mounted on said shaft and having rims concentric with respect to said shaft and extending between said clutch-members on the opposite sides of said disk like member, radially disposed threaded rods rotatively mounted in said disk like member for actuating said clutch members, worm wheels for said rods, a device shiftable on said shaft and provided with a freely rotatable annular rack, worm spindles rotatively mounted on said shiftable device and disposed in concentric relation with respect to said shaft and engaging said worm wheels and said disk like member, and pinions fixed to said worm spindles and meshing with said annular rack, substantially as described.

2. A friction clutch comprising in combination, a shaft, a disk like member rigidly mounted on said shaft, a clutch member rotatively mounted on said shaft and having rims extending toward said disk member on opposite sides thereof, clutch shoes carried by said disk member for engaging said rims, radially disposed threaded rods in said disk member for actuating said shoes, worm wheels on said rods, a shiftable clutch means on said shaft, worm spindles rotatively mounted in said shiftable means in parallel relation with said shaft and in mesh engagement with said worm wheels, said spindles engaging openings in said disk member for preventing independent rotation of said disk member with respect to said shiftable means, pinions rigidly mounted on said worm spindles, and an annular rack freely mounted on said shiftable means and meshing with said pinions, substantially as described.

1,061,173. GAME. JOHN GREENE, Salt Lake City, Utah. Filed Oct. 16, 1912. Serial No. 726,056. (Cl. 46—41.)



1. The herein described game apparatus comprising a box, the interior of which comprises a series of parallel grooves arranged in sets and a field, the grooves of one set constituting a pit, a plurality of disks within the box and shiftable therein, and a plurality of guides serving to guard certain of the grooves so that the disks may not enter therein.

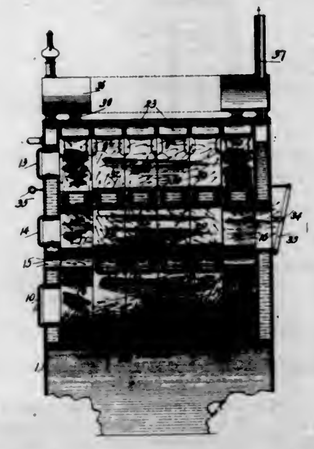
2. The herein described game apparatus comprising a flat box, a plurality of ribs extending longitudinally therein from one end toward the other, said ribs being of different lengths, the longer ribs being arranged adjacent the sides of the box, a plurality of disks within the box and of a thickness substantially equivalent to the depth of the inner space thereof, and means controllable from the exterior of the box to prevent the disks from passing between the ribs comprising the longer sets of ribs.

3. In a game apparatus, the combination of a flat box, means within the box forming the interior space into a plurality of parallel grooves extending from one end of the box toward the other, certain of said grooves being shorter than the remaining grooves and constituting a pit, a plurality of disks approximating in thickness the depth of the interior of the box and freely shiftable along the bottom of the box, and movable means controllable from the exterior of the box to cause the disks to occupy said pit and fill the grooves pertaining thereto.

4. The herein described game apparatus comprising a flat box, a plurality of ribs within the box extending parallel to one another from one end thereof toward the other end, certain of said ribs adjacent the sides of the box being longer than the others and forming home grooves, the other of said ribs constituting a pit, a series of differently colored sets of disks within the box and shiftable freely along the bottom thereof, one set of disks being adapted to each of said home grooves, and means controllable from the outside of the box to direct the disks away from the home grooves and into the pit preparatory to the operation of the game.

1,061,174. BOILER. SAMUEL A. GRIFFIS, Peoria, Ill., assignor, by mesne assignments, to John V. Brokaw, Canton, Ill. Filed June 19, 1909. Serial No. 503,181. (Cl. 122—225.)

1. A boiler, comprising a plurality of separable sections, each of said sections having the intercommunicating vertical and spaced water compartments 20 and 24, and the horizontal and spaced water compartments 21, 22 and 23, and with half flue portions in the outside walls of the compartments 21, 22 and 24 and with an air duct extending through the compartment 21.



2. A section for a sectional boiler, comprising vertical leg portions with water compartments and intermediate spaced vertical water compartments communicating with the leg portions and the overlying horizontal water compartments, the lower horizontal water compartment being inclined at its opposite ends where it merges into the legs, and an air duct extending transversely through said lower horizontal water compartment.

3. A section for a sectional boiler, consisting of vertical leg portions having water compartments which communicate through upper and lower horizontal water compartments, intermediate spaced vertical water compartments communicating with the upper and lower horizontal water compartments, and with the water compartments of the legs through a water compartment disposed intermediate said upper and lower water compartments, an air duct through the lower water compartment, clean out openings in the outside walls of said legs, and plugs for closing said openings.

4. A sectional boiler, comprising a hollow water front and back, hollow separable intermediate sections, the lower portions of the sections forming a fire chamber, said intermediate sections provided with a plurality of over-lying transverse openings, which, when the sections are united, form longitudinal flues through the boiler, and said sections provided in their opposite faces with matching half flue portions for forming a plurality of series of vertical and transverse flues between the said sections, air ducts in each of the water front and said intermediate sections immediately above the fire chamber for forming a continuous air duct from and through the water front to the water back, and air exit openings in said sections communicating with the air duct and said fire chamber.

5. A sectional boiler, comprising a hollow water front and back, hollow separable intermediate sections, each of said sections provided with coinciding transverse openings forming longitudinal flues in the boiler and with half flue portions in their matching faces forming together a plurality of series of vertical and transverse flues between said sections, the lower portions of the sections forming a fire-chamber which communicates with the flues between the said sections, coinciding air ducts in each of said water front and intermediate sections for forming a continuous air duct from and through the water front to the water back, and air exits communicating with said air ducts and said fire-chamber for causing a separation of the products of combustion in the fire-chamber, whereby they are directed to the flues between said sections upon the opposite sides of said ducts.

[Claims 6 to 10 not printed in the Gazette.]

1,061,175. WEED-PULLING DEVICE. JOHN F. GUY and JOHN H. BLOM, Everett, Wash. Filed Dec. 14, 1912. Serial No. 736,771. (Cl. 55—148.)



1. In a weed pulling implement, a staff having a handle extending at an angle thereto, and an arm depending from said handle and spaced thereby from the staff, a hand lever pivoted on the staff and having a bifurcated end guided on the arm, a jaw at the lower end of the staff, a jaw carrying lever pivoted on the staff, and a rod connecting the jaw carrying lever with the hand lever.

2. In a weed pulling implement, a staff having a handle extending at an angle thereto, and an arm depending from the handle and spaced thereby from the staff, a hand lever pivoted on the staff and having a bifurcated end engaging and guided on the arm, a jaw at the lower end of the staff, a lever pivoted on the staff adjacent to the jaw and having an arcuate offset portion provided with a terminal jaw, and a rod connecting the jaw carrying lever with the hand lever.

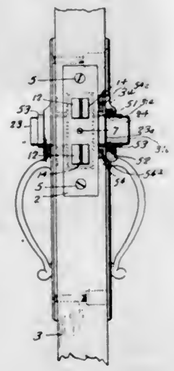
1,061,176. SET-SCREW. HUBERT C. HART, Unionville, Conn. Filed May 6, 1910. Serial No. 559,777. (Cl. 85—53.)



A new article of manufacture comprising a cupped cap formed of sheet metal, the said cap having a flat bottom formed with an opening, the walls of which are angular, the lower portion of the walls of the cap being substantially vertical and annular and flared outwardly from the annular portion, and thence the said walls curve inwardly and form an annular bead to provide a finger grip, the top of the cap being open, and a headed screw fitting in the opening in the bottom of the cap, the head of the screw being of less width than the diameter of the opening formed between the edges of the cap forming the bead, said screw having an angular portion to correspond with and fitting against the angular walls of the opening, and the threaded portion being of less diameter than the width of the opening in the bottom of the cap and extending below the bottom of said cap.

1,061,177. LOCK. HASHIM SALEEM HASHIM, Raymond, Wash. Filed Feb. 10, 1912. Serial No. 676,779. (Cl. 70—91.)

1. A lock comprising a main casing, a bolt slidable in the casing, said bolt comprising a substantially rectangular open frame provided at one end with a pair of spaced longitudinally extending lugs, each beveled on one face, the casing having openings for the lugs, an auxiliary casing at each side of the main casing, said main casing having an opening for each auxiliary casing, a yoke shaped spring having its body secured to the end of the casing between the bolt openings, and its arms extending toward the auxiliary casings, a ring threaded into the inner end of each auxiliary casing, each ring having an annular lateral flange at its inner end engaging the inner face of the main casing to limit the outward movement of the auxiliary casing, a latch member held in each ring, each member being rotatable and having an opening in its outer end for engagement by a key and provided with a cam at its inner end, each cam having one face perpendicular to the bolt and the other beveled to engage and move the bolt inwardly when the auxiliary casing is pressed inward with the latch member turned into one position, a lug on the bolt for engaging the latch to limit the inward movement when the latch member is turned into another position, said latch members having each a lug on the opposite side of the lug on the bolt from the perpendicular face of the cam for preventing inward movement of the bolt, means for preventing rotation of the auxiliary casings, and springs pressing the bolt outwardly.



2. A lock comprising a main casing, a bolt slidable in the casing, an auxiliary casing at each side of the main casing, said main casing having an opening for each auxiliary casing, a yoke shaped spring having its body secured to the end of the casing between the bolt openings, and its arms extending toward the auxiliary casings, a ring threaded into the inner end of each auxiliary casing, each ring having means for limiting the outward movement of the auxiliary casing, a latch member held in each ring, each member being rotatable and having an opening in its outer end for engagement by a key and provided with a cam at its inner end, each cam having one face perpendicular to the bolt and the other beveled to engage and move the bolt inwardly when the auxiliary casing is pressed inward with the latch member turned into one position, a lug on the bolt for engaging the latch to limit the inward movement when the latch member is turned into another position, said latch members having each a lug on the opposite side of the lug on the bolt from the perpendicular face of the cam for preventing inward movement of the bolt, means for preventing rotation of the auxiliary casings, and springs pressing the bolt outwardly.

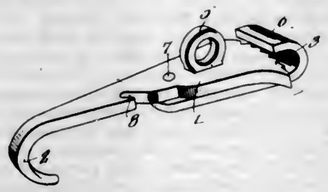
3. A lock comprising a main casing, a bolt slidable in the casing, an auxiliary casing at each side of the main casing, a yoke shaped spring having its body secured to the end of the casing between the bolt openings, and its arms extending toward the auxiliary casings, a ring threaded into the inner end of each auxiliary casing, each ring having an annular lateral flange at its inner end engaging the inner face of the main casing to limit the outward movement of the auxiliary casing, a latch member held in each ring, each member being rotatable and having an opening in its outer end for engagement by a key and provided with a cam at its inner end, each cam having one face perpendicular to the bolt and the other beveled to engage and move the bolt inwardly when the auxiliary casing is pressed inward with the latch member turned into one position, a lug on the bolt for engaging the latch to limit the inward movement when the latch member is turned into another position, means in connection with the latch members and the bolt for preventing movement of the bolt when the latch member is turned into the said last named position, means for holding the auxiliary casings from rotation, and springs pressing the bolt outwardly.

4. A lock comprising a main casing, a bolt slidable in the casing, an auxiliary casing at each side of the main casing, a yoke shaped spring having its body secured to the end of the casing between the bolt openings, and its arms extending toward the auxiliary casings, a ring threaded into the inner end of each auxiliary casing, each ring having an annular lateral flange at its inner end engaging the inner face of the main casing to limit the outward movement of the auxiliary casing, a latch member held in each ring, each member being rotatable and having an opening in its outer end for engagement by a key and provided with a cam at its inner end, each cam having one face perpendicular to the bolt and the other beveled to engage and move the bolt inwardly when the auxiliary casing is pressed inward with the latch member turned into one position, a lug on the bolt for engaging the latch to limit the inward movement when the latch member is turned into another position, and means in connection with the latch members and the bolt for preventing movement of the bolt when the latch member is turned into the said last named position.

5. A lock comprising a casing having oppositely arranged openings in its side walls, a bolt slidable in the main casing, an auxiliary casing having its inner end secured in each opening, a ring threaded into the inner end of each auxiliary casing, each ring having a flange for limiting the outward movement of the auxiliary casings, a spring pressing each casing outward, a latch member rotatable in each ring, each latch member having a cam face for engaging the bolt when the latch member is in one position to retract the bolt, and means for engagement by the bolt to limit the inward movement of the latch member and the auxiliary casing when the latch member is in another position, each latch member having means for engagement by a key to turn the said member, means for holding each auxiliary casing from rotation with the key, and a spring pressing the bolt outward.

[Claims 6 to 14 not printed in the Gazette.]

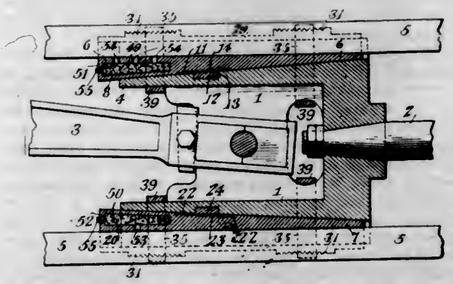
1,061,178. CLAMP. ISAAC G. HUSTON, Carey, Ohio. Filed Feb. 13, 1912. Serial No. 677,389. (Cl. 100—31.)



1. A device of the type described, including a jaw-member having a hook at one end, the opposite end or edge of said jaw-member having a convex ratchet face, and a second hook-ended jaw member pivoted at one end laterally to the first referred-to jaw-member at a point distant from said ratchet face, said second jaw-member having its hook-ended portion facing the ratchet-faced end or edge of said first-referred to jaw-member, said first-referred to jaw-member also having a laterally outstanding eye arranged between its pivot and its ratchet-faced or gripping edge, the axis of said eye being in a plane parallel with the gripping action of the ratchet-faced edge of said first-referred to jaw-member.

2. In a binder, the combination of, a jaw member, having a convex ratchet face at one end, a hook extending perpendicular to said jaw member at the other end, a laterally outstanding eye rigidly secured to said jaw member; a second hook ended jaw member pivotally connected to the aforesaid jaw member intermediate said eye and hook, said second jaw member having its hook end portion facing the ratchet faced end of said first mentioned jaw member, a binder rope secured at one end to said eye, and the other end extending between said ratchet faced jaw member end and said hook facing said ratchet, said first mentioned jaw member being provided with a slot intermediate said hook and said pivotal connection, adapted to engage a permanent binder rope.

1,061,179. CROSS-HEAD. MILES D. JOYNER, Savannah, Ga. Filed May 7, 1912. Serial No. 695,749. (Cl. 121—106.)



1. The combination with a cross head having projecting side walls, of a tapered longitudinal gib adjustably arranged between the side walls and provided with side flanges fitting against the said side walls and having serrations or teeth, and a clamp composed of two sides provided at their outer ends with inwardly extending jaws having teeth for engaging those of the gib, a transverse bar fulcrumed on the cross head and formed integral with one of said sides of the clamp and having an opening receiving the other side, and means for adjustably connecting such side of the clamp with the transverse bar.

2. The combination with a cross head having projecting side walls, of a tapered longitudinal gib arranged between the side walls and provided at opposite sides with longitudinal flanges approximately L-shaped in cross section to fit against the inner faces and longitudinal edges of the said walls and provided with enlargements having teeth, and a clamp composed of two sides provided with jaws having teeth engaging those of the enlargements, and a transverse bar extending across the cross head and connected with the said sides.

3. The combination with a cross head having projecting side walls, of a tapered longitudinal gib adjustably arranged between the side walls, and a clamp composed of spaced sides provided at their outer ends with inwardly extending jaws engaging the gibs at opposite sides thereof, and a transverse bar formed integral with one of the sides of the clamp and adjustably connected with the other side of the clamp, said transverse bar being provided with a substantially convex bearing face forming a fulcrum for equalizing the pressure exerted by the jaws.

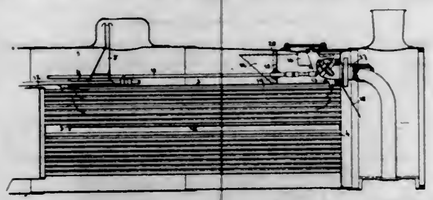
4. The combination with a cross head having projecting side walls, of a tapered longitudinal gib adjustably arranged between the side walls, and a clamp composed of sides provided at their outer ends with jaws for engaging the gib, one of the sides of the clamp having its inner portion threaded and provided with a slot, and a transverse bar formed integral with the other side of the clamp and provided with an opening receiving the said threaded portion, a nut engaging the threaded portion, and a key extending through the slot of the threaded portion and provided at one end with a head and having a pivoted gravity latch at the other end for retaining the key in the slot.

5. The combination with a cross head having projecting side walls, of a tapered longitudinal gib arranged between the side walls and provided at its inner face with a longi-

tudinal series of teeth, a transverse key extending through the cross head and provided with means for engaging the teeth, and clamping means for holding the gib against the cross head and in engagement with the key.

[Claims 6 to 8 not printed in the Gazette.]

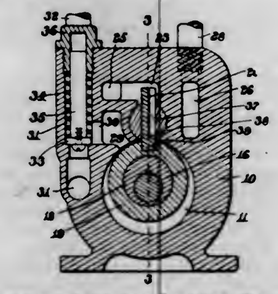
1,061,180. SUPERHEATER FOR STEAM-GENERATORS. WILLIAM F. KIESEL, Jr., Altoona, Pa. Filed Jan. 9, 1911. Serial No. 601,566. (Cl. 122—463.)



1. In a boiler of the locomotive type, the combination with the boiler shell and fire tubes, of a superheater chamber through which a plurality of the upper fire tubes pass, the upper wall of said superheater chamber being arched and its lower wall being V-shaped in cross section and having an inlet opening at its rear end and a delivery opening near its forward end, a rear flue sheet for the superheater adjacent the fire box, a common flue sheet for the forward end of the superheater and boiler, and spaced longitudinally extending bracing plates secured to the top of the superheater, the boiler shell and the forward flue sheet.

2. In a boiler of the locomotive type, a superheater chamber inclosing portions of the upper fire tubes of the boiler, a duct for transferring steam from the boiler to the rear end of the superheater, and a throttle chamber above the forward end of the superheater, the said throttle chamber having side walls connected respectively to the shell of the boiler, the front flue sheet of the boiler and the top sheet of the superheater and serving to brace the flue sheet and support the superheater casing, substantially as and for the purpose set forth.

1,061,181. AIR-COMPRESSOR. JUSTUS R. KINNEY, Dorchester, Mass. Filed June 5, 1912. Serial No. 701,916. (Cl. 230—30.)



1. In a device of the class described, the combination of a casing having two piston chambers therein and a smaller cylindrical chamber communicating therewith, said casing being provided with a passage from the outlet of one piston chamber to the inlet of the other; two slotted oscillating members positioned in said smaller chamber; an eccentric in each piston chamber said eccentrics being oppositely disposed; and an annular member on each piston provided with a radial blade rigidly secured thereto each blade having an outlet passage therein extending outwardly from a point removed from the periphery of said annular member whereby the outlet from each piston chamber may be temporarily cut off during a portion of the cycle of said piston.

2. In a device of the class described, the combination of a casing having two piston chambers therein and a smaller cylindrical chamber communicating therewith, said casing being provided with a passage from the outlet of one piston chamber to the inlet of the other; two slotted oscillating members positioned in said smaller chamber; an eccentric in each piston chamber, said eccentrics being oppositely disposed; and an annular member on each piston provided with a radial blade rigidly secured thereto, each blade having an outlet passage therein, the annular member of the second piston chamber being adapted to close the inlet thereto while the piston in the first piston chamber is compressing.

3. In a device of the class described, the combination of a casing having two piston chambers therein, the outlet from one communicating with the inlet of the other; and rotary eccentric pistons in said chambers so positioned relative to each other that one will cut off the inlet to the second piston chamber while the piston in the first chamber is compressing.

4. In a device of the class described, the combination of a casing having formed therein two piston chambers, an outlet compartment communicating with one chamber, an inlet passage communicating with the other chamber, and a connecting passage between the inlet to the first mentioned chamber, and the outlet from the other chamber; rotary eccentric pistons in said chambers each provided with a radial blade having a groove in one face thereof adapted to permit the passage of air from said chambers during a portion of the cycle of said pistons and cut off the outlet for said air during the remainder of said cycle; and a check valve in said inlet passage.

5. In a device of the class described, the combination with a casing having two alined piston chambers separated by a division wall; an inlet passage to one of said chambers; a check valve in said passage; a revoluble shaft extending through both chambers; an eccentric keyed to said shaft in each chamber, said eccentrics being oppositely disposed; an annular piston mounted upon said eccentric provided with a radial blade having a groove in one face extending from its outer end to a point slightly removed from the periphery of said piston; a slotted oscillating member for each blade through the slot of which said blade extends; a passage from the outlet of one chamber communicating with the other chamber; a compartment communicating with the outlet of the other chamber; and a discharge passage from said compartment.

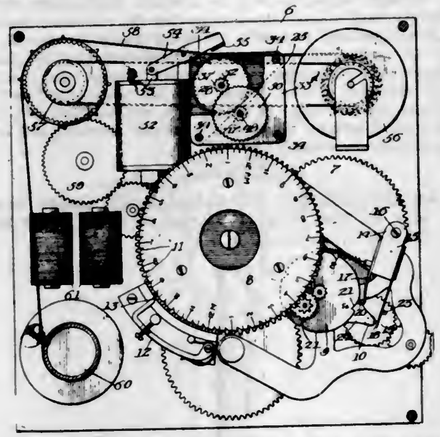
[Claims 6 to 8 not printed in the Gazette.]

1,061,182. RECORDING-WATTMETER. FRANK F. KINNEY, Chicago, Ill., assignor, by mesne assignments, to Chicago Electric Meter Company, Chicago, Ill., a Corporation of Illinois. Filed June 26, 1907. Serial No. 380,878. Renewed Sept. 13, 1912. Serial No. 720,279. (Cl. 234—5.5.)

1. A recording wattmeter, comprising integrating wattmeter mechanism, means for forming a record of the integrations of said mechanism, time keeping mechanism combined with means for electrically operating said recording mechanism by said timekeeping mechanism, said recording mechanism comprising a pivotally mounted platen, and a plurality of type wheels, for printing said record upon a strip of paper movable transversely to the said platen.

2. A recording wattmeter, comprising integrating wattmeter mechanism, means for forming a record of the integrations of said mechanism, timekeeping mechanism combined with means for electrically operating said recording mechanism by said timekeeping mechanism, said recording mechanism comprising a pivotally mounted platen, a plurality of type wheels, and a solenoid and plunger for operating said platen.

3. A recording wattmeter, comprising integrating wattmeter mechanism, means for periodically automatically providing a record of the integrations of said mechanism, timekeeping mechanism combined with means for operating said recording mechanism automatically at predetermined times by said timekeeping mechanism through the agency of electrical devices, said electrical devices consisting of a time-wheel, a pivotally mounted lever, and a relay.



4. A recording wattmeter, comprising integrating wattmeter mechanism, means for periodically automatically providing a record of the integrations of said mechanism, timekeeping mechanism combined with means for operating said recording mechanism automatically at predetermined times by said timekeeping mechanism through the agency of electrical devices, said electrical devices comprising a time wheel, a pivotally mounted lever for periodically closing the operating electric circuit associated with said time wheel, a relay, and means whereby said relay operates the recording means.

5. A recording wattmeter, comprising integrating wattmeter mechanism, means for periodically automatically providing a record of the integrations of said mechanism, timekeeping mechanism combined with means for operating said recording mechanism automatically at predetermined times by said timekeeping mechanism through the agency of electrical devices, said electrical devices comprising a time wheel, a pivotally mounted lever for periodically closing the operating electric circuit associated with said time wheel, a relay, and means whereby said relay operates a solenoid plunger to actuate the recording means.

1,061,183. BAKING-POWDER. WILHELM KLAPPROTH, Ober-Ingelheim, Germany. Filed May 1, 1912. Serial No. 694,362. (Cl. 99—10.)

1. Baking-powder composed substantially of a lactate of aluminium and a suitable substance which yields carbonic acid when reacting with the lactate.

2. Baking-powder composed substantially of normal lactate of aluminium and a suitable substance which yields carbonic acid when reacting with the lactate.

3. Baking-powder composed substantially of a lactate of aluminium and an alkali carbonate.

4. Baking-powder composed substantially of a lactate of aluminium and an alkali bicarbonate.

5. Baking-powder composed substantially of a lactate of aluminium, a suitable substance which yields carbonic acid when reacting with the lactate, and a filling agent.

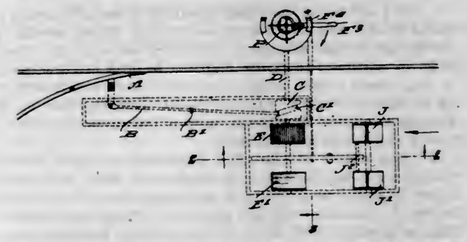
1,061,184. ALARM FOR TIRES. HENRY EDWARD KNIES, White Haven, Pa. Filed June 11, 1912. Serial No. 703,075. (Cl. 116—1.)

1. In a device for indicating tire-failure, a supporting structure; a charge holder carried thereby; a firing member in the supporting structure movable toward and away from the charge holder; a latch movable in the firing member, transversely of the line of movement of the firing member, the latch and the firing member being provided with interengaging elements limiting the movement of the latch; means for actuating the latch; a sear movable in the supporting structure, into and out of the path of the latch; and means for advancing the firing member toward the charge holder.



2. In a device for indicating tire-failure, a supporting structure; a charge holder carried thereby; a firing member movable in the supporting structure; means for actuating the firing member; there being a rib upon the supporting structure, engaging in a groove in the firing member, to prevent a rotation of the firing member, the rib being prolonged into close relation to the charge holder, to hold the charge in the charge holder; and a sear movable into and out of the path of the firing member.

1,061,185. SWITCH-OPERATING MECHANISM. EARL J. KNOWLTON, Birmingham, Ala. Filed Sept. 8, 1911. Serial No. 648,262. (Cl. 104—24.)



1. The combination substantially as herein described, of a switch point, a lever to operate said point, a cam operating said lever, a pair of drums operating said cam, means for locking said drums from movement, devices for releasing said locking means to permit the operation of the cam by the movement of the drums, said releasing devices including rockers in alinement with their respective drums, a hand operating means connected with the cam for operating the same, and means operated by the hand operating means for releasing the drum locking means, all substantially as and for the purpose set forth.

2. The combination of a switch point, a cam for operating said point, means for operating said cam, a bar for locking said operating means from movement, and a rocker having means for releasing said locking bar to permit the operation of the cam.

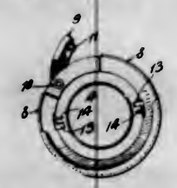
3. The combination of a switch point, a pair of drums each having a flat side with the flat side of one drum diametrically opposite that of the other, a pair of rockers in alinement with their respective drums, means for locking the drums from movement and arranged for operation by the rockers, and means whereby the drums may operate the switch point.

4. The combination of a switch point, a cam for operating the same and having diametrically opposite circumferential portions, a shaft having means for operating the cam whereby to operate the switch point, bars in connection with said shaft, a locking bar having at one end a notch operating in connection with said bar to lock the shaft from turning and a rocker for operating said locking bar, substantially as set forth.

5. The combination of a switch point, a rotating cam for operating the same, means for turning said cam step by step in the same direction for opening and closing the switch point, a locking bar pivoted between its ends and operating at one end to lock the cam from movement and a rocker operating upon the other end of the bar to release the same.

[Claims 6 to 9 not printed in the Gazette.]

1,061,186. SHADE-HOLDER. KENNARD J. KORNBAU, New York, N. Y. Filed Jan. 23, 1913. Serial No. 743,764. (Cl. 240—115.)



1. In a device of the class described, a holder having a depending collar with parts adapted to engage a shade, a latch mounted on said collar with a part adapted to engage a shade, a clamping ring adapted to hold said collar and latch in proper relation to a shade, and means for holding said ring in place.

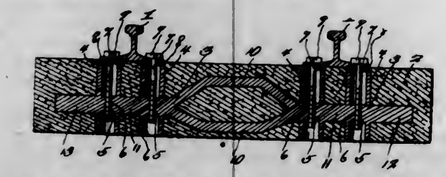
2. In a device of the class described, a socket with a shade holder affixed thereto, said shade holder having a depending flange with an edge adapted to engage a shade, a latch with a portion adapted to engage said shade mounted on said shade holder, and a clamping ring adapted to engage said latch and flange and fix them against said shade.

3. In a device of the class described, a socket having a shade holder secured thereto, said shade holder having a depending flange extending partially around the same with an upturned inwardly disposed edge, a latch secured to said shade holder which is provided with a part adapted to engage a shade, and means for securing said latch in proper relation to a shade, so that the shade is held between the flange and the latch.

4. In a device of the class described, a shade holder having a recessed portion provided with a latch, said latch being pivotally mounted in a depressed part of the shade holder, an annular ring and means for fixing said annular ring in place on said shade holder so as to hold the latch in proper relation to a shade.

5. In a device of the class described, a socket having a shade holder fixed thereon, said shade holder having a downwardly depending flange and a recessed portion and a depressed part, a latch pivotally mounted in said depressed part, an upwardly extending collar on said shade holder, and an annular ring having parts adapted to engage said latch and downwardly disposed collar, and another part adapted to engage said upwardly extending portion, and means on said annular ring and on said shade holder for locking the two parts together when the device is in use.

1,061,187. CEMENT TIE INCLUDING A RAIL-FASTENER. PAUL KRAFT, Nekoosa, Wis. Filed Feb. 18, 1913. Serial No. 749,094. (Cl. 238—3.)



1. A cement railway tie having a metallic frame embedded therein, said frame being composed of a pair of tubular members at each end, each pair of tubular members being connected by integral reinforcing tie bars, each tubular member of each pair being intersected by a bar, one of each pair of tubular members having an extension in alinement with the tie, said tubular members having interior cross pieces having openings to receive fastening means for fastening a rail to the tie.

2. A cement railway tie having a metallic frame embedded therein, said frame being composed of a pair of tubular members at each end, each pair of tubular members being connected by integral reinforcing tie bars, each tubular member of each pair being intersected by a bar extending longitudinally of the tie, one of each pair of tubular members having an extension in alinement with the tie, said tubular members having interior cross pieces having openings to receive fastening means for fastening a rail to the tie, said tubular members having in their upper ends cap plates seated therein through which said rail fastening means passes, said cap plates conforming to the opposite edges of a base of a rail, and lateral projections forming a part of said tubular members and extending transversely of the tie.

1,061,188. PEAVEY OR CANT-HOOK. ALFRED LAMBERT, St. Paul, Oreg. Filed Oct. 24, 1912. Serial No. 727,528. (Cl. 145—22.)



An implement of the character described, comprising a handle having a ferrule at one end thereof provided with a hollow side boss, a hook member having one end pivoted between the side walls of the said boss and adapted to swing to and from the ferrule, a pin having bearings through the side walls of the boss adjacent to the point of pivot of the said hook, and a buffer consisting of a roller mounted upon the said pin and confined between the said side walls of the boss, whereby it may rotate to present various portions of its surface at different times to the said hook for the purpose of preventing the latter coming in contact with the ferrule.

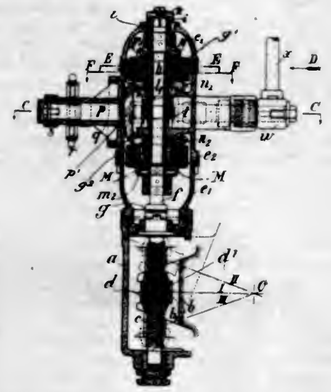
1,061,189. METHOD OF MAKING PIG-IRON FROM STEEL-SCRAP. HORACE W. LASH, Cleveland, Ohio, assignor to The West Coast Iron Company, San Francisco, Cal., a Corporation of Ohio. Filed Mar. 2, 1912. Serial No. 681,286. (Cl. 75—27.)

1. A method of making cast iron which consists in melting in a reverberatory furnace, a mixture of steel scrap, carbon, and silicious material, the carbon of the charge being distributed in the charge mixture in a manner to be protected from the oxidizing flame of the furnace.

2. A method of making cast iron which consists in melting in a reverberatory furnace, a mixture of steel scrap, carbon, and silicious material, the carbon effective for chemical re-action with the charge being placed within the charge mixture at or near the hearth of the furnace, whereby it is protected from the oxidizing flame of the furnace.

1,061,190. REVERSING-GEARING. FRANCIS LENDER, St. Petersburg, Russia. Filed Dec. 27, 1911. Serial No. 668,157. (Cl. 74—59.)

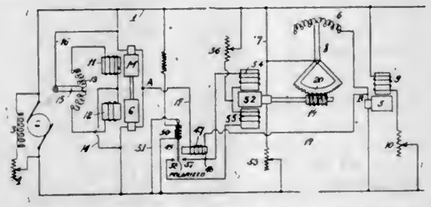
1. Reversing gearing comprising a casing having bearings located therein, a sleeve journaled in the bearings, a shaft located in the sleeve and adjustably connected to the same, means for moving the sleeve longitudinally, wheels journaled upon the bearings, cups fixed to the sleeve, friction rings located in the cups adjacent the said wheels, a shaft journaled in the casing for rotation in one direction and a wheel carried by the last mentioned shaft and engaging the first mentioned wheels.



2. Reversing gearing comprising a casing, bearings located in the casing, a sleeve journaled in the bearings and located in the casing, a nut fixed to the sleeve, and provided with teeth, a shaft journaled in the casing and having teeth which engage the teeth of the nut, means for turning the last mentioned shaft, a shaft located within the sleeve, wheels journaled upon the bearings, cups fixed to the sleeve, friction rings carried by the cups and adapted to engage the said wheels, a shaft journaled for rotation in one direction and a wheel carried by the last mentioned shaft and engaging the first mentioned wheels.

3. Reversing gearing comprising a casing, bearings located in the casing, a sleeve journaled in the bearings, a shaft located in the sleeve, a ring adjustably attached to the shaft and having teeth which engage the sleeve, wheels journaled upon the bearings, cups carried by the sleeve, friction rings located in the cups and adapted to operate against the said wheels, means for moving the sleeve longitudinally, a shaft journaled in the casing for rotation in one direction only and a wheel carried by the last mentioned shaft and engaging the first mentioned wheels.

1,061,191. ELECTRICAL CONTROLLING DEVICE. HARRY WARD LEONARD, Bronxville, N. Y. Filed June 25, 1904. Serial No. 214,142. (Cl. 171—229.)



1. The combination of a source of magnetically induced electromotive force, a device having an opposing magnetically induced electromotive force, means for controllably varying the electromotive force of said device, said opposing electromotive force under normal conditions having a value fixed relative to that of the first named electromotive force, a device responsive to any change in the relative values of said electromotive forces, and means controlled by said second device for restoring the desired relation between the two electromotive forces.

2. The combination with a source of magnetically induced electromotive force, of a device having an electromotive force opposing the electromotive force of said source, a common source of electric energy upon which both of said electromotive forces are continually dependent, a device responsive to the difference between said electromotive forces, and means controlled by said second device for changing one of the electromotive forces to preserve a desired relation between them.

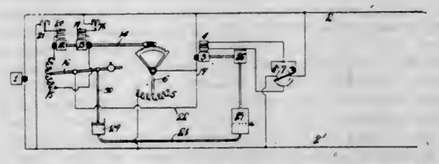
3. The combination with a source of magnetically induced electromotive force, of a device having an opposing electromotive force, a common source of energy upon which both of said electromotive forces are continually dependent, a device responsive to the difference between the electromotive forces and connected in circuit with said first named source and first named device, and means controlled by said second device for changing one of the electromotive forces to preserve a desired relation between them.

4. The combination of a source of magnetically induced electromotive force, a device having an opposing magnetically induced electromotive force, said device having a field magnet, means for controllably varying the field of said magnet for controllably varying said opposing electromotive force, a device responsive to the difference between the electromotive forces, one electromotive force tending to move said device in one direction, and the other electromotive force tending to move the same in the opposite direction, and means controlled by said second device for changing one of the electromotive forces to preserve a desired relation between it and the other electromotive force.

5. The combination with a source of electromotive force, a translating device, an adjustable rheostat for controlling the electromotive force applied to said device, a second source of electromotive force whose electromotive force may be made that desired on said device, electrical connections between said second source and said device, and electroresponsive device in circuit with said connections, and means connected with said electroresponsive device for varying said rheostat.

[Claims 6 to 44 not printed in the Gazette.]

1,061,192. MEANS FOR CONTROLLING ELECTROMOTIVE FORCE. HARRY WARD LEONARD, Bronxville, N. Y. Filed Dec. 23, 1905. Serial No. 293,048. (Cl. 171—229.)



1. The combination of a source of electric energy, a translating device which requires varying currents in its operation, a device for varying the electromotive force applied to said translating device, and automatic means for controlling said varying device to maintain upon said translating device an electromotive force different from that of said source, said means comprising two movable opposing electro-responsive devices and an adjustable device in series with each other across said source.

2. The combination of a source of electric energy, a translating device, a device for varying the electromotive force applied thereto independently of change of electromotive force of said source, and automatic means for controlling said varying device, said means comprising two opposing electric motors connected in series across said source.

3. The combination of a source of electric energy, a translating device, a device connected to said translating device for varying the electromotive force applied thereto, automatic means for controlling said varying device, said means comprising an electroresponsive device connected

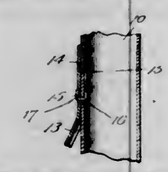
across said source, and an adjustable device connected to said translating device and to said electroresponsive device for determining the desired potential at the point of connection of said varying device to said translating device.

4. The combination of a source of electric energy, a translating device, a device for varying the electromotive force applied thereto, automatic means for controlling said varying device, said means comprising an electroresponsive device connected across said source, an adjustable device connected to said translating device and to said electro-responsive device for determining the desired potential upon said translating device, and automatic means dependent upon service conditions for controlling said adjustable device.

5. The combination of a source of constant electromotive force, an electric motor, a variable resistance in series with the armature of said motor connected across said source, two force producing electric devices connected in series across said source, an electrical connection from a point between said two devices to a point between said motor armature and said resistance, and means whereby the potential of one of said points is made to correspond with that of the other.

[Claims 6 to 18 not printed in the Gazette.]

1,061,193. CLIP FOR FOUNTAIN-PENS, PENCILS, AND THE LIKE. HENRY C. MABIE, Maywood, N. J. Filed Nov. 19, 1912. Serial No. 732,263. (Cl. 24—11.)



1. A clip of the character described comprising in combination a base portion with a perforation near one end thereof, a retaining finger, and an attachment tongue projecting from the end of said base portion which is remote from the perforation, corresponding in width with said perforation and of greater length than the distance from said perforation to said remote end of base portion.

2. A clip of the character described, comprising in combination a perforated base portion, a retaining finger integral with and projecting longitudinally from one end of said base portion and an attachment tongue integral with and projecting from the other end of said base portion, said attachment tongue being of a width corresponding with the width of said perforation in the base portion and of a length greater than the distance from its junction with said base portion to said perforations in the base portion.

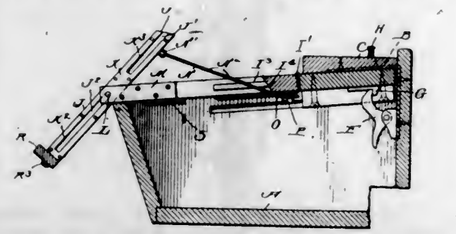
3. A clip of the character described, comprising in combination a perforated base portion having a countersink adjacent thereto, a retaining finger integral with and projecting longitudinally from one end of said base portion, and an attachment tongue integral with and projecting longitudinally from the other end of said base portion, said tongue being of a width corresponding with the said perforation and countersink in the base portion and of a length greater than the distance from its junction with said base portion to said perforation plus the length of said countersink.

4. A clip of the character described, comprising in combination a base portion having a perforation near one end thereof, a retaining finger integral with and projecting longitudinally from the perforated end of said base portion and an attachment tongue integral with and projecting from the other end of said base portion, said tongue being of a width corresponding with said perforation in the base portion and of a length greater than the distance from its junction with the base portion to said perforation.

5. A device of the character described, comprising in combination a tubular shell having perforations therein longitudinally spaced apart and a clip comprising a base portion of a length commensurate with the distance between said perforations in the shell and having a perforation near one end adapted to register with one of said shell perforations, a yielding retaining finger projecting longitudinally from the perforated end of said base portion and an attachment tongue projecting longitudinally from the other end of said base portion, said tongue passing inwardly through one of said shell perforations and outwardly through the other shell perforation and the registering perforation in the base member and folded over against the outer surface of said base member to retain the clip in position.

[Claim 6 not printed in the Gazette.]

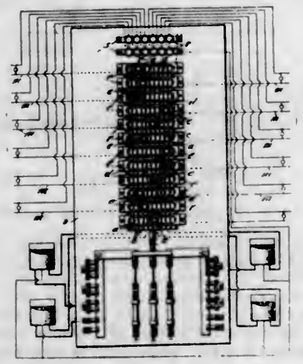
1,061,194. EXTENSION AND LIFTING LID FOR DESKS. THOMAS E. MCNULTY, San Francisco, Cal. Filed July 24, 1911. Serial No. 640,126. (Cl. 45—91.)



1. The combination with a desk having a fixed upper horizontal portion, of a slidable section adapted to slide beneath said fixed portion, a catch carried by the rear of the desk and within the desk for the purpose of locking said slidable portion, in normal position, means working through the fixed portion and the slidable portion for disengaging said catch, a frame hinged to said slidable portion and adapted to swing upwardly and rearwardly and a pivoted section mounted in said frame and adapted to be swung downwardly and forwardly, and means for locking the pivoted section to the sides of the frame.

2. The combination with a desk body having a fixed shelf, of a sectional lid slidably mounted on said body and extending under said shelf, a catch carried by said lid, a latch carried by the body adapted to engage said catch, a pin carried by said lid for engaging said latch and a spring actuated button carried by the fixed shelf for engaging said pin.

1,061,195. METERING PANEL-BOARD. ARTHUR C. MCWILLIAMS, Chicago, Ill. Filed May 13, 1910. Serial No. 561,142. (Cl. 247—13.)



1. In a metering panel board, a set of parallel permanent conductors, a permanent cross conductor, a slidable element mounted on said cross conductor and a connector for establishing electrical connection between said cross conductor and the desired one of said parallel conductors, said slidable element and said connector making interfitting screw connections with each other, and said slidable element being slidable to different positions upon said cross conductor to thereby remind the operator, after the adjustment has once been made, what particular conductor the connector should engage.

2. In a metering panel board, a set of parallel permanent conductors, a permanent cross conductor, a threaded bushing slidable upon said cross conductor, and a screw plug adapted to screw downward into said bushing to establish the connection between the cross conductor and the conductor beneath, the threads on the bushing and plug serving to increase the pressure of contact between the bar and the bushing to thereby increase the electrical efficiency of the connection.

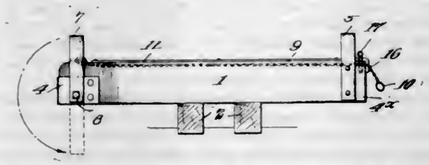
3. In a metering panel board, the combination of a set of parallel meter bars, a circuit bar extending across them a slight distance away from them, an internally threaded socket bushing slidably mounted upon said circuit bar and electrically in contact therewith, a connector adapted to contact the meter bars, and means adapted to screw into said bushing for electrically connecting said connector to said bushing.

4. In a metering panel board, the combination of a set of parallel meter bars, a circuit bar extending across them a slight distance away from them, a bushing slidably mounted upon said circuit bar and electrically in contact therewith, a connector adapted to contact the meter bars, and a fuse plug screwing into said bushing for connecting it to said connector.

5. In apparatus of the class described, in combination, a set of parallel insulated bars, a transverse bar crossing above them, a normally raised connector longitudinally movable upon said transverse bar and means for holding said connector depressed to thereby establish electrical connection between said transverse bar and the selected one of said parallel bars.

[Claims 6 to 10 not printed in the Gazette.]

1,061,196. TRIP-STANCHION FOR LOGGING-CARS. VANCE L. MORRIS, Arbo, Miss. Filed May 16, 1912. Serial No. 697,742. (Cl. 105—173.)

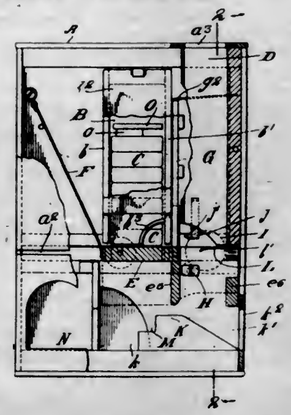


1. The combination with a car bolster having a longitudinal groove in its top, of a rigid stanchion at one end of said bolster, a pivoted stanchion at the opposite end of said bolster, a chain connected with said pivoted stanchion and arranged to move in said groove, a plate secured to the bolster for protecting said chain, means at the end of the bolster opposite the pivoted stanchion for adjustably holding said chain, said means comprising an end plate having a slot of greater width than the thickness of the links of the chain, but of less width than the width of the links, and a latch plate for preventing the accidental displacement of the chain from the slot.

2. The combination with a car bolster having a longitudinal groove in its top, of a rigid stanchion at one end of said bolster, a pivoted stanchion at the opposite end of said bolster, said pivoted stanchion comprising a single piece of metal, substantially M-shaped, a chain secured to the central portion of said pivoted stanchion and arranged to move in said groove, a plate secured to the bolster for protecting said chain, and means at the end of the bolster opposite the pivoted stanchion for adjustably holding the chain.

3. The combination with a car bolster having a longitudinal groove in its top, of a rigid stanchion at one end of said bolster, a pivoted stanchion at the opposite end of said bolster, said pivoted stanchion comprising a single piece of metal substantially M-shaped, a chain secured to the central portion of said pivoted stanchion and arranged to move in said groove, a plate secured to the bolster for protecting said chain, means at the end of the bolster opposite the pivoted stanchion for adjustably holding the chain, said means comprising an end plate having a slot of greater width than the thickness of the link but of less width than the width of the link, and a latch plate for preventing the accidental displacement of the chain from the slot.

1,061,197. AUTOMATIC VENDING-MACHINE. ADOLPH MOSES, Mount Vernon, N. Y. Filed May 20, 1911. Serial No. 628,394. (Cl. 194—69.)



1. In an automatic vending machine employing a horizontally reciprocating delivery slide, means for locking said slide comprising a locking dog having a vertically reciprocating movement and fixed against longitudinal movement and a coöperating stop on the slide, combined with means for insuring a full stroke of said slide comprising a dog support upon said slide, adapted to hold the dog out of locking position when lifted by a coin, and a shoulder on said support adapted to prevent the return of the slide until the stroke has been completed.

2. In an automatic vending machine employing a package delivery slide, a coin released lock for said slide comprising a locking dog, having a vertically reciprocating movement and fixed against longitudinal movement, a corresponding locking projection on said slide, means for supporting a coin in position to be moved by said slide and raise said dog out of locking position, means for holding said dog above the line of said locking stop when raised by a coin, comprising a dog support carried by said slide and having a locking shoulder therein adapted to prevent the return of the slide until it has completed its delivery stroke.

3. In an automatic vending machine employing a sliding platform, a lock therefor comprising a vertically reciprocating dog on the frame, a coöperating locking stop on the slide, means on said slide for holding and propelling a coin, disk or washer under said dog, a support having a V-shaped recess within which an edge of said coin is adapted to rest, whereby a coin or other disk or washer of less thickness than the proper coin will fail to lift said dog high enough to clear said stop.

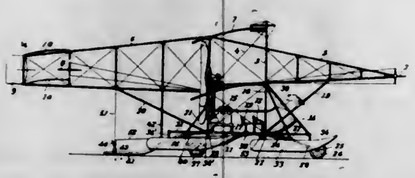
4. In an automatic vending machine employing a sliding platform, a lock therefor comprising a vertically reciprocating dog on the frame, a coöperating locking stop on the slide, means on said slide for holding and propelling a coin, disk or washer under said dog, which permit the tipping of said article so held, a projection on one side of

said coin supporting means substantially centrally located with respect to the article so held, and a spring on the other side adapted to press the article so held against said projection, whereby a proper coin will be held substantially upright in position to lift said dog and a washer will be pressed by said spring, and said projection will enter the hole in the washer and said washer will be tipped out of proper lifting position with relation to said dog.

5. In an automatic vending machine employing a sliding platform, a lock therefor comprising a vertically reciprocating dog on the frame, a cooperating locking stop on the slide, means on said slide for holding a coin disk or washer and propelling the same under said dog, means whereby a coin of insufficient thickness will fail to release said lock, means for returning said ineffective coin disk or washer to the customer comprising an inclined coin return chute, flanges upon the slide which, when the slide is moved to cause the lock to engage, provide a coin slot directing the coin toward said chute, one of said flanges preventing the coin, disk or washer from entering the receptacle for proper coins.

[Claims 6 to 16 not printed in the Gazette.]

1,061,198. FLYING-MACHINE. AXEL R. NORDSTROM, West Lynn, Mass., assignor of three-sixteenths to Martin Bowman, Rockport, Mass., and one-sixteenth to Carin E. Norwall and one-fourth to Gustaf F. Hellstrom, Sr., and Gustaf F. Hellstrom, Jr., West Lynn, Mass. Original application filed Dec. 27, 1911, Serial No. 668,046. Divided and this application filed June 4, 1912. Serial No. 701,578. (Cl. 244—2.)



1. A flying machine including a car or platform, a main frame rising therefrom and carrying a supporting surface, a bracket formed of rods pivotally connected with the car or platform and carrying a supporting axle, a ground wheel journaled on said axle, springs connected with the platform and slidably connected with the bracket rods, a member connecting said springs to move in unison, and braces connecting said member with the main frame to limit the pivotal play of the bracket.

2. A flying machine including a car or platform, a main frame rising therefrom and carrying a supporting surface, a bracket formed of rods pivoted to the main frame and extending downwardly and forwardly in convergent relation therefrom and carrying at their converging ends a supporting axle, a wheel mounted upon said axle, longitudinally bowed springs connected with the car or platform and slidably engaging the bracket rods, a connection between said springs to adapt them to move in unison, and downwardly and forwardly diverging braces coupled to said connection and to the main frame, and serving to limit the pivotal play of the bracket.

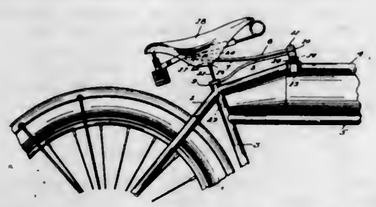
3. A flying machine including a frame structure, pairs of longitudinally extending looped springs, arranged on opposite sides of the longitudinal center of the frame structure, the springs of each pair having their forward ends slidably connected with the framework and their rear ends rigidly connected therewith, axles extending between and carried by the springs of each pair, ground wheels supported by said axles, and braces flexibly connecting each pair of springs with the framework to limit the play of said springs.

4. In a flying machine, the combination of a car or platform having front and rear transverse supporting rods, a bracket hinged to the front supporting rod and extending outwardly and downwardly therefrom, a supporting wheel carried by said bracket, springs secured at one end to the front supporting rod and slidably connected at their opposite ends to the bracket, braces connecting said springs with the framework of the machine to limit the yielding pivotal play of the bracket, pairs of longitudinally extending looped springs arranged on opposite sides of the longitudinal center of the machine and connected at their rear ends with the rear transverse rod and slidably connected at their forward ends to the car or platform, a transverse axle extending between and carried by each pair of springs, ground wheels mounted on said axles, and braces flexibly coupling said springs to the framework of the machine to limit the play of the springs.

5. A flying machine including a car or platform having front and rear transverse rods extending laterally therefrom, a front ground wheel yieldingly supported upon the front transverse rod in the central longitudinal line of the machine, rear ground wheels arranged on opposite sides of the longitudinal center of the machine, supporting springs for said ground wheels coupled to the rear transverse rod and slidably connected with the car or platform, means for limiting the play of said springs, and front and rear pairs of floats suspended from the transverse rods on opposite sides of and in transverse alinement with the front and rear wheels.

[Claims 6 and 7 not printed in the Gazette.]

1,061,199. SEAT-SPRING FOR MOTOR-CYCLES. FRANK E. PALIN and RONALD A. PALIN, San Mateo, Cal. Filed June 17, 1912. Serial No. 704,223. (Cl. 208—100.)



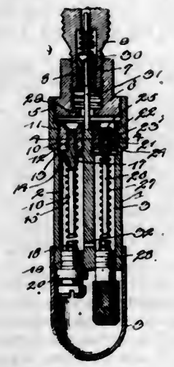
1. In a motorcycle spring, a clamp adapted to be passed around one of the bars of a motorcycle, flat divergent leaf springs secured to said clamp and extending rearwardly therefrom, a seat carried by one of said springs, and a saddle upon which the end of an other of said springs bears, substantially as described.

2. In a seat spring for motorcycles, a clamp for securing the spring to the frame of the motorcycle, a series of divergent leaf springs having their ends secured to said clamp and extending rearwardly therefrom, a seat carried by one of said springs, a saddle upon which another of said springs bears, and resilient means to prevent the seat from rising more than a determined amount, substantially as described.

3. In a seat spring for motorcycles, a clamp, a clip pivoted to said clamp, divergent springs secured to said clip and extending rearwardly therefrom, a seat secured to one of said springs, a saddle upon which another of said springs bears, a seat post secured to said saddle, a bolt secured to the spring carrying the seat and extending into the saddle post, and a spring within said saddle post to prevent the seat spring from rising too high, substantially as described.

4. In a motorcycle spring, a clamp, a clip pivoted to said clamp, a plurality of leaf springs rigidly secured to said clip and diverging from each other as they recede from the clip, a seat carried by one of said springs, a saddle upon which the other of said springs bears, a post connected with said saddle, a pivoted bolt connected to the upper spring and extending into the saddle post, and a spiral spring on said bolt within the saddle post for preventing the seat spring from rising too high, substantially as described.

1,061,200. TIRE-ALARM. JOSEPH B. POLO, Clear Lake, S. D. Filed Apr. 27, 1912. Serial No. 693,512. (Cl. 116—1.)



1. A tire alarm, including a casing designed for attachment to the inflation valve stem of a pneumatic tire and formed with separate bores adapted to communicate at one end with the interior of said inflation valve stem, one of said bores containing an outwardly facing valve seat, a valve adapted to rest thereon, means for yieldingly holding said valve on its seat, the other bore containing both inwardly and outwardly facing valve seats in communication with each other, a valve provided with two heads adapted to alternately seat against the said reapective inwardly and outwardly facing valve seats of the second named bore, and yielding means connected to the last named valve and tending to hold the valve in an inner position with the outermost head resting against its outwardly facing valve seat.

2. A tire alarm, including a casing designed for attachment to the inflation valve stem of a pneumatic tire and formed with separate bores adapted to communicate at one end with the interior of said inflation valve stem, one of said bores containing an outwardly facing valve seat, a valve adapted to rest thereon, means for yieldingly holding said valve on its seat, the other bore containing both inwardly and outwardly facing valve seats in communication with each other, a valve provided with two heads adapted to alternately rest against the said respective inwardly and outwardly facing valve seats of the second named bore, and means tending to hold the valve in an inner position with the outermost head resting against its outwardly facing valve seat, said means being yieldable in both directions, for the purpose specified.

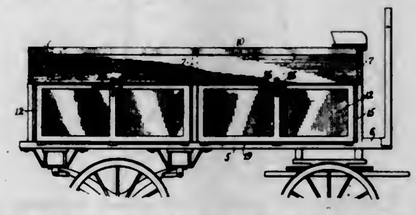
3. A tire alarm, including a casing designed for attachment to the inflation valve stem of a pneumatic tire and formed with separate bores adapted to communicate at one end with the interior of said inflation valve stem, one of said bores containing an outwardly facing valve seat, a valve adapted to rest thereon, means for yieldingly holding said valve on its seat, the other bore containing both inwardly and outwardly facing valve seats in communication with each other, a valve provided with two heads adapted to alternately seat against the said respective inwardly and outwardly facing valve seats of the second named bore, a spring connected to said last named valve and tending to hold the same in an inner position with the outermost head resting against the outwardly facing valve seat, and adjusting means secured to the casing and connected to said spring and movable in a direction to draw one head against the inwardly facing valve seat or press the other head against the outwardly facing valve seat.

4. A tire alarm, including a casing designed for attachment to the inflation valve stem of a pneumatic tire and formed with separate bores adapted to communicate at one end with the interior of said inflation valve stem, one of said bores containing an outwardly facing valve seat, a valve adapted to rest thereon, a spring connected to said valve and adapted to hold it on its seat, an adjusting screw working in the end of said bore and connected to said spring to adjust the tension thereof, the other bore containing both inwardly and outwardly facing valve seats in communication with each other, a valve provided with two heads adapted to alternately seat against said respective inwardly and outwardly facing valve seats of the second named bore, a spring connected to said last named valve, and an adjusting screw working in the end of the second named bore and connected to said spring and movable in a direction to draw one head against the inwardly facing valve seat or press the other head against the outwardly facing valve seat.

5. A tire alarm including a casing designed for attachment to the inflation valve stem of a pneumatic tire and formed with three separate and distinct bores extending longitudinally of the casing, one of said bores containing an outwardly facing valve seat and another containing an inwardly facing valve seat and an outwardly facing valve seat, a valve adapted to rest on the first named outwardly facing valve seat, means for yieldingly holding said valve thereon, a two-headed valve adapted to rest on the inwardly facing valve seat and the corresponding inwardly facing seat, and means tending to hold the last named valve in an inner position with the outermost head resting against the second named outwardly facing valve seat, the casing being formed with an opening leading from the third bore to the atmosphere and with passages establishing communication between the third bore and the other two bores.

[Claims 6 and 7 not printed in the Gazette.]

1,061,201. COKE AND COAL WAGON. MARTIN L. SENDERLING, Jersey City, N. J. Filed Oct. 1, 1910. Serial No. 584,839. (Cl. 21—86.)



1. A wagon body having a hopper bottom extended beyond the bottom frame at its lower end, and a door closing the body at the lower side of the bottom and hinged to swing downwardly and outwardly and form a chute co-extensive with the bottom, the door being extended to pass under the bottom when in open position, the hinge having two members, one of which is secured to the door and passes through a notch formed in the extended portion of the bottom, and the other secured to the bottom, passing through the extended portion of the door.

2. A wagon body having a bottom frame, a hopper bottom, corner stakes, a sheathing covering the corner stakes, angle-irons arranged at the opposite sides of the body, with one flange of each iron passing to the outer side of the sheathing, and the other flange seating at the top of the corner stakes, and straps passing down the inner faces of the corner stakes and secured to the stakes through the outer flanges of the angle-irons and passing through the bottom frame of the body and each provided with a tightening nut.

3. A wagon body having a transverse partition dividing it into a number of compartments, each compartment having a laterally-inclined bottom discharging through one side of the body, doors to close the open side of the body, each end of the body and the partition being extended beyond the body to provide wings, each door having inwardly-turned flanges at each end and hinged to swing downwardly and outwardly to receive and discharge the load from its respective compartments, with

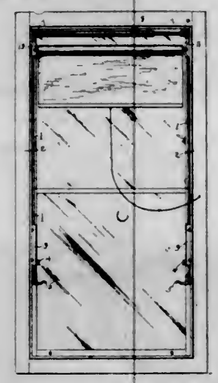
the flanges arranged close to the wings, and the wings serving to direct the material onto the doors.

4. A wagon body having a hopper bottom, a door closing the body at the lower side of the bottom and hinged to swing downwardly and outwardly to form a chute coextensive with the bottom, and an angle-iron arranged at the top of the door opening, with one flange disposed at substantially right-angles to the wall above, of the body, and the other flange depending to lap the top of the door and prevent the load from sifting out.

5. A wagon body having a bottom frame, corner stakes, a sheathing covering the corner stakes, angle-irons arranged at the opposite sides of the body, with one flange of each iron passing to the outer side of the sheathing, and the other flange seating at the top of the corner stakes, and straps passing down the inner faces of the corner stakes and secured to the stakes through the outer flanges of the angle-irons and passing through the bottom frame of the body and each provided with a tightening nut.

[Claims 6 to 9 not printed in the Gazette.]

1,061,202. CURTAIN AND SHADE-ROLLER SUPPORT. JOHN C. SEYMOUR, New York, N. Y. Filed May 7, 1909. Serial No. 494,594. (Cl. 156—27.)



1. A curtain and shade-holder support including in combination, a pair of elongated bracket members, each member being angulated at its upper end and provided adjacent said angulated end with an offset having an aperture, the portions of the member above and below said offset being in substantially the same vertical plane and the apertures in said offsets being adapted to receive the spring and pivot ends, respectively, of a shade roller, and an extensible curtain-rod rigidly supported in the angulated portions of said bracket-members.

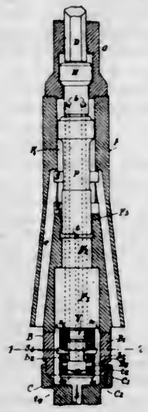
2. A curtain and shade-holder support including in combination, a pair of elongated bracket-members, each member being angulated at its upper end and provided adjacent said angulated end with an offset having an aperture, the portions of the member above and below said offset being in substantially the same vertical plane and the apertures in said offsets being adapted to receive the spring and pivot ends, respectively, of a shade roller, an extensible curtain-rod rigidly supported in the angulated portions of said bracket-members, and guide-members of less length than the bracket-members and adapted to be secured to the window-frame and to embrace said bracket-members.

3. A curtain and shade-holder support including in combination, a pair of elongated bracket-members, each member being angulated at its upper end and provided adjacent said angulated end with an offset having an aperture, the portions of the member above and below said offset being in substantially the same vertical plane and the apertures in said offsets being adapted to receive the spring and pivot ends, respectively, of a shade roller, an extensible curtain-rod rigidly supported in the angulated portions of said bracket-members, guide-members of less length than the bracket-members and adapted to be secured to the window-frame and to embrace said bracket-members, thumb-screws threaded into said guide-members for adjustably holding the bracket-members therein.

4. A curtain and shade-holder support including in combination, a pair of elongated bracket-members, each member being angulated at its upper end and provided adjacent said angulated end with an offset having an aperture, the portions of the member above and below said offset being in substantially the same vertical plane and the apertures in said offsets being adapted to receive the spring and pivot ends, respectively, of a shade roller, an extensible curtain-rod rigidly supported in the angulated portions of said bracket-members, guide-members of less length than the bracket-members and adapted to be secured to the window-frame and to embrace said bracket-members, thumb-screws threaded into said guide-members for adjustably holding the bracket-members therein, and a handle carried by each of said bracket-members and extending outwardly from the face thereof.

5. A curtain and shade-holder support including in combination, a pair of bracket-members each comprising an elongated body-portion, a handle-portion at its lower end, an angulated portion at its upper end, and an offset portion adjacent the angulated portion; said offset portions of the respective members extending outwardly toward each other and occupying a position parallel with each other; said angulated portions extending in a direction at an angle to said offset portions; and an extensible curtain-rod rigidly supported in said angulated portions; and a shade-roller removably supported in said offset portions and occupying a position in a plane below and to one side of that of the curtain-rod.

1,061,203. HAMMER OPERATED BY COMPRESSED FLUID. CHARLES H. SHAW, Denver, Colo. Filed Mar. 20, 1912. Serial No. 684,926. (Cl. 121—20.)

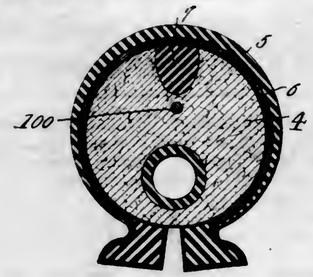


1. In a device of the class described, a cylinder, a piston hammer mounted to reciprocate freely in the cylinder and being of larger area at its forward than its rearward end, the said cylinder being provided with an inlet port and conduits leading from the inlet port to the front end of the cylinder and to an annular groove intermediate the ends of the cylinder, means to subject both ends of the piston to fluid pressure, and a valve mounted in the inlet port adapted at times to relieve the fluid pressure at the forward end of the piston.

2. In a device of the class described, a cylinder, a piston hammer mounted to reciprocate freely in the cylinder and provided with its forward end having a greater area than its rearward end, said cylinder being provided with an inlet port and conduits leading from the inlet port to the forward end of the cylinder and to an annular groove intermediate the ends of the cylinder, means to introduce fluid under pressure through the inlet port and through the passages to subject both ends of the piston to fluid pressure, a valve introduced into the inlet port adapted to control the conduits and adapted at times to cut off communication between the conduits and the inlet port and to open communication between the conduits and an exhaust.

3. In a device of the class described, a piston having its front end of larger transverse area than its rear end, a chamber at the rear thereof, means for supplying compressed fluid to said chamber, a chamber at the front of said piston, passages to said front chamber, an automatically operated valve, having its front end of a smaller transverse area than its rear end, for permitting compressed fluid to pass intermittently from said means of supply, through said passages and into said front chamber.

1,061,204. TIRE. WILLIAM T. SMITH and CHARLES C. ROYER, Bellefontaine, Ohio; said Royer assignor to Myrtle Smith, Bellefontaine, Ohio. Filed Mar. 19, 1909. Serial No. 484,503. (Cl. 152—5.)



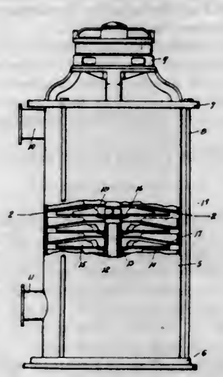
A tire consisting of a resilient outer tube, longitudinally split along its inner face, to separate its inner edges; a core within the tube, the core consisting of abutting disks embraced closely by the tube, the disks being provided with alined notches having parallel walls; a pneumatic tube threaded through the disks and located close to the fixed inner edges of the outer tube, the pneumatic tube being adapted to yield, and to prevent a forcing of the disks between the inner edges of the outer tube; the resilient outer tube being provided with an integrally formed wedge shaped rib, registering in the notches to expand the disks and to prevent movement between the disks and the outer tube; and a wire inserted through the disks between the rib and the pneumatic tube, whereby the rib and the wire will serve to reinforce the tire along its median plane and coöperate with the pneumatic tube in resisting a compression of the disks between the inner edges of the outer tube.

1,061,205. APPARATUS FOR PROPELLING FLUIDS. IRA H. SPENCER, West Hartford, Conn., assignor to The Spencer Turbine Cleaner Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 12, 1912. Serial No. 714,513. (Cl. 230—11.)

1. A casing, a rotatable shaft extending within the casing, disks of a flexible character secured to said shaft and arranged to flex in a direction longitudinally of the shaft, said disks having means to support a blade radially thereon.

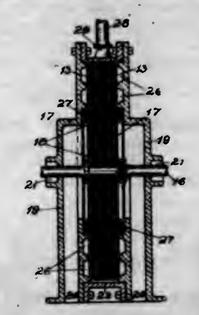
2. A casing, a rotatable shaft of rigid material located within the case, a disk of flexible material secured to said shaft and constructed to flex in a direction longitudinally thereof, and blades secured to said disk.

3. A casing, a shaft of rigid material located within the casing, means for rotating the shaft, a disk of flexible material firmly secured to the shaft and constructed to flex in a direction longitudinally of the shaft, and blades secured to the face of the disk and extending radially thereof.



4. A casing, a shaft of rigid material located within the casing, means for rotating the shaft, a series of disks of flexible material firmly secured to the shaft and constructed to flex in a direction longitudinally thereof, and blades secured to the faces of said disks.

1,061,206. TURBINE. NIKOLA TESLA, New York, N. Y. Original application filed Oct. 21, 1909, Serial No. 523,832. Divided and this application filed Jan. 17, 1911. Serial No. 603,049. (Cl. 121—60.)



1. A machine adapted to be propelled by a fluid consisting in the combination with a casing having inlet and outlet ports at the peripheral and central portions, respectively, of a rotor having plane spaced surfaces between which the fluid may flow in natural spirals and by adhesive and viscous action impart its energy of movement to the rotor, as described.

2. A machine adapted to be propelled by a fluid, comprising a rotor composed of a plurality of plane spaced disks mounted on a shaft and open at or near the same, an inclosing casing with a peripheral inlet or inlets, in the plane of the disks, and an outlet or outlets in its central portion, as described.

3. A rotary engine adapted to be propelled by adhesive and viscous action of a continuously expanding fluid comprising in combination a casing forming a chamber, an inlet or inlets tangential to the periphery of the same, and an outlet or outlets in its central portion, with a rotor composed of spaced disks mounted on a shaft, and open at or near the same, as described.

4. A machine adapted to be propelled by fluid, consisting in the combination of a plurality of disks mounted on a shaft and open at or near the same, and an inclosing casing with ports or passages of inlet and outlet at the peripheral and central portions, respectively, the disks being spaced to form passages through which the fluid may flow, under the combined influence of radial and

tangential forces, in a natural spiral path from the periphery toward the axis of the disks, and impart its energy of movement to the same by its adhesive and viscous action thereon, as set forth.

5. A machine adapted to be propelled by a fluid comprising in combination a plurality of spaced disks rotatably mounted and having plane surfaces, an inclosing casing and ports or passages of inlet and outlet adjacent to the periphery and center of the disks, respectively, as set forth.

[Claims 6 to 8 not printed in the Gazette.]

1,061,207. RUBBER COMPOUND. EUGENE VON VARGYAS, Pittsburgh, Pa. Filed Aug. 9, 1912. Serial No. 714,213. (Cl. 106—23.)

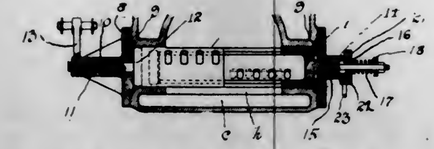
1. As a new article of manufacture a rubber compound consisting of a vulcanized composition of rubber, granulated cork and granulated coal ash, the quantity of rubber in the compound by weight being greater than the combined weights of the cork and coal ash.

2. As a new article of manufacture a rubber compound consisting of a vulcanized composition of approximately one pound of rubber, from one and seven-tenths to three and three-tenths ounces of dry cork in granulated form and about one and one-tenth ounces of coal ash in granulated form.

3. As a new article of manufacture a rubber compound consisting of a vulcanized composition of approximately one pound of rubber, one and seven-tenths ounces of dry cork in granulated form, and one and one-tenth ounces of coal ash in granulated form.

4. As a new article of manufacture a rubber compound consisting of a vulcanized composition of rubber, granulated cork and granulated coal ash, the quantity of rubber in the compound by weight being greater than the combined weights of the cork and the coal ash and the weight of the cork being greater than that of the coal ash.

1,061,208. GOVERNING DEVICE FOR FLUID-COMPRESSORS. CHARLES WAINWRIGHT and FRED J. CARNEY, Erie, Pa. Filed May 29, 1912. Serial No. 700,444. (Cl. 230—24.)



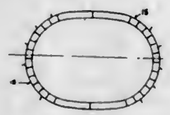
1. In a governing device for fluid compressors the combination with the pump mechanism; of mechanically operated means arranged to operate intermittently on the intake of the compressor and means arranged to be operated with a predetermined pressure in the receiver of the compressor to co-act with the first mentioned means for the purpose set forth.

2 In a governing device for fluid compressors the combination with the pump mechanism; of mechanically operated turnable means arranged to operate intermittently on the intake of the pump mechanism and means arranged to be operated with a predetermined pressure in the receiver of the compressor and to co-act with the first mentioned means for the purpose set forth.

3. In a governing device for fluid compressors, the combination with the pump mechanism; of a mechanically turnable hollow cylindrical intake valve including a slidable ported element arranged to be operated with a predetermined pressure in the receiver of the compressor for the purpose set forth.

4. A combined intake valve and controlling device for fluid compressors comprising, intermittingly mechanically operated turnable members each of which has ports normally out of alinement with the ports of the other member, one of said members being arranged to be moved with a predetermined pressure in the receiver of the compressor to effect the alining of its ports with those of the other member for the purpose set forth.

1,061,209. LIFE-SAVING DEVICE. WILLIAM MONROE WHITE, Milwaukee, Wis. Filed Apr. 22, 1912. Serial No. 692,512. (Cl. 9—12.)



1. As a life saving device, a detachable buoyant ship stack.

2. As a life saving device, a detachable ship stack having an air tight compartment.

3. As a life saving device, a detachable stack having two opposite air tight compartments.

4. As a life saving device, a detachable flattened stack having an air tight compartment at each of its two more flexed sides.

5. As a life saving device, a detachable stack having multi-cellular air tight compartments.

[Claims 6 to 23 not printed in the Gazette.]

1,061,210. CHAMBERING ATTACHMENT FOR ROCK-DRILLS. JOHN B. WORD, Latrobe, Cal., assignor of one-half to William F. Deaner, Amador City, Cal. Filed Apr. 5, 1912. Serial No. 688,589. (Cl. 166—6.)



1. A chambering attachment for rock-drills comprising a frame adapted for connection with the rock-drill body; a plunger-sleeve rotatably mounted in said frame; cutting bits movably mounted in the forward end of said plunger-sleeve; a plunger mounted to slide lengthwise in said sleeve and having its rear end projecting therefrom for engagement with the rock-drill chuck; a head on the other end of the plunger adapted by contact with the cutting-bits to effect their operation; and means for locking the plunger sleeve against independent rotation on their axes.

2. A chambering attachment for rock-drills comprising a frame consisting of a pair of side arms having at their rear ends means for detachably connecting them with the rock-drill body, and front cross arms with which the forward ends of the side arms are connected, said cross arms having overlapping ends and a bearing formed between said ends; a plunger-sleeve rotatably mounted in said cross-arm bearing and locked against endwise movement therein by a collar fitted in a slot in said bearing; cutting bits movably mounted in the forward end of said plunger-sleeve; a plunger mounted to slide lengthwise in said sleeve and having its rear end projecting therefrom for engagement with the rock-drill chuck; a head on the other end of the plunger adapted by contact with the cutting-bits to effect their operation; and means for locking the plunger and sleeve against independent rotation on their axes.

1,061,211. ACOUSTIC DIAPHRAGM. WILLIAM W. YOUNG, Agawam, Mass., assignor, by mesne assignments, to Lucy A. Young, Agawam, Mass. Filed Aug. 1, 1911. Serial No. 641,753. (Cl. 181—10.)



1. As a new article of manufacture, an acoustic diaphragm comprising a base member slit from a point outside of the center thereof to and through the edge of said member, and an integument affixed to said member over the slitted portions of the same.

2. As a new article of manufacture, an acoustic diaphragm comprising a base member perforated outside of the center thereof and having a slit extending from such perforation to and through the edge of said member, and an integument affixed to said member over the perforated and slitted portions of the same.

3. As a new article of manufacture, an acoustic diaphragm comprising a base member slit from a point outside of the center thereof to and through the edge of said member, an integument adapted to cover one side of said member, and a hardening adhesive material capable of uniting said integument with said member and of entering intimately and permanently into the texture of said integument.

4. As a new article of manufacture, an acoustic diaphragm comprising a base member having a plurality of perforations therein adjacent to the center thereof, and also having a plurality of slits extending from said perforations to and through the edge of said member, and an integument covering one side of and united with said member.

1,061,212. HAT-PIN GUARD. JULIA ANDERSON, Superior, Wis. Filed Aug. 13, 1912. Serial No. 714,939. (Cl. 24—155.)

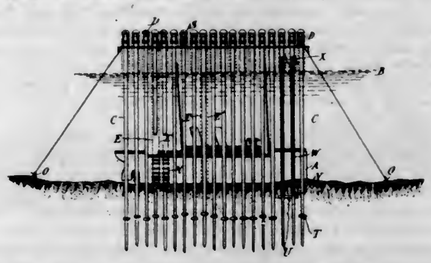


In a device as set forth comprising a pin having a piercing terminal, a guard for the terminal thereof, said pin being provided with a slot and an escape opening communicating with the slot, a spring on said guard, and a locking member carried by said spring and adapted to enter the escape opening upon longitudinal movement of the guard over the piercing terminal and to interlockingly engage in the slot in the pin upon movement of said guard in the opposite direction.

1,061,213. MEANS FOR RAISING SUNKEN VESSELS. JOHN ARBUCKLE, New York, N. Y.; Christina Arbuckle and Charles A. Jamison administrators of said John Arbuckle, deceased. Filed July 23, 1910. Serial No. 573,543. (Cl. 61—48.)

1. In apparatus of the character described, the combination of a series of piles, lifting means supported upon said piles and flexible connections passing over the top of said lifting means and adapted to exert a central or longitudinal thrust on said lifting means and connected to the vessel.

2. In apparatus of the character described, the combination of a series of piles, jacks supported upon said piles, each having a movable member, and flexible connections passing over the tops of said movable members and adapted to exert a central or longitudinal thrust on said jacks and connected to the vessel.



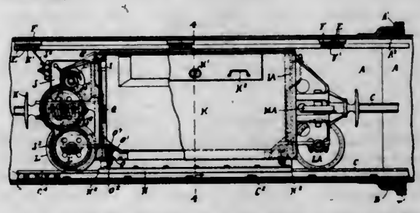
3. In apparatus of the character described, the combination of a series of piles, lifting means supported on said piles and having movable members, flexible members passing beneath the bottom of the vessel, and over the movable members of said lifting means and adapted to exert a central or longitudinal thrust on said lifting means.

4. In apparatus of the character described, the combination of a series of piles, jacks supported upon the tops of said piles and having movable members, and flexible members passing over said movable members of said jacks and adapted to exert a central or longitudinal thrust and passing beneath the bottom of the vessel.

5. In apparatus of the character described, the combination of a plurality of piles, one arranged on each side of the vessel, a jack supported upon each pile, a plurality of flexible members passing beneath the bottom of the vessel on opposite sides of said piles, said flexible members being connected to said jacks whereby when the latter are operated both of said flexible members are raised on each side of the vessel.

[Claims 6 to 12 not printed in the Gazette.]

1,061,214. CARRIER SYSTEM. BIRNEY C. BATCHELLER, New York, N. Y. Original application filed Feb. 20, 1912, Serial No. 678,893. Divided and this application filed Oct. 31, 1912. Serial No. 728,775. (Cl. 104—4.)



1. In a carrier system the combination with a single supporting track rail and an opposed pair of lateral guide rails, of a carrier having rigidly connected end portions and having journaled to each end portion a main supporting wheel running on said supporting rail and two substantially horizontal lateral guide wheels, one engaging each of said guide rails, said lateral guide rails and wheels being located approximately at the level of the center of gravity of the carrier.

2. In a carrier system the combination with a single supporting track rail and an opposed pair of lateral guide rails, of a carrier provided at each end with a main supporting wheel running on said supporting rail and with two substantially horizontal lateral guide wheels, one engaging each of said guide rails, said lateral guide rails and wheels being located approximately at the level of the center of gravity of the carrier, and the main and guide wheels at each end of the carrier having their axes

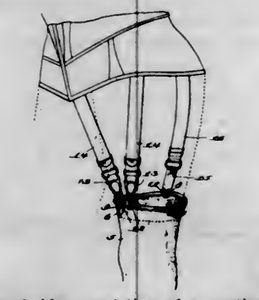
located in approximately the same plane transverse to the length of the carrier.

3. In a carrier system the combination with a single supporting track rail and an opposed pair of lateral guide rails, of a carrier having rigidly connected end portions and having journaled to each end portion a main supporting wheel running on said supporting rail and two substantially horizontal lateral guide wheels, one engaging each of said guide rails, said lateral guide rails and wheels being located at approximately the level of the center of gravity of the carrier, and a motor secured to one end of said carrier and geared to one of said supporting wheels.

4. In a carrier system the combination with a single supporting track rail and an opposed pair of lateral guide rails, of a carrier having rigidly connected end portions and having journaled to each end portion a main supporting wheel running on said supporting rail and with two substantially horizontal lateral guide wheels, one engaging each of said guide rails, said lateral guide wheels and rails being located at approximately the level of the center of gravity of the carrier, said supporting wheels having rail engaging flanges at both sides and said lateral guide wheels having flanges at their undersides.

5. In a carrier system the combination with a single supporting track rail and an opposed pair of lateral guide rails, of a carrier, comprising a body and cast metal end members to which said body is secured and having journaled at each end member a main supporting wheel running on said supporting rail and two substantially horizontal lateral guide wheels, one engaging each of said guide rails, said lateral guide rails and wheels being located at approximately the level of the center of gravity of the carrier.

1,061,215. GARTER-HOLDER. NORA E. P. BERGMANN, New York, N. Y. Filed Sept. 2, 1911. Serial No. 647,378. (Cl. 241—1.)



1. A garter holder consisting of a continuous strip of inelastic material and of the same cross-sectional dimension from end to end, the said strip being adapted to be removably applied in the hem at the top of a stocking, garter attaching devices applied at different points throughout the length of the strip and projected through the hem of the stocking, and fastening devices secured to the ends of the strip to draw the latter in endwise close relation within the hem to avoid projection of any part of the strip exteriorly of the hem, the strip being readily insertible in and withdrawable from the hem.

2. A garter holder consisting of a strip of inelastic material which is freely flexible and of the same cross-sectional dimension from end to end thereof, the strip being adapted to be loosely and removably threaded through the top hem of a stocking and having fastening devices at the ends to draw the latter closely in endwise relation within the confines of the hem, and garter attaching devices secured to the strip and projected through openings in the hem for exterior access, the garter attaching devices being greater in number at the front than at the rear portion of the strip.

3. A garter holder consisting of a continuous strip of inelastic material which is flexible and provided with fabric fastening devices at the ends to draw the latter in close endwise relation and also provided with fabric garter attaching devices at different points throughout the length thereof, the said strip being adapted to be removably applied in the hem at the top of a stocking and the garter attaching devices projected through openings formed in the hem for exterior access, the attached ends of the strip also being inserted in and wholly inclosed by the stocking hem and accessible through an opening in the latter, the strip being readily removable from and insertible in the hem of the stocking and the extremities of the flexible fastening devices for the ends of the strip being projected to the exterior of the stocking hem.

4. A garter holder consisting of a continuous strip of inelastic material substantially circular in cross-section and flexible, the said strip of material being of the same dimension from end to end and adapted to be removably applied in the hem at the top of a stocking, the strip being also provided with textile fabric fastening devices at the ends to draw the latter in close endwise relation within the hem and wholly inclosed by the latter, and textile fabric garter attaching devices secured to the strip and loosely projected through openings in the stocking hem, the strip being readily removable from and insertible in the hem of a stocking.

1,061,216. SPECTACLES-ADJUSTER. WILLIAM O. BOYLE, St. Joseph, Mo. Filed Feb. 5, 1912, Serial No. 675,527. Renewed Mar. 12, 1913. Serial No. 753,862. (Cl. 88—41.)



1. The combination with a pair of spectacles provided with lens frames and a connecting bridge, of a downwardly projecting spring metal adjuster frame comprising a curved portion and flexible arms connected with the bridge of the spectacles said curved portion adapted to be seated on the bridge of the nose when the spectacles are in use and to be seated in the normal position of the spectacles bridge when the spectacles are elevated, and in disuse, supported by said flexible arms.

2. The combination with the bows, lens frames, and connecting bridge of a pair of spectacles, of a spring metal frame having a curved portion at the bottom corresponding with that of said bridge, upwardly extended elastic arms, the ends of said arms curled loosely around the ends of said bridge adjacent to said lens frames, the tips of said lens bearing upwardly and outwardly into contact with the front of said lens frames.

3. The combination of a pair of lens frames, a connecting bridge, an spectacles adjuster comprising a single thread like elastic wire, the body portion thereof curved to be seated on a nose, the ends of said wire extending upward into springy and curled connection around the ends of the spectacles bridge, and the tips of said ends, said tips having pressure contact at all times against the front of the lens frames.

4. The combination with a pair of spectacles of a single thread like elastic wire, the body portion thereof curved forward and upward, the ends of said body portion having elastically curled connection around the ends of the bridge of the spectacles, and the upward and outward tips of the ends of said wire, said tips being always in contact with the front of the lens frames.

1,061,217. COMBINED RAKE AND PITCHFORK. PRINCE B. BREEDEN, Norfolk, Va. Filed Nov. 15, 1912. Serial No. 731,616. (Cl. 55—25.)

A handle having a sleeve secured thereto and terminating beyond the end of the handle in a socket, the said socket having its walls provided with oppositely disposed

slots, a head mounted for rocking movements in the socket and provided with a plurality of radial lugs, one of the lugs being adapted to engage with one of the walls of one of said slots on one adjustment of the head,



the other lug being adapted to engage with one of the walls of the other slot on another adjustment of the head, and means adjustably mounted on the sleeve and adapted to singly engage with the lugs.

1,061,218. SPRING STRUCTURE. GEORGE B. BRINK, Plymouth, Mich. Filed Apr. 25, 1912. Serial No. 693,231. (Cl. 155—25.)



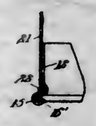
1. In a spring structure, an upper frame, a lower frame composed of two web portions arranged at right angles to each other, one web portion forming the base of the structure and the other web portion having an external surrounding groove therein, springs between the frames, a cover for the structure including a side facing, a wire secured to the edge of the side facing and adapted to bind the entire lower edge of the facing in the groove of the lower frame and thereby hold the lower edge of the facing above the lower edge of the lower frame and secure it against accidental disconnection therefrom.

2. In a spring structure, an upper frame, a lower frame composed of two web portions arranged at a right angle to each other, one web portion forming the base of the structure and the other web portion forming a marginal vertical portion and which is provided with an external continuous groove, springs between the frames, a cover for the structure including a side facing, a wire secured to the free edge of the side facing and adapted to be drawn in said groove of the lower frame to bind the entire lower edge of the side facing in the groove of the lower frame and thereby hold the side facing against accidental disconnection from the lower frame, the side facing having a plurality of slits therein above said wire and the lower frame having a plurality of fingers thereon adapted to be directed outwardly of said frame and passed through said slits and bent over the wire in the lower edge of the facing to coöperate with said wire to hold the side facing against upward movement with relation to the lower frame.

3. In a spring structure, a base frame, having an inwardly directed flange portion and also provided with an internal longitudinal groove and with an external longitudinal groove, supporting wires disposed on said inwardly directed flange with their ends fitted in said internal groove, springs mounted on the supporting wires, and a cover for the structure including a side facing having its lower edge fitted in said external groove of the base frame.

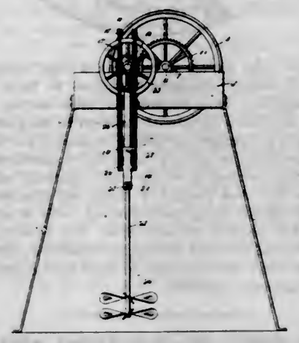
4. In a spring structure, a base frame having an external surrounding groove opening outwardly horizontally and also provided with a continuous internal groove arranged below the external groove with the lower wall of the external groove forming the upper wall of the internal groove, supporting wires having their ends secured in the inwardly opening groove, springs mounted on the supporting wires, a cover for the structure including a side facing, and a single piece of material drawn entirely around the base frame and thereby pulled tightly into said external groove and to which single piece of material the free edge of the side facing is secured.

1,061,219. SPRING STRUCTURE. GEORGE B. BRINK, Plymouth, Mich. Original application filed Apr. 25, 1912, Serial No. 693,231. Divided and this application filed July 3, 1912. Serial No. 707,586. (Cl. 155—25.)



A base frame for spring structures comprising a member formed of angle iron with one of its portions directed inwardly and with its other portion provided with an internal longitudinal groove and also with an external longitudinal groove.

1,061,220. CHURN. JOHN F. BURNS, Bronson, Tex. Filed Aug. 28, 1912. Serial No. 717,532. (Cl. 31—30.)



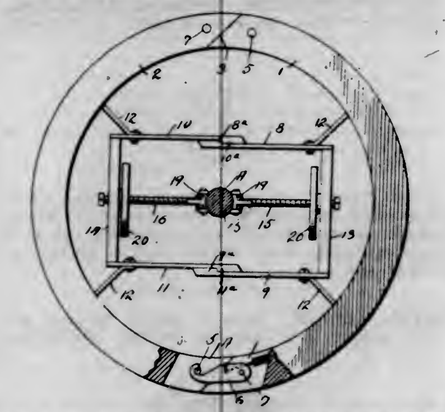
A churn comprising a frame, a driving mechanism therefor including a driven shaft, supporting arms secured to one side of the frame on opposite sides of the driven shaft and projecting above and below said frame, the upper and lower terminals of the arms being bent lateral in direction away from the frame, guide rods supported at the free terminals of the lateral projection or said arms whereby said rods are arranged in spaced parallel relation, a slide head comprising a plate like member, guide eyes arranged in pairs on each longitudinal edge of said plate each pair being in spaced relation and projecting forwardly from the plate and being arranged in vertical alinement with each other to slidably engage the guide rod, a dasher connection formed on and projecting from the lower edge of said plate below the lowermost eyes, and a connection between the driven shaft and said plate, said connection being in alinement with the dasher connection whereby the strain on the slide head is at all times intermediate the guide bars.

1,061,221. DRILL-CABLE CLAMP. ROBERT FENTRESS CLAYTON, Wimberly, Tex. Filed June 1, 1912. Serial No. 701,036. (Cl. 166—3.)

1. In a drill rope clamp, a ring formed in two sections, a frame mounted on each section and having interengaging portions to engage corresponding parts of the frame on the other section and form an inclosed frame, and clamping members mounted on each frame.

2. A drill rope clamp comprising a ring formed in two sections, releasable engaging members to hold said ring sections together, bars secured to each section and having offset shoulders on one of their ends, said offset shoulders adapted to engage the offset shoulders on the bars on the corresponding section, a cross bar connecting the bars on each ring section, a screw shaft slidably mounted in each cross bar and having a clamping member thereon, means to hold said screw shafts from rotation, and a wheel having a

threaded opening mounted on each shaft and adapted to hold said clamping members in a clamping position.



3. A drill rope clamp comprising a ring formed in two sections, releasable engaging members to hold said ring sections together, bars secured to each section and having offset shoulders on one of their ends, said offset shoulders adapted to engage the offset shoulders on the bars on the corresponding section, a cross bar connecting the bars on each ring section, a screw shaft slidably mounted in each cross bar and having a clamping member thereon, said screw shafts being each formed with a longitudinal groove, a key secured to each cross bar slidably engaging said groove, and a wheel having a threaded opening mounted on each shaft and adapted to hold said clamping members in a clamping position.

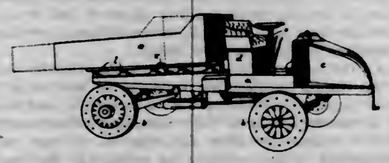
1,061,222. SHOE. MILLER E. CONRAD, Atlantic, Iowa. Filed Jan. 5, 1912. Serial No. 669,586. (Cl. 36—17.)



1. A shoe having a lining and an insole formed of a single thickness of flexible material, marginal portions of the lining and insole being arranged in superposed relation on the insole and stitched together and to said insole, whereby a shoulder is formed.

2. A shoe having a lining and a flexible fabric insole of single thickness, marginal portions of the insole and lining being turned inwardly and superposed on the insole and conjunctively stitched thereto, whereby a shoulder is formed, a vamp having its margin superposed on the shoulder and a welt separately and successively stitched to said shoulder and vamp and adapted to receive an outsole.

1,061,223. COUNTERBALANCED UNLOADING DEVICE FOR TRUCKS. FRED A. COOK, Portland, Oreg. Filed Nov. 11, 1911. Serial No. 659,870. (Cl. 21—20.)



1. In a truck, the combination with the frame of the running gear and a truck-body supported longitudinally movable on such truck-frame, the supporting devices also adapted to permit the tilting of the truck-body when moved rearward to the degree causing it to over-balance; of means for moving the truck-body rearward and thus causing it to tilt on its fulcrum; a counter-weight slidably supported at the forward end of the truck-body; and means adapted to cause said counter-weight to automatically move from and toward the fulcrum of the truck-body while the latter is tilting into discharging position and also while returning to its normal position.

2. In a truck, the combination with the frame of the running gear and a truck-body supported longitudinally movable on such truck-frame, the supporting devices also adapted to permit the tilting of the truck-body when moved rearward to the degree causing it to over-balance; a longitudinal guide affixed under the truck-body, a counter-weight sliding in such guide, a cable fastened at one end to the counter-weight and at its opposite end to the truck-body, a sheave secured to the forward end of the truck-body over which sheave said cable passes; and the devices being adapted to cause the counter-weight to move from and toward the fulcrum of the truck-body while the latter is tilting into discharging position and also while returning to its normal position.

3. In a truck, the combination with the frame of the running gear and a truck-body supported longitudinally movable on such truck-frame, the supporting devices also adapted to permit the tilting of the truck-body when moved rearward to the degree causing it to over-balance; a longitudinal guide affixed under the truck-body, a counter-weight sliding in such guide, a cable fastened at one end to the counter-weight and at its opposite end to the truck-body, a sheave secured to the forward end of the truck-body over which sheave said cable passes; a cable connecting the forward end of the truck-body with the truck-frame; and the devices being adapted to cause the counter-weight to move from and toward the fulcrum of the truck-body while the latter is tilting into discharging position and also while returning to its normal position.

4. In a truck, the combination with the frame of the running gear and a truck-body supported longitudinally movable on such truck-frame; a rack extending longitudinally under the truck-body, a pinion engaging said rack, means for rotating the pinion; a counter-weight slidably supported at the forward end of the truck-body; and means adapted to cause said counter-weight to automatically move from and toward the fulcrum of the truck-body while the latter is tilting into discharging position and also while returning to its normal position.

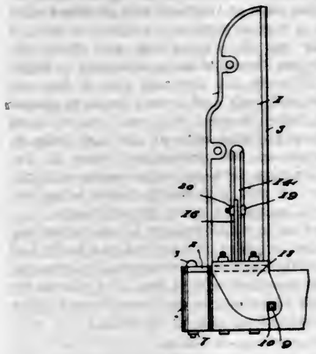
5. In a truck, the combination with the frame of the running gear and a truck-body supported longitudinally movable on such truck-frame; a rack extending longitudinally under the truck-body, a pinion engaging said rack, means for rotating the pinion; a longitudinal guide affixed under the truck-body, a counter-weight sliding in such guide, a cable fastened at one end to the counter-weight and at its opposite end to the truck-body, a sheave secured to the forward end of the truck-body over which sheave said cable passes; and the devices being adapted to cause the counter-weight to move from and toward the fulcrum of the truck-body while the latter is tilting into discharging position and also while returning to its normal position.

[Claim 6 not printed in the Gazette.]

1,061,224. WAGON-STANDARD. STEPHEN A. COWART, Midlothian, Tex. Filed Aug. 26, 1912. Serial No. 717,044. (Cl. 21—54.)

1. A wagon standard comprising a body and a base integral therewith and web braces integral with said body and base, braces for binding said base to a wagon bolster each consisting of a vertical portion engaging the side of the bolster and a slotted horizontal portion engaging said base, vertical bolts extending through said slots and through said base and through the bolster and nuts on said bolts binding said braces and base and bolster together, and a horizontal bolt and a nut therefor binding the vertical portions of said braces to said bolster.

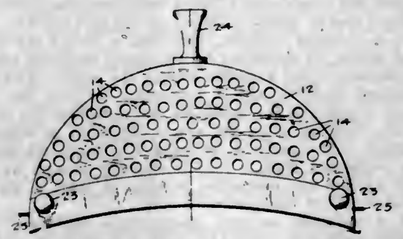
2. A wagon standard comprising a body and a base therefor integral therewith mounted on a bolster, front and rear braces integral with said body and said base, braces having horizontal portions engaging said base and vertical portions engaging said bolster, vertical bolts binding said braces and base and bolster together, said braces having slots for said bolts permitting adjustment to bolsters of different thicknesses, the lower ends of said braces being extended inwardly, and a horizontal bolt lying out of the path of said vertical bolts for binding said braces to said bolster.



3. A standard comprising an upright body having a flat base mounted on a bolster and front and rear braces integral with said body and base, braces having vertical portions engaging the sides of a bolster and horizontal portions engaging said base, said horizontal portions being bifurcated to engage said base on both sides of each of said first named braces and having slots therein, vertical bolts projected through the bolster and said base and through said slots and nuts therefor, and a horizontal bolt binding the vertical portions of said braces to the bolster.

4. A standard for bolsters comprising an upright body and a flat base integral therewith and vertical front and rear braces integral with said body and base, detachable braces having vertical portions engaging the sides of a bolster and having bifurcated horizontal portions engaging said base on both sides of said front and rear braces and having upstanding flanges engaging said front and rear braces and said flanges having horizontal slots therein, bolts projected through said slots and through said front and rear braces, the horizontal portions of said detachable braces having slots therein, bolts projected through the bolster and through said base and through said slots and nuts for said bolts, and a bolt binding the vertical portions of said detachable braces to said bolster.

1,061,225. THERAPEUTIC DEVICE FOR UTILIZING RADIANT ENERGY. SAMUEL A. CUNNINGHAM, New York, N. Y. Filed Nov. 14, 1912. Serial No. 731,276. (Cl. 174—177.)



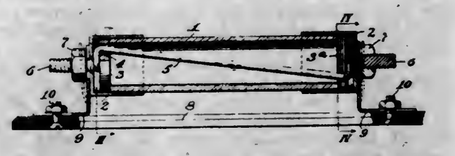
1. In a device of the character specified, the combination of a ventilated reflector; a transparent screen supported by said reflector and adapted for contact with the surface to be treated; and a source of light surrounded by a colored medium through which the light-rays pass.

2. In a device of the character specified, the combination of an arch-shaped member having a reflecting surface upon its inner face; apertured end walls secured to said member; a transparent screen supported at the outer edge of the arch-shaped member and adapted for contact with the surface to be treated; and a source of light surrounded by a colored medium through which the light-rays pass.

3. In a device of the character specified, the combination of an arch-shaped metallic member having a reflecting surface upon its inner face, the lower edges of said member being turned inwardly; apertured end walls secured to said member, the apertures being sufficient in number to permit free passage of air through the device to keep it thoroughly ventilated and cooled; an electric light supported by one of said end walls and lying adjacent to the reflecting surface aforesaid; lugs extending inwardly from the side walls of the arch-shaped member adjacent the inturned lower edges of said member and thereby forming a guide-way; and a transparent screen mounted in said guide-way.

4. In a device of the character specified, the combination of an arch-shaped member having a reflecting surface upon its inner face, the lower edges of said member being inturned; lugs extending inwardly from each side of said arch-shaped member, having a spaced relation with reference to the inturned edges, and forming guide-ways; apertured end walls secured to said arch-shaped member, the apertures being sufficient in number to permit free passage of air through the device to keep it thoroughly ventilated and cooled; an electric light supported by one of said end walls and standing in close proximity to the arch-shaped member; a transparent screen supported by the guide-ways aforesaid; and means for holding said screen in place in said guide-ways.

1,061,226. SAFETY-FUSE. ALBERT F. DAUM, Pittsburgh, Pa. Filed July 7, 1911, Serial No. 637,322. Renewed Dec. 2, 1912. Serial No. 734,626. (Cl. 175—273.)



1. In an electric safety apparatus, a casing of non-conducting material, an end cap therefor provided with a hole opening into the interior of the casing, a clamping-head, a stem therefor extending through the hole in the cap, a fuse-wire having one end lying between the head and the cap, a terminal external to the cap, and means for causing the head to clamp the end of the fuse-wire between the head and cap and to clamp the terminal to the cap.

2. In an electric safety apparatus, a casing of non-conducting material, an end cap therefor provided with a hole opening into the interior of the casing, a clamping-head, a stem therefor extending through the hole in the cap, a fuse-wire having one end lying between the head and the cap, an electric terminal, and means coöperating with the stem and acting on the terminal for simultaneously clamping the terminal to the cartridge-fuse, and the fuse-wire between the head and the cap.

3. In an electrical apparatus, a casing, an end cap thereon, a bolt having its head within the casing and its stem extending through the end of the cap, a fuse within the casing and with one end between the bolt head and the cap, and a device movable with respect to the stem and coöperating with the stem and the outer face of the cap to clamp the fuse between the bolt head and the cap.

4. In a refillable fuse, an end cap, a shell adapted to extend into said cap, a metallic member within the end

cap and free from peripheral engagement with the skirt of the cap and coöperating with the cap to secure a fuse element therebetween, said member being also free from holding engagement with the shell, and means for positioning said member within said cap to provide a normally fixed relation between said cap and member independently of the shell.

5. In a refillable fuse, an end cap, a shell adapted to extend into said cap, a metallic member within the end cap and free from peripheral engagement with the skirt of the cap and coöperating with the cap to secure a fuse element therebetween, and means for positioning said member within the cap to provide a normally fixed relation between said cap and member independently of the shell, a spring contact, said means including a stem carried by said member and extending through said cap, and external means for clamping said spring contact to the face of said cap, said latter contact acting to exert an outward pull on the connecting members when the fuse blows.

1,061,227. CARTRIDGE-FUSE. ALBERT F. DAUM, Pittsburgh, Pa. Filed Jan. 26, 1912, Serial No. 673,529. Renewed Dec. 4, 1912. Serial No. 734,985. (Cl. 175—273.)



1. In a cartridge fuse, a cylindrical casing, a cup-shaped cap telescopic over one end of the casing, a screw-stem having a head within the cap, and a fuse strip between the head and the end-closure of the cap, the stem being threaded and the said end-closure having a threaded opening adapted to work on the stem.

2. In a cartridge fuse, a stem, an elongated head having the longitudinal corners next to the stem rounded, a fuse strip extending over one of the rounded corners and about the stem, and means for clamping to the said head that part of the fuse wire which is about the stem.

3. In a re-filiable fuse, an end cup, a shell adapted to extend into said cap, a metallic member within the end cap and free from peripheral engagement with the skirt of the cap and coöperating with the cap to secure a fuse element therebetween, and means for positioning said member within the cap to provide a normally fixed relation between said cap and member independently of the shell, said means including a stem carried by the member and threaded to the end cap.

4. In a re-filiable fuse, an end cap, a shell adapted to extend into said cap, a metallic member within the end cap and free from peripheral engagement with the skirt of the cap and coöperating with the cap to secure a fuse element therebetween, and means for positioning said member within the cap to provide a normally fixed relation between said cap and member independently of the shell, said means including a stem integral with the member and threaded to the end cap.

5. In a re-filiable fuse, an end cap, a shell adapted to extend into said cap, a metallic member within the end cap and free from peripheral engagement with the skirt of the cap and coöperating with the cap to secure a fuse element therebetween, and means for positioning said member within the cap to provide a normally fixed relation between said cap and member independently of the shell, said means including a stem carried by the member and threaded to the end cap, the shell being recessed at its end to freely receive said member, said recess preventing rotative movements of the member relative to the shell but permitting endwise relative movements of said parts.

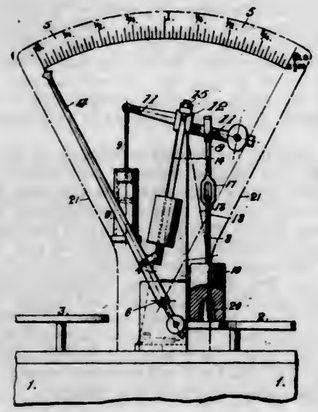
1,061,228. CARTRIDGE-FUSE. ALBERT F. DAUM, Pittsburgh, Pa. Filed Mar. 1, 1912. Serial No. 680,939. (Cl. 175—273.)



1. In a cartridge fuse, a tubular body, skirted caps secured exteriorly of the ends of the body and provided with holes in their ends, a fuse extending through the body, a washer within each cap free therefrom and from the body and having therein threaded holes arranged to register with the said holes in the adjacent cap, a fuse extending through the said body and having its ends passed through one of the holes in each cap, and one or more screws extending through some only of the said holes in each cap and certain of the unoccupied holes in the washers to clamp the fuse between each washer and the adjacent cap, other of said registering holes being unoccupied to allow the escape of gases therethrough.

2. In a cartridge fuse, a tubular body, a cup-shaped cap having its closed end opposite the end of the body and having its skirted portion arranged telescopically over one end of the body and provided with a slot, and means for drawing the opposing edges of the slot toward each other so as to clamp the skirted portion to the body.

1,061,229. WEIGHING-MACHINE. JAMES DOBSON, Birmingham, England. Filed May 18, 1912. Serial No. 698,245. (Cl. 73—29.)



1. A weighing machine, comprising a weight carrier, a load carrier, and indicating means, a constant weight cooperating with the weight carrier, operating connections between the constant weight and the indicating means to permit operation of the latter, the operating connections serving to exert a normal upward pull on the constant weight and constructed to break said operating connection when a load is suddenly thrown on the load carrier.

2. A weighing machine, comprising a weight carrier, a load carrier, an indicating device, weight operating means, a constant weight normally holding the weight carrier in weighted position, and a connection between the constant weight and the indicating device to hold the latter in zero position when the weight carrier is in weighted position, said connection including a device which breaks the connection when a load is suddenly thrown on the load carrier, the connection serving to exert a normal upward pull on the constant weight.

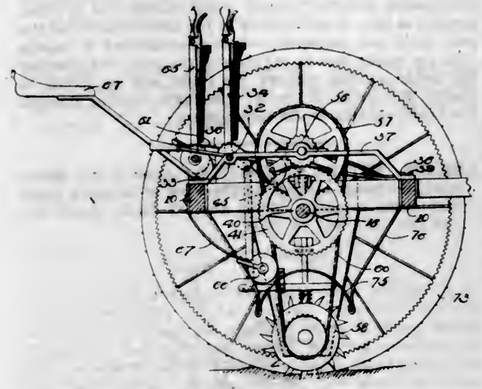
3. A weighing machine, comprising a load carrier, a weight carrier, a constant weight supported by and in loose contact with the weight carrier, indicating means including a device for operating the same and connecting means between the constant weight and the indicating means to permit operation of the latter when a load is placed on the load carrier, said connecting means including means which will permit the constant weight and the weight carrier to move quicker than the indicating means when a load is suddenly thrown on the load carrier, and serves to exert a normal upward pull on the constant weight.

4. A weighing machine, comprising a load carrier, a weight carrier, a constant weight loosely mounted on the weight carrier, indicating means including a pointer and a means for operating same, and a connection between the constant weight and the indicating means including interlooped, elongated members, the said connection serving to exert a normal upward pull on the constant weight, whereby when a load is suddenly thrown on the load carrier, the constant weight will move faster than the pointer, and break said connection.

5. A weighing machine, comprising a load carrier, a weight carrier, a constant weight loosely mounted on the weight carrier, indicating means including a pointer, and means for operating the same, means for cushioning the movement of the pointer, and means between the constant weight and the indicating means to permit the means for operating the latter to move the indicator when the constant weight is moved by a load placed on the load carrier and to permit the constant weight to move faster than the indicator, should a load be suddenly placed on the load carrier, the means between the constant weight and the indicating means serving to exert a normal upward pull on the constant weight.

[Claims 6 to 8 not printed in the Gazette.]

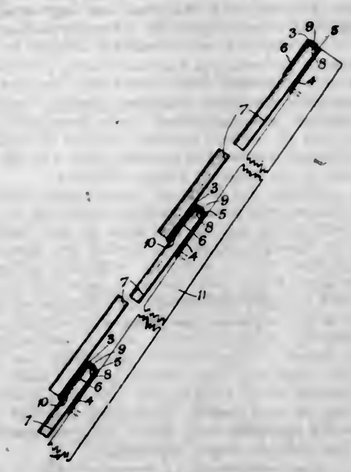
1,061,230. PULVERIZING-HARROW. WILLIAM CAREL EVANS and ROY CLEMENTS, Sedalia, Mo. Filed Dec. 26, 1911. Serial No. 667,736. (Cl. 55—85.)



1. A harrow of the class described comprising a frame, supporting wheels therefor, hanger frames carried by said first mentioned frame, brackets positioned above said frame, a main driving sprocket carried by said bracket, a main driving gear, an auxiliary driving gear associated with said main sprocket wheel, a harrow roller suspended below said frame, a sprocket chain driving said harrow roller from said main sprocket wheel, clutch members associated with said sprocket wheels, actuating levers carried by said frame and coöperating with said clutches extending rearwardly of said frame in such a manner as to have easy access thereto from the seat of said frame for throwing said clutch into and out of an operative position.

2. A device of the class described comprising a frame, wheels supporting said frame, brackets suspended from said frame, a harrow roller slidably mounted upon said brackets, a pivoted lever secured to said brackets and capable of swinging movement thereon for raising and lowering said harrow, the outer end of said lever provided with a longitudinally extending slot, a lifting lever carried by said frame within the rear thereof, a vertical link connecting said lever for facilitating a direct upward pull upon said first mentioned lever when said lifting lever is operated, a bracket carried by said frame and provided with a journal at one corner thereof, a shaft positioned in said journal supporting said operating lever, and said bracket adapted to rigidly brace said operating lever, and a driving sprocket wheel carried by said bracket and coöperating with said harrow roller for operating the same.

1,061,231. METALLIC ROOFING AND THE LIKE. HEINRICH CHRISTIAAN FERRON, Amsterdam, Netherlands. Filed June 29, 1912. Serial No. 706,735. (Cl. 108—13.)



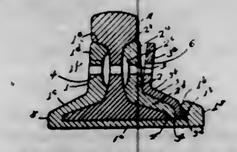
1. In a metallic roofing, the combination of upper and lower purlins of channel section arranged in spaced, parallel relation and having their lower side walls disposed against the roof rafters; and a row of metal tiles interposed between said purlins and housed at their upper ends in the space between the side walls of the upper purlin, each tile being formed at its upper end with an upstanding weather-stripping flange having a tongue engaged with the connecting wall of said upper purlin, and being formed at its lower end with an extension removably bent over the upper side wall of the lower purlin.

2. In a metallic roofing, the combination of upper and lower purlins of channel section arranged in spaced, parallel relation and having their lower side walls disposed against the roof rafters, the upper purlin being formed with a series of longitudinal slots at the junction of its upper side wall and connecting wall; and a row of metal tiles interposed between said purlins and housed at their upper ends in the space between the side walls of said upper purlin, each tile being formed at its upper end with an upstanding weather-stripping flange having its upper edge provided with a tongue which is inserted through the adjacent slot and bent downward against the connecting wall of the said upper purlin, and being formed at its lower end with an extension which is bent over the upper side wall of the lower purlin and inwardly against the under surface of such wall.

1,061,232. COMBINED RAIL-JOINT AND LOCKING-PLATE. JOHN T. FINLEY, Jr., and JOHN T. FINLEY, Sr., Atlanta, Ga. Filed Sept. 12, 1912. Serial No. 720,034. (Cl. 238—6.)

1. In a combined rail joint and locking plate, a member comprising a base plate, one edge of said member being pro-

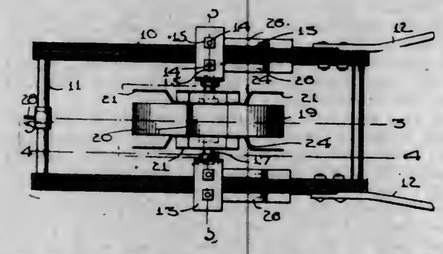
vided with an upwardly extending portion adapted to engage one side of the rail, the other edge of said base portion being provided with an upwardly extending flange having an undercut groove on its inner side, a member shaped to fit the opposite side of the rail, and a locking plate adapted to coöperate with the last mentioned member and provided with a flange adapted to engage the undercut portion aforesaid.



2. A combined rail joint and locking plate comprising a member consisting of a base plate, one edge of said base plate provided with an upwardly extending portion adapted to fit one side of a rail, a member adapted to fit the other side of the rail, said base plate being provided with an upwardly extending flange on the edge opposite to the first mentioned upwardly extending portion, and having a longitudinal undercut groove in its inner side, and a locking plate of resilient material adapted to engage the last mentioned member and provided with a flange adapted to seat in the undercut groove aforesaid.

3. A combined rail joint and locking plate comprising three members, one of said members consisting of a horizontal base plate, one of the edges of said base plate having an upwardly extending portion, an inwardly inclined portion, and a vertically extending portion, the opposite edge of said plate having an upwardly extending flange with its inner side formed with an undercut groove, another of said members consisting of a vertical portion, an outwardly inclined portion, and a downwardly extending flange, a third member comprising the locking plate and consisting of an angular plate of resilient material adapted to seat upon the last mentioned member, the lower edge of said angular plate being provided with a downwardly extending hook shaped flange adapted to seat within the undercut groove aforesaid.

1,061,233. COTTON-CHOPPER. GREEN BERRY CLAY FOSTER, Milltown, Ala. Filed Nov. 6, 1912. Serial No. 729,848. (Cl. 97—49.)



1. In a chopper of the class described, a disk provided with a series of peripheral pockets, and a series of chopper blades having their cutting edges spaced from the sides of the disk and parallel thereto.

2. In a chopper of the class described, a disk provided with a series of peripheral pockets, a plurality of pairs of chopper blades secured to the sides of said disk and having their cutting edges spaced from the sides of the disk and parallel thereto, said blades being made in pairs from a single blank of sheet metal bent to permit its center portion to rest against the respective side of the disk and be secured thereto, and having its ends in said spaced relation.

3. In a cotton chopper, a pair of blades made from a single blank of sheet metal having parallel sides and curved sharpened ends, the central portion of the blank being slitted longitudinally and transversely with the transverse slits intersecting the ends of the longitudinal slit, said blank having the partially separated portions folded outward to reinforce the sides and being bent upward and then parallel at the ends to bring the cutting edges formed by the sharpened ends in spaced parallel relation with the center.

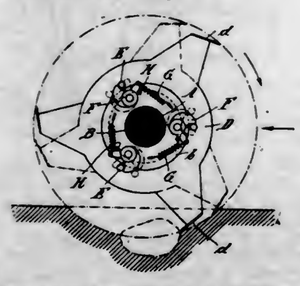
1,061,234. TOBACCO-PIPE. HENRY FROEHLICH, Central Aguirre, Porto Rico. Filed Oct. 31, 1911. Serial No. 657,763. (Cl. 131—12.)



1. A tobacco pipe having a main smoke bore extending for a portion of the stem, a reduced port communicating with the bowl, and a chamber disposed between the main smoke bore and the port, said chamber being of a greater interior dimension than either the main smoke bore or the port, and a passage communicating with the chamber at its juncture with the port, said passage being inclined with respect to the main smoke bore and with the port, a hollow stopper for the passage, a mouth-piece adapted to fit the main smoke bore, and a spiral member carried by the said mouth-piece and closing the main smoke bore through the full length of the latter beyond the mouth-piece, whereby the main smoke bore receives the convolutions of said member.

2. A mouth-piece for tobacco pipes provided with a spiral extension, the said extension embodying a removable member and having one of its ends flat and bifurcated to provide side arms, the said arms adapted to have their extremities connected with the mouth-piece to permit of the opening provided thereby being arranged in a plane parallel to that of the opening in the mouth-piece, and the said spiral and end of the mouth-piece adapted to engage with the smoke bore in the stem of the pipe, and whereby the smoke passing through the spiral will be forced to contact with either of the flat arms before passing through the smoke opening in the mouth-piece.

1,061,235. ROTARY POWER-HOE. ADAM FUHR, Mannheim, Germany, assignor to The Firm of Heinrich Lanz, Mannheim, Germany. Filed Aug. 22, 1912. Serial No. 716,457. (Cl. 97—62.)



1. A rotary power hoe, comprising a driving element, an element driven thereby, carrying a hoe and capable of complete rotation relatively to the driving element, a member projecting from one of said elements, and a member arranged on the other element, said members being normally held in yieldable contact but adapted to be moved out of contact with each other, so that the driven element moves in one direction in unison with the driving element, but is capable of movement relative thereto in the opposite direction until arrested by said members again moving into contact with each other.

2. A rotary power hoe, comprising a driving element, an element driven thereby and carrying a hoe, a plurality of pins projecting from one of said elements, and a yieldable member arranged on the other element, the single member on the one element and the pins on the other element, in succession, being normally held in yieldable contact, so that the driven element moves in one direction in unison with the driving element, but is capable of movement relative thereto in the opposite direction, until arrested by contact of the single member with one of said pins.

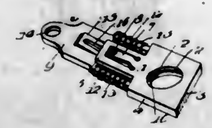
3. A rotary power hoe, comprising a driving element, an element driven thereby and carrying a hoe, a pin projecting from one of said elements, and a plurality of yieldable members arranged on the other element, the pin and the other members, in succession, being normally held in yieldable contact, so that the driven element moves in one direction in unison with the driving element, but is capable of movement relative thereto in the opposite direction, until arrested by contact of the pin with one of the other members.

4. A rotary power hoe, comprising a driving element, an element driven thereby and carrying a hoe, a pin projecting from one of said elements, and a spring-controlled catch arranged on the other element, said catch being normally held in contact with said pin but the latter being movable out of contact therewith, so that the driven element moves in one direction in unison with the driving element, but is capable of movement relative thereto in the opposite direction, until arrested by the pin again moving into contact with the catch.

5. A rotary power hoe, comprising a driving element, an element driven thereby and carrying a hoe, a plurality of pins projecting from one of said elements, and a plurality of spring controlled catches arranged on the other element, said catches being normally held in contact with said pins but the latter being movable out of contact therewith, so that the driven element moves in one direction in unison with the driving element, but is capable of movement relative thereto in the opposite direction, until arrested by the said pins again coming into contact with the catches.

[Claim 6 not printed in the Gazette.]

1,061,236. CIGAR-END CUTTER. JAMES A. FULLER, Providence, R. I., assignor to Hamilton and Hamilton, Jr., Providence, R. I. Filed Jan. 18, 1912. Serial No. 671,837. (Cl. 131—38.)



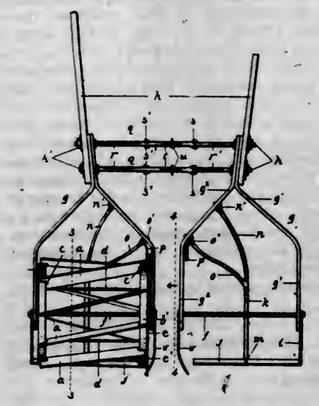
1. In a cigar cutter, a housing having apertures to receive the cigar tip and formed with contracted free end portions, one of said end portions having a spring tongue struck out therefrom and formed with a perforation, a plate having elongated slots at opposite sides thereof to form bars, coiled springs mounted over said bars, said plate having knife edges at one end, and also having a slotted spring tongue struck out therefrom, said plate being slidably mounted in the housing and having the inner ends of its coiled springs abutting the inner end of the housing on opposite sides of said contracted parts thereof, the spring tongue of the plate engaging the housing, an outer casing inclosing the housing and the plate, and a pin that extends through the perforation in the spring tongue of the housing, through the slot of the spring tongue of the plate and through the side of the housing opposite to that having the spring tongue for operating said spring tongue of the housing to cause same to disengage the spring tongue of the plate from the casing.

2. In a cigar cutter, a housing having cigar tip receiving apertures and also having contracted portions, a cutter member sliding in the housing, said cutter member having bars formed on its opposite sides, and coiled springs surrounding the bars and located on opposite sides of the contracted portions of the housing and engaging the latter at points at the juncture between the housing and the contracted portions thereof.

3. In a cigar cutter, a housing, a spring pressed cutter sliding in the housing and having a spring tongue that engages the housing to lock the cutter against movement relative to the housing, and a member carried by the housing to engage said tongue to move same out of engagement with the housing, said tongue having movement independent of said member when the cutter is moved into locked position and being moved by the member, when the latter is actuated, to release the tongue from engagement with the housing.

4. In a cigar cutter, a housing, a spring pressed cutter member sliding in the housing, a spring member integral with the cutter member for engagement with the housing to hold the cutter member against movement, a spring tongue integral with the housing to engage one face of said spring member to move the latter ont of engagement with the housing, and a pin connected to the tongue and extending without the housing to enable operation of the tongue.

1,061,237. GARDEN-WEEDER. LANE GEDNEY, Orchards, Wash. Filed July 19, 1912. Serial No. 710,499. (Cl. 97—42.)



1. The combination with a weed-cutting device comprising a main frame, a revolving frame journaled therein, an endless series of diagonal blades affixed on the periphery of said revolving frame, and a cutter blade affixed at the base of said main frame exterior of the path of said diagonal blades and rearward of the axis about which the latter rotate, of an annular guard disk provided at one side of said revolving frame perpendicular to the axis of the latter for the purpose specified; and a scraper affixed to the main frame, adapted to bear against and remove adhering dirt from said guard disk.

2. The combination with a weed-cutting device comprising a main frame, a revolving frame journaled therein, an endless series of diagonal blades affixed on the periphery of said revolving frame, and a cutter blade affixed at the base of said main frame exterior of the path of said diagonal blades and rearward of the axis about which the latter rotate, of an annular guard disk provided at one side of said revolving frame perpendicular to the axis of the latter for the purpose specified; a scraper affixed to the main frame, adapted to bear against and remove adhering dirt from said guard disk; and an outwardly projecting fending finger attached to the main frame adjacent said guard disk.

3. A weeding implement comprising a pair of weed cutters each comprising a main frame, a revolving frame journaled therein, an endless series of diagonal blades affixed on the periphery of said revolving frame, and a cutter blade affixed at the base of said main frame exterior of the path of said diagonal blades and rearward of

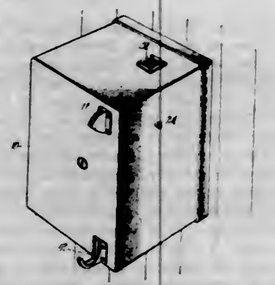
the axis about which the latter rotate; an annular guard disk provided at the inner sides of the revolving frames of said weed cutters perpendicular to the axis of the latter for the purpose specified; a pair of handle bars; and connections between the handle-bars, said connections adjustable to vary the space intermediate said weed cutting elements.

4. A weeding implement comprising a pair of weed cutters each comprising a main frame, a revolving frame journaled therein, an endless series of diagonal blades affixed on the periphery of said revolving frame, and a cutter blade affixed at the base of said main frame exterior of the path of said diagonal blades and rearward of the axis about which the latter rotate; an annular guard disk provided at the inner sides of the revolving frames of said weed cutters perpendicular to the axis of the latter for the purpose specified; a pair of handle bars; connections between the handle-bars, said connections adjustable to vary the space intermediate said weed cutting elements; and the means securing the handle bars to the frames of the weed cutters being adapted to permit the adjustment of the portion of the handle-bars seized by the hands at an angle relatively to the portions to which the frames of the weed cutters are affixed.

5. A weeding implement comprising a pair of weed cutters each comprising a main frame, a revolving frame journaled therein, an endless series of diagonal blades affixed on the periphery of said revolving frame, and a cutter blade affixed at the base of said main frame exterior of the path of said diagonal blades and rearward of the axis about which the latter rotate; scrapers affixed to the main frame, adapted to bear against and remove adhering dirt from said guard disks; an outwardly projecting fending finger attached to the main frame adjacent said guard disks; a pair of handle bars; connections between the handle-bars, said connections adjustable to vary the space intermediate said weed cutting elements; and the means securing the handle bars to the frames of the weed cutters being adapted to permit the adjustment of the portion of the handle-bars seized by the hands at an angle relatively to the portions to which the frames of the weed cutters are affixed.

[Claim 6 not printed in the Gazette.]

1,061,238. TELEPHONE-SIGNAL. ARTHUR U. GERBER, Chicago, Ill. Filed Feb. 19, 1912. Serial No. 678,607. (Cl. 179—7.)



1. A device, for use with the circuit-closing switch of a telephone apparatus, comprising an emergency circuit-closing switch, switch-operating means extending to the exterior of said device for manual operation to close said switch, register means associated with said switch-operating means to produce a visible indication of calls effected by the emergency switch up to a limited number thereof, and means to lock said switch-operating means against movement after said limited number of calls is registered.

2. In a telephone call-signal device, an emergency circuit-closing switch, a switch-operating means extending to the exterior of said device for manual operation to close said switch, a lock adapted and arranged to become effective after a predetermined number of emergency calls, to lock said switch-operating means, and means associated with said switch-operating means to produce a visible indication of previous emergency calls.

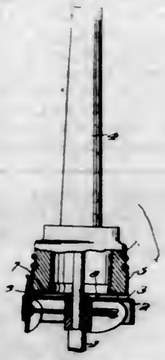
3. In a telephone call-signal device, an emergency circuit-closing switch, a push rod for manual operation thereof, a pawl on the rod, a ratchet engaged by the pawl, a smaller ratchet loosely mounted with respect to said pawl-engaged ratchet, a dog on said pawl-engaged ratchet spring-pressed into engagement with said smaller ratchet and an index wheel rotatable with said ratchet, for purposes described.

4. In a telephone call-signal device, an emergency circuit-closing switch, a push rod for manual operation thereof, a pawl on the rod, a ratchet engaged by the pawl, and a dog rotatable with said ratchet to a position in engagement with said rod to prevent further movement thereof.

5. In a telephone call-signal device, an emergency circuit-closing switch, a push rod for manual operation thereof, a pawl on the rod, a ratchet engaged by the pawl, a dog adapted and arranged for rotation from one position to another position into engagement with said rod, an index wheel adapted and arranged for rotation successively to indicate calls made by said emergency switch, and connections between said ratchet, dog, and index wheel for movement thereof step-by-step by operation of said push rod.

[Claims 6 to 10 not printed in the Gazette.]

1,061,239. BOBBIN. GEORGE HAMBLETON, Goffstown, N. H., assignor to U. S. Bobbin & Shuttle Co., Providence, R. I., a Corporation of New Jersey. Filed June 19, 1912. Serial No. 704,497. (Cl. 242—120.)



In combination with a bobbin, a ferrule attached to the bobbin head and having its base formed with a plurality of outwardly punched conoidal-shaped teats for engagement with the top of the bobbin holder to space the ferrule base from said top.

1,061,240. ADJUSTMENT FOR REGULATING THE DISCHARGE OF LIQUIDS OVER CREST-WEIRS AND THE LIKE. JAMES ALBERT GRAYSON HARRISSON, Potchefstroom, Transvaal. Filed Oct. 7, 1912. Serial No. 724,328. (Cl. 61—46.)



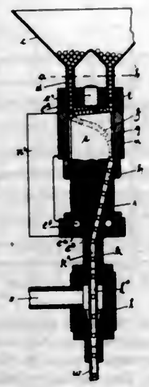
1. Means for varying the effective area of a rectangular open-topped notch weir comprising lateral guides on the weir, a panel sliding laterally in the guides and an edge on the panel more or less covering and uncovering the notch opening as the panel moves.

2. Means for varying the effective area of a rectangular notch weir comprising inclined lateral guides on the weir, a panel sliding laterally in the guides and a horizontal edge on the panel more or less covering and uncovering the notch opening as the panel moves.

3. Means for varying the effective area of a rectangular notch weir comprising inclined lateral guides on the weir, a panel sliding laterally in the guides and a horizontal edge on the panel more or less covering and uncovering the notch opening as the panel moves and a vertical-edged part on the panel also controlling the opening.

4. In a weir of the character described, a stationary frame having a series of pins to form fulcrums for a tommy-bar or the like, a panel sliding laterally in guides and provided with an edge more or less covering and uncovering a notch opening as the panel moves, and a pin on said panel positioned with relation to said series of pins in the weir frame and affording means for engagement by said tommy-bar when fulcrumed upon one or the other of said pins on the weir frame to slide said panel laterally, for the purpose described.

1,061,241. DEVICE FOR ACCELERATING THE FEED OF BALL-BEARING BALLS TO GRINDING-MACHINES. CARL ALBERT HIRTH, Cannstatt, near Stuttgart, Germany. Filed Oct. 19, 1911. Serial No. 655,625. (Cl. 51—4.)



1. A device for accelerating the feed of ball-bearing balls to grinding machines, comprising members relatively movable to each other and spaced ball-guiding distance apart, one of said members having a ball-guiding groove of increasing inclination toward its outlet.

2. A device for accelerating the feed of ball-bearing balls to grinding-machines, comprising members relatively movable to each other and spaced ball-guiding distance apart, ball-guiding grooves in said members arranged angularly to each other, and a communicating ball-guiding groove in one of said members, inclined to the axis thereof.

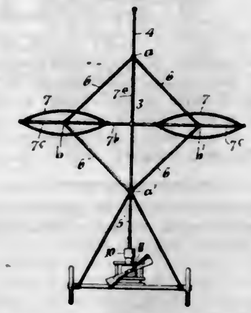
3. A device for accelerating the feed of ball-bearing balls to grinding machines, comprising a stationary member provided with grooves in the direction of movement of the balls, and a rotary member spaced ball-guiding distance from said stationary member and provided with a screw-line groove transverse to the first-named grooves and increasing in pitch from one end of the rotary member to the other.

4. A device for accelerating the feed of ball-bearing balls to grinding machines, comprising a hollow cylindrical member having interior grooves parallel with the axis of the member, and a cylindrical rotary member within the hollow cylindrical member having grooves arranged screw-line fashion on the exterior surface thereof and increasing in pitch from one end of the rotary member to the other, the said groove being adapted to be brought in registration with the grooves of the stationary member and conduct the balls held between the grooves with a constantly increasing speed.

5. A device for accelerating the feed of ball-bearing balls to grinding machines, comprising a movable member having an inlet for the balls, and a ball-guide having an outlet for the balls, said movable member and ball-guide coöperating to increase the speed of the balls from said inlet to said outlet.

[Claims 6 to 10 not printed in the Gazette.]

1,061,242. AEROPLANE. BENJAMIN T. BABBITT HYDE, New York, N. Y., and ANDREW GAUL, Jr., Ridgefield, N. J. Filed Nov. 23, 1912. Serial No. 733,074. (Cl. 244—12.)



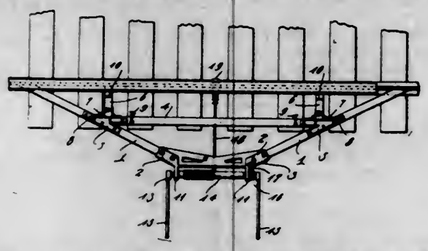
1. In an aeroplane, a centrally arranged diamond-shaped framing, stabilizing fins or members arranged vertically and connected with apices of said framing and carrying wings or planes arranged laterally and connected with the centrally arranged rod of said framing, and the major portion of said wings or planes on both sides extending beyond apices of outlining fittings of said diamond-shaped framing and said central rod in its extended portion providing securing means for the extended portion of said carrying wings or planes, to thereby provide steadier wings or planes for the vehicle in its operative position in the presence of variable flight encountering air conditions.

2. In an aeroplane, a centrally arranged diamond-shaped framing, stabilizing fins or members arranged vertically and connected with apices of said framing and convex-convex carrying wings or planes arranged laterally and connected with the centrally arranged rod of said framing, and the major portion of said wings or planes on both sides extending beyond apices of outlining fittings of said diamond-shaped framing and said central rod in its extended portion providing securing means for the extended portion of said carrying wings or planes, to thereby provide steadier wings or planes for the vehicle in its operative position in the presence of variable flight encountering air conditions.

1,061,243. TRACK-LINER. CHARLES M. KIPP, Marysville, Cal. Filed Dec. 13, 1912. Serial No. 736,549. (Cl. 153—38.)

1. In a track liner, a roller supporting frame, brace bars secured at one end to said frame and having diverging opposite ends adapted to be engaged with a rail, a connecting bar secured at its ends to said brace bars, short bracing bars hingedly attached to said connecting bar and adapted to be swung outwardly and inwardly to operative and inoperative positions, means to hold said short bars in their operative and inoperative positions, a cable winding roller revolubly mounted in said roller supporting frame, a cable adapted to be wound thereon, a rail engaging hook secured to the outer end of said cable, and roller operating levers adapted to be operatively engaged with trunnions of the roller whereby the latter is turned in the proper direction to wind said cable.

2. In a track liner, a roller supporting frame, brace bars secured thereto and adapted to be engaged with a rail, a connecting bar secured to said brace bars, short bracing bars hingedly attached to said connecting bar and adapted to be swung outwardly and inwardly to operative



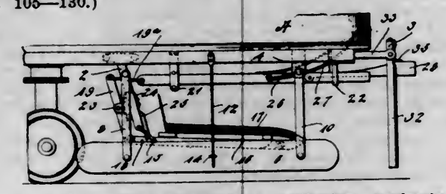
and inoperative positions, means to hold said bars in their operative and inoperative positions, a cable winding roller revolubly mounted in said frame, a cable secured to and adapted to be wound on said roller, rail engaging means secured to said cable, and means to revolve said roller for winding said cable.

1,061,244. FASTENING PINS TO ARTIFICIAL TEETH. EDOUARD LIÉGEY, Paris, France. Filed June 6, 1911. Serial No. 631,512. (Cl. 32—9.)



The method of preparing an artificial denture to receive an anchor pin which consists in molding the plastic denture material upon a wedge-shaped platinum core, baking the denture on said core and then dissolving out the latter to obtain a denture having in its root face an undercut recess of predetermined shape and dimensions adapted to receive and retain without cement the spread end of an anchor pin, substantially as described.

1,061,245. CAR-FENDER. JOHN R. LILLEY, Coatesville, Pa. Filed Feb. 21, 1912. Serial No. 679,067. (Cl. 105—130.)

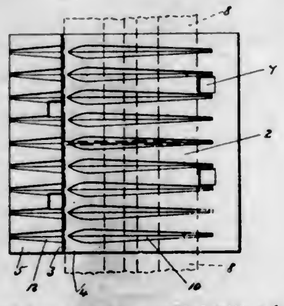


1. A supporting structure, a gathering mechanism mounted on said structure, a depending pivotally mounted trip element mounted in advance of said gathering mechanism, a latch for locking said gathering mechanism to said supporting structure to hold said mechanism in inoperative position, said trip element having an opening therein through which said latch projects and means on said trip to hold said latch in locked position when the trip is in normal position to release it on the swinging rearward of said trip element beyond a predetermined point.

2. In a car fender, a supporting structure, a frame pivotally supported at one end on said structure, a downwardly and forwardly curved gathering apron secured to said frame, means to limit the movement of said frame when swung to operative and inoperative positions, a slidably mounted member connected with said frame, a catch secured to said member, a catch engaging element on said supporting structure and adapted to be engaged by said catch when the frame is raised whereby said gathering mechanism is supported in an inoperative position, a trip secured to said supporting structure and normally projecting down in position to engage an object lying in the path of movement of the car and whereby when said trip engages said object the catch will be released to permit the gathering mechanism to swing down to an operative position, and means for locking said frame stationary while an object is being engaged and lifted by said gathering mechanism.

3. A car fender comprising a supporting structure, a frame pivoted at its rear end in said structure, a gathering apron mounted in said frame, a member mounted to slide longitudinally in a plane above said apron, a lever fulcrumed intermediately of its ends and pivotally connected at its opposite ends to said frame and said sliding member respectively, an inverted U-shaped spring secured at one end to said supporting structure and with its free end engaging said lever below its fulcrum, a catch bar pivoted intermediate of its ends to said sliding member, a spring bearing angularly on the rear end of said catch bar, means for engagement by said catch bar for locking said slidable member in retracted position, whereby said apron is held in inoperative position, and a trip for releasing said catch bar operable by an object on the track.

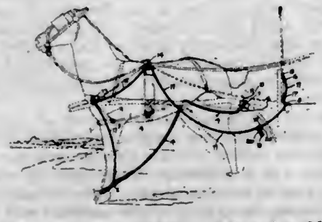
1,061,246. TRACK-PLATE. EDWARD T. LILLIEDALE, Hornbrook, Cal. Filed Mar. 8, 1913. Serial No. 753,028. (Cl. 238—2.)



1. A track plate or tie plate provided with a longitudinal rib on its upper surface near one side edge, and having a tapering main portion which is thickest at the said rib, said plate having also lateral cross-grooves in its said rib and main portion, which cross-grooves are deepest at the thickest parts of the plate.

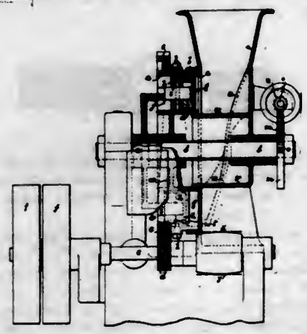
2. A track plate provided with a guide-rib near one side and having a tapering main portion which is thickest at the guide-rib, and having also spike holes through the guide-rib and through the thinner side part of its main portion, said plate having also series of tapering cross-grooves in its guide-rib and in its main portion, which cross-grooves are deepest at the thickest parts of the plate.

1,061,247. HITCHING-STRAP. THOMAS LOTHERINGTON, Little Rock, Ark. Filed Jan. 11, 1912. Serial No. 670,697. (Cl. 54—71.)



A hitching strap comprising a U-shaped padded hobble to engage the animal's limb, terminal loops on said hobble, a holding strap attached to the shafts and engaged by said loops, a supporting strap having a snap hook, rings on said hobble one of which is engaged by said snap hook, a trace ring near the animal's shoulder through which said strap passes, said strap also passing through the saddle ring, its end engaging a ring on the dash board and the loop on said strap adapted to engage a hook on the dash board.

1,061,248. MACHINE FOR DIVIDING AND MOLDING DOUGH AND OTHER PLASTIC SUBSTANCES. ALEXANDER MORRIS MELVIN, Glasgow, Scotland. Filed May 24, 1910. Serial No. 563,188. (Cl. 107—15.)



1. In a machine for dividing and molding dough and other plastic substances and of the type in which cam-operated plungers work in apertures in the face of a rotating mold disk; a hopper consisting of the rotating disk acting as one wall, an outer cylindrical wall abutting the periphery of the disk, a partially helicoidal wall opposite the face of the disk and, centrally within the hopper, a cylindrical wall or boss arranged between said disk and hopper wall, for the purpose described.

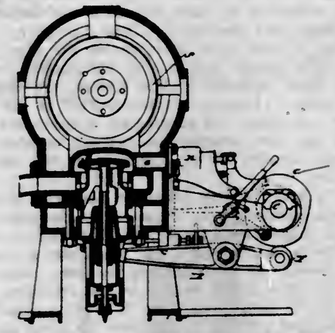
2. In a machine for dividing and molding dough and other plastic substances and of the type in which cam-operated plungers work in apertures in the face of a rotating mold disk, a hopper consisting of the rotating disk acting as one wall, an outer cylindrical wall abutting the periphery of the disk, a wall opposite to the face of the disk, parallel thereto for a part of its length and ending in a helicoidal part and centrally within the hopper a cylindrical wall or boss arranged between said disk and hopper wall, for the purpose described.

1,061,249. INTERNAL-COMBUSTION ENGINE. CHARLES E. SARGENT, Chicago, Ill., assignor to Sargent Engineering Company, Chicago, Ill., a Corporation of New York. Filed Oct. 7, 1905. Serial No. 281,756. (Cl. 123—181.)

1. The combination with an internal combustion engine and valve mechanism for operating it in the usual manner, of a normally closed valve for admitting air to the engine cylinder, engine-actuated devices normally disconnected during the operation of the engine as an internal combustion engine for opening said valve at intervals, an outer hand valve for admitting compressed air to the valve first mentioned, and intermediate mechanism operated by air from the hand valve to throw said devices into operative connection.

2. The combination with an internal combustion engine, of a valve for admitting compressed air to the space upon the inner side of the gas valve, means for at will admitting compressed air to said air admitting valve and cutting it off therefrom, normally disconnected engine actuated devices for opening the air admission valve at intervals, and means whereby air pressure may connect the disconnected devices.

3. In an engine of the class described having valve apparatus for operating the engine as an explosion engine, the combination with a valve for admitting compressed air to the engine cylinder, of an engine operated valve-actuating mechanism normally unconnected with said valve, an air operated device, normally out of operative position, for connecting said mechanism and valve, and means for at will throwing said device into operative position.

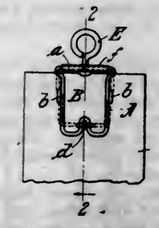


4. In an engine of the class described having valve apparatus for operating the engine as an explosion engine, the combination with a valve for admitting compressed air to the engine cylinder, a spring normally holding said valve closed during such operation, engine operated mechanism for opening said valve at intervals but normally unconnected therewith during the operation of the engine as an explosion engine, manually controlled means for admitting compressed air to said valve, and means whereby the admitted air connects said mechanism and valve.

5. In an engine of the class described having valve apparatus for operating the engine as an explosion engine, the combination with the engine cylinder and a compressed air chamber alongside the same, of a valve controlling communication between said chamber and cylinder, manually operated means for controlling the admission of compressed air to said chamber, devices adapted to control periodic admission of air to and exhaust from said chamber, engine operated mechanism for actuating said valve, and devices, and automatic means for disconnecting said mechanism when air pressure in said chamber ceases.

[Claim 6 not printed in the Gazette.]

1,061,250. SWIVEL-HOLDER FOR RAZOR-STROPS. LUTHER H. TAIESCHMANN, Hartford, Conn., assignor of one-half to Frank W. Westervelt, Hartford, Conn. Filed July 2, 1912. Serial No. 707,248. (Cl. 51—16.)



1. In a device of the character described, a pair of frames adapted to lie on opposite sides of a strop, means for hinge connecting one frame with the other whereby the one frame may have a swinging motion outwardly relatively to the other frame,—one of said frames having angularly projecting members adapted to extend through the strop and operative to prevent swinging movements of the strop relatively to such frame, and said frames having detachably interengaging parts, that of one frame being adapted to extend through and beyond the strop, and to receive that of the other frame.

2. In a device of the character described, a pair of opposed frames formed of wire, having straight upper members thereof arranged in parallelism, the side members of one of the frames being formed with coils extending right angularly to the general plane of such frame, and adapted for engagement through the razor strop and to prevent swinging or rocking movement of the strop relatively to such frame, and such frame being also made with an eye member projecting at right angles to the general plane of the frame and adapted to extend through and beyond the strop, a sheet metal plate having the edge portions thereof bent around and having engagements with the parallel upper members of said frames, the second one of the frames having a member located in the general plane of such frame and adapted for a detachable engagement in the said strop-penetrating eye member, and a suspension member swivel connected to the said sheet metal plate.

3. In a device of the character described, a plate, a suspension member swivel connected to the plate, a pair of frames hinged to the opposite parallel sides of the plate, one of the frames having at the outer edge a finger projecting toward the said plate in the same plane as the frame, the other frame having an eye extending perpendicular to the frame and lying in a plane parallel with said plate, and adapted to penetrate the strop and to receive said finger to lock the device to the strop.

4. In a device of the character described, a plate, a suspension member swivel connected to the plate, a pair of frames hinged at the opposite parallel edges of the plate, one of the frames having at its outer edge a pair of fingers projecting toward said plate in the same plane as the frame, the other frame having a pair of eyes extending perpendicular to the frame and lying in a plane parallel with said plate, and adapted to penetrate the strop and to receive said fingers respectively to lock the device on the strop.

1,061,251. COMMUTATOR. JAMES BURKE, Erie, Pa., assignor to Burke Electric Company, a Corporation of Pennsylvania. Filed Dec. 21, 1906. Serial No. 348,841. (Cl. 171—211.)



1. In a circuit changing device, a segment embodying an inner main portion containing iron and an outer portion of copper serving as the trailing portion of the segment, said outer portion being formed of sheet copper enveloping said inner main portion and having an extension adapted to be electrically connected to a conductor.

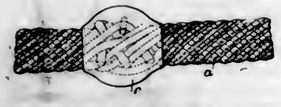
2. In a circuit changing device, a segment embodying an inner main portion of conducting material of relatively high corrodibility by arcs or sparks, and an outer portion serving as the trailing portion of the segment, said outer portion being formed of relatively thin copper embracing said inner main portion and adapted to be electrically connected to a conductor.

3. In a commutator, a segment comprising an inner main part of relatively long tread, and an outer part of relatively short tread serving as the trailing part of the segment, said outer part being of a material of relatively high conductivity and of relatively low corrodibility as compared with the material of said inner main part, said outer part enveloping said inner main part and adapted to be connected to a conductor.

4. In a commutator, a segment comprising an inner main part containing iron and of relatively long tread and an outer part of copper of relatively short tread serving as the trailing part of the segment, said trailing part enveloping said inner main part and having extensions for electrical connection to a conductor.

5. In a circuit changing device, a segment embodying a main portion of iron-containing material, and a portion of copper disposed on the trailing side thereof, said copper portion being adapted to be connected to a conductor.

1,061,252. ROPE FOR HAULAGE AND OTHER PURPOSES. GIUSEPPE MATRICARDI, Pallanza, Italy, assignor to Société Harlé & Cie., Paris, France, a Corporation of France. Filed Apr. 12, 1910. Serial No. 555,086. (Cl. 29—148.)



1. A wire rope provided with knobs or bosses formed of metal pins inserted between the strands of the rope, whose projecting ends are surrounded with a mass of metal substantially as described.

2. The method of manufacturing a wire rope provided with knobs or bosses which consists in loosening the strands, removing the core, inserting projecting pins between said strands and casting a mass of metal around said projecting pins, substantially as described.

3. The method of manufacturing a wire rope provided with knobs or bosses, which consists in loosening the strands, removing the core, inserting projecting pins between said strands, said pins being provided with a coating of metal adapted to adhere to the pins and, finally, casting a mass of metal around said projecting pins, said metal being such as will adhere to the coating metal of the pins.

1,061,253. METHOD OF ARTIFICIALLY COLORING CITRUS FRUIT. LEE BARNETT WILLIAMS, Lemon Grove, Cal. Filed Nov. 14, 1911. Serial No. 660,292. (Cl. 99—11.)

1. The method of coloring citrus fruit which consists in subjecting it to the action of acrolein with an absence of moisture.

2. The method of coloring citrus fruit which consists in subjecting it to a dehydrated vapor, under pressure containing acrolein.

3. The method of coloring the skin of a mature citrus fruit which consists in subjecting it to the action of acrolein under constant pressure and circulation.

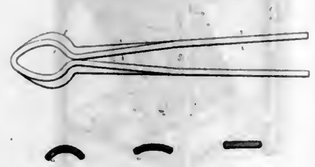
4. The method of coloring the skin of a mature citrus fruit which consists in subjecting it to the action of the fumes from the gases of an explosive engine.

1,061,254. PROCESS OF PRODUCING AN EDIBLE COMPOUND. JAMES BOYCE, Chicago, Ill., assignor to American Cotton Oil Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 25, 1911. Serial No. 610,721. (Cl. 99—13.)

The method of producing an edible compound, which consists in first refining an unsaturated oil or fat to an edible condition, and then mixing the same with a synthetic stearin by subjecting it to the action of hydrogen in the presence of a catalytic and arresting such action at the point when the desired amount of said synthetic stearin has been produced by the saturation with hydrogen of a portion of the said oil or fat, the resulting product being a mixture of a portion of the original body of oil or fat and the synthetic stearin having a consistency of lard.

DESIGNS.

43,953. LEVER. SAMUEL L. ALLEN, Moorestown, N. J. Filed Jan. 10, 1913. Serial No. 741,322. Term of patent 14 years.



The ornamental design for a lever substantially as shown.

43,954. BACK FOR MIRRORS, BRUSHES, OR SIMILAR ARTICLES. GEORGE E. FAHYS, Glen Cove, N. Y., assignor to Joseph Fahys & Company, New York, N. Y., a Corporation of New York. Filed Jan. 14, 1913. Serial No. 742,058. Term of patent 7 years.



The ornamental design for a back for a mirror, brush, or similar article, as shown.

43,955. UMBRELLA-RACK. WILLIS G. FAWCETT, Salem, Ohio. Filed Feb. 14, 1913. Serial No. 748,462. Term of patent 14 years.



The ornamental design for an umbrella rack, substantially as shown.

43,956. TAG. CLIFFORD C. FLETCHER, Harrisburg, Pa. Filed Feb. 21, 1913. Serial No. 750,044. Term of patent 14 years.



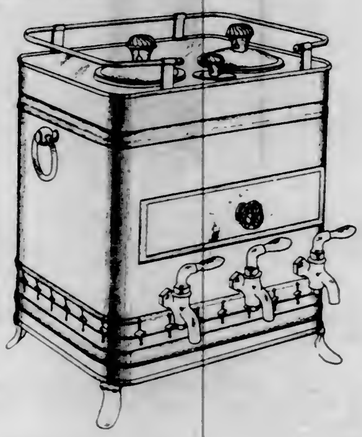
The ornamental design for a tag, as shown.

43,957. TAG. CLIFFORD C. FLETCHER, Harrisburg, Pa. Filed Feb. 25, 1913. Serial No. 750,694. Term of patent 14 years.



The ornamental design for a tag, as shown.

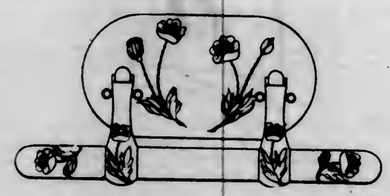
43,958. BEVERAGE-HEATER. CUTHBERT GENTLE, Dorchester, Mass., assignor to Thomas H. Bowdidge, Boston, Mass. Filed Feb. 26, 1913. Serial No. 750,884. Term of patent 7 years.



The ornamental design for a beverage heater, as shown.

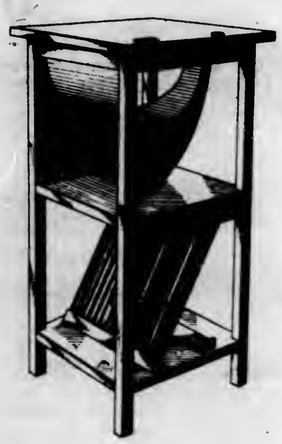
43,959. [WITHDRAWN.]

43,960. COFFIN-HANDLE. HAROLD W. HODGETTS, Springfield, Mass., assignor to The Strong Manufacturing Company, Winsted, Conn., a Corporation of Connecticut. Filed Dec. 21, 1912. Serial No. 738,074. Term of patent 7 years.



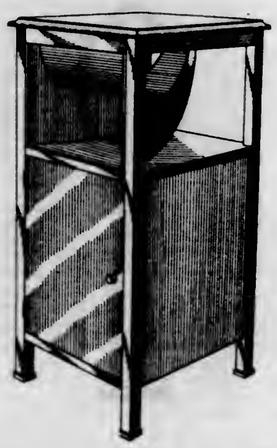
The ornamental design for a coffin handle as shown.

43,961. CABINET FOR SOUND-REPRODUCING MACHINES. MORRIS KEEN, Atlantic City, N. J., assignor to Keen-O-Phone Company, a Corporation of Delaware. Filed Jan. 22, 1913. Serial No. 743,662. Term of patent 14 years.



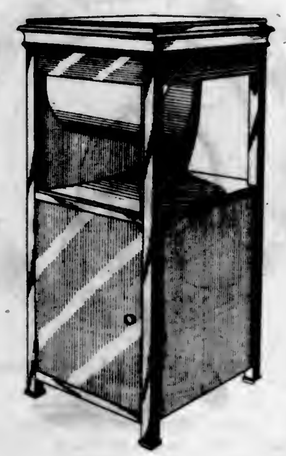
The ornamental design for a cabinet for sound reproducing machine, as shown.

43,962. CABINET FOR SOUND-REPRODUCING MACHINES. MORRIS KEEN, Atlantic City, N. J., assignor to Keen-O-Phone Company, a Corporation of Delaware. Filed Jan. 22, 1913. Serial No. 743,663. Term of patent 14 years.



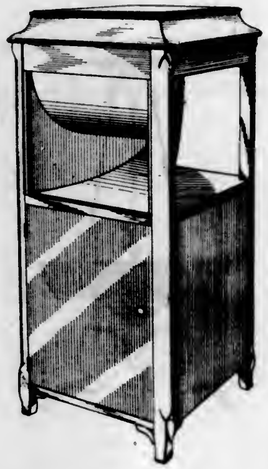
The ornamental design for a cabinet for sound reproducing machine, as shown.

43,963. CABINET FOR SOUND-REPRODUCING MACHINES. MORRIS KEEN, Atlantic City, N. J., assignor to Keen-O-Phone Company, a Corporation of Delaware. Filed Jan. 22, 1913. Serial No. 743,664. Term of patent 14 years.



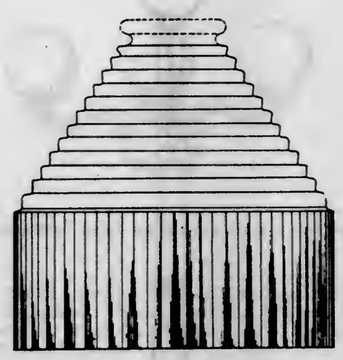
The ornamental design for a cabinet for sound reproducing machine, as shown.

43,964. CABINET FOR SOUND-REPRODUCING MACHINES. MORRIS KEEN, Atlantic City, N. J., assignor to Keen-O-Phone Company, a Corporation of Delaware. Filed Jan. 22, 1913. Serial No. 743,665. Term of patent 14 years.



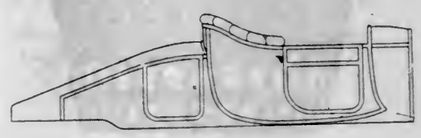
The ornamental design for a cabinet for sound reproducing machine, as shown.

43,965. SHADE, REFLECTOR, OR THE LIKE. OTIS A. MYGATT, New York, N. Y. Filed July 1, 1909. Serial No. 505,509. Term of patent 14 years.



The ornamental design for a shade, reflector or the like, substantially as shown and described.

43,966. VEHICLE-BODY. ADRIAN J. NEERKEN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 24, 1913. Serial No. 756,598. Term of patent 7 years.



The ornamental design for a vehicle body, as shown.

43,967. CANOPY OR REFLECTOR FOR ARTIFICIAL LIGHT. RAYMOND V. OWEN, St. Louis, Mo., assignor to St. Louis Brass Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 13, 1913. Serial No. 748,250. Term of patent 3½ years.



The ornamental design for a canopy or reflector for artificial light, as shown.

43,968. LAMP-POST. ALBERT C. RALEIGH, Helena, Mont. Filed Jan. 17, 1913. Serial No. 742,727. Term of patent 14 years.



The ornamental design for a lamp post, as shown.

43,969. GLOBE. EMMA RHADER, Ashland, Ohio. Filed Dec. 20, 1911. Serial No. 667,054. Term of patent 7 years.

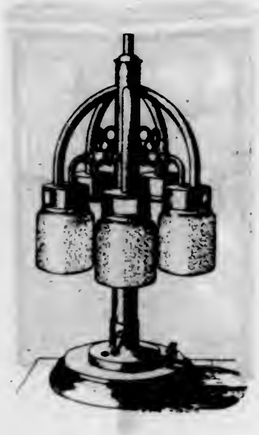
The ornamental design for a globe as shown.

43,970. BUTTON. WALTER L. ROTHSCHILD, New York, N. Y. Filed Mar. 7, 1913. Serial No. 752,773. Term of patent 3½ years.



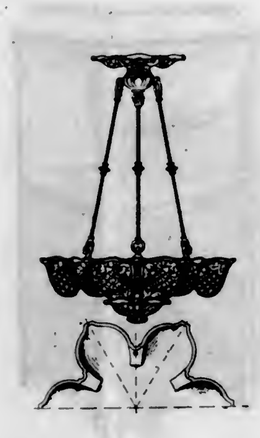
The ornamental design for a button as shown.

43,971. NEBULIZER. OSWALD C. STACKHOUSE, Brooklyn, N. Y. Filed Feb. 15, 1913. Serial No. 748,739. Term of patent 7 years.



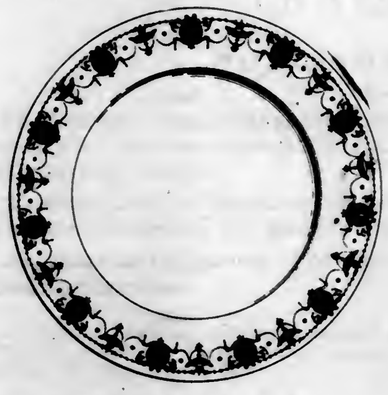
The ornamental design for a nebulizer as shown.

43,972. ELECTROLIER. OLAF S. STROM, Los Angeles, Cal. Filed Feb. 25, 1913. Serial No. 750,699. Term of patent 3½ years.



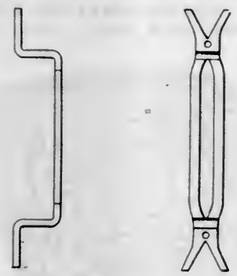
The ornamental design for an electrolier as shown.

43,973. PLATE. WILLIAM SYDNEY WAGNER, New York, N. Y., assignor to Onondaga Pottery Company, Syracuse, N. Y., a Corporation. Filed Feb. 19, 1913. Serial No. 749,550. Term of patent 7 years.



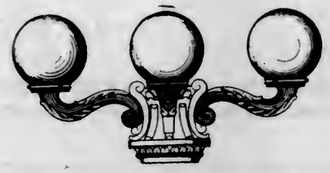
The ornamental design for a plate as shown.

43,974. DRAWER AND CABINET PULL. ABRAHAM GRANT WEISER, South Pasadena, Cal. Filed Dec. 2, 1912. Serial No. 734,634. Term of patent 3½ years.



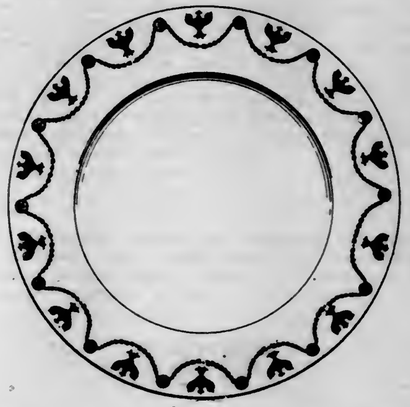
The ornamental design for a drawer and cabinet pull as shown.

43,975. LAMP-BRACKET. THOMAS WIGHT, Kansas City, Mo., assignor to Frank Tilk Ornamental Iron Works Co., Kansas City, Mo., a Corporation of Missouri. Filed Nov. 20, 1912. Serial No. 732,592. Term of patent 7 years.



The ornamental design for a lamp bracket as shown.

43,976. PLATE. JOHN T. WIGLEY, Syracuse, N. Y., assignor to Onondaga Pottery Company, Syracuse, N. Y., a Corporation. Filed Feb. 19, 1913. Serial No. 749,551. Term of patent 7 years.



The ornamental design for a plate as shown.

TRADE-MARKS

PUBLISHED MAY 6, 1913.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 40,794. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CARSON, PIRIE, SCOTT & Co., Chicago, Ill. Filed Feb. 25, 1909.

GOLDEN ROD

Particular description of goods.—Ginghams.
Claims use since about February, 1907.

Ser. No. 53,474. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS. AND PARTS THEREOF.) AMES SHOVEL AND TOOL COMPANY, Boston, Mass. Filed Dec. 27, 1910.



The shield being green trimmed with gilt and the bands crossing the shield being red, also trimmed with gilt, no claim being made to the words "St. Louis," the letters "U. S. A.," the words "St. Louis Shovel Co.," the word "The," and the words "Mfg. By."
Particular description of goods.—Shovels.
Claims use since Nov. 7, 1910.

Ser. No. 53,632. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) FLETCHER-STANLEY COMPANY, New York, N. Y. Filed Jan. 3, 1911.

FSCo

Particular description of goods.—Iron Conduits for Electric Wires, Flexible Conduits for Electric Wires, Electric Sockets and Receptacles, Electric Cut-Outs and Fuse-Blocks, Electric Outlet-Boxes, Arc-Lamps, Incandescent Electric Lamps, Electric Fan-Motors, Electric Dry Batteries, Electric Carbon Batteries, Electric Annunciators, Electric Skeleton Bells, Electric Iron Box-Bells, Electric Buzzers, Electric Insulators, Electric Flash-Lights, Electric Signal Apparatus, Electric Soldering-Torches, Electric Motors and Generators, Telephones, Electric Knife-Switches, Electric Snap-Switches, Electric Fuses, Electric Heaters, Electric Sparkers and Spark-Coils, Electric Gas-Lighting Apparatus, Electric Push-Buttons, Electric Door-Openers, Electric Rubber-Covered Wires and Cables, Electric-Lamp Cord, Electric-Magnet Wire, and Electric Enameled Wires.
Claims use since October, 1910.

Ser. No. 54,778. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) DAIMLER-MOTOREN-GESELLSCHAFT, Unterturkheim, near Stuttgart, Germany. Filed Feb. 28, 1911.

DMG

Particular description of goods.—Unwrought and Partly-Wrought Iron, Steel, Brass, Copper, Bronze, Tin, Lead, Zinc, and Nickel, Machinery-Castings, Anchors, Bed-Plates, Iron, Steel, Brass, Copper, Nickel, and Silver Wire, Fish-Plates, Rolled or Cast Metal Beams, Printing-Type, Solder, Rolled Metal Bars, Rolled Metal Rails, Rolled Metal Sheet and Corrugated Metal Sheet, Rolled Metal Cylinders, Rolled Girders, Cast Cylinders, Cast-Iron Bars and Rods, Cast-Iron Plate, Forged Metal Bars, Forged Rails, and Forged Metal Sheets.
Claims use since March, 1908.

Ser. No. 56,847. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) HOWARD ELLIOTT, Washington, D. C. Filed June 6, 1911.

"STANDIT"

HE

Particular description of goods.—Attachments for Smokers' Pipes.
Claims use since May 1, 1911.

Ser. No. 59,153. (CLASS 12. CONSTRUCTION MATERIALS.) MONARCH PLASTER CO., Watonga, Okla. Filed Oct. 14, 1911.



The word "Brand" being disclaimed.
Particular description of goods.—Calcined Gypsum in the Form of Plaster.
Claims use since 1906.

Ser. No. 59,834. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ADOLPH L. MOCK, New York, N. Y. Filed Nov. 21, 1911.

Phoebe Snow

The name "Phoebe Snow" appearing in the facsimile handwriting of applicant.
Particular description of goods.—Bread, Buckwheat-Flour, Butter, Biscuits, Crackers, Canned Soup, Canned Sardines, Canned Fish, Canned Caviar, Coffee, Chewing-Gum, Condensed Milk, Corn-Starch, Cornmeal, Cheese, Catsup, Cereal Breakfast Food, Dates, Shredded Cocoanut, Fresh, Dried, Canned, and Preserved Fruits, Canned Vegetables, Nuts, Farina, Flavoring Extracts, Figs, Fruit Jellies, Gelatin, Hominy, Honey, Macaroni, Maple-Syrup, Molasses, Mustard, Olives, Olive-Oil, Pearl-Barley, Chocolates, Plum-Pudding, Rolled Oats, Rice, Sago, Spaghetti, Spices, Sugar, Tapioca, Tea, Wheat-Flour, and Yeast.
Claims use since Nov. 1, 1911.

Ser. No. 60,864. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) ALLIE BOYD MACKEY, Birmingham, Ala. Filed Jan. 17, 1912.



No claim being made to the words "Trade Mark."
Particular description of goods.—Washing Fluid.
Claims use since Jan. 1, 1911.

Ser. No. 62,733. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GIFFEN-HOBBS CO., Fresno, Cal. Filed Apr. 8, 1912.



Particular description of goods—Raisins.
Claims use since 1910.

Ser. No. 62,735. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GIFFEN-HOBBS CO., Fresno, Cal. Filed Apr. 8, 1912.



Particular description of goods.—Raisins.
Claims use since 1910.

Ser. No. 62,736. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GIFFEN-HOBBS CO., Fresno, Cal. Filed Apr. 8, 1912.



Particular description of goods.—Raisins.
Claims use since 1910.

Ser. No. 62,785. (CLASS 37. PAPER AND STATIONERY.) ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y. Filed Apr. 9, 1912.

The
STRAIGHT
CUT

Particular description of goods.—Toilet-Paper.
Claims use since Dec. 1, 1892.

Ser. No. 62,801. (CLASS 12. CONSTRUCTION MATERIALS.) D. MEYER & CIA., Bahia Blanca, Argentina. Filed Apr. 10, 1912.



Particular description of goods.—Portland Cement.
Claims use since Apr. 12, 1911.

Ser. No. 63,989. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) UNITED SILK WATERPROOFING COMPANY, New York, N. Y. Filed June 5, 1912.

"CLOTHARIZED"

Particular description of goods.—Waterproof Cloth for Rain-Coats and other Waterproof Garments.
Claims use since January, 1912.

Ser. No. 64,018. (CLASS 2. RECEPTACLES.) HENRY E. FRANKENBERG COMPANY, New York, N. Y. Filed June 6, 1912.

UTOPIA

Particular description of goods.—Bags, Boxes, Cases, and Holders Made of Cloth, Yarn, Cord, Thread, Ribbon, Paper, Cardboard, Pasteboard, Leather, Glass, and Non-Precious Metal.
Claims use since Nov. 1, 1882.

Ser. No. 65,144. (CLASS 12. CONSTRUCTION MATERIALS.) MODERN STEEL STRUCTURAL CO., Waukesha, Wis. Filed Aug. 7, 1912.



No claim being made to the word "Harding."
Particular description of goods.—Structural Columns, Girders, Beams, Plates, Brackets, Angle-Irons, Channel-Irons, Stair Frames, Risers, and Treads, Sills, Jambs, Lintels.
Claims use since June 1, 1912.

Ser. No. 65,158. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) A. STEIN & COMPANY, Chicago, Ill. Filed Aug. 8, 1912.

SANITO

Particular description of goods.—Sanitary Belts.
Claims use since about May 15, 1912.

Ser. No. 65,267. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH B. COLLIE, Malvern, Ark. Filed Aug. 14, 1912.

FOR U

Particular description of goods.—A Remedy for Burns, Bruises, Sprains, Swellings, Insect-Bites, Colds in Chest, Asthma, All Kidney Disorders, Rheumatism, La Grippe, and Piles.
Claims use since July 1, 1912.

Ser. No. 65,353. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) B. GRANT JEFFERIS, Chicago, Ill. Filed Aug. 20, 1912.

PHENYLE

Particular description of goods.—Germicides, Deodorants, and Disinfectants.
Claims use since about May 1, 1903.

Ser. No. 65,383. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRESNO FRUIT GROWERS CO., East Fresno, Cal. Filed Aug. 23, 1912.



Particular description of goods.—Fresh Deciduous Fruits.
Claims use since May 1, 1912.

Ser. No. 65,443. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) PITTSBURG WATER HEATER COMPANY, Pittsburgh, Pa. Filed Aug. 27, 1912.



Particular description of goods.—Instantaneous Water-Heaters for Heating Water for Domestic Purposes and Employing Copper Coils.
Claims use since February, 1907.

Ser. No. 65,521. (CLASS 47. WINES.) THE SCHUSTER COMPANY, Cleveland, Ohio. Filed Aug. 31, 1912.

Euclid BRAND

The word "Brand" being disclaimed.
Particular description of goods.—Alcoholic Cider.
Claims use since July 29, 1912.

Ser. No. 66,093. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) LOUIS BECK, Louisville, Ky. Filed Oct. 2, 1912.

TITANIC



Particular description of goods.—Straight Whisky and Gin.
Claims use since Aug. 29, 1912.

Ser. No. 66,111. (CLASS 48. MALT EXTRACTS AND LIQUORS.) HENRY S. WELLCOME, London, England. Filed Oct. 3, 1912. Under ten-year proviso.

KEPLER

Particular description of goods.—Malt Extract.
Claims use since February, 1879.

Ser. No. 66,539. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ALBERT E. BROWN, Mobile, Ala. Filed Oct. 26, 1912.

RILOX

Particular description of goods.—Castor-Oil.
Claims use since July 2, 1908.

Ser. No. 66,631. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE GRISCOM-RUSSELL CO., New York, N. Y. Filed Oct. 30, 1912.



Particular description of goods.—Feed-Water Heaters, Hot-Water Heaters, Evaporators, Distillers, Hot-Water Generators, Air-Washers, Combustion Apparatus, Apparatus for Eliminating Smoke, Dust, and Fumes from Furnace-Gases, Apparatus for Separating, Grading, and Collecting Powdered Materials, Humidifiers, Ventilating and Air-Conditioning Apparatus, and Garbage-Destructors.
Claims use since Aug. 28, 1912.

Ser. No. 66,638. (CLASS 38. PRINTS AND PUBLICATIONS.) THE MCKELVEY CO., New York, N. Y. Filed Oct. 31, 1912.

sMo

Particular description of goods.—Trading-Stamps.
Claims use since Oct. 15, 1912.

Ser. No. 66,795. (CLASS 12. CONSTRUCTION MATERIALS.) LUDOWICI-CELADON COMPANY, Chicago, Ill. Filed Nov. 11, 1912.

LUDOWICI-CELADON CO.
CHICAGO
IMPERIAL TILE

No claim being made to the words "Ludowici-Celadon Co. Chicago, Tile."
Particular description of goods.—Clay Roofing-Tile.
Claims use since Oct. 1, 1912.

Ser. No. 67,018. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE AMERICAN MULTIGRAPH SALES COMPANY, Cleveland, Ohio. Filed Nov. 20, 1912.

Flexotype

Particular description of goods.—Printing-Presses. (Using Type or Plates.) Form-Holders, Type-Locking Devices, Feeding Apparatus, Inking-Rollers, Type Setting and Distributing Machines, Type-Transfer Tools, and Parts of Such Devices.
Claims use since about the 15th day of May, 1909.

Ser. No. 67,032. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ISIDORO RANDAZZO, Kansas City, Mo. Filed Nov. 20, 1912. Consisting of my picture.



Particular description of goods.—A Remedy for Indigestion, Constipation, Biliousness, Dizziness, Malaria, Eczema, Asthma, Catarrhal Affections, Rheumatism, and Hay-Fever.
Claims use since May, 1911.

Ser. No. 67,082. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARY ANN CONNOLLY, Galveston, Tex. Filed Nov. 23, 1912.



Particular description of goods.—Remedies for Piles.
Claims use since Apr. 1, 1910.

Ser. No. 67,110. (CLASS 17. TOBACCO PRODUCTS.) THE CHEMISTS' CLUB, New York, N. Y. Filed Nov. 25, 1912.



Particular description of goods.—Cigars and Cigarettes.
Claims use since Aug. 1, 1912.

Ser. No. 67,111. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE CHEMISTS' CLUB, New York, N. Y. Filed Nov. 25, 1912.



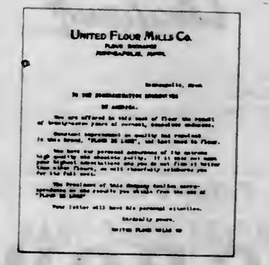
Particular description of goods.—Soda-Water, Ginger-Ale, Pop, and other Effervescent Non-Alcoholic Beverages.
Claims use since Aug. 1, 1912.

Ser. No. 67,276. (CLASS 17. TOBACCO PRODUCTS.) BOBROW BROS., Philadelphia, Pa. Filed Dec. 7, 1912.

BOLD

Particular description of goods.—Cigars, Cigarettes, and Manufactured Tobacco.
Claims use since Mar. 30, 1908.

Ser. No. 67,279. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) UNITED FLOUR MILLS CO., Minneapolis, Minn. Filed Dec. 7, 1912.



The trade-mark being a yellow square tilted on one corner. The name of the company and the particular printed matter appearing on the drawing of the facsimile of the trade-mark are hereby disclaimed.
Particular description of goods.—Wheat-Flour.
Claims use since Sept. 24, 1912.

Ser. No. 67,341. (CLASS 31. FILTERS AND REFRIGERATORS.) SEITZ-WERKE THEO & GEO SEITZ, Kreuznach, Germany. Filed Dec. 11, 1912.

KOMET

Particular description of goods.—Filters.
Claims use since 1906.

Ser. No. 67,373. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FRENCH RIVER TEXTILE COMPANY, Mechanicsville, Conn. Filed Dec. 7, 1912.

FRENCH RIVERS

Particular description of goods.—Woolen Piece Goods.
Claims use since Jan. 1, 1900.

Ser. No. 67,472. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHESEBROUGH MANUFACTURING CO. (CONSOLIDATED.) New York, N. Y. Filed Dec. 18, 1912.



Particular description of goods.—Petroleum Jelly.
Claims use since Nov. 26, 1912.

Ser. No. 67,587. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) HARLAN P. COLE, New York, N. Y. Filed Dec. 26, 1912.

Anatomik

Particular description of goods.—Belts Used for Supporting Clothing.
Claims use since Nov. 1, 1911.

Ser. No. 67,601. (CLASS 12. CONSTRUCTION MATERIALS.) F. T. CROWE & COMPANY, Tacoma, Wash. Filed Dec. 27, 1912.

CROW



No claim being made to the words "Alone at the Top."
Particular description of goods.—Sanded Roofing Material.
Claims use since Oct. 1, 1912.

Ser. No. 67,787. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE MUNYON COMPANY, Philadelphia, Pa. Filed Jan. 8, 1913.

SMO-KO

Particular description of goods.—A Remedy for Colds, Catarrh, Asthma, and Bronchitis, in the Form of a Tobaccoless Cigarette.
Claims use since about Dec. 1, 1912.

Ser. No. 67,851. (CLASS 38. PRINTS AND PUBLICATIONS.) PROVIDENCE LITHOGRAPH CO., Providence, R. I. Filed Jan. 11, 1913.

Beginners
PICTURE LESSON
ROLL

Particular description of goods.—Charts Published in Series.
Claims use since Oct. 1, 1912.

Ser. No. 67,944. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DEAN HARR, Ardmore, Okla. Filed Jan. 16, 1913.

FLODEAN

Particular description of goods.—Lotion for Skin Diseases.
Claims use since Dec. 6, 1912.

Ser. No. 67,954. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SPOKANE VALLEY ORCHARD & LAND CO., Spokane Bridge, Wash. Filed Jan. 16, 1913.



The portrait being that of Martha Washington, deceased.
Particular description of goods.—Pomate of Iron, a Medicinal Tonic for Obviating the Effects of Weakness or Debility and Restoring Healthy Function, Known as Colonial Specific, Honey and Tar, Beef, Iron, and Wine, Fruit Tonic Used as a Remedy for Obviating the Effects of Weakness or Debility and Restoring Healthy Function, Virginia Snake-Root, Ginseng, a Non-Alcoholic Preparation Which is Useful in Preventing the Spread or Contagion

of Fevers, Measles, and other Diseases, Known as Aromatic Vinegar, Blackberry Cordial, Elixir of Rhubarb, Irish-Moss Emulsion of Cod-Liver Oil, Essence of Pepsin, Lime-Juice and Pepsin, Soothing-Syrup, Soothing-Ointment, a Non-Alcoholic Preparation of Orange-Juice Used in Tonics and Cough Remedies, Wine of Orange, a Non-Alcoholic Preparation of Fruit-Juices Used as a Cough Remedy, Known as Wine of Wild Cherry, Syrup of Raspberry, Peroxid of Hydrogen, a Non-Alcoholic Preparation Used for Obviating the Effects of Weakness or Debility and Restoring Healthy Function, Known as Apple-Juice Tonic, Wild-Cherry Cough-Drops, and Flag-Root.
Claims use since Jan. 4, 1913.

Ser. No. 67,979. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE BEACON LIGHTING COMPANY, Pittsburgh, Pa. Filed Jan. 18, 1913.

BEACON

Particular description of goods.—Incandescent Gas-Mantles and Gas-Burners on Which Gas-Mantles are Used.
Claims use since Mar. 15, 1909.

Ser. No. 67,989. (CLASS 2. RECEPTACLES.) ALBERT HESS, Frankfort-on-the-Main, Germany. Filed Jan. 18, 1913.



The use of a pictorial representation of a box is disclaimed.
Particular description of goods.—Boxes and Folding Boxes.
Claims use since July 7, 1911.

Ser. No. 68,077. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) GEORGE RAHMANN, New York, N. Y. Filed Jan. 23, 1913.

TRIUMPH

"Triumph."
Particular description of goods.—Leather Belting.
Claims use since Jan. 11, 1909.

Ser. No. 68,088. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE H. O. CANFIELD COMPANY, Bridgeport, Conn. Filed Jan. 24, 1913. Under ten-year proviso.

Canfield

Particular description of goods.—Rubber Goods for Plumbers' Use—Namely, Ball-Cock Valves, Basin-Gaskets, Beer-Pump Supplies, Bib-Washers, Boiler-Gaskets, Closet Connections, Closet-Flanges, Closet-Rings, Elbows, Floor-Gaskets, Fuller-Balls, Glass-Gage Gaskets, Glass-Gage Rings, Hinge-Seat Rubbers, Hose-Washers, Pipe-Rings, Plunger-Rings, Prier-Balls, Prier-Cushions, Pump-Valves, Basin-Plugs, Bath-Tub Plugs, Sink-Gaskets, Slip-Joint Rings, Slip-Joint Washers, Solid Bib-Disks, Siphon-Valve Washers, Testing-Rings, Top Bib-Washers, Tubing, Union-Washers, Valve-Balls, and Waste-Washers.
Claims use since January, 1894.

Ser. No. 68,098. (CLASS 38. PRINTS AND PUBLICATIONS.) ALFRED MAYER-WEISMANN, Boston, Mass. Filed Jan. 24, 1913.



Particular description of goods.—Art-Needlework Literature.
Claims use since July 20, 1912.

Ser. No. 68,172. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRED A. WHARTENBY, Oklahoma, Okla. Filed Jan. 28, 1913.

WHARTENBY'S WONDER
BABY CHICK SAVER



Guaranteed for
Bowel Trouble or White Diarrhoea
in Baby Chicks

No claim being made for the use of the words "Whartenby's Wonder Baby Chicks Saver" and "Guaranteed for Bowel Trouble or White Diarrhoea in Baby Chicks."
Particular description of goods.—A Remedy for Bowel Trouble or White Diarrhea in Baby-Chicks.
Claims use since Jan. 1, 1911.

Ser. No. 68,192. (CLASS 39. CLOTHING.) WILHELM BENGER SÖHNE, Stuttgart, Germany. Filed Jan. 29, 1913.

Ribana

Particular description of goods.—Trousers, Shirts, Drawers, Undershirts, Combination-Suits, and Corset-Covers of Wool, Half Wool, and Cotton for Men, Women, and Children.
Claims use since Mar. 4, 1912.

Ser. No. 68,194. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) HARRY VISSERING & COMPANY, Louisville, Ky., and Chicago, Ill. Filed Jan. 29, 1913.

VILCO

The words "Trade Mark," appearing thereon, being disclaimed.
Particular description of goods.—Brake-Staff Supports and Brake-Steps.
Claims use since Dec. 24, 1909.

Ser. No. 68,205. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HUMPHREYS, CANNON & CO., Memphis, Tenn. Filed Jan. 30, 1913.



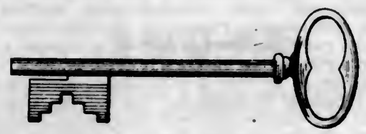
The picture, which is fanciful.
Particular description of goods.—Coffee and Flavoring Extracts for Foods.
Claims use since Dec. 1, 1912.

Ser. No. 68,228. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MAURICE FRINGS & CIE., Paris, France. Filed Jan. 31, 1913.

M.F.A.

Particular description of goods.—Cotton, Wool, Linen, Silk, Artificial Silk, Ramie, Jute, and Lace Piece Goods.
Claims use since the date of 1810.

Ser. No. 68,229. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MAURICE FRINGS & CIE., Paris, France. Filed Jan. 31, 1913.



Particular description of goods.—Cotton, Wool, Linen, Silk, Artificial Silk, Ramie, Jute, and Lace Piece Goods.
Claims use since the date of 1844.

Ser. No. 68,230. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MAURICE FRINGS & CIE., Paris, France. Filed Jan. 31, 1913.

L. V.

Particular description of goods.—Cotton, Wool, Linen, Silk, Artificial Silk, Ramie, Jute, and Lace Piece Goods.
Claims use since the date of 1841.

Ser. No. 68,234. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.



Particular description of goods.—Champagne and Sparkling Wines.
Claims use since the year 1856.

Ser. No. 68,236. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.



Particular description of goods.—Champagne and Sparkling Wines.
Claims use since the year 1856.

Ser. No. 68,237. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.



Particular description of goods.—Champagne and Sparkling Wines.
Claims use since 1856.

Ser. No. 68,238. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.



Particular description of goods.—Champagne and Sparkling Wines.
Claims use since 1856.

Ser. No. 68,239. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.

VEUVE
POMMERY

Particular description of goods.—Champagne and Sparkling Wines.
Claims use since 1856.

Ser. No. 68,240. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.

POMMERY & GRENO
Reims

Particular description of goods.—Champagne and Sparkling wines.
Claims use since 1856.

Ser. No. 68,246. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE NATIONAL ADVERTOGRAPH COMPANY, LIMITED, Toronto, Ontario, Canada. Filed Jan. 31, 1913.

The Advertograph

Particular description of goods.—Printing-Machines.
Claims use since June 15, 1912.

Ser. No. 68,330. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOLON PALMER, New York, N. Y. Filed Feb. 5, 1913.

GARDENGLO

Particular description of goods.—Perfume, Toilet Water, Sachet and Complexion Powder.
Claims use since Jan. 24, 1913.

Ser. No. 68,356. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE MANHATTAN RUBBER MFG. CO., Passaic, N. J. Filed Feb. 6, 1913.

MASTER

Particular description of goods.—Rubber Gland-Packing for Steam-Engines, Steam-Pipes, and Steam-Valves.
Claims use since Dec. 1, 1912.

Ser. No. 68,448. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) CLARENCE E. SLYE, Chicago, Ill. Filed Feb. 10, 1913.

CO-VES-PA

Particular description of goods.—Garment-Hangers.
Claims use since Apr. 15, 1911.

Ser. No. 68,495. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) COMPAGNIE GÉNÉRALE DES ETABLISSEMENTS PATHÉ FRÈRES (PHONOGRAPHE & CINEMATOGRAPHE), Paris, France. Filed Feb. 11, 1913.

"PATHEKOK"

Particular description of goods.—Apparatus for Taking Kinematographic Pictures, Kinematographic Projection Apparatus, Screens for Projections, Projecting-Lanterns, Kinematographic Films, and Packings for Said Films.
Claims use since Jan. 10, 1913.

Ser. No. 68,506. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ULYSSES C. ROUMILLAT, Columbia, S. C. Filed Feb. 11, 1913.

PILEORIO

Particular description of goods.—Ointment and Suppositories for the Treatment of All Diseases of the Rectum.
Claims use since Nov. 12, 1904.

Ser. No. 68,523. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) JOSEPH ROSENBLATT, Providence, R. I. Filed Feb. 12, 1913.

Goldtex

Particular description of goods.—Brass, Copper, Gold, and Silver.
Claims use since Jan. 1, 1912.

Ser. No. 68,578. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) NORTHPORT NOVELTY COMPANY, Northport, N. Y. Filed Feb. 17, 1913.

FLINTEX

Particular description of goods.—Dolls.
Claims use since Jan. 15, 1913.

Ser. No. 68,607. (CLASS 12. CONSTRUCTION MATERIALS.) STANDARD PAINT COMPANY, Boundbrook, N. J., and New York, N. Y. Filed Feb. 18, 1913.

DUPLEX

Particular description of goods.—Flexible Prepared Roofings Consisting of a Felted or Woven Fabric Impregnated or Coated, or Both, with a Bituminous Mixture.
Claims use since Feb. 5, 1913.

Ser. No. 68,626. (CLASS 12. CONSTRUCTION MATERIALS.) STANDARD PAINT COMPANY, Boundbrook, N. J., and New York, N. Y. Filed Feb. 19, 1913.

STACO

Particular description of goods.—Flexible Prepared Roofings Consisting of a Felted or Woven Fabric Impregnated or Coated, or Both, with a Bituminous Mixture.
Claims use since Feb. 4, 1913.

Ser. No. 68,636. (CLASS 12. CONSTRUCTION MATERIALS.) DOLARWAY PAVING CO., New York, N. Y. Filed Feb. 20, 1913.

Dolarway

Particular description of goods.—Portland and Hydraulic Cements.
Claims use since Feb. 18, 1913.

Ser. No. 68,678. (CLASS 39. CLOTHING.) CHIPPEWA SHOE MANUFACTURING COMPANY, Chippewa Falls, Wis. Filed Feb. 24, 1913.

ORIGINAL

Particular description of goods.—Leather Boots and Shoes.
Claims use since 1901.

Ser. No. 68,711. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) JACOB WEIHL, New Bedford, Mass. Filed Feb. 24, 1913.

KAPAWACK CLUB

No claim being made to the word "Club."
Particular description of goods.—Whisky, Gin, and Brandy.
Claims use since Feb. 3, 1913.

Ser. No. 68,728. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE EDW. MALLEY CO., New Haven, Conn. Filed Feb. 25, 1913.

Fraibelle

Particular description of goods.—Candy.
Claims use since Jan. 25, 1912.

Ser. No. 68,732. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) WILLIAM P. STARK NURSERIES, Stark City, Mo. Filed Feb. 25, 1913.

J. H. Hale

Consisting of the facsimile of the signature of J. H. Hale.
Particular description of goods.—Peach-Trees.
Claims use since Nov. 21, 1912.

Ser. No. 68,833. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM JAMES PATTERSON, Cresco, Iowa. Filed Mar. 3, 1913.

VULA

Particular description of goods.—Cough-Drops.
Claims use since Jan. 1, 1913.

Ser. No. 68,835. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE BOWLES, Westport, Conn. Filed Mar. 5, 1913.

GOLD SEAL

Particular description of goods.—Eggs.
Claims use since Dec. 10, 1912.

Ser. No. 68,852. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRANK R. RIEHL, Philadelphia, Pa. Filed Mar. 5, 1913.

Frank R. Riehl

Consisting of a facsimile of my signature.
Particular description of goods.—Salve Used as an External Remedy for Burns, Pimples, Chapped Hands, Ivy-Poisoning, Piles, (Except Bleeding,) Sores, Cuts, Bruises, Bunions, Callous Skin, and Fever-Blisters.
Claims use since Oct. 28, 1911.

Ser. No. 68,864. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) DOBBINS SOAP MANUFACTURING COMPANY, Philadelphia, Pa. Filed Mar. 6, 1913.

OLAMMON

Particular description of goods.—Cleaning Compounds.
Claims use since about Feb. 13, 1913.

Ser. No. 68,877. (CLASS 12. CONSTRUCTION MATERIALS.) WARREN CHEMICAL & MANUFACTURING COMPANY, New York, N. Y. Filed Mar. 6, 1913.

ANCHOR

Particular description of goods.—Asphalt, Asphaltic Composition, Including Asphalt, Asphalt Roofing, Paving-Cement, and Asphalt Mastic.
Claims use since on or about July 1, 1876.

Ser. No. 68,878. (CLASS 12. CONSTRUCTION MATERIALS.) WARREN CHEMICAL & MANUFACTURING COMPANY, New York, N. Y. Filed Mar. 6, 1913.

Particular description of goods.—Asphalt, Asphaltic Compositions, Including Asphalt, Asphalt Roofing, Paving-Cement, and Asphalt Mastic.
Claims use since on or about July 1, 1876.

Ser. No. 68,880. (CLASS 12. CONSTRUCTION MATERIALS.) WARREN CHEMICAL & MANUFACTURING COMPANY, New York, N. Y. Filed Mar. 6, 1913.

Anchor

Particular description of goods.—Sheathing and Roofing Felt.
Claims use since on or about July 1, 1876.

Ser. No. 68,946. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Filed Mar. 10, 1913.

BANZAI

Particular description of goods.—Biscuit.
Claims use since at least Feb. 4, 1913.

Ser. No. 68,948. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) REED-PRENTICE COMPANY, Worcester, Mass. Filed Mar. 10, 1913.

R-P C

Particular description of goods.—Lathes and Drills.
Claims use since about the 1st day of January, 1913.

Ser. No. 68,952. (CLASS 39. CLOTHING.) THE SUNLIGHT HAT CO., Marshalltown, Iowa. Filed Mar. 10, 1913.



Particular description of goods.—Hats and Caps.
Claims use since Apr. 19, 1912.

Ser. No. 69,101. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) F. C. HUYCK AND SONS, Rensselaer and Albany, N. Y. Filed Mar. 17, 1913. Under ten-year proviso.

KENWOOD

Particular description of goods.—Bed-Blankets and Steamer-Rugs.
Claims use since May, 1880.

Ser. No. 69,111. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PLANSIFTER MILLING COMPANY, Oklahoma, Okla. Filed Mar. 17, 1913.

PLANCO

Particular description of goods.—Wheat-Flour and Cornmeal.
Claims use since Jan. 1, 1913.

Ser. No. 69,116. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE RODERICK LEAN MANUFACTURING CO., Mansfield, Ohio. Filed Mar. 17, 1913.



The words "Trade Mark" being disclaimed.
Particular description of goods.—Harrows.
Claims use since Aug. 16, 1912.

Ser. No. 69,133. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) VALLEY CITY MILLING COMPANY, Grand Rapids, Mich. Filed Mar. 17, 1913.

"YES-MA'AM"

Particular description of goods.—Graham Flour.
Claims use since September, 1912.

Ser. No. 69,135. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRED D. WAITE, Palmetto, Fla. Filed Mar. 17, 1913.

DAISY

Particular description of goods.—Oranges and Grape-Fruit.
Claims use since Oct. 1, 1911.

Ser. No. 69,155. (CLASS 47. WINES.) DONNELLY BROTHERS, Troy, N. Y. Filed Mar. 18, 1913.

COLLEGIATE

Particular description of goods.—Wines.
Claims use since Jan. 1, 1907.

Ser. No. 69,167. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) CHAS. H. ROSS & CO., Baltimore, Md. Filed Mar. 18, 1913. Under ten-year proviso.

WARWICK

Particular description of goods.—Whisky.
Claims use since about Jan. 1, 1878.

Ser. No. 69,181. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) R. E. G. KEENE, San Francisco, Cal. Filed Mar. 19, 1913.

BITKOTE

Particular description of goods.—Liquid Paints, Roofing-Paints, Varnishes, and Oils for Painters' Use.
Claims use since March, 1912.

Ser. No. 69,186. (CLASS 39. CLOTHING.) E. C. MCWATTY COMPANY INCORPORATED, New York, N. Y. Filed Mar. 19, 1913.

DORINE

Particular description of goods.—Corsets.
Claims use since Mar. 12, 1913.

Ser. No. 69,257. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRANCIS H. LEGGETT & COMPANY, New York, N. Y. Filed Mar. 22, 1913.

Queenzanilla

Particular description of goods.—Olives.
Claims use since Jan. 15, 1903.

Ser. No. 69,259. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Filed Mar. 22, 1913.

ALCAZAR

Particular description of goods.—Biscuit.
Claims use since at least August, 1911.

Ser. No. 69,260. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Filed Mar. 22, 1913.

FORTUNA

Particular description of goods.—Biscuit.
Claims use since at least July, 1911.

Ser. No. 69,261. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Filed Mar. 22, 1913.

SPRINGMAID

Particular description of goods.—Biscuit.
Claims use since at least January, 1913.

Ser. No. 69,263. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Filed Mar. 22, 1913.

VENUS

Particular description of goods.—Biscuit.
Claims use since at least Jan. 22, 1894.

Ser. No. 69,272. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) AMERICAN OPTICAL COMPANY, Southbridge, Mass. Filed Mar. 24, 1913.

AOCO

Particular description of goods.—Eyeglasses, Spectacles, Lenses, Nose-Guards, Frames, Bridges, Mountings, Gages, Optometers, Dioptrometers, Retinascopes, Pupilometers, Ophthalometers, Refractometers, Skiascopes, Trial-Frames, Eye-Testing Charts, Hand-Magnifiers, Watchmakers' Loops, Reading-Glasses, Lens-Testing Instruments, Goggles.
Claims use since January, 1885.

Ser. No. 69,273. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMERICAN OPTICAL COMPANY, Southbridge, Mass. Filed Mar. 24, 1913.



Particular description of goods.—Grinding, Drilling, Swaging, and Lens-Cutting Machines, Case-Machines, and Machines for Manufacturing Eyeglasses, Spectacles, Goggles, and Parts Thereof.
Claims use since Apr. 1, 1899.

Ser. No. 69,277. (CLASS 39. CLOTHING.) ARBUTHNOT-STEPHENSON CO., Pittsburgh, Pa. Filed Mar. 24, 1913.



Particular description of goods.—Hosiery.
Claims use since Sept. 14, 1912.

Ser. No. 69,284. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) EDWIN A. FITCH & SON, New York, N. Y. Filed Mar. 24, 1913.



Particular description of goods.—Embroideries, Stamped Linens, and Art Novelties—Namely, Centerpieces, Scarfs, Embroidered Pillow-Tops, and Embroidered Towel-Ends.
Claims use since Sept. 1, 1912.

Ser. No. 69,293. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LEADER IRON WORKS, Decatur, Ill. Filed Mar. 24, 1913.

Leader

Particular description of goods.—Internal-Combustion Engines.
Claims use since on or about the 1st day of April, 1906.

Ser. No. 69,300. (CLASS 39. CLOTHING.) ABRAHAM POSNER, New York, N. Y. Filed Mar. 24, 1913.



Particular description of goods.—Leather and Canvas Shoes.
Claims use since 1912.

Ser. No. 69,309. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BEAUMONT RICE MILLS, Beaumont and El Campo, Tex. Filed Mar. 25, 1913.



Particular description of goods.—Rice.
Claims use since Dec. 1, 1912.

Ser. No. 69,390. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) HANOVER VULCANITE CO., New York, N. Y. Filed Mar. 28, 1913.

The Golf-Club

Particular description of goods.—Combs, Hair-Combs, Side Combs, and Back Combs Made of Hard Rubber.
Claims use since Apr. 16, 1912.

Ser. No. 69,392. (CLASS 39. CLOTHING.) HENRY HEATH, LIMITED, London, England. Filed Mar. 28, 1913.



Particular description of goods.—Hats and Caps.
Claims use since July 26, 1912.

Ser. No. 69,396. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) G. REIS & BRO., New York, N. Y. Filed Mar. 28, 1913. Under ten-year proviso.

'REIS'

Particular description of goods.—Embroidery Foundations.
Claims use since on or about the 1st of March, 1894.

Ser. No. 69,416. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ECONOMY BALER COMPANY, Ann Arbor, Mich. Filed Mar. 29, 1913.

ECONOMY

The words "Fire Proof" being disclaimed.
Particular description of goods.—Baling-Presses.
Claims use since Dec. 1, 1910.

Ser. No. 69,453. (CLASS 39. CLOTHING.) CONVERSE RUBBER-SHOE CO., Malden, Mass. Filed Mar. 31, 1913.



Particular description of goods.—Rubber Heels.
Claims use since Mar. 11, 1913.

Ser. No. 69,509. (CLASS 39. CLOTHING.) HURLEY SHOE COMPANY, Rockland, Mass. Filed Apr. 1, 1913. Under ten-year proviso.

HURLEY

Particular description of goods.—Leather Boots and Shoes.
Claims use since the year 1893.

Ser. No. 69,514. (CLASS 39. CLOTHING.) E. ROSENFELD & Co., Baltimore, Md. Filed Apr. 1, 1913.

"My-letter"

Particular description of goods.—Pajamas, Night-Shirts, and Dress, Negligée, and Work Shirts.
Claims use since Mar. 1, 1913.

Ser. No. 69,611. (CLASS 39. CLOTHING.) BRILL BROTHERS, New York, N. Y. Filed Apr. 5, 1913.

GET THE HABIT

Particular description of goods.—Men's and Boys' Coats, Vests, Pants, and Overcoats.
Claims use since June 2, 1903.

Ser. No. 69,639. (CLASS 43. THREAD AND YARN.) NECRONSETT MILLS INCORPORATED, Cumberland, N. C. Filed Apr. 7, 1913.

NECRONSETT

Particular description of goods.—Yarns.
Claims use since about Mar. 1, 1913.

Ser. No. 69,645. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) UNITED STATES BUNTING CO., Lowell, Mass. Filed Apr. 7, 1913. Under ten-year proviso.

SIGNAL

Particular description of goods.—Bunting.
Claims use since Dec. 20, 1890.

Ser. No. 69,646. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) UNITED STATES BUNTING CO., Lowell, Mass. Filed Apr. 7, 1913. Under ten-year proviso.

ANCHOR

Particular description of goods.—Bunting.
Claims use since Dec. 1, 1879.

Ser. No. 69,774. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) MORRIS, MANN & REILLY, Chicago, Ill. Filed Apr. 14, 1913.



The seal being red.
Particular description of goods.—Hair-Nets.
Claims use since May 2, 1910.

TRADE-MARKS

REGISTERED MAY 6, 1913.

91,437. LIQUID FOR USE AS A PAINT AND A WALL-COATING. ALABASTINE COMPANY, Grand Rapids, Mich.
Filed October 2, 1912. Serial No. 66,094. PUBLISHED MARCH 11, 1913.

91,438. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed January 6, 1913. Serial No. 67,738. PUBLISHED MARCH 4, 1913.

91,439. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed January 6, 1913. Serial No. 67,739. PUBLISHED MARCH 4, 1913.

91,440. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed January 6, 1913. Serial No. 67,741. PUBLISHED MARCH 4, 1913.

91,441.. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed January 6, 1913. Serial No. 67,742. PUBLISHED MARCH 4, 1913.

91,442. WOOD-TURPENTINE. AMERICAN NAVAL STORES COMPANY, Savannah, Ga.
Filed January 4, 1913. Serial No. 67,702. PUBLISHED MARCH 4, 1913.

91,443. WASTES AND OVERFLOWS. AMERICAN PIN COMPANY, Waterbury, Conn.
Filed December 22, 1911. Serial No. 60,406. PUBLISHED MARCH 11, 1913.

91,444. WATCH CASES AND MOVEMENTS AND DETACHED PARTS OF THE SAME. ANCIENNE FABRIQUE VACHERON & CONSTANTIN SOCIÉTÉ ANONYME, Geneva, Switzerland.
Filed August 31, 1912. Serial No. 65,524. PUBLISHED FEBRUARY 18, 1913.

91,445. MEDICINAL TABLETS FOR CONSTIPATION, CORYZA, AND BILIOUSNESS. THE ANTIKAMNIA CHEMICAL COMPANY, St. Louis, Mo.
Filed December 18, 1912. Serial No. 67,482. PUBLISHED MARCH 4, 1913.

91,446. COTTON-SEED OIL. ASPEGREN & Co., New York, N. Y.
Filed January 11, 1913. Serial No. 67,833. PUBLISHED MARCH 4, 1913.

91,447. COTTON-SEED OIL. ASPEGREN & Co., New York, N. Y.
Filed January 11, 1913. Serial No. 67,836. PUBLISHED MARCH 4, 1913.

91,448. COTTON SEED OIL. ASPEGREN & Co., New York, N. Y.
Filed January 11, 1913. Serial No. 67,832. PUBLISHED MARCH 4, 1913.

91,449. COTTON-SEED OIL. ASPEGREN & Co., New York, N. Y.
Filed January 11, 1913. Serial No. 67,834. PUBLISHED MARCH 4, 1913.

91,450. CERTAIN NAMED FOODS. AUSTIN, NICHOLS & Co., New York, N. Y.
Filed July 27, 1909. Serial No. 43,825. PUBLISHED FEBRUARY 25, 1913.

91,451. PREPARATIONS FOR REMOVING PAINT AND OTHER COATINGS FROM SURFACES. BALL CHEMICAL COMPANY, Pittsburgh, Pa.
Filed December 13, 1912. Serial No. 67,388. PUBLISHED MARCH 11, 1913.

91,452. NAPHTHALENE, CRUDE AND REFINED. BARRETT MANUFACTURING COMPANY, New York, N. Y.
Filed March 22, 1912. Serial No. 62,349. PUBLISHED MARCH 4, 1913.

91,453. CANDY. PAUL F. BEICH COMPANY, Bloomington, Ill.
Filed January 13, 1913. Serial No. 67,862. PUBLISHED MARCH 4, 1913.

91,454. PAINT, VARNISH, SASH-TOOL, CALCIMINE, WHITEWASH, AND PAINTERS' DUSTING AND COUNTER-DUSTING BRUSHES. THE BIGELOW BRUSH CO., Baltimore, Md.
Filed October 26, 1912. Serial No. 66,564. PUBLISHED MARCH 11, 1913.

91,455. CORSETS. BIRDSEY-SOMERS CO., New York, N. Y.
Filed January 9, 1912. Serial No. 60,707. PUBLISHED MARCH 4, 1913.

91,456. CORSETS. BIRDSEY-SOMERS CO., New York, N. Y.
Filed January 16, 1912. Serial No. 60,854. PUBLISHED MARCH 4, 1913.

91,457. CERTAIN ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES. BROLT LIMITED, Birmingham, England.
Filed January 21, 1913. Serial No. 68,030. PUBLISHED MARCH 11, 1913.

91,458. WHEAT-FLOUR. CALLAM MILLS, Saginaw, Mich.
Filed January 13, 1913. Serial No. 67,864. PUBLISHED MARCH 4, 1913.

91,459. OLIVE-OIL. ALEXANDER L. CAPRINI, Pittsburgh, Pa.
Filed November 4, 1911. Serial No. 59,539. PUBLISHED SEPTEMBER 3, 1912.

91,460. MIXED PAINTS AND WOOD-PRESERVATIVES. THE CARBON PRESERVATIVE PAINT CO., Salt Lake City, Utah.
Filed November 2, 1909. Serial No. 45,670. PUBLISHED MARCH 11, 1913.

91,461. BUTTER. THE CONCORDIA CREAMERY COMPANY, Concordia, Kans.
Filed June 27, 1912. Serial No. 64,440. PUBLISHED MARCH 4, 1913.

91,462. ENAMELED, GALVANIZED, AND TIN WARE. COONLEY MFG. CO., Clyde, Ill.
Filed January 16, 1913. Serial No. 67,941. PUBLISHED MARCH 11, 1913.

91,463. LIQUIDIZED SULFUR. CREW'S LIQUIDIZED SULPHUR CO., Blountstown, Fla.
Filed September 25, 1911. Serial No. 58,833. PUBLISHED MARCH 4, 1913.

91,464. CERTAIN PAINTS, WALL-FINISHES, STAINS, ENAMELS, VARNISHES, FILLERS, AND LACS. DAVIES & MEACHAM, Cleveland, Ohio.
Filed January 20, 1913. Serial No. 68,008. PUBLISHED MARCH 11, 1913.

91,465. CHOKING DEVICES FOR ALTERNATING-CURRENT CIRCUITS. DEAN AUTO DEVICES COMPANY, Chicago, Ill.
Filed January 7, 1913. Serial No. 67,765. PUBLISHED MARCH 4, 1913.

91,466. CERTAIN SCIENTIFIC APPLIANCES. CHARLES DELAC, Paris, France.
Filed October 18, 1912. Serial No. 66,352. PUBLISHED MARCH 4, 1913.

91,467. PERCUSSION ROCK-DRILLING MACHINES. DIAMOND EXPANSION BOLT CO., New York, N. Y.
Filed November 21, 1912. Serial No. 67,052. PUBLISHED MARCH 4, 1913.

91,468. MACHINE-OIL. DIRECT IMPORTING COMPANY, Boston, Mass.
Filed December 9, 1912. Serial No. 67,299. PUBLISHED MARCH 4, 1913.

91,469. CIGARS AND CIGARETTES. EL DRACO CIGAR M'F'G COMPANY, Camden, N. J., and Philadelphia, Pa.
Filed January 7, 1913. Serial No. 67,771. PUBLISHED MARCH 4, 1913.

91,470. CANNED FRUITS, VEGETABLES, PORK AND BEANS, SALMON, AND LOBSTER. FARGO MERCANTILE COMPANY, Fargo, N. D.
Filed January 13, 1913. Serial No. 67,874. PUBLISHED MARCH 4, 1913.

91,471. WEEKLY PERIODICAL. FLORIDA GROWERS PUBLISHING COMPANY, Tampa, Fla.
Filed January 2, 1913. Serial No. 67,670. PUBLISHED MARCH 11, 1913.

91,472. CLOVER, ALSIKE, ALFALFA, AND TIMOTHY SEEDS. S. W. FLOWER & COMPANY, Toledo, Ohio.
Filed January 19, 1912. Serial No. 60,907. PUBLISHED MAY 28, 1912.

91,473. SUNDAY NEWSPAPER. THE GEORGIAN COMPANY, Atlanta, Ga.
Filed February 11, 1913. Serial No. 68,500. PUBLISHED MARCH 11, 1913.

91,474. DAILY NEWSPAPER. THE GEORGIAN COMPANY, Atlanta, Ga.
Filed February 11, 1913. Serial No. 68,499. PUBLISHED MARCH 11, 1913.

91,475. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. GERSTENDORFER BROS., New York, N. Y.
Filed July 10, 1912. Serial No. 64,655. PUBLISHED MARCH 11, 1913.

91,476. ELECTRIC SPARK-PLUGS. EMIL GROSSMAN COMPANY, New York, N. Y.
Filed January 30, 1913. Serial No. 68,204. PUBLISHED MARCH 11, 1913.

91,477. ELECTRIC SPARK-PLUGS. EMIL GROSSMAN COMPANY, New York, N. Y.
Filed January 30, 1913. Serial No. 68,203. PUBLISHED MARCH 11, 1913.

91,478. PAINTERS' SIZE AND DRESSINGS AND POLISHES FOR WOOD AND IRON. THE GUM TRAGASOL SUPPLY COMPANY LIMITED, Hooton, England
Filed November 8, 1912. Serial No. 66,765. PUBLISHED MARCH 4, 1913.

91,479. PAINTERS' SIZE AND DRESSINGS AND POLISHES FOR WOOD AND IRON. THE GUM TRAGASOL SUPPLY COMPANY LIMITED, Hooton, England.
Filed November 23, 1912. Serial No. 67,070. PUBLISHED MARCH 4, 1913.

91,480. LEATHER SHOES. ERNEST A. HALEY, Cleveland, Ohio.
Filed January 20, 1913. Serial No. 68,010. PUBLISHED MARCH 4, 1913.

91,481. LARD, HAMS, BACON, SAUSAGE, CHEESE, MINCE-MEATS, AND DRIED BEEF. HAMMOND, STANDISH & CO., Detroit, Mich.
Filed August 30, 1912. Serial No. 65,506. PUBLISHED MARCH 4, 1913.

91,482. COMBINATION-SUITS AND SHIRTS AND DRAWERS OF RIBBED KNITTED MATERIAL. P. H. HANES KNITTING CO., Winston-Salem, N. C.
Filed January 9, 1913. Serial No. 67,800. PUBLISHED MARCH 4, 1913.

91,483. BAKING-POWDER. THE HEEKIN SPICE COMPANY, Cincinnati, Ohio.
Filed December 14, 1912. Serial No. 67,445. PUBLISHED MARCH 4, 1913.

91,484. CIGARS. HEMMETER CIGAR COMPANY, Detroit, Mich.
Filed August 23, 1911. Serial No. 58,340. PUBLISHED FEBRUARY 18, 1913.

91,485. COMPRESSED TABLETS USED AS MEDICINE AGAINST INTERMITTENT FEVER AND COLDS. VINCENTY HNOS., Mexico, Mexico.
Filed October 31, 1911. Serial No. 59,441. PUBLISHED MARCH 4, 1913.

91,486. PERIODICALLY-PUBLISHED MAGAZINE. THE HOME PATTERN COMPANY, New York, N. Y.
Filed January 18, 1913. Serial No. 67,988. PUBLISHED MARCH 11, 1913.

91,487. LAUNDRY WASHING-MACHINES. GEORGE H. HUENERGARDT, Collegeview, Nebr.
Filed October 1, 1912. Serial No. 66,074. PUBLISHED MARCH 11, 1913.

91,488. CERTAIN NAMED FOODS. J. F. HUMPHREYS AND CO., Bloomington, Ill.
Filed October 21, 1912. Serial No. 66,444. PUBLISHED MARCH 4, 1913.

91,489. CANNED CORN. THE ILLINOIS CANNING COMPANY, Hoopeston, Ill.
Filed January 13, 1913. Serial No. 67,879. PUBLISHED MARCH 4, 1913.

91,490. MAGAZINE. FLORENCE KING, Chicago, Ill.
Filed December 3, 1912. Serial No. 67,210. PUBLISHED MARCH 11, 1913.

91,491. WASHING-POWDER. THE KLEENSER CO., Fostoria, Ohio.
Filed October 29, 1912. Serial No. 66,602. PUBLISHED MARCH 4, 1913.

91,492. WAXED PAPER. KUHMARKER MANUFACTURING COMPANY, New York, N. Y.
Filed December 26, 1912. Serial No. 67,595. PUBLISHED MARCH 4, 1913.

91,493. LEATHER OR CANVAS SHOES. ARTHUR LETTS, Los Angeles, Cal.
Filed December 31, 1912. Serial No. 67,655. PUBLISHED MARCH 4, 1913.

91,494. CORSETS. LILY OF FRANCE CORSET CO., New York, N. Y.
Filed January 22, 1913. Serial No. 68,058. PUBLISHED MARCH 4, 1913.

91,495. CERTAIN NAMED CUTLERY, TOOLS, AND PARTS THEREOF. MARKT & CO., New York, N. Y.
Filed January 26, 1912. Serial No. 61,043. PUBLISHED APRIL 30, 1912.

91,496. GAS-MANTLES. MARKT & HAMMACHER COMPANY, New York, N. Y.
Filed January 29, 1913. Serial No. 68,184. PUBLISHED MARCH 4, 1913.

91,497. REMEDY FOR THE ALLEVIATION AND TREATMENT OF CRAMPS. MARSHALL CHEMICAL CO., INC., Great Neck, N. Y.
Filed December 12, 1912. Serial No. 67,372. PUBLISHED MARCH 4, 1913.

91,498. AUDIBLE SIGNALS FOR DETERMINING THE TEMPERATURE OF SEA-WATER AND AIR. THE MCNAB COMPANY, Bridgeport, Conn.
Filed January 10, 1913. Serial No. 67,823. PUBLISHED MARCH 4, 1913.

91,499. COMPOUND OF QUININ AND DIETHYL-BARBITURIC ACID PREPARED FOR PHARMACEUTICAL USE. E. MERCK, Darmstadt, Germany.
Filed July 24, 1912. Serial No. 64,893. PUBLISHED MARCH 4, 1913.

91,500. WIRE NAILS, NUTS, BOLTS AND RIVETS, WASHERS, SCREWS, AND TACKS. ARNOLD OTTO MEYER, Hamburg, Germany.
Filed July 28, 1911. Serial No. 57,915. PUBLISHED MARCH 11, 1913.

91,501. WHITE PASTE PAINT. BENJAMIN MOORE & Co., Jersey City, N. J., and New York, N. Y.
Filed January 28, 1913. Serial No. 68,166. PUBLISHED MARCH 11, 1913.

91,502. CANNED RIPE AND GREEN PICKLED OLIVES. MUNGER BROTHERS COMPANY, Phoenix, Ariz.
Filed February 9, 1912. Serial No. 61,382. PUBLISHED JULY 2, 1912.

91,503. GAS-LAMPS. THE NAGEL-CHASE MANUFACTURING COMPANY, Chicago, Ill.
Filed December 30, 1912. Serial No. 67,633. PUBLISHED MARCH 4, 1913.

91,504. BISCUIT. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y.
Filed December 21, 1912. Serial No. 67,539. PUBLISHED MARCH 4, 1913.

91,505. RUBBER BOOTS AND SHOES. NATIONAL INDIA RUBBER COMPANY, Bristol, R. I.
Filed October 16, 1912. Serial No. 66,322. PUBLISHED MARCH 4, 1913.

91,506. FRESH FRUIT. THOMAS F. NEVINS, Brooklyn and New York, N. Y., and Merritt, Fla.
Filed December 21, 1912. Serial No. 67,548. PUBLISHED MARCH 4, 1913.

91,507. WHEAT-FLOUR. NEW PRAGUE FLOURING MILL COMPANY, New Prague, Minn.
Filed December 30, 1912. Serial No. 67,637. PUBLISHED FEBRUARY 25, 1913.

91,508. HATS. FRED K. NICHOLS, Spokane, Wash.
Filed October 8, 1912. Serial No. 66,189. PUBLISHED MARCH 4, 1913.

91,509. BATTERY-CELLS. THE NUNGESSER CARBON & BATTERY CO., Cleveland, Ohio.
Filed February 6, 1913. Serial No. 68,357. PUBLISHED MARCH 11, 1913.

91,510. CERTAIN NAMED PACKING FOR STEAM, AMMONIA, AND HYDRAULIC PURPOSES. ORIENTAL OIL CO., Dallas, Tex.
Filed December 13, 1912. Serial No. 67,390. PUBLISHED MARCH 4, 1913.

91,511. [WITHDRAWN.]

91,512. FLAVORING EXTRACTS FOR FOODS. PEREIRA & PEREIRA, New York, N. Y.
Filed April 5, 1912. Serial No. 62,666. PUBLISHED JANUARY 28, 1913.

91,513. HAIR-TONIC. PETTY AND SCHRECK, Fort Collins, Colo.
Filed July 24, 1905. Serial No. 10,749. PUBLISHED MARCH 4, 1913.

91,514. CERTAIN NAMED CHEMICAL AND PHARMACEUTICAL PREPARATIONS. L. T. PIVER & CIE., Paris, France.
Filed November 26, 1912. Serial No. 67,131. PUBLISHED MARCH 4, 1913.

91,515. OVERALLS, WORK-SHIRTS, DRAWERS, AND WORK-PANTS. RIVERSIDE OVERALL CO., Danville, Va.
Filed January 8, 1909. Serial No. 39,787. PUBLISHED MARCH 4, 1913.

91,516. COFFEES AND TEAS. ROYAL VALLEY COFFEE CO., Detroit, Mich.
Filed August 28, 1912. Serial No. 65,469. PUBLISHED MARCH 4, 1913.

91,517. CERTAIN NAMED FOODS. SHERER-GILLETT COMPANY, Chicago, Ill.
Filed April 22, 1912. Serial No. 63,054. PUBLISHED FEBRUARY 18, 1913.

91,518. SEWING-MACHINE NEEDLES. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J.
Filed January 4, 1913. Serial No. 67,729. PUBLISHED MARCH 4, 1913.

91,519. CUTTER-HEADS AND LATHES. SMITH CANNERY MACHINES COMPANY, Seattle, Wash.
Filed February 24, 1912. Serial No. 61,707. PUBLISHED MARCH 4, 1913.

91,520. ORANGES. GEO. E. SNOW, Eastlake, Fla.
Filed January 13, 1913. Serial No. 67,907. PUBLISHED MARCH 4, 1913.

91,521. DIARRHEA REMEDIES, CHILL-TONICS, COUGH-SYRUPS, ANTIMALARIAL TONICS, AND SALVES. THE E. E. SOLOMON MEDICINE CO., Lonoke, Ark.
Filed September 10, 1912. Serial No. 65,667. PUBLISHED MARCH 4, 1913.

91,522. ENGINE-OIL, TURBINE-OIL, TRANSFORMER-OIL, AND GAS-ENGINE OIL. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill.
Filed January 6, 1913. Serial No. 67,755. PUBLISHED MARCH 4, 1913.

91,523. WHEAT-FLOUR. GEORGE G. STUBBLEFIELD, Waco, Tex.
Filed January 16, 1913. Serial No. 67,950. PUBLISHED MARCH 4, 1913.

91,524. MEN'S WOOLEN AND WOOLEN MIXED FIBROUS CLOTH SUITS AND OVERCOATS. M. SWARTTZ & SONS, Philadelphia, Pa.
Filed January 14, 1913. Serial No. 67,924. PUBLISHED MARCH 4, 1913.

91,525. CERTAIN NAMED HARDWARE SUPPLIES. TOWER MANUFACTURING & NOVELTY CO., New York, N. Y.
Filed October 25, 1912. Serial No. 66,498. PUBLISHED MARCH 4, 1913.

91,526. WATCHES AND CLOCKS. TOWER MANUFACTURING & NOVELTY CO., New York, N. Y.
Filed October 25, 1912. Serial No. 66,511. PUBLISHED MARCH 4, 1913.

91,527. TALKING-MACHINES. THE UNITED STATES PHONOGRAPH CO., Cleveland, Ohio, assignor to The U. S. Phonograph Company, Cleveland, Ohio, a Corporation of Ohio.
Filed March 28, 1912. Serial No. 62,474. PUBLISHED MARCH 4, 1913.

91,528. CERTAIN NAMED HARDWARE SUPPLIES. UNITED STATES SPECIALTY COMPANY, New York, N. Y.
Filed January 14, 1913. Serial No. 67,925. PUBLISHED MARCH 11, 1913.

91,529. BRANDING-PAINT. VACUUM OIL COMPANY, Rochester, N. Y.
Filed February 1, 1913. Serial No. 68,274. PUBLISHED MARCH 11, 1913.

91,530. CERTAIN ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES. VICTOR ELECTRIC COMPANY, Chicago, Ill.
Filed August 23, 1912. Serial No. 65,396. PUBLISHED MARCH 4, 1913.

91,531. CIGARS, CIGARETTES, AND CHEWING AND SMOKING TOBACCO. WALDORF-ASTORIA SEGAR COMPANY, LTD., New York, N. Y.
Filed November 12, 1912. Serial No. 66,856. PUBLISHED MARCH 4, 1913.

91,532. METAL GATE-VALVES AND COUPLINGS. WALWORTH MANUFACTURING CO., Boston, Mass.
Filed December 12, 1912. Serial No. 67,371. PUBLISHED MARCH 4, 1913.

91,533. BREAD. HOWARD B. WARD, New York, N. Y.
Filed January 21, 1913. Serial No. 68,047. PUBLISHED MARCH 4, 1913.

91,534. DIARIES AND CALENDARS. SAMUEL WARD COMPANY, Boston, Mass.
Filed November 27, 1911. Serial No. 59,963. PUBLISHED MARCH 11, 1913.

91,535. LEATHER BELTING. THE J. F. & W. H. WARREN Co., Worcester, Mass.
Filed January 27, 1913. Serial No. 68,159. PUBLISHED MARCH 4, 1913.

91,536. GERMICIDAL COMPOUND. FENTON J. WINANS, Asheville, N. C.
Filed November 9, 1912. Serial No. 66,786. PUBLISHED MARCH 4, 1913.

91,537. CERTAIN NAMED FOODS. WINSTON, HARPER, FISHER COMPANY, Minneapolis, Minn.
Filed January 13, 1913. Serial No. 67,912. PUBLISHED MARCH 4, 1913.

91,538. TABLES, CHAIRS, DESKS, AND CABINETS. WOLVERINE MFG. Co., Detroit, Mich.
Filed July 15, 1912. Serial No. 64,739. PUBLISHED MARCH 11, 1913.

91,539. CERTAIN NAMED CHEMICAL PREPARATIONS. ZAUDER BROS., New York, N. Y.
Filed November 21, 1912. Serial No. 67,040. PUBLISHED MARCH 4, 1913.

91,540. TURPENTINE AND TURPENTINE COMPOSITIONS. BENZINWERKE RHENANIA GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Dusseldorf-Reisholz, Germany.
Filed November 21, 1911. Serial No. 59,826. PUBLISHED MARCH 11, 1913.

LABELS

REGISTERED MAY 6, 1913.

16,986.—*Title:* "PLASTICO ACEITE NACIONAL." (For Medicinal Plasters.) CLYDE L. BREWER, Trinidad, Colo. Filed March 5, 1913.

16,987.—*Title:* "AVON SPRINGS." (For Ginger-Ale.) KELLAR INVESTMENT COMPANY, Tampa, Fla. Filed March 20, 1913.

16,988.—*Title:* "MAGIC OIL." (For a Polishing and Lubricating Oil.) THE MAGIC OIL CO., New Orleans, La. Filed February 3, 1913.

16,989.—*Title:* "CLOSE FIT." (For Hair-Nets.) E. MITTELSTAEDT, New York, N. Y. Filed April 17, 1913.

16,990.—*Title:* "BLUE GIANT." (For Overalls.) NEELY, HARWELL & Co., Nashville, Tenn. Filed April 7, 1913.

16,991.—*Title:* "TWIN SWAN." (For Flour.) RIVERSIDE MILLING CO., Clinton, Iowa. Filed April 21, 1913.

16,992.—*Title:* "CARAVAN." (For Toilet-Paper.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed April 8, 1913.

16,993.—*Title:* "BEST EVER." (For Butter.) WINONA ICE CREAM AND BUTTER COMPANY, Winona, Minn. Filed January 27, 1913.

PRINTS

REGISTERED MAY 6, 1913.

3,249.—*Title:* "ARROW COLLARS AND SHIRTS." (For Collars and Shirts.) CLUETT, PEABODY & COMPANY, Troy, N. Y. Filed April 17, 1913.

3,250.—*Title:* "LA SALLE A LIGHT, DEEP POINTED ARROW COLLAR." (For Collars.) CLUETT, PEABODY & COMPANY, Troy, N. Y. Filed April 17, 1913.

3,251.—*Title:* "MARLEY-DEVON, TWO HEIGHTS IN THE MODISH LONDON CUTAWAY FRONTS." (For Collars.) CLUETT, PEABODY & COMPANY, Troy, N. Y. Filed April 17, 1913.

3,252.—*Title:* "'KENMORE,' 'BALTIC,' 'DEVON,' ARROW COLLARS." (For Collars.) CLUETT, PEABODY & COMPANY, Troy, N. Y. Filed April 17, 1913.

3,253.—*Title:* "'COLUMBIA' CUFTURN SHIRT." (For Shirts.) NEW COLUMBIA SHIRT CO., New York, N. Y. Filed March 29, 1913.

3,254.—*Title:* "GARWOOD'S VIOLET BREATH HEARTS." (For Perfumed Candy Tablets.) SCHANDEIN & LIND Co., Philadelphia, Pa. Filed April 18, 1913.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

LUELLEN *v.* CLAUSSEN AND CLAUS.

Decided April 21, 1913.

INTERFERENCE—TESTIMONY—PUBLIC USE—INTERFERENCE NOT SUSPENDED TO CONSIDER QUESTION OF.

After testimony on the question of priority has been filed an interference will not be suspended to determine the question whether such testimony establishes a statutory bar of public use.

ON PETITION.

DESIGN FOR PAPER CUPS.

Mr. Clifford E. Dunn for Luellen.

Mr. Wilbur M. Stone for Claussen and Claus.

MOORE, *Commissioner:*

This is a petition by Claussen and Claus, one of the parties to the interference *Luellen* v. *Claussen and Claus*, that—

> • • • the said interference No. • • • and all the papers in the Patent Office relevant thereto, be transmitted from the Examiner of Interferences, to the proper Primary Examiner; and that the said Primary Examiner be directed to take testimony and other evidence in accordance with the practice of the Patent Office in such cases, for the purpose of ascertaining officially, whether the said application of the said Luellen ought to be rejected because the design for a paper cup which is claimed therein was in public use in the United States more than two years before that application was filed;
>
> also—
>
> for the purpose of ascertaining whether the application of Luellen ought to be rejected upon the ground that said paper cups were on sale in the United States more than two years before the said application was filed.

The record shows that in the above-entitled interference, in which Luellen is the junior party, he has taken and filed both his direct and rebuttal testimony and that the case is now awaiting final hearing, which has been set for June 17, 1913. It further appears that Claussen and Claus are patentees, so that the only question before the Office is whether Luellen is entitled to a patent.

It is not the practice where an interference has proceeded to the stage which has been reached in this case to suspend the interference proceeding for the purpose of instituting a public-use proceeding. Should it be determined in the interference that Luellen did not make the invention until after his opponents, a patent on his application will be refused for this reason, and there will be no occasion for attempting to establish a statutory bar of public use or sale. (*Sarfert* v. *Meyer*, 98 O. G., 793; *Winter* v. *Slick* v. *Volkammer*, 107 O. G., 1659; *Perrault* v. *Pierce*, 108 O. G., 2146; *Doble* v. *Henry*, 118 O. G., 2249; *Burson* v. *Vogel*, 131 O. G., 942; 29 App. D. C., 388; *Brenizer* v. *Robinson*, 166 O. G., 1281; *Kneisly* v. *Kaisling*, 174 O. G., 830.)

It is noted, moreover, that in this case the petition is not accompanied by proof of service upon Luellen nor by an offer to produce the witnesses and to bear the expense of investigation, as required by the practice set forth in *Siebert* v. *Bloomberg*, (124 O. G., 628.)

For a number of years it has been the practice to conduct a public-use proceeding similarly to the manner in which an interference proceeding is carried on—namely, by setting times in which the protestant may take his testimony, in which the applicant may take his testimony, and in which the protestant may take rebuttal testimony. Where a *prima facie* case of the existence of a statutory bar of public use or sale has been made before the taking of any testimony in the interference proceeding, the parties have in a number of cases been permitted to take testimony upon both issues concurrently. The affidavit of counsel in support of the present petition, however, shows that the suggestion of the existence of the statutory bar of public use arose out of testimony taken in the interference proceeding.

The petition is dismissed without prejudice to petitioners' right to renew the same should they desire to do so after the termination of the interference proceeding.

LONG *v.* FLAGG AND LIVERMORE.

Decided April 23, 1913.

INTERFERENCE—MOTION TO DISSOLVE—ALLEGED DELAY IN PRESENTING THE CLAIMS—MOTION NOT TRANSMITTED.

A motion to dissolve on the ground that the opposing party is estopped to make the claims in issue by reason of long delay in making the same *Held* properly refused transmission, since this question can more properly be raised on final hearing than on a motion to dissolve.

APPEAL on motion.

COIN-CONTROLLED APPARATUS.

Messrs. Sutherland & Anderson for Long.

Mr. Rufus B. Fowler and *Mr. Guy Cunningham* for Flagg and Livermore.

BILLINGS, *First Assistant Commissioner:*

This is an appeal by Long from a decision of the Examiner of Interferences refusing to transmit a

motion to dissolve in so far as it is based on the ground that Flagg and Livermore are estopped to make the claims in issue by reason of their long delay in presenting the same.

The motion to dissolve in so far as it alleges that the subject-matter in issue is new matter in the application of Flagg and Livermore, and that therefore they have no right to make the claims, has been properly transmitted. The question raised by the part of the motion which the Examiner of Interferences refused to transmit is one which it is believed will be more properly raised on final hearing than on a motion to dissolve. As appears from the decision of the Court of Appeals of the District of Columbia in *Manly* v. *Williams*, (168 O. G., 1034; 37 App. D. C., 194,) a similar ruling was made by the Commissioner with respect to a similar contention in that case.

It is alleged in the reasons of appeal and in the brief that the Examiner of Interferences in refusing to transmit the motion decided the question on its merits. While the Examiner of Interferences cited certain decisions, it is not believed that his decision justifies the construction placed on it by the appellant. He did not decide the merits of the motion, but merely refused to transmit the same to the Primary Examiner.

The decision of the Examiner of Interferences is affirmed.

GAMMETER *v.* THROPP.

Decided March 21, 1913.

INTERFERENCE—MOTION TO AMEND PRELIMINARY STATEMENT POSTPONED TO FINAL HEARING—DECISION OF THE EXAMINER OF INTERFERENCES REVIEWABLE BY THE EXAMINERS-IN-CHIEF.

Where a motion to amend a preliminary statement was filed after testimony had been taken and the Examiner of Interferences postponed consideration of such motion until final hearing and rendered a decision thereon in connection with his decision on priority, *Held* that the question of amending the preliminary statement should be reviewed by the Examiners-in-Chief in connection with the appeal on the question of priority.

APPEAL on motion.

TIRE-MAKING MACHINE.

Mr. Seward Davis for Gammeter.

Messrs. Brown & Seward for Thropp.

TENNANT, *Assistant Commissioner:*

This is an appeal by Gammeter from a decision of the Examiner of Interferences refusing him permission to amend his preliminary statement.

The record shows that the motion for leave to amend his preliminary statement was filed by Gammeter after the taking of his *prima facie* testimony had been completed. This motion was denied by the Examiner of Interferences, however, without prejudice to the renewal of the same at final hearing. From the decision of the Examiner of Interferences postponing consideration of the motion until final hearing appeal was taken to the Commissioner, who in a decision rendered April 16, 1912, refused to disturb the ruling of the Examiner of Interferences and dismissed the appeal. At final hearing a renewed motion was presented and the Examiner of Interferences, in connection with his decision upon the question of priority, carefully considered the renewed motion for leave to amend and denied the same in view of the insufficiency of the showing and also in view of the fact that he was of the opinion that the testimony did not support the dates sought to be alleged in the amended preliminary statement.

This appeal is taken by Gammeter for the avowed purpose of enabling him to present his full case before the Examiners-in-Chief, it being asserted that unless leave is given to amend his preliminary statement he will be restricted to the dates alleged in his original preliminary statement, and therefore will be unable to avail himself of such testimony as tends to establish such earlier dates as are alleged in the proposed amended statement.

It has been the practice to postpone consideration of motions to amend the preliminary statements until final hearing where the motion to amend is based upon facts brought out in the testimony of the moving party and it is necessary to consider the testimony in connection with the motion in order to reach a proper determination of whether the proposed amendment should be permitted. (*Forsberg* v. *Bradbury*, 177 O. G., 239; *Bauer* v. *Crone*, 111 O. G., 1939.)

It is obvious that if Gammeter's present appeal from the decision of the Examiner of Interferences upon the motion to amend be entertained and the decision of the Examiner of Interferences affirmed the Examiners-in-Chief might be precluded from giving Gammeter the benefit of any date earlier than the date alleged in his original preliminary statement, and would therefore be unable to review and reverse any error which might, in their opinion, exist in the decision of the Examiner of Interferences. The only manner, therefore, in which the question of Gammeter's right to amend could be reviewed would be in connection with a renewed petition for rehearing brought by him at the final hearing of the case. It is manifestly in the interest of justice that the Examiners-in-Chief should review the whole question.

The question of the right to amend the preliminary statement is an interlocutory matter, which the court of appeals has held could not be reviewed by that tribunal in the absence of the abuse by the Commissioner of his discretionary authority. In the case of *Cross* v. *Phillips* (87 O. G., 1399; 14 App. D. C., 228) the court said:

> Appeals do not lie to this court from all or any preliminary decisions in matters of interference though seriously affecting the rights of the parties, but only from those wherein the priority of the claim to the invention has been finally awarded. (*Westinghouse* v. *Duncan*, C. D., 1894, 170; 66 O. G., 1009; 2 App. D. C., 131, 134.)
>
> If, then, the exercise of the discretion of the Commissioner in the matter of allowing and refusing leave to amend preliminary statements be subject to review at all, it must be confined to those cases where the question comes up properly with the appeal from the decision on the merits and where it can be made clearly to appear that this discretion has been abused to the extent of causing a palpable miscarriage of justice.
>
> Notwithstanding the decision of the Examiners-in-Chief, the Commissioner considered the motion for leave to amend as open and determined it upon full consideration of all of the evidence, and one of the appellant's reasons of appeal is founded on its denial by him.

Under these conditions the question must be considered as involved in this appeal and has therefore received full consideration.

It is apparent from this decision that under the conditions of that case, as under the circumstances of the present case, the question of the moving party's right to make the claim was involved in the decision on priority and also in such appeals as were taken therefrom. In the present case one of the assignments of error in Gammeter's appeal from the Examiner of Interferences is that the Examiner of Interferences—

> erred in denying the motion of the party Gammeter for leave to file an amended statement alleging the date of his reduction to practice as prior to April 1, 1907,

and thereby made the same formally a part of the question to be raised before the Examiners-in-Chief.

In view of these facts I am of the opinion that Gammeter's appeal from the decision on the motion to amend the preliminary statement should not be decided at this time, but that this question should be reviewed by the Examiners-in-Chief in connection with their decision upon the appeal now pending before them. The appeal is therefore dismissed, without prejudice to its renewal in connection with such appeal as may be taken from the decision of the Examiners-in-Chief upon the question of priority of invention.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

DUNKLEY *v.* BEEKHUIS.

Decided January 6, 1913.

1. INTERFERENCE—PRIORITY—RIGHT TO MAKE CLAIMS.

In an interference involving an apparatus for removing skins from fruit *Held* that B. is entitled to make claims which include "means for directing peeling water jets upon said fruit."

2. SAME—SAME—SAME—APPLICANT NOT AWARE OF ALL THE FUNCTIONS OF THE DEVICE IMMATERIAL.

"Dunkley was the first to invent and put into practice a rapid and effective machine for peeling peaches. This comprised in the combination the jets of water which he evidently realized aided in the removal of the skins when disintegrated by the alkali solution. That he did not realize the full extent of their agency cannot deprive him of the benefits accruing from their use."

3. SAME—SAME.

D. *Held* entitled to make the claims in issue and to have been the first to conceive and reduce to practice the invention covered thereby, and therefore entitled to an award of priority.

Mr. F. L. Chappell for the appellant.

Mr. L. S. Bacon, Mr. J. H. Milans, and *Mr. T. Walter Fowler* for the appellee.

SHEPARD, *C. J.:*

Appeal from a decision of the Commissioner of Patents in an interference proceeding.

The invention involved is a device for peeling fruit in which jets or sprays of water are employed as a means for performing the peeling operation.

The counts of the issue are four in number:

1. In an apparatus for treating fruit such as peaches, means for removing previously disintegrated skin from the fruit, including a support for the fruit, means for effecting a change of position of the fruit on said support, and means for directing peeling water jets upon said fruit.

2. In an apparatus for removing the previously disintegrated skin from fruit, the combination with means for supporting and advancing the fruit of means for directing a peeling water jet upon said fruit as it advances.

3. In an apparatus for removing the previously disintegrated skin from fruit, the combination with means for supporting and advancing the fruit, of means for directing peeling jets of water at intervals upon said fruit as it advances.

4. In an apparatus for removing the previously disintegrated skin from fruit, the combination with means for supporting and advancing the fruit, of means for directing peeling jets of water at intervals upon said fruit from above and below as it advances.

All the tribunals of the Office found that Dunkley was the first to conceive and reduce to practice, provided he was entitled to make the claims of the issue, and this decision was undoubtedly right.

This presents the single issue of the case, and there is direct conflict in the decisions of the several tribunals passing upon it in succession. A motion to dissolve by Beekhuis on the ground that Dunkley was not entitled to make the claims, was referred, in the first instance, to the Primary Examiner and by him denied. The question was reserved and presented on the hearing. The Examiner of Interferences differed with the Primary Examiner, and awarded priority to Beekhuis. On appeal to the Examiners-in-Chief this decision was reversed; one member dissenting. On appeal to the Commissioner that decision was reversed, and priority awarded to Beekhuis.

The decision turned on the effect of the words "peeling jets of water," which are found in each claim. These words were first used in the claims of Beekhuis to whom patent issued pending the application of Dunkley, and his claims were copied by the latter for the purpose of procuring the declaration of interference.

The common use of the peeling-machine is the removal of the skin from peaches. Before introduction into either machine the fruit passes through a receptacle where it is subjected to a bath in a hot solution of lye which disintegrates the skin and makes it readily removable. In Dunkley's device, the fruit from the bath is delivered on to an endless belt conveyer and passes between rotary brushes for about six feet. The brushes are in sections of fiber, and sponge. These revolve apparently, at different rates and rotate the peach as it is carried along by the conveyer-brush. Three perforated pipes are arranged along the passage—one at each side and one above—so that the jets or sprays of the nozzle perforations are directed against the line of passing fruit, striking the fruit tangentially and tending to impart a rotary movement to each as it advances in single file to the point of exit.

The Beekhuis machine has a large box-screen of wire mesh arranged so as to shake the peaches as they pass over it; the peaches having been submitted to the skin-disintegrating bath and cut in halves. Above this shaking-screen is arranged a water-pipe at a distance of twelve or fifteen inches with transverse slits at intervals, which deliver a broad fan spray or jet of water on to the fruit passing

over the screen. Another pipe arranged below the screen delivers a similar spray or jet upon the under side. The fruit is delivered by hand through a feed-spout and falls in a mass upon the screen. There it is subjected to the water-jets as it passes. The jets assist, and doubtless, chiefly remove the disintegrated skin. They also cool the fruit after its subjection to the hot lye solution, wash it and prepare it for canning. The effect of the shaking in the box-screen is described as follows:

> This agitation, shaking or dancing to which the fruit is subjected has the triple effect of, first, advancing the fruit to its discharge from the lower end of the box, second, of occasioning sufficient friction, both between the individual specimens themselves and between them and the screen bottom and sides of the box to assist in removing the skin, and third of presenting every portion of the fruit, at some time throughout the course of its travel, to the action of the water jets or sprays from the pipes 15 and 19. As the fruit travels through the box under the constant agitation or shaking described the water jets or sprays from below and above serve to fully remove the particles of skin.

The Commissioner was not satisfied with the evidence of Dunkley relating to the operation of his machine—which peeled peaches rapidly and satisfactorily—that the jets of water had anything more than a washing operation, and was of the opinion that this was all that Dunkley contemplated. It would be practically impossible for any witness to testify to the actual fact that the skins were chiefly removed by the water-jets in Dunkley's machine for the reason of the rapid passage of the fruit and its concealment. Without pausing to discuss the criticism by each party of the jet or spray of the other, we think it apparent that the jet of Dunkley would have the effect to remove the skins as well as to cool and wash the fruit for the canning process. The skin of the peach having been disintegrated by the action of the hot solution of lye, that is to say cut or broken and loosened from the pulp, was, to say the least, as easily removed by one jet as the other. But let it be conceded that Dunkley was not fully aware of the effective action of the jets of water and relied chiefly upon the action of the brushes to remove the skins; and on the other hand, that Beekhuis relied chiefly on the water-jets, yet the latter, as we have seen, relied upon the friction of the peaches with each other and the screen to assist in removing the skins, while the water-jets had the additional function of cooling and washing the fruit. It is to be observed that none of the counts define the water-jets as constituting the sole peeling means. The counts of the issue are satisfied by a construction in which peeling water-jets enter into the operation of removing the skins whether they be exclusively employed to remove the skins or not. And in neither machine as described and constructed are the water-jets shown to be the exclusive means of peeling. Since stress is laid upon the words "peeling jets" it must be noted that no such words occur either in the specifications, or the original claims of Beekhuis, whose application was filed May 25, 1904. They first occur in amended claims filed October 21, 1904, and were thereafter embodied in all of the allowed claims. As shown by the described and exhibited structures, both parties first subject the fruit to the hot lye solution to effect the disintegration of the skin. Beekhuis agitates the fruit in his box-screen so as to partially peel it. Dunkley passes the fruit between his brushes to assist in peeling. Beekhuis subjects the fruit to the water jets or spray to "fully remove particles of skin," and for the purpose of "assisting in turning the fruit." Dunkley subjects each piece of fruit to jets of water from three pipes which strike the fruit tangentially with sufficient power to turn it. These, with the brushes, remove the skins, and, being extended beyond the brushes, remove any remaining particles of skin. This is described as a "water brushing action." In both, the water serves to cool, wash, and rinse the fruit and make it ready for canning.

We agree with the Primary Examiner and the majority of the Examiners-in-Chief that there is a great similarity in each application in so far as showing the functions performed by the water-jets in the peeling operation; and that both parties are equally entitled to make the claims in interference.

A sufficient foundation for the claims is in Dunkley's description to the effect that the peaches (after preparation) are delivered in single-file line to a brushing and washing mechanism which preferably comprises—

> a group of three long perforated pipes for spraying water upon the moving line of peaches and subjecting them to *water brushing action*, an endless belt brush arranged between the two lowermost perforated pipes and operating to brush the peaches as they are rotated and to convey them along, and a pair of opposite rotating cylinder brushes operating both to rotate and brush the peaches, and having hollow perforated pipe cores for spraying the rotary brushes with water, and rotary cylindrical rubber sponge brushes, also having hollow perforated pipe cores for supplying the same with water; whereby the peaches may be very rapidly and cheaply and perfectly peeled without waste or injury.

Again he describes the delivery of the line of peaches—

> between water pipes and brushes of the washing and brushing mechanism by which the softened and loosened and shriveled skins of the peaches are removed, and the peaches thoroughly washed and freed from all taint or trace of the skin softening or loosening liquid. This washing or brushing mechanism comprises a group of, preferably, three water pipes G, having a series of perforations *g*, arranged to strike the peaches tangentially as they are conveyed along between the pipes.

And again, the description says that the perforated water-pipes extend beyond the rotary brushes—

> so that the water spray may entirely free the surface of the peaches from any particle of skin or peel.

Dunkley was the first to invent and put into practice a rapid and effective machine for peeling peaches. This comprised in the combination the jets of water which he evidently realized aided in the removal of the skins when disintegrated by the alkali solution. That he did not realize the full extent of their agency cannot deprive him of the benefits accruing from their use.

His specifications and construction afforded sufficient foundation for the claims; and as he was the first to conceive the idea and reduce it to successful practice, he is entitled to the award of priority. The decision will, therefore, be reversed; and this decision will be certified to the Commissioner of Patents.

Reversed.

Court of Appeals of the District of Columbia.

THE JOSEPH LAY COMPANY *v.* INDIANAPOLIS BRUSH AND BROOM MANUFACTURING COMPANY.

Decided February 3, 1913.

1. TRADE-MARKS—ACQUIESCENCE IN RULING BY THE OFFICE—APPLICANT BOUND THEREBY.

   Where an application for registration of a trade-mark was refused on the ground that the mark was not a technical trade-mark and applicant acquiesced in this decision and filed a new declaration alleging exclusive use of the mark for ten years next preceding the passage of the Trade-Mark Act, *Held* that applicant is estopped to urge thereafter that the registration was other than under the ten-year clause.

2. SAME—CANCELATION—USE NOT EXCLUSIVE DURING THE TEN-YEAR PERIOD.

   An application for the cancelation of a registration, effected under the ten-year clause of the act, of a mark for brooms consisting merely of a red band at the top of the broom *Held* properly sustained where the evidence shows that another used this identical mark during the ten-year period.

Mr. John E. Cross for the appellant.

Mr. V. H. Lockwood for the appellee.

ROBB, *J.*:

This is an appeal from a decision of the Commissioner of Patents sustaining a petition of the appellee for the cancelation of a trade-mark registration by the appellant.

The appellant corporation has long been a manufacturer of brooms, as has the appellee. In March, 1910, it filed an application in the Patent Office seeking the registration of a red band applied to the extreme upper end of the body portion of a broom as a technical trade-mark. This application was promptly denied upon the ground that it consisted merely of a red band and was therefore not registerable as a technical trade-mark. To this action appellant responded insisting that it was—

> entitled to the registration of the red band shown in the drawings accompanying this application as a technical trademark.

The Patent Office, however, adhered to its former decision, the opinion concluding as follows:

> It is believed that the mark disclosed is not registerable as a technical trademark and registration is accordingly again refused.

Appellant acquiesced in this decision, *canceled its declaration*, and filed a new declaration alleging exclusive use of the mark for ten years next preceding the passage of the act of February 20, 1905. Upon this amended petition favorable action was taken by the Patent Office, whereupon the petition of appellee for cancelation was filed.

Appellant now concedes what it must have known when it filed its amended application, namely, that appellee was using this identical mark during said ten-year period, such use commencing as early as 1900, when a patent-infringement suit was prosecuted by the appellant against the appellee which resulted favorably to the latter company. The fact of such use of the mark during the ten-year period by the appellee of course disentitled appellant to registration under the ten-year clause. Appellant, however, advances the proposition that, notwithstanding its original application was denied by the Patent Office upon the ground that the mark is not technical, in which denial it acquiesced, it may now treat the registration subsequently obtained under an averment of ten years' exclusive use as that of a technical mark. This proposition is manifestly unsound.

While, as we have many times suggested, the purpose and effect of the Trade-Mark Act is not finally to determine the right of property in the trade-mark registered but rather to furnish *prima facie* proof of such right, the functions of the Patent Office tribunals in passing upon applications are not merely ministerial but quasi-judicial. (*Bronson* v. *Duell*, 17 App. D. C., 471, 473.) It is settled that the doctrine of *res adjudicata* applies to proceedings in the Patent Office in the same manner as in the courts. (*Bluthenthal & Bickart* v. *Bigbie Bros. & Co.*, 33 App. D. C., 209; *Blackford* v. *Wilder*, 28 App. D. C., 535; *Newcomb Motor Co.* v. *Moore*, 30 App. D. C., 464.) In this case appellant is not proceeding against the appellee as an infringer of its mark but is seeking to sustain a registration obtained in the Patent Office, and this proceeding involves that registration. In *Durham* v. *Seymour*, (6 App. D. C., 78, 89, 90,) which was a suit in equity against the Commissioner of Patents by a party whose application for patent had been rejected by the Commissioner, to compel the issuance of the patent, the petitioner while prosecuting his application in the Patent Office acquisced in objections of the Examiners and repeatedly amended his claims, so that when final action was had in the Patent Office three claims only remained. It was his contention in the equity proceeding that he was not concluded by his action in the Patent Office. The court, however, rejected this contention, saying:

> He had his election to stand by his specifications and claims, and to demand a decision thereon as presented, with the right to appeal therefrom, if adverse, to the court, directly as provided in section 4911, and indirectly through bill in equity under section 4915; or to amend his application, alter his specifications, and abandon any part or parts of his claims based thereon. * * * Having elected to amend again and again and finally to stand upon the three claims which were rejected, we think the abandonment of all else is as complete as if he had succeeded and received his patent thereon.

By analogy, the reasoning in that case is applicable to the present. Here the appellant sought the registration of a red band as a technical trade-mark. This application being twice refused, it was abandoned and an amended application based upon the ten-year clause was filed, and that application is the one before us. Clearly appellant is now estopped to urge that the registration was other than under the ten-year clause. Had its original application contained averments sufficient to warrant registration either as a technical trade-mark or under the ten-year clause, and the decision of the Commissioner had been general, we would have considered the registration in a light most favorable to appellant. (*McIlhenny's Son* v. *The New Iberia Co.*, 30 App. D. C., 337.) But here the Commissioner has left no room for conjecture, nor has the appellant. It is unnecessary, therefore, to determine whether appellant's mark may be sustained as a technical trade-mark, since that question is not before us.

The decision is affirmed.

Affirmed.

Court of Appeals of the District of Columbia.

HEWLETT *v.* STEINBERGER.

Decided April 7, 1913.

1. INTERFERENCE—TESTIMONY—PRESUMPTIONS—FAILURE TO CALL WITNESS — CONFLICTING AFFIDAVITS IN SOLE AND JOINT APPLICATIONS.

Where H. and B. filed an application for the invention in issue and subsequently, without abandoning the joint application, H. filed a sole application for this invention and S. has established a disclosure of the invention to B., *Held* that in the absence of testimony by H. the presumption is that the invention was disclosed to H. by B. and that this presumption is not overcome by H.'s oath in the sole application.

2. SAME—PRIORITY.

Evidence reviewed and *Held* to establish that H. was not an original inventor, but derived his knowledge of the invention in issue from S. through a third party and that priority was properly awarded to S. (*For decision of the Commissioner see 183 O. G., 1398.*)

Mr. A. G. Davis, *Mr. J. F. Bartlett*, and *Mr. Melville Church* for the appellant.

Mr. Chas. H. Wilson for the appellee.

ROBB, *J.:*

Appeal from an award of priority in a Patent Office interference proceeding.

The invention is for disk strain-insulators for electric conductors designed mechanically to secure and electrically insulate two connecting parts. The object sought to be accomplished was to prevent current creepage over the surface of the insulator in wet weather as well as in dry. To accomplish this result irregularities in the surface of the sides of the disk are provided which are so arranged as to increase its surface without increasing its diameter, and also to prevent the formation of a film of water on both sides of the insulator at the same time. In the claims these irregularities are called "flanges," "annular collars," and "collars." The claims read as follows:

1. A disk strain insulator, comprising suspension members, a mass of insulating material partially enveloping the same, said mass being provided centrally with a disk integral therewith and lying substantially in the general equatorial plane of said mass, and further provided with flanges extending in opposite directions from said equatorial plane.

2. A disk strain insulator, comprising suspension members, a mass of insulating material partially enveloping the same and having a disk portion, said disk portion being provided with annular collars extending in opposite directions and in the general direction of said suspension members.

3. A disk strain insulator, comprising strain members, a body of insulating material partially enveloping the same and having a comparatively large disk, said disk being provided with collars integral therewith and extending in opposite directions.

Steinberger is the president and general manager of the Electrose Mfg. Company of Brooklyn, N. Y., and a prolific inventor in the art to which the claims of the issue relate. In 1902 he commenced sending to the Niagara Falls Power Company insulating material, known in the art as electrose, and various devices made therefrom for the purpose of testing, so as to demonstrate dielectric qualities, strength, etc. At that time and for several years thereafter an electrical engineer by the name of H. W. Buck was connected with said Power Company. The relations between Steinberger's company and the Power Company continued without interruption and, on September 28, 1905, Buck, for the Power Company, wrote Steinberger for an experimental insulator—

to be made up of a disk of electrose with an electrose hub welded to the center of the disk on either side.

A sketch accompanied this letter. On the next day Steinberger replied that he would be glad to construct such an insulator at the expense of his company, advising Buck that they—

could construct the die so as to mold the disk and hubs integrally, and also mold the two eye bolts into the hubs.

He further advised Buck that the disk could be made fourteen inches in diameter, instead of twelve as suggested by Buck. Buck, in replying to this letter, did not refer to the suggestion about the integral relation between the disk and the hub, which, it may be here noted, is a feature of the claims in issue. Buck, however, did request Steinberger to send him "a rough sketch showing exact arrangement of the insulator" to be made. Thereupon, on October 7, 1905, Steinberger wrote Buck in considerable detail concerning the insulator to be made and inclosed sketches as requested by Buck. These sketches showed a disk strain-insulator having oppositely extending protective parts in the form of corrugations upon both sides of the disk. They also showed integrally-formed, centrally-located, hub portions and molded-in strain members. Of course, these sketches were very much smaller than the proposed insulator. In his letter Steinberger said:

On the inclosed sketch marked No. 2 please note that we have indicated the surface of the disk as being corrugated. Our object for corrugating the planes of the disk is to provide additional surface, without increasing the diameter of the disk, thereby providing for surface leakage, and enabling you to impress greater voltage than you could on a disk with plane surfaces.

He also directed attention to—

our new suggestions regarding the modifications of the surface of the disk, the tapering form of the disk, also a modified form of the hub portion of the disk.

On October 11th Buck replied, and in alluding to the feature of the corrugations said:

In regard to the corrugation on the disk which you have shown in one of your sketches, *I believe this might be of advantage under certain conditions*, but for the purposes of my test I should prefer to have a smooth surface.

Nor did he adopt Steinberger's suggestions as to the integrally-formed, centrally-located hub portion, but did adopt the suggested idea of the tapering form of disk.

In June, 1907, Steinberger, in reading a copy of the *American Institute of Electrical Engineers*, noticed an article therein describing a system of high-tension insulation which, according to the article, had been developed by Buck and Hewlett, the appellant herein. Shortly thereafter Steinberger saw Buck and, in a friendly way, criticized the article and claimed the invention himself. Buck did not question Steinberger's claim. Prior to this, on February 15, 1906, and of course without the knowledge of Steinberger, Hewlett and Buck had filed in the Patent Office an application for this very invention, which application, before filing, was assigned to the General Electric Company. On April 20, 1907, the present Hewlett application was filed, and also assigned to the General Electric Company. While this application was for the same invention, no reference was made therein to the prior joint application, and both applications were for some

time thereafter prosecuted by the General Electric Company. The joint application became abandoned for failure of prosecution on November 16, 1909. No testimony whatever has been taken in behalf of Hewlett. Steinberger has taken the stand and also introduced corroborative evidence.

The application of Steinberger was filed January 20, 1908, and each of the tribunals of the Patent Office found lack of diligence on his part, and each disposed of the case upon the question of originality, that is, whether Steinberger's said letter of October 7, 1905, with its inclosed sketches, amounted to a disclosure of the invention to Buck. The Examiner of Interferences stated that plane insulators at that time were old, but that the use of corrugations upon the disk type of insulators, as suggested by Steinberger, was new. He concluded, however, that the "flanges" or "collars" of the insulator covered by the issue are more than corrugations, and hence that there was no disclosure to Buck. In no other respect did the Examiner criticize the Steinberger disclosure. It is apparent, therefore, that the criticism with reference to the character of the corrugations was one solely of degree. The Examiners-in-Chief directed attention to the contention of Hewlett that, even assuming a disclosure by Steinberger to Buck, the evidence was insufficient to support the conclusion that Hewlett derived the invention from Buck. Answering this contention they well said:

It appears, however, that upon Feb. 15, 1906, prior to the filing of Hewlett's application, but after Steinberger's disclosure to Buck, Hewlett and Buck filed an application as joint inventors, disclosing the invention in issue. This circumstance, taken in connection with the fact that Hewlett has not taken the stand to assert that he did not derive from Buck, makes Hewlett's position an impossible one, so far as this point is concerned.

They then suggested that each of the counts of the issue would be fully satisfied in the alleged disclosure by Steinberger to Buck—

if the word "flanges," in count 1, and the word "collars," in counts 2 and 3, should be construed as of sufficient breadth to include the projections which are formed in the exhibit construction by reason of the fact that the surfaces of the disk are corrugated.

They then found that each count defines—

a supposed combination in an insulating disk of the oppositely extending flanges or collars and the central mass of insulating material partially enveloping the supports.

After discussing two possible interpretations of the claims, under one of which Steinberger could be said to have made a full disclosure to Buck, they said:

We have found it difficult to fasten upon one rather than the other of the two interpretations urged upon us by the parties.

They resolved the doubt, however, in favor of Hewlett and therefore affirmed the decision of the Examiner of Interferences. The Commissioner directed attention to the fact that the disk to which Steinberger referred in his correspondence with Buck was to be fourteen inches in diameter, and hence that the relative measurements of the device shown in the sketches sent Buck were to be proportionately increased; in other words, that a disk fourteen inches in diameter, with the corrugations suggested in Steinberger's letter and sketches, would present quite a different appearance from a disk one-fifth that size. The Commissioner then demonstrated very clearly, we think, that Steinberger, at the time of this disclosure had in mind the idea of so constructing his device that it would divert moisture, and that the device described in the letter to Buck and shown in said sketches was capable of accomplishing this result. The Commissioner tersely concluded:

The invention of this issue, as in other cases, is a thing and not words, and in the light of the record the refinements of language should not control; and the words "corrugations," "flanges" and "collars" as used in this case are held to be synonymous.

We fully agree with the finding of the Commissioner that the corrugations of Steinberger, being properly positioned, perform and were intended to perform substantially the same function of the so-called "flanges" and "collars" of the issue. The terms are therefore synonymous, as used in this record. This conclusion recognizes the rule that claims should be given the broadest interpretation consistent with the terms. (*Lindmark* v. *Hodgkinson*, 31 App. D. C., 612; *Viele* v. *Cummings*, 30 App. D. C., 455; *Miel* v. *Young*, 29 App. D. C., 481.)

It is singular, indeed, that intelligent men like Buck and Hewlett could not determine whether they were joint inventors or whether Hewlett was the sole inventor, and it is also significant, in view of the disclosure to Buck, that the original joint application should have been abandoned in favor of the later Hewlett application. It is still more significant that Hewlett, whose joint application with Buck was filed, as we have seen, a few months after Steinberger's disclosure to Buck, (which application was not finally abandoned until about three and one-half years later,) was not called as a witness. On the face of the record, therefore, Buck and Hewlett have sworn that they were joint inventors of the subject-matter of the issue and Hewlett has sworn that he was the sole inventor of such subject-matter. These apparently inconsistent positions are unexplained. Had the joint application been involved in this interference, a disclosure to one of the joint applicants would have constituted disclosure to the other. Since neither Hewlett nor Buck has been called to testify that the disclosure of Steinberger was not communicated to Hewlett, the presumption is that it was. Certainly Hewlett's oath in his own application does not overcome that presumption, for in addition to the fact that he had theretofore sworn that he and Buck were joint inventors, the joint application was not abandoned until the exigencies of the case apparently demanded it.

The decision is affirmed.

Affirmed.

ADJUDICATED PATENTS.

(U. S. C. C. A.) The Collett and Rennie patent, No. 949,293, for a machine for stuffing horse-collars. *Held* not anticipated, valid, and infringed. *J. D. Randall Co.* v. *Foglesong Mach. Co.*, 203 Fed. Rep., 41.

(U. S. D. C.) The Knight patent, No. 979,965, for a mausoleum having improved means of ventilation and drainage, is void for lack of invention in view of the prior art. *Knight* v. *Rieger*, 203 Fed. Rep., 49.

Ratification of the Convention for the Protection of Industrial Property.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 28, 1913.

Attention is invited to the following communication from the Secretary of State with reference to the ratifications of the Convention adopted and signed at the Conference of Washington of 1911 and deposited at this capital under the provisions of the Treaty of Paris of 1883.

EDWARD B. MOORE,
Commissioner.

[Copy.]

DEPARTMENT OF STATE,
Washington, April 21, 1913.

The Honorable the Secretary of the Interior.

SIR: I have the honor to inform you that in execution of article 18 of the Convention for the Protection of Industrial Property signed at Washington on June 2, 1911, there were deposited with the Department of State on April 1, 1913, the ratifications of the said Convention by the following named governments: Germany, Austria and Hungary, Dominican Republic, Spain, United States, France, Great Britain, Italy, Japan, Mexico, Norway, Netherlands, Portugal, Switzerland, and Tunis.

In making the deposit for Austria and for Hungary the Austro-Hungarian Chargé d'Affaires officially declared that the Convention was effective with respect to Bosnia and Herzegovina, and a declaration was made at the same time by the British Ambassador that the ratification of His Britannic Majesty related only to the United Kingdom of Great Britain and Ireland.

I have the honor to be, sir, your obedient servant,

W. J. BRYAN.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 30, 1913.

Leo Rex Canning & Preserving Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frank Herfort, of Baraboo, Wis., for registration of a trade-mark, the trade-mark registration of Diehm-Fansler Grocer Co., 402–404 Missouri avenue, East St. Louis, Ill., and trade-mark registered August 6, 1907, No. 64,425, to the Leo Rex Canning & Preserving Co., of the borough of Manhattan, 381 Fourth avenue, New York, N. Y., and a notice of such declaration sent by registered mail to the said Leo Rex Canning & Preserving Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Leo Rex Canning & Preserving Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 14, 1913.

Simon Greenebaum, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of James G. Moran, 524 Walton avenue, Philadelphia, Pa., for registration of a trade-mark, trade-mark registered May 6, 1890, No. 17,852, to Simon Greenebaum, of Chicago, Ill., and trade-mark registration of Charles F. Miller, of Lancaster Pa., and a notice of such declaration sent by registered mail to said Simon Greenebaum at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Simon Greenebaum, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 11, 1913.

Fabian Sachs Kaliske and Rose, McAlpin & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of J. G. Hoffmann & Sons Company, of Wheeling, W. Va., for registration of a trade-mark, trade-mark registered May 6, 1890, No. 17,875, to Fabian Sachs Kaliske, 180 William street, New York, N. Y., and trade-mark registered September 15, 1885, No. 12,582, to Rose, McAlpin & Co., of New York, N. Y., and the notices of such declaration sent by registered mail to Fabian Sachs Kaliske and Rose, McAlpin & Co. at the said addresses having been returned by the post-office undeliverable, notice is hereby given that unless said Fabian Sachs Kaliske and Rose, McAlpin & Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 11, 1913.

Ellis Brothers, their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Henry von Glahn & Son, of Washington and Park avenues, Brooklyn, N. Y., for registration of a trade-mark and trade-mark No. 12,884, registered December 29, 1885, to Ellis Brothers, 21 Merchants Row, Boston, Mass., and the Office having been unable to reach said Ellis Brothers, notice is hereby given that unless said Ellis Brothers, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 11, 1913.

Julien du Parc, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Henry von Glahn & Son, of Washington and Park avenues, Brooklyn, N. Y., for registration of a trade-mark and trade-mark registered November 25, 1902, No. 39,335, to Julien du Parc, of Sidney, N. Y., and the Office having been unable to reach said Julien du Parc, notice is hereby given that unless said Julien du Parc, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 11, 1913.

Max Piowaty, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Henry von Glahn & Son, of Washington and Park avenues, Brooklyn, N. Y., for registration of a trade-mark and trade-marks Nos. 22,085 and 21,822, registered November 29, 1892, and October 4, 1892, respectively, to Max Piowaty, of St. Paul, Minn.; Hutchinson, Minn., and Glencoe, Minn., and the Office having been unable to reach said Max Piowaty, notice is hereby given that unless Max Piowaty, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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ISSUE OF MAY 13, 1913.

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Trade-Marks	87—No.	91,541 to No.	91,627, inclusive.
Labels	33—No.	16,994 to No.	17,026, inclusive.
Prints	7—No.	3,255 to No.	3,261, inclusive.
Reissues	2—No.	13,561 to No.	13,562, inclusive.
Total	913		

TO RESIDENTS OF THE UNITED STATES.

States.	Patents and Designs.	Trade-Marks, Labels, and Prints.	States.	Patents and Designs.	Trade-Marks, Labels, and Prints.
Alabama	8	1	New York	138	40
Arizona	1	.....	North Carolina	6	1
Arkansas	1	.....	North Dakota	3	.....
California	25	4	Ohio	49	5
Colorado	8	1	Oklahoma	7	.....
Connecticut	16	1	Oregon	9	3
Delaware	.....	.....	Pennsylvania	67	8
Florida	4	.....	Rhode Island	5	.....
Georgia	5	1	South Carolina	.....	.....
Idaho	1	.....	South Dakota	6	.....
Illinois	70	17	Tennessee	3	1
Indiana	19	4	Texas	11	.....
Iowa	10	.....	Utah	4	.....
Kansas	11	.....	Vermont	.....	.....
Kentucky	3	3	Virginia	9	4
Louisiana	1	.....	Washington	11	.....
Maine	3	1	West Virginia	3	.....
Maryland	6	4	Wisconsin	14	1
Massachusetts	28	2	Wyoming	1	.....
Michigan	16	2			
Minnesota	14	3	Alaska, District of	.....	.....
Mississippi	1	.....	Canal Zone	.....	.....
Missouri	28	1	District of Columbia	6	2
Montana	3	.....	Hawaii Territory	1	.....
Nebraska	7	1	Porto Rico	.....	.....
Nevada	1	.....	U. S. Army	.....	.....
New Hampshire	2	.....			
New Jersey	23	7	Total to residents of the United States	668	118
New Mexico	.....	.....			

TO RESIDENTS OF FOREIGN COUNTRIES.

Countries.	Patents and Designs.	Trade-Marks.	Countries.	Patents and Designs.	Trade-Marks.
Argentina	.....	.....	Netherlands	.....	.....
Austria-Hungary	3	.....	Newfoundland	.....	.....
Belgium	2	.....	New South Wales	.....	.....
Bermuda	.....	.....	New Zealand	.....	1
Brazil	.....	.....	Norway	2	.....
British West Indies	.....	.....	Queensland	.....	.....
Canada	8	.....	Roumania	.....	.....
Cape Colony	.....	.....	Russia	1	.....
China	.....	.....	Scotland	1	.....
Costa Rica	.....	.....	South Australia	.....	.....
Cuba	.....	.....	Spanish Honduras	.....	.....
Denmark	.....	.....	Sweden	4	.....
Egypt	.....	.....	Switzerland	1	.....
England	31	3	Transvaal, South Africa	1	.....
Fiji Islands	.....	.....	Victoria	1	.....
France	10	1	Western Australia	.....	.....
Germany	48	3			
Ireland	.....	.....	Total to residents of foreign countries	116	9
Italy	2	1			
Japan	.....	.....			
Mexico	1	.....			

Photographic Copies of Drawings.

The Patent Office will furnish photographic prints of any unbound drawing, foreign or domestic, which may be in its possession. These prints will be made only in two sizes, 8 by 12½ at 15 cents per sheet and 10 by 15 at 25 cents per sheet.

This Office has no printed copies of foreign patents for sale.

In ordering photographic copies of drawings of foreign patents cited as references, applicants must state the date and number thereof, the name of the patentee, the country in which each patent was granted, and the class and subclass in which the patent is classified. If the class and subclass were not given in the Office letter citing the patent, the applicant must state the serial number of the application in which it was cited, the number of the action therein, the name of the inventor, and the title of the invention.

The photoprints will be furnished more expeditiously if the number of the division is also given in which they may be found. A separate order should be made for each case, for which the Office will furnish blanks gratuitously upon request.

BOUND VOLUMES CANNOT BE USED FOR MAKING PRINTS.

Failure to give the fullest data whereby the mounted drawing may be found will cause unnecessary delay and correspondence.

Applicants and attorneys are strongly urged to file a set of prints, small size, 8 by 12½ inches, or order them to be made by the Office, 15 cents per sheet, at the time of filing an application. Such procedure will save delay later, if correction of the drawing is desired or required.

Trade-Marks.

Extra copies of the trade-mark portion of the GAZETTE, which will be sold separately, may be obtained single or in quantities for five cents each. Coupons will be taken in payment therefor.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business May 10, 1913.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
313	1. Fences; Harrows and Diggers; Plows; Seeders and Planters; Trees, Plants, and Flowers.	Mar. 5	Mar. 10	764
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Pneumatic Despatch; Pneumatics; Presses; Store-Service; Tobacco.	Jan. 17	Mar. 1	675
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Metal-Founding: Metallurgy; Plastic Metal Working.	Apr. 11	Apr. 28	249
232	4. Bridges; Conveyers; Excavating; Hoisting; Hydraulic Engineering; Loading and Unloading; Metallic Building Structures; Traversing Hoists.	Feb. 15	Mar. 28	673
167	5. Bookbinding; Harvesters; Jewelry; Music.	Feb. 27	Feb. 24	612
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Medicines; Preserving; Sugar and Salt; Substance Preparation.	Feb. 4	Mar. 10	741
312	7. Educational Appliances; Clutches; Games and Toys; Mechanical Motors; Optics; Velocipedes.	Jan. 3	Feb. 10	986
131	8. Beds; Chairs; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Jan. 20	Apr. 10	586
142	9. Air and Gas Pumps; Fluid-Pressure Regulators; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Wind-Wheels.	Dec. 27	Apr. 5	578
235	10. Carriages and Wagons.....	Dec. 23	Mar. 1	1216
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Hutton, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whips and Whip Apparatus.	Mar. 21	Mar. 20	374
322	12. Elevators; Journal-Boxes, Pulleys, and Shafting; Lubrication; Machine Elements.	Feb. 3	Mar. 3	1129
329	13. Arms, Projectiles, and Explosive Charges, Making; Bolt, Nail, Nut, Rivet, and Screw Making; Boring and Drilling; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 11	Feb. 24	756
307	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Metal-Ornamenting; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Jan. 20	Mar. 1	522
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Liquid Coating Compositions; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastic Compositions; Plastics.	Dec. 9	Mar. 5	1323
100	16. Radiant Energy; Telegraphy; Telephony.	Jan. 15	Feb. 15	555
303	17. Matrix-Making; Paper Manufactures; Printing; Type-Bar Making.	Mar. 24	Apr. 7	296
327	18. Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 10	Mar. 27	249
236	19. Dampers, Automatic; Furnaces; Heat-Distributing Systems; Stoves and Furnaces.	Feb. 6	Mar. 25	539
179	20. Artificial Limbs; Builders' Hardware; Dentistry; Locks and Latches; Safes; Undertaking.	Mar. 12	Apr. 9	202

Applications Under Examination—Continued.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
112	21. Brakes and Gins; Carding; Cloth-Finishing; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 11	Feb. 18	557
249	22. Aeronautics; Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Firearms; Marine Propulsion; Ordnance; Ships.	Feb. 1	Apr. 9	376
379	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Time-Controlling Mechanism.	Feb. 3	Mar. 15	512
144	24. Apparel; Apparel Apparatus; Sewing-Machines.	Feb. 27	Apr. 3	620
315	25. Butchering; Mills; Threshing; Vegetable Cutters and Crushers.	Apr. 7	Apr. 14	223
106	26. Electricity, Generation; Motive Power.	Nov. 27	Jan. 23	642
372	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Mar. 5	Mar. 20	529
65	28. Internal-Combustion Engines.	Jan. 2	Jan. 2	1180
147	29. Coopering; Fire-Escapes; Ladders; Roofs; Wheelwright-Machines: Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking-Tools.	Nov. 16	Mar. 22	844
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Feb. 10	Apr. 14	470
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue.	Feb. 1	Jan. 28	557
278	32. Carbonating Beverages; Dispensing Beverages; Dispensing-Cans; Ornamentation; Packaging Liquids; Refrigeration.	Feb. 1	Apr. 3	400
71	33. Cutlery; Domestic Cooking Vessels; Masonry and Concrete Structures; Paving; Tents, Canopies, Umbrellas, and Canes.	Dec. 27	Mar. 14	388
304	34. Railways; Railway-Brakes; Railway Rails and Joints; Railway Rolling-Stock; Railway Ties and Fasteners.	Feb. 18	Feb. 17	485
244	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Garment-Supporters; Toilet.	Feb. 19	Apr. 10	802
264	36. Drafting; Driers; Engraving; Measuring Instruments; Photography.	Mar. 13	Mar. 12	908
107	37. Electric Lamps; Electricity, Conductors; Electricity, Conduits; Electricity, General Applications.	Nov. 8	Jan. 22	901
378	38. Animal Husbandry; Artesian and Oil Wells; Fishing and Trapping; Stationery; Stone-Working.	Jan. 6	Feb. 24	834
321	39. Water Distribution.....	Feb. 26	Apr. 11	473
280	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Feb. 3	Mar. 7	1059
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Mar. 17	Mar. 27	598
279	42. Electric Railways; Electric Signaling; Railway Signaling; Signals.	Jan. 23	Feb. 6	765
382	43. Baths and Closets; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Mar. 17	Apr. 8	317

Oldest new case, Nov. 8; oldest amended, Jan. 2.
Total number of applications awaiting action..... 27,465

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	Designs.....	Apr. 1	Apr. 5	265
	Labels and Prints.....	May 1	Apr. 24	60

PATENTS

GRANTED MAY 13, 1913.

1,061,255. METHOD OF TREATING ELECTROMETALLURGICAL PRODUCTS. THOMAS B. ALLEN and FRANK J. TONE, Niagara Falls, N. Y., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Aug. 12, 1910. Serial No. 576,807. (Cl. 252.)

1. The process of removing the carbids and silicids which exist as impurities in electrometallurgical products used for abrasive or refractory purposes, which consists in treating said products with sulfur.

2. The process of removing the carbids and silicids which exist as impurities in electrometallurgical products used for abrasive or refractory purposes, which consists in treating said products with sulfur under the action of heat.

3. The process of improving the bonding qualities of electrometallurgical products used for abrasive or refractory purposes, which consists in removing the carbids and silicids existing in said products as impurities by the action of sulfur.

1,061,256. MANUFACTURE OF SILICON. THOMAS B. ALLEN and FRANK J. TONE, Niagara Falls, N. Y., assignors to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Nov. 28, 1911. Serial No. 662,950. (Cl. 204—63.)

1. In the manufacture of silicon, the step consisting in subjecting briquets containing silicious and carbonaceous material to the direct heat of an electric arc.

2. In the manufacture of silicon, the step consisting in briqueting a finely divided mixture of silicious and carbonaceous material and subjecting the briquets to the direct heat of an electric arc.

3. In the manufacture of silicon, the method consisting of subjecting a briqueted mixture of finely divided silicious and carbonaceous materials to the direct heat of an electric arc.

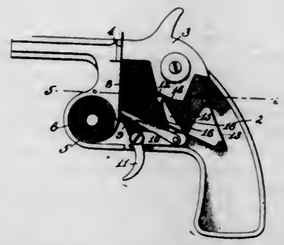
4. In the manufacture of silicon, the steps consisting in briqueting a mixture of silicous ore and carbon, charging the same into the reaction zone of an electric furnace, subjecting it to the direct heat of an electric arc, and causing the outgoing gases to permeate and pre-heat the charge.

5. In the manufacture of silicon, the steps consisting of charging an electric furnace with a briqueted mixture and disposing said charge so that on subjecting it to electrically developed heat it will act as a condensing medium for the volatile reduction products carried by the outgoing gases.

[Claims 6 and 7 not printed in the Gazette.]

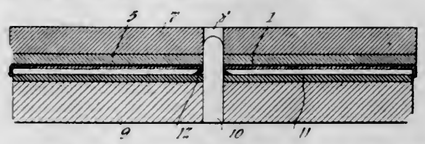
1,061,257. TOY PISTOL. WILLIAM R. ATKINSON, Homestead, Pa., assignor of one-third to John C. Knode, Munhall, Pa. Filed Dec. 12, 1908. Serial No. 467,172. (Cl. 42—57.)

1. In a toy pistol designed to use cap strip ammunition, the combination of a hammer, a firing abutment, and a feed wall continuous with the face of said abutment, a trigger having an arm extending rearwardly to a point below the hammer pivot, a single spring for operating the hammer and the trigger, a cap strip feeding dog pivoted on one side of the free end of the trigger arm, a sear pivoted on the opposite side of the free end of said arm, actuating portions extending laterally from said dog and said sear overlying the trigger arm and overlapping each other, and a single spring between and attached to said actuating portions tending to hold said dog and sear apart and to their work.



2. In a toy piston designed to use cap strip ammunition, the combination of a hammer, a firing abutment, and a feed wall continuous with the face of said abutment, a trigger having an arm extending rearwardly to a point below the hammer pivot, a single spring for operating the hammer and the trigger, a cap strip feeding dog pivoted on one side of the free end of the trigger arm, a laterally extending portion on said feeding dog overlying said trigger arm adapted to engage with and feed the cap strip, a sear pivoted on the opposite side of the free end of said arm, a laterally extending portion on said sear arranged to engage with and actuate the hammer, said portion also overlying the trigger arm and overlapping the similar portion on the feeding dog, and a single spring attached to said actuating portions tending to hold said dog and sear apart and to their work.

1,061,258. PROCESS OF MAKING SOUND-RECORD MOLDS. JONAS W. AYLSWORTH, East Orange, and EDWARD L. AIKEN, Orange, N. J., assignors, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Nov. 17, 1910. Serial No. 592,764. (Cl. 113—112.)



1. The process of making disk sound record molds having central holes therein, consisting in placing a backing plate upon the back of a disk mold with soldering material interposed between the same, and pressing the same together with application of heat to solder the backing to the mold, while sealing the central hole through the mold to prevent the soldering material running through the same, substantially as described.

2. The process of making disk sound record molds, consisting in placing a backing plate upon the back of a disk mold with soldering material interposed between the same, laying the mold face downward upon a member which will not injure the mold surface or adhere to the same under the necessary heat and pressure, exerting pressure upon the backing plate with the application of heat sufficient to melt the soldering material and solder the backing plate and mold together, and obstructing the

flow of the molten solder to the face of the mold, substantially as described.

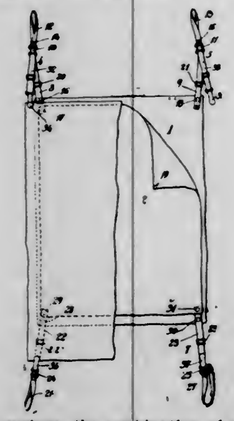
3. The process of making disk sound record molds having central holes therein, consisting in placing a backing plate having a central hole upon the back of a disk mold with soldering material interposed between the same, placing a centering pin in the central holes through the mold and backing, and pressing the mold and backing together with application of heat to solder the same together while sealing the space around the pin to prevent the soldering material running through the holes, substantially as described.

4. The process of making disk sound record molds having central holes therein, consisting in placing a backing plate having a central hole upon the back of a disk mold with soldering material interposed between the same, placing a centering pin in the central holes through the mold and backing, laying the mold face downward upon a plate of material which will not injure the mold surface or adhere to the same under the necessary heat and pressure, and exerting pressure upon the backing plate with application of heat sufficient to melt the soldering material and solder the backing and mold together, while sealing the space around the pin to prevent the soldering material runnning through the holes, substantially as described.

5. The process of making disk sound record molds having central holes therein, consisting in placing a backing plate having a central hole upon the back of a disk mold with soldering material interposed between the same, placing a centering pin in the central holes through the mold and backing, laying the mold face downward upon a plate of material which will not injure the mold surface or adhere to the same under the necessary heat and pressure, placing a powdered material between the mold and the plate and around the centering pin, the said material being of such nature as to fuse upon application of heat to seal the opening around the pin, but not to adhere to the mold surface after the completion of the process, or to injure the same, and applying heat and pressure upon the backing plate to solder the same to the mold and fuse the powdered material to seal the opening around the pin, substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

1,061,259. BED-COVERING. ARTHUR E. BLOFIELD and JACOB J. LINK, New York, N. Y. Filed Apr. 24, 1912. Serial No. 692,861. (Cl. 5—3.)



1. In bed coverings, the combination of a cover adapted to be lain upon, a separate cover adapted to cover the occupant of the bed, straps adapted to encircle the bed posts at both head and foot, a connection from each strap removably secured to the adjacent corner of said lower cover and a connection from each strap adapted to be secured to the corners of said upper cover, substantially as described.

2. In bed coverings, the combination of an under cover, adapted to be lain upon, and an upper cover, adapted to cover the occupant, means for securing the same to the bed at the foot thereof, straps adapted to encircle the bed posts at the head end and connections from said straps to the upper ends of both said under and upper covers, the said connections to said under cover being non-elastic and said connections to said upper cover being elastic, substantially as described.

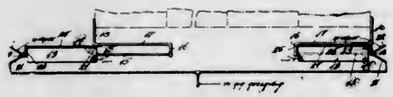
3. In bed coverings, the combination of an under cover, adapted to be lain upon, and an upper cover independent thereof, adapted to cover the occupant, means for securing the same to both of the bed posts at the same point on each post in such manner as to hold the under cover flat and the upper cover yieldingly in position, regardless of the movements of the occupant of the bed, the said securing means comprising elastic connections for the foot of said under cover and the head of said upper cover, respectively, substantially as described.

4. In bed coverings, the combination of an upper cover, an under cover, adapted to be lain upon, adjustable elastic means for securing the lower corners thereof to the foot of the bedstead and non-elastic means for securing the upper corners thereof to the head of the bedstead, and adjustable means for securing said upper cover to the bedstead, connected to said securing means for the head and foot of said under cover, substantially as described.

5. In bed coverings, the combination of a pair of separate under covers both adapted to be lain upon, and means for removably securing both of the same to the bed adapted to hold both of the same flat and unwrinkled regardless of the movements of the occupant of the bed, comprising straps secured to the adjacent upper corners of both covers, and adapted to be secured to the head of the bed, and a pair of elastic straps each removably secured to the adjacent lower corners of both covers, and adapted to be secured to the foot of the bed, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,061,260. STREET-CAR ADVERTISING APPARATUS. HERMANN BOERNER, St. Louis, Mo., assignor to Frederick R. Cornwall, St. Louis, Mo. Filed Nov. 29, 1910. Serial No. 594,685. (Cl. 40—79.)



1. In an apparatus of the class described, a support, a series of independent and unattached card carrying frames arranged for moving upon the support, pneumatically operated means for moving the frames upon the support, and means actuated by the frames for throwing the pneumatically operated means into operation.

2. In an apparatus of the class described, a pair of rails, a series of independent and unattached card carrying frames arranged for movement on said rails, pneumatically operated means at the ends of the rails for imparting intermittent movement to the frames upon the rails, and means actuated by the frames for throwing the pneumatically operated means into operation.

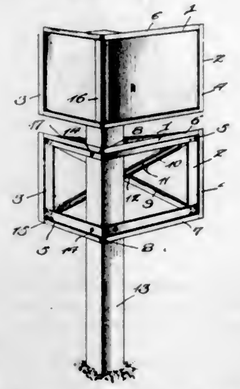
3. In a device of the class described, including frames mounted upon a rail, a fluid actuated motor for shifting said frames longitudinally on said rail, comprising a pressure cylinder, a piston in said pressure cylinder, a rod mounted on said piston, and a bifurcated member attached to said rod and positioned to engage one of said frames.

4. In a device of the class described, including frames adapted to traverse adjacently disposed rails, a fluid actuated motor having a reciprocating member adapted to transmit motion to said frames, and a means actuated from said reciprocating member for shifting the frames from one rail to the other.

5. In a device of the class described, a support, a rail affixed to said support, a bracket affixed to said support and extending in front of said rail, a second rail affixed to said bracket, a series of separate signs supported on said first rail, a series of separate signs supported on said second rail, and means for transferring said signs from one of said rails to the other.

[Claims 6 to 12 not printed in the Gazette.]

1,061,261. SIGN-HOLDER. DENFORD A. BRUMBAUGH, Broken Arrow, Okla. Filed May 1, 1912. Serial No. 694,471. (Cl. 40—145.)



1. In a sign holder a skeleton metal frame comprising side and end members fastened together and having inturned outer margins to form opposed grooves adapted to receive signs, the margins of the side members slitted intermediate their length, said frame bent at right angles along a line connecting with the slits, a post disposed within the angle, suitable fastening devices securing the frame to the post, a pair of braces each bolted at one end to an upper corner of the frame and at the other end to the opposite lower corner, said braces permanently pivoted together at the point of intersection and provided upon their exterior faces with upstanding longitudinal strengthening ribs, and a metal strip of L cross section spanning the frame at the exterior angle thereof and removably secured within the marginal grooves to cover the joint of the inserted signs.

2. In a sign holder, a skeleton metal frame comprising side members each consisting of a continuous strip bent at right angles at an intermediate portion and having an inturned edge to form a groove, a supporting post, the apices of said side members being secured to said post, end members each consisting of a continuous strip having an inturned edge, the extremities of said side and end members being secured together, diagonal intersecting brace rods, each consisting of a continuous strip, permanently secured together at the point of their intersection, the extremities of said brace rods each being bent at an angle, and means for securing the angular portions of said brace rods to the extremities of said side and end members, substantially as described.

1,061,262. APPARATUS FOR FLOODING THE COMPARTMENTS OF SHIPS. JOHN LOCKHART BRUNTON and WILLIAM PATON BRUNTON, Westcombe Park, England, assignors to Brunton Brothers, Limited, London, England. Filed Oct. 25, 1912. Serial No. 727,773. (Cl. 114—0.5.)

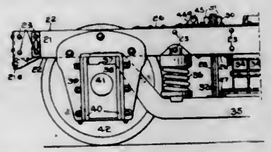
1. The combination of a condenser discharge pipe, a valve on the discharge pipe, a main connected to the discharge pipe, a valve on the main near the connection, valves connecting the main to the various compartments of the ship and hydraulic mechanism for operating all the valves from a distance.

2. The combination of a main, valves connecting the main to the various compartments of the ship, a hydraulic cylinder operating each of the valves, a slide valve supplying pressure to and exhausting it from the ends of each hydraulic cylinder, a differential ram operating the slide valve, the smaller area of such ram being always exposed to pressure and means at a distance for admitting pressure to and cutting it off from the larger area of the ram.



3. The combination of a condenser discharge pipe, a valve on the discharge pipe, a main connected to the discharge pipe, a valve on the main near the connection, valves connecting the main to the various compartments of the ship, a hydraulic cylinder operating each of the valves, a slide valve supplying pressure to and exhausting it from the ends of each hydraulic cylinder, a differential ram operating the slide valve the smaller area of such ram being always exposed to pressure and means at a distance for admitting pressure to and cutting it off from the larger area of the ram.

1,061,263. PASSENGER-CAR TRUCK. RICHARD WEBB BURNETT, Montreal, Quebec, Canada. Filed Apr. 12, 1911. Serial No. 620,713. (Cl. 105—243.)



1. A railway passenger car truck having side sills and provided with equalizing bars, each of said side sills being comprised of a pair of channel members having their flanges faced toward each other and secured closely together at intervals throughout their length, pedestals secured to said sills, the lower flanges of the side sills being cut away at the portions above the pedestals whereby the goose-necks of the equalizing bars are adapted to move up and down between the channels above the pedestals and be guided by the vertical portions of said side sills.

2. A railway passenger car truck comprising a frame, a spring plank and spring hangers pivotally mounted, the hangers each being comprised of laminations and each provided with a shouldered pivot pin at one end.

3. The combination with the frame and spring plank of the laminated spring hangers, substantially as specified.

1,061,264. LIFE-SAVING DEVICE. PETER BYS, Great Falls, Mont. Filed Nov. 26, 1912. Serial No. 733,702. (Cl. 9—21.)

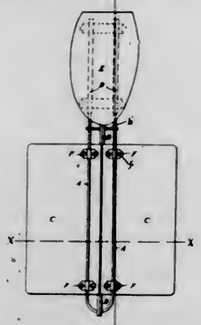
1. In a life saving device, a frame having two sides, a rod in a position intermediate the said sides, wings hinged to the frame and projecting partially across the rod and adapted to engage said rod, whereby the movement of the wings in one direction is limited, and a plate to which the frame is connected.

2. In a life saving device, a frame having two sides, a rod in position intermediate the said sides, wings hinged to the frame and projecting partially across the rod and adapted to engage said rod, whereby the movement of the wings in one direction is limited, a plate, and members carried by the plate to which the frame is connected.

3. In a life saving device, a frame having two sides, a rod in position intermediate the said sides, wings hinged to the frame and projecting partially across the rod and adapted to engage said rod, whereby the movement of the wings in one direction is limited, a plate, and tubular members secured to the plate for receiving the ends of the frame.

4. In a life saving device, a frame having two sides and an offset end, a rod connected to said offset end.

wings, clips secured to the wings and engaged by the frame whereby the wings are pivotally connected to the frame, a plate to which the frame is secured, and means for securing the plate to a wearer.



5. In a life saving device, a frame having two sides and an offset end, a rod connected to said offset end, wings, clips secured to the wings and engaged by the frame whereby the wings are pivotally connected to the frame, a plate, and members carried by the plate to which the frame is secured, and means for securing the plate to a wearer.

1,061,265. CARTRIDGE-ADAPTER FOR FIREARMS. FRANCIS C. CHADWICK, Hartford, Conn., assignor to Savage Arms Company, Utica, N. Y. Filed Oct. 8, 1912. Serial No. 724,533. (Cl. 102—14.)



1. In combination, a holder member having a cartridge seat and a back-pressure-assuming member for the cartridge supported by the holder member back of said seat, said members coacting to resist backward independent movement of the second member and the latter having an exposed shoulder to be engaged by the extractor device of the arm, substantially as described.

2. In combination, a holder member having a passage extending longitudinally therethrough and a cartridge seat in said passage, and a rigid back-pressure assuming member for the cartridge arranged in said passage and extending from said seat to substantially the rear end of the passage and having in its rear portion an extractor-shoulder, substantially as described.

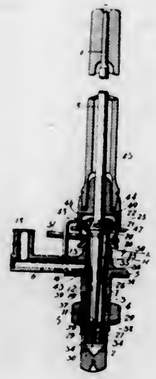
3. In combination, a holder member having a bore extending longitudinally therethrough and a cartridge seat in said bore, a plug fitted into said bore relatively back of the seat and movable in said bore longitudinally thereof, and a cartridge extracting device carried by said plug, substantially as described.

4. In combination, a holder member having a bore extending longitudinally therethrough and a cartridge-seat in said bore, a plug fitted into said bore relatively back of the seat and movable in said bore longitudinally thereof, a cartridge extracting device carried by said plug, and a firing-piece movable in said plug and held assembled therewith by the extractor device, substantially as described.

5. In combination, a holder member having a bore extending longitudinally therethrough and a cartridge-seat in said bore, a plug fitted into said bore relatively back of the seat and movable in said bore longitudinally thereof, a cartridge extracting device having a band embracing the plug, and a firing-piece movable in said plug and held assembled therewith by said band, substantially as described.

[Claims 6 to 12 not printed in the Gazette.]

1,061,266. SPINNING-SPINDLE. CHARLES H. CHAPMAN, Winchester, Mass., assignor to Chapman Gravity Spindle Company, Winchester, Mass., a Corporation of Maine. Filed Apr. 16, 1908. Serial No. 427,377. (Cl. 118—19.)



1. A spindle, a cushioned non-flexible bolster having transverse slits in its bottom, a ball-bearing in the top of said bolster, and a ball-bearing adjustable step in the bottom of said bolster to receive the spindle, said step having transverse notches, a locking clip engaging said slits and notches and supported by said bolster independently of the surrounding parts, and a bolster-case in which said bolster is mounted and supported to move laterally and vertically with the spindle.

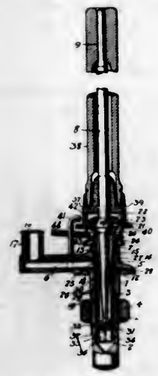
2. A bolster-case, a bolster mounted and supported therein and having a bolster bearing in its top and transverse slits in its bottom, and an adjustable step-bearing in the bottom of said bolster to receive the spindle and provided with notches across its bottom, a locking clip engaging said slits and notches and attached to and supported by the said bolster independently of the surrounding parts, the spindle, bolster, bolster-bearing, step-bearing and locking clip adapted to move both laterally and vertically together.

3. A bolster, having an enlarged upper end and a cylindrical portion below said upper end, a bolster-case in the upper end of which the bolster is adapted to be loosely sustained, a spring forming a part of the said bolster, a supporting part for said bolster having a longitudinal slot with an inwardly tapered shoulder at its upper end to act upon the spring to facilitate the removal of said bolster from the bolster-case.

4. A bolster, having an enlarged upper end, a bolster-bearing in said upper end, a cylindrical portion below the said upper end, a spring extending from the said cylindrical portion and adapted to enter a longitudinal slot in the upper end of the bolster-case to restrain the bolster from rotating with the spindle, an adjustable step-bearing in the lower end of said bolster, said adjustable step-bearing having transverse nicks across its bottom adapted to be alined with a transverse nick across the bottom of the said bolster, a locking clip adapted to enter the nick in the bolster, and one of the transverse nicks in the step-bearing, said locking clip attached to and supported by the bolster independently of surrounding parts and adapted to move both laterally and vertically with the bolster and spindle.

5. A spindle, a bolster-case, a bolster having bearings at its top and bottom for receiving and supporting the spindle, a supporting tube fixed in the upper end of the bolster-case for suspending the bolster in the bolster-case and having a slot engaged by a spring on the bolster to prevent rotation of the bolster, and a yielding medium interposed between the lower end of the bolster and the adjacent portions of the bolster-case to cushion said bolster as it yields laterally under stress of use.

1,061,267. SPINNING-SPINDLE. CHARLES H. CHAPMAN, Winchester, Mass., assignor to Chapman Gravity Spindle Company, Winchester, Mass., a Corporation of Maine. Filed Apr. 16, 1908. Serial No. 427,378. (Cl. 118—19.)



1. A bolster-case, adapted to receive and sustain a bolster and spindle, said bolster-case having a supporting tube slotted longitudinally and adapted to be engaged by the bolster to prevent rotation of the bolster with the spindle, a bolster having an enlarged upper end, a spring below said end to engage the longitudinal slot in the supporting tube, and a series of laterally projecting springs to engage the interior walls of the bolster-case, all of said springs being cut integrally from the metal of the bolster and adapted to move both laterally and vertically with the spindle and bolster.

2. A spindle, a bolster-case, and a bolster having bearings in it for receiving and supporting the spindle, said bolster loosely connected with and supported at its upper portion by the bolster-case and having its lower portion of less diameter than the interior of the bolster-case and provided with laterally projecting springs cut integrally from the material of the bolster and in contact with the inner surface of the walls of the bolster-case.

3. A spindle, a bolster-case, and a bolster having bearings in it for receiving and supporting the spindle, said bolster loosely connected with and supported at its upper portion by the bolster-case and having its lower portion of less diameter than the interior of the bolster-case and provided with integral laterally projecting springs bulging out upwardly therefrom and in contact with the inner surface of the walls of the bolster-case.

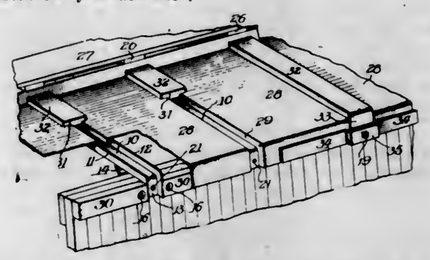
4. A spindle, a bolster-case, and a bolster having bearings in it for receiving and supporting the spindle, said bolster loosely connected with and supported at its upper portion by the bolster-case and having its lower portion of less diameter than the interior of the bolster-case and provided with integral laterally projecting springs bulging out upwardly therefrom and having their upper ends curved inwardly toward the bolster, said springs in contact with the inner surface of the walls of the bolster-case.

5. A spindle, a bolster-case, and a bolster having bearings in it for receiving and supporting the spindle, said bolster having a cylindrical upper portion by which it is sustained in the bolster-case, a next adjacent downwardly tapering portion, and a terminal cylindrical portion next below the tapering portion and having integral laterally projecting springs in contact with the bolster-case.

[Claims 6 and 7 not printed in the Gazette.]

1,061,268. CAR-ROOF. HENRY A. CHRISTY, Chicago, Ill. Filed Jan. 22, 1912. Serial No. 672,558. (Cl. 108—5.)

1. In a car-roof construction, the combination of channel carlines disposed trough-side upward, the ends of such carlines including their outstanding flanges being bent downwardly over the car-body side-walls, and sheet-metal roof-plates having ends downturned over such side-walls and having inwardly extended flanges accommodated in the troughs of said carlines and conforming to the shapes of such carlines including the downturned ends thereof, substantially as described.



2. In a car-roof construction, the combination of channel carlines disposed trough-side upward, the ends of such carlines including their outstanding flanges being bent downwardly over the car-body side-walls, and sheet-metal roof-plates having ends downturned over said side-walls and having inwardly extended flanges accommodated in the troughs of said carlines and conforming to the shapes of such carlines, and filler blocks disposed between the downturned ends of the roof plates and the side wall, substantially as described.

1,061,269. DOOR-STOP. ANTOINETTE A. COFFIN, Cleveland, Ohio. Filed Dec. 28, 1912. Serial No. 739,079. (Cl. 16—79.)



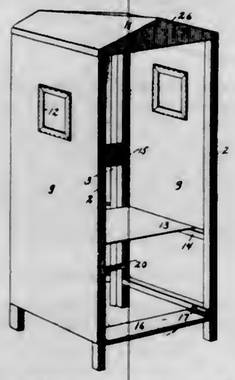
1. A safety device for a swinging door comprising a plate lying on the floor beneath the door and adjacent the free edge of the door, a stop projecting upward from the rear portion of the plate and adapted to engage the rear side of the door when the door is partially opened, and downwardly projecting means to the rear of the front surface of the door when closed for pivoting the front portion of the plate to the floor, the stop and downwardly projecting means being positioned at a distance from the free edge of the door less than the length of the device, so that when the door is closed and the stop is swung laterally from its operative position it will clear such free edge of the door and permit the door to move to complete open position.

2. A safety device for a swinging door comprising a plate lying on the floor beneath the door and adjacent the free edge of the door, a stop projecting upward from the rear portion of the plate and adapted to engage the rear side of the door when the door is partially opened, and downwardly projecting screw means for pivoting the front portion of the plate to the floor and preventing its removal therefrom, the stop and screw means being positioned at a distance from the free edge of the door less than the length of the device so that when the stop is swung laterally from its operative position it will clear such free edge of the door and permit the door to move to complete open position, the position of the stop and screw means being such as to require the substantial closure of the door before the stop can be swung clear of the edge of the door to permit the door to open.

3. A safety device for a swinging door comprising a plate lying on the floor beneath the door and adjacent the free edge of the door, a stop projecting upward from the rear portion of the plate and adapted to engage the rear side of the door when the door is partially opened, downwardly projecting means to the rear of the front surface of the door when closed for pivoting the front portion of the plate to the floor, the stop and downwardly projecting

means being positioned at a distance from the free edge of the door less than the length of the device so that when the stop is swung laterally from its operative position it will clear such free edge of the door and permit the door to move to complete open position, and a movable member adapted to fit between the said stop and the back of the door when the door is completely closed, the relation of the stop to the free edge of the door being such that the said edge of the door must be brought closely adjacent the door jamb in order to permit the stop to be disengaged from the door.

1,061,270. BEACH-CHAIR. JOHN B. COOK, Troy, N. Y. Filed Nov. 15, 1912. Serial No. 731,478. (Cl. 155—5.)



1. A collapsible beach chair comprising two side frames, two back frames hinged to each other and to the side frames, said frames folding together in flat condition with the back frames extending rearward from the side frames and when open being limited to positions in which the side frames are parallel and the back frames in rearward-projecting angular relation, canvas walls and a foldable canvas top secured to said frames, foldable braces or thrust members between the side frames to hold the frames open, and a canvas seat and a canvas back rest connecting said side frames and constituting tension members coöperating with said braces or thrust members to render the chair firm in its open condition.

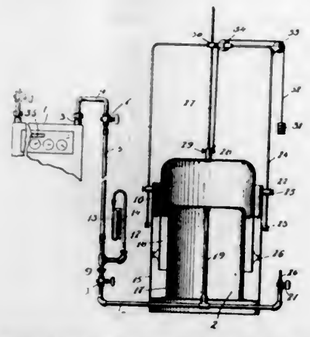
2. A collapsible canvas structure comprising two side frames, two back frames hinged to each other and to the side frames, said frames folding together in flat condition, canvas walls and a foldable canvas top secured to said frames, and a foldable triangular brace at the upper ends of the side frames, said brace comprising bars pivoted to the respective side frames and flexibly connected with each other and adapted to force the top upward in the middle so as to give it a pitch toward both sides, and a knockdown brace bar for holding the aforesaid bars in such position against the tension of the top.

1,061,271. METER-TESTING APPARATUS. RICHARD L. DEZENDORF, Richmond Hill, N. Y. Filed Sept. 15, 1911. Serial No. 649,443. (Cl. 73—51.)

1. The combination of a meter having an indicator, a portable gasometer, a coupling connecting said gasometer with the outlet port of said meter, a pressure gage connected between said gasometer and said meter, a cock between said gage and said meter, and means for venting said gasometer.

2. The combination of a meter having an indicator, a portable gasometer, a coupling connecting said gasometer with the outlet port of said meter, a pressure gage connected between said gasometer and said meter, a stop cock between said pressure gage and said meter, means for venting said gasometer, and means for calibrating the passage between said pressure indicator and said gasometer.

3. The combination of a meter having an indicator, a portable gasometer, a coupling connecting said gasometer with the outlet port of said meter, a pressure gage connected between said gasometer and said meter, a stop cock between said gage and said meter, means for venting said gasometer, means for calibrating the passage between said pressure gage and said gasometer, and a scale for said gasometer.

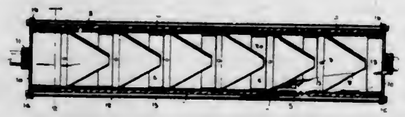


4. The combination of a meter having an indicator, a portable gasometer, a coupling connecting said gasometer with the outlet port of said meter, a pressure gage connected between said gasometer and said meter, a stop cock between said gage and said meter, means for venting said gasometer, an adjustable bail carried by the stationary part of said gasometer, and a scale for said gasometer, adjacent to said bail.

5. The combination of a meter having an indicator, a portable gasometer, a coupling connecting said gasometer with the outlet port of said meter, a pressure gage connected between said gasometer and said meter, the passage between said gage and said gasometer being calibrated so as to have a smaller capacity than said meter, a stop cock between said gage and said meter, a stop cock between said gasometer, and an additional stop cock between said meter and said gasometer.

[Claims 6 to 8 not printed in the Gazette.]

1,061,272. ENGINE-MUFFLER. CLARENCE E. DE WITT, Mount Jewett, Pa. Filed Nov. 29, 1912. Serial No. 734,112. (Cl. 121—116.)



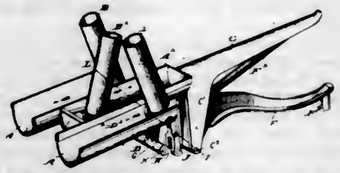
1. A muffler comprising a plurality of removable and replaceable sections, each section comprising a short cylinder shaped at its ends to connect with the adjacent cylinders, and a frusto-conical member.

2. A muffler comprising a plurality of removable and replaceable sections, each section having at its exhaust end a reduced portion to enter the inlet end of the adjacent section, and a frusto-conical member the smaller end of which projects toward the inlet end of the muffler.

3. A muffler comprising a plurality of removable and replaceable sections, each section having at its exhaust end a reduced portion to enter the inlet end of the adjacent section, and a frusto-conical member the smaller end of which projects toward the inlet end of the muffler, while its larger end fits snugly in the cylinder and abuts against the end of the adjacent section.

4. A muffler comprising a plurality of removable sections each of which comprises a short cylinder reduced at one end to fit into the cylinder of the adjacent section and thus form an inner shell, each section having an inner frusto-conical member, a cylinder of heat-insulating material surrounding the sectional shell, a metal outer cylinder surrounding the heat-insulating cylinder and of a diameter to leave an annular air chamber between the two cylinders, a flanged head inclosing the ends of all of the cylinders, a series of longitudinal bolts between the insulating cylinder and the metal outer cylinder serving to space them apart and passing through the heads, and nuts on the ends of the bolts and bearing against the heads.

1,061,273. CURLING-IRON AND THE LIKE. GUSTAVE DINGER, London, England, assignor to Dinger's Ondulateur Parfait Limited, London, England, a Corporation. Filed Dec. 19, 1911. Serial No. 666,858. (Cl. 132—19.)



1. A curling iron comprising a series of longitudinally recessed members and a series of coöperating members adapted to fit in said recessed members, the members of one series of members being pivoted on and movable relatively to the corresponding members of the other series, the pivots of adjacent members in the movable series being located on opposite sides of an imaginary transverse line and the free ends thereof being movable in opposite circular paths.

2. A curling iron or the like comprising a plurality of concavely recessed members, and coöperating convex members pivotally secured thereto and movable into and out of said recessed members, the free ends of adjacent convex members being movable in opposite circular paths, resilient means for maintaining all of said convex members out of said recesses, and means for simultaneously moving all of said convex members into said recesses against the tension of said resilient means.

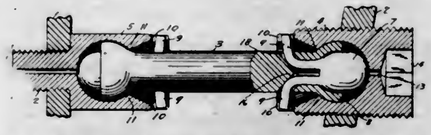
3. A curling iron or the like comprising a plurality of concavely recessed members and coöperating convex members pivotally secured thereto and movable into and out of the said recessed members, the pivots of adjacent convex members being located on opposite sides of an imaginary transverse line with said adjacent convex members extending from said pivots in opposite directions when the curling iron is closed and means for operating said convex members.

4. A curling iron or the like comprising a plurality of concavely recessed members and coöperating convex members pivotally secured thereto and movable into and out of the said recessed members, the pivots of adjacent convex members being located on opposite sides of an imaginary transverse line with said adjacent convex members extending from said pivots in opposite directions, the distance between the axis of the pivots of adjacent convex members being less than the length of a convex member.

5. A curling iron comprising a support, a plurality of concavely recessed members carried thereby, coöperating convex members pivoted therein and movable into and out of said recessed members, the pivots of said convex members being located on opposite sides of an imaginary transverse line with adjacent members extending from the pivots in opposite directions when the curling iron is closed, a crank-shaft, links pivotally connected with said crank-shaft and said convex members, an operating handle pivotally mounted on said support and a link pivotally connected with said handle and with said crank shaft.

1,061,274. STAY-BOLT FOR LOCOMOTIVE AND OTHER BOILERS. ETHAN I. DODDS, Central Valley, N. Y., assignor to Kerner Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1911. Serial No. 655,433. (Cl. 85—1.5.)

1. A stay bolt having hollow ends, connecting caps on the ends of said stay bolts, and securing heads having legs passing through openings through the ends of the bolt for connecting the bolt to said caps; substantially as described.



2. A stay bolt having hollow ends, connecting caps on the ends of said stay bolts, and securing heads having legs passing through openings through the ends of the bolt for connecting the bolt to said caps and into recesses in said caps; substantially as described.

3. A stay bolt having hollow ends, a connecting cap on each end thereof having a spherical recess, a head within the recess of each cap, said heads having diverging legs passing through openings in said bolt for connecting the members to each other; substantially as described.

4. A stay bolt having hollow ends, there being lateral openings extending through the walls of said hollow ends, a connecting member on each end of the bolt having a spherical recess, transverse recesses in the ends of said caps, and a head within the recess of each cap and within the hollow ends of the bolt, said head having legs extending through the openings in the ends of the bolt and into the recesses in said caps; substantially as described.

5. A stay bolt having an opening through each of its ends, a connecting cap movably mounted on each end of said bolt, and a securing member at each end of the bolt, each of said securing members having a leg extending through one of the openings, said members being arranged to secure the ends of the bolt to the connecting caps; substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,061,275. LIFE-PRESERVER AND PILLOW. SAMUEL P. EDMONDS, Catonsville, Md. Filed Dec. 7, 1912. Serial No. 735,546. (Cl. 9—13.)

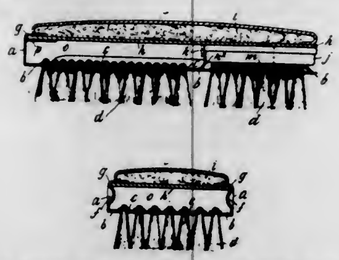


1. A life-preserver comprising a fabric casing or envelop having similar substantially rectangular pillow-like compartments connected by an intermediate shoulder portion having a narrow transverse slot to receive the head of a wearer, a buoyant resilient non-absorbent material filling said compartments, fastening means connecting intermediate parts of said compartments adjacent the waist-line, which upon being submerged permits the entire buoyant body to rise and concentrate the sustaining force thereof about the head and shoulders of the wearer, the portion adjacent the slot engaging the head and the casing being held upon the wearer solely by the engagement about the neck and said intermediate fastening means.

2. A life-preserver comprising a fabric casing forming a substantially rectangular closed bag, said bag being normally folded upon itself and provided with a narrow transverse slot or opening in the fold, a buoyant resilient material filling the bag, and adjustable fastening devices connected to opposite intermediate parts of the folded bag, the bag being held upon the wearer solely by the engagement about the neck and said intermediate fastening

device, whereby upon being submerged the entire buoyant body is raised and the sustaining force thereof is concentrated about the head and shoulders of the wearer, the portion adjacent the slot engaging the head.

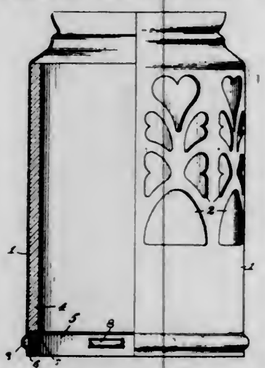
1,061,276. BRUSH. THERESA MARY ELLIS, London, England. Filed July 26, 1911. Serial No. 640,569. (Cl. 15—16.)



1. In a brush, in combination, a one-piece metal stock consisting of a base and upwardly-extending end and side flanges, bristles secured to said base, said side flanges having inwardly-bent portions intermediate their upper and lower edges to form finger grooves, said flanges being provided adjacent their upper edges with a back-receiving groove and a back supported in said back-receiving groove.

2. In a brush, in combination, a one-piece metal stock consisting of a base and upwardly-extending end and side flanges, bristles secured to said base, said side flanges having inwardly-bent portions intermediate their upper and lower edges to form finger grooves, the upper edges of said flanges being bent inwardly whereby the inwardly-bent edges of the side flanges will form with said first-mentioned inwardly-bent portions back-receiving grooves, and a back supported in said back-receiving grooves.

1,061,277. LIGHT-SHADE. ROBERT E. EWING, Avalon, Pa., assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 30, 1912. Serial No. 687,348. (Cl. 240—94.)



1. A light-shade comprising a perforated casing formed with an annular groove, a shade removably mounted within the casing, and detachable shade supporting and locking means comprising a continuous yielding ring formed with an inwardly projecting shade engaging member and a projection adapted to enter the groove of the casing.

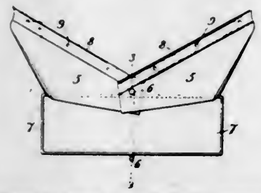
2. A light-shade comprising a perforated metallic casing formed with an annular groove, a shade removably mounted within the casing, and detachable shade supporting and locking means comprising a continuous yielding ring formed with inwardly projecting shade contacting means and an inwardly compressible spring member adapted to enter the groove of the casing.

3. A light-shade comprising a perforated metallic casing formed with an annular groove, a shade or shell removably mounted within the casing and detachable shade supporting and locking means comprising a continuous yielding ring formed with an annular flange and a plurality of projecting spring members struck up from the periphery of the ring, said projecting members of the ring adapted to enter the groove of the casing.

4. A light shade comprising a perforated metallic casing formed with an annular groove, a shade or shell removably mounted within the casing, and detachable shade supporting and locking means comprising a continuous yielding ring formed at its upper edge with an inwardly projecting flange and a projecting spring member struck up from its periphery and adapted to enter the groove of the casing.

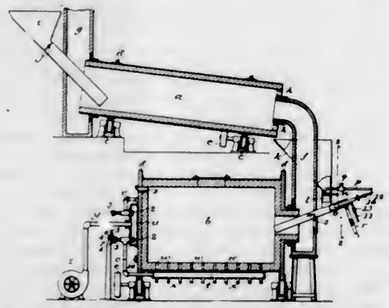
5. A light shade comprising a perforated metallic casing formed with an annular groove, a shade or shell removably mounted within the casing, and detachable shade supporting and locking means comprising a continuous yielding ring formed at its upper edge with an inwardly projecting flange and a vertically extending flange at right angles with the first mentioned flange, and a projecting member struck up from its periphery and adapted to enter the groove of the casing.

1,061,278. SAP-GATHERER. ELIJAH J. FILLINGIM, Pace, Fla. Filed July 20, 1912. Serial No. 710,671. (Cl. 47—40.)



A sap-gathering apron comprising sections lapped at the middle portion of the apron and pivotally held together by having a cup-supporting member passed therethrough.

1,061,279. ORE SMELTING AND REFINING APPARATUS. EDWARD FINK, Milwaukee, Wis., assignor to Fink Smelters Company, Chicago, Ill., a Corporation of South Dakota. Filed Jan. 5, 1910. Serial No. 536,453. (Cl. 75—57.)



1. In ore smelting and refining apparatus the combination of a rotary smelting barrel having an opening in one end, a rotary heating barrel, a flue connecting the end opening of the smelting barrel with one end of the heating barrel, an escape flue with which the other end of the heating barrel communicates, means for feeding ore into the end of the heating barrel adjacent to the escape flue, and means for conducting the ore independently of said flue from the other end of the heating barrel into the smelting barrel while said barrels are in motion.

2. In ore smelting and refining apparatus the combination of a rotary smelting barrel having a central opening in one end, a rotary heating barrel, a flue connecting the end opening of the smelting barrel with one end of the heating barrel, an escape flue with which the other end of the heating barrel communicates, an ore feed spout passing through the escape flue into the adjacent end of the heating barrel, and an ore conduit leading from the other end of the heating barrel through the connecting flue into the end opening of the smelting barrel.

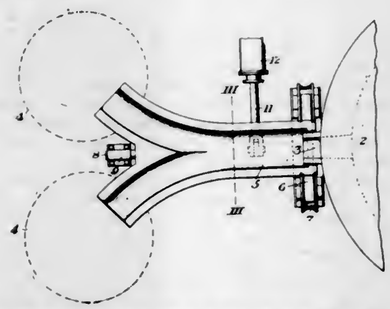
3. In ore smelting and refining apparatus the combination of a rotary smelting barrel having an opening in one end, a rotary heating barrel, a flue connecting the end opening of the smelting barrel with one end of the heating barrel, an escape flue with which the other end of the heating barrel communicates, means for feeding ore into the end of the heating barrel adjacent to the escape flue, a longitudinally divided feed pipe passing through the connecting flue into the end opening of the smelting barrel, an ore conduit leading from the end of the heating barrel adjacent to the connecting flue into one passage of said feed pipe, and fuel and air supply pipes connected with the other passage of said feed pipe.

4. In ore smelting and refining apparatus the combination of a rotary smelting barrel having an opening in one end, a rotary heating barrel, a flue connecting the end opening of the smelting barrel with one end of the heating barrel, a chimney with which the other end of the heating barrel communicates, a feed spout passing through said chimney into the adjacent end of the heating barrel, and provided with a regulating valve, and an ore conduit leading from the other end of the heating barrel through the connecting flue into the end opening of the smelting barrel and provided with a regulating valve.

5. In ore smelting and refining apparatus the combination of a rotary smelting barrel having an opening in one end, a rotary heating barrel, a flue connecting the end opening of the smelting barrel with one end of the heating barrel, a chimney with which the other end of the heating barrel communicates, means for feeding ore into the end of the heating barrel adjacent to said chimney, an ore conduit leading from the other end of the heating barrel into the smelting barrel, and an air supply pipe directed into said conduit toward the smelting barrel.

[Claims 6 to 14 not printed in the Gazette.]

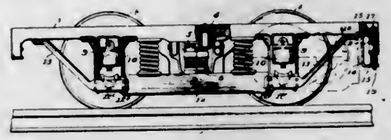
1,061,280. LADLE-RUNNER. EDWARD L. FORD, Youngstown, Ohio. Filed Jan. 13, 1913. Serial No. 741,648. (Cl. 75—194.)



1. A ladle runner having its discharge end formed with two branches which diverge from each other at an acute angle to the longitudinal axis of the runner, the inner walls of the branches forming a relatively sharp metal dividing wedge at the point of the divergence, and supporting means which permit rotation of the runner about its longitudinal axis; substantially as described.

2. A ladle runner having two branches at its discharge end, said branches having their center lines at an acute angle to the longitudinal axis of the runner, and means for rotating the runner about such axis and for adjusting it whereby metal may be made to flow through both branches simultaneously in the same or in different volume, or through either branch thereof only; substantially as described.

1,061,281. ELECTRIC-MOTOR TRUCK. CHARLES F. FREDE, St. Louis, Mo., assignor to Double Body Bolster Company, St. Louis, Mo., a Corporation of New Jersey. Filed Sept. 15, 1911. Serial No. 649,564. (Cl. 105—239.)



1. In an electric motor truck, a truck frame having wheel pieces, pedestals depending therefrom, a vertically movable equalizer bar between the lower ends of the pedestals and diagonally disposed bars fixed at their upper ends to the wheel pieces and the lower ends of which braces are divided and fixed to the lower ends of the pedestals on the outer faces thereof.

2. In an electric motor truck, a truck side frame comprising a wheel piece, pairs of pedestals fixed to and depending therefrom, journal boxes between the pairs of pedestals, an equalizer bar connected to the journal boxes, and diagonally disposed brace members fixed to the end portions of the wheel piece at their upper ends, the lower ends of which brace members span the space between the pedestals below the journal boxes, and said brace members being fixed to said pedestals.

3. In an electric motor truck, a truck frame having wheel pieces, pedestals arranged in pairs, which pedestals are fixed to and depend from the wheel pieces, a vertically movable equalizer bar arranged between the lower ends of the pairs of pedestals and diagonally disposed braces fixed to the end portions of the wheel pieces at their upper ends, their lower ends being divided and fixed to the lower portions of the pedestals on the outer faces thereof, which equalizer bars and diagonally disposed braces form the lower chords of the side frames of the truck.

4. In an electric motor truck, the combination with a truck frame having wheel pieces, pedestals depending therefrom, and journal boxes between the pedestals, of a continuous lower chord for the truck side frame, which lower chord comprises a vertically movable equalizer bar connected to the journal boxes, and diagonally disposed brace members, extending downward from the end portions of the wheel pieces, the lower ends of which brace members are divided and are fixed to the inner and outer side faces of the pedestals below the journal boxes.

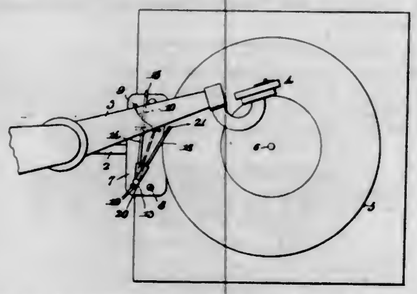
5. In an electric motor truck, a motor frame support comprising a bracket fixed to the motor frame, the ends of which bracket extend above and below a transverse member of the truck frame, and springs interposed between the projecting ends of said bracket and the transverse member of the truck frame.

[Claims 6 and 7 not printed in the Gazette.]

1,061,282. PHONOGRAPH BRAKE AND STOP. BAPTISTE J. GENESY, Reno, Nev. Filed June 17, 1912. Serial No. 704,116. (Cl. 74—46.)

1. In a device of the class described, the casing, rotatable members and movable arm, in combination with a post mounted upon said casing, a spring arm secured at one end to said post, a brake shoe at the free end of said spring arm, a pivotally mounted brake actuating arm provided with a pair of stops engaging said spring arm, and a trip arm connected to said brake actuating arm and having its free end arranged in the path of said movable arm, said trip arm being arranged above the plane of the

rotatable member and the rest of the mechanism being arranged entirely below the plane of said rotatable member, substantially as described.

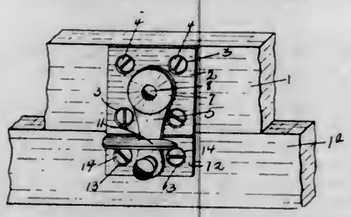


2. An attachment for a machine having a casing, a rotatable member and a movable arm comprising a plate adapted to be secured to the upper surface of the casing adjacent the rotatable member, a post on said plate, a spring brake arm secured at one end to said post and extending toward the periphery of the rotatable member, a pivotally mounted post adjacent the opposite end of said plate, a brake actuating arm fixed to said post and provided with stops for engagement with said brake arm, and a trip arm secured at one end to said pivoted post and having a free end adapted to be arranged to lie in the path of the movable arm, substantially as described.

3. An attachment for a machine having a casing, a rotatable member, and a movable arm comprising a plate adapted to be secured to the casing adjacent the rotatable member, a post on said plate, a spring brake arm secured at one end to said post, a pivotally mounted post adjacent the opposite end of said plate, a brake actuating arm fixed to said post and provided with stops for engagement with said brake arm and a trip arm adjustably secured at one end to said pivoted post, the free end thereof being adapted to be arranged to lie in the path of the movable arm substantially as described.

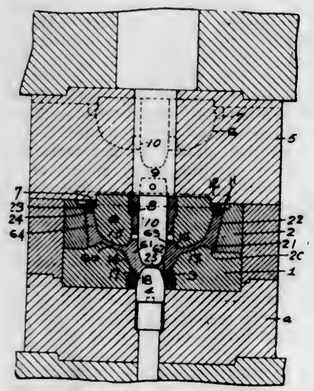
4. An attachment for a machine having a casing, a rotatable member, and a movable arm comprising a plate adapted to be secured to the casing of the machine adjacent the rotatable member, a post on said plate, a spring brake arm fixed at one end to said post and having a brake shoe at its free end to engage said rotatable member, a brake actuating arm pivotally mounted on said plate and adapted to engage and operate said spring arm, a trip arm adjustably connected to said brake actuating arm, said spring arm and brake actuating arm lying in a plane wholly below the upper surface of the rotatable member and said trip arm lying above the plane of the upper surface of said rotatable member, said trip arm being adapted to be actuated by the movable arm, substantially as described.

1,061,283. SASH-FASTENER. JAMES C. GRIFFIN, Erie, Pa., assignor to Griffin Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Sept. 25, 1911. Serial No. 651,042. (Cl. 16—30.)



In a sash fastener, the combination of a base plate; a pin secured to the plate and having a head spaced from the plate; a swinging latch journaled on the pin and arranged next the plate; and a spring washer arranged on the pin between the head of the pin and the latch and yieldingly pressing the latch against the base plate, said base plate and latch having variations from a plane on their joint surfaces co-acting to compel an axial movement of the latch against the spring washer as the latch is swung, said variations having slanting surfaces in a circumferential direction whereby the latch will yield to circumferential pressure to move it to different adjustments.

1,061,284. MANUFACTURE OF CAR-WHEELS. JOHN M. HANSEN, Pittsburgh, Pa. Filed Oct. 7, 1911. Serial No. 653,435. (Cl. 29—168.)



1. The improvement in the art of forming forged steel car and like wheels, consisting in die forging an imperforate heated blank to thin the web portion and initially develop the rim and hub portions, immediately raising the blank from the bottom die and transferring it to separate finishing dies and therein forging the hub, rim and web portions to finished form and shape of dish.

2. The improvement in the art of forming forged steel car and like wheels, consisting in die forging an imperforate heated blank to thin the web portion and initially develop the rim and hub portions, raising the blank from the bottom die by means of a center plunger, immediately transferring the blank to separate finishing dies and therein bending the web portion to finished shape of dish, forging the rim and piercing the hub.

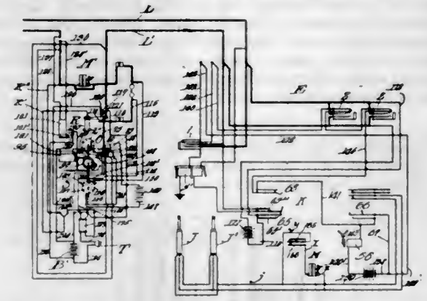
3. The improvement in the art of forming forged steel car and like wheels, consisting in die forging an imperforate heated blank to develop rim, web and hub portions, partially piercing the hub portion from below, raising the blank from the bottom die by means of the center plunger by which the hub has been partially pierced, immediately transferring the blank to separate finishing dies and therein bending the web portion to finished shape of dish, forging the rim, and piercing the hub.

4. The improvement in the art of forming forged steel car and like wheels, consisting in die forging an imperforate heated blank to partially develop the hub and rim portions and bring the web to finished thickness, immediately transferring the blank to finishing dies and therein bending the web to finished shape of dish and while the web is confined between the dies forging the rim portion to finished shape.

5. The improvement in the art of forming forged steel car and like wheels, consisting in die forging an imperforate heated blank to develop the web portion and beyond the same a rudimentary rim portion depending below the web portion, immediately transferring the blank to finishing dies and therein forging the rim portion to finished shape with its body extending on both sides of the web portion.

[Claims 6 to 10 not printed in the Gazette.]

1,061,285. SELECTIVE SYSTEM OF TELEPHONY. RUBEN C. M. HASTINGS, Columbus, Ohio, assignor to The International Telephone Co., Columbus, Ohio. Filed Aug. 29, 1911. Serial No. 646,697. (Cl. 179—31.)



1. In a system of selective telephony, the combination of an exchange and a plurality of subscribers' instruments connected in a talking circuit, a selecting instrument at the exchange, and a shunt operating device in each subscriber's instrument influenced only by the selecting instrument to shunt the uncalled subscribers' instruments from the talking circuit and at the same time open all the transmitter circuits to the batteries in the instruments so shunted.

2. In a system of selective telephony, the combination of an exchange and a plurality of sets of subscribers' instruments connected for the transmission of intelligence, said exchange having manually operated means for selecting a subscriber's set and shunting the uncalled sets, and automatically operated means for signaling the called set, said selecting means being the sole instrumentality for selecting and signaling a called set, and for shunting the uncalled sets.

3. In a system of selective telephony, the combination of an exchange and a plurality of sets of subscribers' instruments connected for the transmission of intelligence, said exchange having means for selecting the desired set, signaling the same, and shunting all uncalled sets from the system, said selecting means being the sole instrumentality for selecting and signaling a called set, for shunting the uncalled sets, and for connecting all sets to the line for communication with the exchange.

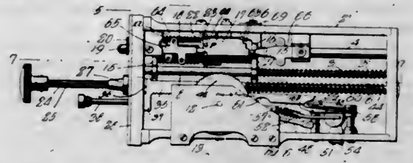
4. In a system of selective telephony, the combination of an exchange and a plurality of sets of subscribers' instruments, each set having a transmitter, receiver, a call-up device and a receiver locking and shunting device, said exchange and sets being connected for the electrical transmission of speech, and mechanism mounted at the exchange and manually operated to connect any two of the subscribers' sets for communication, to operate the shunting devices in the remaining sets to isolate them from the line, and for automatically operating the call-up device of the set called, and auxiliary means mounted in said mechanism for repeating the signal.

5. In a system of selective telephony, the combination of an exchange and a plurality of subscribers' sets of instruments, including a transmitter, a receiver, a call-up alarm, a shunting device and a visual indicator, said exchange and subscribers' sets of instruments being in electrical communication, and mechanism mounted at the exchange and manually operated to connect any two of the subscribers' sets of instruments for communication, to operate the shunting devices and visual indicators in the remaining sets of instruments, and for automatically operating the call-up alarm of the set selected.

[Claims 6 to 12 not printed in the Gazette.]

1,061,286. SELECTING APPARATUS FOR TELEPHONE SYSTEMS. RUBEN C. M. HASTINGS, Columbus, Ohio, assignor to The International Telephone Co., Columbus, Ohio. Filed Apr. 22, 1912. Serial No. 692,465. (Cl. 179—85.)

1. A selecting key having a supporting frame, a carriage slidably mounted therein, a rotatable selecting member mounted in the carriage, means for rotating said member and for imparting to the carriage an inward sliding movement, means for retaining the carriage and member in selected position, and means for releasing said retaining means to permit the carriage to return to initial position.



2. A selecting key, having a supporting frame, a carriage slidably mounted therein, a spring for causing the return of the carriage, a rotatable selecting member mounted in the carriage, means for rotating said member and for imparting an inward sliding movement against the tension of the spring, means for retaining the carriage and member in selected position, and means for releasing said retaining means to permit the carriage to return to initial position.

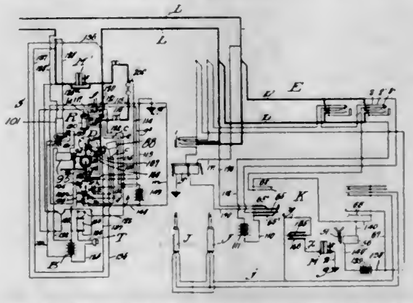
3. A selecting key, having a supporting frame, a carriage slidably mounted therein, a spring for causing the return of the carriage, a rotatable selecting member mounted in the carriage, means for rotating said member and for moving the carriage and member against the tension of the spring into selected position, and electromagnetically operated means disposed to act as a lock to retain the carriage at selected position and as a release to permit the carriage to return to initial position.

4. A selecting key, having a supporting frame, a carriage slidably mounted therein, a selecting member rotatably mounted in the carriage, a rod for rotating said member and for imparting to the carriage an inward movement, means for retaining said carriage and member in selected position, and means for releasing said retaining means to permit the carriage to return to initial position.

5. A selecting key, having a supporting frame, a carriage slidably mounted therein, a spring for causing the return of the carriage to initial position, a selecting member rotatably mounted in the carriage, a rod for rotating said member and for imparting to the carriage an inward movement against the tension of the spring, means for retaining said carriage and member in selected position, and means for releasing said retaining means to permit the spring to return the carriage and member to initial position.

[Claims 6 to 22 not printed in the Gazette.]

1,061,287. TELEPHONE SYSTEM. RUBEN C. M. HASTINGS, Columbus, Ohio, assignor to The International Telephone Co., Columbus, Ohio. Filed Apr. 22, 1912. Serial No. 692,466. (Cl. 179—30.)



1. In a telephone system, the combination with an exchange station having a selecting apparatus, of a series of sub-stations connected in said system and with the exchange for the transmission of speech, each sub-station having a transmitter, a receiver, and a receiver hook, a shunting device controlled by said selecting apparatus,

each shunting device having a rotatable shaft, an electromagnet controlled from the selecting apparatus to actuate said shaft, a receiver hook lock controlled by the shaft, shunt contacts connected to the line at each sub-station, and a lever disposed in operable relation to the shunt contacts and receiver hook lock to shunt the sub-station from the system or place the same into the system for speech transmission.

2. The combination with an exchange station having a selecting apparatus, of a series of sub-stations connected to the exchange station for the transmission of intelligence, a transmitter, a receiver, and a receiver hook in each sub-station, and a shunting device for each substation controlled by said selecting apparatus, each shunting device having a rotatable shaft, means controlled through the line to actuate said shaft, a receiver hook lock controlled by said means, a shunting connection with the line operably disposed to be closed by the lock, and a visual signal connected to the shaft to indicate the condition of the shunt connection.

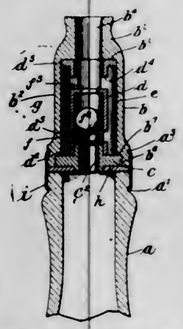
3. In a shunting device for the local battery circuit of a sub-station set of instruments, a rotatable shaft, electromagnetically operated means for rotating said shaft, a receiver hook lock controlled by said shaft, a lever in operable relation to said lock, and a pair of spring terminal contacts controlled by said lever and in a shunt circuit with the transmission line to cause the local battery circuit to be shunted from or connected in the line.

4. In a shunting device for the local battery circuit of a sub-station set of instruments, a rotatable shaft, electromagnetically operated means for rotating the shaft, a receiver hook lock controlled by said shaft, a lever in operable relation to said lock, a pair of spring terminal contacts controlled by said lever and in a shunt circuit with the transmission line to cause the local battery circuit to be shunted from or connected in the line, and a visual signal operated by the shaft to indicate the condition of the local battery circuit relatively to the line.

5. In a telephone system, a sub-station having a switch controlled shunt connection when closed adapted to isolate the sub-station from the line, a transmitter, a receiver, a local battery circuit having two switches therein, and means controlled by the transmission current of the system for opening and closing the switch of the shunt connection and closing and opening one of the switches of the local battery circuit, the switch of the shunt connection being closed when one switch of the local battery circuit is open, or vice versa.

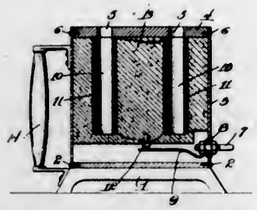
[Claims 6 to 12 not printed in the Gazette.]

1,061,288. NON-REFILLABLE BOTTLE. PATRICK J. HERBERT, Dover Plains, N. Y. Filed Oct. 21, 1912. Serial No. 726,877. (Cl. 215—62.)



The combination with the neck of a bottle or similar vessel of an attachment comprising a main outer tubular shell in the bottom of which is placed a plate having a central, vertical tubular member, a tubular casing placed centrally and vertically in said shell, the lower end of which incloses the top of said tubular member and the sides of which are provided with transverse ports or passages in the top and bottom portions thereof, the ports or passages in the bottom portion of said tubular casing being above the top of said tubular member, a valve placed in said tubular casing and vertically movable therein and normally resting on the top of said tubular member and closing the bottom ports or passages in said tubular casing, and a ball placed in the chamber formed by the central portion of said tubular casing and normally resting on said valve.

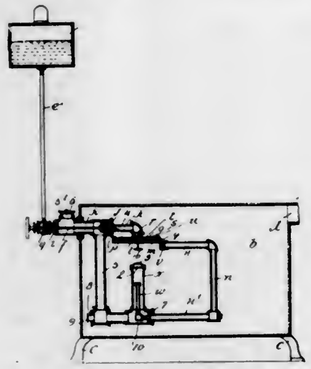
1,061,289. ELECTRIC HEATER. CHARLES C. HEYDER, Hansford, W. Va. Filed Aug. 31, 1912. Serial No. 718,083. (Cl. 219—22.)



1. A heater comprising a metallic casing, contact terminals carried by but insulated from the casing, spring contacts connected to the terminals and extending into the casing and insulated heating coils removably mounted in the casing and having their terminals arranged to engage said spring contacts together with an apertured cover for holding the coil terminals in engagement with the spring contacts.

2. An electrical heater comprising a casing, contact terminals connected to but insulated from the casing, contact springs carried by the terminals and extended into the casing, instrument receiving tubes, heating coils surrounding the tubes, an insulated block covering the tubes and the coils and having the terminals of the coils projecting therefrom to engage the springs and a cover removably secured on the casing for holding the terminals of the coils in engagement with the springs, said cover being apertured to register with the instrument tubes.

1,061,290. OIL-BURNER. GEORGE LEWIS HOGAN, Montreal, Quebec, Canada, assignor of one-half to Arthur Bailey, Seattle, Wash. Filed Sept. 28, 1912. Serial No. 722,961. (Cl. 158—65.)

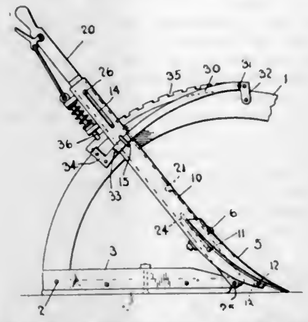


1. In an oil burner, the combination with a combustion chamber and an oil inlet, of a vaporizing chamber, an oil supply passage leading from the oil inlet to the vaporizing chamber, a tip, a gas chamber located intermediate of and in communication with the vaporizing chamber and the said tip, a chamber within the combustion chamber and inclosing the tip, and a conduit leading from the exterior of the combustion chamber to the said inclosing chamber.

2. In an oil burner, the combination with an oil supply reservoir, of a vaporizing chamber, an oil supply passage leading from the oil reservoir to the vaporizing chamber, a gas chamber in communication with the vaporizing chamber and located beneath the same, a pan formed upon the top of the gas chamber, ribs reinforcing the sides of the pan, and a tip in communication with the gas chamber and situated below the latter.

3. In an oil burning apparatus, a gas chamber including a top portion having a vent therethrough and a bottom portion bolted to the top portion, the upper surface of the top portion having a series of ribs thereon forming a pan and an annular flange encircling the said vent, and the bottom portion having a tortuous path formed therein and leading from the said vent.

1,061,291. AUTOMATIC-ADJUSTING PLOW. JAMES ALLEN HUGGINS, Red Springs, N. C. Filed July 18, 1912. Serial No. 710,317. (Cl. 97—26.)



1. In a plow, the combination with the runner, a lever having a fork at its lower end whose arms are longitudinally slotted and pivoted to said runner and a handle at its upper end, the beam, a rack bar secured to the beam and past which said handle moves, and a latch on the handle engaging said rack bar; of a plow standard made in spaced members, the shovel carried by said members, a cross rivet passing through the members and the slots of said fork-arms, and means for adjusting the standard along said arms as the lever is turned on its pivot.

2. In a plow having a runner, the combination with a lever having a fork at its lower end whose arms are pivoted to said runner and a handle at its upper end, the beam, and devices carried by the beam for holding the lever in adjusted position; of a plow standard made in spaced members curved forward at their lower ends, the shovel secured upon said ends and overlying the lower ends of the fork-arms, a cross rivet passing through said members and slidably mounted in said slots, and means for adjusting the standard along said arms as the lever is turned on its pivot.

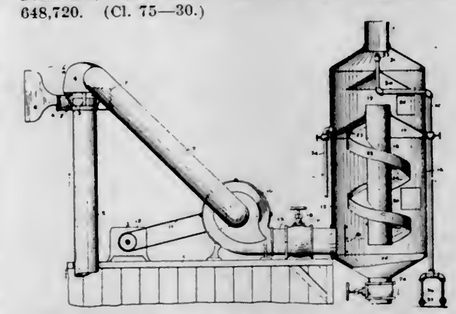
3. In a plow, the combination with the runner, a lever having a pair of arms pivoted to the runner and a handle, a latch on the lever, the beam, and a rack bar secured to the beam and engaged by the latch; of a plow standard including a pair of members, the shovel carried by them, longitudinal slots in one of said pairs, a cross rivet passing through the other of said pairs and slidably engaging said slots, and means for adjusting the standard along said arms as the lever is turned on its pivot.

4. In a plow, the combination with the runner, a lever having a fork at its lower end whose arms are slotted and pivoted to said runner and a handle at its upper end, a beam, a brace connecting the beam with the runner, a thumb-latch on said lever, and a rack bar curved around said pivot and having offset ends secured respectively to said brace and beam; of the plow standard slidably mounted between said fork-arms, a cross rivet through the standard moving in said slots, the shovel mounted on the standard, and a curved guide eccentric to said pivot and engaged by the standard for moving the latter longitudinally of the fork-arms when the handle is turned around its pivot.

5. In a plow, the combination with the runner, a lever having a fork at its lower end whose arms are slotted and pivoted to said runner and a handle at its upper end, a beam, a brace connecting the beam with the runner, a thumb-latch on said lever, and a rack bar curved around said pivot and having offset ends secured respectively to said brace and beam; of the standard slidably mounted between the fork-arms, a cross rivet through the standard slidably mounted in said slots, the shovel carried by the standard, a bar passing between the fork-arms and pivoted at its upper end to the beam, its body having a guide-slot struck on a curve eccentric with said pivot and its lower end having a longitudinal slot, means for adjusting the last-named slot over and securing it to said brace, and devices on the standard engaging said curved slot for moving the standard longitudinally of the fork-arms as the lever is turned around its pivot.

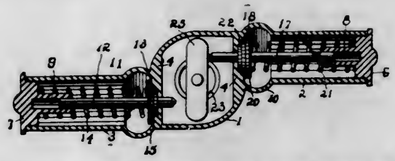
[Claim 6 not printed in the Gazette.]

1,061,292. DUST AND FUME ARRESTER. JOHN P. HUNDRUP, Riverside, and WILLIAM G. ALLEN, San Francisco, Cal. Filed Sept. 11, 1911. Serial No. 648,720. (Cl. 75—30.)



In an apparatus of the character described, the combination of a separator, baffling means therein, a blower, a pipe leading from said blower to said separator, a stack leading from the place of generation of dust and fumes, a hood surrounding the open top of the pipe, a movable wind shield for preventing a strong current of air entering said hood above said latter pipe, a tail adapted to be actuated by the wind to move said latter means into operative position.

1,061,293. AUTOMATIC SELF-CLOSING COMPOUND MIXING-FAUCET. JOSEPH G. HUYE, New Orleans, La., assignor of one-half to William J. Kernaghan, New Orleans, La. Filed June 14, 1912. Serial No. 703,689. (Cl. 137—26.)



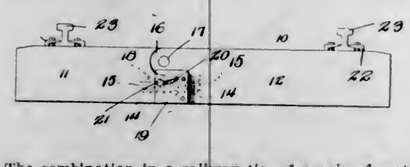
1. A faucet casing provided with a central chamber having valve seats on opposite sides thereof and two laterally extending chambers communicating with said central chamber through said seats, these latter chambers being out of line with each other, a pair of valves having stems and governing the flow through said lateral chambers re-

spectively, springs tending to hold said valves on their seats and cause the protrusion of said stems into said central chamber, a cross-bar in said central chamber and means for turning said cross-bar to act on said stems, the cross-bar returning to its neutral position upon the release of said means.

2. A faucet-casing comprising a central chamber, a laterally extending chamber communicating therewith and having an enlargement at its inner end provided with valve seats at its inner side and outer side respectively, a valve located in said enlargement and adapted to fit on either of said seats, a stem carried by said valve, a spring tending to force said valve on its inner seat and to cause the protrusion of said stem into said central chamber, another laterally extending chamber communicating with said central chamber on the opposite side from the lateral chamber first mentioned, an inwardly spring pressed valve for closing this second lateral chamber and carrying a valve-stem which is arranged to enter said central chamber and a device rotatable in said central chamber arranged for contact with said valve stems to move said valves off from their seats.

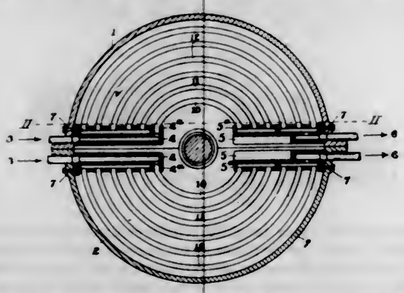
3. A faucet-casing having a chamber and two opposite inlets arranged out of line with each other, in combination with inwardly closing spring pressed valves provided with inwardly presented stems and governing said inlets, said stems running parallel to each other, and a device rotatable in said chamber and arranged and adapted to act on said stems for opening the valves and to be turned by the said stems and the spring pressure thereon to permit the seating of said valves.

1,061,294. METALLIC RAILROAD-TIE. WILSON IMHOFF, Lititz, Pa. Filed Aug. 7, 1912. Serial No. 713,906. (Cl. 238—5.)



The combination in a railway tie, of a pair of sections, one being greater in length than the other section, interlocking tongues formed upon said sections, a bolt passing through said tongues, said sections having recesses formed in the ends thereof, pins formed upon the sections and projecting into the recesses, springs engaging the pins, plates secured to the sides of one section, and extending to engage the sides of the other section, said plate having slots formed therein, and pins extending from one section through the slots.

1,061,295. TUBULAR HEAT-EXCHANGE APPARATUS. CARL HERMANN JAEGER, Leipzig-Plagwitz, Germany. Filed Apr. 17, 1911. Serial No. 621,649. (Cl. 62—30.)



1. Tubular heat exchange apparatus comprising a plurality of tubes of different lengths, and end chambers connecting tubes of one length with a greater number of tubes of greater length; substantially as set forth.

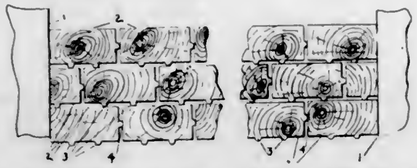
2. Tubular heat exchange apparatus comprising a plurality of groups of tubes of different lengths, and end connections connecting said groups in series, the number of tubes in the various groups from one end of the series to the other being increased in accordance with the increase in length of the tubes in that group as compared with tubes in another group; substantially as set forth.

3. Tubular heat exchange apparatus comprising a number of curved tubes of different lengths arranged so that the longer tubes partly surround the shorter tubes, and headers connecting the tubes in such a manner as to constitute a plurality of groups with the groups connected in series any group of longer tubes comprising a greater number than any group of shorter tubes; substantially as set forth.

4. Tubular heat exchange apparatus comprising two headers to which are connected a number of tubes of gradually increasing length, partitions in said headers so arranged that any group of tubes is connected in series with a group of tubes of greater length and of a greater number than itself; substantially as set forth.

5. Tubular heat exchange apparatus comprising a plurality of longitudinally curved or bent tubes of different radii concentrically arranged, headers connecting corresponding ends of the tubes and partitions in the headers so arranged as to divide said tubes into groups of parallel members with groups connected in series, groups of tubes of smaller radius comprising fewer numbers of tubes than groups of tubes of greater radius; substantially as set forth.

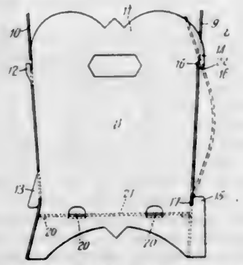
1,061,296. WOOD-PAVEMENT. HARRY G. JENNISON, Toledo, Ohio. Filed Apr. 17, 1912. Serial No. 691,439. (Cl. 94—8.)



1. A pavement comprising wood blocks with the grain of the wood of the blocks extending in one direction, there being wood spacing means for the blocks having the grain of the wood of the spacing means extend in the same direction as the grain of the wood of the blocks.

2. The combination with a wood paving block provided with an integral wood projection extending in the direction of the grain of the block along a vertical side of the block, of a second block spaced from the first by said projection.

1,061,297. COLLAPSIBLE WASTE-BASKET. GEORGE L. JOHNSON, Lynn, Mass. Filed July 11, 1912. Serial No. 708,821. (Cl. 229—48.)



1. A collapsible waste basket having, in combination, a plurality of sides of sheet material, two of the opposite edges of each of said sides being shaped to form a plurality

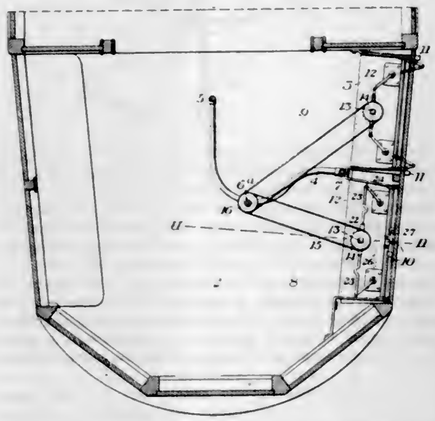
of hooks adapted to interlock with a like number of hooks on the edges of the sides adjacent thereto, one of the hooks on each edge of each of said sides being oppositely disposed to another hook on the same edge of the same side.

2. A collapsible waste basket having, in combination, a plurality of sides of sheet material, two of the opposite edges of each of said sides being shaped to form a plurality of hooks adapted to interlock with a like number of hooks on the edges of the sides adjacent thereto, one of the hooks on each edge of each of said sides being oppositely disposed to another hook on the same edge of the same side and the corresponding hooks on opposite edges of the same side piece being oppositely disposed, respectively, to each other.

3. A collapsible waste basket having, in combination, a plurality of sides of sheet material, two of the opposite edges of each of said sides being shaped to form a plurality of hooks adapted to interlock with a like number of hooks on the edges of the sides adjacent thereto, one of the hooks on each edge of each of said sides being oppositely disposed to another hook on the same edge of the same side and one of said hooks on one edge of each side being beveled on its outer edge adjacent to the free end thereof.

4. A collapsible waste basket having, in combination, a plurality of sides of sheet material, said sides being duplicates of each other, two of the opposite edges of each of said sides being shaped to form a plurality of hooks adapted to interlock with a like number of hooks on the edges of the sides adjacent thereto, one of the hooks on each edge of each of said sides being oppositely disposed to another hook on the same edge of the same side.

1,061,298. DOOR-OPERATING MECHANISM. PEARL N. JONES, Pittsburgh, Pa. Filed Sept. 20, 1911. Serial No. 650,405. (Cl. 39—93.)



1. The combination with a pair of doors, said doors being mounted to have a combined swinging and sliding movement, a pair of shafts mounted in stationary bearings and having connections arranged to simultaneously open and close the co-acting pair of doors, and connections for simultaneously turning said shafts; substantially as described.

2. The combination with a pair of doors, said doors being mounted to have a combined swinging and sliding movement, a pair of inter-connected rotary shafts mounted in stationary bearings and having connections arranged to simultaneously open and close the co-acting doors, and means for simultaneously turning said shafts; substantially as described.

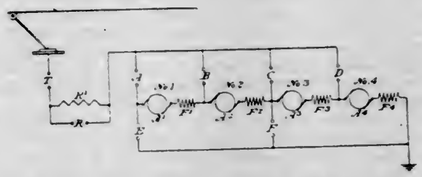
3. The combination with a pair of doors mounted to have a combined swinging and sliding movement, a rotary shaft, actuating means connected to said shaft, oppositely extending arms rigidly secured to said shaft, a bent link connected to each of said arms, and link and lever connections between each of said links and one of the doors, the bends in the links being arranged to have a locking engagement with the said shaft when the doors are opened; substantially as described.

4. In a car door operating mechanism, the combination with a pair of doors mounted to have a combined swinging and sliding movement, of a support mounted above the upper edges of the doors, a shaft journaled in said support, actuating connections for said shaft, and link and lever connections extending from said shaft to each of the doors; substantially as described.

5. In a car door operating mechanism, the combination with two pairs of doors arranged side by side, each door being mounted to have a combined swinging and sliding movement, of a rotary shaft supported above the upper ends of each of the pairs of doors, link and lever connections between each shaft and the doors of one pair of doors, and separate operating connections for the two shafts, said connections having concentrically arranged members provided with actuating means located adjacent to each other: substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,061,299. ELECTRIC-MOTOR CONTROL. PEARL N. JONES, Pittsburgh, Pa. Filed Sept. 23, 1912. Serial No. 721,788. (Cl. 172—179.)



1. In the control of three or more electric motors, the steps which consist in establishing as many parallel paths through the motors as there are motors, and maintaining a series of connection between the motors while establishing such paths, and also maintaining at least two of the motors actively in circuit while establishing said parallel paths; substantially as described.

2. In the control of three or more electric motors, the method which consists in changing the motors from series to parallel relation by successively establishing parallel current paths through the motors and maintaining at least two of the motors actively in circuit throughout said changes, and also maintaining a series connection between the motors until there are as many of such paths as there are motors; substantially as described.

3. The method of controlling electric motors, which consists in connecting a plurality of them in series, then in series-parallel groups, and finally in parallel by establishing parallel circuits which reverse the current flow in some of the motors, and maintaining a series connection between the motors while effecting the circuit changes; substantially as described.

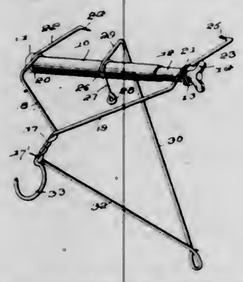
4. The method of controlling electric motors, which consists in connecting a plurality of them in series, then short-circuiting one or more of the motors, then connecting them in series-parallel groups, and then successively connecting them in parallel by establishing parallel circuits which reverse the current flow in some of them, and maintaining a series connection between the motors while effecting the circuit changes: substantially as described.

5. The herein described method of controlling electric motors while permanently connected in series, which consists in short-circuiting two of the motors, then connecting them in series-parallel groups, then short-circuiting one motor of one group and connecting the remaining motor of that group in parallel with the two motors of the other group, then short-circuiting a motor of the other group and placing the remaining two motors in parallel.

and finally connecting all four motors in parallel, and effecting said steps while maintaining a series connection of the motors by establishing parallel circuit connections which reverse the flow of current through some of them, substantially as described.

[Claims 6 to 12 not printed in the Gazette.]

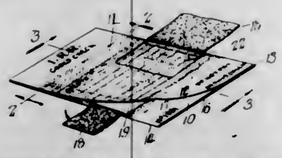
1,061,300. CURTAIN-BRACKET. IGNATZ F. KAZMIERCZAK, Detroit, Mich. Filed Sept. 25, 1912. Serial No. 722,314. (Cl. 156—24.)



1. A window pole and shade bracket comprising an outer tubular member, an inner tubular member internally threaded and telescopically engaging the outer tubular member, a threaded rod engaging the inner tubular member and extending through the outer tubular member and having a head engaging against the outer end of the same, means for rotating the inner tubular member, clamp members carried respectively by said tubular members and adapted to engage a window, and pole brackets connected to said clamping means.

2. A window pole and shade bracket comprising body members telescopically engaging, means for forcibly adjusting said body members longitudinally, a clamping device formed from wire and including spaced sides coiled intermediate the ends respectively around the body members and with inwardly directed casing engaging spurs at one end and united into an eye at the other end, and a combined curtain pole and shade support formed from a single piece of wire and including a vertical portion coiled near one end around one of said body members and extended into a shade roller journaled bearing, and a diagonal bracing portion extending through the eye of the clamping portion and terminating in a pole receiving hook, said bracing portion and vertical portion being bent into an eye at their juncture.

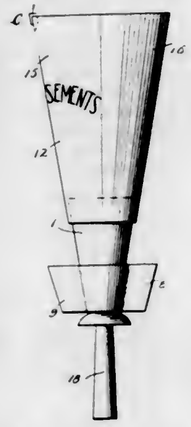
1,061,301. MANIFOLDING SALESMAN'S CHECK. EDWARD Z. LEWIS, Chicago, Ill., assignor to The General Manifold and Printing Company, Franklin, Pa., a Corporation of Pennsylvania. Filed Sept. 14, 1912. Serial No. 720,305. (Cl. 11—23.)



1. A salesman's manifolding check consisting of a single sheet divided transversely by lines of fold into three sections and provided on its back with transfer material, the end sections of said sheet constituting, respectively, an accountant's check-form and a requisition check-form, and of a sheet of heavier material of substantially the size of said sections, the accountant's check-section and the intermediate section being folded about said sheet of heavier material and being secured together at their ends and at one side along a line adjacent the fold line between the said intermediate section and the requisition check section, and the requisition check section being then folded down on top of the accountant's check section.

2. A salesman's manifolding check consisting of a single sheet divided transversely by lines of fold into three sections and provided on its back with transfer material, the end sections of said sheet having printed on their faces, respectively, an accountant's check-form and a requisition check-form, and of a sheet of heavier material of substantially the size of said sections, the accountant's check section and the intermediate sections being folded about said sheet of heavier material and being secured together at their ends by adhesive material and at one side by a line of stitching adjacent the fold line between the said intermediate section and the requisition check section, and the requisition check section being folded down on top of the accountant's check section.

1,061,302. ADVERTISING NOVELTY. DORSIE A. LOHR, Woodlawn, Pa. Filed May 29, 1911. Serial No. 630,084. (Cl. 46—46.)



1. An advertising novelty consisting of a megaphone adapted to be collapsed, and means for holding the same collapsed whereby it may be used for a fan.

2. An advertising novelty consisting of a megaphone adapted to be collapsed, means for holding the same collapsed whereby it may be used for a fan, said megaphone consisting of a pair of telescopic members.

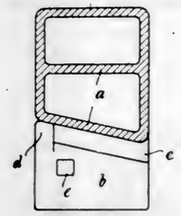
3. An advertising novelty consisting of a megaphone adapted to be collapsed, means for holding the same collapsed whereby it may be used for a fan, said megaphone consisting of a pair of telescopic members, and a mouthpiece for said megaphone having inner opposing tapering surfaces.

4. An advertising novelty consisting of a megaphone adapted to be collapsed, means for holding the same collapsed whereby it may be used for a fan, said megaphone consisting of a pair of telescopic members, a mouthpiece for said megaphone having an inner tapering surface, and a tapering musical mouthpiece adapted to frictionally engage said first mouth piece and adapted to form a handle.

5. An advertising novelty consisting of a megaphone adapted to be collapsed, means for holding the same collapsed whereby it may be used for a fan, said megaphone consisting of a pair of telescopic members, a mouthpiece for said megaphone having an inner tapering surface, a tapering musical mouthpiece adapted to frictionally engage said first mouthpiece, and adapted to form a handle, said means consisting of a flattened member adapted to engage one end of one of said telescopic members.

[Claims 6 to 8 not printed in the Gazette.]

1,061,303. AGITATING OR STIRRING DEVICE FOR USE IN MECHANICAL ROASTING-FURNACES. MAURICE VAN MARCKE DE LUMMEN, Cologne, Germany. Filed June 11, 1912. Serial No. 702,952. (Cl. 75—143.)

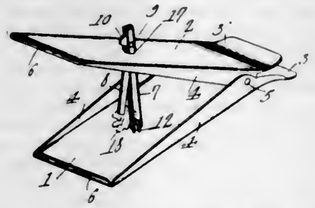


1. In roasting furnaces or the like, in combination, an agitating arm, guides thereon inclined to the horizontal and teeth detachably supported in said guides.

2. In roasting furnaces or the like, in combination, an agitating arm, guides thereon, said guides being inclined upwardly from the rear to the front of said arm and teeth detachably supported in said guides.

3. In roasting furnaces or the like, in combination, an agitating arm, guides thereon inclined to the horizontal and teeth slidingly mounted in said guides, each of said teeth being provided with means to limit its sliding movement with respect to said guides.

1,061,304. ANIMAL-TRAP. HENRY HEALD MAY, New Albion, Iowa. Filed July 24, 1912. Serial No. 711,302. (Cl. 43—21.)

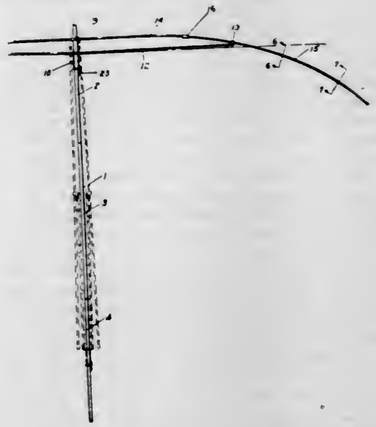


1. A trap comprising coöperating jaws; and trigger mechanism comprising diverging, pivotally connected members, between which the bait is gripped, to hold one member engaged with one jaw, when said jaw is set, the other member being slidably held in said jaw and being pivoted to the other jaw.

2. A trap comprising pivotally connected primary and secondary members; and trigger mechanism comprising pivotally connected main and auxiliary members, the main member being pivotally connected with the primary jaw, and the auxiliary member having a shoulder engaging the secondary jaw when the secondary jaw is set, the auxiliary member having a stop engageable by the secondary jaw to position the shoulder for engagement by the secondary jaw, the trigger members diverging, to grip the bait between them, whereby the shoulder will be bait-held in engagement with the secondary jaw.

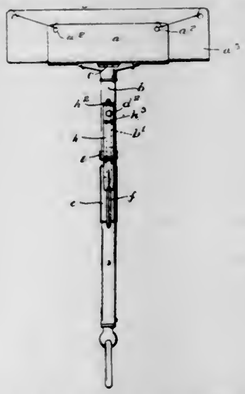
3. A trap comprising pivotally connected primary and secondary jaws having diverging finger pieces, the secondary jaw having an opening; trigger mechanism comprising a main member and an auxiliary member, pivotally connected, the main member being pivotally united with the primary jaw, the trigger mechanism lying in an inclined position upon the secondary jaw, when the jaws are closed together, the finger pieces constituting means for separating the jaws, whereby the trigger mechanism will assume an upright position and ride automatically into the opening, the auxiliary member of the trigger mechanism having spaced elements, one of which is engageable by the secondary jaw, to swing the other of said elements into engagement with the secondary jaw.

1,061,305. FOLDING UMBRELLA. JOHN FRANK MCALLISTER, Pittsburgh, Pa. Filed Oct. 7, 1912. Serial No. 724,428. (Cl. 135—25.)



A folding umbrella comprising a stick, a notch at or near one end thereof, ribs pivotally secured to said notch and comprising inner and outer members having a stiff pivotal connection therebetween, said outer members being of relatively greater length than said inner members, spreaders pivotally connected to said outer members near the inner ends thereof, a runner on said stick to which said spreaders are connected, said spreaders being located in such position as to balance the pressure on the umbrella and hold it open without the use of any stay pieces or other device, and a catch member on said stick adapted to engage said runner when said ribs are extended, said catch member being so located that in the opened position of said umbrella, said spreaders are nearly perpendicular to said stick.

1,061,306. FLASH-LIGHT APPARATUS. IRVING G. MCCOLL, New York, N. Y. Filed Apr. 27, 1912. Serial No. 693,548. (Cl. 67—33.)



1. A flash light apparatus embodying therein a flash pan, a handle therefor, said flash pan having an opening therethrough and a recess being formed between said handle and said pan adjacent to said opening and opening outwardly below said pan, a spring actuated firing pin mounted within said handle and adapted to be forced into engagement with a cap contained in said recess, and a trigger mechanism comprising a member slidably mounted upon said handle, coöperating coupling members carried

by said firing pin and said member respectively, and means operating to disengage said coupling members at a predetermined point in the movement of said slidable member, whereby said firing pin will be set and released by the continued movement of said slidable member.

2. A flash light apparatus embodying therein a flash pan, a handle therefor, said flash pan having an opening therethrough and a recess being formed between said handle and said pan adjacent to said opening, a spring actuated firing pin mounted within said handle and adapted to be forced into engagement with a cap contained in said recess, a stud carried by said pin and movable in a slot in said handle, a trigger mechanism comprising a slidable member mounted upon said handle, and a spring tongue carried thereby and adapted to engage said stud, and a cam carried by said handle and adapted to act upon said tongue at a predetermined point in its movement to release said firing pin.

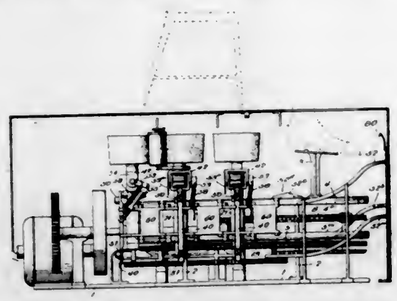
3. A flash light apparatus embodying therein a flash pan, a handle therefor, said flash pan having an opening therethrough and a recess being formed between said handle and said pan adjacent to said opening, a spring actuated firing pin mounted within said handle and adapted to be forced into engagement with a cap contained in said recess, a stud carried by said pin and movable in a slot in said handle, a trigger mechanism comprising a slidable member mounted upon said handle, and a spring tongue carried thereby and adapted to engage said stud, a cam carried by said handle and adapted to act upon said tongue at a predetermined point in its movement to release said firing pin, and means holding said member against rotation upon said handle.

4. A flash light apparatus embodying therein a flash pan, a handle therefor, said flash pan having an opening therethrough and a recess being formed between said handle and said pan adjacent to said opening, a spring actuated firing pin mounted within said handle and adapted to be forced into engagement with a cap contained in said recess, a stud carried by said pin and movable in a slot in said handle, a trigger mechanism comprising a slidable member mounted upon said handle, and a spring tongue carried thereby and adapted to engage said stud, and a cam carried by said handle and adapted to act upon said tongue at a predetermined point in its movement to release said firing pin, the free end of said tongue being flared outwardly away from said handle, and said tongue intermediate said flared end being spaced away from said handle, whereby oppositely pitched cam surfaces are provided adapted to coöperate respectively with said stud and with said cam to insure the automatic engagement of said spring with, and release from, said stud.

5. A flash light apparatus embodying therein a flash pan, a handle therefor, said flash pan having an opening therethrough and a recess being formed between said handle and said pan adjacent to said opening, a spring actuated firing pin having the impact end thereof recessed to form a continuous firing rim, mounted within said handle and adapted to be forced into engagement with a cap contained in said recess, and a trigger mechanism comprising a member slidably mounted upon said handle, coöperating coupling members carried by said firing pin and said member respectively, and means operating to disengage said coupling members at a predetermined point in the movement of said slidable member, whereby said firing pin will be set and released by the continued movement of said slidable member.

1,061,307. SHOE-POLISHING MACHINE. WILLIAM H. MCCONNELL, Richmond, Va., assignor to International Machine Corporation, Richmond, Va., a Corporation of Virginia. Filed Jan. 4, 1912. Serial No. 669,387. Renewed Oct. 8, 1912. Serial No. 724,676. (Cl. 15—61.)

1. In a shoe polishing machine, the combination with a shoe support, a traveling brush carriage, rigid guiding means for said carriage extending around the shoe support, a vertically movable rotatable shaft mounted in said carriage, a brush carrier connected to a part carried by said shaft by a horizontal pivot, a brush carried by said brush carrier and operatively connected for rotation with said rotatable shaft and means for moving said rotatable shaft and brush carrier vertically, of a connection between said brush carrier and said carriage, whereby the vertical movement of said carrier will positively rock the same toward and from the shoe support.



2. In a shoe polishing machine, the combination with a shoe support, a traveling brush carriage, rigid guiding means for said carriage extending around the shoe support, a vertically movable rotatable shaft mounted in said carriage, a brush carrier connected to a part carried by said shaft by a horizontal pivot, a brush carried by said brush carrier and operatively connected for rotation with said rotatable shaft, and means for moving said rotatable shaft and brush carrier vertically, of a yielding connection between the brush carrier and said carriage, for positively rocking the brush carrier toward and from the shoe support when the said carrier is moved vertically, while permitting the brush carrier and brush to yield away from the shoe support at all positions to which it may be moved.

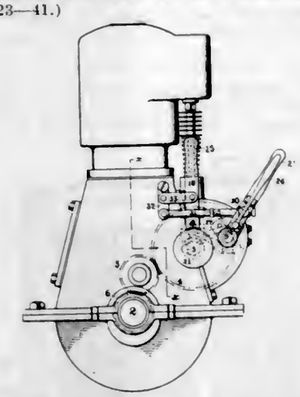
3. In a shoe polishing machine, the combination with a shoe support a traveling brush carriage, rigid guiding means for said carriage extending around the shoe support, a vertically movable rotatable shaft mounted in said carriage, a brush carrier connected to a part carried by said shaft by a horizontal pivot, a brush carried by said brush carrier and operatively connected for rotation with said rotatable shaft and means for moving said rotatable shaft and brush carrier vertically, of a yielding connection between the brush carrier, and said carriage, and a rigid part connecting said brush carrier and said carriage and provided with a slotted connection with one of said parts.

4. In a shoe polishing machine, the combination with a shoe support, a traveling brush carriage, rigid guiding means for said carriage extending around the shoe support, a vertically movable rotatable shaft mounted in said carriage, a brush carrier connected to a part carried by said shaft, by a horizontal pivot, a brush carried by said brush carrier and operatively connected for rotation with said shaft and means for moving said rotatable shaft and brush carrier vertically, of an actuating arm connected with said brush carrier, a spring connecting said arm with the brush carriage, and a link connecting said arm with said carriage, said link having a slot therein and a stud secured to one of said parts and extending into said slot.

5. In a shoe polishing machine, the combination with a shoe support, a traveling brush carriage, rigid guiding means for said carriage extending around the shoe support, a vertically movable rotatable shaft mounted in said carriage, a brush carrier connected to a part carried by said shaft by a horizontal pivot, a brush carried by said brush carrier and operatively connected for rotation with said rotatable shaft and means for moving said rotatable shaft and brush carrier vertically, of an actuating arm connected with said brush carrier, a link pivotally connected to said arm and having a longitudinal slot, a stud extending into said slot and connected with the brush carriage, and a spring connected at one end to the carriage and having its other end operatively connected with said arm for holding the link normally in position engaging said stud at one end of the slot.

[Claims 6 to 9 not printed in the Gazette.]

1,061,308. EXPLOSIVE-ENGINE. ROBERT MCKEE, Philadelphia, Pa. Filed Mar. 19, 1909. Serial No. 484,364. (Cl. 123—41.)



1. In a reversible explosive engine, the combination of the crank shaft, a valve operating cam shaft having inlet and exhaust cams, gearing for causing the cam shaft to be operated by and maintain the same relative directions of rotation with respect to the direction of rotation of the crank shaft, inlet and exhaust valves, reciprocatable parts for operating the valves, means for operating the reciprocatable parts, actuated by the cams and adjustable circumferentially about the axis of the cam shaft but always in operative relation between the same cams and reciprocatable parts, and hand operated adjusting devices for adjusting the means for operating the reciprocatable parts for changing the time of action of the cams upon the valves both in opening and closing.

2. In a reversible explosive engine having ignition devices, the combination of the crank shaft, a valve operating cam shaft having inlet and exhaust cams, gearing for causing the cam shaft to be operated by and maintain the same relative directions of rotation with respect to the direction of rotation of the crank shaft, inlet and exhaust valves, reciprocatable parts for operating the valves, means for operating the reciprocatable parts actuated by the cams and adjustable circumferentially about the axis of the cam shaft but always in operative relation between the same cams and reciprocatable parts, means for changing the time of action of the ignition devices, and hand operated adjusting devices for adjusting the means for operating the reciprocatable parts for changing the time of action of the cams upon the valves both in opening and closing, and also for operating the means for changing the time of action of the ignition devices whereby the time of ignition and the angular adjustment of the means for operating the reciprocatable parts are caused to be simulutaneously adjusted.

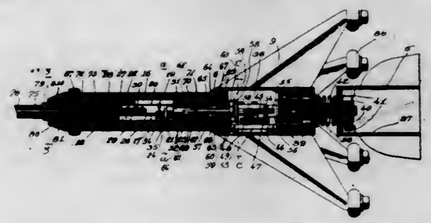
3. In a reversible explosive engine, the combination of the crank shaft, a valve operating cam shaft having one inlet and one exhaust cam for each cylinder, gearing for causing the cam shaft to be operated by and maintain the same relative directions of rotation with respect to the direction of rotation of the crank shaft, inlet and exhaust valves, reciprocatable parts for operating the valves, means for operating the reciprocatable parts actuated by the cams and adjustable circumferentially about the axis of the cam shaft, hand operated adjusting devices for adjusting the means for operating the reciprocatable parts for changing the time of action of each of the cams upon the valves both in opening and closing, and locking devices to positively retain the means for operating the reciprocatable parts in their circumferentially adjusted positions.

4. In an explosive engine, the combination of the crank shaft and a cam shaft geared together so as to always rotate in the same relative directions and said cam shaft having its cam surfaces upon only a portion of its circumference so as to intermittently act, valves for the engine, operating heads for the valves having extended lower surfaces, lifters interposed between the extended surfaces of the operating heads and the cams of the cam shaft, and means for bodily shifting the lifters simultaneously in relatively opposite directions for reversing the engine.

5. In an explosive engine, the combination of the crank shaft and a cam shaft geared together so as to always rotate in the same relative directions, valves for the engine, sliding operating heads for the valves, lifters interposed between the operating heads and the cams of the cam shaft and intermittently operated by the cams, and means for shifting the lifters simulutaneously in opposite directions for reversing the engine, consisting of a rock shaft, means for adjusting the rock shaft and holding it in its adjusted positions, and oppositely directed arms secured on the rock shaft to which the lifters are respectively connected and by which they are moved.

[Claims 6 to 15 not printed in the Gazette.]

1,061,309. SHIP'S LOG. THOMAS H. MCQUOWN, Cambridge, Mass. Filed Feb. 25, 1910. Serial No. 545,839. (Cl. 73—122.)



1. In a ship's log, the combination with a frame, of flexible means to tow said frame in close proximity to the hull of a vessel, whereby said frame is free to move laterally in any direction independently of the vessel, an actuator flexibly sustained by the frame and operated by its movement through the water, an indicator situated at a distance from the actuator and means to operate the indicator by the actuator, said frame having means to prevent the actuator from contacting with the vessel.

2. In a ship's log, the combination with a frame, of flexible means to tow said frame in close proximity to the hull of a vessel, whereby said frame is free to move laterally in any direction independently of the vessel, an actuator flexibly sustained by the frame and operated by its movement through the water, said frame having means to prevent the actuator from contacting with the vessel, and electrical indicator-operating means operated by the actuator.

3. In a ship's log, the combination with an actuator adapted to be operated by its movement through the water, of means to tow said actuator in close proximity to a vessel, said means having the portion adjacent the actuator more flexible than the remaining portion thereof whereby the actuator may readily aline itself to the course of the vessel independently of the movement thereof, means to prevent the actuator from contacting with the vessel, a make-and-break device operated by the actuator, an electrical conductor extending from the make-and-break device through both portions of said towing means, and an indicator connected to said conductor.

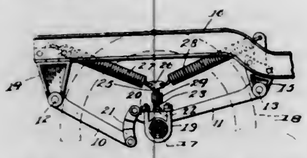
4. In a ship's log, the combination with an actuator adapted to be operated by its movement through the water, of a cable for towing said actuator in close proximity to the vessel, said cable being armored except for the portion adjacent the actuator, the unarmored portion being more

flexible than the armored portion to permit the actuator to readily aline itself with the course of the vessel.

5. In a ship's log, the combination with an actuator adapted to be operated by its movement through the water, of a cable for towing said actuator in close proximity to the vessel, said cable being armored except for the portion adjacent the actuator, the unarmored portion being more flexible than the armored portion to permit the actuator to readily aline itself with the course of the vessel, and means to prevent the actuator from contacting with the vessel.

[Claims 6 to 23 not printed in the Gazette.]

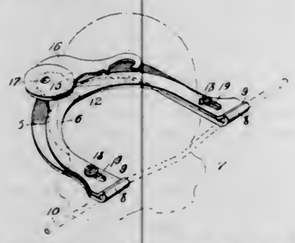
1,061,310. VEHICLE-SPRING. J WALTER MOORE, Fort Edward, N. Y. Filed Jan. 14, 1911. Serial No. 602,700. (Cl. 21—101.)



1. The combination with a vehicle including a frame and axle, of a lever rigidly connected intermediate its ends to said axle and pivoted at one point to said frame, another lever pivoted intermediate its ends to said frame, a link coupling said last-mentioned lever to said first-mentioned lever, and springs connected respectively to said levers.

2. The combination with a vehicle including a frame and axle, of a lever rigidly connected intermediate its ends to said axle and pivoted at one point to said frame, another lever pivoted intermediate its ends to said frame, a link coupling said last-mentioned lever to said first-mentioned lever, a coupling device connected to said rigidly connected lever, and springs connected respectively to said levers and to said coupling device.

1,061,311. LINE-WIRE FASTENER. ARTHUR M. MORGAN, Bridgeport, Ohio. Filed May 31, 1912. Serial No. 700,732. (Cl. 173—313.)

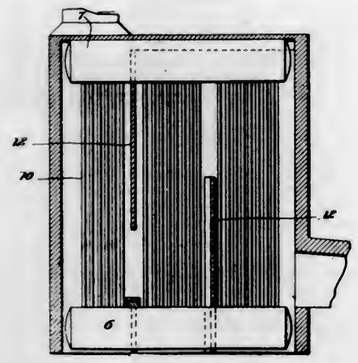


1. A line wire fastener comprising two superposed substantially U-shaped members, each provided at the free ends of their arms with a clamping jaw, securing pins carried by the lower member and projecting through slots provided therefor in the upper member, a clamping lever pivoted to the lower member and carrying an eccentric, and a seat carried by the upper member against which the eccentric acts in the closing of the jaws.

2. A line wire fastener comprising two superposed flat substantially U-shaped members, one having a sliding engagement on the other, pins on one member working in slots in the other member and holding the members in superposed relation, clamping jaws at the forward ends of the arms of said members, and a clamping lever pivoted to one member and having an eccentric operating on the rear end of the other member to move the slidable member toward the open end of the other member, said eccentric having a head overlying the slidable member at the closed end of the latter to secure the members against separation at their closed ends.

3. A line wire fastener comprising two substantially U-shaped members, each having clamping jaws at the free ends of their arms, a clamping member pivoted to the closed end of the lower member and having a cam acting on the rear end of the upper member to slide the latter toward the open end of the lower member, means at the forward ends of the arms for holding the same in superposed relation, and means carried by the clamping lever to hold the arms in superposed relation at their closed ends.

1,061,312. STEAM-BOILER. EGBERT R. MORRISON, Sharon, Pa. Filed Mar. 1, 1912. Serial No. 680,944. (Cl. 122—336.)



1. A tubular boiler having five rows of tubes, located beside each other, the tubes of the two outer rows being located with alternate wide and narrow spaces between the tubes of each of said rows, the wide spaces in each of said rows being opposite the narrow spaces in the other.

2. A tubular boiler having five rows of tubes located beside each other, the distance between the three inner rows being less than the distance between adjacent tubes in any one of said rows, and the tubes of the two outer rows being located in pairs with wide spaces between each pair, the wide spaces being located alternately in the two opposite outer rows.

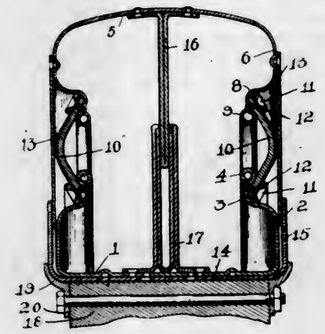
3. A tubular boiler having five rows of tubes, located beside each other, the middle row being staggered with respect to the two adjacent rows and the tubes of the two outer rows being located with alternate wide and narrow spaces between the tubes of each of said outer rows, the wide spaces in each of said rows being opposite the narrow spaces in the other and in line with the tubes in the middle row and the arrangement of these wide and narrow spaces and the distance apart of the outer and adjacent rows being such as to allow a passage for the removal of any tube 9, in the inner rows as well as a passage for the removal of any tube 8, in the middle row.

4. A tubular boiler having five rows of tubes located beside each other, the middle row being staggered with respect to the two adjacent rows and the distance between the three inner rows being less than the distance between adjacent tubes in any one of said rows, and the tubes of the two outer rows being located in pairs with wide spaces between each pair, the wide spaces being located alternately in the two opposite outer rows and the arrangement of these wide and narrow spaces and the distance apart of the outer and adjacent rows being such as to allow a passage for the removal of any tube 9, in the inner rows, as well as a passage for the removal of any tube 8, in the middle row.

5. A water tube boiler having a heating chamber through which the combustion products flow from front to rear, multiple drums located side by side in said chamber and extending lengthwise from front to rear therein, in the same general direction as that of the flow of products through said chamber, banks of tubes connected to said drums and standing beside each other in said chamber, the banks being arranged in relation to the side walls of the heating chamber and in relation to adjacent banks in such manner that the space between the outside tube of one bank and the wall, or between the outside tube of one bank and the outside tube of another bank, is practically the same as the space between any two tubes of any one bank, the tubes of the banks being bent in such a manner that this spacing will exist throughout the larger part of the tube length, thus resulting in securing a uniformity in size of all the heat alleys between all the rows of tubes regardless as to whether the heat alleys are formed by two tube rows of the same bank, two tube rows of different banks or a tube row on one side and the side wall of the heating chamber on the other side.

[Claim 6 not printed in the Gazette.]

1,061,313. ARMORED PNEUMATIC TIRE. WILLIAM ROBERT MORRISON, Chicago, Ill. Filed Feb. 2, 1911. Serial No. 606,095. (Cl. 152—13.)



1. A tire of the class described embracing a rim channel, integral beaded flanges thereon, a similar tread channel of greater diameter inverted thereover, flexible airtight connecting members attached to said beaded flanges, annular rings secured thereover, complemental protective plates on each of said channels and a series of internal complemental webs and flanges affording lateral support between said rim and tread channels.

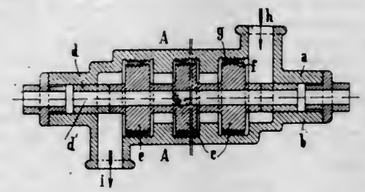
2. In a device of the class described a rim channel, a tread channel, beads turned on the peripheral edges of each, annular flexible strips connecting said channels, and rings adapted to be engaged over said strips at the edges thereof to secure the strip to the channels.

3. In a device of the class described an annular tread channel having the edges thereof directed inwardly to afford a bead, a rim channel, beads turned thereon, flexible airtight means securing the said members together, a series of complemental adjustable flanges secured on the interior of each member and engaging one another affording a lateral support for the said tread member.

4. An armored pneumatic tire comprising a rim and tread members curved toward one another, a flexible airtight connection joining said members at the edges, annular plates secured to the sides of said tread member, flanged annular plates secured around said rim member, slidably engaging said tread plates between said flanges and rim member, and a series of internal complemental flanges secured on each member affording a lateral support between the two.

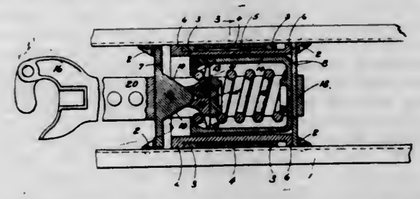
1,061,314. APPARATUS FOR DRAWING OFF WATER OF CONDENSATION. KARL MÜLLER, Paris, France. Filed Dec. 30, 1912. Serial No. 739,241. (Cl. 137—103.)

A device of the character described, comprising a casing having a plurality of circumferentially grooved recesses, a spindle mounted within the casing and having an axial air passage, and a plurality of circumferentially grooved disks on the spindle that project a limited distance



into the recesses and are of less width than the recesses, so as to form a tortuous steam passage therebetween.

1,061,315. DRAFT-RIGGING. GEORGE C. MURRAY, Chicago, Ill., assignor to Continental Railway Equipment Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 21, 1909. Serial No. 514,075. (Cl. 213—64.)



1. In a device of the class described, a fixed abutment, a draft spring, outer and inner longitudinal thrust members and intermediate transverse thrust members, said intermediate thrust members being movable independently of each other and both longitudinally and transversely with relation to said outer thrust members, said intermediate thrust members having inclined surfaces coacting with inclined surfaces upon said outer and inner thrust members and having friction surfaces coacting with said fixed abutment, a draw-bar, and means for transmitting buffing and draft forces from said draw-bar directly to said outer and intermediate thrust members.

2. In a device of the class described, a fixed abutment, a draft spring, outer and inner longitudinal thrust members and intermediate transverse thrust members, all of the thrust surfaces of said thrust members being located at one end of said draft spring, said intermediate thrust members being movable independently of each other and both longitudinally and transversely with relation to said outer thrust members, said intermediate thrust members having inclined surfaces coacting with inclined surfaces upon said outer and inner thrust members and having friction surfaces coacting with said fixed abutment, a draw-bar, and means for transmitting buffing and draft forces from said draw-bar directly to said outer and intermediate thrust elements.

3. In a device of the class described, an outer longitudinal follower having a wedge-shaped longitudinal thrust member, intermediate thrust members co-acting with said wedge-shaped projection, an inner thrust member, said intermediate and inner thrust members having co-acting inclined surfaces converging toward their ends, rollers between said converging surfaces, a casing surrounding said thrust members, a bridge extending across and secured to said casing, said bridge forming an abutment for said intermediate thrust members, an extension secured to said inner thrust member and spaced from said bridge, a draft spring between said bridge and extension, a draw-bar, means for transmitting force acting in one direction from said draw-bar to said wedge-shaped thrust member and for transmitting force in the opposite direction from said draw-bar to said casing.

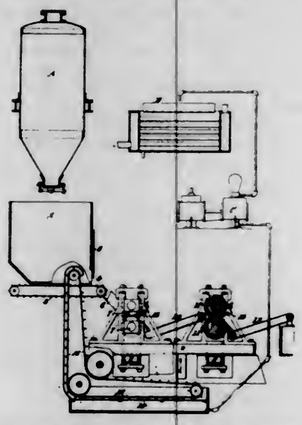
4. In a device of the class described, draft sills, stops secured thereto, a casing fitted between said draft sills

and movable to the extent permitted by said stops, a bridge extending across said casing, intermediate thrust members abutting against said bridge, a wedge-shaped outer thrust member acting between inclined surfaces on said intermediate thrust members, an inner thrust member of U-form and having inclined surfaces at the ends of the arms thereof coacting with inclined surfaces on said intermediate thrust members, said inclined surfaces presenting different angles to the draft line at different points, rollers between said surfaces, a draft spring between said bridge and the loop of the U-form inner thrust member, a draw-bar, means for transmitting forces in one direction from said draw-bar to said outer thrust members and for transmitting forces in the other direction from said draw-bar to said casing.

5. In a device of the class described, draft sills, stops secured thereto, a casing, a bridge secured to said casing and extending transversely thereof, a draw-bar, an outer wedge-shaped longitudinal thrust member, intermediate thrust members in operative relation with said outer thrust member and bridge, an inner longitudinal thrust member having inclined surfaces operatively related to inclined surfaces upon said intermediate thrust members and having an extension spaced from said bridge on the side opposite said intermediate thrust members, a resilient element between said bridge and extension, means for transmitting force from said draw-bar to said outer and intermediate thrust members, the co-acting surfaces between said intermediate and one of said longitudinal thrust members being of varying inclination to the draft line, and rollers between said surfaces.

[Claim 6 not printed in the Gazette.]

1,061,316. TREATMENT OF WOOD-PULP. BARNABAS T. NASE, San Francisco, Cal., assignor to Stanley Paper Fiber Co., San Francisco, Cal., a Corporation of Arizona. Filed Dec. 2, 1911. Serial No. 663,488. (Cl. 92—20.)



1. The process for treating digested fibrous materials to remove chemical containing liquors therefrom, consisting of subjecting the fibers to a combined compressing and disintegrating action, spraying water on the compressed fibers at the moment they start to expand after their release from pressure, and then recompressing them to remove the water.

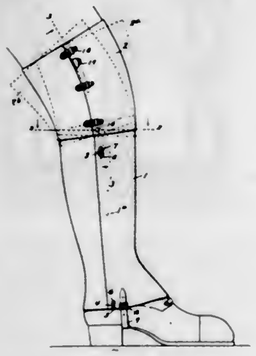
2. The process for treating digested fibrous materials to remove chemical containing liquors therefrom, consisting of subjecting the fibers to a combined compressing and disintegrating action, spraying water on the compressed fibers at the moment they start to expand after their release from pressure, in a quantity corresponding to the absorptive power of the fibers, and then recompressing them to remove the water.

3. The method of treating wood pulp, which consists in subjecting it to a digesting process in the presence of the soda solution, then passing it through disintegrating rollers to disintegrate the pulp and remove a part of the soda solution, then spraying the pulp with water, passing this sprayed pulp through other rolls under pressure, and then treating the liquids thus extracted successively in an evaporator and incinerator to recover the soda values.

4. In an apparatus for treating pulp, the combination with a digester, of successively arranged pulp disintegrators, each disintegrator comprising coacting, corrugated pressure rolls, means by which the digested pulp is fed successively to the rolls, and means by which the pulp is subjected to a cleansing spray after leaving each set of rolls.

5. In an apparatus for treating pulp, the combination with a digester, of successively arranged pulp disintegrators, each disintegrator comprising coacting, corrugated pressure rolls, means by which the digested pulp is fed successively to the rolls, means by which the pulp is subjected to a cleansing spray after leaving each set of rolls, a tank for collecting the liquid extracted by the rolls, and means by which the pulp fibers carried into the tank are collected and re-delivered to the pressure rolls.

1,061,317. COMBINED LEGGING AND THIGH-COVERING. EDWIN B. NATHAN, New York, N. Y. Filed Mar. 25, 1911. Serial No. 616,859. (Cl. 36—2.)



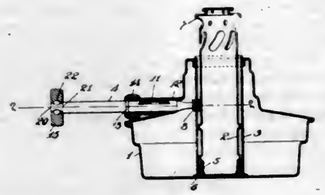
1. A combined leg and thigh covering comprising a legging and a thigh extension pivoted thereto, the axis of said pivot being substantially parallel with the axis of the knee joint of the wearer, whereby said extension is pivotally movable about the axis of said pivot in a direction corresponding to the direction of movement of the knee.

2. In combination with a legging and a thigh extension removably connected therewith, of two fastening members located at diametrically opposite sides of the upper edge of the legging and two corresponding mating fastening members located at the lower edge of the thigh extension, said fastenings being located on an axis substantially coincident with the axis of the knee joint of the wearer, and adapted to permit pivotal movement between the parts of the combined device.

3. In combination with a legging and a thigh extension removably connected therewith, of fastening means for connecting the two, said fastening means being located on an axis substantially coincident with the axis of the knee joint of the wearer and adapted to permit relative pivotal movement between the parts of the combined device.

4. A combined leg and thigh covering comprising a legging and a thigh extension removably connected therewith, fastening means on one of said members, and corresponding fastening means on the other of said members, the mating fastenings being located closely adjacent to the contiguous edges of said members and located and adapted to permit relative pivotal movement between them in the direction of movement of the knee of the wearer.

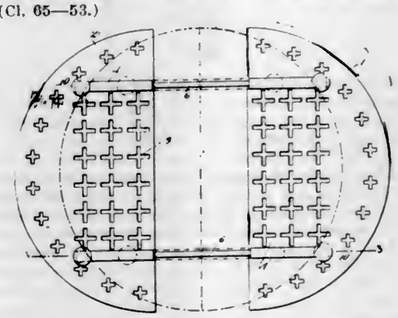
1,061,318. ALCOHOL-LAMP. CHARLES NELSON and WALTER G. BARKER, New York, N. Y., assignors to S. Sternau & Company, Brooklyn, N. Y., a Copartnership. Filed Feb. 11, 1911. Serial No. 607,937. (Cl. 158—72.)



1. A lamp having a controlling shaft, or spindle, a bearing for the shaft, and a leaf spring, the ends of which are carried by the shaft and rotate with it and the intermediate portion of which elastically engages with the inside of the bearing.

2. A lamp having a controlling shaft, a cut-away portion therein, a leaf spring lying within the cut-away portion, said spring having notched extremities and lips struck down from the body of the shaft and engaging with the notches for holding the spring in place.

1,061,319. TRIVET. CHARLES NELSON, New York, N. Y., assignor to S. Sternau & Company, Brooklyn, N. Y., a Copartnership. Filed June 2, 1911. Serial No. 630,838. (Cl. 65—53.)



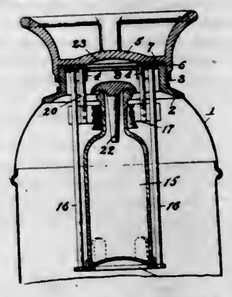
1. A trivet which comprises two plates; tubes arranged in pairs and connected to the plates, the two tubes of each pair being in alinement; a rod lying within each pair of tubes; a sleeve in each tube to limit the extent of separation of the plates; and legs having stems which enter the tubes and hold the rods in place.

2. A trivet which comprises two plates; two pairs of tubes on the plates, each two tubes of a pair being in alinement; sleeves on the inner end of the tubes; a rod lying within each of the two tubes of a pair; a head on each end of the rod, means for removably securing one of the heads to a rod, and feet with stems which enter the tubes and prevent displacement of the rods.

1,061,320. CHEMICAL FIRE-EXTINGUISHER. WILLIAM A. PAINTER, Pittsburgh, Pa., assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed May 16, 1911. Serial No. 627,583. (Cl. 169—7.)

1. A fire extinguisher cage comprising a top member provided with an apertured portion, a bottom member, a side member connecting the top and bottom members, and a vertically movable closure device coöperating with the side member and having an upright member entered in the apertured portion of the top member.

2. A fire extinguisher cage comprising a top member provided with an apertured portion, a bottom member, a side member connecting the top and bottom members, and a vertically movable cage closure device comprising a yoke portion having an end thereof in engagement with the side member and provided with an upright member entered in the apertured portion of the top member.



3. A fire extinguisher cage comprising a top member provided with apertured lugs, a bottom member, side members connecting the top and bottom members, and a vertically movable closure device having upright members entered in the apertured lugs of the top member.

4. In a fire extinguisher, the combination with a casing, of an externally threaded neck therefor, said neck provided with supporting means, a cap secured to the neck, a separable removable bottle holder or cage supported by the neck and comprising a top member, a bottom member, a side member connecting the top and bottom members, and a vertically movable cage closure device having means coacting with the cap and the side member.

5. In a fire extinguisher, a neck therefor having supporting means, a cap for the neck, of an independent movable bottle holder supported by the neck independently of the cap and comprising a top member seated upon the supporting means of the neck, a bottom member, a side member connecting the top and bottom members, and a vertically movable cage closure device having means for limiting its vertical movement and coöperating with the side member.

[Claims 6 to 9 not printed in the Gazette.]

1,061,321. MILKING-STOOL. FREDRICK A. PELLETIER, Elgin, Ill. Filed Mar. 15, 1913. Serial No. 754,583. (Cl. 31—13.)



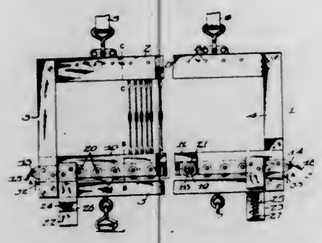
1. In a milking stool, the combination with a plurality of standards, of a seat supported thereon, a movable portion supported by said seat, a pail holder, and means between the movable portion and the pail holder whereby a movement of one member will cause a relative movement of the other.

2. In a milking stool, the combination with a plurality of standards, of brace rods therefor, a fixed seat supported by said standards and provided with an opening therethrough, a movable seat, a cross piece supported by said fixed seat and between said brace rods, provided with an opening therethrough, an arc shaped rod fixed upon said movable seat portion and passing downwardly and forwardly through the opening in the fixed seat portion and the opening in the said cross piece, a removable pail holding member attached to said rod at its lower ex-

tremity, said members being so located as to allow of relative movement thereof from a horizontal to a vertical plane.

3. In a milking stool, the combination with a movable seat, of a pail holder, means between said movable seat and the pail holder whereby a movement of one of said members will cause a relative movement of the other of said members, and means for preventing said relative movement whereby to hold the members in operative position.

1,061,322. HEDDLE AND HEDDLE-FRAME. BURT A. PETERSON, Rockford, Ill., assignor, by mesne assignments, to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners as Barber-Colman Company, Rockford, Ill. Filed Feb. 15, 1908. Serial No. 416,018. (Cl. 139—91.)



1. The combination of a rigid frame comprising a top bar, a bottom bar and two end bars; a heddle bar slidably engaged with said end bars, spring means tending to move said slidable bar downwardly, heddles supported by said top bar and said slidable bar for vertical movement with relation to both of said bars, and electric contact means carried by and rigidly fixed to said slidable bar in position to be contacted by a heddle whose thread is broken, the heddles being of such length as to be normally out of contact with said contact means when at the lower limit of their movement with relation to the top bar.

2. Means for supporting heddles comprising an approximately-rectangular frame having a fixed heddle bar; a movable heddle bar; and spring-actuated guides for said movable heddle bar.

3. Means for supporting heddles comprising an approximately-rectangular frame having a fixed heddle bar; a movable heddle bar; and spring-actuated guides for said movable heddle bar, said guides being below said movable heddle bar.

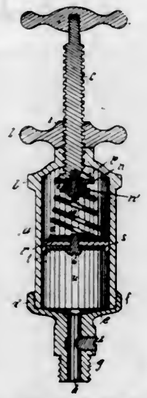
4. In a heddle frame, a heddle bar consisting of a plurality of T-rails, inserts spacing said rails apart to provide narrow spaces between their flanges and wider and relatively deep spaces between their webs, and means for securing said rails and inserts together.

5. A heddle frame comprising a bar having an elongated slot; heddles vertically and horizontally movable in said slot; and broadened portions on the heddles extending in said slot for uniformly facing the heddle eyes at the proper angle for the passage of the thread.

[Claims 6 to 23 not printed in the Gazette.]

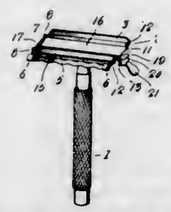
1,061,323. COMPRESSION GREASE-CUP. CLARENCE R. POWERS, Terre Haute, Ind. Filed Feb. 19, 1912. Serial No. 678,513. (Cl. 184—45.)

1. In a grease-cup, the combination of a cylinder having its upper end closed by a cap, integral therewith and having an aperture at its center, and having its lower end threaded with a threaded cap, adapted to screw onto the externally threaded lower end of said cylinder and having a wrench flange projecting laterally from the upper edge and an externally threaded stem pendent from the center thereof, a feed-vent extending axially through said stem, a cut-off screw movably mounted in said stem and adapted to close said feed-vent, an externally threaded shaft extending outwardly from the interior of said cylinder, through the upper cap thereof and adapted to thread up and down through said upper cap, a pair of washers attached to the inner end of said shaft, means of attaching the same, a spiral-spring having its upper coil clamped between said pair of washers, a washer having a grooved edge adapted to receive and be attached to the lower coil of said spring, a piston leather and supporting washer attached to said grooved-washer, means of attaching the same, a jam-nut threaded upon said shaft and adapted to seat itself upon the upper cap and a handle attached to the outer end of said shaft, all substantially as shown and for the purpose set forth.



2. In a grease-cup, the combination of a cylinder, having its lower end screw threaded, and having the upper end closed by a cap, said cap having a threaded aperture in the center thereof, an externally threaded shaft, extending from the interior of said cylinder through said threaded aperture, a jam-nut upon said shaft, a handle upon the upper end of said shaft, a set-screw adapted to attach a pair of washers to said shaft, a pair of metallic washers supported by said set-screw, a spiral-spring having its upper coil clamped between said pair of washers, a grooved washer adapted to engage the lower coil of said spring and be fixed thereto, a piston leather and supporting washer attached to said grooved washer, said piston leather being turned downward and against the inner wall of said cylinder and adapted to push all matter therein before it, an internally threaded cap adapted to close the lower end of said cylinder and having a wrench-flange projecting radially therefrom, an externally threaded stem integral with and pendent from the body of said lower cap, a feed-vent extending through said stem, a cut-off screw adjustably mounted in the side of said stem and adapted to close said feed-vent, all substantially as shown and described and for the purpose set forth.

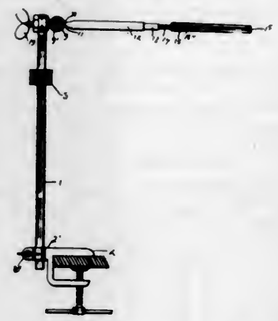
1,061,324. SAFETY-RAZOR. BERTRAND L. PREMO, Newark, N. J. Filed Feb. 28, 1912. Serial No. 680,404. (Cl. 30—12.)



In a safety razor, a handle, a holder carried thereby and formed of a single piece of metal bent to provide a top flange and a bottom guard bar, a pair of upwardly turned

retaining spurs at each side of the holder, a downwardly turned lug located at the side of the holder between the spurs of one pair and having a notch in the lower edge thereof, a downwardly turned lip arranged at the opposite side of the holder between the other pair of spurs and provided with an outwardly extending locking projection, a blade, and a clamping bar for clamping the blade in the holder, said bar comprising a strip of metal bent downwardly and inwardly at one end and adapted to have the inwardly extending portion thereof engaged in the notch in the lug at the adjacent side of the holder, the opposite end of said clamping bar being bent downwardly and thence extended to form a finger piece, the downwardly bent end of the clamping bar having a recess adapted to receive the outwardly extending locking projection on the lip at the adjacent side of the holder.

1,061,325. EMBROIDERY-HOOP SUPPORT. HENRY J. REINARTZ, Cleveland, Ohio. Filed Dec. 16, 1910. Serial No. 597,621. (Cl. 45—24.)



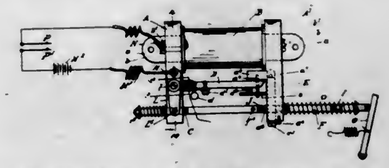
1. An embroidery hoop support of the class described, comprising the combination of an embroidery hoop, the outer ring of said embroidery hoop having at its upper edge an outwardly and downwardly projecting flange and at its under edge having an outwardly and upwardly projecting flange, a connection having a flanged head, said head adapted to fit and be mounted slidable in the channel formed by the flanges of the outer ring of the embroidery hoop.

2. An embroidery hoop support of the class described, having an embroidery hoop, the outer ring of said embroidery hoop having at its upper edge an outwardly and downwardly projecting flange and at its upper edge having an outwardly and upwardly projecting flange, in combination with a connection, said connection being screw-threaded and having a flanged head, said head being adapted to be slidably mounted in the channel of the outer embroidery hoop ring, and a nut adapted to be screwed onto the threaded portion of said connection for the purpose of fastening the connection in any predetermined place on the periphery of the outer embroidery hoop ring.

3. An embroidery hoop support, comprising the combination of a main supporting stem, a clamp for securing said stem in a predetermined height, a cup joint for adjusting and securing the upper portion of said stem in any radial position, a ball and socket joint adapted to hold the embroidery hoop at any desired plane, a telescoping extension located between the main supporting stem and the embroidery hoop, a slidable connection mounted in the outer ring of said embroidery hoop and means for fastening the slidable connection in relation to the embroidery hoop.

1,061,326. MAGNETICALLY-OPERATED TRIPPING DEVICE. MANUEL R. RODRIGUES, Brooklyn, N. Y. Filed Jan. 14, 1911. Serial No. 602,563. (Cl. 175—28.)

1. In a tripping mechanism, the combination with a circuit controlling device, and with a movable trip mechanism, of a locking rock device controlled by a rearward movement of the tripping means, an armature plate to control the locking device and hold it in a locked relation, and of an electro-magnet coöperating therewith, and of means to move the tripping means with a forward impelling movement upon the locking means being released by the armature, the said tripping means being in electrical connection with the circuit controlling device, and also of means to break the electric connection through the tripping mechanism to the two members of the circuit controlling device.



2. The combination with a suitable support, of a movable tripping means having a notch formed therein, a locking rock device having a groove to abut the said notch and provided with an arm extending therefrom, and an armature plate to control the rock device and having a locking tooth to engage the said arm.

3. The combination with a suitable support, of a spring impelled tripping means having a notch formed therein, a spring controlled locking rock device having a groove to abut the said notch and provided with an arm extending therefrom and a stop device to control the rock device having a locking tooth to engage the said arm.

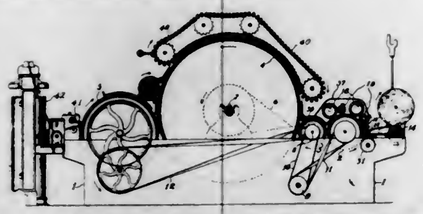
4. The combination with a suitable support, of a movable tripping means formed with conducting and insulating portions, means to hold the tripping means in a locked position when moved in one direction, an electro-magnet having one terminal connected with a source of electromotive force, and having the other terminal grounded to the said tripping mechanism, and a contact pin bearing on the said movable element and also connected with the source of electromotive force, and in electrical connection with the said tripping mechanism when the latter is in a locked position and insulated therefrom when it is in a released relation.

5. The combination with a suitable support, of a movable tripping means formed with conducting and insulating portions, and also having a notch formed therein, an electro-magnet having one terminal connected with a source of electromotive force, and having the other terminal grounded to the said tripping means, a locking rock device engaged with the tripping means and having a groove formed therein to abut the said notch to hold the tripping means in a locked position when moved in one direction, and provided with an arm extending therefrom, an armature plate to control the rock device having a locking tooth to engage the said arm, and a contact pin bearing on the said movable element and also connected with the source of electromotive force and in electrical connection with the said tripping means when the latter is in a locked position and insulated therefrom when it is in a released relation.

1,061,327. MACHINE FOR WORKING COTTON-WASTE. ELWIN H. ROONEY, Whitinsville, Mass., assignor to The Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Oct. 4, 1911. Serial No. 652,777. (Cl. 19—23.

1. A machine for carding waste cotton fibers comprising a first cylinder provided with feed rolls and a series of pairs of worker and stripper rolls coöperating therewith and adapted to form a uniform fleece on said first cylinder, a second cylinder operating to transfer such fleece to a third cylinder, a series of revolving top-flats coöperating with said third cylinder acting to separate the dirt and shorter fibers from said fleece, a doffer cylinder co-acting with the third cylinder and means for conducting the fleece therefrom in the form of carded sliver.

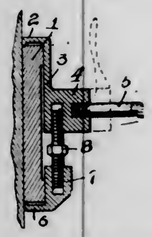
2. A machine for carding waste cotton comprising a series of three, card clothed cylinders each speeded to doff to the next in the series, a series of worker and stripper rolls mounted above and coöperating with the slowest speed cylinder and a series of revolving top-flats arranged above and coöperating with the third cylinder, in combination with a curved casing bridging the space between the workers and strippers and said top flats and provided with wedge shape fillers extended into the converging spaces between the said three rolls and operating to prevent the formation of fluff rolls therein.



3. A machine of the class specified having two card-clothed cylinders and an intermediate transfer cylinder adapted to transfer fleece from one to the other, worker and stripper rolls coöperating with the cylinder of slowest speed and revolving top-flats coöperating with the cylinder of higher speed, in combination with a driving connection between the said two cylinders whereby the one drives the other, intermediate gearing for said transfer cylinder and differential gearing for driving the said worker rolls.

4. In a machine of the class described, a series of three or more card-clothed cylinders and means for driving them whereby each doffs to the next in the series, a series of worker and stripper rolls co-acting with the first cylinder and means for driving the same comprising a gear fast on the shaft of the first cylinder and directly driving the stripper rolls and a planetary pinion revolving with said gear connected to drive the worker rolls.

1,061,328. ADJUSTABLE SUPPORT. DAVID SANDBERG, Chicago, Ill. Filed July 17, 1912. Serial No. 709,867. (Cl. 248—30.)



A device of the class described comprising a pair of upper and a pair of lower clamping jaws, having teeth thereon adapted to engage in a horizontal support, a clamping bolt having right and left threads at its opposite ends and having threaded engagement with the upper and lower jaws in pairs, and a rod bent at its ends and having positive engagement at its opposite ends with corresponding members of each clamping jaw and affording a horizontal supporting rail.

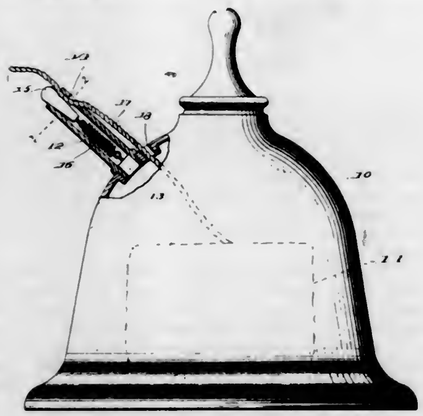
1,061,329. TROUSERS-STRETCHER. CHARLES OTTO SCHNEIDER, Wimbledon, London, England. Filed Aug. 24, 1912. Serial No. 716,822. (Cl. 223—19.)

A trousers stretcher comprising a member for engaging one end of the trousers, a member for engaging the other end of said trousers, said members being each formed in two parts of thin sheet material, a resilient member connected to one of said parts and pivotally connected to the other part, a second resilient member attached to the opposite end of one of the parts, and a clip upon the end of the other part engaging the end of said resilient member, a rod formed in two parts, a ball upon the inner end of one part of the rod, a socket upon the inner end of the other



part of the rod, a sleeve for retaining the parts of the rod in alinement, a slot in each end of the rod, a projection upon each of the trousers engaging members whereby said slots may engage said members to enable the rod to hold them apart.

1,061,330. TWINE-HOLDER. GEORGE L. SELF, Asheville, N. C. Filed June 7, 1912. Serial No. 702,316. (Cl. 242—149.)



1. In a device of the class described, a cord receptacle having a cord delivery aperture, a tubular member extending from said receptacle adjacent to the aperture and open at the outer end, said tubular member having a lateral aperture spaced from its open end, a tapered plug engaging in the outer open end of the tubular member, and a spring within the tubular member and concealed and protected thereby and connected to said plug and to the closed end of the tubular member and operating to maintain said plug yieldably in its inner position, said plug being adapted to bear against a cord when passed through the aperture of the receptacle and through the aperture of the tubular member and holding the cord constantly in the same plane as the longitudinal axis of the plug.

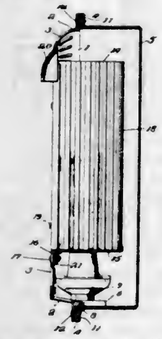
2. A cord holder comprising a tubular member open at the outer end and with a lateral aperture spaced from the open end, a tapered plug engaging in the open end of the tubular member, and a spring within the tubular member and protected and concealed thereby and connected respectively to the plug and to the tubular member, said plug adapted to engage a cord when passed through the aperture and out through the open end of the tubular member.

1,061,331. TRANSOM DRAFT-GEAR. CHARLES S. SHALLENBERGER, St. Louis, Mo., assignor to Transom Draft Gear Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 2, 1911. Serial No. 647,352. (Cl. 213—42.)



The combination of truck and body bolsters, of a floating spring carrier pivotally mounted between said bolsters, spring seats formed on the ends of said carrier, center bearings formed on the upper and lower faces of said floating spring carrier, which bearings coöperate with the center bearings formed on the truck and body bolsters, a draw bar extension, a yoke carried by said draw bar extension, which yoke extends between the bolsters around the floating spring carrier, spring seats formed on said yoke, and springs arranged in the seats of the spring carrier and yoke.

1,061,332. BATH-ROOM HEATER. GEORGE E. SHARPE, Steubenville, Ohio. Filed Oct. 28, 1912. Serial No. 728,311. (Cl. 219—45.)

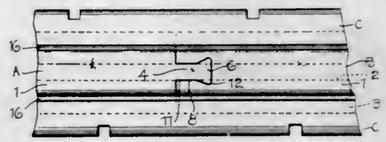


1. The combination of a face plate having a central opening and provided with a forwardly projecting foraminous hood around said opening, a drum secured to the rear face of said plate around said opening, a reflector secured in the opening of said plate and extending into and spaced from the drum, and means for supporting a heating member in advance of the reflector.

2. The combination of a face plate having an opening therethrough and provided with a forwardly projecting foraminous hood around said opening and a depending forwardly projecting crown at the upper portion of said hood, a drum secured to the rear face of the face plate around said opening, a reflector secured to the forward edges of the hood and extending through the opening in the face plate into and spaced from the drum, the upper end of the reflector being above the lower edge of the crown, and means for supporting a heating member in advance of the reflector.

3. The combination of a face plate having an opening therein, a reflector secured to the face plate at the side edges of said opening, a bottom plate supporting said reflector and extending across the lower end thereof and having its front edge bent downwardly to fit against the face plate at the lower edge of the opening therein, a reinforcing bar fitted against the said bottom plate and the front down-turned portion of the same, and securing devices inserted through the face plate, the reinforcing bar, and the down-turned portion of the said bottom plate.

1,061,333. RAIL-JOINT. EDWIN J. SLUSSER, Freeland, Pa. Filed Feb. 26, 1913. Serial No. 750,901. (Cl. 239—8.)



1. A rail joint comprising the meeting ends of a pair of rolls, one of said rail ends having a reduced tread and a reduced base flange, the other rail end having its tread and base flange projecting beyond the web portion thereof a distance substantially the length of the reduced portions of the tread and base flange of the first rail, means formed on the treads and base flanges of the rails for locking the rails together, and means for holding said rails in interlocking engagement with each other, as and for the purpose described.

2. A rail joint comprising the meeting ends of a pair of rails, one of said rails being formed with a reduced tread and a reduced base flange, the extremities of the reduced portions of said tread and base flange being formed with enlarged heads, the other rail end having its tread and rail flange projecting beyond the web thereof, means whereby the enlarged portions of the tread and base flange of the first rail may be interlockingly engaged with the projecting portions of the tread and base flange of the second rail, and means for holding said rails in interlocking engagement with each other, as and for the purpose described.

3. In a joint chair, a rail having a reduced tread and a reduced base flange at one end thereof, the extremities of the reduced portions of said tread and base flange being formed with enlarged heads, a second rail having its tread and base flange projecting beyond the web portion thereof, the projecting portions of said tread and base flange being formed with slots, the slots in said tread and base flange of the second rail being enlarged at their inner ends, to receive the enlarged heads of the reduced portions of the tread and base flange of the first rail, and means for holding said rails in interlocking engagement with each other.

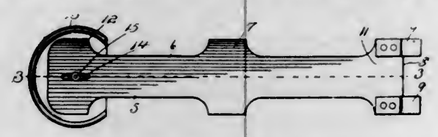
4. A rail joint comprising the meeting ends of a pair of rails, one of said rails having a reduced tread and a reduced base flange, the other rail having its tread and base flange projecting beyond the web portion thereof, the projecting portions of the last mentioned rail being formed with slots to receive the reduced tread and reduced base flange of the first mentioned rail, as and for the purpose described.

5. In a joint chair, a rail having a reduced tread and a reduced base flange at one end thereof, the reduced portions of said tread and base flange being of a width substantially the width of the web of the rail, the extremities of the reduced portions of said tread and base flange being formed with enlarged heads, a second rail having its tread and base flange projecting beyond the web portion thereof, the projecting portions of said tread and base flange of the second rail being formed with slots of substantially the same width as the width of the web of said rail, the slots in said tread and base flange of the second rail being enlarged at their inner ends to receive the enlarged heads of the reduced portions of the tread and base flange of the first rail, and means for holding said rails in interlocking engagement with each other, as and for the purpose described.

1,061,334. ATTACHMENT FOR BARBERS' CHAIRS. BILLY HEAD SMITH, Marshfield, Oreg. Filed July 10, 1911. Serial No. 637,803. (Cl. 155—26.)

A device of the type described, including a flat supporting member adapted to be applied transversely to the arms of a barber's chair and having a seat upon one end there-

of, said supporting member being laterally extended about at its midlength to afford an extended bearing upon that chair arm distant from the attaching end of said supporting member, the seat-equipped end of said supporting mem-



ber being likewise extended to afford a stable support for the seat, the chair-arm attaching end of said supporting member being also laterally extended and having applied thereto angular clips adapted to engage the chair-arm to which said supporting member is thereby attached.

1,061,335. BLUE-PRINT HOLDER OR DRAWING-HOLDER. ROBERT HENRY SMITH, Boston, Mass. Filed Feb. 17, 1911. Serial No. 609,251. (Cl. 40—146.)



1. In a support, the combination of a standard, and a pair of retaining members mounted thereon and adjustable toward and from each other, said members being formed with clamping surfaces, adapted to overlap to hold a flexible sheet when the members are in juxtaposition, and with means to engage opposite edges of a stiff card or the like inserted between said members, when they are separated.

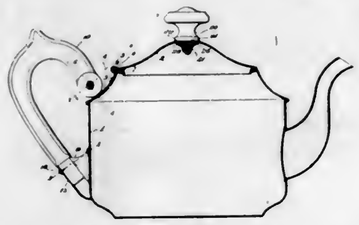
2. In a support, the combination of a standard; a cross-bar carried thereby having a groove upon one face, and a gripping surface; and a second cross-bar slidably mounted on the standard, having a lip extending toward the first-named cross-bar adapted alternatively to enter into clamping relation with said gripping surface to clamp a sheet or to engage and retain an edge of a card or the like whose opposite edge is engaged in the groove of the first cross-bar.

3. In a support, the combination of an upright standard; a cross-bar adjustable vertically and axially thereon, having a groove in its upper face and an inclined front face; and a second cross-bar slidably mounted on the standard above the first cross-bar and having an overhanging inclined portion adapted alternatively to enter into clamping relation with the inclined face of the first cross-bar to hold a sheet, or to engage and retain an edge of a card whose other edge is engaged in the groove of the first cross-bar.

1,061,336. TEA OR COFFEE POT. SIGMUND STERNAU, LIONEL STRASSBURGER, and ALBERT N. LATTIN, New York, N. Y., assignors to S. Sternau & Company, New York, N. Y., a Copartnership. Filed June 10, 1905. Serial No. 264,630. (Cl. 53—3.)

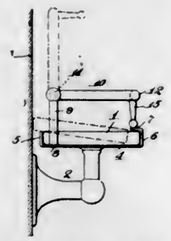
1. In a tea or coffee pot, the combination of the body and cover and handles; and a combined handle support and hinge comprising a plate attached to the cover and forming one leaf of the hinge, another plate attached to the body and forming at one end the other leaf of the hinge and having ears between which the handle fits, and a bolt passing through said ears and said handle.

2. In a tea or coffee pot, the combination with a plate having ears, inset portions having central openings therein, a handle between the ears, a bolt passing through one



ear and the handle and terminating short of the other ear, the said bolt having a threaded seat in the end opposite the head and a screw passing through the other ear and entering the threaded seat.

1,061,337. BOTTLE SHELF OR SUPPORT. SIGMUND STERNAU and CHARLES NELSON, New York, N. Y., assignors to S. Sternau & Company, Brooklyn, N. Y., a Copartnership. Filed Feb. 11, 1911. Serial No. 607,910. (Cl. 248—18.)



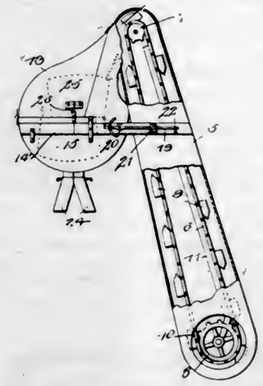
1. A bottle support comprising a slab and a support for such slab, said support comprising a plurality of brackets, an arm on each of said brackets, said arms engaging with the bottom of the slab, said arms also having bent extremities, one extremity engaging with the front edge of the slab, an extension on each bracket to one side, a pillar or post on the extension, and a rack secured to the pillar or post, such pillar or post supporting the rack and also serving as a stop for preventing the slab from moving endwise.

2. A bottle support comprising a slab, and a support for such slab, said support comprising a plurality of brackets, arms on the brackets engaging with the bottom of the slab, said arms having bent extremities, a hook on one of said bent extremities engaging with the front edge of the slab and holding it down, a pillar or post on the arm engaging with the end of the slab, and a rack secured to the pillar or post, said rack being supported above the slab.

3. A bottle support, having a shelf, a plurality of brackets for supporting the shelf, each bracket having an arm, with bent extremities, the front extremity being continued into a hook which passes over the upper front edge of the shelf, the rear bent extremity engaging with the rear edge only of the shelf, the hook holding down the front edge of the shelf, and the rear bent extremity holding the shelf in engagement with the hook, the rear extremity being sufficiently removed from the wall to permit the shelf to be lifted up in the rear, and moved backward and thereby becoming disengaged from the hook.

4. A bottle support which comprises brackets having arms, said arms having rear and front extensions, a hook on the front extension; a shelf within the bracket and resting on the arms; a rack pivoted to pillars on the arms, said rack having legs which rest upon the hooks, out of engagement with the shelf.

1,061,338. AUTOMATIC WEIGHING-MACHINE. LLOYD J. SUDDARTH, Silex, Mo. Filed July 8, 1912. Serial No. 708,288. (Cl. 73—182.)



1. In an automatic weighing machine, the combination with an elevator including a casing having a discharge opening at its upper end, of weighing mechanism including opposed receptacles mounted for rotation around a common axis, a housing for the receptacles mounted upon the elevator casing, a weighted pivotally mounted beam normally supporting the receptacles in their receiving positions, and a stop plate extending outwardly from the discharge opening of the elevator casing to be engaged by the receptacles and limit their movement to their receiving positions said plate also acting to direct the material from the elevator into the receptacles.

2. In an automatic weighing machine, the combination with a grain elevator including a casing having a discharge opening at its upper end, of weighing mechanism comprising opposed receptacles mounted to rotate about a common axis, a housing for the receptacles secured to the upper end of the elevator casing, a pivotally mounted weighted beam to support said receptacles and adapted to be overbalanced by the weight of material deposited therein, and a resilient stop plate extending downwardly and outwardly from the discharge opening in the elevator casing and adapted to engage at its free end with one of the receptacle walls to limit the movement of the receptacle to its receiving position, said plate further acting as a directing member for the material discharged from the elevator.

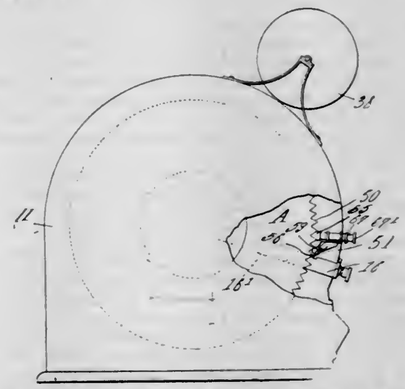
1,061,339. WRENCH. WILLIAM S. THOMSON, Plantsville, Conn., assignor to The H. D. Smith & Company, Plantsville, Conn., a Corporation. Filed Apr. 12, 1912. Serial No. 690,346. (Cl. 81—165.)



1. A wrench comprising a handle member having a head, a way extending across said head, a rib located in the said way, a moving jaw member comprising an arm, the said arm fitting and filling the said way and provided with a recess coöperative with the said rib, means for moving the said arm relatively to the said way, and means for maintaining the said rib and recess in engagement, the said latter means comprising lips on the said members each overhanging an edge of the other member, and the said lips of limited extent and located adjacent the outer exposed faces of the said members and separated from the inner face of the member overhung thereby by an appreciable space.

2. A wrench comprising a handle member having a head and a jaw member having an arm, the said head having a way, the said way being open on one face of the said head, extending across the same and positioned along the outer edge thereof, a jaw at one end of the said way and having a base extending over the said way, the said arm fitting and filling the said way and extending underneath the said base, a second jaw at the end of the said arm remote from the said base and first jaw, and having a base, the said latter base extending over the said outer edge of the head and way, holding means for holding the said arm and way engaged comprising a lip extending from each of the said bases of the said jaws and the said lip of the one member overhanging the adjacent edge of the other member, whereby the said holding means are limited to the extent of the said bases of the said jaws and the space between the said jaws is free from holding means.

1,061,340. ACCOUNT-FILE. EDWIN J. VICKERS, New Philadelphia, Ohio. Filed June 6, 1911, Serial No. 631,641. Renewed Sept. 6, 1912. Serial No. 719,007. (Cl. 45—3.)



1. An account file, having a rotatable series of radially disposed file trays, each slidably mounted to move radially, an extractor for engaging and moving any chosen one of said trays radially, and means for locking the extractor against movement during the rotation of the trays and for locking the trays against rotation while the extractor is operated.

2. An account file, having a rotatable series of radially disposed trays, each movable radially, an extractor for the trays also movable radially with relation to the axis of rotation, said extractor being provided with engaging means movable at will into locking engagement with any chosen one of the trays, and means for locking the extractor against movement during the rotation of the trays.

3. An account file, having a series of rotatable trays supported between drums, one of said drums being provided with a series of peripheral teeth, an extractor adapted to extract one tray at a time when the drum is stationary, and a locking means adapted to engage the teeth of the drum for locking the drum against rotation while the tray is being extracted and locking the trays against rotation while the extractor is operated.

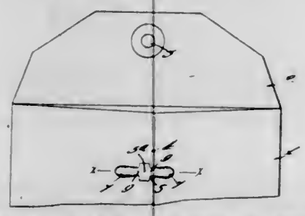
4. An account file comprising a series of rotatable trays adapted to have radial movement, an extractor for extracting one tray at a time, a pair of locking members, one for the extractor and one for the series of trays, and

means for actuating said locking members, whereby when the extractor is locked by its locking member, the trays are free to rotate, and when the trays are locked by their locking member the extractor is free to operate.

5. An account file, comprising a drum one head of which is provided with a series of peripheral teeth, a series of trays radially slidable and mounted in said drum, an extractor for extracting a single tray at a time, a lock for the drum and one for the extractor, and means connecting said locks whereby when one is operated the other is thrown out, and vice versa.

[Claim 6 not printed in the Gazette.]

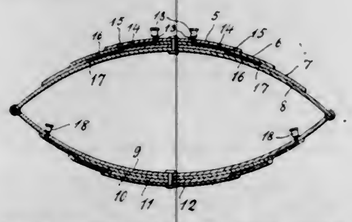
1,061,341. ENVELOP-FASTENER. MATTHEW VIERENGEL, Brooklyn, N. Y. Filed Mar. 27, 1911. Serial No. 617,147. (Cl. 229—78.)



1. An envelop fastener constructed of bendable substantially inelastic metal comprising an attaching portion formed with means whereby it is adapted to be fastened to the body of an envelop, and a wing which is arched transversely to stiffen it and prevent its body being bent on itself, the arched formation of said wing being terminated adjacent the portion to be attached to the envelop to adapt the wing to be disposed normal to the envelop body for receiving the flap and to be folded down into position parallel to the envelop to retain the flap in closed position.

2. An envelop fastener constructed of bendable substantially inelastic metal comprising an attaching portion formed with means whereby it is adapted to be fastened to the body of an envelop, and wings which are arched transversely to stiffen them and prevent their bodies from bending on themselves, the arched formation of said wings being terminated adjacent to the portion to be attached to the envelop to adapt the wings to be disposed normal to the envelop body for receiving the flap and to be folded down into position parallel to the envelop to retain the flap in closed position, the arched wings being arranged with their convex faces outward, in folded down position to facilitate the wings being forced snugly against the flap.

1,061,342. VEHICLE-SPRING. CLAUD M. WALTZ, Sumaltville, Ind. Filed Aug. 26, 1912. Serial No. 717,104. (Cl. 21—103.)

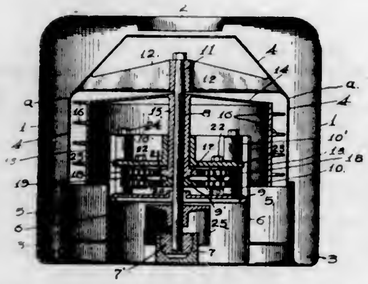


1. A spring composed of a series of super-imposed bowed leaves, the top surface of the intermediate leaves of the series having intercommunicating longitudinal grooves, the longitudinal grooves of the intermediate leaf which is contiguous to the bottom leaf of the series being in communication with the top surface of said bottom leaf, and the top leaf of the series having openings which communicate with the grooves of the intermediate leaf which is contiguous to said top leaf.

2. A spring composed of a series of super-imposed bowed leaves, there being openings through the top and intermediate leaves of the series, and the top surface of the intermediate leaves having longitudinal grooves communicating at one end with the openings in said leaves, and at their other ends with the openings in the next leaf above.

3. A spring composed of a series of super-imposed bowed leaves, there being openings through the top and intermediate leaves of the series, and the top surface of the intermediate leaves having grooves communicating at one end with the openings in said leaves, and at their other end with the openings in the next leaf above, the aforesaid grooves running in the direction of the incline of the leaves.

1,061,343. DRIVING MECHANISM FOR CENTRIFUGAL MACHINES. WALTER J. WAYTE, San Francisco, Cal. Filed Nov. 15, 1910. Serial No. 592,491. Renewed Jan. 30, 1912. Serial No. 674,388. (Cl. 74—34.)



1. In a centrifugal separator, the combination of two concentric members mounted for rotation at different speeds about a common axis, yieldable bearing means for supporting the said members in such a manner as to permit automatic centering during rotation, power transmitting gearing interposed between the two members, means for holding some of the elements of the gearing against rotation about the axis of the two concentric rotatable members, means for holding the last said elements of the gearing in mesh with the other elements irrespective of the transverse centering movements of the concentric members, and means for driving one of the concentric members.

2. In a centrifugal separator, the combination of two concentric members mounted for rotation at different speeds about a common axis, yieldable bearing means for supporting the said members in such a manner as to permit automatic centering during rotation, a gear carrier mounted co-axially with the concentric members for adjustment therewith, means for holding the gear carrier against rotation, gearing mounted in part on the gear carrier for insuring rotation of one of the concentric members at a different speed from that of the other, and means for driving the members.

3. In a centrifugal separator, the combination of three concentric members, two of which are mounted for rotation about the common axis at different speeds, means for holding the third members against rotation, yieldable bearing means for supporting all of the said members, power transmitting gearing interposed between the two rotatable members and mounted in part on the non-rotatable member, and means for driving the rotatable elements.

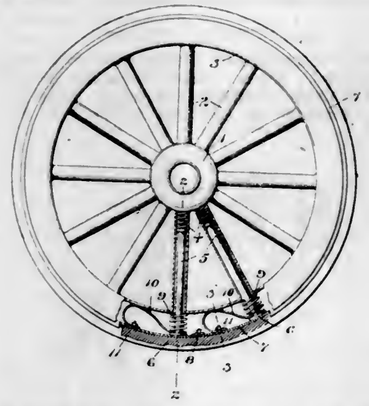
4. In a centrifugal separator, the combination of two concentric members mounted for rotation at different speeds about a common axis, yieldable bearing means for supporting the said members in such a manner as to permit automatic centering during rotation, a plate having a central bearing with its axis co-incident with the axis of the concentric members, the plate being adjustable with the members as they automatically center themselves,

means for holding the plate against rotation, a gear on one of the concentric members, a second gear on the other of the concentric members, gearing mounted on the plate and meshing with the gears on the two concentric members for insuring their rotation at different speeds, and means for driving the concentric members.

5. In a centrifugal separator, the combination of two concentric members mounted for rotation at different speeds about a common axis, yieldable bearing means for supporting the said members in such a manner as to permit automatic centering during rotation, a plate having a central bearing with its axis coincident with the axis of the concentric members, the plate being adjustable with the members as they automatically center themselves, means for holding the plate against rotation, a gear on one of the concentric members, a second gear on the other of the concentric members, a plurality of sets of gears mounted on the plate for rotation above axes parallel to the axis of the concentric member and meshing with the gears on the said elements to insure rotation at different speeds, and means for driving the concentric members.

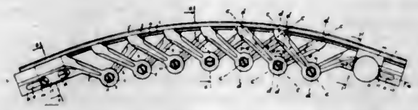
[Claims 6 to 9 not printed in the Gazette.]

1,061,344. VEHICLE-WHEEL. MARTIN S. WEIST, Sedalia, Mo., assignor of one-half to Holmes Hall, Sedalia, Mo. Filed June 26, 1912. Serial No. 706,053. (Cl. 152—28.)



In a spring wheel, a hub, a plurality of tubes radiating therefrom, a rim connected to said tubes, spokes slidably mounted in the tubes and having heads, a felly surrounding the spokes and loosely engaged with the head, springs interposed between the heads and the rim and between the ends of the spokes and the hub, and bowed springs carried by the felly and apertured to receive the spokes, said last-named spring being held in engagement with the heads by the springs which are interposed between the heads and the rim, together with a tire carried by the felly.

1,061,345. ADJUSTABLE CURVE-SCRIBER. WILLIAM S. WESTON, Chicago, Ill. Filed May 13, 1911. Serial No. 627,036. (Cl. 33—2.)



1. An adjustable curve scriber comprising a longitudinal flexible body and two series of lever arms mounted on said flexible body at fixed angles thereto, each arm of one series being pivotally connected to the companion arm of the other series, the arms of each series being mounted on said flexible body independently of the arms of the other series and said separate series of arms being relatively shiftable together and apart.

2. An adjustable curve scriber comprising a longitudinal flexible body and two series of oppositely inclined, overlapping rigid arms mounted at their inner ends on said flexible body at fixed angles thereto, each arm of one series being pivotally connected at its outer end to the corresponding end of a companion arm of the other series and said arms forming the side portions of a series of overlapping triangles of which the base portions are formed by the common flexible body, one series of arms being shiftable relatively to the other series.

3. An adjustable curve ruler having a flexible body provided with a ruling edge, two series of lever arms mounted on said flexible body, each arm of one series being pivotally connected to the companion arm of the other series, said arms being maintained at fixed angles to said flexible body and said body comprising suitable means for shifting one series of arms relatively to the other series.

4. An adjustable curve scriber having a flexible body and two series of rigid lever arms mounted at their inner ends on said flexible body at fixed angles thereto, each arm of one series being pivotally connected at its outer end to the companion arm of the opposite series, the inner ends of the arms of one series being shiftable relatively to the inner ends of the arms of the other series, and said flexible body having suitable means connecting the inner ends of the arms of each series.

5. An adjustable curve scriber comprising a longitudinal, flexible body having a ruling edge and a number of pairs of uniform, oppositely inclined, rigid arms mounted on said flexible body at uniform fixed angles thereto, and pivotal connections between the outer ends of the arms of each pair, said flexible body comprising suitable means for relatively shifting the points of mounting of said arms to increase or decrease the angles between the pivoted arms of each pair.

[Claims 6 to 23 not printed in the Gazette.]

1,061,346. PLASTIC MATERIAL AND PROCESS OF PREPARING SUCH PLASTIC MATERIAL. FERDINAND GERHARD WIECHMANN, New York, N. Y., assignor to Fenoform Corporation, Hastings-upon-Hudson, N. Y., a Corporation of New York. Filed Nov. 13, 1909. Serial No. 527,753. (Cl. 106—22.)

1. A process of treating an albuminoid of the character described, which consists in subjecting it first to the action of a solvent of the character indicated and then to the action of formaldehyde, and aiding chemical reactions by the application of heat and pressure.

2. A process of treating vegetable albumin which consists in subjecting it to the action of phenol and subsequently to the action of formaldehyde and aiding the chemical reactions by the application of heat and pressure.

3. A process of treating vegetable albumin which consists in reducing it to a divided condition, then subjecting it to the action of phenol, then the combined mass to the action of formaldehyde and aiding the chemical reactions by heat and pressure.

4. A process of producing the product herein described which consists in first effecting a chemical combination between vegetable albumin and phenol and subsequently between the combined vegetable albumin and phenol and formaldehyde, under conditions of heat and pressure which will permit such chemical combinations to be formed.

5. A process of producing the product herein described which consists in subjecting an albuminoid to the action of a body of the phenol group and subsequently to the action of a body which will chemically combine with the product derived from the union of the first two mentioned bodies.

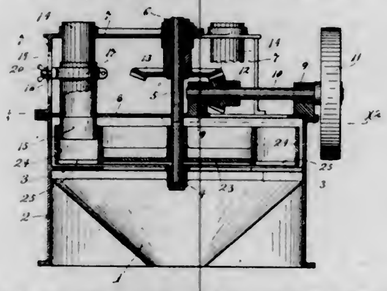
[Claims 6 to 9 not printed in the Gazette.]

1,061,347. CANDLE-HOLDER. ANTHONY WILL, Syracuse, N. Y. Filed Sept. 6, 1910. Serial No. 580,691. (Cl. 67—27.)



A candle holder comprising a tube formed of two sections united substantially midway their lengths, the upper section at the outer end thereof tapering inwardly and terminating in an annular shoulder having a groove formed in the lower side thereof, an inverted cup of substantially the same diameter as the groove arranged therein, a disk positioned upon the upper side of said cup for supporting a candle, and a compression coil spring intermediate the cup and lower end of said tube to cause the disk and cup to engage said annular shoulder in the limit of its outward movement.

1,061,348. ADJUSTABLE FEEDER AND MIXER. JOSEPH L. WILLFORD, Minneapolis, Minn., assignor of one-half to Benjamin A. O'Neill, Minneapolis, Minn. Filed Dec. 1, 1911. Serial No. 663,191. (Cl. 83—44.)



1. In a feed device of the kind described, the combination with a feed table, of a rotary feed wheel having a continuous annular feed trough with continuous parallel walls and openings in its bottom arranged to move immediately above said feed table, and a supply spout having its lower end located vertically over said feed table and extended downward into the annular feed trough of said feed wheel.

2. In a feed device of the kind described, the combination with a feed table, of a rotary feed wheel having a continuous annular feed trough with continuous parallel walls and openings in its bottom arranged to move immediately above said feed table, a supply spout having its lower end located vertically over said feed table and extended downward into the annular feed trough of said feed wheel, and a relatively fixed back stop extended downward into said annular feed trough immediately back of the lower or delivery end of said supply spout.

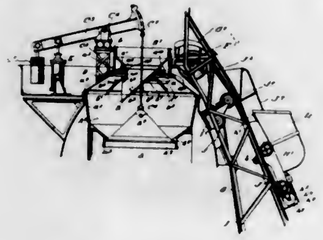
3. In a feed device of the kind described, the combination with a feed table, of a rotary feed wheel having a continuous annular feed trough with continuous parallel vertical walls and openings in its bottom arranged to move immediately above said feed table, and a supply spout having an adjustable delivery end depending into and arranged to deliver material into said feed trough immediately above said feed table.

4. In a feed device of the kind described, the combination with a feed table, of a rotary feed wheel having an annular feed trough with continuous parallel vertical walls and openings in its bottom arranged to move immediately over said feed table, a supply spout arranged to deliver material into said feed trough immediately above said feed table, and a back stop located immediately at the rear of said feed spout and depending into said feed trough.

5. In a feed device of the kind described, the combination with a feed table, of a rotary feed wheel having a continuous annular feed trough with continuous parallel walls and openings in its bottom arranged to move immediately above said feed table, a supply spout having its lower end located vertically over said feed table and extended downward into the annular feed trough of said feed wheel, and a relatively fixed back stop extended downward into said annular feed trough immediately back of the lower or delivery end of said supply spout, the said feed table being extended in the direction of rotation of said wheel so as to prevent grain supplied thereto by said spout from running off from the same when the feed wheel is standing still.

[Claim 6 not printed in the Gazette.]

1,061,349. CHARGING APPARATUS FOR BLAST-FURNACES. EDGAR JOSIAH WINDSOR-RICHARDS and THOMAS LEWIS, Glengarnock, Scotland. Filed Dec. 23, 1909. Serial No. 534,658. (Cl. 75—115.)



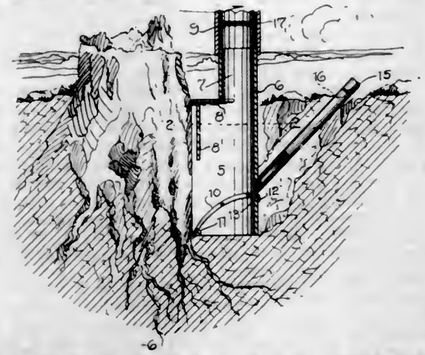
1. In a charging apparatus for blast furnaces, the combination of a hopper adapted to deliver the furnace, a bell-valve for closing the mouth of said hopper, a rotating chute adapted to feed said hopper, a door for closing said chute, a counter-balance adapted to open said door and a ring in position to engage a portion of the door to close it in opposition to its counter-balance.

2. A charging apparatus for blast furnaces comprising a hopper, a rotary chute in said hopper, means for imparting intermittent rotary movement to said chute, a door for closing said chute, a ring for closing said door at suitable intervals and a counter-balance on said door normally tending to open it.

3. In a charging apparatus for furnaces, the combination of a hopper, a chute, means for imparting intermittent rotation to said chute, means for opening and closing the chute in consequence of its rotation, and an indicating means adapted to record the number of charges of material delivered by said chute.

4. In a charging apparatus for furnaces, the combination of a hopper, a chute, means for imparting intermittent rotation to said chute, means for opening and closing the chute in consequence of its rotation, and an indicating means adapted to record the number of charges of material delivered by said chute, said indicating means being adapted to show the position of the chute within the hopper.

1,061,350. STUMP-BURNER. WALTER CLIFFORD BECKHAM, Paxton, Fla. Filed Feb. 15, 1913. Serial No. 748,678. (Cl. 110—21.)

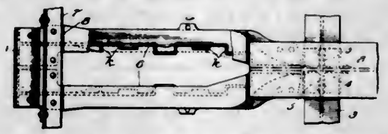


1. A burner of the character described comprising an elongated body of U shaped form in cross section provided with a cylindrical extension upon one end, a plate connecting the side walls of said body at the inner end of said extension, the longitudinal edges of the U shaped portion of said body and the edge of said plate being adapted for engagement with a tree stump, a fuel bed supporting grate arranged between the side walls of the body at its lower end, an air blast pipe connected to said body to supply air to the fuel bed, and a draft pipe connected to the extension of the burner body.

2. A burner of the character described comprising an elongated body of U shaped form in cross section, a plate connecting the side walls of said body at one of its ends, the edge of said plate and the longitudinal edges of said body walls being adapted for engagement with a tree stump, a longitudinally extending plate connecting the side walls of the burner body inwardly of their edges to provide an air space between said plate and the tree stump, a fuel bed supporting grate arranged at an inclination between the side walls of the burner body to direct the fuel against the base of the tree stump, an air blast pipe connected to the burner body to supply air to the fuel bed, and a draft pipe connected to the upper end of said burner body.

3. A burner of the character described comprising an elongated body of U shaped form in cross section having a cylindrical extension upon its upper end, a draft pipe connected to said extension, a longitudinally extending plate connecting the side walls of the burner body at their upper ends, said plate being spaced from the edges of said side walls to provide an air chamber between itself and the tree stump, a removable inclined fuel bed supporting grate arranged between the side walls of the burner body to direct the fuel to the base of the tree stump, and a blast pipe connected to the burner body at the upper end of said grate plate through which the fuel may be inserted, said pipe directing air to the fuel bed to cause the flames to eat through the tree stump at its base.

1,061,351. UNDERFRAME FOR CARS. WILLIAM P. BETTENDORF, Davenport, Iowa; J. W. Bettendorf administrator of said William P. Bettendorf, deceased. Filed Nov. 8, 1909. Serial No. 526,866. (Cl. 105—76.)



1. An underframe for cars comprising end-sills and integral body-bolsters of flanged form extending from side-sill to side-sill, a continuous center-sill terminating at points mediate the end-sills and body-bolsters which latter pass through the web of the center-sill mediate the flanges thereof, and cast-metal draft-sills that have their rear ends bend toward, lap past, and secure to the web of the ends of the center-sill in front of the transverse plane of the body-bolsters.

2. An underframe for cars comprising end-sills and integral body-bolsters of flanged form extending from side-sill to side-sill, a continuous center-sill terminating at points mediate the end-sills and body-bolsters which latter pass through the web of the center-sill mediate the flanges thereof, center bearing-plates secured to the flange of said center-sill below the body-bolsters, and cast-metal draft-sills that have their rear ends bend toward, lap past, and secured to the web of the ends of the center-sill in front of the transverse plane of the body-bolsters.

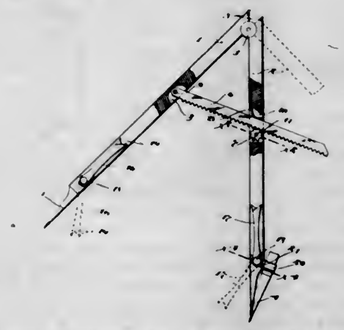
3. An underframe for cars comprising end-sills and integral body-bolsters of flanged form extending from side-sill to side-sill, a continuous center-sill terminating at points mediate the end-sills and body-bolsters which latter pass through the web of the center-sill mediate the flanges thereof, and cast-metal draft-sills that have their rear ends bend toward, lap past, and secured to the web of the ends of the center-sill in front of the transverse plane of the body-bolsters, and having their forward portions built toward each other.

4. An underframe for cars comprising end-sills and integral body-bolsters of flanged form extending from side-sill to side-sill, a continuous center-sill terminating at points mediate the end-sills and body-bolsters which latter pass through the web of the center-sill mediate the flanges thereof, center bearing-plates secured to the flange of said center-sill below the body-bolsters, and cast-metal draft-sills that have their rear ends bend toward, lap past, and secured to the web of the ends of the center-sill in front of the transverse plane of the body-bolsters, and having their forward portions built toward each other.

5. An underframe for cars comprising end-sills and integral body-bolsters of flanged form extending from side-sill to side-sill, a continuous center-sill terminating at points mediate the end-sills and body-bolsters which latter pass through the web of the center-sill mediate the flanges thereof, draft-sills having their rear ends secured to and lapping past the end of the center-sill in front of said body-bolsters and connecting said center-sill to said end-sills, and a striking-plate secured directly to the front ends of said draft-sills.

[Claims 6 to 11 not printed in the Gazette.]

1,061,352. COMBINATION-TOOL. ANDREW BISKO, Minneapolis, Minn. Filed Jan. 6, 1913. Serial No. 740,408. (Cl. 73—185.)

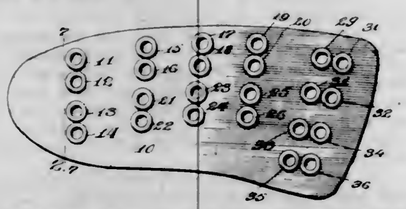


1. The combination with a pair of legs connected by a hinge joint and having divider points, of means for setting said legs in different angular adjustments with respect to each other, a pair of caliper arms pivotally secured to said legs, a pencil holder secured to one of the pivotal connections of said arms, and means for holding said arms in different pivotal adjustments on said legs.

2. The combination with a pair of legs connected by a hinge joint and having divider points, of a coöperating rack bar and pinion secured, one to each of said legs, a thumb piece for rotating said pinion and having a graduated dial for setting said legs in predetermined adjustments with respect to each other.

1,061,353. ARCH-SUPPORT. ALEXANDER E. BLOCK, St. Louis, Mo. Filed Sept. 18, 1912. Serial No. 720,936. (Cl. 36—71.)

1. In an arch support, the combination of an insole-member; an insertion; and self-contained means carried by the insole-member and the insertion whereby the insertion may be detachably secured to the insole-member at pre-determined points.

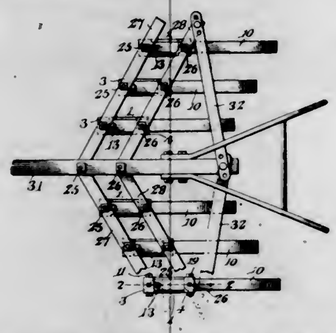


2. In an arch support, the combination of an insole-member; sockets embedded in the insole-member; an insertion; a skeleton mounted on the insertion and adapted to detachably engage with either of the sockets.

3. In an arch support, the combination of an insole-member; sockets arranged in pairs and embedded in the insole-member; an insertion; skeletons arranged in pairs and mounted on the insertion, and adapted to detachably engage with either of the pairs of sockets.

4. In an arch-support, the combination of an insole-member; a plurality of insertions; and self contained means carried by the insole-member and the insertions whereby the insertions may be detachably secured to the insole-member or to each other at pre-determined points.

1,061,354. SPRING-TOOTH CULTIVATOR. ARTHUR BRIGDEN, Albertville, Ala. Filed Nov. 14, 1912. Serial No. 731,369. (Cl. 97—10.)

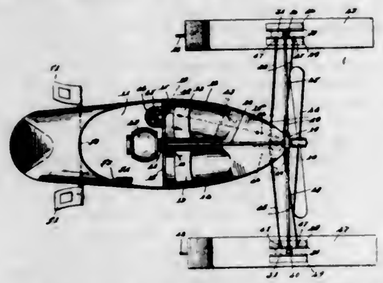


1. The combination with a cultivator tooth provided at its front end with an eye, of a tooth supporting bracket provided with resilient compressible sides and having front and rear perforations, a pivot mounted in the front perforation and passing through the eye of the spring tooth, and a bolt arranged in the rear perforations and adjustably securing and clamping the spring tooth between the sides of the bracket.

2. The combination with a cultivator tooth having an eye, of a tooth supporting bracket provided with spaced resilient compressible sides and having alined front and rear perforations, the rear perforations of one side being threaded, a pivot bolt mounted in the front perforations and passing through the eye of the cultivator tooth, and a pair of bolts arranged in the rear perforations and engaging the threads of the same and supporting and adjustably clamping the spring tooth between the sides, said bolts being provided with exterior lock nuts engaging the side of the bracket having the threaded perforations.

3. A tooth supporting bracket composed of spaced resilient approximately U-shaped sides having front and rear upwardly extending portions and bottom connecting portions, the front and rear portions being provided with alined perforations adapted to receive fastening devices for pivoting the cultivator tooth within the bracket and for adjustably clamping the same between the said sides, and front and rear top connecting portions having openings adapted to receive pivots for connecting the front and rear portions of the bracket to the tooth carrying bars or members of a cultivator.

1,061,355. BOAT. GEORGE P. BUTTSOV, Chicago, Ill., assignor of one-third to Charles Matsen and one-third to Herman P. Erb, Chicago, Ill. Filed May 20, 1912. Serial No. 698,549. (Cl. 114—66.5.)



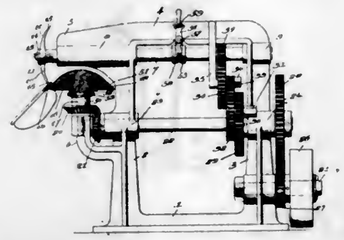
1. The combination with a boat; of a vertical standard carried on the prow of said boat; two diverging legs depending from the top of said vertical standard; a vertical sleeve on the lower end of each of said diverging legs; a plurality of pontoons; angle bars arranged upon the decks of said pontoons; a bar pivoted between the angle bars of each pontoon having the forward terminal thereof curved in order that the forward terminal of each pontoon may swing upwardly; and rods carried by said bars swiveled in the sleeves aforesaid.

2. The combination with a boat; of a vertical standard carried on the prow of said boat; two diverging legs depending from the top of said vertical standard; a vertical sleeve on the lower end of each of said diverging legs; a plurality of pontoons; angle bars arranged upon the decks of said pontoons; a bar pivoted between the angle bars of each pontoon having the forward terminal thereof curved in order that the forward terminal of each pontoon may swing upwardly; rods carried by said bars swiveled in the sleeves aforesaid; and guide rods connected with certain of said angle bars for steering said pontoons.

3. The combination with a boat; of a frame mounted thereon; vertical sleeves secured to said frame; a plurality of pontoons; angle bars arranged upon the decks of said pontoons; a bar pivoted between the angle bars of each pontoon having the forward terminal thereof curved in order that the forward terminal of each pontoon may swing upwardly; and rods carried by said bars swiveled in the sleeves aforesaid.

1,061,356. SOLE-ROUNDING MACHINE. GEORGE W. CARTER, Norway, Me. Filed July 31, 1911, Serial No. 641,395. Renewed Oct. 7, 1912. Serial No. 724,438. (Cl. 12—85.)

1. A sole rounding machine comprising a rest for sustaining and guiding the sole margin, a rotatory cutter knife and means for rotating it in a conical path at right angles to, and having its apex on the same side as, the margin sustaining surface of said rest.



2. A sole rounding machine comprising a rotary circular rest for sustaining and guiding the sole margin, said rest being provided near its periphery with an annular recess having its outer wall perpendicular to the surface of the rest, a rotary cutter moving in a conical path at right angles to said rest and coöperating with the perpendicular wall of said recess to round the sole.

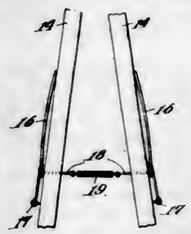
3. A sole rounding machine comprising a rotary cutter moving in a conical path, and a rotary rest moving in a conical path, the said paths intersecting at right angles.

4. A sole rounding machine comprising a rotary cutter comprising a plurality of radial knives, the cutting edges of which lie in a cone having the same axis as the axis of rotation of the cutter, and a rest for sustaining and guiding the sole margin having its supporting surface at right angles to the path of said knives and below the conical apex thereof and on the same side of the rest as the conical apex of the knives' path.

5. A sole rounding machine comprising a rotary cutter comprising a plurality of radial knives, the cutting edges of which lie in a cone having the same axis as the axis of rotation of the cutter, a rotary rest for sustaining and guiding the sole margin having its peripheral surface lying in a cone having the same axis as the axis of rotation of the rest, the conical surface of the rest at its point of coöperation with the knives being located at right angles to the path thereof.

[Claims 6 to 12 not printed in the Gazette.]

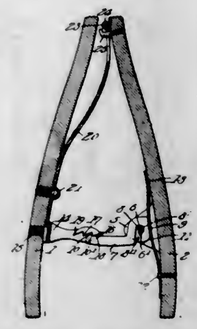
1,061,357. PAPER-BAG HOLDER. FERDINANDO D. CROCE, New York, N. Y. Filed June 6, 1912. Serial No. 702,052. (Cl. 211—2.)



1. In a device of the class described, spaced members; a bag holding clip pivoted at its lower end to one member and provided intermediate its ends with an eye; a straight link pivoted in the eye and extended through said member; a spring connected to the link; and means for connecting the spring to the other member; the link being slidable in the first specified member to permit the top of the clip to engage the bags when the link is actuated by the spring, the link constituting means for upholding the bags, thereby preventing the bags from wedging in the angle defined by the clip and said member, and permitting the bags to be engaged by the top of the clip.

2. In a device of the class described, spaced supporting members; bag holding clips pivoted at their lower ends upon said members; links connected with the intermediate portions of the clips, the links being straight and being extended through said members; and a retractile spring connecting the inner ends of the links; the links constituting stops for upholding the bags, thereby permitting the bags to be engaged by the tops of the clips, when the links and clips are actuated by the spring.

1,061,358. PLIERS. FOREST E. CULVER, Chicago, Ill. Filed July 5, 1912. Serial No. 707,816. (Cl. 81—45.)



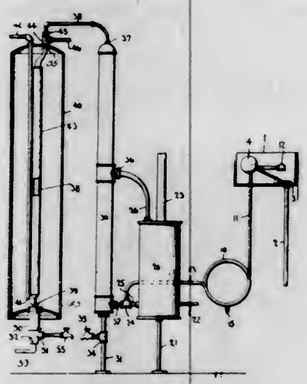
1. Pliers, having two spring extended handles, a stationary stud carried by one handle intermediate of its ends, the free end of said stud being provided with an offset projection having a plurality of ratchet teeth upon one side and a curved portion upon the opposite side, two spaced lugs carried by the other handle, a pin having a flattened outer face mounted in the two lugs, a trigger having a slotted head upon its inner end for disposition between the lugs, the slot fitting upon the pin and forming a pivot for the trigger, said trigger having a hook with an offset portion upon its outer free end, and a flat spring between the spaced lugs and bearing against the adjacent portion of the head of the trigger to resiliently hold the free end of the trigger for registration with the free end of the stud when the handles are depressed, the depression of the handles and the meeting of the free ends of the arm and stud, causing the hook of the trigger to be moved against the spring and into engagement with the ratchet teeth, a further depression of the handles causes the hook of the trigger to be moved beyond and free of the ratchet teeth while the spring of the handle separates the handles and the trigger spring causing the offset hook of the trigger to rise and ride upon the curved portion of the offset of the stud.

2. A pliers having two handles, means carried by the handles for locking the same when moved toward each other and to be released upon the final movement of the handles toward each other, a flat spring having one end fast to one of the handles with its free end slotted, an antifrictional roller mounted in the free end for engagement with the other handle, and a hooked stud carried by the last handle and projected through the slotted end of the spring to co-act with the antifrictional roller to limit the extension of the handles.

1,061,359. HOT-WATER SYSTEM. DENNIS WILLIAM DALEY and FRANK RICHARD DALEY, Parkersburg, W. Va. Filed Aug. 14, 1912. Serial No. 715,108. (Cl. 122—33.)

1. The combination with an upright tank having a cold water inlet and openings in its upper and lower ends;

of a hot-water outlet pipe in the uppermost opening and connected with the house fixtures, a stuffing box also in this pipe, a pipe section in the lowermost opening, a flush cock connected with this section, a stuffing box connected therewith, a steam line pipe leading through the uppermost stuffing box, throughout the length of the tank, and out through the lowermost stuffing box, and means for supplying steam thereto and drawing off distilled water therefrom.



2. The combination with an upright tank having a cold water inlet and openings in its upper and lower ends; of a hot-water outlet pipe in the uppermost opening and connected with the house fixtures, a stuffing box also in this pipe, a pipe section in the lowermost opening, a flush cock connected with this section, a stuffing box connected therewith, a steam line pipe leading through the uppermost stuffing box, throughout the length of the tank, and out through the lowermost stuffing box, a boiler and a heater in circuit with each other and connected with the source of water supply, connections between the upper end of the boiler and said steam line pipe at the upper end of the tank, and means for drawing off distilled water at the lower end of said tank.

3. The combination with an upright tank having a cold water inlet and openings in its upper and lower ends; of a T-coupling having one arm engaging the uppermost opening and its shank connected to the house fixtures, a stuffing box in the other arm of this coupling, a pipe section engaging the lowermost opening, a T-coupling into one arm of which this pipe section leads, a stuffing box in its other arm, a flush cock connected with the shank, a steam line pipe leading through the uppermost stuffing box, throughout the length of the tank, and out through the lowermost stuffing box, and means for supplying steam thereto and drawing off distilled water therefrom.

4. The combination with an upright tank having a cold water inlet and openings in its upper and lower ends; of a T-coupling having one arm engaging the uppermost opening and its shank connected to the house fixtures, a stuffing box in the other arm of this coupling, a steam line pipe leading through the stuffing box, throughout the length of the tank, and out through the lowermost opening, and means for supplying steam thereto and drawing off distilled water therefrom.

5. The combination with an upright tank having a cold water inlet and openings in its upper and lower ends; of a pipe section engaging the lowermost opening, a T-coupling into one arm of which this pipe section leads, a stuffing box in its other arm, a flush cock connected with its shank, a steam line pipe leading through the uppermost opening, through out the length of the tank, and out through the pipe section and stuffing box, and means for supplying steam thereto and drawing off distilled water therefrom.

1,061,360. GAS-BURNER. FRANCIS J. DOYLE, Chicago, Ill. Filed July 19, 1909. Serial No. 508,407. (Cl. 158—112.)



1. A gas burner comprising a draft tube, a jet plug seated in the lower end of said tube and provided with one or more vertical jet openings, said draft tube having a port formed through its side at or above the upper end of said jet-plug, a hollow head approximately oblong in vertical axial section and of greater area in cross section than the tube at the upper end of the latter, said head having an axial inlet and an axial outlet port, said ports being substantially less in cross sectional area than the head, and a gauze diaphragm extending across the interior of said head and separating the same, said diaphragm being dome-shaped in cross section and extending nearly to the upper end of the head to form a restricted passage or chamber between the upper end of the diaphragm and the outlet port of the head.

2. A gas burner comprising a draft tube, a jet-plug seated in the lower end of said tube and having a plurality of vertical openings for the escape of the gas, said tube having an air port formed in the side of the tube at or above the upper end of the jet-plug, the upper part of said tube forming a mixing chamber for the gas and air, a secondary chamber communicating with said mixing chamber and taking the form of an enlarged flattened head having an inlet and an outlet port of substantially the same cross sectional area as the cross section of the tube, and a gauze diaphragm extending across the entire interior of the head, said diaphragm being dome-shaped in cross section and approaching closely the upper half of the head throughout its entire area to form a restricted annular passage in the upper end of the head.

3. A gas burner comprising a primary mixing chamber taking the form of an elongated tube, a jet-plug close to the lower end of the tube and having a jet opening for gas, the lower part of said tube having an air inlet port, a secondary mixing chamber communicating with the upper end of the primary chamber and taking the form of an enlarged head, a dome-shaped gauze diaphragm extending across the said head and so disposed as to closely approach the upper end of the head throughout its length, said head having inlet and outlet ports of substantially the same cross sectional area as the primary mixing chamber.

4. A gas burner comprising a draft tube, a jet plug seated in the lower end of said tube and having a vertical jet opening, an air port formed in the side of the tube and spaced at or above the upper end of this jet-plug, an enlarged hollow head at the upper end of the tube having inlet and outlet ports, said head flaring outwardly as to its lower half and converging inwardly as to its upper half, and a convex diaphragm mounted in the upper half of the head and closely approaching the inner wall of said upper half, the inlet and outlet ports of said head being of substantially less area than the main body of the head.

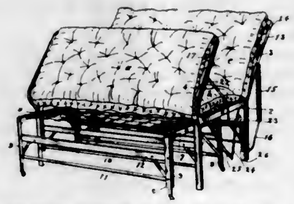
1,061,361. WEED-EXTRACTOR. JACOB D. ELLIS, Castle Rock, Colo. Filed Jan. 6, 1913. Serial No. 740,562. (Cl. 55—65.)

A device of the character described, comprising a handle, a shank secured thereto, a knife blade formed upon the shank, said blade tapering toward the free end thereof and producing a terminal cutting edge and side cutting edges, lugs formed upon the shank at its juncture with the blade, said lugs being tapered at their opposite sides



to produce side cutting edges and at their ends to produce an end cutting edge, as and for the purpose set forth.

1,061,362. CONVERTIBLE BED AND DIVAN. BENJAMIN B. ENGLANDER, New York, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 16, 1912. Serial No. 720,475. (Cl. 5—46.)



1. A divanette comprising a stationary or seat section, a sliding section, a swinging back section hinged to said stationary section, a swinging front section hinged to said stationary section, and means connecting the swinging front section, the sliding section and the back section whereby on shifting one of said members the structure will be converted either into a double bed or a divan.

2. A divanette comprising a stationary or seat section, a sliding section movable thereunder, a swinging back section hinged to said stationary section, a swinging front section hinged to the opposite side of said stationary section, and linkage connection between the swinging front section, the sliding section and the back section whereby on shifting one of said sections the structure will be converted into a double bed or a divan.

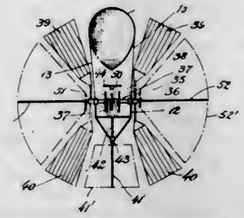
3. A divanette comprising a stationary or seat section, a sliding section, a swinging back section hinged to said stationary section, a swinging front section hinged to said stationary section, means connecting the swinging front section, the sliding section and the back section whereby on shifting one of said members the structure will be converted either into a double bed or a divan, and means linked to the stationary section for supporting the back section when in its lowered position.

4. A divanette comprising stationary supporting means, a shiftable or sliding section, a back section hinged to said supporting means, a swinging front section also hinged to said supporting means, and the sliding section shiftable relatively to said supporting means into position to the front thereof to receive the swinging front section.

5. A divanette comprising stationary supporting means, a shiftable or sliding section, a back section hinged to said supporting means, a swinging front section also hinged to said supporting means, the sliding section shiftable relatively to said supporting means into position to the front thereof to receive the swinging front section, and means connecting the swinging front section, the sliding section and the back section whereby on shifting one of said sections the structure will be converted into a double bed or a divan.

[Claims 6 to 9 not printed in the Gazette.]

1,061,363. AIRSHIP. LEWIS J. EVANS, Kirkwood, N. Y. Filed June 14, 1911. Serial No. 633,066. (Cl. 244—9.)



1. In an air-ship, the combination with a car, and raising means therefor, of a pair of alined shafts extending transversely of said car and journaled therein, oars radially extending from said shafts, and means for rocking said shafts independently of each other.

2. In an air-ship, the combination with a car, and raising means therefor, of a pair of tubular alined shafts extending transversely of said car and journaled therein, radially extending oars carried by said shafts respectively, means for rocking said shafts independently of each other, a spindle journaled within said tubular shafts aero-planes on said spindle, and means for moving said shaft to vary the inclination of said aero-planes.

3. In an air-ship, the combination with a car, and raising means therefor, of a pair of alined shafts extending transversely of the car, oars extending radially therefrom, means for rocking said shafts, a spindle parallel with said shafts, aero-planes on said spindle, and means for moving said spindle.

4. In an air-ship, the combination with a car, and raising means therefor, of a pair of alined shafts extending transversely of the car, oars extending radially therefrom, means for rocking said shafts, a spindle parallel with said shafts, aero-planes on said spindle, and means for moving said spindle, and a rudder disposed below the bottom of the car and movable from within the same.

5. In an air-ship the combination with a car, and raising means therefor, of a pair of alined shafts extending transversely of the car, oars extending radially therefrom, means for rocking said shafts, a spindle parallel with said shafts, aero-planes on said spindle, and means for moving said spindle, a vertical rod extending through the bottom of the car, a rudder blade carried on the lower end thereof, and a hand wheel on the upper end thereof.

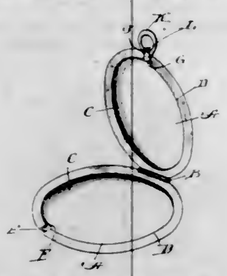
[Claim 6 not printed in the Gazette.]

1,061,364. LOCKET. ROBERT M. EWING, Philadelphia, Pa. Filed May 21, 1912. Serial No. 698,799. (Cl. 63—19.)

1. An article of the character described, consisting of two cupped or concaved members formed each with a flat rim, a hinge connecting the members at their lower edge to permit the members to open downwardly, the rim of one member being cut out to form a seat or recess, a catch or keeper provided by the cut out portion of the rim, a projection formed on the other member and adapted when closed to have its lower edge engaged by the catch or keeper of the other member, and a ring swiveled in said projection for suspending the locket.

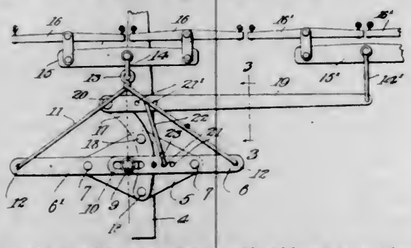
2. An article of the character described, consisting of two similar members dished or concaved and hinged at their lower edge, said members being each formed upon its

inner edge with a rim, a cut out portion or seat formed in the rim of one member, a catch or keeper provided by the material cut from the rim, a projection formed on the rim of the other member in opposite relation to the seat in the rim of the other member, to be engaged by the catch or keeper on said member, said projection being formed with an opening, a pin pivoted in said opening, and a ring swiveled upon said pin, said projection and seat being arranged in opposite relation to the hinge of the article.



3. An article of jewelry of the character described, consisting of two similar dished or concaved members, a hinge connecting the members at their edge, a recess and contiguous catch on one of the sections, a projection on the other member adapted to fit the recess and be engaged by the catch on the other member for securing the members when closed, said recess, catch and projection being on the edge of the locket directly in line with and opposite the hinge of the members, a pin pivoted in the projection and extending above the edge of the locket and a suspending ring having its collar swiveled upon the projecting end of the pin, whereby the locket may be readily opened and may be swung to the desired position with ease upon the pivot pin.

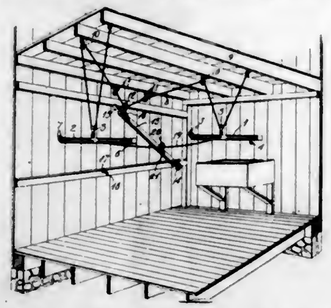
1,061,365. DRAFT-EQUALIZER. NATHAN W. FINCH, Plano, Ill. Filed Sept. 23, 1912. Serial No. 721,930. (Cl. 21—76.)



A draft equalizer embodying a pair of levers operatively connected at their inner ends, a V-shaped rod connected at its ends to the outer ends of the levers and having its crotch rigid and twisted into an eye so that the arms may be flexed as the levers are swung and in order to tend to maintain the levers in alinement, an equalizing lever, a link connecting the equalizing lever and one of the former levers, and whiffletrees connected to the said eye and equalizing lever.

1,061,366. HANGER FOR HARNESS. THOMAS O. FRAZIER, Paris, Ill. Filed Oct. 3, 1912. Serial No. 723,807. (Cl. 54—84.)

1. A harness hanger comprising a pair of stretcher bars each having one end forked and turned up to provide harness engaging hooks, harness engaging hooks detachably and adjustably secured to the opposite ends of said bars, said hooks and the forked hooks of the bars being adapted to be engaged with parts of the harness whereby said parts are spread apart and held in position to be engaged with the animal, a hoisting cable connected at its ends to an overhead support and having an operating engagement with said bars, a pivoted hoisting lever having an operative connection with said cable whereby the latter may be operated to raise and lower said stretcher bars and the harness attached thereto, and a stop pin adapted to hold said hoisting lever in an operative position.



2. A harness hanger comprising a pair of stretcher bars adapted to be engaged with the parts of a harness, supporting pulleys connected with said bars, a pulley supporting cable arranged between and having its ends secured to said bars, a pulley engaged with said cable, a harness engaging hook carried by said pulley, a hoisting cable engaged with the pulleys on said bars and having its ends secured to an overhead support, guide pulleys secured to said support to receive and guide said hoisting cable, a pivoted lever, a pulley secured thereto and engaged with said hoisting cable whereby when the lever is depressed said cable will be operated to raise said stretcher bars and the harness engaged therewith, and means to fasten said lever in depressed position.

3. A harness hanger comprising a pair of stretcher bars having means at their extremities for engaging a harness, a member connecting said bars and also having harness-engaging means, guide pulleys in an overhead support, a pivoted lever, means for holding it in operative position, a pulley on this lever, and a hoisting cable whose center embraces the lever-pulley and whose two stretches are passed over said guide pulleys respectively and connected beyond them with said stretcher bars.

1,061,367. REVERSIBLE FRICTION-ROLL AUTOMOBILE-WRENCH. HENRY G. GEILS, Chicago Heights, Ill. Filed July 22, 1912. Serial No. 710,746. (Cl. 81—58.)



1. In a wrench, the combination of a sleeve, a head having a reduced portion part of its length, one surface being continuous with that of the head, the other surface being oval and providing a crescentic chamber between this surface and the inner wall of said sleeve, a roller positioned between the wall of the sleeve and the reduced portion of the head, and means for forcing said roller into frictional engagement with the sleeve, substantially as described.

2. A wrench having a head provided with an oval shaped section near the center thereof, a smooth bored sleeve forming a crescent shaped chamber between the inner wall thereof and the oval shaped section, a barrel keyed to said wrench head, a collar surrounding said wrench head between the barrel and sleeve, a pin projecting into the aforesaid chamber, a friction roller mounted in said sleeve, a wedge shaped plug movable in a socket extending transversely into the oval shaped section of the wrench head, means for holding said plug into engagement with the roller and forcing it against the inner wall of the sleeve.

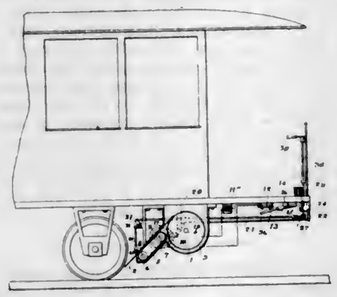
3. A wrench having a head provided with an oval shaped section near the center thereof, said head having a circumferential groove near one end thereof, and a longitudinal key way at the opposite end a barrel keyed to one end of said head, a smooth bored sleeve inclosing the opposite end of said head, means engaging the aforesaid groove and securing the head and sleeve together, a friction roller movable between the sleeve and the oval shaped section of the head, means coöperating therewith to reverse the action of said roller and to keep it in frictional engagement with the sleeve, substantially as described.

1,061,368. FILTERING MATERIAL. WALTER L. GILLIAM, St. Louis, Mo. Filed Oct. 16, 1911. Serial No. 655,073. (Cl. 210—9.)



As an article of manufacture a filtering body composed of an intermingled fibrous wood pulp compressed into a solid mass, and said compressed body carbonized throughout making a solid compact non-separable filtering body, substantially as specified.

1,061,369. SAFETY DEVICE TO KEEP WHEELS FROM SLIDING. JOHN A. GRUBER, Cincinnati, Ohio, assignor of one-half to W. H. Hambaugh, Cincinnati, Ohio. Filed Mar. 12, 1913. Serial No. 753,814. (Cl. 105—60.)



1. A safety device comprising a roll of fabric, a feed belt, a pulley securely mounted on the drive shaft and driving feed belt, a casing supporting the roll of fabric and the feeding mechanism, and power means suitably connected with the feeding mechanism.

2. A safety device comprising a roll of fabric, a feed belt, a pulley securely mounted on the drive shaft and driving feed belt, a casing supporting the roll of fabric and the feeding mechanism, a motor connected to the drive shaft, a source of electrical energy, a foot operating switch, and conductors connecting the motor and the foot operating switch from the source of electric energy.

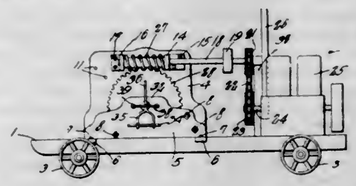
3. A safety device comprising a roll of fabric, a feed belt, a pulley securely mounted on the drive shaft and driving feed belt, a casing supporting the roll of fabric and the feeding mechanism, a motor connected to the drive shaft, a source of electrical energy and a foot operating switch disposed within the motor circuit and controlling the speed of the motor.

4. A safety device comprising a roll of fabric, a feed belt, a pulley securely mounted on the drive shaft and driving feed belt, a casing supporting the roll of fabric and the feeding mechanism, a motor connected to the drive shaft, a source of electrical energy driving the motor, a foot operating switch disposed within the motor circuit and controlling the speed of the motor, and means for controlling the speed of the feed mechanism.

5. A safety device comprising a roll of fabric, a feeding mechanism for advancing the fabric to the vehicle wheel, a casing supporting the roll of fabric and the feeding mechanism, a motor, a drive shaft connecting the feeding mechanism and the motor, means for driving the motor, a brake pulley located on the drive shaft, a brake shoe, a foot operated treadle and suitable means connecting the brake shoe and the foot operated treadle.

[Claims 6 to 8 not printed in the Gazette.]

1,061,370. STUMP-PULLER. ERICK A. GRUNDEEN, Escanaba, Mich. Filed Oct. 5, 1912. Serial No. 724,157. (Cl. 57—83.)

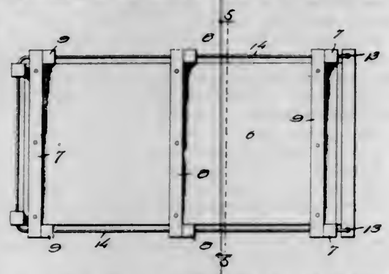


In a device of the class described, a frame comprising side plates; a drum journaled in the side plates; a worm wheel secured to the drum; a shaft; a worm on the shaft meshing into the worm wheel; bearings in which the shaft is journaled; means for securing the bearings to one side plate above the drum to dispose the shaft in an approximately horizontal position; means for securing the bearings to said side plate, to one side of the worm to permit the shaft to be disposed in a substantially vertical position; a lever receiving socket secured to the shaft, the socket lying beyond said side plate when the shaft is horizontally disposed and lying above the said side plate when the shaft is vertically disposed; an engine mounted on the frame; means for operatively connecting the engine detachably with the shaft; the socket constituting a fly wheel for the engine and constituting means for throwing the engine over when the shaft is horizontally disposed.

1,061,371. CRATE. DUKE GUICE, Greenville, Ala. Filed Oct. 7, 1912. Serial No. 724,346. (Cl. 217—36.)

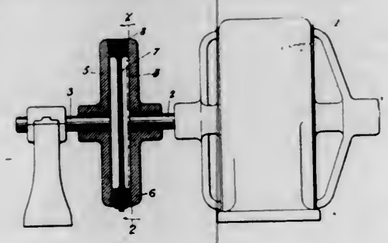
A crate or box of the character described, comprising side pieces, transverse strips attached to the side pieces and extending at both ends beyond the same and provided with openings, end pieces to engage the ends of the side pieces, transverse strips attached to the end pieces and ex-

tending at both ends beyond said end pieces and provided with openings, and sections of wire passing through the



openings in the strips of the side and end pieces and having their free ends suitably connected.

1,061,372. INDICATING TORQUE-METER. ALBERT E. GUY, Pittsburgh, Pa. Filed Aug. 12, 1912. Serial No. 714,676. (Cl. 73—15.)



1. Apparatus for determining and indicating the torque transmitted by a driving to a driven member, comprising a member adapted to connect said driving and driven members and to be twisted thereby, and a reflector on said connecting member and arranged to be carried bodily around the axis of rotation of said members and to be rotated in accordance with the amount of twist therein.

2. Apparatus for determining and indicating the torque transmitted by a driving to a driven member, comprising a member adapted to connect said driving and driven members and to be twisted thereby, a reflector on said connecting member and arranged to be carried bodily around the axis of rotation of said members and to be rotated in accordance with the amount of twist therein, and an illuminator arranged to cast light rays into the path of movement of said reflector around the axis of rotation.

3. Apparatus for determining and indicating the torque transmitted by a driving to a driven member, comprising a member adapted to connect said driving and driven members and to be twisted thereby, a reflector connected to said connecting member and arranged to be carried bodily around the axis of rotation of said members and to be rotated in accordance with the amount of twist therein, a projector arranged to illuminate said reflector as it travels around the axis of rotation, said reflector being provided with an indicating mark, and a reflecting scale in which is seen an image of said indicating mark.

4. Apparatus for determining and indicating the torque transmitted by a driving to a driven member, comprising a member arranged to connect said members and to be twisted during rotation thereof, and means for indicating the amount of twist in said member, comprising a reflector connected to be moved in accordance with the amount of twist in said member and provided with an indicating mark, and means for illuminating said reflector to render said indicating mark visible.

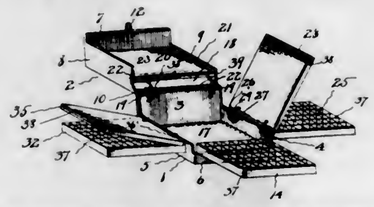
5. Apparatus for determining and indicating the torque transmitted by a driving to a driven member, comprising a shaft connecting said members and arranged to be twisted during rotation thereof, and a reflector rigidly connected to said shaft and arranged to be moved in accordance with the amount of twist therein.

[Claims 6 to 14 not printed in the Gazette.]

1,061,373. PROCESS OF MAKING ALLOYS. ROBERT A. HADFIELD, Sheffield, England. Filed July 5, 1906. Serial No. 324,895. (Cl. 75—45.)

The herein described process of producing a ferro-silicon alloy for magnetic purposes, characterized by its low hysteresis and high magnetic permeability and electric resistance which consists in placing in the ladle ferro-silicon containing about 50% of silicon, raising the ferro-silicon to a red heat, melting pure iron in another vessel, pouring the molten iron over the ferro-silicon so that the ferro-silicon is easily melted and disseminates itself through the mass rapidly and effectively and then adding, just before the pouring of the mixture takes place, aluminium in a proportion not exceeding 1%, then casting into ingots.

1,061,374. EGG-CASE. LAURA HARRINGTON, Davenport, Iowa. Filed June 3, 1911. Serial No. 631,076. (Cl. 217—18.)

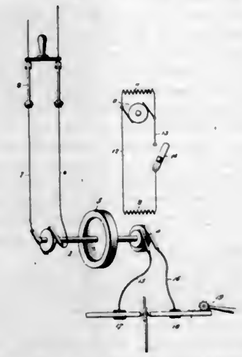


1. An egg-case having sides of graduated heights, hinge members secured to the highest side of the case, a cell-section secured to said hinge members by being secured to one of its upper edges, loops secured to the inner faces of the two sides nearest in height to the highest side, other cell-sections, rings secured to one of the lower edges of the last-mentioned cell-sections and slidably engaging said loops, hinge members secured to the lowermost side of the case, and a cell-section secured to the last-mentioned hinge members by being secured to one of its upper edges, all of said cell members being adapted to be turned inwardly of the case and rest upon one another and to turn outwardly of the several sides and extend laterally thereof, substantially as shown and described.

2. An egg-case comprising a box having its back formed the full height of the case, one of its sides formed three-fourths of the height of the back, another side formed one-half of the height of the back, and the front formed one-fourth of the height of the back, a cover pivotally secured to the back and having its sides and front formed to mate with the sides and front of the box, a cell-section pivotally secured by one of its top edges to the back of the box, a tray adapted to act conjunctively with the cell-section, flexible members connecting said tray and the inner face of the back of the box, cell-sections having rings secured to one of their lower edges, loops secured to the inner faces of the two sides of the box, the rings on the said cell-sections being slidably mounted in said loops, trays acting in conjunction with said cell-sections, flexible members secured to said trays and to the inner faces of the box sides, and a cell-section pivotally secured by one of its top edges to the top edge of the front of the box, substantially as shown and described.

1,061,375. ELECTRIC WELDING. JOHN ALLEN HEANY, Washington, D. C. Filed Oct. 7, 1912. Serial No. 724,312. (Cl. 219—4.)

1. Electric welding apparatus comprising welding electrodes, an alternating current generator, means independent of the welding electrodes for intermittently energizing said generator to deliver current during the welding operations, means for constantly driving said generator, and means for storing the driving energy during the inactive periods of the generator and delivering the stored energy to the generator during the welding periods.

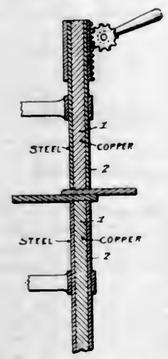


2. Electric welding apparatus comprising welding electrodes, an alternating current generator, means independent of the welding electrodes for intermittently energizing said generator to deliver current during the welding operations, means for constantly driving said generator, and a fly wheel operatively connected with the generator to store the driving energy and deliver the same to the generator during the welding periods.

3. Electric welding apparatus comprising welding electrodes, an alternating current generator for supplying current to said electrodes, means for constantly driving said generator, means independent of the electrodes for rendering said generator electrically inactive between welds, and means connected with said generator for storing the driving energy during the inactive periods and delivering the stored energy to the generator during the welding operations.

4. Electric welding apparatus comprising welding electrodes, an alternating current generator for supplying current to said electrodes, means for constantly driving said generator, means independent of the electrodes for rendering said generator electrically inactive between welds, and a fly wheel connected with said generator for storing the driving energy during the inactive periods and delivering the stored energy to the generator during the welding operations.

1,061,376. ELECTRODE FOR ELECTRIC WELDING-MACHINES. JOHN ALLEN HEANY, Washington, D. C. Filed Oct. 7, 1912. Serial No. 724,313. (Cl. 219—4.)



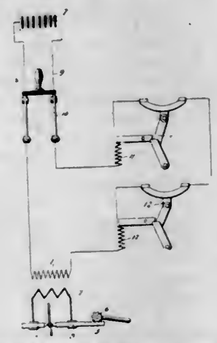
1. An electrode for electric welding comprising a metal of high electric conductivity, and a reinforcing member having a relatively high compression factor, the conducting metal and the reinforcing member being so disposed as to admit of both being brought simultaneously into intimate contact with the work.

2. An electrode for electric welding, comprising a metal of high electric conductivity, and a reinforcing metal having a high compression factor.

3. An electrode for electric welding comprising concentric connected bodies of copper and a metal having a high compression factor.

4. An electrode for electric welding comprising a composite rod of copper and steel, one of the component metals being surrounded by the other.

1,061,377. ELECTRIC WELDING SYSTEM. JOHN ALLEN HEANY, Washington, D. C. Filed Oct. 7, 1912. Serial No. 724,314. (Cl. 219—4.)



1. An electric welding system comprising a direct current supply, a welding transformer, circuit connections between the primary of said transformer and said supply, and auto-manual means for breaking the circuit to said primary and thereby inducing a momentary welding current in the secondary.

2. An electric welding system comprising a direct current supply, a welding transformer, circuit connections between the primary of said transformer and said supply, and two auto-manual switches for alternately and successively breaking the circuit to the primary.

3. An electric welding system comprising a direct current supply, a welding transformer, circuit connections between the primary of said transformer and said supply, and two automatic overload switches in series in the primary circuit.

4. An electric welding apparatus for direct current comprising a transformer, and means in the circuit of the primary of said transformer under control of the operator for first making and then breaking said circuit at desired intervals.

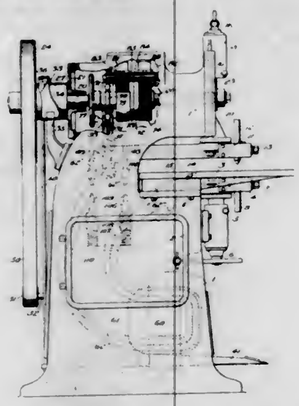
1,061,378. ELECTRIC WELDING-MACHINE. JOHN ALLEN HEANY, Washington, D. C. Filed Nov. 14, 1912. Serial No. 731,306. (Cl. 219—4.)

1. Electric welding apparatus, comprising welding electrodes relatively movable toward and from each other, mechanical means for effecting the movement aforesaid, and relatively adjustable contacts operated by said means for regulating the duration of the welding current.

2. Electric welding apparatus, comprising welding electrodes, mechanical means including a rotary shaft for moving said electrodes relatively toward and from each other, and relatively adjustable contacts operated by said shaft for regulating the duration of the welding ucrrent.

3. Electric welding apparatus, comprising a transformer, a work table carrying a fixed electrode, a movable head carrying a coöperating electrode, a rotary shaft operating said head, and relatively adjustable contacts in the transformer circuit and operated by said shaft to regulate the duration of the current flowing through said electrodes.

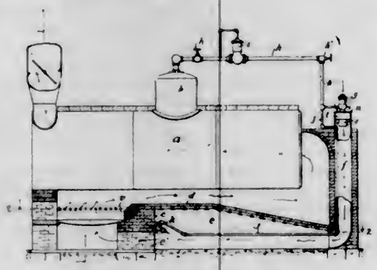
4. Electric welding apparatus, comprising a transformer, a work table carrying a fixed electrode, a movable head carrying a coöperating electrode, a rotary shaft operating said head, and relatively adjustable contacts in the primary circuit of the transformer and operated by said shaft to regulate the duration of the current flowing through said electrodes.



5. Electric welding apparatus, comprising relatively movable welding electrodes, mechanism for effecting the relative movement of said electrodes, and an adjustable timing switch operated by said mechanism whereby the duration of the welding current through the electrodes is determined.

[Claims 6 to 13 not printed in the Gazette.]

1,061,379. BOILER-FURNACE. JOHANNES CHRISTOPHER HEINRICH, Milwaukee, Wis., assignor to Heinrich Manufacturing Company. Filed June 5, 1907. Serial No. 377,301. (Cl. 110—60.)



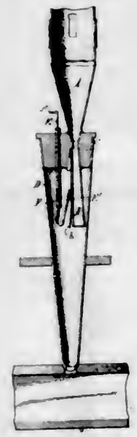
1. In a steam boiler furnace the combination with the combustion chamber, ash pit, grate and bridge wall, of an air heating chamber located behind the bridge wall and below the combustion chamber and communicating with the ash pit through an opening in the bridge wall, a flue leading downwardly in the furnace wall into said heating chamber and having an air intake opening at its upper ends, a blower in said flue having a steam supply connection and an air inlet, a twyer pipe in the furnace wall leading from said heating chamber and having an outlet directed into and across the space above the grate, and an auxiliary blower connected with said twyer pipe.

2. In a steam boiler furnace the combination with the combustion chamber, ash pit, grate and bridge wall of a heating chamber located behind the bridge wall and below and adjacent to the combustion chamber with which it communicates through the ash pit, a blower connected with said heating chamber and having an air intake opening and a steam supply connection with the boiler, twyer pipes communicating with and leading from said heating chamber on opposite sides of the combustion chamber and having outlets directed across and over the grate and auxiliary blowers arranged to force air from said heating chamber through said pipes into the combustion chamber, substantially as described.

3. In a steam boiler furnace the combination with the combustion chamber, ash pit, grate and bridge wall of a heating chamber located behind the bridge wall and below and adjacent to the combustion chamber and communicating with the ash pit through an opening in the bridge wall, an air supply flue leading downwardly in the furnace wall into said heating chamber and having an air intake opening at its upper end, a blower connected with the upper part of said flue and having a steam supply connection with the boiler, a twyer pipe leading from said heatitng chamber through the furnace wall to the combustion chamber above the grate and an auxiliary blower connected with said pipe and having a steam supply connection with the boiler, substantially as described.

4. In a steam boiler furnace the combination with the combustion chamber, ash pit, grate and bridge wall, of an air heating chamber located behind the bridge wall and below the combustion chamber, from which it is separated by a heat conducting wall, and enlarging from the rear toward the bridge wall through on opening in which it communicates with the ash pit, a blower connected with the smaller end of said heating chamber and having a steam supply connection and an air intake opening, a pipe leading from said heating chamber through the furnace wall to the combustion chamber above the grate and in front of the bridge wall, and a blower having a steam supply connection and arranged to force air through said pipe from the heating chamber into the combustion chamber.

1,061,380. TUNING DEVICE FOR REED-ORGAN PIPES. ROBERT HOPE-JONES, North Tonawanda, N. Y., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y., a Corporation of New York. Filed Dec. 5, 1910. Serial No. 595,551. (Cl. 84—22.)



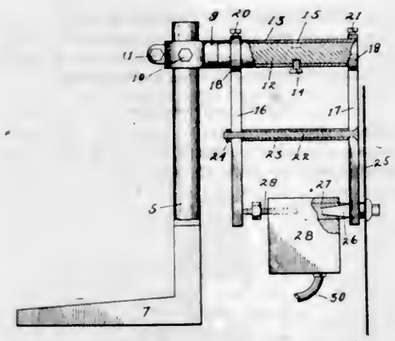
1. A reed organ pipe, comprising a tongue, a tuning wire having a shank and a member arranged at the free end of the shank and bearing against said tongue, and means for holding that portion of the shank adjacent to said member against deflection.

2. A reed organ pipe, comprising an eschalot, a block supporting the same, a tongue, a tuning-wire having a finger which bears against the tongue, the body of the tuning-wire being adjustable in said block, and a rigid guide for the body-portion of the tuning-wire extending below the block.

3. A reed-organ pipe, comprising an eschalot, a block supporting the same, a tongue, a tuning-wire having a finger which bears against the tongue, the body of said wire being adjustable in the block, and a rigid guide-tube carried by the block and surrounding the body-portion of the tuning-wire below the block.

4. A reed organ pipe, comprising an eschalot, a tongue, a block supporting the eschalot, a guide-tube arranged in the block and extending below the same to a point opposite the free portion of the tongue, and a tuning-wire having its body portion adjustably arranged in said tube and provided at its lower end with a finger bearing against the tongue.

1,061,381. PORTABLE POWER-SAW. WILLIAM L. HOPKINS, New York, N. Y. Filed May 17, 1911. Serial No. 627,788. (Cl. 29—69.)



1. In a portable power saw, the combination with a supporting standard provided with means for securing said standard in either a vertical or horizontal position, of a transversely extending arm adapted to swing bodily around said standard, a swinging frame adapted to swing entirely around said transverse arm, a power element mounted in said swinging frame and bodily movable therewith, and a circular saw connected to and driven by said power element.

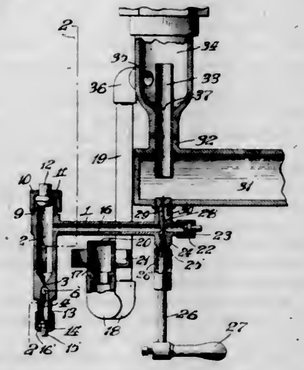
2. In a device of the character described, the combination with a supporting standard provided with means for securing said standard in either a vertical or horizontal position, a transverse arm mounted to bodily slide upon said supporting standard and to bodily swing entirely around said supporting standard, a swinging frame mounted to swing entirely around said transverse arm, a power element mounted in said swinging frame, and a circular saw connected to said power element and driven thereby, substantially as shown and described.

3. In a device of the character described, the combination with a supporting standard comprising a body portion and a foot member, there being a slot formed in the body portion and there being a slot formed in the foot member, of a transverse swinging arm adapted to swing around said standard, means for binding said arm upon said standard, a swinging frame having a swinging movement about said arm, a compressed air power element mounted in said frame, a shank passing through a portion of said frame and engaging said power element, and a circular saw fixedly secured upon said shank.

4. In a device of the character described, the combination with a supporting standard comprising a round body portion and a flat foot portion, there being a vertical and a horizontal slot formed in said standard, of a transversely extending arm having a ring-like portion embracing the round portion of said standard, means traversing said ring-like portion for binding said arm upon said standard, said arm having a reduced outer end, a sleeve encircling said reduced outer end of the arm, means for preventing accidental displacement of said sleeve from said arm, a pair of swinging bars having ring-like upper ends which embrace said sleeve, means traversing said ring-like upper ends for binding said bars in position upon said sleeve, means for spacing said bars apart, and a bolt traversing said bars and said spacing means for binding said bars together.

5. In a device of the character described, the combination with a supporting standard comprising a round body portion and a flat foot portion, there being a vertical and a horizontal slot formed in said standard, of a transversely extending arm having a ring-like portion embracing the round portion of said standard, means traversing said ring like portion for binding said arm upon said standard, said arm having a reduced outer end, a sleeve encircling said reduced outer end of the arm, means for preventing accidental displacement of said sleeve from said arm, a pair of swinging bars having ring-like upper ends which embrace said sleeve, means traversing said ring-like upper ends for binding said bars in position upon said sleeve, means for spacing said bars apart, a bolt traversing said bars and said spacing means for binding said bars together, a circular saw, a shank upon which said saw is fixedly mounted, said shank passing through and having its bearing in one of said swinging bars, and a power element engaging said shank for imparting movement thereto, said power element being bodily supported between said swinging bars.

1,061,382. VAPOR GENERATOR AND MIXER. EDWARD R. HUBER, St. Louis, Mo., assignor of one-half to Frederick L. Pohlmann, St. Louis, Mo. Filed Oct. 26, 1910. Serial No. 589,215. (Cl. 158—58.)



1. In an apparatus of the character described, the combination with an inlet chamber and a valve chamber distant therefrom, of a tubular chamber connecting said inlet chamber with said valve chamber, and a heating plate extending through the length of said tubular chamber, and connecting said vaporizing chamber and said valve chamber.

2. In an apparatus of the character described, the combination with an air intake, of a valve chamber depending therefrom, a fluid inlet chamber spaced from said valve chamber, a broad flat heating plate rigidly connecting the walls of said chambers, said heating plate being provided with an integrally formed tube of relatively small diameter connecting said valve chamber to said inlet chamber, and means for heating said plate.

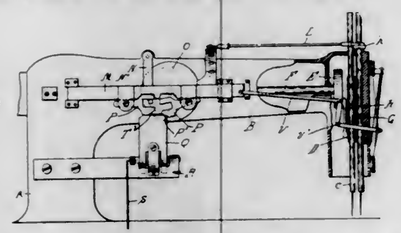
3. In an apparatus of the character described, an integral casting comprising a fluid inlet chamber and a valve chamber disposed at a distance therefrom, a broad flat heating plate integrally connecting the walls of said chambers and provided with a protuberant rib hollowed interiorly to provide a passageway connecting said inlet chamber with said valve chamber, and means for heating said plate.

4. In an apparatus of the character described, the combination with a fluid inlet chamber, of a valve chamber dis

tant therefrom, a tube of relatively small diameter in comparison to its length connecting said chambers, the under wall of said tube being provided with an integral heating plate conductively connecting the walls of said chambers and projecting on each side of the outer lateral wall of said tube a distance approximately equal to the outside diameter of the tube, and means for heating said heating plate.

5. In a device of the character described, the combination with a vertically disposed inlet chamber, of a vertically disposed valve chamber distant therefrom, and a horizontally disposed generator chamber connecting said inlet chamber with the valve chamber; said generator chamber being of relatively small cross section to the inlet chamber and having one wall thereof provided with a heating plate extending from said inlet chamber to the valve chamber; said heating plate being of relatively great width to the diameter of said inlet chamber.

1,061,383. SEWING-MACHINE. GARRETT A. KINDER, Detroit, Mich., assignor to American Lady Corset Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 9, 1909. Serial No. 521,913. (Cl. 112—24.)



1. In a sewing machine, the combination with a reciprocatory needle bar, of an auxiliary needle bar, a coupler arm on one of said bars normally engaging a keeper on the other bar, a rock arm feathered upon the arm-carrying bar for rotating the same to disengage said arm from the other bar, and mechanism timed with the reciprocation of the main bar for operating said rock arm.

2. In a sewing machine, a plurality of reciprocatory needle bars, means for operating one of said bars, and means for coupling another bar to said first mentioned bar by a rotation of one of said bars.

3. In a sewing machine, the combination of a reciprocatory needle bar, tension means for the thread of the needle, means timed in relation to the reciprocatory needle bar for arresting movement of said needle bar during the continued operation of the machine, and means for releasing the tension of the thread simultaneously with the arresting of the needle bar.

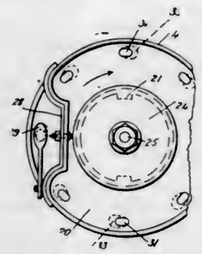
4. In a sewing machine, a plurality of reciprocatory needle bars, means for operating one of said bars, means for alternately connecting and disconnecting another bar to said first mentioned bar by the rotation of another of said bars, and means for arresting the movement of the bar disconnected.

5. In a sewing machine, a plurality of recprocatory needle bars, means for operating one of said bars, means operated in timed relation to said first mentioned means for alternately connecting and disconnecting another bar to said first mentioned bar at a predetermined point in the movement of said second mentioned bar by the rotation of one of said bars, and means for arresting the movement of the bar disconnected.

[Claims 6 to 16 not printed in the Gazette.]

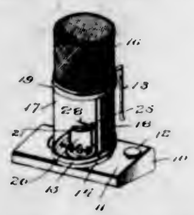
1,061,384. PEANUT-PLANTER. EDGAR KNOWLTON, Pidcock, Ga. Filed June 19, 1912. Serial No. 704,554. (Cl. 111—32.)

In a pea-nut planter, the combination, with a seedbox, of a feed disk journaled at the bottom of the seedbox and provided with a series of holes for receiving the pea-nuts, each hole being oval at the top of the plate and having a vertical rear end, the lower part of each hole having a concave spoon-shaped enlargement of greater width and length than the top part of the hole and extending



along its sides and projecting beyond its front end only, the front end of the bottom of the enlargement being of greater radius than the front end of the top of the hole, and driving devices for revolving the feed disk.

1,061,385. MINER'S LAMP. SILAS N. KRIEGER and CHARLES A. FIDLER, Shamokin, Pa. Filed Apr. 13, 1912. Serial No. 690,546. (Cl. 67—12.)



1. In a miner's lamp, a body, a burner mounted above the body, a tube extending upwardly through the body adjacent the burner, means carried at the top of the tube for igniting a match inserted upwardly through the tube, and an elastic closure at the bottom of the tube adapted to engage the stick of the match and to extinguish the match when withdrawn through such elastic closure.

2. In a miner's lamp, a body, a burner mounted above the body, a tube extending upwardly through the body and terminating adjacent the extremity of the burner, abrading means carried by the upper end of the tube adapted to ignite a match inserted through the tube and an elastic slitted gasket closing the lower end of the tube.

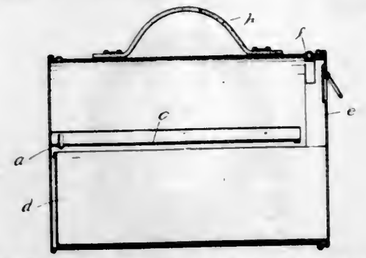
3. In a miner's lamp, a body, a burner carried above the body, a tube extending upwardly through the body and terminating adjacent the burner, abrading means carried at the upper end of the tube, a slitted elastic gasket closing the lower end of the tube, a wire extending upwardly through the gasket and through the tube, an offset formed at the lower end of the wire forming means for moving the wire rotatably upon its axis, and an offset formed at the top of the wire extending across and above the burner.

1,061,386. LUNCH-BOX. JOSEPH F. LAMB, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 5, 1912. Serial No. 681,681. (Cl. 220—50.)

1. In a lunch box, a casing open at one end, a bottle holder in said casing, a food receptacle adapted to fit and slide in the casing under said bottle holder and be covered by said casing, and a closure for the open end of the casing carried by the food receptacle.

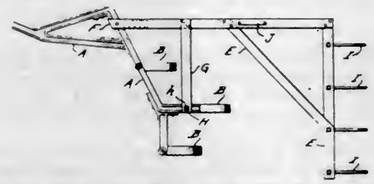
2. In a lunch box, two telescoping parts one of which is open-ended and provided with a bottle holder and a compartment thereunder, the other part being provided with a food receptacle adapted to fit in said compartment, and a closure for the open end of the first mentioned part.

3. In a lunch box, a casing open at one end, a food receptacle adapted to fit and slide in and be covered by said casing, a compartment in said casing above said food receptacle, a bottle holder therein, and a closure for the open end of said casing carried by said food compartment.



4. In a lunch box a casing open at one end, a bottle holding tray extending transversely between and attached to the walls thereof, a food compartment adapted to fit within said casing underneath said tray, and means carried by said food compartment for closing the end of said casing.

1,061,387. COMBINED LEVELER AND WEED-GATHERER FOR CULTIVATORS. LARS A. LARSON, Elgin, Ill. Filed Dec. 14, 1910. Serial No. 597,267. (Cl. 97—35.)

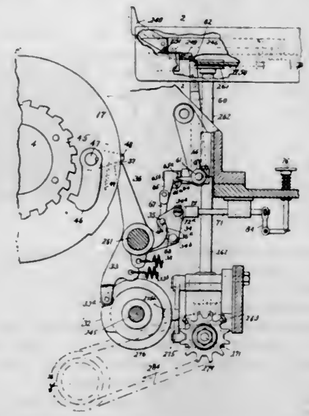


1. A cultivator frame provided with shovels and with a seat, in combination with an additional frame, said additional frame provided with means to removably attach it to the cultivator frame, shovels on said additional frame, said shovels alined in a row and positioned to be back of and between the first named shovels when said frames are attached together, means to adjustably raise the rear end of the additional frame and means to maintain said additional frame in an adjusted position, means to change said additional frame from an operative to an inoperative position independently of the operative position of the cultivator frame, the connection between the frames being such that when the cultivator frame is raised the additional frame is also raised.

2. A cultivator frame provided with a horizontal bar, shovels on said frame, an additional frame, a curved plate attached to the forward end of the additional frame and removably attachable to the horizontal bar, said additional frame movable from an operative to an inoperative position independently of the operative position of the cultivator frame, a vertically mounted screw threaded bolt in the additional frame, said bolt positioned so that the lower end thereof rests on the cultivator frame, a lock nut on said bolt, shovels on said additional frame and a handle to said additional frame, the said shovels alined in a row and positioned so that the shovels on the additional frame are behind and between the shovels on the cultivator frame.

1,061,388. CASTING-CONTROL MECHANISM FOR LINOTYPE-MACHINES. ARTHUR W. LE BOEUF, Woonsocket, R. I., assignor to Electric Compositor Company, New York, N. Y., a Corporation of New Jersey. Filed July 11, 1910. Serial No. 571,311. (Cl. 199—7.)

1. The combination of a driving member, a driven member and spring actuated mechanism for connecting them, with a device restraining the operation of said connecting mechanism, a line carrier, a movable member adapted to be engaged thereby only when the line carrier has completed its movement in one direction, and mechanism operated by said member for making or breaking the train of mechanism through which the restraining device is withdrawn.



2. The combination of a line carrier, a lever having a spring plunger in its end, a dog carried by the line carrier and adapted to operatively engage with said spring plunger and to pass it when the line carrier has moved to the end of its path in one direction, a driven shaft, driving mechanism therefor, and mechanism under the control of said lever for connecting and disconnecting the driving member and driven shaft referred to.

3. In a linotype machine, the combination of a line carrier and mechanism for moving it backward and forward in a fixed path, a dog 249 fixed to said line carrier, and lever arm having a spring plunger in its end adapted to be engaged by said dog, a rock shaft to which said arm is connected, an arm fixed to said rock shaft, a bell crank lever having one arm which engages with the last mentioned arm, a restraining lever having a shoulder, a frame having a pin adapted to be projected over said shoulder, a forked member engaging said pin and connected with the other arm of the last mentioned bell crank lever on a pivot at right angles to the axis of said lever, a lever pivotally connected with said frame, and a cam for actuating the latter lever.

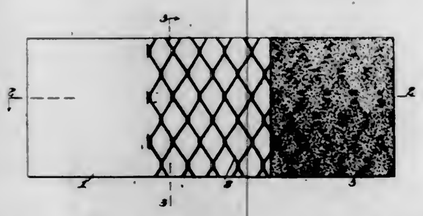
4. In a linotype machine, the combination with a line carrier and mechanism for operating the same, of an arm projecting in the path of said line carrier, of a rock shaft to which said arm is secured, a second arm connected with said rock shaft, a bell crank lever, one arm of which engages with the arm last mentioned, a fork member pivoted to the other arm of said bell crank lever, a rotatable driven member, a rotatable driving member, mechanism for automatically connecting these members, a device restraining the action of said connecting mechanism and provided with a shoulder, a pin adapted to be projected over the shoulder on said restraining device and adapted to be moved into and out of that position by said fork member, a frame in which said pin is mounted, a lever pivotally connected with said frame, and a cam for operating said lever.

5. The combination of a driven shaft, a driving member therefor including a ratchet, a disk fixed to the driven member, a spring actuated dog mounted on the disk and provided with a trip arm, a trip lever adapted to engage said arm to withdraw the pawl from engagement with said ratchet, a rotatable cam, a lever adapted to be operated thereby, a device connected with the last mentioned lever, a movable member carried by said device and adapted to be moved into positions where it may or may not engage the trip lever, a line carrier, and mechanism

operated thereby for determining the position of the last mentioned movable member.

[Claims 6 to 9 not printed in the Gazette.]

1,061,389. LATH. JACOB H. LEIST, Portland, Oreg. Filed Feb. 27, 1912. Serial No. 680,270. (Cl. 72—116.)



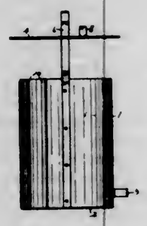
1. A new article of manufacture consisting of metallic lath and a backing mold sheet secured on one side thereof by means of an adhesive, substantially as and for the purpose described.

2. A new article of manufacture consisting of metallic lath and a backing mold sheet secured on one side thereof by means of an adhesive applied to the lath, substantially as and for the purpose described.

3. A new article of manufacture consisting of metallic lath having projecting portions and a backing mold sheet secured on one side thereof by means of an adhesive between said sheet and the projecting portions of the lath, said sheet being spaced away from the lath between the projecting portions to provide spaces for passage of plastic material between the lath and sheet for molding a solid body of plastic material against the mold sheet, substantially as and for the purpose set forth.

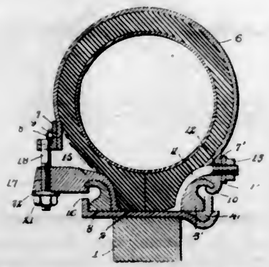
4. A new article of manufacture consisting of expanded metal lath having its strands turned at an angle to the plane of the metal, and a paper backing mold sheet secured on one side thereof by means of an adhesive between said sheet and the projecting strand joints of the lath, said sheet being spaced away from the lath strands between the projecting joints to provide spaces between the sheet and the lath strands for the passage of plastic material between the lath strands and paper to mold a solid body of plastic material against the sheet, substantially as and for the purpose set forth.

1,061,390. GARBAGE-RECEPTACLE. WILLIAM L. LUBBOCK, Houston, Tex. Filed Aug. 9, 1912. Serial No. 714,235. (Cl. 220—22.)



A device of the character described, including a receptacle, a vertically extending brace secured upon each side of said receptacle, the upper ends of said braces extending above the receptacle, a covering having a slot in each side thereof through which the upper ends of said braces extend, a bail hinged upon each side to the upper ends of said braces, arranged so that said covering may be moved up and down thereon, a brace extending across the covering and having up-turned ends forming clamps between which said bail may be forced when the covering is upon the receptacle and which will engage against said bail and lock the covering on the receptacle.

1,061,391. TIRE-PATCHING DEVICE. GUSTAVE J. MARTEL, Chicago, Ill. Filed Sept. 7, 1911. Serial No. 648,134. (Cl. 152—24.)



A tire patching device adapted for use in conjunction with a rim having outwardly laterally projecting flanges and comprising a flexible patching strap adapted to extend over the tread portion of a tire, means for securing one edge of said strap to the rim upon one side of the tire, a bar secured to the opposite end of said strap, an inwardly extending hook on said bar adapted to engage under the adjacent flange and a member carried by said bar extending over the adjacent rim flange and under said tire, substantially as described.

1,061,392. BLEACHING PROCESS. WALTHER MATHESIUS and MORITZ FREIBERGER, Charlottenburg, Germany. Original application filed Dec. 28, 1911, Serial No. 668,315. Divided and this application filed July 23, 1912. Serial No. 711,111. (Cl. 8—2.)

1. The method of bleaching cotton goods in rope form which consists in continuously moving the fabric forward and effecting in immediate succession partial alkaline bleaching in a warm alkaline bleaching solution, partial rinsing in a rinsing liquid and completion of the bleaching in an acid solution.

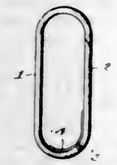
2. The method of bleaching cotton goods in rope form which consists in continuously moving the fabric forward and effecting in immediate succession partial alkaline bleaching in a warm alkaline bleaching solution, partial rinsing in a rinsing liquid and completion of the bleaching in a warm acid solution.

3. The method of bleaching cotton goods in rope form which consists in continuously but slowly moving the fabric through a warm alkaline bleaching solution for a period of from 10 to 25 minutes, so as to effect partial alkaline bleaching thereby, immediately thereupon partially rinsing the fabric so as to leave a little alkaline bleaching solution thereon, and immediately thereupon and in continued slow forward movement passing the fabric through an acid solution for a period of from 10 to 25 minutes to complete the bleaching.

4. The method of bleaching cotton goods in rope form which consists in continuously moving the fabric forward and effecting in immediate succession, partial alkaline bleaching in an alkaline bleaching solution, partial rinsing in a rinsing liquid and completion of the bleaching in an acid solution, and simultaneously heating said solutions by means not heated to an essentially higher temperature than that to which the solutions are to be raised.

5. The method of bleaching cotton goods in rope form which consists in continuously moving the fabric forward and effecting, in immediate succession, partial alkaline bleaching in an alkaline bleaching solution, partial rinsing in a rinsing liquid and completion of the bleaching in an acid solution, and simultaneously heating said solutions by passing a fluid of a temperature not essentially higher than that to which the solutions are to be raised, through said solutions without direct contact therewith.

1,061,393. KEY-RING AND KEY-RETAINER. CHRISTIAN C. MESSMER, Salt Lake City, Utah. Filed July 15, 1911. Serial No. 638,727. (Cl. 70—65.)



A key ring and key retainer consisting of a piece of round spring wire bent to form one portion of an ellipse and having one end thereof cut at an angle; another piece of similar wire pivoted to said first mentioned wire and having the free end cut at a reverse angle to the end of the first mentioned wire and formed to complete the ellipse; and a piece of metal spring semi-circular in cross section secured to the last mentioned wire and having its free end bent to conform to the curvature of one end of said ellipse and to contact with a portion of the inner periphery of the first mentioned wire to hold the free ends of said wires in contact when contiguous said spring end preventing the slipping off of keys from said first mentioned wire.

1,061,394. CONVEYER. JOHN H. MICHENER, Jr., New York, N. Y. Filed May 10, 1912. Serial No. 696,310. (Cl. 193—3.)



1. An elevator including in combination, a main member, a movable member slidably mounted in the main member, hand governed power actuated means for raising the movable member relatively to the main member, and automatic means for slowly lowering the movable member, after said member has been raised.

2. An elevator including in combination, a main member, a movable member slidably mounted in the main member, a rotatable drum operably connected with the movable member, and automatic means for rotating said drum for lowering the movable member.

3. An elevator including in combination, a main member, a movable member slidably mounted in the main member, an endless load-carrying member supported for movement on said main member and on said slidable member, said load-carrying member being mounted for movement simultaneously in opposite directions on said slidable member, means for actuating the load-carrying member, hand governed power actuated means for raising the movable member relatively to the main member, and automatic means for slowly lowering the movable member, after said member has been raised.

4. An elevator including in combination, a main member, a movable member slidably mounted in the main member, an endless load-carrying member supported for movement on said main member and on said slidable member, said load-carrying member being mounted for movement simultaneously in opposite directions on said slidable member, means for actuating the load-carrying member, a rotatable drum operably connected with the movable member and automatic means for rotating said drum for lowering the movable member.

5. An elevator including in combination, a main member, a movable member slidably mounted in the main member, an endless load-carrying member supported for movement on said main member and on said slidable member, said load-carrying member being mounted for movement simultaneously in two opposite directions on said slidable member, means for actuating the load-carrying member, a rotatable drum operably connected with the movable member and automatic means for rotating said drum for lowering the movable member, a connection between said drum and said automatic rotating means, for permitting said drum to be rotated in the opposite direction by the hand governed power actuated means or by other means.

[Claims 6 to 8 not printed in the Gazette.]

1,061,395. HORSESHOE-CALK. JOHN WALLACE MILLER, Bernharts, Pa. Filed Aug. 2, 1912. Serial No. 712,982. (Cl. 168—42.)



1. A calk attachment for horseshoes comprising a contractible plug having a bore therein, and a calk having a shank insertible into the bore of the plug to be clamped thereby and having an enlarged portion so that when the plug is contracted to clamp the shank, the enlarged portion locks the shank against removal.

2. A calk attachment for horseshoes comprising a contractible plug having a bore therethrough, and a calk having a shank adapted to be projected through the said bore of the plug to be clamped thereby with a slightly enlarged portion at the outer end of the shank in order than when the plug is contracted to clamp the shank the same is locked against removal.

3. A calk attachment for horseshoes comprising a contractible plug having a bore therethrough, a calk having a shank adapted to be projected through the bore of the plug to be clamped thereby, and a member engageable with the outer end of the shank to lock the same against removal.

4. A calk attachment for horseshoes comprising a contractible plug having a bore therethrough, a calk having a shank adapted to be projected through the bore of the plug to be clamped thereby and having an annular groove adjacent its outer end, and a U-shaped member having its arms engageable to the shank in the said groove in order to lock the shank against removal.

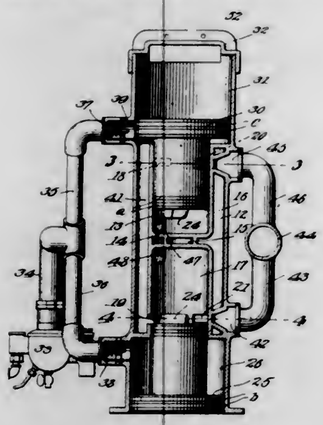
5. A calk attachment for horseshoes comprising a contractible plug having a bore therethrough, a calk having a shank adapted to be projected through the bore of the plug to be clamped thereby and having an annular groove adjacent its outer end with the portion of the shank beyond the said groove slightly enlarged, and a U-shaped member having its arms engageable to the shank in the said groove in order to lock the shank against removal.

[Claims 6 and 7 not printed in the Gazette.]

1,061,396. EXPLOSIVE-ENGINE. HARRY W. MOORE, Nebraska City, Nebr., assignor to Ralph A. Duff, Nebraska City, Nebr. Filed Sept. 13, 1911. Serial No. 649,010. (Cl. 123—57.)

1. An explosive engine, having a main cylinder, a concentrically disposed reduced cylinder providing enlarged

chambers beyond its respective ends within the main cylinder, said main cylinder having a carbureted air supply port at the junction of each enlarged chamber with its reduced cylinder, said reduced cylinder having a central diaphragm dividing said cylinder into oppositely disposed explosive chambers, each of said chambers being provided with intake and exhaust ports near one end and in substantially the same circumferential line, said reduced cylinder providing two parallel channels between its outer shell and the wall of the main cylinder, one of said channels forming communication between the lower enlarged chamber and the intake of the upper explosive chamber while the other channel forms communication between the upper enlarged chamber and the intake port of the lower explosive chamber, two superposed and connected explosive and explosive charge supplying pistons mounted in the respective ends of the main cylinder and reduced cylinder, a branched carburted air supply manifold leading to each carbureted air supplying port, and a valve in each branch thereof to permit carbureted air to enter its enlarged chamber upon the out-stroke of its explosive charge supplying piston and to close on the in-stroke thereof.



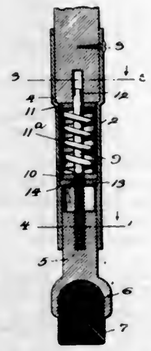
2. An explosive engine, having a main cylinder, a concentrically disposed reduced cylinder providing enlarged chambers beyond its respective ends within the main cylinder, each enlarged chamber having a carbureted air intake port near its junction with the reduced cylinder, said reduced cylinder having a central diaphragm dividing said cylinder into oppositely disposed explosive chambers, each of said chambers being provided with intake and exhaust ports near one end and in substantially the same circumferential line, said reduced cylinder providing two parallel channels between its outer shell and the wall of the main cylinder, one of said channels forming communication between the lower enlarged chamber and the intake of the upper explosive chamber while the other channel forms communication between the upper enlarged chamber and the intake port of the lower explosive chamber, two superposed and connected explosive and explosive charge supplying pistons mounted in the respective ends of the main cylinder and reduced cylinder, a two branched carbureted air supply conduit in communication with the ends of the respective enlarged chambers adjacent the junction thereof with the respective ends of the reduced cylinder, and a spring closed valve to each branch to permit the flow of carbureted air to its enlarged chamber upon the out-stroke of its piston and to close its branch upon the in-stroke thereof.

3. An explosive engine, having a main cylinder, a concentrically disposed reduced cylinder providing enlarged chambers beyond its respective ends within the main cylinder, each enlarged chamber having a carbureted air intake port near its junction with the reduced cylinder, said reduced cylinder having a central diaphragm dividing said cylinder into oppositely disposed explosive chambers, each of said chambers being provided with intake and exhaust ports near one end and in substantially the same circumferential line, said reduced cylinder providing two parallel channels between its outer shell and the wall of the main cylinder, one of said channels forming communication between the lower enlarged chamber and the intake of the upper explosive chamber, while the other channel forms communication between the upper enlarged chamber and the intake port of the lower explosive chamber, two superposed and connected explosive and explosive charge supplying pistons mounted in the respective ends of the main cylinder and reduced cylinder, the said explosive pistons controlling both the intake and exhaust ports of their respective explosive chambers, and a valve to each intake port of the enlarged chambers opened upon the outstroke of its explosive charge supplying piston, and closed upon the in-stroke thereof.

5. An explosive engine, having a main cylinder, a concentrically disposed reduced cylinder providing enlarged chambers beyond its respective ends within the main cylinder, each enlarged chamber having an intake port, said reduced cylinder having a central diaphragm, dividing said cylinders into oppositely disposed explosive chambers, each of said chambers being provided with intake and exhaust ports near one end and in substantially the same circumferential line, said reduced cylinder providing two parallel channels between its outer shell and the wall of the main cylinder, one of said channels forming communication between the lower enlarged chamber and the intake of the upper explosive chamber, while the other channel forms communication between the upper enlarged chamber and the intake port of the lower explosive chamber, two superposed and connected explosive and explosive charge supplying pistons mounted in the respective ends of the main cylinder, the said explosive pistons controlling both the intake and exhaust ports of their respective explosive chambers, a two branched carbureted air supply conduit having each branch in communication with its respective intake port of the enlarged chambers of the main cylinder, a valve in each branch, and an exhaust conduit leading from the respective exhaust ports of the explosive chambers.

1,061,397. CRUTCH. GEORGE A. NEWELL, Buffalo, N. Y., assignor to Hilda Lawson, Buffalo, N. Y. Filed Nov. 15, 1912. Serial No. 731,541. (Cl. 3—4.)

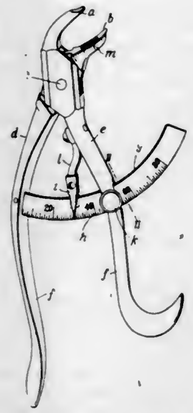
1. The combination of a crutch body, a ferrule secured to said body and extending below the same, a plunger fitted in the lower portion of the ferrule and having a screw threaded opening, a screw stem engaging said opening and having a flat-sided upper end, a collar secured to said stem, a cushioning spring interposed between said collar and the lower end of the crutch body, and means for limiting the downward movement of said collar in the ferrule.



2. The combination of a crutch-body, a ferrule secured to said body and extending below the same, a plunger fitted in the lower portion of the ferrule and having an upwardly-extending stem, a collar carried by said stem and held against vertical movement thereon, a cushion interposed between said collar and the lower end of the crutch-body, the ferrule being provided between said collar and the upper end of said plunger with an internal upwardly-facing shoulder, and a stop-washer resting on said shoulder, said plunger-stem passing through said washer.

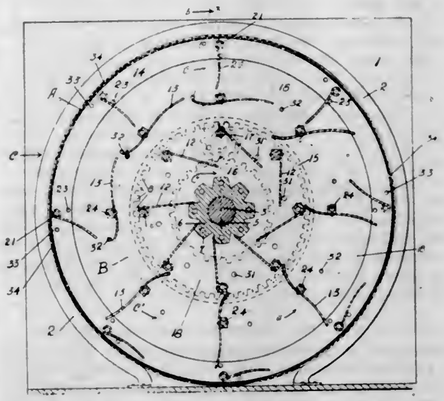
3. The combination of a crutch-body, a ferrule secured to said body and extending below the same, a plunger fitted in the lower portion of the ferrule and having an upwardly-extending screw stem, a nut applied to said stem, a cushion arranged in the ferrule between said nut and the lower end of the crutch-body, the ferrule being provided below said nut with an internal upwardly-facing shoulder, and a stop-washer resting on said shoulder.

1,061,398. TOOTH-MEASURING INSTRUMENT. SAMUEL NEWMAN, New York, N. Y. Filed Dec. 26, 1911. Serial No. 667,955. (Cl. 73—105.)



A tooth measuring instrument, comprising a pair of jaws pivotally connected to adapt them to have relative movement to bring them into contact with opposite sides of a tooth, branches extending from the jaws on the opposite sides of the pivotal connection responding to the movement of the jaws, handles terminating the branches for holding the instrument and operating the jaws, a graduated curved bar secured to one branch and slidably mounted through a slot of the other branch, a friction spring in the slot pressing the bar, a set screw extending in the slot to vary the pressure of the spring to hold the bar in adjusted position, and an indicator for said scale secured to the said other branch to indicate the amount of separation of the jaws.

1,061,399. POWER-WHEEL. HENRY E. OSBORNE, Salt Lake City, Utah, assignor to M. B. Johnston, Salt Lake City, Utah. Filed Apr. 5, 1912. Serial No. 688,786. (Cl. 170—109.)



1. A power wheel consisting of a horizontally placed driving shaft; an under-shot water wheel secured thereon; a drum screen mounted on said shaft concentric with said wheel, and consisting of two spaced-apart circular disks; a plurality of brace rods horizontally placed between said disks with their ends secured in the disks and near the peripheric edges thereof; a coarse mesh screen inclosing all of said rods; hinge rods also secured between said disks; inwardly extended lugs on said disks; blades pivoted on said last mentioned rods adapted to contact with said lugs and at times to assume a radial position; a gear keyed on said shaft; an annular gear attached to said drum screen and a pinion intermeshing with said gear and said annular gear to impart motion to said shaft.

2. A power wheel consisting of a driving shaft; two spaced-apart disks mounted thereon by means of a hub between said disks; feathering blades pivotally mounted between said disks and parallel with said hub, the free edges thereof adapted to contact with said hub; a plurality of vanes pivotally mounted between said disks adapted, when assuming a radial position as to said disks, to contact with said feathering blades on their narrower edge; and a drum screen on said shaft, consisting of two spaced apart disks 14; brace rods secured between said disks; a screen inclosing said rods within a drum like space; and feathering blades pivotally mounted on said rods.

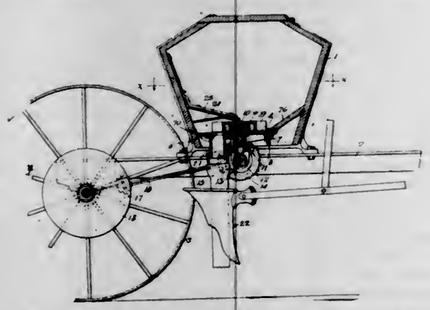
3. A power wheel consisting of a casing; a driving shaft mounted therein; a hub carried on said shaft; a disk on each end of said hub; feathering blades pivotally swung between said disks, the free end of each adapted to contact with said hub; vanes double curved in cross section pivotally mounted between said disks adapted at times to contact with said blades and at other times to feather; inwardly extending lugs on said disks adapted to limit the motion of said vanes and said blades; and intermeshing gears coacting to impart the motion of said disks and connected parts, two disks carried on said shaft on the outer sides of said first mentioned disks; brace rods secured between said last mentioned disks; and a screen inclosing said rods within a drum like space.

4. A power wheel consisting of a casing; a driving shaft mounted therein; a hub carried on said shaft; a drum screen mounted on said shaft consisting of two spaced-

apart disks; brace rods secured between said disks; a screen inclosing said rods within a drum like space; feathering blades pivotally mounted on said rods; a hub carried on said shaft; two spaced-apart disks mounted thereon; feathering blades pivotally mounted between said last mentioned disks and parallel with said hub, the free edges of each adapted at times to contact with said hub; vanes pivotally mounted between said disks, each formed with a double curve in cross section, pivotally mounted between said disks and adapted at times to contact on one edge thereof with said blades; inwardly extended lugs adapted to limit the movement of said vanes and said blades; and intermeshing gears, coacting to impart motion to said shaft.

5. A power wheel consisting of a casing; a driving shaft mounted therein; a hub carried on said shaft; a drum screen mounted on said shaft consisting of two spaced-apart disks; brace rods secured between said disks, a screen inclosing said rods within a drum like space, feathering blades pivotally mounted on said rods; a wheel concentrically mounted within said drum screen consisting of a hub carried on said shaft; two spaced-apart disks secured to said hub; feathering blades pivotally mounted between said last mentioned disks and parallel with said hub; vanes pivotally mounted between said disks, and adapted at times to contact on one edge thereof with said blades; inwardly extended lugs adapted to limit the movement of said vanes and said blades; and intermeshing gears, coacting to impart the motion of said drum screen and said wheel to said shaft.

1,061,400. FERTILIZER-DISTRIBUTER. CHARLES H. PELTON, Springfield, Ohio, assignor to The Thomas Manufacturing Company, Springfield, Ohio, a Corporation of Ohio. Filed Dec. 27, 1910. Serial No. 599,312. (Cl. 111—34.)



1. In a fertilizer distributer having a plurality of feed openings, a plurality of feeding devices movably mounted adjacent to the respective openings to feed the fertilizer through the same, and a guard mounted in said hopper and having a lower surface extending in a substantially horizontal plane from a point above and close to said feeding devices to a point near the rear wall of said hopper and serving to prevent the fertilizer from accumulating about said feed openings.

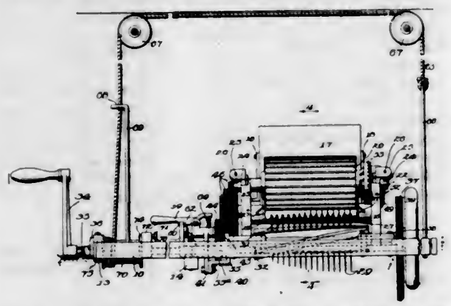
2. In a fertilizer distributer having a plurality of feed openings, a plurality of feeding devices rotatable about vertical axes to feed the fertilizer to the respective feed openings, a device mounted in said hopper having an inclined longitudinal surface and extending from the rear wall of said hopper to a point close to said feeding device and in front of said feed openings and also having a lower surface extending in substantially a horizontal plane from a point above and close to said feeding device to a point near the rear wall of said hopper and serving to prevent the fertilizer from accumulating about said feed opening.

3. In a fertilizer distributer, the combination with a hopper having a feed opening and a feeding device rotatable about a vertical axis to feed the fertilizer to said opening, of a device to prevent the fertilizer from accumulating about said feed opening, comprising a guard member supported above the said opening and having its lower surface extending substantially in a horizontal plane from a point above and close to said feeding device to a point near the rear wall of said hopper.

4. In a fertilizer distributer, a hopper having a plurality of discharge openings, a guard plate supported above said openings, a plurality of rotary feeding devices mounted in said hopper near the respective discharge openings, each of said devices having a series of feeding teeth, and crushing teeth arranged between the feeding teeth and of less length than the latter.

5. In a fertilizer distributer, a hopper having a discharge opening, a feeding device comprising a rotary disk, like member arranged in a plane substantially parallel with the plane of said discharge opening and having a series of teeth projecting from the periphery thereof for feeding the fertilizer to the discharge opening and having a second series of teeth of less length than the teeth of the first-mentioned series and arranged alternately with the teeth of the first-mentioned series, and a device supported adjacent to and coöperating with the teeth of said disk-like member to crush the lumps of fertilizer.

1,061,401. CURD-MILL. WILLIAM E. PENN, Lake Mills, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1912. Serial No. 682,411. (Cl. 31—22.)



1. A curd mill comprising a framework, a hopper, corrugated feed rollers, cutting mechanism, means for operating said rollers and mechanism, and bearings supporting said rollers, one pair of said bearings being slidably mounted in said framework, the axes of said rollers lying in an inclined plane.

2. A curd mill comprising a framework, corrugated feed rollers, cutting mechanism, means for operating said rollers and mechanism, bearings supporting said rollers, one pair of said bearings being slidably mounted in said framework, and yieldable means pressing said slidable bearings toward the other pair of bearings, the axes of said rollers lying in an inclined plane.

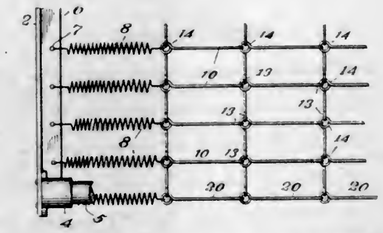
3. In a curd mill, cutting mechanism comprising a fixed member and a rotary member, said fixed member having longitudinal slots therein and transverse cutting edges thereon, said rotary member having a shaft with a plurality of splitting knives and a plurality of transverse cutting knives mounted on said shaft; and means for rotating said shaft.

4. In a curd mill, cutting mechanism comprising a fixed member and a rotary member, said fixed member having longitudinal slots therein, and said fixed member having transverse cutting edges thereon, said rotary member comprising a shaft, a plurality of splitting knives and a plurality of transverse cutting knives mounted on said shaft; means for rotating said shaft, each of said splitting knives in its rotation passing through one of said slots.

5. In a curd mill, cutting mechanism comprising a shaft, a plurality of splitting knives and two transverse cutting knives mounted on said shaft, and means for operating said shaft; said splitting knives comprising two sets, said sets positioned substantially diametrically opposite each other, and the individual knives in each set spaced angularly with reference to each other; said cutting knives positioned substantially diametrically opposite each other, and at substantially 90° from the central portion of said sets.

[Claims 6 and 7 not printed in the Gazette.]

1,061,402. SPRING-MATTRESS FABRIC. CHARLES L. PLUNKETT, Brooklyn, N. Y., assignor to American Couch Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 1, 1911. Serial No. 618,269. (Cl. 245—5.)



1. A spring mattress fabric made up of links, each comprising an eye or loop formed by a plurality of coils, a pair of coils terminating in relatively straight portions, which straight portions are at least 90 degrees apart without one crossing the other and have hook or loop terminals, said terminals engaging the adjacent links in both longitudinal and transverse straight line series, said plurality of coils giving resiliency equally to such straight portions, and the pull on each of said straight portions being in substantially a straight direction.

2. A spring mattress fabric made up of links, each comprising an eye or loop formed by a plurality of coils, a pair of coils terminating in relatively straight portions, one extending substantially at right angles to the other without one crossing the other, and having hook or loop terminals, said terminals engaging the adjacent links in both longitudinal and transverse straight line series, said plurality of coils giving resiliency equally to such straight portions, and the pull on each of said straight portions being in substantially a straight direction.

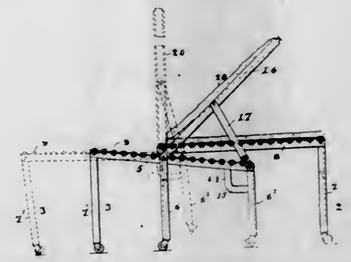
3. A spring mattress fabric made up of links, each comprising an eye or loop formed by a plurality of coils, a pair of coils terminating in relatively straight portions, one extending substantially at right angles to the other without one crossing the other, and having hook or loop terminals, said terminals engaging the adjacent links in both longitudinal and transverse straight line series, one straight portion of each link being shorter than its companion straight portion, said plurality of coils giving resiliency equally to such straight portions, and the pull on each of said straight portions being in substantially a straight direction.

4. A spring mattress fabric made up of links, each comprising an eye or loop formed by a plurality of coils, a pair of coils terminating in relatively straight portions, one extending substantially at right angles to the other without one crossing the other, and having hook or loop terminals, said terminals engaging the adjacent links in both longitudinal and transverse straight line series, that straight portion of each link extending crosswise of the fabric being shorter than its companion straight portion, said plurality of coils giving resiliency equally to such straight portions, and the pull on each of said straight portions being in substantially a straight direction.

5. A spring mattress fabric made up of links, each comprising an eye or loop formed by a plurality of coils, a pair of coils terminating in relatively straight portions, one extending substantially at right angles to the other without one crossing the other, and having hook or loop terminals, said terminals engaging the adjacent links in both longitudinal and transverse straight line series, said plurality of coils giving resiliency equally to such straight portions, and the pull on each of said straight portions being in substantially a straight direction, the outer edge of the fabric comprising independent lengthwise extending straight links each also having a plurality of coils.

[Claim 6 not printed in the Gazette.]

1,061,403. COUCH OR COUCH-BED. CHARLES L. PLUNKETT, Brooklyn, N. Y. Filed Aug. 9, 1912. Serial No. 714,169. (Cl. 5—46.)



1. A sliding couch bed comprising a pair of sections one sliding under the other and each provided with a spring and legs, a pair of legs of the sliding section being shorter than the other pair and its spring inclined when under its companion spring, a side brace bar and rigid means carried by the other section for engaging said side bar thereby to raise the inner side of the sliding section when it is moved into position to form a double bed.

2. A sliding couch bed comprising a pair of sections one sliding under the other and each provided with a spring and legs, a pair of legs of the sliding section being shorter than the other pair and its spring inclined when under its companion spring, a side brace bar, rigid means carried by the other section for engaging said side bar thereby to raise the inner side of the sliding section when it is moved into position to form a double bed, and manually operative means for shifting said sliding section and assisting in the raising of the shorter legs thereof to bring the side bar engaging means into operation.

3. A sliding couch bed comprising a pair of sections one sliding under the other and each provided with a spring, that of the sliding section inclined when under its companion section, permanently rigid means extending in the direction of the length of one section at one side thereof, and rigid corner means located at one side of the other section for slidingly engaging the aforesaid rigid means thereby to raise the adjacent side of the sliding section when moved into position to form a double bed and so bring its spring into a level position and in juxtaposition to the spring of the other section.

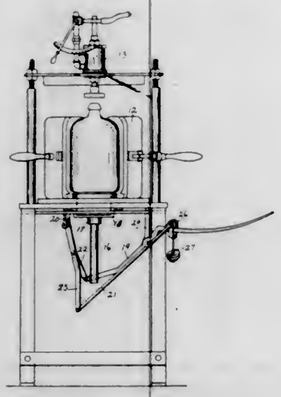
4. A sliding couch or couch bed comprising a pair of sections one sliding under the other and each provided with a spring, the spring of the sliding section having an inclined position relatively to that of its companion section when the structure is in the form of a couch, a side bar carried by the main section at its inner side, and angular braces carried at the inner corners of the sliding section and adapted to engage the side bar of the main section thereby to raise the inner side of the sliding section to bring the springs to a substantially level position.

5. A sliding couch or couch bed comprising a pair of sections one sliding under the other and each provided with a spring, the spring of the sliding section having an inclined position relatively to that of its companion section when the structure is in the form of a couch, a side bar carried by the main section at its inner side, angular braces carried at the inner corners of the sliding section and adapted to engage the side bar of the main section thereby to raise the inner side of the sliding sec-

tion to bring the springs to a substantially level position, and means for shifting the sliding section to effect such engagement and thereby bring the spring into a level position.

[Claims 6 to 8 not printed in the Gazette.]

1,061,404. GLASS-BLOWING MACHINE. JOHN RAU, Indianapolis, Ind. Filed June 15, 1911. Serial No. 633,227. (Cl. 49—11.)



1. A glass blowing machine including a blow mold, a movable bottom therein, a rod extending down from said bottom, a lever engaging said rod for elevating the same, and a weight adapted to travel on said lever toward the fulcrum thereof as the movable bottom moves downward.

2. A glass blowing machine including a blow mold, a movable bottom therein, a rod extending down from said bottom, a lever engaging said rod for elevating the same, a weight on said lever, and means for moving said weight along said lever toward the fulcrum thereof as the movable bottom moves downward.

3. A glass blowing machine including a blow mold, a movable bottom therein, a rod extending down from said bottom, a lever engaging said rod for elevating the same, a weight on said lever, and means actuated by said lever for moving the weight along said lever toward the fulcrum thereof as the movable bottom moves downward.

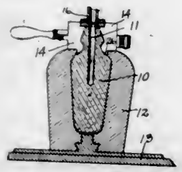
4. A glass blowing machine including a blow mold, a movable bottom therein, lever controlled means for supporting said bottom, and a weight adapted to travel on said lever toward the fulcrum thereof as the movable bottom deseends, said parts being so arranged that said weight is overbalanced during the latter portion of the downward movement of the bottom.

5. A glass blowing machine including a blow mold, a movable bottom therein, a rod extending down from said bottom, a lever fulcrumed between its ends and at one end engaging said rod, and a weight adapted to travel on the other end of said lever toward the fulcrum thereof as the movable bottom descends, the parts being so arranged that the movable bottom, rod and inner end of the lever will overbalance the outer end of the lever and said weight before said weight reaches the inward limit of its travel.

1,061,405. PROCESS OF MAKING HOLLOW GLASSWARE. JOHN RAU, Indianapolis, Ind. Filed Feb. 23, 1912. Serial No. 679,451. (Cl. 49—80.)

1. In the process of making hollow glass ware, pressing a glass blank in a press mold and forming a blow opening centrally in the neck end thereof, introducing air under pressure into said blow opening while the blank is in said mold for maintaining said blow opening and chilling its surface without enlarging the blank, replacting the press mold with a separate blow mold and subsequently blowing said blank into a finished article.

2. In the process of making hollow glass ware, pressing a glass blank and forming a blow opening centrally in the neck end thereof, introducing air under pressure into said blow opening for maintaining said blow opening and chilling its surface without enlarging the blank, removing said glass blank from the position where it was formed, and subsequently blowing said blank into a finished article.



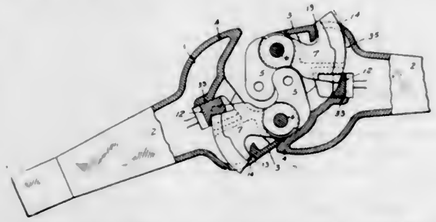
3. In the process of making hollow glass ware, pressing a glass blank with a central blow opening in the neck end thereof, introducing air into said blank for blowing the same, resisting the longitudinal expansion of said blank during the first part of the blowing thereof so that it will laterally expand to form the upper part of the article, and guiding the lower end of said blank during the latter part of the blowing thereof.

4. In the process of making hollow glass ware, pressing a glass blank with a central blow opening in the neck end thereof, introducing air into said blank for blowing the same, resisting the longitudinal expansion of said blank during the first part of the blowing thereof so that it will laterally expand to form the upper part of the article, and yieldingly holding the lower end of said blank during the latter part of the blowing thereof.

5. In the process of making hollow glass ware, pressing a glass blank and forming a blow opening centrally in the neck end thereof, introducing air under pressure into said blow opening for maintaining said blow opening and chilling its surface without enlarging the blank, transferring the blank to another position, introducing air into the blank for blowing the same, and guiding the lower end of the blank while it is being blown.

[Claims 6 to 10 not printed in the Gazette.]

1,061,406. AUTOMATIC CAR-COUPLING. JAMES F. ROBERTSON, Pittsburgh, Pa. Filed July 19, 1910. Serial No. 572,683. (Cl. 213—10.)



1. In a car coupler, the combination of a recessed head, a knuckle pivoted thereto and provided with a tail projecting into said head, said tail being provided with side locking faces in different vertical planes, one parallel to the center line of the coupler and the other at an angle thereto when the knuckle is closed, and a vertically movable locking member provided with coöperating locking faces in different vertical planes, one parallel to the center line of the coupler and the other at an angle thereto, the faces of the knuckle tail being each adapted to engage the angular face of said locking member in half lock and full lock position of the coupler, respectively, said head being provided with a vertical opening larger in cross section than the locking member and in which the latter moves, said opening permitting rearward movement of the locking member in releasing the same, and said angular faces being adapted to prevent backward creeping of the locking member under service conditions.

2. In a car coupler, the combination of a recessed head, a knuckle pivoted thereto and provided with a tail projecting into said head, said tail being provided with side locking faces in different vertical planes, the lower face being in advance of the upper face, and a vertically movable locking member provided with coöperating locking faces in different vertical planes, the lower face of said member being in advance of the upper face thereof, the upper set of said coöperating locking faces being parallel to the center line of the coupler and the lower advance set of said locking faces being at such an angle to the center line of said coupler that when the locking member is in half locked position and the knuckle is swung partly open the upper locking face of the knuckle will coöperate with the lower advanced locking face on the locking member and correspond to the angle thereof, said head being provided with a vertical opening larger in cross section than said locking member and in which it moves, said opening permitting rearward movement of the locking member in releasing the same, and said angular faces and said upper knuckle face being adapted to prevent backward creeping of the locking member under service conditions.

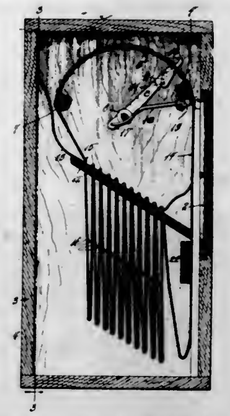
3. In a car coupler, the combination of a recessed head, a knuckle pivoted thereto and provided with a tail projecting into the head, said tail having a segmental end portion provided with a lower spiral knuckle throwing face, and a locking member movable in said head and arranged to swing forwardly as it moves vertically and provided with a knuckle throwing shoulder which when the locking member is lifted engages the lower spiral face of the knuckle tail and throws the knuckle open, said spiral face having a varying incline transversely of the spiral from end to end thereof.

4. In a car coupler, the combination of a recessed head, a knuckle pivoted thereto and provided with a tail projecting into the head, said tail having a segmental end portion provided with a lower spiral knuckle throwing face, and a locking member movable in said head and arranged to swing forwardly as it moves vertically and provided with a knuckle throwing shoulder having an extended upper face which when the locking member is lifted engages the lower spiral face of the knuckle tail with extended bearing contact and throws the knuckle open, said spiral face having a varying incline transversely of the spiral from end to end thereof, and a projection on the back of the locking member arranged when the latter is lifted to engage the head to move the lower end of the locking member forwardly and to maintain full contact of the bearing face on the locking member with the varying inclined face of the knuckle tail.

5. In a car coupler, the combination of a recessed head, a knuckle pivoted thereto and provided with a tail projecting into the head, said tail having a segmental end portion provided with a spiral lower face having a varying transverse incline, said incline being greater to the horizontal at its lower portion than at its upper portion, a vertically moving locking member provided with a projection having a broad upper bearing face inclined to the horizontal when the member is in lowest position, and which, when the locking member is lifted, engages the spiral transversely inclined lower face of the knuckle tail and throws said knuckle open, and a projection on the back of the locking member arranged when the latter is lifted to move its lower end forwardly and maintain full bearing contact between the knuckle throwing faces on the locking member and knuckle tail.

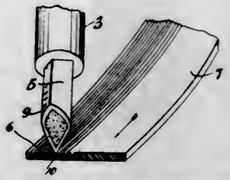
1,061,407. ADVERTISING DEVICE. FLAVEL A. RUDOLPH, Maplewood, Mo. Filed Jan. 2, 1912. Serial No. 669,040. (Cl. 40—96.)

1. In an advertising device, a carrier for advertising matter comprising endless, flexible tapes and rods secured to the tapes, a support for the carrier, a pair of rocking levers arranged to engage with the rods for the movement of the carrier and advertising matter, and means operable in conjunction with the levers for engagement with the rods for limiting the movement of the carrier.



2. An advertising device, comprising in combination a carrier consisting of a pair of endless, flexible tapes and rods of different lengths secured adjacent their ends to each of the tapes, a pair of supports one above the other for the carrier, the uppermost support arranged to support all of the rods, the lowermost support arranged to support only the rods of greatest lengths, a pair of rocking levers, a detent carried by each lever capable of movement in one direction only for engagement with said rods, means for moving said levers and detents for the advancement of the carrier, and means operable in conjunction with said levers for engagement with said rods for limiting the movement of the carrier.

1,061,408. NEEDLE FOR TALKING-MACHINES. PERCY B. RUGGLES, Wyoming, Ohio. Filed Feb. 8, 1913. Serial No. 747,029. (Cl. 181—11.)



1. A reproducing needle formed from the shaft of a feather denuded of barbs and possessing an outer shell with softer interior.

2. A reproducing needle formed from the shaft of a feather denuded of barbs and possessing an outer shell with softer interior, and having a V-shaped point of the outer shell to enter and fill the record grooves.

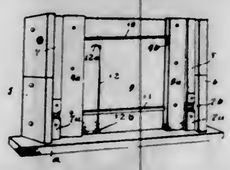
3. A reproducing needle formed from the shaft of a feather denuded of barbs and possessing an outer shell with softer interior, with the structure artificially hardened.

4. A reproducing needle formed from the shaft of a feather denuded of barbs and possessing an outer shell with softer interior, and having a V-shaped point of the outer shell to enter and fill the record grooves, with the structure artificially hardened.

1,061,409. END-GATE FOR WAGONS. MORGAN RYAN Chatsworth, Ill. Filed Aug. 7, 1912. Serial No. 713,726. (Cl. 21—21.)

1. In combination with a laterally slotted support, a plug rotatably mounted in the support, and having a slot

adapted to register with the slot in the support, a closure pivotally mounted on said support and means for locking said closure in closed position, said means consisting of a rotatable bar having a tongue adapted to pass through the slot in the support and engage the slot in the plug.



2. In combination with a laterally slotted support, plugs rotatably mounted in the support and having slots adapted to register with the slots in the support, a closure pivotally mounted on said support, a locking-bar rotatably mounted on the closure and having ends adapted to engage the slots in the supports and plugs and to turn the latter, and means for rotating said bar.

3. In combination with laterally slotted supporting side pieces, plugs rotatably arranged in the slots in said side pieces and having slots adapted to register with the slots in the side pieces, a gate swingingly mounted between said side pieces, a bar rotatably mounted in said gate and adapted to engage and rotate said plugs, and a member slidably mounted in said bar and adapted to lock it against rotation and to facilitate its rotation when in another position.

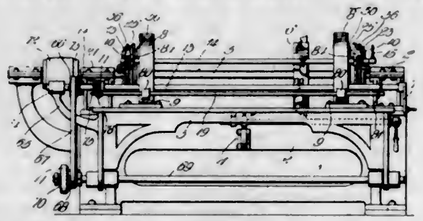
1,061,410. ATTACHMENT FOR HAT-PINS. MARTIN H. SCHMIDT, BERTEL H. SCHMIDT, and ANGELO R. SEBERG, Oakland, Cal. Filed June 27, 1912. Serial No. 706,216. (Cl. 24—155.)



1. In a securing attachment for the head of a hat pin, the combination with a pin provided with an annular groove adjacent its pointed end, of a head plate provided with a conical stem having an outwardly inclined tapering bore therein, a sleeve slidably mounted on said stem, an expansion spring acting against said sleeve for normally holding the same upwardly pressed relative to the conical stem, an inturned extension carried by the sleeve fitted within the tapering bore of the said stem and slotted to provide spring arms, the said arms being provided with a projecting shoulder for engaging with the annular groove of the hat pin when inserted within the bore of the conical stem and the sleeve forced upwardly thereon its full distance.

2. In an attachment for securing a head to the end of a hat pin, the combination with a hat pin pointed at its end and provided adjacent said end with an annular groove, of a head plate provided with a conical stem having an outwardly inclined tapering bore, an outwardly projected annular flange at the lower end of said stem, a sleeve provided with an inturned flange at its upper end slidably mounted on said stem, an expansion spring on the stem confined between the flanged end of the sleeve and the annular flange at the lower end of the stem, a series of spring arms carried by the spring held sleeve fitted within the bore of the mentioned conical stem, the said arms being provided with a shoulder for moving into locked engagement with the annular groove of the hat pin when inserted within the bore of the conical stem and the sleeve forced upwardly thereon its full distance.

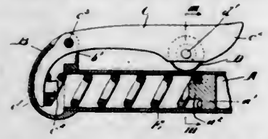
1,061,411. CHUCK MECHANISM FOR SPINDLE-TURNING MACHINES. AUGUST J. SCHULTE, Tacoma, Wash. Filed Mar. 14, 1912. Serial No. 683,832. (Cl. 142—55.)



1. A lathe stock, a band rotatably mounted within the stock, means for turning the band at will, and diametrically opposite pins projecting inward within the band; combined with a chuck head, diametrically opposite pins projecting outward therefrom, jaws adjustable within the head, and a ring interposed between the band and head and having sockets set quartering to each other for loosely engaging the four pins.

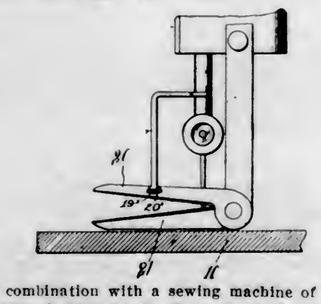
2. A lathe stock, a band rotatably mounted within the stock, means for turning it at will, and diametrically opposite pins projecting radially inward within said band and having heads at their inner extremities, combined with a chuck head, diametrically opposite pins projecting radially outward therefrom and having heads at their outer extremities, and a ring interposed between said band and head and having sockets set quartering to each other for loosely engaging the heads of said four pins.

1,061,412. HOLDER FOR REMOVABLE OBJECTS. WILLIAM H. SEMON, Cleveland, Ohio. Filed May 4, 1911. Serial No. 625,106. (Cl. 45—32.)



A holder for removable objects comprising the combination of a supporting tube having an open extremity; the hollow cap B secured to the latter and itself provided with the opening b'; the clamping member C pivoted to said cap and having its extremity extending within the latter; the holder provided with the lug c^2; the spring E mounted within said tube having its outer end engaging the extremity c' of the member C, and its inner end abutting the fixed partition a'; and the anti-friction roller D normally in engagement with the surface of said rod.

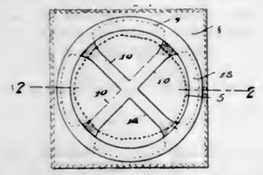
1,061,413. SEWING-MACHINE. WILLIAM W. SINGER, Olivia, Tex., assignor of one-third to Larson-Singer Company, Olivia, Tex. Filed Sept. 14, 1910. Serial No. 582,060. (Cl. 112—6.)



The combination with a sewing machine of a stitching mechanism, including a housing and a reciprocating needle

bar movable in the housing, of a scissors blade, a vertical extension on said blade attached to the housing and holding the blade spaced from the table of the machine, a second blade pivoted at its inner extremity to the heel of the first blade, a pin on said second blade intermediate its ends, an angle rod having one arm secured to the needle-bar and the other formed with an enlarged head provided with a slot and the pin engaging in said slot.

1,061,414. CERAMIC-PAINT PACKAGE. FREDERICK L. SLEEPER, Chicago, Ill. Filed Aug. 2, 1912. Serial No. 712,999. (Cl. 41—4.)



1. A ceramic paint package comprising a palette for receiving a charge of paint, an impervious member overlying said palette, an inclosing member of low tensile strength adapted to receive said palette and impervious member and provided with an opening therein and means for holding said inclosing member to said impervious member adjacent the periphery of said opening.

2. A ceramic paint package comprising a palette for receiving a charge of paint, an impervious member overlying said palette, an inclosing member of low tensile strength adapted to receive said palette and impervious member and provided with an opening therein, means for holding said inclosing member to said impervious member adjacent the periphery of said opening and means connected to said inclosing member for conveniently separating said inclosing member from said palette and impervious member.

3. A ceramic paint package comprising a palette for receiving a charge of paint, an impervious member overlying said palette and having its central portion convexed, an inclosing member having an opening therein and means secured to said inclosing member and adjacent said opening for conveniently tearing said inclosing member from said palette and impervious member.

4. A ceramic paint package comprising a palette for receiving a charge of paint, an impervious member overlying said palette and having its central portion convexed, an inclosing member of low tensile strength having an opening therein, means connected to said inclosing member for conveniently tearing the same from said palette and impervious member and a sealing member for securing that portion of the inclosing member adjacent said opening to said impervious member.

5. A ceramic paint package comprising a palette for receiving a charge of paint, an impervious member overlying said palette and having its central portion convexed, an inclosing member of low tensile strength having an opening therein through which the central convexed portion of said impervious member projects, releasing members connected to said inclosing member adjacent the marginal edge of said opening and a sealing ring overlying the edge of said opening and sealed to both said inclosing member and to said impervious member.

1,061,415. SOLE FOR BOOTS OR SHOES. CHESTER C. SMALL, Newton, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 21, 1912. Serial No. 732,703. (Cl. 36—25.)

1. As a new article of manufacture, a sole for boots or shoes having the interior wear resisting portion of its forepart compressed and condensed, and having that part of the sole between said interior portion and the edge of the forepart compressed to a less extent and thicker than the interior portion.



2. As a new article of manufacture, a compressed sole having its faces smooth and unbroken by any substantial changes in direction, and having edges of a substantially uniform thickness greater than that of the interior portion of the sole.

3. As a new article of manufacture, a sole thinner in its interior than at its edges and having both faces flaring from the interior toward the edges.

4. As a new article of manufacture, a sole blank for boots or shoes having a compressed interior portion and a thicker marginal portion, the opposite faces of the marginal portion being shaped to form with the respective faces of the interior portion substantially smooth surfaces.

5. As a new article of manufacture, a sole for boots or shoes having the interior wear receiving portion of its forepart compressed and condensed, having the marginal portion compressed to a less extent and thicker than the interior portion and having the opposite faces of the marginal portion shaped to form with the respective faces of the interior portion substantially smooth surfaces.

[Claims 6 to 13 not printed in the Gazette.]

1,061,416. METHOD OF PREPARING SOLES FOR BOOTS OR SHOES. CHESTER C. SMALL, Newton, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 12, 1913. Serial No. 747,951. (Cl. 12—142.)



1. The method of improving sole blanks for boots or shoes which comprises applying to the faces of a blank pressure which reduces substantially the thickness of the interior portion of the blank and which reduces the thickness of the marginal portion of the blank by an amount diminishing from a maximum at the inner boundary of the margin to a negligible amount at the outer edge of the blank.

2. The method of improving sole blanks for boots or shoes which consists in forcing the edges of a blank inwardly by pressure and then, while the edges are confined, applying to the faces of the blank pressure which reduces substantially the thickness of the interior portion of the blank and which reduces the thickness of the marginal portion of the blank by an amount diminishing from a maximum at the inner boundary of the margin to a negligible amount at the outer edge of the blank.

3. The method of improving sole blanks for boots or shoes which comprises exerting thickness reducing pressure upon the faces of the interior portion of the forepart of a sole blank while confining the edges of the blank

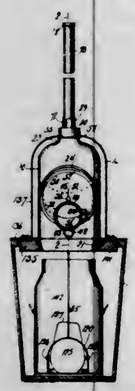
and exerting substantially less pressure upon the faces of the marginal portion between the outer boundary of the interior portion and the edge of the sole.

4. The method of preparing soles for boots or shoes which consists in confining the edges of a sole blank, exerting thickness reducing pressure upon the faces of the interior portion of the blank while the edges are held confined, and, during the operation upon the interior portion, exerting pressure progressively from the outer boundary of the interior portion toward the edge of the sole.

5. The method of preparing soles for boots or shoes which consists in forcing inwardly the edges of a sole blank, applying thickness-reducing pressure to the interior portion of the blank and applying to the marginal portion of the blank pressure which is progressively less from the boundaries of said interior portion toward the edges of the blank, where it is not sufficient to reduce the thickness, thereby producing a condensed sole having its interior portion thinner than that of the original blank but having its edges of approximately the same thickness as the edges of the original blank.

[Claims 6 to 14 not printed in the Gazette.]

1,061,417. SANITARY FLUID-DISPENSING APPARATUS. WALTER STELLARD, New York, N. Y., assignor to Universal Paper Bottle Company, New York, N. Y., a Corporation of Delaware. Filed July 8, 1911. Serial No. 637,535. (Cl. 73—163.)



1. In a fluid dispensing apparatus the combination of a receptacle, a dipper slidably suspended therein, means to reciprocate the dipper, a reservoir below the receptacle to hold the fluid to be dispensed, and a tilting frame adjustably suspended in said apparatus in the path of the dipper to tilt the latter and thereby discharge a predetermined quantity of fluid therefrom.

2. In a fluid dispensing apparatus the combination of a receptacle, a measuring vessel detachably connected thereto, a spout extending from the measuring vessel, a dipper slidably suspended in the receptacle, means to reciprocate the dipper to dip into a fluid and means to tilt the dipper to different angles at the upper end of its stroke, to discharge the fluid into the measuring vessel in predetermined quantities.

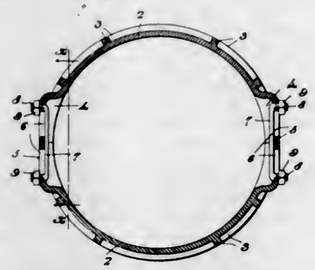
3. In a fluid dispensing apparatus the combination of a receptacle, a dipper slidably suspended therein, a counter-weight for the dipper, a check valve connected to said dipper, means to reciprocate the dipper and thereby charge it with the fluid to be dispensed, an adjustable tilting frame for the dipper in said apparatus, the dipper maintaining an upright position during its reciprocations until tilted by said tilting frame.

4. In a fluid dispensing apparatus the combination of a receptacle, a measuring vessel extending therefrom, a spout with an opening extending from said measuring vessel, a stopper at the upper portion of the receptacle, a lifting rod guided in said stopper, a bail extending from said rod, a dipper pivoted in said bail, a counter weight for the dipper, a check valve hinged in the bottom of the dipper, an adjustable tilting frame in the receptacle in the path of the dipper, an adjustable stop extending from the stopper in the path of said bail.

5. In a dispensing apparatus the combination of a receptacle, a measuring vessel having an outlet opening connected to one side of said receptacle, a stopper at the top of the receptacle, a lifting rod slidably guided in said stopper, a bail extending from said rod, a dipper suspended from the bail, means to maintain the dipper in an upright position when not at the upper end of its stroke, a tilting frame in said receptacle in the path of the dipper, a tubular guide extending up from the stopper for said lifting rod, a sheave journaled in the upper end of the tubular guide and a chain extending from said rod over said sheave to reciprocate said rod and thereby the dipper.

[Claims 6 to 9 not printed in the Gazette.]

1,061,418. CONDUCTING-PIPE. GEORGE EDSON STINSON, Cleveland, Ohio. Filed Oct. 2, 1912. Serial No. 723,462. (Cl. 61—9.)

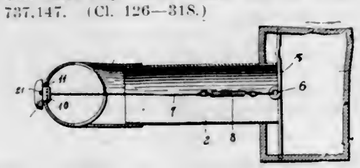


1. A pipe formed of two similar longitudinal parts having abutting edges, said parts being provided adjacent their edges with spaced alined slots, plates covering said slots and securing means on said plates extending through said slots, substantially as described.

2. A pipe formed of similar longitudinal parts, said parts being provided with transversely alined slots, covering means for said slots and integral securing means on said covering means extending through said slots, substantially as described.

3. A pipe formed of similar longitudinal sections, the adjacent edges of said sections being formed with registering recesses, the walls of said recesses being formed with alined slots, plates in said recesses covering said slots, integral studs on said plates projecting through said slots and nuts threaded on said studs, substantially as described.

1,061,419. STOVEPIPE-FASTENER. JEREMIAH STOKES, Jr., Salt Lake City, Utah. Filed Dec. 16, 1912. Serial No. 737,147. (Cl. 126—318.)



A stove pipe fastener comprising an anchoring bar adapted to be secured in a flue and having wire attaching means, a fastening wire secured at its one end to said anchoring bar, a coiled spring arranged in said wire, a wire holding device comprising a plate having on its inner side a pipe engaging lug provided with a transverse pin hole and a longitudinal passage communicating at its outer end with a recess formed in said plate, a wire

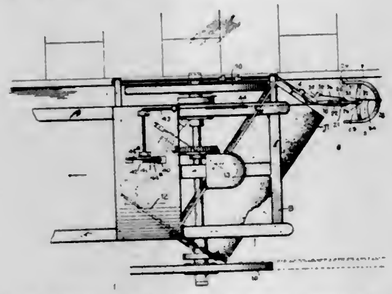
clamping cam pivoted to said plate and adapted to co-act with one end of said recess to grip the end of the wire when drawn through said passage and recess, whereby the wire is adjustably fastened against the resistance of said spring, a cleat on said plate to receive the end of the wire, studs formed on the edge of the plate, and a cap adapted to be engaged with said plate over the wire fastening mechanism therein and having in its edges bayonet slots adapted to engage said studs whereby the cap is detachably secured to the plate.

1,061,420. SHOCK-ABSORBER. HERMAN H. SUNVOLD and HALFDAN LARSON, Sacred Heart, Minn. Filed July 1, 1912. Serial No. 707,030. (Cl. 21—105.)



In a shock absorber of the class described adapted to straddle the angle iron of an automobile comprising a spring, connecting means carried by the lower end of said spring, said spring provided with an upwardly extending neck terminating in a laterally extending arm, a U-shaped clamp member adapted to be carried by the frame of the automobile, said clamp member provided with means for holding it in engagement with said frame, a journal formed upon the upper side of said clamping member, said journal provided with an enlarged body portion tapering to produce a uniform thickness along the side edges of the clamping member, said body portion of said journal provided with a longitudinally extending aperture, said laterally extending arm of said spring positioned within said aperture formed in said journal so as to overhang said clamping member and relieve the strain from the jaws thereof, means for holding the laterally extending arm therein, whereby when pressure is brought to bear upon the spring the strain will be brought to bear directly upon the frame of the automobile, and in this manner greatly reduce the wear upon the clamping member.

1,061,421. STREET-SWEEPER. JOHN SUSZYCKI, Reedsburg, Wis. Filed Oct. 16, 1912. Serial No. 726,080. (Cl. 15—17.)



1. In collecting mechanism for street sweepers, the combination with a bracket, of means for connecting the front end of the same to the frame of a sweeper, a collector pivoted to said bracket on a substantially upright axis and being thus capable of swinging toward and from a curb, and yielding means between the bracket and collector for urging the same laterally toward the curb.

2. In collecting mechanism for street sweepers, the combination with a bracket, of means for connecting the front end of the same to the frame of a sweeper, a laterally swinging arm pivoted to the rear portion of the bracket, a vertically swinging arm pivoted to the laterally swinging arm, a collector mounted on the latter arm, a spring connected to the laterally swinging arm for urging the collector laterally toward a curb, means connected to the vertically swinging arm for elevating the collector, and means for mounting the elevating means on a sweeper.

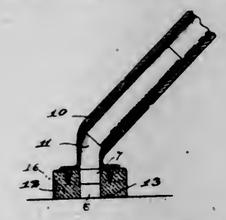
3. In collecting means for street sweepers, the combination with a vertically adjustable bracket, of means for holding the bracket in different adjusted positions, a laterally swinging arm pivoted to the bracket, a vertically swinging arm pivoted to the laterally swinging arm, a substantially U-shaped collector connected to the vertically swinging arm, means for raising and lowering the arm and collector, and a spring connecting the bracket and laterally swinging arm for swinging the same toward the curb of the street being swept.

4. In collecting mechanism for street sweepers, the combination with a vertically movable member, of means for raising and lowering the same, a bail pivoted between its ends to the member and swinging thereon, and a scraper having spaced sides pivoted to the ends of the bail on an axis disposed at substantially right angles to the axis of the pivot connection between the bail and member.

5. In collecting mechanism for street sweepers, the combination with a vertically swinging arm, of means for raising and lowering the same, a bail pivoted between its ends to the arm on an axis disposed longitudinally of the arm, and a scraper having sides pivoted to the ends of the bail on an axis disposed transversely to the arm.

[Claim 6 not printed in the Gazette.]

1,061,422. SUCTION CLEANING-TOOL. WILLIAM S SUTTON, Rockford, Ill., assignor to American Radiator Company, Chicago, Ill., a Corporation of New Jersey. Filed Aug. 20, 1912. Serial No. 716,014. (Cl. 15—60.)



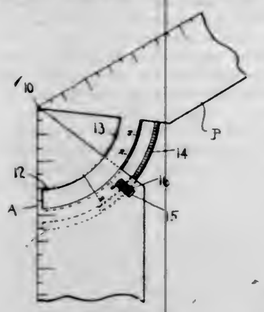
1. A suction tool having a longitudinal slot and the wall on one side of the slot being shorter than the wall on the opposite side, said walls being flush with each other on their working faces.

2. A suction tool comprising a top wall and spaced side walls forming a slot, one of said side walls being greater in length than the other side wall.

1,061,423. CARPENTER'S SQUARE. BENURI O. SWEUM, Hamar, N. D. Filed July 23, 1910. Serial No. 573,468. (Cl. 73—187.)

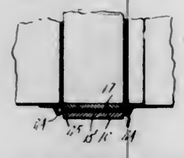
In a carpenter's square, a blade having a beveled end, a tongue having a beveled end hinged to the beveled end of the blade, the beveled ends of the tongue and blade being fitted snugly together when the blade and tongue are at right angles to each other, said tongue having an arcuate adjusting screw thereon, said blade having a recess which

entirely incloses and protects the free end of the arcuate adjusting screw, said recess being formed with an enlarged portion, a nut seated in the enlarged portion and engaging the adjusting screw in coöperative relation for forcing the



beveled ends to swing on their hinged connection, the nut being cylindrical and knurled and of a less diameter than the thickness of the blade, so that it cannot contact with a plane solid surface, but may be easily rotated by contact with a thumb or finger of an operator.

1,061,424. FLUME. WILBERT L. SWICK, Glenwood Springs, Colo. Filed July 31, 1912. Serial No. 712,516. (Cl. 61—5.)

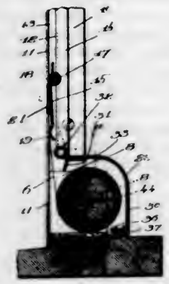


1. The combination of a pair of flume sections having their adjacent ends formed with interior grooves and resultant exterior ribs and disposed in overlapping relation with the rib of one section seated in the groove of the other section, the rib of the first named section being of less width than the groove of the second named section whereby said sections may be moved longitudinally a predetermined distance relatively to each other, and inner and outer clamping members, the inner clamping member being seated in the groove of the first named section and having its inner face in registration with the inner face of said first named section.

2. The combination of a pair of flume sections having their adjacent ends formed with interior grooves and resultant exterior ribs and disposed in overlapping relation with the rib of one section seated in the groove of the other section, the rib of the first named section being of less width than the groove of the second named section whereby said sections may be moved longitudinally a predetermined distance, relatively to each other, and inner and outer clamping members, the inner clamping member being seated in the groove of the first named section.

3. The combination of a pair of flume sections having their adjacent ends formed with interior grooves and resultant exterior ribs and disposed in overlapping relation with the rib of one section seated in the groove of the other section, the rib of the first named section being of less width than the groove of the second named section whereby said sections may be moved longitudinally a predetermined distance relatively to each other, and the rib of the second named section being provided with a plurality of supplemental exteriorly disposed ribs forming an exteriorly disposed groove and inner and outer clamping members, the inner clamping member being seated in the groove of the first named section, and the outer clamping member being seated in the exterior groove formed by said supplemental ribs.

1,061,425. WINDOW-SCREEN. ZEPHANIAH TALBOT, Holliston, Mass.; Henry Paul Talbot executor of said Zephaniah Talbot, deceased. Filed Jan. 19, 1906. Serial No. 296,778. (Cl. 156—39.)



1. The combination with the sashes of a window, of a screen independently adjustable to a plurality of positions including a position for closing an opening of the lower sash alone and a position for closing an opening of the upper sash, and means carried by the screen to press the end edge of the screen snugly against the part with which it is desired to make closure.

2. The combination with the sashes of a window, of a roller screen adjustable to close an opening of a lower sash, and adjustable further to close an opening of the upper sash; means coöperating with the screen to supply closure at the lateral edges of the screen, and means to press the end edge of the screen snugly against the part with which it is desired to make closure.

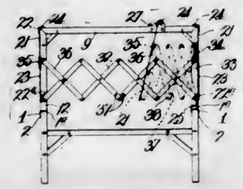
3. The combination with the sashes and frame of a window, of an adjustable screen; and means independent of the window frame to hold the end edge of the screen snugly against a part with which said edge is desired to make closure.

4. The combination of a frame having an opening to be screened; a screen to close said opening; and means carried by the screen for pressing an edge of the screen against a part of the frame with which it is desired to make closure.

5. The combination of a part proximate an opening to be screened; a screen to close said opening; and means carried by the screen and pressing an edge of the screen yieldingly against said part.

[Claims 6 to 13 not printed in the Gazette.]

1,061,426. CONVERTIBLE FURNITURE. JOHN L. TANDY, Kansas City, Mo. Filed Aug. 8, 1910. Serial No. 576,224. (Cl. 5—61.)

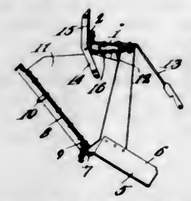


1. In convertible furniture, a structure, comprising a bed frame, arm frames arranged at each end of the bed frame and pivoted thereto and adapted to project vertically upward therefrom or to be swung downwardly and outwardly to a horizontal position to increase the length of the bed frame, a substantially upright frame arranged longitudinally of and above the bed frame and between the arm frames when upright, to constitute a back wall, means for securing the upper corners of the upright frame to the upper portions of the arm frames, and connections extending outwardly from the lower portion of the upright frame to one of the sides of the bed frame to anchor the former in a fixed relation to the latter.

2. In convertible furniture, a structure comprising a bed frame consisting of end and side rails, and a wire fabric connecting the rails, arm frames pivoted to the ends of the bed frame and provided with fillings, the filling constituting extensions of the wire fabric of the bed frame, a frame arranged longitudinally above the bed frame when the arm frames are upright and consisting of a bottom rail, a top rail overlapping at its ends the upper portions or ends of the arm frames, and a filling connecting said rails, transversely extending bars connecting the lower part of the longitudinally extending frame with one of the said rails of the bed frame, means for securing the overlapping ends of the longitudinally extending frame to the upper portions of the arm frames, and means for supporting the structure at a suitable height.

3. In convertible furniture, a structure comprising a bed frame, a pair of substantially vertical arm frames secured to the ends of the bed frame, a longitudinally extending frame arranged in a substantially upright position and embodying a top rail overlapping the upper ends of the arm frames when vertical, means for adjustably securing the said overlapping ends to the upper ends of the arm frames at different points along the length of the latter, and means for securing the lower portion of the said longitudinally extending frame in fixed relation to the bed frame.

1,061,427. COAL-HOPPER FOR WINDOWS AND THE LIKE. WILLIAM H. TAYLOR, Kewanee, Ill. Filed May 24, 1912. Serial No. 699,582. (Cl. 57—37.)



1. The combination with a frame and an inclined chute extending from the bottom thereof, of a closure plate hingedly mounted at its lower edge within the frame, side wings extending therefrom into the frame, a guard plate movably connected to the wings, and means operated by the movement of the closure plate and wings to open position, for elevating the guard plate above the frame.

2. The combination with a frame and an inclined chute extending from the bottom thereof, of a closure plate hingedly mounted at its lower edge within the frame, side wings extending therefrom into the frame, a guard plate movably connected to the wings, and means operated by the movement of the closure plate and wings to open position, for elevating the guard plate above the frame, said guard plate being normally housed between the wings and within the frame.

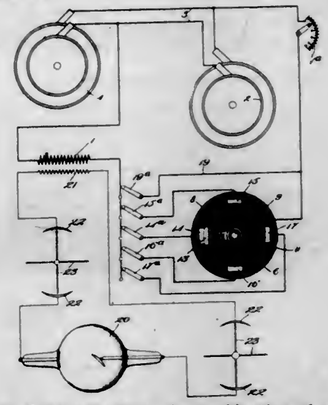
3. The combination with a frame and an inclined chute extending from the bottom thereof, of a closure plate hingedly mounted at its lower edge within the frame, side wings extending therefrom into the frame, a guard plate movably connected to the wings, means operated by the movement of the closure plate and wings to open position, for elevating the guard plate above the frame, and coöperating means upon the wings and frame for locking the closure plate when closed.

4. The combination with a frame and an inclined chute extending from the bottom thereof, of a closure plate hingedly mounted at its lower edge within the frame, side wings extending therefrom into the frame, a guard plate movably connected to the wings, means operated by the movement of the closure plate and wings to open position, for elevating the guard plate above the frame, and coöperating means upon the wings and frame for automatically locking the closure plate when closed.

5. The combination with a frame and an inclined chute extending from the bottom thereof, of a closure plate hingedly mounted at its lower edge within the frame, side wings extending therefrom into the frame, a guard plate movably connected to the wings, means operated by the movement of the closure plate and wings to open position, for elevating the guard plate above the frame, said guard plate being normally housed between the wings and within the frame, and coöperating means upon the wings and frame for automatically locking the closure plate when closed.

[Claim 6 not printed in the Gazette.]

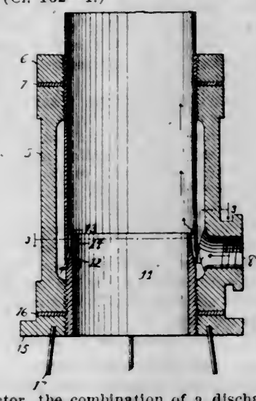
1,061,428. X-RAY SYSTEM. HARRY F. WAITE, New York, N. Y. Filed Jan. 16, 1912. Serial No. 671,442. (Cl. 250—34.)



1. In an X-ray apparatus, the combination of a step-up transformer, an alternating current source and a selecting device connected in series with the primary of said transformer, means for adjusting said selecting device to permit predetermined portions only of each alternating current wave length to pass through said transformer primary, and an X-ray tube in the secondary of said transformer.

2. In an X-ray apparatus, the combination of a step-up transformer, an alternating current source and a selecting device connected in series with the primary of said transformer, means for adjusting said selecting device to permit predetermined portions only of each alternating current wave length to pass through said transformer primary, and an X-ray tube and a rectifier connected in series with the secondary of said transformer.

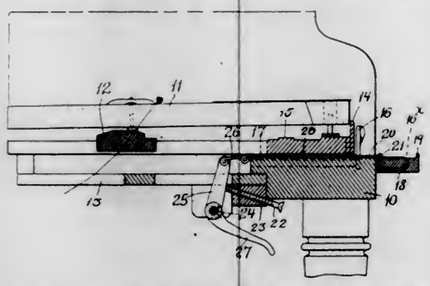
1,061,429. EJECTOR. GUSTAV WALLBILLICH, Brown Station, N. Y. Filed July 18, 1912. Serial No. 710,292. (Cl. 162—1.)



In an ejector, the combination of a discharge pipe having the edge of its lower end beveled inwardly, a suction pipe having one end reduced and projected within said

discharge pipe, a beveled shoulder formed by said reduced end and adapted to coact with the beveled end of said discharge pipe to form an inwardly and upwardly inclined air passage the effective cross sectional area of which may be increased or diminished by longitudinal movement of said suction pipe, and an air deflecting flange formed on the projected end of said suction pipe above the shoulder thereon, whereby air cone formation is prevented and the substance lifted carried through the discharge pipe in an unbroken condition.

1,061,430. KEY-RAIL FOR PLAYER-PIANOS. WILLIAM ARTHUR WATSON, Medford, Mass., assignor to National Piano Company, Boston, Mass., a Corporation of Maine. Filed Aug. 18, 1911. Serial No. 644,830. (Cl. 84—160.)



1. In a player piano, a key bed and keys thereon, a shield in front of the keys, a controller in front of the shield, a movable key rail adapted to conceal the controller, said rail having a lip adapted to extend over and conceal the shield when the rail is in position to conceal the controller, and means connecting the key rail with the key bed for guiding the key rail so that it may move bodily forward from the keys and swing downwardly against the front of the key bed, said means being adapted to support the rail flush with the top of the key bed and with said lip extending upwardly from its forward edge.

2. In a player piano, a key bed and keys thereon, a controller in front of the keys, a movable key rail adapted to conceal said controller, a plurality of sliding members movable from front to rear and vice versa upon the key bed, said key rail being pivotally mounted upon said sliding members, and means connecting said sliding members to cause them to move in unison, said key rail being adapted to swing downwardly from its plane of bodily movement with said slides.

3. In a self-playing instrument, a key bed and keys, a controller in front of the keys, a bodily movable key rail, a plurality of members mounted to slide upon the key bed, means pivotally connecting said key rail to each of said sliding members, so that the key rail may swing downwardly in front of the key bed, and a single operating means below the key bed for moving said sliding members in unison forward and back.

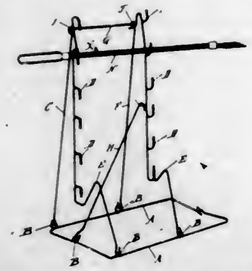
4. In a self-playing instrument, a key bed and keys, a controller in front of the keys, a movable key rail, means mounted to slide upon the key bed, means pivotally connecting said key rail to said sliding means, so that the key rail may swing downwardly in front of the key bed, and means entirely below the key frame for moving said sliding means forward and back.

5. In a self-playing instrument, a key bed, a key frame and keys, a controller in front of the keys, a movable key rail, and means entirely below said key frame for moving the key rail forward and back, the key rail being pivotally connected to said means so that it may swing downwardly in front of the key bed.

[Claims 6 to 11 not printed in the Gazette.]

1,061,431. STAND AND FORK FOR TOASTING. WILLIAM HUME ROTHERY WEST, Winchester, England. Filed Apr. 12, 1912. Serial No. 690,440. (Cl. 53—5.)

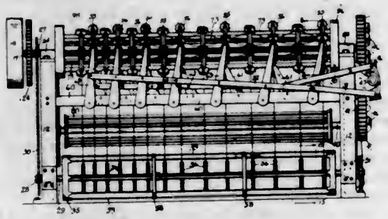
1. A stand for supporting toasting forks in front of the fire, comprising a rectangular base, two double-legged standard members hinged to said base, means for holding the standards in a vertical position, upwardly projecting hooks on one standard, and inverted hooks on the other, such hooks being adapted to carry and counterbalance respectively the toasting fork or forks in the required position.



2. A stand for supporting toasting forks in front of the fire comprising, a base of bent wire work, a rectangular containing member, hooks on said member, two double-legged standard members hinged to said wire base, means for holding the standards in a vertical position, upwardly projecting hooks on one standard, and inverted hooks on the other standard, said hooks adapted to carry and counterbalance the toasting fork.

3. A rack for toasting forks comprising a rectangular containing member, hooks on said member, a rectangular wire base adapted to rest on said containing base, opposite collapsible standards hinged on said wire base, hooks for holding said standards in a vertical position, upwardly projecting hooks on one standard, and inverted hooks on the other of said standards, said hooks adapted to carry and counterbalance a toasting fork.

1,061,432. WIRE-FABRIC MACHINE. GEORGE W. WHITTINGTON, Indianapolis, Ind., assignor, by direct and mesne assignments, to The Indiana Machine and Wire Company, Indianapolis, Ind. Filed Dec. 11, 1911. Serial No. 665,087. (Cl. 140—9.)



1. A machine for making wire fabric, including means for moving parallel strand wires through the machine, means for carrying a mesh wire from one strand wire to the next strand wire and back again alternately, and means for twisting each bend of a mesh wire about the strand wire at two points spaced apart so that a portion of the mesh wire at each bend will lie parallel with the strand wire.

2. A machine for making wire fabric, including means for moving a series of parallel strand wires through the machine, means for carrying a mesh wire from one strand wire of each pair of strand wires to the next strand wire of each pair and back again alternately, the bends of adjacent mesh wires registering with each other, and means for twisting the adjacent bends of the mesh wires about the strand wires and in the same direction so that they will interlock.

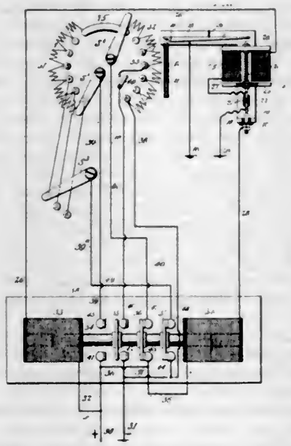
3. A machine for making wire fabric, including a rotary frame, a series of twisters revolubly mounted thereon so as to be rotatable in planes bisecting each other at the axis of the frame, means on said frame for rotating said twisters, means for maintaining and moving a pair of strand wires into position so that each will be engaged by one of said twisters, arms pivoted on said frame and projecting into proximity with the path of said twisters, a single means for oscillating said arms between each pair of twisters for alternately placing a mesh wire therein, and means for actuating the twisters.

4. A machine for making wire fabric, including a plurality of sets of twisters arranged in staggered position with reference to each other, means for revolving said twister sets in substantially parallel planes, means for maintaining and moving marginal strand wires into position to be engaged by two of said twister sets, means moving transversely of said twisters for placing mesh wires first in one twister and then in the next twister adjacent thereto, oppositely moving transversely moving means for placing a second mesh wire in said twisters after the first mesh wire has been placed therein, and means for actuating the twisters.

5. A machine for making wire fabric, including a frame for a transverse bar, a transverse series of twisters, means for revolving said twisters in a plane longitudinally of the machine, means for maintaining and moving a series of strand wires in position to receive said twisters as they are revolved, arms pivoted on said frame and projecting into proximity with the path of the twisters, a single means for oscillating said arms transversely of the machine between each pair of twisters for placing alternately therewith a mesh wire, and means for actuating the twister.

[Claims 6 to 10 not printed in the Gazette.]

1,061,433. ELECTRICAL HEATING APPARATUS. HUGH M. WICKER, New York, N. Y. Filed May 27, 1908, Serial No. 435,276. Renewed Dec. 24, 1912. Serial No. 738,477. (Cl. 219—19.)



1. In an electric heating apparatus, the combination of a plurality of heating groups comprising each a plurality of connected heating coils or elements, means for connecting said groups in parallel, and means for connecting an element of one group in series with the elements of the other group while preserving the parallel connection of the groups.

2. In an electric heating apparatus, the combination of a plurality of heating groups comprising each a plurality of connected heating coils or elements, means for connecting said groups in parallel, and means for connecting an element of either group in series with the elements of the other group while preserving the parallel connection of the groups.

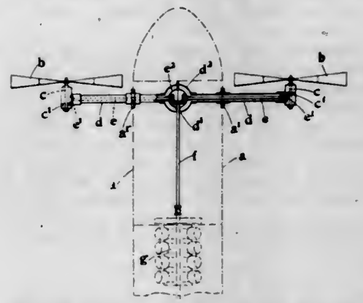
3. In an electric heating apparatus, the combination with a plurality of heating groups of automatic controlling means whereby the heating effect of the several groups is varied by shifting their connection from parallel to series or vice versa.

4. In an electric heating apparatus, the combination with a plurality of heating groups of thermostatic controlling means whereby the heating effect of the several groups is varied by shifting their connection from parallel to series or vice versa.

5. In an electric heating apparatus, the combination with a plurality of heating groups of automatic controlling means whereby the heating effect of the several groups is varied by shifting their connection from parallel to series or vice versa, together with further means whereby the heating effect of the several groups may be varied relatively to each other.

[Claims 6 to 8 not printed in the Gazette.]

1,061,434. AIRSHIP, AEROPLANE, OR AEROSTAT. ERNEST THOMPSON WILLOWS, Cardiff, England. Filed June 16, 1910. Serial No. 567,254. (Cl. 244—23.)



1. In apparatus for propelling and maneuvering airships and the like the combination comprising tubular members, means connecting together said tubular members, driving spindles within said tubular members, means for simultaneously rotating said spindles in opposite directions, casings mounted at the free ends of said tubular members, propeller shafts within said casings, said propeller shaft being driven by the spindles, propellers on said propeller shafts, and means for simultaneously varying the position of the propellers.

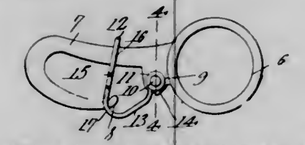
2. In apparatus for propelling and maneuvering airships and the like the combination comprising two tubular members, a spherical member fixedly connecting together the tubular members, driving spindles within said tubular members, gears connecting said spindles inclosed within said spherical member, means for operating said gears, casings mounted at the ends of said tubular members, propeller shafts within said casings, said propeller shafts being driven by the spindles, propellers on said shafts, and means for rotating the tubular members for the purpose of adjusting the position of the propellers.

3. In apparatus for propelling and maneuvering airships and the like the combination comprising tubular members, a spherical member connecting together the two tubular members, driving spindles within said tubular members, gears connecting said spindles, said gears being inclosed within said spherical member, means for driving the gears, casings mounted at the ends of said tubular members, propeller shafts within said casings, bevel wheels between the propeller shafts and the spindles, the bevel wheels on opposite sides of the airship being so disposed that the reactive forces set up by the bevel wheels when under power are balanced, propellers mounted on said propeller shafts, and means connected to the spherical member for varying the inclination of the propellers.

4. In apparatus for propelling and maneuvering airships and the like the combination comprising two tubular members, a spherical member connecting together the tubular members, driving spindles within said tubular

members, gears connecting said spindles, said gears being inclosed within said spherical member, means for driving said gears, casings mounted at the ends of said tubular members, propeller shafts within said casings, bevel wheels between the propeller shafts and the spindles, said bevel wheels being disposed in diametrically opposite positions in relation to the axis of the spindles for the purpose of balancing the reactive forces set up by the bevel wheels when under power, propellers mounted on said propeller shafts, and means connected to the spherical member for simultaneously varying the inclination of the propellers.

1,061,435. SWINGLETREE-HOOK. WARREN E. WITT, Raymond, Ill. Filed Apr. 23, 1912. Serial No. 692,742. (Cl. 24—241.)



A swingletree hook embodying a shank and a bill having its tip curved toward the shank, a pin passing through the butt end of the shank, and a resilient U-shaped guard straddling the shank from opposite the tip of the bill and having its branches bent to form elbows and its ends bent into eyes embracing the ends of the pin, so that when the bend of the guard is swung against the shank of the hook, the tip of the bill will project and terminate between the elbows, those arms of the guard between the elbows and bend being provided with inwardly bowed portions to snap over the shank of the hook.

1,061,436. TIP FOR VEHICLE SHAFTS, POLES, AND THE LIKE. ADAM WOEBER, Denver, Colo. Filed Feb. 17, 1912. Serial No. 678,202. (Cl. 21—92.)

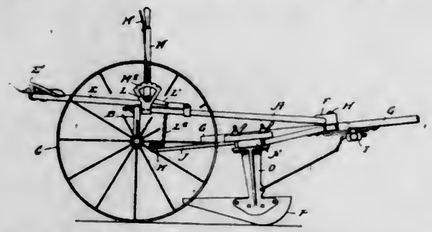


The combination with a shaft or the like of a vehicle having a leather covering secured a suitable distance from the outer end of the shaft, of a ferrule mounted directly on the shaft and provided on its inner end with an enlargement which is of greater diameter than that of the ferrule,—the outer end of the ferrule being spaced from the outer end of the shaft and also spaced from the outer end of the covering so as to adjust the ferrule and its enlargement respectively on the shaft and on the covering, said enlargement having a shoulder at its intersection with the ferrule which is adapted to contact with the inner end of the covering when the ferrule is adjusted its full length on the end of the shaft, and means inserted through the end of the ferrule and into the end of the shaft whereby to hold the ferrule and its enlargement in an adjusted position.

1,061,437. WHEEL ATTACHMENT FOR HORSE-HOES. FREDERIC S. WOODMAN, Fairfield, Me. Filed Feb. 21, 1911. Serial No. 610,115. (Cl. 97—34.)

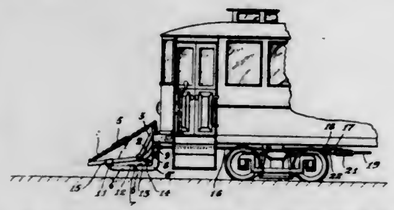
1. In a cultivator the combination with cultivator blades, and stocks to which they are attached, of a cross bar to which said stocks are secured, a tongue attached to said cross bar, a block upon said tongue, a wheeled frame, the forward end of which is pivotally connected to said block, a lever carried by said frame and a connection between said lever and the rear end of said tongue for the purpose set forth.

2. In a cultivator, a tongue, a block rotatably mounted upon said tongue, a V-shaped frame having its apex portion pivotally mounted in said block, wheels adapted to support the rear end of said frame, a foot rest carried by the rear end of the tongue and providing means for



swinging said tongue relative to said frame, and cultivator blades adjustably supported from said tongue and at a point between said foot rest and said block, as and for the purpose set forth.

1,061,438. CAR-FENDER. MICHEL J. WOZNACK, Seattle, Wash. Filed Dec. 29, 1911. Serial No. 668,514. (Cl. 105—250.)



1. In a car fender mechanism, in combination with an adjustable fender section, an operating arm connected with said section for lowering the same comprising articulated sections, and releasable means for connecting the component sections of said arm for movement in a common direction by movement of one of said sections.

2. In a car fender mechanism, in combination with an adjustable car fender section, an operating arm connected with said section for lowering the same comprising articulated sections, and means connecting the component sections of said arm for movement in a common direction and for independent downward movement of the arm section connected with said fender section.

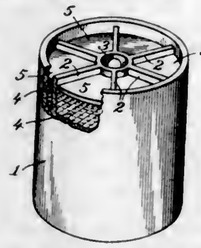
3. In a car fender mechanism, in combination with an adjustable car fender section, a swingingly supported operating arm connected at its free end portion with said section, said arm being composed of articulated sections, releasable means on said arm for holding the outer section of said arm for bodily movement by and in a common direction with the inner section of said arm, and operating means for said arm connected with the inner section of the latter.

4. In a car fender mechanism, in combination with an adjustable car fender section, a swingingly supported operating arm connected at its free end portion with said section, said arm being composed of articulated sections, releasable means for holding the outer section of said arm for movement with the inner arm section in one direction by movement of said inner arm section, and permitting independent downward movement of said outer arm section by said car fender section.

5. In a car fender mechanism, in combination with an adjustable car fender section, a pivotally supported operating arm connected with said section, said arm being composed of articulated sections, and a releasable member movably supported on one section of said arm and engaging the other section thereof for connecting the last named section for movement by the former in one direction but which when disengaged will permit of independent movement of the other section in the same direction.

[Claims 6 and 7 not printed in the Gazette.]

1,061,439. PACKAGE FOR MATERIALS LIABLE TO BE INJURED BY EXPOSURE. WALTER ALEXANDER, New York, N. Y., assignor to National Gum & Mica Company, New York, N. Y., a Corporation of New York. Continuation of application Serial No. 641,043, filed July 28, 1911. This application filed Sept. 26, 1912. Serial No. 722,401. (Cl. 91—67.1.)



1. A receptacle for substances which deteriorate by exposure, comprising a molded glass jar, having substantially vertical walls and being divided into several compartments by vertical radially disposed partitions, molded integrally in the jar, each of said compartments being adapted to be sealed when filled with the substance for which the receptacle is intended, and a removable cover adapted to close the entire top of the receptacle.

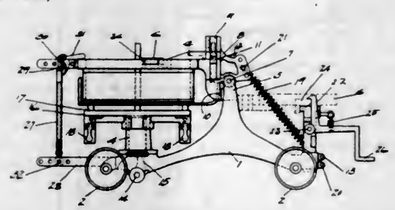
2. A paste package comprising a receptacle having a vertical partition therein dividing the receptacle into a plurality of compartments, at least two of which are filled with paste, said filled compartments being independently and separately sealed, and a removable cover adapted to close the entire top of the receptacle.

3. A paste package comprising a receptacle having a central brush well and a plurality of partitions radiating therefrom and dividing said receptacle into a plurality of cells filled with paste, a similar number of layers of suitable sealing material, each sealing one of said cells.

4. A paste package comprising a receptacle having a central brush well and a plurality of partitions radiating therefrom and dividing said receptacle into a plurality of cells filled with paste, a corresponding number of layers of suitable sealing material, each of which independently seals one of said filled cells, and a removable cover for the receptacle sealing the same as a unit but not sealing said cells or said brush well with respect to each other.

5. A paste package comprising a receptacle having a central brush well and a plurality of partitions radiating therefrom and dividing said receptacle into a plurality of cells filled with paste, each of said cells being separately sealed, said receptacle comprising a glass jar having substantially vertical walls, the central brush well and radial partitions being molded as an integral part of said jar.

1,061,440. MOLD-MAKING MACHINE. HARRY R. ATWATER, Cleveland, Ohio, assignor to The Osborn Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 19, 1910. Serial No. 587,815. (Cl. 22—33.)



1. In a machine of the character described, the combination of a stand; an oscillatorily supported pattern carrier adapted in one position to rest upon said stand, said carrier being adapted to receive the flask to be filled; springs connected with said carrier and adapted to raise the same with a flask when unfilled but not when filled; an automatically operative catch mounted on said stand and adapted to secure said carrier in position thereon against the action of said springs; resilient means rendering said catch thus operative; and a treadle for releasing said catch.

2. In a machine of the character described, the combination of a filling stand and a parting stand; a carrier for the pattern and flask oscillatorily supported on a transverse axis between said stands and adapted in one position to rest upon said filling stand and in another position to extend horizontally over said parting stand with such flask resting thereon; resilient means connected with said carrier and adapted to raise the same with a flask when unfilled but not when filled; a strut adapted to engage the outer, or free, end of said carrier and support the same in its horizontal position over the parting stand; and retaining means adapted to detachably secure said carrier in such other position upon said filling stand against the action of said resilient means.

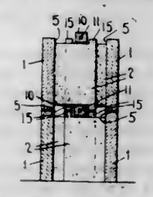
3. In a machine of the character described, the combination of a filing stand and a parting stand, the latter being vertically reciprocable to withdraw the mold from the pattern; a member oscillatorily supported on a transverse axis between said stands; a pattern carrier adjustably secured to said member and adapted in one position to rest upon said filling stand and in another position to extend horizontally over said parting stand; means tending to raise said carrier from such positions; and catches respectively adapted to detachably secure said carrier in each of said positions, the catch associated with the parting stand being vertically adjustable to correspond with the adjusted position of said carrier on said member.

4. In a machine of the character described, the combination of a filling stand and a parting stand, the latter being vertically reciprocable to withdraw the mold from the pattern; a member oscillatorily supported on a transverse axis between said stands; a carrier for the pattern and flask adjustably secured to said member and adapted in one position to rest upon said filling stand and in another position to extend horizontally over said parting stand with such flask resting thereon; resilient means connected with said carrier tending to raise the same with a flask when unfilled but not when filled; and catches respectively adapted to detachably secure said carrier in each of said positions, the catch associated with the parting stand being vertically adjustable to correspond with the adjusted position of said carrier on said member.

5. In a machine of the character described, the combination of a filling stand and a parting stand, the latter being vertically reciprocable to withdraw the mold from the pattern; a member oscillatorily supported on a transverse axis between said stands; a pattern carrier adjustably secured to said member and adapted in one position to rest upon said filling stand and in another position to extend horizontally over said parting stand; and an adjustable strut adapted to engage said carrier and support the same in such last-named position.

[Claim 6 not printed in the Gazette.]

1,061,441. REINFORCED BLOCK WALL. JOHN SCOTT BANKS, Portsmouth, Va. Filed Feb. 29, 1912. Serial No. 680,644. (Cl. 72—39.)

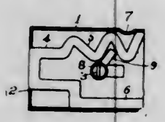


1. The herein described building block comprising a substantially right-angular body having greater height than thickness, and a plurality of fingers projecting integrally

fron one of its faces and also having greater height than thickness, the height of the fingers being less than that of the body so as to leave shoulders on the face of the latter above and below the fingers, for the purpose set forth, and lugs at the outer end of each finger respectively rising from its upper edge and depending from its lower edge a distance equal to the upright dimension of said shoulders so that the outer end of the finger shall have an upright dimension equal to that of the body, all as and for the purpose set forth.

2. In a reinforced wall structure, the combination with two separated thicknesses of blocks laid in opposite rows, each block consisting of a flattened right angular body standing on edge, a series of integral upright fingers projecting from said body toward the blocks in the opposite row and lapping the fingers thereof, all fingers being also flattened, tapered laterally and of less upright dimension that said bodies so as to leave shoulders on the latter above and below the fingers, and lugs projecting both upward and downward from the fingers at their outer thinner ends and having the same upright dimensions as said shoulders; and for each pair of rows of blocks a reinforced concrete bar of rectangular cross section disposed between their bodies, resting on the upper edges of their fingers and having an upright dimension twice that of said shoulders, for the purpose set forth.

1,061,442. LOCK. EDGAR W. BASSICK, Bridgeport, Conn. Filed Aug. 6, 1912. Serial No. 713,545. (Cl. 70—78.)



1. In a lock, the combination with a flat sheet metal casing having one side dented inwardly, a skeleton bolt formed of spring metal having a nose portion and distended rear legs all in the same plane, one leg being straight and lying snugly against the wall of the casing while the other leg is sinuous and normally engages the casing at opposite sides of said dented portion.

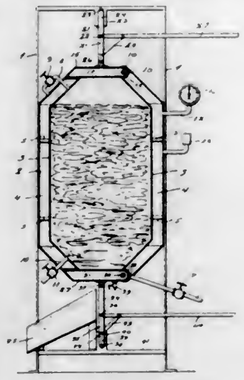
2. A lock, comprising a casing and a key post with an indentation formed at one side of said casing, a skeleton bolt made of flattened wire and comprising a nose portion adapted to be projected and retracted through a suitable opening in the casing, distended rearwardly projecting legs one of which is straight and lies snugly against one wall of the casing while the other leg is sinuous and normally engages said casing on opposite sides of said indentation, and a suitable key engaging said post and having a plain bit adapted to operate against bent portions of the sinuous leg for the purpose of projecting and retracting the bolt.

1,061,443. PROCESS OF DESTROYING INSECTS AND THEIR EGGS. JOSEPH W. BLOSSER, Atlanta, Ga. Filed July 8, 1912. Serial No. 708,327. (Cl. 167—6.)

1. The process of treating organic material to destroy animal life present therein, which consists in inclosing the material to be treated within a chamber, subjecting it to the action of steam under pressure in excess of atmospheric pressure, and suddenly releasing the pressure within the chamber.

2. The process of treating organic material to destroy animal life present therein, which consists in subjecting the material to be treated to the action of heat, then to the action of steam at a pressure exceeding atmospheric pressure, and suddenly releasing the pressure within the chamber to explosively eject the contents thereof.

3. The process of treating organic material to destroy animal life present therein, which consists in inclosing the material to be treated within a chamber, passing steam under pressure exceeding atmospheric pressure into said chamber, simultaneously permitting the escape of air from an outlet located at a point distant from the steam inlet, closing said outlet after the escape of the greater portion of the air within said chamber, subjecting the contents of the chamber to the action of steam under pressure exceeding atmospheric pressure, and suddenly releasing the pressure within the said chamber.

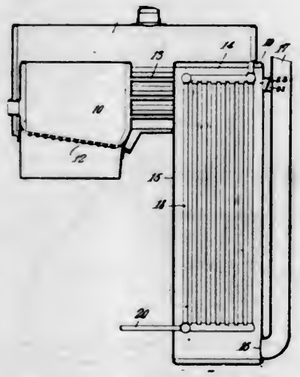


4. The process of treating organic material to destroy animal life present therein, which consists in inclosing the material to be treated within a chamber, passing steam under pressure exceeding atmospheric pressure into the upper portion of said chamber, simultaneously permitting the escape of air from the lower portion of such chamber, closing the air outlet after the escape of the greater portion of the air contained within said chamber, subjecting the contents of the chamber to the action of the steam until the said contents are of approximately the temperature of the steam, and suddenly releasing the pressure within the chamber to explosively eject the contents thereof.

5. The process of treating vegetable matter to destroy insects and their eggs present therein, which consists in heating the vegetable matter in a normally closed chamber, then injecting steam at a pressure exceeding atmospheric pressure into the closed chamber and suddenly forming a relatively large opening in the chamber, whereby the pressure is released and the vegetable matter is explosively ejected from said chamber.

[Claims 6 and 7 not printed in the Gazette.]

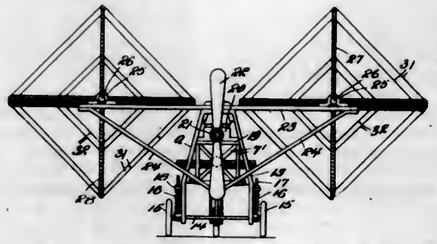
1,061,444. BOILER AND ECONOMIZER. PETER WILLIAM BRITTS, Arleta, Oreg. Filed June 11, 1908. Serial No. 438,001. (Cl. 122—420.)



1. A boiler and economizer, comprising a fire box including grate bars, a horizontally extending smoke chamber, a boiler, a feed water heater in the smoke chamber having its upper end disposed above the plane of the grate bars and below the plane of the boiler crown sheet, a horizontal smoke stack adjacent said smoke chamber, a connection between said smoke chamber and said smoke stack below the lower end of said feed water heater, a by-pass leading from said smoke chamber to said smoke stack adjacent the upper end of said feed water heater, means for controlling passage through the said by-pass, a feed water pipe communicating with the lowest point of the feed water heater, and a pipe connecting the top of said feed water heater to the said boiler.

2. The combination with a horizontal boiler, a horizontal fire box, vertical smoke chamber and vertical smoke stack, of a feed water heater located in said smoke chamber, the upper end of which lies above the fire grate of the fire box and below the plane of the crown sheet of the boiler, communication between the lower end of said smoke chamber and said smoke stack, said communication lying below the lower end of said feed water heater, a by-pass leading from a point adjacent to the upper end of the feed water chamber to the stack, means for controlling passage through said by-pass, said feed water pipe communicating with the lowest point of the feed water heater, and an upwardly extending pipe connecting the top of said feed water heater to the said boiler.

1,061,445. AIRSHIP. CARL DRYDEN BROWNE, Hot Springs township, Napa county, Cal. Filed Jan. 7, 1911. Serial No. 601,484. (Cl. 244—14.)



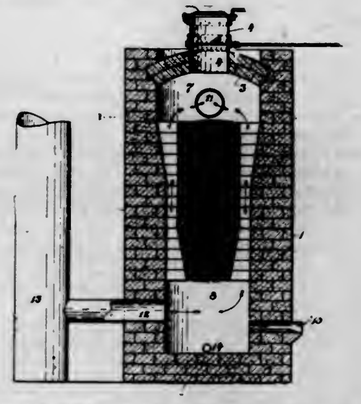
1. A flying machine comprising a main frame, a pair of transverse beams supported upon the main frame at right angles thereto and extending laterally beyond the same, bearings upon the extended ends of the beams, longitudinally extending shafts journaled in said bearings in parallel relation to each other and equidistantly from the longitudinal center of the main frame, and a supporting surface carried by each shaft and fixed thereto to freely revolve therewith, each surface embodying pairs of diametrically opposed planes arranged at right angles to each other.

2. A flying machine comprising a main frame, a longitudinally extending motor driven shaft mounted upon said frame, a tractor propeller carried by said shaft, a pair of transverse horizontal beams mounted in parallel relation upon the main frame above the level of the propeller shaft and extending beyond the sides of the main frame, bearings upon the extended ends of the beams, longitudinally extending shafts journaled in said bearings in substantially parallel relation to each other and above the horizontal plane of and on opposite sides of the vertical line of the motor shaft, and supporting surfaces carried by said longitudinally extending shafts, each of said surfaces consisting of diametrically opposed pairs of planes fixed to and revoluble freely with the shaft and arranged at right angles to each other.

1,061,446. METALLURGICAL APPARATUS. WILLIAM BRYANT, Massillon, Ohio. Filed Jan. 17, 1912. Serial No. 671,681. (Cl. 75—62.)

1. A metallurgical furnace including a mixing chamber above, a refining chamber below, and an intervening smelting chamber, there being channels in the wall of the smelting chamber in open communication with all the chambers.

2. A metallurgical furnace including a mixing chamber above, a refining chamber below, and an intervening smelting chamber, there being a series of spaced radial ribs in the wall of the smelting chamber forming a series of channels communicating with the upper and lower chambers.



3. A metallurgical furnace including a mixing chamber above, a refining chamber below, and an intervening smelting chamber, there being a series of spaced radial ribs in the wall of the smelting chamber forming a series of channels communicating with the upper and lower chambers, the edges of the lower portions of the ribs being beveled to form a bosh.

4. A metallurgical furnace including a mixing chamber above, a refining chamber below, and an intervening smelting chamber, there being a series of spaced radial ribs in the wall of the smelting chamber forming a series of channels communicating with the upper and lower chambers, the wall of the smelting chamber being tapered from a larger upper end to a smaller middle portion.

5. A metallurgical furnace including a mixing chamber above, a refining chamber below, and an intervening smelting chamber, there being a series of spaced radial ribs in the wall of the smelting chamber forming a series of channels communicating with the upper and lower chambers, and there being an air tube opening into the upper chamber and an outlet flue leading from the lower chamber.

1,061,447. METHOD OF OBTAINING ZINC OXID AND SINTER FROM ALLOYS CONTAINING ZINC. HARVEY M. BURKEY, Newark, N. J., assignor to Metallurgical Company of America, New York, N. Y., a Corporation of New Jersey. Filed Feb. 29, 1912. Serial No. 680,710. (Cl. 75—153.)

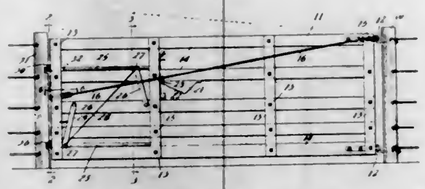
1. The method of recovering zinc from turnings and other waste metal alloys containing it, which consists in mixing the turnings or the like with fine coal, and igniting and blowing the mixture under temperature conditions which will volatilize and oxidize the zinc; and which will leave a residual sinter, and recovering the zinc as zinc oxid; substantially as described.

2. The method of recovering zinc from brass turnings and other waste brass, which consists in mixing the brass turnings or the like with fine coal, and igniting and blowing the mixture under temperature conditions which will volatilize and oxidize the zinc, and which will leave a residual copper sinter, and recovering the zinc as zinc oxid; substantially as described.

1,061,448. GATE. JAMES CARROLL, Pittsfield, Ill. Filed Nov. 6, 1911. Serial No. 658,645. (Cl. 39—18.)

1. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other,

said gate being hingedly mounted on the hinge post, a loop-formed flexible brace member diagonally arranged on the gate, a portion of the loop being on each side of the members of the gate, said loop being adjustably attached at one end to one of the uprights of the gate, and means for deflecting the loop at a point intermediate its ends whereby the distance between the diagonally disposed corners of the gate is varied, said means being located intermediate the upper and lower cross bars, substantially as specified.



2. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other, said gate being hingedly mounted on the hinge post, a loop formed brace member diagonally arranged on the gate, said loop being adjustably attached at one end to one of the uprights of the gate, and means for adjustably deflecting the loop at a point intermediate its ends thereof, said means being located intermediate the upper and lower cross bars, substantially as specified.

3. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other, said gate being hingedly mounted on the hinge post, a flexible loop brace member diagonally arranged on the gate, an anchoring member provided with noteches mounted at one end of the gate, one end of said loop member being adjustably attached to said anchoring member by means of said notches, and means for deflecting the bracing member at a point intermediate its ends, substantially as specified.

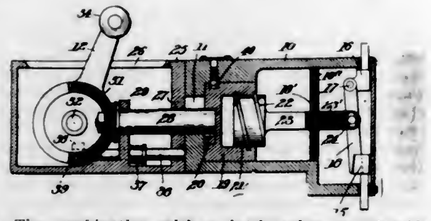
4. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other, said gate being hingedly mounted on the hinge post, a flexible loop brace member diagonally arranged on the gate, an anchoring member provided with notches mounted at one end of the gate, one end of said loop member being adjustably attached to said anchoring member by means of said notches, means for adjustably deflecting the loop at a point intermediate its ends, whereby the distance between the ends of the loop and the diagonally disposed corners of the gate is varied and the free end of the gate adjustably raised or lowered, said means for adjustably deflecting the intermediate portion of the loop member comprising a stepped or notched member attached to one of the cross bars, and a bail slidably mounted on said loop and adapted to be retained at different notches on the stepped member, substantially as specified.

5. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other, said gate being hingedly mounted on the hinge post, a flexible loop bracing member extending on opposite sides of said gate and diagonally arranged thereon, said loop being adjustably attached to an anchoring member at one end, said anchoring member comprising a slotted portion having notches therein and a T-shaped end, and slidably mounted between a pair of uprights, and means for adjustably deflecting the loop at a point intermediate its ends, said means comprising a triangular stepped piece mounted on one of the cross bars of the gate, and a bail slidably mounted on the loop and adapted to be adjusted on the steps of the triangular member, substantially as specified.

[Claim 6 not printed in the Gazette.]

1,061,449. DOOR-LOCK. SAMUEL HERBERT CLARKE, Richmond, Va. Filed Apr. 13, 1911. Serial No. 620,959. (Cl. 187—31.)

1. The combination with a latch-casing, a rotatable latch-bolt in the casing, and means for operating the latch-bolt; of a keeper-casing provided with an opening in one end to receive the latch-bolt, a switch mechanism mounted in the keeper-casing, a rotatable member mounted in the keeper-casing and provided on its side adjacent the opening of the casing with a recess to receive the outer end of the latch-bolt and on its opposite side having a screw threaded socket, and a bar connected to the switch and provided with a threaded head having working fit in the screw threaded socket of the rotatable member so that upon rotation of the latter under the influence of the aforesaid latch bolt operating means the switch may be opened or closed.



2. The combination with a latch-casing, a rotatable latch-bolt, and means for operating the latch-bolt, of a keeper-casing provided with an opening in one end to receive the latch-bolt, a switch mechanism in the keeper-casing, a rotatable member mounted in the keeper-casing for engagement by the latch-bolt, the aforesaid operating means being capable of effecting rotation of the rotatable member when the latch bolt is in engagement with the latter and rotated in the same direction as the latch bolt and an operative connection between the rotatable member and said switch mechanism to operate the latter upon rotation of the rotatable member.

3. The combination with a latch-casing, a rotatable latch-bolt provided at its outer end with a lateral projection, and means for operating the latch-bolt, of a keeper-casing provided with an opening in one end to receive the latch-bolt, a rotatable member mounted in the keeper casing adjacent said opening and on its side adjacent the opening having a socket adapted to be thrown into and out of alinement with said opening, said socket being adapted to receive the lateral projection of the latch-bolt and the rotatable member being rotatable under the influence of the latch-bolt and in the same direction of rotation as the latch-bolt when the latter is turned, and a switch mechanism connected with the rotatable member and operable when the rotatable member is rotated.

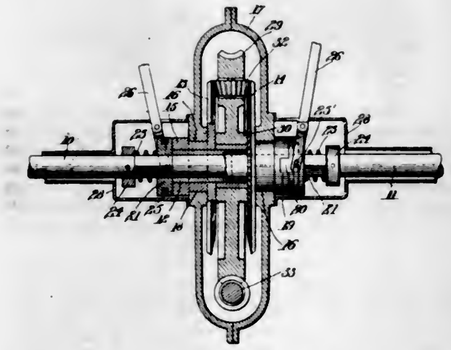
4. The combination with a latch-casing, a latch-bolt in said casing, and means for rotating the latch-bolt, of a keeper-casing provided with an opening to receive the latch-bolt, a rotatable member in the keeper-casing adapted to be engaged by the latch-bolt when the latter has entered the keeper casing and to have operative connection therewith to rotate it axially, a switch mechanism, means connecting the switch mechanism and the rotatable member for operating the former when the latter is rotated, and means for preventing rotation of the bolt prior to its operative connection with said rotatable member.

5. In a lock for elevator doors, a keeper-casing, a switch mechanism in said casing, a rotatable member in the casing and operatively connected to the switch mechanism, a latch casing, a latch-bolt in the latch-casing, means for operatively connecting the latch-bolt with said rotatable member, means for preventing rotation of the bolt prior to its operative connection with the rotatable member, and means for detachably securing the bolt and rotatable member against rotation after the lock is in operative locked condition.

[Claims 6 to 16 not printed in the Gazette.]

1,061,450. DIFFERENTIAL MECHANISM. ARTHUR COLEMAN, Higgins, Tex. Filed Sept. 5, 1912. Serial No. 718,746. (Cl. 74—34.)

1. The combination of a casing, an axle composed of sections whose inner ends project into and abut within said casing, each axle having a squared portion adjacent its inner end, a sleeve projecting through said casing and embracing the inner ends of the axle sections between their squared portions to couple the inner ends of the axle sections together, a second sleeve which is mounted within said casing and which embraces said first-mentioned sleeve intermediate the ends of the latter, beveled gears confined within the casing fitted loosely on the first-named sleeve and engaging the ends of the second-mentioned sleeve each of said gears being provided with a hub projecting through said casing, each hub having a notch in its outer end, a worm gear in the casing journaled on the second-mentioned sleeve and provided with openings, beveled gears mounted in the openings of the worm gear and adapted to mesh with the first-named gears, a worm shaft projecting into said casing and having constant mesh therein with said worm gear, clutch members mounted on the squared portions of the axle sections and provided each with a lug adapted to fit in the notch of the corresponding hub of the first-named gears to operatively connect the gears to the axle, collars secured on the axle sections, springs between said collars, and the clutch members to hold them normally in operative relation with the hubs of the first-named gears, levers having connection with said clutch members to shift the latter out of operative relation with the hubs of the first named gears so as to disconnect the gear mechanism from operative connection with the axle to permit coasting with all of said gears constantly in mesh, and casings embracing said collars and said clutch members and into which said operating levers project.



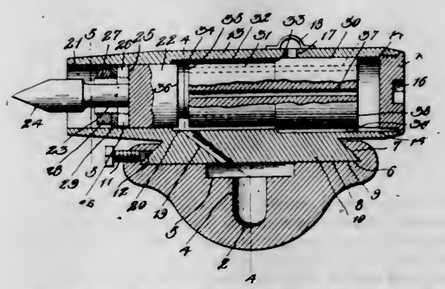
2. The combination of a casing, axle sections whose inner ends project into the casing and abut therein, each axle section having a squared portion adjacent its inner end, a sleeve projecting through said casing and embracing the inner ends of the axle sections between said squared portions to couple the inner ends of the axle sections together, a second sleeve which is mounted within said casing and which embraces said first-mentioned sleeve intermediate the ends of the latter, beveled gears in the casing fitted loosely on the first-named sleeve and engaging the ends of the second-mentioned sleeve each of said gears being provided with a hub projecting through said casing, each hub having a notch in its outer end, a worm gear in the casing journaled on the second-mentioned sleeve and provided with openings, beveled gears mounted in the openings of the worm gear and adapted to mesh constantly with the first-named gears, a worm shaft having constant mesh with said worm gear, clutch members mounted on the squared portions of the axle sections and provided each with a lug adapted to fit normally in the notch of the corresponding hub of the first-named gears to operatively connect the gears to the axle, and levers having connection with said clutch members to shift the latter out of operative relation with the hubs of the first-named gears so as to disconnect the gear mechanism from operative connection with the axle to permit coasting with all of said gears constantly in mesh.

3. The combination of a casing, axle sections whose inner ends abut within the casing, beveled gears mounted within the casing, a worm gear mounted within the casing between said beveled gears, beveled pinions carried thereby which mesh with the aforesaid beveled gears, the worm gear and the beveled gears being mounted loosely on said axle sections, a worm shaft projecting into said casing and meshing with the worm gear to operate the latter and drive the beveled gears, the beveled gears having hubs projecting through said casing, and clutch members arranged for sliding movement on the axle sections into direct engagement with said hubs and out of engagement therewith to respectively connect the gears to the axle sections and to disconnect the same therefrom.

4. The combination of a casing, axle sections whose inner ends abut within the casing, a sleeve embracing the abutting ends of the axle sections, beveled gears mounted loosely on said sleeve within said casing and each being provided with a hub which projects through the casing, a sleeve mounted on the first-named sleeve between said beveled gears, a worm gear mounted on the second sleeve between said beveled gears, beveled pinions carried thereby adapted to mesh with the beveled gears to drive the latter, a worm shaft projecting into the casing and having constant mesh with said worm gear to drive the latter, and clutch mechanism arranged adjacent the casing for direct engagement with the hubs of the beveled gears to connect and disconnect the gear mechanism from said axle sections, the worm shaft being in constant mesh with the worm gear whether the clutch members connect or disconnect the gear mechanism and said axle sections.

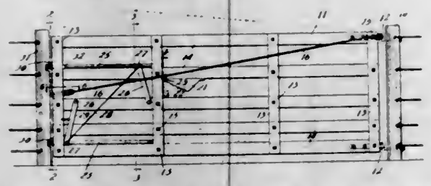
5. The combination of a casing, axle sections whose ends extend into the casing, a sleeve embracing the inner ends of the axle sections, beveled gears mounted on said sleeve within the casing, a worm gear mounted within the casing between said beveled gears, beveled pinions carried thereby which mesh with the aforesaid beveled gears to drive the latter, a worm shaft projecting into the casing and having constant mesh with said worm gear to drive the latter, and clutch mechanism arranged for direct engagement with said beveled gears to connect and disconnect the gear mechanism from said axle sections with the worm shaft in constant mesh with the worm gear whether the clutch mechanisms connect or disconnect the gear mechanism and said axle sections.

1,061,451. DRILL-SUPPORTING MECHANISM. WILLIAM R. COLLINS, Chicago, Ill. Filed Apr. 8, 1912. Serial No. 689,412. (Cl. 125—14.)



1. In a device of the character described, a bed plate having an air passage formed therein and provided in its upper face with a dove tail groove, a drill carrier fitted within the said groove, a plurality of cylinders formed as an integral part of and supported by the carrier, the several cylinders each having an inlet port and an exhaust port, the upper face of the bed plate is provided with a feed chamber, means to clamp the carrier upon the bed plate to form an air-tight joint, an air channel leading from the air passage to the feed chamber, branched channels leading from the chamber to the inlet ports of the cylinders, and a tool bearing piston in each of the cylinders.

said gate being hingedly mounted on the hinge post, a loop-formed flexible brace member diagonally arranged on the gate, a portion of the loop being on each side of the members of the gate, said loop being adjustably attached at one end to one of the uprights of the gate, and means for deflecting the loop at a point intermediate its ends whereby the distance between the diagonally disposed corners of the gate is varied, said means being located intermediate the upper and lower cross bars, substantially as specified.



2. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other, said gate being hingedly mounted on the hinge post, a loop formed brace member diagonally arranged on the gate, said loop being adjustably attached at one end to one of the uprights of the gate, and means for adjustably deflecting the loop at a point intermediate its ends thereof, said means being located intermediate the upper and lower cross bars, substantially as specified.

3. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other, said gate being hingedly mounted on the hinge post, a flexible loop brace member diagonally arranged on the gate, an anchoring member provided with notches mounted at one end of the gate, one end of said loop member being adjustably attached to said anchoring member by means of said notches, and means for deflecting the bracing member at a point intermediate its ends, substantially as specified.

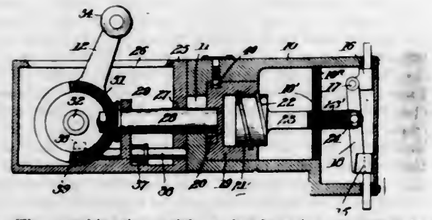
4. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other, said gate being hingedly mounted on the hinge post, a flexible loop brace member diagonally arranged on the gate, an anchoring member provided with notches mounted at one end of the gate, one end of said loop member being adjustably attached to said anchoring member by means of said notches, means for adjustably deflecting the loop at a point intermediate its ends, whereby the distance between the ends of the loop and the diagonally disposed corners of the gate is varied and the free end of the gate adjustably raised or lowered, said means for adjustably deflecting the intermediate portion of the loop member comprising a stepped or notched member attached to one of the cross bars, and a bail slidably mounted on said loop and adapted to be retained at different notches on the stepped member, substantially as specified.

5. The combination of a hinge post, a gate composed of uprights and cross bars pivotally connected to each other, said gate being hingedly mounted on the hinge post, a flexible loop bracing member extending on opposite sides of said gate and diagonally arranged thereon, said loop being adjustably attached to an anchoring member at one end, said anchoring member comprising a slotted portion having notches therein and a T-shaped end, and slidably mounted between a pair of uprights, and means for adjustably deflecting the loop at a point intermediate its ends, said means comprising a triangular stepped piece mounted on one of the cross bars of the gate, and a bail slidably mounted on the loop and adapted to be adjusted on the steps of the triangular member, substantially as specified.

[Claim 6 not printed in the Gazette.]

1,061,449. DOOR-LOCK. SAMUEL HERBERT CLARKE, Richmond, Va. Filed Apr. 13, 1911. Serial No. 620,959. (Cl. 187—31.)

1. The combination with a latch-casing, a rotatable latch-bolt in the casing, and means for operating the latch-bolt; of a keeper-casing provided with an opening in one end to receive the latch-bolt, a switch mechanism mounted in the keeper-casing, a rotatable member mounted in the keeper-casing and provided on its side adjacent the opening of the casing with a recess to receive the outer end of the latch-bolt and on its opposite side having a screw threaded socket, and a bar connected to the switch and provided with a threaded head having working fit in the screw threaded socket of the rotatable member so that upon rotation of the latter under the influence of the aforesaid latch bolt operating means the switch may be opened or closed.



2. The combination with a latch-casing, a rotatable latch-bolt, and means for operating the latch-bolt, of a keeper-casing provided with an opening in one end to receive the latch-bolt, a switch mechanism in the keeper-casing, a rotatable member mounted in the keeper-casing for engagement by the latch-bolt, the aforesaid operating means being capable of effecting rotation of the rotatable member when the latch bolt is in engagement with the latter and rotated in the same direction as the latch bolt and an operative connection between the rotatable member and said switch mechanism to operate the latter upon rotation of the rotatable member.

3. The combination with a latch-casing, a rotatable latch-bolt provided at its outer end with a lateral projection, and means for operating the latch-bolt, of a keeper-casing provided with an opening in one end to receive the latch-bolt, a rotatable member mounted in the keeper casing adjacent said opening and on its side adjacent the opening having a socket adapted to be thrown into and out of alinement with said opening, said socket being adapted to receive the lateral projection of the latch-bolt and the rotatable member being rotatable under the influence of the latch-bolt and in the same direction of rotation as the latch-bolt when the latter is turned, and a switch mechanism connected with the rotatable member and operable when the rotatable member is rotated.

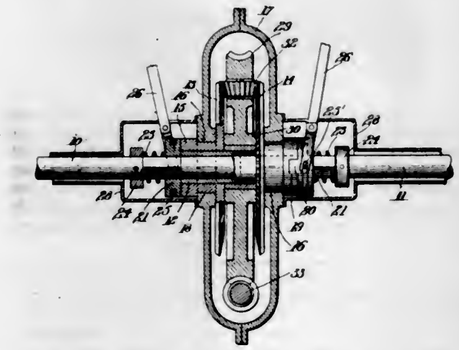
4. The combination with a latch-casing, a latch-bolt in said casing, and means for rotating the latch-bolt, of a keeper-casing provided with an opening to receive the latch-bolt, a rotatable member in the keeper-casing adapted to be engaged by the latch-bolt when the latter has entered the keeper casing and to have operative connection therewith to rotate it axially, a switch mechanism, means connecting the switch mechanism and the rotatable member for operating the former when the latter is rotated, and means for preventing rotation of the bolt prior to its operative connection with said rotatable member.

5. In a lock for elevator doors, a keeper-casing, a switch mechanism in said casing, a rotatable member in the casing and operatively connected to the switch mechanism, a latch casing, a latch-bolt in the latch-casing, means for operatively connecting the latch-bolt with said rotatable member, means for preventing rotation of the bolt prior to its operative connection with the rotatable member, and means for detachably securing the bolt and rotatable member against rotation after the lock is in operative locked condition.

[Claims 6 to 16 not printed in the Gazette.]

1,061,450. DIFFERENTIAL MECHANISM. ARTHUR COLEMAN, Higgins, Tex. Filed Sept. 5, 1912. Serial No. 718,746. (Cl. 74—34.)

1. The combination of a casing, an axle composed of sections whose inner ends project into and abut within said casing, each axle having a squared portion adjacent its inner end, a sleeve projecting through said casing and embracing the inner ends of the axle sections between their squared portions to couple the inner ends of the axle sections together, a second sleeve which is mounted within said casing and which embraces said first-mentioned sleeve intermediate the ends of the latter, beveled gears confined within the casing fitted loosely on the first-named sleeve and engaging the ends of the second-mentioned sleeve each of said gears being provided with a hub projecting through said casing, each hub having a notch in its outer end, a worm gear in the casing journaled on the second-mentioned sleeve and provided with openings, beveled gears mounted in the openings of the worm gear and adapted to mesh with the first-named gears, a worm shaft projecting into said casing and having constant mesh therein with said worm gear, clutch members mounted on the squared portions of the axle sections and provided each with a lug adapted to fit in the notch of the corresponding hub of the first-named gears to operatively connect the gears to the axle, collars secured on the axle sections, springs between said collars, and the clutch members to hold them normally in operative relation with the hubs of the first-named gears, levers having connection with said clutch members to shift the latter out of operative relation with the hubs of the first named gears so as to disconnect the gear mechanism from operative connection with the axle to permit coasting with all of said gears constantly in mesh, and casings embracing said collars and said clutch members and into which said operating levers project.



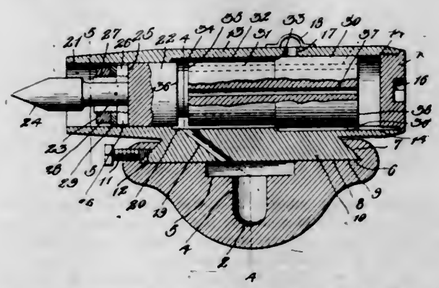
2. The combination of a casing, axle sections whose inner ends project into the casing and abut therein, each axle section having a squared portion adjacent its inner end, a sleeve projecting through said casing and embracing the inner ends of the axle sections between said squared portions to couple the inner ends of the axle sections together, a second sleeve which is mounted within said casing and which embraces said first-mentioned sleeve intermediate the ends of the latter, beveled gears in the casing fitted loosely on the first-named sleeve and engaging the ends of the second-mentioned sleeve each of said gears being provided with a hub projecting through said casing, each hub having a notch in its outer end, a worm gear in the casing journaled on the second-mentioned sleeve and provided with openings, beveled gears mounted in the openings of the worm gear and adapted to mesh constantly with the first-named gears, a worm shaft having constant mesh with said worm gear, clutch members mounted on the squared portions of the axle sections and provided each with a lug adapted to fit normally in the notch of the corresponding hub of the first-named gears to operatively connect the gears to the axle, and levers having connection with said clutch members to shift the latter out of operative relation with the hubs of the first-named gears so as to disconnect the gear mechanism from operative connection with the axle to permit coasting with all of said gears constantly in mesh.

3. The combination of a casing, axle sections whose inner ends abut within the casing, beveled gears mounted within the casing, a worm gear mounted within the casing between said beveled gears, beveled pinions carried thereby which mesh with the aforesaid beveled gears, the worm gear and the beveled gears being mounted loosely on said axle sections, a worm shaft projecting into said casing and meshing with the worm gear to operate the latter and drive the beveled gears, the beveled gears having hubs projecting through said casing, and clutch members arranged for sliding movement on the axle sections into direct engagement with said hubs and out of engagement therewith to respectively connect the gears to the axle sections and to disconnect the same therefrom.

4. The combination of a casing, axle sections whose inner ends abut within the casing, a sleeve embracing the abutting ends of the axle sections, beveled gears mounted loosely on said sleeve within said casing and each being provided with a hub which projects through the casing, a sleeve mounted on the first-named sleeve between said beveled gears, a worm gear mounted on the second sleeve between said beveled gears, beveled pinions carried thereby adapted to mesh with the beveled gears to drive the latter, a worm shaft projecting into the casing and having constant mesh with said worm gear to drive the latter, and clutch mechanism arranged adjacent the casing for direct engagement with the hubs of the beveled gears to connect and disconnect the gear mechanism from said axle sections, the worm shaft being in constant mesh with the worm gear whether the clutch members connect or disconnect the gear mechanism and said axle sections.

5. The combination of a casing, axle sections whose ends extend into the casing, a sleeve embracing the inner ends of the axle sections, beveled gears mounted on said sleeve within the casing, a worm gear mounted within the casing between said beveled gears, beveled pinions carried thereby which mesh with the aforesaid beveled gears to drive the latter, a worm shaft projecting into the casing and having constant mesh with said worm gear to drive the latter, and clutch mechanism arranged for direct engagement with said beveled gears to connect and disconnect the gear mechanism from said axle sections with the worm shaft in constant mesh with the worm gear whether the clutch mechanisms connect or disconnect the gear mechanism and said axle sections.

1,061,451. DRILL-SUPPORTING MECHANISM. WILLIAM R. COLLINS, Chicago, Ill. Filed Apr. 8, 1912. Serial No. 689,412. (Cl. 125—14.)



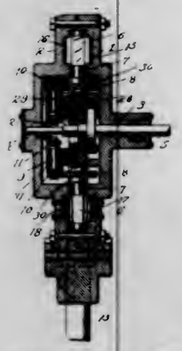
1. In a device of the character described, a bed plate having an air passage formed therein and provided in its upper face with a dove tail groove, a drill carrier fitted within the said groove, a plurality of cylinders formed as an integral part of and supported by the carrier, the several cylinders each having an inlet port and an exhaust port, the upper face of the bed plate is provided with a feed chamber, means to clamp the carrier upon the bed plate to form an air-tight joint, an air channel leading from the air passage to the feed chamber, branched channels leading from the chamber to the inlet ports of the cylinders, and a tool bearing piston in each of the cylinders.

2. In a device of the character described, the combination with a bed plate provided in its upper face with a dove-tail groove, an air passage formed within said bed plate, a drill carrier slidably mounted within said dove-tail groove, a plurality of cylinders supported by the drill carrier, the several cylinders each having an inlet and exhaust port, a feed chamber formed within the upper face of the bed plate and communicating with said air passage, the said bed plate having a plurality of diagonally extending channels communicating with said feed chamber and the several inlet ports of the cylinders, and a tool bearing piston in each of said cylinders.

3. In a device of the character described, a bed plate having an air passage formed therein and provided in its upper face with a dove tail groove, a drill carrier, a tongue formed integrally with said drill carrier and slidably mounted within said groove, a beveled plug adjustably mounted within said bed plate and adapted to engage said tongue, a plurality of cylinders supported by the carrier, the several cylinders each having an inlet port and an exhaust port, means of communication between said air passage and the inlet ports of the several cylinders, and a tool bearing piston in each of said cylinders.

4. In a device of the character described, the combination of a bed plate having a longitudinally extending air passage formed therein and terminating adjacent the central portion thereof, the upper face of said bed plate having a dove tail groove, a drill carrier slidably mounted within said dove-tail groove, a plurality of cylinders supported by said carrier, the several cylinders each having an inlet port and an exhaust port, the upper face of said bed plate having a feed chamber formed therein extending parallel with said dove tail groove, a channel leading from said air passage and communicating with said chamber, branched channels leading from said chamber to the inlet ports of the several cylinders, and a tool bearing piston in each of said cylinders.

1,061,452. ROTARY ENGINE. ARTHUR M. CONDIT, East Orange, N. J. Filed Mar. 27, 1912. Serial No. 686,523. (Cl. 121—87.)



1. In a rotary engine, a stator member and a rotor member, one of said members being provided with a fixed abutment and the other of said members being provided with a blade movable continuously at a uniform speed into and out of position forming an expansion chamber with said fixed abutment.

2. In a rotary engine, the combination with a housing provided with a fixed abutment, of a rotor provided with a rotary blade, and means for continuously rotating said blade with a uniform speed in the same direction during the movement of said rotor.

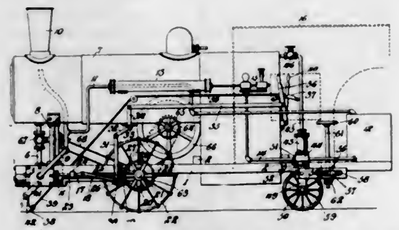
3. In a rotary engine, the combination with a housing provided with annular grooves in opposite walls thereof, of a rotor comprising a disk centrally disposed with respect to said grooves and having blades rotatable about radially disposed axes into and out of positions closing the cross sectional area of said grooves, and means operated by the movement of said rotor for rotating said blades continuously.

4. In a rotary engine, a stator provided with a fixed abutment, a rotor, a blade journaled on an axis extending radially of said rotor, a gear secured to said rotor and a gear mounted on said stator and geared to the gear on said blade whereby said blade is caused to rotate continuously in the same direction by the rotation of said rotor.

5. In a rotary engine, the combination with a rotor housing provided with an annular throughway, of a rotor disk dividing said throughway into two oppositely disposed chambers, adjacently disposed fixed abutments in said chambers, rotary blades journaled on axes extending radially of said disk and in the central plane thereof, gears carried by each of said blades, a gear fixed to said housing, and gearing operatively connecting the blade gears to said fixed gear and adapted to continuously rotate said blades in the same direction when said disk is rotated.

[Claims 6 and 7 not printed in the Gazette.]

1,061,453. TRACTION-ENGINE. OSCAR MCGRUDER COX, Plainview, Tex. Filed May 4, 1910. Serial No. 559,279. (Cl. 21—114.)



1. A traction engine provided with a boiler elongated in the direction of the length of the engine, steering wheels at one end of the traction engine, a traction wheel in substantially the longitudinal center line of the boiler and underneath said boiler and located between the ends of the boiler, and driving engines for the traction wheels located at that end of the boiler and side of the traction wheel remote from the steering wheels.

2. A traction engine provided with a boiler, steering wheels at one end of the traction engine and power engines at the other end of the traction engine, and a traction wheel located in substantially the longitudinal center line of the boiler underneath the same and intermediate of the power engines and steering wheels, said power engines being connected to the traction wheel for driving the same.

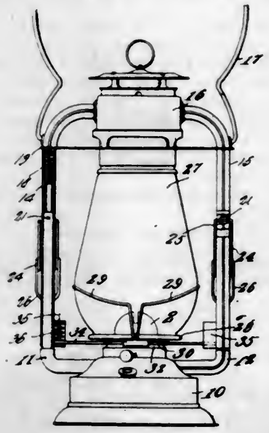
3. A traction engine provided with a supporting frame carrying steering wheels adjacent one end and driving engines adjacent the other end, a traction wheel mounted in substantially the longitudinal center line of the frame between the driving engines and the steering wheels and connected to the engines for actuation thereby, and a boiler elongated in the direction of the length of the frame and supported thereby in overriding relation to the frame above the traction wheel and engine, the boiler extending beyond the traction wheel to substantially that end of the frame carrying the engines.

4. A traction engine provided with a main frame, a driving shaft mounted transversely thereof, a single traction wheel secured to said driving shaft in substantially the center line of the main frame, power engines carried by the front end of the main frame at the sides thereof and directly connected to the driving shaft, and a boiler elongated in the direction of the length of the frame and supported thereon directly above and in overriding relation to the traction wheel and also above the power engines, the traction wheel being located nearer to the middle portion of the traction engine than the power engines.

5. In a traction engine, the combination with a main frame and boiler, a driving shaft mounted on the frame below the boiler and provided with cranks, a traction wheel mounted on the shaft between the cranks and located directly underneath the boiler, and power engines mounted on the frame below the boiler and having their piston rods connected directly to the cranks of the said shaft, the traction engine having other supporting means than the traction wheel in spaced relation to the latter and the boiler and power engines overhanging the traction wheel beyond that side of the latter remote from said other supporting means.

[Claims 6 to 9 not printed in the Gazette.]

1,061,454. LANTERN. ARTHUR D. CRAIG, Lamar, Mo. Filed Feb. 9, 1912. Serial No. 676,626. (Cl. 240—32.)



A lantern, including a hood support having two depending sleeves, a base, two vertical standards carried by the base and telescopically engaging the sleeves, a resilient connection between each sleeve and standard, and two resilient latch members for locking the sleeves and standards against extension.

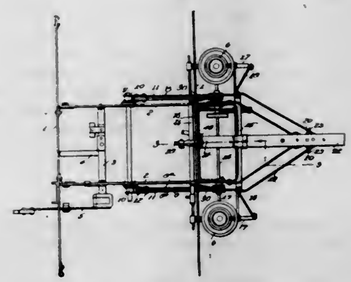
1,061,455. CONCRETE TILE. EDWARD F. CRANE, Newark, N. J. Filed Jan. 9, 1911. Serial No. 601,559. (Cl. 72—18.)



A tile comprising a cementitious body having inwardly beveled edges and a plurality of relatively small and downwardly flared recesses in its underside arranged at right and oblique angles to one another, and an open work reinforcement embedded in the body across the upper ends of said recesses.

1,061,456. PLANTER-FRAME. ALONZO M. CRISMAN, Davenport, Iowa. Filed May 19, 1910. Serial No. 562,116. (Cl. 111—6.)

1. In a planter of the character specified, a main frame, a tongue connected with the front end thereof, an axle journaled transversely in the frame at approximately the center thereof, arms pivoted at one end on the axle at each end of the main frame and outside of the same and extending forwardly, an auxiliary frame secured to the outer ends of the arms, a seed box supported in the auxiliary frame at each end thereof and outside of the main frame, a furrow opener below each seed box, a shaft journaled transversely of the main frame near the front thereof, an arm extending rearwardly from the center of the shaft, a foot plate on the arm, an arm extending forwardly from the shaft at each end thereof, a link connecting each arm with the auxiliary frame, a spring connected at one end with the tongue, a link connected with the other end of the spring, a bracket depending from the foot plate arm, the link passing through the bracket, a nut engaging the link on each side of the bracket, said spring normally holding the auxiliary frame in elevated position, a catch pivoted to the main frame, and having means for engaging the auxiliary frame, and a spring normally pressing the catch into engagement with the auxiliary frame.



2. In a planter of the character specified, a main frame, a tongue connected with the front end thereof, an axle journaled transversely on the frame at approximately the center thereof, arms pivoted at one end on the axle at each end of the main frame and outside of the same and extending forwardly, an auxiliary frame secured to the outer ends of the arms, a seed box supported in the auxiliary frame at each end thereof and outside of the main frame, a furrow opener below each seed box, a shaft journaled transversely of the main frame near the front thereof, an arm extending rearwardly from the center of the shaft, a foot plate on the arm, an arm extending forwardly from the shaft at each end thereof, a link connecting each arm with the auxiliary frame, a spring connected at one end with the tongue, a link connected with the other end of the spring, a bracket depending from the foot plate arm, the link passing through the bracket, a nut engaging the link on each side of the bracket, said spring normally holding the auxiliary frame in elevated position, and means for holding the auxiliary frame in elevated position.

3. In a planter of the character specified, a main frame, a tongue connected with the front end thereof, an axle journaled transversely of the rame, arms pivoted on the axle, an auxiliary frame for supporting the seed boxes and furrow openers secured to the arms, a shaft on the main frame, a foot plate for oscillating the shaft, arms extending forwardly from the shaft, links connecting the arms with the auxiliary frame, a spring for holding the frame in elevated position, and means for regulating the tension of the spring.

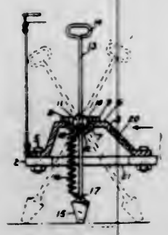
4. In a planter of the character specified, a main frame, a tongue connected with the front end thereof, an axle journaled transversely of the frame, arms pivoted on the axle, an auxiliary frame for supporting the seed boxes and furrow openers secured to the arms, a shaft on the main frame, means for oscillating the shaft, a connection between the shaft and the auxiliary frame for lifting the same when the shaft is oscillated, links pivoted to the front of the auxiliary frame and having a sliding connection with the tongue, a spring for holding the auxiliary frame in elevated position, and means for holding the frame in elevated position.

5. In a planter of the character specified, a main frame, a tongue connected with the front thereof, an axle journaled transversely of the frame, arms pivoted to the axle and extending forwardly, an auxiliary frame on the front ends of the arms for supporting the seed boxes and furrow openers, links pivotally connected with the auxil-

lary frame and having a slidable connection with the tongue, means for lifting said frame vertically, means for holding it in its lifted position, and a spring for holding it in elevated position.

[Claims 6 to 15 not printed in the Gazette.]

1,061,457. SWITCH-THROWING DEVICE. OCTAVE DMEN, Rochester, N. Y. Filed Dec. 16, 1911. Serial No. 666,240. (Cl. 104—171.)



1. In a switch throwing device, a car having a floor, a member having a transparent portion, and formed with an opening adapted to be attached to the floor of the car over the opening formed therein, a socket member having an overhanging shoulder fitting in the opening in said member, said socket member formed with an opening, a ball adapted to rotate in said opening formed with an opening therethrough, a rod fitting in said opening and formed into a handle at one end and into a wedge at the other, and a spring attached at one end to said rod at the wedge end and to said ball at the other end.

2. In a switch throwing device, a ball, a socket in which said ball is adapted to oscillate having an opening into which said ball extends, said ball formed with an opening therethrough, a rod adapted to slide in said opening, means for grasping said rod above the ball, said rod having a wedge below said ball, and resilient means between the ball and the rod adapted to raise the rod after being depressed.

3. In a switch throwing device, a socket member formed with an opening therethrough, a ball formed with an opening therethrough adapted to oscillate in said socket and extending into said first mentioned opening, a rod having means for grasping it at one end and a wedge shaped member at the other slidably mounted in the opening in the ball, resilient means drawing the ball and wedge bearing end of the rod toward each other, means for supporting the socket member, and a transparent member also borne by said means.

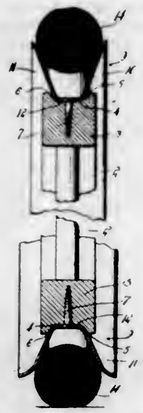
4. In a switch throwing device, a socket member formed with an opening therethrough, a ball formed with an opening therethrough adapted to oscillate in said socket and extending into said first mentioned opening, a rod having means for grasping it at one end and a wedge shaped member at the other slidably mounted in the opening in the ball, resilient means drawing the ball and wedge bearing end of the rod toward each other, means for supporting the socket member.

5. The combination with a car, of a universal fulcrum carried by the car, and a switch rod carried by said fulcrum and adapted to be brought into engagement with a switch.

[Claim 6 not printed in the Gazette.]

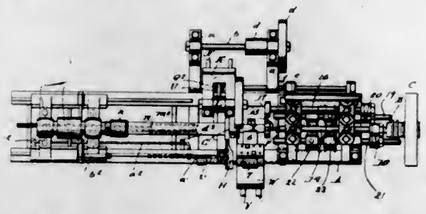
1,061,458. VEHICLE-WHEEL. WILLIAM DOWNHAM, Jr., Philadelphia, Pa. Filed July 1, 1911. Serial No. 636,352. (Cl. 152—1.)

In a wheel the combination with a felly having a circumscribed peripheral channel, of sections secured at spaced distances in said channel and having flared sides, the said sections being of suitable V-shaped form in cross section, the sides of the channel in the felly limiting the spreading of the said flared sides of the said sections, and a tire of circular form in cross section seated



between the sides of said sections and held in position by the latter.

1,061,459. LATHE. HENRY J. DUNCAN, Alpena, Mich. Filed Feb. 3, 1912. Serial No. 675,378. (Cl. 144—14.)



1. A lathe comprising a head stock provided with a rotatable work holder, means for moving said head stock longitudinally inward, a fixed die having means for roughdressing a length of stock, a boring tool arranged at the opposite side of the die, with reference to the work holder, and in alinement with said work holder and die and movable longitudinally, a knife holder movable longitudinally and arranged in alinement with the die and at the opposite side thereof, with reference to the work holder, a knife carried by said holder, transversely movable cutting-off means, a transversely movable slide, tools carried thereby and spaced apart, means for moving the cutting-off means, means for moving the slide, means for moving the boring tool longitudinally inward and outward, and means for moving the knife holder longitudinally inward and outward.

2. In a lathe, the combination of a main frame, rods fixed to and extending laterally from the same, a shaft, a cam thereon, a slide movable on said rods, cutting means carried by said slide, a lever fulcrumed at an intermediate point of its height and having its lower arm arranged to be engaged by said cam, a link connecting the upper arm of the lever with the slide, an abutment fixed with respect to the main frame, a rod connected to the lower arm of the lever and extending through the abutment and having an abutment, and a spring interposed between the fixed abutment and the rod abutment.

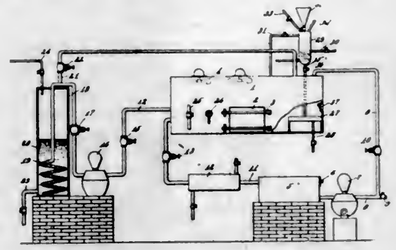
3. The combination in a lathe of a main frame, a drive shaft, a bracket fixed to the main frame, downwardly and inwardly inclined rods fixed to said bracket, a carriage movable inward and downward and upward and outward on said rods, a shaft journaled in said carriage and provided with a band pulley, a cutting-off means fixed on said shaft, a lever fulcrumed at an intermediate point of its height, a link connecting the upper arm of the lever with the carriage, a cam fixed on the drive shaft and arranged to engage the lower arm of the lever, an abutment connected with the bracket, a rod connected with the lower arm of the lever and extending through said abutment and having an abutment of its own, and a spring interposed between the fixed abutment and the rod abutment.

4. In a lathe, the combination of a main frame, rods fixed to and extending laterally from the same, a shaft, a cam thereon, a tool slide movable on said rods, a lever fulcrumed at an intermediate point of its height and having its lower arm arranged to be engaged by said cam, a link connecting the upper arm of the lever with the tool slide, an abutment fixed with respect to the main frame, a rod connected to the lower arm of the lever and extending through the abutment and having an abutment, and a spring interposed between the fixed abutment and the rod abutment.

5. In a lathe, the combination of a main frame, a movable head stock, a ratchet wheel supported on the main frame, means intermediate the head stock and the ratchet wheel for moving the former inward by the latter, a shaft, a lever mounted at an intermediate point of its length on the main frame, means intermediate the shaft and the said lever for oscillating the latter, a pawl pivoted to the lever in position to engage the ratchet wheel and having an upstanding arm arranged in the path of and adapted to be engaged by the head stock during the completion of the inward traverse thereof, a vertically movable rod extending in the direction of movement of the head stock and pivoted at a point remote from the ratchet wheel to the main frame and having a hook disposed under the pawl, means on the main frame for supporting said rod in a position to enable the pawl to engage the ratchet wheel, and a lever fulcrumed on and carried by the head stock and having a lower arm provided with a portion disposed under and movable independently of the rod and also having an upper arm constituting a handle.

[Claims 6 to 8 not printed in the Gazette.]

1,061,460. PROCESS OF PRESERVING FOOD AND APPARATUS THEREFOR. ROY D. ELLIOTT, Oxnard, Cal. Filed Sept. 24, 1912. Serial No. 722,053. (Cl. 99—9.)



1. The process of preserving food which comprises exposing such food in a suitable chamber to the action of a volatile antiseptic until the food surfaces and chamber surfaces are sterile, then subjecting the atmosphere of the chamber to the action of an absorbent for such antiseptic until such atmosphere is substantially free of such antiseptic and maintaining the food under the aseptic conditions thus produced.

2. The process of preserving food which comprises exposing such food in a suitable chamber to the action of sulfur dioxid until the food surfaces and chamber surfaces are sterile, then subjecting the atmosphere of the chamber to the action of an absorbent of sulfur dioxid till such atmosphere is substantially free of sulfur dioxid and maintaining the food under the aseptic conditions thus produced.

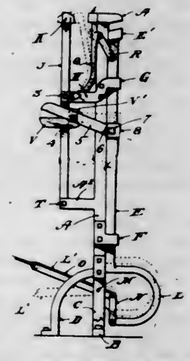
3. The process of preserving food which comprises exposing such food in a suitable chamber to the action of sulfur dioxid under pressure until the food surfaces and chamber surfaces are sterile, then subjecting the atmosphere of the chamber to the action of an absorbent of sulfur dioxid till such atmosphere is substantially free of sulfur dioxid and maintaining the food under the aseptic conditions thus produced.

4. The process of preserving food which comprises exposing such food in a suitable chamber to the action of a gaseous mixture comprising nitrogen and sulfur dioxid, said mixture being under pressure, till the food surfaces and chamber surfaces are sterile, circulating the gaseous mixture past an absorbent for sulfur dioxid till a test for sulfur dioxid shows it to be absent and then maintaining the food under aseptic conditions in the residual nitrogen, said nitrogen being under pressure in excess of atmospheric pressure.

5. The process of preserving food which comprises placing such food in a container, replacing the oxygen of the atmosphere of such container by sulfur dioxid and placing such atmosphere under pressure, continuing the contact of the modified atmosphere with the food and interior chamber walls until antisepsia takes place, exposing the atmosphere to the action of an absorbent till a test no longer shows the presence of sulfur dioxid and maintaining the food under the aseptic conditions thus produced.

[Claims 6 to 12 not printed in the Gazette.]

1,061,461. VISE. JOHN L. FISHER, Pekin, Ill. Filed Dec. 27, 1909. Serial No. 535,027. (Cl. 81—21.)



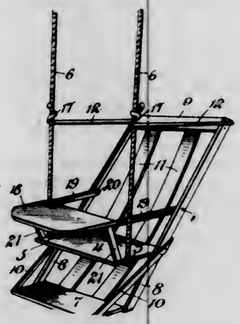
1. In a vise the combination of an upright support, a movable jaw pivotally supported therefrom, a member slidable vertically upon the support, a single arm pivoted at one end to said member and having pivotal attachment at its other end to the jaw at a relatively higher position, a lever adapted to impart an upward movement to the said vertically movable member, and a stationary jaw to receive the first.

2. The combination in a blacksmith's vise, of a standard erected upon the floor and including a fixed jaw spaced from said standard, a member slidable vertically upon the standard and having a U-shaped spring formed therewith at its lower end, a foot-lever pivoted between its ends on the standard, a link connecting the lever with the free end of the spring and adapted to place a lifting strain upon the same, a jaw pivoted relatively to the standard, its pivot lying adjacent the fixed jaw, and an arm pivotally attached at one end to the slidable member and pivoted at its other end to the pivoted jaw and adapted to move the latter in the direction of the fixed jaw in the upward movement of the slidable member.

1,061,462. SWING-SEAT. BERTRAM G. FOSTER, Washington, D. C. Filed June 11, 1908. Serial No. 437,900. (Cl. 155—35.)

1. As an article of manufacture, a swing seat having means for detachably interlocking with the lower looped end of a swing rope, and means permanently connected with said seat and detachably interlocking with the swing rope above the seat, and means having a fixed relation to

the seat when engaged with the rope for preventing undue rocking of the seat on the swing rope, while permitting the removal and replacement of the swing seat without dismantling the swing.



2. As an article of manufacture, a swing seat including a seat member having notches in its opposite ends to detachably receive the lower looped end of a swing rope, a back carried by the seat member and fixed against movement with respect thereto, and means mounted on the back and detachably interlocking with the swing rope above the seat member for preventing undue rocking of the seat on the swing rope, said seat and rope engaging means being removable from and replaceable in a rope swing in assembled condition without dismantling said rope swing.

3. In a detachable swing seat, a seat member having means for detachably engaging in the loop of a swing rope, and means for securely but detachably holding the seat in position, including an arm connected with the seat and having a coiled portion forming an open socket into which the swing rope can be laterally placed and from which it can be laterally removed.

4. In a detachable swing seat, a seat member, a back rigidly connected thereto, and a holding arm exteading forwardly from the back and having a terminal swing rope receiving coil into which the swing rope can be laterally placed and from which it can be laterally removed.

5. In a detachable swing seat, the combination with a seat member, of a back rigidly connected thereto, and a holding yoke connected to the back and having forwardly extending arms provided with terminal swing rope receiving coils into and out of which the sides of the rope swing can be laterally twisted.

[Claim 6 not printed in the Gazette.]

1,061,463. FOLLOWER-BLOCK FOR FILING-CABINETS. JOHN A. FRASER, Benton Harbor, Mich., assignor to Metal Sectional Furniture Company, Portland, Me., a Corporation. Filed Aug. 6, 1909. Serial No. 511,480. (Cl. 129—30.)

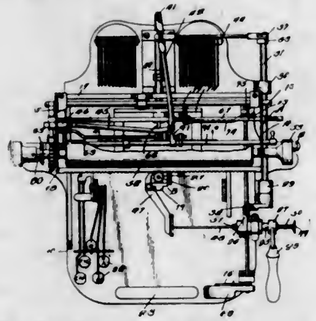


1. In a cabinet file, the combination with a filing drawer and ribs fitted to the upper edge of the sides of said drawer, of a follower comprising an apron lying between the sides of said drawer, flanged shoes embracing the said ribs and being rigidly attached to said apron, housings formed of internal extensions of said flanged shoes, slides engaging said housings and having lateral movement therein, bell crank levers rotatably attached to said housings and engaging one end with said slides and other end with the sides of said drawer, springs attached to said housings and engaging said bell crank levers whereby the sides of said drawer are normally held impinged between said flanged shoes and said bell crank levers.

2. In a cabinet file, the combination with a filing drawer and ribs fitted to the upper edge of the sides of said drawer, of a follower comprising an apron lying within the said drawer and extending from side to side, flanged shoes embracing said ribs and having permanent rigid attachment to said apron, housings formed of extensions to said flanged shoes, slides engaging said housings and having lateral movement therein, the outer ends of said slides being provided with recesses, bell crank levers rotatably attached to said housings one end of each of said levers being formed with a circular outline of same contour as a portion of the said recesses and designed to engage the said recesses in said slides the other end of each of said bell crank levers being fitted with a roughened cam face and adapted to engage the sides of said drawer, thumb pieces attached to the inner ends of said slides and extending through elongated slots in said apron, whereby the said slides may be moved laterally within said housings, substantially as described.

3. In a cabinet file, the combination with a filing drawer and ribs fitted to the upper edge of the sides of said drawer, of a follower comprising an apron, flanged shoes rigidly attached to the ends of said apron and having engagement with said ribs, housings formed from extensions of said flanged shoes and integral therewith, laterally movable slides engaging said housings and fitted near their outer ends with recesses, bell crank levers rotatably attached to the said housings, one arm of each of which levers is formed at its end with a circular outline of the same contour as a portion of the said recesses in said slides and having rotating engagement with said slides, the other arm of each of said bell crank levers being fitted on the end with a roughened cam face adapted to engage the sides of said drawer, thumb pieces on the inner end of said slides and adapted to extend through elongated slots in said apron, springs attached to said housings and adapted to engage said bell crank levers whereby the said sides of said drawer are held normally impinged between said flanged shoes and said bell crank levers, substantially as described and for the purposes herein set forth.

1,061,464. TYPE-WRITING MACHINE. BERNARD F. FRIZZELL, Washington, D. C. Filed May 15, 1912. Serial No. 697,510. (Cl. 197—65.)



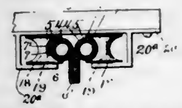
1. In a typewriting machine the combination of a base, a carriage mounted for reciprocation on said base, an escapement mechanism normally in operative connection with the carriage, a rotatable member mounted on the base, means for rotating said member, connections between the rotatable member and the carriage whereby the rotation of the former will reciprocate the latter, a rod slidably mounted in said rotatable member, and means operated by the movement of said rod in one direction for disconnecting the escapement mechanism from the carriage.

2. In a typewriting machine the combination of a base, a carriage mounted for reciprocation on said base, an escapement mechanism normally in operative connection with the carriage, a lever pivotally supported by the base and adapted when moved in one direction to disconnect the escapement mechanism from the carriage, a rotatable member mounted on the base, means for rotating said member, connections between the rotatable member and the carriage whereby the rotation of the former will reciprocate the latter, and means carried by said rotatable member for effecting a movement of said lever to disconnect the escapement mechanism from the carriage.

3. In a typewriting machine the combination of a base, a carriage mounted for reciprocation on said base, an escapement mechanism normally in operative connection with the carriage, a lever pivotally supported by the base and adapted when moved in one direction to disconnect the escapement mechanism from the carriage, a rotatable member mounted on the base, means for rotating said member, connections between the rotatable member and the carriage whereby the rotation of the former will reciprocate the latter, and slidable means carried by said rotatable member for effecting the movement of said lever to disconnect the escapement mechanism from the carriage.

4. In a typewriting machine the combination of a base, a carriage mounted for reciprocation on said base, an escapement mechanism normally in operative connection with the carriage, a lever pivotally supported by the base and adapted when moved in one direction to disconnect the escapement mechanism from the carriage, a rotatable member mounted on the base, means for rotating said member, connections between the rotatable member and the carriage whereby the rotation of the former will reciprocate the latter, and a rod slidably mounted in said rotatable member and adapted when moved in one direction to engage said lever and operate the latter to disconnect the escapement mechanism from the carriage.

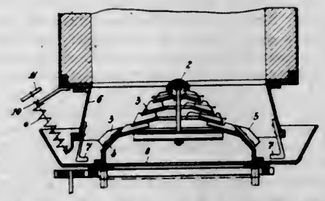
1,061,465. DRAWER-GUIDE. JESSE D. FRYER, Alhambra, Cal. Filed Feb. 15, 1912. Serial No. 677,768. (Cl. 45—77.)



1. The combination with a frame having a drawer opening and a drawer slidable in said drawer opening; of a twin drawer guide for supporting the drawer, comprising two telescoping double guide members, the inner double guide member being formed with a pair of tubular portions and at one end with transversely extending flanges located beneath the tubular portions and secured to the frame, and the outer double guide member being formed with a folded U shaped central depending portion surmounted by a pair of outturned tubular portions fitting around the tubular portions of the inner double guide member, and having at one end transversely extending flanges located beneath the tubular portions and secured to the frame, and the double bracket secured to the drawer and consisting of a flat plate having depending right angle hangers, oppositely arranged and spaced from the ends of the bracket, and a pair of rollers having concavely curved flanges, mounted in the bracket and hangers and adapted to travel on the outer side of the paired tubular portions of the inner and outer double guide members.

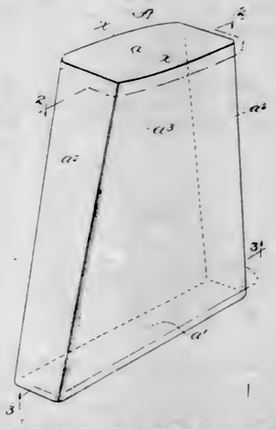
2. The combination with a frame having a drawer opening and a draw slidable in said drawer opening; of a twin drawer guide for supporting the drawer, comprising two telescoping double guide members, the inner double guide member being formed with a folded U-shaped central depending portion surmounted by a pair of outturned tubular portions and at one end with transversely extending flanges located beneath the tubular portions and secured to the frame, and the outer double guide member being formed with a folded U shaped central depending portion fitting in the central depending portion of the inner double guide member and surmounted by a pair of outturned tubular portions fitting around the tubular portions of the inner double guide member, and having at one end transversely extending flanges located beneath the tubular portions and secured to the frame, and the double bracket secured to the drawer and consisting of a flat plate having depending right angle hangers oppositely arranged and spaced from the ends of the bracket, and a pair of rollers having concavely curved flanges, mounted in the bracket and hangers and adapted to travel on the outer side of the paired tubular portions of the inner and outer double guide members.

1,061,466. GAS-GENERATOR. HERMANN GADERMAYR, Bischofswerda, Germany. Filed Aug. 28, 1911. Serial No. 646,489. (Cl. 48—66.)



In a gas generator, a turntable, a conical grate supported thereby, said grate being composed of sections surmounting one another with air spaces between, the conical grate being supported at an inclination from the center line in respect to the turntable, substantially as described.

1,061,467. INGOT. EMIL GATHMANN, Baltimore, Md. Filed Feb. 15, 1913. Serial No. 748,562. (Cl. 22—218.)



1. An ingot having some of its sides inclined or tapered downwardly and outwardly from its upper end and others inclined downwardly and inwardly from its upper end.

2. An ingot having approximately uniform cross-section throughout its length and which has some of its sides inclined or tapered from its upper portion downwardly and inwardly toward the bottom of the ingot and other intermediate sides tapered or inclined from its upper portion downwardly and outwardly toward the bottom.

3. An ingot, the upper portion of which is narrower and thicker than its lower portion and in which some of its sides are tapered or inclined downwardly and outwardly from top to bottom and other intermediate sides tapered or inclined downwardly and inwardly in such manner as to insure a uniform cross-sectional area throughout.

4. An ingot having some of its sides inclined or tapered downwardly and outwardly from its upper end and others inclined downwardly and inwardly from its upper end and which has on the upper portion of one of its sides a crowned enlargement for the purpose specified.

1,061,468. RAZOR-STROPPING DEVICE. JOSEPH F. GAU, St. Paul, Minn. Filed June 19, 1912. Serial No. 704,502. (Cl. 51—16.)

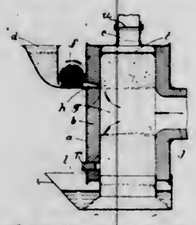


1. A device of the kind described comprising a base adapted to be held in the hand, a rack bar carried by the base, a bar pivoted upon the base, a shaft mounted upon said bar, a gear carried by said shaft, and engaging said rack bar, blade holding means connected to said shaft, and a jaw carried by the said bar and adapted to grip a strap.

2. A device of the kind described comprising a base, means partially inclosing said base, brackets carried by the base, a curved rack bar supported by the brackets spaced from the base, a bar pivoted upon the base and swinging beneath said rack bar, blocks carried by the pivoted bar and arranged upon opposite sides of said rack bar, a shaft mounted upon said blocks, a gear mounted between the block and adapted to engage the rack bar, a blade holder carried by the outer end of the shaft, and a spring gripping jaw mounted upon the side of the pivoted bar opposite the said blade holder, as and for the purpose set forth.

3. A razor stropping device comprising a base, a pivoted bar carried by the base, means supported from said bar for holding a razor blade and a spring pressed jaw carried by said bar, and adapted to engage one of a pair of flexible members, the blade being stropped engaging the other of said members.

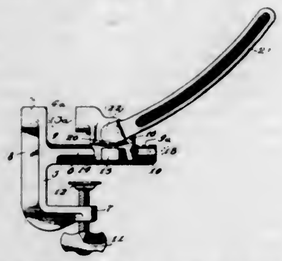
1,061,469. METHOD OF TREATING PULVERULENT SUBSTANCES. EMILE GOBBE, Jumet, Belgium. Filed July 3, 1911. Serial No. 636,635. (Cl. 110—28.)



1. The method of treating pulverulent substances which consists in forming a rotating hollow cylindrical mass of the same by admitting the substance at substantially the central part of said mass and mechanically distributing the same substantially over the entire width thereof, admitting a tangential draft at the periphery of said mass and over substantially the entire width thereof, igniting the incoming substance, collecting the resultant products at the periphery of the rotating mass and discharging the gases at the central part thereof whereby a melting zone is formed at the periphery of the rotating mass, a heating zone at the central part thereof, and a reduction zone intermediate the said melting and heating zones.

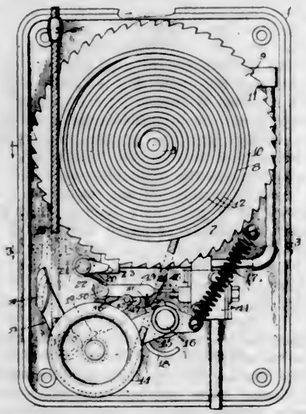
2. The method of treating pulverulent substances which consists in forming a rotating hollow cylindrical mass of the same by admitting the substance at substantially the central part of said mass and mechanically distributing the same substantially over the entire width thereof, igniting the incoming substance, admitting a tangential draft at the periphery of said mass and over substantially the entire width thereof and discharging the same at the central part of the rotating mass, said draft traveling in an opposite direction to the particles of the pulverulent substance which are thrown outwardly by centrifugal force, whereby a melting zone is formed at the periphery of the rotating mass, a heating zone at the central part thereof, and a reduction zone intermediate the said melting and heating zones.

1,061,470. NUTCRACKER. WILEY N. GRADICK, Tyler, Tex., assignor to Woldert Grocery Company, Tyler, Tex., a Corporation of Texas. Filed Feb. 26, 1912. Serial No. 680,075. (Cl. 146—3.)



In a nut-cracker, a fixed jaw having a nut-receiving recess in its inner face, and having an angular extension and a rack-bar integral with said jaw, a clamping screw mounted in said angular extension, a jaw slidably mounted on said rack-bar and having a nut-receiving recess in its inner face, and provided with an open slot forming a slideway on said rack-bar, a lever having a solid cam projecting at right-angles from its lower end and journaled in said sliding jaw, a pin projecting from the face of said cam eccentric to the pivotal axis of the latter, a pawl loosely mounted on said pin and adapted to engage the rack-teeth upon the downward and rearward movement of the lever, and to be held disengaged therefrom when said lever is thrown forward and downward.

1,061,471. TROLLEY-CONTROLLING DEVICE. ALBERT A. GROSSARTH and THEODORE E. BARKER, Chicago, Ill. Filed Apr. 5, 1909. Serial No. 488,045. (Cl. 191—35.)



1. In a device of the kind specified, a spring-actuated rotatable drum, a trolley rope secured at one end thereto and maintained taut thereby, a normally free and inactive motor, a member over which the trolley rope is trained controlling said motor, said member being actuated by a sudden jerk imparted to said rope, and a clutch member carried by said motor and adapted to couple said drum therewith, said clutch being actuated to engage said drum by the power actuating said motor.

2. In a device of the kind specified, a spring-actuated rotatable drum, a trolley rope secured at one end thereto and maintained taut thereby, a normally free and inactive fluid pressure motor, a member over which the trolley rope is trained controlling said motor, said member being actuated by a sudden jerk imparted to said rope, and a fluid pressure actuated clutch member carried by said motor and adapted to couple said drum therewith.

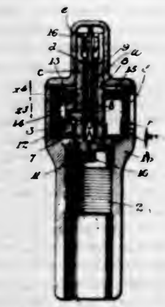
3. In a device of the kind specified, a movable member, a trolley rope connected at one end therewith and maintained taut thereby, a normally free and inactive motor adapted to actuate said member, a second movable member over which said rope is trained between its ends and controlling said motor, said last-named member being actuated by a sudden jerk imparted to the trolley rope, and a clutch adapted to couple said motor with said first-named member, said clutch being actuated by the power actuating said motor.

4. In a device of the kind specified, a movable member, a trolley rope connected at one end therewith and maintained taut thereby, a normally free and inactive fluid pressure actuated motor adapted to actuate said member, a fluid pressure actuated clutch engaging said motor with said drum, a valve controlling the connection of said motor and said clutch with the source of supply of fluid under pressure, and a member controlling said valve and over which the trolley rope is trained and adapted to be actuated by a sudden jerk on the latter to open said valve.

5. In a device of the kind specified, a movable member, a trolley rope connected at one end therewith and maintained taut thereby, a normally free and inactive fluid pressure actuated motor adapted to actuate said member, a fluid pressure actuated clutch engaging said motor with said movable member, means controlling the connection of said motor and said clutch with the source of supply of fluid under pressure, and devices engaged with the trolley pole and actuated by a sudden jerk on the latter to actuate said means, whereby said clutch and said motor are actuated.

[Claims 6 to 22 not printed in the Gazette.]

1,061,472. PRESSURE-GAGE. GEORGE T. HACKLEY, Los Angeles, Cal. Filed Oct. 23, 1911. Serial No. 656,337. (Cl. 73—31.)



1. A barrel adapted to be screwed to the valve of a tire, an indicating drum rotatable in said barrel with its axis longitudinal with the barrel, the barrel having a sight opening and the indicating drum having numerals visible consecutively through said opening, means for conducting air through said drum, and means communicating with said air conducting means and responsive to the air pressure in the tire for rotating said indicating drum.

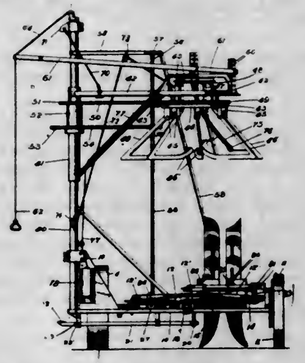
2. A barrel, a conduit in the upper portion of said barrel and protruding above the barrel for the attachment of inflating means, a valve in said conduit, there being an annular space formed between said conduit and the wall of said barrel, pressure operated indicating means movable circularly in said space and provided with indicating marks, said barrel having a sight opening for revealing a portion of the indicating means.

3. A pressure gage comprising a barrel, a drum revoluble therein, a conduit extending into the barrel through the drum, pressure operated means within the drum communicating with the conduit for revolving the drum when pressure is applied, the barrel having a sight opening and the drum having indicating numerals which are consecutively brought into view in the sight opening when the drum is revolved.

4. A pressure gage comprising a barrel having a socket adapted to fit over and forming a housing for the valve nipple of the pneumatic tire, means for attaching said socket on the valve nipple, said barrel having a chamber above said socket, the side wall of said chamber having a sight opening, pressure operated indicating means in said chamber with numerals, the indicating means being circularly movable to move said numerals consecutively into position in register with said sight opening, a conduit extending through the upper wall of said chamber through said pressure operated indicating means and communicating with said socket, and means in the upper end of said socket for depressing the valve stem of the valve in the tire.

5. A pressure gage comprising a barrel, a drum revoluble in said barrel and having indicating numerals on its outer surface, the barrel having a sight opening to reveal the indicating numerals, a conduit extending through said drum, and communicating with a source of pressure, a hollow extensible member movable within the barrel around the conduit, said hollow extensible member communicating with said conduit and having a connection with the drum for turning the drum.

1,061,473. STALK-HARVESTER. ARTEMUS N. HADLEY, Indianapolis, Ind. Filed July 6, 1906. Serial No. 324,940. (Cl. 56—104.)



1. In a stalk harvester, the combination, with stalk cutting means, of a rotary shock-forming table arranged to receive the cut stalks, substantially radially arranged stalk-supporting fingers above said table and independently supported, means for revolving said fingers in substantial synchronism with the table, and means for withdrawing said fingers outwardly from a shock.

2. In a stalk harvester, the combination, with stalk cutting means, of a rotary shock-forming table arranged to receive the cut stalks, substantially radially arranged stalk-supporting fingers supported above said table, means for revolving said fingers in substantial synchronism with the table, and means for withdrawing said fingers outwardly from a shock.

3. In a stalk harvester, the combination, with a stalk cutting means, of a rotary shock-forming table arranged to receive the cut stalks, a rotatable head arranged above said table, a series of movable arms carried by the head and having substantially radial inwardly projecting fingers, means for revolving said head in substantial syn-

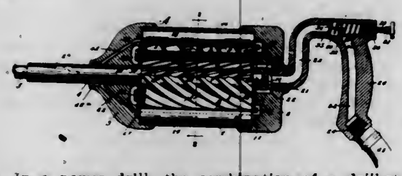
chronism with the table, and means for moving said arms on the head to withdraw their substantially radial fingers from a shock.

4. In a stalk harvester, the combination, with stalk cutting means, of a rotary shock-forming table arranged to receive the cut stalks, substantially radially arranged stalk-supporting fingers above said table and independently supported, means for revolving said fingers in substantial synchronism with the table, means for withdrawing said fingers outwardly from a shock, and a support for said supporting fingers whereby they may be moved away from above the table.

5. In a stalk harvester, the combination, with stalk cutting means, of a rotary shock-forming table arranged to receive the cut stalks, substantially radially arranged stalk-supporting fingers supported above said table, means for revolving said fingers in substantial synchronism with the table, means for withdrawing said fingers outwardly from a shock, and a support for said supporting fingers whereby they may be moved away from above the table.

[Claims 6 to 56 not printed in the Gazette.]

1,061,474. POWER-DRILL. WILLIAM HARTEL, Cleveland, Ohio. Filed Aug. 27, 1912. Serial No. 717,257. (Cl. 121—57.)



1. In a power drill, the combination of a drill-stock, a rotor for operating said drill-stock having a plurality of blades, and a casing for said rotor having ports therein for directing pressure fluid against said blades whereby the rotor is caused to revolve and operate said drill-stock, said casing also having exhaust ports converging toward the drill, whereby the exhaust fluid will serve to cool the same.

2. In a power drill, the combination of a drill-stock, a rotor for operating said drill-stock and having a series of spiral blades, a casing for said rotor having ports therein through which pressure fluid is directed against the blades thereby causing the rotor to revolve and operate the drill-stock, and bearings for said drill-stock carried by said casing, the bearing for the forward end of the drill stock being formed with an enlargement at its forward end and the casing being formed with exhaust passages communicating with said enlargement whereby the exhaust fluid is directed upon the tool so as to cool the same.

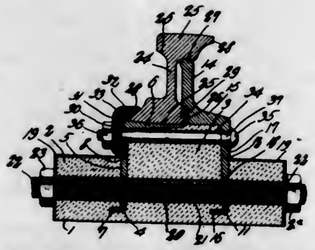
3. In a power drill, the combination of a drill-stock having blades throughout a portion of its length which project at an angle with respect to its radius and also at an angle with respect to its longitudinal axis, a drum surrounding said blades and secured thereto and having blades upon its exterior inclined with respect to its radius and also inclined with respect to its longitudinal axis but in the opposite direction with respect to the inclination of the first mentioned blades, a cylindrical shell surrounding said latter blades and secured thereto, a casing within which the drill-stock is supported inclosing that portion provided with the blades and having ports therein for directing pressure fluid against the first mentioned blades and additional ports for conducting the pressure fluid from the zone of said blades to the blades on the drum, and a valve for controlling the supply of pressure fluid to said ports.

4. In a power drill, the combination of a drill-stock having blades throughout a portion of its length which project at an angle with respect to its radius and also at an angle with respect to its longitudinal axis, a drum surrounding said blades and secured thereto, blades upon the exterior of said drum inclined with respect to its radius and also inclined with respect to its longitudinal axis but in the opposite direction with respect to the inclination of the first-mentioned blades, a cylindrical shell surrounding said latter blades and secured thereto, a casing within which the drill-stock is supported inclosing that portion provided with the blades, and provided with ports for directing pressure fluid against the first mentioned blades, rollers journaled within the casing against which the aforesaid cylindrical shell is adapted to bear, and additional ports for conducting the pressure fluid from the zone of said first blades to the blades on the drum.

5. In a power drill, the combination of a casing comprising a cylindrical shell, a head block having ports therein, and a tail block which is also provided with ports, a rotor centrally located within said casing and having a series of inclined blades, a drill-stock secured to said rotor and projecting through a bore in the tail-block, a handle for the power drill secured to the head block and having a port therethrough communicating with the ports within said head block, and a valve within said handle by the actuation of which pressure fluid is caused to flow through the port within the handle and the ports within the head block and impinge against the blades of the rotor whereby the rotor is caused to rotate and operate the drill-stock.

[Claims 6 and 7 not printed in the Gazette.]

1,061,475. RAIL-SUPPORT. FRANK O. HELLSTROM, Grove, N. D. Filed Feb. 10, 1913. Serial No. 747,465. (Cl. 238—3.)



1. In a device of the class described, a stringer; a primary angle member comprising a main flange embedded in the stringer and a transverse flange lying upon the top of the stringer; a rail resting upon the transverse flange; a fixed abutment carried by the stringer and receiving one edge of the rail; and removable means for engaging the other edge of the rail.

2. In a device of the class described, a stringer; a primary angle member comprising a main flange embedded in the stringer and a transverse flange resting upon the top of the stringer; a secondary angle member comprising a main flange embedded in the stringer and a transverse web located on the top of the stringer, the transverse web of the secondary member upstanding above the transverse flange of the primary member to constitute a rail abutment; and a clip engaged with the main flange of the primary angle member and overhanging the transverse flange of the primary angle member.

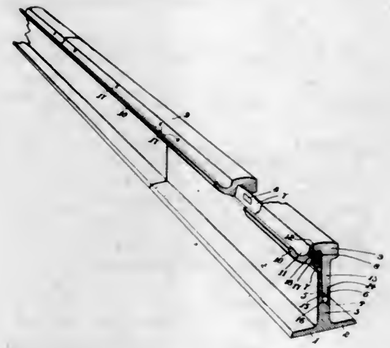
3. In a device of the class described, a stringer; an angle member comprising a main flange embedded in the stringer and a transverse flange located on top of the stringer; a secondary argle member comprising approximately parallel flanges, one of which is embedded in the stringer, the other of which upstands from the stringer, there being a transverse web connecting the parallel flanges and located on top of the stringer; a rail engaging clip applied to the main flange of the primary angle member and overhanging the secondary flange of the primary angle member; and a connection between the main flanges of both angle members and the clip.

4. In a device of the class described, a stringer; a primary angle member including a main flange partially embedded in the stringer and provided with an opening, the primary angle member including a transverse flange located upon the top of the stringer; and a secondary angle member including a main flange partially embedded in the stringer and a transverse web located upon the top of the stringer and constituting a rail abutment; and a rail engaging clip, one end of which is engaged in the opening, the other end of which overhangs the transverse flange of the primary angle member.

5. In a device of the class described, a stringer comprising a base and an upstanding rib; a primary angle member including a flange lying along one side face of the rib and embedded in the base, and a transverse flange resting on top of the rib; a secondary angle member including a main flange lying along one side face of the rib and embedded in the base, the secondary angle member including a transverse web located upon the top of the rib and upstanding above the transverse flange of the primary member; and a rail engaging clip removably secured to the main flange of the primary angle member.

[Claims 6 to 9 not printed in the Gazette.]

1,061,476. RAILWAY-RAIL. EDMOND HÉROUX, Montreal, Quebec, Canada, assignor to Charles Albert Milette, Montreal, Quebec, Canada. Filed Aug. 5, 1912. Serial No. 713,352. (Cl. 239—16.)



1. In a railway rail, a base having a web portion extending upwardly therefrom and a vertical recess in said web portion, and a head having a web portion extending downwardly therefrom into said recess and fastener holes through one side thereof adjacent to the top of the head proper leading to registering slots in an upwardly extending part of the said base portion of the web and fasteners extending through said holes in the head into the slots of the base part.

2. In a railway rail, a base having an upwardly extending part therefrom forming a portion of the web of the rail said web portion having a vertical recess therein, flanged at one side by an upwardly extending wall thickened at the top and on the other side by a wall terminating intermediate of the height of the aforesaid wall, said thickened end having longitudinal slots at intervals on the outer side, a head having a depending portion therefrom forming the other part of the web and extending into said vertical slot in the base and a recess in the underside corresponding to the aforesaid thickened top and diagonal fastener holes through an edge face of the head and registering with said longitudinal slots and fastening pins inserted in said fastener holes.

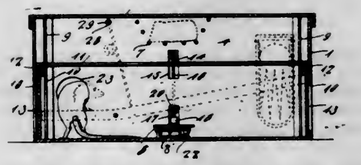
3. In a railway rail, a base formed of lateral flanges from an upstanding part, the latter forming part of the web of the rail and having a vertical recess flanged by a short wall and a tall wall, a head having a depending part therefrom forming the other part of the web of the rail, extending into the aforesaid recess and having oblique fastener holes from one side of the head proper extending into the base portion of the web and fastener members inserted in said holes and engaging said base portion.

4. In a railway rail, a base formed by lateral flanges extending from an upstanding part, the latter forming a portion of the web of the rail and having a vertical recess flanged on one side by a short and on the other by a tall wall terminating in a tapered and thickened portion with elongated slots at intervals in the outer side, a head having a depending portion reduced at the lower edge and entering said recess forming a shoulder resting on said short wall and having oblique holes through the head proper from one side thereof registering with said slots and fastener members inserted in said holes and entering said slots.

5. In a railway rail, a base formed with a lateral recess in the upper side thereof and an upward extension terminating in a thick and tapered portion with elongated slots in the outer side thereof, a head having a depending portion entering said recess and a recess for said thickened portion and screw holes extending in a slanting direction downwardly from one side of the head and registering with the aforesaid slots and screws inserted in said screw holes and extending into said slots.

[Claim 6 not printed in the Gazette.]

1,061,477. ANIMAL-TRAP. LAWRENCE HILDRETH, Lexington, Ky. Filed Oct. 17, 1912. Serial No. 726,385. (Cl. 43—26.)

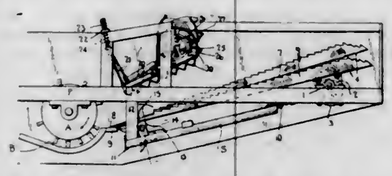


The herein described trap comprising a body divided by a longitudinal partition into a bait compartment and a passage way parallel therewith, the body having inlet openings into the ends of said compartment and an outlet opening out of one end of said passageway and said partition having an opening connecting the other end of the passageway with said compartment, a cage with which said outlet opening communicates, a drop door in this opening for checking the return of the animals caught, a drop door in said passageway opening toward the first-named drop door, a weighted false bottom in the passageway pivotally supported under this drop door, a catch member beneath the normally raised end of said false bottom, a rock shaft with which the moving end of said catch member is connected, doors carried by said rock shaft and adapted to close said inlet openings, transverse partitions in the bait compartment between which and the ends of this compartment the doors move, a treadle pivotally mounted on the bottom of this compartment midway between said doors, and a second catch member carried by the treadle and adapted to coöperate with the first, the whole constructed substantially as described.

1,061,478. FEEDER FOR THRESHING-MACHINES. JOSEPH HOVEY, Florida, Ohio. Filed June 13, 1912. Serial No. 703,534. (Cl. 130—1.)

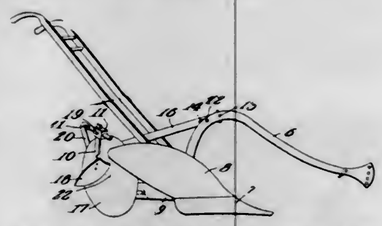
In a feeder for threshing machines, the combination with the main frame, of the cylinder and concave near one end thereof, a shaft across the frame near its other end, the conveyer whose lower end is slidably mounted on the concave, and means for giving its upper end a gyratory motion by the rotation of said shaft; of uprights depending from the frame between said shaft and cylinder, a sub-frame whose upper end is hinged to the frame, a catch on one of said uprights engaging the lower end of said sub-frame when the latter is raised, a shaft

mounted in bearings on said sub-frame, and a retarder fast on said shaft and having its fingers projecting



through said conveyer when the sub-frame is latched in position.

1,061,479. DEEP-TILLING ATTACHMENT FOR PLOWS. CLARENCE S. JOHNSTON, ROY C. JEFFERIES, and WILLIAM J. RYAN, Glendive, Mont. Filed Jan. 22, 1912. Serial No. 672,776. (Cl. 97—32.)



1. The combination with a plow embodying a beam, of a trailing attachment embodying a curved beam having a transverse and a longitudinal slot at its forward end, bolts carried by the former beam and passing through the said slots, a standard vertically and rotatably adjustable in the rear end of the latter beam in rear of the plow, a rotary disk mold board carried by the lower end of the standard to trail in rear of the plow, and a deflector adjustably connected to the upper end of the standard and coöperating with the disk mold board so as to pulverize and deposit the sub-soil of the furrow made by the plow upon the soil turned thereby.

2. The combination with a plow embodying a beam, of a trailing attachment embodying a curved and skewed beam having its forward end adjustably secured to the vertical side of the said beam and having an eye at its rear end, a standard adjustable through the said eye so as to lie in a canted position, and a rotary disk mold board carried by the lower end of the standard to trail in rear of the plow, so as to pulverize and deposit the sub-soil of the furrow made by the plow upon the soil turned thereby.

1,061,480. STAY-WASHER. JOSEPH KENNEDY, New York, N. Y. Filed July 6, 1912. Serial No. 707,981. (Cl. 85—3.)



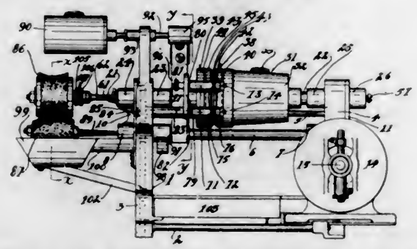
1. In combination with a machine bolt having a threaded shank and a holding member pivoted on the end thereof, a stay-washer on said shank of thin sheet spring metal constructed with an opening therein, the said opening being smaller than the diameter of said shank, with the portions thereof adjacent said opening of sufficient resiliency to allow said washer to be pushed over the shank longitudinally and to catch on the threads of the shank, and folds in the metal of the washer radiating from the opening therein.

2. In combination with a machine bolt having a threaded shank and a holding member pivoted on the end thereof, a stay-washer on said shank of thin sheet spring metal constructed with a star-like central opening therein, the sheet metal between the points of said star forming prongs projecting toward the center of the washer but leaving between them an opening smaller than the diameter of the threaded shank, said prongs having sufficient resiliency to allow said washer to be pushed over the shank longitudinally and to catch on the threads of the shank.

3. In combination with a machine bolt having a threaded shank and a holding member pivoted on the end thereof, of a stay-washer of thin sheet metal on said shank constructed with an opening therein smaller than the diameter of said shank, with portions thereof adjacent said opening of sufficient resiliency to allow said washer to be pushed over the shank longitudinally.

4. In combination with a machine bolt having a threaded shank and a holding member pivoted on the end thereof, of a stay-washer of thin sheet spring metal on said shank constructed with a star-like central opening therein, the sheet metal between the points and said star forming prongs projecting toward the center of the washer but leaving between them an opening smaller than the diameter of said shank, said prongs having sufficient resiliency to allow the washer to be pushed over the shank longitudinally and to catch on the threads of the shank, and folds in the metal of the washer radiating from the points of said star-like opening.

1,061,481. CLEANING OR POLISHING MACHINE. EMIL W. KOTTUSCH, Cincinnati, Ohio, assignor to The Miller, Du Brul & Peters Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Aug. 12, 1910. Serial No. 576,790. (Cl. 51—6.)



1. In a polishing machine, the combination with a pair of shafts arranged in alinement and at constant distance during operation, polishing heads rigidly secured on the adjacent ends of said shafts, a powder chamber in one of said heads, a polishing plate on each of said heads and means for holding said plates yieldingly in contact with each other, whereby the plates may be sprung apart when inserting an article between them for polishing and whereby the plates are again brought into contact with each other upon the withdrawal of said article to prevent leakage of cleaning powder from between the plates.

2. In a cleaning and polishing machine, the combination of a pair of polishing heads arranged at a constant distance from each other, said heads having a powder space open to the joint between said heads, of means for holding said heads yieldingly against each other.

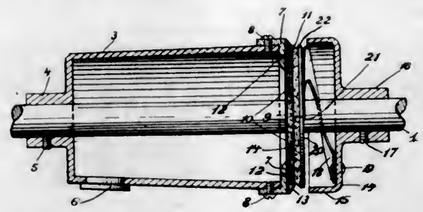
3. In a cleaning and polishing machine, the combination with a pair of cleaning heads kept at a constant distance from each other, each head comprising a supporting plate having an inner annular flange, a cleaning ring keyed to rotate with its supporting plate, a cushion ring mounted on said flange between said cleaning ring and supporting plate, a powder receptacle to one side of one of said heads, said powder receptacle comprising a sifter opening into the space formed by said annular flange.

4. In a cleaning and polishing machine, the combination with a pair of alined shafts arranged at a constant distance from each other, adjacent polishing heads on said shafts, a polishing disk on each head and means for holding said disks yieldingly in contact with each other, a third shaft arranged parallel to said pair of shafts, and gearing between said third shaft and each of said pair of shafts.

5. In a cleaning and polishing machine, the combination with a pair of alined shafts, arranged at a constant distance from each other, polishing heads rigidly secured on the adjacent ends of said shafts, a polishing disk on each head and means for yieldingly holding said disks in contact, a third shaft arranged parallel to said pair of shafts, gearing between said third shaft and each of said pair of shafts, whereby the shafts are driven faster than the third shaft and end thrust means for one of said pair of shafts.

[Claims 6 to 17 not printed in the Gazette.]

1,061,482. CLEANING AND POLISHING MACHINE. EMIL W. KOTTUSCH, Cincinnati, Ohio, assignor to The Miller, Du Brul & Peters Mfg. Co., Cincinnati, Ohio, a Corporation. Filed Aug. 7, 1911. Serial No. 642,741. (Cl. 51—6.)



1. A cleaning head for a cleaning and polishing machine comprising a cup-shaped base, a spring secured in said base, a flat ring secured to the outer end of said spring and a polishing and cleaning face secured to said ring at its perimeter, the portion of the face covering the open space of said ring forming a powder pocket.

2. A revolving cleaning head for a cleaning and polishing machine comprising a base, an annular upstanding flange extending from said base, a spring secured to said base, a flat ring of less diameter than the collar secured to said spring, and a circular polishing and cleaning face secured to said ring near its periphery and of less diameter than the collar, whereby the ring and polishing face may enter said collar.

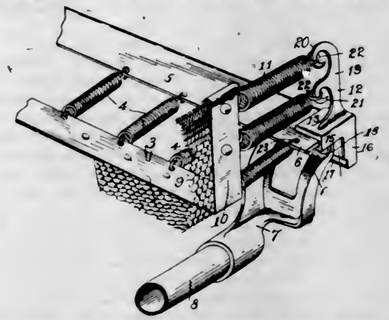
3. In a cleaner for a cleaning and polishing machine, an open split frame in combination with a polishing face covering one side of said frame and its intermediate space.

4. In a cleaner for a cleaning and polishing machine, the combination with an open split frame, of a polishing face covering one side of said frame and its intermediate space, said face being split radially from its perimeter toward its center, the splits in the frame and face registering, whereby one edge of the split may spring out of the plane of said face.

5. In a cleaning and polishing machine, the combination with a cleaning and polishing cup-shaped revolving head, of a single flat inclined spring confined in said head, and a circular cleaning and polishing face secured to said spring.

1,061,483. SIDE-GUARD-HOLDING MEANS. AUGUST J. KREUZKAMP, Brooklyn, N. Y., assignor, by mesne assignments, to Charles J. Witzel, Brooklyn, N. Y. Filed June 28, 1911. Serial No. 635,756. (Cl. 5—39.)

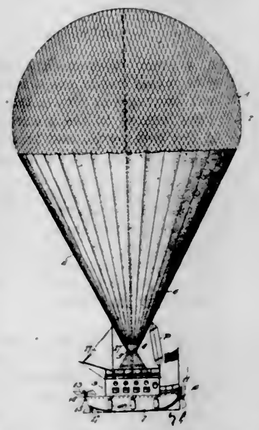
1. A spring mattress comprising a supporting frame including transverse end irons, a spring bottom supported by said irons, vertical side guards for the bottom one extending along each side edge thereof under tension, upstanding brackets secured to said irons one adjacent to each corner of the frame and each of said brackets having a base portion overlapping different portions of said transverse irons and also having an upstanding part provided with one or more downwardly and inwardly turned hooks each projecting toward the end of the side guard for the reception of closed loops of helical springs, and helical springs between the ends of the side guards and said hooks.



2. A spring mattress comprising a supporting frame including a pair of angle iron transverse bars, a bottom connected thereto under tension, side guards secured to the bottom, one extending along each side edge thereof and stretched under tension, brackets secured one at the end of each bar, each of said brackets comprising a base portion consisting of a horizontal and a vertical member having inturned flanges, one of said flanges having an inturned portion underlapping the horizontal portion of the angle bar, said base portion having an upstanding arm provided with one or more hooked projections, and a helical spring or springs connected to the end of each side guard and each having a closed loop for attachment to the hooked projection of a bracket.

3. A spring mattress side guard bracket comprising a base portion having a horizontal and a vertical member, each having inturned flanges, one of said flanges having an inturned edge, and an upstanding arm carried by said base portion and having one or more hooked projections.

1,061,484. AIRSHIP. THADDEUS S. C. LOWE, Los Angeles, Cal. Filed Apr. 6, 1910. Serial No. 553,870. (Cl. 244—6.)



1. An air ship comprising a gas envelop, having its upper portion spherical in form and a tapering downward extension therefrom and a protecting flexible casing secured to said gas envelop at the lower part of said spherical portion and extending downwardly therefrom in the form of an inverted cone.

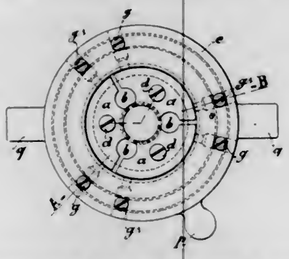
2. An air ship comprising a gas envelop having its upper portion spherical in form and a tapering downward extension therefrom and a protecting flexible casing secured to said gas envelop or netting covering the same at the

lower part of said spherical portion and extending downwardly therefrom in the form of an inverted cone, a concentrating ring, at the lower end of said cone and a vessel suspended from said concentrating ring.

3. An air ship comprising a gas envelop having its upper portion spherical in form and a tapering downward extension therefrom and a protecting flexible casing secured to said gas envelop at the lower part of said spherical portion and extending downwardly therefrom in the form of an inverted cone, a vessel suspended from said cone-shaped cordage, an engine for propelling said vessel, and means for conducting the heated exhaust gases from said engine into the space between said casing and the depending portion of the gas envelop.

4. An air ship comprising a gas envelop having its upper portion spherical in form, and a tapering downward extension therefrom, and a protecting flexible casing secured to said gas envelop at the lower part of said spherical portion and extending downwardly therefrom in the form of an inverted cone, said flexible casing being provided with flexible suspending means, a vessel suspended from the said suspending means, a gas engine for propelling said vessel, a heater provided with a connection to the exhaust of said gas engine and with an atmospheric supply connection whereby a quantity of atmosphere is heated by the heat from the gas engine exhaust, and means for forcing such heated atmosphere into the space between said casing and the gas envelop.

1,061,485. DIE-STOCK. PASQUALE MARTIGNONI and AUGUST JÄGER, Frankfort-on-the-Main, Germany. Filed Oct. 31, 1912. Serial No. 728,824. (Cl. 10—117.)



1. In combination, a stock, die-segments pivoted therein, a plurality of bolts whose heads are accommodated in holes in the stock and are tapered alternately in opposite directions, slidable pins located in the stock and protruding into the path of the bolt-heads, and means, rotatable upon the stock, for holding the bolts and imparting an axial motion thereto.

2. In combination, a stock, die-segments pivoted therein, a plurality of bolts whose heads are accommodated in holes in the stock and are tapered alternately in opposite directions, slidable pins located in the stock and protruding into the path of the bolt-heads, an annularly grooved collar threaded upon the stock, and tapped blocks slidably secured in the collar-groove and receiving the threaded bolt-ends.

3. In combination, a stock having an externally threaded boss, die-segments pivoted therein, a plurality of bolts whose heads are accommodated in holes in the stock and are tapered alternately in opposite directions, slidable pins located in the stock and protruding into the path of the bolt-heads, a collar, having an annular undercut groove, threaded over the stock-boss, tapped blocks located in the groove and receiving the threaded bolt-ends, and a ring securing the blocks in the collar.

1,061,486. BROOM ATTACHMENT. AMANDA MCDONALD, Central City, S. D. Filed Oct. 17, 1910. Serial No. 587,452. (Cl. 15—20.)

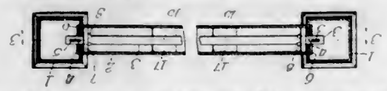
1. A broom attachment comprising an annulus and a plurality of single arms loosely connected therewith, the terminals of which are formed into inturned pointed hooks.

2. A broom attachment comprising an annulus and a plurality of single arms, the upper ends of which are



formed into eyes that loosely engage the annulus, and the lower ends of which are formed into inturned pointed hooks.

1,061,487. TUBULAR STRUCTURE. JACOB L. MOORE, Butler, Pa., assignor to Pittsburgh-Hickson Company, East Butler, Pa., a Corporation of Pennsylvania. Filed Feb. 6, 1911. Serial No. 606,901. (Cl. 5—4.)



1. In a structure of the kind specified, the combination with parallel polygonal tubes and a transversely disposed polygonal tube abutting at its ends against an outer wall of each of the first-named tubes, of polygonal washers fitting within the transverse tube and having central polygonal openings, polygonal rods fitting said openings and of greater length than said tube projecting at its ends through polygonal openings in the walls of the first-named tubes against which said transverse tube abuts, and wedges disposed in openings in the end portions of said rod, substantially as described.

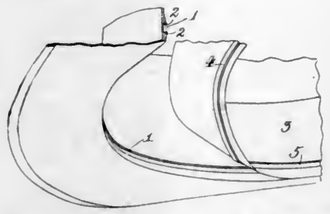
2. In a structure of the kind specified, the combination with parallel polygonal tubes and a transversely disposed polygonal tube abutting at its ends against an outer wall of each of the first-named tubes, of polygonal washers fitting within the transverse tube and having central polygonal openings, polygonal rods fitting said openings and of greater length than said tube projecting at its ends through polygonal openings in the walls of the first-named tubes against which said transverse tube abuts, projections on said rod adjacent its ends for limiting the movement of said washers thereon in one direction, and wedges disposed in openings in the end portions of said rod, substantially as described.

3. In a structure of the kind specified, a pair of parallel tubes, filler tubes interposed between the same, plates mounted upon the outer faces of said parallel tubes corresponding in shape and size with the bores of the filler tubes and adapted to enter the latter to hold the same against lateral movement, plates mounted within one of said parallel tubes non-rotatable therein and provided with threaded openings, the other of said parallel tubes and the plates mounted thereon having registering openings, and rods each having a threaded end passing through the openings in the last-named parallel tube and plates and through the filler tubes and the plates and openings in the other of said parallel tubes and engaging the plates within the latter.

1,061,488. MANUFACTURE OF ALIMENTARY PRODUCTS. PHILIPP MÜLLER, Frankfort-on-the-Main, Germany, assignor to Heinrich Finkelstein and Ludwig F. Meyer, Berlin, Germany. Filed Mar. 7, 1910. Serial No. 547,772. (Cl. 99—11.)

The herein described process of manufacturing a cows' milk, low in salts and sugar, but with a normal fat and casein content, especially adapted as a food for infants, consisting in precipitating the curd mass from a given quantity of whole milk, and mixing the same with a mixture of equal parts of buttermilk and water, the volume of the mixture being substantially equal to the volume of the whole milk from which the curd was precipitated, substantially as and for the purpose described.

1,061,489. DETACHABLE SWEAT-BAND. WILLIAM HAROLD MYMMS, Luton, England. Filed Feb. 15, 1913. Serial No. 748,654. (Cl. 2—32.)



1. The combination of a hat body and a detachable sweat band therefor, one of said parts having in its body a groove and the other having in its body a rib fitting said groove, one of said parts being elastic to insure a hold on the other part.

2. The combination of a hat body and a detachable sweat band therefor, one of said parts having in its body an undercut groove and the other having in its body an undercut rib fitting said groove, one of said parts being elastic to insure a hold on the other part.

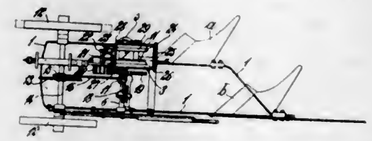
3. The combination of a hat member and a detachable sweat band therefor, one of said parts having in its body a groove and the other having in its body a rib fitting said groove.

4. The combination of a hat body thickened at its base and provided in its thickened portion on its inner face with an under cut groove, and a detachable sweat band therefor provided in its body with an outward undercut rib engaging said groove.

5. An article of manufacture consisting of a sweat band provided along its body with an integral undercut holding device for engaging a corresponding holding device in a hat member.

[Claim 6 not printed in the Gazette.]

1,061,490. POTATO-PLANTING MACHINE. ANTON JAMES PAULY, Stockerau, Austria-Hungary. Filed May 3, 1911. Serial No. 624,709. (Cl. 111—27.)



1. In a potato planting machine, the combination with a seed hopper, of a recessed disk for distributing the seeds, the recesses being so formed that the forward edge of each recess in the direction of rotation is raised to a greater axial distance from the axis of the disk than the rear edge of said recess, whereby the seeds are loosened by the action of said disk before the recess is in position to receive a seed from the hopper.

2. A potato planting machine comprising in combination, a hopper containing seed potatoes, a grooved disk for distributing the potatoes, means for driving the disk, and rotary dispersing rollers mounted in operative relation to the distributing disk, the groove in the disk being such that the front edge is radially farther distant from the axis of the disk than the back edge.

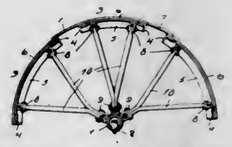
3. A potato planting machine, comprising in combination, a hopper containing seed potatoes, a grooved disk for distributing the potatoes, rotary dispersing rollers mounted in coöperative relation to the disk, means for driving the disk and dispersing rollers, agitating rollers arranged above and transversely of the dispersing rollers, and means for driving the agitating rollers in the same direction.

4. A potato planting machine, comprising in combination a hopper containing seed potatoes, a grooved disk for distributing the potatoes, the groove on one edge in the direction of rotation being at a greater distance from the axis than the back edge, rotary dispersing rollers mounted in coöperative relation to the disk, means for driving the disk and dispersing rollers, agitating rollers arranged above and transversely of the dispersing rollers, and means for driving the agitating rollers in the same direction.

5. A potato planting machine, comprising in combination a hopper containing seed potatoes, a grooved disk mounted in a horizontal plane for distributing the potatoes, dispersing rollers mounted also in a horizontal plane in operative relation to the distributing disk, agitating rollers also in a horizontal plane arranged transversely of the dispersing rollers and tangential to the periphery of the distributing disk, and means for driving the latter, the dispersing rollers in opposite directions and the agitating rollers in the same direction.

[Claims 6 to 8 not printed in the Gazette.]

1,061,491. CULVERT-MOLD. JOHN F. PECK, Madison, S. D. Filed Oct. 21, 1911. Serial No. 655,972. (Cl. 25—32.)



In a culvert mold, a collapsible semi-cylindrical shell comprising a plurality of arcuate sections, each of said sections comprising a rectangular angle iron frame, transverse segmental angle iron braces, and a sheet metal covering, the said covering of one of said sections overlapping the edges of the contiguous sections, and the longitudinal bars of the frames of said sections adapted to act as stops to limit the collapsing of the mold; a longitudinally movable core provided with a plurality of collars, U shaped brackets upon each of said collars corresponding in number to the number of arcuate sections; links pivoted in pairs within said brackets, extending divergently toward the shell and pivoted within brackets disposed upon the transverse segmental braces; and means mounted upon said core for attachment with a draft means for moving said core longitudinally to collapse the mold and withdraw it from the molded structure.

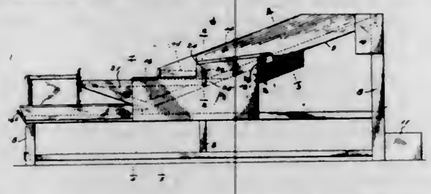
1,061,492. MAGAZINE-LOADER. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed May 12, 1910. Serial No. 560,900. (Cl. 118—13.)

1. In a magazine loader, in combination, means for supporting a magazine adapted to contain a row of bobbins; means for supporting a row of bobbins; and means for moving the row of bobbins as a unit into the magazine.

2. In a magazine loader, in combination, means for supporting a magazine adapted to contain a row of bobbins; means for supporting a row of bobbins in alinement with the receiving end of a magazine placed on its support; and means for pushing the row of bobbins as a unit into the magazine.

3. In an apparatus for loading bobbins into a magazine having longitudinal spaces to receive rows of bobbin-butts,

and opposite narrower longitudinal spaces to receive rows of bobbin-tips, the combination of means to support such a magazine and means to position bobbins adjacent to the magazine for entrance into said spaces.

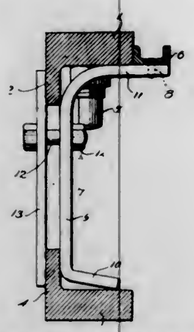


4. The combination of a rack on which a row of bobbins may be supported by their heads, and means for removably supporting a magazine with its receiving end adjacent the discharge end of the rack.

5. In a magazine loader, in combination, a rack adapted to support a plurality of rows of bobbins, and means for supporting a bobbin magazine adjacent said rack, one end of said rack being arranged to enter a magazine supported by said means.

[Claims 6 to 27 not printed in the Gazette.]

1,061,493. MEANS FOR SECURING DOFFER-SUPPORTING RAILS TO SPINNING-FRAMES. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed Dec. 2, 1910. Serial No. 595,231. (Cl. 118—13.)



1. The combination, with the spindle rail of a spinning frame, of a doffer-supporting rail, a resilient member secured to the doffer-supporting rail and means for engaging said member with the spindle rail, said member being adapted to yield and be placed under tension as it is being engaged with the spindle rail.

2. A doffer-supporting rail having an attaching bracket secured thereto, said bracket consisting of a vertical portion 9, an angular lower portion 10, and an angular resilient upper rail-bearing portion 11.

3. The combination, with the spindle rail of a spinning frame, of a doffer-supporting rail, a bracket secured to the doffer-supporting rail and located at one side of the spindle rail, a member located at the opposite side of the spindle rail, and means for clamping said bracket and said member together.

4. The combination, with the spindle rail of a spinning frame, of a doffer-supporting rail, a bracket secured to the doffer-supporting rail, said bracket having an angular upper rail-bearing portion, and means acting upon said bracket near said upper portion to draw said upper portion into close contact with the spindle rail.

5. The combination, with the spindle rail of a spinning frame, said rail comprising the upper horizontal web 1, the lower horizontal web 3, and the vertical webs 2 and 4, of a doffer-supporting rail, a bracket having a vertical portion contacting the forward side of the web 4, a foot portion bearing against the web 3, and an angular portion 11 to which the doffer-supporting rail is secured, a cross-piece located at the rear side of the webs 2 and 4, and a bolt extending through the upper part of the vertical bracket-portion and through the cross-piece.

1,061,494. METHOD OF INCREASING THE FERMENTATION PROPERTY OF YEAST. ALFRED POLLAK, Allach, near Munich, Germany. Filed Sept. 18, 1912. Serial No. 720,934. (Cl. 195—20.)

1. The herein described method of increasing the fermentation property of yeast, which consists in subjecting yeast to treatment with hexamethylenetetramin.

2. The herein described method of increasing the fermentation property of yeast, which consists in adding a solution of hexamethylenetetramin to the fluid to be fermented.

3. The herein described method of increasing the fermentation property of yeast, which consists in subjecting yeast to treatment with a preparation of hexamethylenetetramin and phosphoric acid.

4. The herein described method of increasing the fermentation property of yeast, which consists in subjecting yeast to treatment with a preparation of hexamethylenetetramin and a phosphate.

1,061,495. BEVERAGE EXTRACT. WILLIS H. POST, Battle Creek, Mich., assignor to Postum Cereal Company, Limited, Battle Creek, Mich. Filed Aug. 16, 1912. Serial No. 715,355. (Cl. 99—11.)

1. A solid soluble extract for preparing beverages, consisting of extractive matter in soluble form of roasted bananas.

2. A solid soluble extract for preparing beverages, consisting of extractive matter in soluble form of decorticated roasted bananas.

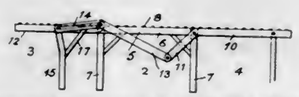
3. A solid soluble extract for preparing beverages, consisting of soluble extractive matter in comminuted form derived from roasted banana pulp.

4. A solid soluble extract for preparing beverages, consisting of extractive matter in soluble form of bananas roasted to a degree sufficient to caramelize the sugar content.

5. A solid soluble extract for preparing beverages, consisting of soluble extractive matter in comminuted form derived from banana pulp roasted to a degree sufficient to caramelize the sugar content.

[Claim 6 not printed in the Gazette.]

1,061,496. CONVERTIBLE DIVAN OR COUCH-BED. SAMUEL W. POTTS, Brooklyn, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 28, 1912. Serial No. 728,023. (Cl. 5—48.)



1. A divanette comprising a stationary middle section, a spring fabric secured thereto and fixed against movement, whereby it is always normally maintained permanently level, a pair of swinging sections, each of which also has a similar spring, hinged to said stationary middle section, said swinging sections being movable in opposite directions whereby when fully opened they form with the stationary middle section a full length bed, and means connecting said swinging sections so that on the shifting of one of them the other will be shifted, the spring of one of said swinging sections adapted to rest flatwise over the spring of the stationary middle section and form therewith the seat when the structure is in the form of a divan, and the other swinging section adapted to extend perpendicularly to form the back.

2. A divanette comprising a stationary middle section and a pair of swinging sections hinged thereto at opposite sides thereof, one forming the back and the other the seat when the structure is in the form of a divan, and movable in opposite directions to form a full length bed, and means connecting the two swinging sections together whereby on swinging one of them the other will be also swung, said means having a sliding connection with the front swinging section.

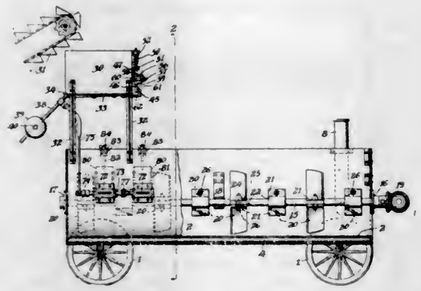
3. A divanette comprising a stationary middle section and a pair of swinging sections hinged thereto at opposite sides thereof, one forming the back and the other the seat when the structure is in the form of a divan, and shiftable in opposite directions to form a full length bed, and means connecting the two swinging sections together whereby on swinging one of them the other will be also swung, said means having a sliding connection with the front swinging section and also having a depending leg portion for supporting the front swinging section.

4. A divanette comprising a stationary section, a back hinged thereto at one side and having a depending lever portion, a front swinging section hinged at the opposite side of said stationary section, a link connecting the depending portion of the back with said front swinging section, said swinging section and link having one a stud and the other a slot, and means carried by the structure for supporting the front swinging section when the structure is converted into a full length bed.

5. A divanette comprising a stationary section and back hinged thereto at one side and having a depending lever portion, a front swinging section hinged at the opposite side of said stationary section, a link connecting the depending portion of the back with said front swinging section, said swinging section and link having one a stud and the other a slot, and means for supportng the front swinging section when the structure is converted into a full length bed, said means being carried by said link.

[Claims 6 to 9 not printed in the Gazette.]

1,061,497. CONTINUOUS MIXING-MACHINE. JOSEPH PRICE, Providence, R. I. Filed May 5, 1910. Serial No. 559,532. (Cl. 73—177.)



1. A weighing machine comprising a stone receiving box having a pivoted bottom, a spring sustained rod in engagement with the said bottom at one edge thereof to support the same while stone is being delivered into the said box, a cam carried by the said rod, and means with which the said cam is in contact to cause lateral movement of the said rod when it is depressed by the weight of the stone in the box to disengage the same from the said bottom to permit pivotal movement thereof to discharge the stone from the said box.

2. A mixing machine comprising a mixing chamber, a stone receiving receptacle located above said mixing chamber, the said receptacle having a pivoted bottom and the said bottom having a hook-shaped part or member projecting therefrom, movable means for engaging the said hook-shaped member, means for causing lateral movement of the said movable means to disengage it from the said hook-shaped part or member whereby the said bottom is released and the stone discharged from the said receptacle into the said mixing chamber.

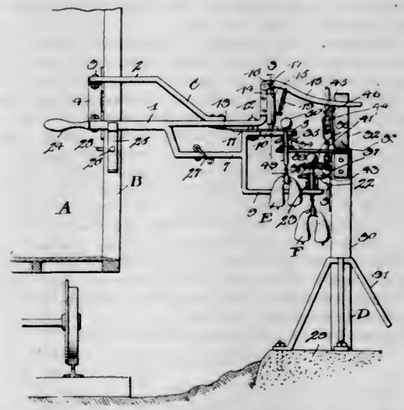
3. A mixing machine comprising a mixing chamber, a stone receiving box located above said mixing chamber, the said box having a pivoted bottom and the said bottom having a hook-shaped part or member projecting therefrom, spring-supported means for engaging the said hook-shaped member, means for causing lateral movement of the said spring-supported means to disengage it from the said hooked part or member, whereby the said bottom is released and the stone discharged from the said box into the said mixing chamber.

4. A mixing machine comprising a mixing chamber, a stone receiving box located above said mixing chamber, the said box having a pivoted bottom and the said bottom having a hook-shaped part or member projecting therefrom, spring supported means for engaging the said hook-shaped member, means for causing lateral movement of the said spring-supported means to disengage it from the said hooked part or member, whereby the said bottom is released and the stone discharged from the said box into the said mixing chamber, and means for returning the bottom of the said box to normal position.

5. A mixing machine comprising a mixing chamber, a stone receiving box located above and adapted to supply stone to said mixing chamber, the said box having a pivoted or hinged bottom which bottom is provided with a catch member, a spring supported member adapted to engage the said catch member and support the bottom of the said box, a cam member carried by the said spring-supported member, and a roller or guide with which the said cam member is in engagement to cause movement of the said spring supported member laterally when it is depressed by the weight of the stone in the said box to disengage the said member from the said catch to discharge the stone from the said box into the said mixing chamber.

[Claims 6 and 7 not printed in the Gazette.]

1,061,498. MAIL-BAG COLLECTING AND DELIVERING APPARATUS. EDWIN S. PRIDDY, Gothenburg, Nebr., assignor to Western Mail Transfer Company, Incorporated, a Corporation of Nebraska. Filed Aug. 28, 1912. Serial No. 717,639. (Cl. 105—231.)



1. In a mail bag collecting and delivering apparatus, the combination with a movable object, an arm extending laterally therefrom, the outer end of said arm being bifurcated to form upper and lower arm sections, a bag delivering mechanism formed on the upper arm section, a bag collecting mechanism formed on the lower arm section, and means to lock said bag delivering mechanism in position; of an additional bag delivering and collecting mechanism mounted on a stationary object and adapted

to coöperate with the aforesaid delivering and collecting mechanisms, additional means carried on said stationary object to retain said last mentioned delivering means in locked position, and means coöperating with the locking means on both the stationary and movable objects to simultaneously dispose the same to their unlocked positions.

2. In a bag delivering and collecting apparatus the combination with a movable object, an arm extending laterally therefrom, the outer end of said arm being bifurcated to form upper and lower arm sections, said upper arm section being provided with recesses on opposite sides thereof, a locking plate pivotally carried on said latter arm section to coöperate therewith in retaining a bag in position to be delivered, means to retain said plate in its locked position, and a bag collecting means carried on the lower arm section; of an additional bag delivering and collecting means carried on a stationary object, and adapted to coöperate respectively with the aforesaid collecting and delivering means, and means on the stationary object to temporarily release the locking means for the plate on said movable object.

3. In a bag delivering and collecting apparatus, the combination with a movable object, an arm extending laterally therefrom, the outer end of said arm being bifurcated to form upper and lower arm sections, said upper arm section being provided with recesses on opposite sides thereof, a locking plate pivotally carried on said latter arm section to coöperate therewith, in retaining a bag in position to be delivered, means to retain said plate in its locked position, and a bag collecting means carried on the lower arm section; of an additional bag delivering and collecting means carried on a stationary object and adapted to coöperate respectively with the aforesaid collecting and delivering means, additional locking means for the last mentioned delivering mechanism, and means carried on said stationary object adapted to cooperate with the locking means on both the movable and stationary objects to temporarily dispose the same to their released positions.

4. In a bag delivering and collecting apparatus, the combination with a movable object, an arm extending laterally therefrom, the outer end of said arm being bifurcated to form upper and lower arm sections, the upper arm section being recessed on opposite sides thereof, a plate pivotally carried on the upper face of said upper arm section and centrally recessed to provide arms for coöperation with the aforesaid recesses in said upper arm section, means to normally retain said plate in longitudinal alinement with the upper arm section, means to lock said plate in the last mentioned position, and a bag delivering mechanism carried on the lower arm section; of an additional bag delivering and collecting mechanism carried on a stationary object and adapted for coöperation with the aforesaid collecting and delivering mechanism, and means on the stationary object for releasing the locking means for the plate on the upper arm section.

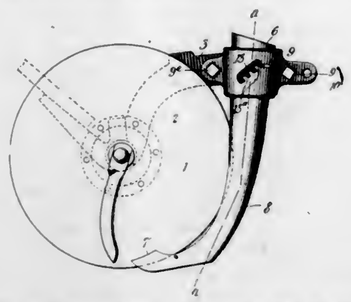
5. In an apparatus of the class described, the combination with a car, of bag collecting and delivering mechanism comprising a supporting arm adapted to be projected from the car, bag supporting means carried by the forward end of said arm, a catch detachably engaging said last mentioned means, and bag receiving and holding mechanism including a trip adapted to engage said catch to deliver and receive the bags.

[Claims 6 to 10 not printed in the Gazette.]

1,061,499. GRAIN-DRILL. OTTO G. RIESKE, St. Louis Park, Minn., assignor to Monitor Drill Company, a Corporation of Minnesota. Filed May 24, 1910. Serial No. 563,110. (Cl. 111—11.)

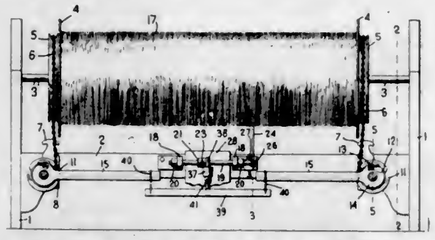
1. In a grain drill and in combination with a support or frame provided with an upright socket, an opening disk sustained by said support, a seed tube mounted in the socket in the support to swivel around the longitudinal axis of the tube, and means for holding said tube against endwise motion in both directions, said means serving also to guide the tube in its swiveling motion.

2. In a grain drill and in combination with a support or frame provided with a socket having a plurality of teeth spaced apart in a direction circumferentially of the socket, an opening disk sustained by the support, a seed tube mounted to swivel in the socket, and a spring encircling the tube within the socket with one end connected with the tube and its opposite end adapted to be engaged with any of the notches in the socket; whereby the tension of the spring may be adjusted.



3. In a grain drill and in combination with a frame or support provided with a socket having inwardly extended shoulders at its upper and lower ends, an opening disk sustained by the support, and a seed tube mounted to swivel in said socket, said tube being provided with outwardly extending flanges in position to abut against the said shoulders and bear against the interior of the socket, whereby endwise motion of the tube within the socket will be prevented and it will be guided in its swiveling motion.

1,061,500. FRICTION LET-OFF MECHANISM FOR LOOMS. ANDREW J. RILEY, Alabama City, Ala., assignor to Draper Company, Hopedale, Mass., a Corporation of Maine. Filed Nov. 25, 1912. Serial No. 733,261. (Cl. 139—85.)



1. In let-off mechanism for looms, a warp beam adapted to be rotated by the pull of the warp, frictional means to retard the rotation of the beam, said means including a rocking friction regulating member, a controlling cam having a gradually decreasing radius from its high point, a pivotally mounted cam follower, connections between it and said regulating member to maintain the follower in engagement with the cam, and means governed by the diameter of the yarn mass on the beam to rotate said cam slowly as the yarn mass diminishes, the frictional action on the beam being decreased gradually as the point of engagement between the cam and its follower moves from the high to the low point of the former.

2. In let-off mechanism for looms, a warp beam adapted to be rotated by the pull of the warp, means, including sheaves fixed on the beam and flexible friction members cooperating therewith, to retard such rotation, a rotatable controlling cam having a gradually decreasing radius from its high to its low point, a rocking follower coöperating with the cam and operatively connected with said flexible friction members, the tension on the latter maintaining the follower in engagement with the cam and tending to rotate the latter to present a gradually decreasing radius to the follower, and means governed by the diameter of the yarn mass on the beam to permit such rotative movement of the cam as the diameter of the yarn mass diminishes, whereby through the follower the frictional retarding action upon the beam is decreased gradually.

3. In let-off mechanism for looms, a warp beam adapted to be rotated by the pull of the warp, means, including sheaves fixed on the beam and flexible friction members cooperating therewith, to retard such rotation, each of said members having one end fixed, a tension regulating arm connected with the other end thereof, to regulate the initial frictional retardation of the beam, a rotatable controlling cam having a gradually decreasing radius from its high to its low point, a rocking follower coöperating with the cam, and operative connections between said arms and the follower, the tension exerted by the flexible friction members acting through said arms and connections upon the follower to maintain it in engagement with the cam and tending to rotate the latter to present a smaller radius to the follower, and means governed by the yarn mass on the beam to permit such rotative movement of the cam as the diameter of the yarn mass diminishes, whereby the initial frictional action exerted upon the beam is decreased gradually as the warp is unwound therefrom.

4. In let-off mechanism for looms, a warp beam adapted to be rotated by the pull of the warp, means, including sheaves fixed on the beam and flexible friction members coöperating therewith, to retard such rotation, a rotatable controlling cam having a gradually decreasing radius from its high to its low point, a rocking follower cooperating with the cam and operatively connected with said flexible friction members, the tension on the latter maintaining the follower in engagement with the cam and tending to rotate the latter to present a gradually decreasing radius to the follower, and means governed by the diameter of the yarn mass on the beam to permit such rotative movement of said controlling cam as the diameter of the yarn mass diminishes, whereby through the follower the frictional retarding action upon the beam is decreased gradually, combined with a device coöperating with the follower to effect temporarily an abnormal positioning thereof to release the beam from the control of the retarding means, whereby the beam may be turned manually.

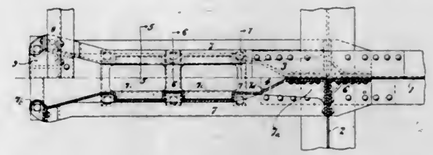
5. In let-off mechanism for looms, a warp beam adapted to be rotated by the pull of the warp, means, including sheaves fixed on the beam and flexible friction members cooperating therewith, to retard such rotation, a rotatable controlling cam having a gradually decreasing radius from its high to its low point, a rocking follower coöperating with the cam and operatively connected with said flexible friction members, the tension on the latter maintaining the follower in engagement with the cam and tending to rotate the latter to present a gradually decreasing radius to the follower, an arm fixedly connected with the cam, and a follower roll on the free end of the arm held against the periphery of the yarn mass on the beam, movement of said roll toward the axis of the beam as the diameter of the yarn mass decreases acting through the arm to permit rotative movement of the controlling cam for the presentation of a gradually decreasing radius thereof to its follower, whereby the frictional retarding action upon the beam is decreased gradually.

[Claim 6 not printed in the Gazette.]

1,061,501. CAR-UNDERFRAME. JOHN M. ROHLFING, St. Louis, Mo., assignor to American Car and Foundry Company, St. Louis, Mo., a Corporation of New Jersey. Filed July 17, 1911. Serial No. 638,945. (Cl. 105—76.)

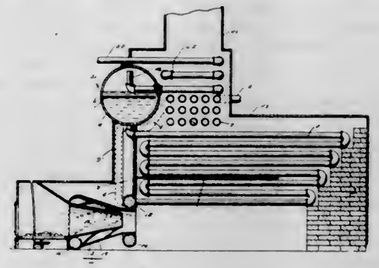
1. In a car underframe, the combination of a bolster member whose vertical web is provided with an opening, a center sill member having its top and bottom flanges cut away and whose vertical web extends through the opening in said bolster member and draft sill members secured to the protruding end of the vertical web of said center sill.

2. In a car underframe, the combination of a bolster member, a center sill member made up of light commercially rolled sections, the vertical web of said bolster member being provided with an opening and the top and bottom flanges of said center sill member being cut away whereby



the vertical web of said center sill member extends through the opening in the bolster member, and connection members for securing said parts together.

1,061,502. SMOKE-CONSUMER. CHARLES A. RUSH, La Grange, Ill. Filed Jan. 18, 1910. Serial No. 538,691. (Cl. 110—73.)



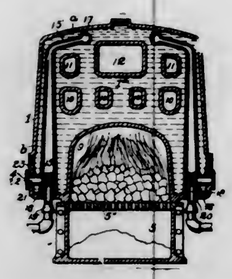
1. In combination a furnace comprising a preliminary combustion chamber and a secondary combustion chamber, water heating coils situated within said secondary combustion chamber, said preliminary combustion chamber having its top, side and rear walls converging to a centrally disposed outlet an annular opening surrounding said outlet, said outlet discharging through said opening into said secondary combustion chamber, said outlet being funnel shaped, an air heating chamber directly and completely incasing said outlet, an air inlet into said air heating chamber, a spiral rib connecting the walls of said outlet and said air heating chamber whereby air is fed with a whirling motion directly to the gases of combustion as they issue from said outlet through said opening.

2. In combination a furnace comprising a preliminary combustion chamber and a secondary combustion chamber, water heating coils situated within said secondary combustion chamber, said preliminary combustion chamber having its top, side and rear walls converging to a centrally disposed outlet, said outlet discharging into said secondary combustion chamber, said outlet being funnel shaped, an air heating chamber directly and completely incasing said outlet, an air inlet into said air heating chamber, a spiral rib connecting the walls of said outlet and said air heating chamber, said outlet and air heating chamber terminating in a mixing chamber, the air from said air chamber being discharged spirally into the gases as they pass from said outlet into said mixing chamber in order that said air and gases be thoroughly commingled and caused to impinge upon said coils.

1,061,503. HOT-WATER AND STEAM BOILER. JOHN P. SCHAFFER, Pittsburgh, Pa. Filed Dec. 10, 1912. Serial No. 735,981. (Cl. 122—211.)

1. In a boiler for heating water, the combination with the hollow boiler body for the water and having the fuel chamber therein, of a vertical tubular flue within the hollow sides of said body and within the water therein, a horizontal flue in the upper portion of said body connecting said vertical flue at its upper end with the smoke box.

and a fluid supply pipe connected to said vertical flue for supplying fuel to the same to heat the water in said body.



2. In a boiler for heating water, the combination with the hollow boiler body for the water and having the fuel chamber therein, of a vertical tubular flue within the hollow sides of said body and within the water therein, a horizontal flue in the upper portion of said body connecting said vertical flue at its upper end with the smoke box, a fluid supply pipe connected to said vertical flue for supplying fuel to the same to heat the water in said body, and a burner within said vertical flue and above said pipe.

3. In a boiler for heating water, the combination with the hollow boiler body for the water and having the fuel chamber therein, of a vertical tubular flue within the hollow sides of said body and within the water therein, a horizontal flue in the upper portion of said body and connected to said vertical flue by an inwardly extending portion on said vertical flue, and a fluid supply pipe connected to said vertical flue for supplying fuel to the same to heat the water in said body.

4. In a boiler for heating water, the combination with the hollow boiler body for the water and having the fuel chamber therein, of a vertical tubular flue within the hollow sides of said body and within the water therein, a horizontal flue in the upper portion of said body and connected to said vertical flue by an inwardly extending portion on said vertical flue, a fluid supply pipe connected to said vertical flue for supplying fuel to the same to heat the water in said body, and a burner within said vertical flue and above said pipe.

5. In a boiler for heating water, the combination with the boiler body formed of a series of hollow sections adapted to contain water and forming a fuel chamber therein, of a vertical tubular flue within the hollow sides of each of said sections and within the water therein, and a fluid supply pipe connected to each of said flues for supplying fuel to the same to heat the water in said body.

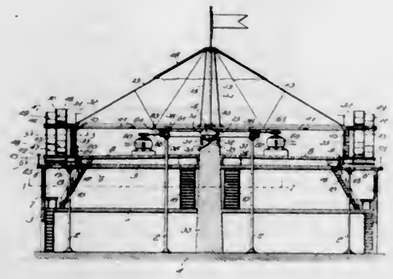
[Claims 6 to 25 not printed in the Gazette.]

1,061,504. AMUSEMENT DEVICE. JOHN C. SCHLEICHER, Mount Vernon, N. Y. Filed May 25, 1912. Serial No. 699,778. (Cl. 46—27.)

1. The herein described amusement house comprising a circular structure having an annular space around its edge with openings through the ceiling of said space; combined with a merrygoround whose floor is disposed above said ceiling and the openings therein, a series of blades carried by said floor, and means for adjusting the angle of the blades.

2. The herein described amusement house comprising a circular structure having an annular space around its edge with openings through the ceiling of said space; combined with a merrygoround whose floor moves in a plane above said ceiling and the openings therein, a series of blades mounted on radial shafts journaled in bearings depending from said floor, connections between said shafts, and means for adjusting them in their bearings to set the blades at various angles.

3. The herein described amusement house comprising a circular structure having a plurality of floors connected by stairways and the like, an annular space around the edge of the uppermost floor, the ceiling above said space being provided with a ring of openings, and a roof above said ceiling whose periphery stands inside the inner ends of said openings; combined with a centrally mounted merrygoround structure including an elevated support, a hanging floor carried thereby and whose inner edge moves past the periphery of said roof, a series of blades carried by said floor and moving above the openings in the ceiling, and means for adjusting the angle of said blades.



4. The herein described amusement house comprising a circular structure having a plurality of floors connected by stairways and the like, an annular space around the edge of the uppermost floor, the ceiling above said space being provided with a ring of openings, and a roof above said ceiling whose periphery stands inside the inner ends of said openings; combined with a centrally mounted merrygoround structure including an elevated support, a hanging floor carried thereby and whose inner edge moves past the periphery of said roof, a series of blades hinged to said floor and moving above the openings in the ceiling, gears fast on the shafts of said blades, a ring movably mounted in said floor and having racks at intervals engaging said gears, and lever mechanism for adjusting the position of said ring, for the purpose set forth.

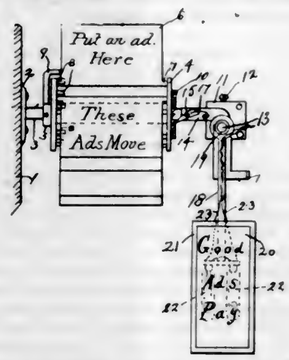
5. The herein described amusement house comprising a circular structure consisting of a base, a main floor above it, a ceiling above said floor, a roof above and smaller than the ceiling, an inclosing wall surrounding said floor and ceiling, stairways connecting the base with the floor and the floor with the roof, a ring of posts from the base through said floor to the ceiling, a smaller ring of posts from the base through said floor and ceiling and roof, and anti-friction rollers carried by the upper ends of the posts of the smaller ring; combined with a merry-go-round structure including a spider carrying a ring standing above said rollers, a central pier in the house structure extending from the base upward through its roof, a step bearing between the hub of the spider and the apex of said pier, and a plurality of decks carried by the arms of said spider, the lowermost deck standing in line with and beyond the periphery of said roof, substantially as described.

[Claims 6 to 14 not printed in the Gazette.]

1,061,505. ADVERTISING DEVICE. MILTON H. SHOENBERG, San Francisco, Cal., assignor, by direct and mesne assignments, to Presto Electrical Manufacturing Company, San Francisco, Cal., a Corporation of California. Filed Jan. 29, 1912. Serial No. 674,285. (Cl. 40—51.)

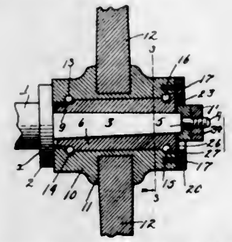
1. In a display device, a pendulum having a sign thereon, an electromagnet to give impulses to said pendulum, a movable circuit breaker carried by the pendulum, and an electric circuit connecting the magnet, the illuminating means and said circuit breaker to intermittently illuminate the signs on said pendulum, substantially as described.

2. In a display device, a pendulum having a sign thereon, means operated by the pendulum to intermittently



illuminate said sign, and an electromagnet to give impulses to said pendulum, substantially as described.

1,061,506. ANTIFRICTION-BEARING FOR VEHICLE-WHEELS. DAVID A. SNYDER, Jersey City, N. J. Filed July 18, 1910. Serial No. 572,446. (Cl. 64—36.)



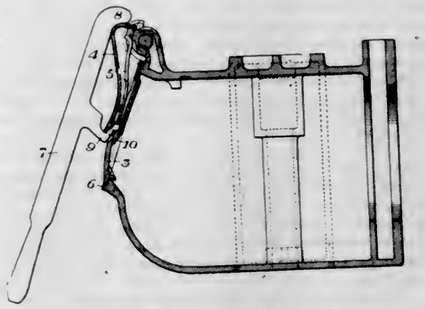
The combination with an axle having a squared spindle and a reduced threaded end; of a hub having a pair of inner and outer ball races opening outwardly, a circular sleeve snugly fitting in the hub and having a square bore engaging the spindle and of less length than the spindle, said sleeve having a similarly located series of ball races opening inwardly, the outer race forming a flange engaged within the sleeve, an annular ring detachably secured to the outer end of the hub and overlying the sleeve, a washer loosely mounted on the reduced end and having an inner rectangular recess engaged by the spindle and a nut threaded on said end over the washer.

1,061,507. JOURNAL-BOX. JOHN W. STEPHENSON and LOREN B. WILSON, Toledo, Ohio, assignors to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 26, 1911. Serial No. 656,801. (Cl. 64—23.)

1. A journal box having a lid hinged thereto at one of its edges, the other three edges of the lid being guarded by the walls of the opening covered by said lid to protect them from direct lifting engagement, and spring mechanism for holding the lid in engagement with the box, the lid having a recess therein for receiving a projection of a lid raising lever, and also having a bearing portion for said lever; substantially as described.

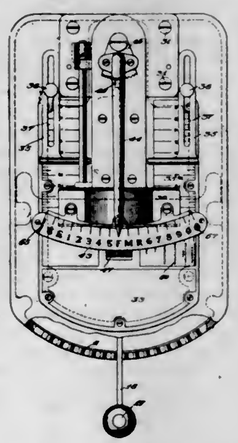
2. A journal box having a lid hinged at one of its edges, the box having guard portions protecting the other edges from direct lifting engagement therewith, a spring mechanism arranged to hold the lid in closed position, there being a recess in the lid, said recess being shaped and arranged so that one of its walls will form a seat for a special opening tool having two seating portions; substantially as described.

3. A journal box having a lid hinged at one edge, the box having portions along the other edges arranged to cover and protect them from direct lifting engagement,



and spring mechanism arranged to hold the lid yieldingly in closed position, the lid having a fulcrum portion and an engaging portion for a lid lifting lever which has two lid engaging portions; substantially as described.

1,061,508. PRINTING APPARATUS. LIBANUS M. TODD and CHARLES G. TIEFEL, Rochester, N. Y., assignors to G. W. Todd & Company, Rochester, N. Y., a Firm composed of George W. Todd and Libanus M. Todd. Filed Jan. 22, 1908. Serial No. 412,224. (Cl. 101—57.)



1. In a printing apparatus, the combination with a main frame, a printing wheel journaled thereon and means for rotating it, of a platen coöperating with the wheel, a pivoted arm by which the platen is carried, a link carrying the pivot of the arm and connecting it with the main frame, devices for adjusting the link to shift the pivot of said arm and means for moving the platen toward the printing wheel.

2. In a printing apparatus, the combination with a printing wheel and a platen coöperating therewith, a horizontally swinging frame, a vertically swinging frame mounted on the horizontally swinging frame, an operating arm for the platen pivoted thereto, and devices for changing the position of the vertically swinging frame so as to alter the point of initial contact between the operating arm and platen.

3. In a printing apparatus, the combination with a printing wheel, of a platen coöperating with the printing wheel and movable about an axis in a plane at one side of said wheel, the pivotal axis of the platen being movable toward and from the plane of the printing wheel so

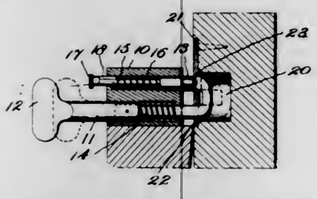
as to shift said arm lengthwise and alter the contacting relation between the printing wheel and platen, and an operating arm for adjusting the printing wheel and swinging the platen.

4. In a printing apparatus, the combination with a main frame, a printing wheel, of a pivoted arm, a platen carried by the pivoted arm, a separate frame piece supporting the pivot of the arm, adjustable on the main frame to shift the arm and alter the contacting relation between the printing wheel and platen, and devices for moving the arm on its pivot to carry the platen into engagement with the printing wheel.

5. In a printing apparatus, the combination with a printing mechanism, of selective means for operating the printing mechanism, a feeding device adapted to advance the work piece step-by-step relatively to the printing mechanism, a clamp movable on the feeding device to cooperate therewith during the feeding, and devices controlled by the selective means for effecting movement of said clamp.

[Claims 6 to 23 not printed in the Gazette.]

1,061,509. AUXILIARY-BOLT SASH-FASTENER. ELIAS TROETEL, New York, N. Y., assignor to Troetel Burglar Alarm-Lock Company, a Corporation of New York. Filed Jan. 9, 1912. Serial No. 670,231. (Cl. 16—119.)



1. In a fastener, a housing, a main bolt slidably and revolubly mounted therein and having a recurved end, an auxiliary bolt adapted to engage said recurved end, and a keeper adapted to coöperate with said bolts, substantially as described.

2. In a fastener, a housing, a main bolt slidably and revolubly mounted therein and having a recurved end, a spring tending to draw said bolt inward, an auxiliary bolt adapted to engage said recurved end, a spring tending to press said bolt outward, and a keeper adapted to coöperate with said bolts, substantially as described.

3. In a fastener, a housing, a main bolt slidably and revolubly mounted therein and having a recurved end, a keeper having a slot for receiving said bolt and a hole for receiving the recurved tip thereof, and an auxiliary bolt in said housing adapted to engage the tip of said main bolt, substantially as described.

4. In a fastener, a housing, a main bolt slidably and revolubly mounted therein and having a recurved end, a keeper having a slot for receiving said bolt and a hole for receiving the recurved tip thereof, an auxiliary bolt in said housing adapted to engage the tip of said main bolt, and a spring adapted to press said auxiliary bolt inward through the hole in said keeper, substantially as described.

5. In a fastener, a slidable and revoluble main bolt having a recurved hollow end, a keeper having a suitable opening for admitting said bolt, and an auxiliary bolt adapted to enter the hollow end of said main bolt for locking the same, substantially as described.

[Claim 6 not printed in the Gazette.]

1,061,510. GAITER. WILLIAM H. WEASER, Pittsfield, Mass. Filed Mar. 26, 1912. Serial No. 686,461. (Cl. 36—2.)

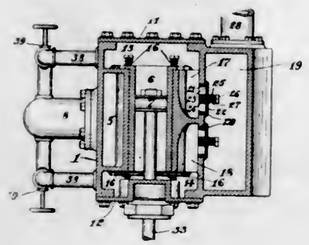
1. A separate gaiter to be worn in conjunction with low shoes, comprising an ankle-portion, a sole-strap attached thereto and arranged to be worn under the foot within the shoe, means attached to the front of said ankle-portion adapted to coöperate with means on the shoe to fasten said ankle-portion to the inner side of the shoe, and means to close said ankle-portion.



2. A separate gaiter to be worn in conjunction with low shoes, comprising a closable ankle-portion provided with depending margins constructed to extend within the top of the shoe, eyes on the front of said depending margins adapted to coöperate with the shoe lace for attaching said margins to the inner side of the shoe, and means for closing said ankle-portions above the top of the shoe.

3. A separate gaiter to be worn in conjunction with low shoes, comprising a closable ankle-portion provided with depending side margins arranged to be worn inside of a shoe, a sole-strap attached to said depending margins arranged to be worn under the foot and within the shoe, means on the front of said depending margins adapted to coöperate with means on the shoe for attaching said margins to the inner side of the shoe, and means for closing said ankle-portion at a point above the top of the shoe.

1,061,511. PISTON-PUMP FOR AUTOMOBILE FIRE APPARATUS. ALBERT C. WEBB, St. Louis, Mo., assignor to The Webb Motor Fire Apparatus Company, St. Louis, Mo., a Corporation of Delaware. Filed Feb. 5, 1912. Serial No. 675,410. (Cl. 103—77.)



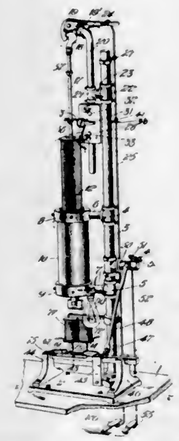
1. In a pump of the character described, the combination of a case divided by partitions into an inlet chamber and a pair of auxiliary chambers, said inlet chamber being located intermediate said auxiliary chambers, a supply pipe opening into said inlet chamber, an outlet chamber located adjacent one of the side walls of the case, an open-ended cylinder supported by said partitions and opening at the ends thereof into said auxiliary chambers, a double-acting reciprocatory piston working in said cylinder, valve connections between said inlet chamber and said auxiliary chambers, fluid-controlled valve connections between said auxiliary chambers and said outlet chamber, a discharge pipe leading from said outlet chamber, a pair of auxiliary pipes connecting said supply pipe with said auxiliary chambers, and each of said auxiliary pipes being provided with a valve.

2. In a pump of the character described, the combination of a case divided by partitions into an inlet chamber and a plurality of auxiliary chambers, said auxiliary chambers being arranged in pairs and said inlet chamber being located intermediate the auxiliary chambers of each pair, a pair of open-ended cylinders supported by said partitions and each cylinder opening at the ends thereof into a pair of said auxiliary chambers, a supply pipe opening into said inlet chamber, an outlet chamber located adjacent one of the side walls of the case and extending the entire length of the case, valve connections between said inlet chamber and each auxiliary chamber, fluid-controlled valve connections between said inlet chamber and each auxiliary chamber, fluid-controlled valve connections between each auxiliary chamber and said outlet chamber, a discharge pipe leading from said outlet chamber, a pair of auxiliary pipes connecting said inlet pipe with the auxiliary chambers of one of said cylinders, and each of said auxiliary pipes being provided with a valve.

3. In a pump of the character described, the combination of a case divided by partitions into an inlet chamber and a pair of auxiliary chambers, said inlet chamber being located intermediate said auxiliary chambers, a supply pipe opening into said inlet chamber, an outlet chamber located adjacent the side wall of the case, an open-ended cylinder supported by said partitions and opening at the ends thereof into said auxiliary chambers, a double-acting reciprocatory piston working in said cylinder, inlet valves between said inlet chamber and each auxiliary chamber, fluid-controlled valve connections between each auxiliary chamber and said outlet chamber, a plurality of shafts revolubly supported by said case, and cams borne by said shafts for opening said inlet valves when said shafts are rocked.

4. In a pump of the character described, the combination of a case divided by partitions into an inlet chamber and a plurality of auxiliary chambers, said auxiliary chambers being arranged in pairs and said inlet chamber being located intermediate the auxiliary chambers of each pair, a pair of open-ended cylinders supported by said partitions and each cylinder opening at the ends thereof into a pair of auxiliary chambers, a supply pipe opening into said inlet chamber, an outlet chamber located adjacent the side wall of the case and extending the entire length of the case, inlet valves between the inlet chamber and each auxiliary chamber, fluid-controlled valve connections between each auxiliary chamber and said outlet chamber, a discharge pipe leading from said outlet chamber, a plurality of shafts revolubly supported by the case and arranged in sets, one set for each cylinder, and cams borne by said shafts adapted to open said inlet valves when said shafts are rocked.

1,061,512. HAMMER. HARRY B. WHITE, Canton, Ohio. Filed Mar. 21, 1908. Serial No. 422,411. (Cl. 172—126.)



1. In an apparatus of the character described, the combination of a normally inactive magnet coil and an armature therefor, a reciprocating part to which said armature is connected, a releasable device for engaging and holding said part in retracted position, manual means for releasing said holding device, and means for closing the circuit for the magnet coil after the said part has been released from the holding device for effecting its working stroke.

2. In an apparatus of the character described, the combination of a normally inactive magnet coil and an armature therefor, a reciprocating part to which said armature is connected, a releasable device for engaging and holding said part in retracted position, manual means for releasing said holding device, means for closing the circuit for the magnet coil after the said part has been released from the holding device for effecting its working stroke, the said coil being inactive during the retraction of said part.

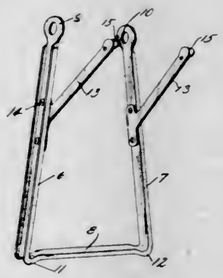
3. In an apparatus of the character described, the combination of a normally inactive magnet coil and an armature therefor, a reciprocating part to which said armature is connected, a releasable device for engaging and holding said part in retracted position, manual means for releasing said holding device, means for closing the circuit for the magnet coil after the said part has been released from the holding device for effecting its working stroke, and means for retracting said reciprocating part, said retracting means being inactive during the working stroke thereof.

4. In an apparatus of the character described, the combination of a normally inactive magnet coil and an armature therefor, a reciprocating part to which said armature is connected, a releasable device for engaging and holding said part in retracted position, manual means for releasing said holding device, means for closing the circuit for the magnet coil after the said part has been released from the holding device for effecting its working stroke, and electrical means for retracting said reciprocating part, said means being inactive during the working stroke thereof.

5. In an apparatus of the character described, the combination of a normally inactive magnet coil and an armature therefor, a reciprocating part to which said armature is connected, a releasable device for engaging and holding said part in retracted position, manual means for releasing said holding device, and means for closing the circuit for the magnet coil after the said part has been released from the holding device for effecting its working stroke and means comprising a coil operating on said armature to retract said reciprocating tool.

[Claims 6 to 13 not printed in the Gazette.]

1,061,513. BICYCLE-STAND. HENRY T. ADAMS, Chicago, Ill., assignor to Henry T. Adams Company, South Chicago, Ill. Filed Oct. 7, 1912. Serial No. 724,276. (Cl. 208—75.)

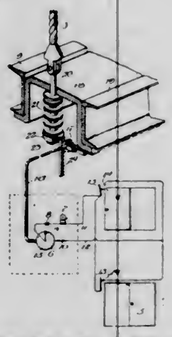


1. A support for bicycles or the like comprising a stirrup, a pivot upon which said stirrup is adapted to rotate, and a spring-like clamp provided with a notch into which said stirrup is adapted to ride, said spring-like clamp being at all times locked in fixed position.

2. A support for bicycles and the like comprising a stirrup, a pivot upon which same is adapted to rotate, a spring-like clamp adapted to be retained upon the same pivot as said stirrup, said spring-like clamp having a flange provided with a locking notch into which said stirrup is adapted to ride, and means for locking said spring-like clamp against rotation upon said pivot.

3. A support for bicycles and the like comprising a stirrup adapted to swing upon the axle of the vehicle, a spring-like clamp intermediate said stirrup and the framework of the vehicle, and means for locking said spring-like clamp to said framework, said clamp being provided with a flange having a notched edge, the stirrup being adapted to seat in the notch upon said edge.

1,061,514. ELEVATOR-ALARM. JOHN C. A. ANDERSON, Chicago, Ill. Filed Nov. 7, 1911. Serial No. 658,964. (Cl. 177—336.)



1. In combination with a movable transporting platform, means for moving said platform, means for giving an indication when the weight on the said platform exceeds a predetermined amount, gates to control access to said platform, and means to prevent the said indication operable when said gates are in their access preventing position.

2. In combination with a movable transporting platform, means for moving said platform, means to indicate the weight carried by said platform, means for giving an indication operable when the weight on the said platform exceeds a predetermined amount, gates to control access to said platform, and means to prevent the said indication when said gates are in their access preventing position.

3. In combination with a weight carrying platform, means for moving said platform having resilient association with the said platform, means interposed between the said means and the said platform to give an indication when the weight of said platform exceeds a given predetermined amount, gates to control access to said platform, and means to prevent the said indication operable when said gates are in their access preventing position.

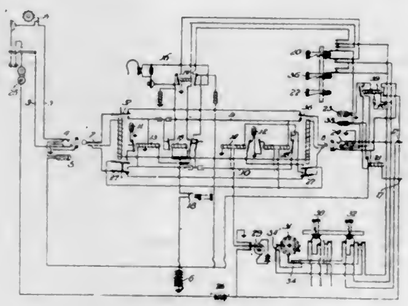
4. In combination with a weight carrying platform, means for moving said platform having resilient association with the said platform, means interposed between the said means and the said platform to control an indicator for indicating the weight carried by said platform and to give an indication when the weight of said platform exceeds a given predetermined amount, gates to control access to said platform, and means to prevent the said indication operable when said gates are in their access preventing position.

5. In combination with a movable transporting platform, means for moving said platform, means for giving an indication when the weight on the said platform exceeds a predetermined amount, and means to at times prevent the said indication, said last aforesaid means comprising a door and controlling devices under the control of said door.

[Claims 6 to 9 not printed in the Gazette.]

1,061,515. TELEPHONY. CHARLES A. BALS, Chicago, Ill., assignor to Corwin Telephone Manufacturing Company, a Corporation of Illinois. Filed Apr. 24, 1911. Serial No. 623,043. (Cl. 179—27.)

1. A telephone exchange system including a plurality of telephone lines extending between an exchange and a telephone station; extensions for said telephone lines having terminals at the exchange; electro-magnetic selecting mechanism for effecting connection between said extensions and said telephone lines; circuit breaking mechanism at said telephone station for setting said selecting mechanism into operation and serving when at rest to establish connection between the sides of the telephone line with which it is associated to hold the selecting mechanism in that position in which a telephone line is connected through the agency of said selecting mechanism with a telephone line extension; and switching mechanism whereby said circuit breaking mechanism may be interchangeably associated with said telephone lines and whereby a connection is established between the sides of the telephone line from which the circuit breaking mechanism is transferred in order to prevent that operation of the selecting mechanism associated with the line from which the circuit breaking mechanism is transferred that would cause the separation between the telephone line and extension previously connected by the selecting mechanism.



2. A telephone system including telephone lines extending to different exchanges; a battery at each exchange common to equipment there located; a trunk line extending from one exchange to the other; link connecting mechanism at the exchange to which the trunk line extends for connecting the trunk line with telephone lines extending to this exchange; circuit connections whereby the common battery at one exchange may be brought into direct operative association with clearing out or supervisory equipment at the other exchange; and means at the exchange having the equipment with which the common battery is brought into operative association for disassociating the common battery thereat from the circuit established between lines by way of both exchanges and trunk line.

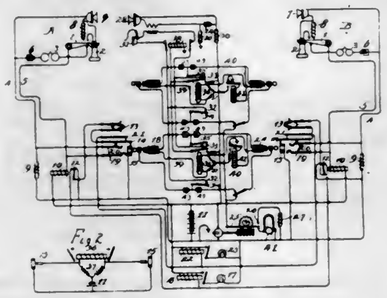
3. A telephone system including telephone lines extending to different exchanges; a battery at each exchange common to equipment there located; a trunk line extending from one exchange to the other; link connecting mechanism at the exchange to which the trunk line extends for connecting the trunk line with telephone lines extending to this exchange; circuit connections whereby the common battery at one exchange may be brought into direct operative association with clearing out or supervisory equipment at the other exchange; and means for disassociating the battery at one of the exchanges from the circuit established between lines by way of both exchanges and trunk line.

4. A telephone system including telephone lines extending to different exchanges; a battery at each exchange common to equipment there located; a trunk line extending from one exchange to the other; mechanism at the exchange to which the trunk line extends for connecting the trunk line with telephone lines extending to this exchange; circuit connections whereby the common battery at one exchange may be brought into direct operative association with clearing out or supervisory equipment at the other exchange; and means at the exchange having the equipment with which the common battery is brought into operative association for disassociating the common battery thereat from the circuit established between lines by way of both exchanges and trunk line.

5. A telephone system including telephone lines extending to different exchanges; a battery at each exchange common to equipment there located; a trunk line extending from one exchange to the other; mechanism at the exchange to which the trunk line extends for connecting the trunk line with telephone lines extending to this exchange; circuit connections whereby the common battery at one exchange may be brought into direct operative association with clearing out or supervisory equipment at the other exchange; and means for disassociating the battery at one of the exchanges from the circuit established between lines by way of both exchanges and trunk line.

[Claims 6 to 12 not printed in the Gazette.]

1,061,516. TELEPHONE-EXCHANGE SYSTEM. CHARLES A. BALS, Chicago, Ill., assignor to Corwin Telephone Manufacturing Company, a Corporation of Illinois. Filed Mar. 3, 1909, Serial No. 481,084. Renewed Apr. 29, 1911. Serial No. 624,144. (Cl. 179—72.)



1. A telephone exchange system including telephone lines extending from sub-stations to an exchange, cord circuits, each provided with terminal plugs adapted for connection with telephone lines to unite the same in conversation, an operator's telephone outfit adapted for telephonic connection with the telephone lines, switching mechanism governing the association of the operator's telephone outfit with the telephone lines, an electro-magnet governing the operation of said switching mechanism, a source of current for energizing said electro-magnet, switching devices governed by the plugs of each cord circuit, and circuit connections governed by said plugs and switching devices, whereby when a plug and one of said switching devices co-act, current is caused to flow through said electro-magnet to cause it to operate the switching mechanism, and when both plugs coöperate with both switching devices, current is diverted from said electro-magnet to cause it to release the switching mechanism that it controls, thereby to remove the operator's telephone set from circuit relation with united telephone lines, said circuit connections defining local circuits to which said source of current is common, there being resistance in parallel with the electro-magnet winding with a mid portion of which said source of current is connected, whereby each of said local circuits includes a part of said resistance and whereby when both local circuits are established, the electro-magnet is deprived of current, owing to the lack of the necessary difference of potential between its terminals due to said resistance and the connection of the source of current therewith, each of said local circuits being exclusive of said electro-magnet, which, therefore, only receives current through the resistance portion of the open local circuit when the companion local circuit is closed.

2. A telephone exchange system including telephone lines extending from sub-stations to an exchange, cord circuits, each provided with terminal plugs adapted for connection with telephone lines to unite the same in conversation, said telephone lines having jack switches for the reception of the plugs, an operator's telephone outfit adapted for telephonic connection with the telephone lines, switching mechanism governing the association of the operator's telephone outfit with the telephone lines, an electro-magnet, governing the operation of said switching mechanism, a source of current for energizing said electro-magnet, and circuit connections leading to said jack switches and said plugs, whereby when a plug and one of said jack switches co-act, current is caused to flow through said electro-magnet to cause it to operate the switching mechanism, and when both plugs coöperate with both jack switches, current is diverted from said electro-magnet to cause it to release the switching mechanism that it controls, thereby to remove the operator's telephone set from circuit relation with united telephone lines, said circuit connections defining local circuits to which said source of current is common, there being resistance in parallel with the electro-magnet winding with a mid portion of which said source of current is connected, whereby each of said local circuits includes a part of said resistance and whereby when both local circuits are established, the electro-magnet is deprived of current, owing to the lack of the necessary difference of potential between its terminals due to said resistance and the connection of the source of current therewith, each of said local circuits being exclusive of said electro-magnet, which, therefore, only receives current through the resistance portion of the open local circuit when the companion local circuit is closed.

3. A telephone exchange system including telephone lines extending from sub-stations to an exchange, cord circuits for uniting lines in conversation, an operator's telephone outfit adapted for circuit relation with the cord circuits, electro-magnetic mechanism adapted, when sufficiently energized, to prevent the operative association of the operator's telephone outfit with the cord circuits, a source of current, and resistances, one per cord circuit, adapted to be included in circuit with said electro-magnetic mechanism and said source of current and whose circuit relation with said electro-magnetic mechanism is governed by the cord circuit apparatus, the said resistances of the different cord circuits being in parallel relation, whereby a plurality of such resistances thus connected in parallel will permit the flow of sufficient current to effect the operation of the electro-magnetic mechanism to render the operator's telephone outfit temporarily inoperative, a single one of said resistances sufficiently reducing the flow of current to said electro-magnetic mechanism to prevent said electro-magnetic mechanism from operating.

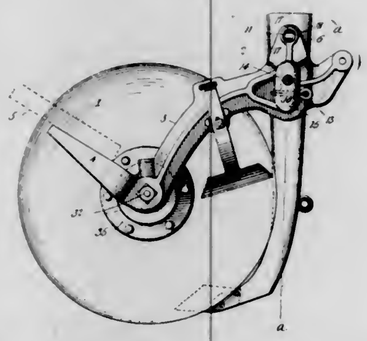
4. A telephone exchange system including telephone lines extending from sub-stations to an exchange, cord circuits for uniting lines in conversation, an operator's telephone outfit adapted for circuit relation with the cord circuits, electro-magnetic mechanism adapted, when sufficiently energized, to prevent the operative association of the operator's telephone outfit with the cord circuits, a source of current, and resistances, one per cord circuit, adapted to be included in circuit with said electro-magnetic mechanism and said source of current and whose circuit relation with said electro-magnetic mechanism is governed by the cord circuit apparatus, the said resistances of the different cord circuits being in parallel relation, whereby a plurality of such resistances thus connected in parallel will permit the flow of sufficient current to effect the operation of the electro-magnetic mechanism to render the operator's telephone outfit temporarily inoperative, a single one of said resistances sufficiently reducing the flow of current to said electro-magnetic mechanism to prevent said electro-magnetic mechanism from operating, the cord circuit apparatus governing the asso-

ciation of said resistances with said electro-magnetic mechanism including an electro-magnetic device or relay per cord circuit, a switch governed by each relay and for connecting the aforesaid resistance of said cord circuit with the first aforesaid electro-magnetic mechanism, and switching mechanism governed by the cord circuit for governing the operation of said electro-magnetic device or relay.

5. A telephone exchange system including telephone lines extending from sub-stations to an exchange, cord circuits for uniting lines in conversation, an operator's telephone outfit adapted for circuit relation with the cord circuit, electro-magnetic mechanism adapted, when sufficiently energized, to prevent the operative association of the operator's telephone outfit with the cord circuits, a source of current, and means jointly made effective and controlled by a plurality of cord circuits for operating said electro-magnetic mechanism to render the operator's telephone set temporarily inoperative.

[Claims 6 to 13 not printed in the Gazette.]

1,061,517. GRAIN-DRILL. EDWIN R. BEEMAN, Minneapolis, and THOMAS BRENNAN, Jr., St. Louis Park, Minn., assignors to Monitor Drill Company, a Corporation of Minnesota. Filed May 16, 1910. Serial No. 561,572. (Cl. 111—11.)



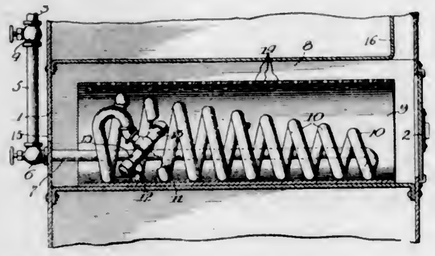
1. In a grain drill and in combination with a rotary opening disk, a seed tube having its toe in direct contact with the disk and movable bodily, transversely with reference to the plane of the disk about a fore and aft axis, and means for maintaining the toe in yielding engagement with the disk.

2. In combination with the supporting arm, an opening disk mounted thereon, a seed tube mounted on said arm on an axis parallel or substantially so with the plane of the disk and adapted to engage the disk below said axis; whereby the lower end of the tube is movable to and from the disk, and a spring engaging the arm and tube above said axis and acting to hold the lower end of the tube in yielding engagement with the disk.

3. In combination with the supporting arm provided with a socket, a disk mounted on the arm, a seed tube formed with a lug seated in the socket, a device confining the lug pivotally in said socket, and a spring between the arm and tube acting to hold the latter yieldingly against the disk.

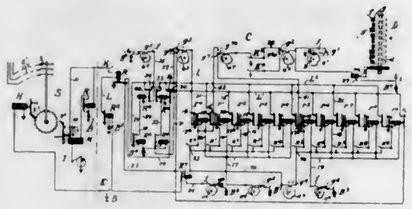
1,061,518. VAPORIZER AND VAPOR-BURNER. ADOLPH C. BEHNKE and ALBERT J. BEHNKE, Valders, Wis. Filed Dec. 14, 1911. Serial No. 665,740. (Cl. 158—79.)

A liquid fuel burner consisting of a combustion chamber, a hollow tube open at both ends disposed therein and having apertures through the upper portion thereof, a coiled pipe disposed throughout the length of said tube and having its end extending to within the interior of said coil, a nozzle consisting of a pipe arranged at right angles



upon said pipe end, and apertures in said nozzle through which the fuel escapes.

1,061,519. CONTROLLING APPARATUS. WILLIAM G. BLAUVELT, New York, N. Y., and EDWARD C. MOLINA, East Orange, N. J., assignors to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 13, 1911. Serial No. 660,088. (Cl. 179—27.)



1. The combination with a selective apparatus including electro-responsive means for causing its selective movement, of a controlling apparatus therefor comprising a set of manually operable contact devices for determining the extent of movement of the selective apparatus, electro mechanisms, one for each contact device, by which the movement of the selective apparatus toward the desired point is measured, and means under the influence of the electromechanisms for controlling selection.

2. A selector controlling apparatus comprising a set of manually operable circuit controlling devices, a series of electrical controlling devices each corresponding to a manually operable device, an energizing circuit for said electrical devices, and means common to the series for connecting the energizing circuit to successive electrical devices.

3. An impulse counting apparatus comprising a series of electromechanical contact devices, said contact devices corresponding to a series of impulses and being arranged in groups, an energizing circuit for said contact devices, and means for alternately connecting the groups of contact devices to the energizing circuit.

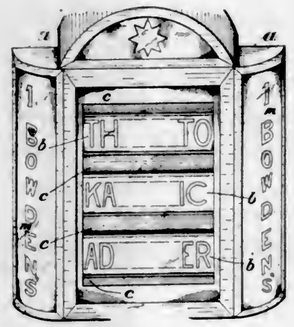
4. An impulse counting apparatus comprising a device actuated by the impulses to be counted, a series of counting electro-mechanisms, an energizing circuit for the counting electromechanisms controlled by the device, and means common to the series of counting electromechanisms for successively connecting said counting electromechanisms to the energizing circuit.

5. A selection controlling apparatus comprising controlling relays arranged in groups, an energizing circuit therefor, a relay governing said energizing circuit to actuate the controlling relays, and means for alternately connecting the groups of relays to the actuating relay.

[Claims 6 to 23 not printed in the Gazette.]

1,061,520. ADVERTISING AND LIKE APPARATUS. THOMAS BOWDEN, Manchester, England. Filed Feb. 24, 1910. Serial No. 545,592. (Cl. 40—77.)

In apparatus for displaying advertisements and for like purposes, a casing and a revolving frame within such casing carrying the lettering or other matter to be displayed, and means rotating said frame intermittently, in combination with rotatable members arranged in such relation to the frame as to form the sides of the apertures through which the lettering is visible, and said members being multi-colored in order that when rotated they will



give a novel optical effect, and means for rotating the rotatable members, substantially as herein set forth.

1,061,521. GRAIN-DRILL. THOMAS BRENNAN, Jr., St. Louis Park, Minn., assignor to Monitor Drill Company, a Corporation of Minnesota. Filed May 24, 1910. Serial No. 563,111. (Cl. 111—11.)



1. In a seeding machine, the combination with a seed tube, of a rotary opening disk sustained adjacent the tube, one of said parts being yieldable relatively to the other about an axis situated in advance of the tube and extending at an angle with reference to the axis of rotation of the disk.

2. In a seeding machine, the combination with a seed tube, of a rotary opening disk sustained adjacent the tube and yieldable relatively to the tube about an axis extending parallel or substantially so with the axis of the tube.

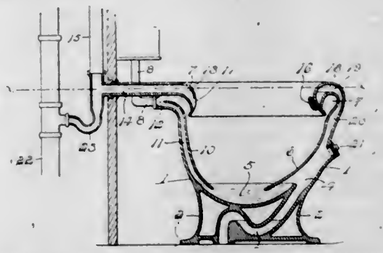
3. In a seeding machine, the combination with a seed tube, of a rotary opening disk sustained adjacent the tube and yieldable relatively to said tube on an axis situated in advance of the tube and extending at an angle with reference to the axis of rotation of the disk.

4. In a seeding machine, the combination with a rotary opening disk, of a seed tube sustained adjacent to the disk and contacting with the side of the same, the said disk being movable about an axis situated in advance of the tube and extending at an angle with relation to the axis of rotation of the disk, and means for holding the disk in yielding engagement with the tube.

5. In a seeding machine, the combination with a seed tube, of a rotary disk movably supported adjacent to its axis of rotation and adapted to rock on its support relatively to the tube on an axis extending at an angle to the axis of rotation of the disk, and means for holding the disk and tube in yielding engagement with each other.

[Claims 6 to 12 not printed in the Gazette.]

1,061,522. WATER-CLOSET. ALBERT A. BRUDER and AUGUST J. BRUDER, Detroit, Mich. Filed Dec. 18, 1911. Serial No. 666,566. (Cl. 4—21.)



1. The combination of a closet bowl having a ventilating passage near its top, a vent pipe connected to said passage to draw air therefrom, a soil stack extending upward at a distance from the bowl, and a connection between the lower end of the vent pipe and the soil stack comprising a trap.

2. The combination of a closet bowl having a hollow flushing rim passage, a ventilating passage above the flushing passage having a horizontally extending outlet, a vent pipe connected to the said outlet to draw air therefrom, a soil stack extending vertically past the bowl adjacent to the vent pipe, and a trap connecting the lower end of the vent pipe and the soil stack.

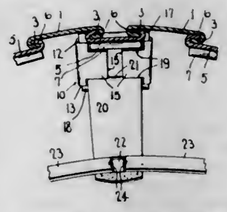
3. The combination of a closet bowl, a trap, a passage forming the outlet for the bowl and leading to the inlet side of the trap, a rim passage connected with said passage leading to the trap, and a ventilating outlet for said rim passage.

4. The combination of a closet bowl having a trap basin, a trap below the trap basin, a passage leading upward from the inlet of the lower trap and into which passage the trap basin is adapted to overflow, a rim passage into which the passage from the trap opens and which has an outlet, and a vent pipe connected to said outlet.

5. A closet bowl comprising a trap basin in its bottom, a trap below said basin, a passage at the forward side of the bowl forming the inlet for the lower trap and into which the trap basin discharges, a clean-out opening being provided in the front wall of said passage, a closure for said opening, and a breather passage connected to the upper end of said passage.

[Claims 6 and 7 not printed in the Gazette.]

1,061,523. TIRE-ARMOR. JOHN J. BUKOLT, Stevens Point, Wis. Filed May 9, 1912. Serial No. 696,174. (Cl. 152—16.)



1. The herein described tire armor made up of a tread section comprising inner and outer members and flexible connections between them, the inner members having their side edges hooked outwardly; two sides sections, each composed of a series of plates having hooks at their outer ends engaging the hooks of said inner members, the said connections preventing the longitudinal disengagement of such hooks; and two ring-shaped members smaller than the largest circumference of the tire, and connections between said rings and the side sections.

2. In a tire armor, the combination with a tread composed of members flexibly connected and certain of them having outturned hooks at their sides; of two side sections, each made up of a number of plates whose bodies have inturned hooks across their outer ends engaging the hooks on said tread members, and their side edges rolled inward in tongues underlying the throats of said hooks, for the purpose set forth.

3. In a tire armor, the combination with a tread composed of members flexibly connected and certain of them having outturned hooks at their sides; of two side sections, each made up of a number of plates whose bodies have inturned hooks across both ends, those at the outer ends engaging the hooks on said tread members, their side edges rolled inward and reduced and continued inward in tongues underlying the throats of both said hooks, two series of clasps each made up of a number of plates having outturned hooks at their upper ends engaging the lower hooks on said side sections; and means for holding the clasps on the tire.

4. In a tire armor, the combination with a tread section comprising a number of outer members each having a substantially rectangular flat body with round corners and inturned hooks at opposite sides thereof, and a number of inner members each having a transversely curved body with outturned hooks at two opposite sides engaging the inturned hooks of the outer member and additional hooks at the remaining sides of said body; of side members complementing the tread section and making up said armor, and means for holding the members in engagement with the side hooks of the inner members of the tread section.

5. In a tire armor, the combination with a tread composed of members flexibly connected and certain of them having hooks at their sides; of two side sections, each made up of a number of plates whose bodies have inturned hooks across their outer ends engaging the hooks on said tread members, and their side edges rolled inward to close the lateral extremities of said hooks and reduced and continued inward in tongues underlying the throats of said hooks, for the purpose set forth.

[Claims 6 and 7 not printed in the Gazette.]

1,061,524. TIRE-ARMOR. JOHN J. BUKOLT, Stevens Point, Wis. Filed Aug. 8, 1912. Serial No. 714,045. (Cl. 152—16.)



1. A tire armor comprising a tread portion composed of a plurality of alternately arranged inner and outer plates having hooks at the opposite ends thereof, the hooks of the outer plates being engaged with those of the inner plates, said inner plates being provided at their opposite side edges with lips, flexible straps secured to said lips, and yielding means for detachably connecting said straps.

2. A tire armor comprising a plurality of alternately arranged inner and outer plates flexibly connected, flexible straps secured to the side edges of one series of said plates and provided with hooks at their free ends, and resilient annular members engaged with said hooks for detachably connecting the straps and for securing the armor to a tire.

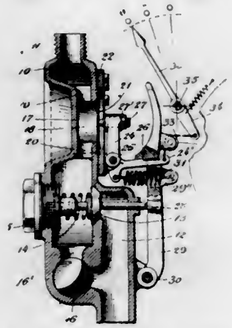
3. A tire armor comprising a plurality of alternately arranged inner and outer plates having interlocking hooks at their ends, said inner plates having laterally extending lips projecting from their side edges, flexible straps secured at one end to said lips and provided at their free ends with hooks, and annular coiled springs detachably engaged with the hooks of said straps.

4. A tire armor comprising a plurality of alternately arranged inner and outer plates having interlocking hooks at their ends, said inner plates having laterally extending lips projecting from their side edges, flexible straps secured at one end to said lips and provided at their free ends with hooks, and annular coiled springs detachably engaged with the hooks of said straps, said outer plates having laterally extending aprons on their side edges set at an angle thereto.

5. A tire armor composed of a tread section comprising outer members each having a substantially rectangular body with inturned hooks along its front and rear ends and inturned sides standing over the extremities of said hooks, and inner members each having a flat rectangular body with outturned hooks along its front and rear ends adapted to engage those on the outer members and stand between the sides of the latter, and lips along its opposite sides combined with attaching means engaging said lips for holding the tread section on the tire.

[Claims 6 to 9 not printed in the Gazette.]

1,061,525. DEVICE FOR PREVENTING LIQUID FROM FREEZING IN TANKS. WILFRED O. CHASE, Detroit, Mich. Filed Jan. 29, 1912. Serial No. 674,183. (Cl. 137—35.)



1. A device for the purpose named, comprising a casing having an inlet and an outlet opening, a chamber within the main chamber of the casing above said outlet opening and communicating with the interior of the main chamber, a valve in the outlet below the first mentioned chamber normally closed, and means for opening said valve by the formation of ice in said chamber.

2. A device for the purpose named, comprising a casing having an inlet and an outlet opening, a chamber within the main chamber of the casing above said outlet opening and communicating with the interior of the main chamber, a valve in the outlet below the first mentioned chamber, and a lever connected with said valve and operable upon the formation of ice in said chamber.

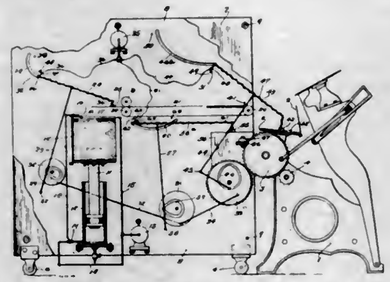
3. A device for the purpose named, comprising a casing having an inlet and an outlet opening, a chamber within the main chamber of the casing above said outlet opening and communicating with the interior of the main chamber, a valve in the outlet below the first mentioned chamber normally closed, a lever pivoted on the casing, resilient means for moving said lever to open said valve, means for normally holding said lever against operation by said resilient means, and a diaphragm in one wall of the first mentioned chamber and movable by the formation of ice therein to release said lever from the holding means.

4. A device for the purpose named, comprising a casing having an inlet and an outlet opening, a chamber within the main chamber of the casing above said outlet opening and communicating with the interior of the main chamber, a valve in the outlet below the first mentioned chamber normally closed, a lever pivoted on the casing, resilient means for moving said lever to open said valve, a trip lever for normally holding said lever against operation by said resilient means, and a diaphragm closing one side of said first-mentioned chamber and movable by the formation of ice therein, to release said lever from the holding means.

5. A device for the purpose named, comprising a casing having an inlet and an outlet opening, a chamber within the main chamber of the casing above said outlet opening and communicating with the interior of the main chamber, a valve in the outlet below the first mentioned chamber normally closed, a lever for opening said valve, a trip lever normally holding the valve-lever against operation, a diaphragm inclosing one side of said first-mentioned chamber, and a spring for operating said valve lever to open the valve and also for normally holding the trip lever against the valve lever to prevent its operation, said trip lever being operative to release the valve lever therefrom by the formation of ice in said first-mentioned chamber.

[Claims 6 to 8 not printed in the Gazette.]

1,061,526. FEED AND DELIVERY ATTACHMENT FOR PRINTING-PRESSES. SAMUEL W. CORTISSOZ, Philadelphia, Pa. Filed Aug. 9, 1910. Serial No. 576,345. (Cl. 101—41.)



1. Apparatus of the class recited comprising a table operated through the instrumentality of pressure, said table containing articles to be fed, means for supplying pressure beneath said table for elevating the same vertically, a horizontally arranged endless conveyer, a reciprocating arm equipped with a suction device for transferring one at a time said articles from said table to the conveyer, a pneumatic device for relatively separating said articles prior to transfer, valved means responding to the removal of an article from the table for causing the admission of pressure beneath the table to elevate it a predetermined distance, means for reciprocating said arm and means actuated by the reciprocating arm for establishing and interrupting suction through said suction device.

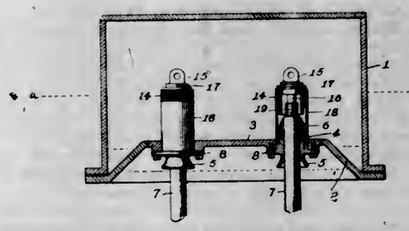
2. Apparatus of the class recited comprising a table constructed to be automatically lifted containing sheets of paper to be fed, an endless conveyer, a reciprocating arm equipped with a suction device for transferring one at a time said sheets of paper from the table to the conveyer, means responding to the removal of a sheet of paper from the table for lifting the same a predetermined distance, a reciprocating arm equipped with a suction device for transferring said sheets of paper from the conveyer to the platen of a printing press, a reciprocating arm carrying a suction device for delivering the printed sheets, means for reciprocating said arms and means actuated by the reciprocating arms for establishing and interrupting suction through said device.

3. Apparatus of the class recited comprising a table equipped with a plunger, said table containing sheets of paper to be fed, a cylinder through which the plunger works, means for supplying pressure within the cylinder, an endless conveyer, a reciprocating arm equipped with a suction device for transferring one at a time said sheets of paper from the table to the conveyer, means responding to the removal of a sheet of paper from the table for causing the admission of pressure within the cylinder, a reciprocating arm equipped with a suction device for removing the sheets from the endless conveyer, means for reciprocating said arms and means actuated by the reciprocating arms for establishing and interrupting suction through said devices.

4. In an attachment for printing presses, the combination of a portable structure, traction wheels therefor, a feed table constructed to be automatically lifted containing a stack of paper, an endless conveyer, a reciprocating arm equipped with a suction device for transferring one at a time said sheets of paper from the table to the conveyer, a second reciprocating arm equipped with a suction device for transferring sheets of paper from the conveyer to the platen of the printing press, a third reciprocating arm equipped with a suction device for removing the printed sheets from said platen, means for reciprocating said arms, and means actuated by the reciprocating arms for establishing and interrupting suction through said devices.

5. In combination a printing press including its complemental platen and grippers, pneumatic sheet adjusting means operatively mounted upon said platen said means being operated by said platen grippers, a reciprocating arm equipped with a suction device for delivering sheets of paper to said platen, a reciprocating arm equipped with a suction device for removing the printed sheets from said platen, means carried by the press parts for operating said platen and grippers and said reciprocating arms and means actuated by said reciprocating arms for establishing and interrupting suction through said devices.

1,061,527. JUNCTION-BOX FOR ELECTRICAL CABLES. CHARLES W. DAVIS, Edgeworth, Pa., assignor to Standard Underground Cable Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 24, 1909. Serial No. 479,769. (Cl. 247—14.)



1. A junction box for electrical conductors, which consists of a dished bottom plate with depressed rim and an elevated intermediate portion, and a water-tight cover fitting over said bottom plate and engaging the depressed rim thereof, said bottom plate being provided in its elevated portion intermediate the rim with an orifice for the introduction of an electrical conductor, substantially as described.

2. In an electrical installation, the combination of a junction box formed substantially of magnetic metal and provided with an orifice in its wall for the reception of a cable, a single conductor carrying an alternating current passing through said orifice, a break in the continuity of the magnetic metal of which the said box is formed at a point adjacent said orifice, and a body of non-magnetic metal filling said break and integrally united with said magnetic metal, substantially as described.

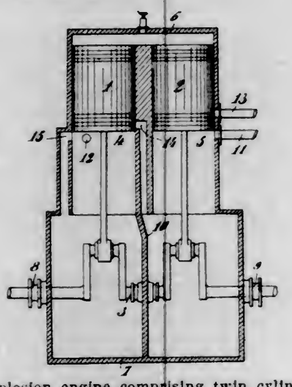
3. A junction box for electrical conductors formed substantially of magnetic metal and having two cable orifices in a magnetic-material wall thereof, a slot through such magnetic-material wall extending from one of said orifices to the other, and a body of non-magnetic metal filling said slot and integrally united with said magnetic metal, substantially as described.

4. A junction box for electrical cables provided with a terminal structure carried in an orifice in its wall, such terminal including a thimble engaging both the cable sheath and the junction-box wall and a lead-out connected with said thimble, substantially as described.

5. A terminal structure adapted to be introduced in an orifice in the wall of a junction box, said terminal structure including a thimble adapted to surround a cable to be secured upon the sheath thereof and to be secured in the orifice in the junction-box wall, and a lead-out in structural connection with said thimble, and adapted to be connected electrically with the core of a cable, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,061,528. VALVELESS TWO-CYCLE MOTOR. OSCAR DEPREZ, Brussels, and ARMAND RICHIR, Anderlecht-Brussels, Belgium. Filed Jan. 26, 1911. Serial No. 604,852. (Cl. 123—53.)



1. An explosion engine comprising twin cylinders, pistons therein, a closed crank case having a chamber beneath each cylinder, one of said cylinders having an inlet port controlled by its piston, the other cylinder having a fuel inlet port controlled by its piston and a conduit leading from each of said crank chambers to the last named cylinder, terminating in different longitudinal positions and controlled by the last named piston.

2. An explosion engine comprising twin cylinders, pistons therein, a closed crank case having a chamber beneath each cylinder, one of said cylinders having an air inlet port controlled by its piston, the other cylinder having a fuel inlet port controlled by its piston and a conduit leading from each of said crank chambers to the last named cylinder terminating in different longitudinal positions and controlled by the last named piston.

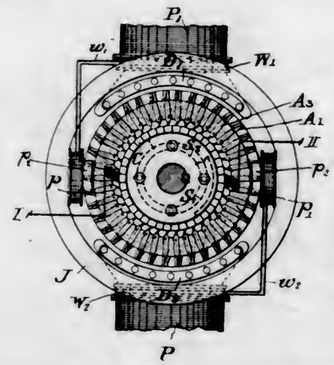
3. An explosion engine comprising twin cylinders, pistons therein forming a combustion chamber between the heads of the cylinders and the pistons, a closed crank case having a chamber communicating with each cylinder, means controlled by one of the pistons to admit air into one of the chambers through the cylinder communicating therewith, means controlled by the other piston to admit fuel into the other chamber through the cylinder communicating with the latter, means controlled by the last named piston to permit the passage of air from the air chamber to the combustion chamber, and means controlled by said last named piston to permit the passage of fuel from the fuel chamber to the combustion chamber.

4. An explosion engine comprising twin cylinders pistons therein forming a combustion chamber between the heads of the cylinders and the pistons, a closed crank case having a chamber communicating with each cylinder, means controlled by one of the pistons to admit air into one of the chambers through the cylinder communicating therewith, means controlled by the other piston to admit fuel into the other chamber through the cylinder communicating with the latter, means controlled by the last named piston to permit the passage of air from the air chamber to the combustion chamber, and means controlled by said last named piston to permit the passage of fuel from the fuel chamber to said combustion chamber.

5. An explosion engine comprising an air cylinder, and a fuel cylinder, pistons therein forming a combustion chamber between the heads of the cylinders and the pistons, a wall between said cylinders, a closed crank case having a chamber communicating with each cylinder, said air cylinder having a port therein, the piston of said cylinder adapted to open and close said port and move the air from the cylinder and compress it in the chamber communicating with the latter, the fuel cylinder having a fuel inlet port, the piston of the fuel cylinder adapted to open and close said fuel port and move the fuel from the fuel cylinder to the chamber communicating with the latter, an air conduit connecting the air chamber with the fuel cylinder, a fuel conduit connecting the fuel chamber with its cylinder, both of said conduits controlled by the piston in the fuel cylinder and adapted to communicate with the combustion chamber.

[Claims 6 to 8 not printed in the Gazette.]

1,061,529. ALTERNATING-CURRENT DYNAMO-ELECTRIC MACHINE. WLADIMIR DOLNIKOFF, Baden, Switzerland. Filed Apr. 28, 1909. Serial No. 492,766. (Cl. 171—228.)

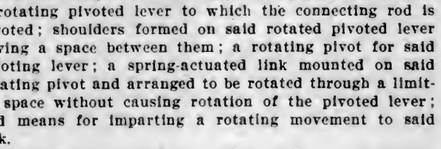


1. A rotary converter comprising a main armature core, an auxiliary armature core, a winding on the main core, a winding on the auxiliary core inserted between the main winding and the commutator, main field poles, an exciting winding on said field poles, a separate inductive winding on said field poles, commutating poles in magnetic relation with said auxiliary iron core, a winding on said commutating poles fed from said second winding on the main field poles, and a commutator to which the conductors of said main winding are connected.

2. A rotary converter comprising a main armature core a winding on said main armature core, a commutator to which the conductors of said winding are connected, an auxiliary armature core between the main armature core and the commutator, the conductors between said main winding and the commutator being looped around said auxiliary armature core, main field poles, an exciting winding on said field poles, a separate inductive winding on said field poles with which the flux of the field poles is interlinked, commutating poles in magnetic relation with said auxiliary iron core, and windings on said commutating poles fed from said second winding on the main field poles.

1,061,530. SPRING-SWITCH. FRANK H. ELLIS, Somerville, Mass., assignor to Barbour-Stockwell Company, a Corporation of Massachusetts. Filed June 26, 1911. Serial No. 635,254. (Cl. 104—79.)

1. The combination in a spring-locking switch structure, of a tongue; a connecting rod engaging the tongue; a rotating pivoted lever to which the connecting rod is pivoted; a rotating pivot; shoulders formed on said rotating pivot; a link mounted on said rotating pivot between said shoulders; a spring actuated rod pivoted to said link; a spring; a spring-case forming a bearing for said spring; and a bearing for one end of said spring-case in the switch structure.



2. The combination in a spring-locking switch structure, of a tongue; a connecting rod engaging said tongue; a rotary lever to which the connecting rod is pivoted; a rotating pivot upon which said lever is mounted; a bearing in the switch structure for said rotating pivot; a link rotatively mounted on said pivot, and arranged to abut against either of the shoulders on the pivoted lever; a spring actuated rod pivoted to the outer end of said link; a spring mounted on said rod and arranged to cause the link to yieldingly abut against either of said shoulders as desired; and means to rotate said link to cause the thrust of the spring to yieldingly press it against either of said shoulders on the pivoted lever as desired.

3. The combination in a spring-locking switch structure, of a tongue; an adjustable connecting rod engaging said tongue; a rotating pivoted lever having shoulders, to which said connecting rod is pivoted; a rotating pivot; shoulders on said rotating pivot; a bearing in the switch structure for said rotating pivot; a link rotatively mounted on said pivot arranged to abut against the shoulders on the pivoted lever; a spring actuated rod pivoted to the outer end of said link; the pivot for said rod having a portion extending above the end of said rod and arranged to abut against the shoulders on the rotating pivot; and a spring mounted on said rod and arranged to cause the link to yieldingly abut against either of the shoulders on the pivoted lever as desired.

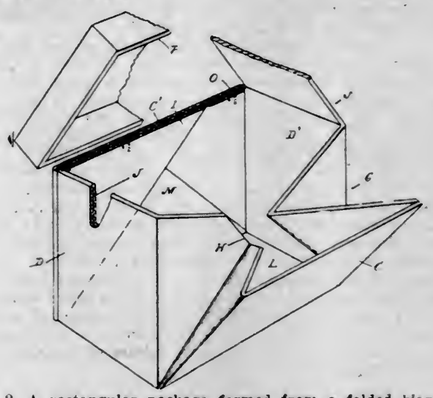
4. The combination in a spring-locking switch structure, of a tongue; an adjustable connecting rod engaging said tongue; a rotating pivoted lever to which said connecting rod is pivoted; shoulders formed on said lever; a rotating pivot; shoulders on said rotating pivot; a bearing in the switch structure for said rotating pivot; a link rotatively mounted on said pivot arranged to abut against the shoulders on the pivoted lever; a spring actuated rod pivoted to the outer end of said link; a pivot having a portion extending beyond the end of said rod and arranged to abut against the shoulders on the rotating pivot; a spring mounted on said rod and arranged to cause the link to yieldingly abut against either of the shoulders on the pivoted lever as desired; and means for increasing or decreasing the tension on the spring.

5. In a spring-locking switch structure having a movable switch-tongue; a connecting rod engaging the tongue; a rotating pivoted lever to which the connecting rod is pivoted; shoulders formed on said rotated pivoted lever having a space between them; a rotating pivot for said pivoting lever; a spring-actuated link mounted on said rotating pivot and arranged to be rotated through a limited space without causing rotation of the pivoted lever; and means for imparting a rotating movement to said link.

[Claim 6 not printed in the Gazette.]

1,061,531. PACKAGE. FREDERICK EMMONS, Sandusky, Ohio, assignor to Hinde & Dauch Paper Company, Sandusky, Ohio, a Corporation of Ohio. Filed Apr. 20, 1911. Serial No. 622,257. (Cl. 229—23.)

1. A rectangular package formed of a blank having two of the opposite walls thereof each folded to provide gore portions, leaving a space between the gores, and an insert having a portion covering the bottom and provided with gore portions of a size only to fill the space between said gores of the walls.

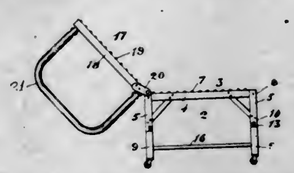


2. A rectangular package formed from a folded blank having two of the opposite walls thereof each formed of a plurality of plies of substantially the same size, and the other opposite walls each having folded gore portions forming a space between the gores and an insert having a portion covering the bottom and provided with gore portions of a size only to fill the space between the gores of the walls.

3. A rectangular package formed of a folded blank having two of the opposite walls thereof each formed of a plurality of plies of substantially the same size and the other opposite walls having folded gores, one of the gores having a portion cut away to permit of the gores lying in the same plane, there being a space formed between the gores, and an insert having a portion completely covering the bottom and gore portions of a size only to fill said space between the gores of the walls.

4. A rectangular package formed of a folded blank having two of the opposite walls thereof provided with extensions of substantially the same size as the walls and folded downward within the package and the other opposite walls having folded gores, one of the gores having a portion cut away to permit the gores to lie in the same plane, there being a space formed between the gores, and an insert having a portion completely covering the bottom and gore portions of a size only to fill said space between the gores of the walls.

1,061,532. COUCH OR DIVAN. BENJAMIN B. ENGLANDER, New York, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y., a Corporation of New York. Filed Oct. 15, 1912. Serial No. 725,806. (Cl. 5—49.)

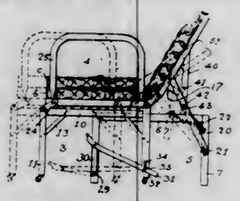


1. A couch or divan comprising a main section and a swinging section hinged thereto and adapted to rest flatwise over the main section to form a divan and to be swung to one side thereof and reversed to form a bed, said main section having leg portions foldable inwardly in the direction of the length of the bed, and said swinging section having foldable end arms also foldable inwardly in the direction of the length of the bed, said arms having sufficient height to form supports for the swinging section when the structure is converted into a double bed, and means carried by the arm and leg portions

for maintaining each of them locked in their perpendicular position, the release of such arms and legs from said locked position being obtained by shifting said arms and legs in the direction of their length.

2. A couch or divan comprising a main section and a swinging section hinged thereto, and adapted to rest flatwise over the main section to form a divan, and to be swung to one side thereof and reversed to form a double bed, said main section having legs each made up of a rigid portion and a foldable portion pivotally connected to the rigid portion to fold inwardly in the direction of the length of the bed, means for maintaining the folded portion in a perpendicular position, and comprising a pin and a notch, the latter carried by said rigid portion, said swinging section having upright end arms pivotally connected thereto and likewise foldable inwardly in the direction of the length of the bed, and means for maintaining said arms in an upright position and also comprising a pin and a notch, the latter carried by the arms, the pivotal connection of the legs and arms being such that movement in the direction of the length thereof is permitted to effect the release of the notches from their pins.

1,061,533. ADJUSTABLE-BACK DIVANETTE. BENJAMIN B. ENGLANDER, New York, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y., a Corporation of New York. Filed Nov. 18, 1912. Serial No. 731,924. (Cl. 5—46.)



1. A convertible bed comprising a main or stationary section, a seat section supported for sliding movement relatively thereto, an adjustable back hinged to said seat section for movement therewith, means connecting the back with the main section, said main section supporting the back when it is lowered to form a bed, and means for supporting said back in an adjusted position between its bed forming and divan forming positions.

2. A convertible bed comprising a main or stationary section, a seat section supported for sliding movement relatively thereto, an adjustable back hinged to said seat section for sliding movement therewith, means connecting the back with the main section, said main section supporting the back when it is lowered to form a bed, and means for supporting said back in an adjusted position between its bed forming and divan forming positions, said means comprising pivoted and notched members connected with the back and means carried by the structure coöperating with said notched members.

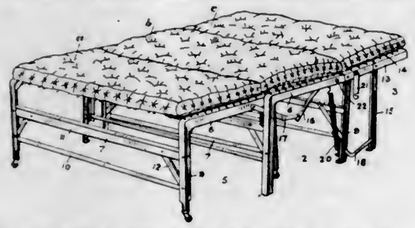
3. A convertible bed comprising a main or stationary section, a seat section supported for sliding movement relatively thereto, an adjustable back section hinged to said seat section for movement therewith, means connecting the back with the main section, said main section supporting the back when it is lowered to form a bed, and members connecting the back with said means for supporting the back in any of its adjusted positions.

4. A convertible bed comprising a main or stationary section, a seat section supported for sliding movement relatively thereto, an adjustable back section hinged to said seat section for movement therewith, means connecting the back with the main section, said main section supporting the back when it is lowered to form a bed, and bars connecting the back with said means for supporting the back in any of its adjusted positions, one of each set of bars having one or more notches and the other having a pin adapted to engage each of said notches.

5. A convertible bed comprising a seat section, an adjustable back section hinged thereto, means for supporting it in its upright divan forming position or in its lowered position to form with the seat section a bed, and means for supporting it in different positions intermediate its bed and divan forming positions, said seat section and back section being shiftable together and forwardly of the back supporting means a predetermined distance each time the back is lowered a predetermined distance.

[Claims 6 to 8 not printed in the Gazette.]

1,061,534. DIVANETTE. BENJAMIN B. ENGLANDER, New York, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 6, 1912. Serial No. 735,200. (Cl. 5—46.)



1. A divanette comprising a stationary or seat section, a sliding section, and a swinging back section hinged to said stationary section, and means connecting the swinging back section and the sliding section whereby on the manipulation of either one of said sections the other will be shifted, said means comprising a lever connected to and projecting under the stationary section and a link connected thereto and with the sliding section and also located under the stationary section.

2. A divanette comprising a stationary or seat section, a sliding section, and a swinging back section hinged to said stationary section, and means connecting the swinging back section with the sliding section and located below the mattress supporting bottoms of said sections, the connection being such that on the shifting of either movable section the other will be shifted.

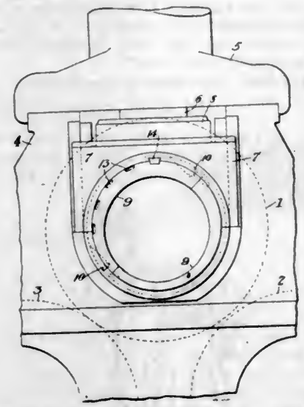
3. A divanette comprising a stationary or seat section, a sliding section, and a swinging back section hinged to said stationary section, a linkage connection between said back and sliding sections and located wholly below the mattress supporting bottoms of the sections, one end of one member of such linkage connection being connected to the mattress supporting member of the sliding section and the other member of said linkage connection forming an extension of the back in the direction of the plane thereof when the structure is in the form of a divan.

1,061,535. SUGAR-CANE MILL. ARTHUR FREDERICK EWART, Honolulu, Hawaii, assignor to Honolulu Iron Works Company, Honolulu, Hawaii, a Corporation of Hawaii. Filed Nov. 17, 1911. Serial No. 660,788. (Cl. 100—47.)

1. In a sugar-cane mill, a roller, an eccentric bushing in which the journal of the roller is mounted, a vertically movable bearing block, and means associated with said bearing block and said bushing to lock the bushing against rotation when the said block is lowered and to permit the bushing to be circumferentially shifted when said block is raised.

2. An adjustable bearing for a sugar-cane roller and the like, comprising a circumferentially shiftable bushing surrounding the journal of the roller, a vertically movable locking elemeat adapted in the raised position to render said bushing shiftable and when in the lowered position to lock said bushing against rotation.

3. In a sugar-cane mill, a roller, an eccentric bushing in which the roller is journaled, a vertically movable bearing, a key carried thereby and a key-way in the bushing adapted to be engaged by said key to prevent rotation of the bushing, said bushing adapted to be circumferentially adjusted when said key is removed from the key-way by raising said bearing block.

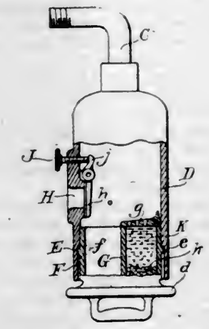


4. A bearing for rollers and the like, comprising an eccentric bushing in which the roller is journaled, a series of key-ways peripherally arranged thereon, a movable element mounted above said bushing and carrying a key adapted to engage in any of said key-ways to lock the bushing against rotation, said bushing being circumferentially adjustable when said movable element is raised to bring the proper key-way under the said key.

5. A bearing for rollers and the like, comprising an eccentric bushing provided with peripheral annular tongues to prevent lateral displacement and a series of peripherally arranged recesses, a movable top bearing having locking means to engage in said recesses to lock the bushing against rotation, said bushing being circumferentially adjustable when the top bearing is raised to disengage said locking-means from said recesses.

[Claims 6 and 7 not printed in the Gazette.]

1,061,536. GASOLENE-ENGINE STARTER. DANIEL FUHRER, Bluffton, Ind. Filed Apr. 27, 1912. Serial No. 693,626. (Cl. 123—180.)



1. In a gas engine starter, the combination with an engine having an intake pipe, of a casing arranged in communication with the said pipe, the said casing having an air-inlet valve and an internal pocket, and means constructed to permit access to said pocket from the outside of said casing.

2. In a gasolene engine starter, the combination with an engine having an intake pipe, of a casing arranged in communication with said pipe, the said casing having an air-inlet valve and a removable portion provided with a pocket.

3. In a gasolene engine starter, the combination with an engine having an intake pipe, of a casing arranged in communication with the said pipe, the said casing having an air-inlet valve, and the said casing having a removable cupped bottom provided with a pocket.

1,061,537. VEHICLE-WHEEL. LUCIEN R. GRUSS, San Francisco, Cal., assignor to Auto Compressed-Air Wheel Company, Chico, Cal., a Corporation of California. Filed Mar. 16, 1911. Serial No. 614,822. (Cl. 152—47.)



1. The combination in a vehicle wheel having a hub and rim, of a socket piece connected with the hub, said socket piece carrying a tubular extension, a cylinder pivoted to the rim and telescoping with said tubular extension, a cylinder fixed to the socket piece and telescoping with said rim cylinder, a double-ended floating piston having one end working in a compression chamber in the cylinder on the socket piece, and having its other end working in a vacuum chamber in the rim cylinder, said cylinders and piston constructed and arranged so that the compression-chamber piston-head automatically operates to pump up the compression chamber proportionately to the load carried, and said vacuum-chamber piston-head normally seats by vacuum in its chamber.

2. The combination in a vehicle wheel having a hub and rim, of a socket piece connected with the hub, said socket piece carrying a tubular extension, a cylinder pivoted to the rim and telescoping with said tubular extension, a cylinder fixed to the socket piece and telescoping with said rim cylinder, and a double-ended floating piston, having one end working in a compression chamber in the cylinder on the socket piece, and having its other end working in a vacuum chamber in the rim cylinder, said cylinder and piston constructed and arranged so that the compression-chamber piston-head automatically operates to pump up the compression chamber proportionately to the load carried, and said vacuum-chamber piston-head normally seats by vacuum in its chamber, valved ports in the piston through which communication is had with said compression chamber, and said chamber also containing constantly a body of oil.

3. A cushioning device comprising reciprocating telescopic, tubular members inclosing a double-ended piston, one head of which fits in a chamber in one section and acts always on compression in said chamber, the other head of which fits in a chamber in the other spoke section and always works on vacuum, the parts so constructed and arranged that the piston heads both normally abut against the outer end of their respective chambers.

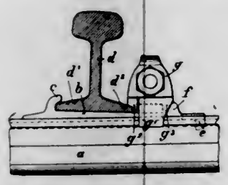
4. A cushioning device comprising a pair of telescoping cylinders, a free moving piston-head in each cylinder, a piston rod common to both heads and connecting them so that they move in unison, a stuffing box through which said piston rod extends and which closes the end of the

inner cylinder, the space in said inner cylinder on one side of the piston head forming a compression chamber, and means by which, on the reciprocation of the piston rod said compression chamber may be automatically filled with air.

5. A cushioning device comprising a pair of telescoping cylinders, a free moving piston head in each cylinder, a piston rod common to both heads and connecting them so that they move in unison, a stuffing box through which said piston rod extends and which closes the end of the inner cylinder, the space in said inner cylinder on one side of the piston head forming a compression chamber, means by which, on the reciprocation of the piston rod, said compression chamber may be automatically pumped up, and vacuum producing means operating on the other head in the outer cylinder for normally maintaining the piston head in the inner cylinder against said stuffing box.

[Claims 6 to 9 not printed in the Gazette.]

1,061,538. MEANS FOR FASTENING THE RAILS TO THE SLEEPERS. AUGUST HAARMANN, Osnabrück, Germany. Filed Nov. 23, 1912. Serial No. 733,072. (Cl. 238—2.)



1. In means for fastening the track-rails to iron sleepers, the combination of a sole-plate having at its outer end a hook engaging over the base of the rail and at its inner end an extension having above it a lug, and below it a pin, an iron sleeper below said sole-plate, having projections thereon and a hole engaged by said pin, and a clamp bearing against the inner edge of the base of the rail and against said lug, and having hook-like ends engaging over said projections.

2. In means for fastening the track-rails to iron sleepers, the combination of a sole-plate having at its outer end a hook engaging over the base of the rail and at its inner end an extension having above it a lug, and below it a pin, an iron sleeper below said sole-plate, having projections thereon and a hole engaged by said pin, and a clamp bearing against the inner edge of the base of the rail and against said lug, having hook-like ends engaging over said projections and being at its center portion turned up to form a loop, the side portions of said loop being bolted together.

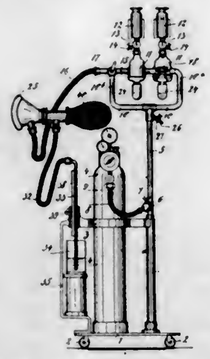
3. In means for fastening the track-rails to iron sleepers, the combination of a sole-plate having at its outer end a hook engaging over the base of the rail and at its inner end an extension having above it a lug, and below it a pin, an iron sleeper below said sole-plate, having projections thereon and a hole engaged by said pin, and a clamp bearing against the inner edge of the base of the rail and against said lug, having hook-like ends engaging over said projections and being at its center portion turned up to form a loop, the side portions of said loop being bolted together and the top of said loop being of a smaller section than said side-portions.

4. In means for fastening the track-rails to iron sleepers, the combination of a sole-plate having at its outer end a hook engaging over the base of the rail and at its inner end an extension having above it a lug, and below it a pin, an iron sleeper below said sole-plate, having projections thereon and a hole engaged by said pin, and a clamp having ribs at each side, those on one side bearing against the inner edge of the base of the rail and those at the other side against said lug, and having hook-like ends engaging over said projections.

5. In means for fastening the track-rails to iron sleepers, the combination of a sole-plate having at its outer end a hook engaging over the base of the rail and at its inner end an extension having above it a lug, and below it a pin, an iron sleeper below said sole-plate, having projections thereon, said projections serving to guide the sole-plate, and having a hole engaged by said pin, and a clamp bearing against the inner edge of the base of the rail and against said lug, and having hook-like ends engaging over said projections.

[Claims 6 and 7 not printed in the Gazette.]

1,061,539. APPARATUS FOR ADMINISTERING NARCOTICS. GEORG HAERTEL, Berlin, Germany. Filed Mar. 13, 1912. Serial No. 683,477. (Cl. 128—13.)



1. Apparatus for administering narcotics, comprising a stand having a tubular upright forked at its upper end and forming a gas connection, a vaporizing receptacle supported between the forks of said end and communicating therewith, and a pressure gas cylinder mounted in said stand and in gas connection with said tubular upright.

2. Apparatus for administering narcotics, comprising a stand having a tubular upright forked at its upper end and forming a gas connection, a vaporizing receptacle supported between said forked end and communicating therewith, a pressure gas cylinder mounted in said stand and a short length of flexible tubing connecting said pressure gas cylinder and tubular upright.

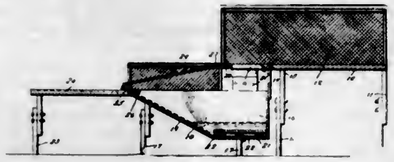
3. In apparatus for administering narcotics, the combination with a dropping bottle for containing the narcotic, and a vaporizing receptacle beneath said bottle, of a plurality of substantially horizontal plates, and an intermediate centrally apertured dished plate, lower at the center than at the periphery, said horizontal plates and apertured plate being superposed alternately in said receptacle and said apertured plate projecting laterally beyond the superposed horizontal plate, whereby the narcotic is caused to alternately flow from the center to the circumference of said horizontal plates and from the circumference to the center of said apertured plate.

4. In apparatus for administering narcotics, the combination with a dropping bottle for containing the narcotic, and a vaporizing receptacle beneath said bottle of a plurality of substantially horizontal plates, and a centrally apertured and concentrically corrugated dished plate, lower at the center than at the periphery, said horizontal plates and apertured plate being superposed alternately in said receptacle and said apertured plate projecting laterally beyond the superposed horizontal plate, whereby the narcotic is caused to alternately flow from the center to the circumference of said horizontal plates and from the circumference to the center of said apertured plate.

5. In apparatus for administering narcotics, the combination with a dropping bottle for containing the narcotic, and a vaporizing receptacle beneath said bottle, of an upper inverted dished plate, a substantially horizontal and concentrically corrugated plate, and an intermediate centrally apertured and concentrically corrugated dished plate, lower at the center than at the periphery, and projecting laterally beyond said upper inverted dished plate, whereby the narcotic is caused to alternately flow from the center to the circumference of said upper inverted dished plate and horizontal plate and from the circumference to the center of said apertured plate.

[Claims 6 to 9 not printed in the Gazette.]

1,061,540. POULTRY-DISINFECTING DEVICE. JAMES HUDELE, Haugen, Wis. Filed July 2, 1912. Serial No. 707,389. (Cl. 119—158.)



1. A poultry disinfecting device comprising a covered runway having one end open and the other closed, a hinged drop door in the floor of the said closed end, a disinfecting tank below the drop door, an exit runway in the tank, a trip at the upper end of the tank runway, a spring pressed detent for the drop door, resilient means for holding the door in horizontal position, the hinged edge of the door being cut away to permit same to move above the level of the runway and rest on the detent at times, and connections between the trip and detent.

2. The combination with a dipping tank and a runway leading thereto, of a hinged drop door in the runway, a spring for holding the door normally on a level with the runway, the hinge carrying portions of the door and runway being beveled to permit the door to swing above the runway by its own impetus, a spring-pressed sliding detent for holding the door above the runway, and a fowl actuated trip, connected to the detent for withdrawing the detent, whereby when a fowl steps on the door, the door will drop to plunge the fowl into the tank, and then swing above the runway to rest on the detent the subsequent movement of the trip withdrawing the detent to permit the door to assume its normal level position.

1,061,541. PRIMARY BATTERY. ELISHA E. HUDSON, Newark, and DEVEREUX ELMES, Orange, N. J., assignors, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Sept. 19, 1910. Serial No. 582,608. (Cl. 204—49.)



1. In a primary battery, a positive plate having a depression of small area on the side farthest away from the negative element with which it coacts, for indicating the approaching necessity for renewal, substantially as described.

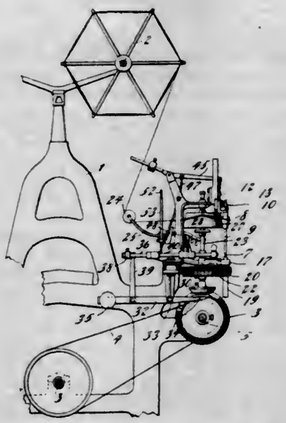
2. In a primary battery, a positive plate having a small circular depression on the side farthest away from the negative element with which it coacts, to indicate the approaching necessity for renewal of the plate after sufficient service in the battery, by the appearance of a hole through the same, substantially as described.

3. As a new article of manufacture, an electrode plate for a voltaic battery comprising a flat plate having means for indicating visually the approaching necessity for renewal of the plate when the latter has worn thin in use in a voltaic battery, comprising a small depression in one surface of the plate surrounded by a raised rim, substantially as described.

4. As a new article of manufacture, an electrode plate for a voltaic battery comprising a flat plate having means for indicating visually the approaching necessity for renewal of the plate when the latter has worn thin in use in a voltaic battery, comprising a small depression in one surface of the plate and means for indicating the location of the depression, substantially as described.

5. In a primary battery, a removable positive plate having a small portion thereof of reduced thickness, in which portion the plate is adapted first to wear through in the operation of the battery to indicate a predetermined extent of consumption of the plate, substantially as described.

1,061,542. COP-WINDING MACHINE. JOSEF HUNZ, Crefeld, Germany, assignor to Herm. Schroers Maschinenfabrik, Crefeld, Germany. Filed Dec. 1, 1910. Serial No. 595,021. (Cl. 242—34.)



1. In a cop-winding machine the combination of a spindle and means for rotating the same, a thread guide having means to traverse the thread a predetermined distance on the spindle, a shaft on which said guide is mounted, means for rotating said shaft, and means for moving said shaft longitudinally to disengage it from the driving means.

2. In a cop-winding machine the combination of a spindle and means for rotating the same, means for moving the spindle longitudinally while the thread is being wound thereon, a thread guide having means to traverse the thread a predetermined distance on the spindle, a shaft on which said guide is mounted, means for rotating said shaft, and means for moving said shaft longitudinally to disengage it from the driving means.

3. In a cop-winding machine the combination of a spindle and means for rotating the same, a thread guide having means to traverse the thread a predetermined distance on the spindle, a shaft on which said guide is mounted, supports for said shaft permitting a longitudinal movement thereof, a friction drive for said shaft, and means for moving said shaft longitudinally in its bearings to disengage it from the driving member.

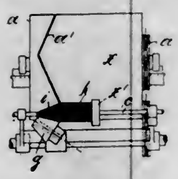
4. In a cop-winding machine the combination of a spindle and means for rotating the same, a thread guide in the form of a frustum of a cone having a slot therein extending obliquely upward from a central point equally in both directions to its highest point, a shaft on which said guide is mounted, means for rotating said shaft, and means

for moving said shaft longitudinally to disengage it from the driving means.

5. In a cop-winding machine the combination of a spindle, a slide block in which the spindle is vertically suspended, a guide for said block, a bearing sleeve for the lower end of said spindle, a pinion on said sleeve, a spur gear meshing with said pinion, a driven shaft on which said gear is secured, a thread guide carried by said shaft, and means for disengaging said shaft from the driving mechanism.

[Claims 6 to 9 not printed in the Gazette.]

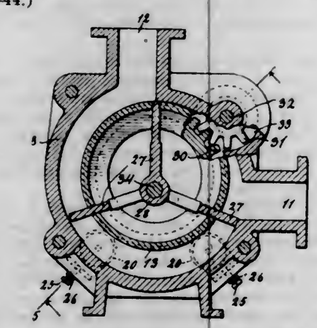
1,061,543. COP-WINDING MACHINE. JOSEPH HUNZ, München-Gladbach, Germany, assignor to Herm. Schroers Maschinenfabrik, Crefeld, Germany. Filed Sept. 2, 1909. Serial No. 515,748. (Cl. 242—34.)



1. In a cop winding machine, the combination of a spindle, a longitudinally movable shaft on which said spindle is mounted, a drum having an inclined peripheral slot to guide the thread back and forth a fixed distance on said spindle less than the length of the cop and to effect a cross winding of the thread as the spindle is rotated, the axes of said spindle and drum being parallel, means for rotating the spindle and drum, and means connecting with the conical end of the cop to move the latter longitudinally as it becomes filled with thread.

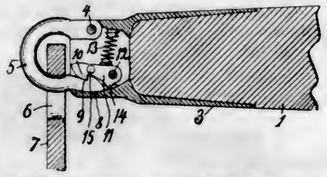
2. In a cop winding machine, the combination of a spindle, a longitudinally movable shaft on which said spindle is mounted, a drum having an inclined peripheral slot to guide the thread back and forth a fixed distance on said spindle less than the length of the cop and to effect a cross winding of the thread as the spindle is rotated, the axes of said spindle and drum being parallel, means for rotating the spindle and drum, and a conical rotatable member contacting with the conical end of the cop to move the latter longitudinally as it becomes filled with thread.

1,061,544. ROTARY PUMP. THOMAS HYE, Spokane, Wash. Filed July 30, 1912. Serial No. 712,273. (Cl. 103—44.)



The combination of a cylinder, heads closing the ends of said cylinder, said heads being formed with circular recesses which are eccentric to the cylinder, and pockets in communication with said recesses, a rotor mounted in the cylinder and seating at its ends in the aforesaid recesses, spur gears on the ends of the rotor, pinions in mesh with said gears, said pinions being mounted in the pockets of the cylinder heads, and driving means for said pinions.

1,061,545. WHIFFLETREE-HOOK. PAULINE JOHNSON, Brockton, Mont. Filed Feb. 16, 1912. Serial No. 678,097. (Cl. 21—79.)



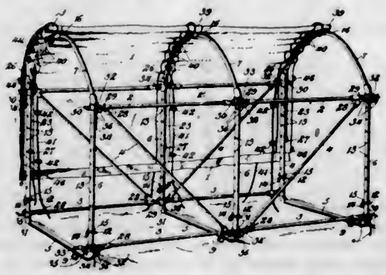
1. A whiffle-tree hook comprising a sleeve securable upon the end of a whiffle-tree and having in its outer end an open space, a U-shaped hook adapted to engage a tug by one of its arms and having its two ends or arms normally inserted in the space in longitudinal direction of the sleeve, one end being pivoted to the sleeve and the other provided with a notch, a spring-pressed dog pivoted in the space and arranged to engage in the notch and hold the hook closed, and means for reaching the dog to disengage it from the hook when so desired, said sleeve having a lateral slot, and said disengaging means consisting of a pin fixed in the dog and projecting outward through and beyond the slot.

2. A whiffle tree hook comprising a sleeve securable upon the end of a whiffle-tree and having in its outer end an open space, a U-shaped hook adapted to engage a tug and having its two ends or arms normally inserted in the space, one end being pivoted to the sleeve and the other provided with a notch, a spring-pressed dog pivoted in the space and arranged to engage in the notch and hold the hook closed, and means for reaching the dog to disengage it from the hook when so desired, the engagement of the tug being upon one arm of the hook and said arm being normally supported against the inner side of the sleeve to prevent spreading of the hook by the pulling of the tug.

1,061,546. COMPOSITION OF MATTER. KONRAD KATHER, San Francisco, Cal. Filed July 10, 1912. Serial No. 708,641. (Cl. 152—25.)

The herein-described composition of matter, consisting of water, alcohol, rubber flakes, sugar, glue, flour, asbestos, alum, substantially as described and for the purpose specified.

1,061,547. COVERING FOR HAY, GRAIN, &c. WILLIAM A. KENNEDY and JOSEPH EVANS, Wichita, Kans. Filed Feb. 9, 1912. Serial No. 676,619. (Cl. 135—5.)



1. A device of the class described comprising a flexible cover, a supporting frame-work including a plurality of adjustable transverse frames composed of extensible horizontal bottom bars having telescopic sections, vertical side bars connected with and carried by the sections of the bottom bars, and arched top bars supporting the flexible cover and connected with the upper ends of the side bars and composed of separable sections movable with the vertical side bars in the adjustment of the bottom bars, and braces located at opposite sides of the supporting frame-work and detachably connecting the transverse frames.

2. A device of the class described comprising a flexible cover, and a supporting frame-work including adjustable transverse frames composed of horizontal bottom bars having telescopic sections, vertical side bars also provided with telescopic sections and connected with the sections of the bottom bars, and arched top bars connected with sections of the side bars and composed of separable sections, and braces located at opposite sides of the frame-work and connecting the transverse frames.

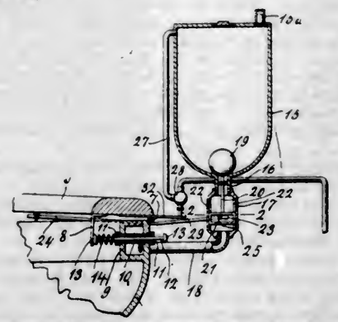
3. A device of the class described comprising a flexible cover, and a supporting frame-work including transverse frames having side bars and provided with arched top bars consisting of separable tubular sections, a catch carried by one of the separable sections of each arched top bar and engaging the interior of the other separable section thereof and concealed within the said sections, braces located at opposite sides of the supporting frame-work and connecting the transverse frames, and means for operating the catches.

4. A device of the class described comprising a flexible cover, and a supporting frame-work including transverse frames having side bars and provided with arched top bars consisting of separable tubular sections, a catch carried by one of the separable sections of each arched top bar and engaging the interior of the other separable section thereof and concealed within the said sections, flexible operating means connected with the catch and extending through the tubular sections of the arched top bars to the side of the frame-work and having exteriorly arranged portions, and braces located at the sides of the frame-work and connecting the transverse frames.

5. A device of the class described comprising a flexible cover, and a supporting frame-work including transverse frames having arched tubular top bars composed of separable sections, and braces arranged at the sides of the frame-work and connecting the transverse frames, a lug arranged within one of the sections of each of the top bars, a support projecting from the other section and having a slot or bifurcation, a catch mounted in the slot or bifurcation and engaging the lug and concealed within the separable sections when the latter are locked, and means for operating the catches of the arched top bars.

[Claims 6 to 9 not printed in the Gazette.]

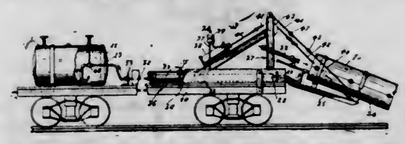
1,061,548. FLUSHING APPARATUS. EDWARD KERSEY, Chicago, Ill. Filed Oct. 4, 1912. Serial No. 723,868. (Cl. 4—5.)



1. The combination with a closet bowl having a hinged seat; of a flushing apparatus comprising a supply-tank, a casing connected to the tank and the bowl, a valve controlling the flow from the tank, a cross head slidably mounted in the casing and open on two opposite sides, a stem projecting from the cross head and adapted to unseat the valve, a rock shaft extending transversely through the casing and having intermediate its ends a crank portion which is located in the cross head, arms extending from the rock-shaft and connected to the seat, a finger extending from the seat, and a spring-actuated slidable stem carried by the bowl and extending into the path of the finger.

2. The combination with a closet bowl having a hinged seat; of a flushing apparatus comprising a supply-tank, a casing connected to the tank and the bowl, a valve controlling the flow from the tank, a cross head slidably mounted in the casing and open on two opposite sides, a stem projecting from the cross head and adapted to unseat the valve, a rock shaft extending transversely through the casing and having intermediate its ends a crank portion which is located in the cross head, arms extending from the rock-shaft and connected to the seat, a finger extending from the seat, a casing mounted transversely in the flushing rim of the bowl, and a spring-actuated slidable stem carried by said casing and extending into the path of the finger.

1,061,549. TRACK-CLEANING MACHINE. WILBERT W. LAMB, Alhambra, Cal., assignor to The Lamb Railway Service Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 5, 1910, Serial No. 536,468. Renewed Sept. 23, 1912. Serial No. 721,924. (Cl. 126—271.1.)



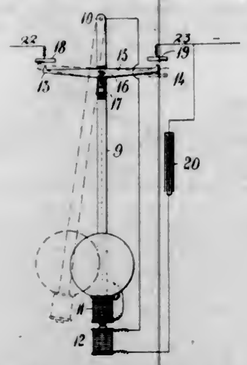
1. The combination of a car platform and a derrick mounted thereon, with means to move said derrick longitudinally upon the platform; a burner frame carried by said derrick; a burner cylinder mounted upon said burner frame, said burner cylinder being partially closed at the rear end; a vaporizing coil within said burner cylinder, said vaporizing coil comprising a plurality of connected tubes extending longitudinally of the cylinder; vaporizing webs within said generating tubes; a needle valve adapted to discharge vapor into the rear end of said burner cylinder; a connection from said needle valve to said vaporizing coil; and means to supply liquid hydro-carbon fuel to said coil under pressure.

2. In a device of the character described herein, a running gear; a platform mounted upon said running gear; a derrick mounted upon said platform; means secured to said platform and to said derrick to move the derrick longitudinally upon said platform; a burner frame pivotally mounted upon said derrick; means secured to said burner frame and derrick adapted to adjust the height of the burner frame; a burner cylinder mounted upon said burner frame; said burner cylinder having a port in its rear end; a vaporizing coil within said burner cylinder, said vaporizing coil comprising a plurality of connected tubes extending longitudinally of the cylinder; vaporizing webs within said generating tubes; a needle valve adapted to discharge vapor into the port in the rear end of said burner cylinder; a connection from said needle valve to said vaporizing coil; and means to supply liquid hydro-carbon fuel to said coil under pressure.

3. In a device of the character described herein, a running gear; a platform mounted thereon; a derrick mounted on said platform; pneumatic means connected to said platform and to said derrick adapted to move the derrick frame longitudinally upon the platform; a burner frame pivotally secured to said derrick; means to adjust the elevation of said burner frame; a burner cylinder mounted on said burner frame; said burner cylinder being partially closed at the rear end; a vaporizing coil within said burner cylinder; said vaporizing coil comprising a plurality of connected tubes extending longitudinally of the cylinder; vaporizing webs within said generating tubes; a needle valve adapted to discharge vapor into the rear end of said burner cylinder; a connection from said needle valve to said vaporizing coil; and means to supply liquid hydro-carbon fuel to said coil under pressure.

4. In a device of the character described herein a burner cylinder, said cylinder being partially closed at the rear end, open at the front end, and having longitudinal rows of perforations in the side walls thereof; a vaporizing coil within said cylinder, said vaporizing coil comprising a plurality of connected tubes extending longitudinally of the said cylinder; vaporizing webs within said generating tubes; a needle valve to discharge vapor into the rear end of said burner cylinder, said needle valve being exterior the cylinder and adapted to discharge vapor through the rear opening of the cylinder; a connection from said needle valve to said vaporizing coil in combination with means to transport said burner cylinder and means to supply liquid hydro-carbon fuel to said coil under pressure.

1,061,550. DEVICE FOR DRIVING ELECTRIC CLOCKS AND SIMILAR APPARATUS. GUSTAF OSCAR LARSSON, Stockholm, Sweden, assignor to Aktiebolaget L. M. Ericsson & Co., Stockholm, Sweden. Filed Oct. 1, 1908. Serial No. 455,735. (Cl. 58—30.)



1. In an electrically driven clock and its operating circuit, the combination of an electric condenser in said circuit for taking up and delivering the driving currents of the driven clock, and means actuated by the clock for periodically closing and breaking the circuit of said condenser, substantially as and for the purpose set forth.

2. In an electrically driven pendulum actuated clock and its operating circuit, the combination of an electric condenser in said circuit for taking up and delivering the driving current of the said clock, and an oscillating member for closing and breaking the circuit of said condenser, substantially as and for the purpose set forth.

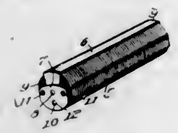
3. In an electrically driven pendulum actuated clock and its operating circuit, the combination of an electric condenser in said circuit for taking up and delivering the driving currents of the said clock, an oscillating member, and an electro-magnetic device controlled by said oscillating member for maintaining the movements of the said oscillating member and supplied by current impulses from the condenser, substantially as and for the purpose set forth.

4. In an electrically driven clock and its operating circuit, an electric condenser in said circuit for taking up and delivering the driving currents of the clock, an oscillating member having contacts for closing and breaking the circuit of said condenser, and an electro-magnetic device connected in series with the condenser and adapted to maintain the movements of the said oscillating member, substantially as and for the purpose set forth.

5. In an electrically driven clock, the combination of an electric condenser for taking up and delivering the driving currents of the clock, a charging circuit for said condenser, a discharging circuit for the same, an oscillating member, and an electro-magnetic clock-actuating device connected to one of said circuits, substantially as and for the purpose set forth.

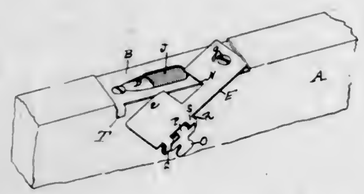
[Claims 6 to 10 not printed in the Gazette.]

1,061,551. COIN-HOLDER. WALTER A. LEWIS, Batavia, Iowa. Filed May 23, 1912. Serial No. 699,181. (Cl. 133—9.)



A coin holder comprising a pair of longitudinal bars which are curved in cross-section and adapted to be placed side by side to form a trough having a closed bottom, outstanding overlapped ears on the ends of the bars, said ears forming the ends of the trough, and a pivotal connection between the ears of the respective bars, the ears of one of the bars having a locking stud, and the ears of the other bar having apertures to receive said stud, two of said apertures being located on opposite sides of the aforesaid pivotal connection, and one aperture being located in the path of the locking stud midway between the first-mentioned apertures.

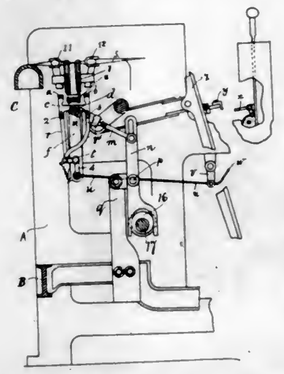
1,061,552. FASTENING DEVICE FOR CASKET-COVERS. JOHN J. MCNERNEY, Watervliet, N. Y. Filed Jan. 11, 1912. Serial No. 670,554. (Cl. 27—12.)



1. A coffin fastener, comprising a disk; a hook thereon projecting at an acute angle thereto and extending beyond the edge of the disk, the hook cut away at the base thereof near the disk forming a recess for the reception of a retaining plate; a means for securing said disk to the cover of a coffin near the edge thereof; a plate covering a portion of an opening in the top of the side of the coffin, through which plate into said opening said hook is adapted to pass and extend beneath a portion of the plate which holds the hook within the opening; a locking flange attached to said plate and projecting from the edge thereof, having a portion of the flange extending below the face of said plate; a portion of the plate at one side of said opening depressed, forming a runway for the passage of the hook into said opening; a retaining plate pivoted to the top of the side of the coffin over said first mentioned plate with an offset in one side thereof, permitting the plate to be moved beneath the cover after the hook has been inserted into the plate, said plate passing into said recess and holding the hook in position beneath the plate; a sliding bar secured to the edge of said retaining plate adapted to engage said locking flange when the retaining plate is inserted into said recess.

2. A coffin fastener, comprising a hook provided with a recess near the base thereof, said hook secured to and projecting at an acute angle to the coffin cover near one edge thereof; a plate covering a portion of an opening in the top of the side of the coffin, said hook adapted to pass through said plate into said opening and extend beneath a portion of the plate which holds the hook in the opening; a retaining plate pivoted to said first mentioned plate adapted to be inserted in said recess; a sliding bar attached to the edge of said retaining plate; a catch on said first mentioned plate with which said sliding bar may engage.

1,061,553. WARP STOP MECHANISM FOR LOOMS. WILLIAM BICKERSTAFFE MONK, Keighley, England, assignor to The Firm of George Hattersley and Sons, Limited, Keighley, England. Filed Feb. 5, 1910. Serial No. 542,246. (Cl. 139—92.)



1. In warp stop mechanism for looms, detectors to be supported by the warp threads, cross-bars for guiding said detectors vertically, a pivotal bearing movable backward and forward below said cross bars, means for moving said bearing, angular brackets extending in opposite directions from said bearing and pivotally mounted thereon, two feeler bars carried by said brackets on opposite sides of a vertical plane extending through said bearing and adapted to be raised and lowered as the brackets swing on their pivotal bearing, a lever, connecting rods for transmitting motion from the said brackets to said lever, means for effecting the stoppage of the loom by the movement of said lever, and a rigid cross bar adapted to support the detectors against pressure of the feeler bars.

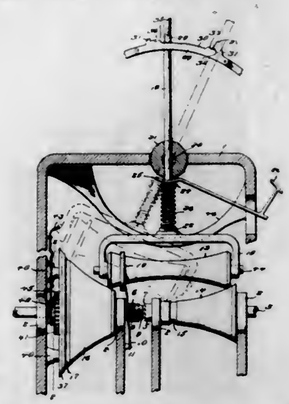
2. In warp stop mechanism for looms, detectors, cross-bars for guiding and supporting said detectors, reciprocating feeler-bars, swiveling bearings upon which said feeler-bars are fixed, lever arms upon which said bearings are pivotally mounted to swivel, said bearings extending laterally from their pivots, eccentric and lever devices for transmitting motion to said lever arms, connecting rods for transmitting motion from the swiveling bearings to levers and parts for actuating the belt shifting mechanism of the loom substantially as herein specified.

3. In warp stop mechanism for looms, detectors, guide-bars for said detectors, feeler-bars for contacting with said detectors swiveling bearings for carrying or supporting said feeler-bars, said bearings being formed with slots to receive connecting pins, connecting rods carrying said connecting pins, a bell-crank lever to which said connecting rods are attached, a rod connecting said lever to other levers and a bunter, said bunter and means whereby the motions of same may be transmitted to the belt shifting mechanism of the loom substantially as set forth.

4. In warp stop mechanism for looms, two series of detectors, a feeler-bar arranged to contact with one series when moving in one direction, and with the other series when moving in the other direction, swiveled brackets supporting said feeler-bar, said brackets having lateral arms provided with vertical slots, connecting-rods having pins passing through said slots, a bell-crank lever connected with the other ends of said connecting rods, and means whereby said bell-crank lever may actuate the belt shifting mechanism of the loom.

1,061,554. TRANSMISSION-GEARING. JUSTUS H. NAUMANN, Woodlake, Minn., assignor of one-fourth to J. Paul Scherf, Balaton, Minn. Filed May 7, 1912. Serial No. 695,791. (Cl. 74—26.)

1. In a transmission gearing, the combination of a driving shaft, a driven shaft in axial alinement therewith, rollers on said shafts, a transmission roller frictionally engaging the rollers on the said shafts, means for shifting said transmission roller, and means whereby the movement of said transmission roller will couple the driven shaft directly to the driving shaft.



2. In a transmission gearing, the combination of a driving shaft having a clutch member at one end, a driven shaft in axial alinement with the driving shaft, a clutch member on the driven shaft adapted to engage the first mentioned clutch member, means for yieldably holding the clutch members out of engagement, rollers on the said shafts, a transmission roller adapted to frictionally engage said rollers, and a trip actuated by the transmission roller to shift the clutch members into engagement.

3. In a transmission gearing, the combination of a driving shaft having a clutch member at one end, a driven shaft in axial alinement with the driving shaft, a clutch member on the driven shaft adapted to engage the first-mentioned clutch member, means for yieldably holding the clutch members out of engagement, a trip lever mounted to bear upon the clutch member on the driven shaft, rollers on the said shafts, a transmission roller adapted to frictionally engage said rollers, and an annular projection on said transmission roller adapted to engage the said trip lever whereby when the transmission roller is swung beyond the rollers on the said shafts the clutch member on the driven shaft will be caused to engage the clutch member on the driving shaft.

4. In a transmission gearing, the combination of axially alined shafts, rollers upon the said shafts, a transmission roller adapted to frictionally engage the first-mentioned rollers, a disk loosely mounted on the driven shaft adjacent the roller thereon, a train of gearing disposed between the said disk and the driven shaft, a hub rotatable with said shaft and adapted to lock the same to one element of the train of gearing, and means adapted to be actuated by the transmission roller for shifting said hub.

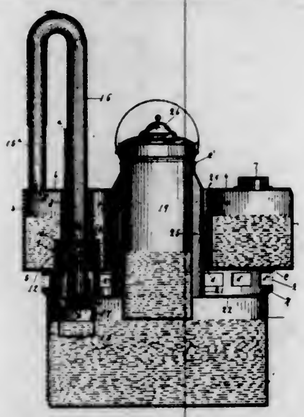
5. In a transmission gearing, the combination of axially alined driving and driven shafts, rollers thereon, a transmission roller adapted to frictionally engage said rollers, a disk loosely mounted on the driven shaft and adapted to be engaged by the transmission roller, a normally inactive train of gearing connected with said disk, and means actuated by the shifting of the transmission roller to lock said gearing to the driven shaft whereby the motion of said shaft will be reversed.

[Claims 6 to 12 not printed in the Gazette.]

1,061,555. COOKING UTENSIL. FRENCH NESTOR, Elkins, W. Va. Filed Jan. 30, 1909. Serial No. 475,088. (Cl. 53—2.)

1. In a cooking utensil, the combination of a lower vessel, a superposed hermetically sealed supply reservoir, a liquid outlet communication between the reservoir and vessel, a tube having its lower end in communication with the vessel and its upper end in communication with

the reservoir, the lower end of the tube adapted to contact normally with the liquid in the vessel and vertically adjustable for regulating and controlling the supply of liquid from the reservoir to the vessel.



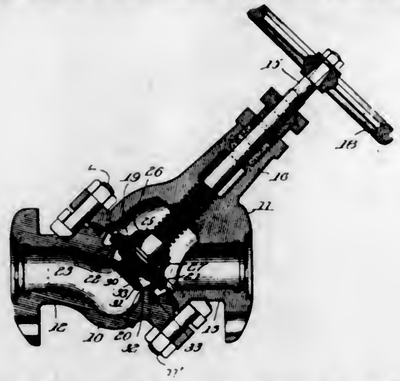
2. In a cooking utensil, the combination of a vessel, a superposed hermetically sealed supply reservoir, the reservoir having a communication with the vessel, a valve controlling said communication, a vertically adjustable tube having its lower end within the vessel and its upper end communicating with the reservoir for regulating and controlling the supply of liquid from the reservoir to the vessel and operative means communicating with the tube and said valve, whereby the valve may be opened and closed by the movement of the tube for opening and closing the said communication.

3. In a cooking utensil, the combination of a lower vessel, a superposed hermetically sealed supply reservoir having a communication with the vessel, a valve controlling the said communication, a vertically adjustable tube having its lower end within the vessel and adapted to contact normally with the liquid therein, the upper end of the tube communicating with the reservoir, the valve having a short vertical slot and the tube a relatively long spiral rib entering said slot, whereby the valve is operated by the vertical movement of the tube during the engagement of the spiral rib and slot, and the tube movable above said engagement and without operating said valve, the parts combined for the purpose described.

1,061,556. VALVE. EUGENE F. OSBORNE, Chicago, Ill., assignor to Osborne Steam Engineering Company, Chicago, Ill., a Corporation of Illinois. Original application filed Oct. 1, 1909, Serial No. 520,487. Divided and this application filed Dec. 30, 1909. Serial No. 535,548. (Cl. 137—4.)

1. A valve having an annular body seat, a movable valve piece having a seating face to engage the body seat, and a cylindric projection on the valve piece in advance of the seating face adapted to enter and closely fit a like shaped part of the fluid passage to maintain a substantially constant restricted area for fluid flow between the same and the wall of the passage in which it fits during a substantial extent of movement of the valve piece from the body seat, there being formed between the inner end of the said projection and said seating face an equalizing chamber, arranged principally radially within the circumference of said projection.

2. A valve having an annular body seat, a movable valve piece having a seating face to engage the body seat, and a cylindric projection on the valve piece in advance of the seating face adapted to enter and closely fit a like shaped part of the fluid passage beyond the body seat, there being formed between the inner end of said projection and said seating face an equalizing chamber, said chamber and projection being arranged to direct a jet issuing from the space around said projection upon a part of the valve piece radially within said seating face.

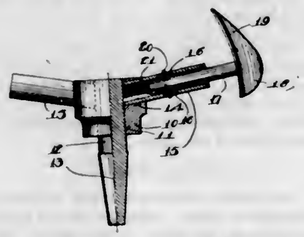


3. A valve having an annular ground body seat, a movable valve piece having a ground seating face to engage the body seat, and a cylindric projection on the valve piece arranged to enter and closely fit a part of a fluid passage embraced by the body seat, said projection being of a length or thickness slightly greater than the distance between the restricted part of the passage, and the body seat, there being formed between the inner end of said projection and seating face of the valve an equalizing chamber arranged relatively to the projection to direct fluid passing between said projection and the wall of said passage, when the projection occupies the restricted part of the passage, against a non-seating portion of the valve piece.

4. A valve having an annular body seat, a movable valve piece having a seat to engage the body seat, a projection integral with the valve piece comprising a neck and a relatively wide cylindric flange, the latter adapted to enter and closely fit a part of the fluid passage adjacent to said seat, and the projection being of a length slightly greater than the distance between the body seat and the restricted part of the passage.

5. A valve comprising a casing having an annular body seat surrounding a passage connecting the two sides of the valve, a movable valve piece having a seat to engage the body seat, a stem having swivel connection with the valve piece and screw-threaded to the casing to move the valve piece toward and from the body seat, the valve piece being provided with an extension which fits closely in a restricted part of said passage to prevent wire drawing action of the fluid on the valve seat, the frictional contact between the projection and passage wall being greater than that between the stem and valve piece, whereby when said projection enters the passage the valve piece is held from turning while it is being seated.

1,061,557. REAMER. JOHN H. OSGOOD, Putnam, Conn. Filed Apr. 3, 1912. Serial No. 688,223. (Cl. 145—114.)

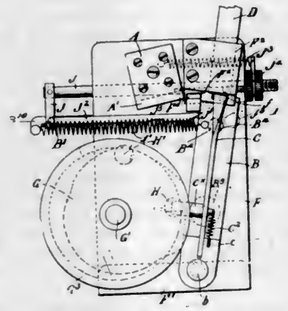


1. A reamer of the class described comprising a body, a shank extending from the body, a tang on said shank,

lateral tubes extending from said body, a plunger in each of said tubes, a cutting blade carried on the outer end of each plunger, a spring normally urging said plunger outwardly, and means to limit the outward movement of the plunger.

2. In a reamer of the class described, a body, a shank extending from said body, a tang on said shank, said body being provided with oppositely disposed inclined radial openings, tubes driven in said openings, each of said tubes having oppositely disposed slots therein, a plunger movable longitudinally in each of said tubes, a cutter blade carried on the outer end of each plunger, a pin extending through each of said plungers and the slots of the respective tube, and a spring in said tube bearing against the inner end of the respective plunger and urging the same outwardly.

1,061,558. MATRIX GAGING AND SORTING MECHANISM. FRANK HINMAN PIERPONT, Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa., a Corporation of Virginia. Filed Nov. 9, 1909. Serial No. 527,053. (Cl. 73—138.)



1. In a gaging apparatus, the combination of the following elements, to-wit; a gaging member provided with opposed converging gaging surfaces; a blank holder movable longitudinally of and between said gaging surfaces; and actuating devices for said holder including a retracting cam and opposed advancing spring.

2. In a gaging apparatus, the combination of the following elements, to-wit; a gaging member provided with opposed longitudinally converging gaging surfaces; a reciprocatory carrier slotted transversely to form a blank holder, and means for traversing the latter longitudinally of and between the gaging surfaces of the gaging member.

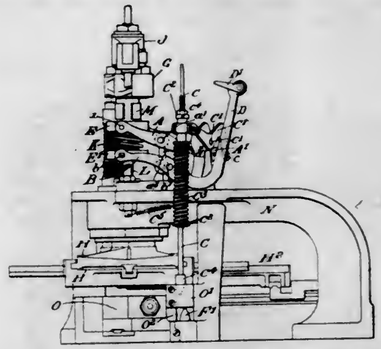
3. In a gaging apparatus, the combination of the following elements, to-wit; a gaging member provided with opposed converging gaging surfaces; a transversely slotted carrier supported to traverse between and longitudinally of said gaging surfaces; actuating devices for said carrier; and blank feeding devices located contiguous to the path of the carrier in rear of the gaging member.

4. In a gaging apparatus, the combination of the following elements, to-wit; a gaging member provided with opposed converging gaging surfaces; a reciprocatory carrier provided with a blank holder, the latter traversing said gaging member; and actuating devices for said carrier including an advancing spring and retracting means opposing said spring.

5. In a gaging apparatus, the combination of the following elements, to-wit; a gaging member provided with opposed converging gaging surfaces; a blank holder movable between said gaging surfaces; actuating devices for said blank holder including an advancing spring and retracting means opposing said spring; and blank feeding devices including a galley or holder and a pusher the latter delivering to the blank holder at a point in advance of the entrance to the gaging member.

[Claims 6 to 20 not printed in the Gazette.]

1,061,559. TYPE-CASTING MACHINE. FRANK HINMAN PIERPONT, Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa., a Corporation of Virginia. Filed Apr. 11, 1911. Serial No. 620,390. (Cl. 101—200.)



1. In a type casting machine the combination with mechanism for clamping a matrix upon a mold, comprising driving and driven members, of an actuating member connected with the driving member, and a designating or selecting member operated by the interruption of the normal travel of the driven member to determine the direction of movement of the actuating member substantially as described.

2. In a type casting machine the combination with clamping mechanism comprising driving and driven members of two levers pivoted to the machine frame and connected one to the driving and the other to the driven member, an actuator connected to the driving member lever and a designating or selecting member connected to the driven member lever for determining the direction of motion of the actuator substantially as described.

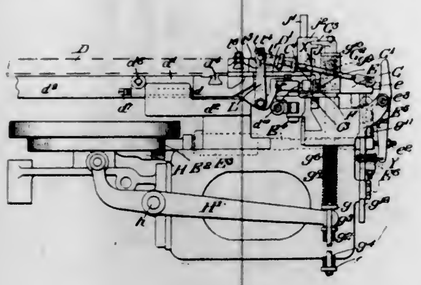
3. In a type casting machine provided with a low quad mold, a matrix carrier, a reciprocatory centering pin and a driving member yieldingly coupled with the latter and in combination therewith actuating means for the cut-off member of the mold coupled with said driving member and adapted to move said cut-off member in opposite directions and a designating or selecting member coupled with the centering pin and acting upon said actuating means to determine its action in projecting or retracting said cut-off section.

4. In a type casting machine provided with a low quad mold containing a movable cut-off section, interchangeable matrices, and a reciprocating centering pin coupled with a driving member and in combination therewith actuating devices for said cut-off section coupled with said driving member and adapted to shift the cut-off section into either of two positions corresponding respectively with full body and short body type, and a selecting member coupled with the centering pin and acting upon said actuating devices to determine the direction of motion of the cut-off section.

5. In a type casting machine provided with a matrix seating member, actuating means therefor including driving and driven members, the latter coupled with said matrix seating member, yielding transmission means intermediate said driving and driven members, and a low quad mold equipped with a plurality of movable dimensioning members for the mold cavity and in combination therewith means for transmitting motion to one of the movable mold dimensioning members from said driving member and for controlling the direction of such motion, the same comprising a reciprocatory member coupled with the driving member and adapted to shift the mold dimensioning member in either of two directions, and a controlling member coupled with the driven member for selectively determining the application of said reciprocatory member and the direction of motion transmitted to the mold member.

[Claims 6 to 14 not printed in the Gazette.]

1,061,560. MACHINE FOR THE CASTING AND COMPOSING OF SINGLE TYPES IN SEMITIC LANGUAGES. FRANK HINMAN PIERPONT, Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa., a Corporation of Virginia. Filed Apr. 11, 1911. Serial No. 620,391. (Cl. 101—200.)



1. In the casting and composing of typographic matter in Semitic languages the combination with a mold and a series of matrices having the characters positioned thereon with their feet to the right of the line of delivery of the type from the mold, of mechanism for ejecting the type from the mold, mechanism for assembling the type side by side to form a line, and mechanism for delivering the lines successively to a galley with the feet of the alined characters leading, substantially as described.

2. In the casting and composing of typographic matter in Semitic languages, the combination with a mold, a series of matrices having the characters positioned thereon as described, a line channel and a line carrier therein, of a galley situated at a different level to the line channel and having a vertically movable rule, a line supporting and lifting mechanism automatically operated to raise the line to the galley and to lift the galley rule and a line pusher carried on the line lifting mechanism and automatically operated to deliver the lifted line into the galley.

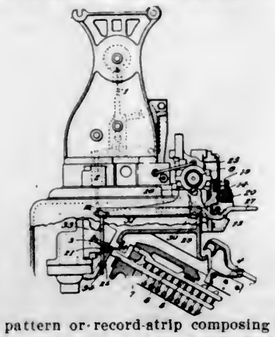
3. In a type casting and composing machine provided with a mold containing dimensioning and ejecting means, and a series of matrices the characters whereof are positioned with their feet to the right of the line of delivery from the mold, and in combination therewith, means for assembling successive type in a line, a galley, and mechanism for delivering successive lines into the galley with the feet of the characters in advance.

4. In a type casting and composing machine equipped with a series of matrices, a mold provided with type ejecting means, and mechanism for assembling the type in line, and in combination therewith, a galley mechanism including the following elements, to wit; a galley; a line channel below the galley and extending across the mouth thereof, said channel comprising a fixed wall beneath the galley entrance, a vertically and laterally movable wall opposite and parallel with said fixed wall; and a vertically movable line support or plate; and means for elevating said line support and for reciprocating the movable wall both vertically and laterally.

5. In a galley mechanism for type casting and composing machines, the combination of the following elements, to wit, a line assembling channel provided with a vertically movable line support or plate and two opposed parallel walls the one fixed and the other vertically and laterally movable; a galley with its entrance above the fixed wall of the line channel; and means for vertically reciprocating the line support and movable wall of the line channel and for reciprocating the latter horizontally opposite the entrance to the galley.

[Claims 6 to 12 not printed in the Gazette.]

1,061,561. RECORD-STRIP COMPOSING-MACHINE. FRANK HINMAN PIERPONT, Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa., a Corporation of Virginia. Filed Apr. 12, 1911. Serial No. 620,605. (Cl. 164—112.)



1. In a pattern or record-strip composing machine provided with a series of character designating punches supplemental or justification punches a series of keys controlling the punches and a line admeasuring mechanism of controllable mechanism for coupling the supplemental punches for simultaneous operation by any of the keys with the designating punches and mechanism for simultaneously varying the normal movement of the unit measuring mechanism, substantially as described.

2. In a pattern or record-strip composing machine furnished with character designating and supplemental or justification punches and a series of keys for actuating the punch operating mechanism the combination with the punch operating mechanism of a hand-controlled device for coupling the justification punches for simultaneous operation with any of the character punches and mechanism for registering the space value added to the character by the supplemental punch signals, substantially as described.

3. In a pattern or record-strip composing machine furnished with character designating and justification or supplemental punches a series of keys for actuating the punches and a line measuring mechanism the arrangement of a hand-controlled mechanism for simultaneously varying the travel of the line measuring mechanism or the amounts registered thereby and for coupling the keys to operate simultaneously character and supplemental punches.

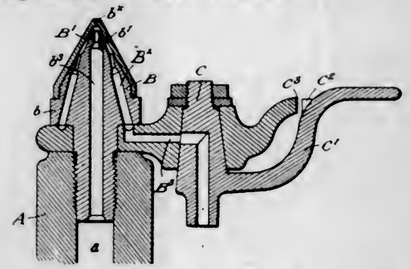
4. In a pattern or record-strip composing machine furnished with a series of motor-operated punches comprising character-designating punches and two supplemental or justification punches, a series of keys, a permutation system interposed between the keys and the valves of the punch motors the combination with the members of the permutation system of a movable bar having parts which in one position only of the bar are in the paths of collars on the supplemental punch motor valves and controlled mechanism for moving the bar, substantially as described.

5. In a pattern or record strip composing machine provided with key-controlled signal producing devices including selective and dimensioning elements responsive to each key and in combination therewith supplemental dimensional signal producing devices and means for coupling the latter with any key for adding, at will, a special dimensioning member to the normal dimensioning component of the signal assigned to the operated key.

[Claim 6 not printed in the Gazette.]

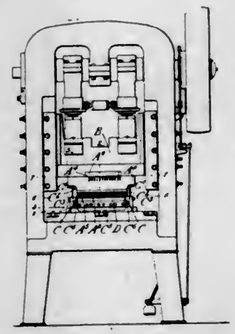
1,061,562. PUMP. FRANK HINMAN PIERPONT, Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa., a Corporation of Virginia. Filed Mar. 4, 1912. Serial No. 681,425. (Cl. 22—70.)

1. A nozzle for metal injecting pumps provided with a jet opening, a metal supply passage terminating in rear of the jet opening to form a chamber in rear of said jet opening, a discharge passage for said chamber, and an adjustable valve in said discharge passage for varying or adjusting the rate of discharge therethrough.



2. A nozzle for metal injecting pumps, the same comprising a hollow conical seating section provided with a jet orifice at its apex, and a main or body section provided with attaching means at one end, a central passage and a reduced discharge end, the latter located within the seating section to which it is attached at the base to provide a metal receiving chamber within the seating section surrounding the discharge end of the main section, the latter also provided with a discharge passage communicating with said metal receiving chamber.

1,061,563. STAMPING, PUNCHING, SHEARING, OR SIMILAR MACHINE. FRANK HINMAN PIERPONT, Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa., a Corporation of Virginia. Filed Mar. 4, 1912. Serial No. 681,426. (Cl. 164—15.)



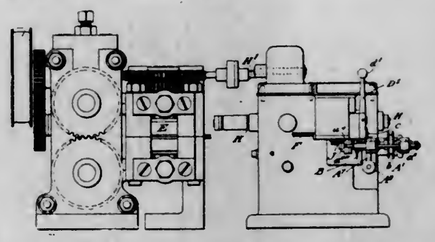
1. In a stamping, punching, shearing or similar machine the combination with a series of tools the members of which are simultaneously movable with and also separately relatively to a reciprocating head, of a cam piece coupled with each tool and a hand operated lever pivoted in the head and connected one to each cam piece substantially as described.

2. In a stamping, punching, shearing or similar machine the combination with a reciprocating head and one or more series of tools the members of which are simultaneously movable with and separately relatively to the head of a movable feed-slide connected with the head through a resilient coupling and adapted to deliver a blank to the tools and remove it therefrom when finished and a switch or latch in the feed channel for effecting the ejection of the finished blank from the machine, substantially as described.

3. In a punching, stamping, shearing or similar machine the combination with one or more series of tools the members of which are simultaneously movable with and separately relatively to a reciprocating head, of a stationary support for the blank during the operation of the tools and a resiliently supported blank clamping bar carried by the head, substantially as described.

4. In a punching, stamping, shearing or similar machine furnished with one or more series of tools carried by a reciprocating head, the combination with a feeding device controlled by the head, of supports for the blank adapted to yield under pressure of the head and deposit a blank on a stationary support and so automatically raise the finished blank again into the path of the feeding device, substantially as described.

1,061,564. MACHINE FOR SEVERING UNIFORM LENGTHS FROM A ROD OR BAR. FRANK HINMAN PIERPONT, Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa., a Corporation of Virginia. Filed Mar. 4, 1912. Serial No. 681,427. (Cl. 164—61.)



1. In a machine or apparatus for cutting or severing uniform or equal lengths from a moving rod, bar or the like, the combination with a rod feeding mechanism and a rotary cutter mounted in a carriage that is moved by the advancing rod, of a clamping mechanism mounted in the carriage and controlled by the movement of the rod, substantially as described.

2. In a machine or apparatus for cutting or severing uniform or equal lengths from a continuously moving rod, bar or the like furnished with rod feeding rolls, and a rotary cutter mounted in a carriage that is moved by the advancing rod, the combination with a rod clamping device, and a combined stop and ejector, of a shaft having cams controlling certain movements of the carriage, the stop ejector and the clamping device and a one-revolution clutch controlled by the movement of the rod to couple the cam shaft with a driving shaft, substantially as described.

3. In a machine for severing uniform lengths from a rod or bar, the combination of the following elements, to-wit: means for continuously feeding or advancing the rod; a carriage supported to reciprocate longitudinally of the rod and provided with a gage movable transversely of the rod into and out of the path of the latter; a rotary cutter mounted upon the carriage and movable transversely thereof in a path intersecting the rod; rod clamping means mounted on the carriage; and actuating devices for said cutter, carriage, gage and clamping means, the same including driving and driven members and a one revolution clutch under the control of the movable carriage.

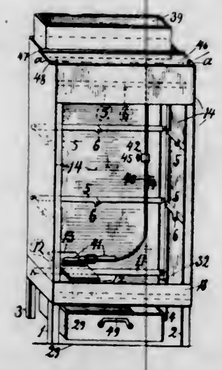
4. In a machine such as described, the combination of the following elements, to-wit: rod feeding means; a carriage movable longitudinally of the rod and equipped with a gage projecting into the line of travel of the rod, a clamping means, and a rotary cutter, the latter movable in a path intersecting the rod at a point intermediate said clamping means and gage; and actuating mechanism for said cutter and clamping means controlled by the feeding mechanism through the engagement of the rod with the gage on the carriage.

5. In a machine of the class described provided with means for continuously advancing or feeding a rod, and means for severing the rod into predetermined lengths including a carriage movable longitudinally of the rod equipped with a gage movable into and out of the path of the rod, a clamp for engaging the rod and a reciprocat-

ing cutter intermediate the gage and clamp, and in combination therewith, an actuating mechanism for said gage, clamp and cutter, the same including driving and driven members, a one revolution clutch, and controlling devices for said clutch coupled with the carriage to close the clutch.

[Claims 6 and 7 not printed in the Gazette.]

1,061,565. BATH-CABINET. JOHN H. PRIDE, Kidder, S. D. Filed Sept. 13, 1912. Serial No. 720,192. (Cl. 4—26.)



1. A bath cabinet comprising a foldable body having four legs supporting it and provided with shoulders, a perforated detachable floor supported at its corners on said shoulders, a flexible integral bottom fitting tightly about the legs below the shoulders and extending upwardly for some distance upon the outer side of the body, said flexible bottom extending all over below the floor and having a central aperture with a weight about it which causes the bottom to slope toward the aperture, and a drip pan arranged below the aperture.

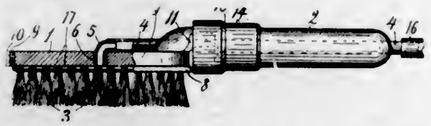
2. A bath cabinet comprising a foldable body having four legs supporting it and provided with shoulders, a metal frame having four legs resting one on each of said shoulders, a wooden floor perforated and fixed upon said metal frame, a flexible integral bottom fitting tightly about the legs and extending all over below the floor some distance from the same and having an aperture with a weight about it to hold the apertured portion of the bottom lower than the rest of it, and a drip pan placed below said aperture; the edges of said bottom being directed vertically upward about the outer side of the body of the cabinet.

3. A bath cabinet comprising a foldable body having legs supporting it and provided with shoulders, a wooden floor having means for supporting it on said shoulders, a flexible bottom extending all over below the floor some distance from the same and having holes fitting the legs and surrounded each with an embossment about the leg, said bottom being of rubber or similar elastic material and extending upwardly about the lower end of the body, and means for lending water off from said bottom.

4. A bath cabinet having a foldable frame and flexible back, sides and front secured thereto; said frame comprising four corner posts, horizontal upwardly foldable knee-jointed braces extending between each two posts and having their ends pivoted to the posts, a flexible door in the front side of the cabinet, said door having its frame foldable, it being composed of horizontal upwardly foldable knee-jointed braces having each one end pivoted to one of the corner posts, two vertical metal strips pivoted to the other end of the braces, the flexible material of the door being secured between said strips, and edge portions of the strips projecting beyond the material to form a groove arranged to partly straddle the corner post adjacent thereto when the door is closed, a foldable horizontal bar near the lower end of the frame and means on the moving lower corner of the door guiding on said bar.

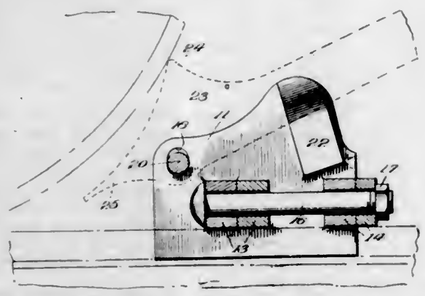
5. A bath cabinet having a foldable frame and flexible back, sides and front secured thereto; said frame comprising four corner posts, horizontal upwardly foldable knee-jointed braces extending between each two posts and having their ends pivoted to the posts, a flexible door in the front side of the cabinet, said door having its frame foldable, it being composed of horizontal upwardly foldable knee-jointed braces having each one end pivoted to one of the corner posts, two vertical metal strips pivoted to the other ends of the braces, the flexible material of the door being secured between said strips, and edge portions of the strips projecting beyond the material to form a groove arranged to partly straddle the corner post adjacent thereto when the door is closed, a foldable horizontal bar near the lower end of the frame and means on the moving lower corner of the door guiding on said bar, a weighted vertical rod connecting the knee-jointed braces in the door, and a flexible strand extending from said rod and outward over the top of the front side portion above the door.

1,061,566. BATHING-BRUSH. JOHN H. PAIDE, Kidder, S. D. Filed Sept. 13, 1912. Serial No. 720,193. (Cl. 15—48.)



A bathing brush comprising a stock with bristles at its front side, a handle on the stock, a tube longitudinally through the handle and adapted for connection with a water hose at its rear end, the front end of the tube extending through the stock to the front side of it and means for spreading the water among all the bristles before it can reach the front ends of the same, said spreading means consisting of a sheet of rubber covering the front side of the stock and having apertures embracing each one a tuft of the bristles; said rubber having its edge portion brought to the edges of the stock, a clamping band fitting about the rubber and composed of two sections hinged together at the front end of the stock and having the rear ends curved so as to fit the sides of the brush handle, and a slidable ring on the brush handle adapted to engage and hold the rear ends of the clamp members closed to the handle.

1,061,567. CAR STOPPER AND STARTER. ENOCH H. PUGH, Nelsonville, Ohio. Filed Dec. 17, 1912. Serial No. 737,338. (Cl. 105—71.)



1. A car stopper and starter including co-acting clamp plates, a lever pivoted between the plates, and a bolt pivotally connecting the plates and lying in the vertical plane of the lever.

2. A car stopper and starter including co-acting pivotally connected clamp plates and a lever swingingly mounted between the plates, the pivot of the plates extending at right angles to the pivot of the lever.

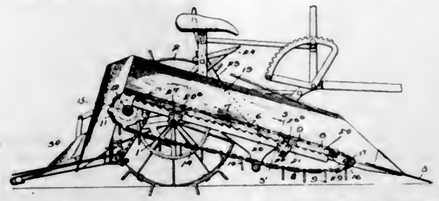
3. A car stopper and starter including co-acting clamp plates pivotally connected intermediate their height by a bolt and with their adjacent ends free for swinging movement toward and away from each other about the bolt as an axis, and a lever mounted between the plates and movable to swing the same into active position.

4. A car stopper and starter including a pair of plates provided with longitudinally spaced apart inwardly directed perforated ears, a bolt passed through the perforations of the ears and pivotally connecting the plates, the inner faces of said plates being provided with cam shoulders, and a lever pivoted between said plates and movable between said cam shoulders.

5. A car stopper and starter including plates pivotally connected intermediate their height, a lever pivoted between said plates and above the pivotal connection between the same, and means carried by the inner faces of the plates and engageable by the lever, whereby the downward swinging of the lever will swing the upper portions of the plates away from each other.

[Claims 6 to 8 not printed in the Gazette.]

1,061,568. POTATO-SEPARATOR. JOHN REUTHER, East Aurora, N. Y. Filed Jan. 23, 1913. Serial No. 743,741. (Cl. 130—32.)



1. In a potato digger, the combination of a separator comprising endless carriers and transverse separating rods, alternate rods being adjustable relatively to the remaining rods to vary the space between them, and means for delivering the material upon the separator.

2. In a potato digger, the combination of a separator comprising endless carriers and transverse separating rods, alternate rods being immovable relatively to the carriers and the remaining rods being pivoted to swing toward and from the immovable rods to vary the space between the immovable and the swinging rods, means for limiting the pivotal movement of the swinging rods, and means for delivering the material upon the separator.

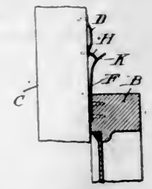
3. In a potato digger, the combination of a separator comprising endless carriers and transverse separating rods, alternate rods being immovable relatively to the carriers and the remaining rods being pivoted on the first-named rods to swing vertically thereon, means for adjusting said swinging rods, and means for delivering the material upon the separator.

4. In a potato digger, the combination of a separator, comprising endless carriers and transverse separating rods, alternate rods being substantially straight throughout their length and attached to said carriers, and each of the intermediate rods having crank arms pivoted to one of said straight rods, means for limiting the swinging movement of said pivoted rods, and means for delivering the material upon the separator.

5. In a potato digger, the combination of a separator comprising endless carriers and transverse separating rods, alternate rods being attached to the carriers, the intermediate rods being pivoted to the first-named rods to swing vertically thereon, means underneath the upper portion of the separator for supporting said swinging rods at different distances from the plane of said first-named rods, and means for delivering the material upon the separator.

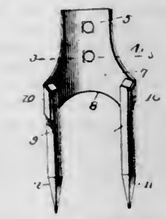
[Claims 6 to 9 not printed in the Gazette.]

1,061,569. WINDOW-LOCKING DEVICE. FRANK BENJAMIN RULLMAN, Hiawatha, Kans. Filed July 15, 1912. Serial No. 709,476. (Cl. 16—18.)



A window fastener comprising a bowed socket plate with a transverse slot therein and adapted to be fastened to the face of a sash, a resilient strip fastened to the inner face of an adjacent sash and having its outer face flush with the face of the sash to which it is secured, said plate being bent at a slight angle opposite the top of the sash to which it is fastened and its free end bifurcated, each wing being bent at an angle at a location midway its length, the two bent portions of the wings being at right angles to each other, one adapted to engage the slot of the keeper and the other serving as a handle, as set forth.

1,061,570. HARROW-TOOTH. ROBERT P. RUTLEDGE and RANDSOME G. BOLAND, Scranton, Tex. Filed Aug. 27, 1912. Serial No. 717,403. (Cl. 55—94.)



1. A device of the class described, comprising a shank having wings extending laterally in opposite directions therefrom, and a tooth carried by each wing.

2. A device of the class described, comprising a shank having wings extending laterally in opposite directions therefrom and curved to extend downwardly and rearwardly, and a tooth projecting downwardly from each wing.

3. A device of the class described, comprising a shank having wings extending laterally in opposite directions therefrom, and a tooth carried by each wing, each tooth being rectangular in cross-section and having an edge presented forwardly.

4. A device of the class described, comprising a shank having wings extending laterally in opposite directions therefrom, and a tooth carried by each wing, each tooth being rectangular in cross-section and having an edge presented forwardly, the teeth at their lower ends being of pyramidal form.

5. A device of the class described, comprising a shank formed from a plate having wings extending laterally in opposite directions therefrom, the said plate and the wings being transversely curved with their convex sides presented forwardly, and a tooth supported at the outer end of each wing and projecting downwardly therefrom.

1,061,571. LOCK. EBERHARD SCHROEDER, Volmarstein, Germany. Filed Apr. 10, 1912. Serial No. 689,837. (Cl. 70—46.)

1. A rotatable barrel for flat key locks comprising a piece of thin sheet metal having a central substantially flat constriction constituting a narrow passage for the key, and enlarged cylindrical end parts rotatable in corresponding openings in the lock casing.

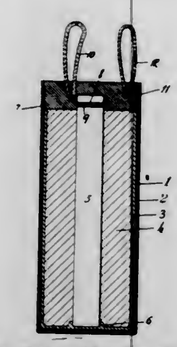
2. A rotatable barrel for flat key locks comprising a piece of thin sheet metal having a central substantially flat constriction constituting a narrow passage for the key, enlarged cylindrical end parts rotatable in corresponding openings in the lock casing, and end disks integral with said cylindrical end parts at right angles thereto and having slots for the passage of the key.



3. The method of manufacturing rotatable barrels for flat key locks which consists in bending each of the two end parts of a thin piece of sheet metal into cylindrical shape to form two cylindrical ends rotatable in corresponding openings in the lock casing, and in bending the part between the two cylindrical ends into a channel-shaped constriction to receive the key.

4. The method of manufacturing rotatable barrels for flat key locks which consists in bending a piece of thin sheet metal intermediate its ends to form this intermediate part into U-shape to receive the key, and in forming the end parts into cylindrical shape and forming slots therein and in bending thereupon the end parts at right angles to the intermediate part so as to form cylindrical end parts rotatable in corresponding openings in the lock casing and end disks integral with said cylindrical end parts and having slots for the passage of the key.

1,061,572. ELECTRIC BATTERY. CHARLES F. SCHUH, Newark, N. J., assignor of one-half to Robert J. Wilkie, Saugus, Mass. Filed Aug. 9, 1912. Serial No. 714,145. (Cl. 204—52.)



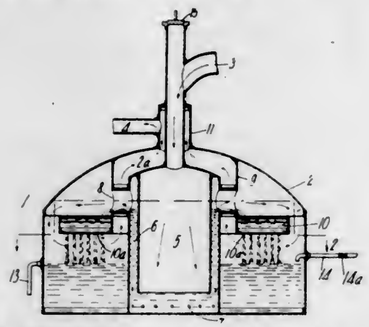
1. In a battery, the combination with an electrode and sealing means for the battery, of a loop of conducting material connected to the electrode and serving as the terminal thereof, the ends of said loop being covered with insulation and unexposed for connection to a circuit wire, said loop intermediate its ends being covered with insulating material, a portion of which is removable whereby to connect a circuit wire to the loop.

2. In a battery, the combination with an electrode and sealing means for the battery, of a loop of conducting wire connected to the electrode and serving as the terminal thereof, the ends of said loop being disposed interiorly of the sealing means, the portion of the loop exterior of the sealing means being covered with insulation, a portion of which insulation is displaceable under pressure.

3. In a battery, the combination with an electrode and sealing means for the battery, of a loop of conducting wire serving as the terminal of the electrode, one end of said loop being connected directly with the electrode, the other end of said loop being disposed interiorly of the sealing means, the portion of said loop exterior of the sealing means being covered with removable insulation.

4. In a dry battery the combination with the battery electrodes and sealing means for the battery, of loops of conducting wire connected respectively to the battery electrodes and serving as the terminals thereof, both ends of each of said loops being embedded in insulation and unexposed for connection to circuit wires, the portion of each loop intermediate the ends being covered with insulation which is displaceable under pressure.

1,061,573. APPARATUS FOR REGENERATING STEAM. RICHARD H. STEVENS, Munhall, Pa. Filed Feb. 5, 1910. Serial No. 542,253. (Cl. 121—95.)



1. A steam regenerator comprising a vessel to contain a heat storing fluid having a fluid overflow outlet and having a partition separating the vessel into steam-receiving and steam-regenerating chambers, said partition having openings connecting the chambers below the level of the overflow outlet, a steam inlet opening into the receiving chamber, a steam outlet opening out of the regenerating chamber, depending partitions within the chambers terminating above the overflow outlet and forming separate compartments within the chambers, a passage directly connecting the chambers, and a trough in one compartment of the regenerating chamber having a perforated bottom, said trough being positioned above the level of the overflow outlet to receive fluid discharged from said passages and spray the outgoing steam therewith.

2. A steam regenerator comprising a vessel to contain a heat storing fluid having a fluid overflow outlet and having a partition separating the vessel into an inner steam-receiving and outer steam-regenerating chambers, said partition having openings connecting the chambers below the level of the overflow outlet, a steam inlet opening into the receiving chamber, a steam outlet opening out of the regenerating chamber, depending partitions within the chambers terminating above the overflow outlet and forming separate compartments within the chambers, at least one passage directly connecting the outer compartments of said chambers, and a trough in the outer compartment of the regenerating chamber having a perforated bottom, said trough being positioned above the level of the overflow outlet to receive fluid discharged from said passages and spray the outgoing steam therewith.

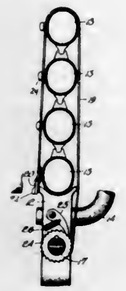
3. A steam regenerator comprising a vessel to contain a heat storing fluid having a fluid overflow outlet and having a partition separating the vessel into an inner steam-receiving and outer steam-regenerating chambers, said partition having openings connecting the chambers below the level of the overflow outlet, a steam inlet opening into the receiving chamber, a relief valve on said inner steam-receiving chamber, a steam outlet opening out of the regenerating chamber, depending partitions within the chambers terminating above the overflow outlet and forming separate compartments within the chambers, passages directly connecting the outer compartments of said chambers, and a trough in the regenerating chamber having a perforated bottom, said trough being positioned above the level of the overflow outlet to receive fluid discharged from said passages and spray the outgoing steam therewith.

4. A steam regenerator comprising a vessel to contain a heat storing fluid having a fluid overflow outlet and having a partition separating the vessel into annular steam-receiving and steam-regenerating chambers, said partition having openings connecting the chambers below the level of the overflow outlet, a steam inlet opening into the receiving chamber, a steam outlet opening out of the regenerating chamber, depending partitions within the chambers terminating above the overflow outlet and forming separate annular compartments within the chambers, at least one passage directly connecting the outer annular compartments of said chambers, and a trough in one compartment of the regenerating chamber having a perforated bottom, and secured on the lower end of the depending partition in position to receive fluid discharged from said passages and spray the outgoing steam therewith.

5. A steam regenerator comprising a vessel to contain a heat storing fluid, a partition extending upwardly within said vessel from the bottom thereof and having a closed upper end forming an inner steam-receiving and an outer steam-regenerating chamber, a partition depending from the closed upper end of the steam-receiving chamber forming separate steam-receiving and discharge compartments therein, a partition depending from the top of the steam regenerating chamber forming inner and outer compartments within the steam-regenerating chamber and having a trough on the bottom thereof, the bottom of said trough having a series of perforations therein, an overflow outlet on the vessel for the heat storing fluid, the depending partition in the regenerating chamber terminating above the level of said overflow outlet, a plurality of openings in the partition forming the steam-receiving and regenerating compartments connecting said compartments below the level of the overflow outlet, a passage connecting the outer compartment in the steam receiving chamber with the outer compartment in the regenerating chamber, a steam inlet connecting into the inner compartment of the steam receiving chamber, and a steam outlet leading from the inner compartment of the steam regenerating chamber.

[Claim 6 not printed in the Gazette.]

1,061,574. TOP-BOW CLAMP. AUGUSTUS E. THOMPSON, Brookline, Mass. Filed Oct. 17, 1912. Serial No. 726,394. (Cl. 21—61.)



A bow clamp comprising a bow rest adapted to be secured to a vehicle body and having a recessed bow-supporting upper surface, a hook at one edge of said surface, and bearings below said surface and hook, a reel journaled in said bearings, a flexible strap attached at its inner end to said reel and adapted to be extended therefrom across the opposite edge of the recessed surface around a tier of bows supported by the rest, and provided at its outer end with an eye adapted to engage said hook, the reel being provided with a handle whereby it may be rotated to bind the strap on the tier of bows, and means for preventing backward rotation of the reel.

1,061,575. TORCH. JOHN UNSER, Carthage, N. Y. Filed July 8, 1912. Serial No. 708,253. (Cl. 67—55.)



1. The herein described wick raiser comprising a rod having a knob at its upper end and a deflection in its body; a pair of semicircular jaws whereof each has a pair of perforated lugs mounted on the lower end of said rod, a series of inwardly projecting teeth, and an outwardly projecting stud; and a spring coiled on the lower end of the rod between the pairs of lugs and having its extremities throwing said jaws normally outward.

2. The combination with a wick tube having a pair of internal grooves; of a wick raiser consisting of a rod, a pair of jaws mounted thereon and having studs adapted to enter said grooves, and means for throwing the jaws normally outward.

3. The combination with a wick tube having a pair of internal grooves whereof the lower wall of the lowermost groove is abrupt and its upper wall less so, and an oil font secured to the lower end of said tube; of a wick raiser consisting of a rod, a pair of jaws mounted thereon and having studs adapted to enter said grooves, and means for throwing the jaws normally outward.

4. The herein described torch comprising a font, a wick tube provided with an outwardly projecting shoulder; an externally threaded collar surrounding the upper end of the tube and resting upon the shoulder, an internally threaded cap adapted to be screwed onto this collar and having a groove in its lower face, and a gasket of poor heat-conducting qualities contained within said grooves.

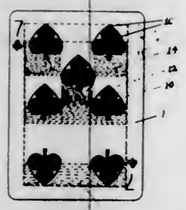
5. In a torch the combination with the wick tube, a threaded collar secured around its upper end and having a radial flange with an annular knife-edge rising therefrom; of a cap having threads to correspond with those on the collar and an annular groove in its lower edge, and a gasket of poor heat-conducting qualities contained within said groove and adapted to engage said knife-edge when the cap is screwed in place.

1,061,576. TRICK-CARD. GEORGE W. WALTER, New York, N. Y., assignor to Edgar G. Walthall, New York, N. Y. Filed Sept. 25, 1911. Serial No. 651,182. (Cl. 46—41.)

1. A trick card comprising a face card bearing a symbol and having an opening near said symbol and a back card having different shades thereon, said cards being movable one relative to the other.

2. A trick card comprising a face card bearing a symbol and having openings adjacent to said symbol forming with said symbol the outline of a different symbol, and a slid-

ing card having a part of the same shade as said first named symbol and a part the same shade as the ground of the face card, either of which parts are adapted to be placed in register with said openings.

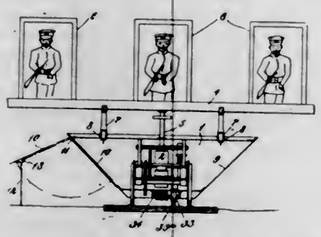


3. A trick card comprising a face card having clubs marked thereon and openings adjacent to the clubs and forming with the clubs the outline of spades, a sliding card having portions thereon the same shade as the clubs, and other portions thereon the same shade as the ground of the face card, either of said portions being adapted to be placed in register with said openings.

4. A trick card comprising a face card having clubs marked thereon and having openings adjacent to the clubs and forming therewith the outlines of spades, a back card secured at its edges to the edges of said face card, and a sliding card between the face card and the back card and having dark parts and light parts either of which is adapted to the place in register with the openings, said back card being provided with, at its upper part, a dark portion and at its lower part with a light portion adapted to register with the openings at the upper and lower ends of the face card respectively, said upper and lower parts being adapted to be covered or uncovered by the sliding card.

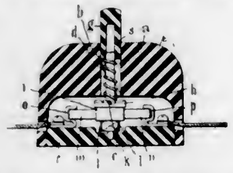
5. A trick card comprising a face card bearing clubs marked thereon and having openings adjacent to the clubs and forming therewith the outlines of spades, a back card secured at its edges to the edges of said face card, and a sliding card between the face card and the back card and having dark parts and light parts either of which are adapted to be placed in register with certain of said openings, the upper part of the back card being provided with a dark portion and the lower part of the back card being provided with a light portion adjacent respectively to certain of said openings, said upper part and said lower part being adapted to be covered or uncovered by the respective ends of said sliding card.

1,061,577. RIFLE-RANGE, TARGET, AND THE LIKE. ASA NORMAN WHITNEY, Melbourne, Victoria, Australia. Filed Dec. 10, 1910. Serial No. 596,701. (Cl. 124—16.)



The herein described device for moving the target-carriage forward and backward on the track, comprising in combination, an electro-motor on the carriage, a battery or other source of electric energy, means to connect the battery with the track, an intermediate rail between the track, a reverse switch on the carriage, a contact roller suspended from the carriage and adapted to contact with the said intermediate rail, an electro magnet and armature interposed between the contact roller and one of the rails of the track, and a spring operatively connected with the armature and the switch, substantially as and for the purpose specified and shown.

1,061,578. PUSH-BUTTON SWITCH. HEINRICH WISCHHUSEN and ALEXANDER HEPKE, Berlin, Germany. Filed Mar. 25, 1912. Serial No. 686,199. (Cl. 175—291.)



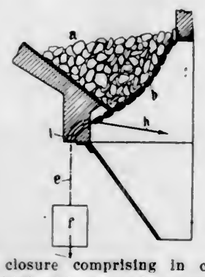
1. In a push button switch the combination of a base plate, a cover provided with an inner spiral groove, an axle journaled in said base plate, a drum secured to said axle, a push button movable down and up along said axle, a spiral spring arranged about the axle and having one end adapted to rotate said drum and the other guided in said spiral groove when said spring is compressed by the push button.

2. In a press-button switch, the combination of a base-plate, a cover having a central hole mounted thereon, said hole having a spiral groove, an axle journaled in the base and extending into said hole, a drum fast on the axle under the cover, a press-button movable down and up in said hole, a spiral spring arranged about the axle in said hole and having one end adapted to rotate said drum, the other end of said spring being guided in said groove.

3. In a press-button switch, the combination of a base-plate, a cover having a central hole mounted thereon, said hole having a spiral groove, an axle journaled in the base and extending into said hole, a drum fast on the axle under the cover, a crown wheel rigidly connected with the drum, a press-button movable down and up in said hole, a spiral spring arranged about the axle in said hole and having one end normally resting behind one tooth of the crown wheel, the other end of said spring being guided in said groove.

4. In a press-button switch, the combination of a base-plate, a cover having a central hole mounted thereon, said hole having a spiral groove, an axle journaled in the base and extending into said hole, a drum fast on the axle under the cover, a crown wheel having four ratchet teeth rigidly connected with the drum, a press-button movable down and up in said hole, a spiral spring arranged about the axle in said hole and having one end normally resting behind one tooth of the crown wheel, the other end of said spring being guided in said groove, a square block fast on the axle, and two leaf springs normally bearing against opposite faces of the block.

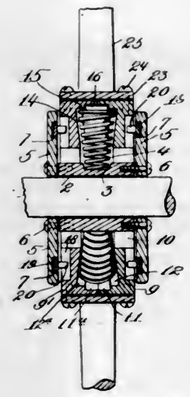
1,061,579. CLOSURE FOR EXIT-ORIFICES OF SILOS AND THE LIKE. EDUARD ZÜBLIN, Strassburg, Germany. Filed Feb. 6, 1912. Serial No. 675,870. (Cl. 57—37.)



1. A chute closure comprising in combination with the chute provided with channels at its sides, a flexible curtain adapted to tightly close the discharge opening of said chute, chains passing through said channels of the chute carrying weights for holding said curtain in its closing position tightly against the under edge of said chute, and means for adjusting the width and shape of the discharge opening of said chute, substantially as described.

2. A chute closure comprising in combination with the chute provided with channels at its sides, a flexible curtain adapted to tightly close the discharge opening of said chute, chains passing through said channels of the chute carrying weights for holding said curtain in its closing position tightly against the under edge of said chute, and a plurality of chains secured to the flexible closure at suitable places intermediate its width for adjusting the width and shape of the discharge opening of said chute, substantially as described.

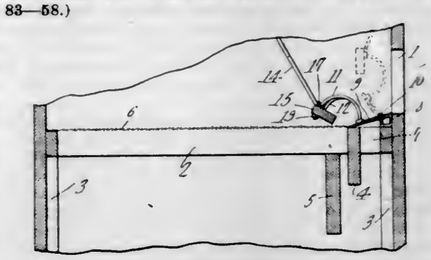
1,061,580. ELASTIC WHEEL. CHARLES ADAMS-RANDALL, New York, N. Y. Filed Sept. 7, 1906. Serial No. 333,689. (Cl. 152—45.)



1. In a resilient wheel, the combination of a hub comprising a tubular member, annular side flanges secured to the tubular member and formed with annular grooves in their inner faces and a ring movably held between the annular side flanges and separated from the said tubular member, the outer sides or faces of the ring being formed with a plurality of radially disposed recesses, shoes movably mounted in the annular grooves of the side flanges and having projections extending into the radially disposed recesses of the ring, the inner periphery of the ring being formed with grooves, and radially disposed springs interposed between the tubular member of the hub and the grooves in the inner periphery of the ring, the outer extremities of the springs being circumferentially movable.

2. In a resilient wheel, the combination of a hub comprising a tubular member and a ring surrounding the said member and radially movable with relation to the latter, the ring having grooves in its inner periphery and also radial grooves in its outer sides, annular side flanges secured to the tubular member and having annular grooves in its inner faces, shoes movably mounted in the annular grooves of the flanges and having projections extending into the radial grooves of the ring, shoes also disposed in a part of the grooves in the inner periphery of the ring and circumferentially movable in said grooves, and radially disposed springs between the tubular member and the ring and having portions thereof fitted over the shoes in part of the grooves in the inner periphery of the ring and circumferentially movable with said latter shoes.

1,061,581. JIG. HARRY PRESTON ALTMAN, Collinsville, Ill. Filed Feb. 6, 1913. Serial No. 746,640. (Cl. 83—58.)

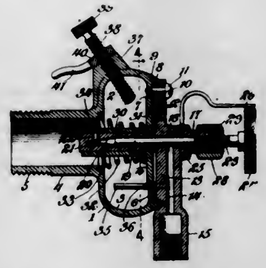


1. In a jig, a frame having an opening; a deck terminating adjacent the opening; a hinged gate extended across the opening; a float rigidly connected with the gate and located above the deck and at an acute angle to the deck.

2. In a jig, a frame having an opening; a deck terminating adjacent the opening; a hinged gate extended across the opening; a float connected with the gate and located above the deck; and a baffle located below the deck and below the float and adapted to protect the float from currents.

3. In a jig, a frame having an opening; a deck terminating adjacent the opening; a hinged gate extended across the opening; a curved support secured to the gate; a float located above the deck and mounted upon the support for adjustment transversely of the support, the curved form of the support serving to adjust both the distance of the float from the deck and the distance of the float from the opening when the float is moved along the support; and means for holding the float in adjusted positions upon the support.

1,061,582. CARBURETER. GEORGE A. CLEMENT, Beloit, Wis. Filed Apr. 12, 1912. Serial No. 690,300. (Cl. 48—154.1.)



1. A carbureter provided with an air valve and a fuel valve connected for simultaneous movement and timed in operation to cause the opening and subsequent closing of the fuel valve prior to the full active opening of the air valve.

2. A carbureter provided with an air valve responsive to the production of sub-atmospheric conditions to move to the open position, and a fuel valve connected to and operated by the air valve and timed with respect to the movement of the air valve to open and close prior to the full effective opening of the air valve.

3. A carbureter provided with an air valve having a range of movement in part substantially inactive for the admission of air, and a fuel valve movable with the air valve to fully open and then close the fuel supply, the opening and the beginning of the closing of the fuel valve being timed to occur during the substantially inactive movement of the air valve.

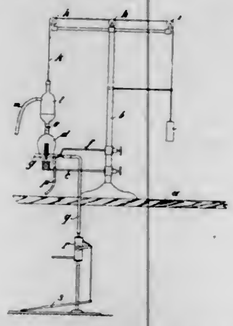
4. A carbureter provided with an air inlet and a fuel inlet, the latter being closer to the outlet end of the car-

bureter than the air inlet, and a valve structure controlling both the air inlet and the fuel inlet and responsive to the action of subatmospheric pressure established within the carbureter, the valve structure having a range of movement from rest at first substantially inactive to open the air inlet and active to open and then close the fuel inlet, and after the fuel inlet is closed to further open the air inlet.

5. A carbureter comprising a casing inclosing a chamber with inner walls curved in the direction of the axis of the carbureter casing and provided at one end with an air inlet, a laterally expanded valve for the air inlet having its outer portions in coöperative relation to the curved walls of the chamber to produce a whirl of air entering the chamber, and a fuel controlling means within the chamber movable by the air valve and timed in operation to cause an opening and closing of the fuel inlet during the initial portion of the movement of the air valve and before the latter is fully open and maintaining the fuel inlet closed during the remainder of the movement of the air valve to the fully open position.

[Claims 6 to 9 not printed in the Gazette.]

1,061,583. APPARATUS FOR REPAIRING ELECTRIC METALLIC-FILAMENT LAMPS. OSKAR ARENDT, Berlin, and CURT SCHLESINGER, Strassburg, Germany. Filed Oct. 4, 1911, Serial No. 652,791. Renewed Apr. 2, 1913. Serial No. 758,489. (Cl. 176—4.)



1. In apparatus for use in repairing electric metallic filament lamps having fractured filaments, the combination, with a support having a holder for carrying a defective lamp, of a blowpipe burner carried by the support in operative relation to a lamp carried by the holder for fusing one or more holes in the bulb of the lamp at the cap end thereof, an air vessel carried by the support for connection to the pointed end of a lamp carried by the said holder, and means for supplying gas to the burner.

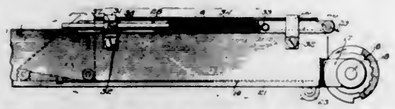
2. In apparatus for use in repairing electric metallic filament lamps having fractured filaments, the combination, with a support having an adjustable holder for carrying a defective lamp, of a blowpipe burner adjustably carried by the support in operative relation to a lamp carried by the holder for fusing one or more holes in the bulb of the lamp at the cap end thereof, an air vessel adjustably carried by the support for connection to the pointed end of a lamp carried by the said holder, and means for supplying gas to the burner.

3. In apparatus for use in repairing electric metallic filament lamps having fractured filaments, the combination, with a support having a holder for carrying a defective lamp, of a blowpipe burner carried by the support in operative relation to a lamp carried by the holder for fusing one or more holes in the bulb of the lamp at the cap end thereof, a counterpoised air vessel suspended from the support for connection to the pointed end of a lamp carried by the said holder, and means for supplying gas to the burner.

4. In apparatus for use in repairing electric metallic filament lamps having fractured filaments, the combination, with a support having a holder for carrying a defective lamp, of a circular, two-part, hinged burner having a plurality of closable nozzles carried by the support in operative relation to a lamp carried by the holder for fusing one or more holes in the bulb of the lamp at the cap end thereof, an air vessel carried by the support for connection to the pointed end of a lamp carried by the said holder, and means for supplying gas to the burner.

5. In apparatus for use in repairing electric metallic filament lamps having fractured filaments, the combination, with a support having a holder for carrying a defective lamp, of a circular, two-part, hinged burner having a plurality of closable and adjustable nozzles carried by the support in operative relation to a lamp carried by the holder for fusing one or more holes in the bulb of the lamp at the cap end thereof, an air vessel carried by the support for connection to the pointed end of a lamp carried by said holder, and means for supplying gas and air to the burner.

1,061,584. SHEET-FEEDING DEVICE. HARRY YARRINGTON ARMSTRONG, Elgin, Ill., assignor to Armstrong Wrapping Machine Company, Louisville, Ky., a Corporation of Kentucky. Filed Jan. 8, 1912. Serial No. 669,935. (Cl. 101—39.)



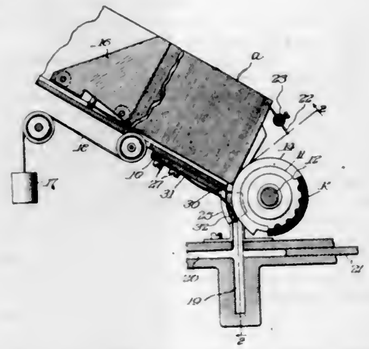
1. The combination with a magazine to receive a group of sheets, a rotative stripper device mounted at one end of the magazine to rotate on an axis fixed relatively to said magazine for stripping the sheets one at a time from said group, means to feed the sheets toward the stripper device, a needle adapted to penetrate the sheets at the outer end of the magazine, a support for the needle embracing a sliding bar having guiding support on the wall of the magazine, and a spring stretched between the magazine wall and said sliding bar.

2. The combination with means for guiding a bundle of sheets having relatively thicker and thinner portions with the sheets standing on edge, stripping means unyieldingly engaging the delivery end of the bundle near one margin of the sheets, retarding means movable in a fixed path of travel and engaging the delivering end at a point remote from the point of engagement thereof by said stripping means, means engaging that end of the bundle remote from the delivery end for bodily moving the bundle and simultaneously advancing all portions of the sheets of the bundle toward said retarding and stripping means, and a device for moving said retarding means toward the delivery end of the bundle to compensate for varying degrees of inclination of the delivery end of the bundle with respect to the plane of the opposite end thereof.

1,061,585. SHEET-FEEDING DEVICE. HARRY YARRINGTON ARMSTRONG, Elgin, Ill., assignor to Armstrong Wrapping Machine Company, Louisville, Ky., a Corporation of Kentucky. Filed May 31, 1912. Serial No. 700,673. (Cl. 101—39.)

1. A sheet feeding mechanism for feeding sheets from a magazine to a receiving recess comprising, in combination with a magazine having an open discharge end, a stripper roll arranged across the open end of the magazine with its axis between the recess and the bottom of the magazine, a presser device acting against the periphery of the roll at a point beneath the discharge end of the magazine and vertically above said recess, the presser device being arranged tangentially to the periphery of the roll and terminally curved away from the roll and guiding means coöperating with the presser device and roll to guide the sheets into said recess.

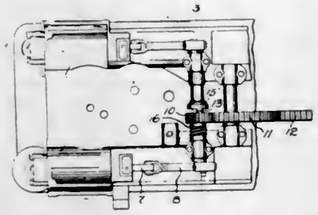
2. A sheet feeding mechanism comprising a magazine for a group of sheets, a stripper roll at the discharge end thereof, a plate fixed to the magazine and extending toward said roll and having a curved guide portion concentric to the roll between which and said stripper roll the sheets are delivered, and a presser device acting against said roll abreast said guide portion.



3. A sheet feeding mechanism comprising a magazine for a group of sheets, a stripper roll at the discharge end thereof, a fixed, two-arm curved guide between which and said stripper roll the sheets are delivered, and a spring bearing against the stripper roll between the arms of said guide.

4. A sheet feeding mechanism, comprising a magazine for a group of sheets, a stripper roll at the discharge end thereof, a two-armed curved guide between which and said stripper roll the sheets are delivered, a spring bearing against the stripper roll between the arms of said guide and guards at the sides of said guide.

1,061,586. ENGINE-REVERSING MECHANISM. ALBERT BALL, Claremont, N. H., assignor to Sullivan Machinery Company, Claremont, N. H., a Corporation of Maine. Original application filed Aug. 4, 1906, Serial No. 329,190. Divided and this application filed Nov. 4, 1909. Serial No. 526,250. (Cl. 121—100.)



1. The combination with an engine and its crank shaft, a valve operating shaft, a pinion loose on the valve operating shaft but driven from the crank shaft, a clutch member fast on the valve shaft, coöperating clutch surfaces on the clutch member and the pinion whereby the former is driven by the latter to actuate the valve mechanism, said clutching surfaces permitting relative movement between the clutch member and the pinion whereby the valve shaft may be turned to be driven in an advanced or posterior relation as the engine is reversed, and means for pressing the pinion laterally into frictional engagement with the clutch member to prevent accidental overthrow and reversal of the engine during its operation.

2. An engine reversing mechanism comprising valve operating means and driving means therefor, the latter including a driving and a driven member having interengaging means permitting a free predetermined relative rotative movement of said members whereby the valve operating means may be turned by the driving means in either an advanced or posterior relation, and means for constantly urging said driving and driven members into uninterrupted frictional driving engagement to prevent accidental rotative movement therebetween.

3. In a fluid pressure engine the combination with a crank shaft, a valve operating shaft driven thereby, a pair of valve operating rods eccentrically connected one to each end of the valve operating shaft, a driven member fixed on said shaft at an intermediate point thereon, a pinion loose on said shaft and driven from said crank shaft and coöperating clutch surfaces on the driven member and on the pinion whereby the former is driven by the latter to actuate the valve shaft, said clutch surfaces permitting relative movement between the clutch member and the pinion whereby the valve shaft may be turned to be driven in an advanced or posterior relation, and both valve operating rods simultaneously moved to reverse the engine.

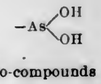
4. In a fluid pressure engine the combination with a crank shaft, a valve operating shaft driven thereby, reversing mechanism comprising a driving member loose on the operating shaft and connected to be driven by the crank shaft and a driven member connected to drive the valve operating shaft, said driven member being fixed on said operating shaft but movable relatively to the driving member whereby it may be driven in an advanced or posterior relation to the driving member for the reversal of the engine.

1,061,587. PROCESS OF PRODUCTION OF ORGANIC DERIVATIVES OF ARSENIC ACID. HEINRICH BART, Bad Dürkheim, Germany. Filed Dec. 27, 1910. Serial No. 599,329. (Cl. 23—24.)

1. Process for the production of aryl-substitution products of the arsenic acid having the following general formula:



which process consists in causing compounds which contain the group



to react on aryl-diazo-compounds having the general formula

$$R-N=N-OH$$

wherein R denotes an aryl-radical.

2. Process of producing aromatic arsenic compounds which comprises heating an aromatic diazo compound with an arsenic compound, until the arsenic compound has been combined with the aromatic nucleus.

3. Process of producing aromatic arsenic compounds which comprises heating an aromatic diazo compound with an arsenic compound in the presence of an alkali, until the arsenic compound has been combined with the aromatic nucleus.

4. The process of producing aromatic arsenic compounds which comprises heating an aromatic diazo compound with an alkaline arsenite until the arsenic is combined with the aromatic nucleus.

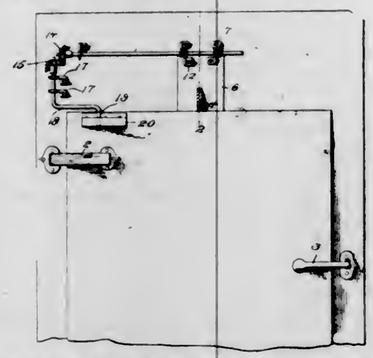
5. The process of producing aromatic arsenic compounds which comprises heating an aromatic diazo compound with sodium arsenite until the arsenic is combined with the aromatic nucleus.

[Claims 6 to 14 not printed in the Gazette.]

1,061,588. DOOR FOR PACKING-HOUSES. BERNARD BATES, Vancouver, British Columbia, Capada. Filed May 22, 1912. Serial No. 699,012. (Cl. 39—95.)

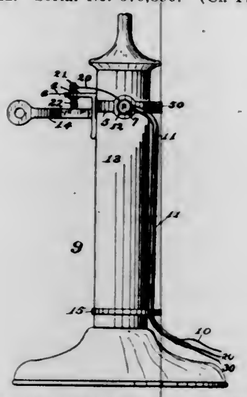
1. In a door for packing houses, the combination with a door frame having a trolley passage therethrough, of a main door hung on said frame below said trolley passage, a supplemental door adapted to close the said trolley

passage, a rotary shaft mounted on the door frame and connected with said closure for the trolley passage, a rotary shaft mounted on the door frame in a plane intersecting the plane of the first-mentioned shaft and having a laterally extending crank arm at its lower end engaging the main door, and gearing between the adjacent ends of the two shafts.



2. In a door for packing houses, the combination of a door frame, a main door hung on said frame, a supplemental closure above the said door, a rotary shaft supported on the door frame above said closure and having rigid connections therewith, a crank shaft mounted on the door frame above the main door and extending laterally from the supplemental closure, gearing between the two shafts, and a guiding bracket secured on the main door at the upper end thereof and engaging the said crank shaft whereby the opening or closing of the main door will actuate said shaft.

1,061,589. BUSY-SIGNAL ATTACHMENT FOR TELEPHONES. ADAM M. BEELER, Seattle, Wash. Filed Jan. 9, 1912. Serial No. 670,300. (Cl. 179—28.)

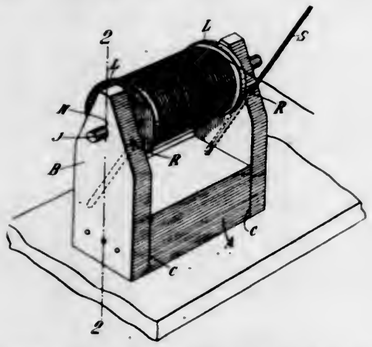


1. A "busy" signal attachment for telephones, comprising a band adapted to be secured about the stem of the telephone and carrying a contact member insulated therefrom and in a position to be engaged by the receiver carrying arm when the latter rises, a lamp carried by said band and having one pole in electrical connection with the receiver carrying arm, and three conductors connecting, one with said contact member, and the others each with its respective pole of the lamp.

2. A "busy" signal attachment for telephones comprising a band adapted to be secured about the stem of the telephone stand and having an arm extending over the receiver carrying arm, a contact member insulated from and carried by said arm in position above the receiver carrying arm, said band having a lamp receiving socket, a conducting tube connected with one pole of said socket and also with the receiver carrying arm and extending downward along the stem of the telephone stand, a conductor within and insulated from said tube and connecting with the other pole of the lamp socket, and a second insulated wire extending through said tube and connected with the contact member.

3. A "busy" signal device for multiple telephone circuits comprising a lamp support securable upon the telephone, a lamp mounted upon said support, one pole of said lamp being electrically connected with the receiver supporting arm, an arm extending outward from the lamp support over the receiver supporting arm, a spring or yielding contact member carried by said arm and insulated therefrom, said contact member being in position to be engaged by the receiver supporting arm when the latter rises, a three wire circuit extending between the telephones, a source of electrical energy having two of said wires connected with its opposite poles, one of said pair of wires and the third wire having the lamps connected therewith in parallel.

1,061,590. SPOOL AND NEEDLE HOLDER. ROBERT H. BENNET, New York, N. Y. Filed Aug. 30, 1911, Serial No. 646,900. Renewed Mar. 13, 1913. Serial No. 754,131. (Cl. 223—56.)

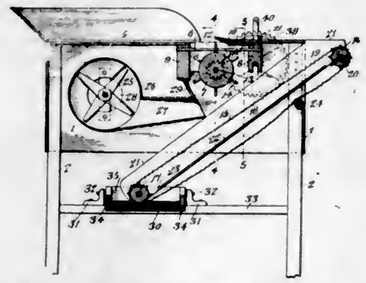


A spool and needle holder comprising a relatively thick rectangular base block, relatively thinner flat parallel upright side members secured thereto against the end faces of the base block, and a spindle loosely mounted horizontally in transverse apertures in the side members, said side members being of sufficient thickness to permit needle holding recesses to be formed wholly therein extending longitudinally of the side members and downwardly and inwardly at an angle to the plane of the base block to a point below the plane of the upper surface of the base block.

1,061,591. PEANUT-PICKER AND PEA-HULLER. WILLIAM C. BERRY, Marshall, Tex. Filed June 4, 1912. Serial No. 701,559. (Cl. 130—30.)

1. A machine of the class described comprising a casing provided with a hopper having a bottom and open at one end, a rotary picking cylinder arranged within the casing below the open end of the hopper and provided with projecting spikes or teeth, supports located above the picking cylinder and extending from the open end of the hopper and spaced apart to permit vines to pass between them, and an adjustable guiding leaf also located above the picking cylinder and arranged opposite the open end of the hopper.

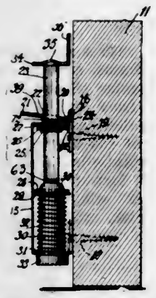
2. A machine of the class described comprising a casing provided with a hopper having a bottom and open at one end, a rotary picking cylinder arranged within the casing below the open end of the hopper and provided with projecting spikes or teeth, spaced supports located above the picking cylinder, and an adjustable guiding leaf also located above the picking cylinder and spaced from and arranged opposite the open end of the hopper, said guiding leaf being hinged and having an inclined beveled portion.



3. A machine of the class described including a casing provided with a hopper having a bottom and open at one end, a hinged guiding leaf mounted on the casing opposite the open end of the hopper in spaced relation with and presenting a lower inclined face for directing the material downwardly, and picking mechanism arranged within the casing and below the space between the hopper and the said leaf.

4. A machine of the class described comprising a casing provided with a hopper having a bottom and open at one end, a rotary picking cylinder arranged within the casing below the open end of the hopper and provided with projecting spikes or teeth, supports located above the cylinder and extending from the open end of the hopper and spaced apart to permit the vines to pass between them, and guiding means located above the spaced supports and arranged opposite the open end of the hopper for guiding the vines downwardly to the picking cylinder.

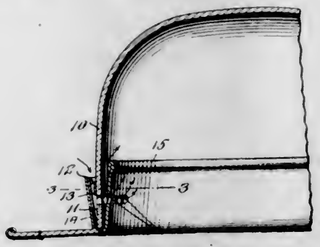
1,061,592. DOOR-HOLDER. EMIL BOMMER, Brooklyn, N. Y. Filed Dec. 19, 1911. Serial No. 666,754. (Cl. 16—83.)



1. An improved door-holder comprising a casing stamped or cast of one piece of metal and having lateral flanges with fastening-openings, and an upwardly extending solid flange having a slot, a spring-actuated rod having a straight rear-surface and an arc-shaped curved front surface, and a clamping plate hinged to the upwardly extending flange of the casing and having an opening with a straight rear part and an arc-shaped curved front part substantially the same shape as the rod, said rod being capable of being moved downwardly through the opening of the plate in one direction, and held by the clamping action of the curved front and straight rear part of the opening in the plate against upward movement.

2. An improved door-holder, comprising a casing having top and bottom walls and side and front walls, an opening in the top wall, straight at the rear and curved at the front, a circular opening in the bottom wall, a plate pivoted above the top wall of the casing having an opening of the same configuration as the opening in the top wall of the casing, and a rod within the casing, the upper part of which is of a configuration substantially like that of the opening in the top wall, and the lower part of which is of a configuration like the circular opening in the bottom-wall, whereby the rod is prevented from turning during the operation of the door-holder.

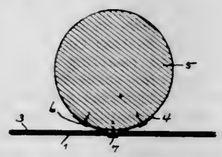
1,061,593. HAT-VENTILATOR. JOHN C. G. BONNEY, Brooklyn, N. Y. Filed Feb. 8, 1912. Serial No. 676,437. (Cl. 2—114.)



1. In a hat ventilator, a removable guard insertible between the ribbon and crown of a hat, said guard comprising a curved plate of shorter length than the circumference about the crown of a hat, a spacing bar of less width and length than the guard having its ends secured to the ends of said guard to cause said guard to curve from said strip as to form an opening between said guard and strip to permit free passage of air therebetween.

2. In a hat ventilator in combination with a hat having portions of the crown and sweat band thereof perforated to permit the passage of air therethrough, a guard comprising a curved band of less length than the perimeter of the crown, and a band of less width and length than the guard secured at its ends to the ends of the guard to cause said guard to assume a spaced position from said band, and said guard and band being insertible and removable between the ribbon and crown of a hat.

1,061,594. ADVERTISING-SIGN. JOHN J. BRODERICK, Manchester, N. H. Filed Aug. 12, 1911. Serial No. 644,383. (Cl. 40—145.)

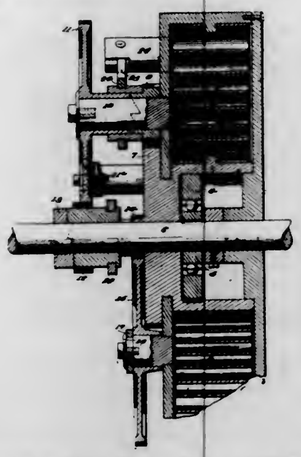


A sign comprising a strip the end portions of which are folded back upon the face portion in close proximity to the same with its end portions folded over and disposed away from each other there being a space between the inner edges of the second mentioned folds, securing devices passing through the ends of the strip and securing devices passing through the intermediate portion of the strip and passing through the space between the inner edges of the second mentioned folds.

1,061,595. AUTOMATIC CRANKING DEVICE. COLEMAN H. BROWN, Pulaski, Tenn. Filed Jan. 24, 1911. Serial No. 604,455. (Cl. 123—187.)

1. A cranking device for engines, embodying a cranking shaft, a spring concentrically disposed to and mounted on the shaft, a train of gearing arranged to place the spring under tension upon the rotation of the shaft, said train of gearing including a clutch member mounted on the shaft, another clutch member on the shaft and coacting with the said first-named clutch member, one of

said clutch members being loose on the cranking shaft, and the other relatively fixed thereon, a shipper lever connected to one of said clutch members to connect and disconnect them, a wheel movable with the train of gearing, means controlled by said wheel for actuating said shipper lever, and means for transmitting energy from the spring under tension to the cranking shaft.



2. A cranking device for engines, embodying a power spring, a cranking shaft, a train of gearing arranged to place the spring under tension upon the rotation of the shaft, said train of gearing including a clutch member loose on the shaft, a clutch member relatively fixed on the shaft and co-acting with the loose clutch member, a shipper lever operatively connected to the loose clutch member, a revoluble stud movable with the train of gearing, a loose crank, the stud being arranged to engage said crank to move the same in one direction or the reverse according to the direction of revolution of the stud, a crank shaft operatively connected to said crank and to the shipper lever, and means for transmitting energy from the spring under tension to the cranking shaft.

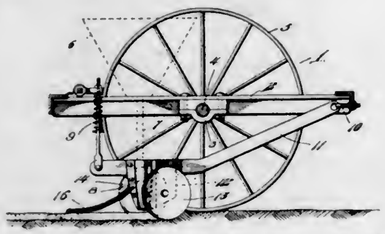
3. A cranking device for engines, embodying a power spring, a cranking shaft, a train of gearing arranged to place the spring under tension upon the rotation of the shaft, a clutch member loose on the shaft and included in said train of gearing, another clutch member relatively fixed on the shaft and co-acting with the first-named clutch member, means for connecting and disconnecting said clutch members, said means including a loose crank, a shipper lever and an operative connection between the loose crank and the shipper lever, means for automatically moving said crank in opposite directions to operate the shipper lever in both directions so as to connect and disconnect the clutch members, and means for transmitting energy from the spring under tension to the cranking shaft.

4. A cranking device for engines, embodying a power spring, a cranking shaft, a train of gearing between the shaft and spring arranged to place the spring under tension upon the rotation of the shaft, said train of gearing including a clutch member, another clutch member, one of said clutch members being loose on the shaft and the other relatively fixed thereon, a wheel movable with the train of gearing and provided with a stud, a loose crank designed for engagement by said stud to move the crank in one direction or the reverse according to the direction of rotation of said wheel, a shipper lever arranged to connect and disconnect the clutch members, and an operative connection between said wheel and said shipper lever.

5. A cranking device for engines, embodying a cranking shaft, an arbor loosely mounted on the shaft, a spring held at one end and operatively engaging the arbor, a train of gearing arranged to place the spring under tension upon the rotation of the shaft, said train of gearing including a clutch member loose on the shaft, a clutch member relatively fixed on the shaft and co-acting with the loose clutch member, a shipper lever operatively connected to the loose clutch member to connect it and disconnect it with and from the fixed clutch member, a wheel actuated by the rotation of the arbor in one direction, means controlled by said wheel for actuating said shipper lever, and means for transmitting energy from the spring under tension to the crank shaft.

[Claims 6 to 11 not printed in the Gazette.]

1,061,596. PLANTER ATTACHMENT. ALONZO H. BURNS, Jefferson, Ga. Filed Aug. 10, 1911. Serial No. 643,354. (Cl. 111—11.)



1. A seed planter consisting of a frame, drag bars secured to said frame, seed droppers secured to said drag bars, and two disks carried by each of said drag bars, one of said disks being slightly in advance of the other, the plane of the edges of the rearmost disk being on a line with the forwardmost edge of the forward disk, substantially as and for the purposes set forth.

2. The combination in a seed planter, of a frame, drag bars secured to said frame, seed droppers carried by said drag bars, each of said drag bars having an angular offset portion, and forwardly converging disks carried by each of said drag bars, one of said disks being arranged slightly in advance of the other, the rearmost disk having the plane of its edge in substantial alinement with the forwardmost edge of the forward disk and the forwardmost edge of the rearmost disk being in advance of the pivot of the forward disk, substantially as and for the purposes set forth.

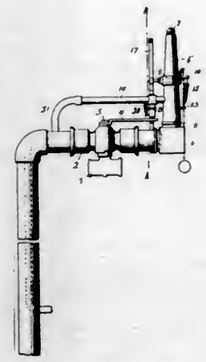
3. In combination with a seed planter, a frame, drag bars secured to the frame, each of said drag bars being provided with an angular offset portion, and flanges extending downwardly from said offset portions, a pair of forwardly converging disks carried by the flanges on each drag bar, the plane of the edge of the rearmost disk of each pair being substantially in alinement with the forwardmost edge of the forward disk and the forward edge of the rearmost disk being in advance of the pivot of the forwardmost disk, arms connecting said drag bars with the frame, and drags connected to said drag bars.

1,061,597. PROCESS FOR TREATING IRON-TANNED LEATHER. JOSEPH BYSTRON, Teschen, Austria-Hungary, assignor to himself, and Karl Baron von Vietinghoff, Berlin, Germany. Filed Sept. 26, 1912. Serial No. 722,472. (Cl. 149—5.)

The process herein described of treating leather tanned with iron salts, which consists in treating the leather with neutral alkali metal salt solutions.

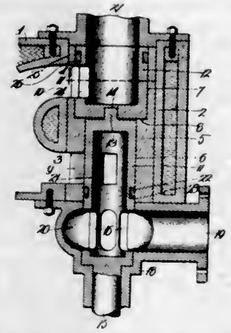
1,061,598. ESCAPING-GAS ALARM. OTTAVIO CASILLI, Newark, N. J. Filed Mar. 25, 1911. Serial No. 616,928. (Cl. 177—311.)

1. In a gas alarm, a burner provided with a tube communicating therewith and said burner having a valve intermediate the tip and junction of said tube with the burner, an approximately U-shaped lever secured to the outer end of the valve spindle, a plug valve in the tube having an opening, said plug valve being held with its opening out of registration with said tube by said U-shaped lever, when said first mentioned valve is open, means for holding said plug valve with its opening in registration with the tube, a reservoir communicating with said tube, an electric bell, an inflatable bag communicating with said reservoir and adapted to form a contact for the circuit of said bell, a lever secured to the spindle of the gas pipe valve and adapted to contact with the end of the U-shaped lever substantially as described.



2. In a gas alarm, a burner provided with a tube communicating therewith, a valve seated in said burner, said tube intersecting said burner below the valve, a plug valve seated in the tube, means for holding said valve in registration with said tube, an approximately U-shaped lever provided with a spring arm secured on the outer end of the burner valve, said plug valve being held with its opening out of registration with said tube by said U-shaped lever, when said first mentioned valve is open, an alarm comprising an electric bell and battery, a gas reservoir, a sack communicating with said reservoir and adapted to be inflated, and means carried by the sack for forming a contact.

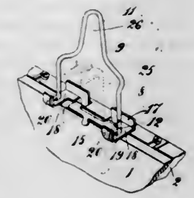
1,061,599. ROTARY VALVE FOR INTERNAL-COMBUSTION ENGINES. CHARLES L. COOKSON, Kansas City, Mo. Filed Aug. 21, 1911. Serial No. 645,067. (Cl. 136—7.)



1. A rotary valve, comprising a casing having an inlet port and an exhaust port, a bushing fitting in and terminating short of the upper end of the casing and of increased internal diameter in a plane above the inlet port, and provided with an inlet port and an exhaust port registering respectively with the corresponding ports of the casing, an exhaust pipe secured upon and depending into the casing and engaging the upper end of the bushing, and a valve journaled in the bushing, consisting of superposed inlet and exhaust members detachably interlocked together at their adjacent ends, with the exhaust port member resting at its lower end upon the bushing at the upper end of the portion thereof of smallest internal diameter, the inlet port member being hollow and having a port to register at regular intervals with the inlet port of the bushing, and the exhaust port member being of cup-form and communicating at its upper end with said pipe and having a port to register at regular intervals with the exhaust port of the bushing.

2. A rotary valve, comprising a casing having an inlet port and an exhaust port, a bushing fitting in and terminating short of the upper end of the casing and of increased internal diameter in a plane above the inlet port, and provided with an inlet port and an exhaust port registering respectively with the corresponding ports of the casing, an exhaust pipe secured upon and depending into the casing and engaging the upper end of the bushing, a valve journaled in the bushing, consisting of superposed inlet and exhaust members detachably interlocked together at their adjacent ends, with the exhaust port member resting at its lower end upon the bushing at the upper end of the portion thereof of smallest internal diameter, the inlet port member being hollow and having a port to register at regular intervals with the inlet port of the bushing, and the exhaust port member being of cup-form and communicating at its upper end with said pipe and having a port to register at regular intervals with the exhaust port of the bushing, a packing ring fitting around the inlet port member of the valve below the plane of the inlet port of the bushing, and a packing ring fitting around the exhaust port member of the valve above the exhaust port of the bushing.

1,061,600. TYPE-WRITING MACHINE. CORNELIUS B. CORCORAN, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 28, 1911. Serial No. 611,412. (Cl. 197—135.)



1. A typewriting machine having a platen, in combination with a unitary guide adjacent thereto, and a clip having a resilient extension, said guide having a notch engaging said extension to lock said unitary guide.

2. A typewriting machine having a platen, in combination with a guide adjacent thereto having shanks entering openings in the type segment of said typewriter, and releasable spring-actuated shoes arranged to press the sides of said shanks against the sides of said openings and lock said guide, said shanks each having notches receiving the edges of said shoes.

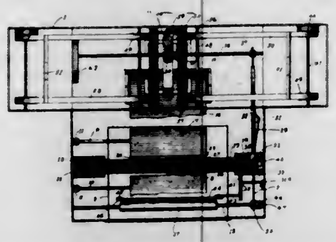
3. A typewriting machine having a platen and a segment, in combination with a guide-holder secured to said segment and having an integral movable shoe, and a guide having a notch engaging said shoe.

4. In a typewriting machine, in combination, a segment having sockets therein, a platen, a guide having shanks received in said sockets, and having notches in the side of each shank, and latches engaging said notches to lock said guide.

5. In a typewriting machine, in combination, a segment, a platen, a guide coöperating with the platen, a clip connected with said segment and having integral bow-springs, and shoes therebeyond pressed by said springs against said guide to lock said guide.

[Claims 6 to 13 not printed in the Gazette.]

1,061,601. ADVERTISING DEVICE. COLONEL N. FALK, San Jose, Cal., assignor of one-half to John W. Batdorf, San Jose, Cal. Filed May 9, 1912. Serial No. 696,142. (Cl. 211—8.)



1. A device of the character described comprising a case, a spring pulled member disposed in said case, such member being adapted to move longitudinally in said case, a vertically moving member held normally in engagement with said longitudinally movable member, means for disengaging said vertically movable member from said longitudinally movable member, a paper strip adapted to project over said vertically movable member and means connected with said longitudinally movable member and adapted to cut said paper strip when said longitudinally movable member moves, as described.

2. A device of the character described comprising the combination with a case having slots, of members movable vertically beneath said slots, another member movable longitudinally between said vertically moving members, means for holding said longitudinally moving member stationary when said vertical members are stationary, means for moving said longitudinal member when said vertically moving members are moved, a paper disposed over said vertical moving members and means operatively connected with said longitudinally moving member whereby with the movement of said last named member said paper will be moved and cut, as described.

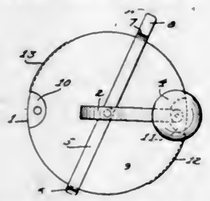
3. A device of the character described comprising a case, a spring pressed carrier movable within said case, a stationary member in said case at the end of said carrier, a vertically moving member in said case adapted to move along said stationary member, a transversely moving member in said case movable across said case just above the path of said vertically moving members, said case being provided with a slot disposed in alinement with the path of said transversely moving member, as described.

4. A device of the character described comprising the combination with a vertically movable and a longitudinally movable member controlled thereby, of a merchandise delivering mechanism and means operatively connected between said longitudinally movable member and said merchandise delivering mechanism whereby when said longitudinally movable member moves said merchandise delivering mechanism may be operated and when said longitudinally movable member is in normal position said merchandise delivering mechanism is locked against operation, as described.

1,061,602. CAN OPENER AND CLOSURE. JEROME FOUNTAIN, Oakland, Cal. Filed Sept. 25, 1912. Serial No. 722,271. (Cl. 220—67.)

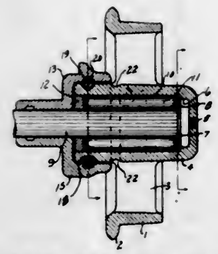
1. In a can opener and closure therefor, a cover plate having notches cut therein, means to secure the cover plate to a can, and a punch pivotally mounted upon said cover plate so that it may be moved to a position adjacent each of the notches in said cover plate, substantially as described.

2. In a can opener and closure therefor, a cover plate having notches at the edges thereof, means to hold the same centrally with respect to a can upon which it may be placed, a bar pivotally mounted upon said cover plate for releasably securing the cover plate to the can, and a pivotally mounted punch adapted to be presented to



each of the notches in the cover plate, substantially as described.

1,061,603. WHEEL. CHARLES ELLIS FOUST, Birmingham, Ala. Filed Dec. 2, 1912. Serial No. 734,641. (Cl. 105—67.)



1. The combination of a wheel having the inner end of its hub externally and circumferentially grooved, a boxing adapted to receive said grooved end of the hub which rotates therein, said boxing having an internal circumferential groove, and a retaining means which is inclosed in the boxing and interposed in the annular space formed between said grooved portions of hub and boxing to engage with the walls of such grooved portions and retain said parts assembled, substantially as described.

2. The combination of a wheel having the inner end of its hub provided with an external circumferential groove, a parted boxing adapted to be connected to a car, an axle passing through said boxing and wheel hub, the outer grooved portion of said hub being adapted to rotate in the boxing which has an internal circumferential shoulder, and a curved retaining means, inclosed by the boxing, which engages a wall of said groove and shoulder and holds the hub and boxing in assembled relationship.

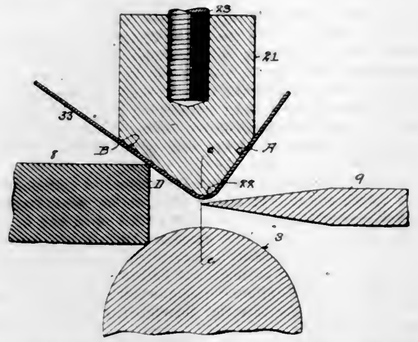
3. The combination with a wheel having the inner end of its hub provided with a circumferential groove, an axle on which said wheel is rotatably mounted, a boxing surrounding said axle and grooved end of the hub, a circumferential groove in said boxing alining with said groove on the hub, an inclosed retaining ring which engages the walls of said grooves, and means to permit the insertion of said ring into the boxing, substantially as described.

4. The combination with a car wheel having its hub circumferentially grooved, of a split retaining ring adapted to be clamped into said groove, an axle on which said wheel is rotatably mounted, a parted boxing which surrounds the axle and grooved end of the hub and has an inner circumferential shoulder against which said retaining ring works to hold the wheel in running position on the axle, as and for the purposes described.

5. A wheel retaining means comprising a parted boxing, the upper boxing section being adapted to be connected to the car, means to detachably connect the under boxing section to the upper boxing section, a wheel hub extended and adapted to make a close running fit in said boxing, the end of said hub within the boxing being circumferentially grooved and the inner wall of the boxing being correspondingly grooved, and a retaining ring which engages walls of said grooved parts, as and for the purposes described.

[Claim 6 not printed in the Gazette.]

1,061,604. HIDE-SPLITTING MACHINE. JOSEPH H. GAY, Newark, N. J. Filed June 12, 1912. Serial No. 703,321. (Cl. 69—10.)



A hide-splitting machine, comprising a splitting blade, a moving support, a moving web, a presser block having an edge bearing on said web to compress said hide between said web and said support, and inclined converging faces meeting at said edge; the said edge being rounded to produce a clearance of sufficient width to permit of the adjustment of said blade in close proximity to the line of maximum compression of said hide, and the inclined face of said block on the entrance side being disposed at a less angle to a horizontal plane than the inclined face of said block on the delivery side.

1,061,605. WATER-MOTOR. GEORGE S. GILLETT, Halfway, Oreg., assignor of one-half to Charles Black, Wallowa, Oreg. Filed Oct. 3, 1911. Serial No. 652,583. (Cl. 170—127.)

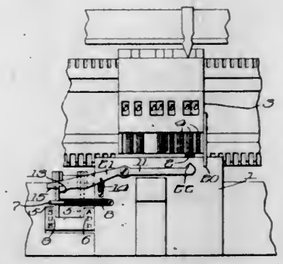


A current motor including a drive shaft, a transmission shaft operatively connected to the drive shaft, and a rotor operatively connected to the transmission shaft, said rotor comprising an elongated cylindrical float, a plurality of L-shaped blade shanks secured in spaced spiral relation to each other upon the float, one arm of each shank being bent spirally about the float, while the other arm extends radially from the float and in a plane at an acute angle to the axis of the float, a blade bearing against the forward face of each radial arm, a plurality of diagonal braces secured each by one end to the float in longitudinal spaced alinement with one of the shanks, and a plurality of fastening devices passed through the blades and shanks, one of said devices in each instance also passing through the free end of the brace to secure the blades and braces to the shanks.

1,061,606. CALCULATING-MACHINE. HYMAN ELI GOLDBERG, Chicago, Ill., assignor to Goldberg Calculating Machine Company, Chicago, Ill. Filed Aug. 28, 1911. Serial No. 646,445. (Cl. 235—63.)

1. In a calculating machine; a carriage to determine the place of calculation; a handle adapted to occupy a normal position for the normal operation of the machine, and a correcting position for the correcting operation of the machine; and means including a part moving with the carriage and operative at a predetermined location thereof to control the handle to move it from its correcting position to its normal position.

2. In a calculating machine; a carriage to determine the place of calculation; a handle adapted to occupy a normal position for the normal operation of the machine, and a correcting position for the correcting operation of the machine, said handle continually tending to move from its correcting position to its normal position when displaced therefrom; a stop to prevent such movement; and mechanism including a part traveling with the carriage and operative at a predetermined location thereof to release the handle from said stop.



3. In a calculating machine; a carriage to determine the place of calculation; a handle adapted to occupy a normal position for the normal operation of the machine, and a correcting position for the correcting operation of the machine, said handle continually tending to move from its correcting position to its normal position when displaced therefrom; a pawl to prevent such movement; and mechanism including a part traveling with the carriage and operative at a predetermined location thereof to release the handle from said pawl.

4. In a calculating machine; a carriage to determine the place of calculation; a handle adapted to occupy a normal position for the normal operation of the machine, and a correcting position for the correcting operation of the machine, said handle continually tending to move from its correcting position to its normal position when displaced therefrom; a pawl to prevent such movement; and mechanism including a projection on the carriage and operative at a predetermined location thereof to release the handle from said pawl.

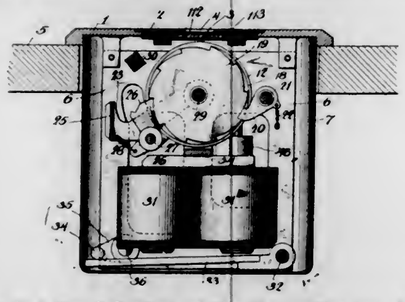
5. In a calculating machine; a carriage to determine the place of calculation; a handle adapted to occupy a normal position for the normal operation of the machine, and a correcting position for the correcting operation of the machine; a spring continually tending to return the handle to its normal position when displaced therefrom; a pawl to prevent such movement; and mechanism including a projection on the carriage and operative at a predetermined location thereof to release the handle from said pawl.

[Claims 6 to 20 not printed in the Gazette.]

1,061,607. TIME RECORDER AND INDICATOR. HARRY T. GOSS, Rutherford, N. J., and JAMES W. BRYCE, Brooklyn, N. Y. Filed June 18, 1909. Serial No. 502,909. (Cl. 161—21.)

1. The combination of a time recorder, a check time indicator, an electromagnet for actuating the time recorder, an electromagnet for actuating the indicator, a common operating electric circuit through both magnets, a source of electric energy therein, two circuit controllers in the operating circuit, a clock movement, a clock circuit containing a source of electric energy, a circuit controller therein adapted to be opened and closed at regular stated intervals of time to make or break said circuit, two electromagnets arranged in said clock circuit in parallel with each other, each magnet adapted to control one of the circuit controllers of the common operating circuit, and a switch for cutting one or the other of said magnets in the clock circuit into or out of circuit with the circuit controller and source of electric energy of the clock circuit.

2. In a time indicating machine the combination of an oil dash-pot to cushion the operation of the machine arranged in a vertical position in said machine, and means for adjusting the dash-pot relative to the machine, whereby when the machine is moved from its normal vertical position to a new vertical position, the dash-pot may still occupy a vertical position.



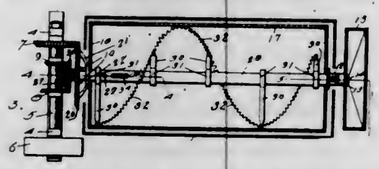
3. In a time indicating machine the combination of an oil dash-pot to cushion the operation of the machine arranged in a vertical position in said machine, and a universal joint attachment between the dash-pot and the machine, whereby the dash-pot will always automatically preserve its vertical position, notwithstanding changes in the position of the machine.

4. In a time indicating machine the combination of an oil dash-pot to cushion the operation of the machine arranged in a vertical position in said machine, means for adjusting and locking the dash-pot relative to the machine, whereby, when the machine is moved from its normal vertical position to a new vertical position, the dash-pot may be moved into and locked in such a new position relative to the machine as will still keep the dash-pot vertical.

5. In the operating mechanism of a time indicating machine the combination of a driving pawl, a ratchet wheel adapted to be rotated thereby and provided with teeth and with curved surfaces between the teeth, means for giving the pawl a swinging movement to cause it to engage with the teeth and curved surfaces of the ratchet wheel, and a stop between which and the ratchet the pawl will become wedged to stop both pawl and ratchet and to prevent overthrow of the latter.

[Claims 6 to 9 not printed in the Gazette.]

1,061,608. COMBINED CORN-POPPER AND PEANUT-ROASTER. FRED C. GROB, Metamora, Ill. Filed June 9, 1911. Serial No. 632,284. (Cl. 53—4.)



1. In a device of the character described, a cylinder, a hollow shaft supporting said cylinder and having openings therein, a conveyer loosely mounted within said hollow shaft, means to rotate said cylinder, and means to operate said conveyer.

2. In a device of the character described, a cylinder, a hollow shaft supporting said cylinder and having openings therein, a conveyer loosely mounted within said hollow shaft, an additional conveyer in said cylinder and connected to rotate with said hollow shaft, means to rotate said cylinder, means to rotate said first mentioned conveyer, and means to rotate said second mentioned conveyer.

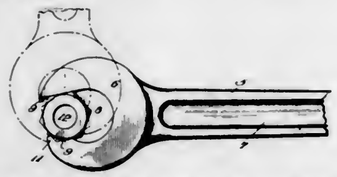
3. In a device of the character described, a cylinder, a hollow shaft supporting said cylinder and having openings therein near one extremity thereof, a hopper connected to the other end of said hollow shaft, a conveyer loosely mounted in said hollow shaft to feed material from said hopper to the other end of the shaft, and another conveyer to feed the material through the cylinder back to the end thereof adjacent the hopper.

4. In a device of the character described, a cylinder, a hollow shaft supporting said cylinder, said hollow shaft having openings therein, a conveyer in said hollow shaft, a sleeve surrounding said hollow shaft having openings therein corresponding and registering with the openings in said hollow shaft, said sleeve having a conveyer secured thereto and means to rotate said cylinder and conveyers in different directions.

5. In a device of the character described, a cylinder having a closed end and an open end, a hollow shaft supporting said cylinder having an inlet at the open end of said cylinder, said shaft having openings therein adjacent the closed end of the cylinder, a conveyer in said hollow shaft to feed the material through the hollow shaft toward the closed end of said cylinder and another conveyer in said cylinder to feed the material through the cylinder to the open end thereof.

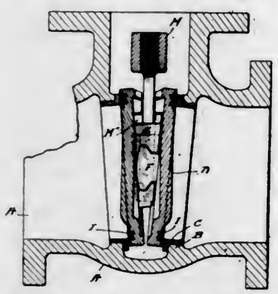
[Claims 6 to 9 not printed in the Gazette.]

1,061,609. WRENCH. CHARLES C. GUERNSEY, Lawrence, Mass., assignor of one-half to Frank O. Libbey, Lawrence, Mass. Filed Nov. 9, 1911. Serial No. 659,370. (Cl. 81—119.)



A wrench having a head formed with a circular socket and work-engaging faces extending laterally from the said socket, one of said faces being tangential to the circular socket and the other of said faces being parallel with said tangential face, the inner ends of both faces being in the circumference of the socket and the outer end of one face being extended angularly toward the other face.

1,061,610. VALVE. ANTON HANSEN, Greensburg, Pa. Filed Sept. 24, 1910. Serial No. 583,678. (Cl. 137—5.)



1. In a device of the character described, a pair of disks provided with interlocking members interfitting relatively loosely to permit a relative rocking movement and adapted to lock the disks against movement apart on the line of their axis, said members being adapted to lock and be unlocked by relative movement transverse the axis of the disks.

2. In a device of the character described, a pair of disks provided with fixed locking members formed so as to permit of a relative rocking movement of the disks and adapted to lock the disks against movement apart on the line of their axis, the said members being locked on relative movement between the disks transverse their axis.

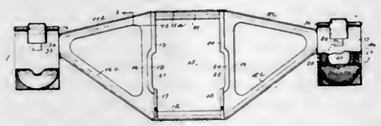
3. In a device of the character described, a pair of disks provided with locking members comprising a T-head member, and a member recessed to receive the T-head, the said members locking the disks against movement apart on the line of their axis and being locked and unlocked by relative movement of the disks transverse the line of their axis.

4. In a device of the character described, a pair of disks provided with locking members comprising a pair of T-head members, and a pair of members recessed to receive one of the T-head members, the said members locking the disks against movement apart on the line of their axis and being locked and unlocked by relative movement of the disks transverse the line of their axis.

5. In a device of the character described, a pair of disks provided with locking members comprising a pair of T-head members, and a pair of members recessed to receive one of the T-head members, the said members locking the disks against movement apart on the line of their axis and being locked and unlocked by relative movement of the disks transverse the line of their axis, and the said T-head members having their outer surfaces slightly rounded to permit of relative rocking motion between the disks.

[Claims 6 to 9 not printed in the Gazette.]

1,061,611. SIDE FRAME FOR CAR-TRUCKS. ALONZO L. HASTINGS, Chicago, Ill. Filed Jan. 12, 1912. Serial No. 670,775. (Cl. 105—243.)



1. As a new article of manufacture, a side frame structure for railway trucks comprising upper and lower walls secured together at their outer ends and spaced apart between such ends, adjacent vertical walls connecting between said upper and lower walls and forming with the middle sections of said walls a central opening for receiving bolster and spring plank mechanism, lateral extensions from the lower ends of said vertical walls for supporting spring plank mechanism within said central opening, and brake hanger brackets extending laterally from said vertical walls, said walls, extensions, and brake hanger brackets forming part of a single-piece drop forging.

2. As a new article of manufacture, a side frame structure for railway trucks comprising a main frame part having a central opening for receiving spring plank and bolster mechanism and having journal box structures at its ends, said main frame and journal box structures being a single-piece drop forging.

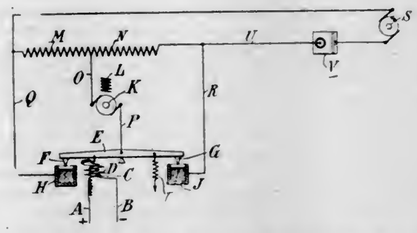
3. As a new article of manufacture, a single-piece drop forged side frame structure comprising a main frame part having a central opening for receiving bolster and spring plank mechanism, brake hanger brackets extending laterally from said main frame part, and a journal box structure at each end of the main body part.

4. As a new article of manufacture, a side frame for railway trucks comprising a main body part, upper halves of journal boxes at the ends of said body part, said body part and journal box upper halves being in the form of a single-piece drop forging, and lower journal box halves secured to the upper journal box halves.

5. As a new article of manufacture, a side frame for railway trucks comprising a main body part, upper halves of journal boxes at the ends of said body part, said body part and journal box upper halves being in the form of a single-piece drop forging, and lower journal box halves welded to the upper journal box halves.

[Claim 6 not printed in the Gazette.]

1,061,612. REGULATING ELECTRIC FURNACES. PAUL LOUIS TOUSSAINT HÉROULT, La Praz, Savoie, France, assignor to Societe Electro-Metallurgique Francaise, Froges, France. Filed Jan. 21, 1909. Serial No. 473,573. (Cl. 204—64.)

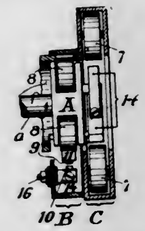


1. An apparatus for regulating electric furnaces or the like, including in combination a regulating circuit for bringing the furnace to the desired operation, and means for changing the course of the current in said circuit and holding it continually in its course until the regulation is effected, and an interrupter in said circuit for causing said current to pass intermittently.

2. An apparatus for regulating electric furnaces or the like, including in combination a regulating circuit for bringing the furnace to the desired operation and means for changing the course of the current in said circuit, an interrupter comprising a number of segments interposed in succession in the circuit, and means for breaking the connections of said segments separately.

3. An apparatus for regulating electric furnaces or the like, including in combination a regulating circuit for bringing the furnace to the desired operation and means for changing the course of the current in said circuit, and an interrupter comprising a rotating ring of sectors W connected to one branch of said circuit, an arm Y connected to the other branch thereof and carrying a brush Z overlying said segments, means for rotating said arm, and means for disconnecting some of said segments W.

1,061,613. CONTACT-BREAKER FOR ELECTRICAL IGNITION IN INTERNAL-COMBUSTION ENGINES. GOTTLOB HONOLD, Stuttgart, Germany. Filed Nov. 11, 1907. Serial No. 401,665. (Cl. 123—167.)



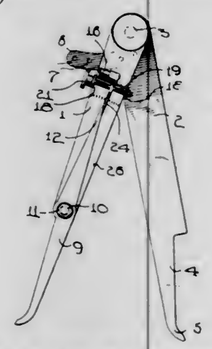
1. The combination with the frame of a magneto having a tubular projection on its side, and an armature shaft projecting through the frame within said tubular projection, a plurality of casings frictionally held on said projection, one of said casings containing a stationary interrupter, means carried by the armature shaft for operating said interrupter, a rotary interrupter on the end of the armature shaft within the other of said casings, and stationary means within said second casing for operating said rotary interrupter.

2. In electric igniting apparatus for internal combustion engines provided with magneto and battery igniting circuits, the combination, with the armature shaft, of an interrupter for the magneto mounted on and rotating with said shaft and provided with stationary actuating means angularly adjustable with relation to the axis of

said armature shaft, and a stationary interrupter for the battery having actuating means mounted on and rotating with the said armature shaft, said stationary interrupter being angularly adjustable with relation to the axis of said armature shaft and independently of the rotary interrupter.

3. In electric igniting apparatus for internal combustion engines provided with magneto and battery igniting circuits, the combination with the armature shaft, of an interrupter mounted on and rotating with said armature shaft, cams adapted to actuate said rotating interrupter, a stationary housing angularly adjustable with relation to the axis of said armature shaft and containing the cams, an interrupter for said battery, a stationary housing angularly adjustable with relation to the axis of said armature shaft and containing the battery-interrupter, and cams adapted to actuate said stationary interrupter mounted on and rotating with said armature shaft.

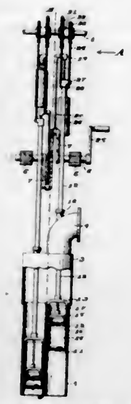
1,061,614. CALIPERS. ALFRED JOHNES, Bridgeport, Conn., assignor of one-half to Anton H. Heil, Bridgeport, Conn. Filed Oct. 29, 1912. Serial No. 728,408. (Cl. 33—25.)



1. Calipers of the class described comprising a pair of legs, said legs pivotally secured to each other, means carried by one of said legs which is adapted to limit the pivotal movement of said legs in one direction, an arm pivotally secured to the other of said legs, a spring carried by said arm and coiled for holding one end of said arm to one side of the central portion of said leg, a bracket member carried by said last mentioned leg, said bracket member provided with a screw, a finger carried by said screw, said finger adapted to move laterally relative to said leg, the outer end of said finger engaging the inner end of said arm for moving said arm.

2. Calipers of the class described comprising a pair of legs, said legs pivotally secured to each other, means carried by one of said legs which is adapted to limit the pivotal movement of said legs in one direction, an arm pivotally secured to the other of said legs, a spring carried by said arm and coiled for holding one end of said arm to one side of the central portion of said leg, a bracket member carried by said last mentioned leg, said bracket member comprising a bar, downwardly extending lugs carried by said bar, said lugs adapted to fit over the edges of said leg for preventing any lateral movement of said bracket upon said leg, said bar provided with an outwardly extending portion rolled to form a pivot eye, a lug carried by said leg, said pivot member positioned upon said lug for pivotally securing said bracket upon said leg, bearing members carried by the outer end of said bar, a screw carried by said bracket member, said screw provided with enlarged head portions, a bracing member carried by said bearing members, a finger carried by said screw, the inner face of said finger bearing against said bracing member and the lower edge of said finger cut away to form a seat and resting upon said bar, said finger capable of being moved laterally relative to said leg upon said screw for moving said arm when so desired.

1,061,615. PUMP. THOMAS JEFFERSON JOHNSON, Norman, Okla. Filed Oct. 28, 1910. Serial No. 589,569. (Cl. 103—81.)



1. A device of the class described, comprising a plurality of cylinders, a common outlet at the top of the cylinders, a pair of pistons in each cylinder, a double pulley arranged above each cylinder, one of the members of each pulley being of greater diameter than the other, a common shaft upon which both pulleys are journaled, a piston rod connected with each piston, the rod of the lowermost piston being hollow and the rod of the upper-most piston passing through the hollow rod, a flexible connection for each pulley, said connection having one end secured to each piston rod of the pistons in the adjacent cylinder, said connection passing over the members of the double pulley, a counter weight on the other side of the shaft from each cylinder, a pulley on each counterweight engaging the central portion of the adjacent flexible connection, a crank shaft provided with two cranks, and a link connecting each crank with the piston rod of the upper-most piston of the adjacent cylinder.

2. A device of the class described, comprising a pump incasement or cylinder provided with an outlet, a pair of pistons in said incasement, an auxiliary incasement having a water connection with the first incasement, a pair of pistons in the auxiliary incasement, a double pulley arranged above each incasement, one member of said double pulley being of greater diameter than the other, a flexible connection for each incasement, one end of the connection being connected with each piston, said connection passing over the respective members of the double pulley adjacent the incasement, and a counterbalance connected with the connection on the opposite side of the double pulley from the incasement.

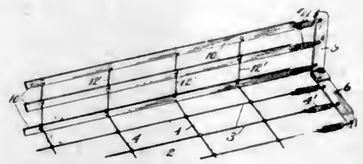
3. In a device of the class described, a pump incasement or cylinder, upper and lower pistons in the incasement, a double pulley comprising members of unequal diameter, a flexible connection having one end connected with each piston and passing over the respective members of the double pulley, and a counterweight movable on the said flexible connection on the opposite side of the double pulley from the incasement.

4. In a device of the class described, a pulley, a counterbalancing weight, a pump incasement or cylinder, upper and lower pistons in the incasement and connectedly supported over the pulley by the counterbalancing weight, and means for imparting to the pistons an up and down reciprocable movement.

5. In a device of the class described, a pair of pump incasements or cylinders, a pair of pistons in each cylinder, a double pulley arranged above each incasement, one of the members of said double pulley being of lesser diameter than the other, and a connection between the respective pistons of each incasement, the connections passing over the members of the pulley, and means connected with one of the connections of each pump for operating them.

[Claims 6 to 9 not printed in the Gazette.]

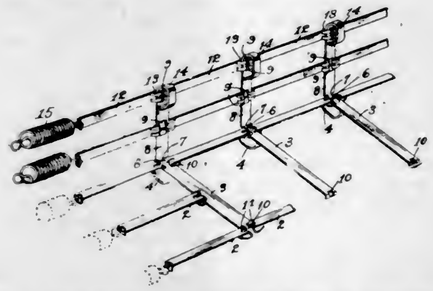
1,061,616. SIDE GUARD FOR SPRING-MATTRESSES. AUGUST J. KREUZKAMP, New York, N. Y., assignor, by mesne assignments, to Charles J. Witzel, Brooklyn, N. Y. Filed June 22, 1910. Serial No. 568,241. (Cl. 5—39.)



1. A metallic formed mattress comprising a spring bottom, lugs secured one adjacent to each corner thereof and unyieldable with the bottom, a yielding and flexible side guard at each side of the bottom and comprising one or more lengthwise extending flat metal strips set edgewise to the bottom and connected at the ends with said lugs and provided at close intervals with openings along the same, and a pair of hook-formed wires extending into each of said openings and connecting the strip or strips with the bottom, the hooks of said wires extending in opposite directions.

2. A spring mattress comprising a pair of transverse members, a bottom supported therebetween and having each side edge thereof provided with openings, a yielding side guard carried by the bottom at each side thereof, each of said side guards comprising an inelastic and an elastic member, the inelastic member consisting of one or more flat metal strips extending lengthwise of and edgewise to said bottom, lugs secured to such transverse members, one adjacent to each corner of the bottom and unyieldable with such bottom, each of such flat metal strips having openings located at intervals along the same, and hook formed wires extending into such openings and hooked into the aforesaid openings of the bottom.

1,061,617. SPRING-MATTRESS SIDE GUARD. AUGUST J. KREUZKAMP, Brooklyn, N. Y., assignor, by mesne assignments, to Charles J. Witzel, Brooklyn, N. Y. Filed Sept. 7, 1911. Serial No. 648,135. (Cl. 5—39.)



1. A metallic mattress comprising a pair of transverse members and a bottom suspensively supported therebetween, said bottom including a series of crosswise extending flat metal strips extending to the side edges of the bottom, a side-guard at each side of said bottom and made up of short upright flat metal strips having unbent lower ends and lengthwise extending short flat metal strips articulated with said upright strips, the lower unbent end of each upright strip having a hinged connection with the outer end of a bottom flat strip, whereby the bottom and side-guards are articulated along the lowermost edges of the guards and the outermost edges of the bottom.

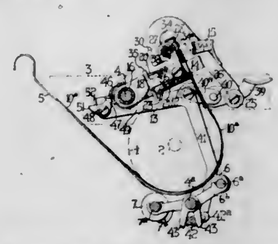
2. A metallic mattress comprising a pair of transverse members and a bottom suspensively supported therebetween, said bottom including a series of crosswise flat metal strips extending to the side edges of the bottom, a side-guard at each side of said bottom, and made up of short upright flat metal strips having unbent lower ends and lengthwise extending short flat metal strips articulated with said upright strips by angular formed slots and hooks extending thereinto carried by said upright and lengthwise extending flat strips, the lower unbent end of each upright strip having a hinged connection with the outer end of a bottom flat strip, whereby the bottom and side-guards are articulated along the lowermost edges of the guards and the outermost edges of the bottom.

3. A metallic mattress comprising a pair of transverse irons and a bottom suspensively supported therebetween and including a series of crosswise extending flat metal strips, said bottom having at each side edge thereof a side guard made up of short upright flat metal strips having unbent lower ends and short lengthwise extending flat metal strips articulated with said upright strips, said upright strips and bottom strips having one elongated slots and the other T-shaped unbent ends for the articulation thereof.

4. A metallic mattress comprising a pair of transverse members and a bottom suspensively supported therebetween and including crosswise extending flat metal strips, a pair of side guards each comprising a series of upright short flat metal strips having unbent lower ends and lengthwise extending flat metal strips articulated together by hooks and openings carried by said strips, said sets of bottom strips and upright strips having one headed projections and the other openings for the reception of said headed projections cross wise in said openings, whereby said strips are articulated at the lower ends of the upright strips.

5. A metallic mattress comprising a bottom and transverse members to which it is connected, said bottom having transverse flat members each provided at its end with an elongated slot, said bottom also having at each side edge thereof a side guard comprising a series of upright flat members having T-shaped unbent lower ends for insertion into said slots, said upright members also having slots, and lengthwise extending members having bent ends projecting through said slots.

1,061,618. TYPE-WRITING MACHINE. ALFRED G. F. KUROWSKI, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed May 11, 1910. Serial No. 560,554. (Cl. 197—127.)



1. In a typewriting machine, the combination with a platen and feed-roll mechanism therefor, including releasable feed rolls, of shiftable alining pins, mechanism independent of the releasable feed-roll mechanism, and effective to project said alining pins into and remove them from the path of the sheets, and means for moving said rolls from released position whenever the pins are withdrawn from projected position.

2. In a typewriting machine, the combinatioin with a platen having a feed roll mechanism, and an apertured tablet extending along the platen, of alining pins projectable back and forth through the apertures in the tablet, a manually operated rock shaft, and cams on the rock shaft to protrude the pins, said cams having dwell portions to maintain the pins in active positions.

3. In a typewriting machine, the combination with a platen, a feed roll mechanism therefor, an apertured tab-

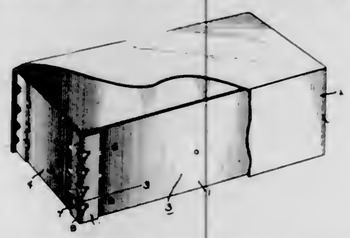
let having bearings in line with its apertures, of alining pins slidable in the bearings, a manually-operated rock shaft, and cams on the rock shaft working in slots in the bearings, and effective to protrude the pins.

4. In a typewriting machine, the combination with a platen, and an apertured tablet having bearings in line with its apertures, of alining pins slidable in the bearings, springs engaging shoulders in the bearings and on the pins to hold the latter retracted, cams to protrude the pins beyond the plane of the tablet against the tension of the springs, and a finger piece controlling the cams.

5. In a typewriting machine, the combination with a platen, and an apertured tablet having bearings in line with its apertures, of spring-pressed alining pins slidable in the bearings, cams effective to protrude the pins, and enable them to be retracted, and a finger piece controlling the cams.

[Claims 6 to 40 not printed in the Gazette.]

1,061,619. BOX. WILLIAM A. LOFLAND, Camden, N. J. Filed June 3, 1912. Serial No. 701,127. (Cl. 229—47.)



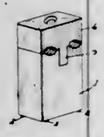
1. A corner piece for boxes comprising a blank bent at right angles and adapted to be secured to the box, and downwardly and outwardly projecting spurs formed at the angle of said corner piece, substantially as described.

2. A corner piece for boxes, comprising an angle, triangular openings cut in said angle, spurs projected outwardly from said angle at the triangular openings, and means for securing the corner pieces to the box, substantially as described.

3. In combination with a box and a cover, four corner pieces composed of metal, lugs on said corner pieces projected through the sides and ends of the box, and bent against the box, and spurs formed at the angles of said corner pieces and projecting downwardly and outwardly, substantially as described.

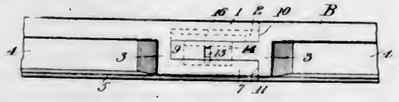
4. In combination with a rectangular box, and a cover, four corner pieces secured to the outside of the angles of the box and of approximately the same depth as the box, said angles composed of sheet metal, integral lugs at the edges of the angles projected through the box and upset at their inner ends, said angles having a plurality of downwardly and outwardly projecting spurs located at the corners of the box, whereby said spurs are adapted to embed themselves in the angle of the cover when the cover is moved to open, substantially as described.

1,061,620. INSULATOR. HARLEY R. MARKEL, Columbus, Ohio. Filed July 31, 1911. Serial No. 641,437. (Cl. 173—314.)



An insulator comprising a base portion having a passage-way formed longitudinally therein for the reception of a retaining screw, there being a wire retaining groove extending transversely across a plane face of said base upon opposite sides of said passage-way, said base portion being provided with diametrically opposed recesses located at its edges, extending longitudinally thereof and tapering inwardly, said recesses terminating short of said passage-way and having rounded inner walls, a crown portion having a passage-way for said retaining screw which alines with the passage-way of the base portion, transverse wire retaining grooves formed upon opposite sides of said passage-way in a plane face of said crown portion and alining with the grooves of the base portion, and projecting diametrically opposed lugs located at the edge of said crown portion and between said grooves, said lugs tapering inwardly and having rounded inner faces, the longitudinal walls of said lugs lying in parallelism with the longitudinal walls of the recesses of the base portion, the said lugs being spaced outwardly from said screw receiving passage-way.

1,061,621. RAIL-JOINT. FRANCISCUS B. MARRIOTT, Homewood, Ala. Filed Mar. 11, 1913. Serial No. 753,542. (Cl. 239—8.)

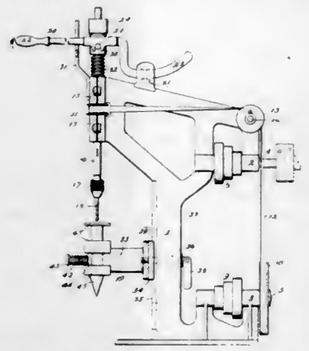


1. In a rail joint, the combination of two abutting rail ends, the web of one rail being cut away to form a horizontally extending slot between the head and base thereof, and the end of the other rail being provided with a projecting tongue adapted to fit into said slot, said tongue having a vertically disposed opening extending therethrough, and the base of said first mentioned rail having a pocket extending downwardly thereinto from the said slot, and a block loosely fitting into the opening in said tongue, and adapted to drop partially therethrough into said pocket and thus lock said rails together when the opening in the tongue is brought into registry with said pocket.

2. In a rail joint, the combination of two abutting rail ends, the web of one rail being cut away to form a horizontally extending slot between the head and base thereof, and the end of the other rail being provided with a projecting tongue adapted to fit into said slot, said tongue having a vertically disposed opening extending therethrough, the base of said first mentioned rail below the slot having a pocket extending downwardly thereinto, and the head of such rail having a groove extending along the under side thereof directly over said pocket, and a block loosely fitting into the opening in said tongue, and adapted to drop partially therethrough into said pocket when said opening and pocket are brought into registry, and thus lock the rails together, said block being divided horizontally to form upper and lower sections, the upper section, when in locking position, lying partially in said pocket, and partially in said groove, and means for lifting said lower section out of said pocket, and forcing said upper section wholly into said groove so that said tongue may be slipped laterally out of said slot, and the rails thus disconnected.

3. In a rail joint, the combination of two abutting rail ends, the web of one rail being cut away to form a horizontally extending slot between the head and base thereof, and the end of the other rail being provided with a projecting tongue adapted to fit into said slot, said tongue having a vertically disposed opening extending therethrough, and the base of said first mentioned rail having a pocket extending downwardly thereinto from the said slot, and a block loosely fitting into the opening in said tongue, and adapted to drop partially therethrough into said pocket and thus lock said rails together when the opening in the tongue is brought into registry with said pocket, and means for lifting said block out of said pocket so that said rails may be separated by a relative lateral movement.

1,061,622. DRILLING-MACHINE. GEORGE R. MELLON, Kansas City, Mo. Filed Mar. 19, 1912. Serial No. 684,847. (Cl. 77—63.)

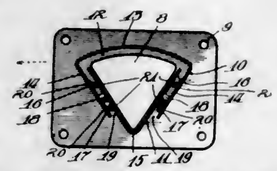


1. In combination with a frame, a cross-head connected to the frame, a horizontal stub-shaft rigidly carried by the cross-head, a rigid stud carried by the cross-head, a table slidable and rotatable on said stub-shaft and having a series of openings to receive said stud, the forward end of the stub-shaft projecting beyond the front end of the table and having an abutment thereon, and a coil spring surrounding said projecting end of the stub-shaft and engaging said abutment and the front end of the table.

2. In combination with a frame, a cross-head connected to the frame, a rigid horizontal stub-shaft carried by the cross-head, a table slidably and rotatably mounted on the sub-shaft, means between the cross-head and the inner end of the table to lock the latter in various positions to the cross-head, and spring means engaging the outer end of the table to normally hold same against sliding movement.

3. In combination with a frame, a cross-head connected to the frame, a horizontal stub-shaft rigidly secured at its rear end to said cross-head, a stud rigidly secured to the cross-head and projecting outwardly therefrom, a table slidable and rotatable on said stub-shaft, said table having a rear circular enlarged end having a series of openings to receive said stud, the front end of said stub shaft being reduced in diameter and projecting beyond the front end of the table, a coil spring surrounding the reduced front end of the stub-shaft and engaging the front end of the table, and a head on the extremity of said reduced end of the stub shaft engaging the outer end of said spring.

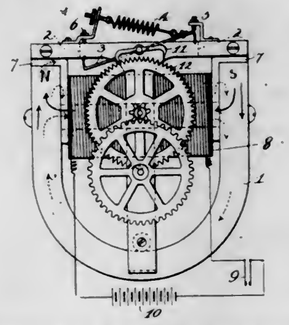
1,061,623. VENTILATOR. JOSEPH T. MERCIER, Chicago, Ill. Filed Feb. 15, 1912. Serial No. 677,723. (Cl. 98—22.)



1. In a ventilator of the class described, the combination of an inner section of V-shaped formation, having its narrow end downward and its upper end open, the outer section being of triangular formation with its narrow end downward, the lower end of said outer section being cut away to provide an open lower end, the adjacent walls of said sections being spaced apart from one another to provide air passages therebetween, the upper wall of the outer section forming a cap-piece to prevent the entrance of matter into the interior of the ventilator, the outer section terminating adjacent the lower end of the inner section, and means for joining the sections together, substantially as described.

2. In a ventilator of the class described, the combination of an inner section of V-shaped formation, having its closed narrow end downward and its upper end open, the outer section being of triangular formation with its narrow end downward, the lower end of said outer section being cut away to provide an open lower end, the adjacent walls of said sections being spaced apart from one another to provide air passages therebetween, the upper wall of the outer section forming a cap-piece to prevent the entrance of matter into the interior of the ventilator, the outer section terminating adjacent the lower end of the inner section, tines struck from the side walls and extending inwardly and providing air openings communicating with the air passages between said sections, and baffle plates from said openings, and means for joining the sections together, substantially as described.

1,061,624. ELECTROMOTOR. CHARLES RUBY MOORE, La Fayette, Ind. Filed Mar. 14, 1912. Serial No. 683,796. (Cl. 172—126.)

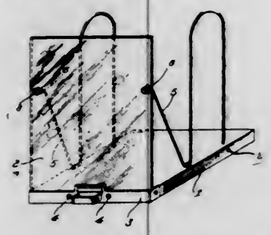


1. An electro-motor including a swingingly mounted armature; a permanent magnet element for supplying flux to the armature space; a magnetizable element in shunt of the armature space; a winding for said magnetizable element; a source of current for energizing said winding; means for governing the association of said source of current with said winding to energize and deënergize the same, the winding being so directed as to set up flux opposing the permanent magnet flux in the shunt and augmenting the flux flowing across the armature space when the winding is energized to cause the armature to swing in one direction; and means for reversing the movement of the armature when the winding is deënergized.

2. An electro-motor including an armature; a permanent magnet element for supplying flux to the armature space; a magnetizable element in shunt of the armature space; a winding for said magnetizable element; a source of current for energizing said winding; means for governing the association of said source of current with said winding to energize and deënergize the same, the winding being so directed as to set up flux opposing the permanent magnet flux in the shunt and augmenting the flux flowing across the armature space when the winding is energized to cause the armature to move in one direction; and means for reversing the movement of the armature when the winding is deënergized.

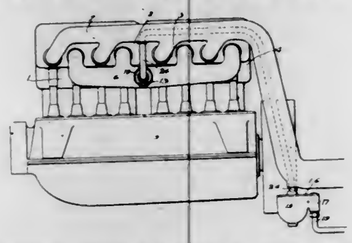
3. An electro-motor including an armature; a permanent magnet element for supplying flux to the armature space; a magnetizable element in shunt of the armature space; a winding for said magnetizable element; a source of current for energizing said winding; and means for governing the association of said source of current with said winding to energize and deënergize the same, the winding being so directed as to set up flux opposing the permanent magnet flux in the shunt and augmenting the flux flowing across the armature space when the winding is energized.

1,061,625. DISPLAY-RACK. JOHN ALEC MORRISON, Kelowna, British Columbia, Canada. Filed July 11, 1912. Serial No. 708,786. (Cl. 211—16.)



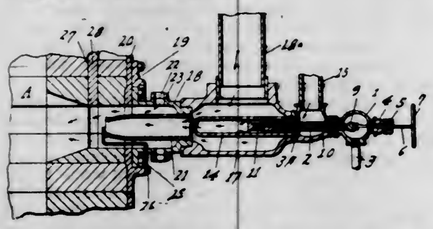
In combination with the base of a display rack, a transparent front plate, a metal strip fastened to said base and against the front of said plate and oblique bracing rods fastened to said plate and base and prolonged to form in the rear of their points of attachment to the latter raised wire supports for articles to be exhibited.

1,061,626. CARBURETER. JAMES WILLIAM MOWBRAY, Winnipeg, Manitoba, Canada, assignor of one-half to John Hudson Chambers, Winnipeg, Manitoba, Canada. Filed Sept. 3, 1912. Serial No. 718,408. (Cl. 48—148.)



A carbureter comprising a device for mixing the volatile liquid and the primary air, having an air inlet tube provided with a spray nozzle located therein, the air inlet tube being of such a size at the point of the spray nozzle as to produce a vapor which when heated will not produce combustion, a tube or conduit located in a heated zone and forming an extension of the aforesaid tube to gasify and carry onwardly the vapor produced at the spray nozzle, a chamber into which the inner end of the gasifying tube extends provided with a secondary inlet opening, so proportioned in area to the primary air inlet as to introduce a volume of air into the chamber greatly in excess of the primary air introduced, to insure with the gas perfect combustion, and a throttle located on the manifold side of air intake of the chamber in such a manner as to control both the gas and secondary air.

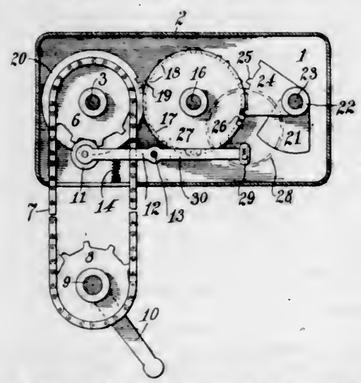
1,061,627. HYDROCARBON-BURNER. FREDERICK J. NICE, Pontiac, Mich. Filed June 10, 1912. Serial No. 702,688. (Cl. 158—76.)



1. In a device of the character described, the combination with a furnace, of a nozzle located therein from which the flame issues and a divider comprising a rod portion projecting vertically in front of the nozzle and a portion extending to the exterior of the furnace where it has an adjustable connection therewith to adjust the same vertically, whereby the divider may be moved vertically in front of the nozzle to vary the amount of flame that is given a lateral spread, substantially as described.

2. An oil burner, having in combination, a flanged coupling that is boltable to the furnace wall and provided with air supply openings and a valve to control the same, a nozzle adapted to be screwed into the coupling, a nozzle casing that screws onto the end of the coupling opposite the flange, a secondary nozzle that screws into the nozzle casing at the end opposite its attachment to the coupling, a controllable air conduit attachable at an opening in the side of the nozzle casing, the said secondary nozzle arranged to discharge into said first mentioned nozzle, a pipe union attachable to the end of the nozzle casing opposite the end attached to the coupling, a controllable air conduit fitted into an opening in the side of the union, an initial nozzle fitted into the end of the pipe union opposite the attachment to the nozzle casing, said initial nozzle passing through the pipe union and projecting into the secondary nozzle, a spreader located in the secondary nozzle and in front of the mouth of the initial nozzle, a valve casing located at the end of the pipe union opposite the attachment to the nozzle casing, and a valve in said valve casing projecting into the initial nozzle for controlling the issue of fuel therethrough and an oil pipe leading into the valve casing, substantially as described.

1,061,628. ANNUNCIATOR OR INDICATOR FOR STREET AND INTERURBAN CAR LINES. JOHN F. OHMER, Dayton, Ohio, assignor to Ohmer Fare Register Company, Rochester, N. Y. Filed Nov. 25, 1910. Serial No. 593,993. (Cl. 235—91.)



1. In a station indicator, a disk having numerals thereon, and rotatable in either direction to indicating positions, a sprocket wheel combined with said disk having teeth thereon corresponding in number to the numerals on the disk, an audible indicator or signal, means for connecting the sprocket wheel with said audible indicator or signal, and means whereby the sprocket wheel and disk, and the audible indicator or signal, are moved simultaneously.

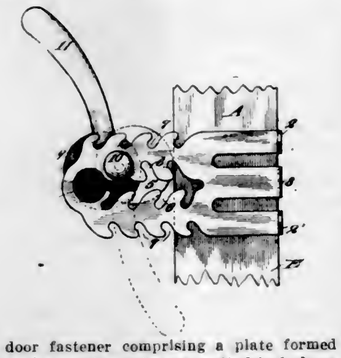
2. In a machine of the type specified, a units indicator disk, a tens indicator disk, said disks being rotatable in either direction to indicating positions, a sprocket connected to said units disk and moving in unison therewith, a roller mounted to move over the teeth of said sprocket wheel to arrest the movement of said sprocket wheel and units disk, and means on said units wheel for imparting movement to said tens wheel with each complete revolution of the units wheel.

3. In a station indicator, a disk having numerals upon the face thereof, and movable in either direction to indicating positions, a sprocket wheel combined with said disk, and means whereby the sprocket wheel and disk are moved simultaneously in either direction.

4. In a station indicator, a plurality of movable members rotatable in either direction to indicating positions and provided with indications on the face thereof, setting means for rotating one of said indicators, and transfer mechanism mounted between said members whereby the remaining members are actuated by the member actuated by the setting means.

5. In a station indicator, a plurality of indicating dials adapted to visually announce the approaching stops on a car line, said indicator members being geared together and adapted to rotate in either direction to indicate the stops beginning at either end of the line, and means for actuating said indicating dials in either direction.

1,061,629. DOOR-FASTENER. IONE F. PARSONS, San Francisco, Cal. Filed Apr. 22, 1912. Serial No. 692,267. (Cl. 16—8.)



1. A door fastener comprising a plate formed with a series of staggered notches, a cylindrical drum having a stud eccentrically mounted on one end thereof engageable with the notches in the plate, a door engaging flange formed on the plate and bent at right angles thereto in such manner that the edge of the door may be clamped between said flange and said drum, and jamb engaging teeth formed on the plate, said teeth extending opposite the door engaging flange.

2. A door fastener comprising a plate, a revoluble drum eccentrically mounted on said plate and detachable therefrom, means for adjusting the position of the drum on the plate including a pivot stud on the drum engageable with a series of staggered notches formed in the plate, a handle on the drum for the rotation thereof, door engaging means on the plate opposite the drum, constructed to permit the edge of the door to be clamped between said drum and said door engaging means, and means on the plate for engaging the door-jamb.

3. A door fastener comprising a plate having a series of outwardly extending notches and a series of inwardly extending notches, all of said notches being staggered with reference one to another, of a cylindrical drum having a stud eccentrically mounted thereon, said stud being adapted to be engageable with any one of said notches, a handle for turning said drum, jamb engaging teeth formed upon the inner end of said plate, and a door engaging flange formed upon said plate adjacent said jamb engaging teeth and oppositely turned therefrom in such manner as to permit the edge of said door to be clamped between said flange and said drum.

1,061,630. PROCESS OF ABSORBING DILUTE NITROUS GASES. HARRY PAULING, Gelsenkirchen, Germany, assignor to The Firm Salpetersäure-Industrie Gesellschaft, G. M. B. H., Gelsenkirchen, Germany. Filed June 15, 1911. Serial No. 633,363. (Cl. 23—13.)

1. The process of quantitatively absorbing nitrous gases, which comprises oxidizing and absorbing said gases as far as possible treating the remaining unabsorbed gases with gases adapted to produce with said unabsorbed gases a substantially equimolecular mixture of NO and NO_2, and absorbing said equimolecular mixture by means of suitable absorbing agents.

2. The process of quantitatively absorbing nitrous gases, which comprises oxidizing and absorbing said gases as far as possible, mixing the unabsorbed part of said gases with oxidized nitrous gases in such proportions as to produce a substantially quantitatively absorbable mixture of nitrogen oxids and absorbing said mixture by means of a suitable absorbing agent.

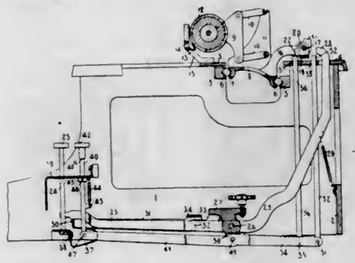
3. The process of absorbing oxids of nitrogen, which comprises absorbing the major portion of the nitrogen oxids from gases containing the same, adjusting the relative proportions of nitric oxid and nitrogen tetroxid in the gases remaining after such absorption to render such oxids substantially quantitatively absorbable, and absorbing such oxids after such adjustment.

4. The process of absorbing oxids of nitrogen, which comprises absorbing the major portion of the nitrogen oxids from gases containing the same, treating the gases remaining after such absorption to obtain gases comprising nitric oxid and nitrogen tetroxid in substantially equimolecular proportions, and absorbing such oxids from the gases so obtained.

5. The process of absorbing oxids of nitrogen from gases containing the same in relatively very small proportions, which comprises mixing with such gases other gases containing oxids of nitrogen to obtain a mixture comprising nitric oxid and nitrogen tetroxid in such relative proportions that both said oxids are substantially completely absorbable from said mixture, and absorbing said oxids from the mixture thus obtained.

[Claims 6 to 9 not printed in the Gazette.]

1,061,631. TYPE-SETTING MACHINE. ROY W. PEEBY, Bristol, Tenn., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed July 12, 1912. Serial No. 708,940. (Cl. 197—179.)



1. In a typewriting machine and tabulating mechanism, the combination of a carriage, a series of column stops mounted for individual rotative movement into and out of operative position and adapted to remain indefinitely in either of such positions, key controlled means operative individually on the column stops to rotate them separately into operative position, and separate key controlled means operative individually on said column stops under the operation of the key therefor to rotate the column stops separately out of operative position.

2. In a typewriting machine and tabulating mechanism, the combination of a carriage, a column stop bar, a series of column stops mounted for individual movement from one position to another on said column stop bar into and out of operative position and adapted to remain indefinitely in either of such positions, key controlled means operative individually on the column stops for moving them separately into operative position, and separate key controlled means having a contact portion of a width sufficient to coöperate with but one column stop at a time and operative individually under the action of the key therefor

on the column stops for moving them separately on the column stop bar out of operative position.

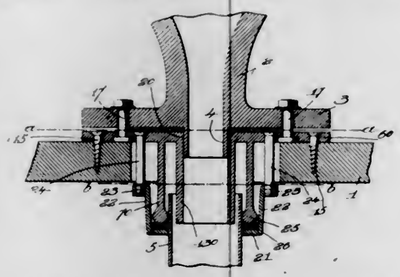
3. In a typewriting machine and tabulating mechanism, the combination of a carriage, a series of column stops one for each letter space position of the carriage, said stops being mounted for individual movement into and out of operative position, a key controlled device operative individually on the column stops to move them separately into operative position, and a key controlled device having a contact portion of a width sufficient to coöperate with but one column stop at a time and operative individually on the column stops to move them separately out of operative position.

4. In a typewriting machine and tabulating mechanism, the combination of a carriage, a series of column stops permanently located a letter-space distance apart and mounted for individual movement into and out of operative position and adapted to remain indefinitely in either of said positions, and a key controlled device having a contact portion of a width sufficient to coöperate with but one column stop at a time and operative individually on the column stops for moving them separately out of operative position.

5. In a typewriting machine and tabulating mechanism, the combination of a carriage, a series of column stops permanently located a letter-space distance apart and mounted for individual movement into and out of operative position and adapted to remain indefinitely in either of said positions, a key controlled device operative individually on the column stops for moving them separately into operative position, and a key controlled device having a contact portion of a width sufficient to coöperate with but one column stop at a time and operative individually on the column stops for moving them separately out of operative position.

[Claims 6 to 14 not printed in the Gazette.]

1,061,632. WATER-CLOSET CONNECTION. JACOB POLSKY, Boston, Mass. Filed Mar. 29, 1912. Serial No. 687,027. (Cl. 137—94.)

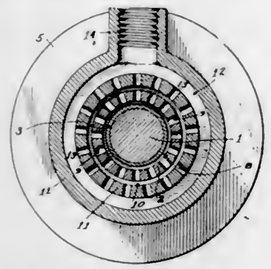


1. In a water-closet connection, the combination with a water-closet base, of a floor plate having a central aperture and two concentric flanges separated from each other and extending downwardly below the base, the inner flange being immediately circumjacent said aperture, a waste pipe having its upper end entering between the flanges, a packing ring engaging the exterior flange and the exterior of the waste pipe, a clamping collar for holding the packing ring in place, and clamping screws connecting the clamping collar and floor plate for clamping said collar against the packing.

2. In a water-closet connection, the combination with a water-closet base, of a floor plate having a central aperture and having integral therewith two concentric flanges separated from each other and each extending downwardly below said base, the inner flange being immediately circumjacent said aperture, a waste pipe having its upper end entering between said flanges, a packing ring engaging the exterior flange and the exterior of the pipe, and a clamping collar for holding the packing ring in place.

3. In a water-closet connection, the combination with a water-closet base, of a floor plate having two concentric flanges separated from each other and extending downwardly below the base, said plate having an aperture within the interior flange, a waste pipe having its upper end entering between said flanges, the exterior flange having a bead on its lower edge, and means for making a tight joint between said bead and the exterior of the pipe.

1,061,633. PACKING-JOINT. FRANK MONROE PRATHER, Los Angeles, Cal. Filed July 11, 1911. Serial No. 638,029. (Cl. 121—109.)



1. A rotating member, a stationary member, radially elastic packing rings carried by one of said members and exerting a radial pressure against the other member, the said members having passages which communicate, said rings being arranged in two sets on opposite sides of said passages.

2. A stationary member, a rotating member therein, the rotating member having a series of annular grooves, packing rings in said grooves in intimate contact with the stationary member, the said rotating member operating to move its grooves around the stationary rings, the said members having air passages which communicate, said passages being located between said rings, thereby causing the rings to be forced in opposite directions by fluid from said passages.

3. A rotating member, a stationary member, stationary packing rings engaging the inner walls of the stationary member, the rotating member having annular grooves which receive said stationary packing rings, the stationary member and the rotating member each having a series of radial air passages there being more passages in one member than in the other.

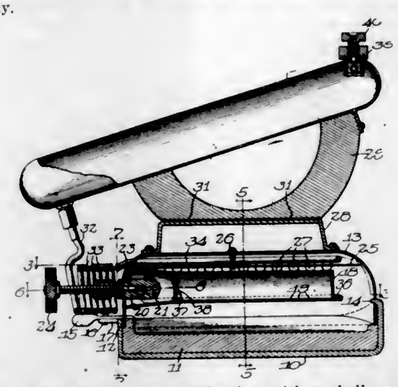
4. A rotating member, a stationary member, stationary packing rings engaging the inner walls of the stationary member, the rotating member having annular grooves which receive said stationary packing rings, the stationary member and the rotating member each having a series of radial air passages there being more passages in one member than in the other, one of said members having an annular passage which communicates with the radial passages in that member and with the radial passages in the other member.

5. A rotating member, a stationary member, said members having passages which communicate, and radially expansive packing rings between said members and arranged in two sets on opposite sides of said passages.

1,061,634. SAD-IRON. THEODORE C. PROUTY, Aurora, Ill., assignor to Acorn Brass Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed Feb. 8, 1912. Serial No. 676,199. (Cl. 158—23.2.)

1. In a sad-iron, the combination with a shell or body and a burner therein, of an oil-reservoir attached thereto, a supply-pipe leading from the reservoir to the burner, a section of said pipe being located in the upper portion of the shell or body, and a shield in said shell or body interposed between said section of pipe and the burner, said shell or body being provided with openings opposite the edge of said shield.

2. In a sad-iron, the combination with a shell or body and a burner therein, of an oil-reservoir attached thereto, a supply-pipe leading from the reservoir to the burner, one portion of the pipe being formed into a coil outside of the shell or body, another portion lying in the upper part of the shell or body and still another portion lying in a lower part of the shell or body and adjacent to the said burner, and a shield interposed between the burner and that portion of the pipe lying in the upper part of the shell or body.



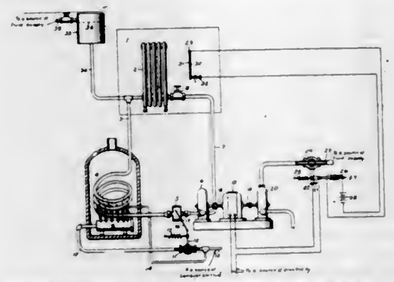
3. In a sad-iron, the combination with a shell or body and a burner therein, of an oil-reservoir attached thereto, a supply-pipe leading from the reservoir to the burner, one portion of the pipe being formed into a coil outside of the shell or body, another portion lying in the upper part of the shell or body and still another portion lying in a lower part of the shell or body and adjacent to the said burner, and a shield interposed between the burner and that portion of the pipe lying in the upper part of the shell or body, said shell or body having air openings in its side walls adjacent to said shield.

4. In a sad-iron, the combination with a shell or body and a burner therein which extends longitudinally of the shell or body, of an oil-reservoir attached to said shell or body, a supply-pipe leading from the reservoir to the burner, one portion of the pipe being formed into a coil outside of the shell or body, another portion located in the upper part of the shell or body and bent to form a loop, and a shield below said loop portion, and still another looped portion of the pipe being arranged below said shield and adjacent to and communicating with said burner.

5. In a sad-iron, the combination with a shell or body and a burner therein, of an oil-reservoir attached thereto, a supply-pipe leading from the reservoir to the burner, one portion of the pipe comprising a loop arranged in the upper part of the shell or body and another portion comprising a loop arranged beneath it and adjacent to and communicating with the burner, and a shield interposed between said two loop portions.

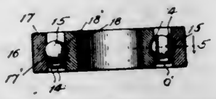
[Claims 6 to 8 not printed in the Gazette.]

1,061,635. HEATING SYSTEM. OSCAR A. ROSS, Rochester, N. Y. Filed Apr. 17, 1912. Serial No. 691,335. (Cl. 237—15.)



In an automatic heating system, a thermostat in the space to be heated and governed by the temperature thereof, a motor governed by said thermostat, a pump actuated by said motor, a fluid circuit including a radiator, the fluid of said circuit being caused to circulate by an actuation of said pump, a device through which said fluid flows adapted to be heated, a source of combustible fluid, a combustible fluid burner for heating said device, means to govern the supply of combustible fluid to said burner governed by the flow of said first mentioned fluid.

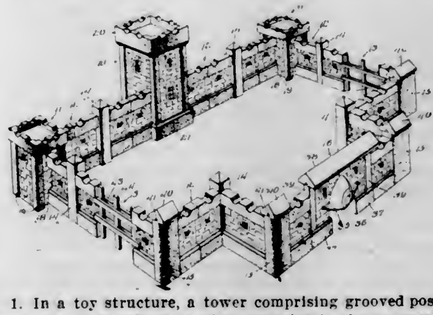
1,061,636. BALL-BEARING. STEFAN SCHNEIDER, Oak Park, Ill. Filed Sept. 9, 1912. Serial No. 719,383. (Cl. 64—59.)



1. In a ball-bearing, the combination of a casing having balls rotatably confined therein, and a freely floating retainer comprising an annulus with a series of resilient tongues extending at intervals from its outer edge, and a series of resilient tongues extending from its inner edge, forming pairs presenting concaved edges to successive balls, such edges extending to a point beyond the rotative axes of said balls to suspend such container and space such balls apart, said pair forming resilient tongues being parallel to each other and extending at right angles to the annulus and adapted to be sprung apart by the balls when such balls pass between the same, whereby the retainer may be applied to and withdrawn from the balls while the latter are in place in the casing.

2. In a ball-bearing, the combination of a casing having balls rotatably confined therein, and a freely floating retainer comprising an annulus with a series of resilient tongues extending at intervals from its outer edge, and a series of resilient tongues extending from its inner edge, forming pairs presenting concaved edges to successive balls, such edges extending to a point beyond the rotative axes of said balls to suspend such container and space such balls apart, said pair forming resilient tongues being parallel to each other and extending at right angles to the annulus and adapted to be sprung apart by the balls when such balls pass between the same, said pair forming resilient tongues having the inner faces of their edge portion chamfered near their ends to exert a wedging action against the balls in placing the retainer in position, whereby the retainer may be applied to and withdrawn from the balls while the latter are in place in the casing.

1,061,637. BUILDING-BLOCKS FOR TOY CASTLES. OTTO C. SCHWARZ, New Chicago, Ind. Filed Apr. 25, 1912. Serial No. 693,147. (Cl. 46—35.)



1. In a toy structure, a tower comprising grooved posts, panels removably fitted at their margins in the grooves of the posts and a top piece surmounting the tower, said top piece comprising a surrounding wall which fits down over the tower walls and provided with recesses to receive the upper ends of the tower posts.

2. In a toy structure, a tower provided with a multipart base comprising outer opposite members, arranged

side by side and interlocking with the walls of the tower, and a separate, removable intermediate member.

3. In a toy structure, a tower comprising side panels and posts connecting the same, one of said panels being provided with an opening, a draw-bridge section for closing said opening and adapted to swing to a horizontal position, chains for supporting said draw-bridge section in its open position, and a weight within the tower acting on said chains to hold the draw-bridge section in its closed position.

4. In a toy structure, the combination with a tower comprising connected panels and a base, of a wall section comprising a base, a top piece and an intermediate panel, said tower base having an opening to receive the wall section base to permit the wall section panel to fit flush against the tower panel.

5. In a toy structure, the combination with a tower comprising connected panels and a multipart base, of a wall section comprising a panel, a base and a top piece, one of the parts of the base being removable to provide a space at the base to permit an adjacent wall section base to fit thereinto, for the purpose set forth.

[Claims 6 to 8 not printed in the Gazette.]

1,061,638. SPIRIT-LEVEL. JOHN SCOTT and NICHOLAS B. MCGRATH, Southington, Conn. Filed Nov. 11, 1912. Serial No. 730,656. (Cl. 73—70.)



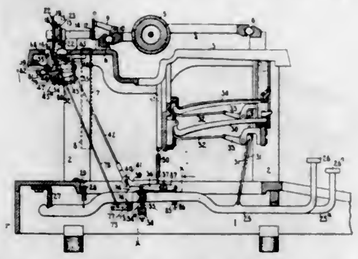
1. In a level, the combination with a body formed with a bubble tube opening, a plate located in the bottom of said opening, said plate being longer than the said opening, the ends of the plate entering the body at the ends of the opening, whereby the plate is secured in the opening, a bubble carrier entering said opening, and a longitudinally movable roller between the said carrier and the plate and on which the carrier rests.

2. In a level, the combination with the body thereof formed with a bubble tube opening, a plate secured in the bottom of said opening and formed with a centrally arranged longitudinal groove, a bubble tube carrier mounted in said opening, and a roller bearing longitudinally movable in said groove and forming a fulcrum on which the bubble tube carrier may rest.

1,061,639. TYPE-WRITING MACHINE. ARTHUR W. SMITH, New York, N. Y., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Dec. 17, 1912. Serial No. 737,241. (Cl. 197—84.)

1. In a typewriting machine, the combination of a power driven carriage; printing keys; and variable feed carriage escapement mechanism including a feed dog operative at one time as a loose dog and at another time as a fixed dog, and controlling means controlled by certain only of said printing keys for controlling said feed dog to operate as a fixed dog and controlled by certain other of the printing keys to control said dog to operate as a loose dog.

2. In a typewriting machine, the combination of a power driven carriage; printing keys; and variable feed carriage escapement mechanism including a normally loose feed dog operative at one time as a loose dog and at another time as a fixed dog, and controlling means operative by certain only of said printing keys for moving said dog and taking up the movement that it normally has as a loose dog and causing it to operate as a fixed dog, said controlling means being operative by certain other of said keys to control said dog to operate as a loose dog.



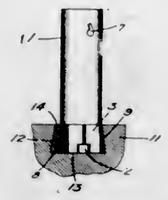
3. In a typewriting machine, the combination of a power driven carriage, an escapement rack, a dog rocker, a dog carried thereby, a second normally loose dog also carried by the dog rocker, printing keys, means controlled by said keys for controlling the movement of said dog rocker, and independent means controlled by certain only of said keys for rendering said second normally loose dog operative as a fixed dog.

4. In a typewriting machine, the combination of a power driven carriage, an escapement rack, a dog rocker, a dog carried thereby, a second normally loose dog also carried by said rocker, printing keys, means controlled by said keys for controlling the movement of said dog rocker, and independent means controlled by certain only of said keys for taking up the movement that said dog normally has as a loose dog and causing it to operate as a fixed dog.

5. In a typewriting machine, the combination of a power driven carriage; printing keys; and variable feed carriage escapement mechanism including a feed dog operative at one time as a loose dog and at another time as a fixed dog, controlling means controlled by certain only of said printing keys for controlling said feed dog to operate as a fixed dog and by certain other of the printing keys to operate as a loose dog, and means for returning said controlling means to normal position after each printing operation to enable said feed dog to operate as a loose dog.

[Claims 6 to 28 not printed in the Gazette.]

1,061,640. BLADING. JOHN E. SNYDER, Swissvale, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 10, 1910. Serial No. 586,286. (Cl. 121—57.)

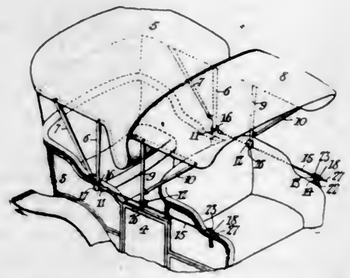


1. The combination with a packing piece having an undercut portion and a blade having a projection completely filling the undercut portion.

2. The combination with a packing piece having an undercut portion extending entirely through it, and a blade having a projection of the same cross sectional area as the undercut portion.

3. The combination with a packing piece having an undercut portion extending entirely through it, and a blade having a projection extending into the undercut portion, the bottom edges of the packing piece and the projection being in the same plane.

1,061,641. FOLDING TOP FOR VEHICLES. ELIAL M. STAPLES, Elizabeth, N. J. Filed Feb. 28, 1912. Serial No. 680,441. (Cl. 21—81.)



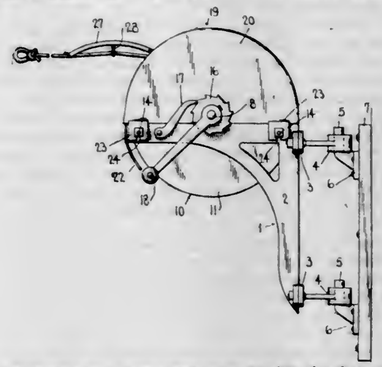
1. A temporary support for an automobile top, comprising a rope having at one end a device for detachably catching upon a part provided upon the automobile, and at the other end secured to a block, and a lever having a short arm to which said block is pivoted; said lever having a fulcrum for detachably engaging a catch upon the automobile, and said short arm of said lever having a toggle relation to the rope, to enable the latter to be tautened and locked in its tautened condition.

2. A temporary support for an automobile top, comprising a rope having at one end a device for detachably catching upon a part provided upon the automobile, and at the other end secured to a block, and a lever having a short arm to which said block is pivoted; said lever having a fulcrum for detachably engaging a catch upon the automobile, said short arm of said lever having a toggle relation to the rope, to enable the latter to be tautened and locked in its tautened condition, a device being provided for releasably securing said rope to said block, to permit the adjustment of the block along the rope, whereby the effective length of the rope may be varied to fit it to different automobiles.

3. A temporary support for an automobile top, comprising a rope having at one end a device for detachably catching upon a part provided upon the automobile, and at the other end secured to a block, and a lever having a short arm to which said block is pivoted; said lever having a fulcrum for detachably engaging a catch upon the automobile, said short arm of said lever having a toggle relation to the rope to enable the latter to be tautened and locked in its tautened condition, and means to limit the throw of the lever when tautening and locking said rope.

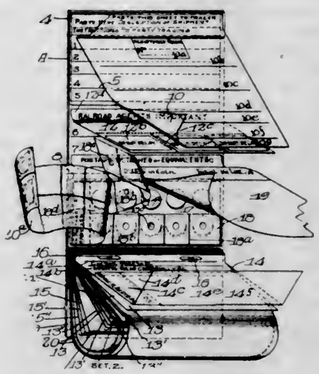
1,061,642. CLOTHES-LINE REEL. HENRY L. STOUP, Ypsilanti, Mich. Filed May 16, 1912. Serial No. 697,730. (Cl. 242—102.)

A clothes line reel comprising a pivotally mounted supporting casing, a line winding drum revolubly mounted thereon, a spring one end of which is attached to the drum and its opposite end to the casing, a guard secured to one side of the latter for covering the spring and against which the same is adapted to contact when expanded, a hinged cover normally closing the opening in the front of the hood, a line guiding eye secured to the cover beyond the free end thereof, a line secured to the reel and adapted to be wound and unwound from the same, said line freely passing through the eye and through the opening in the hood, whereby the cover is automatically closed and opened by the winding and unwinding of the line upon the drum, with the end of the line in contact with the eye when the cover is closed, said line



being adapted for riding engagement with the free end of the cover when the latter is an open position, and a locking mechanism to fasten said drum and thereby prevent the unwinding of the line therefrom.

1,061,643. TRACER. JOHN T. TODD, Springfield, Ill., assignor to The Register Tracer System, Springfield, Ill., a Corporation of Illinois. Continuation of application Serial No. 482,166, filed Mar. 8, 1909. This application filed Feb. 5, 1912. Serial No. 675,439. (Cl. 11—19.)



1. In a shipment tracer, the combination of a pliable cover adapted to be folded twice transversely to inclose a gummed sticker sheet and an agent's report form attached to said cover and comprising a reference to the way bill covering the shipment which is being traced, said gummed sticker sheet being secured to the inside of said cover and comprising a number of separately detachable stickers separated by perforations, and said agent's record form being also secured to the inside of said cover and comprising a reference to the way bill to which is attached a sticker detached from said sticker sheet.

2. In a tracer, the combination of a plurality of sets of records secured together, and a cover connected with said sets for protecting them, said records being arranged one over the other to form a series and bearing identical printed matter which is in registration when the sheets are superposed, all of which records have a common series designation, said sets also having an individual set designation, each set comprising two or more records, one of which is adapted to be detached from the tracer to form a return medium, each of the records of the respective sets also being provided with data embodying

the name of the sender, the name of the party to whom sent, and a statement of one of the parties to the transaction with reference to the matter concerning which the tracer was used.

3. In a tracer, the combination of a plurality of sets of records secured together, a cover connected with said sets for protecting them, said records being arranged one over the other to form a series and bearing identical printed matter which is in registration when the sheets are superposed, all of which records have a common series designation, said sets also having an individual set designation, each set comprising two or more records, one of which is adapted to be detached from the tracer to form a return medium, each of the records of the respective sets also being provided with data embodying the name of the sender, the name of the party to whom sent, and a statement of one of the parties to the transaction with reference to the matter concerning which the tracer was used, and means connected and carried with the tracer whereby prepayment charges may be made.

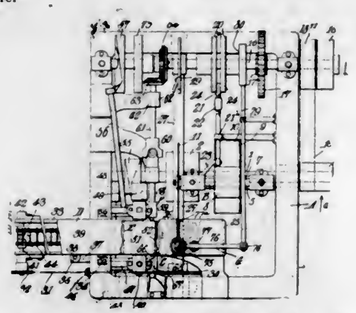
4. In a tracer, the combination of a plurality of sets of records secured together, a cover connected with said sets for protecting them, said records being arranged one over the other to form a series and bearing identical printed matter which is in registration when the sheets are superposed, all of which records have a common series designation, said sets also having an individual set designation, each set comprising two or more records, one of which is adapted to be detached from the tracer to form a return medium, each of the records of the respective sets also being provided with data embodying the name of the sender, the name of the party to whom sent, and a statement of one of the parties to the transaction with reference to the matter concerning which the tracer was used, and a holder connected and carried with the tracer for holding coins for payment charges.

5. A shipment tracer comprising a main cover; agent's record sheets attached to said main cover and setting forth the name of the agent, the railway, the place to which the tracer is forwarded, the set number of the report, the number of the tracer, the line from which received and the date, a description of the way bill, the date of the way bill, the name of the consignor, the name of the consignee, the car number and initial, the train date and time, the lines to which delivered, the date of the delivery, the pro number, the pro date, the car number and initials, a statement of unattached postage, and the name of the railway and agent furnishing the information and the date; a final report for setting forth the station, State, pro number date, car number and initials, when arrived, notified, and delivered, the number of the tracer, a statement of postage remaining in the tracer, the name of the agent, and the railway furnishing the information and the date thereof; and a special request sheet containing a request relating to the shipment, the tracer number, a description of the tracer and shipment, and comprising a gummed strip detachably connected with said special request sheet and a space adapted to receive the impressions of the agent's dating stamp.

1,061,644. MACHINE FOR MAKING CLOTHES-PINS. EDWARD WINFRED TURNER, Swansboro, and HERMAN SEGAR REAMS, Richmond, Va., assignors to Richmond Cedar Works, Richmond, Va., a Corporation of Virginia. Filed Jan. 15, 1907, Serial No. 352,459. Renewed Oct. 3, 1908. Serial No. 456,059. (Cl. 144—9.)

1. In a machine of the character described the combination with a conveyer drum having parallel seats in the periphery thereof; of mechanism for imparting an intermittent rotary motion to the drum, means for supplying articles to the seats, a die, and means for operating the die to stamp the periphery of an article between every two movements of the drum and clamp said article upon the drum and means for slotting said article while clamped by the die.

2. In a machine of the character described the combination with a conveyer, and means for imparting an intermittent movement thereto: of a die adjacent the conveyer, mechanism for actuating the die during each pause in the movement of the conveyer to stamp the periphery of an article and to clamp said article upon the conveyer and means for slotting the article while clamped by the die.



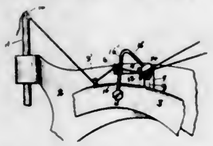
3. In a machine of the character described the combination with a conveyer; of a shaft, means operated by the shaft for imparting an intermittent motion to the conveyer, a die, means operated by the shaft for directing the die toward the conveyer during each pause in the movement thereof to clamp an object upon the conveyer and means for slotting the object while clamped by the die.

4. In a machine of the character described the combination with a conveyer having seats therein; of a shaft, means operated by the shaft for imparting an intermittent movement to the conveyer, a die, a cam upon the shaft, means operated by the cam for moving the die toward the conveyer during each pause in the movement of the conveyer to stamp an object and clamp said object in a seat on the conveyer.

5. In a machine of the character described the combination with a conveyer drum having slotted peripheral seats, and means for imparting an intermittent motion to the drum; of a slotting tool, means for shifting said tool into and out of the slotted seats successively during the successive pauses in the movement of the drum, a combined stamping and holding device adjacent the drum, and means for actuating said device during each pause in the movement of the conveyer to stamp an object and hold it in the path of the slotting tool.

[Claims 6 to 16 not printed in the Gazette.]

1,061,645. NEEDLE-LOOP TAKE-UP FOR SEWING-MACHINES. ALBERT H. WEIS, Sparkill, N. Y., assignor to Lucius N. Littauer, Gloversville, N. Y. Filed Apr. 9, 1912. Serial No. 689,598. (Cl. 112—26.)



1. In a sewing machine having an overhanging arm, a plurality of needles and a needle actuating lever, needle loop take up means for giving to the needle threads a movement greater than that of said needle lever during the upward movement of such needles and prior to the needles leaving the work thereby to insure a uniform formation of all of the needle loops.

2. In a sewing machine having an overhanging arm, a movable arm, and a plurality of needles, needle loop take up means for controlling the needle loops and comprising a movable part carried by the overhanging arm and a part carried by the movable arm for shifting said movable part during the upward movement of the needles and prior to the needles leaving the work thereby to obtain uniformity in the sizes of all of the loops.

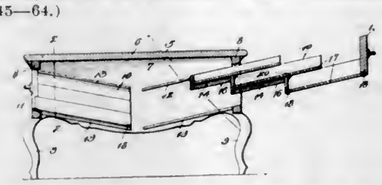
3. In a sewing machine of the class described having an overhanging arm and a pivotally supported needle actuating arm, needle loop take-up means for controlling the needle loops and comprising a movable part carried by the overhanging arm and a normally fixed part carried by the needle actuating arm for shifting said movable part on the upward movement of the needle and prior to the needle leaving the work thereby to obtain uniformity in the sizes of the loops.

4. In a sewing machine of the class described having an overhanging arm and a pivotally supported needle actuating arm, needle loop take-up means for controlling the needle loops and comprising a shiftable resilient member carried by the overhanging arm and a normally fixed part carried by the needle actuating arm for shifting said resilient member prior to the needle leaving the work thereby to obtain uniformity in the sizes of the loops.

5. In a sewing machine of the class described having an overhanging arm and a pivotally supported needle actuating arm, needle loop take-up means for controlling the needle loops and comprising a resilient member carried by the overhanging arm and a normally fixed part carried by the needle actuating arm, said fixed part having an inclined portion and a notch for casting off the resilient member.

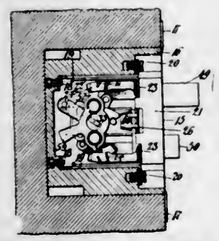
[Claims 6 to 20 not printed in the Gazette.]

1,061,646. CABINET. WILMOT H. WELLIVER, Elmira, N. Y. Filed Feb. 21, 1912. Serial No. 679,194. (Cl. 45—64.)



The combination with a bench or seat having side walls and longitudinally inclined upper and lower parallel bars secured upon said side walls, of a series of superposed drawers arranged between the side walls of the seat, the uppermost drawer being slidably mounted upon the upper inclined bars, said drawers being slidable upon each other and adapted to be extended beyond the ends of the side walls of the seat, said drawers when in their extended positions being wholly supported upon the upper inclined bars, transverse stop cleats secured to the bottom walls of the upper drawer for engagement by the rear walls of the next lower drawers to limit the outward movement of the latter drawers, and rollers mounted upon the lowermost drawer to rest upon the lower inclined bars when the drawers are in their closed positions between the side walls of the seat to relieve the upper bars of the weight of the drawers.

1,061,647. FLUSH SWITCH. JOSEPH J. WESLEY, Douglaston, N. Y., assignor to Metropolitan Electric M'f'g. Co., a Corporation of New Jersey. Filed Apr. 6, 1911. Serial No. 619,366. (Cl. 175—293.)



1. In a snap-switch, the combination of two pairs of end clips, blade-plates, adapted to move in unison and each having a pair of end blades one for each of said end clips respectively, an intermediate blade on one of said plates, and adapted to be received by one of the end clips, and an intermediate clip adapted to receive one of the end blades of said plate carrying the intermediate slip.

2. A snap-switch comprising two pairs of end clips; a pair of blade plates, one for each pair of clips and each having a pair of end blades, one for each of said end clips respectively, said blade-plates being connected in staggered relation and so as to move in unison with each other, whereby when the blades of one plate are received by the clips the blades of the other are free, an intermediate blade on one of said plates and adapted to be received by one of the end clips, and an intermediate clip adapted to receive one of the end blades.

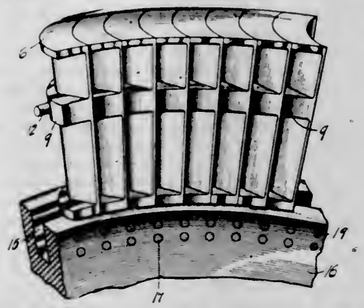
3. A snap-switch having two pairs of end clips, a pair of connected blade-plates, one for each pair of end clips and each carrying a pair of blades adapted each to be received by one of said end clips respectively, intermediate clips each adapted to receive one of the blades of each plate, and an intermediate blade on each blade-plate adapted to engage one of the end clips.

4. An electric switch contact plate comprising a plate proper having lateral stop fingers, and spring clips secured at one end to said plate proper and vibratable at their free ends between said fingers in receiving and releasing the switch plate.

5. In a push button snap switch two pairs of end clips, an intermediate clip, a blade plate adapted to connect the end clips of one pair, a blade plate adapted in one position to connect the ends of the other pair and in its other position to connect one of the end clips of the other pair with said intermediate clip, and a push button snap switch mechanism operative to snap said blade plates simultaneously in the same direction into relatively reverse positions.

[Claims 6 and 7 not printed in the Gazette.]

1,061,648. BLADES. GEORGE WESTINGHOUSE, Pittsburgh, Pa. Filed Aug. 27, 1910. Serial No. 579,247. (Cl. 121—57.)



1. A blade segment comprising a plurality of blades provided with intermediate spacing pieces located between the ends of the blades and formed integrally therewith and a binding member extending through the blades and spacing pieces.

2. A blade segment comprising a plurality of blades, means formed integrally with the blades for dividing the passages between the blades into two sets of working passages and a binding member passing through said means for securing the blades together.

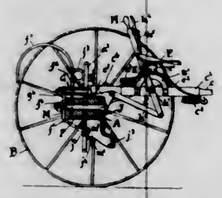
3. A blade segment comprising a plurality of blades, means for dividing the passages between the blades into two sets of working passages and a binding member extending through the blades and said means.

4. In combination with a blade mounting element, a plurality of blades provided with mounting portions, and shrouding flanges located at opposite ends of the blades and means extending through the blades and located between said flanges and said mounting portions for securing them together.

5. In combination with a blade mounting element, a plurality of blades provided with integrally formed spacing pieces located at their outer or free ends, and intermediate spacing pieces located between the outer ends and the mounting ends of the blades, means for securing said blades to said mounting element and a binding member extending through said spacing pieces for securing the blades together.

[Claim 6 not printed in the Gazette.]

1,061,649. HORSE-RAKE. EDWARD WICK, Kiel, Wis. Filed Mar. 28, 1912. Serial No. 686,774. (Cl. 56—115.)



1. In a rake, the combination of an axletree transverse to the direction of movement, a pair of wheels rotatably mounted on the ends of said axletree, a frame journaled on said axletree, means on said frame for turning said axletree about its own axis, an auxiliary frame pivoted to said axletree to turn about a normally vertical central axis, a set of rake-teeth carried by said auxiliary frame, means carried by said first-named frame for laterally shifting the auxiliary frame to a position oblique to the direction of movement, said rake-teeth being pivoted on said auxiliary frame and being maintained constantly parallel to the direction of movement in every position of said auxiliary frame.

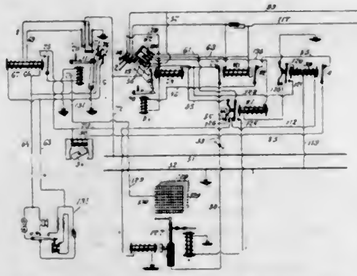
2. In a rake, the combination of a horizontal transverse axletree, a main frame journaled thereon, a pair of wheels mounted on the ends of said axletree on which it is adapted to run and which form bearings on which it is adapted to turn, a hand-lever mounted on said frame and connected with said axletree to turn the latter about its axis, an auxiliary frame pivoted at the center of said axletree and under the latter to turn about a normally vertical pivot in either direction, a plurality of rake-teeth carried by said auxiliary frame, means for turning said auxiliary frame about its pivot to a position oblique to the direction of propulsion of the rake, means for keeping said rake-teeth parallel to the direction of propulsion of the rake in all positions of said auxiliary frame, and means mounted on said main frame for skewing said auxiliary frame in either direction.

3. In a rake, the combination of a horizontal transverse axletree, a main frame journaled thereon, a pair of wheels mounted on the ends of said axletree on which it is adapted to run and which form bearings on which it is adapted to turn, a hand-lever mounted on said frame and connected with said axletree to turn the latter about its axis, an auxiliary frame pivoted at the center of said axletree to turn about a normally vertical pivot, a plurality of rake-teeth carried by said auxiliary frame, means for turning said auxiliary frame about its pivot to a position oblique to the direction of propulsion of the rake, means for keeping said rake-teeth parallel to the direction of propulsion of the rake in all positions of said auxiliary frame, a lever mounted on said main frame, and a link connecting said lever with a point of said auxiliary frame at one side of the pivot thereof, said point lying in the axis of rotation of said axletree in one position of said auxiliary frame, whereby in said position only the axletree can be rotated.

4. In a rake, the combination of a horizontal transverse axletree, a main frame journaled thereon, a pai rof wheels mounted on the ends of said axletree on which it is adapted to run and which form bearings on which it is adapted to turn, a hand-lever mounted on said frame and connected with said axletree to turn the latter about its axis, an auxiliary frame pivoted at the center of said axletree to turn about a normally vertical pivot, a plurality of rake-teeth carried by said auxiliary frame, means for turning said auxiliary frame about its pivot to a position oblique to the direction of propulsion of the rake, means for keeping said rake-teeth parallel to the direction of propulsion of the rake in all positions of said auxiliary frame, a lever mounted on said main frame and adapted to rotate said axle or shaft, an auxiliary member pivoted to said axle or shaft upon a substantially vertical axis, midway of its length, a second lever mounted on said main frame and adapted to shift said member about its axis, and a set of rake-teeth carried by said member.

[Claims 6 and 7 not printed in the Gazette.]

1,061,650. TELEPHONE SYSTEM. FRANS GUNNAR AGRELL, Stockholm, Sweden. Filed Oct. 10, 1906. Serial No. 338,309. (Cl. 179—27.)



1. In a telephone system, the combination with a number of subscribers' stations of a number of sub-exchanges, a central exchange, a number of trunk lines each provided with movable terminals and adapted to connect said sub-exchange with said central exchange, lines provided with movable terminals each adapted to connect one of said subscribers' stations with one of said sub-exchanges, means adapted to automatically connect the terminals of one of said subscribers' lines to one of said trunk lines through said movable terminals, means for automatically moving said trunk terminals when so connected to such a position that the same will not be engaged by subsequently operated subscribers' terminals, means for automatically locking said terminals in said position, means for releasing and allowing said trunk terminals to assume the position in which the same may be engaged by and connected with a subsequently operated subscriber's line, and means for restoring said subscribers' terminals to their original position.

2. In a telephone system, the combination with a number of subscribers' stations of a number of sub-exchanges, a central exchange, a number of trunk lines each provided with movable terminals and adapted to connect said sub-exchanges with said central exchange, lines provided with movable terminals each adapted to connect one of said subscribers' stations with one of said sub-exchanges, a device adapted to automatically connect the terminals of one of said subscribers' lines to one of said trunk lines through said movable terminals, a device adapted to automatically move said trunk terminals when so connected to such a position that the same will not be engaged by subsequently operated subscribers' terminals, means for automatically locking said trunk terminals in said position, means for releasing and allowing said trunk terminals to assume the position in which the same may be engaged by and connected with a subsequently operated subscriber's line, and means for restoring said subscribers' terminals to their original position.

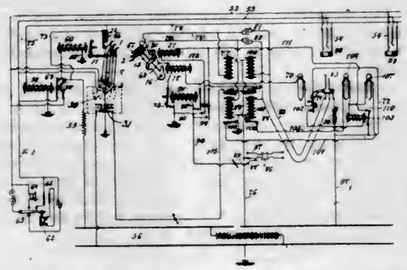
3. In a telephone system, the combination with a number of subscribers' stations of a number of sub-exchanges, a central exchange, a number of trunk lines each provided with movable terminals and adapted to connect said sub-exchange with said central-exchange, lines provided with movable terminals adapted to connect one of said subscribers' stations with a predetermined trunk line, a device adapted to connect the terminals of one of said subscribers' lines to one of said trunk lines through said movable terminals, a device adapted to move said trunk terminals when so connected to such a position that the same will not be engaged by subsequently operated subscribers' terminals, means for automatically locking said trunk terminals in said position, means for releasing and allowing said trunk terminals to assume the position in which the same may be engaged and connected with a subsequently operated subscriber's line, and means for restoring said subscribers' terminals to their original position.

4. In a telephone system, the combination with a number of subscribers' stations of a number of exchanges, a number of lines provided with movable terminals and adapted to connect one of said subscribers' stations with one of said exchanges, a device operative when released to automatically connect the terminals of one of said subscribers' lines to a predetermined line, a device operative to select and release said connecting device, means for automatically disconnecting said selecting device after the connecting device has been released so as to leave it free to select and release the terminals of a subsequently called subscriber, and means for restoring the terminals and the connecting device to their original positions.

5. In a telephone system, the combination with a number of subscribers' stations of a number of sub-exchanges, a central exchange, a number of trunk lines each provided with movable terminals and adapted to connect said sub-exchange with said central exchange, lines provided with movable terminals adapted to connect one of said subscribers' stations with one of said trunk lines, a connecting device operative when released to automatically connect the terminals of one of said subscribers' lines to one of said trunk lines, a selecting device operative to release said connecting device, means for automatically disconnecting said selecting device after said connecting device has been released leaving the same free to be operated in the same manner to release the terminals of the lines of a subsequently called subscriber, and means for restoring said subscribers' terminals to their original position.

[Claims 6 to 12 not printed in the Gazette.]

1,061,651. TELEPHONE SYSTEM. FRANS GUNNAR AGRELL, Stockholm, Sweden. Filed Oct. 10, 1906. Serial No. 338,310. (Cl. 179—27.)



1. In a telephone exchange, in combination, a number of switching devices adapted to be controlled by a number of operators, a number of movable terminals, a number of circuits connecting said switching devices and said movable terminals, a number of subscribers' lines each provided with movable terminals, means adapted to move the terminals of one of said subscribers' lines into operative engagement with the terminals of one of said switching circuits, means adapted to move said last named terminals when so connected to such a position that the same will not be engaged by a subsequently operated subscriber's terminals, means for moving the terminals of all other switching circuits controlled by any one operator into such a position that the same will not be engaged by a subsequently operated subscriber's terminals when said operator is busy, and means for restoring the terminals to their original position.

2. In a telephone exchange, in combination, a number of switching devices adapted to be controlled by a number of operators, a number of movable terminals, a number of circuits connecting said switching devices and said movable terminals, a number of subscribers' lines a device adapted to connect one of said subscriber's lines with the terminals of one of said switching circuits, means adapted to automatically move said terminals when so connected to such a position that the same will not be engaged by a subsequently operated subscriber's line, means for moving the terminals of all other switching circuits controlled by any one operator into such a position that the same cannot be connected with a subsequently operated subscriber's line when said operator is busy, and means for restoring the terminals to their original position.

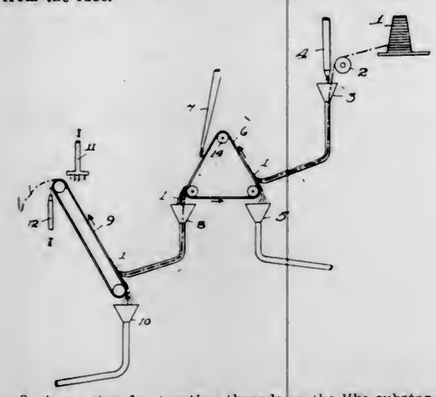
3. In a telephone exchange, in combination, a number of switching devices, adapted to be controlled by a number of operators, a number of movable terminals, a number of circuits connecting said switching devices and said movable terminals, a number of subscribers' lines each provided with movable terminals, electrically operated means adapted to move the terminals of one of said subscribers' lines in to operative engagement with the terminals of one of said switching circuits, electrically operated means adapted to move said last named terminals when so connected to such a position that the same will not be engaged by a subsequently operated subscriber's terminals, electrically operated means for moving the terminals of all switching circuits controlled by any one operator into such a position that the same will not be engaged by a subsequently operated subscriber's terminals when said operator is busy, and means for restoring the terminals to their original position.

4. In a telephone exchange, in combination, a number of switching devices, a number of movable terminals, a number of circuits connecting said switching devices and said movable terminals, a number of subscribers' lines each provided wth movable terminals, electrically operated means adapted to move the terminals of one of said subscribers' lines in to operative engagement with the terminals of one of said switching circuits, electrically operated means adapted to move said last named terminals when so connected to such a position that the same will not be engaged by a subsequently operated subscriber's terminals, electrically operated means for moving the terminals of all switching circuits into such a position that the same will not be engaged by a subsequently operated subscriber's terminals, and means for restoring the terminals to their original position.

1,061,652. APPARATUS FOR TREATING THREADS. CHARLES SCOTT ALTHOUSE, Reading, Pa. Original application filed Mar. 21, 1912, Serial No. 685,319. Divided and this application filed Apr. 29, 1912. Serial No. 694,001. (Cl. 8—19.)

1. Apparatus for treating threads or like substances comprising a liquid conveying tube through which the liquid and the threads pass, a separator adapted to automatically pick up the threads and shed the liquid as they emerge from the tube, a second conveying tube adapted to receive the threads together with a second liquid as they leave the separator and a second movable body adapted to automatically engage the threads and to shed the liquid as they emerge from the second tube.

2. Apparatus for treating threads comprising a liquid conveying tube through which the thread is conveyed by the liquid and a separator adapted to automatically pick up the thread and shed the liquid as they emerge from the tube.



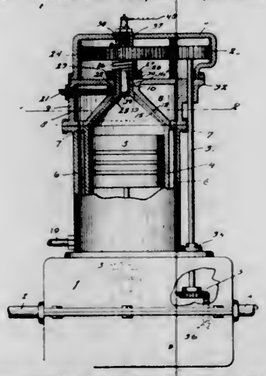
3. Apparatus for treating threads or the like substances comprising a liquid conveying tube through which the thread is conveyed by the liquid and a separator adapted to engage the thread and to shed the liquid as they emerge from the tube and means for detaching the thread from the separator.

4. Apparatus for treating threads or like substances comprising a liquid conveying tube through which the substance is conveyed by the liquid, a separator adapted to automatically pick up the substance and shed the liquid as they emerge from said tube and a second liquid conveying tube adapted to receive the substance and a second liquid as they leave the separator.

5. Apparatus for treating threads or like substances comprising a separator means for conveying the thread while immersed in liquid from a source of supply to the separator, said separator automatically picking up the thread and separating it from the liquid.

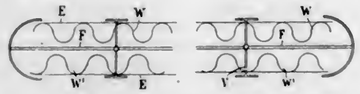
[Claims 6 to 8 not printed in the Gazette.]

1,061,653. EXPLOSIVE-ENGINE. COURTLAND P. ALYEA, Jacksonville, Fla., assignor, by direct and mesne assignments, of one-half to George W. Spaulding and one-half to Charles N. Griffin, Jacksonville, Fla. Filed June 4, 1912. Serial No. 701,499. (Cl. 123—80.)



In an engine of the character described, an explosion cylinder, a piston operating therein, a head mounted upon the cylinder and provided with a conical valve seat having inlet and exhaust ports arranged at substantially a right angle with relation to each other, a hollow conical valve rotatably mounted within the conical valve seat and provided upon its periphery with an opening to be moved into and out of registration with the inlet and exhaust ports, said opening having its vertical sides in the form of sharp cutting edges to prevent deposits upon the inner surface of the conical valve seat, a tubular stem connected with the conical valve, a spark plug disposed in the tubular stem to provide a spark adjacent the lower end of the tubular stem, spring means to yieldingly hold the conical valve in engagement with the conical valve seat, means to rotate the valve stem, said conical valve having its material formed comparatively thin and provided upon its exterior surface with a suitable number of involute grooves having their upper ends leading with respect to the direction of rotation of the conical valve, and a conduit to constantly supply a lubricant to the upper ends of the involute grooves, whereby such lubricant is worked downwardly within the involute grooves during the rotation of the conical valve.

1,061,654. CORRUGATED PASTEBOARD WRAPPER. FRIEDRICH AUGUST ANTONI, Cologne-Ehrenfeld, Germany. Filed Nov. 2, 1911. Serial No. 658,247. (Cl. 229—87.)



A protective wrapper comprising layers of pasteboard having smooth and corrugated faces and disposed with their smooth faces outermost, a layer loosely disposed between the juxtaposed corrugated faces, and means movably connecting said layers, substantially as and for the purposes set forth.

1,061,655. MIXER FOR GASEOUS FUEL. FRANK E. BACHMAN, Port Henry, N. Y. Filed Oct. 9, 1911 Serial No. 653,683. (Cl. 48—180.)



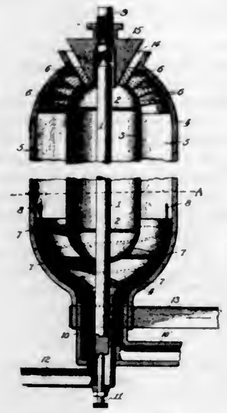
1. A device for use in the intake pipes of internal combustion engines, comprising a hollow fixed screen open at one end, and a series of obliquely placed fixed baffles located adjacent to the open end of the screen, said baffles acting to change the direction of the air currents passing through the intake pipe and causing cross-currents which tend to break up drops of liquid fuel and to impart a swirling motion to the mixture of air and fuel within the body of the screen; substantially as described.

2. A device for use in intake pipes of internal combustion engines, comprising a supporting member having therein a series of fixed oblique vanes or baffles, and an elongated hollow screen closed at one end and having its open end secured to the supporting member, said screen having at least a portion of its surface at an angle to the longitudinal axis of the intake pipe; substantially as described.

3. A device for use in the intake pipe of internal combustion engines, said device being located between the carbureter and the engine and acting upon the explosive mixture passing to the engine, and comprising a fixed screen surface at an oblique angle to the normal direction of travel of the mixture, and a plurality of fixed oblique baffle members arranged to act upon the mixture adjacent to the screen and to impart a swirling motion to the mixture, substantially as described.

1,061,656. SEPARATOR FOR MECHANICAL MIXTURES OF GASES. JOSEPH L. BLACK, Palatine, Ill. Filed Feb. 19, 1906. Serial No. 301,785. (Cl. 127—3.)

outlets for separated gases, separating cells in said cylinder, and wedge-shaped partitions between said separating cells, substantially as described.



2. In a centrifugal gas-separating device, a rotating cylinder, an inlet to said cylinder for mixed gases, two outlets for separated gases, separating cells in said cylinder, and partitions between said separating cells, said partitions being wedge-shaped and said separating cells being substantially parallelograms in cross section, substantially as described.

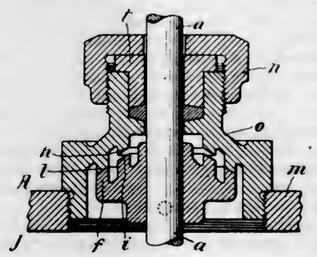
3. In a centrifugal gas-separating device, a rotating cylinder, an inlet to said cylinder for mixed gases, two outlets for separated gases, separating cells in said cylinder, and partitions between said separating cells, said cells being radial and the two sides of each of said cells being parallel, substantially as described.

4. In a centrifugal gas-separating device, a rotating cylinder, an inlet to said cylinder for mixed gases, a separate outlet from said cylinder for each of a plurality of separated gases, longitudinal partition walls in said cylinder, said walls being approximately radial, longitudinal separating cells formed by said walls, each of said cells being formed by wall-surfaces approximately parallel, substantially as described.

5. In a centrifugal gas-separating device, a rotating cylinder, an inlet to said cylinder for mixed gases, a separate outlet from said cylinder for each of a plurality of separated gases, separating cells in said cylinder, and partitions between said separating cells, said partitions being wedge-shaped and forming parallel sides for said separating cells, substantially as described.

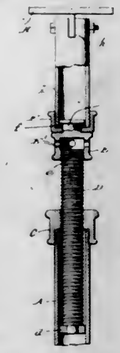
[Claims 6 to 11 not printed in the Gazette.]

1,061,657. ELASTIC-FLUID PACKING. SIEGFRIED BONDY, Vienna, Austria-Hungary, assignor to Karl Krupitschka, Vienna, Austria-Hungary. Filed Aug. 10, 1912. Serial No. 714,413. (Cl. 121—109.)



An elastic fluid packing comprising a bell-shaped casing, inwardly directed annular extensions thereon, a shaft in said casing, a bell-shaped bearing fixed on said shaft, and annular extensions on said bearing directed toward and bearing against said extensions on said casing and concentrically surrounding said shaft.

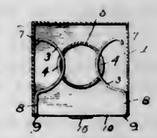
1,061,658. ADJUSTABLE SUPPORT FOR CONCRETE-BUILDING FORMS. CHARLES E. BRADSHAW, Cleveland, Ohio, assignor of one-half to William Dunbar, Cleveland, Ohio. Filed Mar. 7, 1912. Serial No. 682,105. (Cl. 57—44.)



1. An adjustable support such as described, embodying a tubular base section screw threaded externally at top and bottom, a base flange internally screw threaded a boxing cap internally screw threaded engaging the upper end of said base section and having an internally screw threaded opening therethrough, an externally screw threaded section passing through said boxing cap, a guide collar mounted on said last mentioned section within the base section, a head casting carried on the upper end of said externally screw threaded section, a cap journaled on the head casting, and an upper pipe section screw threaded into said cap.

2. In a support such as described, the combination with the bottom section formed of pipe threaded at its opposite ends, a base flange secured to its threaded lower end and a boxing cap secured to its threaded upper end and having an internal threaded aperture therethrough in alinement with the interior of the pipe, of an externally threaded pipe section adjustable in said boxing cap, a head casting rigidly mounted on said headed pipe section and embodying means whereby it may be turned for adjustment, said head casting having an upwardly projecting journal, an internal threaded cap mounted to rotate on said journal, and an upper pipe section having its lower end threaded and secured in said cap, substantially as described.

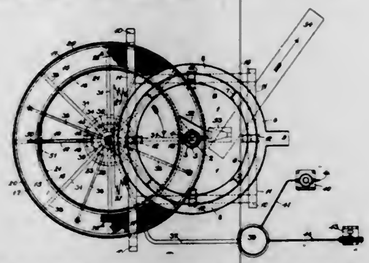
1,061,659. MANTLE-RETAINER. CHARLES M. BRANDT, Holmes, Pa., assignor of twenty-five and one-half one-hundredths to Alfred B. Willoughby, Philadelphia, Pa. Filed July 8, 1912. Serial No. 708,264. (Cl. 24—81.)



1. A spring mantle retainer clasp comprising curved spring members for engaging the base of a mantle, side guards extending from said spring members, parallel members spaced from the guards and in vertical alinement therewith, said parallel members being connected to the side guards by bends, and a finger-hold disposed centrally between the parallel members and connected thereto.

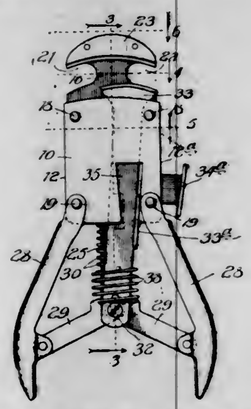
2. A spring wire mantle retainer clasp comprising resilient mantle-engaging members, guards extending from said members, spaced parallel members connected to said guards by bends, members extending inwardly from said parallel members, forwardly extending portions connected to said inwardly extending members, and a finger-hold connecting said forwardly extending portions.

1,061,660. SEPARATION OF LIQUIDS FROM CRUSHED-ORE PRODUCTS. WILLIAM ARTHUR CALDECOTT, Johannesburg, Transvaal. Filed Mar. 18, 1907. Serial No. 363,072. (Cl. 83—82.)



The process of preparing metal-bearing sands for leaching, consisting in subjecting the pulp, containing sands and slimes, continuously to such a settling and decanting separation as will separate the slimes and the bulk of the water from the sands, continuously discharging the sands and subjecting them to vacuum filtration to extract substantially all the water accompanying said sands, the sands and slimes, once separated, being maintained separate.

1,061,661. GRAPE-PICKING IMPLEMENT. BENJAMIN J. CLOES, Los Angeles, Cal. Filed June 10, 1912. Serial No. 702,708. (Cl. 30—24.)



1. In an implement of the character described, the combination with a frame or casing, of a pair of shearing-members cutting at either side thereof, stem-grippers at opposite sides of the shearing-members, and a pair of handles with which said shearing-members and stem-grippers are operatively connected.

2. In an implement of the character described, the combination with a frame or casing, of a pair of shearing-members cutting at either side thereof, stem-grippers at opposite sides of the shearing-members, each shiftable to operate at either side of said frame or casing, and a pair of handles with which said shearing-members and stem-grippers are operatively connected.

3. In an implement of the character described, the combination of a pair of plates separated from each other, a stem-engaging recess in one side of the plates near the outer end thereof, a stationary stem-gripping member at the outer side of said recess, a movable shearing-blade mounted between said plates to cut across said recess, a movable gripping-member at the side of said blade coöperating with said stationary gripping-member to clamp a stem as it is cut by the shearing-blade, and handles with which said shearing-blade and movable gripping-member are operatively connected.

4. In an implement of the character described, the combination of a pair of plates separated from each other, stem-engaging recesses in opposite sides of the plates near the outer end thereof, stationary stem-gripping members at the outer sides of the recesses, a movable shearing-blade mounted between said plates to cut across said recesses, movable gripping-members at opposite sides of said shearing-blade, each shiftable to either of said recesses and coöperating with said stationary gripping-members to clamp a stem as it is cut by the shearing-blade, and handles with which said shearing-blade and movable gripping-members are operatively connected.

1,061,662. WRENCH. MAX E. CRANDALL, Fairfax, Okla. Filed Mar. 29, 1912. Serial No. 687,209. (Cl. 81—59.)



1. In a wrench, a handle having spaced cheek-pieces, a head, the cheek-pieces being formed with alined openings and the head being formed with an opening registering with the said openings in the cheek-pieces, a pivot pin removably fitted through the openings in the cheek-pieces and the pin at one end formed with a groove, the said cheek-piece having a recess in its outer face, a spring arranged within the recess and engaging in the groove in the pin, the head having a peripheral ratchet portion and a nut-receiving socket, and a pawl coöperating with the ratchet portion of the head.

2. In a wrench, a handle having spaced cheek-pieces formed with alined openings, a nut engaging head arranged between the cheek-pieces and formed with an opening registering with the first mentioned openings, one of the cheek-pieces being formed with a recess located beside the opening therein, a pivot-pin inserted through the openings in the cheek-pieces and in the head and formed with a groove located near one end thereof, a spring locking member seated in the recess and having a portion projecting into the groove whereby to removably hold the pin in place, the head having a peripheral ratchet portion, and a pawl carried by the handle and coöperating with the said ratchet portion of the head.

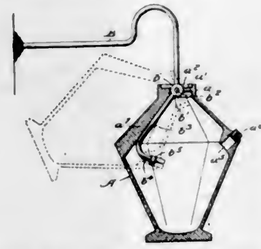
3. In a wrench, a handle having spaced cheek-pieces, a head fitted between the cheek-pieces, the said cheek-pieces and the head having registering openings, one of the cheek-pieces being formed with a depression surrounding the opening therein, a pivot-pin removably fitted through the said registering openings and having one end projecting into the depression, means upon the other cheek-piece engaging with the other end of the pivot pin and normally holding the pin against displacement, and a pawl coöperating with the said head, the head being provided with a nut-receiving socket.

4. In a wrench, a handle having spaced cheek-pieces, a head rotatably fitted between the cheek-pieces, the said head and cheek-pieces being formed with registering openings, one of ther cheek-pieces being formed with a depression surrounding the opening therein and the other cheek-piece being formed adjacent to its opening with a recess, a pivot pin removably fitted through the registering openings in the cheek-pieces and head and having one end projecting into the depression and its other end formed with a circumscribing groove, a spring seated in the recess and projecting into the groove in the pivot pin, the head having a ratchet portion, and a pawl carried by the handle and coöperating with the ratchet portion of the head.

5. In a wrench, a handle provided with spaced cheek-pieces, a head fitted between the cheek-pieces, the said cheek-pieces and the head being formed with registering openings, a pivot pin inserted through the registering openings in the cheek-pieces and the head and formed at one end with a circumscribing groove, one of the cheek-pieces being formed with a recess communicating with the opening therein, means for holding the pin against displacement from the openings comprising a resilient wire bent on the arc of a circle and having its terminal portions projecting into the groove in the pin, the head having a peripheral ratchet portion, and a pawl carried by the handle and coöperating with the said ratchet portion of the head.

[Claim 6 not printed in the Gazette.]

1,061,663. VESSEL FOR DISPENSING LIQUIDS. JOHN CRAWFORD, Rochester, N. Y. Filed Mar. 7, 1913. Serial No. 752,657. (Cl. 221—94.)



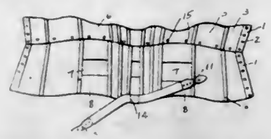
1. In a liquid soap dispenser, the combination with a fixed bracket or support, of a vessel suspended therefrom above its center of gravity, and having a discharge orifice through which the contents of the vessel may be discharged, and a fixed plunger adapted to force the contents through said orifice when the vessel is swung relatively to said plunger.

2. In a liquid soap dispenser the combination with a fixed bracket or support, of a vessel suspended therefrom above its center of gravity, a plunger forming an extension of the bracket extending down into said vessel, said vessel being provided with a discharge orifice at the front and in line with the plunger, whereby when said vessel is swung backward the plunger will be caused to discharge the liquid through said orifice.

3. In a liquid soap dispenser the combination with the vessel having a discharge orifice, of a fixed bracket or support, having a cross piece upon which the vessel is freely suspended, an arm or extension of said bracket extending down into the vessel, constituting a stop for limiting the forward movement of the vessel, and a plunger carried by said arm for forcing the contents through the orifice in the vessel.

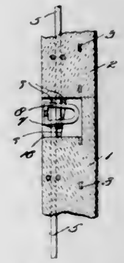
4. In a liquid soap dispenser, the combination with the vessel having a discharge orifice located above the liquid line, a fixed bracket upon which the vessel is suspended, a stop for limiting the forward swing of the vessel and a fixed plunger for forcing the liquid through the orifice when the vessel is swung backward relatively thereto.

1,061,664. COMBINED CORSET AND ABDOMINAL SUPPORTER. EPHRAIM DRENSHTEIN, New York, N. Y. Filed June 28, 1911. Serial No. 635,754. (Cl. 2—188.)



A combined corset and abdominal support comprising transversely disposed and parallel elastic strips overlapping each other, a stiffening rib connected to the opposite ends of said elastic strips, an inelastic portion connected to said stiffening ribs, said inelastic portion being adapted to extend up under the arm and over the hips of a person, an upright stiffening rib reinforcing said inelastic portion, said elastic strips having their two outer strips broadened on their outer sides at a central point so as to extend over the bust and abdomen for supporting the same, a set of upright stiffening ribs arranged on each side of the center of said elastic strips and within said broadened portion, a perforated rib secured to the free end of said inelastic portion, fastening means adapted to engage said perforations for securing said support to the body.

1,061,665. COUPLING FOR REINFORCED-CONCRETE CONDUIT-SECTIONS. PHILIP S. EASTERDAY, Portland, Oreg. Filed Jan. 27, 1913. Serial No. 744,564. (Cl. 72—53.)



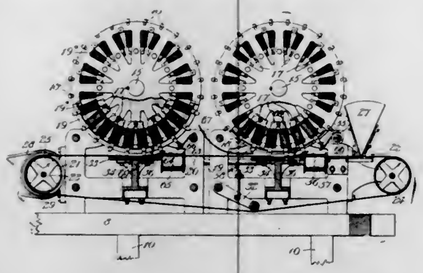
1. An elastic coupling for reinforced-concrete conduit sections comprising rods provided at their respective ends with loops and coils, and a spring pin comprising a coaxial series of tapered coils adapted to be tightly forced within the coöperating rod loops and coils of abutting conduit sections.

2. A reinforced-concrete conduit section provided at one end with peripheral recesses, rods embedded in said concrete section and formed with coils lying within such recesses, loops on said rods projecting from the ends of said concrete section, and spring pins formed of coaxial series of tapered coils adapted to be tightly forced within said rod coils and loops of abutting conduit sections.

1,061,666. MAGNETIC SEPARATOR. HERMAN W. FREESE, Chicago, Ill. Filed Sept. 11, 1909. Serial No. 517,182. (Cl. 83—71.)

1. A magnetic separator comprising, in combination, a series of electro-magnets supported to move in a circular path, a traveling flexible apron for supporting and conveying to said magnets the material to be subjected to the action thereof, and a member of magnetizable material located below said support and closely adjacent thereto and

having a curved upper surface substantially concentric with the circular path through which the magnets move in their rotation and presenting a recess, the said electro-magnets being so positioned as to cause the companion poles thereof to extend into the material and directly above said member and deflect said apron into said recess during the movement of said magnets to cause the lines of magnetic force to pass through said member from one pole of each magnet to its companion pole and minimize the air-gaps to be traversed by the lines of magnetic force.



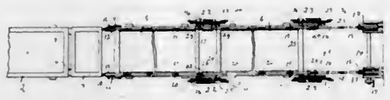
2. A magnetic separator comprising, in combination, a series of electro-magnets supported to move in a circular path, the outer faces of the poles of said magnets being grooved, a traveling flexible apron for supporting and conveying to said magnets the material to be subjected to the action thereof, and a member of magnetizable material located below said support and closely adjacent thereto and having a curved upper surface substantially concentric with the circular path through which the magnets move in their rotation and presenting a recess, the said electro-magnets being so positioned as to cause the companion poles thereof to extend into the material and directly above said member and deflect said apron into said recess during the movements of said magnets, to cause the lines of magnetic force to pass through said member from one pole of each magnet to its companion pole and minimize the air-gaps to be traversed by the lines of magnetic force.

3. A magnetic separator comprising, in combination, a movable magnetic member, a member of magnetic material spaced from and coöperating with said movable member, a support for the material to be subjected to the separator action interposed between said member, said movable member operating to withdraw magnetic particles from said material, a bar located above said support and beyond the point at which the separation takes place, and means for automatically removing from the surface of said bar accumulation thereon of particles of the material.

4. A magnetic separator comprising, in combination, a movable magnetic member, a member of magnetic material spaced from and coöperating with said movable member, a support for the material to be subjected to the separator action interposed between said members, said movable member operating to withdraw magnetic particles from said material, a bar located above said support and beyond the point at which separation takes place, a wiper-device movable with said movable member, and means for automatically moving said wiper-member into engagement with the upper surface of said bar, for the purpose set forth.

5. A magnetic separator comprising, in combination, a movable magnetic member, a member of magnetic material spaced from and coöperating with said movable member, a support for the material to be subjected to the separator action interposed between said members, said movable member operating to withdraw magnetic particles from said material, a bar located above said support and beyond the point at which separation takes place, a wiper-device movable with said movable member, and a cam-device on the machine extending into the path of said wiper and operating to move the latter into engagement with the upper surface of said bar, for the purpose set forth.

1,061,667. PHOTOGRAPHIC PLATE AND PAPER DEVELOPING MACHINE. ELMER S. GERHARD, Philadelphia, Pa., assignor of one-half to J. Harry Evans, Philadelphia, Pa. Filed June 20, 1912. Serial No. 704,720. (Cl. 95—89.)



1. A photographic delevoping machine consisting of a plurality of tanks a number of which are in alinement, a conveyer passing over a number of said tanks, a frame for carrying the photographic plate or paper supported by the conveyer and carried through the tanks thereby, and means for elevating and transferring the frame from one portion of the conveyer to another portion thereof.

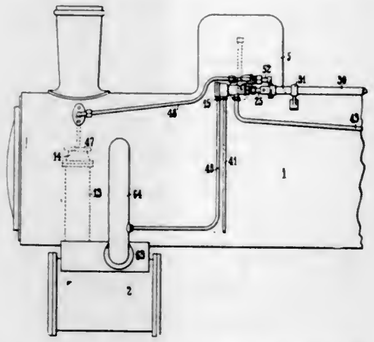
2. A photographic developing machine consisting of two tanks in alinement, a pair of conveyer chains running along the upper edges of said tanks, some of the links of said chains carrying means for holding a rod, said rod carrying a holding device, a frame carried by said rod, means for transmitting motion to the conveyer chains and means for transferring the rod from one portion of the chain to another portion thereof.

3. A photographic developing machine consisting of two tanks in alinement, a pair of conveyer chains running along the upper edges of said tanks, some of the links of said chains carrying means for holding a rod, said rod carrying a holding device, a frame carried by said rod, means for transmitting motion to the conveyer chains, and an elevating and transferring mechanism for transferring the rod from one portion of the chain to another, said mechanism consisting of a pair of oppositely disposed frames, sprocket wheels journaled to said frames, chains passing over said sprocket wheels, pickups pivoted to said chains, means for transmitting motion from one of the conveyer chains to one of the sprocket wheels on one frame and means for transmitting motion from said sprocket wheel to a similar sprocket wheel upon the other frame.

4. A photographic developing machine consisting of two tanks in alinement, a pair of conveyer chains running along the upper edges of said tanks, some of the links of said chains carrying means for holding a rod, said rod carrying a holding device, a frame carried by said rod, means for transmitting motion to the conveyer chains, a pair of elevating and transferring mechanisms for transferring the rod from one portion of the conveying chains to another portion thereof, thereby transferring the photographic plate or paper from one tank to another or from one tank to the atmosphere, each of said elevating and transferring mechanisms consisting of a pair of oppositely disposed frames, shafts journaled in said frame, one of said shafts passing over one frame to the other, sprocket wheels mounted on said shafts, a chain running over the sprocket wheels journaled on each frame, pickups pivoted to each of the chains, each pickup consisting of a notched head, a pendulum arm and a pendulum weight, and means for transmitting motion from one of the conveyer chains to one of the sprocket wheels mounted upon the shaft which is journaled in both frames whereby the chains carrying the pickups are caused to pass the conveyer chains at predetermined time for picking up and delivering the rod carried by the conveyer chains.

4. A photographic developing machine consisting of two tanks in alinement, a pair of conveyer chains running along the upper edges of said tanks, some of the links of said chains carrying means for holding a rod, said rod carrying a holding device, a frame carried by said rod, means for transmitting motion to the conveyer chains, a pair of elevating and transferring mechanisms for transferring the rod from one portion of the conveying chains to another portion thereof, thereby transferring the photographic plate or paper from one tank to another or from one tank to the atmosphere, each of said elevating and transferring mechanisms consisting of a pair of oppositely disposed frames, shafts journaled in said frame, one of said shafts passing over one frame to the other, sprocket wheels mounted on said shafts, a chain running over the sprocket wheels journaled on each frame, pickups pivoted to each of the chains, each pickup consisting of a notched head, a pendulum arm and a pendulum weight, a shaft journaled in the frame, two sprocket wheels mounted on said shaft one of which co-acts with one of the conveying chains, another shaft journaled in the frame, two sprocket wheels mounted thereon, a chain passes over one of the first named sprocket wheels and one of the last named sprocket wheels, another sprocket wheel mounted upon the shaft which is journaled in both of the frames and another chain running over one of the second named sprocket wheels and the last named sprocket wheel thereby transmitting motion from one of the conveyer chains to the chains which carry the pickups.

1,061,668. APPARATUS FOR CONTROLLING THE ARTIFICIAL BLAST IN LOCOMOTIVES. GUSTAV DE GRAHL, Zehlendorf, near Berlin, Germany. Filed June 17, 1910. Serial No. 567,403. (Cl. 110—150.)



1. In an apparatus for controlling the artificial draft in locomotives the combination with a valve box 15 having a steam inlet chamber 23, of steam nozzles 70 and auxiliary blast 47, a pipe 43 connecting said valve box 15 with the nozzle 70, another pipe 48 connecting the valve box 15 with the auxiliary blast, a non-return valve 44 between the valve box 15 and the last named pipe 48, a manually operated valve 26 in said box for shutting off steam from the said pipes 43 and 48, a steam operated valve 20 in said box controlling the entrance of steam by way of the said non-return valve 44 to pipe 48 leading to the auxiliary blast and for simultaneously preventing the first named valve 26 from shutting off steam from the pipe 43 leading to the steam nozzles 70, another valve 51 for connecting and disconnecting said inlet chamber 23 with the pipe 48 leading to the auxiliary blast, said valve 51 being independent of the manually operated valve 26 in said inlet chamber 23 and having an opening larger than that of the said non-return valve 44.

3. In an apparatus for controlling the artificial draft in locomotives the combination with a valve-box having a steam inlet chamber, of steam-nozzles, an auxiliary blast, a pipe connecting said valve box with the nozzles, another pipe connecting the valve box with the auxiliary blast, a manually operated valve in said box for shutting off steam from the said pipes, a steam-operated valve in said box for shutting off steam from the pipe leading to the auxiliary blast and for simultaneously preventing the first named valve from shutting off steam from the pipe leading to the steam-nozzles, another valve, a rotatable axial displaceable rod connected with the last named valve, an arm on said rod, an axially slidable rod connected with said first named valve, an axially non-displaceable hollow shaft rotatable on the last named rod, an arm on said hollow shaft and straps pivotally connecting the two arms, the last named rod being displaceable longitudinally with respect to said hollow shaft.

4. In an apparatus for controlling the artificial draft in locomotives the combination with a valve-box having a steam inlet chamber, of steam-nozzles, an auxiliary blast, a pipe connecting said valve-box with said steam-nozzles, a second steam-pipe connecting said valve box with the auxiliary blast, a manually operated valve in said box for shutting off steam from said pipes, a steam-operated valve in said box for shutting off steam from pipe leading to the auxiliary blast and for simultaneously preventing the first named valve from shutting off steam from the pipe leading to the steam-nozzles, another valve, a rotatable axially displaceable rod connected with the last named valve, an arm rigidly secured on said rod, an axially slidable rod connected with said first named valve, an axially non-displaceable hollow-shaft rotatable on said last named rod, an arm being provided with projections having the form of spherical segments, links between said arms, pivots for movably securing said links to said arms said arms being provided with holes for said pivots, said holes being gradually enlarged toward the lateral surface of said arms.

1,061,669. COMBINED BABY JUMPER AND SWING. FRANKLIN A. HAWK, Central Point, Oreg.; Clara M. Hawk executor of said Franklin A. Hawk, deceased. Filed Feb. 23, 1912. Serial No. 679,383. (Cl. 155—44.)

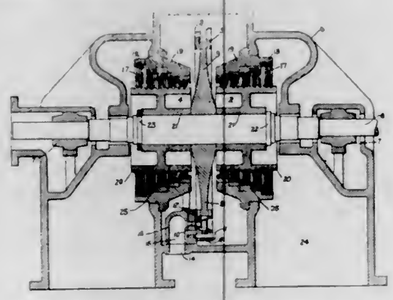


1. In an appliance of the character described an overhead support which consists of two rod-like members held parallel to one another but spaced apart, each of said rod-like members having one of its ends bent to slidably engage the opposite rod, a clamp member mounted on said rods and slidable along the same, said clamp member including means for rigidly gripping said rods to hold them in their relative adjustments, means for se-

curing one of said rod members in a fixed location at its upper or free end, the free end of the other rod member being bent into a loop having a cross bar portion.

2. In an appliance of the character described, an overhead support which includes a triangular loop portion having a lower horizontal bar, a second triangular loop member having an upper horizontal bar portion, said second triangular member being formed of resilient material and "split," a plurality of coil springs connecting the horizontal bars of said triangular members, said springs having free slidable engagement with said triangular loop members, whereby said springs may lie in parallelism and in contact with each other, the springs being relatively permanently secured to the upper triangular member and being detachably secured to the lower triangular member, by virtue of said "split," whereby one or more of said springs may be detached from said lower triangular member to vary the resiliency of the connection between the two triangular members.

1,061,670. STEAM-TURBINE. HERBERT T. HERR, Pittsburgh, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, of Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 3, 1910. Serial No. 580,393. (Cl. 121—58.)



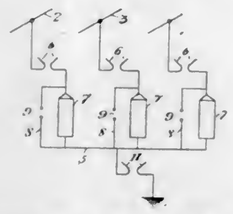
1. In combination in a turbine, a casing, a rotor element comprising a cylindrical blade carrying drum, a blade carrying wheel, a removable and replaceable segment provided with a fluid delivery passage and a fluid delivery nozzle for delivering motive fluid to the blades of the wheel and a stationary blade carrying element removably mounted on the casing and surrounding said drum and capable of being altered to accommodate blades of various lengths.

2. A turbine comprising a casing provided with an admission and an exhaust port, a separately formed and removable initial stage comprising impulse blades and coöperating expansion nozzles, and separately formed low pressure sections communicating therewith and capable of being removed from the turbine casing for the purpose of varying the capacity of the turbine.

3. In combination in a turbine, a casing, a rotor element comprising a cylindrical blade-carrying drum, a blade-carrying wheel, and a stationary blade-carrying element removably mounted on the casing and surrounding said drum and capable of being altered to accommodate blades of various lengths.

1,061,671. LIGHTNING-ARRESTER. JOHN D. HILLIARD, Jr., and CHARLES E. PARSONS, Glens Falls, N. Y. Filed Jan. 29, 1906. Serial No. 298,439. (Cl. 175—30.)

1. The combination with a three conductor electrical circuit, of three bridge circuits connecting the three main conductors to a common point, an arrester and a switch in each bridge circuit, an adjustable resistance shunted by a gap in each bridge, and a connection from the said common point through an arrester to ground, whereby any one of the phases or conductors can be disconnected without disconnecting the others and a balance is maintained under normal conditions.



2. A protective system for multiphase circuits comprising the following instrumentalities; a bridge circuit from each conductor to a point common to all of them, a switch, and a high potential discharge means in each bridge between its conductor and a common point, and separate high potential discharge means connected between said common point and the ground.

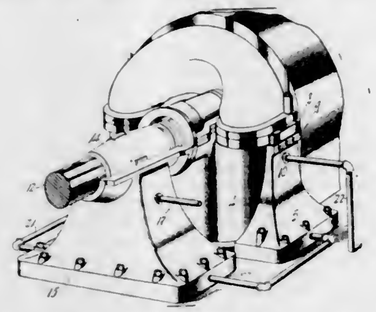
3. A protective system for multiphase circuits comprising the following instrumentalities; line conductors carried on insulators, separate insulators associated with each line conductor, a switch, a high potential discharge means and a resistance carried on said associated insulators, a bridge wire from each of the line conductors through its switch, discharge means, and resistance, to a common point; and a separate high potential discharge means connected between said common point and the ground, the switch connected with each bridge wire arranged to be accessible and movable independently of the other switches, whereby any one or more phases can be disconnected from ground, a balance being maintained under normal conditions.

4. The combination with a three-conductor electrical circuit, of three bridge circuits connecting the three main conductors to a common point, an adjustable resistance shunted by a gap in each bridge, and a connection through an adjustable gap from the common point to ground, substantially as described.

5. A protective system for multi-phase circuits comprising the following instrumentalities; a bridge circuit from each conductor to a point common to all of them, high potential discharge means and a resistance in each bridge between its conductor and the common point, and separate high potential discharge means connected between said common point and the ground, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,061,672. SUPPORTING MEANS FOR TURBINES. FRANCIS HODGKINSON, Edgewood Park, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 30, 1910. Serial No. 579,788. (Cl. 121—58.)



1. In combination with the rotor of a turbine, a shaft coupled to the rotor, a supporting pedestal for said shaft, supporting pedestals for the turbine and means for maintaining said pedestals at an approximately equal temperature.

2. In combination with the rotor of a turbine, a shaft coupled to the rotor, supporting pedestals for the rotor, a supporting pedestal for said shaft and means for maintaining said pedestals at approximate constant temperatures.

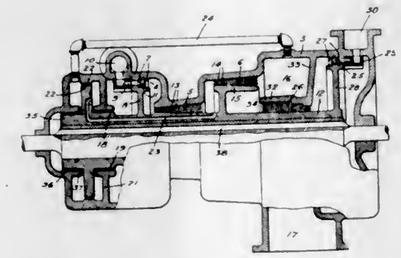
3. In combintion with the rotor of a turbine, a shaft coupled to the rotor, a supporting pedestal for the shaft, supporting pedestals for the rotor and means for equalizing the temperatures of said pedestals and for maintaining them at approximately equal temperatures.

4. In combination with a turbine and a shaft coupled to the turbine rotor, a bearing for the shaft, a bearing support provided with an interior chamber and a passage between said chamber and said bearing, independently formed supports for the turbine provided with interior chambers and a lubricator circulating system for delivering lubricant to the chambers provided in said supports.

5. In combination with a turbine, and a shaft coupled to the turbine rotor, a supporting pedestal for said shaft provided with an interior chamber, supporting pedestals for the turbine provided with interior chambers and means for circulating a cooling medium through said chambers.

[Claims 6 to 10 not printed in the Gazette.]

1,061,673. MARINE TURBINE. FRANCIS HODGKINSON, Edgewood Park, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 24, 1910. Serial No. 583,643. (Cl. 121—58.)



1. A reversing turbine comprising an ahead portion and a reversing portion located at apposite ends of the turbine, and means located at one end of the turbine for balancing the longitudinal thrust of both portions.

2. A reversing turbine comprising an ahead portion and a reversing portion located at opposite ends of the turbine, an exhaust passage located near one end of the turbine casing and common to both portions and means located at the other end of the turbine for balancing both portions.

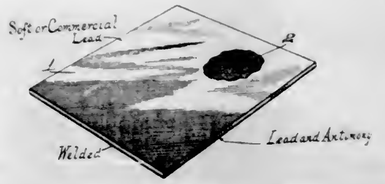
3. A reversing turbine comprising an ahead portion and a reversing portion, an exhaust passage common to both portions and located near one end of the turbine and means for balancing both portions located adjacent to the inlet end of the ahead portion.

4. A reversing turbine comprising an ahead and a reversing portion through which the working fluid flows inwardly in opposite directions, and means located adjacent to the inlet end of the ahead portion of the turbine for balancing the longitudinal thrust of both portions.

5. A reversing turbine comprising an ahead and a reversing portion located at opposite ends of the turbine and through which the working fluid flows inwardly in opposite directions, and balancing dummies for both portions located adjacent to each other and at the inlet end of the ahead portion.

[Claims 6 to 12 not printed in the Gazette.]

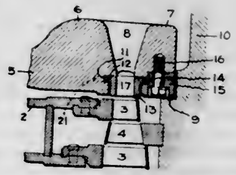
1,061,674. ROLLED METAL. EDWARD R. HOYT, St. Louis, Mo., assignor to Hoyt Metal Company, St. Louis, Mo., a Corporation. Filed June 29, 1908. Serial No. 440,887. (Cl. 29—181.)



1. A rolled metal sheet for tanks or vats, comprising a thick inner layer of commercial lead, and a thin outer alloy layer containing lead and antimony, the latter being at least two per cent. of the whole of said alloy layer.

2. A rolled metal sheet for tanks and vats, comprising a thick inner layer of commercial lead, and a thin outer alloy layer containing lead and antimony, the latter being from two to twenty per cent. of the whole of said alloy layer.

1,061,675. DIAPHRAGM AND NOZZLE CONSTRUCTION FOR TURBINES. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 18, 1911. Serial No. 666,549. (Cl. 121—57.)



1. A diaphragm for a turbine comprising a body portion and a peripheral portion connected thereto, a detachable nozzle comprising inner and outer members with partitions between forming passages, and a clamping ring separate from the nozzle for securing it to the diaphragm.

2. A diaphragm for a turbine comprising a cast metal body portion and a peripheral portion between which the elastic fluid flows, means connecting said portions, a detachable nozzle located on one side of the diaphragm which is provided with a peripheral shoulder, means for securing the inner portion of the nozzle to the body of the diaphragm, means engaging the shoulder for securing the outer portion of the nozzle to the said peripheral portion of said diaphragm, and retaining devices that pass through the last named means into said peripheral portion.

3. A diaphragm for a turbine comprising a body portion and a peripheral portion separated by an annular space through which steam flows, ribs formed integral with both portions for uniting them, a nozzle which registers with said annular space and receives steam therefrom, an annular shoulder carried by the body of the diaphragm for supporting one side of the nozzle, and a detachable shouldered ring carried by said peripheral portion for supporting the other side of said nozzle.

4. A diaphragm for a turbine comprising body and peripheral portions between which the steam flows, a nozzle that has surface engagement with both of said portions, a shoulder between the nozzle and one of said diaphragm portions, a detachable ring that is secured to the other portion of said diaphragm, and a shoulder between the ring and the nozzle.

5. In a turbine, the combination of a bucket wheel, a shouldered casing therefor, a diaphragm, a nozzle for discharging steam against the buckets, and a ring which is located between the diaphragm and the shoulder on the cas-

ing and transmits the thrust on the diaphragm to said shoulder and which also engages and holds said nozzle in place.

[Claims 6 to 11 not printed in the Gazette.]

1,061,676. ROLLING-MILL GUIDES. JULIAN KENNEDY, Pittsburgh, Pa. Filed Dec. 5, 1911. Serial No. 664,114. (Cl. 80—48.)



1. A rolling mill feed table having a sliding longitudinal guide, screws arranged to effect a lateral movement of said guide, and actuating mechanism for driving the screws, said actuating mechanism being substantially parallel with the length of the guide, substantially as described.

2. A rolling mill feed table having a longitudinal guide mounted to move transversely of the table, a screw arranged to effect the transverse movement of the guide, and rack and pinion mechanism for actuating the screw, the racks extending in the direction of the length of the table and adjacent to the side thereof, substantially as described.

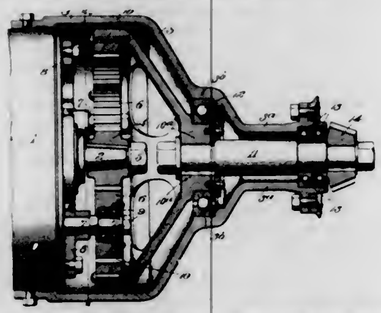
3. A feed table having a transversely movable longitudinal guide, a screw connected to each end portion of the guide to effect the transverse movement thereof, a pinion on the screw shaft, and a rack for actuating the pinion, said rack extending lengthwise of the table, substantially as described.

4. A rolling mill feed table having rollers, longitudinal guides mounted to move transversely of the rollers toward and away from each other, transversely arranged screws connected to said guides, pinions on the shafts of said screws, and racks engaging said pinions, said racks extending longitudinally of the table and adjacent to the sides thereof, substantially as described.

5. A rolling mill feed table having longitudinally extending guides mounted to move transversely of the table toward and away from each other, screws for effecting the movement of the guides, a pinion on the shaft of each screw, racks engaging said pinions to operate the screws of one guide, and other racks engaging other pinions to operate the screws of the other guide, said racks extending longitudinally of the table, substantially as described.

[Claim 6 not printed in the Gazette.]

1,061,677. TRANSMISSION-SPEED-REDUCING GEARING. ARTHUR KING, St. Louis, Mo. Filed Dec. 21, 1911. Serial No. 667,149. (Cl. 74—7.)



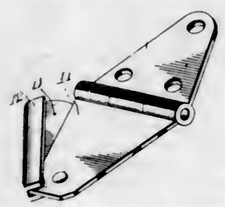
1. In a transmission gearing, the combination with a driving shaft, of a gear wheel mounted on said shaft and rotatable therewith, an internal gear surrounding said gear wheel and having its hub to one side thereof, a shaft having connection with said internal-gear-hub and adapted to be driven by said internal gear, a stationary pinion-supporting ring mounted in operative position relatively to said gear-wheel, a plurality of pinion-supporting studs mounted on said ring and immovable about said driving shaft, a plurality of pinions rotatably mounted on said studs and interposed between, and adapted to coöperate and mesh with, said gear-wheel and said internal gear, said pinions being of the same diameter with each other, but varying in diameter relatively to said gear-wheel, and a housing surrounding said gearing and adapted to provide a bearing for said hub and for the other end of said driven shaft; substantially as described.

2. In a transmission gearing, the combination with a driving shaft, of a gear wheel mounted on said shaft and rotatable therewith, an internal gear surrounding said gear wheel, and having its hub to one side thereof, a shaft having connection at one end with said internal-gear-hub and adapted to be driven by said internal gear, a stationary pinion-supporting ring mounted in operative position relatively to said gear-wheel, a plurality of pinion-supporting studs mounted on said ring and immovable about said driving-shaft, a plurality of pinions rotatably mounted on said studs and interposed between, and adapted to coöperate and mesh with, said gear-wheel and said internal gear, and a housing surrounding said gearing and adapted to provide a bearing for said hub and for the other end of said driven shaft; substantially as described.

3. In a transmission gearing, the combination with a driving shaft, of a gear-wheel mounted on said shaft and rotatable therewith, an internal gear surrounding said gear-wheel and having its hub to one side thereof, a shaft having connection at one end with said internal-gear-hub and adapted to be driven by said internal gear, a stationary pinion-supporting ring mounted in operative position relatively to said gear-wheel, a plurality of pinion-supporting studs mounted on said ring and immovable about said driving-shaft, a plurality of pinions rotatably mounted on said studs and interposed between, and adapted to coöperate and mesh with, said gear-wheel and said internal gear, said pinions being of the same diameter with each other, but varying in diameter relatively to said gear-wheel, and a housing surrounding said gearing and adapted to provide a bearing for said hub and for the other end of said driven shaft; substantially as described.

4. In a transmission gearing, the combination with a driving shaft, of a gear-wheel mounted on said shaft and rotatable therewith, an internal gear surrounding said gear-wheel and having its hub to one side thereof, a shaft connected at one end to said internal-gear-hub and adapted to be driven by said internal gear, a support permanently stationary and fixed in position relatively to said driving-shaft, a pinion-supporting ring fastened to said support in operative position relatively to said gear-wheel, a plurality of pinion-supporting studs mounted on said ring and immovable about said driving shaft, a plurality of pinions rotatably mounted on said studs and interposed between, and adapted to coöperate and mesh with, said gear-wheel and said internal gear, said pinions being of the same diameter with each other, but varying in diameter relatively to said gear-wheel, a housing fixedly connected to said support and surrounding said gearing and adapted to provide a bearing for said hub and for the other end of said driven shaft; substantially as described.

1,061,678. HINGE. JOSEPH T. LAPACEK, Schuyler, Nebr. Filed May 22, 1912. Serial No. 699,050. (Cl. 16—106.)

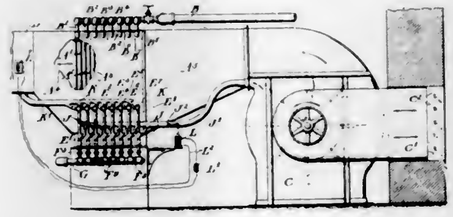


1. A hinge comprising a pair of coöperating leaves one of which is provided with means for rigidly securing same to a door frame, and a link having one end pivotally connected to the free end of the other leaf and its other end provided with means for pivotal connection to a door, whereby the latter may be adjusted in a plane at right angles to the plane of movement of said last named leaf.

2. A hinge comprising a pair of coöperating leaves, one of which is provided with means for rigidly securing same to door frame, a link pivotally secured to the free end of the other leaf, and means for limiting the pivotal movement of said link in either direction.

3. A hinge comprising an attaching leaf, a second leaf pivoted to the first leaf and a third leaf which is an attaching leaf, pivoted to the second leaf and movable with respect thereto in a plane at an angle to the plane of movement of the second leaf with respect to the first leaf.

1,061,679. HOT-BLAST HEATING SYSTEM. HARRY C. MALLORY, New York, N. Y. Filed Mar. 20, 1907. Serial No. 363,460. (Cl. 237—2.)



1. In a hot blast heating system, a heater, a thermostatic valve mechanism directly controlling the flow of the heating fluid through the heater, a fan for moving air through the heater, a pipe arranged to direct a stream of the air set in motion by the fan against the thermostatic valve mechanism, and means for varying the flow of air through said pipe in response to variations in the temperature produced by said heater.

2. In combination, a steam heater, comprising a plurality of sections, and a separate thermostatically actuated valve for controlling the escape of water of condensation from each section, the thermostatic valve mechanism being so set that different valves open at different temperatures, and the parts being so arranged and proportioned that the thermostatic mechanism of each valve will be heated to the valve closing temperature by steam passing through the port controlled by it.

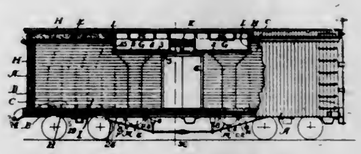
3. In combination, a steam heater comprising a plurality of sections, a separate thermostatically actuated valve for controlling the escape of water of condensation from each section and means for causing a cooling fluid to flow along the thermostatic mechanism of all the valves, the different valves being set to open at different temperatures of said cooling medium and the parts being so arranged and proportioned that the thermostatic mechanism of each valve will be heated to the valve closing temperature by steam passing through the port controlled by it.

4. In combination, a steam heater comprising a plurality of sections, a separate thermostatically actuated valve for controlling the escape of water of condensation from each section, means for causing a cooling fluid to flow along the thermostatic mechanism of all the valves, the different valves being set to open at different temperatures of said cooling medium and the parts being so arranged and proportioned that the thermostatic mechanism of each valve will be heated to the valve closing temperature by steam passing through the port controlled by it, and means for varying the rate of flow of said cooling medium in response to variations in the temperature produced by said heater.

5. In combination, a heater comprising sections, a controlling valve for each section, thermostatic actuating mechanism for the valves including an expansible member and a surrounding casing for each valve, said casings each having inlet and outlet ports, an air moving device for moving air by said heater and a conduit for conveying a portion of the air set in motion by said device to the inlet ports of said casings.

[Claims 6 to 11 not printed in the Gazette.]

1,061,680. REFRIGERATOR-CAR. JAMES P. ELMER, St. Paul, Minn., assignor to Moore Patent Car Company, a Corporation of South Dakota. Filed Nov. 30, 1909. Serial No. 530,634. (Cl. 62—12.)



1. A refrigerator car, comprising, in combination, a suitable car body having a provision or lading chamber, an ice bunker substantially midway between its ends extending longitudinally and horizontally below the roof of the entire inside width of said body at that point and occupying substantially the central one-third of said car body, said ice bunker being provided with upright ends having horizontal openings into said provision or lading chamber and with a central longitudinal down draft port opening into said provision or lading chamber and remote from the ends of said bunker, a plurality of drip pans fastened directly under said ice bunker and eath other, drain pipes from said pans leading downward in the walls of the car, a drain trap tank below the floor of the car into which said drain pipes lead, and hatchways entering said ice bunker through the roof of said car.

2. In a refrigerator car, a car body, an ice bunker therein, a drip pan for said ice bunker, a drain tank beneath the car and connected with said drip pan and ice bunker, a valve for draining said tank and means for automatically closing said valve due to the motion of the car.

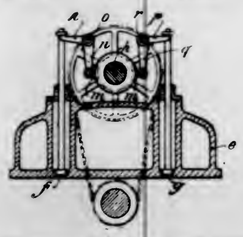
3. A refrigerator car, comprising, in combination, a suitable car body having a provision or lading chamber, an ice bunker substantially midway between its ends, extending horizontally along the roof of said body and the entire inside width of the car at that point, said ice bunker being provided with openings into said provision or lading chamber, hatchways entering said ice bunker through the roof of the car, circulating air space passageways through the ceiling, walls, and under the floor of said car body and connecting said provision or lading chamber with said ice bunker, and drain pipes leading from said ice bunker downward through the side walls and inside of the side sills to the outside of said car body, and a brine tank fastened below the floor of said car body and extending the entire width of said body into which the drain pipes on either side of the car drip, substantially as set forth.

4. A refrigerator car, comprising, in combination, a car body having a lading chamber extending completely to both extremities thereof, an ice bunker remote from both ends of the car body and extending along the ceiling thereof with its floor positioned overhead and sloping down toward both sides of the car body from near the center thereof and formed with a longitudinal air port near the center thereof opening down into the lading chamber, and with upright ends having horizontal openings into the lading chamber, drains leading down below the car body from the floor of the bunker, a brine tank into which said drains empty, a valve to drain said tank and means for causing said valve to close by the motion of said car.

5. In a refrigerator car, a car body, an ice bunker therein, a drip pan for said bunker, a drip trap tank beneath the car and connected with said drip pan, said tank consisting of a metal shell extending across the width of the car and having a drain, a valve in said drain adapted to close automatically, and means for operating said valve.

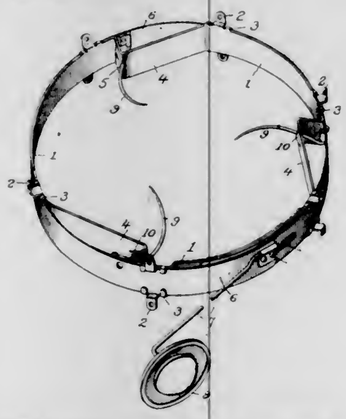
[Claims 6 to 8 not printed in the Gazette.]

1,061,681. VALVE-GEAR FOR TWO-STAGE COMBUSTION-ENGINES. KARL FEILNER, Nuremberg, Germany. Filed Nov. 26, 1910. Serial No. 594,252. (Cl. 123—90.)



In a two-stage combustion engine, the combination with a cylinder cover, of a cam disk shaft disposed near said cover at right angles to its axis and adapted to be driven at half the speed of the crankshaft, even numbers of air valves disposed in pairs in said cover in parallel planes at right angles to and on both sides of said cam disk shaft, even numbers of hydrocarbon valves similarly disposed in said cover, cam disks on said cam disk shaft having each two opposite cams for simultaneously actuating the two valves of the corresponding pair, and means for transmitting the motion from said cam disks to said air valves and hydrocarbon valves respectively.

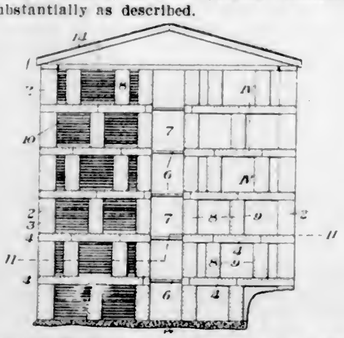
1,061,682. HAT-FASTENER. ERNEST L. MCHENRY, Chicago, Ill. Filed Mar. 8, 1911. Serial No. 613,196. (Cl. 132—25.)



A lady's hat fastener, comprising in combination a fixed annulus adapted to be secured in the interior of the hat, a movable annulus adapted to slide upon the fixed annulus, curved prongs pivotally connected to one annulus and having sliding and supporting engagement with the other annulus by a series of integrally formed inset bends of an angular form in said other annulus and of a width equal to said other annulus, the inner or apex portion of each bend having a guiding and supporting orifice for the shank of one of the curved prongs aforesaid to provide a support for the middle portion of said prongs against a movement of the hat in windy weather, and an operating rod connected to the movable annulus for manipulation of the same from the exterior of the hat.

1,061,683. GRAIN-CRIB. HARRY B. NAYLOR, Pittsburgh, Pa., assignor to The National Fire Proofing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 24, 1912. Serial No. 727,564. (Cl. 72—6.)

1. A grain crib having a wall composed of separated horizontal courses of tiles, and spaced vertical tiles between said courses and supporting the same, the open spaces between the courses intermediate of the vertical tiles having a plurality of spaced parallel ventilator members; substantially as described.



2. A grain crib, having a wall composed of separated horizontal courses of tiles, and spaced vertical tiles between said courses and supporting the same at the joints thereof, the open spaces between the courses intermediate of the vertical tiles having a plurality of spaced parallel ventilator members; substantially as described.

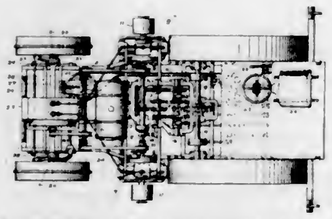
3. A grain crib having a wall composed of separated horizontal courses of tiles, and spaced vertical tiles between said courses and supporting the same at the joints thereof, the open spaces between the courses intermediate of the vertical tiles having a plurality of spaced parallel ventilator members, the vertical tiles between adjacent horizontal courses being in staggered relation except at the corners of the building and adjacent to door openings in the wall, where they are in line; substantially as described.

4. A grain crib having a wall composed of separated horizontal courses of tiles, and spaced vertical tiles between said courses and supporting the same, the open spaces between the courses intermediate of the vertical tiles having a plurality of spaced parallel ventilator members, the vertical tiles having corner ribs or flanges to retain said members; substantially as described.

5. A grain crib having a wall composed of separated horizontal courses of tiles, and spaced vertical tiles between said courses and supporting the same, the open spaces between the courses intermediate of the vertical tiles having a plurality of spaced angular ventilator members; substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,061,684. TRACTION-ENGINE. NELS H. NELSON, Willmar, Minn. Filed Nov. 6, 1911. Serial No. 658,768. (Cl. 21—114.)



1. The combination, with a frame, having rear traction wheels and a source of motive power mounted on said frame, of an equalizing bar, rotating, vertically-sliding rods having loose connections with said bar, forward wheels having their axles secured to said rods and a steering mechanism attached to said rods for rotating them.

2. A machine of the class described, comprising a frame having rear traction wheels, a source of motive power mounted on said frame and operatively connected with said traction wheels, forward wheels for said frame, an equalizing bar pivotally supported above the level of said forward wheels, means connecting said equalizing bar with said wheels and having a rotary and vertical movement with said wheels, and a steering mechanism connected with said forward wheels.

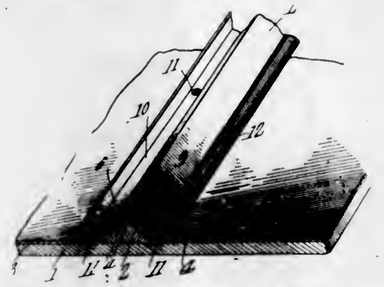
3. A machine of the class described comprising a frame having rear traction wheels and a source of motive power mounted on said frame and operatively connected with said rear wheels, said frame being composed of side rails and cross bars between them, hangers depending from said side rails, rods having bearings in said hangers and having a rotary and vertical movement therein, forward wheels having axles secured to said rods, an equalizing bar pivoted in said frame and connected with said rods, and a steering mechanism connected with said rods.

4. A machine of the class described comprising a frame having forward and rear wheels, a source of motive power mounted on said frame and operatively connected with said rear wheels, a rear axle having a raised middle portion between said rear wheels, said frame having a raised or arched portion between said forward wheels, an equalizing bar pivoted in the arched portion of said frame, means operatively connecting said bar with said forward wheels, said means permitting the vertical movement of said wheels and the oscillation thereof to steer the machine, and a steering mechanism for said wheels.

5. A traction engine comprising a frame having forward and rear carrying wheels, a source of motive power operatively connected with said rear wheels, a centrally pivoted equalizing bar, and vertically movable means connecting the ends of said equalizing bar with said forward wheels.

[Claims 6 to 9 not printed in the Gazette.]

1,061,685. ROOFING. GEORGE NEWTON, Odessa, N. Y. Filed Oct. 30, 1911. Serial No. 657,634. (Cl. 108—7.)

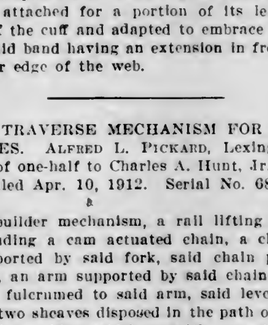


A roof comprising sheathing, a batten of triangular cross section secured thereto, roofing material having its edge portions disposed against the sides of the batten and extending to the apex thereof, and a cap fitting over batten and secured to the sheathing adjacent to the base of the batten, the edges of the cap being turned in and over the fastening means to shield the same.

1,061,686. WRIST AND SLEEVE PROTECTOR. PERRY JOHN NICHOLS, Ames, Colo. Filed Oct. 3, 1911. Serial No. 652,552. (Cl. 2—95.)

1. A wrist and sleeve protector comprising a split cuff, means for drawing the margins of the cuff together, and an elastic circular band attached along a portion of its length to the inner face of one extremity of the cuff and adapted to embrace the wrist of a wearer.

2. A wrist and sleeve protector comprising a split cuff larger at one end than at the other, parallel lacing hooks disposed upon the margins of the cuff, a lacing cord engaging said hooks for drawing the margins together, means for independently tightening the small extremity of the cuff around the wrist of a wearer, and an elastic band attached to the small end of the cuff along a portion of its length but disconnected from the margins of the cuff and adapted to tightly embrace the wrist of the wearer.



3. A wrist and sleeve protector consisting of a split cuff larger at one end than at the other and providing parallel marginal portions, a loose connecting web attached to the inner faces of said marginal portions inward from the marginal edges of the cuff and connecting the margins of the cuff, lacing hooks disposed upon both margins of the cuff, outward of the point of attachment of the web, a lacing cord engaging said hooks, means for independently tightening the small extremity of the cuff around the wrist of a wearer, and an elastic circular band attached along a portion of its length to the inner extremity of the cuff and adapted to embrace the wrist of the wearer, said band projecting beyond the adjacent edge of the cuff.

4. A wrist and sleeve protector consisting of a split cuff larger at one end than at the other and providing two parallel margins, parallel lacing hooks disposed on said margins, a lacing cord engaging the hooks, a loose connecting web attached to the inside faces of said margins and forming a shield preventing the entrance of particles between the overlapping margins of the cuff, a tab attached at one end to one of the margins of the cuff at the small end of the latter, a loop attached to the tab, a hook upon the back of the cuff with which said loop is adapted to engage to draw the small end of the cuff tightly around the wrist of a wearer, and an elastic band attached to the inside of the cuff at its small end, a portion of the band being unattached to the cuff.

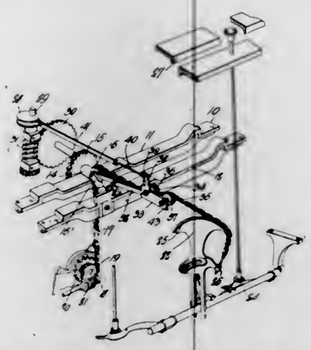
5. A wrist and sleeve protector comprising a split cuff, means for drawing the marginal edges of the cuff together, a web attached to the inner face of the cuff adjacent to but spaced from the margins, and an elastic circular band attached for a portion of its length to one extremity of the cuff and adapted to embrace the wrist of a wearer, said band having an extension in front attached to the upper edge of the web.

1,061,687. TRAVERSE MECHANISM FOR SPINNING-MACHINES. ALFRED L. PICKARD, Lexington, N. C., assignor of one-half to Charles A. Hunt, Jr., Lexington, N. C. Filed Apr. 10, 1912. Serial No. 689,942. (Cl. 118—1.)

1. In a builder mechanism, a rail lifting means, said means including a cam actuated chain, a chain fork, a sheave supported by said fork, said chain passing over said sheave, an arm supported by said chain fork, a bell crank lever fulcrumed to said arm, said lever being provided with two sheaves disposed in the path of said chain, and means for rocking said lever with respect to said arm to vary the traverse.

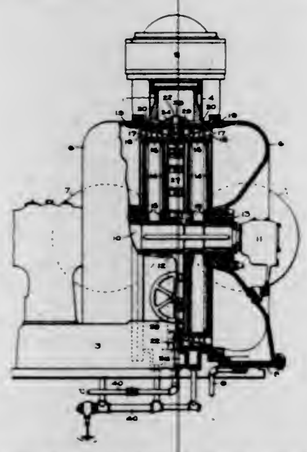
2. In a builder mechanism, a rail lifting means, said means including a cam actuated chain, a chain fork, a sheave supported by said fork, said chain passing over said sheave, an arm supported by said chain fork, a bell crank lever fulcrumed to said arm, said lever being provided with two sheaves disposed in the path of said chain,

and means actuated by the rail lifting mechanism for rocking said lever with respect to said arm to vary the traverse.



3. In a builder mechanism, a rail lifting means, said means including a cam actuated chain, a chain fork, a sheave supported by said fork, said chain passing over said sheave, an arm supported by said chain fork, a bell crank lever fulcrumed to said arm, said lever being provided with two sheaves disposed in the path of said chain, and cam means actuated by the rail lifting mechanism for rocking said lever with respect to said arm to vary the traverse.

1,061,688. TURBINE. RICHARD H. RICE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 22, 1909. Serial No. 518,925. (Cl. 121—57.)



1. A turbine having an annular hollow casing, walls that extend from the outer portion of the casing toward the shaft and divide the interior thereof into main and auxiliary steam chests which taken together form an annulus, a valve means in at least one of said walls for controlling the flow of steam between the chests, an annular nozzle that is surrounded by said chests and is fitted steam tight to the inner ends of said dividing walls, inlet and outlet conduits, and a rotor that is acted upon by the steam from the nozzle.

2. A turbine having a hollow casing forming an annular steam chest, means supplying steam to said chest, a detachable nozzle mounted on the chest and forming a wall thereof, said nozzle discharging steam laterally in two directions, walls on the opposite sides of the casing that divide the chest into two parts, said walls making steam tight connections with the casing and nozzle, a rotor having two sets of buckets disposed one on each side of the nozzle and receiving steam therefrom, and a valve means controlling the passage of steam from the main to the auxiliary chest.

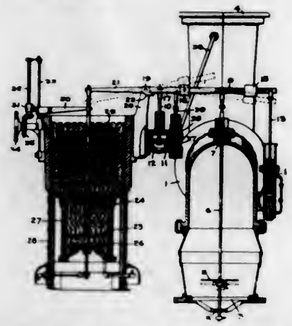
3. A turbine having an annular hollow casing forming a steam chest, the interior of said chest having a substantially rectangular cross-section with parallel side walls and being provided with openings in its bottom, an annular nozzle concentric with said steam chest, provided with slots registering with said openings and having passages running laterally in opposite directions, and a wheel on each side of said nozzle having buckets in line with said passages.

4. A turbine having a shaft, a hollow annular casing concentric with said shaft and having a steam chest formed therein, an annular nozzle fitted to the inner surface or bore of the casing and discharging steam received from said chest laterally in both directions, rings fitted to the bore of the casing at each side of the nozzle, a bucket wheel mounted on the shaft at each side of said nozzle, intermediate buckets carried by the rings, and heads inclosing said wheels which are secured to the casing and hold said rings and nozzle against lateral movement.

5. A turbine having an annular hollow casing forming a main steam chest, means supplying steam to the upper portion of said chest, an annular nozzle mounted on the inner wall of the chest, a portion of said nozzle receiving steam from said chest, an auxiliary steam chest arranged at the opposite or bottom portion of the main chest for supplying steam to the remainder of the nozzle, and valves in the walls of the auxiliary chest for controlling the flow of steam between the two chests.

[Claims 6 to 12 not printed in the Gazette.]

1,061,689. GOVERNING MECHANISM FOR CENTRIFUGAL AIR-COMPRESSORS. RICHARD H. RICE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 2, 1911. Serial No. 652,284. (Cl. 230—24.)

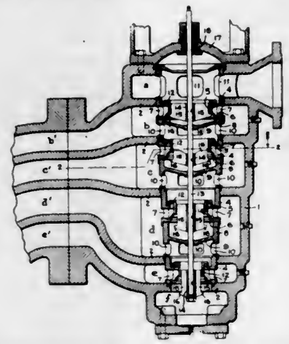


1. The combination with an air compressor, of a motor for driving it, a regulator for the motor having a movable member, a float arranged in the stream of air passing through the compressor, a floating lever, a rod connecting the float to the lever, a fluid motor having a movable member, a pilot valve for the fluid motor having a stem connected to the floating lever, a connection between the movable member of the fluid motor and the floating lever, lever means for controlling the movable member of the regulator and comprising lever arms connected to said movable member, other lever arms pivoted on the same axis as the first arms but movable independently thereof in one direction, a connection between said means and the floating lever, and means for limiting the movement of the movable member of the regulator in one direction.

2. The combination with an air compressor, of a motor for driving it, a regulator for the motor having a movable member, a float located in the stream of air passing through the compressor, a floating lever, a rod connecting the float to the lever, a fluid motor having a movable member, a pilot valve for the fluid motor having a stem connected to the floating lever, a connection between the movable member of the fluid motor and the floating lever, a cross-head connected to the floating lever adjacent to the last connection, levers pivoted adjacent to the cross-head and connected thereto, other levers pivoted on the same axis as the first levers and connected thereto, said sets of levers being movable independently of each other to a limited extent, and means connecting the last named levers to the movable member of the regulator.

3. The combination with an air compressor, of a motor for driving it, a regulator for the motor having a movable member, a float in the intake of the compressor, a floating lever, a rod that extends through the wall of the intake and connects the float to the lever intermediate its ends, an adjustable counterweight on one end of the lever, a dash-pot connected to said end of the lever, a fluid actuated motor having its piston and pilot valve connected to the lever adjacent the other end, a cross-head connected to said other end, levers pivoted adjacent to said end of the floating lever, extending in the direction of said lever and connected to the cross-head, and other levers pivoted on the same axis as the first levers and extending away from the floating lever, there being lugs on the last named levers that engage the arms of the first levers to cause said sets of levers to move together under certain conditions and also to permit movement of the first levers independently of the second under other conditions.

1,061,690. VALVE FOR TURBINES. RICHARD H. RICE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 9, 1912. Serial No. 730,326. (Cl. 121—118.)



1. The combination with a casing having a plurality of partitions dividing it into chambers, of a plurality of annular valves controlling openings in said partitions, a steam supply pipe opening into an end chamber, means for lifting said valves in succession, and means whereby the steam can pass through one valve after another in series, as they are successively opened.

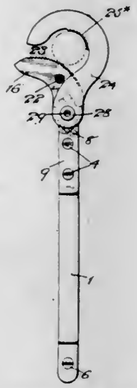
2. The combination with a valve casing having a plurality of partitions dividing it into chambers and containing alined openings, of a ported bushing for said opening in each chamber, having seats for a double valve, and a ported cylinder below said bushing provided with a diaphragm.

3. The combination with a valve casing having a plurality of partitions containing openings progressively decreasing in diameter, of bushings fitting respective openings and having interior valve seats, ports in said bushings between said seats, and a ported cylinder extending from each bushing to the opening in the next partition below, and provided with a diaphragm above its ports.

4. The combination with a valve casing having a plurality of partitions containing openings progressively decreasing in diameter, of a tier of ported bushings in said openings provided with valve seats above and below said ports, annular valves on said seats, ported cylinders below said bushings provided with diaphragms, and a stem for operating said valves.

5. The combination with a valve casing having a plurality of partitions containing openings progressively decreasing in diameter, of a tier of ported bushings in said openings provided with valve seats above and below said ports, annular valves on said seats, ported cylinders below said bushings provided with diaphragms, a stem for operating said valves, and valve lifters on said stem positioned to act on said valves in succession.

1,061,691. WRENCH. EDMUND K. RIGHTER, Newark, N. J. Filed Feb. 24, 1912. Serial No. 679,580. (Cl. 81—98.)



1. A pipe wrench comprising a handle, an offset head, a stationary jaw, a movable jaw and means for holding the parts in assembled adjustment, the handle and stationary jaw being independently reversible for varying laterally the position of the stationary jaw in the wrench.

2. A pipe wrench comprising a handle, a head secured thereto, a stationary jaw interlocked with said head, a movable jaw and means for holding the parts in assembled adjustment, the stationary jaw and the movable jaw both being independently reversible.

3. A pipe wrench comprising a handle, a head secured thereto, a stationary jaw interlocked with said head, a movable jaw and means for holding the parts in assembled adjustment, the stationary jaw and the movable jaw both being independently reversible and the stationary jaw being rotatively adjustable with respect to said head.

4. A pipe wrench comprising a handle, an offset head secured thereto, a stationary jaw interlocked with said head, a movable jaw and means for holding the parts in assembled adjustment, the stationary jaw and the movable jaw both being independently reversible and the stationary jaw being also reversible for varying its lateral position in the wrench.

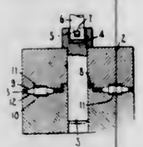
5. A pipe wrench comprising a handle, an offset head secured thereto, a stationary jaw interlocked with said head, a movable jaw and means for holding the parts in assembled adjustment, the stationary jaw and the movable jaw both being independently reversible and the stationary jaw being rotatively adjustable and reversible for varying its lateral position in the wrench.

[Claims 6 to 19 not printed in the Gazette.]

1,061,692. GRINDING-MACHINE. WILHELM A. SCHMIDT, Ilion, N. Y., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed July 6, 1912. Serial No. 708,001. (Cl. 51—4.)

1. The combination of two co-axial grinding members having grinding surfaces facing each other, said grinding

surfaces being annularly disposed about the common axis of said members and each formed with a cross-section complementary to the longitudinal sections of the articles to be ground and such that, when said two members are in position facing each other, there is an annular space between them which in cross-section has boundary lines corresponding to those of the parts of said articles that are to be ground, and means for guiding said articles so as to maintain their longitudinal axes in fixed relation to said common axis of said members, the form of the parts being suitable for grinding articles having surfaces of revolution about longitudinal axes and each of varying radii at different points along its axis.



2. In a device for grinding articles having surfaces of revolution about longitudinal axes and each of varying radii at different points along its said axis, the combination of two co-axial plates having relative rotary motion, said plates having grinding surfaces annularly disposed about the axis of such motion and which in cross section are complementary in form to the longitudinal sections of the articles to be ground, and a disk between said plates and having a series of openings to guide said articles, each of said openings being formed approximately like the longitudinal section of one of said articles.

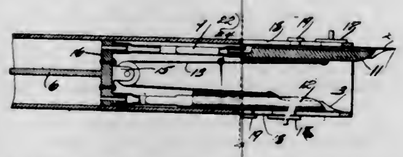
3. In a grinding or lapping device, the combination of two plates having coincident axes and having their adjacent surfaces formed for grinding pins each having a cylindrical middle portion and two tapered ends, and a separator disk having a series of radial openings adapted to guide said pins, each of said plates having an annular groove to clear said cylindrical middle portions.

4. In a grinding device, the combination of a lower grinding plate having an annular grinding surface and formed inside of said grinding surface with a flange which constitutes a dam, an axial hole through said plate, and an upper grinding plate having a coöperating annular grinding surface and having a spindle adapted to work in said hole, said dam acting to keep the abrasive from flowing into the bearing.

5. In a grinding or lapping device, the combination of two grinding members having coincident axes and having in their adjacent sides, annular surfaces for grinding elongated articles and having also grooves cut so as not to touch said articles at points in the length of the latter where no grinding is desired, and means for guiding said articles between said members.

[Claim 6 not printed in the Gazette.]

1,061,693. FOUNTAIN-PEN. DANIEL W. SCHNEBBE, New York, N. Y. Filed Mar. 4, 1912. Serial No. 681,476. (Cl. 120—49.)

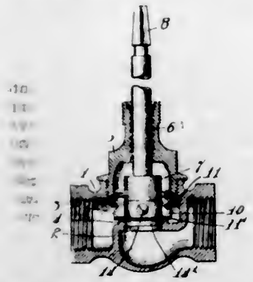


1. A fountain pen consisting of a casing, an ink reservoir within said casing, a pen carried by said casing and movable longitudinally thereof, and a flexible duct connecting said reservoir and said pen.

2. A fountain pen consisting of a casing, an ink reservoir within said casing, a pen carried by said casing and movable longitudinally thereof, and a flexible rubber tubing connecting said duct and said pen.

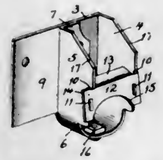
3. A fountain pen comprising a casing, a plurality of ink reservoirs within said casing, a plurality of pens carried by said casing, adapted for movement longitudinally thereof, and means connecting said pens adapted to move one of said pens into said casing when the other of said pens is moved to project beyond said casing.

1,061,694. VALVE-DRESSING TOOL. MORTIMER B. SKINNER, Wilmette, Ill. Filed July 9, 1909. Serial No. 506,710. (Cl. 90—12.5.)



In a valve dressing tool, the combination with a stock, of a cylindrical chuck member threaded to the lower end of said stock, said chuck member having a diametral slot in its lower end, a tool rigidly secured in said slot, a cylindrical centering cap for fitting over the lower end of said chuck member and having opposite slots for receiving the ends of the tool projecting from the chuck member, said chuck member having a peripheral groove and a set screw for engaging in said groove to hold said centering sleeve to said chuck member.

1,061,695. BED-RISER. FRANCIS EUGENE SLOAN, Baltimore, Md., assignor to The O. K. Manufacturing & Stamping Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 12, 1912. Serial No. 714,497. (Cl. 5—63.)



1. A bed riser having a front wall and two side walls; a stirrup carried by the said side walls and connecting the latter at their lower ends; a supporting flange extending laterally and beyond one side wall, and a plate extending between and connecting the said two side walls,—the lower edge of said plate being elevated with respect to the stirrup to enable the end of a stretcher tube to be inserted between said lower edge and stirrup.

2. A bed riser having a front wall, two side walls each of which latter has an overhanging shoulder on its rear edge; a stirrup connecting the side walls at their lower ends; a supporting flange and a plate also connecting the side walls and engaging the said overhanging shoulders on the rear edges of the latter,—said plate having its lower edge elevated with respect to the stirrup to seat on the upper side of a stretcher tube while the lower side of the tube is seated in the stirrup.

3. A bed riser having a front wall, two side walls each of which latter has an overhanging shoulder on its rear edge; a stirrup connecting the side walls at their lower ends; a supporting flange and a separate plate having one end secured to one side wall and its other end attached to the other side wall and the upper edge of the said plate being seated beneath the overhanging shoulders on the side walls while the lower edge thereof is provided with a curved notch which latter is elevated with respect to the stirrup.

4. A bed riser having a front wall, two side walls each having an overhanging shoulder and a lug on its rear edge; a stirrup connecting the lower ends of the side walls below the said lugs; a supporting flange and a plate having a flange to project between the side walls,—said plate being engaged by the overhanging shoulders and lugs on the edges of said side walls and the lower edge of the plate having a curved notch.

5. A bed riser for sustaining the ends of stretcher tubes having a front wall and two spaced apart side walls which latter have a crosswise connection at their lower ends to form a support for the bottom circumferential surface of a stretcher tube and said riser also having a supporting wall extending crosswise of and between the two side walls which supporting wall is elevated with respect to the lower crosswise connection so as to engage the upper circumferential surface of the stretcher tube.

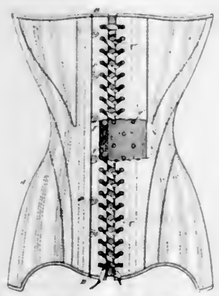
1,061,696. CONCEALED CIGAR HOLDER AND MOUTHPIECE. JOHN OSCAR SMITH, Moberly, Mo. Filed Aug. 24, 1912. Serial No. 716,854. (Cl. 131—52.)



1. In a cigar holder or mouth piece adapted to be concealed beneath the wrapper thereof and having a bore provided with threads to be engaged by the filler of the cigar, said bore terminating in a restricted portion, a cylindrical member of blotting paper arranged in the restricted portion and provided with an unobstructed passage.

2. In a cigar holder or mouth piece adapted to be concealed beneath the wrapper thereof and having a bore provided with threads to be engaged by the filler of the cigar, said bore terminating in a restricted portion, a cylindrical absorber arranged in the restricted portion and provided with an unobstructed passage.

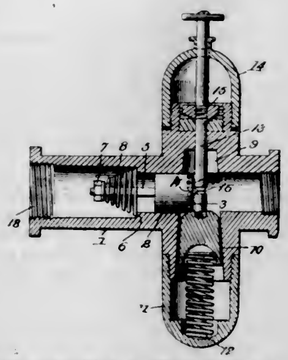
1,061,697. CORSET. MARGUERITE L. SOBRA, Chicago, Ill. Filed May 13, 1912. Serial No. 696,970. (Cl. 2—73.)



1. A corset comprising a body portion having fastening means permanently secured at one edge and a floating strip having permanent complemental fastening means and adjustably laced to the opposite edge of the body, said strip and edge to which it is laced being in substantial alinement and a shield formed by a pliant body detachably fastened at one edge directly to the inner side of the floating strip parallel with the strip, said shield extending across the lacing opening and underlapping but free from and unattached to the edge of the body to which the strip is laced, said shield forming a bridge across the lacing opening to prevent protrusion of the flesh of the wearer through between the lacing.

2. A corset comprising a body portion having fastening means permanently secured at one edge and a floating strip having permanent complemental fastening means and adjustably laced to the opposite edge of the body, said strip and the edge to which it is laced being in substantial alinement and a shield formed of heavy fabric having rubber incorporated therein and with ventilating apertures, said shield being secured at one edge directly to the inner side of the floating strip parallel with the strip and extending across the lacing opening and underlapping but free from and unattached to the edge of the body to which the strip is laced, said shield forming a bridge across the lacing opening to prevent protrusion of the flesh of the wearer through between the lacing.

1,061,698. VALVE. CORNELIUS SPILLAN, Steubenville, Ohio. Filed Apr. 3, 1912. Serial No. 688,260. (Cl. 137—4.)



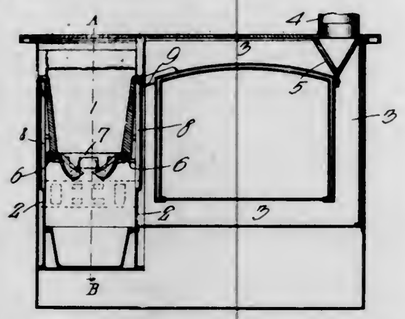
1. A valve comprising a fitting having a passageway therethrough and a bore disposed transversely of said passageway, a valve member mounted for movement in the passageway of the fitting, a valve member mounted for movement in the bore, said valve members adapted to engage each other to be retained in open positions when the first mentioned valve member is subjected to pressure, and means for automatically moving the valve members to closed positions when the pressure upon the first mentioned valve member is removed.

2. A valve comprising a fitting having a passageway therethrough and provided with a bore disposed transversely to the passageway, a valve member mounted for movement in the bore, means tending to move the said valve member to closed position, a valve member slidably mounted in the passageway in the fitting and adapted to engage the first mentioned valve member and hold it in open position, the last mentioned valve member having a closed end and being provided in its sides with openings that are within said bore when said valve member is in engagement with the first-mentioned valve member.

3. A valve comprising a fitting having a passageway therethrough and provided with a bore disposed transversely to the passageway, caps detachably mounted upon the fitting at the ends of the bore, a valve member slidably mounted in the bore, a spring interposed between one of the caps and the valve member and tending to hold the said valve member across the passageway in the fitting to close the passageway, a stem attached to the valve member and passing through one of the caps, said stem having a groove, a valve member slidably mounted in the passageway in the fitting and having a portion adapted to enter the groove in said stem and hold the first-mentioned valve member in open position, the second mentioned valve member having a closed end and openings in its sides that are within said bore when said valve member is in engagement with the first-named valve member, and a spring engaging

the second mentioned valve member and tending to hold the same away from the stem of the first mentioned valve member.

1,061,699. KITCHEN-RANGE. WILLIAM R. K. STANFORD, Lawley, Ala. Filed Dec. 18, 1911. Serial No. 666,413. (Cl. 126—1.)



1. In a stove, the combination with opposed partitions having inwardly directed top flanges, of a fire pot bearing downwardly on the flanges and supported thereby between the partitions, there being openings within the contacting portions of the flanges and fire pot and constituting nozzles, there being longitudinal depressions or channels within the partitions and extending from the openings downwardly to points below the fire pot.

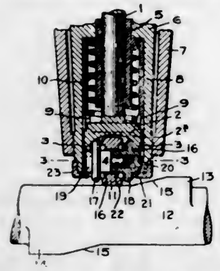
2. In a stove, the combination with oppositely disposed partitions having inwardly directed supporting flanges at their upper edges, of a fire pot interposed between the partitions and having outstanding flanges bearing downwardly on the flanges of the partitions, there being openings through the contacting flanges, said partitions having longitudinally extending depressions or channels extending from the openings in the flanges and downwardly to points below the fire pot to receive air from the ash chamber under the fire pot.

3. In a stove, oppositely disposed partitions constituting walls of an ash compartment, said partitions having inwardly directed top flanges, a fire pot having outstanding flanges supported by the flanges on the partitions, there being openings through the flange of one of the partitions and the adjacent flange of the fire pot, said partition having longitudinal depressions in one face thereof forming channels communicating with the openings in the flange and with the ash compartment below the fire pot, said fire pot having its outer walls converging downwardly to form an air space between the fire pot and the partitions, spaced ledges upon the partitions, and a grate supported by the ledges, there being air passages between the ledges, said longitudinal channels or depressions extending below the grate supporting ledges.

1,061,700. MEANS FOR TRANSMITTING MOTION. KARL STEINBECKER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 21, 1912. Serial No. 679,016. (Cl. 74—1.)

1. In a device of the character described, the combination of a driving member, a reciprocating means moving in a plane at an angle thereto, a roller that travels on the member, a pivot for the roller, a support for the roller that moves with said means, and a means moving with the roller that is arranged to roll on a surface of the support when the roller is subjected to axial thrust.

2. In a device of the character described, the combination of a driving member, a reciprocating means moving in a plane at an angle thereto, an inverted socket located at one end of the reciprocating means and having a curved surface, a roller located within the socket, a pivot for the roller that engages the socket, and one or more devices each having a surface of revolution arranged to engage with and roll on the curved surface of the socket when the roller is subjected to axial thrust.



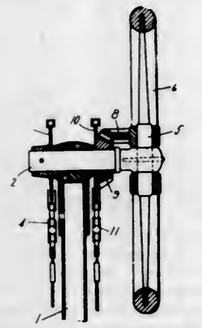
3. In a device of the character described, the combination of a driving member, a reciprocating means actuated thereby, a socket carried by one end of said means, a casing, a sleeve located in the casing having a slotted end that receives and guides the socket, a roller that travels on the member, a pivot for the roller that engages the socket, and a disk carried by the pivot that rolls on the under side of the socket when the roller is subjected to axial thrust.

4. In a device of the character described, the combination of a driving shaft, a reciprocating means actuated thereby, a socket carried by one end of the means which has a curved under surface, a roller located within the socket and traveling on the shaft, a pivot for the roller that engages the walls of the socket, a pair of disks carried by the pivot and located on opposite sides of the roller which are adapted to roll on the curved surface of the socket when the roller is subjected to end thrust, and thrust bearings between the roller and disks.

5. In a device of the character described, the combination of a cam shaft, a reciprocating means actuated thereby, a casing for said means, a sleeve lining for the casing having a slotted end, a socket carried by one end of the means which has a curved surface and is guided by the sleeve, a spring that presses the socket toward the shaft, a roller located in the socket, a pivot therefor which engages the socket, and a disk carried by the pivot that rolls on the curved surface of the socket when the roller is subjected to axial thrust.

[Claims 6 to 8 not printed in the Gazette.]

1,061,701. CONTROLLING DEVICE FOR FLYING-MACHINES. PAUL STUMPF and JOSEF SCHROEDER, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed June 1, 1912. Serial No. 700,938. (Cl. 244—29.)

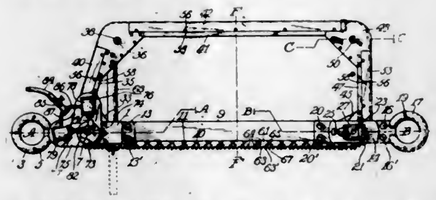


1. A controlling device consisting of a main shaft rotatable on a given axis, an actuating device therefor, connections between said shaft and actuating device permitting a rotation of the latter on an axis transverse to said shaft, elements responding to a rotation of said actuating device on either axis, whereby said elements can be actuated either without causing a rotation of said main shaft or simultaneously therewith, and elements adapted to respond only to a rotation of said main shaft when said actuating device is operated to effect such rotation.

2. A controlling device consisting of a rotatable shaft, a shaft secured thereon transverse thereto, an actuating device journaled on said transverse shaft, a movement-imparting element secured on said rotatable shaft, another movement imparting element mounted to rotate on said shaft, and operative connections between said second element and the actuating device, whereby the rotation of said device on the transverse shaft will actuate said second element only, and the rotation of the rotatable shaft by said device will actuate both movement-imparting elements.

3. A controlling device consisting of a rotatable shaft, a sprocket wheel secured thereto, a shaft mounted on said rotatable shaft and transverse thereto, an actuating device journaled on said transverse shaft, a sprocket wheel sleeved loosely on said rotatable shaft, and bevel gears connecting said latter sprocket wheel and the actuating device.

1,061,702. PORTABLE POWER-SAW. THOMAS O. TAGGART, Morristown, Ind., assignor of one-fourth to Omer L. Stultz, Zionsville, Ind. Filed Mar. 21, 1912. Serial No. 685,195. (Cl. 143—32.)



1. In a portable saw, the combination of a head stock, a backing blade secured to the head stock, a tail stock secured to the blade and comprising two plates having each a guideway therein, two journal boxes adjustably mounted in the guideways, a driving wheel rotatably mounted in the head stock, a main frame part fixedly secured to the head stock, an adjustable frame part having one end portion adjustably guided between the two plates of said tail stock, a shaft extending through said end portion and journaled in said boxes, a guide wheel secured to said shaft, means for adjustably connecting the opposite end of said adjustable frame part to said main frame part, and a chain saw extending about said wheels and guided in said two frame parts.

2. In a portable saw, the combination of a head stock, a shaft rotatable in the head stock, a driving wheel secured to the shaft, a backing blade secured to the head stock, a tail stock secured to said backing blade, a main frame part secured to the head stock, an adjustable frame part adjustably connected with said tail stock and also with said main frame part and having two guide wheels mounted therein, and a chain saw extending about said wheels and guided by said frame parts.

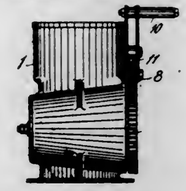
3. In a portable saw, the combination of a head stock, a backing blade and a tubular frame member secured at one end thereof to one end portion of the head stock, the said member being at right angles to the blade, a driving wheel mounted in the head stock, a frame part secured at one end to the opposite end portion of the head stock and extending obliquely to and secured to the opposite end of the tubular frame member, a tail stock secured to the opposite end of the backing blade, and a chain saw extending about the wheels.

4. In a portable saw, the combination of a head stock, a driving wheel rotatably mounted in the head stock, two frame plates secured to the head stock, a guide bar secured between the two plates and having a longitudinal channel therein, a guard extending over and covering the channel and detachably secured to opposite sides of the guide bar, and a chain saw extending about the driving wheel and through said channel under said guard.

5. In a portable saw, the combination of a frame comprising a housing having a guard thereon, two longitudinally channeled guide bars secured at one end to different portions of the housing, a guide wheel mounted in the housing under the guard thereof, and two guards detachably secured to the two guide bars respectively and extending over the channel therein and to the guard of the said housing, with a chain saw extending over the guide wheel under the guard of said housing and extending also through the channels of said guide bars and under said two guards.

[Claims 6 to 8 not printed in the Gazette.]

1,061,703. CHARGING-HOPPER. GODFREY M. S. TAIT, Montclair, N. J., assignor to Tait Producer Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 11, 1910. Serial No. 537,382. (Cl. 73—135.)

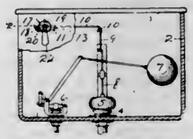


1. A hopper comprising a receiving chamber, a valve chamber below it and a discharge opening beneath said valve chamber, a hollow plug valve within the valve chamber having an opening arranged to register with the receiving chamber in one position of the valve and with the discharge opening in another position of the valve, said valve extending beyond the valve chamber and having teeth on its periphery forming a driving gear for the valve, a pinion mounted on the casing of the hopper and arranged to engage with said gear to rotate said valve, and an operating handle having ratchet connection with said pinion.

2. A charging hopper for gas producers comprising the combination of the hopper, a casing, hollow conical rotary valve in said casing, said valve having in its side an opening adapted in one position to receive fuel from the casing and in another position to discharge fuel, a gear on said valve and projecting beyond said casing, a stud on said hopper, a driving pinion meshed with said gear and mounted on said stud and an operating handle mounted on said stud and having ratchet connection with said pinion.

3. A hopper, such as described, comprising a casing and a hollow rotary valve therein having in its side an opening adapted in one position to receive fuel from the casing and in another position to discharge fuel, said valve having in one end a poke hole whereby an instrument may be introduced within the valve to dislodge material clogged therein.

1,061,704. FLUSH-TANK-OPERATING DEVICE. BERT O. TILDEN, New York, N. Y., assignor to American Sanitary Works, New York, N. Y., a Corporation of New Jersey. Filed Feb. 15, 1913. Serial No. 748,533. (Cl. 4—5.)



1. The combination with a flush-tank and a flush valve therein, of a rocking lever, one end of said lever connecting with said valve, the opposite end of said lever having a crank, a rock shaft disposed at right angles to said lever,

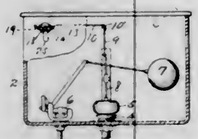
the one end of said shaft formed into a loop through which said crank passes, and means for rotating said shaft in opposite directions for causing said loop to rock said lever and open said valve.

2. The combination with a flush-tank and a flush valve therein, of a rocking lever, one end of said lever connecting with said valve, the opposite end of said lever having a crank, a rock shaft journaled in the wall of the tank, the inner end of said shaft formed into a loop through which said crank passes, and a gravitative handle secured to the opposite end of said shaft adapted when swung to the right or to the left to cause said loop to partially rotate the said lever for unseating said valve.

3. In a flush tank operating device, a rocking lever having an arm at one end adapted to connect with a flush valve, and having at its opposite end an U-shaped crank, a bracket for supporting said lever, said bracket having spaced perforated lugs between which the crank of said lever is disposed, a shaft piercing the said bracket, the inner end of said shaft having an integral ring in which said crank is disposed, the said ring adapted to rock said lever when said shaft is partially rotated in opposite directions, and a depending handle secured to the opposite end of said shaft capable of being manually operated for rocking said shaft and said lever.

4. In a flush tank operating mechanism, the combination with a tank and a flush valve therein, of a rocking lever connecting at one end to the said valve, the opposite end bent to provide an elongated crank portion, a bracket having spaced bearing lugs adapted to support said lever, the said lugs alining and positioned at the opposite ends of said crank portion for preventing the longitudinal movement of said lever, a rock shaft piercing the wall of the tank, the inner end of said shaft comprising a circular loop which encircles said crank portion of said lever, and adapted when said shaft is partially rotated to rock said lever in the direction for opening said valve, and means for manually operating said shaft.

1,061,705. FLUSH-TANK-OPERATING MECHANISM. BERT O. TILDEN, New York, N. Y., assignor to American Sanitary Works, New York, N. Y., a Corporation of New Jersey. Filed Feb. 15, 1913. Serial No. 748,534. (Cl. 4—5.)



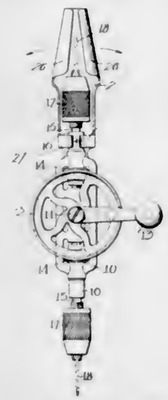
1. The combination with a flush tank and a flush valve therein, of a rocking lever, one end of said lever adapted to connect with said valve, the other end folded upon itself for forming an elongated loop, a bracket for supporting said lever, a shaft for operating said lever, one end of said shaft having a plurality of pins normally in engagement with said loop, one of said pins adapted when the shaft is rocked in opposite directions to remain in engagement with and to lift said loop and thereby tilt said lever in the direction for unseating said valve, means for limiting the rotary movement of said shaft, and means for manually rocking said shaft.

2. In a flush valve operating mechanism, a rocking valve lever having an arm at one end adapted to connect with the valve, the opposite end folded into a loop, a bracket for supporting said lever, said bracket having a plurality of alined perforated lugs for operatively supporting said lever, a rock shaft having at one end spaced pins normally in engagement with said loop, adapted when said shaft is rocked in opposite directions to lift said loop and thereby tilt said lever in the direction for opening the flush valve, a lug carried by said shaft and projections carried by said bracket adapted for limiting the rocking movement of said shaft to less than a quarter turn, and a gravitative handle carried by the opposite end of said shaft for manually operating said shaft.

3. The combination with a flush tank and a flush valve therein, of a rocking lever, one end of said lever having an arm connecting with said valve, the other end comprising an elongated loop, a bracket to support said lever, said bracket mounted inside the tank and having a series of alined lugs each of which is perforated to receive and pivotally support said lever, two of said lugs being spaced sufficiently to receive a portion of said loop for preventing the longitudinal movement of said lever, a rock shaft, said shaft piercing the wall of the tank and also said bracket and having on its inner end a double-lever, said double-lever having spaced pins adapted to engage a portion of said loop, and means for rocking said shaft either to the right or to the left for effecting the tilting of said rocking lever and the unseating of said valve.

4. A flush valve operating mechanism, comprising a lever having one end connected with the flush valve, the opposite end formed into a loop, a bracket for pivotally supporting said lever, a rock shaft journaled in said bracket, one end of said shaft having spaced studs adapted to engage the underside of said loop, a handle carried by the other end of said shaft, said handle capable of being swung in opposite directions for rocking said shaft for effecting the tilting of said lever first by one, and then by the other of said studs, and a stop-lug carried by said shaft adapted for limiting the operative movements of said shaft and said lever.

1,061,706. HAND-DRILL. ALBERT E. TUNSTALL, Worcester, Mass. Filed July 8, 1912. Serial No. 708,121. (Cl. 77—7.)



1. As an article of manufacture, a hand drill comprising a frame and a plurality of drill spindles supported thereon, means on the frame for driving said drill spindles, and a handle carried by said frame and movable into a plurality of positions, in one of which it covers one of the drill spindles and serves as a handle for guiding another one.

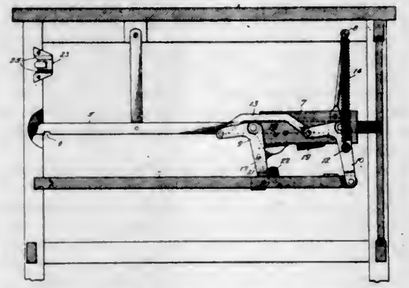
2. In a hand drill, the combination of a frame having a pair of opposite bearings, a drill spindle rotatably mounted in each of said bearings and having a driving pinion therefor at the inner end, a gear mounted frame and adapted to mesh with said pinions for driving said spindles, and a handle pivotally connected with said frame on the side opposite the gear and adapted to swing half way around on said frame in order to cover either one of said spindles while serving as a handle for guiding the other.

3. In a hand drill, the combination of a main frame, driving means mounted on one side thereof, a plurality of drill spindles mounted on said frame and having means thereon for engaging said driving means, and a handle connected with said frame opposite said driving means and adapted to move into positions to cover said drill spindles one at a time.

4. In a hand drill, the combination of a frame having a pair of opposite bearings, a drill spindle rotatably mounted in each of said bearings and having a driving pinion therefor at the inner end, a gear mounted on the frame and adapted to mesh with said pinions for driving said spindles, a rotatable stud on the side of the frame opposite the handle having two opposite arms, and a handle pivotally mounted on said arms.

5. The combination with a drill frame, of a stud pivoted thereon to swing on an axis normal to one side of the frame, and a handle pivoted on said stud to swing on an axis transverse to the axis on which the stud swings.

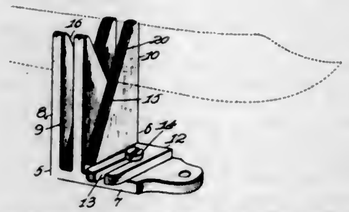
1,061,707. LATCH FOR TYPE-WRITER-DESK PLATFORMS. JENS VAALER, Chicago, Ill., assignor to The Clemetsen Company, Chicago, Ill., a Corporation of Illinois. Original application filed May 11, 1912, Serial No. 696,592. Divided and this application filed Aug. 12, 1912. Serial No. 714,622. (Cl. 70—119.)



1. A supplemental platform-supporting device for the purpose set forth, comprising a bar having a rigid projecting tongue on one edge, and a keeper formed of a bulging plate provided with a finger struck therefrom for releasably confining the tongue against the plate.

2. A supplemental platform-supporting device for the purpose set forth, comprising a bar having a rigid projecting tongue on one edge, and a keeper formed of a recessed bulging plate with a finger extending over the recess and having cam-edges at opposite sides of the recess-entrance leading to the finger.

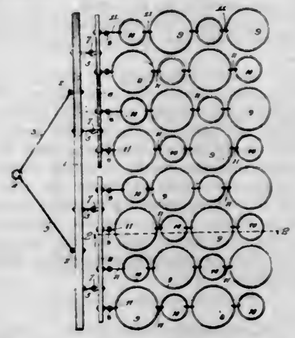
1,061,708. KNIFE-SHARPENER. GUSTAV C. VOLLMER, St. Louis, Mo. Filed Oct. 6, 1911. Serial No. 653,240. (Cl. 76—86.)



A knife sharpener comprising a stationary member, a base formed integral with the stationary member, an adjustable member mounted on said base, each of said members provided with integral vertically projecting members suitably spaced apart to admit the seating of one between the other, each provided with a serrated inclined edge, the corners of the serrated edge being beveled to permit the material removed from the knife to pass away, substantially as specified.

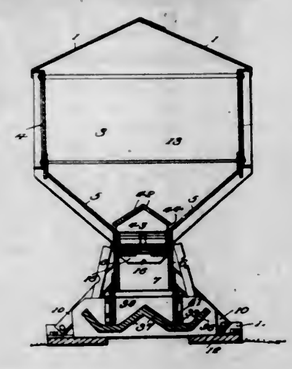
1,061,709. DRAG. IRA J. WARD, Angora, Okla. Filed Jan. 23, 1912. Serial No. 672,833. (Cl. 55—22.)

1. A drag comprising a plurality of rings of different sizes, said rings being secured together to form a series of chains, the rings of one size alternating with the rings of another size in the chains, and the rings of one size in the chains being disposed opposite to rings of another size in the adjoining chains, a draft mechanism, and means to connect the chains thereto.



2. A drag comprising a plurality of large and small rings, links to loosely connect said rings together to form chains, said large and small rings being alternately arranged in the chains and adapted to turn in the links, a draft bar, and beams connected to said bar and to the forward ends of the chains of rings.

1,061,710. STOCK-FEEDER. SAMUEL F. WEBB, Wichita, Kans. Filed June 23, 1911. Serial No. 634,965. (Cl. 119—53.)



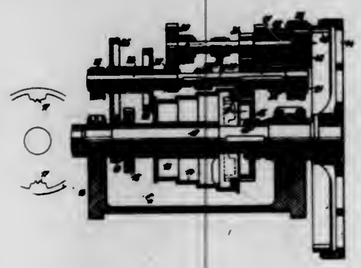
1. A stock feeder comprising a bin provided with a storage compartment, a lower discharging compartment, and a subjacent trough into which the discharging compartment opens, the discharging compartment embodying a relatively stationary upper section and a lower vertically adjustable telescoping section which in the upper adjusted positions of said telescoping section has its lower edge entirely free from the bottom of the trough, the trough having an oppositely and outwardly beveled bottom within the discharging compartment and opening directly thereinto, ledges projecting from the ends of the telescoping section, suspension rods secured above said section and passing through said ledges, supports adjustably mounted on the suspension rods and bearing against the under sides of the ledges, and means for controlling the communication between the storage and discharging compartment therebelow.

2. A stock feeder comprising a bin provided with a storage compartment, the lower side walls of which converge downwardly, a lower discharging compartment having vertical side walls, depending from the converging walls and a subjacent trough into which the discharging com-

partment opens, the discharging compartment consisting of an upper relatively stationary section and a lower vertically adjustable telescoping section, a vertically adjustable connection between the ends of the vertically adjustable telescoping section and the supports therefor, guides for said section on the ends of the trough, and means for controlling the communication between the storage compartment and the discharging compartment therebelow.

3. A stock feeder comprising a storage compartment having downwardly converging side walls, a discharging compartment having vertical side walls leading from the lower ends of the said converging side walls, a feeding trough at the lower end of the discharging compartment and communicating therewith, a cut-off within the discharging compartment near the upper end thereof to control the flow therethrough, and a deflector arranged within the storage compartment over and immediately adjacent the lower end thereof and having its edges spaced slightly from the downwardly converging side walls of said compartment.

1,061,711. TRANSMISSION-GEARING. HANS WERNER, Hanover, Germany. Filed May 28, 1912. Serial No. 700,187. (Cl. 74—58.)



1. In a transmission apparatus, the combination with a spindle and a drive pulley, of a train of transmission devices, and a device fixed to turn with the spindle and shiftable thereon, to engage and turn with the said pulley, to engage and turn with the said train of transmission devices, and to be disengaged from the said pulley and train of transmission devices.

2. In a gear transmission mechanism, the combination with a spindle and a drive pulley, of a train of gears and a device fixed to turn with the spindle and slidable thereon to one position to engage the pulley to be turned thereby and to another position to engagement with the train of gears to be turned by the same.

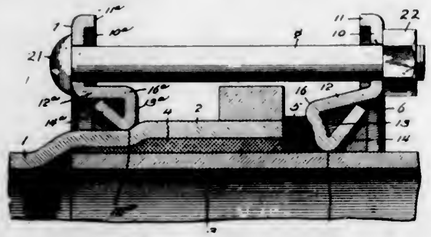
3. In a gear transmission mechanism, the combination with a spindle and a drive pulley thereon, of a train of gears and a device fixed to turn with the said spindle and shiftable thereon to one position to engage the pulley to be turned thereby and to another position to engagement with the said train of gears to be turned by the same.

4. In a gear transmission mechanism, the combination with a spindle and a drive pulley thereon, of a train of gears, a gear mounted on and fixed to turn with the spindle and slidable thereon to one position to engage the pulley to be turned thereby and to another position to engagement with the said train of gears to be turned by the same.

5. In a gear transmission mechanism, the combination with the driven shaft and a pulley loosely mounted thereon, of a gear shaft, gears secured to the gear shaft, a gear connected to the said pulley, and a gear fixed to turn on the said driven shaft and slidable thereon to engage the said pulley directly and also to engage one of the gears on the gear shaft to turn the spindle through the same and the said other gears.

[Claims 6 to 10 not printed in the Gazette.]

1,061,712. WROUGHT-METAL RING FOR PIPE-COUPLINGS. LOUIS PREVOST WHITAKER, New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Dec. 30, 1912. Serial No. 739,420. (Cl. 137—28.)



1. A wrought metal ring for use in pipe couplings comprising an annular plate member, an annular wall, extending from the inner edge thereof and terminating in an inwardly extending annular flange and an annular reinforcing flange extending from the inner edge of the said inwardly extending flange, outwardly toward the said annular wall said reinforcing flange being located on the side of said inwardly extending flange nearer the plane of the plate member.

2. A wrought metal ring for use in pipe couplings comprising an annular plate member, an annular wall, extending from the inner edge thereof and terminating in an inwardly extending annular flange, and an annular reinforcing flange extending from the inner edge of the said inwardly extending flange outwardly and having its outer edge in contact with said annular wall.

3. A wrought metal ring for use in pipe couplings comprising an annular plate member, an annular wall, extending from the inner edge thereof and terminating in an inwardly extending annular flange, and an annular reinforcing flange extending from the inner edge of the said inwardly extending flange outwardly and having its outer edge in contact with said annular wall at a distance from the junction of said wall and said inwardly extending flange.

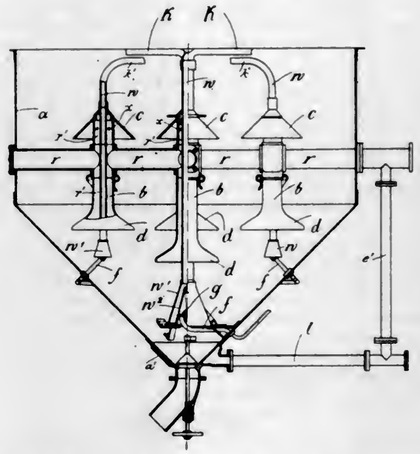
4. A wrought metal ring for use in pipe couplings comprising an annular plate member, an annular wall extending from the inner edge thereof and terminating in an inwardly extending annular flange, and an annular reinforcing flange extending from the inner edge of the said inwardly extending flange outwardly toward said wall, said wall having the portion adjacent to the plate member disposed angularly to the portion adjacent to the said inwardly extending flange.

5. A wrought metal ring for use in pipe couplings comprising an annular plate member, an annular wall, extending from the inner edge thereof and terminating in an inwardly extending annular flange, and an annular reinforcing flange extending from the inner edge of the said inwardly extending flange outwardly toward said wall said wall having the portion adjacent to the plate member disposed angularly to the portion adjacent to the said inwardly extending flange to form an internal shoulder, and said reinforcing flange being disposed in line with that portion of said wall adjacent to the plate member and having its outer edge in engagement with said shoulder.

1,061,713. GRAIN-STEEPING TANK. OSWALD WINDE, Lutzschena-Leipzig, Germany. Filed Mar. 23, 1911. Serial No. 616,378. (Cl. 195—21.)

1. In a device of the character set forth, a steeping tank provided with a washing pipe having a lower downwardly flaring orifice, in combination with a ventilating pipe having downwardly opening and flaring screens or fenders, the ventilating pipe being provided with air-outlets at the portions protected by the screens, whereby a large surface of the material is exposed to the action of the fluid used in treating the same.

2. In a device of the character set forth, a steeping tank, in combination with a washing pipe having at its lower end an inner and an outer hollow downwardly flaring cone, so arranged as to form between them an annular conical space communicating with the upper part of the washing pipe, the inner cone being divided at an intermediate portion to form an annular slot, the part of the said inner cone above the slot being arranged slidably in a longitudinal direction over the lower part of said cone to vary the width of the slot, and means for introducing fluid into the interior of the inner cone.



3. In a device of the character set forth, a ventilating pipe provided with downwardly flaring screens and perforations in the portions protected by said screens, in combination with a washing pipe, provided at its lower portion with a pair of concentric hollow cones, inclosing a space communicating with the upper part of the washing pipe, the inner cone being divided at an intermediate portion to form a slot; the upper portion of said inner cone being longitudinally slidable to vary the width of the slot, and means for introducing fluid under pressure into the interior of the inner cone.

1,061,714. DYES CONTAINING SULFUR AND PROCESS OF MAKING THEM. HUGO WOLFF, Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Feb. 5, 1912. Serial No. 675,593. (Cl. 8—1.)

1. The process of producing coloring matters containing sulfur by heating a nitro-phenanthraquinone compound with sulfur and alkaline sulfid.

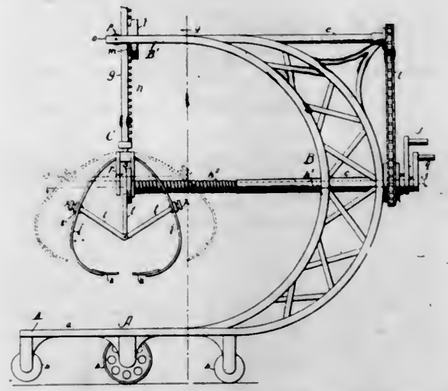
2. The process of producing coloring matters containing sulfur by heating a nitro-phenanthraquinone compound with sulfur and alkaline sulfid in the presence of a diluting agent.

3. The process for producing coloring matter containing sulfur by heating 2.7-dinitro-phenanthraquinone with alkaline polysulfid.

4. The new coloring matters which can be obtained by heating a nitro-phenanthraquinone compound with sulfur and alkaline sulfid, which coloring matters are insoluble in dilute acids and alkalis, but which are soluble in sodium sulfid solution and also in alkaline hydrosulfite solution and dye cotton from these solutions very fast brown shades, which shades, upon treatment with nitrous acid and beta-naphthol, remain unchanged.

5. The new coloring matter which can be obtained by heating 2.7-dinitro-phenanthraquinone with alkaline polysulfid, which coloring matter is insoluble in dilute acids and alkalis, but which is soluble in sodium sulfid solution and also in alkaline hydrosulfite solution, and dyes cotton from these solutions very fast khaki shades, which shades, upon treatment with nitrous acid and beta-naphthol, remain unchanged.

1,061,715. INVALID LIFTER AND CARRIER. WILSON A. ALLEN, Rochester, Minn. Filed June 10, 1912. Serial No. 702,977. (Cl. 5—44.)



1. The combination with the truck substantially as herein shown, the lifting and supporting means embodying a horizontally arranged shaft, a spiral disk affixed thereon and revoluble therewith, a vertical toothed bar, the teeth of which engage the thread of the said spiral disk, grapplers pivotally affixed to the said toothed bar and revoluble thereon and toggle levers affixed to and adapted to operate the said grapplers, substantially as and for the purposes described.

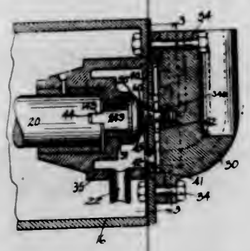
2. In a device of the character described, the combination with the truck and crane substantially as herein shown, of the vertically arranged toothed bar mounted and longitudinally movable within the said crane, grapplers suspended from but revoluble upon said toothed bar, a horizontally arranged flexible shaft mounted and revoluble in the said crane, a crank disk rigidly affixed to and revoluble with the said flexible shaft, and toggle levers connecting the said grapplers and the said crank disk, substantially as shown, and for the purpose described.

3. In a device of the character herein shown, the combination with the truck A and the crane B substantially as shown, a horizontally arranged crank shaft mounted and revoluble in the said crane, a counter shaft arranged parallel with the said crank shaft, a sprocket wheel affixed upon the said crank shaft, a similar sprocket wheel affixed upon the said counter shaft, a chain driven by the first named sprocket wheel and adapted to drive the said last named sprocket wheel, a vertically arranged toothed bar recessed and longitudinally movable in the said crane, a spiral gear, the thread of which engges the teeth of the said toothed wheel, grapplers connected to the said toothed bar, a flexible shaft chambered within the said crank shaft, a crank disk affixed to the said flexible shaft, and toggle levers connecting the said crank disk and the said grapplers, substantially as shown and for the purposes specified.

1,061,716. STARTER FOR INTERNAL-COMBUSTION ENGINES. DAVID W. ANDERSON, La Fayette, Ind. Filed Dec. 28, 1911. Serial No. 668,334. (Cl. 137—26.)

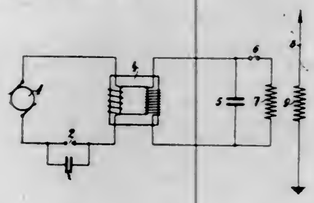
A starter for an internal combustion engine including a fluid distributing member having a supply port and discharge ports, a slotted valve mounted within said member for governing said discharge ports, a valve shaft slidably mounted in said member on which said valve is slidably mounted so as to be longitudinally movable thereon, a bearing for said shaft, a disk on said shaft adapted

to engage said bearing to prevent leakage around the shaft, a spring around said shaft between the valve and



disk pressing against the valve and disk, and a driving shaft with its ends slidably coupled with said valve shaft for driving the same.

1,061,717. ARRANGEMENT FOR PRODUCING ELECTRICAL OSCILLATIONS. GEORG GRAF VON ARCO, Berlin, Germany, assignor to Gesellschaft für Drahtlose Telegraphie, M. B. H., Berlin, Germany, a Corporation of Germany. Filed Apr. 11, 1911. Serial No. 620,496. (Cl. 250—37.)



1. In an arrangement for producing electric oscillations by interrupted direct current, a feeding circuit containing in series a direct current source, an interrupter, the primary coil of a transformer having a closed magnetic circuit, a primary oscillation circuit containing a quench spark gap and a capacity adapted to be loaded by the secondary coil of the transformer, and a slightly damped secondary oscillation circuit closely coupled with the primary circuit.

2. In an arrangement for producing electric oscillations by interrupted direct current, a feeding circuit containing in series a direct current source and a rotatable interrupter comprising a suitable number of current conducting bars, a slip ring electrically connected with some of said bars to cause the periods of "open circuit" to be larger than the periods of "closed circuit" in the interruptions of the feed current, a transformer having a closed magnetic circuit and having its primary coil in series with said circuit, a primary oscillation circuit containg a quench spark gap and a capacity adapted to be loaded by the secondary coil of said transformer, and a slightly damped secondary oscillation circuit closely coupled with the primary circuit.

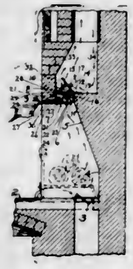
3. In an arrangement for producing electric oscillations by interrupted direct current, a feeding circuit containing in series a direct current source and a rotatable interrupter comprising a suitable number of current conducting bars, a plurality of slip rings, each ring being electrically connected with an equal number of bars in alternate sequence with the bars connected to the other rings, a brush sliding on the interrupter bars, a brush for each of said slip rings, a connection between the interrupter brush and one pole of said source, means for connecting any of said slip ring brushes with the other pole of said source, a transformer having a closed magnetic circuit and having its primary coil in series with said source, a primary oscillation circuit containing a quench spark gap and a capacity adapted to be loaded by the secondary coil of the transformer, and a slightly damped secondary oscillation circuit closely coupled with the primary circuit.

4. In an arrangement for producing electric oscillations by interrupted direct current, a feeding circuit containing in series a direct current source and a plurality of disk interrupters, each disk having a brush coöperating with it and a slip ring connected to it, and a brush coöperating with said ring, said disks adapted to interrupt the current substantially synchronously and so connected that the current passes between the disk brush and the interrupter disk in the same direction in all interrupters, a transformer having a closed magnetic circuit, and having its primary coil in series with said current source, a primary oscillation circuit containing a quench spark gap and a capacity adapted to be loaded by the secondary coil of the transformer, and a slightly damped secondary oscillation circuit closely coupled with the primary circuit.

5. In an arrangement for producing electric oscillations by interrupted direct current, a feeding circuit containing in series a direct current source, and a rotatable interrupter comprising a disk having a plurality of current conducting bars, a slip ring electrically connected with some of the bars, a brush sliding on the interrupter disk, another brush sliding on the slip ring, the polarity between the interrupter disk and its brush being suitably selected to cause the brush sliding on the disk to burn away more rapidly than the bars, a transformer having a closed magnetic circuit, and having its primary coil in series with said current source, a primary oscillation circuit containing a quench spark gap and a capacity adapted to be loaded by the secondary coil of the transformer, and a slightly damped secondary oscillation circuit closely coupled with the primary circuit.

[Claim 6 not printed in the Gazette.]

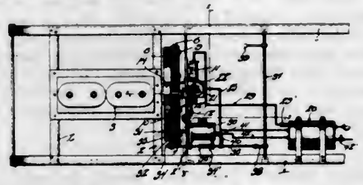
1,061,718. FIREPLACE. MERVIN V. ARNOLD, Syracuse, N. Y. Filed Dec. 5, 1912. Serial No. 735,066. (Cl. 126—288.)



In a fire-place, a throat formed by the forwardly inclining back wall, the sloping reveals, and the vertical wall of the arch, a metal frame disposed in the throat, one member of said frame adapted to support the said arch, the other member of said frame having parallel lugs disposed at the top of the throat, a damper comprising a rectangular plate, one edge of said plate disposed between, and supported by said lugs during the opening and closing movements of said damper, a reciprocating rod for operating said damper, and a spring adapted to exert its tension against said rod for preventing the accidental closing of said damper.

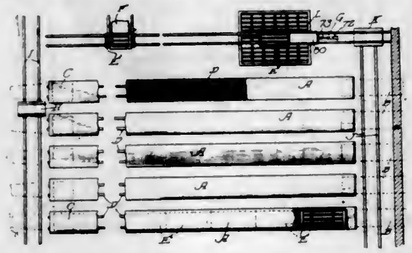
1,061,719. ENGINE-STARTER. EDWIN D. BANGS, Milwaukee, Wis. Filed Mar. 5, 1912. Serial No. 681,723. (Cl. 123—179.)

1. In an engine starter having a toothed gear-wheel, an air motor and its shaft; the combination of a pinion in splined engagement with the motor-shaft, the same being adapted to be slidably moved into and out of engagement with the toothed gear-wheel, a reciprocative rod, a spanner-arm carried by the rod engageable with the pinion, a manually controlled rock-shaft having an arm connected to the rod, an air-supply pipe in communication with the motor, a valve therefor, and a finger carried by the reciprocative rod engageable with the valve whereby the same is actuated co-incident with a shift of the pinion.



2. In an engine starter having a toothed gear-wheel, and an air motor having a splined shaft; the combination of a pinion loosely mounted upon the shaft engageable with the gear-wheel, a spring-plug carried by the pinion engageable with the shaft spline, a reciprocative rod having a spanner arm engageable with the pinion, an air-supply pipe in communication with the motor, a valve therefor, and a fluger carried by the rod engageable with the valve.

1,061,720. APPARATUS FOR DRYING STARCH. LOUIS P. BAUER, Pekin, Ill., assignor to Corn Products Refining Company, a Corporation of New Jersey. Filed Jan. 30, 1913. Serial No. 745,191. (Cl. 34—46.)



1. In apparatus for drying starch, the combination with a drying tunnel and means for causing a circulation of hot air through the same from end to end, of a carrier for the starch adapted to be moved through the tunnel and formed with a plurality of relatively narrow starch compartments extending from top to bottom of the carrier, the sides of which are foraminous and which are spaced apart so as to form circulation spaces extending lengthwise of the carrier.

2. In apparatus for drying starch, the combination with a drying tunnel and means for causing a circulation of hot air through the same from end to end, of a carrier for the starch adapted to be moved through the tunnel and formed with a plurality of relatively narrow compartments extending from top to bottom of the carrier, open at the top and adapted to discharge through the bottom, the sides of which are foraminous and which are spaced apart so as to form circulation spaces extending lengthwise of the carrier.

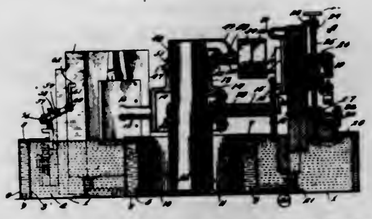
3. In apparatus for drying starch, the combination with a drying tunnel and means for causing a circulation of hot air through the same from end to end, of a carrier for the starch adapted to be moved through the tunnel and formed with a plurality of relatively narrow compartments extending from top to bottom of the carrier, open at the top, the sides of which are foraminous and which are spaced apart so as to form circulation spaces extending lengthwise of the carrier, and closing means for the bottoms of the compartments adapted to be shifted so as to allow the compartments to discharge by gravity.

4. In apparatus for drying starch, the combination with a drying tunnel and means for causing a circulation of hot air through the same from end to end, of a carrier for the starch adapted to be moved through the tunnel and formed with a plurality of starch compartments, the sides and ends of which are foraminous, and which are spaced apart so as to form circulation spaces extending lengthwise of the carrier.

5. In apparatus for drying starch, the combination with a drying tunnel and means for causing a circulation of hot air through the same from end to end, of a carrier for the starch adapted to be moved through the tunnel comprising running gear, a framework, foraminous sides and substantially vertical foraminous partitions dividing the space between the sides into a plurality of starch compartments and between each of the same circulation spaces; said sides and partitions being made up each of a plurality of screens removably arranged in said framework.

[Claims 6 to 30 not printed in the Gazette.]

1,061,721. SPRING FORMING AND TEMPERING MACHINE. GEORGE H. BEAUMONT, JOHN F. BEANS, and JAY E. LEHMAN, Canton, Ohio; said Lehman assignor to said Beaumont and Beans. Filed Jan. 30, 1913. Serial No. 745,087. (Cl. 148—34.)



1. In a device of the character described, a tempering bath, a plurality of metal forming means, means for moving said metal forming means in a substantially horizontal orbit through said bath, means for vertically raising said metal forming means out of said bath at a predetermined point in said orbit and for vertically lowering said metal forming means into said bath beyond said point, said metal forming means, when out of said bath, adapted to form and clamp heated metal and then to carry the same in formed, clamped condition throughout said orbit.

2. In a device of the character described, a plurality of heads, a tank common to and including all of said heads, a tempering liquid in said tank, said heads connected together and adapted to revolve horizontally in said tank about a common center, each of said heads provided with metal forming members adapted to receive heated metal and to form the same between them, means for actuating said metal forming members to form said metal, means for rotating said heads about said common center, and means for vertically moving said metal forming members to submerge the same in and raise the same out of said tempering liquid as said heads revolve horizontally about said common center.

3. In a device of the character described, an annular tank, tempering liquid within said tank, a center post arranged concentrically with reference to said tank, a housing mounted on said center post and rotatable thereabout, a plurality of radially extending arms connected to said housing and a head connected to each of said arms and rotatable with said arms and housing about said center post, said heads moving in an annular pathway within said tank, each head provided with metal forming means adapted to receive and form heated metal and said metal forming means adapted to descend beneath and rise above the surface of said tempering liquid, and means for raising and lowering said metal forming means during the rotation of said heads, arms and housing about said center post.

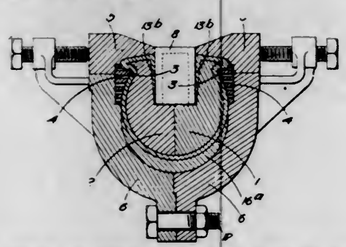
4. In a device of the character described a tank, tempering liquid within said tank, a plurality of arms connected together and extending radially from a common center, a head connected to each of said arms, said arms and heads horizontally rotatable about said center, said heads moving

in an annular pathway within said tank, each head provided with metal forming means adapted to receive and form heated metal and said forming means adapted to descend beneath and arise above the surface of said tempering liquid, and means for raising and lowering said metal forming means during the rotation of said heads and arms about said common center.

5. In a device of the character described a tank, tempering liquid within said tank, a first base adapted for horizontal movement within said tank, a second base connected to said first base and adapted for vertical movement with relation thereto, a first jaw connected to said second base and adapted to move vertically therewith and a second jaw connected to said base and adapted for relative movement therewith and adapted to move toward and away from said first jaw, means for moving said first base with said second base and jaws horizontally through said liquid, means for raising and lowering said second base with reference to said first base, and means for moving said second jaw with relation to said first jaw when said second base is vertically moved with relation to said first base.

[Claim 6 not printed in the Gazette.]

1,061,722. DEVICE FOR SHAPING THE OUTER CASINGS OF PNEUMATIC TIRES. GEORGE WILSON BELL, Stockport, England. Filed July 25, 1912. Serial No. 711,382. (Cl. 69—21.)



1. A device for shaping the outer casing of pneumatic tires comprising in combination an internal annular core having an annular groove in its inner face into which the bead-forming edges of the casing material may be inserted, sectional means adapted to receive the core and casing material fitted thereon and press said material closely about the core, and a plurality of radially movable dies adapted to fit into the annular groove in the core and clamp the bead-forming edges of the tire casing therein.

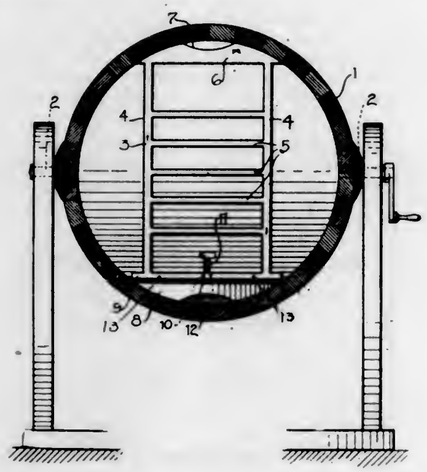
2. A device for shaping the outer casings of pneumatic tires comprising in combination an internal annular core having an annular groove in its inner face into which the bead-forming edges of the casing material may be inserted, sectional means adapted to receive the core and casing material fitted thereon and press said material closely about the core, and a plurality of hollow, perforated, radially movable dies adapted to fit into the annular groove in the core and clamp the bead-forming edges of the tire casing therein.

3. A device for shaping the outer casings of pneumatic tires comprising in combination an internal annular core having an annular groove in its inner face into which the bead-forming edges of the casing material may be inserted, a sectional means adapted to receive the core and casing material fitted therein and press said material closely about the core, said means including removable bead-forming sections, and a plurality of radially movable dies adapted to fit into the annular groove in the core and clamp the bead-forming edges of the tire casing therein.

4. A device for shaping the outer casing of pneumatic tires comprising in combination an internal annular core having an annular groove in its inner face into which the bead-forming edges of the casing material may be inserted, a sectional pressing means adapted to receive the core and casing material fitted thereon and press said material closely about the core, said pressing means having removable perforated bead-forming sections, and a plurality of radially movable dies adapted to fit into the annular groove in the core and clamp the bead-forming edges of the tire casing therein.

5. A device for shaping the outer casing of pneumatic tires comprising in combination an annular core, and pressing means adapted to receive the core and casing material fitted thereon and press said material closely about the core, said means including recessed body members 6, removable bead-forming sections fitted to the recesses in said members, and laterally movable dies mounted on said members and adapted to be projected transversely of the core.

1,061,723. CHURN-DASHER. BELLE BELLMAN, Hays, Kans. Filed Mar. 1, 1913. Serial No. 751,578. (Cl. 31—18.)



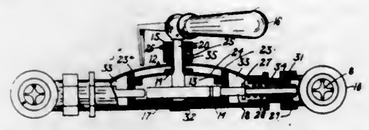
1. A churn dasher consisting of a frame, head pieces thereon having the outer edges thereof convexed, the converged edges of said head pieces being provided with cavities, and means to adjustably secure one of said head pieces on the frame.

2. A churn dasher comprising a frame, head pieces thereon, said head pieces being each provided with cavities on the outer edges whereby to form grasping means therefor, and means to adjustably and removably secure one of said head pieces in position on the frame.

3. A churn dasher comprising a frame composed of side bars and transverse connecting slats therefor, a head member rigidly secured to the one end of said frame, an additional head member removably engaged with the opposite end of said frame, and an adjusting bolt extending through the transverse slat at the last mentioned end of said frame adapted for contact with the additional head member to adjust the latter with respect to the frame, whereby the device may be frictionally held in the churn body.

1,061,724. MIXING-VALVE. WILLIAM J. BERGENS, Cleveland, Ohio, assignor of one-fourth to Carleton L. Terry and one-fourth to John A. Bommhardt, Cleveland, Ohio, and one-half to The Single Faucet Company, Chicago, Ill., a Corporation of Illinois. Filed May 13, 1912. Serial No. 697,047. (Cl. 137—26.)

1. In a mixing valve, the combination with a valve casing, a valve-operating device including a spindle extending into the casing, a bonnet on the casing, an index plate mounted on the casing, an outer packing nut surrounding the spindle, a connecting sleeve between the packing nut and the bonnet, said sleeve extending around the spindle and through the index plate, and means engaged by the packing nut to confine the index plate to the casing.



2. In a mixing valve, the combination of a casing, a bonnet thereon having a sleeve projecting outwardly, valve operating devices located in the casing and including a spindle extending through said sleeve, an index plate mounted on the casing and surrounding said sleeve, a packing nut screwed on the sleeve around the spindle, and a spring between the packing nut and the index plate.

3. In a mixing valve the combination of a valve casing having a central chamber, a bonnet screwed into the casing and forming the top of said chamber and having an outwardly projecting sleeve, valve operating devices located in the chamber and including a spindle extending through said sleeve and retained by the bonnet, a packing nut around the spindle on the outer end of the sleeve, and an index plate confined between the nut and the bonnet.

1,061,725. PROCESS OF PRODUCING MOLYBDENUM NITRID. CARL BOSCH and ALWIN MITTASCH, Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin and Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Sept. 19, 1911. Serial No. 650,246. (Cl. 23—13.)

1. The process of producing molybdenum nitrid by heating a compound of molybdenum containing oxygen with a reducing gas and with nitrogen at a temperature between 400° and 800° C.

2. The process of producing molybdenum nitrid by heating a compound of molybdenum containing oxygen with hydrogen and with nitrogen at a temperature between 400° and 800° C.

3. The process of producing molybdenum nitrid by heating a compound of molybdenum containing oxygen with a reducing gas and with nitrogen under pressure, at a temperature between 400° and 800° C.

4. The process of producing molybdenum nitrid by heating a compound of molybdenum containing oxygen first with a reducing gas and then with nitrogen under pressure at a temperature between 400° and 800° C.

5. The process of producing molybdenum nitrid by heating an oxid of molybdenum with hydrogen and with nitrogen under pressure at a temperature between 400° and 800° C.

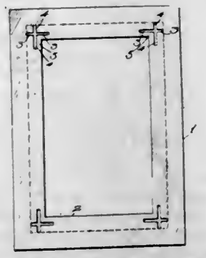
[Claims 6 and 7 not printed in the Gazette.]

1,061,726. COMPOUND RAIL. JULIAN G. CAMPAU, Monroe, Mich., assignor of one-half to Leo M. Connell, Jackson, Mich. Filed Jan. 15, 1913. Serial No. 742,230. (Cl. 239—16.)



A compound rail comprising a section including a head and a half web and a half flange and with a recess in the lower face of the head, said recess having the lower face inclined downwardly and outwardly from the half web, another section including a half flange and a half web confronting the half web of the first mentioned section with its upper end inclined to correspond to and engage in the recess of the head, the inner face of the last mentioned half web being slightly obtuse to the half flange of the same, and clamp devices operating through the confronting half webs whereby the head is supported and the parts held under strain when pressure is applied by the clamp devices.

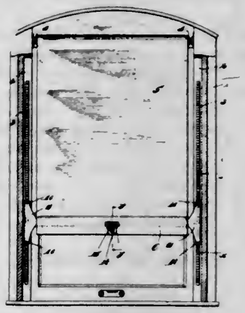
1,061,727. PHOTOGRAPHIC-PRINTING MASK. NORMAN W. CARKHUFF, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 21, 1911. Serial No. 655,927. (Cl. 95—77.)



1. As an article of manufacture, a photographic printing mask embodying a sheet adapted to be inserted between the negative and sensitized surface and comprising a rectangular center portion open to the passage of actinic rays and defining the picture area, and a surrounding portion adapted to resist the passage of actinic rays to form an unexposed border on the print, the sheet being provided with intersecting elongated slots beyond the border parallel with adjacent sides of the picture area for producing guiding marks on the print for trimming the latter down to a border of a predetermined width.

2. As an article of manufacture, a photographic printing mask embodying a transparent flexible sheet adapted to be inserted between the negative and the sensitive surface and composed of a material adapted to resist the passage of actinic rays of light, said sheet being provided with a central rectangular opening defining the picture area and with intersecting elongated slotted portions at the corners of the opening parallel with but removed from the edges of adjacent sides of the latter for the purposes set forth.

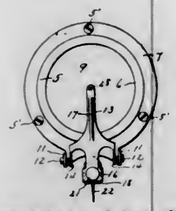
1,061,728. WINDOW-SHADE. EDWARD EMMANUEL CARLSON, Geneva, Ill. Filed Mar. 11, 1912. Serial No. 683,052. (Cl. 156—26.)



The combination with a frame having grooves therein; rack bars mounted in said grooves; a tube interposed between said grooves, having ends thereof flared vertically to rest in said grooves; rollers mounted in said flared portion; a finger piece formed on said tube; a shaft mounted for rotation in said tube and of a diameter substantially equal to that of the bore thereof; pawls mounted at the ends of said shaft for coöperation with the rack bars aforesaid; a lever formed on said shaft and projecting through said tube for coöperation with the finger piece

aforesaid; and springs in said flared ends bearing against said pawls for normally holding the same in engagement with the rack bars.

1,061,729. SOUND-BOX. PLINY CATUCCI, Newark, N. J., assignor to A. F. Meisselbach & Brother, a Corporation of New Jersey. Filed Apr. 26, 1912. Serial No. 693,353. (Cl. 181—11.)



1. In a phonograph sound box, the combination of a body section, a clamping ring having lateral supporting lugs thereon, and a diaphragm, a rigid stylus lever, having resilient supporting lugs pivotally secured between the lateral supporting lugs upon said clamping ring.

2. In a phonograph sound box, the combination of a body section, a diaphragm, a clamping ring for securing said diaphragm to said body section, lateral lugs upon said ring, adjustable pivot pins extending through said lugs in axial alinement with each other, a rigid stylus lever connected to said diaphragm, resilient supporting lugs upon said lever, for resiliently supporting said lever between said pivot pins.

3. In a phonograph sound box, the combination of a body section, a diaphragm, a flanged clamping ring for securing said diaphragm to the body section, rigid lugs upon said clamping ring, a rigid stylus lever connected to the center of said diaphragm, a pair of resilient supporting lugs upon said stylus lever, adjustable pivots extending inwardly from said rigid lugs for pivotally supporting between them said rigid stylus lever through said resilient lugs thereon.

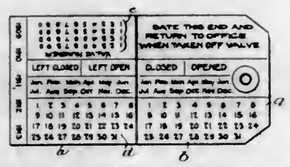
4. In a phonograph sound box, the combination of a body section, a diaphragm and a flange clamping ring for securing said diaphragm to said body section, a pair of rigid lugs integral with said clamping ring, and extending laterally therefrom, pivot pins adjustably secured in said lugs, and a rigid stylus lever secured to said diaphragm and resilient lugs upon said lever located between said rigid lugs and held therein by said pivots.

5. A stylus lever for phonograph sound boxes, comprising a rigid strip of metal having a pair of lugs extending relatively upon opposite sides of its median line, with their extremities bent at right angles to the general plane of the lever and provided near their extremities with pivot sockets, a second pair of resilient lugs extending respectively upon opposite sides of one extremity of said lever, being bent into a tubular resilient ring, a cylindrical stylus needle socket extending into and frictionally held by said tubular ring, and a clamping screw extending through said tubular resilient ring through said socket to bear upon the stylus needle inserted into the axis of said socket.

[Claim 6 not printed in the Gazette.]

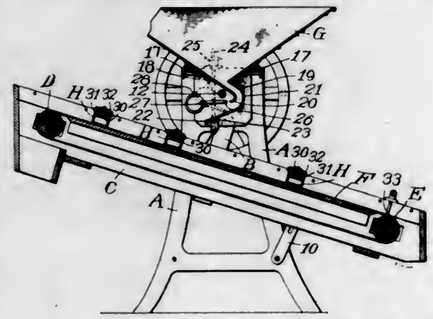
1,061,730. TAG FOR WATER-PIPE VALVES. JOHN A. COLE, Chicago, Ill. Filed June 24, 1909. Serial No. 504,104. (Cl. 40—2.)

A device for use in indicating an initial condition and a subsequently changed condition in valves comprising a tag separated facially into two divisions and provided with a means of attachment, both divisions having permanent characters to be used in indicating relatively different dates, one of said divisions also having permanent characters by which to indicate the valve number and a permanent chackable initial condition record which also indicates that such devision is to be first used, as "Left open", and the other of said divisions also having a permanent checkable changed condition record as "Closed", the body of the tag having its integrity preserved through-



out both divisions so that the said divisions are inseparably connected and the complete tag constitutes a permanent entity.

1,061,731. FEED-REGULATOR. WILLIAM L. DINES, Jr., Worcester, Mass., assignor to William L. Dines, Jr., Co., Worcester, Mass., a Corporation of Massachusetts. Filed Dec. 22, 1911. Serial No. 667,285. (Cl. 83—44.)



1. As an article of manufacture, a hopper, and a stationary flat delivery chute extending substantially across the bottom of the hopper and curving downwardly and reversely therefrom, and having on the reverse portion thereof a flat sheet metal delivery lip normally stationary but adjustable up and down independently of the body of the chute.

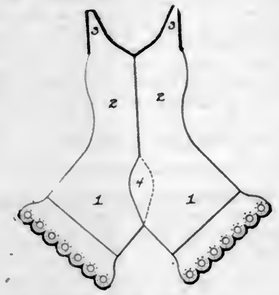
2. As an article of manufacture, a hopper having slanting lower sides bent to form an angular delivery outlet, the lower side of the upper part of which is flat and substantially in alinement with the plane of one of said slanting sides, said delivery having a sharply curved section and a flat mouth slanting at a sharp angle to the upper part, the lower end of the mouth having a flat delivery lip extending beyond the end thereof and in the plane of the lower side of said mouth.

3. In a device of the class described, a hopper having an inclined angular delivery outlet, and means for controlling the feed therethrough, consisting of a wire or rod crank-armed and journaled so that the same can be moved into and out of position.

4. In a device of the class described, a hopper having an inclined angular delivery outlet, and means for controlling the feed therethrough, consisting of a wire or rod crank-armed and journaled so that the same can be moved into and out of position, and a weight for holding the rod in its operative or inoperative positions.

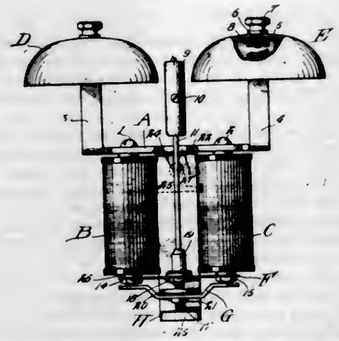
1,061,732. UNION SUIT. WILLIAM S. ELDER, Philadelphia, Pa., assignor to Julius Hirsh, Philadelphia, Pa. Filed Aug. 7, 1912. Serial No. 713,762. (Cl. 2—144.)

1. The mode herein described of producing a union suit from a tube of fabric without waste, said mode consisting in forming a central longitudinal cut in the tubular web and diagonal cuts one extending from one end of said central cut to one side of the tube and the other extending from the other end of said central cut to the opposite side of the tube, whereby two like members are produced, each comprising a leg portion and a body portion, and then reversing said members end for end and uniting the body portions thereof at front and rear, the hip portion of each leg being of the full width of the original tube of fabric and therefore providing a garment with overlapping flaps both at front and rear while still preserving the necessary width of the garment at the hips.



2. The mode herein described of producing a union suit from a tube of fabric without waste, said mode consisting in forming a central longitudinal cut in the tubular web and diagonal cuts one extending from one end of said central cut to one side of the tube and the other extending from the other end of said central cut to the opposite side of the tube, whereby two like members are produced, each comprising a leg portion with front and rear flaps, and a body portion with cut-out neck and shoulder straps, the flaps being produced from the cut-out neck portion, and then reversing said members end for end, uniting the body portions thereof at front and rear and closing the shoulder straps, whereby a garment is produced having the hip portion of each leg of the full width of the original tube of fabric so as to provide the necessary material for the overlapping front and rear flaps without reducing the necessary width of the garment at the hips.

1,061,733. HARMONIC ELECTRIC BELL OR RINGER. CHARLES J. ERICKSON, Chicago, Ill., assignor, by mesne assignments, to First Trust and Savings Bank, trustee, Chicago, Ill. Filed Dec. 18, 1905. Serial No. 292,187. (Cl. 177—7.)



1. In a bell or ringer, gongs, electro-magnets, a permanent magnet, a spring yoke of sheet-metal connecting the ends of said electro-magnets, a striker rigidly secured to the middle portion of said yoke, the striker being entirely free except where connected with said spring, and an armature rigidly connected with said striker and arranged between the permanent magnet and the ends of the electro-magnets.

2. In a bell or ringer, electro-magnets, a leaf spring yoke connecting the ends of said magnets, a striker-rod secured to the middle portion of said spring yoke, an armature for operating said striker-rod, a striker adjustably mounted upon said rod, the striker being entirely free except where connected with said spring yoke, and sound-producing means adapted to be engaged by said striker.

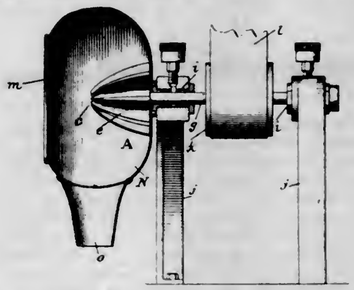
3. In an electric bell or ringer, a thin resilient spring member, suitable means for supporting said member, a rod secured at right angles to and supported by said thin resilient member, an armature rigidly secured to said rod, the said member and armature being disposed in parallel planes, a striker rigidly mounted on the free or swinging end of said rod, the striker being held in its normal position by the said spring, electromagnetic means for operating said armature, and sound producing means to be engaged by said striker.

4. In an electric bell or ringer, a thin resilient member, suitable means for supporting said member, a rod secured at right angles to and supported by said thin resilient member, an armature rigidly secured to said rod, a striker rigidly mounted on the free or swinging end of said rod, electromagnetic means for operating said armature, sound producing means to be engaged by said striker, means for permitting adjustment of the striker on the rod, and means for permitting adjustment of the armature on the rod, said thin resilient member disposed between the armature and the striker.

5. In a bell or ringer, an electromagnet, a spring mounted at its opposite ends, a striker mounted upon the middle portion of said spring, an armature for operating the striker, said spring and armature being disposed in parallel planes, the armature being magnetically propelled in both directions to reverse the tension of the spring by which it is carried, which spring normally holds the armature at the center of its vibratory movement, and sound-producing means adapted to be engaged by said striker.

[Claim 6 not printed in the Gazette.]

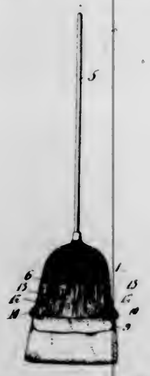
1,061,734. ORANGE AND LEMON JUICE AND PULP EXTRACTOR. FRANKLIN S. FISKE, Baltimore, Md. Filed Aug. 22, 1912. Serial No. 716,459. (Cl. 100—49.)



1. A machine for removing the juice and pulp from fruit such as oranges and lemons, comprising a head approximately cone-shaped and provided at its small end with a cavity, and having corrugations extending parallel with the axis of said head and the small end of the raised part of each corrugation forming a tooth at said cavity, whereby an annular-shaped toothed cutter is produced around the cavity.

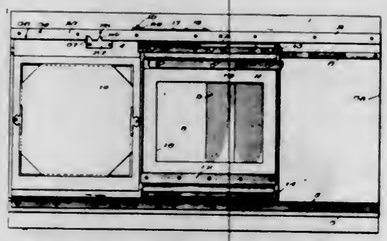
2. In a machine for removing juice and pulp from such fruit as oranges and lemons, the combination of a horizontal revoluble shaft, a solid head whose exterior is approximately cone-shaped and attached to the shaft and said head provided at its small end with a circular cup-shaped cavity formed in the solid head, and a circle of toothed cutters around said cavity.

1,061,735. BROOM-BRIDLE. ALBERT D. FIVESHILLING, Buffalo, N. Y., assignor of one-half to Roy Reed, Buffalo, N. Y. Filed Oct. 4, 1912. Serial No. 723,888. (Cl. 15—23.)



The broom bridle herein shown and described, consisting of the pair of horizontal members adapted to bear upon the side faces of the broom, and a pair of vertical or end members formed by crossing the horizontal members, said end members having each a pair of spring coils for embracing the edges of the broom and an upper loop to rest flat against the said edges of the broom, the bridle thus completely binding the sides and edges of the broom.

1,061,736. MULTIPLYING CAMERA-BACK. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 23, 1912. Serial No. 733,053. (Cl. 95—36.)



1. In a multiplying back, the combination with a back frame and a shiftable carriage movable thereon, of a reversible plate frame on the carriage and means for interlocking the back frame and carriage controlled by the position of the plate frame with reference to the latter.

2. In a multiplying back, the combination with a back frame, a shiftable carriage movable thereon and a locking device for halting the carriage in a predetermined position, of a reversible plate frame adapted to assume either of two positions on the carriage and tending to render the locking device inoperative when in one of said positions.

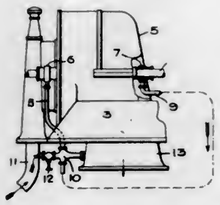
3. In a multiplying back, the combination with a back frame, a shiftable carriage movable thereon and means for interlocking the parts comprising an automatic locking device on one part arranged to coöperate successively with a plurality of stops on the other to halt the carriage in different positions relatively to the back frame, of a reversible plate frame adapted to assume either of two positions on the camera and means for preventing the engagement of the latch with one of said stops, said means being rendered operative when the plate frame is in one position and inoperative when it is in the other.

4. In a multiplying back, the combination with a back frame having an automatic latch thereon, a shiftable carriage movable on the back frame and provided with a stop arranged to be normally engaged by the latch to halt the carriage in one position, of a reversible plate frame adapted to assume either of two positions on the carriage and means actuated upon the reversal of the plate frame for rendering the stop ineffective.

5. In a multiplying back, the combination with a back frame having an automatic latch thereon, a shiftable carriage movable on the back frame, and a track on the carriage on which the latch runs, said track being provided with a recess forming a stop with which the latch normally coöperates to lock the carriage in one position relatively to the back frame, of a reversible plate frame on the carriage adapted to assume either of two positions and a member on the carriage held in the recess in the track by the plate frame when the latter is in one position to prevent an effective coöperation of the latch and stop.

[Claim 6 not printed in the Gazette.]

1,061,737. ELASTIC-FLUID TURBINE. GEORG FORNER, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Dec. 30, 1911. Serial No. 668,719. (Cl. 121—58.)



1. An elastic-fluid turbine having a shaft and a packing therefor, an ejector that is connected to a chamber in the packing, a means for supplying fluid to the ejector, and a conduit for conveying the said fluid and leakage into the exhaust conduit of the turbine.

2. An elastic-fluid turbine having a shaft and packings therefor, an ejector that is common to and receives the leakage steam from the packings, means for supplying steam to the ejector to operate it, a regulating means therefor, and a pipe that conveys fluid from the ejector to a point of low pressure in the turbine.

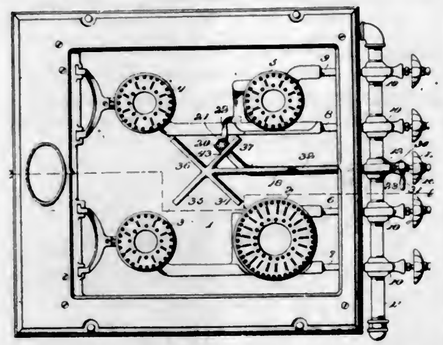
3. An elastic-fluid turbine having a shaft and a packing therefor, an ejector, a pipe that conveys leakage from the packing but of higher pressure to the ejector for actuating it, and a valve for controlling the passage of fluid through the last named pipe.

1,061,738. LIGHTING DEVICE FOR GAS-STOVES. HERMAN C. FRITZ, Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Sept. 26, 1911. Serial No. 651,331. (Cl. 158—115.)

1. A lighter comprising a tube and radially arranged hollow arms in communication with said tube and having open outer ends, the lower face of said arms having grooves terminating in slits extending from the open ends to the tube and communicating with the hollow portion of the arms, whereby a depending flange is formed on each side of the slit, substantially as shown and described.

2. The combination with a stove having a series of burners, of a simmering burner between said burners, a lighter between said burners and composed of radially arranged arms extending adjacent the burners and having slits in their lower face communicating with each other, the arm adjacent the simmering burner having a transverse slit communicating with the slits to allow the lighter to be ignited from said simmering burner.

3. The combination with a stove having a series of burners, of a simmering burner between said burners, a valve for each burner, a lighter between said burners and composed of radially arranged arms extending adjacent the burners and having slits in their lower face communicating with each other, and a valve for said lighter.



4. The combination with a stove having a series of burners, of a gas supply pipe, a valve in said pipe for each burner, a simmering burner between the burners, a lighter between the burners, a valve casing in the gas supply pipe, a nipple extending inwardly from the valve casing for supplying the simmering burner with gas, a valve controlling said nipple, a second nipple in communication with the valve casing above the first nipple and adapted to supply the lighter with gas, and a valve controlling the said second nipple.

5. The combination with a gas stove, having a series of burners, of a simmering burner between the burners, a separate valve for each burner, a lighter supported by the simmering burner and having radially arranged arms extending adjacent the first named burners, and having open outer ends, the lower face of said arms having longitudinal slits communicating with each other at their inner ends, one arm having a transverse slit adjacent the simmering burner and communicating with the longitudinal slit, and a valve controlling the supply of gas to the lighter.

[Claim 6 not printed in the Gazette.]

1,061,739. SHEET-METAL PIPE. BENJAMIN DAVID FUDGE, Bainbridge, Ga. Filed Jan. 2, 1913. Serial No. 739,840. (Cl. 126—309.)



1. A sheet metal pipe section having on its longitudinal edges interlocking hooks the free longitudinal edges of which are relatively inclined longitudinally of the pipe, for the purpose described.

2. A sheet metal pipe section having its longitudinal edges formed with hooks adapted to be interlocked and the free longitudinal edges of which are reversely inclined longitudinally of the pipe, for the purpose described.

3. A sheet metal pipe section having its longitudinal edges reversely turned to form hooks adapted to be interlocked, and extending continuously from end to end of the section the free edges of the hooks being oppositely inclined longitudinally of the pipe, for the purpose described.

4. A sheet metal pipe section having one of its longitudinal edges turned back upon itself to form a hook, and its other longitudinal edge doubled, said doubled edge being turned back upon itself to form a hook adapted to be interlocked with the first mentioned hook, and the single edge of the doubled portion being turned back on the inside of the pipe toward said first mentioned hook to overlie the hooks when the latter are interlocked.

5. A sheet metal pipe section having one of its longitudinal edges turned back upon itself to form a hook which is tapered longitudinally of the pipe, and its other longitudinal edge doubled and turned back upon itself and tapered oppositely of the first mentioned hook and adapted to be interlocked therewith, and the single edge of the doubled portion being turned back to prevent disengagement of said hooks.

[Claims 6 and 7 not printed in the Gazette.]

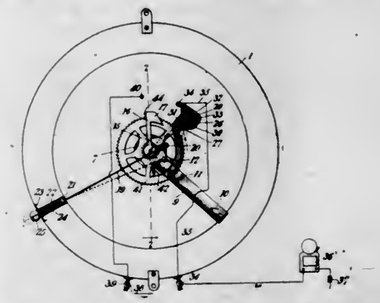
1,061,740. EXTENSION-CUFF FOR TOPS OF BOOTS. HENRY W. GEHANT, West Brooklyn, Ill. Filed Dec. 12, 1912. Serial No. 736,387. (Cl. 36—1.)



1. In combination with a boot, an extension cuff of double thickness, thereby forming inner and outer portions, the inner portion arranged upon the inside of the boot leg while the outer portion is arranged upon the outside of the boot leg, means for fastening the inner and outer portions to the boot leg, said cuff having a channel, and a draw string in said channel.

2. An extension cuff for boot legs comprising an area of waterproof material, folded upon itself to form a channel and inner and outer portions, one adapted to be arranged upon the inside of the boot and the other upon the outside, said inner and outer portions being adapted to be stitched to the boot leg, and a draw string in said channel.

1,061,741. CLOCK. LEWIS D. GIDDENS, Wilson, N. C. Filed May 9, 1912. Serial No. 696,117. (Cl. 58—19.)

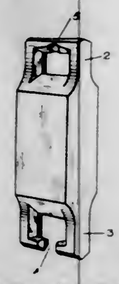


1. The combination with the minute hand arbor of a clock, of a ratchet wheel mounted thereon to move therewith, a pawl bearing plate pivotally mounted on the arbor and carrying a pawl adapted to engage the ratchet, a trip lever mounted on the arbor and formed with an abutment adapted to engage and release the pawl, an extension formed on said trip lever, a trip rod connected at one end with said extension, and means connected with said trip rod and operated exteriorly of the clock for causing the trip lever to prevent the movement of the pivotal plate when desired.

2. The combination with the minute hand arbor of a clock, of a ratchet wheel mounted thereon to move there-

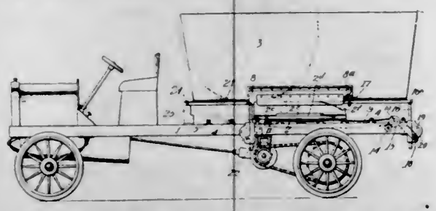
with, a pawl bearing plate pivotally mounted on the arbor and carrying a pawl adapted to engage the ratchet, a trip lever mounted on the arbor and formed with an abutment adapted to engage and release the pawl, an electric circuit associated with said clock mechanism, one leg of the circuit terminating at a contact point carried by the clock and the other leg terminating at the pivotal plate, an alarm mechanism arranged in said circuit and actuated by the engagement of the plate with the contact point, a trip rod connected at one end to the trip lever and carrying a plunger near its other end, a housing for said plunger, a spring surrounding said trip rod and incased in said housing, and an operating member threaded onto the extremity of the trip rod and operable from without the clock.

1,061,742. SASH-WEIGHT. JOHN M. GRAYBILL, Gary, Ind. Filed May 27, 1912. Serial No. 699,923. (Cl. 16—20.)



A sash weight consisting of a plurality of separable sections, each of said sections comprising a body substantially symmetrical in cross-section; an extension at one end of said body in the form of a closed stirrup; and an extension at the other end of said body in the form of a stirrup having an entry passage in its outer end adapted to permit the passage of the outer portion of a closed stirrup on another section, when said other section is arranged at an angle to the first section, and to prevent the passage of said outer portion, when said sections are in substantial alinement with each other, said stirrups being arranged substantially parallel to each other and projecting from said body in substantially the same planes, and the edges of said stirrups being beveled to provide draft for casting substantially as described.

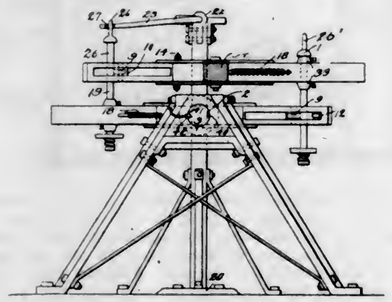
1,061,743. DUMP-WAGON. CHARLES D. HEILE, Oak Park, and ERNEST GEORGE SNYDER, Chicago, Ill., assignors to H. McFarlane & Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 14, 1911. Serial No. 643,815. (Cl. 21—20.)



1. In combination with a motor wagon having traction wheels and a frame supported thereon, a body normally located about centrally over said traction wheels, and means by which said body is supported on the frame, comprising a turn-table mounted for longitudinal travel on said frame to permit swinging said body to a transverse position and tilting it between the front and rear wheels of the wagon for dumping its contents.

2. In combination with a wagon having steering wheels and other supporting wheels and a frame mounted thereon, a body normally located about centrally over said other wheels, and means by which said body is supported on the frame comprising a turn-table mounted for longitudinal travel on said frame to permit swinging said body to a transverse position and tilting it between the steering wheels and other wheels of the wagon for dumping its contents.

1,061,744. MAIL RECEIVING AND DELIVERING APPARATUS. PEDER HETLE, Miner, N. D. Filed Sept. 23, 1912. Serial No. 721,992. (Cl. 105—231.)



1. The combination of oppositely disposed clamps, means for pressing the jaws of one of the clamps toward a clamping position, a trip lock for locking said jaws in an open position, said trip lock pivotally connecting said jaws, similar car-carried clamps disposed inversely to the disposition of the first mentioned clamps, means carried by the car-carried clamps for tripping the lock of the first mentioned jaws, and means carried by the first clamp for tripping the jaws of the car-carried clamp.

2. The combination of oppositely disposed clamps, means for pressing the jaws of one of the clamps toward a clamping position, a trip lock for locking said jaws in an open position, said trip lock being pivotally connected to both of said jaws, similar car-carried clamps disposed inversely to the disposition of the first mentioned clamps, mail-sustaining means carried by the car-carried clamps for tripping the lock of the first mentioned jaws, and mail sustaining means carried by the first clamp for tripping the jaws of the car-carried clamp.

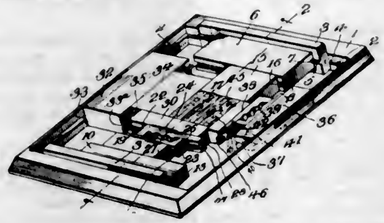
3. The combination of relatively stationary mail sustaining jaws, mail catching jaws coöperatively connected therewith for clamping mail carrying means when the first mentioned jaws are released, means pressing the first mentioned jaws toward a released position, and a trip lock retaining the second mentioned jaws in mail sustaining position, the said trip lock connecting and being collapsible between the second mentioned jaws, said trip lock being disposed to lie in the path of car-carried trip mechanism.

4. The combination of pivotally connected arms disposed to form a pair of clamping jaws at each side of the pivot means for tensioning the jaws and pressing the same in a direction for closing one set of jaws and opening the other, a trip locking mechanism for retaining the last mentioned jaws in clamping position, said last mentioned jaws being adapted to sustain mail carrying means and to release the same on being opened, similar clamps adapted to be carried by a car and to have one of its jaws sustain mail carrying means in the line of the trip lock mechanism of the first mentioned jaws, and trip lock mechanism on the car carried clamp disposed in the line of the mail sustaining means carried by the first mentioned clamp.

5. In mail receiving and delivering apparatus, the combination of a body adapted to swing vertically from a horizontal position extending in one direction to a horizontal position extending in the opposite direction, means for locking the same in a horizontal position, and pairs of clamping jaws extending therefrom and coöperatively connected for respectively releasing and gripping mail carrying means.

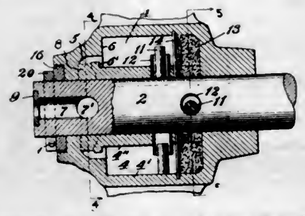
[Claims 6 to 15 not printed in the Gazette.]

1,061,745. MEANS FOR LOCKING TYPE-FORMS IN A CHASE. JOHN E. HEWETT, Wilmington, N. C. Filed Nov. 4, 1912. Serial No. 729,415. (Cl. 101—50.)



In combination, a chase formed with a continuous groove on its inner surface, furniture having ribs and grooves extending longitudinally thereof, certain of said furniture located adjacent the chase with the ribs thereof fitting in the groove of the chase, quoins comprising two members, each member having ribs and grooves extending longitudinally thereof with a rib on one member of each quoin engaging a groove on the other members, and with other ribs and grooves engaging with the grooves and ribs in the adjacent furniture, whereby all the furniture and quoins between a form and the chase are locked together and to the chase.

1,061,746. MINE-CAR WHEEL. FRANKLIN C. HOCKENSMITH, Pittsburgh, Pa., assignor to Hockensmith Wheel & Mine Car Company, Penn Station, Pa., a Corporation of Pennsylvania. Filed Nov. 8, 1911. Serial No. 659,217. (Cl. 64—26.)



1. The combination of a car wheel having its hub formed with a circumferential oil chamber with the inner wall of the chamber separating it from the wheel bore and with said wall ported to pass oil to the bore, the outer portion of the hub formed with ports each of which communicates with the oil chamber between the inner and outer walls of the latter and with said ports extending to the hub bore in a plane outwardly from the plane of the oil chamber, means at the inner ends of said ports for preventing oil from flowing outwardly therethrough when the position of the wheel places them above the wheel bore, and an axle extending through the hub bore with the end of the axle exposed at the outer side of the wheel, the axle having a constantly open oil inlet port extending inwardly from its outer end with the inner portion of said port branched laterally into the plane of and adapted to register with the hub ports leading to the oil chamber, the hub having a flange-like portion adapted to rotatably fit on said axle outside said ports.

2. A car wheel having its hub formed with a circumferential oil chamber 4 having outer longitudinal wall 4′ and inner longitudinal wall 4″ and with end walls connecting the outer and inner walls, end wall 6 having port 5 open therethrough between walls 4′ and 4″ and with portion 6′ of wall 6 encircled by port 5 spaced outwardly from the main portion of said wall 6 for the purpose described, inner wall 4″ being open for the passage of oil to the wheel bore and with port 5 extending to said bore, and an axle having an oil inlet opening adapted to register with port 5, the hub having a flange-like portion adapted to rotatably fit on said axle outside said ports, said portion forming in part an end wall of the oil-chamber.

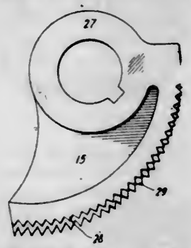
3. The combination of a car wheel having its hub formed with an oil chamber with the inner wall of the chamber separating it from the wheel bore and with said wall ported to pass oil to the bore, the hub formed with a port extending from the oil chamber and open to the wheel bore between the plane of the oil chamber and the outer end of the hub, and an axle on which the hub rotates, the axle having a port extending inwardly from its extremity and with the port branching laterally through the periphery of the axle in the plane of and adapted to register with the said hub port, the hub having a flange-like portion adapted to rotatably fit on said axle outside said ports, said portion forming in part an end wall of the oil chamber.

4. A wheel hub formed with substantially imperforate flange-like portions having a bore adapted to receive and rotatably fit on the supporting member, said hub also having an oil chamber open at one end for receiving oil, said chamber having inner and outer longitudinally-extending walls, said opening and the chamber being located between said portions, said portions forming in part the end walls of the oil chamber, the opening being spaced from the inner longitudinal wall of the chamber.

5. A wheel hub formed with substantially imperforate flange-like portions having a bore adapted to receive and rotatably fit on the supporting member, said hub also having a circumferential oil chamber open at one end with the inner and outer walls thereof extending longitudinally of the hub, said opening and the chamber being located between said portions, said portions forming in part the end walls of the oil chamber, the opening being spaced from the inner longitudinal wall of the chamber, one of said portions having a port leading to said opening in a direction lateral to the bore axis, said port being positioned inside and spaced from the plane of the outer end of the hub to provide a flange rotatably fitting the supporting member between said port and the outer face of the hub.

[Claims 6 and 7 not printed in the Gazette.]

1,061,747. SAFETY APPLIANCE FOR MINE-CAGES. GUSTAVE E. HUTTELMAIER, Scottdale, Pa. Filed Feb. 24, 1912. Serial No. 679,581. (Cl. 187—87.)

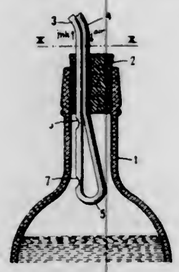


In a safety appliance for mine cages, a rotatable cam having an eccentric peripheral gripping surface, a series of V shaped serrations on said gripping surface, and a series of pointed spikes on said surface, said spikes having a plurality of flat faces projecting outwardly beyond the apices of said serrations, and the length of said spikes increasing progressively from end to end of the gripping surface.

1,061,748. FILLER FOR INK-WELLS, &c. JAMES W. JACOBUS, Great Neck, N. Y. Filed May 31, 1912. Serial No. 700,580. (Cl. 215—15.)

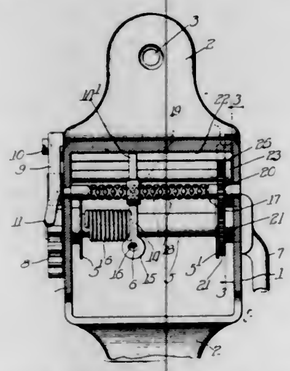
1. A filling device comprising a stopper and a double tube extending through the stopper and having two open

ends adjacent each other above the stopper and a U-shaped loop portion below said stopper with an air entrance opening and a liquid exit opening, the two branches of the loop portion being integrally connected by a curved bend at the bottom, and the sides of the loop portion being spaced apart just above the bend.



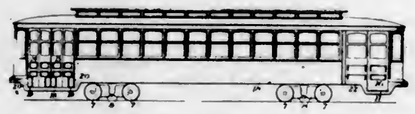
2. A filler comprising a stopper and a double tube secured to the stopper and having its two outer ends open and arranged adjacent each other, one branch of the tube being substantially straight through the stopper and below the stopper and having two openings below the stopper, the outer end of the other branch lying alongside of the outer end of the first branch and the inner portion of the said second branch being spaced apart from the inner portion of the first branch and united to the first branch by a curved bend.

1,061,749. LINE-REEL. FRANK R. JENNINGS, Chicago, Ill. Filed June 23, 1910. Serial No. 568,419. (Cl. 242—102.)



In a device of the kind described and in combination, a line reel, means for rotatably supporting the ends thereon and securing the reel in position, said supporting means comprising a casing having end walls connected at their top and bottom and arranged for attachment to a fixed support, the top connection extending downwardly to form a hood over said reel, said hood having a groove on the inside thereof extending substantially from end to end, means for operating the reel, said reel provided with a pinion thereon, a threaded shaft and a pinion thereon meshing with said reel pinion, a traveler positioned on said shaft and movable longitudinally thereof said traveler provided with a vertically extending bar having an opening through the lower end thereof with the upper end positioned in the groove in said hood, and means for operatively connecting said shaft and traveler, a pinion meshing with said reel pinion, a resilient member having one end connected to said supporting means and the other end to said pinion, said resilient member arranged to be wound by the unwinding rotation of said reel.

1,061,750. PASSENGER-CAR. PEARL N. JONES, Pittsburgh, Pa. Filed July 20, 1911. Serial No. 639,538. (Cl. 105—205.)



1. A passenger car having a step and a combined swinging and sliding door arranged to close over the outer edge of the step and to assume a position at substantially right angles to its closed position when opened, the door having a portion to overhang the car floor or platform when opened; substantially as described.

2. A passenger car having its floor provided with a depressed portion or pocket, a step therein, and a swinging and sliding door having a corner portion thereof cut away to clear the step; substantially as described.

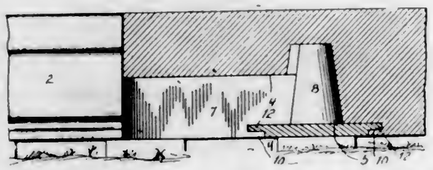
3. A passenger car having its floor provided with a depressed portion or pocket, a step therein, and a swinging and sliding door having a corner portion thereof cut away, together with means for covering the cut-away corner portion when the door is closed; substantially as described.

4. A passenger car having its floor provided with a depressed portion or pocket, a step therein, and a swinging and sliding door having a corner portion thereof cut away, together with a spring-actuated flap for covering the cut-away corner portion; substantially as described.

5. A passenger car having a step, and a door inclosing said step when closed, the door being wider than the step and having a corner portion cut away to permit it to move inwardly over the step when opened; substantially as described.

[Claims 6 to 12 not printed in the Gazette.]

1,061,751. RAIL-JOINT. HENRY B. KAEHN, Lookout, Okla. Filed Nov. 16, 1912. Serial No. 731,839. (Cl. 238—4.)

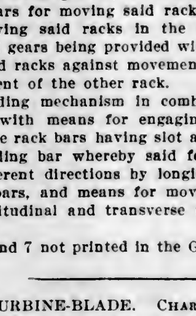


The combination with the abutting ends of two rails having a recess formed in the base portion thereof, and inwardly projecting flanges formed at the lower side of the recess, of a plate having outwardly projecting flanges adapted to be disposed between the first flanges and the body of the rail and means for securing said plate in position to prevent vertical movement of the rails.

1,061,752. CLAMP FOR DETACHABLE VEHICLE-SEATS. EDWARD H. KESSELHUTH, Long Pine, Nebr., assignor of one-half to Charles E. Hall, Long Pine, Nebr. Filed May 10, 1912. Serial No. 696,531. (Cl. 21—41.)

1. A clip for securing seats to vehicles comprising a base member adapted to be attached to a seat, and a plate swingingly coupled at one end to the base member and including a resilient portion and a depending portion, the depending portion adapted to engage a wagon body and held in position thereon by the reaction of the resilient portion.

2. The combination with a seat including terminal cleats having means adapted to support the same upon a wagon body, of a clip comprising a base connected to the cleat, and a plate swingingly coupled at one end to the base and including a resilient portion and a depending portion, the depending portion of the clip being adapted



to engage over a wagon body and held in position thereon by the reaction of the resilient portion.

1,061,753. FEEDING MECHANISM. WILLIAM G. KIRCHHOFF, St. Louis, Mo., assignor to Theodore W. Remmers, St. Louis, Mo. Original application filed Sept. 24, 1912. Serial No. 722,062. Divided and this application filed Jan. 20, 1913. Serial No. 743,179. (Cl. 101—42.)



1. A feeding mechanism comprising in combination cooperating rack bars, a feeding bar coöperating therewith, and means for moving the rack bars longitudinally to cause a longitudinal and transverse reciprocation of said feeding bar.

2. A feeding mechanism comprising in combination a lifting rack, a holding rack, a feeding bar adapted to be actuated by said racks, means for moving said racks longitudinally, means for moving said feeding bar transversely as one of said racks moves longitudinally thereof, and means for moving said feeding bar longitudinally with the longitudinal movement of the other rack.

3. A feeding mechanism comprising in combination a lifting rack, a holding rack, a feeding bar operated by said racks, means for reciprocating said racks simultaneously, and means for holding one of said racks against longitudinal movement during a portion of the movement of the other rack.

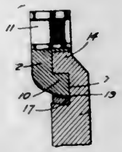
4. A feeding mechanism comprising in combination a lifting rack, a holding rack, a feeding bar actuated by said racks, gears for moving said racks in one direction, gears for moving said racks in the opposite direction, certain of said gears being provided with means for holding one of said racks against movement during a portion of the movement of the other rack.

5. In a feeding mechanism in combination, a feeding bar provided with means for engaging the material to be fed, movable rack bars having slot and pin connections with said feeding bar whereby said feeding bar may be moved in different directions by longitudinal movements of said rack bars, and means for moving said rack bars to cause longitudinal and transverse movements of said feeding bar.

[Claims 6 and 7 not printed in the Gazette.]

1,061,754. TURBINE-BLADE. CHARLES N. F. KNAPE, Pittsburgh, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 10, 1910. Serial No. 586,288. (Cl. 121—57.)

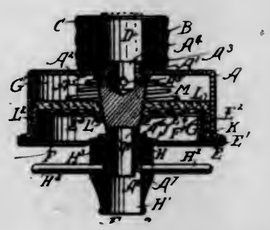
1. The combination with an impulse wheel having an undercut groove and a projection and a blade having a slot and projection, the projection on the blade of less width than the width of the slot, the projection on the blade engaging the groove in the impulse wheel and a projection on the impulse wheel engaging the slot in the blade and fitting it, and means between the blade and the inner wall of the undercut portion of the groove for fastening said blade and impulse wheel together.



2. The combination with an impulse wheel and a blade, means for causing the blade and impulse wheel to interengage and a distortable wedge having a bent over end engaging a shoulder on the blade for securing them together.

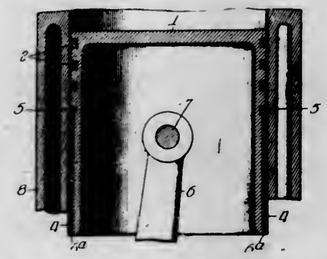
3. The combination with an impulse wheel having a dove-tailed groove, a blade having a slot engaged by a portion of the impulse wheel which fills said slot, a tail-piece on the blade for engagement with the impulse wheel and a distortable wedge interposed between the tail piece and one edge of the groove and with the undercut portion of the groove, and having one end bent over a shoulder on the blade.

1,061,755. FILTER. GEORGE M. KNEUPER, New York, N. Y. Filed June 14, 1911. Serial No. 633,065. (Cl. 210—7.)



A filter comprising an upper part, a lower part comprising a section dished upwardly and perforated at the top, and another section which is substantially flat and has an upwardly directed peripheral flange fitted tightly into the lower portion of said dished section, filtering material adapted to be clamped between said parts, and means for forcing one of said parts toward the other.

1,061,756. PISTON. CHARLES Y. KNIGHT, Coventry, England. Filed Sept. 28, 1910. Serial No. 584,179. (Cl. 121—104.)

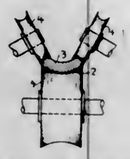


1. In a device of the class described the combination of a piston proper having its diameter reduced throughout a portion of its length, a split collar surrounding the pis-

ton at said reduced portion, and interlocking provisions provided on said collar and piston for causing the collar to travel with the piston.

2. In a device of the class described the combination with a piston provided with a head having pressure retaining provisions and a trunk of smaller diameter than said head, of an elastic axially elongated split collar or bushing surrounding the said trunk and movable therewith for retaining around the trunk a film of lubricant.

1,061,757. METHOD OF TREATING THE TIPPING MATERIAL OF CIGARETTE-TUBES. EWALD KOERNER, Dresden, Germany. Filed June 15, 1912. Serial No. 703,872. (Cl. 131—39.)



1. The method of applying mouth-piece material to cigarettes which consists in bending and setting a strip of mouth-piece material to a shape corresponding substantially to the form of the cigarette to which said mouth-piece is to be applied and then permanently attaching the mouth-piece to an end of the cigarette.

2. The method of applying mouth-piece material to cigarettes, which consists in subjecting a piece of the said material to the simultaneous action of pressure and heat between dies shaped to bend and set said material to substantially the form of the cigarette to which the material is to be applied and then affixing the said shaped mouth-piece to an end of the cigarette.

1,061,758. ELECTRODE. CARL R. KRUEGER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 16, 1911. Serial No. 654,878. (Cl. 176—136.)

1. An arc light electrode containing titaniferous material and a small percentage of a cupreous material.

2. An arc light electrode composed of titaniferous material which produces a slag in burning and a small percentage of a cupreous material.

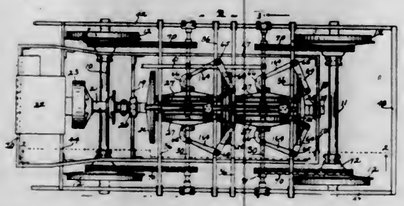
3. An arc light electrode containing titanium carbid and a small percentage of cupreous material.

4. An arc light electrode containing titaniferous material and an admixture of a small percentage of metallic copper.

5. An arc light electrode containing titanium carbid and a small percentage of metallic copper.

[Claims 6 and 7 not printed in the Gazette.]

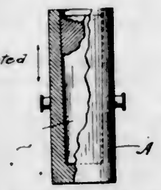
1,061,759. FRICTION TRANSMISSION MECHANISM. JOHN W. LAMBERT, Anderson, Ind., assignor to The Buckeye Manufacturing Company, Anderson, Ind., a Corporation of Indiana. Filed May 31, 1910. Serial No. 564,151. (Cl. 74—26.)



1. The combination of a frame, a driving shaft mounted in the frame, a plurality of driving friction wheels secured on said shaft, driven shafts extending laterally in opposite directions from said driving shaft, means for mounting said driven shafts so that their inner ends may have some lateral movement, means for giving the inner ends of said driven shafts such lateral movement in opposite directions, a driven friction wheel on each side of the driving shaft between said driving wheels and mounted on the inner end of said driven shafts so as to turn the same and be slidable thereon, a bell crank lever mounted in the frame for each driven shaft and connected at one end therewith, and a single means for operating all of said bell crank levers whereby said driven wheels will be moved toward or away from the centers of said driving wheels.

2. The combination of a frame, a driving shaft mounted in the frame, a plurality of driving friction wheels secured on said shaft, driven shafts extending laterally in opposite directions from said driving shaft, means for mounting said driven shafts so that their inner ends may have some lateral movement, means for giving the inner ends of said driven shafts such lateral movement in opposite directions, a driven friction wheel on each side of the driving shaft between said driving wheels and mounted on the inner end of said driven shafts so as to turn the same and be slidable thereon, a bell crank lever mounted in the frame for each driven shaft and connected at one end therewith, and a longitudinally slidable plate connected with the other arms of all of said bell crank levers for simultaneously moving them and sliding all the driven friction wheels toward or away from the centers of the driving friction wheels.

1,061,760. PROCESS OF MAKING DENSE STEEL INGOTS. HORACE W. LASH, Cleveland, Ohio, assignor to The Liquid Forged Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 4, 1909. Serial No. 516,276. (Cl. 22—216.)

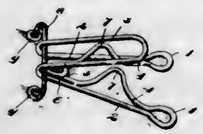


1. The process of producing dense steel ingots which consists in confining the molten metal in a mold and causing the metal to settle or be compressed toward the bottom of the mold by impact against the bottom of the mold, the said mold being so formed that the metal is compressed laterally as it settles.

2. The method of casting, which consists in subjecting the solidifying casting with its larger end uppermost to a succession of impacts applied vertically thereto in a straight line.

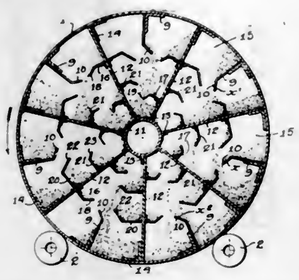
3. The method of casting, which consists in pouring the casting with the wide end of the mold uppermost, and subjecting the solidifying casting to a succession of impacts applied vertically in a straight line.

1,061,761. HOOK AND EYE. MAY L. LEE, Chicago, Ill. Filed Jan. 19, 1912. Serial No. 672,242. (Cl. 24—228.)



A hook consisting of a single continuous section of wire bent upon itself and having the bent portion re-bent to form a base and a bill, said bill arranged at an angle to the base and formed of two substantially parallel spaced portions, the terminals of said wire being re-bent forming securing loops at the end of the base aforesaid, and curved upwardly to form co-incident humps directly beneath the respective portions of the bill, one end of said wire being looped to form a secondary securing loop at the lower end of the bill and the other end terminating adjacent thereto.

1,061,762. APPARATUS FOR DRYING SUBSTANCES. WALTHER LIERFELD, Dortmund, Germany. Original application filed Mar. 8, 1911, Serial No. 613,055. Divided and this application filed Dec. 5, 1911. Serial No. 664,057. (Cl. 34—5.)



1. A drying apparatus comprising in combination, a revoluble casing provided with peripherally disposed shelves carried by and projecting from said casing to elevate and then drop the material, a tube centrally disposed in said casing, and abutments for intercepting the material spaced at different radial points between said tube and said shelves.

2. A drying apparatus comprising in combination, a revoluble casing provided with a plurality of peripherally disposed shelves carried by and projecting from said casing to elevate and then drop the material, a tube in said casing, and partitions extending from said tube to said casing and dividing the same into chambers, substantially as described.

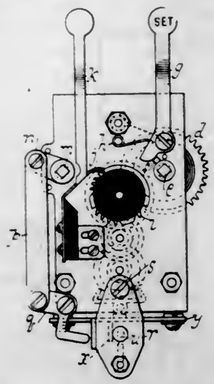
3. A drying apparatus comprising in combination, a revoluble casing provided with a plurality of peripherally disposed shelves carried by and projecting from said casing to elevate and then drop the material, a tube centrally disposed in said casing, partitions extending from the said tube to said casing and dividing the same into a plurality of chambers, and a plurality of abutments extending from said partitions and disposed at different radial points with respect to said shelves, substantially as described.

1,061,763. ELECTRIC FIRE-ALARM. LOUIS J. LOEFFLER, Stapleton, N. Y. Filed Jan. 13, 1912. Serial No. 671,039. (Cl. 178—50.)

1. In an electric fire alarm the combination with a normally wound spring motor, a lever piece mounted on the motor, a manually operable device carried by the lever piece normally preventing movement of the motor, and a manually controlled secondary device for independent operation of the lever piece to allow movement of the motor.

2. In an electric fire alarm, the combination with a normally wound spring motor including an escapement, a lever piece swingingly mounted on the motor, a manually operable device carried by the lever piece normally preventing movement of the motor, and manually controlled secondary devices for controlling the lever piece to allow movement of the motor.

3. In an electric fire alarm the combination with a normally wound spring motor including an escapement, a lever piece swingingly mounted on the motor, a manually operable device carried by the lever piece normally preventing movement of the escapement, and secondary devices independent of the motor for operating the lever piece to release the escapement.



4. In an electric fire alarm, the combination with a normally wound spring motor, including an escapement, a lever piece swingingly mounted on the motor, a manually operable device carried by the lever piece normally preventing movement of the escapement, secondary devices independent of the motor, comprising a key lever, a link connected to the key lever and a bell crank lever actuated by the key lever for oscillating the lever piece to release the escapement and allow movement of the motor.

5. In an electric fire alarm, the combination with a normally wound spring motor, including a circuit breaker having a closed circuit, a lever piece swingingly mounted on the motor, a manually operable device carried by the lever piece normally preventing movement of the motor, manually controlled secondary devices including a key shaft for independent operation of the lever piece to allow movement of the motor, and means carried by the key shaft for shunting the circuit breaker while the secondary devices are in action.

1,061,764. SHAPE-PRESERVER FOR OPEN-ENDED NECKTIES. AARON MARCUS, New York, N. Y. Filed Aug. 6, 1912. Serial No. 713,695. (Cl. 2—11.)



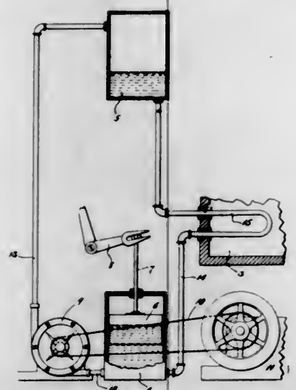
In an open-ended necktie, a facing having flaps and inclosing a lining extending to the beginning of the flaps, and a tape secured to the facing and lining adjacent to an end of the lining, and also secured to the extreme end of the facing, so that when the necktie is being tied, the tape will prevent all undue distortion of the necktie.

1,061,765. CONTROLLING MECHANISM. EMERICH J. MARKEL, New Haven, Conn. Filed Oct. 21, 1912. Serial No. 726,866. (Cl. 62—6.)

1. Controlling mechanism of the class described comprising a controlling member, means for circulating a liquid, the liquid governing the controlling member, and a refrigerating device, said circulating means having a thermostat connected therewith, said thermostat being in operative relation with the refrigerating device and acting to check the flow of the liquid when the temperature in the refrigerating device passes below a predetermined point.

2. Controlling mechanism of the class described comprising a controlling member, means including piping, for circulating a liquid, the liquid governing the controlling member, and a refrigerating tank, said piping having a thermostat connected therewith, said thermostat being in operative relation with the refrigerating device and act-

ing to check the flow of the liquid when the temperature of the refrigerating device passes below a predetermined point.



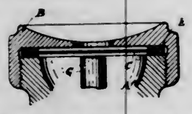
3. Controlling mechanism of the class described comprising a controlling member, means including piping, for circulating a liquid, the liquid governing the controlling member, and said piping extending through the refrigerating device and having a thermostat connected with that part thereof in the refrigerating device, said thermostat acting automatically to check the flow of the liquid when the temperature in the refrigerating device passes below a predetermined point.

4. Controlling mechanism of the class described comprising a controlling member, a system of piping, a refrigerating device through which the piping extends, the piping having a bend in the refrigerating device, a congealable liquid, and means for forcing the congealable liquid through the piping, said liquid governing the action of said controlling member.

5. The combination of a refrigerating device, a plurality of vessels, piping connecting the vessels and extending through the refrigerating device, a congealable substance, means for forcing the congealable substance from one vessel to another and then returning it to the original vessel by way of said piping, and a controlling member in one of the vessels movable by the congealable substance.

[Claim 6 not printed in the Gazette.]

1,061,766. DIAPHRAGM OF TELEPHONIC RECEIVERS AND LIKE INSTRUMENTS. ALEXANDER MARR, Manchester, England. Filed Sept. 12, 1912. Serial No. 719,962. (Cl. 179—115.)

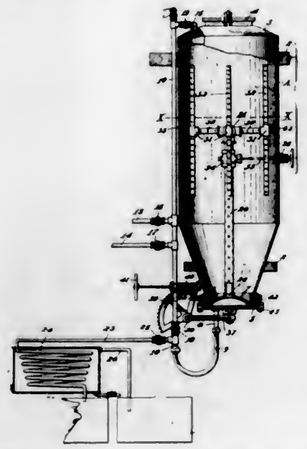


1. In combination, a vibratory diaphragm and an encircling holder therefor to grip the diaphragm only around the extreme peripheral corners of both faces, substantially as set forth.

2. In combination, a vibratory diaphragm and an encircling holder therefor to grip the diaphragm only around the extreme peripheries of both faces, such encircling holder being a ring with a V shaped groove formed on its inner surface, substantially as set forth.

3. In combination, a vibratory diaphragm and an encircling holder therefor to grip the diaphragm only around the extreme peripheral corners of both faces, such encircling holder comprising two ring components one of which is fitted into the other, both being provided with beveled surfaces to make tight contact with said corners, substantially as set forth.

1,061,767. WOOD-PULP DIGESTER. JOHN CHARLES WILLIAM STANLEY, San Francisco, Cal., assignor, by direct and mesne assignments, to Stanley Paper Fibre Company, San Francisco, Cal., a Corporation of Arizona. Filed Sept. 25, 1911. Serial No. 651,015. (Cl. 92—7.)



1. In a digester, the combination with a digesting tank having a perforated dome in the bottom thereof, of means for delivering steam, air and fluids under pressure to the upper end of the tank, means for distributing steam, air and fluids through the interior of the tank, comprising a plurality of perforated, horizontally and vertically arranged tubes connected together; a condenser, and means for delivering steam, air and fluids through the perforated dome in the bottom of the tank to said condenser.

2. A digester which includes a vertically disposed, cylindrical container having a feed opening at its upper end and a discharge opening at its lower end, a closure with a perforated dome for said discharge opening, said dome consisting of a hemispherical, perforated hood smaller in diameter than the diameter of said discharge opening, a vertically disposed, perforated pipe in the container opening at its lower end to the interior of the perforated dome, and a cut-off valve in said pipe operable from the exterior of the container.

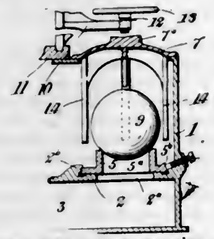
3. A digester which includes a vertically disposed, cylindrical container having a feed opening at its upper end and a discharge opening at its lower end, a closure with a perforated dome for said discharge opening, said dome consisting of a hemispherical, perforated hood smaller in diameter than the diameter of said discharge opening, a vertically disposed, perforated pipe in the container opening at its lower end to the interior of the perforated dome, a cut-off valve in said pipe operable from the exterior of the container, radial pipes leading from the upper end of said perforated pipe above said valve, and a vertically disposed, perforated pipe connecting with the outer end of each of said radial pipes.

4. A digester consisting of a container having a feed opening at its upper end and a discharge opening at its lower end, closures for said openings and a perforated partition plate at the lower end of the container and forming with said bottom closure a fluid chamber which is in communication through said perforations with the container and in communication with a source of steam pressure supply and also in communication with the discharge for the liquid, said partition plate having a perforated hollow column extending upwardly from it and means for delivering air under pressure into the top of the container.

5. A digester consisting of a container having a feed opening at its upper end and a discharge opening at its lower end, closures for said openings and a perforated partition plate at the lower end of the container and forming with said bottom closure a fluid chamber which is in communication through said perforations with the container and in communication with a source of steam pressure supply and also in communication with the discharge for the liquid, said partition plate having a perforated hollow column extending upwardly from it, means for delivering air under pressure into the top of the container, said column having perforated radial branches with vertical perforated hollow terminals, said chamber below the partition plate and column, branches and terminals so constructed and arranged to afford a percolating system for the steam and fluid through the material undergoing digestion.

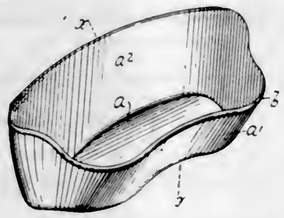
[Claim 6 not printed in the Gazette.]

1,061,768. VALVE FOR PULP-PUMPS. THOMAS MCOUAT, La Chute, Quebec, Canada. Filed June 27, 1912. Serial No. 706,126. (Cl. 103—66.)



In a valve for pulp pumps, a valve casing having an aperture in the bottom thereof, a removable seat adapted to fit over the aperture and having a beveled periphery, a beveled flange on the bottom of the casing at one side of the aperture therein, a screw bolt extending through the casing and adapted to engage the beveled periphery of the removable seat and thus hold the same in position, a removable cover, a swingable bracket suitably pivoted to the casing, a screw spindle extending through the outer end of the bracket adapted to bear against the cover when in one position, a hand wheel for operating the screw spindle and integral guide fingers formed on the bottom of the cover, and a spherical valve mounted on the seat.

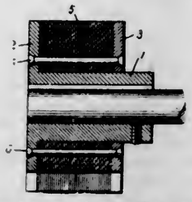
1,061,769. SURGICAL BASIN. CHRISTIAN WILLIAM MEINECKE, Jersey City, N. J., assignor to Whitall-Tatum Company, New York, N. Y., a Corporation of New Jersey. Filed Jan. 29, 1910. Serial No. 540,893. (Cl. 4—38.)



1. A surgical basin comprising a bottom convexed at the rear and concaved at the front; a convexed rear wall slanting backwardly, and outwardly curved from the bottom to the top; a concaved front wall slanting outwardly from the bottom; the said rear wall extending to a height largely in excess of the height of the front wall to form a relatively high protecting back to the basin; and end sections sloping downwardly at an angle from the high rear wall to the lower front wall.

2. A one-piece surgical basin comprising a solid bottom convexed at the rear and concaved at the front; an integral convexed rear wall slanting backwardly, and outwardly curved from the bottom to the top; an integral concaved front wall slanting outwardly from the bottom; the said rear wall extending to a height largely in excess of the height of the front wall to form a relatively high protecting back to the basin; and integral curved end sections sloping downwardly at an angle from the high rear wall to the lower front wall.

1,061,770. GEAR-WHEEL. JOHN MILLER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Continuation of application Serial No. 507,097, filed July 12, 1909. This application filed June 27, 1911. Serial No. 635,655. (Cl. 74—28.)



1. A gear having its body portion composed of highly compressed spinnable textile fibers.

2. A gear having a toothed body part composed of spinnable textile fibers.

3. A gear composed of compressed spinnable textile fibers, and means for holding said material in compressed state.

4. A gear having a toothed body part composed of spinnable textile fibers, metallic end plates, and means for securing said textile material and said end plates together.

5. A gear having its toothed body portion composed of layers of spinnable textile fibers.

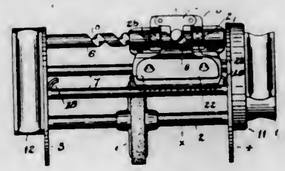
[Claim 6 not printed in the Gazette.]

1,061,771. PROCESS OF TREATING CELLULOSE ESTERS. HARRY S. MORK, Boston, Mass., assignor to Chemical Products Company, Boston, Mass., a Corporation of Maine. Filed Feb. 10, 1910. Serial No. 543,098. (Cl. 23—24.)

1. The process of preparing lower acetates of cellulose which consists in treating cellulose triacetate in which the fibrous structure of the original cellulose is conserved with a saponifying agent until a portion of the combined acid is removed.

2. The process of preparing lower acetates of cellulose which consists in treating the higher acetate in which the fibrous structure of the original cellulose is conserved with a saponifying agent until a portion of the combined acid is removed.

1,061,772. DEVICE FOR STROPPING OR SHARPENING RAZOR-BLADES OR THE LIKE. WILLIAM JAMES MYATT, Birmingham, England. Filed Nov. 30, 1912. Serial No. 734,322. (Cl. 51—16.)



1. A device for stropping or sharpening razor blades or the like, comprising means to which the blade is presented for stropping or sharpening the edge thereof, a spindle, a holder for the blade mounted thereon, an internally driving member common to the said stropping or sharpening means and the spindle for actuating said stropping or sharpening means and said spindle, a helical groove in the spindle with which groove the blade holder

co-acts so that by the rotation of the spindle the blade is pressed upon and moved transversely across the stropping means and so that upon reversing the direction of rotation of the spindle the side of the blade presented to the stropping means is also reversed.

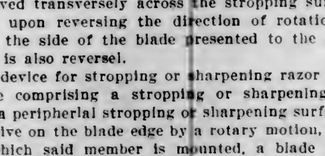
2. A device for stropping or sharpening razor blades or the like, comprising means to which the blade is presented for stropping or sharpening the edge thereof, a spindle having a helical groove therein; an internally driving member common to the said stropping or sharpening means and the spindle for actuating said stropping or sharpening means and said spindle, a holder for the blade mounted thereon, such holder having a spring pressed member engaging with the helical groove, so that by the rotation of the spindle the blade is pressed upon and moved transversely across the stropping surface and so that upon reversing the direction of rotation of the spindle the side of the blade presented to the stropping surface is also reversed.

3. A device for stropping or sharpening razor blades or the like comprising a stropping or sharpening member having a peripherial stropping or sharpening surface which is effective on the blade edge by a rotary motion, a spindle upon which said member is mounted, a blade holder, a spindle upon which such holder is mounted, an internally toothed wheel for simultaneously rotating the said spindles a hand grip rigid with the internally toothed wheel, means whereby the opposite edges of the blade fitted in the holder are alternately presented automatically to and pressed upon said stropping member, and means whereby an alternate reversal of the direction of rotation of the stropping member is effected.

4. A device for stropping or sharpening razor blades or the like, comprising a stropping member which is effective on the blade edge by a rotary motion, a blade holder, means whereby the opposite sides of the blade edge are alternately presented to and pressed upon the stropping member, means whereby an alternate reversal of the direction of rotation of the stropping member is effected, a driving member, side frames in which are journaled the spindles carrying the stropping member and blade holder and hand grips carried one by the side frame and one by the driving member, whereby the device may be operated and held in the hands each of which hand grips produces a couple about the axis of the driving member.

5. A device for stropping or sharpening razor blades or the like, comprising a stropping or sharpening disk, a spindle upon which such disk is mounted, a blade holder, a spindle having a helical groove therein with which helical groove the blade holder coacts, side frames in which the said spindles are journaled, toothed wheels on said spindles and an internally driving toothed wheel for simultaneously rotating the spindles, and grips carried by a side frame and said driving wheel for holding and actuating the device, substantially as and for the purpose described.

1,061,773. DRIVING MECHANISM FOR SPIRAL-TOOL DRIVERS. JOHN NAHLINGER, Cleveland, Ohio. Filed Dec. 18, 1912. Serial No. 737,533. (Cl. 74—40.)



1. The combination of a spindle having right and left spiral grooves, a barrel slidable lengthwise thereon and having ratchets at opposite ends and at the middle, sleeves having projections engaging in said grooves and shiftable in the barrel between the end and middle ratchets, each of said sleeves having ratchets at opposite ends thereof engageable respectively with said end and middle ratchets, and means to shift the sleeves.

2. The combination of a spindle having right and left spiral grooves, a barrel slidable lengthwise thereon and having ratchets at opposite ends with teeth presented in one direction and also having ratchets at the middle with teeth presented in the opposite direction, sleeves shiftable in the barrel, between each end ratchet and middle ratchet, each of said sleeves having teeth at opposite ends presented in opposite directions to engage the said end or middle ratchet respectively, said sleeves having projections engaging in the grooves, and means to shift the sleeves in opposite directions, to engage the same with the end or middle ratchets respectively.

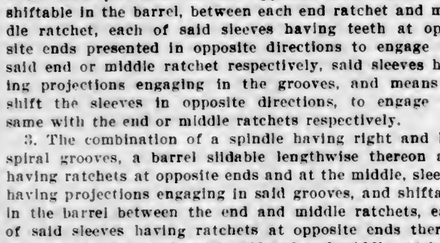
3. The combination of a spindle having right and left spiral grooves, a barrel slidable lengthwise thereon and having ratchets at opposite ends and at the middle, sleeves having projections engaging in said grooves, and shiftable in the barrel between the end and middle ratchets, each of said sleeves having ratchets at opposite ends thereof engageable respectively with said end and middle ratchets, and means to shift the sleeves, comprising a rod movable in the barrel, beside the sleeves and operatively connected to the latter.

4. The combination of a spindle having right and left spiral grooves, a barrel slidable lengthwise thereon and having ratchets at opposite ends and also at the middle, sleeves having projections engaging in said groove and shiftable in the barrel between the end and middle ratchets, each of said sleeves having ratchets at opposite ends thereof engageable respectively with said end and middle ratchets, and each sleeve having a circular flange, and a rod mounted to turn in the barrel and having cams engaging said flanges and adapted to shift the sleeves.

1,061,774. EXPLOSIVE. SIGURD ADOLF GUSTAFSSON NAUCKHOFF, Vinterviken, Liljeholmen, Sweden, assignor to Nitroglycerine Aktiebolaget, Stockholm, Sweden. Original application filed Nov. 22, 1910, Serial No. 593,713. Divided and this application filed Dec. 18, 1911. Serial No. 666,360. (Cl. 52—3.)

An improved explosive comprising a mixture of about 31% of so called commercial liquid dinitrotoluene gelatinized with nitro-cellulose, 43% of ammonium perchlorate and 26% of alkaline nitrate.

1,061,775. SILENCER FOR ENGINES. CHARLES H. NEWTON, East Orange, and ERWIN S. CANFIELD, Newark, N. J., assignors, by mesne assignments, to Standard Company, Torrington, Conn., a Corporation of Maine. Filed Jan. 2, 1912. Serial No. 668,989. (Cl. 121—116.)



1. A silencer comprising a chamber having an exhaust gas inlet at one end, and an outlet at the opposite end, a deflecting plate attached at one end to the wall of the chamber, and extending diagonally across said chamber opposite the gas inlet and having an opening for the passage of the gas therethrough, and a water inlet to the chamber for delivering a cooling stream in a sheet across said opening in the plate, said deflecting plate extending in a plane across the vertical plane, which includes the water inlet.

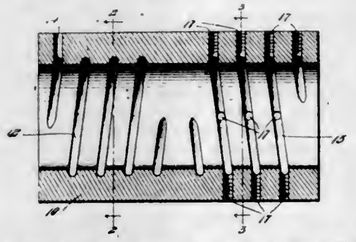
2. A silencer comprising a chamber having an exhaust gas inlet at one end, a silencing sleeve inserted in the chamber at the opposite end, a deflecting plate attached at one end to the wall of the chamber, and extending diagonally across said chamber opposite the gas inlet and having an opening for the passage of the gas therethrough, and a water inlet to the chamber for delivering a cooling stream in a sheet across said opening in the plate, said deflecting plate extending in a plane across the vertical plane, which includes the water inlet.

3. A silencer comprising a chamber having a gas inlet at one end and a discharge outlet at its opposite end, an inclined deflecting plate in the form of a truncated cone extending across the chamber and having an opening therein, opposite the gas inlet with means for admitting a stream of water to the chamber upon the deflecting plate to flow in a sheet over the opening.

4. A silencer comprising a chamber having a gas inlet at one end and a discharge outlet at its opposite end, an inclined deflecting plate extending across the chamber in the form of a truncated cone and having an opening therein with means for admitting a stream of water to the chamber upon the deflecting plate to flow in a sheet over the opening, and a perforated silencing sleeve having an imperforate conical upper end, the apex of which is opposite the opening in the deflecting plate.

5. A silencer comprising a chamber having a gas inlet at one end and a discharge outlet at its opposite end, an inclined deflecting plate extending across the chamber in the form of a truncated cone and having an opening therein with means for admitting a stream of water to the chamber upon the deflecting plate to flow in a sheet over the opening, and an oppositely arranged conical deflecting plate extending across the chamber with its apex opposite the opening in the first deflecting plate, and having openings in its upper and lower edges.

1,061,776. NUT-LOCK. JAMES O'HARE, Washington, Ind. Filed Dec. 16, 1912. Serial No. 737,042. (Cl. 151—25.)



1. A new article of manufacture consisting of a sleeve having internal grooves pitched at different angles to the axis of the sleeve, and openings extending from the outer surface of the sleeve to said grooves, for the purpose described.

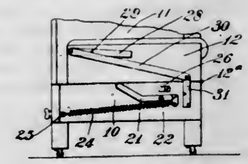
2. A new article of manufacture consisting of a sleeve having internal helical grooves oppositely pitched, and openings extending from the outer surface of the sleeve to said grooves, for the purpose described.

3. A device of the class described comprising, in combination, a cylindrical rod, a sleeve arranged on said rod, said sleeve being provided with internal grooves of substantially uniform depth, pitched at different angles to the axis of the sleeve, and openings extending from the outer surface of the sleeve to said grooves, and balls arranged in said grooves and engaging said rod at different points around the circumference thereof.

4. A device of the class described comprising, in combination, a cylindrical rod, a sleeve arranged on said rod, said sleeve being provided with internal helical grooves, pitched in opposite directions, and openings extending from the outer surface of the sleeve to said grooves, and balls arranged in said grooves and engaging said rod at different points around the circumference thereof, said balls being slightly larger in diameter than the average distance between the surface of the rod and the bottom of the grooves.

5. A device of the class described comprising, in combination, a cylindrical rod, a sleeve arranged on said rod, said sleeve being provided with internal helical grooves, pitched in opposite directions, and an opening extending from the outer surface of the sleeve to one of said grooves, and a plurality of such openings extending to the other of said grooves, balls arranged in the former of said grooves at varying distances from the opening thereto, and balls arranged in the latter of said grooves adjacent the openings thereto, and closures in the latter openings adapted to prevent the escape of the balls.

1,061,777. SOFA OR DAVENPORT BED. WILLIAM A. PEASE, Columbus, Ohio, assignor to The E. M. Hulse Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 9, 1913. Serial No. 740,900. (Cl. 5—51.)

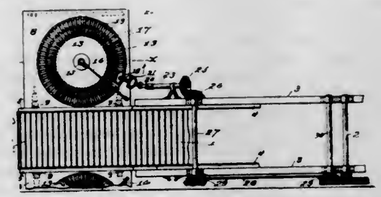


1. In a sofa or davenport bed, the combination with the stationary bed supporting frame and a seat frame foldable with reference to said stationary frame, of a lever fulcrumed on the stationary frame to act slidingly at one end on the seat frame, tending to assist the raising of the same from closed position and a spring, connected with the box or stationary bed supporting frame and the lever, for actuating said lever.

2. In a sofa or davenport bed, the combination with the stationary bed supporting frame and a seat frame foldable with reference to said stationary frame, of a lever fulcrumed on the stationary frame to act slidingly at one end on the seat frame tending to assist the raising of the same from closed position, a spring, connected with the box or stationary bed supporting frame and the lever, for actuating said lever and a stop to limit the movement of said lever, substantially as described.

3. In a sofa or davenport bed, the combination with the stationary bed supporting frame and a seat frame closable on said stationary frame, of a fulcrumed lever to act at one arm on the seat frame tending to assist the opening of the same from closed position and a spring connected with the box or stationary bed supporting frame and the other arm of the lever whereby when the lever is depressed to horizontal position by the closing of the seat frame the connections of the spring and the fulcrum of the lever are brought into nearly horizontal alinement, substantially as described.

1,061,778. COAL-LOADING MACHINE. ANDREW POWELL, Uniontown, Pa. Filed May 25, 1912. Serial No. 699,810. (Cl. 193—24.)



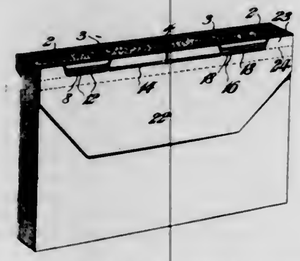
1. In a loading machine, a longitudinal conveyer, a revoluble table at the side of and adjacent to the conveyer for receiving loose material and discharging the same upon the conveyer, an annular rack upon the receiving face of the table, an adjustable support for the table, a yieldable pinion carried by the support and engaging the rack, means for deflecting the material from the table, and means for operating the pinion and the conveyer in unison.

2. In a loading machine, a longitudinal conveyer, a revoluble table at the side of and adjacent to the conveyer for receiving loose material and discharging the same upon the conveyer, an annular rack upon the receiving face of the table, an adjustable support for the table, a yieldable pinion carried by the support and engaging the rack, a deflecting plate for the table and extending from the axis of the table over the rack and secured to the support, and means for operating the pinion and the conveyer in unison.

3. In a loading machine, a platform, a horizontal table revolubly mounted on the platform for receiving loose material, a longitudinal conveyer traveling adjacent to the periphery of the table for receiving the said material from the table, an adjustable support for the platform, a rack formed on and extending around the receiving face of the table, a deflecting-plate extending from the axis of the table over the rack and secured to the platform, a yieldable pinion mounted on the platform and meshing with the rack and adapted to follow the rack in adjusting the platform, and means for operating the pinion and the conveyer in unison.

4. In a loading machine, the combination with a conveyer, and a conveyer frame, of means for catching loose material and discharging the same upon the conveyer, comprising a swinging platform connected with each side of the frame, a table revolubly mounted on each platform adjacent to the sides of the conveyer, a stationary deflecting plate attached to each platform and projecting at an angle from said frame in opposite directions, an annular rack on each table, pinions meshing with the racks to revolve the tables under the said plates for discharging the loose material onto the conveyer, and means for operating the pinions and the conveyer in unison.

1,061,779. BOOKBINDING. PAUL J. RENNINGER, Reading, Pa. Filed Nov. 1, 1912. Serial No. 729,021. (Cl. 11—16.)



1. A book consisting of a plurality of signatures having at the middle of their edges a straight kerf, outwardly-slanting intermediate kerfs at opposite sides of the middle kerf and formed at their inner ends with inwardly-pointing notches, and inwardly slanting end-kerfs, and a twine having its ends carried through the straight kerf and carried around the signatures and through the oblique kerfs and seated in said notches and united.

2. A book consisting of a plurality of signatures having in their edges a straight kerf and a pair of slantingly converging kerfs on each side of said straight kerf, the intermediate slanting kerfs having at their inner ends inwardly pointing notches, and twine looped through said pairs of oblique kerfs and seated in said notches and through the straight kerf, embracing the sides of the signatures, the ends of the twine being united within said straight kerf.

3. A book consisting of a plurality of signatures having kerfs in their edges, reinforcing pieces of fabric on opposite sides of said signatures having corresponding kerfs, and a twine looped through said kerfs and embracing the sides of the signatures and reinforcing pieces, said reinforcing pieces being cemented to the sides of the signatures for the width of the depth of the kerfs and being folded back upon themselves and cemented.

4. A book consisting of a plurality of signatures having kerfs in their edges, reinforcing pieces of fabric on opposite sides of said signatures having corresponding kerfs, and a twine looped through said kerfs and embracing the sides of the signatures and reinforcing pieces, said reinforcing pieces being cemented to the sides of the signatures near their edges, folded back upon themselves, and again cemented.

5. A book consisting of a plurality of signatures, reinforcing pieces of fabric cemented at their back-edges to the opposite sides of the assembled signatures, and twine securing the back-portions of said signatures and reinforcing pieces together, said reinforcing pieces being folded back upon themselves and cemented to cover such twine.

[Claim 6 not printed in the Gazette.]

1,061,780. SHOE-LACE ATTACHMENT. JOHN ELMER ROGERS, Urbana, Ill. Filed Oct. 5, 1912. Serial No. 724,151. (Cl. 24—140.)



1. A spreader for shoe laces, embodying a body portion curved longitudinally and transversely and tapered from its center toward its ends and adapted to be disposed beneath a loop of the lace to spread the same transversely to substantially the width of the material of the lace.

2. A spreader for shoe laces, embodying a body portion adapted to be disposed beneath a loop of the lace to spread the same transversely, and means thereon for detachably engaging the upper for attaching the spreader in position.

3. A spreader for shoe laces, embodying a body portion formed of pliable material and curved longitudinally and transversely, said body portion adapted to be disposed beneath a loop of the lace to spread the same transversely, and means thereon for detachably attaching the spreader in position.

4. A spreader for shoe laces, embodying a body portion formed of pliable material and curved longitudinally and transversely and tapered from its center toward its ends, said body portion adapted to be disposed beneath the loop of the lace to spread the same transversely, and means thereon for detachably attaching the spreader in position.

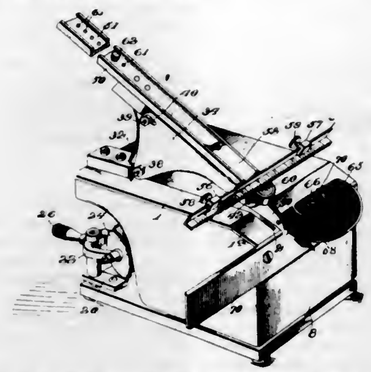
5. A spreader for shoe laces, embodying a body portion adapted to be disposed beneath a loop of the lace and to bridge the space between the adjacent edges of the shoe upper flaps, a hook at one end thereof adapted to detachably engage one of the eyelets of the shoe upper, and a tongue at the other end adapted to rest upon the adjacent edge of the opposite shoe upper flap.

[Claim 6 not printed in the Gazette.]

1,061,781. GREENISH-BLUE HEXABROMINDIGO. ALBRECHT SCHMIDT and KARL THIESS, Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister, Lucius & Brüning, Höchst-on-the-Main, Germany, a Corporation of Germany. Filed Feb. 17, 1909. Serial No. 478,433. (Cl. 8—1.)

As a new product, the hexabromindigo of the constitution $C_{16}H_4O_2N_2Br_6$, being insoluble in water, soluble in concentrated sulfuric acid with a blue color and in cold anilin with a greenish-blue to dark-blue color, yielding by oxidation with nitric acid in presence of glacial acetic acid a 4.5.7-tribromisatin, melting at 257° C., also soluble in alkaline hydrosulfite solution forming then a vat which dyes cotton pure greenish-blue tints.

1,061,782. CLOTH-CUTTING MACHINE. GEORGE SCOTT, Amsterdam, N. Y. Filed Apr. 14, 1911. Serial No. 621,133. (Cl. 164—61.)



1. In a cloth cutting machine, a slotted table, a disk cutter located beneath the table and having its cutting edge projecting upward through the slot in said table, and a rotary guide secured to said table at one side of the cutting disk, whereby the material may be guided by said rotary guide to cut a circular piece.

2. In a cutting machine, a slotted table, a fixed cutter or blade supported by said table, a disk cutter projecting through the slot in said table and cutting against said fixed cutter or blade and away from the table, and a rotary guide secured to one side of the cutting disk and its blade, whereby the material may be guided by said rotary guide to cut a circular piece.

3. In a cutting machine, a slotted cutting table, a disk cutter projecting through the slot in said table, plates on opposite sides of said disk forming a protecting means, a fixed cutter or blade carried by said plates, said disk cutter rotating toward said fixed cutter or blade, and a rotary guide secured to one side of the cutting disk or fixed blade, whereby the material may be guided by said rotary guide to cut a circular piece.

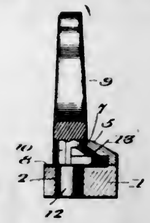
4. In a cutting machine, a slotted cutting table, a disk cutter projecting through the slot in said table, plates on opposite sides of said disk forming a protecting means, and a fixed cutter or blade carried by said plates, said disk cutter rotating toward said fixed cutter or blade, and said plates being adjustably secured in position whereby said fixed cutter or blade may be adjusted.

5. In a cutting machine, a slotted cutting table, a disk cutter projecting through the slot in said table, plates adjustably secured on opposite sides of said disk forming a protecting means, a fixed cutter or blade carried by said plates, said disk cutter rotating toward said fixed cutter or blade, and a rotary guide secured to one side of the cutting disk or fixed blade, whereby the material may be guided by said rotary guide to cut a circular piece.

[Claims 6 to 22 not printed in the Gazette.]

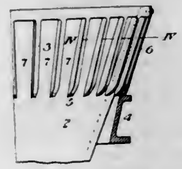
1,061,783. OAR-LOCK. ALBERT L. SHEARS, Seattle, Wash. Filed Sept. 21, 1912. Serial No. 721,597. (Cl. 9—26.)

The combination with a supporting base having a vertical socket of circular form in cross-section, and a retaining member fixed on said base and having a recess in its inner edge and also having a semi-circular dome portion resting over the outer portion of the recess and closing the outer end thereof and having an inner straight edge and a semi-circular notch formed in said edge and arranged coincident with the outer half of the socket in the supporting base; of an oar lock entirely separable by lifting from the supporting base and the retaining member and having stem portions of circular form in cross-section disposed in the socket of the supporting base and the semi-circular notch of the dome portion, respectively, and also having on its stem a lateral semi-circular enlargement shaped to snugly occupy the space below the dome



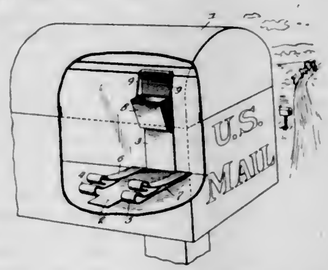
portion and swing horizontally in said space and also swing into and out of the same.

1,061,784. POT FOR HOT METAL, &c. ERWIN C. SHERMAN, Youngstown, Ohio. Filed Apr. 1, 1911. Serial No. 618,429. (Cl. 75—145.)



A pot for hot material, having a plurality of heat radiating projections extending above and below the hot metal line of the pot, and also having a surrounding heat-retaining casing or shield; substantially as described.

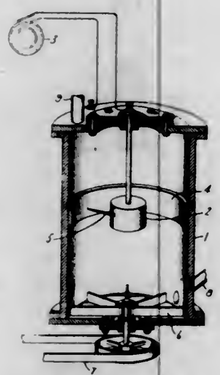
1,061,785. COIN AND MAIL HOLDING DEVICE FOR MAIL-BOXES. JAMES EDDY SHINN, Conway Springs, Kans. Filed May 29, 1912. Serial No. 700,458. (Cl. 232—33.)



1. A coin and mail holding device comprising a base portion, a vertically extending integral portion at one end of said base portion, a coin receptacle carried by said vertically extending portion, said base portion having a lower integral spring clip member on each side of said base portion, and an upper integral spring clip member, both of said clip members having rounded jaws for receiving mail.

2. A coin and mail holding device comprising a base portion, a vertically extending integral portion at one end of said base portion, a coin receptacle carried by said vertically extending portion, said base portion having lower integral spring clip members cut from the base portion and bent toward said upwardly extending support, and a pair of upper spring clip members bent from the end of the base carrying the integral upright toward the lower spring clips, the engaging portions of said spring clips being rounded.

1,061,786. DEVICE FOR SYNTHESIZING GAS. WERNER SIEBERT, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 5, 1908. Serial No. 414,818. (Cl. 204—31.)



1. The process of producing chemical reactions in gases which consists in starting an arc between electrodes separated by an annular space, passing the gases while rotating in said space across said arc, thereby forcing said arc to glide along the annular space whereby the electric discharge takes a disk-like form.

2. The process of causing chemical reaction in gases which consists in striking an arc by a high voltage current between cylindrical electrodes separated by an annular space and passing the gases with a whirling motion across the arc, thereby shifting the same to a point at which the separation of said electrodes is greater than the striking distance of the operating voltage, and causing said arc to glide along said annular space where it appears as a disk-like flame.

3. The process which consists in starting an arc between concentric electrodes at a point of least separation by high voltage discharge, passing gases in a whirling motion between said electrodes, thereby transferring the arc to a point of greater separation of said electrodes and continuing said arc at this point in a plane at right angles to the axis of the electrodes.

4. The combination of coöperating electrodes having their upper surfaces substantially in the same plane, one of said electrodes being situated within the other, means for striking an arc between said electrodes and means for passing air in a spiral path in a general forward direction at right angles to said arc.

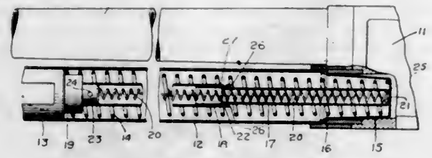
5. The combination of a cylindrical electrode, an insulated electrode, situated within the same, the upper surfaces of said electrodes being substantially in the same plane, a source of electric current, means for starting an arc discharge across the space intervening between said electrodes, and means for setting the gases intervening between the concentric electrodes into a progressive whirling motion.

[Claim 6 not printed in the Gazette.]

1,061,787. MAGAZINE-FIREARM. JOHN O. SIMPSON, Ilion, N. Y., assignor to Remington Arms and Ammunition Company, Ilion, N. Y., a Corporation of New York. Filed Nov. 29, 1912. Serial No. 734,004. (Cl. 42—49.)

1. A magazine firearm converter for insertion within the magazine spring comprising a tubular member, a second member adapted to slide telescopically therein and means for retaining said second member in an extended position.

2. A magazine firearm converter for insertion within the magazine spring comprising a tubular member, a second tubular member adapted to slide telescopically therein, a spring for holding said second member in an extended position and a head secured to the first member for retaining the spring in place.



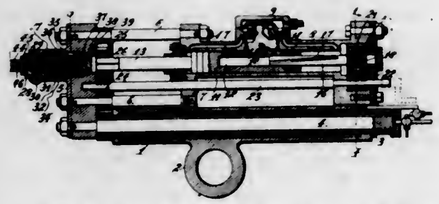
3. A magazine firearm converter for insertion within the magazine spring comprising a tubular member, a second member adapted to slide telescopically therein, a spring for holding said second member in an extended position, means for retaining said members in engagement and means for retaining the spring in place.

4. A magazine firearm converter for insertion within the magazine spring comprising a tubular member, having a stop at one end, a second member adapted to slide telescopically therein and having a shoulder adapted to engage the stop, for the purpose set forth, a spring for holding said second member in an extended position and means for retaining the spring in place.

5. A magazine firearm converter for insertion within the magazine spring comprising a tubular member having a stop at one end, a second tubular member adapted to slide telescopically therein, said second member having a closing at one end and a shoulder at the other end adapted to engage the stop, a spring engaging the end of the second member, for the purpose set forth, and a head secured to the first member against which the spring bears and which retains it in place.

[Claims 6 to 8 not printed in the Gazette.]

1,061,788. ROTATING MECHANISM FOR ROCK-DRILLS. CLARK J. SMITH, Ottumwa, Iowa, assignor to The Hardsocg Wonder Drill Company, Ottumwa, Iowa. Original application filed Feb. 26, 1912, Serial No. 679,956. Divided and this application filed July 22, 1912. Serial No. 710,773. (Cl. 121—10.)



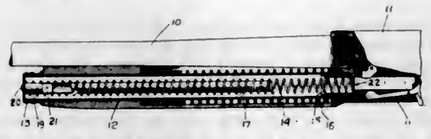
1. A fluid actuated drilling engine, including a reciprocating hammer piston and means for holding said piston from rotation combined with a drill chuck and means for turning the same, said last named means including a power transmitting shaft and power transmitting and translating connections between said piston and said shaft, and power transmitting connections between said shaft and said chuck.

2. In a drilling apparatus, a drilling engine proper including a reciprocating piston, and means for holding said piston from rotation, a chuck holder carried by said engine, a chuck rotatably mounted in said holder and having a shank to be impacted by said piston, a drill held in said chuck and power transmitting and translating devices connecting said chuck with said engine piston for imparting rotary movement to said chuck as said piston moves in one direction, said power transmitting and translating devices including a power transmitting shaft, and means coöperative with said shaft for effecting the turning operation of said chuck without affecting the action of said piston.

3. In a drilling apparatus, a drilling engine proper including a reciprocating piston, means for holding the piston from rotating within its working chamber, a chuck holder carried by the said engine, a chuck rotatably mounted in said holder and having a shank to be impacted by the said piston, a drill held in said chuck, and power transmitting and translating devices connecting said chuck with said engine piston for imparting rotary movement to the said chuck as the piston moves in one direction, said power transmitting and translating devices including a power transmitting shaft having independent rotary movement and a crank receiving extension.

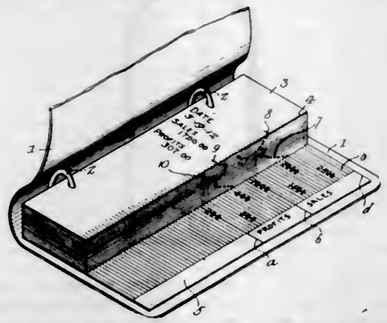
4. A fluid pressure actuated drilling engine including a reciprocating hammer piston combined with a drill chuck having a shank to be impacted by the piston when moving in one direction, and means for turning the chuck as the piston moves in a direction reversely to the direction of impacting movement, the said means including a power transmitting shaft including means for rotating the shaft operated by the return movement of the piston, the said shaft being rotatable independently of the said actuating means, and having a crank receiving extension.

1,061,789. MAGAZINE-FIREARM. CHARLES C. TYLER, Bridgeport, Conn., assignor to Remington Arms and Ammunition Company, Ilion, N. Y., a Corporation of New York. Filed Nov. 29, 1912. Serial No. 733,986. (Cl. 42—49.)



In a magazine firearm, the combination with the magazine, cap, magazine spring, and follower, of a converter for limiting the contents of the magazine to a single cartridge comprising the providing of a central hole in the magazine cap, a stud having a lug riveted in said hole and a hub at its other end, and a tube riveted to the hub and extending rearwardly in the magazine within the magazine spring adapted to be engaged by the follower, for the purpose specified.

1,061,790. RECORD-INDICATING FILE. WILMER M. WEBB, Philadelphia, Pa. Filed Apr. 23, 1912. Serial No. 692,638. (Cl. 11—7.)



1. As a new article of manufacture a record indicating device consisting of holding means and a plurality of leaves mounted therein each having a mark on its edge placed to indicate a predetermined number and coöperating with similar marks on other leaves to form a curve; with a reference scale provided with numbers and places to coöperate with the marks on said leaves.

2. The combination of a leaf receiving structure; a series of record leaves mounted therein each having on the same margin thereof a record indicating symbol placed to indicate a predetermined number and visible both on the face and on the edge thereof, in position to coöperate with similar symbols on other leaves to form a line; and a reference scale placed to coöperate with the symbols on said record leaves.

3. As a new article of manufacture, the combination of a leaf supporting structure; a series of independent leaves each having a scale adjacent the same margin thereof; means for retaining said leaves in a pile, one upon the other; with a reference scale carried by the structure and mounted in a definite relation to the scales on said leaves.

4. The combination of a leaf supporting structure; a series of record receiving leaves mounted thereon and each provided with a scale adjacent the same margin thereof, there being a number indicating symbol on the scale of each leaf placed in position to be visible from the face thereof, as well as from the edge.

1,061,791. SELF-DUMPING SCRAPER. MAX A. WEST, Blind Slough, Oreg. Filed Aug. 20, 1912. Serial No. 716,046. (Cl. 37—19.)



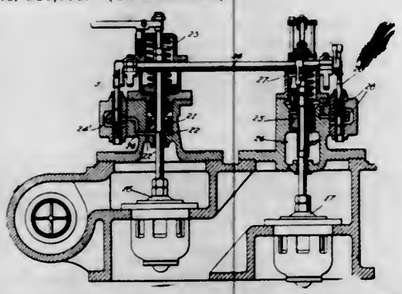
1. A device of the class described comprising a scraper body consisting of side walls, a fixed back connecting the side walls, means for attaching a source of motive power to the front end of said body, means for attaching the source of power to the rear end thereof, a movable back disposed within the said body and hinged to the fixed back, a tripping lever pivotally connected to said fixed back and having its inner arm operatively associated with the said movable back, and means connecting said attaching means for movement with the outer arm of said lever upon movement of the body in a forward direction to actuate the same so as to throw the movable back into its rearward position against the front face of the fixed back, and serving to engage the outer arm of said lever so as to throw the movable back into its forward dumping position upon movement of the body in the opposite direction.

2. In a device of the class described comprising a scraper body consisting of side walls, and a fixed back connecting the side walls, a movable back disposed within the body adjacent the fixed back, a tripping lever pivotally secured to said fixed back and having the end of its inner arm pivotally associated with said movable back, means for attaching a source of motive power to either end of said body, an operating cable connecting the said attaching means and movably associated with the outer end of said tripping lever, means fixedly secured to said cable for engagement with said outer arm of the lever to actuate the same and throw the movable back into its rearmost position against the fixed back upon forward movement of the body, and resilient means carried by the cable and adapted to engage said lever arm upon movement of the body in the reverse direction to throw the movable back suddenly forward into its dumping position upon movement of the body in the opposite direction, and stop members provided in the side walls of the body for checking engagement with the movable back upon arriving at its foremost position.

3. In a device of the class described, the combination with a scraper body, a dumping device located within said body, and a tripping lever carried by said body and operatively connected with the said dumping device, of means for attaching a source of motive power to the front end of said body, an apron hinged to the rear end of said body adapted to swing vertically, means carried by the free end of said apron for attachment to the said source of power,

and a cable connecting the said means of attachment and operatively associated with said tripping lever, said cable adapted to support the apron in inoperative position during forward movement of the body.

1,061,792. ELASTIC-FLUID TURBINE. GEORGE WESTINGHOUSE, Pittsburgh, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Aug. 6, 1904, Serial No. 219,731. Divided and this application filed July 28, 1909. Serial No. 510,076. (Cl. 121—118.)



1. In a turbine, a normal load valve, a plurality of normal load nozzles communicating therewith, an overload valve, a plurality of overload nozzles communicating therewith and a device for controlling the delivery of motive fluid to said nozzles in accordance with the speed of the turbine and for pulsating the fluid passing said valves.

2. In a turbine, a normal load fluid inlet, an overload fluid inlet, a plurality of fluid ports leading from each of said inlets to the primary portion of the turbine, a valve in each of said inlets, means for opening the valve more or less in accordance with the load demand of the turbine, means for opening the valve in the overload inlet in accordance with the load demand of the turbine when said normal load valve is fully open and means for pulsating the fluid passing said valves.

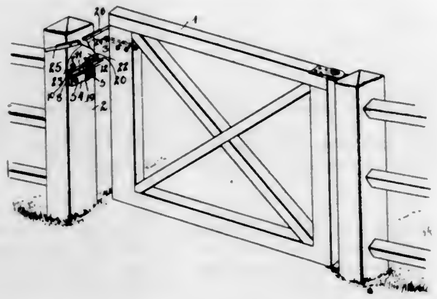
3. In a turbine, a normal load fluid passage, an overload fluid passage, a plurality of fluid ports leading from each of said passages, a valve in each of said passages, means for opening the valve in the normal load passage more or less in accordance with the load demand of said turbine, means for opening the valve in the overload passage in accordance with the load demand of said turbine when said normal load valve is fully open and means for pulsating the fluid passing said valves.

4. In an elastic fluid turbine of the double-flow type, a plurality of normal load divergent nozzles discharging toward the exhaust of each end of the turbine, a plurality of normally inactive overload divergent nozzles discharging similarly to the normal load nozzles, a governor and means controlled by the governor whereby upon an overload motive fluid is admitted to all of said overload nozzles simultaneously and whereby the durations of said overload admissions are made dependent upon the degree of the overload.

5. In an elastic fluid turbine of the double-flow type, a plurality of normal load nozzles discharging toward the exhaust of each end of the turbine, a plurality of normally inactive overload nozzles discharging similarly to the normal load nozzles, a governor and means controlled by the governor whereby upon an overload motive fluid is simultaneously admitted to all of said overload nozzles and the durations of said admissions are made dependent upon the degree of overload.

1,061,793. GATE-LATCH. PINKNEY H. WILSON, Pilot Grove, Mo. Filed Nov. 22, 1912. Serial No. 732,921. (Cl. 70—28.)

In combination with a hinged gate provided with an extending angular tongue and a latch post for the gate, of a latch for the latch post, said latch embodying a lower fixed member provided with guide plates, a bolt extending through the said member, a member pivoted to the latch post and guided between the plates and arranged above the fixed member, the said pivoted member having a funnel-shaped opening through which the bolt of the fixed member passes, a nut for the bolt, a spring upon the bolt and arranged between the nut and the pivoted member, a spring between the pivoted member and the stationary member, the pivoted member having its upper face beveled adjacent its end, a cross sectionally U-shaped catch pivoted



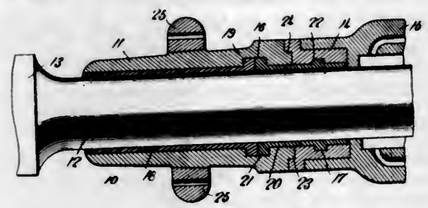
to the sides of the upper member, and adjacent the rounded end thereof, said catch having its outer end curved inwardly to provide a hook, a spring member between the pivoted member and the latch for forcing the hook toward the rounded end of the pivoted member, the rear of the catch beyond the hook being enlarged to provide a stop for the tongue of the gate, and means connected with the latch for swinging the same upon its pivot to bring its hooked end away from the rounded portion of the pivoted member.

1,061,794. BOTTLE. WILLIAM WILSON, Oakland, Cal. Filed Mar. 14, 1911. Serial No. 614,352. (Cl. 215—69.)



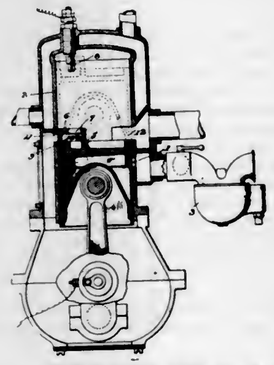
In combination, a bottle having a neck, a stopper wholly disposed and rigidly seated in said neck and having a relatively small central passage and relatively large discharge passage at one side thereof, an air inlet tube extending through said stopper, at the opposite side of said central passage, a guide rod movable through said passage, a valve disk secured to said rod adjacent its upper end and adapted to be seated against the mouth of the bottle, a knob on the upper end of said rod for withdrawing the same, to open said valve, and a head on the lower end of said rod for limiting the movement of said rod and valve to its open position.

1,061,795. FRONT HEAD FOR DRILLS. EDWARD F. WINKELMEYER, Beacon Hill, Mich. Filed July 20, 1912. Serial No. 710,604. (Cl. 121—10.)



In a head for drills, the combination with a tubular body provided with an inner face having an annular groove adapted to receive a packing, of a seat member provided with an inner face having an annular groove and adapted to receive a packing, and a flange on the said tubular body and extending into a recess in the said seat member.

1,061,796. TWO-CYCLE ENGINE. ALEXANDER WINTON and HAROLD B. ANDERSON, Cleveland, Ohio, assignors to The Winton Motor Carriage Company, Cleveland, Ohio. Filed Jan. 20, 1908. Serial No. 411,753. (Cl. 123—73.)



1. The combination in a two-cycle explosion engine, of a cylinder having inlet and exhaust ports, a piston having a vertically-arranged fresh charge pocket having a port adapted to register with said inlet port and in its top a spark plug receiving opening, and a spark-plug carried by the cylinder and adapted to project into said pocket to a point near its bottom for the purpose described.

2. The combination in a two-cycle explosion engine, of a cylinder having inlet and exhaust ports, a piston having a relatively small vertically-arranged fresh charge pocket having a laterally-arranged inlet port adapted to register with said cylinder inlet port and a vertically-arranged spark-plug receiving opening, of a spark-plug carried by the cylinder and extending in a direction longitudinal the piston and projecting into the pocket to near its botttom when the piston is in its outermost position.

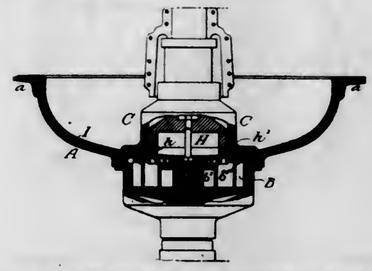
3. The combination in a two-cycle explosive engine, of a cylinder having inlet and exhaust ports, a piston having a vertically-arranged pocket having an inlet port adapted to register with said cylinder inlet port and a cover, the cover having a combined outlet and spark-plug receiving port, and a spark-plug carried by the cylinder and adapted, to project into the pocket below said cover when the piston is in its outermost position.

4. The combination in a two-cycle explosive engine, a cylinder having an inlet port, and an exhaust port at the opposite side from the inlet port, a piston having a vertically-arranged fresh charge pocket at the inlet port side, said pocket having an inlet port adapted to register with said cylinder inlet port and a cover, the cover provided with a spark-plug passage-way, and a spark-plug carried by the cylinder and projecting thereinto to a point inside of the cover pocket when the piston is at or near its uppermost position.

5. The combination in a two-cycle explosion engine, of a cylinder having inlet and exhaust ports, a piston having at its explosion end a relatively small fresh charge pocket having a side entrance adapted to register with said cylinder inlet port and a spark plug receiving opening, of a spark plug projecting into said cylinder and located to enter said fresh charge pocket when the piston is in its outermost position.

[Claim 6 not printed in the Gazette.]

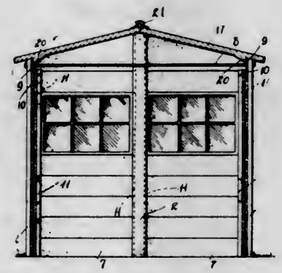
1,061,797. PROCESS OF DISHING METALLIC PLATES. JOHN S. WORTH, Coatesville, Pa., assignor of one-half to William P. Worth, Coatesville, Pa. Filed May 20, 1908. Serial No. 433,866. (Cl. 113—52.)



1. The process herein described of dishing metal plates, said process consisting in heating a plate, making a primary dish therein near the periphery while the periphery and center are positively held; depressing the center of the plate as the dishing proceeds; rolling the plate between the periphery and center to increase the dish; and rolling the plate at the edge while still held at the center.

2. The process herein described of dishing metal plates, said process consisting in heating a plate, making a primary dish therein near the periphery while the periphery and center are positively held; depressing the center of the plate as the dishing proceeds; rolling the plate between the periphery and center to increase the dish; rolling the plate at the edge while still held at the center; then cutting a hole in the plate while the plate is held; and forming a flange on the plate surrounding the hole.

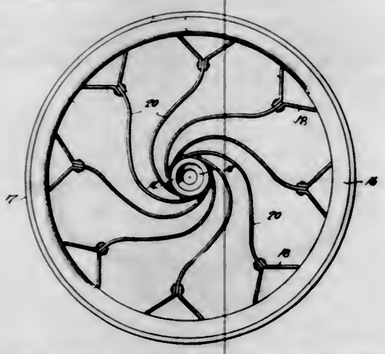
1,061,798. CONCRETE GARAGE. RALPH F. YOURTEE, St. Louis, Mo. Filed Mar. 12, 1912. Serial No. 683,283. (Cl. 72—1.)



In a structure of the character described, the combination of posts, slabs closing the spaces formed between the posts and engaging the latter at their ends, longitudinal L beams placed upon the side posts with one of their flanges in vertical position and the other flange in hori-

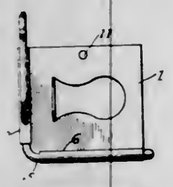
zontal position with its ends bent downwardly and engaging the corner posts, transverse tie rods passing through openings formed in the vertical flanges of the longitudinal beams and connecting the same, oppositely inclined roofing slabs interlocking at their inner upper ends and along their longitudinal edges and provided near their lower outer ends with lugs which engage the vertical flanges of the longitudinal beams, and end slabs filling the space between the transverse tie rods and the roofing slabs and supported at their ends upon the corner posts.

1,061,799. SPRING-WHEEL. BENJAMIN ANDERSON, Gebo, Wyo. Filed Sept. 4, 1912. Serial No. 718,517. (Cl. 152—30.)



A spring wheel comprising a hub, a felly disposed concentrically with respect to said hub and being of semicircular shape in cross section throughout its circumference, resilient spokes fixed to said hub, triangular shaped plates fixed to opposite sides of the outer ends of the spokes and outwardly diverging therefrom, rivet extensions formed integrally with the plates and engaged in the felly, and an annular tread bridging the concaved portion of the felly and securely mounted on the same.

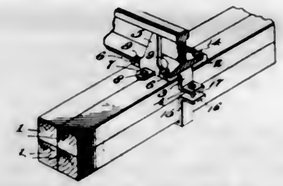
1,061,800. WINDOW-SHADE BRACKET AND CURTAIN-POLE SUPPORT. JAMES W. ANDERSON, Fort Smith, Ark. Filed Aug. 12, 1912. Serial No. 714,642. (Cl. 156—24.)



1. A window shade bracket and curtain pole support comprising a plate, the window shade bracket formed integral with said plate, said plate having a flange extending at right angles to one of its edges and provided with integral prongs, a length of wire secured to the two other edges of said plate and having one of its terminals provided with a tapered prong, the other terminal of said wire formed with a hook adapted to support a curtain pole.

2. A window shade bracket and curtain pole support comprising a plate, a portion of said plate cut out and bent at substantially right angles thereto to form the bracket aforesaid, one edge of said plate being bent at right angles and forming a flange, said flange being provided with integral prongs, a length of wire formed with a rectangular portion and mounted on said plate, two of the edges of said plate bent to engage the rectangular portion of said wire, one of the terminals of said wire formed with a tapered prong and the other terminal of said wire bent to form a hook adapted to support a curtain pole.

1,061,801. CHAIR OR SUPPORT FOR RAILWAY-RAILS. JAMES T. ANDREW, Montgomery, Ala. Filed Feb. 13, 1913. Serial No. 748,237. (Cl. 238—2.)

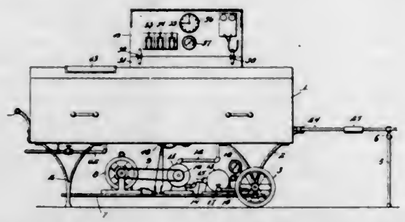


1. The combination of a sectional tie and a rail chair provided with supporting flanges and downwardly extending members partially surrounding the tie, having perforated ears; a U-shaped member having perforated ears coacting with said downwardly extending members and first mentioned ears to completely encircle the tie; means for securing said ears together; and a perforated lug extending from said chair adapted to receive a spike, substantially as described.

2. The combination of a sectional tie and a rail chair provided with supporting flanges having cut-away portions adapted to receive spikes, and downwardly projecting members having perforated ears partially encircling the tie; a U-shaped member having perforated ears coacting with said first mentioned ears to completely encircle said tie; bolts passing through said ears; a perforated lug extending from said chair adapted to receive a spike; and a rail support also extending from said chair, substantially as described.

3. The combination of a pair of rail chairs each provided with a base having cut-away portions adapted to receive spikes and downwardly projecting members having perforated ears adapted to partially encircle the tie; a U-shaped member for each chair having perforated ears adapted to coact with said first mentioned ears to completely encircle the tie; bolts passing through said ears; a perforated lug extending from each chair adapted to receive a spike; a rail support rising from each chair and lug; and a rod connecting said chairs, substantially as described.

1,061,802. LIFE-DETECTING APPARATUS. PETER J. BACKUS, Delphos, Ohio. Filed Nov. 19, 1912. Serial No. 732,268. (Cl. 27—15.)



1. Apparatus of the class specified, comprising an air tight casket, a body-supporting stretcher therein embodying side bars spaced apart in substantially parallel relation, body supporting rests shiftable along said bars, a vacuum pump in communication with the casket, and means controlled exteriorly of the casket for subjecting the body to life tests while resting in the vacuum.

2. Apparatus of the class specified, comprising an air tight casket, a body-supporting stretcher therein embodying side bars spaced apart in substantially parallel relation, body supporting rests shiftable along said bars, a vacuum pump in communication with the casket, and an electric heating coil in said casket controlled from outside the casket.

3. Apparatus of the class specified, comprising an air tight casket, a body-supporting stretcher therein embodying side bars spaced apart in substantially parallel relation, body supporting rests shiftable along said bars, a vacuum pump in communication with the casket, and apparatus controlled exteriorly of the casket for electrifying the body.

4. Apparatus of the class specified, comprising an air tight casket, a body-supporting stretcher therein embodying side bars spaced apart in substantially parallel relation, body supporting rests shiftable along said bars, a vacuum pump in communication with the casket, wrist and ankle holders on said rests, and electrodes connected with said holders and arranged in an electric circuit.

5. Apparatus of the class specified, comprising an air tight casket, a body-supporting stretcher therein embodying side bars spaced apart in substantially parallel relation, body supporting rests shiftable along said bars, a vacuum pump in communication with the casket, means controlled exteriorly of the casket for subjecting the body to life tests while resting in the vacuum, and telephone apparatus having the transmitter arranged in the casket.

[Claims 6 to 8 not printed in the Gazette.]

1,061,803. SOLDERING-IRON. JOSEPH F. BALKUS, Glastonbury, Conn. Filed Dec. 17, 1912. Serial No. 737,301. (Cl. 113—109.)



1. In a soldering iron, a soldering point provided with a duct therethrough, a magazine extending back from said point, a closure for the rear end of said magazine, a combined tubular handle shank and air pipe extending longitudinally within and also exteriorly of the magazine and provided with air ports, a stem fitted in said tubular handle shank and provided with an air passage adapted to register with said ports, a stud connected with said stem for turning the same to open and close said ports, a valve seat at the inner end of the duct in the head, and a cut off valve for said duct operable by the same device which controls the air valve.

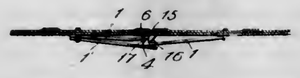
2. In a soldering iron, a soldering point provided with a duct therethrough, a magazine extending back from said point, a closure for the rear end of said magazine, a combined tubular handle shank and air pipe extending longitudinally within and also exteriorly of the magazine and provided with air ports, a stem fitted in said tubular handle shank and provided with an air passage adapted to register with said ports, a stud connected with said stem for turning the same to open and close said ports, a hand grip on the tubular shank having a bayonet slot therein through which said stud passes, a valve seat at the inner end of the duct in the head, and a cut-off valve for said duct operable by the same device which controls the air valve.

1,061,804. ART OF PRODUCING PICTURES, DESIGNS, OR ORNAMENTS. FRANCIS BIDDLE BANNAN, Pottsville, Pa. Filed Jan. 17, 1912. Serial No. 671,655. (Cl. 41—34.)



The herein-described art of producing studded relief pictures or designs, which consists in outlining the design upon a base, following the outline by driving into the base headed studs of the desired color or colors, disposing within the outlined field a filler of suitable material to form a bas relief, and then driving through the filler and into the base a mass of headed studs of the required number, colors and extent of projection to cover the field and produce the proper relief effect and shade.

1,061,805. SEPARABLE FASTENER. HENRY L. BEACH and FREDERIC W. BABCOCK, Cleveland, Ohio. Filed Sept. 19, 1912. Serial No. 721,261. (Cl. 24—230.)



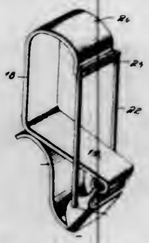
1. In a separable fastener, the combination with a hook having a bill substantially triangular in end elevation and provided with a longitudinal groove throughout the length of its face and extending through its heel; of a second hook shaped to engage the first and having a fin extending to the rear from its heel and adapted to stand in said groove when the heels of the two hooks are engaged.

2. In a separable fastener, the combination with a hook having a bill substantially triangular in end elevation and provided with a longitudinal groove throughout the length of its face and extending through its heel, said groove being curved transversely; of a second hook shaped to engage the first and having a fin extending to the rear from its heel and adapted to stand in said groove when the heels of the two hooks are engaged, the fin having a sharp upper edge adapted to rest in the bottom of said curved groove when said heels are engaged.

3. In a separable fastener, the combination with a hook having a bill provided with a longitudinal groove through its face and heel; of a second hook shaped to engage the first and having a fin extending to the rear from its heel and provided with a sharp edge adapted to rest in said groove when said heels are engaged, and a spring guard secured to the base of the second hook and having a tongue at its front end normally contacting with the bill of this hook but yielding to permit the entrance of the other hook.

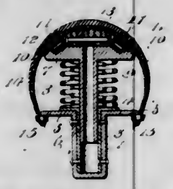
4. In a separable fastener, the combination with a hook having a bill provided with a longitudinal groove throughout the length of its face and extending through its heel, said groove being curved transversely; of a second hook shaped to engage the first and having a fin extending to the rear from its heel and adapted to stand in said groove when the heels of the two hooks are engaged, the fin having a sharp edge adapted to rest in said groove when said heels are engaged, and a spring guard secured to the base of the second hook and having a tongue at its front end normally contacting with the bill of this hook but yielding to permit the entrance of the other hook.

1,061,806. DUST-SHIELD FOR HUBS. WILSON G. BEAR and KENNETH C. HURLBUT, Monroe, Wis. Filed Apr. 1, 1912. Serial No. 687,709. (Cl. 21—40.)



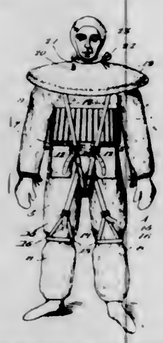
A securing clip for dust shields including an arched member adapted to straddle the shield and having a straight portion adapted to extend along the bottom of an axle, a substantially V-shaped catch pivotally secured to said straight portion, and a closed eye pivotally secured to the intermediate portion of one of the catch legs and adapted to engage yieldingly the free end of said arched portion.

1,061,807. TIRE. WILLIAM A. BINION, Newark, N. Y. Filed Nov. 22, 1911. Serial No. 661,701. (Cl. 152—8.)



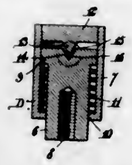
In a device of the class described, the combination with a felly, of bushings mounted therein, plungers slidably mounted in said bushings, springs surrounding said plungers and adapted to normally project the same, heads on the plungers having V-shaped notches adjacent the opposite ends, a plurality of link chains arranged upon the top of the head, a plurality of link chains arranged in the notches at an angle to the first chains, an integral rim on the felly, and a flexible casing surrounding the chains and connected to the rim.

1,061,808. PROTECTIVE UNIFORM. ADELAIDE M. BLACKWELL, Seattle, Wash. Filed June 12, 1912. Serial No. 703,305. (Cl. 9—20.)



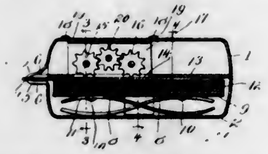
A protective uniform comprising body and leg sections, bands encircling the leg sections and secured thereto, buckles connected to said bands, an adjusting strap connected to each of said buckles, and adjustable shoulder straps connected to said adjusting straps, said shoulder straps being adapted to engage the front and rear of the body portion and pass over the shoulders and under the crotch thereof.

1,061,809. BINDING-POST. FRANK E. BOCORSELSKI and COLUMBUS K. LASSITER, Richmond, Va. Filed Nov. 2, 1911. Serial No. 658,112. (Cl. 173—259.)



A binding post comprising a stationary plug adapted to engage a terminal member, an outer sleeve encircling the plug and of a greater diameter than that of the plug, an enlarged head on the plug and snugly engaging the inner surface of the sleeve, one end of the sleeve being bent at right angles to itself to form an inwardly extending annular retaining flange, a coiled expansion spring encircling said plug and interposed between said flange and head and acting to force the plug within the sleeve, a cap on the sleeve, and a V-shaped lug carried by the inner surface of the cap and disposed across the same and coöperating with a similar shaped recess formed in the head on the plug, said lug and recess being adapted to receive a wire and maintain the same in the binding post and in contact with such post at a number of distinct and separate points.

1,061,810. TICKET-HOLDER. CHARLES A. BOWLES, Richmond, Va. Filed Feb. 7, 1911. Serial No. 607,017. (Cl. 206—40.)

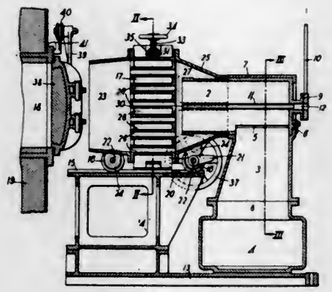


A ticket holder comprising a two-part casing having an intermediate wall and an exit opening adjacent one face of said wall, said wall having a longitudinal slot, a pair of spaced ejecting gear wheels mounted within one part of the casing and having gear teeth movable within the said slot, an intermediate gear wheel mounted within the same part of the casing and having gear teeth intermeshing with the teeth of said ejecting gear wheels, ticket engaging teeth formed upon the gear teeth of the ejecting gear wheels and adapted to move within the opposite part of the casing, and means for forcing cards positioned in the latter part of the casing against the said teeth.

1,061,811. GAS-BURNER. ARTHUR J. BOYNTON, Lorain, Ohio. Filed May 2, 1912. Serial No. 694,724. (Cl. 158—109.)

1. A gas burner comprising a conduit, a support in which said conduit is rotatably mounted through which gas is supplied thereto, a gas and air conveyer in front of and movable relatively to said conduit, means on the conveyer telescoping on the end of and connecting the conduit with said conveyer, said conveyer having gas inlets from the conduit and having independent air inlet openings.

2. A gas burner comprising a tubular conduit, a support in which said conduit is rotatably mounted through which gas is supplied to the conduit, a gas and air conveyer in front of and movable relatively to said conduit, means on the conveyer telescoping over the end of and connecting the conduit with said conveyer, said conveyer having gas inlets from the conduit and independent air inlet openings, and means adjustably secured on the conveyer to vary the size of said air inlets and regulate the air supply thereto.



3. A gas burner comprising a conduit, a support in which said conduit is rotatably mounted through which gas is supplied to the conduit, a gas and air conveyer in front of the conduit, and movable with respect thereto, means on the conveyer telescoping on the end of and connecting the conduit with said conveyer, a nozzle for the conveyer, said conveyer having gas inlets connecting the conduit with the nozzle, independent air inlets opening into said nozzle, and a support on which said conveyer and nozzle are movably mounted.

4. A gas burner comprising a conduit, a support in which said conduit is rotatably mounted through which gas is supplied to the conduit, a gas and air conveyer in front of the conduit, and movable with respect thereto, means on the conveyer telescoping on the end of and connecting the conduit with said conveyer, a nozzle for the conveyer, gas inlets on the conveyer connecting the conduit with the nozzle, independent air inlets opening into said nozzle, a support on which said conveyer and nozzle are movably mounted, and fastening means on the conveyer and support for securing said conveyer against backward movement on the support when the conveyer is in extended position.

5. In a gas burner a gas and air conveyer, a series of inlets extending from side to side therethrough for supplying gas thereto, a series of air inlet openings therein, and a grid on said conveyer adjustably secured thereon to regulate the supply of air to the conveyer.

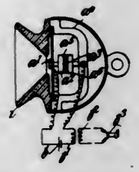
[Claims 6 to 9 not printed in the Gazette.]

1,061,812. MANTLE-RETAINER. CHARLES M. BRANDT, Holmes, Pa., assignor of twenty-five and one-half one-hundredths to Alfred B. Willoughby, Philadelphia, Pa. Filed July 8, 1912. Serial No. 708,263. (Cl. 24—81.)



A mantle retainer comprising parallel centrally disposed spring members for engaging one of the feet at the base of a mantle, said members having a projecting finger-hold, curved spring recessed members connected to the parallel members for engaging the other feet of the mantle and for holding the mantle and retainer firmly connected, guards extending from the recessed members for bearing against the inner sides of the carton, and spring arms connected with the guards and vertically spaced therefrom for engaging the center of the outer surface of the bottom of the carton.

1,061,813. TELEPHONY. SIDNEY GEORGE BROWN, London, England. Filed Feb. 4, 1910. Serial No. 542,023. (Cl. 179—190.)



1. In electrical apparatus for magnifying electric waves or vibrations or producing the same by conversion from corresponding sound waves, a variable resistance contact device comprising fragmentary osmium and iridium alloy.

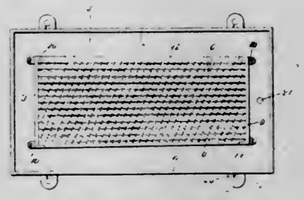
2. In electrical apparatus for magnifying electric waves or vibrations or producing the same by conversion from corresponding sound waves, a variable resistance contact device comprising two hard surfaces and a granule of osmium-iridium alloy interposed between the said surfaces.

3. In electrical apparatus for magnifying electric waves or vibrations or producing the same by conversion from corresponding sound waves, a variable resistance contact device comprising two hard surfaces, and granules of osmium-iridium alloy interposed between the said surfaces.

4. In electrical apparatus for magnifying electric waves or vibrations or producing the same by conversion from corresponding sound waves, a variable resistance contact device comprising two surfaces of iridium and a granule of osmium-iridium alloy interposed between the said surfaces.

5. In electrical apparatus for magnifying electric waves or vibrations or producing the same by conversion from corresponding sound waves, a variable resistance contact device comprising two surfaces of iridium and granules of osmium-iridium alloy interposed between the said surfaces.

1,061,814. BRUSH. CHRISTIAN BURGER, Nuremberg, Germany. Filed June 30, 1910. Serial No. 569,838. (Cl. 15—36.)

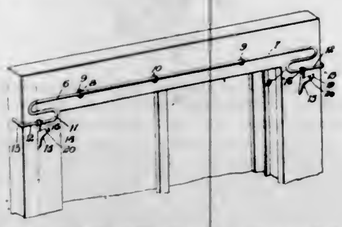


1. A brush of great absorbent capacity, comprising a brush back composed of a multiple of bristle holding strips, each of the strips, except the two outside strips, being made with alternating wide and narrow portions the wide portions being formed by opposite projections from the body of the strip and the said projections from one strip extending into the depressions of an adjacent strip forming thus a wave like channel between each pair of adjoining strips, and a continuous layer of bristles clamped with their inner ends in each channel leaving spaces near said clamped portion of the peculiar shape of the bristle holders which gradually decreases as the bristles spread out.

2. A brush of great absorbent capacity, comprising a brush back composed of two outer holding strips each smooth on the outside and made with alternating wide and narrow portions on the inside, and a multiple of inner strips, each of the inner strips being made with alternating wide and narrow portions the wide portions being formed by opposite projections from the body of the strip and the said projections from one strip extending into the depressions of an adjacent strip forming thus a wave like channel between each pair of adjoining strips, and a continuous layer of bristles clamped with their inner ends in

each channel leaving spaces near said clamped portion of the peculiar shape of the bristle holders which gradually decreases as the bristles spread out.

1,061,815. ADJUSTABLE SHADE AND CURTAIN HANGER. JOHN M. CARMEAN, Noblesville, Ind. Filed Aug. 23, 1912. Serial No. 716,696. (Cl. 156—23.)

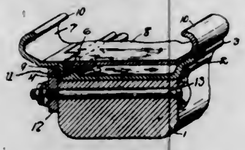


1. A holder of the class described, comprising a pair of rod-like sections each being formed with eyes at its inner end, rings loosely engaged in the eyes and encircling the sections for joining the same, bent portions at the outer ends of said sections and having hooks adapted to be driven into a window casing, and shade holding members slidably engaged upon said bent portions of the sections.

2. A holder of the class described, comprising a pair of rod-like sections each being formed with eyes at its inner end, rings loosely engaged in the eyes and encircling the sections for joining the same, bent portions at the outer ends of said sections and having hooks adapted to be driven into a window casing, shade holding members slidably engaged upon said bent portions of the sections, and hook bills formed on said members and adapted to be driven into a window casing.

3. A holder of the class described, comprising a pair of rod-like sections each being formed with eyes at its inner end, rings loosely engaged in the eyes and encircling the sections for joining the same, bent portions at the outer ends of said sections and having hooks adapted to be driven into a window casing, shade holding members slidably engaged upon said bent portions of the sections, hook bills formed on said members and adapted to be driven into a window casing, and a supplemental ring surrounding the sections between the first-named rings.

1,061,816. DEMOUNTABLE RIM. JOSEPH H. CHAMP, Cleveland, Ohio, assignor to The Standard Welding Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 5, 1912. Serial No. 688,574. (Cl. 152—21.)



1. In a vehicle wheel, the combination with a felly having a fixed rim thereon, and a removable rim adapted to receive a tire shoe; of a fixed bearing surface mounted on said fixed rim; an inclined face on said fixed rim spaced from said bearing surface; a removable bearing surface mounted on said fixed rim; means on said removable rim adapted, upon movement of said removable rim onto said fixed rim, to force said removable bearing member up said inclined face, whereby said removable bearing member and said fixed bearing member support said removable rim; and means for maintaining said removable rim in engagement.

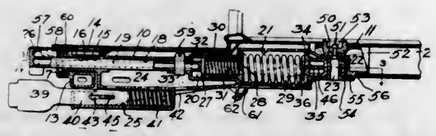
2. In a vehicle wheel, the combination with a felly having a fixed rim thereon, and a removable rim adapted to receive a tire shoe; of a fixed bearing surface mounted on said fixed rim; an inclined face on said fixed rim spaced from said bearing surface; a removable bearing surface mounted on said fixed rim; depending lugs on the inner side of said removable rim adapted, upon movement of the same onto said fixed rim, to force said removable bearing member up said inclined face, whereby said removable bearing member and said fixed bearing member support said removable rim; and means for maintaining said removable rim in engagement.

3. In a vehicle wheel, the combination with a felly having a fixed rim thereon, and a removable rim adapted to receive a tire shoe; of a fixed bearing surface mounted on said fixed rim; a removable bearing surface comprising a split ring mounted on said fixed rim; an inclined face on said fixed rim; depending lugs on the inner side of said removable rim adapted, upon movement of the same onto said fixed rim, to force said removable bearing member up said inclined face, whereby said removable bearing member and said fixed bearing member support said removable rim; and means for maintaining said removable rim in engagement.

4. In a vehicle wheel, the combination with a felly having a fixed rim thereon, and a removable rim adapted to receive a tire shoe; of a fixed bearing surface mounted on said fixed rim; a removable bearing surface comprising a split ring mounted on said fixed rim; an inclined face on said fixed rim, said ring being adapted, when forced up said inclined surface, to act as a second bearing surface for said removable rim; depending lugs mounted on the inner side of said removable rim adapted upon movement of the same onto said fixed rim, to force said split ring up said inclined surface, whereby said removable bearing member and said fixed bearing member support said removable rim; and means adapted to actuate said removable rim to force said split ring into such bearing engagement, said means being also adapted to retain said removable rim on said fixed rim.

5. In a vehicle wheel, the combination with a felly having a fixed rim thereon, and a removable rim adapted to receive a tire shoe; of a fixed bearing surface mounted on said fixed rim; a removable bearing surface comprising a split ring mounted on said fixed rim; an inclined face on said fixed rim, said ring being adapted, when forced up said inclined surface, to act as a second bearing surface for said removable rim; depending lugs mounted on the inner side of said removable rim adapted upon movement of the same onto said fixed rim, to force said split ring up said inclined surface, whereby said removable bearing member and said fixed bearing member support said removable rim; a second split ring adapted to be placed laterally against said lugs on removable rim; and means adapted to engage said second ring and to actuate said removable rim to force said first-named split ring into such bearing engagement, said means being also adapted to retain said removable rim on said fixed rim.

1,061,817. SWINGING BUFFER AND DRAFT RIGGING. ANDREW CHRISTIANSON, Butler, Pa., assignor to Standard Steel Car Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 11, 1909. Serial No. 471,757. (Cl. 213—60.)



1. The combination with a car underframe, of a swinging casing mounted therein, said casing having two guideways in the same vertical plane, one for the buffer shaft and one for the draw bar shaft, and a buffer and a draw bar mounted in said guide-ways respectively.

2. The combination with an underframe, of a swinging casing mounted therein, having a seat for the draft rigging, and guide-ways for the buffer-shaft and draw bar shaft respectively on the same vertical plane, a buffer and

a draw bar mounted in said guideways, respectively, draft rigging mounted in the draft rigging seat and connections from both buffer and draw bar to said draft rigging.

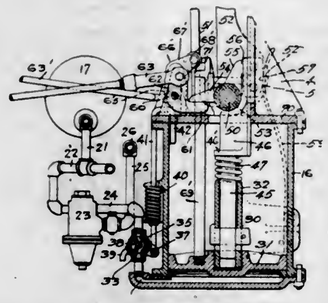
3. The combination with an underframe, of a swinging casing mounted therein, having a seat for the draft rigging, a buffer and a draw bar, and guide-ways for the buffer shaft and draw bar shaft respectively on the same vertical plane, draft rigging mounted in the draft rigging seat and having draft plates, the buffer shaft operating on the forward draft rigging plate, and the draw bar being connected to the rear draft rigging plate.

4. The combination with an underframe, of a casing mounted to swing therein, said casing having a draft rigging pocket, and having in line therewith a buffer bar guide-way and below the same a draw bar guide-way, draft rigging plates, a buffer bar mounted in its guide-way operating on the front draft rigging plate and a draw bar mounted in its guide-way and having connections to the rear draft rigging plate.

5. The combination with an underframe, of a casing mounted to swing therein, said casing having a draft rigging pocket and in front of same, a buffer bar guide-way, and a draft bar guide-way below the same, a draft rigging mounted in said draft pocket, and having draft plates, a buffer bar mounted in its guide-way and operating upon the front draft plate, a draw bar mounted in its guide-way, and straps fitting on both sides of the casing and connecting the draft bar with the rear draft plate.

[Claims 6 to 18 not printed in the Gazette.]

1,061,818. DUMPING-CAR. ANDREW CHRISTIANSON, Butler, Pa., assignor to Standard Steel Car Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 3, 1911. Serial No. 600,563. (Cl. 105—190.)



1. In dumping cars having a tilting body, the combination of oppositely disposed fluid pressure cylinders provided with pistons, dumping mechanism connecting each of said pistons and the tilting body and adapted to normally support the same in horizontal position and means actuated by each of said pistons when set in action to release the dumping mechanism of the opposite piston and permit dumping toward the opposite side.

2. In dumping cars having a tilting body, the combination of oppositely disposed fluid pressure cylinders provided with pistons adapted to be independently set in action, dumping mechanism connecting each of said pistons to opposite sides of the tilting body and normally supporting said body in horizontal position, and releasing mechanism between said cylinders and adapted to be actuated by the initial movement of each of said pistons when set in action to release the dumping mechanism of the opposite cylinder, the further movement of said piston operating to dump the body toward the opposite side.

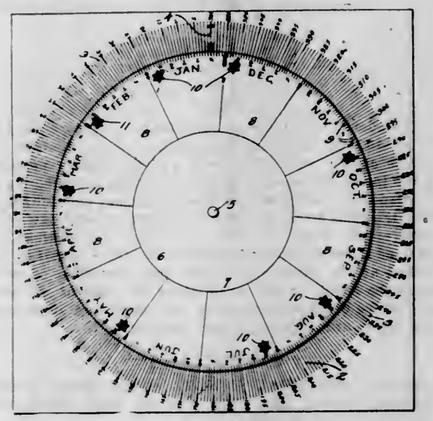
3. In dumping cars the combination with a truck frame and a tilting body thereon, of means for supporting said body in horizontal position arranged on opposite sides of the truck frame, a fluid pressure cylinder provided with a piston coöperating therewith and adapted to raise said supporting means on one side to tilt the body, and mechanism connecting said piston to the supporting means of the opposite side to release the same on the initial movement of said piston.

4. In dumping cars the combination with a tilting body, of oppositely disposed fluid pressure cylinders provided with pistons, and dumping connections between each of said pistons, and the tilting body and adapted to support the same normally in horizontal position, a rod carried by each of said pistons, bell crank levers actuated thereby, and tension rods connecting the same and adapted to release the dumping mechanism of the opposite piston when one of the cylinders is set in action.

5. In dumping cars the combination with a tilting body and truck frame supporting the same, of dumping means oppositely disposed beneath said tilting body and adapted to hold the same normally in horizontal position and including fluid pressure cylinders provided with pistons, a cross head actuated by each of said pistons when separately set in action, but movable relatively thereto on the initial movement of the piston, a cam rod carried by each piston, a bell crank lever actuated thereby, and mechanism connecting the same to the opposite dumping means to release the same on the initial movement of the said piston and permit the body to be dumped toward the opposite side.

[Claims 6 to 34 not printed in the Gazette.]

1,061,819. CALCULATOR. MAUD LOWRY CLEARY, Boise, Idaho. Filed June 19, 1912. Serial No. 704,655. (Cl. 235—78.)

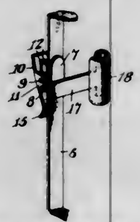


1. A calculator device, consisting of concentric circular dials, said dials being rotatable with respect to each other, one of said dials being divided at its periphery into 360 equal parts or subdivisions which are numbered from 0 to 360, said dial having a suitable indication at the zero mark of said subdivisions, and the other of said dials being divided into twelve equal sectors, which represent successively the months, each of said sectors being divided into 30 equal parts or subdivisions, numbered consecutively from 1 to 30 to indicate the days of the month, the said sectors which correspond to the months having 31 days being each provided with a suitable indication to indicate to the operator that one is to be added for each of said indications which occurs between two specified dates on said second named dial, and the sector which corresponds to February being provided with a suitable indication which may be distinguished from the indications on the other sectors, to indicate that one is to be subtracted when the said indication occurs between two specified dates for leap year, and that two is to be subtracted for the normal years.

2. A calculator device, consisting of a fixed circular dial, said dial being divided at its periphery into 360 equal parts or subdivisions which are numbered consecu-

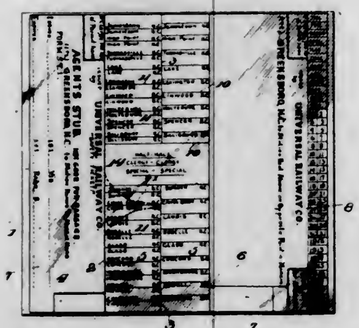
tively from 0 to 360, said dial having a suitable indication at the zero mark of said subdivisions, and a second dial concentrically disposed within said first named dial rotatable with respect thereto, said second dial being of smaller diameter than the dial first named, and being divided into 12 equal sectors, which sectors represent successively the months, each of said sectors being divided into 30 equal parts or subdivisions which are numbered consecutively from 1 to 30 to indicate the days of the month, the said sectors which correspond to the months having 31 days being each provided with a suitable colored indication to indicate to the operator that one is to be added for each of said indications which occurs between two specified dates on said second named dial, and the sector which corresponds to February being provided with an indication having a color to contrast with that of the indications on the other sectors, in order to indicate to the operator that one is to be subtracted when the said indication occurs between two specified dates for leap year, and that two is to be subtracted for the normal years.

1,061,820. COMBINED BOOK AND PENCIL HOLDER. CHARLES W. COLBERT, Westhoff, Tex. Filed May 15, 1912. Serial No. 697,516. (Cl. 24—3.)



In a device of the class described, a support adapted to be secured longitudinally so as to lie against the outside of the cover of a book, a slide movably mounted at the inner side of said support, a spring actuated clamp positioned at the outer side of said support and connected with the slide so as to move therewith, an arm extending transversely from the slide and lying flat against the cover of the book, and a holding sleeve for a pencil or pen formed at the outer end of said arm and offset so as to cause the pencil or pen to lie along the edge of the book, said sleeve being movable with the clamp and slide when said parts are adjusted along the support.

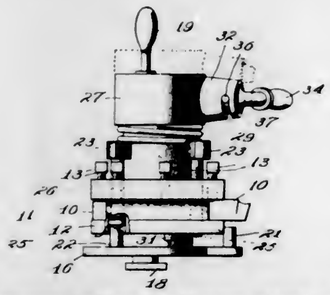
1,061,821. RAILROAD-TICKET. CHRISTOPHER H. COSGROVE, Atlanta, Ga. Filed Nov. 14, 1912. Serial No. 731,351. (Cl. 11—15.)



1. A railroad ticket comprising a sheet designed to be torn to provide a stub with an attached tab portion and a passenger's ticket with a coöperating recess and which has printed thereon two columns of names of stations, the respective names of the stations in the two columns being identical and next to each other, and being substantially in alinement, the names of the stations in one column being in duplicate one above the other on the stub portion, the identical names of the stations on the stub portion appearing on the passenger portion, whereby when the sheet is torn to form a stub provided with a tab, the duplicate names of a station to indicate the destination of the passenger will appear on the tab and a recess will be formed next to the name of the corresponding station on the passenger's ticket.

2. A railroad ticket comprising a sheet designed to be torn to provide a stub with attached tab portions and a passenger's ticket with coöperating recesses, and which has printed thereon two columns of names of stations, the respective names of the stations in the two columns being identical and next to each other, and being substantially in alinement, the names of the stations in one column being in duplicate one above the other on the stub portion, the identical name of the stations on the stub portion appearing on the passenger portion, the two columns of names of stations being separated to form a transverse space on the ticket portion between the upper portion of the two columns and the lower portion of said columns, and two columns of designations printed in the space to indicate the character of the ticket, the respective designation in said space being identical and next to each other, whereby when the sheet is torn to form a stub provided with tabs, the duplicate names of a station to indicate the destination of the passenger will appear on one tab and a recess will be formed next to the name of the corresponding station on passenger portion, and one of said tabs will bear a designation to indicate the character of the ticket, and the passenger portion will have a recess next to a designation identical with the designation on the last mentioned stub.

1,061,822. MULTIPLE MACHINE-TOOL HOLDER. ROBERT B. CRAIG, Kansas City, Mo. Filed May 10, 1912. Serial No. 696,458. (Cl. 29—49.)



1. A multiple machine tool-holder having a central post by means of which the holder is secured on a machine, a revolving tool-carrier seated on said post provided with an equal number of straight sides as the number of tools, and means for axially clamping said tool-carrier to said post; an automatic device for positive lateral adjustment between said tool carrier and post in a plurality of predetermined positions, said adjusting device comprising a stop pin situated on said central post and at such a distance from its axis that it will impinge any one of said straight sides of the tool-carrier near the extreme point thereof.

2. A multiple machine tool-holder having a central post by means of which the holder is secured on a machine, a revolving tool-carrier seated on said post provided with an equal number of straight sides as the number of tools, and means for axially clamping said tool-carrier to said post; an automatic device for positive lateral adjustment between said tool carrier and post in a plurality of predetermined positions, said adjusting device comprising a stop pin situated on said central post and at such a distance from its axis that it will impinge any one of said straight sides of the tool-carrier near the extreme point thereof, a tapered point for each of said tools on said tool-carrier situated equi-distant from the axis of the holder, and a stud on the central post, said stud having a beveled face located in the path of the tapered points on rotating said tool-carrier.

3. A multiple machine tool-holder having a central post by means of which the holder is secured on a machine, a revolving tool-carrier seated on said post provided with an equal number of straight sides as the number of tools, and means for axially clamping said tool-carrier to said post; an automatic device for positive lateral adjustment between said tool carrier and post in a plurality of predetermined positions, said adjusting device comprising a stop pin situated on said central post and at such a distance from its axis that it will impinge any one of said straight sides of the tool-carrier near the extreme point thereof, and an adjusting screw with a tapered point for each of said tools on said tool-carrier situated equi-distant from the axis of the holder, and a stud on the central post, said stud having a beveled face located in the path of the tapered points on rotating said tool-carrier.

4. A multiple machine tool-holder having a central post by means of which the holder is secured on a machine, a revolving tool-carrier seated on said post provided with an equal number of straight sides as the number of tools, and means for axially clamping said tool-carrier to said post; an automatic device for positive lateral adjustment between said tool carrier and post in a plurality of predetermined positions, said adjusting device comprising a stop pin situated on said central post and at such a distance from its axis that it will impinge any one of said straight sides of the tool-carrier near the extreme point thereof, and an adjusting screw with a tapered point for each of said tools on said tool-carrier situated equi-distant from the axis of the holder, and a stud on the central post, said stud having a beveled face located in the path of the tapered points on rotating said tool-carrier; said adjusting screw being provided with a frictional spring for retaining the adjusting screw in any given position.

5. A multiple machine tool-holder having a central post by means of which the holder is secured on a machine, a revolving tool-carrier seated on said post provided with an equal number of straight sides as the number of tools, and means for axially clamping said tool-carrier to said post; an automatic device for positive lateral adjustment between said tool carrier and post in a plurality of predetermined positions, said adjusting device comprising a stop pin situated on said central post and at such a distance from its axis that it will impinge any one of said straight sides of the tool-carrier near the extreme point thereof, and an adjusting screw with a tapered point for each of said tools on said tool-carrier situated equi-distant from the axis of the holder, and a stud on the central post, said stud having a beveled face located in the path of the tapered points on rotating said tool-carrier, whereby said tool-carrier will tend to rotate in one direction actuated by said bevel face and tapered points.

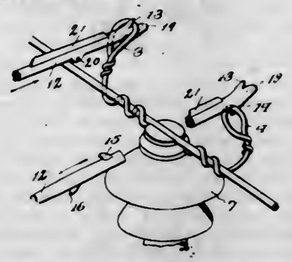
[Claims 6 and 7 not printed in the Gazette.]

1,061,823. TIE-WIRE FOR HIGH-VOLTAGE CIRCUITS. JEREMIAH CRONIN, Wapakoneta, Ohio, assignor to The Cronin Electrical Appliances Company, Wapakoneta, Ohio. Filed May 13, 1912. Serial No. 697,098. (Cl. 173—313.)

1. A tie-wire for holding a line wire of an electric circuit or an insulator, comprising two wire members, each being formed with a curved body portion, a loop end, and a straight end, as and for the purpose set forth.

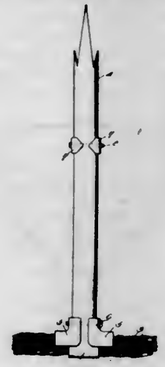
2. A two-piece tie-wire for holding a line wire of an electric circuit on an insulator, and comprising two wire members, each having a loop formed at one end and the other end of each wire wrapped around the body of the other wire, the two said wires adapted to pass around opposite sides of the insulator.

3. The combination with an insulator, of a two-part tie-wire comprising two wires, each passing partly around said insulator on opposite sides thereof, said wires having each an end wrapped around the body of the other wire on opposite sides of said insulator, each wire having a portion extending beyond the said connection of the two wires, and adapted to be wrapped around the conductor to be supported by said insulator.



4. The combination with a high voltage insulator, of a two-part tie-wire comprising two wires, each passing partly around the said insulator on opposite sides thereof, said wires having each an end wrapped around the body of the other body on opposite sides of said insulator, each wire having a portion extending beyond the said connection of the two wires, and adapted to be wrapped around the conductor to be supported by said insulator, the portions of said wires wrapped around said line wire being looped at their ends for the purposes set forth.

1,061,824. LIGHTNING-ROD. JOHN Z. CURNUTT and ELDON E. LLOYD, Maryville, Mo. Filed Apr. 9, 1912. Serial No. 689,633. (Cl. 173—31.)

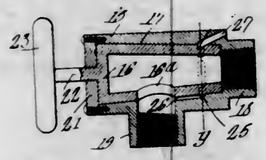


1. A lightning rod comprising central tension wires, outer wires wound spirally around the latter and forming the conductor proper, and a spacing medium consisting of wires wound spirally on each other and about the aforesaid tension wires, thus intervening the latter and the conducting wires, and each of the conducting wires lying in a space provided between the convolutions of the spacing medium, as described.

2. The improved lightning-conductor, comprising a cable or main conductor and a series of terminals projecting therefrom, the same being formed of a strip of copper looped about the cable and the members thereof extended parallel and provided with multiple points, and means securing the terminal to the cable and spacing the members thereof from each other, substantially as described.

3. The improved terminal for a lightning-conductor, formed of a strip of copper looped at its middle and the extended members arranged parallel and curved in cross-section and also provided with multiple points, and means for clamping the two members together but holding them separate, substantially as described.

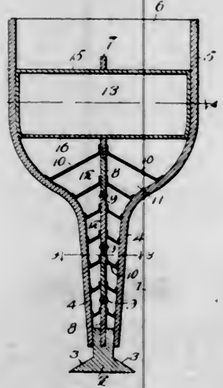
1,061,825. HEATER. WILLIAM F. DEWEY, Iola, Kans. Filed Feb. 21, 1912. Serial No. 679,204. (Cl. 158—115.)



1. In a device of the class described, a casing having an inlet, the casing being provided with an inclined jet opening disposed at an acute angle to the axis of the casing; a hollow valve journaled in the casing and closed at one end, the open end of the valve discharging through one end of the casing, the valve having an inlet adapted to be brought into and out of registration with the inlet of the casing; the valve and the casing having coöperating grooves establishing communication between the jet opening and the inlet of the casing when the inlets are out of alinement; and a burner supported above the discharge end of the jet opening.

2. In a device of the class described, a casing having an inlet; a pipe projecting from one end of the casing; a burner supported by the pipe; there being a jet opening in the casing above the pipe, the opening being upwardly inclined toward the periphery of the burner; a hollow valve journaled in the casing, the valve discharging at one end into the pipe, the valve having an inlet adapted to move into and out of registration with the inlet of the casing; the valve and the casing having coöperating grooves establishing communication between the jet opening and the inlet of the casing when the inlets are out of alinement.

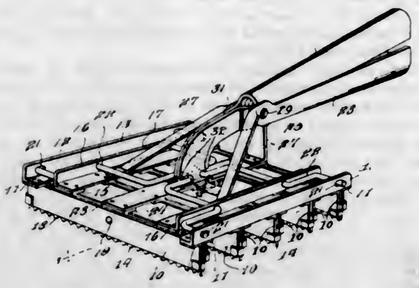
1,061,826. SHIP CONSTRUCTION. WILLIAM H. DIDLAKE, Crystal Springs, Miss. Filed Oct. 11, 1912. Serial No. 725,270. (Cl. 114—78.)



1. A vessel having a hollow keel and a longitudinally disposed vertical plate extending between the walls of the keel and from stem to stern thereof and terminating substantially on the water line of the vessel, and other plates associated with the first plate and with the opposite side walls of the keel whereby to define separate compartments throughout the longitudinal and vertical planes of the keel.

2. A vessel provided with a hollow keel, a vertical plate located between the walls of the keel and extending from stem to stern of the keel and terminating at substantially the water line of the vessel, and a boiler room entirely through said plate at a point immediately above the keel whereby portions of the plate are disposed above and below the room respectively.

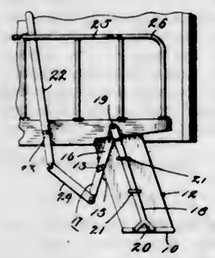
1,061,827. CURRYCOMB. HERMAN DUPONT, Fair Haven, Mich. Filed Nov. 29, 1911. Serial No. 662,969. (Cl. 119—88.)



1. A curry comb comprising a casing frame, casings secured to the said casing frame, a comb frame, comb plates secured to said comb frame and operable in the said casings, operating rods having the ends thereof mounted to turn and slide in the said casing frame and having connection with the said comb frame, a handle carried by said comb frame, an operating lever pivotally mounted on said handle, a notched member extending forwardly from the said handle and provided with slots for the reception of portions of said operating rods whereby upon the operation of the said operating lever, the said rods will be actuated to move the said comb plates relatively to the said casing.

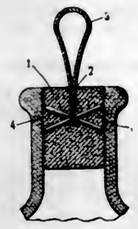
2. A curry comb comprising a casing frame, a casing secured to the said casing frame, a comb frame, comb plates secured to said comb frame and operable in the said casing, operating rods provided with offset U-shaped portions and having the ends thereof mounted to turn and slide in the casing frame, a handle secured to said comb frame, an operating lever pivotally mounted on said handle, a slotted member extending forwardly from the said handle and provided with slots for the reception of the offset U-shaped portions of said operating rods for operatively connecting said operating rods thereto and permitting said rods to be actuated by said lever whereby in turn the said rods will move the said comb plates relatively to said casing.

1,061,828. FOLDING STEP. PHILIP M. ENGELHARDT, Swaledale, Iowa. Filed June 12, 1912. Serial No. 703,282. (Cl. 105—87.)



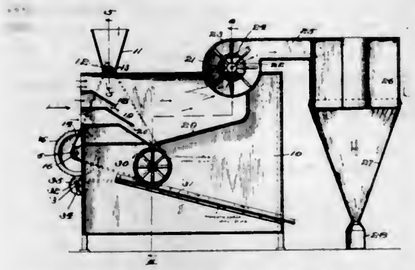
The combination with car steps and rail thereof, of an extension step located beneath the lowermost car step, a rock shaft mounted transversely upon said car steps and having terminal slotted crank arms outside said car steps, guides carried upon said car steps, a pair of hanger links pivotally connected to said crank arms and slidably fitting within said guides, the lower ends of said links being connected to said extension step, a crank arm on said crank shaft extending in an opposite direction from the first named crank arms, an operating lever operatively connected to the last named crank arm, a guide strap carried by the said rail slidably receiving said lever, and locking means on said strap engageable with said lever for locking said lever in position to hold said step raised against the lowermost car step.

1,061,829. STOPPER. FRED EVANS, New York, N. Y., and GUSTAVUS A. DURYEE, Summit, N. J., assignors to Universal Cork Extractor Company, a Corporation of New York. Filed Nov. 11, 1911, Serial No. 659,686. Renewed Aug. 26, 1912. Serial No. 717,191. (Cl. 215—53.)



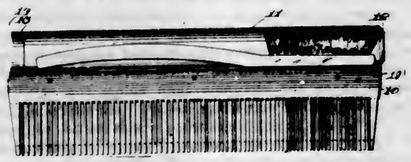
A stopper having an opening extending thereinto from its top, a pull extending into said opening and a plurality of pins crossing each other within the stopper and engaging said pull within the stopper at their points of crossing, said pins being inclined with respect to the axis of the stopper.

1,061,830. ORE-SEPARATOR. GEORGE W. FISHER, Tacoma, Wash., assignor of one-third to Ernest H. Tucker and one-third to Charles W. Wackershauser, Tacoma, Wash. Filed May 1, 1912. Serial No. 694,431. (Cl. 83—68.)



The combination of a separating chamber, means for passing a current of air transversely through said chamber, means for feeding ore into said chamber across the current of air, said chamber having a discharge opening in its bottom below the feed means, an amalgamated cylinder below and substantially closing said opening, and means for rotating said cylinder.

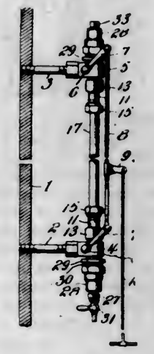
1,061,831. COMBINATION COMB AND TOOTH-BRUSH HOLDER. JOHN HENRY FREESE, Concordia, Mo. Filed Mar. 14, 1912. Serial No. 683,886. (Cl. 132—11.)



1. A comb, and a tooth brush receptacle carried thereby, said receptacle being formed from a strip of material having its central portion bent to form a tubular body portion having strips extending therefrom along the sides of said comb, the back of said comb being provided with an enlarged inner end fitting into said body portion, tongues extending from the free edges of said strips and being bent to engage the back between the teeth of said comb, and rivets securing said comb back between said strips.

2. A comb, a receptacle extending along the back of said comb, flanges extending from said receptacle along the sides of said comb, means connecting said flanges and connecting said receptacle with said comb, and tongues extending from said flanges and bent between the teeth of said comb.

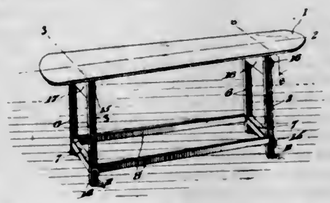
1,061,832. SAFETY-VALVE FOR WATER-GAGES. JOHN GEISINGER, Newport News, Va. Filed June 18, 1912. Serial No. 704,366. (Cl. 73—54.)



1. In combination, separated valve casings, sleeves slidably mounted in the valve casings, means for holding the sleeves in adjusted position within the casings, a glass arranged between said sleeves, valves operating within the sleeves and held in position by said glass, springs for holding the valves against the glass, and means for adjusting the tension of the springs independently of the adjustment of the sleeves.

2. In combination separated valve casings, sleeves slidably mounted in said casings, means for holding the sleeves in adjusted position with the casings, a glass arranged between said sleeves, valves operating within the casings and held in position by the said glass, springs for holding the valves against the glass, means for adjusting the tension of the springs independently of the adjustment of the sleeves, and a petcock carried by the spring adjusting means and communicating with one of the casings.

1,061,833. IRONING-TABLE. CHARLES GIBLIN, Cleveland, Ohio. Filed Apr. 15, 1911. Serial No. 621,297. (Cl. 68—10.)



A stand for the purpose set forth comprising spaced legs arranged in pairs, spacing bars between the legs and arranged at the lower portions thereof, the said bars having openings for the reception of headed bolts which also pass through the legs, the inner faces of the legs at the upper portions thereof being provided with grooves, spacing members having their ends provided with tongues ar-

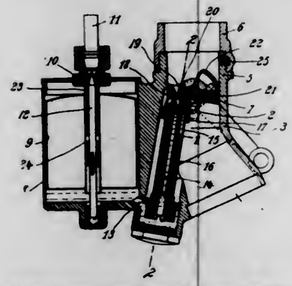
ranged within the grooves, each of the spacing members having longitudinally extending elongated slots, bolt members passing through the legs and through the slots, securing elements for these bolt members, the legs at their outer faces and adjacent the lower bars being recessed to provide pockets, bars arranged within the pockets, said bars being provided with openings for the reception of the elongated bolts, threaded members co-acting with the bolts, and a removable top connected to the upper transverse connecting members of the legs.

1,061,834. COMBINED IRONING-BOARD AND STEP-LADDER. ISAAC S. GIPE, Rapid City, S. D. Filed Mar. 5, 1912. Serial No. 681,836. (Cl. 228—32.)



The herein described combined ironing board and step ladder comprising a board having a medially disposed tongue projecting from one end, legs between which the tongue of the board is pivotally mounted, and steps connecting the legs, the legs being provided on the side opposite the tongue with notches to engage one side of a table top or other like supporting object, the tongue of the board serving to engage the opposite side of the table top, and an adjusting bar mounted on the outer side of the board at the point where the tongue projecta therefrom for longitudinal and pivotal movement, the said adjusting bar being adapted to be arranged transversely on the board to engage the ends of the legs above their pivot and thereby hold the device in adjusted position.

1,061,835. CARBURETER. EMILIO GOBBI, Asnières, France. Filed July 24, 1911. Serial No. 640,298. (Cl. 48—155.1.)

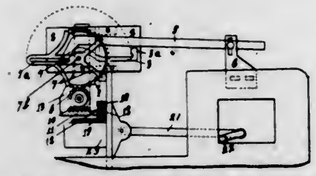


1. In a carbureter, the combination with a casing adapted for connection to the suction pipe of an engine and provided with an air inlet; of a nozzle disposed within the casing; a tube inclosing said nozzle and spaced therefrom; a conical flange provided upon the upper end of said nozzle and extending past the upper end of said tube, for directing air into the space between the tube and the nozzle; and means for supplying fuel to the nozzle, said nozzle having an aperture through which the air is drawn thereinto from said space simultaneously with the fuel, to mix directly with the latter, by the suction created in said casing.

2. In a carbureter, the combination with a casing adapted for connection to the suction pipe of an engine and provided with an air inlet; of a nozzle disposed within the casing and provided with a spraying orifice; means for supplying fuel to said nozzle; and a throttle located in said casing and comprising a pivotally-mounted disk provided with an orifice and with a conduit opening at one end into the latter and at the other end through the bottom face of the disk, the orifice in said disk registering directly with the first-named orifice when the throttle is closed.

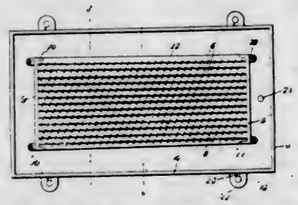
3. In a carbureter, the combination with a casing adapted for connection to the suction pipe of an engine and provided with an air inlet; of a nozzle disposed within the casing; a tube inclosing said nozzle and spaced therefrom; a conical flange provided upon the upper end of said nozzle and extending past the upper end of said tube for directing air into the space between the tube and the nozzle; and means for supplying fuel to the nozzle, said nozzle having upwardly and inwardly directed apertures below the fuel level through which the air is drawn thereinto from said space simultaneously with the fuel, to mix directly with the latter, by the suction created in said casing.

1,061,836. LOOM. EMIL GRAF, Elberfeld, Germany. Filed Feb. 23, 1909. Serial No. 479,413. (Cl. 139—20.)



In a needle loom, the combination of a movable casing, a weft thread-carrying needle movably arranged within the said casing, a roll at the one end and another roll at the other end within the said casing, a bearing piece, carrying the said casing, a rope passed over the two rolls, and fastened in a suitable manner to the bearing piece and to the weft-thread-carrying needle, a gear, and means in connection with the said gear and with said casing and weft thread carrying needle for moving the casing forward and simultaneously forcing the weft thread carrying-needle out of said casing.

1,061,837. COMPRESSION-BOX. MICHAEL B. GREEN, Memphis, Tenn. Filed June 15, 1912. Serial No. 703,869. (Cl. 100—54.)

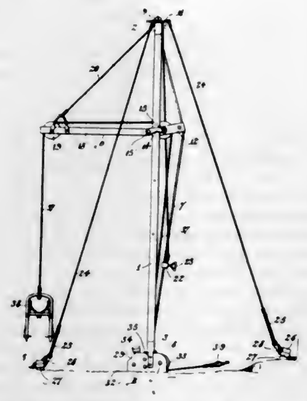


1. A mat for oil presses comprising a plurality of bars having longitudinal substantially semi-circular channels in opposite sides thereof, intermediate their height, and diagonally arranged slots extending inwardly from the sides of the bars and vertically from the top of the bars to the grooves, said slots in the bars alternating with those of the adjoining bars, and means to connect the bars together at their ends, and keys for connecting the bars together intermediate their ends.

2. A mat for oil presses which comprises elongated bars having longitudinally extending substantially semi-circular channels in opposite sides thereof adapted to register with the channels in adjoining bars, said bars being narrower above the channels than below the same and having lateral slots extending inwardly on diagonal lines from the top to the channels, which slots alternate with those of adjoining bars, end pieces for connecting the ends of the bars together, and means passing through the end pieces for securing the bars to a box.

3. A mat for oil presses which comprises elongated bars having longitudinally extending substantially semi-circular channels in opposite sides thereof adapted to register with the channels in adjoining bars, said bars being narrower above the channels than below the same and having lateral slots extending inwardly on diagonal lines from the top to the channels, which slots alternate with those of adjoining bars, end pieces for connecting the ends of the bars together, transverse keys for connecting the bars together adjacent their ends, and intermediate vertically extending dovetail keys for connecting the bars intermediate their length.

1,061,838. HAY-DERRICK. ALFRED HAGERMAN, Chanute, Kans. Filed Oct. 22, 1912. Serial No. 727,177. (Cl. 212—58.)



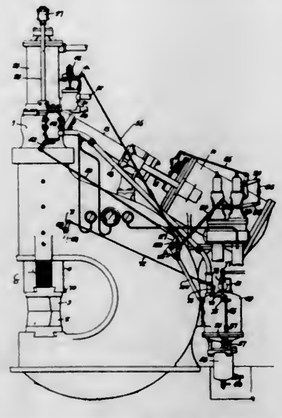
1. A derrick frame comprising side members, ferrules connecting said side members at their upper and lower ends, a sleeve interposed between the contacting lower ends of the side members and projecting downwardly beyond the ferrules, spacing members interposed between the opposed faces of the side members, a truss rod having its lower end positioned between the sleeve and ferrule at the lower end of the frame and provided with a head, the upper end of said truss rod being projected between the upper ends of the side members through and beyond the ferrule at the upper end of the frame, a cap nut threaded on the upper end of the truss rod, a strut spacing the truss rod from the derrick frame intermediate the ends thereof, a derrick arm connected with the strut, guide pulleys supported by the derrick arm and the strut, and a hoisting element guided over said pulleys and through the sleeve between the lower ends of the side members of the derrick frame.

2. A derrick frame having a strut and a truss rod, a derrick arm connected pivotally with the strut, a slide guided on the truss rod, means for securing the slide in adjusted position, and a suitably guided flexible adjusting element connecting the slide with the derrick arm.

3. A derrick frame including side members spaced apart intermediate their upper and lower ends, a strut having side members positioned adjacent to the inner faces of the side members of the frame, clip plates positioned adjacent to the outer faces of the side members of the frame, bolts connecting the clip plates with the side members of the strut, a truss rod supported by the strut and terminally connected with the derrick frame, a guide pulley journaled on one of the bolts, a derrick arm pivoted on the other bolt and having a guide pulley at its outer end, a slide movable on the truss rod, means for securing the slide in adjusted position, and a suitably guided flexible element connecting the slide with the derrick arm.

4. A derrick frame comprising side members connected together at their upper and lower ends and spaced apart intermediate said ends, a strut connected with the frame, ferrules at the upper and lower ends of the frame, a truss rod supported by the strut and spaced thereby from the frame, the lower end of said truss rod being extended through the ferrule at the lower end of the frame and provided with a head and the upper end of the truss rod being projected through the ferrule at the upper end of the frame, a nut threaded on the projecting upper end of the truss rod and having a neck of circular cross section, a cap plate swiveled on said neck, and guy members connected with said cap plate.

1,061,839. FORGING-PRESS. HUGO HAISS, Marietta, Pa. Filed May 14, 1912. Serial No. 697,207. (Cl. 138—17.)



1. The combination in a forging press of a high pressure cylinder; an intensifier having a steam cylinder and a steam valve; with means for controlling said valve consisting of an operating lever connected thereto; a spirally grooved rod connected to the piston of the steam cylinder of the intensifier; a rotary threaded bushing splined to said rod; a nut mounted on the threaded part of the bushing; and means for connecting said nut with the steam valve.

2. The combination in a forging press of a high pressure cylinder; an intensifier therefor including a steam cylinder and a steam valve; a spirally grooved rod connected to the piston of said steam cylinder; a rotary bushing mounted in the upper head of the cylinder and splined to the rod; a nut threaded on the bushing and free to move longitudinally of the bushing without rotating; means for connecting said nut to the steam valve; and means for opening said valve at will.

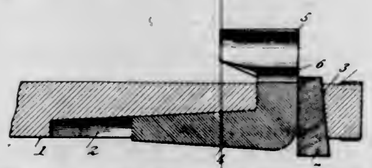
3. The combination in a forging press including a steam hydraulic intensifier and a pull back cylinder, of a steam valve for the intensifier; a steam valve for the pull back cylinder; a water valve; and a single controlling lever governing the operation of said valves; with means for connecting said lever at will to said two last named valves.

4. The combination in a forging press including a steam hydraulic intensifier and a pull back cylinder of a steam valve for the intensifier; a steam valve for the pull back cylinder; a water valve; and a single controlling lever governing the operation of said valves; said lever being permanently connected to the steam valve of the intensifier and attachable at will to the steam valve of the pull back cylinder and to the water valve.

5. The combination in a forging press including a steam hydraulic intensifier and a pull back cylinder of a steam valve for the intensifier; a steam valve for the pull back cylinder; a water valve; a single controlling lever governing the operation of said valves; with means for detachably connecting the lever at will either to the water valve or to the steam valve of the pull back cylinder.

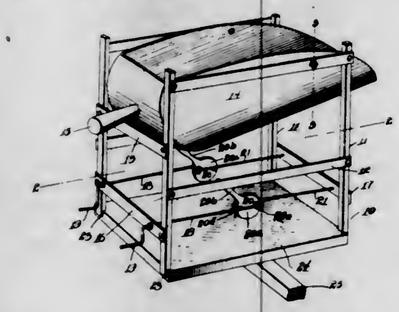
[Claims 6 to 10 not printed in the Gazette.]

1,061,840. PULLER. HASKELL HARSEY, Andalusia, Ala., assignor of one-half to James H. Senterfitt, Andalusia, Ala. Filed June 1, 1912. Serial No. 701,101. (Cl. 47—40.)



A device of the class described comprising a stock having a longitudinal groove in one side thereof and a transverse aperture extending through the stock and communicating with the groove, a tool having curved cutting blades, a shank substantially parallel therewith, and a connection between the shank and the blade, said tool having its shank seated in the groove of the stock and the connecting portion between the shank and the blade seated in the aperture, and a wedge driven in the aperture for holding the tool against displacement.

1,061,841. WEIGHING-SCOOP FOR SCALES. DARWIN HOBART, West Lebanon, Ind., assignor of one-half to Frank J. Goodwine, West Lebanon, Ind. Filed Aug. 28, 1912. Serial No. 717,550. (Cl. 73—41.)



1. In a device of the class described, the combination with the platform of a scale, of a frame consisting of a series of uprights connected by side pieces, an end piece connecting a plurality of the uprights, bars on the front and rear ends of the frame, rods journaled on the rear bars, adjusting members having pivotal connection with the free ends of the said rods, auxiliary rods on the front bar of the said frame and having pivotal connection with the said adjusting members, and pins on the adjusting members for limiting the swinging movement of the adjusting members relatively to the said rods and said auxiliary rods.

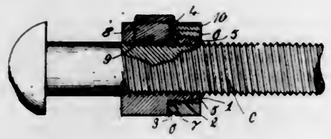
2. In a device of the class described, the combination with the platform of a scale, of a frame consisting of a series of uprights connected by side pieces, an end piece connecting a plurality of the uprights, bars on the front and rear ends of the frame, rods journaled on the rear bars, adjusting members having pivotal connection with the free ends of the said rods, auxiliary rods on the front bar of the said frame and having pivotal connection with the said adjusting members, pins on the adjusting members for limiting the swinging movement of the adjusting members relatively to the said rods and said auxiliary rods, and handles on the said rods for adjusting the said rods in threaded engagement with the said adjusting members.

3. In a device of the class described, the combination with the platform of a scale, of a frame consisting of a series of uprights connected by side pieces, an end piece connecting a plurality of of the uprights, front and rear bars on the ends of the said frame, rods journaled on the rear bars, auxiliary rods journaled on the front bars, adjusting members having pivotal connection with the said auxiliary rods, heads mounted to swing on the adjusting members and having threaded connection with the said rods, and pins on the adjusting members for limiting the swinging movement of the adjusting members relatively to the said rods and the said auxiliary rods.

4. In a device of the class described, the combination with the platform of a scale, of a frame consisting of a series of uprights connected by side pieces, an end piece connecting a plurality of the uprights, front and rear bars on the ends of the said frame, rods journaled on the rear bars, auxiliary rods journaled on the front bars, adjusting members having pivotal connection with the said auxiliary rods, heads mounted to swing on the said adjusting members and having threaded connection with the said rods, pins on the adjusting members for limiting the swinging movement of the adjusting members relatively to the said rods and the said auxiliary rods, and handles on the said rods for rotating the same for increasing or decreasing the threaded connection of the said rods with the said heads.

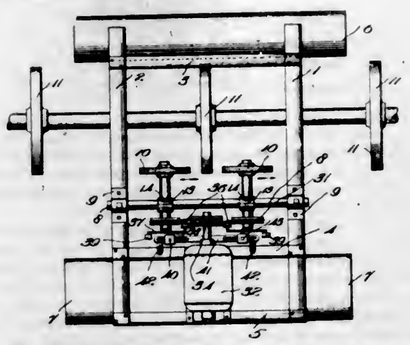
5. In a device of the class described, the combination with the platform of a scale, of a frame consisting of a series of uprights connected by side pieces, an end piece connecting a plurality of the uprights, front and rear bars on the ends of the said frame, rods journaled on the rear bars, auxiliary rods journaled on the front bars, adjusting members having pivotal connection with the said auxiliary rods, heads mounted to swing on the said adjusting members and having threaded connection with the said rods, pins on the adjusting members for limiting the swinging movement of the adjusting members relatively to the said rods and said auxiliary rods, handles on the said rods for rotating the same for increasing or decreasing the threaded connection of the said rods with the said heads, a scoop mounted to swing on the said frame and movable into tilting position thereon, and a handle forming a part of the said scoop and adapted to engage the end piece connecting the uprights to limit the tilting movement of the scoop.

1,061,842. LOCK-NUT. THOMAS A. HOOKEY, McDonald, Pa. Filed Aug. 21, 1912. Serial No. 716,342. (Cl. 151—19.)



A nut lock embodying a pair of separable sections, one of said sections being provided with a sleeve which has its outer face threaded at a distance away from its juncture with the section and the bore of said sleeve being also provided with threads which provide a continuation of the threads of the bore of the nut section, the face of this section as well as the unthreaded portion of the stem thereof being formed with an opening which enters the bore thereof, a slidable key having teeth upon one of its edges and adapted to be arranged within the opening and to be guided by the walls thereof, the said key having one of its faces etxending beyond the nut section, and the said extending portion being provided with a transversely arranged slot, the second nut section being arranged for rotation upon the sleeve, the inner face of the said second section being provided with an eccentrically arranged split flange, the opening or split of the flange being arranged near the perimeter of the said section, and the said flange adapted to coact with the depression of the key when the said section is rotated in either direction upon the sleeve to force the key tightly within the opening of the first nut section and sleeve as well as the teeth thereof vertically into engagement with the thread of the bolt within the bore of the nut when the second section is rotated upon the sleeve in one direction, and to raise the key out of the bore of the nut when the said second section is rotated upon the sleeve in a second or reverse direction.

1,061,843. PORTABLE DUPLEX GRINDER. ROBERT H. HOWARTH, Rothschild, Wis. Filed Jan. 6, 1913. Serial No. 740,494. (Cl. 51—7.)



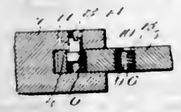
1. In a grinding machine, the combination of a support; a hanger mounted on said support and comprising a swingingly-mounted bar, an arm slidably mounted on said arm; means for sliding said arm and securing the same in different set positions, and a journal bearing rotatably mounted on said arm; a shaft journaled in said journal bearing; a grinding disk mounted on said shaft; and a motor connected to drive the shaft of said grinding disk, substantially as described.

2. In a grinding machine, the combination of a support; a shaft mounted on the support; a bar slidably and swingingly mounted on said shaft; an arm having a dove-tailed slidable connection with said bar; a journal bearing rotatably mounted on said arm, a shaft journaled in said bearing; a grinding element mounted on said shaft; and a motor connected to drive the shaft of said grinding element, substantially as described.

3. In a duplex grinding machine, the combination of a support; a shaft mounted on said support; a pair of hangers mounted on said shaft; a pair of grinding disks mounted on said hangers; means for imparting universal adjustment to said grinding disks; a motor mounted on said support; and driving connections between said motor and said grinding disks.

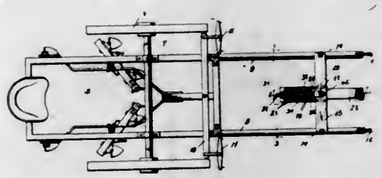
4. In a portable duplex grinding machine, the combination of a rectangular frame; a shaft secured in bearings on said frame; a pair of hangers swingingly mounted on said shaft; said hangers comprising each a bar having a dovetailed guideway formed therein, an arm having a dovetailed head slidably mounted within said guideway, an adjusting screw mounted on said bar and connected with said arm for adjusting the same, and a bolt passing through said arm and bar for securing the arm in different set positions; journal bearings adjustably mounted on the lower ends of said hangers; grinding disks journaled on said journal bearings; and a motor mounted on the frame and having driving connections with said grinding disks.

1,061,844. DOOR-KNOB FASTENER. OLIVER N. HOWERTON, Peoria, Ill. Filed June 19, 1912. Serial No. 704,618. (Cl. 70—86.)



The combination with a lock spindle having an enlarged threaded recess and a restricted aperture opening through one side thereof and forming an intervening shoulder therebetween, and a knob having its shank provided with an opening registering with said aperture, of a fastener comprising an enlarged lower portion threadedly adjustable in the recess of said spindle and a reduced upper portion adapted to be snugly fitted within said opening of the shank of the knob as described.

1,061,845. CULTIVATOR-TONGUE SUPPORT. FRANK C. HRON, Tyndall, S. D. Filed Jan. 4, 1912. Serial No. 669,355. (Cl. 21—63.)

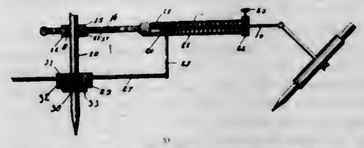


1. In a wheeled implement including a pair of spaced tongues and a transverse supporting member secured to said tongues; a clevis connected to said member, said clevis consisting of two sections, each section comprising a body portion engaging the supporting member and terminating at one end in an offset ear, the ears of said sections being disposed in opposed relation, a pivot bolt connecting said ears, a depending standard connected to said pivot bolt, and a ground wheel carried by said standard.

2. In a wheeled implement including a pair of spaced tongues and a transverse supporting member secured to said tongues; a clevis connected centrally to said member, said clevis consisting of two sections, a pivot bolt connecting said sections, a depending standard consisting of opposed members, the upper ends thereof being outwardly bent and connected to the pivot bolt of the clevis, a ground wheel disposed between and journaled in the lower ends of the members of said standard, a bolt connecting the members of the standard above said wheel, and a brace for the standard having one end connected to the last mentioned bolt and the other end connected to the pivot bolt of the clevis.

3. In a wheeled implement including a pair of spaced tongues, and a transverse supporting member secured to said tongues, a clevis connected to said member, said clevis consisting of two sections, a pivot bolt connecting said sections, a depending standard consisting of opposed members, the upper ends thereof being outwardly bent and connected to said pivot bolt of the clevis, and a ground wheel disposed between and journaled in the lower ends of the members of said standard.

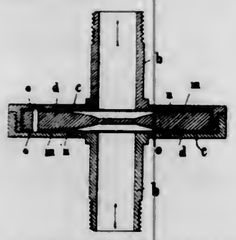
1,061,846. COMPASSES. JOHN J. IACOVINO, Providence, R. I. Filed Aug. 8, 1911. Serial No. 642,960. (Cl. 33—2.)



A compass comprising a vertical leg, a sleeve slidably mounted on the leg and flange on one end of the sleeve, the opposite end of the sleeve being threaded, a transverse member having an opening to receive said sleeve, a nut secured on to the end of the sleeve, a hollow arm pivotally connected to said member, a spring pressed rod within the pivoted arm, said arm having a longitudinal slot formed therein, a block on the inner end of the spring pressed rod, a pin projecting from the block through the slot, means for holding the rod from movement, and a templet removably secured to the lower portion of the leg, and adapted to be engaged by said pin whereby when said

transverse member is rotated on the sleeve, the said rod will be moved inwardly and outwardly of the arm.

1,061,847. MEANS FOR PREVENTING THE BACKWARD PROPAGATION OF FLAME. ALEXANDER CONSTANTINE IONIDES, Jr., London, England. Filed Oct. 4, 1912. Serial No. 723,971. (Cl. 48—192.)



1. A device for preventing the backward propagation of flame, comprising in combination a conduit conveying combustible gaseous mixture, a part of said conduit of greater cross sectional area, annular surfaces connecting said enlarged part with the remaining part of the conduit, a cylindrical member inserted within the enlarged part, said member having an end surface co-acting with one of said annular surfaces to form a passage at right angles to the main conduit, the product of the width of which passage into the corresponding radial distance from the axis of the conduit is constant for all such distances, whereby a backwardly propagated flame on entering said passage is spread in a plane substantially at right angles to the conduit, while maintaining a constant cross sectional area.

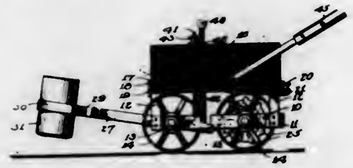
2. A device for preventing the backward propagation of flame, comprising in combination a conduit conveying combustible gaseous mixture, a part of said conduit of greater cross sectional area than the remaining part, annular surfaces connecting the enlarged part with the remaining part of the conduit, a cylindrical member inserted within the enlarged part, said member having an end surface co-acting with one of said annular surfaces, one of the two co-acting surfaces being flat and the other concave but hyperbolic radially, thereby forming a radial passage situated in a plane at right angles to the conduit, and of constant cross sectional area.

3. A device for preventing the backward propagation of flame, comprising in combination a conduit conveying combustible gaseous mixture, an enlarged part of said conduit of greater cross sectional area than the remaining part, annular surfaces connecting said parts, a member inserted in said enlarged part, said member having a concave end surface co-acting with one of said annular surfaces which is flat, the concave surface being radially convex and hyperbolic so as to form between said co-acting surfaces a passage in which the flame is spread in a plane at right angles to the conduit, while its cross sectional area is maintained constant.

4. A device for preventing the backward propagation of flame, comprising in combination a conduit conveying combustible gaseous mixture, said conduit having a cylindrical part of increased cross-sectional area, a disk inserted within said part, and having a substantially hyperbolic surface which co-acts with the flat surface of the cylindrical part to form a radially extending passage of substantially constant cross-sectional area.

5. A device for preventing the backward propagation of flame comprising in combination a conduit conveying combustible gaseous mixture, an enlarged part of said conduit of greater cross sectional area than the remaining part, flat annular surfaces connecting said parts, a disk inserted in said enlarged part, said disk having concave faces which radially are convex and hyperbolic, whereby said faces co-act with the flat annular surfaces to form passages in which the flame is spread in a plane at right angles to the conduit while maintaining a constant cross sectional area.

1,061,848. TINNER'S SEAM-BEATING DEVICE. FRANK JONES, Rock Island, Ill., assignor of one-half to Waldemar A. Endter, Rock Island, Ill. Filed July 20, 1912. Serial No. 710,703. (Cl. 113—55.)



1. In a device of the kind described, a frame, wheels supporting said frame, axles journaled in said frame and carrying said wheels, a hammer provided with a handle pivotally mounted on one of said axles, and means on the other axle to intermittently raise said hammer.

2. In a device of the kind described, a frame, a weight detachably secured to said frame, axles journaled in said frame, ground wheels mounted on said axles, a hammer provided with a handle pivoted to one of said axles, a wheel provided with cam projections fixed on the other axle and arranged to contact with said hammer handle intermittently, and a spring carried by said weight and attached to said handle.

3. In a device of the kind described, a frame, axles journaled in said frame, wheels mounted on said axles, a hammer including a head, and a handle journaled on one of said axles, said handle being provided with a jointed extension forming a pawl, and a cam wheel on the other axle arranged to raise said hammer head when moving in one direction, and to move said pawl with reference to the handle when moving in the opposite direction.

4. In a device of the kind described, a frame, axles mounted in said frame, wheels carried on said axles, a hammer head, a lever pivoted intermediate its ends to one of said axles and provided with means for securing said hammer head, a pawl secured to said lever and pivoted to move in one direction with reference thereto, a spring constantly urging the pawl in the opposite direction, a cam wheel on the remaining axle having projections arranged to intermittently contact with said pawl, a weight carried by said frame, and a spring connecting said weight and lever for actuating said hammer head.

1,061,849. TRANSMITTER. FRANCIS KAYSER, Philadelphia, Pa. Filed Jan. 7, 1913. Serial No. 740,614. (Cl. 179—108.)



1. A transmitter comprising a sound transmitting diaphragm, a vertical carbon lever composed of a short arm and a relatively long arm, a rigid connection between the free end of the short arm of said lever and said diaphragm, a receptacle in which the free end of the long arm of said lever is disposed, a carbon plate in said receptacle spaced apart from the adjacent end of the respective arm of said lever, and carbon granules interposed between the confronting faces of said lever and plate.

2. A transmitter comprising a sound transmitting diaphragm, a vertical carbon lever composed of a short arm and a relatively long arm, a rigid connection between the free end of the short arm of said lever and said diaphragm, a receptacle in which the free end of the long arm of said lever is disposed, a carbon plate in said receptacle spaced apart from the adjacent end of the respective arm of said lever, carbon granules interposed between the confronting faces of said lever and plate, and means for adjusting said plate toward and away from the adjacent end of said lever.

3. A transmitter comprising a base, a hollow standard secured to the base and extending upwardly therefrom and having the free end thereof formed to provide a circular housing, one wall of said housing being formed with an opening, a mouth piece secured to said wall of the housing and surrounding the opening therein, a diaphragm secured to the inner wall of the face of said housing at the rear of the opening therein, a carbon lever pivoted within said hollow standard in such manner as to provide a short arm and a long arm, a connection between the free end of said short arm and the diaphragm, a receptacle resting within the lower end of said hollow standard and receiving the free end of the long arm of said lever, a carbon plate disposed within said receptacle and spaced apart from the adjacent end of said lever, carbon granules interposed between the confronting faces of said plate and lever, and electric circuit wires connected to said diaphragm and carbon plate respectively.

1,061,850. BROOD-COOP AND RUN. CHARLES E. KNUDSON, Everest, Kans. Filed May 12, 1908. Serial No. 432,452. (Cl. 119—21.)

In combination, a coop comprising a sheet metal body of concavo-convexed form having integrally formed outwardly extending longitudinally disposed base flanges, end members secured to the body and having ventilating openings, a foraminous run-way of the same configuration as the coop having a body fully opened on its under side, a member fully closing one end of the run-way, another member partially closing the other end of the run-way, said run-way being greater in longitudinal and transverse extent and adapted to be placed entirely over the coop to position the end members of the run-way over and in advance of said ventilating openings to prevent animals entering the coop, and side strips secured to and underneath the opposite longitudinal edges of the run-way and extending the entire length thereof and adapted to rest upon the said base flanges when the run-way is placed over the coop, the end members being spaced from the ventilating openings to permit the free circulation of air through the coop.

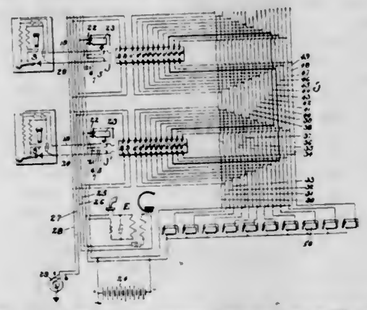
1,061,851. CLOTHES-LINE SUPPORT. STEPHEN JOSEPH KREBS, Philadelphia, Pa. Filed July 10, 1912. Serial No. 708,741. (Cl. 68—3.)

The combination with a prop having spaced terminal arms, a plate connecting the free ends of the arms, and a pulley attached to the plate; of a block having oppositely extending grooves on opposite faces thereof, one of said grooves being adapted to embrace the terminal arms, a line-supporting arm, the other groove being adapted to receive the line-supporting arm, plates on the



block adapted to close the grooves, and a cord attached to the block and passing over the pulley.

1,061,852. EXCHANGE SYSTEM FOR TELEPHONE-LINES AND THE LIKE. ABRAM LAWRENCE, Elizabethtown, Ill. Filed Apr. 13, 1912. Serial No. 690,522. (Cl. 179—72.)



1. In a telephone exchange system, subscribers' circuits, a jack for each circuit, circuits connecting all jacks in multiple or parallel, a plurality of contacts carried by each jack and forming the terminals of the jack circuits, and a plurality of plugs grouped in pairs and coöperative with the jacks, contacts on the plugs of each pair arranged in similar positions and in different positions from those on other pairs and adapted to bridge coöperating pairs of contacts to interconnect subscribers' circuits.

2. In a telephone system, subscribers' circuits, a jack for each circuit, a signal circuit for each subscriber's circuit and adapted to be energized therefrom, circuits connecting all jacks in multiple or parallel, a plurality of contacts forming the terminals of the jack circuits, and a plurality of plugs grouped in pairs and coöperative with the jacks, contacts on the plugs of each pair and arranged in similar positions and in different positions from those on other pairs and adapted to bridge cooperating pairs of contacts to interconnect subscribers' circuits, and means for breaking the signal circuit from the plugs.

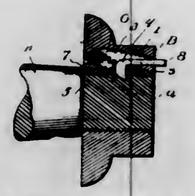
3. In a telephone system, subscribers' telephone sets and circuits therefor, a switch board, a jack on the switch board for each circuit, circuits connecting all jacks in multiple or parallel, a central operator's telephone set and a circuit therefor intermediate said subscribers' circuits, and plugs coöperative with the jacks to connect the first-mentioned circuits to the central operator's telephone circuit and to one another.

4. In a system for transmitting intelligence, a plurality of transmission circuits, a jack for each circuit, circuits connecting all jacks in multiple or parallel, a central operator's telephone set and a circuit therefor, and plugs coöperative with the jacks to connect the first-mentioned circuits to the circuit of the operator's telephone set and the first-mentioned circuits with one another.

5. In a system for transmitting intelligence, a plurality of transmission circuits, a jack for each circuit, circuits connecting all jacks in multiple or parallel, a central operator's instrument and a circuit therefor, and plugs coöperative with the jacks to connect the first-mentioned circuits with the operator's instrument and the first-mentioned circuits with one another successively.

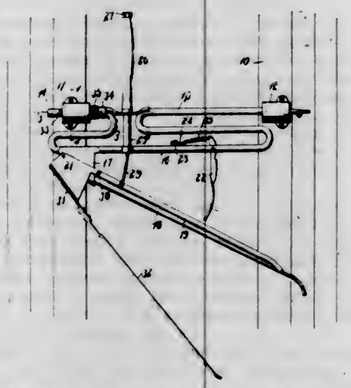
[Claims 6 to 15 not printed in the Gazette.]

1,061,853. NUT-LOCK. HARLEY LEHMAN, Oysterville, Wash. Filed Jan. 23, 1912. Serial No. 672,827. (Cl. 151—10.)



In a nut lock, a nut provided with a chamber having a relatively inclined wall and in communication with the threaded bore of the nut at one extremity of said inclined wall, a locking dog mounted within the chamber and slidable on the inclined wall thereof, a spring within the chamber and normally holding said locking dog within the threaded bore of the nut, and a stem carried by said locking dog and projecting outwardly of the nut and adapted to move the locking dog out of the threaded bore of the nut over the inclined wall of the chamber and against the action of the spring.

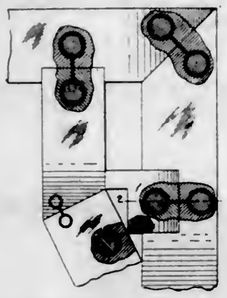
1,061,854. MAIL-BAG CATCHER AND DELIVERER. JOHN D. LEONARD, Kenneth, Mich. Filed Oct. 16, 1912. Serial No. 726,077. (Cl. 105—231.)



1. In a mail bag catcher and deliverer the combination with a car door frame, of a member rotatably mounted between opposite sides of said frame, a head secured to said member, a rigid arm secured to said head, a clamping arm pivotally connected to the head and movable between said member and the rigid arm, spring means constantly tending to move the clamping arm toward the rigid arm, a delivering arm pivotally connected with the head and disposed on the opposite side of the rigid arm from the clamping arm, and connections between said clamping arm and delivering arm whereby the movement of the clamping arm toward and away from the rigid arm will simultaneously move the delivering arm away from and toward the rigid arm respectively.

2. In a mail bag catcher and deliverer the combination with a car door frame, of a member rotatably mounted between opposite sides of said frame, a head secured to said member, a rigid arm secured to said head, a clamping arm pivotally connected to the head and movable between said member and the rigid arm, spring means constantly tending to move the clamping arm toward the rigid arm, a casing inclosing said head and pivotally connected to the latter, connections between the casing and the clamping arm whereby the movement of the latter will effect a movement of the casing, a delivering arm secured to said casing and disposed on the opposite side of the rigid arm from the clamping arm, said delivering arm being movable with the casing whereby the movement of the clamping arm toward and away from the rigid arm will simultaneously move the delivering arm away from and toward the rigid arm respectively.

1,061,855. INSTRUMENT FOR WOODWORKING OR FURNITURE. ERNESTO LOBO, Parras, Mexico. Filed July 13, 1912. Serial No. 709,265. (Cl. 20—92.)

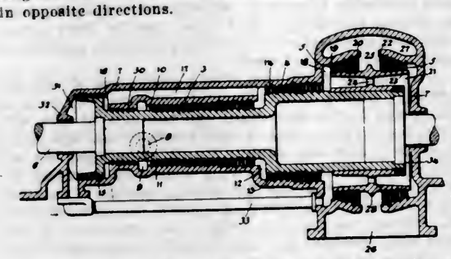


As a new article of manufacture, a joint connector formed from a blank, said connector provided with a centrally located bridge portion, oppositely rolled portions formed upon the ends of said bridge portion, the inner ends of said rolled portions terminating at a spaced distance from said bridge portion, whereby a resilient connector is produced which is capable of fitting within different sized receiving sockets and also for forming a binding engagement between the joints, said connector provided with a beveled cutting edge at its lower end extending from the center of the bridge and around the edge of one of the rolled portions, a cutting beveled edge formed upon the lower edge of said bridge and extending around the other rolled portion, said last mentioned cutting edge being formed on the opposite side of said bridge relative to the first mentioned cutting edge, whereby said cutting edges will hold the rolled portions in their contracted position as the device is being driven into a support.

1,061,856. ELASTIC-FLUID TURBINE. WILLIAM JAMES ALBERT LONDON, Manchester, England, assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 6, 1906. Serial No. 304,477. (Cl. 121—58.)

1. In combination with one or more high-pressure stages of an elastic fluid turbine through which the fluid flows in one axial direction only, a divided low-pressure stage at one end of said high-pressure stage or stages receiving fluid therefrom and through which the fluid flows in opposite axial directions, and means for counterbalancing the inherent axial thrust of said high-pressure stages.

2. In combination with an elastic fluid turbine one or more stages through which the fluid flows in one axial direction only, means for statically balancing the axial fluid pressure in each stage and a divided and counterbalanced low-pressure stage at one end of said other stages in each division of which the working fluid flows in opposite directions.



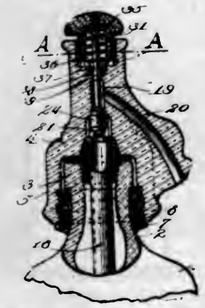
3. In an elastic fluid turbine, an axial flow high-pressure stage in which alternate rows of stationary vanes and moving blades are utilized for fractionally expanding the working fluid, and a divided low-pressure stage at one end of said turbine, each division of which receives fluid from said high-pressure stage and through which the fluid flows in opposite axial directions.

4. In combination in an elastic fluid turbine, a rotor element comprising one of more high-pressure drums, a low-pressure drum located at one end of said high-pressure drum or drums and adapted to receive motive fluid therefrom at opposite sides, and means for counterbalancing the axial thrust of said high-pressure drums.

5. In combination with one or more stages of an elastic fluid turbine through which the fluid flows in axial directions only, a divided low-pressure stage or section located at one end of said turbine receiving fluid therefrom and through the divisions of which fluid flows in opposite axial directions, and means for counterbalancing the inherent axial thrust.

[Claims 6 to 17 not printed in the Gazette.]

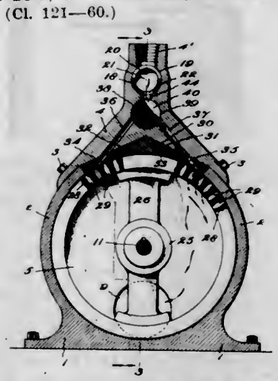
1,061,857. SIPHON-HEAD. CHARLES DE LUKACSEVICS, New York, N. Y. Filed Mar. 20, 1911. Serial No. 615,703. (Cl. 215—115.)



1. In a device of the type set forth, the combination with a bottle, of a head having a socket which fits over the neck of the bottle, means for clamping the head on the said neck, a gasket having a boss provided with a central opening, a flange circumscribing the boss and a flange at the upper end of the boss and overhanging the opening, the boss fitting conformably into the socket and the circumscribing flange between the top of the bottle neck and the adjacent face of the socket, a tube depending into the bottle and having its upper end portion fitted in the opening in the boss and abutting against the underface of the flange which overhangs said opening, the head having an axial duct and having longitudinal ribs which bear against the upper face of the boss immediately adjacent the said overhanging flange, and a spring-held valve working in the chamber and centered by the ribs thereof, the valve controlling the communication of the duct and the tube.

2. In a device of the type set forth, the combination with a bottle, of a vitreous head having a socket which fits over the neck of the bottle, means for clamping the head upon the said neck, a gasket interposed between the socket and the neck and having a central opening, a tube depending into the bottle and communicating with the central opening, the head being interiorly fashioned to afford an axial duct, a valve chamber below the duct, and a conical ribbed valve seat between the duct and the valve chamber and an elastic rubber valve, spring held against the valve seat, and controlling the communication of the duct and the tube.

1,061,858. REVERSIBLE TURBINE. HENRY A. MCCULLOCH, New York, N. Y. Filed May 10, 1912. Serial No. 696,437. (Cl. 121—60.)



1. In a turbine, the combination with a casing provided with a plurality of steam passages, of a nozzle plate mounted within the casing, provided with steam outlets in alinement with the passages and a cylindrical rotor within the casing provided with a plurality of pockets passing through its wall, the interior of the rotor forming an exhaust chamber.

2. In a turbine, the combination with a casing provided with a plurality of steam passages, of a nozzle plate mounted within the casing provided with steam outlets in alinement with the steam passages, of a cylindrical rotor within the casing provided with a plurality of pockets passing through its wall, the interior of the rotor forming an exhaust chamber, and a means for controlling the passage of steam to the pockets successively.

3. In a turbine, the combination with a casing provided with a plurality of longitudinally disposed steam passages, of a nozzle plate mounted within the casing provided with steam outlets in alinement with the steam passages, of a cylindrical rotor provided with a plurality of longitudinally disposed pockets passing through its wall and a means mounted within the casing adapted to control the passage of steam to the pockets successively.

4. In a turbine, the combination with a cylinder provided with a plurality of longitudinally disposed steam passages, of a reversing valve provided with slots in alinement with said steam passages, of heads provided with exhaust outlets mounted on said cylinder, and a cylindrical rotor provided with a plurality of pockets passing through its wall, the interior of the rotor forming an exhaust chamber.

5. In a turbine, the combination with a cylinder provided with a plurality of longitudinally disposed steam passages, means arranged to control the passage of steam to the steam passages, of a reversing valve provided with steam passages, of heads provided with the exhaust outlets mounted on said cylinder and a cylindrical rotor provided with a plurality of pockets passing through its wall, the interior of the rotor forming an exhaust chamber.

[Claims 6 to 12 not printed in the Gazette.]

1,061,859. PROCESS OF REGENERATING IRON OXID USED IN GAS PURIFICATION. DONALD MCDONALD, Louisville, Ky. Filed Oct. 12, 1911. Serial No. 654,425. (Cl. 48—143.)



1. The process of regenerating iron oxid which has become spent by use in the purification of gas, said process consisting in igniting the combustible contents of a body of the spent oxid and setting free the sulfur to be eliminated in the form of vapor.

2. The process of regenerating iron oxid which has become spent by use in the purification of gas and of making harmless the obnoxious gases of combustion resulting therefrom, said process consisting in igniting the combustible contents of a body of the spent oxid under conditions which retard combustion and slowly set free the sulfur and other contents to be eliminated in the form of vapor; the material to be treated being collected in a pile in a combustion chamber and fired upon the outer surface permitting the ash or regenerated oxid to flow down from the firing area for removal and at the same time exposing fresh oxid to be fired.

1,061,860. BALE-TIE BUCKLE. FRANK HAYS MCFARLAND, Fort Worth, Tex., assignor, by mesne assignments, to Frantz Standard Buckle Co., Weatherford, Tex., a Corporation of Texas. Filed May 10, 1911. Serial No. 626,200. (Cl. 24—26.)



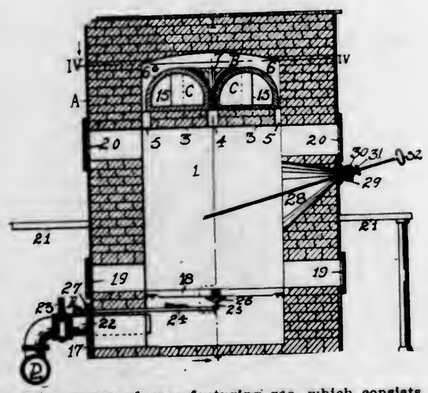
1. A bale-tie buckle formed of a single piece of wire and having a portion thereof doubled upon itself to form a side guard bar and the doubled portion bent to form an end guard, one arm of said wire being bent under the other arm and at right angles to said side guard to form a tie engaging bar and then curved and extended back under said side bar to form another tie engaging bar in alinement with said end guard and the other end of said wire being extended and bent parallel to said first mentioned tie engaging bar to form a clamp to coöperate with said bar.

2. A bale-tie buckle formed of a single piece of wire and having a portion thereof doubled upon itself to form a side guard bar and the doubled portion bent to form an end guard, one arm of said wire being formed into a loop at right angles to said side bar and the opposite sides thereof forming tie engaging bars and the free end of said arm being adapted to coöperate with said end guard to prevent spreading of said buckle and the other arm of said wire being extended and bent parallel to said tie engaging bars to form a clamp.

3. A bale-tie buckle formed of a single piece of wire and having a portion thereof doubled upon itself to form an end guard and a side guard and one arm of said wire being formed into a loop at right angles to said side guard, one side of said loop forming a fixed tie engaging bar and the other side thereof forming a free tie engaging bar within the plane of said end guard, a portion of said free tie engaging bar being curved opposite the side guard bar for binding the tie thereon and the other arm of said wire being extended and bent parallel to said bars to form a clamp to coöperate with said fixed tie engaging bar.

4. A bale-tie buckle formed of a single piece of wire and having a portion thereof doubled upon itself to form a side guard bar and bent to form an end guard, one arm of said wire being bent under the other and at right angles to said side bar to form a tie engaging bar and then bent parallel to said side bar to form the second side bar and then bent substantially at right angles to said side bars and extended under said doubled portion and standing free to be engaged by a bale tie and in position to be drawn automatically against said end guard by the bale tie and the other arm of said wire being extended in line with said first named side bar beyond the first named tie engaging bar and then bent at right angles and parallel to said tie engaging bar to form a clamping bar.

1,061,861. PROCESS OF MANUFACTURING GAS. COMMODORE R. MILLER, Woodlawn borough, Pa., assignor, by mesne assignments, to Superior Gas Improvement Company, Pittsburgh, Pa., a Corporation of Arizona. Filed Sept. 7, 1912. Serial No. 719,049. (Cl. 48—202.)



1. The process of manufacturing gas, which consists in blasting a bed of coke to incandescence; then cutting off the blast; then charging a layer of coal upon the coke-bed; then turning on steam to make water-gas and simultaneously distilling the coal-bed by passing the steam upward therethrough; and simultaneously agitating the bed of coal during the run.

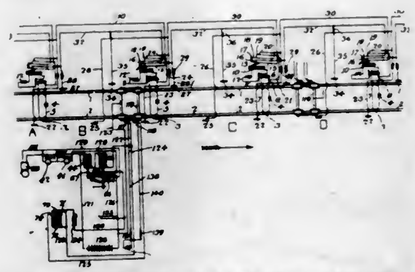
2. The process of manufacturing gas, which consists in blasting to incandescence a plurality of adjacent, spaced coke-beds; then cutting off the blast; then charging a layer of coal upon each coke-bed; then turning on steam to make water-gas and distilling the coal-beds successively by passing the steam upward through said coal-beds successively; and simultaneously agitating the beds of coal during the run.

1,061,862. STAMP-CANCELING DEVICE. WILLIAM MOLT, Spalding, Nebr. Filed Jan. 13, 1912. Serial No. 671,020. (Cl. 101—58.)



A stamp canceling device comprising a die having a dome-shaped boss or projection of less diameter than said die and provided with a socket, a stem having a symmetrical head fitting within the socket, whereby the die and stem are universally jointed, a handle receiving the opposite end of the stem, said stem and handle having their longitudinal axes arranged substantially at an obtuse angle to each other, a sleeve inclosing the lower end of the handle and upper end of the stem and spaced from the die and leaving the lower end of the stem exposed, and a coiled spring bearing respectively at its opposite ends against the die about the dome-shaped boss and against the lower end of the handle, said spring being arranged to inclose the stem and having its upper end inclosed within the sleeve.

1,061,863. RAILWAY SIGNAL SYSTEM. WALTER D. NICKUM, Los Angeles, Cal., assignor to Railway Safety Signal Company, Los Angeles, Cal., a Corporation of California. Filed Apr. 2, 1909. Serial No. 487,586. Renewed Mar. 19, 1913. Serial No. 755,561. (Cl. 246—27.)



1. In an electric railway signal, the combination with track rails, one of which is a continuous rail, a vehicle traveling on said track rails, and insulated contacts along the track, of signal apparatus on said vehicle comprising a battery, a conductor connected to one side of the battery, a relay having its coil connected to said conductor at one side of said relay, a brush connected to said second conductor and adapted for contact with said insulated contacts along the track, a conductor connected to the other side of the battery and grounded to the vehicle wheels for connection with said continuous rail of the track, a danger signal controlled by said relay and auxiliary means for maintaining energizing connection for said relay when the said brush is off of said contacts, said auxiliary means comprising an auxiliary relay and battery, conductors connecting said auxiliary relay and battery, and an auxiliary energizing connection from the first named battery to the first named relay including contact means controlled by said auxiliary relay.

2. In an electric railway signal, the combination with track rails, one of which is a continuous rail, a vehicle traveling on said track rails, and insulated contacts along the track, of signal apparatus on said vehicle comprising a battery, a conductor connected to one side of the battery, a relay having its coil connected at one side of said conductor, a conductor connected to the other side of said relay, a brush connected to said second conductor and adapted for contact with said insulated contacts along the track, a conductor connected to the other side of the battery and grounded to the vehicle wheels for connection with said continuous rail of the track, a danger signal controlled by said relay and auxiliary means for maintaining energizing connection for said relay when the said brush is off of said contacts, said auxiliary means comprising an auxiliary relay and battery, conductors connecting said auxiliary relay and battery, and an auxiliary energizing connection from the first named battery to the first named relay including contact means controlled by said auxiliary relay, and a second brush also adapted to contact with said insulated track contact, said two brushes being connected to opposite sides of the auxiliary battery to short circuit the auxiliary relay when both of said brushes are on one contact.

3. In an electric railway signal, the combination with track rails, one of which is a continuous rail, a vehicle traveling on said track rails, and insulated contacts along the track, of signal apparatus on said vehicle comprising a battery, a conductor connected to one side of the battery, a relay having its coil connected to said conductor at one side of the relay, a conductor connected to the other side of said relay, a brush connected to said second conductor and adapted for contact with said insulated contacts along the track, a conductor connected to the other side of the battery and to the vehicle wheels for connection with said continuous rail of the track, and auxiliary means for maintaining energizing connection for said relay when the said brush is off of said contacts, said auxiliary means comprising an auxiliary relay and battery, conductors connected to said auxiliary relay and battery, an auxiliary energizing connection for the first named relay including contact means controlled by said auxiliary relay, and a second brush also adapted to contact with said insulated track contact, said two brushes being connected to opposite sides of the auxiliary battery to short circuit the auxiliary relay when both of said brushes are on one contact, a contact means in said auxiliary energizing connection controlled by said first named relay and closed on energization of said relay, a safety signal means, and connections therefrom to aforesaid conductors leading to opposite sides of the first named battery, said connections for the safety signal including contact means controlled by the first named relay, and closed by energization of said relay, a danger signal, a conductor connected to said danger signal and to the first named battery, and contacts in the last named conductor controlled by said first named relay and closed when said relay is deënergized.

4. In an electric railway signal, the combination with track rails, one of which is a continuous rail, a vehicle traveling on said track rails, and insulated contacts along the track, of signal apparatus on said vehicle comprising a battery, a conductor connected to one side of the battery, a relay having its coil connected to said conductor at one side of the relay, a conductor connected to the other side of said relay, a brush connected to said second conductor and adapted for contact with said insulated contacts along the track, a conductor connected to the other side of the battery and to the vehicle wheels for connection with said continuous rail of the track, and auxiliary means for maintaining energizing connection for said relay when the said brush is off of said contacts, said auxiliary means comprising an auxiliary relay and battery, conductors connected to said auxiliary relay and battery, an auxiliary energizing connection for the first named relay including contact means controlled by

said auxiliary relay, and a second brush also adapted to contact with said insulated track contact, said two brushes being connected to opposite sides of the auxiliary battery to short circuit the auxiliary relay when both of said brushes are on one contact, a contact means in said auxiliary energizing connection controlled by said first named relay and closed on energization of said relay, a safety signal means, and connections therefrom to aforesaid conductors leading to opposite sides of the first named battery, said connections for the safety signal including contact means controlled by the first named relay, and closed by energization of said relay, a danger signal and a conductor connected to said danger signal and to the first named battery and contacts in the last named conductor controlled by said first named relay and closed when said relay is deënergized, an additional coil connected in the circuit of the aforesaid coil of the first named relay, and means operated by said additional coil on excessive current therein and controlling the aforesaid contact means controlled by said first named relay to close the circuit for the danger signal and open the circuit for the safety signal upon such occurrence of excessive current.

5. In an electric railway signal, the combination with track rails, one of which is a continuous rail, a vehicle traveling on said track rails, and insulated contacts along the track, of signal apparatus on said vehicle comprising a battery, a conductor connected to one side of the battery, a relay having its coil connected to said conductor at one side of the relay, a conductor connected to the other side of said relay, a brush connected to said second conductor and adapted for contact with said insulated contacts along the track, a conductor connected to the other side of the battery and to the vehicle wheel for connection with said continuous rail of the track, and auxiliary means for maintaining energizing connection for said relay when the said brush is off of said contacts, said auxiliary means comprising an auxiliary relay and battery, conductors connecting said auxiliary relay and battery, an auxiliary energizing connection for the first named relay including contact means controlled by said auxiliary relay, and a second brush also adapted to contact with said insulated track contact, said two brushes being connected to opposite sides of the auxiliary battery to short circuit the auxiliary relay when both of said brushes are on one contact, a contact means in said auxiliary energizing connection controlled by said first named relay and closed on energization of said relay, a signal means controlled by the first named relay, and a connection including a manually operated switch for establishing a connection from the first named relay to the return side of the battery independent of the aforesaid brush connected to said relay for the purposes set forth.

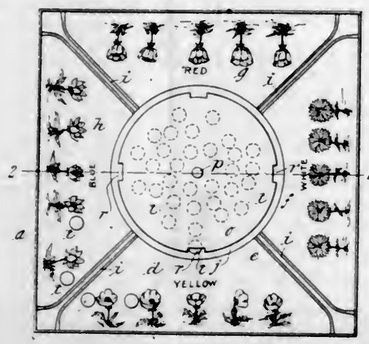
[Claim 6 not printed in the Gazette.]

1,061,864. GAME APPARATUS. HARRY B. PALMER, New York, N. Y., assignor to Milton Bradley Company, Springfield, Mass., a Corporation. Filed Aug. 31, 1912. Serial No. 718,122. (Cl. 46—41.)

1. A game apparatus of the kind described comprising a box-like member, a partition or platform therein, an upright or post element extending through the partition, a cover member adapted to be rotated on the post member, the cover member being designed to receive movable elements, the edge of the cover being raised and perforated to permit the withdrawal of the said members, and means to remove the members through the perforations in the edge of the cover as described.

2. A game apparatus of the kind described, comprising a box-like member, a partition member therein, on the border of which are placed figures of a suitable color, a cover member formed with a raised edge and having openings formed in the edge, metallic elements adapted to be placed under the cover member and withdrawn through the openings by means of a magnet held over, as described.

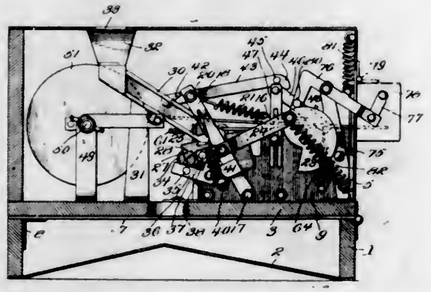
3. A game apparatus designed to represent a bee-hive and comprising a cover member the edge of which is formed with outlet openings, elements placed beneath said member, means to move the elements through the openings and from beneath the cover member, as described.



4. A game apparatus of the kind described comprising a box-like structure, a partition therein designed to have different colored figures represented thereon, a perforated rotatable cover member supported on the partition, metallic elements designed to be placed beneath the cover and to be removed therefrom by means of a magnet placed above the cover, whereby when the magnet is moved about over the upper surface of said cover member the elements are withdrawn therefrom, as described.

5. A game apparatus designed to represent a bee-hive comprising a perforated cover member to receive magnetizable elements whereby when a magnet is moved about over the upper surface of the cover member the elements may be removed therefrom.

1,061,865. STAMP-VENDING MACHINE. LLOYD C. PECK, Sylvan Grove, Kans. Filed Sept. 12, 1911. Serial No. 648,866. (Cl. 211—33.)



1. In a vending machine, a receptacle, a table hinged upon the receptacle, a casing slidably mounted upon the table, means carried by the casing and coacting with the receptacle to prevent the removal of the casing from the table, and vending mechanism carried on the table within the casing.

2. A vending machine comprising a receptacle, a table hinged thereto, a casing slidably mounted over said receptacle, and adapted to enter the receptacle to prevent the removal of the casing from the table, and vending mechanism carried by the table within the casing.

3. A vending machine comprising a receptacle, a table hinged to the receptacle and adapted to support the vending mechanism, a casing comprising a top, side members and an end member, inwardly turned flanges on the side member adapted to lie beneath the table whereby the casing may be slidably mounted upon the table, a bridge piece connecting the free edges of said side member and adapted to enter the receptacle when the casing has its end abutting the free end of the table, said bridge piece adapted to prevent removal of the casing from the table when the latter is closed upon the receptacle.

4. In a vending machine, a casing having a stamp aperture, mechanism within the casing for projecting the stamps through said aperture, a hood actuated by said mechanism for closing the aperture during the projection of the stamps, means for holding the stamps and closing the aperture when the hood is raised, and means for locking said closing means against fraudulent operation.

5. In a vending machine, a casing having a stamp aperture, mechanism mounted in the casing for projecting stamps through said aperture, means hinged to the casing and operated by said mechanism for covering said aperture when the hood is raised, and means for locking said gate in closed position against operation from the outside of the casing.

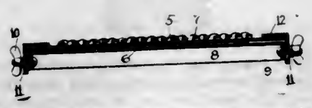
[Claims 6 to 12 not printed in the Gazette.]

1,061,866. KEYHOLE-CLOSER. GEORGE PETERSEN, Spokane, Wash. Filed Feb. 2, 1912. Serial No. 674,889. (Cl. 70—3.)



A key hole closer including a housing to be secured to the door and formed with key hole openings to aline with the key hole opening of the door, the rear wall of the housing being cut to form spaced lips adapted to be bent inwardly into position and transversely of the housing, a locking plate supported on and guided between said lips, said plate being formed in one side edge intermediate its ends with an inwardly extending recess to uncover the key hole openings of the housing when the plate is in one position, said plate being further formed with a key receiving slot to receive a key shank to lock the key against operation when the plate has been moved to operative position, and means operative from beyond the housing to actuate the locking plate.

1,061,867. VEGETABLE-CUTTER. HARRIET PLAGER, Brock, Nebr. Filed Oct. 7, 1912. Serial No. 724,373. (Cl. 146—7.)

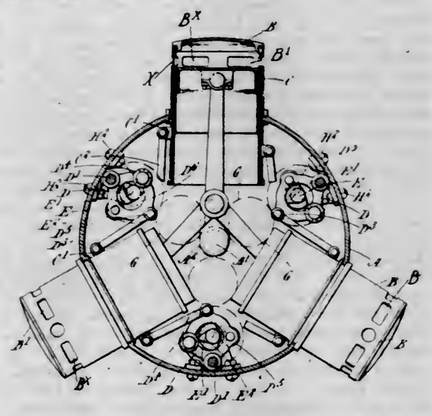


1. A cutting means for vegetables comprising a plurality of upset cutting edges disposed upon a plate and integral therewith and a rack disposed above and normally parallel to the cutting plate, the said rack being adjustable vertically.

2. A cutter having a plurality of up-set semicircular cutting edges disposed upon a plate and integral therewith, the said cutting edges being disposed in a plurality of rows, the said rows being parallel transversely but staggered longitudinally, the said plurality of rows being in two groups, a shifting space between the groups, and a rack disposed above and normally parallel to the cutting plate, the said rack being adjustable vertically.

3. A cutter having a plurality of up-set cutting edges disposed upon a plate and integral therewith, the said cutting edges being disposed in a plurality of rows parallel transversely but staggered longitudinally, said rows being in two groups, a shifting space betwen the groups and a rack disposed above and normally parallel to the cutting plate, an under plate and connecting means between the superimposed rack and the said under plate, the said rack, under plate and connecting means being adjustable vertically, and means for fixedly securing the same in any position of adjustment.

1,061,868. VALVE-GEAR. CHARLES BENJAMIN REDRUP, Canton, Cardiff, England. Filed Aug. 10, 1911. Serial No. 643,455. (Cl. 123—90.)



1. The combination with an internal combustion engine cylinder having inlet and exhaust ports, of controlling valves for said ports; and means for actuating each of said valves comprising a fulcrumed ring having oppositely disposed rollers journaled thereon, a link connecting said ring with the valve; and a cam mounted to rotate within said ring and adapted to engage with said rollers and move the ring to actuate the valve, substantially as described.

2. The combination with an internal combustion engine having a casing and cylinders provided with inlet and exhaust ports, of controlling valves for said ports, and means for moving said valves axially of the cylinders to open and close said ports, said means comprising annular frames fulcrumed in pairs on the casing between said cylinders, a link connecting each of said frames to one of said valves, shafts journaled in the casing and passing through said annular frames, and cams on said shafts located within the annular spaces of said frames and adapted to engage with the frames to move the same for actuating said valves, substantially as described.

3. In valve gear for internal combustion engines of the rotating cylinder type wherein the cylinders are arranged radially around the crank-case the combination of, a fulcrumed frame having an opening in it, a cam-shaft that extends through the opening in the frame, and two cams on the shaft one on each side of the frame the portions of the cams that are at greatest distances from the center of the cam-shaft being both on the same side of the shaft and the frame being provided with opposed projections one on one side and the other on the other side of the frame for coöperation with the cams which projections are so situated and which cams are so shaped

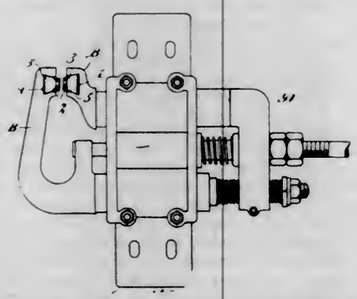
that continuous control of the frame by the cams is maintained. substantially as and for the purpose set forth.

4. In valve gear for internal combustion engines of the rotating cylinder type wherein the cylinders are arranged radially around the crank-case the combination of, a fulcrumed frame having an opening in it, a cam-shaft that extends through the opening in the frame, and two cams on the shaft one on each side of the frame such cams having the portions that are at greatest distances from the center of the cam-shaft both on the same side of the shaft, having approximately half the operative face of each concentric with the axis of the shaft such half of one cam being on the opposite side of the shaft to the corresponding half, and having the remaining portion of each shaped to give a quick full displacement to the fulcrumed frame and the frame being provided with opposed projections one on one side and the other on the other side for coöperation with the cams which projections are so situated and which cams are so shaped that continuous control of the frame by the cams is maintained, substantially as and for the purpose set forth.

5. In valve gear for internal combustion engines of the rotating cylinder type wherein the cylinders are arranged radially around the crank-case the combination of, two rocking frames spaced apart and pivoted about an axis common to both, each frame having an opening in it, a cam-shaft that extends through the openings in the two rocking frames parallel to the axis about which they rock, four cams on the shaft one on each side of each frame, the cams allotted to one frame having the portions that are at greatest distances from the center of the crank-shaft both on the same side of the shaft and those allotted to the other frame having such portions both on the opposite side of the shaft, each cam having approximately half of its operative force concentric with the axis of the shaft such half of one cam being on the opposite side of the shaft to the corresponding half of its fellow cam, the remaining portion of each cam being shaped moreover to give a quick full displacement to its rocking frame, each frame moreover being provided with opposed projections one on one side and the other on the other side for coöperation with the cams allotted to it which projections are so situated and which cams are so shaped that continuous control of each frame by its cams is maintained, means for operatively connecting one rocking frame to a valve of one cylinder of the engine, and means for operatively connecting the other frame to a valve of another cylinder of the engine, substantially as and for the purpose set forth.

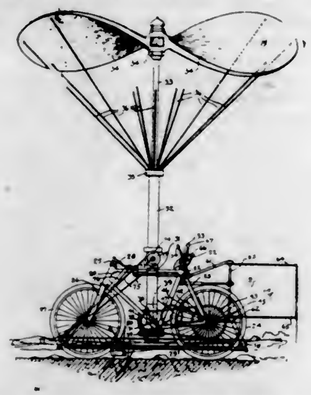
[Claim 6 not printed in the Gazette.]

1,061,869. SAW-GUIDE. BROOKS B. REGISTER, Martel, Fla. Filed Sept. 11, 1912. Serial No. 719,801. (Cl. 143—160.)



A saw guide having an arm provided with a recess, a pin holder consisting of a tubular sleeve detachably mounted in said recess, the bottom of the recess forming an end wall for the base of the sleeve, and a guide pin fitted in the sleeve and adjustable toward and from the bottom of the recess, in combination with one or more washers to limit the inward movement of the pin.

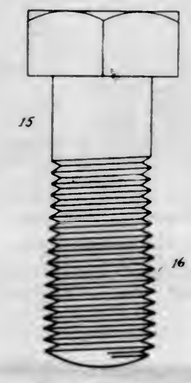
1,061,870. FLYING-MACHINE. VINCENTE LENOARD RODRIGUEZ, Douglas, Ariz. Filed June 22, 1912. Serial No. 705,315. (Cl. 244—19.)



1. In a device of the kind described, a pair of bicycle frames, steering and driving wheels carried by said frames, transverse members connecting said frames in parallel relation, a sleeve extending vertically with reference to said frames, a shaft rotatable in said sleeve and having a collar on the upper end of the sleeve to limit the movement of the shaft through the sleeve, a helix on the upper end of the shaft, braces extending from said collar to said helix, means to drive said driving wheels and shaft, and means to steer said machine.

2. In a device of the kind described, a pair of bicycle frames, steering and driving wheels carried by said frames, transverse members connecting said frames in parallel relation, a sleeve extending vertically with reference to said frame, a shaft rotatable in said sleeve and having a collar on the upper end of the sleeve to limit the movement of the shaft through the sleeve, a helix on the upper end of the shaft, braces extending from said collar to said helix, means to drive said driving wheels and shaft, means to steer said machine, and means to vary the center of gravity of the machine.

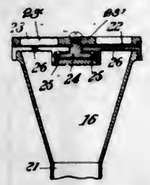
1,061,871. NUT-LOCK. CATHARINE RYAN, St. Paul, Minn. Filed June 29, 1912. Serial No. 706,605. (Cl. 151—21.)



1. A bolt comprising a threaded portion having the threads thereof constantly diminishing in depth from the end to the unthreaded portion, in combination with a nut having the threads thereof constantly increasing in depth from the side of application of the nut to the bolt to the other side of the nut.

2. A bolt having the threaded portion thereof formed with a series of threads constantly diminishing in depth from the end of the threaded bolt to the unthreaded portion thereof, the bases of said threads falling in a cylindrical surface concentric with the axis of the bolt, in combination with a nut having the threads thereof constantly increasing in depth from the side of application of the nut to the bolt to the other side of the nut.

1,061,872. NOZZLE FOR FIRE-EXTINGUISHING APPARATUS. FRANZ VON SCHIDLOWSKY, St. Petersburg, Russia. Filed July 5, 1911. Serial No. 636,949. (Cl. 137—57.)



In an apparatus of the class described, the combination of a pipe having a flaring end, a cap on the flaring end of the pipe, a bearing extending inwardly from the inner surface of the cap, said cap having a plurality of inclined openings arranged in a circle concentric with the axis of the pipe and located between the bearing and the outer edges of the flared end of said pipe, a frame supported in the bearing and mounted to rotate on the front surface of the cap, said frame including a plurality of blades which operate over the inclined openings, the blades being parallel with the axis of the pipe, a valve in the pipe, and means for opening the valve to permit fluid under pressure to pass through the inclined openings and operate on the flat surfaces of the blades to rotate the frame and form a whirling spray.

1,061,873. NUT-LOCK. CHARLES A. SECKINGER, Kansas City, Kans. Filed Sept. 12, 1911. Serial No. 648,858. (Cl. 151—12.)



A nut lock comprising a bolt having a longitudinal V-shaped recess, a nut threaded on the bolt, a locking dog pivoted at one side to the top of the nut and having a projection adapted to snugly fit in the recess, and a locking member eccentrically pivoted to same side on the top of the nut and adapted to throw the locking dog into engagement with the bolt and hold the same in a locking position, said locking member having a cam end adapted to force said locking dog into locking position and a flat side adapted to lie throughout its length against the dog when the nut is locked.

1,061,874. FLUID-INDICATOR. ELMER E. SEELEY, Conneautville, Pa. Filed June 4, 1912. Serial No. 701,595. (Cl. 73—82.)

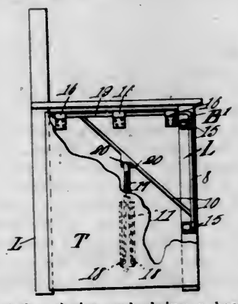
1. A device of the class described comprising a sectional extensible tube guide, a measuring element movably mounted therein, one of said sections of the guide being provided with perforations, and a foraminous strainer strip covering the perforations.

2. The combination with a fluid container having a filling hole and also having a cap for the latter, of a device comprising a sectional extensible tube guide, a measuring element movably mounted therein, one of said sections of the guide being provided with perforations, a foraminous strainer strip covering the perforations and means for suspending the said guide from the filling hole of the fluid container and adapted to receive the cap.



3. The combination with a fluid container having a filling hole and also having a screw cap for the latter, of a device comprising a sectional extensible tube guide and having perforations, a measuring element therein, a foraminous strainer strip covering the perforations, means for suspending the said guide from the filling hole of the fluid container and adapted to receive the screw cap, one of said sections being telescoped within the other of the guide and adapted to permit longitudinal adjustment of the latter.

1,061,875. CHAIR. WILLIAM E. SEELYE, Sault Ste. Marie, Ontario, Canada. Filed June 10, 1912. Serial No. 702,873. (Cl. 45—82.)

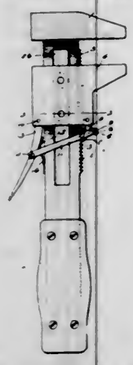


An attachment for chairs embodying a bracket adapted to swing horizontally, a vertically swinging table carried thereby, a channel iron guide secured to the bottom of the table, the guide having apertures in the ends of its flanges and having the edges of its flanges inturned, and a V-shaped brace having its crotch pivoted to the bracket and having the ends of its arms passing between the flanges of the guides, the free ends of the arms of the brace being outturned so as to slide within the inturned edges of the flanges and to engage in the said apertures.

1,061,876. WRENCH. ROY C. SHOWALTER. Altoona, Pa., assignor of one-fourth to J. P. Reilly, Altoona, Pa. Filed Mar. 5, 1912. Serial No. 681,776. (Cl. 81—139.)

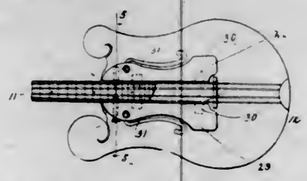
A wrench, comprising a shank having a toothed portion, and a fixed jaw, a movable jaw carried by the shank, a lever on the movable jaw, a dog pivotally mounted in the extreme inner end of the movable jaw and disposed in juxtaposition with the toothed portion of the shank, a post extending laterally from the dog, and provided with an opening, an actuating bar pivoted at one end of the

lever and having a reduced stem formed integral with the free end of the actuating bar and extending at right angles thereto, and adapted to be seated in the opening of



the post for rocking movement, and means for holding the dog operatively associated with the toothed portion of the shank.

1,061,877. GUARD FOR MUSICAL INSTRUMENTS. ALBERT SHUTT, Topeka, Kans. Filed June 8, 1912. Serial No. 702,538. (Cl. 84—115.)



1. In a guard for musical instruments including a sounding-board and a finger-board thereon, the combination with a guard plate, of means for supporting the guard plate on the sounding-board of the instrument with the edge of the guard plate flush with the edge of the finger-board, and a clamp for rigidly clamping the said guard plate to the finger-board of the instrument.

2. In a guard for a musical instrument including a sounding-board and a finger-board thereon, a plurality of guard plates, brackets suporting the guard plates on the sounding-board with the faces of the guard plates flush with the face of the finger-board, a rod connecting the said brackets, and means on the rod and engaging one of the brackets to rigidly clamp the said guard plates to the said finger-board.

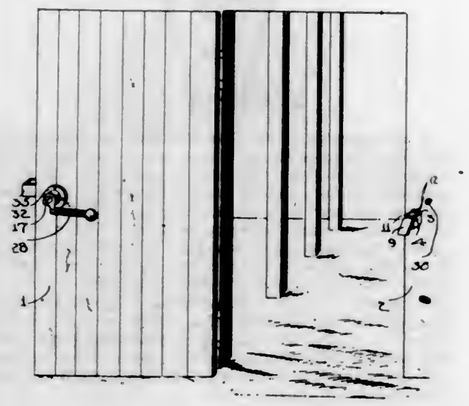
3. A guard for a musical instrument including a sounding-board and a finger-board, comprising a plurality of guard plates mounted on both sides of the finger-board and supported on the sounding-board, a rod connecting the guard plates and means on the rod for rigidly clamping the guard plates to the finger-board.

4. In a guard for musical instruments including a sounding-board and a finger-board thereon, the combination with a guard plate, of a bracket extended therefrom, a cushion on the said bracket and engaging the sounding-board of the instrument, a post depending from the said guard plate, a cushion on the said post and engaging the sounding-board of the instrument, a plate extended from the said guard plate to engage the finger-board of the instrument, a rod mounted to extend through the said bracket, a clamping member having the said rod extending therethrough, and a thumb screw having threaded connection with the rod and engaging the said clamping member to clamp the said guard plate to the finger-board of the instrument.

5. In a guard for musical instruments including a sounding-board and a finger-board thereon, the combination with a guard plate, of a bracket depending therefrom, a post depending from the said guard plate, cushions on the said bracket and the said post and engaging the sounding-board of the instrument to support the said guard plate, a clamping member, and means connecting the said clamping member with the said guard plate for rigidly clamping the said guard plate to the finger-board of the instrument.

[Claim 6 not printed in the Gazette.]

1,061,878. DOOR-LATCH. HENRY SMITH, La Junta, Colo. Filed Jan. 14, 1913. Serial No. 741,992. (Cl. 70—28.)



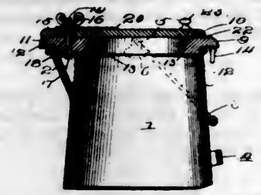
1. In a device of the class described, the combination with a door and a support, a keeper frame provided with laterally extending sides carried by said support, a latching keeper pivotally mounted upon said sides, said latching keeper comprising a plurality of parallel strips, one of said strips terminating in a pivot eye for pivotally mounting said keeper upon said sides, the other strip extending to form a bowed portion and terminating in a horizontal finger, a plate carried by said door, said plate adapted to rest behind said horizontal finger for holding the door in a closed position, an operating arm carried by said door which is adapted to press said latching keeper down so as to disengage said plate whereby the door may be opened when so desired.

2. In a device of the class described, the combination with a door and a support, a keeper frame carried by said support, a latching keeper pivotally mounted upon said keeper frame, a plate carried by said door, said plate provided with an extended portion which terminatea in a U-shaped guard yoke, one portion of said guard yoke provided with a U-shaped pocket, an operating arm carried by said door, said arm extending through said pocket for limiting the pivotal movement thereof, said arm adapted to bear down upon said latching keeper for disengaging said keeper from said extended portion of said plate whereby the door may be opened.

1,061,879. COMMODE. JOHN W. SPRINT, Boyce, Va., assignor of one-half to George W. Garvin, Boyce, Va. Filed Apr. 12, 1912. Serial No. 690,347. (Cl. 4—33.)

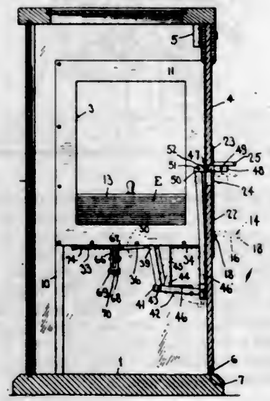
1. In a commode having an opening of irregular shape, a body portion adapted to fit into the opening, said body being provided with an opening, a bolt held rigidly in place in the body, and a cover for the opening of the body pivoted to the bolt, said cover being adapted to swing in one plane and remain in close contact with the body part.

2. In a commode having an opening provided with a recessed part, a seat having a projection adapted to fit into the recessed part of the opening, a bolt secured in the projection, a cover pivoted to the bolt and adapted to swing



in a plane coextensive with the plane of the cover when the latter is at rest, and means for swinging the cover.

1,061,880. VENDING-MACHINE FOR ENVELOPS. JESSE T. STEWART, Mabton, Wash. Filed Oct. 24, 1912. Serial No. 727,582. (Cl. 211—8.)



1. In a vending machine, the combination with a base, and a transparent casing mounted thereon and open at its front, the base having a notch in its upper face at the bottom of said open front; of a front panel having a lip at its lower end adapted to engage said notch, a latch at the upper end of said panel, said panel having an opening for the delivery of the goods and an upright slot, a skeleton framework carried by the back of said panel and including a magazine whose bottom stands opposite said delivery opening, ejecting mechanism movable over said bottom, means for actuating said mechanism, and a thumb piece connected with said means and whose shank projects through said upright slot.

2. In a vending machine, the combination with a casing having an upright slot in its front panel, the vending mechanism, and the actuating mechanism therefor including an upright link having a finger projecting forward through said slot; of a thumb-piece standing forward of said panel and slotted to removably engage said finger, a screw passing through the thumb-piece and finger, a guide having a U-shaped body embracing the finger on the inner side of said front panel and upturned lips at the front ends of its arms, and means for securing said arms upon the finger.

3. In a vending machine, the combination with a casing having an upright slot in its front panel, the vending mechanism, and the actuating mechanism therefor including an upright link having a finger projecting forward through said slot; of a U-shaped guide whose body embraces said finger and whose arms are outturned at their front ends to slide against the inner face of said front panel at opposite sides of the slot therein, and a thumb-piece removably attached to the projecting end of said finger.

4. In a vending machine, the combination with a magazine, the ejecting mechanism, and a trigger thereon; of a hanger depending from an overhead support, a latch pivoted in said hanger, a spring for raising one end of the latch into normal engagement with said trigger, and a clip securing said spring to the lower end of the hanger.

5. In a vending machine, the combination with an upright magazine having a slot in its bottom, an ejector plate movable over said bottom and having a trigger projecting through said slot and provided with a beveled lower end, and a spring-actuating latch having a beveled lip normally engaging the beveled lower end of said trigger; of a spring forcing the ejector normally to the rear, and a starting spring acting on the ejector in the opposite direction, for the purpose set forth.

[Claims 6 and 7 not printed in the Gazette.]

1,061,881. PROCESS FOR THE PRODUCTION OF A PLASTIC OR ELASTIC SUBSTANCE. JULIUS STOCKHAUSEN, Crefeld, Germany. Filed May 4, 1911. Serial No. 625,083. (Cl. 106—23.)

1. The process of producing an india-rubber substitute comprising mixing gelatin with glycerin and with camphor, said camphor being dissolved in acetone.

2. The process of producing an india-rubber substitute comprising mixing gelatin with glycerin, wood-pitch and camphor, said camphor being dissolved in acetone.

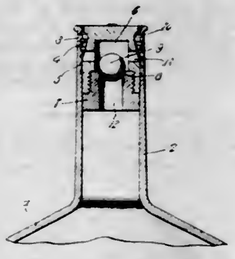
3. The process of producing an india-rubber substitute comprising mixing gelatin with glycerin and with camphor, and treating the mass with sulfur.

4. The process of producing an india-rubber substitute comprising mixing gelatin with glycerin and with camphor, said camphor being dissolved in acetone, and treating the mass with sulfur.

5. The process of producing an india-rubber substitute comprising mixing gelatin with glycerin, wood-pitch and camphor, and treating the mass with sulfur.

[Claims 6 to 12 not printed in the Gazette.]

1,061,882. BOTTLE. WILLIAM TAPPENDEN and CHARLES SCHWARZ, Hornell, N. Y. Filed Apr. 13, 1912. Serial No. 690,559. (Cl. 215—65.)

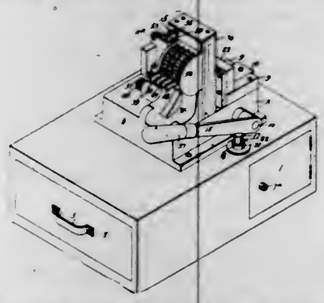


In a non-refillable bottle the combination with a bottle neck having a port in its side, said bottle neck having an internal spiral groove, of a stopper comprising a body having a central recess and an annular groove, with ports extending from the recess to the groove, said ports adapted to form communication with the port in the neck, a valve arranged in the recess, a valve seat member threaded into the body and having a central channel adapted to be closed by the valve, a lug on the body to engage the spiral groove, and a turning button frangibly connected to the body.

1,061,883. CARD-PUNCHING MACHINE. STEPHEN B. TILY, JOHN G. REHFUSS, and MARTIN O. REHFUSS, Philadelphia, Pa., assignors to John Wanamaker, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 4, 1911. Serial No. 663,871. (Cl. 164—111.)

1. The combination in a card punching machine, of a punch head; a series of longitudinally movable members mounted on said head; a punch carried on each member;

a structure having a die plate and formed to support a card; and means for moving said structure and said punch relatively to each other to punch a card.



2. The combination in a card punching machine, of a receptacle; card punching mechanism; and a lever actuated by said mechanism and mounted to automatically discharge cards into said receptacle after they have been punched.

3. The combination of a receptacle; card punching mechanism mounted over the same; a lever for supporting a card while it is being punched; and means for moving said lever to permit the card to pass into the receptacle after said card has been punched.

4. The combination in a card punching machine, of a receptacle; card punching mechanism mounted to discharge cards to the receptacle; said mechanism including a structure for holding the card while it is being punched; a member mounted to support a card in said structure; and means for withdrawing said member to permit the card to drop into the receptacle when the machine is operated.

5. The combination in a card punching machine, of a receptacle, card punching mechanism mounted to discharge cards into said receptacle and including a card holder; a movable member having a portion capable of extending under the holder to support a card therein and movable to release a card; said member also having a portion extended to prevent the introduction of the card to the holder until the said first portion is moved to its card supporting position; and means for actuating the member to release the card when the machine is operated.

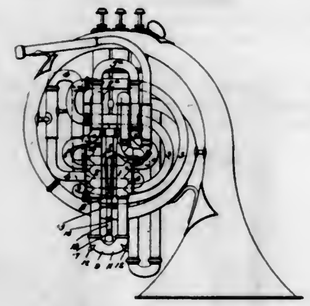
[Claims 6 to 21 not printed in the Gazette.]

1,061,884. CAP. JACOB TIM, New York, N. Y. Filed Nov. 24, 1911. Serial No. 662,130. (Cl. 2—106.)



As a new article of manufacture a knitted cap of a size to extend down over the ears of the wearer and provided at its front with an upturned portion extending approximately to the lower edge of the cap and at its rear with a muffler of a width about equal to the width of the upturned portion of the cap and secured at one edge to the lower edge of the cap, the upturned portion of the cap being provided with a button at each side and the muffler with a button hole at each end and a button adjacent to one end, whereby when the muffler is not in use it may be turned up against the cap and its ends engaged with the buttons on the upturned portion, to form therewith a band-like portion for said cap.

1,061,885. BRASS WIND MUSICAL INSTRUMENT. FREDERICK W. TODT, Elkhart, Ind., assignor to C. G. Conn Co., a Corporation of Indiana. Filed Dec. 9, 1909. Serial No. 532,261. (Cl. 84—8.)



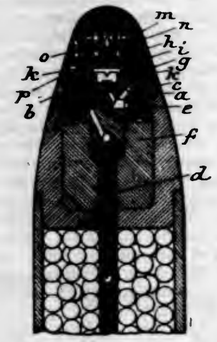
In a brass wind instrument, the combination with parallel tubes, of a hollow bar secured between said tubes and extending toward the open ends thereof, and provided with a perforation near its open end, a spring bar secured to said hollow bar, a pin on said spring bar constructed to enter said perforation, a tuning slide mounted in said tubes, a bar connected to the slide and constructed to enter the hollow bar, and provided with depressions and key tone indicia, said pin being constructed to engage the said depressions and lock the tuning slide relatively to the parallel tubes for a given key.

1,061,886. RULE-POCKET. PERCY W. TOOTH, Leastalk, Cal. Filed Jan. 23, 1912. Serial No. 672,843. (Cl. 24—3.)



In a device of the class described, the combination of a substantially flat rectangular receptacle, a clamp comprising a plate formed at its upper edge to provide forwardly extending arms embracing said receptacle adjacent the upper end and pivotally secured to the opposite sides thereof, inwardly and upwardly disposed prongs punched in said plate adjacent the lower end thereof, and a leaf spring of a length equal to that of said plate and having its lower end secured to the rear wall of said receptacle and having its free end spaced therefrom and bearing against the upper edge of said plate to force the said prong thereof into engagement with the garment pocket.

1,061,887. COMBINATION-FUSE FOR UNIVERSAL PROJECTILES. KARL VÖLLER, Dusseldorf, Germany, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany, a Corporation of Germany. Filed Nov. 23, 1911. Serial No. 662,028. (Cl. 102—39.)



1. In a combination fuse for a high explosive and shrapnel having separate fuse channels, a plurality of relatively adjustable rings, and a single member located between the fuse body and said rings whereby all of the rings may be adjusted, without changing their relative positions, by the adjustment of said single member in shifting from one channel to the other.

2. In a combination fuse for a high explosive and shrapnel having separate fuse channels, a plurality of timing rings, one being relatively stationary while the other or others are being adjusted, a change-over plate located between the fuse body and said rings, and means connecting said plate to said relatively stationary ring, all of the rings being adjusted, without changing their relative positions, by the adjustment of said plate in shifting from one channel to the other.

3. In a combination fuse for a high explosive and shrapnel having separate fuse channels, spaced-apart timing rings connected together so as to move in unison, a third timing ring interposed between the first mentioned rings, a change-over plate located between the fuse body and one of said spaced-apart rings, said plate and said third ring being relatively fixed while said spaced-apart rings are being set, and all of said rings being moved, without changing their relative positions, in shifting the plate from one channel to the other.

4. In a combination fuse for a high explosive and shrapnel having separate fuse channels, spaced apart timing rings connected together so as to move in unison, a third timing ring interposed between the first mentioned rings, a change-over plate located between the fuse body and one of said spaced-apart rings, said plate and said third ring being connected together and held relatively fixed while said spaced-apart rings are being set, and all of said rings being moved, without changing their relative positions, in shifting the plate from one channel to the other.

1,061,888. SELF-CLOSING FUNNEL. AUGUST VON DER CRONE, Berlin, Germany. Filed Nov. 23, 1912. Serial No. 733,106. (Cl. 226—33.)

A funnel comprising a vessel having a spout providing a valve seat; a tube adapted to enter the vessel to be filled; a hollow head connected to and closing the end of the tube within the spout, said head providing, respectively, a valve for the valve seat of the spout, and a valve seat within the tube; and a portion of the head within the spout provided with fluid passageways closed when the valve is seated; means carried by the tube adapted to engage with the vessel to be filled for moving the tube to unseat the valve of the head and open said fluid passageways into the vessel; and a float located within the tube and operable to seat against the valve seat of the head



and automatically close said passageways when said float is lifted by the liquid in the vessel being filled.

1,061,889. PROCESS FOR THE PREPARATION OF COLORED SELENIFEROUS AND TELLURIFEROUS SUBSTANCES. AUGUST VON WASSERMANN, Berlin, and ERNST WASSERMANN, Frankfort-on-the-Main, Germany. Filed Jan. 24, 1912. Serial No. 673,136. (Cl. 23—24.)

1. Process for the preparation of seleniferous and telluriferous colored substances, which consists in allowing salts of halogenated dyestuffs of the phthalein series to re-act with suitable compounds of selenium or tellurium.

2. Process for the preparation of seleniferous colored substances, which consists in allowing salts of halogenated dyestuffs of the phthalein series to re-act with alkali salts of the seleno cyanic acid or telluro cyanic acid, and in separating the so formed precipitate from the supernatant liquid.

3. As new articles of manufacture, colored compounds of the halogenated dyestuffs of the phthalein series containing selenium having a very dark color when dry and in the form of a powder, and being more readily soluble in water than the raw material, having an intensive blood red color when so dissolved.

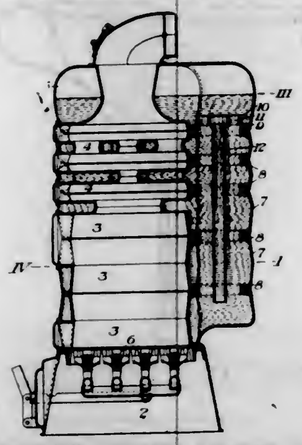
1,061,890. STEAM AND WATER HEATER OR BOILER. SAMUEL B. WATERS, Johnstown, Pa., assignor to National Radiator Company, Johnstown, Pa., a Corporation of New Jersey. Filed Apr. 11, 1912. Serial No. 690,206. (Cl. 122—218.)

1. A heater or boiler having a firepot portion formed in a plurality of superimposed hollow sections, each of said sections having an extension at the back, said extensions being united by a single circulating opening, said circulating openings forming a continuous circuluating passage, and means within said passage for separating the up and down circulating currents; substantially as described.

2. A heater or boiler comprising a plurality of superimposed firepot sections, a dome section, and intermediate sections, each of said sections having a single extension at the back communicating with the water space of the section and said extensions superimposed and connected to form a continuous single water column at the back of the heater or boiler, and a circulation controller or regulating device within said column for separating the up and down currents therein; substantially as described.

3. A heater or boiler comprising a plurality of superimposed firepot sections, a dome section, and intermediate sections, each of said sections having a single extension communicating with the water space of the section and superimposed and connected to form a continuous single water column at the back of the heater or boiler, said column having a single opening communicating with the

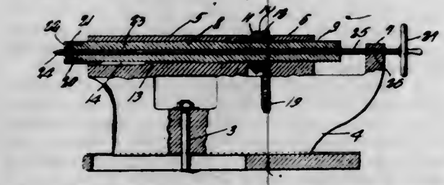
water space of each section, and a removable device within the column for separating the up and down currents of water therein; substantially as described.



4. A heater or boiler comprising a plurality of superimposed sections, a dome section surmounting the heater, each of said sections having a single rearward hollow extension communicating with the water space of the body of the section, said extensions being superimposed and connected to form a continuous water column, and a circulating device for separating the up and down currents of water in said column, said circulating device having an inlet adapted to take water downwardly from substantially the lowest portion of the water space of the dome section and an outlet for the upgoing currents of water which communicates with the dome section at a higher level, substantially as described.

5. A heater or boiler having a continuous water-circulating column at the back and a surmounting dome section, together with a circulating device for separating the up and down currents of water in said column, said device comprising a head portion extending within the dome section and a tube or pipe extending downwardly within the column and open at its lower end, said tube or pipe communicating at its upper end with the dome section at substantially the lowest level of the water space therein and the head portion having openings therethrough communicating with the interior of the dome section at a higher level, substantially as described.

1,061,891. LATHE. FREDERICK H. WICKS and CHARLES GOODMAN, Roanoke, Va. Filed Oct. 29, 1912. Serial No. 728,487. (Cl. 82—1.)



1. A tail stock for lathes, including a support for attachment to a lathe, two sleeves carried by said support and in spaced relation to each other, a tubular member slidably mounted in said sleeves and provided with exterior screw threads at one end, an interiorly screw threaded sleeve disposed between the sleeves of the support and embracing the threaded portion of the tubular member, coacting means carried by the support and tubular member for permitting sliding motion to the member and for preventing the rotation thereof, means for operating the interiorly threaded sleeve for imparting longitudinal movement to the tubular member, a longitudinally adjustable centering rod mounted within the tubular member and adjustably engaging the support, and a detachable cutting tool carried upon the free end of the tubular member and concentrically about the centering rod.

2. A tail stock for lathes, including a support for attachment to a lathe, two sleeves carried by said support and in spaced relation to each other, a tubular member slidably mounted in said sleeves and provided with exterior screw threads at one end, an interiorly screw threaded sleeve disposed between the sleeves of the support and embracing the threaded portion of the tubular member, coacting means carried by the support and tubular member for permitting sliding motion to the member and for preventing the rotation thereof, means for operating the interiorly threaded sleeve for imparting longitudinal movement to the tubular member, a longitudinally adjustable centering rod mounted within the tubular member and adjustably engaging the support, and a detachable cutting tool carried upon the free end of the tubular member and concentrically about the centering rod.

3. A tail stock for lathes, including a lathe bed engaging support, two sleeves carried by the support and in spaced relation, an arm carried by said support and provided with a threaded bore in axial alinement with the center of the sleeve, a tool carrying tubular member slidably mounted in the sleeve, coacting means carried by the tubular member and the support between the sleeves for imparting longitudinal movement to the tool carrying tubular member, and a manually operable centering rod having a threaded portion engaging the threaded bore of the arm of the support with the remaining portion longitudinally movable within the tubular member.

1,061,892. METHOD AND APPARATUS FOR THE PRODUCTION OF LONG ELECTRIC ARCS FOR THE TREATMENT OF GASES. FRANS HENRIK AUBERT WIELGOLASKI, Christiania, Norway. Filed Sept. 19, 1912. Serial No. 721,313. (Cl. 204—31.)



1. A method of producing a long continuously burning electric arc, said method consisting in forming an electric arc between the inner ends of a pair of electrodes having their inner ends adjacent and their outer ends remote from each other; and blowing back the roots of the arc from said inner ends toward said outer ends by passing separated currents of gas, substantially continuously adjacent and parallel to the respective electrodes, from said inner ends to said outer ends.

2. A method of producing a long continuously burning electric arc, said method consisting in providing a furnace space having branching channels in which the walls comprise a pair of electrodes having their inner ends adjacent and their outer ends separated; forming an arc between said inner ends; and blowing the roots of the arc toward said outer ends by passing currents of gas from said inner ends toward said outer end of the electrodes.

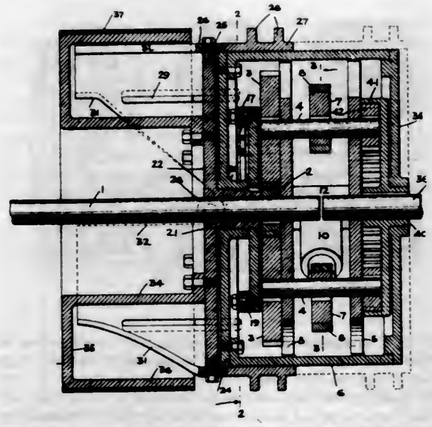
3. A method of producing a long electric arc, said method consisting in forming an electric arc between the inner ends of a pair of electrodes disposed in a pair of branching channels, the inner ends of the channels and electrodes being nearer each other than the respective outer ends, and blowing the roots of said arcs back from the inner ends of the channels by passing currents of gases through the channels from the inner to the outer ends thereof.

4. In means for forming a long electric arc, the combination of a furnace provided with a branching furnace space, and a pair of electrodes comprised in the wall of said branches and having their respective inner ends nearer together than their outer ends, said furnace being adapted to cause currents of gas to flow from said inner ends toward said outer ends.

5. In means for forming a long electric arc, the combination of a furnace provided with an elongated chamber, and a pair of tubular electrodes disposed within said chamber and having their respective inner ends near each other and their outer ends separated and secured in the ends of the chambers, said tubular electrodes forming with said chamber an outer space between the electrodes and the wall of the chamber, and forming an inner space within the electrodes; said furnace body being provided with channels communicating with said spaces respectively.

[Claim 6 not printed in the Gazette.]

1,061,893. TRANSMISSION DEVICE. THOMAS H. WILLIAMS, Buxton, Iowa. Filed June 5, 1912. Serial No. 701,801. (Cl. 74—34.)



1. In a transmission device, the combination of a driving member, a driven member, means for imparting motion from the driving member to the driven member, and means for controlling said last-named means to enable the relative speed of the driven member to be adjusted to any desired extent, and means acting upon the controlling means for reversing the driven member.

2. In a transmission device, the combination of a driving member, a driven member, means for imparting motion from said driving member to the said driven member, fluid-controlled means for enabling the relative speed of the driven member to be adjusted to any desired extent, and means acting upon the fluid controlled means for reversing the driven member.

3. In a transmission device, the combination of a driving member, a driven member, a movable casing, means carried by said casing to cause motion to be imparted from the driving member to the driven member, means for controlling the action of said last-named means to cause the casing and said motion-imparting means to move idly, or to cause the driven member to move therewith, and means for arresting the casing and acting upon the controlling means to reverse the driven member.

4. In a transmission device, the combination of a driving member, a driven member, a movable casing, means mounted in said casing for imparting motion from the driving member to the driven member, fluid-controlled means for causing the casing and the motion-imparting means to move idly, or to cause the driven member to be moved therewith, and means for arresting the casing and acting upon the controlling means for reversing the driven member.

5. In a transmission device, the combination of a driving member, a driven member, a movable casing, means carried by said casing for imparting motion to the driven member, controlling means for causing the casing and the motion-imparting means to rotate idly, or to cause the driven member to be moved therewith at any desired speed with respect to the driving member, and means for arresting the casing and acting upon the controlling means to reverse the driven member.

[Claims 6 to 20 not printed in the Gazette.]

1,061,894. PROTECTIVE APPARATUS FOR ELECTRIC CIRCUITS. ROSS LEE BAKER, Joplin, Mo. Filed Jan. 13, 1912. Serial No. 671,053. (Cl. 175—273.)



1. In combination, a fuse block, a fuse plug adapted to be thrust longitudinally into the block and to be removable therefrom, a fuse carried by the plug and extending across the inner end thereof, a signaling plunger extending through the plug and engaging the fuse at the end of the plug and a spring arranged in the plug and having a portion engaging the plunger and tensioned for subjecting the plunger to pressure in a direction maintaining the fuse under tension.

2. In combination, a fuse plug formed with a longitudinal bore, a reciprocable plunger extending through the bore, a fuse extending across the bore and adapted to engage the plunger and retain the same against movement, the plug being recessed laterally from the bore at the side of the plunger, and the plunger being formed with a recess, and a spring arranged in the recess of the plug and engaging the plug and extending into the recess in the plunger and movably engaging the plunger for normally exerting pressure against the plunger for pressing the same against the fuse.

3. In combination, a fuse plug formed with a bore, a plunger reciprocably mounted therein, a fuse extending across the bore and engaged by the plunger, the plug being recessed laterally from the bore at opposite sides thereof, and a plate spring extending into the lateral recesses of the plug and through the plunger and tensioned to exert pressure against the plunger for pressing the same against the fuse.

4. In combination, a fuse plug formed with a bore, a plunger reciprocably mounted therein, a fuse extending across the bore and engaged by the plunger, the plug being recessed laterally from the bore at opposite sides thereof, and a plate spring extending into the lateral recesses of the plug and through the plunger and tensioned to exert pressure against the plunger for pressing the same against the fuse, the plate spring being arcuate and tensioned to vary the length of its arc for imparting a thrust to the plunger when released.

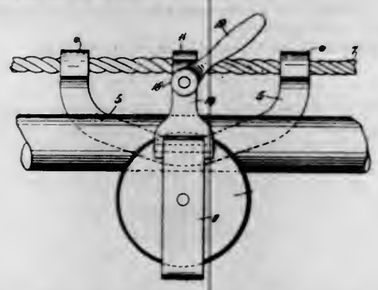
5. In combination, a fuse plug formed with a bore, a plunger reciprocably mounted therein, a fuse extending across the bore and engaged by the plunger, the plug being recessed laterally from the bore at opposite sides thereof, and a plate spring extending into the lateral recesses of the plug and through the plunger and tensioned to exert pressure against the plunger for pressing the same against the fuse, the plate spring being longitudinally arcuate and tensioned for increasing the radius of its arc when released for imparting a thrust to the plunger.

[Claims 6 to 10 not printed in the Gazette.]

1,061,895. CABLE-ROLLER. FREDERICK N. BIERCE, Cincinnati, Ohio, assignor to The Specialty Device Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 21, 1911. Serial No. 655,920. (Cl. 247—23.)

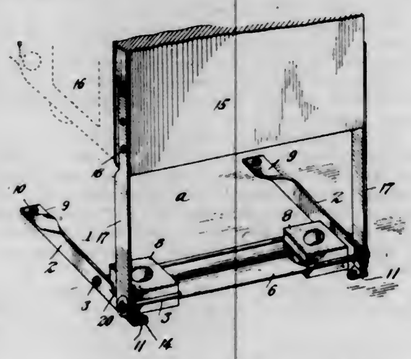
1. In a device of the character specified, a cable roller, with a frame open above in which the roller is mounted, independent suspension members for the frame to engage

over a supporting wire, and an adjustable gripping member pivoted to the frame to grip the supporting wire intermediate the suspension members.



2. In a device of the character specified, a cable roller, with a frame open above in which the roller is mounted, independent suspension members for the frame to engage over a supporting wire, and a gripping member pivoted to the frame to grip the supporting wire intermediate the suspension members, the gripping member comprising a bearing plate and a hook bolt adapted to be tightened to grip the supporting wire to hold the roller and frame in position.

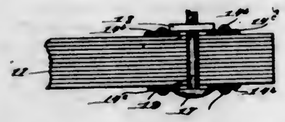
1,061,896. TYPE-WRITER SUPPORT. THOMAS H. BOAL, Philadelphia, Pa. Filed Oct. 9, 1912. Serial No. 724,758. (Cl. 45—90.)



A typewriter support of the class described comprising a frame having side members arranged to be secured to a desk top and each provided with a flattened portion at one end and a foot piece at the other end to bear on the desk top, each side member being also provided with an integral outturned stop near one end, a supporting base for a typewriting machine, arms attached to said base and extending from the inner end thereof, and a cross bar connecting the side members of the frame and also forming pivotal connections between the arms of the base and said side members of the frame to enable the base with a machine thereon to be arranged either in a horizontal position with the base in line and in a common plane with the frame or in an upright position out of the way and at right angles to the frame.

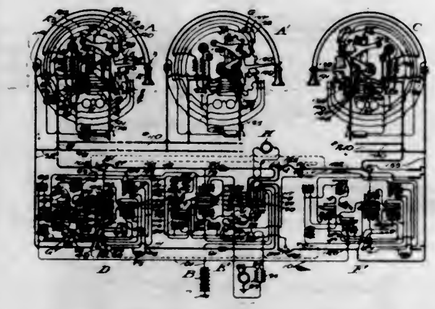
1,061,897. LOOSE-LEAF BINDER. FERDINAND BODENHOFER, New York, N. Y. Filed Feb. 19, 1912. Serial No. 678,526. (Cl. 129—4.)

In a binder, the combination with a plurality of leaves, of a pair of adjustable elongated plates, each plate provided with a central longitudinal slot, a bead struck up in each plate surrounding said slot, said plates adapted to be disposed above and below one extremity of the assembled leaves, bolts adjustably seated in said elongated slots piercing said leaves and engaging the outer face of one of



the plates, and nuts engaging said bolts to clamp the leaves between said plates.

1,061,898. TELEPHONE LOCK-OUT. WILSON L. CAMPBELL, Chicago, Ill., assignor, by mesne assignments, to First Trust and Savings Bank, trustee, Chicago, Ill. Filed Feb. 26, 1907. Serial No. 359,405. (Cl. 179—17.)



1. In a telephone exchange system, the combination of a telephone line, a plurality of subscribers' calling dials on said line, means responsive to the operation of said dials, adapted for automatically connecting a calling subscriber with a called subscriber, a subscriber's transmitter associated with each calling dial, a local battery for each transmitter, a locking device for each dial, and means for operating the locking device of an intruding subscriber.

2. In a telephone exchange system, the combination of a telephone line, a plurality of subscribers' calling dials on said line, means responsive to said calling dials, adapted for automatically connecting a calling subscriber with a called subscriber, a locking device for each dial, and means for operating the locking device of an intruding subscriber before the called subscriber answers.

3. In a telephone exchange system, the combination of a telephone line, a plurality of subscribers' calling dials on said line, a locking device for each dial, means responsive to the operation of said dials, adapted for automatically connecting a calling subscriber with a called subscriber, each locking device including an electromagnet, a normally open ground circuit for energizing each electromagnet, and means for closing the ground circuit to energize the magnet and thereby lock the dial of an intruding subscriber.

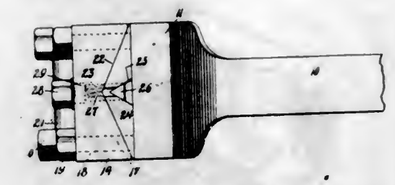
4. In a telephone exchange system, the combination of a telephone line, a plurality of subscribers' calling dials on said line, means responsive to the operation of said dials for automatically connecting a calling subscriber with a called subscriber, a locking device for each dial, each locking device including an electromagnet, a normally open ground circuit for energizing each magnet, each subscriber provided with a switch-hook controlling the ground circuit through his allotted electromagnet.

5. In a telephone exchange system, the combination of a telephone line, a plurality of calling dials on said telephone line, means responsive to the operation of said dials, adapted for automatically connecting a calling subscriber with a called subscriber, a locking device for each dial, adapted when operated to positively lock the dial against rotation, and means for operating the locking

device of an intruding subscriber as soon as the calling subscriber by operating his dial sends in an initial impulse.

[Claims 6 to 30 not printed in the Gazette.]

1,061,899. BEARING. WALTER IVINS CHINNICK, Trenton, N. J. Filed Sept. 9, 1912. Serial No. 719,353. (Cl. 64—55.)



1. In a bearing, two relatively movable members having bearing material for the part journaled therein, one of said members having a triangular recess at each side thereof the apex of which is transverse to the journal; a pair of wedges in each of said recesses intermediate said members operable in a direction parallel to the journal; means in said recesses intermediate said wedges for operation of the said wedges; and clamping means associated with said members whereby the same are normally forced against said wedges intermediate said members.

2. In a bearing, two relatively movable members having bearing material for the part journaled therein, one of said members having a triangular recess at each side thereof, said recesses having the apex of same transverse to the part journaled therein; a pair of wedges in each of said recesses at each side of said apex and intermediate said members; means in said recesses intermediate said wedges and central with said apex for relative adjustment of said wedges in a direction parallel to said journal; and clamping means associated with said members whereby the same are normally forced against said wedges intermediate said members.

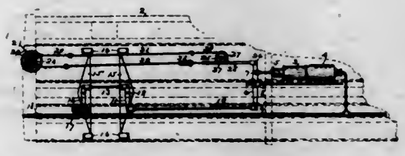
3. In a bearing, two relatively movable members having bearing material for the part journaled therein, one of said members having a triangular recess at each side thereof with the apex transverse to the journal; a pair of substantially identical wedges in each of said recesses intermediate said members; means in said recesses intermediate said wedges and central with said recesses for relative adjustment of said wedges in a direction parallel to the journal; and clamping means associated with said members whereby the same are normally forced against said wedges intermediate said members.

4. In a bearing, two relatively movable members having bearing material for the part journaled therein, one of said members having a triangular recess at each side thereof, said recesses having their apex transverse to the part journaled therein and central with the same; a pair of substantially identical wedges in each of said recesses central of said apex and intermediate said members; adjustable members in the member having the triangular recesses and projecting through the apex of said recesses intermediate said wedges; means on said adjustable members and said wedges whereby said wedges are made operable in a direction parallel to the axis of rotation; and clamping means associated with said members whereby the same are normally forced against said wedges intermediate said members.

5. In a bearing two relatively movable members having bearing material for the part journaled therein, one of said members having a triangular recess at each side thereof, said recesses having their apex central with said journaling part and transverse to the axis of rotation; bolts positioned at each side of said member having the recesses and projecting through the apex of said recesses, said bolts having the parts projecting into said recesses triangular shaped, the base of same being parallel to the axis of rotation; a pair of substantially identical wedges in each of said recesses intermediate said relatively movable members and at each side of said triangular projection of said bolts, said wedges having means at the sides adjacent said triangular projection coacting with same whereby the relative distance between said wedges may be varied; and clamping means associated with said members whereby the same are normally forced against said wedges intermediate said members.

[Claim 6 not printed in the Gazette.]

1,061,900. COMBINED HAND AND AIR BRAKE. WILLIAM J. CLELLAND, Watertown, N. Y., assignor of one-half to Watertown Specialty Company, Watertown, N. Y., a Corporation of New York. Filed Oct. 21, 1912. Serial No. 726,921. (Cl. 188—24.)



1. A car brake, comprising a shaft adapted to be operated by hand, a sprocket-gear carried by said shaft, a second sprocket-gear, a chain connecting said gears, a rack-rod for operating said sprocket-gears, a fluid-pressure cylinder for operating said rack-rod, means for locking said shaft after the brakes are set, and a fluid-pressure cylinder for releasing said locking means.

2. A car brake, comprising a manually operable shaft, means for locking said shaft for preventing the releasing of brakes when set, a fluid-pressure device for releasing said locking means, a chain and sprocket gearing operatively connected to said shaft, a fluid-pressure brake cylinder, a piston operated by said cylinder, and a rack-rod operated by said piston, said rack-rod adapted to operate said chain and sprocket gearing for automatically rotating said shaft.

3. The combination with a fluid-pressure brake cylinder and a push-rod operated thereby, of a sprocket-gear, a rack-rod reciprocated by said push-rod for rotating said sprocket-gear, a hand-brake shaft, a sprocket-gear carried by said shaft, a chain drive for connecting said sprocket-gears, whereby when the brakes are set and released by said brake cylinder said shaft is rotated in opposite directions, means for locking said shaft for holding the brakes when set, and a releasing lever capable of being rocked by fluid-pressure or by foot-power for releasing said locking means.

4. A car brake, comprising a hand-brake shaft, a pair of sprocket-gears, one of said gears carried by said shaft, a chain for connecting said gears, a cylinder lever, a rack-and-pinion for connecting said lever with one of said sprocket-gears, brake-beams, means for operatively connecting said lever with said brake-beams, a ratchet carried by said shaft, a pawl engaging said ratchet for holding the brakes when set, and a rocking-lever adapted for disengaging said pawl for permitting the releasing of the brakes.

5. A car brake, comprising a hand-brake shaft, a pair of sprocket-gears, one of said gears carried by said shaft, a chain for connecting said gears, a cylinder lever, a rack-and-pinion for connecting said lever with one of said sprocket-gears, brake-beams, means for operatively connecting said lever with said brake-beams, a ratchet carried by said shaft, a pawl engaging said ratchet for holding said shaft from rotating in the direction for releasing the brakes, a rocking-lever adapted to disengage said pawl, and a fluid-pressure cylinder having a piston adapted to operate said rocking-lever for releasing the brakes.

[Claims 6 to 11 not printed in the Gazette.]

1,061,901. ADDING-MACHINE. ALEXANDER J. CONEN, Louisville, Ky. Filed Feb. 11, 1913. Serial No. 747,715. (Cl. 235—130.)



1. In an adding machine, a plurality of sets of accumulator wheels arranged side by side in groups of different orders, an actuator for each group of wheels, a stationary shaft, a sleeve slidable on the shaft, on which sleeve the wheels are mounted, said sleeve being adjustable to locate any set of the wheels in operative relation with the actuators, and means for locking the sleeve and holding the same against rotation.

2. In an adding machine, a plurality of sets of accumulator wheels arranged side by side in groups of different orders, an actuator for each group of wheels, a stationary shaft having a longitudinal groove and recesses, a sleeve slidable on the shaft, on which sleeve the wheels are mounted, and a detent carried by the sleeve and extending into the groove and engageable with selected ones of the recesses.

3. In an adding machine, a plurality of sets of accumulator wheels arranged side by side in groups of different orders, an actuator for each group of wheels, a stationary shaft having a longitudinal groove and recesses, a sleeve slidable on the shaft, on which sleeve the wheels are mounted, said sleeve having abutments between which the wheels are located, and a detent carried by the sleeve and extending into the groove and engageable with selected ones of the recesses.

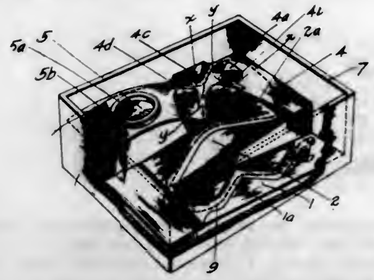
1,061,902. PROCESS FOR SEPARATING VEGETABLE OR ANIMAL FIBER. VINCENZINA DEL PRATO, NATA VISCARDI, GIOVANNI DEL PRATO, VINCENZO DEL PRATO, CESARE DEL PRATO, and MARIA DEL PRATO, Naples, Italy. Filed Mar. 1, 1911. Serial No. 611,622. (Cl. 92—6.)

A combined chemical and mechanical process for treating vegetable and animal fibers consisting in immersing same in a weak alkaline bath of about 20 minutes' duration and consisting of a boiling solution of bicarbonate of soda in the proportion of 10 to 1000, a successive removing of the agglutinant substances by compressing the fibers in a roller machine with smooth cylinders, a successive mechanical separation of the fibers, a second bath of bicarbonate of soda in case the fibers have been permitted to dry, followed by a second compression in a roller machine with smooth cylinders, and finally, several successive cold baths in a solution of chlorid of lime in the proportion of 10 to 1000 in order to cleanse the fibers of the agglutinant substances which may have remained in them after the mechanical treatment.

1,061,903. PUZZLE. DWIGHT FARNUM, Denver, Colo., assignor of one-half to Clifford M. Tyler, Boston, Mass. Filed Aug. 13, 1909. Serial No. 512,678. Renewed July 3, 1912. Serial No. 707,608. (Cl. 46—41.)

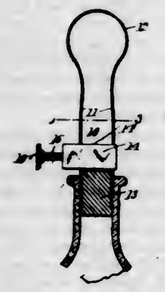
1. In a puzzle of the type described, the combination, in a suitable containing box, of a rectangular incline having a zig-zag groove cut in its face; with a relatively horizontal surface at the upper end of the said incline; with a second rectangular incline suitably grooved, leading from the said horizontal surface to a second horizontal surface, the second incline lying adjacent to, but above the first incline; with two grooves in the shape of an X leading from the second horizontal surface to a rounded knoll and two branches of the said X-grooves forming diverting channels; with the said knoll adjacent to, and above the second incline; and a suitable inclosure on the crest of the said knoll, as specified.

2. In a puzzle, the combination of a plurality of inclined adjacent surfaces sloping consecutively in opposite directions and lying consecutively one above another; with a suitable X-grooved surface leading from the uppermost one of the said inclined surfaces and two branches of the X forming diverting channels; with a suitable knoll, the said knoll being situated adjacent to, and in order following, the said grooved surface; and a suitable inclosure surmounting the said knoll; as, and for the purpose specified.



3. In a puzzle, the combination with an inclined surface, of an adjacent X-grooved surface leading from the upper end thereof with branches of the X forming diverting channels; a rounded knoll approached by the said X-grooved surface, and a suitable inclosure surmounting the said knoll for the purpose specified.

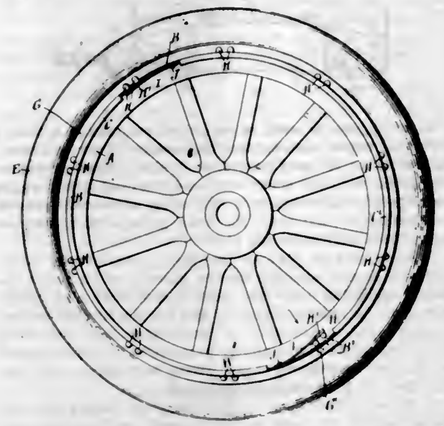
1,061,904. CORK-PULLER. ANDREW FINSEL, Elizabeth, N. J. Filed Oct. 1, 1912. Serial No. 723,297. (Cl. 65—46.)



In a cork puller, the combination of a gripper comprising a pair of spaced fingers and a bow connecting the same, and a clamp coöperating with said gripper, said clamp comprising a sleeve embracing said fingers and movable longitudinally thereof and having parallel upper edges for coöperation with said bow when the sleeve is adjacent the bow and a screw operating through one end of the sleeve and coöperating with one of said fingers when the sleeve is remote from the bow, substantially as set forth.

1,061,905. TIRE-FASTENER. LUKE G. FLEMING, Tarrytown, N. Y. Filed Oct. 5, 1912. Serial No. 724,047. (Cl. 152—21.)

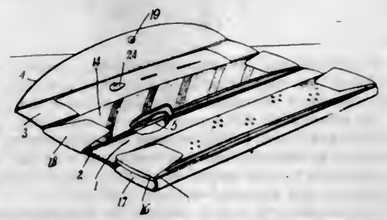
1. In combination with a wheel rim provided at the inner side with a retainer for engagement with the inner side of a tire, a detachable fastening ring removably fitting the outer peripheral face of the said rim at the outer side, the outer side of the rim having spaced apertures outside the said fastening ring, a series of swing arms arranged on the inner face of the rim and spaced approximately equal distances apart, each swing arm being connected at one end with the rim to allow of swinging the arm in a vertical plane and in a transverse direction, and pins on the free ends of the said swing arms and adapted to register with and engage the said apertures from the inner face of the rim, the said pins when out of register with the said apertures reating against the inner face of the rim and the said pins when in engagement with the said apertures projecting beyond the peripheral face of the rim and engaging the fastening ring on the outside thereof.



2. In combination with a wheel rim provided at the inner side with a retainer for engagement with the inner side of a tire, a detachable fastening ring removably fitting the outer peripheral face of the said rim at the outer side, the outer side of the rim having spaced apertures outside the said fastening ring, a series of flat springs spaced approximately equal distances apart on the inner face of the rim, each spring being pivotally connected at one end to the rim to permit of swinging the spring transversely and to bend the spring in a vertical plane, the springs normally resting against the inner face of the rim, and pins attached to the free ends of the springs and adapted to extend through the said apertures and engaging the said fastening ring on the outside thereof, the said pins being adapted to abut against the inner face of the rim at the time the springs are swung transversely into inactive position and the pins are out of register with the said apertures.

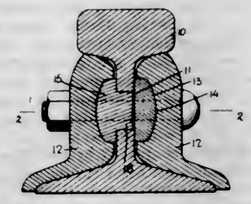
3. In combination with a wheel rim provided at one side with a retainer for engagement with one side of the pneumatic tire, a detachable clenching ring removably fitting on the other side of the said rim, the latter having spaced apertures and the clenching ring having recesses at the outer face in register with the said rim apertures, pins adapted to pass through the rim apertures and having segmental cut-out portions fitting the bottoms of the said recesses, and springs carrying the said pins and attached to the inner face of the rim.

1,061,906. NECKTIE-CASE. THOMAS PAUL FORMAN, Waterbury, Conn. Filed Apr. 5, 1912. Serial No. 688,647. (Cl. 206—44.)



In a necktie case or holder a body portion, a plurality of spaced stiffening members arranged in said body portion and extending entirely across the body portion, each of the said stiffening members having a pair of turned up ears at each end, a clamping plate arranged at each end of each of said stiffening members formed with turned down ears co-acting with the ears of said stiffening members, a pintle at each end of each of said stiffening members for connecting said clamping plate therewith, and a spring acting on each of said clamping plates and on each of said stiffening members for causing the clamping plate to tend to press against said stiffening members whereby the article placed in said holder will be held therein frictionally.

1,061,907. RAIL-JOINT. JOHN F. FORSYTH, Bloomington, Ind., assignor of one-third to Horace Blakely, Bloomington, Ind. Filed Jan. 30, 1913. Serial No. 745,120. (Cl. 239—13.)



1. In a rail joint, each extremity of the webs of the rails having a recess therein, a pair of splice plates, fillers of material in said plates of a higher coefficient of friction with the webs of the rail than said plates, said fillers adapted to contact with the sides of the webs of the rail when the joint is formed, one of said plates having means adapted to engage said recesses in the rails, and means for clamping said plate to the rails.

2. In a rail joint, each extremity of the webs of the rails having a recess therein, a pair of splice plates, fillers of wood in said plates adapted to contact with the sides of the web of the rail, one of said plates having means adapted to engage said recess in the rails, and means for clamping said plates to the ends of the rails.

3. In a rail joint, each extremity of the webs of the rails having a recess therein, a pair of splice plates each having a longitudinal groove in the face oposite the web of the rail, one of said plates having a projection portion adapted to engage the recesses in said extremities of the rail, wooden fillers in said grooves of said plates, adapted to contact with the webs of the rail, and means for connecting said plates to the rails.

4. In a rail joint, each extremity of the webs of the rails having a recess, a pair of splice plates each having a longitudinal groove extending through the entire length of said plate, and lying opposite the side of the web of the rail, a key in the groove in one of said plates, substantially midway its ends, said key having a projection adapted to engage said recesses in said rails, wooden fillers in said grooves adapted to contact with the sides of the webs of the rail, and means for connecting said plates to the rails.

5. In a rail joint, each extremity of the webs of the rails having a recess, a pair of splice plates each having a longitudinal groove extending through the entire length of the plate, and facing the sides of the webs of the rails when forming the joint, said grooves having a curved bottom, a key in the groove of one of said plates substantially midway the ends of the plate, said key having a head portion fitting snugly into said groove, and a projecting portion fitting tightly between the upper and lower sides of said recess in the webs of the rails, wooden fillers in said grooves, and means for binding said plates to the rails.

1,061,908. RAILWAY-CAR HOSE-COUPLING. WALTER GAMBONI, Olema, Cal. Filed Aug. 14, 1912. Serial No. 715,037. (Cl. 188—13.)

1. An automatic hose coupling for railway cars comprising coupling heads having flaring wings to guide the

coupling heads into position when the cars are brought together and the coupling heads are to be interlocked, means for automatically locking the coupling heads together, flexible fluid conductors connecting the coupling heads with telescoping members secured to the cars, and means controlled by the telescoping members for automatically opening or closing the air line when the couplings are connected or disconnected.



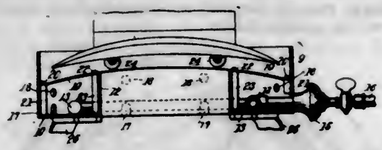
2. An automatic hose coupling for railway cars comprising coupling heads having flaring wings to guide the coupling heads into position when the cars are brought together and the coupling heads are to be interlocked, means for automatically locking the coupling heads together, means for automatically unlocking the coupling heads when the cars are parted, flexible fluid conductors connecting the coupling heads with telescoping members secured to the cars, and means controlled by the telescoping members for automatically opening or closing the air line when the couplings are connected or disconnected.

3. An automatic hose coupling for railway cars comprising coupling heads having flaring wings to guide the coupling heads into position when the cars are brought together and the coupling heads are to be unlocked, spring-actuated latches in each coupling head adapted to automatically interlock with flanges in the opposite coupling head when the heads are brought together, means for automatically releasing the latches when the cars are parted, flexible fluid conductors connecting the coupling heads with telescoping members secured to the cars, and means controlled by the telescoping members for automatically opening or closing the air line when the couplings are connected or disconnected.

4. An automatic hose coupling for railway cars comprising coupling heads having flaring wings to guide the coupling heads into position when the cars are brought together and the coupling heads are to be interlocked, flanges formed on the inner periphery of the coupling heads, spring-actuated latches in each coupling head adapted to automatically interlock with the flanges in the opposite coupling head when the heads are brought together, means for automatically releasing the latches when the cars are parted, flexible fluid conductors connecting the coupling heads with telescoping members secured to the cars, a plurality of by-pass ports in said telescoping members, and means controlled by the telescoping members for automatically opening or closing the air line when the couplings are connected or disconnected, said means comprising annular sleeves actuated by the telescoping member, said sleeves adapted to open or close the by-pass ports forming communication between the telescoping members and the coupling proper.

5. An automatic hose coupling for railway cars comprising coupling heads having flaring wings to guide the coupling heads into position when the cars are brought together and the couplings are to be interlocked, flanges formed on the inner periphery of the coupling heads, spring-actuated latches in each coupling head adapted to automatically interlock with the flanges in the opposite coupling head when the heads are brought together, links connecting the latches with flexible rods actuated to release the latches when the cars are parted, flexible fluid conductors connecting the coupling heads with telescoping members secured to the cars, a plurality of by-pass ports in said telescoping members, and means controlled by the telescoping members for automatically opening or closing the air line when the couplings are connected or disconnected, said means comprising annular sleeves actuated by the telescoping members, said sleeves adapted to open or close the by-pass ports forming communication between the telescoping members and the coupling proper.

1,061,909. HEATER FOR HAT-BRIMS. MAX HEASHKOWITZ and JOSEPH FRIEDMAN, New York, N. Y. Filed Oct. 22, 1912. Serial No. 727,127. (Cl. 223—23.)



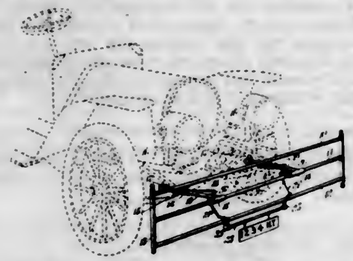
1. An apparatus such as described, comprising a heater having a central opening for the passage of air; a radiating top plate for said heater, said plate being curved to correspond with the curve of the average hat brim; and a plurality of supporting rods extending across said heater for holding the hat with the brim juxtaposed to and removed from said radiating plate.

2. An apparatus such as described, comprising a heater having a central opening for the passage of air; an oval-shaped radiating plate for said heater, said plate being curved on its longest diameter and having an oval central opening; and a plurality of supporting rods extending across said plate substantially parallel to the short diameter thereof to support a hat above said plate, with the brim thereof juxtaposed to said plate.

3. An apparatus such as described, comprising an oval-shaped heater the open center whereof conforms in shape to the average hat crown opening; a cover plate for said heater, having an oval central opening corresponding with said central opening in said heater, said plate being curved lengthwise the longest diameter of said openings; and a plurality of removable supporting rods resting on said heater and separated from said plate.

4. An apparatus such as described, comprising an oval-shaped heater the open center whereof conforms in shape to the average hat crown opening; a cover plate for said heater, having an oval central opening corresponding with said central opening in said heater, said plate being curved lengthwise the longest diameter of said openings; a plurality of removable supporting rods resting on said heater and separated from said plate; and a plurality of oppositely-disposed socket brackets to hold said rods in parallel relation to each other and to the other diameter of said openings.

1,061,910. AUTOMOBILE NUMBER CARRIER AND DROP. GEORGE H. HEWITT, Jr., Jersey City, N. J. Filed Dec. 20, 1909. Serial No. 534,094. (Cl. 116—31.)



1. In combination, an automobile license number tag, a trip, means for supporting said tag from said trip, and means whereby a movement of the trip releases the tag.

2. An attachment for motor vehicles, comprising a rod, two bell crank levers having sockets for receiving the ends of said rod, an identification tag carried by said rod, and a trip connected to said levers for moving them to inoperative position and dropping said rod and tag.

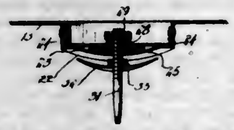
3. In combination with a vehicle, an identification device, arms for retaining said device in position upon the vehicle, yielding means for holding said arms in their operative position, and means adapted to be struck by an object in the path of a vehicle for causing said arms to assume their inoperative position whereby the device will be released.

4. In combination with a vehicle, means for engaging an identification device, an identification device adapted to be held in position on the vehicle by said means, said device being adapted to fall by gravity from its position when said means are removed from engagement therewith, and means adapted to be struck by an object in the path of the vehicle for moving said first-mentioned means out of engagement with said device.

5. In combination with a vehicle, a fender yieldingly mounted on the vehicle, oppositely arranged members mounted on the fender to move toward and from each other, an identification tag having means engaged by said members for holding the same, and means for operating the said members to move them apart and thereby release the tag when said fender moves rearwardly upon encountering an object.

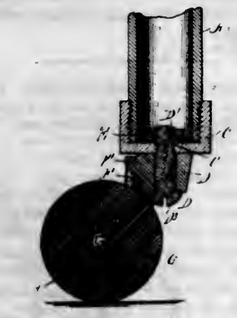
[Claims 6 to 9 not printed in the Gazette.]

1,061,911. DAMPER FOR HEATING-STOVES. JAMES F. HICKENBOTTOM, Flora, Ill. Filed Apr. 6, 1912. Serial No. 688,918. (Cl. 126—290.)



In a heating stove the combination of a body having an opening therein, a door hinged to the body for closing said opening, said door being provided with an opening in its lower end, an outwardly extending tubular portion, an inwardly directed flange on the outer end of said portion, a plate disposed against the inner face of said flange and secured to the tubular portion, said plate being provided with spaced openings, inwardly bent ears at the adjacent edges of said openings, a block clamped between said ears provided with a threaded passage and registering with an opening in said plate, a bolt mounted in said threaded passage, a disk carried by said bolt and disposed outwardly of said plate whereby the rotation of the bolt will move the disk to cover and uncover the openings in the plate, and said outer casing being provided with perforations in its top portion.

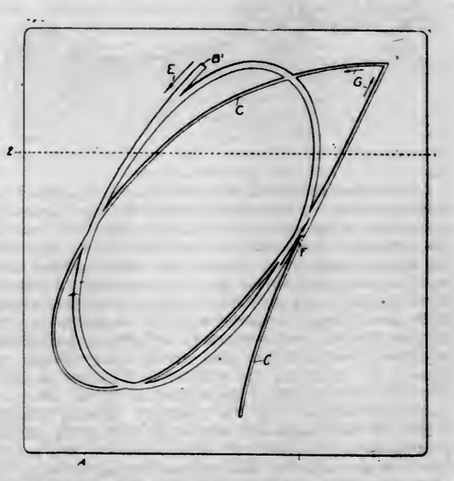
1,061,912. CASTER. JOHN WILLIS HILFRANK, White Plains, N. Y. Filed Sept. 10, 1912. Serial No. 719,505. (Cl. 16—4.)



1. A caster, comprising a cap provided with an interior screw thread adapted to screw on the lower threaded end of a tubular leg, the cap being provided with a central threaded bore, a pintle having a smooth lower portion, a threaded upper portion screwing in the said bore and a head on the lower smooth portion, a caster wheel, and jaws in which the said wheel is journaled and swiveled on the said smooth portion of the pintle.

2. A caster, comprising a cap provided with an interior screw thread adapted to screw on the lower threaded end of a tubular leg, the cap being provided with a central threaded bore, a pintle having a smooth lower portion, a threaded upper portion screwing in the said bore and a head on the lower smooth portion, a caster wheel, jaws in which the said wheel is journaled and swiveled on the said smooth portion of the pintle, and a jam nut screwing on the upper end of the said threaded pintle portion and abutting against the cap.

1,061,913. MEANS FOR PRODUCING A CORRECT WRITING HABIT. MARGARET M. HUGHES, New York, N. Y. Filed Oct. 17, 1912. Serial No. 726,274. (Cl. 35—8.)



1. Means for producing a correct writing habit and for teaching the formation of indicating characters, comprising a practice guideway for guiding a tool in the hands of a pupil, and a guideway representing an indicating character and connected with the said practice guideway to allow the tool to pass from one to the other without interruption of the movement of the pencil.

2. Means for producing a correct writing habit, and for teaching the formation of indicating characters, comprising an endless practice guideway for guiding the point of a tool in the hand of a pupil, and an indicating character guideway representing in outline an indicating character and connected with and starting from the said endless guideway.

3. Means for producing a correct writing habit and for teaching the formation of the letters of the alphabet, comprising a plate having in its face an oval practice guideway in the form of a groove, and a second guideway in the form of a groove and representing in outline a letter of the alphabet, the said second guideway having its beginning end at a point in the said practice groove.

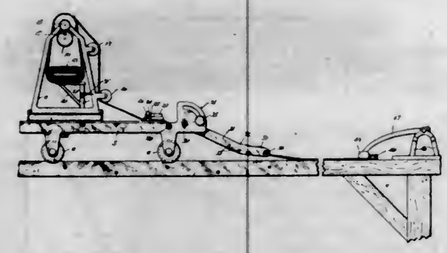
4. Means for producing a correct writing habit and for teaching the formation of the letters of the alphabet, comprising a plate having in its face an oval practice guideway in the form of a groove, and a second guideway in the form of a groove and representing in outline a letter of the alphabet, the said second guideway having its beginning end at a point in the said practice groove, the said practice guideway and the said second guideway being differentiated to ocularly distinguish one from the other.

5. Means for producing a correct writing habit and for teaching the formation of the letters of the alphabet, comprising a plate having in its face an oval practice guideway in the form of a groove, a second guideway in the form of a groove and representing in outline a letter of the alphabet, the said second guideway having its

beginning end at a point in the said practice groove, the said practice guideway being wider than the said second guideway.

[Claims 6 and 7 not printed in the Gazette.]

1,061,914. CLOTH-LAYING MACHINE. MOSES ISAACS, New York, N. Y. Filed Mar. 13, 1912. Serial No. 683,514. (Cl. 223—3.)



1. A cutter attachment for a cloth laying machine comprising a relatively stationary member having a plurality of recesses in its upper face, a longitudinal slot therein, and a relatively movable member consisting of a bar having a plate yieldably attached to the bottom thereof, said bar and said plate having slots therethrough to register with the slot in the stationary member, said plate having holes therethrough to register with the recesses in the stationary member, and a plurality of pointed projections to extend from the lower surface of said bar through the holes in the plate into the recesses in the lower member, when the cloth is laid on the upper face of the relatively stationary member, and the relatively movable member is brought into engagement therewith, so that the pointed projections on the relatively movable member will engage the cloth and hold the same against movement when the cutter knife is moved through the guide slots to sever the cloth.

2. In a cloth laying machine, a tensioning attachment consisting of a bar adapted to rest upon the top surface of the cloth that is being laid, a pair of sliding shoes pivoted to the ends of the bar adjacent the forward edge thereof, guide blocks receiving said sliding shoes, said sliding shoes having slots therein, and fastening bolts passing through said slots and engaging said guide blocks to hold said sliding shoes and the forward edge of said bar in adjusted position.

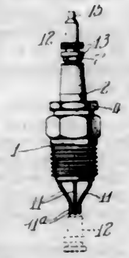
3. Cloth laying apparatus comprising a stand and uprights arranged in two pairs on opposite sides of said stand, said pairs of uprights being spaced apart, a movable truck having a guide frame projecting from one end, said frame being adapted to move between said uprights from one pair to another, transverse bars engaging the sides of said uprights around which bars the cloth is adapted to be folded, said bars being removable to permit any number of folds of cloth to be laid down between the uprights by the cloth laying machine as may be desired, and a vertical rack bar associated with each member of one pair of said uprights, said rack bar having notches in its face, in which one of the transverse rods is received.

4. Cloth laying apparatus comprising a movable truck having an inclined pivoted support mounted on the top thereof, and means for raising and lowering the upper edge of said inclined pivoted support, said support serving as a guide for a folded pile of cloth, to keep the same from being pulled over or tumbled as the cloth is paid out.

5. A cloth laying device comprising a smooth plate over which the cloth passes, and a tension device comprising a transverse bar supported above said plate and adapted to rest upon the cloth, said bar having a facing of fabric to engage the upper surface of the cloth and tension the same as the cloth is paid out.

[Claims 6 to 11 not printed in the Gazette.]

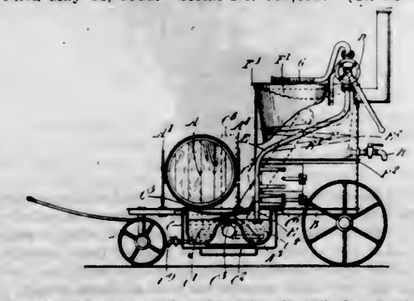
1,061,915. SPARK-PLUG. CHARLES F. JOHNSTON, Marshalltown, Iowa, assignor of one-half to Charles C. Eldridge and one-half to Edwin J. Beebe, Marshalltown, Iowa. Filed Feb. 4, 1911. Serial No. 606,477. (Cl. 123—169.)



1. An improvement in spark plugs comprising a casing adapted to be screwed into an engine cylinder, an insulating sleeve supported by said casing, a central electrode extending through said sleeve and projecting from one end thereof, and four electrodes of opposite polarity to said central electrode and arranged substantially symmetrically around the latter, the outer electrodes being each fixed at one end to the inner end of the casing, the free ends of said outer electrodes being bent to lie approximately parallel to said central electrode to form a screen to prevent carbon from bridging the space between said central electrode and any of said outer electrodes, said parallel ends creating a large spark and serving to break up the incoming charge of fresh gases into eddy currents, whereby the electrodes will be scoured at each cycle of the engine.

2. An improvement in spark plugs comprising a casing adapted to be screwed into an engine cylinder, an insulating sleeve supported by said casing, a central electrode extending through said sleeve and projecting from one end thereof, and four electrodes of opposite polarity to said central electrode and arranged substantially symmetrically around the latter, the outer electrodes being each fixed at one end to the inner end of the casing, the free ends of said outer electrodes being bent to lie approximately parallel to said central electrode to form a screen to prevent carbon from bridging the space between said central electrode and any of said outer electrodes, said parallel ends creating a large spark and serving to break up the incoming charge of fresh gases into the eddy currents, whereby the electrodes will be scoured at each cycle of the engine, said electrodes being uninclosed and all extending far enough from said casing and said insulating member respectively to project beyond the zone of dead gases normally within the engine cylinder, whereby prompt ignition is insured.

1,061,916. PORTABLE TAR-BOILING APPARATUS. JAMES THOMAS MITCHELL JOHNSTON, London, England. Filed May 31, 1912. Serial No. 700,892. (Cl. 94—6.)



1. An apparatus of the character described comprising a receiver and means for heating same, a curved inner bottom in said receiver, dividing the same into substantially two chambers, separated by an arch in said bottom, means for supplying heat to the chamber beneath said arch, and means for feeding the cold tar into one chamber and for drawing off the heated tar near the top of the other chamber, substantially as described.

2. An apparatus of the character described comprising a receiver and means for heating same, a curved inner bottom in said receiver, dividing the same into substantially two chambers, and means for feeding the cold tar into one chamber and for drawing off the heated tar near the top of the other chamber, and means for further heating the tar drawn off from said second chamber, substantially as described.

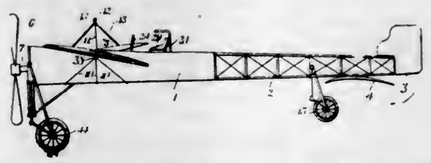
3. An apparatus of the character described comprising a receiver and means for heating same, a curved inner bottom in said receiver, dividing the same into substantially two chambers, means for feeding the cold tar into one chamber and for drawing off the heated tar near the top of the other chamber, comprising a barrel holder above said receiver with a deflecting plate mounted above said receiver and beneath said barrel holder, adapted to deflect the cold tar into one of said chambers and to permit the heated tar to flow in a thin stream to the other chamber, substantially as described.

4. An apparatus of the character described comprising a receiver and means for heating same, a curved inner bottom in said receiver, dividing the same into substantially two chambers, means for feeding the cold tar into one chamber and for drawing off the heated tar near the top of the other chamber, comprising a barrel holder above said receiver with a deflecting plate mounted above said receiver and beneath said barrel holder, adapted to deflect the cold tar into one of said chambers, and means for further heating the tar drawn off from said second chamber, substantially as described.

5. An apparatus of the character described comprising a receiver and means for heating same, a curved inner bottom in said receiver, dividing the same into substantially two chambers, means for feeding the cold tar into one chamber and for drawing off the heated tar near the top of the other chamber, strainers for the heated tar, and a pump for pumping said heated tar through said strainers, substantially as described.

[Claim 6 not printed in the Gazette.]

1,061,917. AEROPLANE. SILAS N. MALTERNER, Canton, N. Y. Filed May 20, 1911. Serial No. 628,427. (Cl. 244—29.)



1. An aeroplane comprising a main frame and a transverse shaft or spar supported in the sides of said frame and extending laterally therefrom, a sleeve surrounding said shaft and being rotatable thereon, a lifting plane forming a wing for the aeroplane, rigidly attached to said sleeve, an arm carried upon the end of said sleeve within the frame, a member pivotally mounted upon the inner end of said sleeve, and means for adjustably connecting said member and said arm, whereby said arm can be moved relatively to said member to adjust said wing, and whereby the member can be moved to adjust the wing without producing relative movement of said arm and member.

2. An aeroplane comprising a frame, a transverse shaft or spar mounted in said frame and extending laterally therefrom, a sleeve rotatably mounted on the said spar, a lifting plane forming a wing for the aeroplane, rigidly secured to the sleeve, the inner end of said sleeve extending within the frame, a rock arm rigidly secured to the inner end of said sleeve, a member loosely journaled upon the inner end of said sleeve and having adjustable connection with said arm, said member having relative movement around said sleeve as an axis, means for actuating said arm, and separate means for actuating said member, whereby the angle of inclination of the wing can be adjusted by operating the arm alone, and, whereby the angle of inclination of the wing can be adjusted by operating the member without producing relative movement of said arm and member.

3. An aeroplane comprising a main frame, a transverse shaft or spar carried by said frame and extending laterally therefrom, sleeves rotatably mounted upon the said spar and extending within the frame, lifting planes rigidly secured to said sleeves to rotate therewith, said planes forming the wings for the aeroplane, arms secured to the inner ends of said sleeves, a yoke-shaped member loosely mounted upon the inner ends of said sleeves and between the said arms and the sides of the frame, a lever for actuating said yoke, a yoke-shaped lever pivotally connected to a transverse bar for actuating said arms, the ends of said transverse bar having linked connection with the lower ends of said arms, whereby, when the lever is moved to right or left, the wings of the aeroplane can be adjusted in opposite directions, said transverse bar being pivotally mounted on a projection extending from the bottom of said yoke, whereby the movement of said yoke will adjust the wings without producing movement of the said arms relative to said yoke, and a lever mounted on the rear of the aviator's seat to be swung to one side or the other, the lower end of said lever having an opening therethrough to receive the end of the yoke-shaped lever, said lever pivoted on the aviator's seat having a yoke-shaped upper end, the arms of which are arranged at both sides of the aviator's seat, whereby the aviator may lean to one side or the other to actuate said lever and the yoke-shaped lever to adjust the said wings.

4. An aeroplane comprising a main frame having a transverse shaft or spar extending laterally therefrom, a lifting plane forming a wing for the aeroplane, adjustably supported by said spar, an arm secured to said wing, and a pivoted member adjustably connected to said arm, said member being mounted concentric with said wing, whereby when said arm is moved with respect to said pivotally-mounted member the wing will be adjusted, and whereby when the pivotally-mounted member is moved the wing will be adjusted through the connection of said member with said arm, without relative movement of said arm or member.

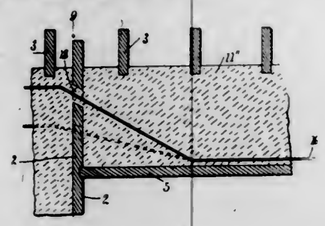
5. An aeroplane comprising a frame having a transverse shaft or spar supported thereby and extending laterally therefrom, a rotatable sleeve carried by said shaft, a lifting plane forming a wing for the aeroplane rigidly attached to the sleeve, an arm carried upon the end of said sleeve, a pivotally-mounted member adjustably connected to said arm, and means for moving said arm and said member independently of each other, whereby when the arm is moved the wing will be adjusted, and whereby when the member is moved the wing will be also adjusted through the adjustable connection of said member with said arm, without producing relative movement of said member and arm.

[Claims 6 to 14 not printed in the Gazette.]

1,061,918. WALL CONSTRUCTION. ADOLPH F. MEYER, St. Paul, Minn. Filed Apr. 27, 1912. Serial No. 693,565. (Cl. 72—50.)

1. A wall construction, comprising a framework including studding and door and window framing, the studding at the sides of each door and window framing being provided with comparatively large openings above the framing integrally cast blocks between the studding on opposite sides of the framing, and an integrally cast beam between the studding above the door and window framing, the material forming the blocks and beam filling the openings in the studding and having embedded therein reinforcing members which are also embedded in the blocks and beam.

2. A wall construction, comprising a framework including studding and door and window framing, the studding at the sides of each door and window framing being provided with comparatively large openings above the framing, integrally cast blocks between the studding at the sides of the framing, an integrally cast beam between the studding above the framing, the material forming the blocks and beam filling the openings of the studding and having embedded therein reinforcing members which are also embedded in the beam and blocks, and members of a length greater than the thickness of the studding, resting on the bottoms of the openings of the studding and embedded in the blocks and beam.



3. A wall construction, comprising a framework including studding and door and window framing, the studding on each side of each door or window framing being formed with openings above said framing, integrally cast blocks arranged in the spaces between the studding at opposite sides of the door or window framing, an integrally cast beam arranged above said framing and formed with projecting end portions extending through said openings, and reinforcing rods embedded in the said beams and extending through the said openings, the end portions of the said beams and the reinforcing rods engaging and supported by the blocks in the spaces between the studding at each side of the door or window framing.

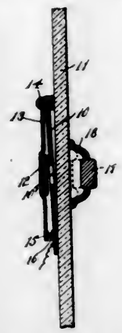
4. A wall construction, comprising a framework including studding and door and window framing, the studding on each side of the door or window framing being provided with one or more openings above said framing, integrally cast blocks in the spaces between studding at opposite sides of the framing, an integrally cast beam arranged above the door and window framing and formed with projecting end portions extending through the openings of the studding and engaged and supported by the blocks between the studding, metal plates in the bottoms of the said openings and of a length greater than the thickness of the studding, said plates being embedded in said blocks and beam, and reinforcing rods passing through the openings in the studding and embedded in the said beams and blocks.

1,061,919. MAGNETIC SWITCH. CLIFFORD G. MILLER, New York, N. Y. Filed Sept. 19, 1912. Serial No. 721,158. (Cl. 177—10.)

1. In a device of the character set forth, the combination with a support, of a plate secured on one side of the support, an arm movably connected to said plate, a magnet carried by the arm, and an armature secured on the opposite side of said support and movable toward and from said plate.

2. In a device of the character set forth, the combination of a vertical support, a plate secured on one side of said support and having a face inclined from its upper edge downward toward said support, an arm pivoted at its upper end to the upper portion of the plate, a magnet carried by the arm and hence spaced at its lower end from the lower portion of the plate, and an armature secured to the opposite side of the support from the plate and movable toward and from the same into and out of the magnetic field of the magnet.

3. In a magnetic switch, the combination of an imperforate support, a plate secured on one side of the support, a pair of contact points carried by the plate, an arm pivotally connected to the plate and adapted to bridge said contact points, a magnet carried by the arm, and an armature secured to the opposite side of the support from the plate and movable into the magnetic field of the magnet, substantially as set forth.

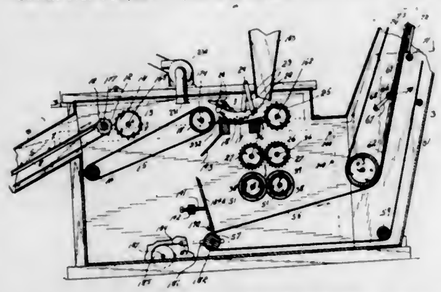


4. In a device of the character described, the combination of a support, an arm movable toward and from said support, a magnet rigidly secured to said arm, an armature on the other side of and movable toward and from said support, and a flexible cup connected with said support and with said armature whereby said armature is held resiliently in position away from said support.

5. In a device of the character described, the combination of a support, an arm movable toward and from said support, a magnet secured to said arm, an armature on the opposite side of said support to said magnet and movable toward and from said magnet whereby both the magnet and the armature are movable, and a flexible cup supporting said armature and secured to said support.

[Claim 6 not printed in the Gazette.]

1,061,920. FORAGE-GRANULATING MACHINE. WILLIAM L. MONROE, Denver, Colo. Filed July 23, 1909. Serial No. 509,247. (Cl. 146—29.)



1. A granulating machine, including a shelf having a downwardly inclined plate at its forward extremity for separating the heavier material from the leaves and lighter material, means separated from the shelf for conveying material thereto, a picker drum arranged in the rear of the shelf, a rake arranged to reciprocate on the said shelf for feeding material to the picker drum, substantially as described.

2. A granulating machine including a shelf having a forwardly located downwardly inclined plate for separating the heavier foreign material from the leaves and lighter material, means separated from the said shelf for conveying material thereto, and a rake reciprocably mounted above the shelf for the purpose set forth.

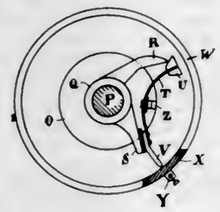
3. A granulating machine including an endless traveling conveyer, a set of reciprocating rakes arranged at the end of the endless traveling conveyer, a shelf arranged below the rakes and also at the end of the endless traveling conveyer, the said shelf being arranged to receive the material from the conveyer, and a coöperating picking drum arranged in the rear of the shelf and to which the material is delivered by the rakes from the said shelf, substantially as described.

4. A granulating machine including an endless traveling belt, a roll arranged at the forward extremity of the said belt and provided with teeth arranged to retard the travel of the material, a coöperating picking drum, a shelf positioned at the rear end of the said belt and arranged to receive the material from the said belt, a set of reciprocating rakes arranged above the shelf, and a second picking drum in the rear of the shelf, for the purpose set forth.

5. A granulating machine comprising a conveyer, means for retarding the material, and a picker drum coöperating with the said means arranged at the forward end of the conveyer, a set of reciprocating rakes arranged at the rear end of the conveyer, a shelf arranged below the rakes and also at the rear end of the conveyer, the said shelf being arranged to receive the material from the conveyer, and a picking drum arranged in the rear of the shelf and to which the material is delivered by the rakes from the said shelf, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,061,921. IGNITION-CONTROLLER FOR INTERNAL-COMBUSTION ENGINES. MARTIN OUSTAD, Hamar, Norway. Filed Mar. 13, 1913. Serial No. 754,088. (Cl. 123—118.)

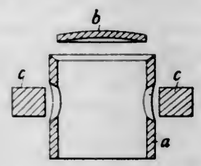


1. In ignition controllers for internal combustion engines, a rotating shaft, a sleeve thereon, radially projecting arms on said sleeve, an electrically insulated plate spring mounted on one arm the free end of said spring being provided with a lug bearing against the pointed end of the other arm, a brush connected with said spring, said brush being adapted to engage periodically an insulated contact piece one lead of the ignition current being connected with said contact piece and the other lead with the rotating shaft so that the ignition current is closed periodically as long as the motor does not exceed a predetermined speed, the centrifugal force driving the free end of the spring out of contact with the pointed arm if the motor runs too fast, so as to interrupt the ignition current and keep it interrupted until the motor has regained its normal speed.

2. In ignition controllers for internal combustion engines, a rotating shaft, a sleeve thereon, radially projecting arms on said sleeve, an electrically insulated plate spring mounted on one arm the free end of said spring being provided with a lug bearing against the pointed end of the other arm, means comprising a slidably mounted wedge-shaped longitudinal projection for acting on said spring to adjust the pressure between the said lug and the said pointed arm, a brush connected with said spring, said brush being adapted to engage periodically an insulated contact piece one lead of the ignition current being connected with said contact piece and the other lead with the rotating shaft so that the ignition current is closed periodically as long as the motor does not exceed a predetermined speed, the centrifugal force driving the free end of the spring out of contact with the pointed arm if the motor runs too fast, so as to interrupt the ignition current and keep it interrupted until the motor has regained its normal speed.

3. In ignition controllers for internal combustion engines a rotating shaft, a sleeve thereon, radially projecting arms on said sleeve, an electrically insulated plate spring mounted on one arm the free end of said spring being provided with a lug bearing against the pointed end of the other arm, a brush connected with said spring, said brush being adapted to engage at a certain point during each revolution of said shaft, an insulated contact piece mounted upon an adjustable ring one lead of the ignition current being connected with said contact piece and the other lead with the rotating shaft so that the ignition current is closed periodically as long as the motor does not exceed a predetermined speed, the centrifugal force driving the free end of the spring out of contact with the pointed arm if the motor runs too fast, so as to interrupt the ignition current and keep it interrupted until the motor has regained its normal speed.

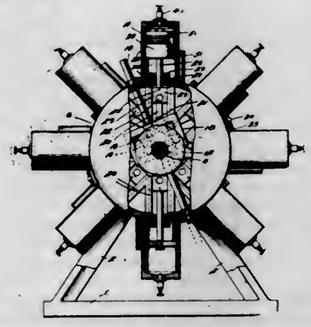
1,061,922. METHOD OF MAKING HOLLOW PISTONS. HUBERT HARRY PATRICK, Handsworth, Birmingham, England, assignor to The Oxygen Welding Works Limited, Birmingham, England. Filed May 6, 1912. Serial No. 695,361. (Cl. 29—148.)



1. The method herein described of making hollow pistons with inwardly projecting bearing bosses, consisting in forming oppositely arranged openings in an open ended tubular body at about its center of length, securing bearing bosses in said openings to extend into the body, and securing a plate on one end of the said body.

2. The method herein described of making hollow pistons with inwardly projecting bearing bosses, consisting in forming oppositely arranged openings in an open ended tubular body at about its center of length, securing solid blocks in said openings to extend into the body, forming bores in said blocks whereby to form said blocks into hollow bearing bosses for the reception of a gudgeon pin, and securing a plate on one end of said body.

1,061,923. INTERNAL-COMBUSTION ENGINE. JAMES C. PEALER, Marion, Ind., assignor of one-half to John W. Kelley. Filed June 25, 1912. Serial No. 705,753. (Cl. 123—44.)



1. In an engine, the combination with a fixed shaft and a rotating shaft, of a plurality of cylinders rotating around said fixed shaft, piston rods carrying pistons sliding in said cylinders, sliding cross heads to which said rods are connected, piston links connected to said cross heads, a bearing for said links, a rectangular shaped yoke embracing said bearing near one end, and a reciprocating

guide rod for said bearing and yoke and a single element fixed on said rotating shaft against which the valve rods of each of said cylinders successively contact in their rotation.

2. In an engine, the combination with a fixed shaft and a rotating shaft, of a plurality of cylinders rotating around said fixed shaft, piston rods carrying pistons sliding in said cylinders, sliding cross heads to which said rods are connected, piston links connected to said cross heads, a bearing for said links, a rectangular shaped yoke embracing said bearing near one end, a reciprocating guide rod for said bearing and yoke, valves for said cylinders, valve rods for said valves, and a stationary cam carried by the rotating shaft with which said valve rods contact successively.

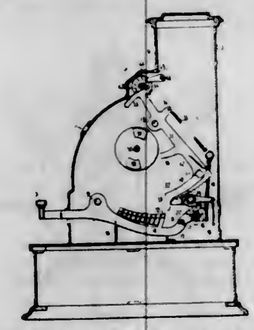
3. The combination with a revolving drum carrying piston cylinders, of a rotating shaft secured thereto, a stationary cam on said shaft, valve rods carrying valves for said cylinders adapted to successively contact with the cam, a fixed shaft carrying a crank having a wrist pin, a cylindrical bearing carried thereby, piston links secured in said bearing, piston rods connected to said links and carrying pistons controlled by said piston valves, and means embracing one end of the piston link bearing and movable therewith for securing the same in position.

4. In an engine, in combination, a fixed shaft and a rotating shaft, a crank on said fixed shaft, a wrist pin carried thereby, a bearing in which said pin is journaled, piston links secured in said bearing at one end and in cross heads at the other end, piston rods fastened in said cross heads, guides in which said cross heads slide, a drum carrying cylinders revolving with said rotating shaft, piston heads carried by said piston rods, offset portions on said cylinders, valves in said portions, a stationary cam on said rotating shaft against which the valve rods successively contact, and an open rectangular frame secured to the bearing and having a guide rod passing through the yoke and casing.

5. In an engine, the combination of a fixed shaft, a disk thereon, a wrist pin on said disk, a bearing therefor, piston rods connected to said bearing, an open rectangular yoke embracing one end of the bearing and eccentric with reference to the fixed shaft, a guide rod for said yoke, and a rotating shaft carrying a rotating drum having cylinders rotating with said drum and shaft.

[Claim 6 not printed in the Gazette.]

1,061,924. CASH-REGISTER WITH A SINGLE SET OF KEYS. ROBERTO TAEGGI PISCICELLI, Florence, Italy. Filed July 2, 1909. Serial No. 505,729. (Cl. 235—3.)



1. In cash registers with a single row of keys for registering values composed of any number of figures, the combination of oscillating pieces, keys adapted when lowered to permit oscillation of the oscillating pieces a distance corresponding to the value of the numeral to be registered, rotating pieces in the path of which the oscillating pieces are adapted to be moved to stop the movement of the rotating pieces, until the oscillating pieces resume the position of rest, pins adapted to be projected from the periphery of the rotating pieces during the stop, the pins projected being of greater or less number according to the duration of the stop, a summing apparatus having disks, printing devices, indicators of the values cashed, and actuating mechanisms for the said disks, printing devices and indicators, the said projected pins coming in gear with the said actuating mechanisms, a series of stops for causing the pins to resume their position of rest, an indicator having disks showing the figures of the number already composed, the said oscillating pieces acting upon the disks of said indicator, to cause the previously composed figures to disappear each time that a registration is effected.

2. In cash registers with a single row of keys, oscillating pieces corresponding to the units of the various orders, and a device for rotating the oscillating pieces a distance proportional to the value of the figures to be registered by lowering successively several keys, the said device comprising a shaft, pawls for engaging the oscillating pieces to prevent forward movement of the same, cams arranged in a spiral line on said shaft and each in the plane of the tail of one of said pawls, a frame oscillating around said shaft, and which at each oscillation causes the shaft to rotate a distance equal to that comprised between two successive cams, whereby one of said cams is brought in position for raising the tail of the corresponding pawl and freeing the oscillating piece kept back by said pawl, each key when lowered producing the same degree of oscillation of the said frame, and a transverse bar carried by each key and brought into the path of the oscillating piece freed from the pawl, to limit the amplitude of its oscillation.

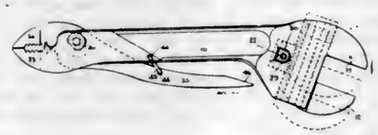
3. In a cash register having a key board with ten keys for registering values comprising any number of figures, key levers all mounted to turn on the same shaft and carrying key heads at one end, a rotatable cam shaft, oscillating pieces controlled by the cam shaft, an oscillating frame which produces the revolution of the cam shaft, the said oscillating frame having a cross bar beneath which the other ends of said key levers terminate, and transverse bars carried by the key levers for limiting the amplitude of oscillation of the oscillating pieces.

4. In cash registers with one row of keys, the combination with a key board and key levers, of a shaft provided with a series of cams arranged in a spiral line at equal intervals, two ratchet wheels at the ends of said shaft, each of which has teeth corresponding in number to the number of the cams, the said wheels being rotated the one with respect to the other by an interval corresponding to the half of the width of a tooth, an oscillating frame on said shaft having cross bars one of which extends over the inner ends of all the key levers, a pawl carried on one of the sides of the frame and sliding on one of said ratchet wheels causing the same to advance when a key is lowered a distance corresponding to the half of the angular width of the tooth, an arm connected with the other side of the said frame and carrying a second pawl which slides on the other ratchet wheel, the said pawl at the ascent of the key causing the said wheel to turn a distance equal to that caused by lowering the key, so that by lowering and raising the key the said shaft advances a distance corresponding to the width of a tooth, or the interval between two successive cams.

5. In cash registers, a single row of keys each having a lever provided with a transverse bar, an oscillating piece adapted when a key is lowered to rotate a distance the value of which corresponds to the value of the figure to be registered, the said oscillating piece consisting of an arm, a pivot on which said arm is mounted to turn, a spring fastened to said arm and adapted to turn the same when the arm is freed, a toothed sector at the top of said arm, an indicator of the figures of the number composed, having a disk, the said disk being acted upon by the toothed sector, a toothed sector at the lower end of said arm having angular teeth, the said toothed sector at the front end being provided with a tooth adapted when the said oscillating piece is freed and advances under the pull of the spring, to strike against the transverse bar carried by the lever of a key which has been lowered.

[Claims 6 to 22 not printed in the Gazette.]

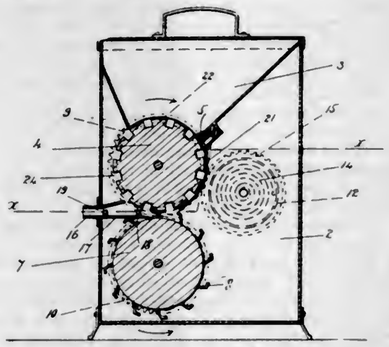
1,061,925. WRENCH. WILLIAM EDWARD POST, Mansfield, Ohio. Filed July 22, 1912. Serial No. 710,891. (Cl. 81—145.)



1. A wrench, comprising a handle having a jaw, a second jaw movable relatively to the first-mentioned jaw and provided with a base at approximately right angles to said movable jaw, the base having teeth at the under side thereof, the wrench having in the fixed portion back of the movable jaw a recess, a locking block movable in said recess toward and from the movable jaw and having teeth to engage with the teeth of said jaw, a spring normally tending to move the block in the direction of the movable jaw, a bolt passing through the fixed side portion of the wrench, and through the said locking block, the said bolt having a non-circular element at an end thereof, the wrench, and through the said locking block, the said bolt element, said bolt being movable axially to withdraw the mentioned element from its recess, the bolt being provided with a spring normally tending to maintain the mentioned element in its recess, and a detachable retaining plate on the fixed portion of the wrench outside of the locking block and its rcess.

2. In a wrench, a fixed and a movable jaw, a locking block movable on the fixed portion of the wrench and into engagement with the movable jaw, a securing bolt passing through said locking block and removable therewith toward and from the movable jaw, said bolt being movable axially and serving in one position to prevent movement of the locking block, and in the other position permitting the movement of said locking block.

1,061,926. SINGLE-DELIVERY RECEPTACLE. JACOB RATZLAFF, Portland, Oreg. Filed Nov. 30, 1912. Serial No. 734,367. (Cl. 206—22.)

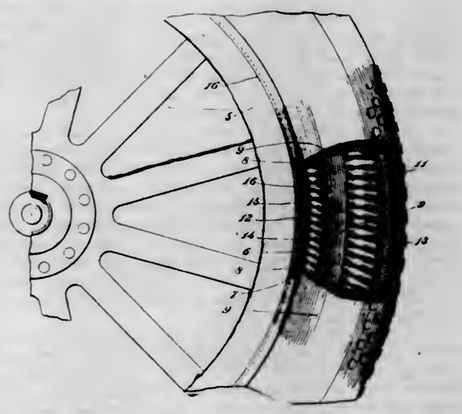


1. In a delivery receptacle, the combination, with a casing provided with a mouthpiece and an internal receiving shelf, of a delivery roller journaled in the casing below the said shelf and provided with projections for delivering the articles one by one onto the shelf, a guide stop arranged inside the casing in the space between the projections and one side wall of the casing and adapted to swing each article around on the shelf so that its front end projects from the mouthpiece and its rear end locks the delivery roller, a motor for revolving the delivery roller when unlocked, and means for supplying the articles to the delivery roller.

2. In a delivery receptacle, the combination, with a casing provided with a mouthpiece and an internal receiving shelf, of a delivery roller journaled in the casing below the said shelf and provided with a series of projecting hooks arranged in pairs around its periphery and operating to deliver the articles one by one onto the shelf, a guide stop arranged inside the casing in the space between the hooks and one side wall of the casing and adapted to swing each article around on the shelf so that its front end projects from the mouthpiece and its rear end locks the delivery roller, a motor for revolving the delivery roller when unlocked, and means for supplying the articles to the delivery roller.

3. In a delivery receptacle, the combination, with a casing provided with a mouthpiece and an internal receiving shelf, of a hopper for the articles, a grooved feed roller journaled in the casing and adapted to feed the articles one by one from the hopper, a delivery roller journaled in the casing below the feed roller and the shelf and provided with projections for delivering the articles onto the shelf as they drop from the feed roller, a guide stop arranged inside the casing in the space between the projections and one side wall of the casing and adapted to swing each article around on the shelf so that its front end projects from the mouthpiece and its rear end locks the delivery roller, and a motor and driving mechanism for revolving the rollers simultaneously in opposite directions when the delivery roller is unlocked.

1,061,927. TIRE. SALVATORE SCOGNAMILLO, New York, N. Y. Filed Sept. 25, 1911. Serial No. 651,206. (Cl. 152—8.)

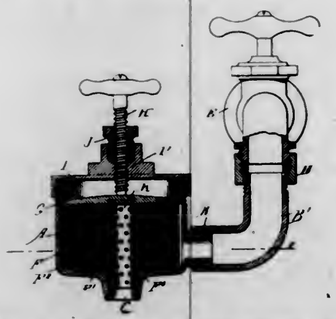


A tire comprising an inclosing casing having an outer tread portion, and two continuous coiled springs inserted through the casing and both semicircular in cross section and respectively engaging by frictional contact the inner surfaces of the tread and rim attaching portions of the casing, the outer tread engaging spring having an inner flat side with the convolutions normally in close contact and the outer curved portions of the convolutions normally open and out of contact, and the spring engaging the rim attaching portion of the tire having the lower curved portions of the convolutions normally closed and the outer flat portions of the convolutions normally open to hold the casing in positive shape and provide a resilient cushion for said casing, the two adjacent flat sides of the springs providing a clearance for all moderate compressions of the casing and forming stop surfaces when the casing is subjected to maximum compression.

1,061,928. FILTER. EUGENE SEAVEY, New York, N. Y. Filed Sept. 28, 1912. Serial No. 722,943. (Cl. 210—11.)

1. A filter, comprising a casing having an inlet and an outlet, a filtering medium in the said casing and interposed between the inlet and outlet, the filtering medium

being formed of a stack of alternately arranged spring metal disks and fabric disks, the spring metal disks being curved and capable of flattening on application of pressure and capable of returning to curved shape on release of pressure, and means for pressing the disks together.



2. A filter provided with a filtering medium formed of a stack of alternating perforated metal disks and fabric disks, the metal disks being curved and capable of flattening on application of pressure and capable of returning to curved shape on release of the pressure to separate the metal and fabric disks.

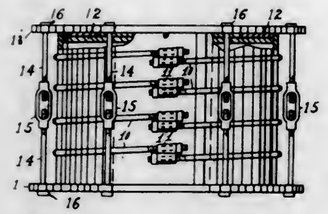
3. A filter, comprising a casing having an inlet and an outlet, a filtering medium in the said casing interposed between the said inlet and outlet, the said filtering medium being formed of alternately arranged spring metal disks and fabric disks, the disk having central registering apertures in register with the said outlet, and the stack of disks forming with the said casing an annular space into which opens the said inlet.

4. A filter, comprising a casing having an inlet and an outlet, a filtering medium in the said casing interposed between the said inlet and outlet, the said filtering medium being formed of alternately arranged spring metal disks and fabric disks, the disks having central registering apertures in register with the said outlet and the stack of disks forming with the said casing an annular space into which opens the said inlet, the said spring metal disks being curved, and a movable presser plate engaging one end of the stack of disks, the other end of the stack resting on the casing.

5. A filter, comprising a casing having an inlet and an outlet, a filtering medium in the said casing interposed between the said inlet and outlet, the said filtering medium being formed of alternately arranged spring metal disks and fabric disks, the disks having central registering apertures in register with the said outlet and the stack of disks forming with the said casing an annular space into which opens the said inlet, the said spring metal disks being curved, a movable presser plate engaging one end of the stack of disks, the other end of the stack resting on the casing, and a perforate tube attached to the presser plate and extending within the registering central apertures of the stack of the disks, the said tube opening into the said outlet.

1,061,929. COMBINED CHEESE-PRESSING HOOP AND CHEESE-SHIPPING BOX. NICHOLAS SIMON and NICHOLAS SIMON, Jr., Chicago, Ill. Filed July 20, 1912. Serial No. 710,724. (Cl. 31—21.)

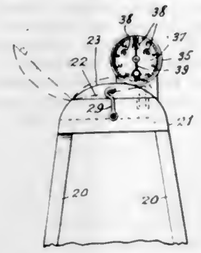
1. A combined cheese pressing hoop and cheese shipping box, consisting of a lower end piece formed of two circular concentric disks, the outer one larger in diameter than the cheese to be made, and the inner or upper one fitted to the inside of the cheese hoop, a sheet metal cheese hoop mounted loosely around said upper disk with its lower end resting upon the lower disk and being adapted to hold the curd for forming the cheese, a plurality of rods which serve as strengthening hoops around the cheese hoops and means for tightening them around the same, an upper end piece corresponding in diameter, when inverted, in construction, with that of the lower one, mounted concentrically upon the upper end of the hoop, its two disks being disconnected from each other, the lower one placed inside of the hoop and the upper one extended over its upper end, and a plurality of headed rods connecting the outer disks of each end piece by passing through said upper and lower disks, and turn buckles arranged to be screwed upon the rods to clamp the two end pieces upon the ends of the cheese hoop and upon the cheese therein.



2. A combined cheese pressing hoop and cheese shipping box, consisting of a circular base piece or disk of a greater diameter than the cheese to be made and formed of a plurality of boards or planks, a second circular base piece or disk of a diameter corresponding with the diameter of the cheese to be made, mounted above and secured concentrically to the first named base piece and formed of a plurality of boards or planks arranged with their length at right angles with the length of those of the first named disk, a hoop formed of sheet metal arranged around the last named base piece or disk of a suitable width for inclosing sufficient curd to form the cheese to be made, and of a length for surrounding the circumference of the second named base piece or disk, one end of the sheet being plain and adapted to abut against the bottom of a groove formed in the other end of the hoop, a plurality of rods spaced apart, each one being threaded at each end, provided with nuts and a coupling lug and adapted to be screwed up tightly around the hoop, a cap piece corresponding with the diameter of the lower base piece or disk, and when inverted, in construction, mounted upon the upper edge of the hoop, the two disks of which it is formed being normally disconnected from each other, the lower one placed inside of the hoop and the upper one extended over its upper end, and a plurality of rods, each consisting of two pieces, one end of which is provided with a head and the other with threads, and a turnbuckle for connecting each pair of rods and drawing the upper and lower end pieces toward each other and against the ends of the cheese hoop.

3. A combined cheese pressing hoop and cheese shipping box, consisting of upper and lower circular end pieces, each end piece being a disk formed of two boards or planks concentric with each other, the boards or planks of one having their length at an angle with the length of the other, the inner disk of each end piece being of a diameter corresponding substantially with the diameter of the cheese to be made and the outer disk of a greater diameter, the lower one of the upper end piece being normally detached from the upper one, a hoop formed of sheet metal fitted around the outer edges of the inner disk of a width adapted for receiving the curd of which the cheese is to be made, one end of the hoop abutting against the bottom of a groove formed in the other end, a plurality of threaded rods spaced apart, and arranged around the hoop and means for drawing them tightly around the same, and its abutting ends together, and a plurality of devices, each consisting of threaded and headed rods and a turnbuckle arranged for connecting said two end pieces and drawing them tightly upon the upper and lower edges of said cheese hoop, after the surplus width of the hoop has been cut down even with the upper surface of the follower, and after the pressing has been completed.

1,061,930. CIGAR-WRAPPER COUNTER. DAVID STRASSER, New York, N. Y. Filed May 9, 1912. Serial No. 696,145. (Cl. 235—99.)



1. In a device of the character described, the combination with a counting mechanism, of an operating system therefor, and two means for separately operating the system, one including a depressible cover and a retracting device therefor and the other including a key and a retracting device therefor, the key being movable through the cover.

2. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member, two operating means, and an intermediate actuator movable to two positions in each of which it is adapted to coöperate with the movable member and one of said means.

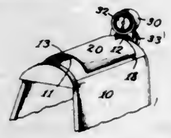
3. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member, two operating means, and one intermediate actuator movable to two positions in each of which it is adapted to coöperate with one of said means, one of said means including a cover for the device.

4. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter, including a movable member, two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to coöperate with the member and one of said means, one of said means including a movable key.

5. In a tobacco wrapper counter, a support, a counter, means for directly actuating the counter including a movable member, two operating means, and an intermediate actuator movable to two positions, in each of which it is adapted to coöperate with the movable member and one of said means, both means being retractable after actuation.

[Claims 6 to 21 not printed in the Gazette.]

1,061,931. COUNTER FOR TOBACCO-WRAPPERS. DAVID STRASSER, New York, N. Y. Filed Feb. 26, 1912. Serial No. 679,822. (Cl. 235—99.)



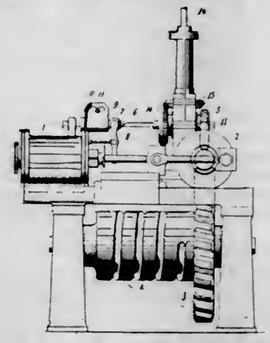
1. In apparatus of the character set forth, the combination with a curved saddle-inspection block, of a depressible platform located thereover and curved on a radius shorter than that of the saddle, the edges of the platform resting on the saddle and the intermediate portion being spaced therefrom, a register, and operating means for the register located in the space between the saddle and the platform and actuated by the platform upon its depression.

2. In apparatus of the character set forth, the combination with a support, of a register mounted thereon, an actuating device for the register, a depressible platform removably located over the support, a mounting removably mounted on the support, and operating means carried by the mounting and detachably engaged with the actuating device of the register, said operating means being actuated by the platform when the latter is depressed and being removable in assembled condition from the support and register when the platform is removed.

3. In apparatus of the character set forth, the combination with a support, of a register mounted thereon, an actuating device for the register, a depressible platform removably located over the support, a lever mounting removably mounted on the support beneath the platform, and operating levers fulcrumed on the support and engaged with the platform, said levers being actuated by the depression of the platform, and one of the same being detachably engaged with the actuating device of the register, the levers and mounting being removable in assembled condition from the support when the platform is removed.

4. In apparatus of the character set forth, the combination with a saddle-inspection block, of a register mounted on the rear end of the same, an actuating lever for the register, a curved depressible platform removably mounted over the saddle block, a channeled lever mounting removably mounted on the saddle block beneath the platform, levers fulcrumed in the channeled mounting, the inner ends of the levers being engaged with each other, the outer ends engaging the platform, and one of said levers being detachably engaged with the actuating lever of the register, said levers and mounting being removable in assembled condition from the saddle block when the platform is removed.

1,061,932. CONTROL DEVICE FOR STEAM-ENGINES. JOHN WIGHAM and JOHN RODHAM WIGHAM, South Hylton, Sunderland, England. Filed Sept. 20, 1911. Serial No. 650,348. (Cl. 121—13.)



1. A control device for steam engines comprising a reciprocatory control member, a double-incline trackway moved by said control member, a lever one end of which is adapted to be rocked by said trackway, and means operated by said lever for cutting off steam from the engine when the control member is brought approximately to mid-position.

2. A control device for the admission valve of a steam engine comprising an operating piston for the admission valve, a reciprocatory control member, a double-incline trackway moved by said control member, a pivoted lever adapted to be rocked by said trackway, a piston valve connected to said pivoted lever for controlling the admission and cut off of steam to the operating piston of the steam admission valve, substantially as set forth.

3. A control device for steam engines comprising a reciprocatory control member, a pivoted lever adapted to be rocked by said reciprocatory member and a piston valve reciprocated by the movements of said rocking lever to cause steam to be cut off from the engine when the control member is in its midposition.

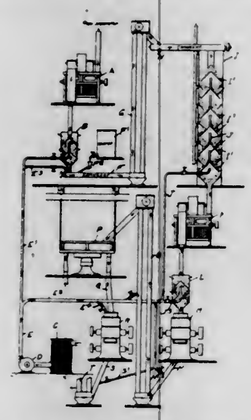
4. A control device for steam engines comprising a reciprocatory control member, a V-shaped trackway on said member, a rocking lever engaging at one end of the

V-shaped guideway and means operated by said rocking lever for causing steam to be cut off from the engine when the control member is in its mid-position.

5. A control device for steam steering engines comprising a steam chest, a steam control valve therein, a piston connected to said valve, a piston valve controlling admission of steam to said piston, a piston valve rod, a rocking member attached to said rod, a V-shaped trackway engaging the other end of said rocking member and a reciprocatory control member carrying said V-shaped trackway substantially as set forth.

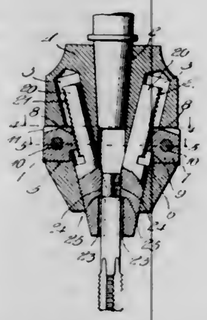
[Claims 6 and 7 not printed in the Gazette.]

1,061,933. PROCESS OF PREPARING GRAIN FOR MILLING. JOSEPH L. WILLFORD, Gladstone, Mich., assignor of two-fifths to Amasa C. Paul, Minneapolis, Minn. Filed Apr. 5, 1910. Serial No. 553,632. (Cl. 83—28.)



The process of preparing grain for milling, comprising heating the grain, subjecting the same to moisture while heated, and subjecting said grain while heated and moistened to a current of heated air for a considerable period of time, progressively in a continuous path of movement.

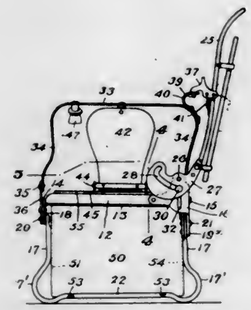
1,061,934. DRILL-CHUCK. ALBERT E. CHURCH, New Britain, Conn. Filed July 22, 1912. Serial No. 710,936. (Cl. 29—117.)



1. In a chuck, a body having converging jaw receiving sockets and an annular groove intersecting said sockets, bit gripping jaws slidably mounted in said sockets and having threaded outer surfaces, a nut revolubly mounted in said groove and having its inner surface threaded to fit the threads on said jaws, said nut being formed in sections, said sections having in one end a screw hole and in their other end a threaded socket, screws engaged with said holes and sockets whereby said sections of the nut are fastened together in said groove, an annular series of gear teeth on said nut and a key having a toothed head to engage the teeth on said nut whereby the latter is revolved to project and retract said jaws.

2. In a chuck of the character described, a body having converging jaw receiving sockets, and an annular groove intersecting said sockets, bit gripping jaws slidably mounted in said sockets and having recessed rounded outer surfaces on their inner ends, said surfaces being threaded, long offset beveled gripping surfaces on the inner sides of the outer ends of the jaws, said surfaces having therein longitudinal grooves to grip the shank of a bit, said grooves being extended at their inner ends to grip and form a driving connection with the square inner end of the bit and stop shoulders at the inner ends of said beveled surfaces of the jaws.

1,061,935. SANITARY NURSERY-CHAIR. DAVID R. COLLIER, Gardner, Mass., assignor to Collier-Keyworth Company, Gardner, Mass., a Corporation of Massachusetts. Filed July 17, 1912. Serial No. 710,074. (Cl. 155—8.)



1. A folding chair comprising a seat, legs pivotally connected thereto so as to swing upwardly under the seat from supporting position, a back-rest pivotally connected to the seat so as to swing downwardly upon the seat, and connection between the back rest and legs whereby swinging movement of the back-rest is transmitted to the legs to swing them as specified.

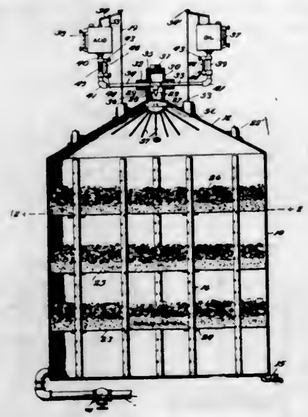
2. A folding chair comprising a seat, supporting means therefor, arm rests pivotally connected to the seat so as to swing toward each other and downwardly upon the seat from operative position, a back-rest pivotally connected to the seat so as to swing forwardly and downwardly from operative position, and means for locking said back-rest to said arm rests when the same are open for use whereby the arm rests and back-rest are rigidly locked.

3. A chair comprising a seat, bent metal strips each consisting of downwardly extending ends and an intermediate connecting portion, the ends of said strips being pivotally connected to the seat near the front and rear, and said intermediate connecting portions being disposed to serve as arm rests, said strips being adapted to swing toward each other and downwardly from operative position, side guards pivotally mounted on the seat between the downwardly extending ends of said strips so as to swing toward each other and downwardly from operative position, and connections between said arm rests and said guards whereby each arm rest moves the corresponding side guard.

4. A chair comprising a seat, supporting means pivotally connected thereto so as to be capable of swinging upwardly under the same, flaps for inclosing the space under the seat, flexible means connecting the flaps with the seat, and means connecting the flaps with said supporting means so that the flaps will be folded and unfolded by the supporting means.

5. A chair comprising a seat, two pairs of legs therefor, means connecting the lower ends of the legs of one pair, means likewise connecting the lower ends of the legs of the other pair, the upper ends of the legs being pivotally connected to the seat so that the legs may be swung upwardly under the seat, and flaps of flexible sheet material for inclosing the space under the seat, the upper edges of said flaps being anchored to the seat, the lower edges of the flaps being anchored to said leg-connecting means, and the meeting edges of the flaps being joined.

1,061,936. GAS-GENERATOR. WILLIAM GREGSON, Fort Worth, Tex., assignor of one-half to John A. Wisherd, Stanton, Nebr. Filed Sept. 3, 1912. Serial No. 718,358. (Cl. 48—117.)



1. A gas generator including a casing, a gas outlet pipe leading from the casing, air supply pipes leading into the casing, automatic valves in said pipes governing the supply of air to the casing, an oil pipe leading to the casing, a valve in said pipe, means operatively connecting one of the air controlling valves with said pipe valve to open the latter upon the opening of the air valve, an acid supply pipe leading into the casing, a valve in said acid supply pipe, and means coacting with another of the air controlling valves and the valve in the acid supply pipe to open the latter upon the opening of the air valve.

2. A gas generator including a casing, a gas outlet pipe leading from the casing, air supply pipes leading into the casing, valves in said pipes for automatically governing the supply of air to the casing, oil and acid pipes leading to the casing, means operable by the valves of the air supply pipes for automatically governing the passage of oil and acid to the casing, said means including valves controlling the flow of oil and acid through their respective pipes, valve stems for said valves, levers fulcrumed intermediate their length and operatively connected with the free ends of said valve stems, and valve stems connecting certain of the air inlet valves with the free ends of said levers.

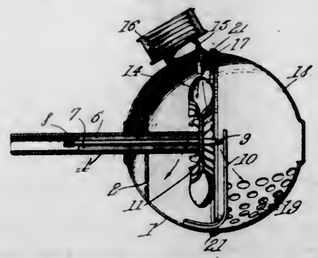
3. A gas generator including a casing, a pipe leading from the casing, means for supplying air to the casing, a T-coupling having a discharge nozzle extending into the casing, pipes leading from said coupling and communicating with acid and oil holding tanks, sight glasses carried by said pipes, valves for regulating the flow of oil and acids through said sight glasses, and means including automatic air inlet valves for controlling the movement of said regulating valves.

4. A gas generator including a casing, an outlet pipe leading from the casing, means for supplying a mixture of oil and acid to the casing, a plurality of vertically extending perforated stand pipes positioned in spaced relation within the casing, and means for admitting air to the casing.

5. A gas generator including a casing, means for supplying oil and acid to the casing, means for supplying air to the casing, a plurality of transversely extending partition walls dividing the casing into chambers, said partition walls being formed of foraminous material and the perforated stand pipes extending vertically of the casing and through said partition walls.

[Claim 6 not printed in the Gazette.]

1,061,937. HYDRAULIC MOTOR. FRANK H. GROVER, Seattle, Wash. Filed Jan. 23, 1911. Serial No. 604,194. (Cl. 138—18.)



1. A hydraulic motor, including a casing, a bearing member extending axially therein and therebeyond, an arbor mounted for rotation within said member, a wheel secured to the arbor and revoluble within the casing, said wheel including radially extending spoon-shaped blades having outlets at their inner ends and located beyond the sides of the wheel, a nozzle for directing water successively against the outer end portions of the blades to rotate the wheel, a reinforcing disk connecting said bearing member to the casing and forming a dead water compartment between the disk and casing.

2. A hydraulic motor including a casing, a disk secured therein and having a marginal opening, a bearing member supported by said disk and casing, an arbor journaled within said member, a wheel revoluble with the arbor and having radially extended spoon-shaped blades, yielding means constituting a thrust bearing for the arbor, and a nozzle for directing water successively against the blades during the rotation of the wheel, said blades constituting means for directing the water outwardly to form a film covering the inner surface of the casing.

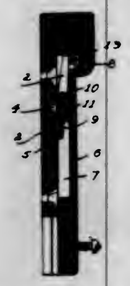
3. A hydraulic motor including a casing, a bearing member extending axially therein and therebeyond, reinforcing means connecting said bearing member with the casing and coöperating with said casing to form a dead water compartment, an arbor journaled within said member, a wheel revoluble with the arbor, a nozzle for directing a jet of water successively against the blades of the wheel and a cap secured upon the casing and having a plurality of discharge openings.

1,061,938. GEAR-SHIFTING-LEVER LOCK. OTTO W. HAHN, San Francisco, Cal. Filed May 23, 1912. Serial No. 699,185. (Cl. 74—39.)

1. A lock for automobiles comprising in combination with a stationary quadrant and a lever movable relative thereto, of a plate having guides at the sides thereof secured on said lever, a bolt covering said plate and slidable thereover and covering its securing means, a locking member carried by said slidable bolt, and means to secure the bolt in the retracted or the extended position, substantially as described.

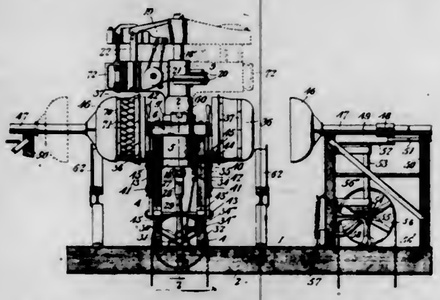
2. In a lock for automobiles, the combination with a change gear lever, of a plate having guides at the sides thereof, means to secure said plate to said lever, a slidable bolt carried by and slidable over said plate and covering its securing means, and a pivoted latch carried by the slidable bolt and adapted to coöperate with means upon the plate to hold the bolt either in the extended or the retracted position, substantially as described.

3. In a lock for automobiles, the combination with a change gear lever and a slotted quadrant through which said change gear lever passes, of a plate secured to said lever adjacent the slotted quadrant, a recessed bolt slidable on said plate and covering the same, a pivoted latch carried by said slidable bolt and operating within said recess for securing it in the extended or the retracted position, and key-operated mechanism for releasing the latch at will, substantially as described.



4. A lock for automobiles comprising in combination with change gear levers and a slotted quadrant through which said levers move, of a guide plate provided with detents secured to the lever adjacent the slots in said quadrant, means to secure said guide plate to the lever, a recessed slidable bolt carried by said plate and having longitudinal guides coöperating with the guide on said plate and covering the same, means to secure said plate to said lever, a locking member carried by the slidable bolt and operating within the recess and coöperating with said detents in said plate to hold the bolt in retracted or extended position, and a mechanism located in the upper end of the bolt for releasing the locking member, substantially as described.

1,061,939. BASKET-MACHINE. CHARLES HARLEY, Ludington, Mich., assignor to Ludington Basket Company, Ludington, Mich. Filed Mar. 26, 1912. Serial No. 686,391. (Cl. 1—14.)



1. A basket machine, comprising rotatable basket forms disposed in horizontal axial alinement, a rotatable stapling mechanism capable of selective positioning over a desired form and having its shaft arranged at a right angle to the horizontal axes of the basket forms, and means arranged in line with the axes of the forms and in opposite horizontal relation with each other for crowding stock on the forms.

2. In a basket machine, the combination of a pair of opposite horizontally disposed rotatable basket forms, a stapling mechanism arranged to be positioned over a desired form, and a pair of oppositely disposed laterally movable followers having their axes in line with each other and with the axes of the basket forms and arranged to be alternately advanced toward and retracted from said forms.

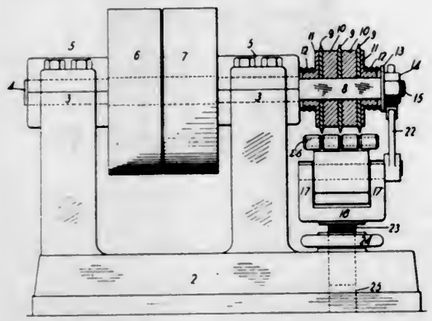
3. In a basket machine, the combination with a plurality of axially opposing rotatable basket forms, of a swinging stapling head adapted to be positioned above any form, means for operating said stapling head and laterally movable followers for crowding the material upon the forms.

4. In a basket machine, the combination with a plurality of axially opposing rotatable basket forms, of a swinging stapling head adapted to be positioned above any form, means for operating said stapling head, and followers laterally movable with reference to the forms and having their axes disposed in line with each other and with the axes of the forms for crowding the material thereupon.

5. In a basket machine, the combination with a plurality of rotatable basket forms, of a swinging stapling mechanism adapted to be positioned over any form, means for operating said stapling mechanism, and laterally movable followers independently operable and movable laterally with respect to the basket forms for crowding the material thereupon.

[Claims 6 to 26 not printed in the Gazette.]

1,061,940. MULTIPLE-DISK CUTTING-OFF MACHINE. JOHN A. HOCK, Pittsburgh, Pa., assignor to The National Tube Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Apr. 23, 1912. Serial No. 692,715. (Cl. 164—61.)



1. A cutting-off machine comprising a driving shaft, a plurality of cutting disks mounted thereon, spacing means separating the disks on the shaft, said disks being relatively movable axially, and means yieldingly holding said disks in engagement with said spacing means to permit relative axial movement of the disks during the cutting operations.

2. A cutting-off machine comprising a driving shaft, at least three cutting disks mounted thereon, spacing means separating the disks, said disks being relatively movable axially on the shaft, and means yieldingly holding said disks in engagement with said spacing means to permit relative axial movement of the disks during the cutting operations.

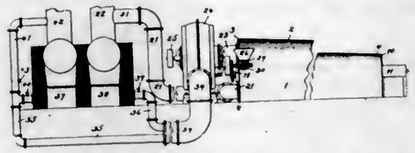
3. A cutting-off machine comprising a plurality of cutting disks, a shaft for positively rotating said disks on which the disks are mounted and relatively movable axially, spacing means separating said disks, and means for yieldingly holding the disks in engagement with said spacing means to permit relative axial movement of the disks during the cutting operations.

4. A cutting-off machine comprising at least three cutting disks, a shaft for positively rotating said disks on which the disks are mounted to be relatively movable axially, spacing means separating said disks, and means yieldingly holding the disks in engagement with said spacing means to permit relative axial movement of the disks during the cutting operations.

5. A cutting-off machine comprising a driving shaft, a plurality of cutting disks mounted thereon, spacing means separating the disks, said disks being relatively movable axially, means yieldingly holding said disks in engagement with said spacing means to permit relative axial movement of the disks during the cutting operations, and means for supporting materials being cut by said disks, said means being arranged to move the materials into engagement with the cutting disks.

[Claims 6 and 7 not printed in the Gazette.]

1,061,941. DRIER. ALEXANDER HOFFMANN, Baltimore, Md., assignor of one-half to P. Demarest Lowe, New York, N. Y. Filed July 6, 1912. Serial No. 708,012. (Cl. 34—45.)



1. In a drier the combination with a furnace having a fire box and also having a stack, of a shell detached with respect to the fire-box of the furnace and having a feed-end and a discharge-end; means for conveying material through the shell from the feed to the discharge-end; mean for conveying gases and heat from the stack to the discharge-end of the shell and means for drawing the gases and heat from the said stack through the conveying chamber.

2. In a drier the combination with a furnace having a fire-box and a stack, of a drying shell detached with respect to the fire-box of the furnace and having a lower chamber and an upper chamber; means for conveying material through the upper chamber of the shell; connections between the lower chamber of the shell and the stack of the furnace and means connected with the upper chamber of the shell for expelling the stack gases and heat from said upper chamber.

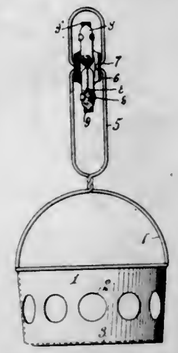
3. In a drier the combination with a furnace having a fire-box and a stack, of a drying shell detached with respect to the furnace and having a lower chamber and an upper chamber which communicate at one end; a trough extending through the shell; a conveyer in said trough; means for establishing communication between the stack of the furnace and the lower chamber of the shell beneath the feed-end of said trough and means connected with the upper chamber and above the feed-end of the said trough for expelling the stack gases and heat from said upper chamber.

4. In a drier the combination with a shell having a lower chamber and an upper chamber and the latter chamber being larger at one end than the other and being in communication with the lower chamber at its smaller end, of means for conveying material through the upper chamber in a direction from the larger to the smaller end; means connected with the larger end of the upper chamber for creating a suction therein and means for supplying heat to the lower chamber.

5. In a drier the combination with a furnace having a fire-box and a stack of a drying shell detached with respect to the furnace and having a lower chamber and a tapering upper chamber with a communication between the smaller end of the upper chamber and said lower chamber; means for conveying material through upper tapering chamber toward the smaller end of the latter; means for establishing communication between the stack and the lower chamber of the shell and means connected with the larger end of the upper chamber for expelling the stack gases and heat from the said upper chamber.

1,061,942. EGG BOILER AND TIMER. OLE JACOBSON, Hamilton, Ohio, assignor of one-half to William W. Arnold, Hamilton, Ohio. Filed Dec. 16, 1911, Serial No. 666,150. Renewed Oct. 4, 1912. Serial No. 723,997. (Cl. 161—16.)

An egg boiler consisting of a perforated receptacle, a wire extending from opposite sides thereof and terminating in an upwardly extended handle portion consisting of two parallel members crimped at points intermediate the ends of said handle, a perforated supporting plate se-



cured to said crimped portions, and a timing device supported on said plate and viewable from opposite sides of the handle, as herein shown and described.

1,061,943. AUTOMOBILE TRANSMISSION-LOCK. HARVEY M. JOHNSTONE, Lincoln, Nebr. Filed Mar. 22, 1912. Serial No. 685,446. (Cl. 74—39.)

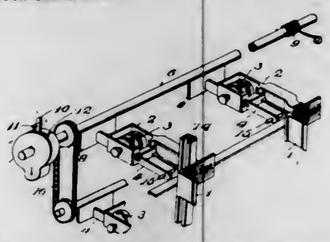
1. In a device for locking the transmission apparatus of a motor vehicle in neutral position, the combination with an operating lever movable laterally from neutral position, and a guide for the lever; of a box carried by the lever and having a hinged door, a block and a lock adapted for simultaneously locking the door and projecting the block into the guide and into the path of movement of the lever.

2. In a device for locking the transmission apparatus of a motor vehicle in neutral position, the combination with an operating lever movable laterally from neutral position, and a guide for the lever; of a box carried by the lever and having a door, means adapted for locking the door, a portion of said means also projecting into the guide and into the path of movement of the lever simultaneously with the locking of the door.

1,061,944. VOTING-MACHINE. CHARLES H. OCUMPAUGH, Rochester, N. Y. Filed Dec. 19, 1907. Serial No. 407,231. (Cl. 235—54.)

1. A multi-candidate group voting mechanism comprising two counters, two indicators, one for each counter, an auxiliary register, and means controlled by the first

of said indicators which is operated for operating the auxiliary register once only on the use of either indicator or of both indicators.



2. A multi-candidate group voting mechanism comprising two counters, two indicators, one for each counter, an auxiliary register, and means for operating the auxiliary register once only on the use of either indicator or of both indicators, said means comprising the sole operating means for the auxiliary register.

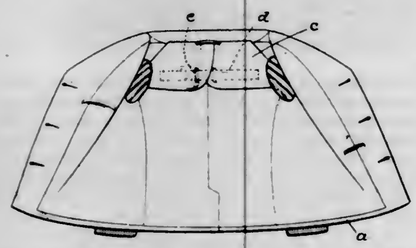
3. A voting machine comprising a plurality of counters, an indicator for each counter, an auxiliary register, and means for operating said register, said means being operable only when an indicator is in voted position at the final moment of voting.

4. In a voting machine, two vote indicators, either indicator or both indicators being operable at one time, a counter for each indicator, an auxiliary register, operating means between each indicator and its counter, and operating means between said indicators and the auxiliary register, said latter means being operable once only when either indicator or both indicators are voted, the construction being such that when one indicator is left in voted position its counter and the auxiliary register will be operated, and when the two indicators are left in voted position the two counters and said auxiliary register will each count one on the final act of voting.

5. In a voting machine, the combination of two indicators, a corresponding register for each indicator, a third register operable by either of said indicators and suitable intermediate devices, and means whereby on the final act of voting, whether one or two of said indicators are left in voted position, said third register will count but one.

[Claims 6 and 7 not printed in the Gazette.]

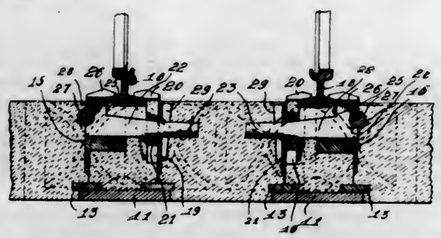
1,061,945. COAT. JOSEPH E. OPPENHEIMER, Philadelphia, Pa., assignor to Nathan Snellenburg, Simon L. Bloch, Samuel Snellenburg, Harry M. Nathanson, Joseph N. Snellenburg, Abraham Snellenburg, Morton E. Snellenburg, Bernard Bloch, Arthur Bloch, and Harry Snellenburg, Philadelphia, Pa., doing business as The Snellenburg Clothing Company, Philadelphia, Pa. Filed Aug. 1, 1912. Serial No. 712,647. (Cl. 2—61.)



1. A coat comprising a main body garment, a pair of stiffening pieces secured to the inside of the coat and on the right and left sides thereof respectively, each stiffening piece being secured at its upper edge to the neck portion of the coat and overlying the shoulder and at its outer edge secured along a part of one arm hole, and an elastic strip extending transversely of the garment and secured at its opposite ends to the stiffening pieces at opposite sides of the center of the garment.

2. A coat comprising a main body garment, a pair of stiffening pieces secured to the inside of the coat and on the right and left sides thereof respectively, each stiffening piece being secured along its upper and outer edges to the neck portion of the coat, the part of the coat between the neck portion and arm hole and along a part of one arm hole, the inner and lower edges of the strips being unsecured and the inner edges overlapping, and an elastic strip extending transversely of the garment and secured at its opposite ends to the stiffening pieces near the edges thereof secured at the arm holes.

1,061,946. CROSS-TIE FORM. ANDREW PETTIS, Vian, Okla. Filed Jan. 22, 1912. Serial No. 672,761. (Cl. 238—3.)

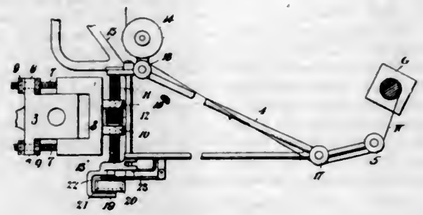


1. A tie comprising a frame, rail supporting blocks positioned in said frame and provided with hollow lower portions having openings to permit communication with the interior of the lower portions, said blocks being each provided with a vertical opening in its upper portion and with a transversely extending opening intersecting with said vertical opening, a rail engaging pin placed in said vertical opening and provided with an opening positioned in alinement with said transversely extending opening, a rail engaging key passing through said transversely extending opening and through said pin to hold said pin in place, means for holding said key in position, and a plastic positioned in said frame and surrounding said blocks and passing into the interior thereof to hold said blocks in position.

2. A tie comprising a frame, rail supports positioned in said frame, each of said supports comprising a block having a hollow lower portion and provided with outwardly extending supporting feet and being also provided with a vertical opening in its upper portion and with a transversely extending opening intersecting said vertical opening and having grooves leading from its outer end portions, a rail securing pin passing through said vertical opening, a rail securing key passing through said transversely extending opening and through said pin, a securing pin passing through an opening formed in one end portion of said key to hold the same in place, arms extending from said key and positioned in said grooves to limit the inward movement of said key, and a plastic placed in said frame and surrounding said block and passing into the interior thereof to hold said blocks in position.

3. A tie comprising a frame, rail supports positioned in said frame, each of said supports comprising a block provided with a vertically extending opening and with a transversely extending opening intersecting said vertically extending opening, a rail engaging pin placed in said vertically extending opening and provided with an opening positioned in alinement with the transversely extending opening, a rail engaging key passing through said transversely extending opening, said key comprising a tapered body portion terminating in a reduced end having a longitudinally extending opening formed therein, a neck extending from said body portion, a rail engaging a head at the upper end of said neck, arms extending from said neck and positioned in grooves leading from said transversely extending opening to limit the inward movement of said key, a securing pin passing through the opening of said key to hold said key in a locked position, and a plastic positioned within said frame and surrounding said blocks to hold said blocks in position.

1,061,947. WINDING-MACHINE. EUGENE R. PHILLIPS, Phillipsdale, R. I. Filed Feb. 21, 1906. Serial No. 302,213. (Cl. 242—9.)



1. A means for winding wire upon a spool, comprising a support movable bodily parallel to the spool, an arm pivoted to said support and mounted to have a freely swinging movement on either side of its central position perpendicular to the spool, said arm having a delivery device, and adjusting means for moving said delivery device forward and back transversely of both its own axis and that of the spool to vary its distance from the axis of the spool, whereby the direction of the wire passing from the delivery device to the spool is altered.

2. A means for winding wire upon a spool comprising a freely swinging arm having a delivery device, a wire carrying frame, a vertically extending screw secured to said frame, a support, a nut carried by said support and engaged with said screw for adjusting said delivery device up and down, a block and adjusting screws carried by said block and bearing on said support for adjusting the delivery device back and forth.

3. A means for winding wire upon a spool, comprising an arm having a delivery device, a support upon which said arm is freely pivoted, a block on which said support is adjustably mounted, and adjusting means for moving said support forwardly and back on the block in the general direction of said arm with relation to the spool to be wound.

4. A means for winding wire upon a spool, comprising a support movable bodily parallel to the spool, a head mounted on said support and projecting therefrom toward the spool, an arm pivoted to said head and mounted to have a freely swinging movement on either side of its central position perpendicular to the spool, said arm having a delivery device, and adjusting means for moving said head on the support to carry said delivery device toward and from the spool, and toward and from said support, whereby the direction of the wire passing to the spool from the delivery device is altered.

5. A means for winding wire upon a spool, comprising a support movable bodily parallel to the spool, a head mounted on said support and projecting therefrom toward the spool, an arm pivoted to said head and mounted to have a freely swinging movement on either side of its central position perpendicular to the spool, said arm having a delivery device, and screws engaged with said head and support and arranged to move the former in and out to carry the delivery device forward and back and thereby alter the direction or slant of the wire passing from the delivery device to the spool.

1,061,948. MINER'S CANDLESTICK. FRANK PLEBAN, Denver, Colo. Filed Apr. 4, 1911. Serial No. 618,973. (Cl. 67—26.)

1. A miner's candlestick composed of a body member, a handle member, a pointed shank and a hook, the body member having a socket to receive a projection formed on the handle member, means for securing the handle member in place within said socket, the body member also having a socket adapted to receive a tongue formed on the shank member, the hook having a threaded extremity and the shank and body members being provided with threaded registering openings adapted to receive the threaded portion of the hook whereby the parts are assembled, for the purpose set forth.

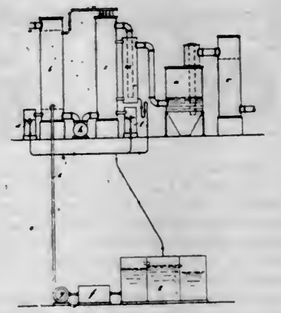


2. A miner's candlestick comprising a body member, a pointed shank, a handle and a hook, means for connecting the shank and hook with the body member, the latter having a socket and the handle member a projection adapted to enter said socket, a pin carried by the body member and adapted to enter registering openings formed in the body member and the projection of the handle member, the pin being movable within the body member and the latter being equipped with means to prevent the pin from becoming detached from the body member, substantially as described.

3. A miner's candlestick including a body member having a socket, a handle member having a projection adapted to enter said socket, a pin passing through registering openings formed in the body member and the said projection of the handle member, the pin being movable to permit detaching the handle member, the body member having a cavity carrying spring rings through which the pin passes, the said rings being adapted to grip the pin with sufficient tension to retain it securely in its position of adjustment, substantially as described.

4. A device of the class described comprising a body member composed of relatively soft metal and having a socket, a handle member having a projection adapted to enter said socket, the handle member having a shoulder adapted to engage the body member adjacent to the socket, the body member having pins composed of relatively hard metal, the extremities of the pins being exposed where the shoulder of the handle member engages the body member, for the purpose set forth.

1,061,949. PROCESS FOR THE RECOVERY OF BY-PRODUCTS FROM GASES OF FUELS. AUGUST ROTTMANN, Bochum, Germany, assignor to The Firm of Dr. C. Otto & Comp. Ges. mit beschränkter Haftung, Bochum, Germany. Filed July 5, 1912. Serial No. 707,764. (Cl. 23—21.)



Process for the recovery of by-products from distillation gases of fuels, which consists in cooling the raw distillation gases for the condensation of tar, part of the ammonia, and steam, with a condensate from a later period of the process, which condensate is cooled and separated from its tar, then bringing the heated cooling liquid into intimate contact with the cooled gases thereby

loading the gases with all the volatile ammonia and with the greater part of the condensed water, and then passing the gases into a bath of acid.

1,061,950. METALLURGY OF IRON AND STEEL. WILLIAM SPEIRS SIMPSON and HOWARD OVIATT, London, England. Filed Nov. 22, 1909. Serial No. 529,338. (Cl. 75—14.)

1. The herein described process of producing refined metallic iron from ores containing the oxids of iron, which consists in subjecting an ore charge containing the ore and suitable quantities of sodium chlorid and silica in a fine state of division, to a high degree of heat for a period sufficient to effect the reduction of the iron oxids to metallic iron.

2. The herein described process of producing refined metallic iron from ores containing the oxids of iron, which consists in subjecting an ore charge containing the iron ore and suitable quantities of sodium chlorid and silica, to a high degree of heat in such a manner as to exclude free access of air for a period sufficient to effect the reduction of the iron oxids to metallic iron.

3. An improvement in the art of reducing ores containing the oxids of iron which involves subjecting an ore charge containing the iron ore and suitable quantities of sodium chlorid and silica to heat of a temperature equal to or greater than the fusing point of pure iron and for a period sufficient to reduce the oxids of iron to metallic iron.

4. An improvement in the art of reducing iron oxid ores which involves mixing an ore charge containing the iron ore and suitable quantities of sodium chlorid and silica, and subjecting the same to heat in an open hearth furnace under a layer of carbonaceous material to exclude the free access of air, for a period sufficient to effect the desired result.

5. The herein described improvement in the art of reducing ores containing oxids of iron which consists in heating such ores while excluding free access of air and while in contact with a suitable chlorid such as the chlorid of sodium mixed with silica to a temperature equal to or greater than the fusing point of pure iron and for a period of time sufficient to reduce the oxids of iron to metallic iron.

[Claims 6 to 14 not printed in the Gazette.]

1,061,951. ROLLER-SKATE. THOMAS SPACIE, Blue Island, Ill. Filed July 22, 1912. Serial No. 710,911. (Cl. 46—51.)



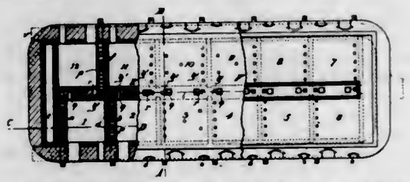
1. In a roller skate, a sole plate having a downwardly extending rear lug, a heel plate, an extension bar rigidly secured to the heel plate and extending through said lug beneath the sole plate, and means for securing the bar and sole plate adjustably together, said means including a guide having a T-head passing through said lug and secured therein by said bar.

2. In a roller skate, a sole plate having a downwardly extending lug at its rear end, an extension bar passing through said lug beneath the plate, a hanger brace secured to the lower surface of said plate, and means to secure the bar in adjustable relation to the sole plate, said means including a guide having one end interlocked with the aforesaid lug and its other end interlocked with said brace, and a screw passing through said guide into contact with said bar.

3. In a roller skate, the combination of a sole plate having a downwardly extending rear lug with a T-shaped hole, an extension bar passing through said hole beneath the plate, a guide having a rear T-head interlocking with said lug in said hole and held therein by said bar, said guide including a pair of upwardly extending side flanges embracing the sides of the bar, a set screw operative through the bottom of the guide into contact with the bar, and means to secure the front end of said guide in position.

4. In a roller skate, the combination of a sole plate having a downwardly extending rear lug with a T-hole therein, said lug being provided with a finger extending upwardly at the bottom of said hole, a guide having a T-head interlocked with said lug and having a hole to receive said finger, a bar extending through said lug hole and securing the guide therein, said guide including a pair of flanges embracing the sides of the bar and being provided with a transverse slot adjacent its front end, and a hanger brace secured to the bottom of said plate and having a tongue interlocking in said transverse slot.

1,061,952. KILN. EDGAR ROUSE SUTCLIFFE, Leigh, England. Filed Feb. 2, 1912. Serial No. 675,061. (Cl. 25—137.)



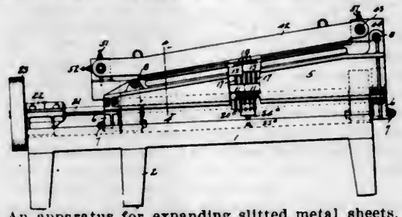
1. The combination in a kiln chamber, of a transverse furnace grating at the floor level adjoining a chamber partition wall, a transverse flue beneath same, an extension flue from the transverse flue to the outer air passing across a hot air flue, an air tube to same arranged to open either in the hot air flue or in the outer air, a steam injector pipe coöperating with the air tube, a chamber partition wall forming one side of the furnace and having distributed openings therein for the purpose of introducing a regularly distributed air supply to the furnace above the grating, and a dwarf wall forming the opposite side of the furnace, all substantially as and for the purpose set forth.

2. The combination in a kiln chamber, of a transverse furnace grating at the floor level adjoining a chamber partition wall, a transverse flue beneath same, a subdivided extension flue from the transverse flue to the outer air passing across a hot air flue, and having its sub-divisions opening into the transverse underground flue at different points in its length, an air tube to each sub-division of the extension flue arranged to open either in the hot air flue or in the outer air, a steam injector pipe coöperating with each air tube a chamber partition wall forming one side of the furnace and having distributed openings therein for the purpose of introducing a regularly distributed air supply to the furnace above the grating, and a dwarf wall forming the opposite side of the furnace, all substantially as and for the purpose set forth.

1,061,953. METAL-EXPANDING MACHINE. HERBERT E. WHITE, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed June 4, 1912. Serial No. 701,634. (Cl. 164—6.6.)

1. A machine for expanding slitted metal sheets, including a rigid frame member, feed rolls carried thereby, an adjustable frame member, coöperating feed rolls carried by the adjustable frame member, and a pair of stationary co-acting expanding dies adapted to receive the slitted metal sheet from the feed rolls and constructed to engage and deflect the unslitted portions of the metal sheet to expand the same.

2. An apparatus for expanding slitted metal sheets, including a rigid frame member, feed rolls carried thereby, an adjustable frame member, a hinged support mounted upon the adjustable frame member, coöperating feed rolls carried by the hinged support, yielding means engaging the hinged support for holding the feed rolls in operative position, and a pair of stationary co-acting expanding dies adapted to receive the slitted metal sheet from the feed rolls and constructed to engage and deflect the unslitted portions of the metal sheet to expand the same.



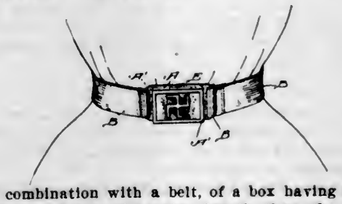
3. An apparatus for expanding slitted metal sheets, including a rigid frame member, feed rolls carried thereby, an adjustable frame member, means for holding the adjustable frame member in operative position, a movable support carried by the adjustable frame member, feed rolls carried by the movable support and adapted to coöperate with the before mentioned feed rolls of the rigid frame member, yielding means engaging the support for holding the feed rolls in operative position, and a pair of stationary co-acting expanding dies receiving the slitted metal sheet and constructed to engage and deflect the unslitted portions of the metal sheet to expand the same.

4. A machine for expanding slitted metal sheets, including a rigid frame member, feed rolls carried thereby, an adjustable frame member, a support movably mounted upon the adjustable frame member, bearing members loosely mounted upon the support, shafts journaled in the bearing members, feed rolls carried by the shafts and adapted to coöperate with the before mentioned feed rolls, yielding means engaging the movable support for holding the feed rolls in coöperative relation to each other, means for driving the feed rolls, and a pair of stationary co-acting expanding dies adapted to receive the slitted metal sheet from the feed rolls and constructed to engage and deflect the unslitted portions of the metal sheet to expand the same.

5. An apparatus for expanding slitted metal sheets, including a rigid frame member, feed rolls carried thereby, an adjustable frame member, a support movably mounted upon the adjustable frame member, two sets of bearings movably mounted upon the support, shafts journaled in corresponding bearings, feed rolls upon the shafts for cooperation with the before mentioned feed rolls of the rigid frame member, means for driving the feed rolls, yielding means engaging the movable support for holding the feed rolls in coöperative position, and a pair of stationary co-acting expanding dies adapted to receive the slitted metal sheets from the feed rolls and constructed to engage and deflect the unslitted portions of the sheets to expand the same.

[Claims 6 to 19 not printed in the Gazette.]

1,061,954. COMBINED BUCKLE AND BOX. JOSEPH BLOCH, New York, N. Y. Filed Feb. 4, 1911. Serial No. 606,566. (Cl. 224—26.)



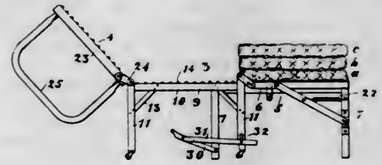
The combination with a belt, of a box having a hinged lid, said lid being of greater length than the box and adapted to project beyond the ends of the box when closed, each of said projecting end portions being transversely slotted, for the purpose of receiving end portions of said belt, the said lid spacing said end portions apart.

1,061,955. HARNESS-BUCKLE. EMMETT C. DRAKE and ELISHA S. BROWN, Blockton, Iowa. Filed June 12, 1911. Serial No. 632,702. (Cl. 24—174.)



A harness buckle, designed for use with straps having holes therein, comprising a central buckle member constructed with parallel S shaped sides, integral end members connecting said sides, two end buckle members each comprising parallel sides, the ends of which are curved at obtuse angles to the main bodies thereof, an end member connecting said sides at one end thereof, a lug on said end member extending at right angles from the plane in which the main portion of said end buckle member lies, a cross member connecting said sides near the middle thereof, a second end member connecting said curved ends, said end buckle members being designed to be detachably mounted on opposite ends of said central buckle member, with the end of the central buckle member received between the cross member of the end buckle member and the end member thereof bearing the lug, said end buckle members being arranged with their curved ends away from the central buckle member in opposite directions.

1,061,956. CONVERTIBLE BED AND DIVAN. BENJAMIN B. ENGLANDER, New York, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y., a Corporation of New York. Filed Sept. 16, 1912. Serial No. 720,474. (Cl. 5—46.)



1. A divanette comprising a stationary section, a sliding section, a front section hinged to said sliding section, and a back section hinged to said sliding section and adapted to rest upon the stationary section when the sliding and front sections are shifted forward of the stationary section.

2. A divanette comprising a stationary section, a sliding section, a front section hinged to said sliding section, and a back section hinged to said sliding section and adapted to rest upon the stationary section when the sliding and front sections are shifted forward of the stationary section, said front section resting on top of the sliding section and the latter on top of the stationary section when the structure is in the form of a divan.

3. A divanette comprising a stationary section, a sliding section, a front section hinged to said sliding section, a back section hinged to said sliding section and adapted to rest upon the stationary section when the sliding and front sections are shifted forward of the stationary section, said front section resting on top of the sliding section and the latter on top of the stationary section when the structure is in the form of a divan, and means for simultaneously shifting the back section down or up and the sliding section and front hinged sections forward or backward from off of or on to the stationary section.

4. A divanette comprising a shiftable section, a back section hinged thereto at one side, a front section hinged thereto at the opposite side and all simultaneously movable

together to transform the structure into a bed or a divan, means for supporting the back section, and means for shifting said sections.

5. A divanette comprising a shiftable section, a back section hinged thereto at one side, a front section hinged thereto at the opposite side and all simultaneously movable together to transform the structure into a bed or a divan, and means stationary during the movement of said sections for supporting the back section.

[Claims 6 to 17 not printed in the Gazette.]

1,061,957. TYPE-WRITING MACHINE. JACOB FELBEL, New York, N. Y., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Dec. 30, 1908. Serial No. 470,043. (Cl. 197—38.)



1. In a typewriting machine, the combination of a type bar having a transverse pivot rigid therewith, a hanger in which both ends of said pivot are journaled, and a spring distinct from the hanger arms and type bar, said spring acting to press said pivot longitudinally.

2. In a typewriting machine, the combination of a type bar having a transverse pivot, a hanger having bearings for said pivot, and a spring mounted on said hanger and pressing against one end of the pivot.

3. In a typewriting machine, the combination of a type bar having a transverse pivot with tapered ends, a hanger having tapered bearings for the tapered ends of said pivot, and a spring pressing said pivot lengthwise.

4. In a typewriting machine, the combination of a type bar having a transverse pivot tapered toward a point at one end and with a tapering head at the other end, a two-armed hanger having a tapered bearing depression in each of its arms, one for the reception of said tapered end and the other for the reception of said tapered head, and a spring tending to press said pivot into its bearings.

5. In a typewriting machine, the combination of a type bar having a transverse pivot with a tapered head at one end and tapering toward a point at the other end, a two-armed hanger having in one arm a bearing opening for said tapered head, an adjustable bearing piece for the other end of said pivot in the other arm of said hanger, and a spring pressing said pivot lengthwise into its bearings.

[Claims 6 to 10 not printed in the Gazette.]

1,061,958. RAILWAY-RAIL JOINT AND BRACE. FREDRICK S. JAINETT, Presidio, Cal. Filed Apr. 15, 1912. Serial No. 690,920. (Cl. 239—6.)



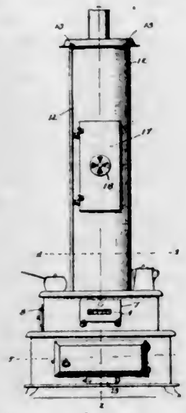
1. A railway rail joint comprising a base for extending beneath the rails and having a rail brace at one side and a lateral web at the other side, said lateral web having a socket, another rail brace bearing against the rail and provided with a socket, a brace rod having a right-handed thread and engaging in one of said sockets, a rod having a left-handed thread and engaging in the other socket, and a sleeve engaging over the threaded portions of said rods, whereby strain may be applied against said rail.

2. A railway rail joint comprising coacting base members adapted to extend beneath railway rails and each having a clamp plate for extending over the tie flanges and against the rail webs, an extension upon one of said base members, means for clamping said base members and their webs together, and rods bearing respectively against said extension and against the adjacent clamp plate and threaded right and left-handed at their adjacent ends, and a sleeve right and left-threaded and engaging the threads of said rods.

3. A railway rail joint comprising coacting base members adapted to bear beneath railway rails and each having a clamp plate for extending over the tie flanges and against the vertical rail webs, a socket upon one of said clamp plates, an extension upon one of said base members, a socket upon said extension, rods bearing respectively in said sockets, and means for moving said rods away from each other.

4. A railway rail joint comprising coacting base members adapted to extend beneath railway rails and each having a clamp plate for extending over the tie flanges and against the vertical rail webs and enlarged at the ends, clamp devices operating through said enlargements, an extension upon one of said base members, a socket upon said extension, rods bearing respectively in said sockets, and means for moving said rods away from each other.

1,061,959. COMBINED HEATING AND COOKING STOVE. MOSES JONES, South Mills, N. C. Filed May 20, 1912. Serial No. 698,443. (Cl. 126—4.)

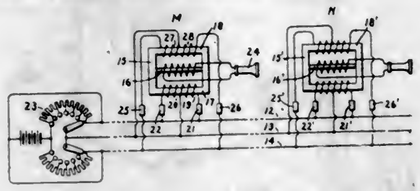


1. In a stove, the combination of an oven having a soot chamber under the same, a fire box superposed upon the oven, a soot flue extending through the fire box and oven and communicating with the soot chamber, an upright body portion projecting upwardly from the fire box and having a soot flue communicating with the before mentioned soot flue of the oven and fire box, the fire box extending laterally on opposite sides of the body portion to provide areas adapted to be utilized for cooking purposes, and a top supplied to the body portion.

2. In a stove, the combination of an oven, a soot chamber under the same, a fire box arranged above the said oven, a soot flue arranged at the rear of and within said oven and fire box and communicating with said soot chamber, a cylindrical body portion vertically and removably superposed upon said fire box and having a soot flue arranged in a rear portion therein and registering with said before mentioned soot flue of the oven and fire box, a top for said body portion provided with a stack opening therein, and means for securing said body portion to said fire box, said fire box extending laterally on opposite sides of said body portion to provide areas adapted to be utilized for cooking purposes.

1,061,960. ELECTRIC SIGNALING. FRED W. LYLE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 22, 1911. Serial No. 645,328. (Cl. 177—344.)

1. In a selective electric signaling device, the combination of a plurality of resistors having the property of greatly lowering in resistance when a current having a voltage greater than a predetermined value is impressed thereupon and means responsive to the passage of current through a predetermined combination of said resistors, whereby a signal may be indicated.



2. In a selective electric signaling device, the combination of a plurality of resistors having predetermined differing breakdown resistances and a magnetic indicating device having opposing coils in series respectively with said resistances.

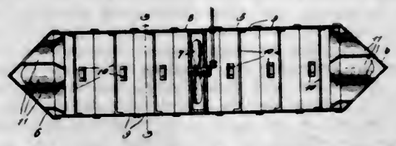
3. In a system of signaling, the combination of selective devices each of which comprises a plurality of boron resistances of unequal resistance break-down characteristic, means for impressing upon said devices a current of desired voltage, and means responsive to a predetermined combination of breakdown condition of the resistors associated with each selective device.

4. The combination of a plurality of signaling stations having paired boron-containing resistors, the members of each pair differing in resistance with respect to each other, means for delivering from any of said stations to the other stations a current of desired voltage, and means at each station responsive to the breakdown of the resistance of a predetermined combination of said resistors.

5. In a system of signaling, the combination of paired boron resistors differing in break-down resistance, means responsive to the passage of current through a predetermined combination of said resistors only and means distant from said resistors for delivering a current of desired voltage to said paired resistors.

[Claims 6 and 7 not printed in the Gazette.]

1,061,961. AIRSHIP-PROPELLER. WILLIAM MCCAIRNS, Eldorado, Ill. Filed Aug. 10, 1912. Serial No. 714,402. (Cl. 244—25.)

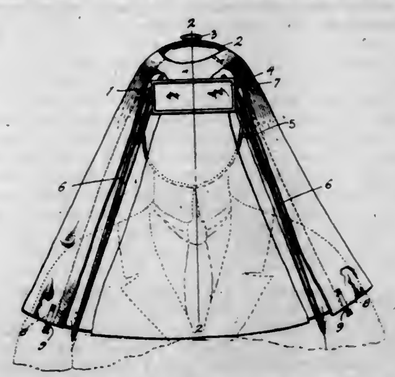


In a propeller for aerial vessels, a central chamber having a propeller arranged therein, longitudinally extending chambers connected to the central chamber, each of said longitudinally extending chambers consisting of a plurality of sections, a web connecting the opposed walls of each of the chamber sections, the webs of adjacent chamber sections extending at right angles to each other, a plurality of air directing tubes arranged in one end of each of the longitudinally extending chambers, said tubes at one of their ends being open to the atmosphere.

1,061,962. HEAD AND FACE PROTECTOR. JERRY MINCHER, Wills Point, Tex. Filed Dec. 27, 1912. Serial No. 738,953. (Cl. 2—118.)

1. As an article of manufacture, a head and face protector comprising a hood formed of water-proof material, one wall thereof being provided with an opening covered by a transparent pane, chin and body straps secured on the inner wall of said hood adjacent the top thereof, and a plurality of additional straps secured to the inner wall thereof, adjacent the lower edge of the same and adapted for engagement with the apparel of the wearer.

2. As an article of manufacture, a head and face protector comprising a hood, the wall of which has an opening therein covered by a transparent pane, straps secured to the inner wall of the hood at the top thereof and adapted to be disposed below the chin of the wearer, body straps secured to the inner wall of the hood rearward of the last



mentioned straps, said last mentioned straps being adapted to be disposed below the arms of the wearer for engagement with the front wall of said hood on both sides of the opening therein, and a plurality of additional straps secured to the inner face of the hood adjacent the lower edge thereof and adapted for engagement with the apparel of the wearer.

1,061,963. STETHOSCOPE. CHARLES M. ROOT, Philadelphia, Pa., assignor to Penn Surgical Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 13, 1912. Serial No. 690,616. (Cl. 181—24.)

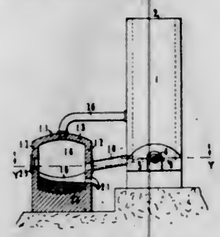


A stethoscope having a transmitting member, a sound conveying member and means for lockingly securing said members, one element of said means connected with said transmitting member and consisting of a series of headed pins a^2, in triangular arranged position, and the other element of said means consisting of a series of catches b^2, and said means operative to attach and detach said members to and from each other by a manual rotary movement of the catches of said sound conveying member, to thereby accommodate such member to different size transmitting members, as shown and described for the purpose set forth.

1,061,964. FURNACE. DAVID WESLEY BLAIR, New York, N. Y., assignor, by mesne assignments, to Metallurgical Research Company, New York, N. Y., a Corporation of Arizona. Filed Nov. 24, 1911. Serial No. 662,095. (Cl. 75—62.)

1. In an apparatus of the character described, in combination, a chamber comprising a receptacle for molten copper and a receptacle for solid copper, means adapted to supply a heating medium to both of said receptacles, and means to substantially prevent the heating medium of one of said receptacles from contaminating the atmosphere of the other receptacle.

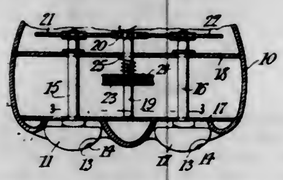
2. In an apparatus of the character described, in combination, a chamber comprising a receptacle to provide a pool of molten copper and a receptacle for solid copper, means adapted to supply a heating medium to both of said receptacles, and means to substantially prevent the heating medium supplied to the receptacle containing the solid copper from contaminating the pool of copper or the atmosphere in the other receptacle.



3. In an apparatus of the character described, a vertical rectangular furnace comprising a combustion chamber projecting laterally in front thereof and a burner projecting into said combustion chamber, said furnace being provided with a bottom sloping toward said burner, said combustion chamber having converging walls surrounding an opening adapted to receive said burner and having a floor sloping in substantially the same direction as the bottom of said furnace, and a gutter extending transversely with respect to the longitudinal axis of said burner from side to side of said combustion chamber.

4. In an apparatus of the character described, in combination, a long, low, narrow, horizontal furnace comprising a combustion chamber projecting laterally in front of the front wall thereof, an inlet for molten metal, a bottom composed of blocks laid to form an inverted arch, said bottom sloping from either end toward a tap in a side wall of said furnace, and a fluid fuel burner projecting through said combustion chamber.

1,061,965. MOVING-EYE FIGURE. CHARLES M. DALY and GUSTAVE A. WEIDHAAS, New York, N. Y. Filed Dec. 23, 1912. Serial No. 738,192. (Cl. 46—40.)



1. A figure having a face, eyes visible through openings in the latter and having pupils eccentrically disposed in respect to the visible portion of said eyes and means for moving said eyes to cause said pupils to travel in curved paths about the centers of the visible portions of said eyes.

2. A figure having eyes rotatable about separate axes extending through the eyes substantially at right angles to the general plane of the face of the figure.

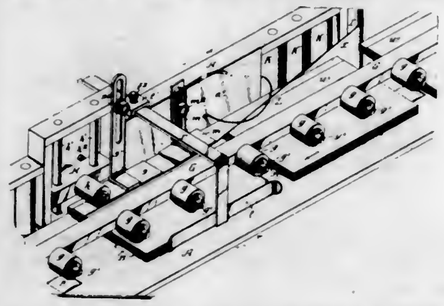
3. A figure having eyes rotatable about separate axes substantially at right angles to the general plane of the face of the figure, and having their pupils eccentric with respect to the axes of rotation.

4. A figure having eyes substantially hemispherical in form and having the pupil of each eye disposed adjacent one edge thereof and means for rotating said eyes about substantially parallel axes.

5. A figure having eyes bearing pupils adjacent the edges thereof and means for simultaneously rotating said eyes in the same direction about substantially parallel axes at an angle to the general plane of the face.

[Claims 6 to 8 not printed in the Gazette.]

1,061,966. STRIP-APPLYING MACHINE. GEORGE E. BISSEX, Philadelphia, Pa., assignor to Stephen Greene Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 1, 1911. Serial No. 657,933. (Cl. 11—2.)



1. A strip-applying machine comprising a supporting structure; means for moving the material to which a strip is to be applied; and two independently adjustable resilient members fixed to the supporting structure and having oppositely disposed surfaces between which the said material moves.

2. A strip-applying machine comprising a supporting structure; means for moving the material to which a strip is to be applied; and a combined strip guiding and presser member adjustably fixed to the supporting structure and having its operating surface inclined in two directions to the plane of movement of the said material, a portion of said member being placed to be deflected by the said movement of the material thereby, said latter portion being resilient and acting to press the strip to the said material.

3. A strip-applying machine comprising a supporting structure; means for moving the material to which a strip is to be applied; and two independently mounted plates adjustably fixed to the supporting structure and having oppositely disposed surfaces between which the material passes, each of said surfaces being inclined in two directions to the plane of movement of the said material.

4. A strip-applying machine comprising a supporting structure; means for moving the material to which a strip is to be applied; two strip guiding and pressing plates having oppositely disposed surfaces and adjustably fixed to the supporting structure, each of said surfaces being operatively inclined in two directions to the plane of movement of said material therebetween, each of said plates having a resilient portion placed to be deflected by the said material in its passage therebetween and acting to press the strip to the said material.

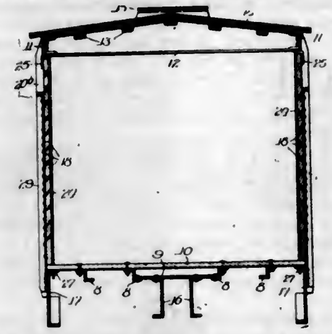
5. A strip-applying machine comprising a supporting structure; means for moving the material to which a strip is to be applied; a member having a strip guiding and pressing plate; and means for operatively keeping a part of the operating surface of the said plate inclined in two directions to the plane of movement of the said material, said plate also having a portion placed to be deflected by the material during the movement thereof and acting to press the strip to the said material.

[Claims 6 to 12 not printed in the Gazette.]

REISSUES.

13,561. BOX-CAR. WILLIAM E. FOWLER, Chicago, Ill., assignor to The Fowler Car Company, a Corporation of Illinois. Filed Mar. 24, 1913. Serial No. 756,595. Original No. 962,425, dated June 28, 1910, Serial No. 441,550. (Cl. 105—192.)

1. In a box car, the combination with a side wall composed of a series of superposed side planks, upright frame posts to which said planks are adjustably secured, of means for tightening said planks upon each other to take up shrinkage, substantially as described.



2. In a box car, the combination with a side wall composed of a series of superposed side planks having offset matching joints, upright frame posts to which said planks are adjustably secured, of means for tightening said planks upon each other to take up shrinkage, substantially as described.

3. In a box car, the combination with a side wall composed of a series of superposed side planks having oblique offset matching joints, upright frame posts to which said planks are adjustably secured, of means for tightening said planks upon each other to take up shrinkage, substantially as described.

4. In a box car, the combination with a side wall composed of a series of superposed side planks, upright frame posts to which said side planks are adjustably secured, of a tightening strap disposed transversely of and its upper end engaging one of said side planks, and means for drawing said tightening strap downwardly relatively to the side planks, substantially as described.

5. In a box car, the combination with the car floor, of a side wall composed of a series of superposed horizontal side planks, upright frame posts to which said side planks are adjustably secured, and a tightening strap disposed transversely of and at its upper end engaging one of said side planks, said tightening strap at its lower end extending through the car floor and provided with means for drawing the strap downwardly, substantially as described.

6. In a box car, the combination with the car floor, of a side wall composed of a series of superposed horizontal side planks, upright frame posts to which said planks are adjustably secured, and a tightening strap disposed transversely of and at its upper end engaging one of said side planks, the lower end of said tightening strap being threaded and extended through the car floor and provided with an adjusting nut, substantially as described.

7. In a box car, the combination with the car floor and side-sill, of a side wall composed of a series of superposed horizontal side planks, stakes secured to said side-sill, securing means between said stakes and side planks permitting a limited vertical adjustment of the latter, and tightening straps engaging at their upper ends one of said side planks and at their lower ends secured to said car floor with capacity for vertical adjustment, substantially as described.

8. In a box car, the combination with the car floor and side-sill, of a side wall composed of a series of superposed horizontal side planks, stakes secured to said side-sill, securing means between said stakes and side planks permitting a limited vertical adjustment of the latter, and tightening straps anchored at their upper ends over the topmost of said side-planks, said tightening straps at their lower ends being threaded and extended through the car floor and provided with adjusting nuts, substantially as described.

9. In a box car, the combination with the car floor and side-sill, of a side wall composed of a series of superposed horizontal side planks, slotted stakes secured to said side-sill and disposed across said side planks, securing bolts passed through the slots of said stakes and said side planks, and tightening straps anchored at their upper ends over the topmost of said side planks, said tightening straps at their lower ends being threaded and extended through the car floor and side-sill and provided below the latter with adjusting nuts, substantially as described.

10. In a box car, the combination with the car floor and side-sill, of a side wall composed of a series of superposed horizontal side planks, a slotted stake secured to said side-sill and disposed across one side to said side planks, a slotted tightening strap disposed across the other side of said side planks opposite said stake and engaging at its upper end one of said side planks and at its lower end adjustably secured to the underframe, and securing bolts passed through said side planks and the slots of said stake and tightening strap, substantially as described.

11. In a car, the combination with the underframe of floor planks laid thereon, and securing means for said floor planks permitting tightening of the latter to take up shrinkage, substantially as described.

12. In a car, the combination with the floor sills, of floor planks laid thereon, and fastening bolts engaging holes in one of said parts and slots in the other, thereby permitting tightening of said floor planks to take up shrinkage, substantially as described.

13. In a car, the combination with slotted floor sills, of floor planks laid thereon, and fastening bolts passed through said floor planks and the slots of said sills thereby permitting tightening of said floor planks to take up shrinkage, substantially as described.

14. In a car, the combination with slotted floor sills, of floor planks having offset matching joints laid thereon, and fastening bolts passed through said floor planks and the slots of said sills, thereby permitting tightening of said floor planks to take up shrinkage, substantially as described.

15. A box car side without interior framing, formed of planking placed edge to edge and finished to present an interior plane surface, and exterior corner and intermediate posts to which posts the planking is adjustably secured, whereby limited vertical tightening movement of the planking is permitted, substantially as described.

16. In a railway car, the combination of a car frame having posts, boards adjustably secured to said posts, and disposed edge to edge, and adjustable screw means acting on said boards, permitting closing of the cracks between the same due to shrinkage or the like, substantially as described.

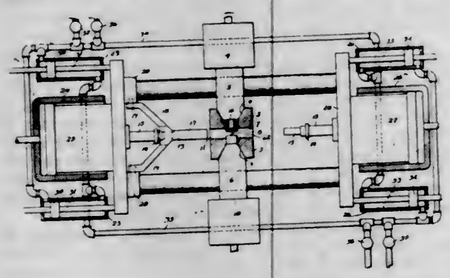
17. A box car side of single thickness without interior framing, formed of planking placed edge to edge and exterior corner and intermediate posts, said posts being provided with slots, and bolts passing through said slots and the planking whereby to adjustably secure the planking to the posts and permit a limited vertical tightening movement of said side wall planking, substantially as described.

13,562. METHOD OF AND MACHINE FOR EXTRUDING METAL. DAVID LONG SUMMEY, Waterbury, Conn., assignor to Chase Rolling Mill Co., Waterbury, Conn., a Corporation. Filed Feb. 18, 1913. Serial No. 749,287. Original No. 1,011,876, dated Dec. 12, 1911, Serial No. 629,273. (Cl. 207—3.)

1. A method of extruding metal consisting in the following cycle of steps, first, positioning a forming tool in a billet-receiving chamber, then introducing solid billets into the said chamber on opposite sides of the said tool, then subjecting the billets to pressure to cause the metal to be shaped by the said tool, and then retiring the tool for the expulsion of the unextruded stump of metal from the chamber which is thus left empty preparatory to the repetition of the cycle.

2. A method of extruding metal consisting in the following cycle of steps, first, positioning forming tools in the billet-receiving chamber, then introducing solid billets into the said chamber on opposite sides of the said tools, then

subjecting the billets to pressure to cause the metal to be shaped by the said tools, and then retiring one of the tools for the expulsion of the unextruded stump of metal from the chamber which is thus left empty preparatory to the repetition of the cycle.



3. A method of extruding metal consisting in the following cycle of steps, first, positioning a mandrel in a billet-receiving chamber furnished with a complementary die, then introducing solid billets into the said chamber on opposite sides of the said mandrel and die, then subjecting the billets to pressure to cause the metal to weld and be shaped by the said mandrel and die as it is extruded through the die, and then retiring the said mandrel for the expulsion of the unextruded stump of metal from the chamber which is thus left empty preparatory to the repetition of the cycle.

4. A method of extruding metal consisting in the following cycle of steps, first, positioning a mandrel in a billet-receiving chamber having open billet-receiving ends and furnished with a complementary die, then introducing a plurality of solid billets into each of the open ends of the said chamber and therefor on opposite sides of the said mandrel and die, then subjecting the billets to pressure to cause the metal of the billets to weld and flow around the said mandrel and through the said die, and then retiring the said mandrel for the expulsion of the unextruded stump of metal from the chamber which is thus left empty preparatory to the repetition of the cycle.

5. A method of extruding metal consisting in the follow cycle of steps, first, positioning a forming tool in a billet-receiving chamber, then introducing solid billets into the said chamber on opposite sides of the said tool, then subjecting the outer ends of the billets to rams the relative pressure-movements of which are hydraulically controlled to cause the metal to be shaped by the said tool as it emerges from the chamber, and then retiring the tool for the expulsion of the unextruded stump of metal from the chamber which is thus left empty preparatory to the repetition of the cycle.

6. A method of extruding metal, consisting in positioning metal-shaping tools in a billet-receiving chamber in a container, then introducing billets into the opposite ends of the said chamber, then subjecting the billets to inward pressure for forcing them upon the said tools and extruding them through an opening in the side of the container, then retiring the metal-shaping tools from the said chamber, and then expelling the unextruded metal from the chamber preparatory to repeating the process.

7. In a machine for extruding metal, the combination with a container, of a metal-extruding ram, and a supplemental ram for expelling the unextruded metal from the container.

8. In a machine for extruding metal, the combination with a container, of a metal-extruding ram, and a pivotally mounted stump-expelling ram for expelling the unextruded metal from the container.

9. In a machine for extruding metal, the combination with a container having a billet-receiving chamber, of a metal-extruding ram, and a stump-expelling ram operated by the said metal-extruding ram and corresponding in length to the length of the said chamber.

10. In a machine for extruding metal, the combination with a container having a billet-receiving chamber open at both ends and having a lateral opening through which the metal is extruded, of two metal-extruding rams arranged in line with the opposite ends of the said chamber, means for operating the said rams, and a stump-expelling ram connected with one of the metal-extruding rams for operation thereby, and equal in length to the length of the said chamber.

11. In a machine for extruding metal, the combination with a metal extruding ram, of a container, a billet carrier mounted thereupon for supporting the billets while they are being introduced into the container.

12. In a machine for extruding metal, the combination with a container, of a metal-extruding ram, and a sliding billet-carrier consisting of a shelf located beneath the ram, and a sleeve encircling the ram and sliding thereupon.

13. In a machine for extruding metal, the combination with a container having a billet-receiving chamber, of two metal-extruding rams arranged to enter the opposite ends of the said chamber which has a lateral opening through which the metal is extruded, and hydraulic speed-controlling cylinders connected with the said rams and with each other for synchronizing the speed at which the rams advance into the said chamber.

14. In a machine for extruding metal, the combination with a container having a billet-receiving chamber open at both ends, of two metal-extruding rams arranged to enter the opposite ends of the said chamber, two main cylinders, pistons therefor, a pair of speed-controlling cylinders for each of the said main cylinders, and pipes connecting the inner ends of one pair of speed-controlling cylinders with the outer ends of the other pair of speed-controlling cylinders and vice versa, for controlling the speed at which the said rams are advanced into the said chamber.

15. In a machine for extruding metal, the combination with a container having a billet-receiving chamber open at both ends, of rams arranged to enter the opposite ends of the said chamber, a main cylinder and a piston for each ram, a cross-head carried by each piston, a pair of speed-controlling cylinders for each ram, the piston rods of the speed-controlling cylinders being connected with the respective cross-heads, and pipes connecting the inner ends of one pair of the speed-controlling cylinders with the outer ends of the other pair of the speed-controlling cylinders, and vice versa.

16. In a machine for extruding metal, the combination with a container having a billet-receiving chamber open at both ends, of rams arranged to enter the opposite ends of the said cylinders, speed-controlling cylinders respectively connected with the said rams and with each other, and valves for supplying water to the speed-controlling cylinders and safe-guarding the same when the pressure passes above a predetermined maximum.

17. In a machine for extruding metal, the combination with a container having a billet-receiving chamber open at both ends, of rams arranged to enter the opposite ends of the said chamber, a pair of speed-controlling cylinders having their piston-rods projecting through their outer ends for the equalization of volumes on the opposite sides of their pistons, pipes connecting the outer ends of one pair of cylinders with the inner ends of the other pair of cylinders, and vice versa, and supply and relief valves located in the said pipes.

18. A method of extruding metal consisting in simultaneously subjecting a plurality of heated solid billets to inward pressure and forcing the metal of the several billets to flow around forming tools, and then retiring one of the forming tools for the purpose of cooling the same and removing the stump, the metal of the several billets being fused and welded as it flows around the forming tools and assumes its extruded shape.

DESIGNS.

43,977. **BRAID OR TRIMMING.** RAYMOND H. AVERNS, Coventry, England, assignor to J. & J. Cash, Limited, Coventry, England, a Corporation of Great Britain and Ireland. Filed Feb. 15, 1913. Serial No. 748,725. Term of patent 3½ years.



The ornamental design for a braid or trimming as shown.

43,978. BRAID OR TRIMMING. RAYMOND H. AVERNS, Coventry, England, assignor to J. & J. Cash, Limited, Coventry, England, a Corporation of Great Britain and Ireland. Filed Feb. 15, 1913. Serial No. 748,727. Term of patent 3½ years.



The ornamental design for a braid or trimming as shown.

43,979. BRAID OR TRIMMING. RAYMOND H. AVERNS, Coventry, England, assignor to J. & J. Cash, Limited, Coventry, England, a Corporation of Great Britain and Ireland. Filed Feb. 15, 1913. Serial No, 748,728. Term of patent 3½ years.



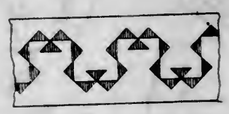
The ornamental design for a braid or trimming as shown.

43,980. BRAID OR TRIMMING. RAYMOND H. AVERNS, Coventry, England, assignor to J. & J. Cash, Limited, Coventry, England, a Corporation of Great Britain and Ireland. Filed Feb. 15, 1913. Serial No. 748,729. Term of patent 3½ years.



The ornamental design for a braid or trimming as shown.

43,981. BRAID OR TRIMMING. RAYMOND H. AVERNS, Coventry, England, assignor to J. & J. Cash, Limited, Coventry, England, a Corporation of Great Britain and Ireland. Filed Feb. 15, 1913. Serial No. 748,730. Term of patent 3½ years.



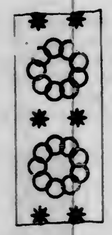
The ornamental design for a braid or trimming as shown.

43,982. BRAID OR TRIMMING. RAYMOND H. AVERNS, Coventry, England, assignor to J. & J. Cash, Limited, Coventry, England, a Corporation of Great Britain and Ireland. Filed Feb. 15, 1913. Serial No. 748,731. Term of patent 3½ years.



The ornamental design for a braid or trimming as shown.

43,983. BRAID OR TRIMMING. RAYMOND H. AVERNS, Coventry, England, assignor to J. & J. Cash, Limited, Coventry, England, a Corporation of Great Britain and Ireland. Filed Feb. 15, 1913. Serial No. 748,732. Term of patent 3½ years.



The ornamental design for a braid or trimming as shown.

43,984. STATUETTE. ORESTE E. S. AZZONI, Philadelphia, Pa. Filed Feb. 15, 1910. Serial No. 544,135. Term of patent 7 years.



The ornamental design for a statuette as shown.

43,985. BRACELET. SIDNEY O. BIGNEY, Attleboro, Mass. Filed Feb. 11, 1913. Serial No. 747,810. Term of patent 3½ years.



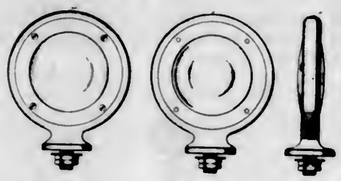
The ornamental design for a bracelet, as shown.

43,986. TEXTILE FABRIC. H. MAISCH-BITSCHENAUER, Paris, France, assignor to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Oct. 8, 1912. Serial No. 724,654. Term of patent 3½ years.



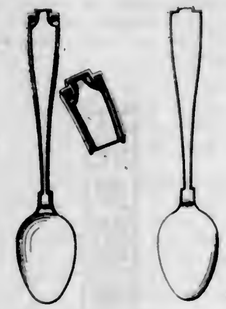
The ornamental design for a textile fabric, as shown.

43,987. CASING FOR AUTOMOBILE RADIATOR-INDICATORS. HARRISON HURLBERT BOYCE, Oyster Bay, N. Y. Filed Oct. 18, 1912. Serial No. 726,574. Term of patent 7 years.



The ornamental design for a casing for automobile radiator indicators as shown.

43,988. HANDLE FOR SPOONS, FORKS, OR SIMILAR ARTICLES. WILLIAM C. CODMAN, Providence, R. I., assignor to Gorman Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Mar. 6, 1913. Serial No. 752,492. Term of patent 14 years.



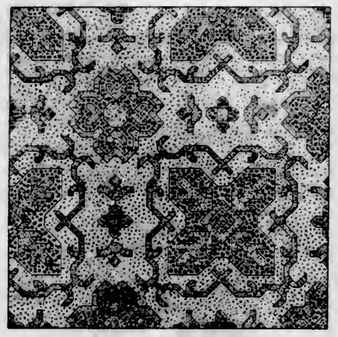
The ornamental design for a handle for spoons, forks or similar articles.

43,989. SHADE OR REFLECTOR HOLDER. HENRY D'OLIER, Jr., Philadelphia, Pa., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Apr. 7, 1910. Serial No. 554,081. Term of patent 14 years.



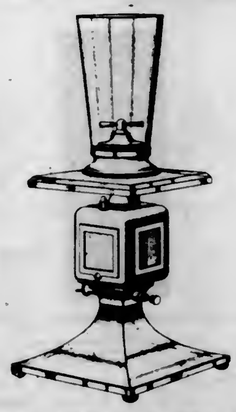
The ornamental design for a shade or reflector holder, as shown and described.

43,990. LINOLEUM, OIL-CLOTH, OR FLOOR-COVERING. ARTHUR WM. DREW, Rinslip, England, assignor to Armstrong Cork Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Apr. 3, 1913. Serial No. 758,718. Term of patent 7 years.



The ornamental design for linoleum, oil-cloth, or floor covering as shown.

43,991. CASING AND STAND FOR LIQUID-AGITATORS. CHARLES N. ECKLYN, Racine, Wis. Filed Oct. 12, 1912. Serial No. 725,530. Term of patent 7 years.



The ornamental design for a casing and stand for liquid agitators as shown.

43,992. SAILOR-BOY DOLL. JOSEPH EISENMANN, London, England. Filed Dec. 23, 1912. Serial No. 738,386. Term of patent 3½ years.



The ornamental design for a sailor boy doll, as shown.

43,993. CARPET. WILLIAM A. ELLIOT, Yonkers, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,497. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

43,994. CARPET. WILLIAM A. ELLIOT, Yonkers, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,498. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

43,995. RUG. WILLIAM A. ELLIOT, Yonkers, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,499. Term of patent 3½ years.



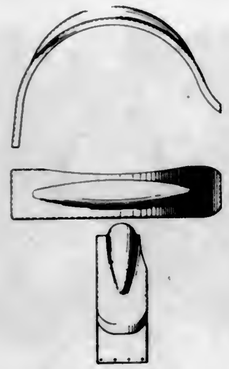
The ornamental design for a rug, as shown.

43,996. TEXTILE FABRIC. HAROLD FRANK, New York, N. Y., assignor to Frank and Lambert, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 31, 1913. Serial No. 758,042. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

43,997. REAR FENDER FOR AUTOMOBILES. ARTHUR L. GARFORD, Elyria, Ohio, assignor to The Garford Company, Elyria, Ohio, a Corporation of Ohio. Filed Nov. 11, 1912. Serial No. 730,820. Term of patent 14 years.



The ornamental design for a rear fender for automobiles, substantially as shown.

43,998. TEXTILE FABRIC. GUSTAVE GEORGE, Paris, France, assignor to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Oct. 8, 1912. Serial No. 724,649. Term of patent 3½ years.



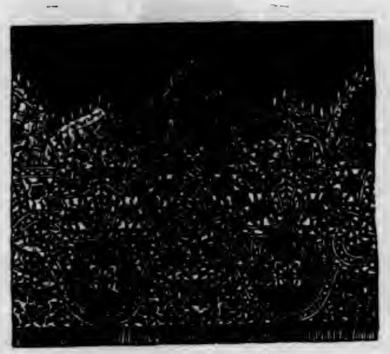
The ornamental design for a textile fabric, as shown.

43,999. TEXTILE FABRIC. GUSTAVE GEORGE, Paris, France, assignor to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Oct. 8, 1912. Serial No. 724,650. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

44,000. TEXTILE FABRIC. GUSTAVE GEORGE, Paris, France, assignor to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Oct. 8, 1912. Serial No. 724,651. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

44,001. TEXTILE FABRIC. GUSTAVE GEORGE, Paris, France, assignor to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Oct. 8, 1912. Serial No. 724,652. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

44,002. WALL-COVERING. ROBERT B. GRIFFIN, New York, N. Y. Filed Nov. 23, 1911. Serial No. 662,061. Term of patent 3½ years.



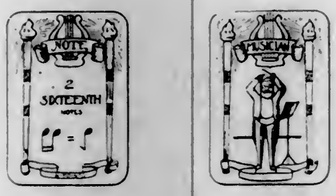
The ornamental design for wall covering as shown and described.

44,003. GLASSWARE VESSEL. WILLIAM H. HAWKES, Honesdale, Pa., assignor to Irving Cut Glass Company, Honesdale, Pa. Filed Mar. 29, 1913. Serial No. 757,707. Term of patent 7 years.



The ornamental design for a glassware vessel, as shown.

44,004. SUIT OF PLAYING-CARDS. HATTIE C. JENSEN, Salt Lake City, Utah. Filed July 13, 1912. Serial No. 709,298. Term of patent 3½ years.



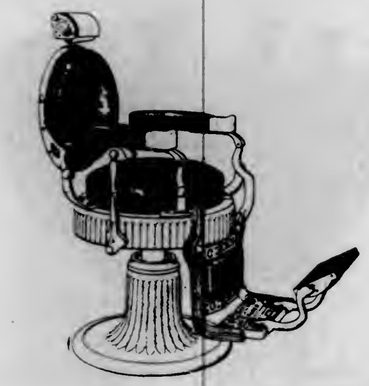
The ornamental design for a suit of playing cards as shown.

44,005. CHALK-HOLDER. JOSEPH W. JOHNSON, Kansas City, Mo., assignor to Theodore R. Treiber, Kansas City, Mo. Filed Oct. 26, 1912. Serial No. 728,007. Term of patent 14 years.

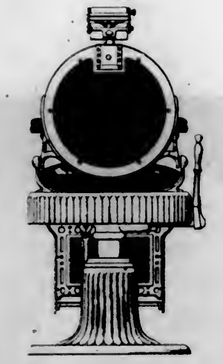


The ornamental design for a chalk holder, as shown.

44,006. CHAIR. WALTER F. KOKEN, St. Louis, Mo., assignor to Koken Barbers Supply Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 17, 1913. Serial No. 749,044. Term of patent 14 years.



44,006.



The ornamental design for a chair as shown and described.

44,007. TEXTILE FABRIC. ALPHONSE H. KURSHEEDT, New York, N. Y. Filed Dec. 7, 1911. Serial No. 664,498. Term of patent 14 years.



The ornamental design for a textile fabric, as shown and described.

44,008. TEXTILE FABRIC. JULIUS J. LAMBERT, New York, N. Y., assignor to Frank and Lambert, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 31, 1913. Serial No. 758,043. Term of patent 3½ years.



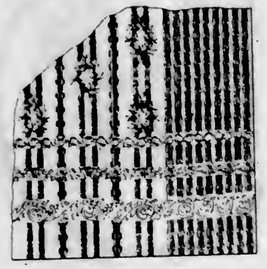
The ornamental design for a textile fabric, as shown.

44,009. CANDY-BOX. JOHN E. LEIKAUF, Bedford Park, N. Y., assignor to Park & Tilford, New York, N. Y., a Corporation of New York. Filed Oct. 22, 1912. Serial No. 727,246. Term of patent 3½ years.



The ornamental design for a candy box as shown.

44,010. BEDSPREAD. FREDERIC LLOYD, Lewiston, Me., assignor to William C. Hunneman, Brookline, Mass. Filed Mar. 19, 1913. Serial No. 755,547. Term of patent 14 years.



The ornamental design for a bedspread, as shown.

44,011. TEXTILE FABRIC. HARRY T. LOOMIS, Brooklyn, N. Y., assignor to Frank and Lambert, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 31, 1913. Serial No. 758,041. Term of patent 3½ years.



The ornamental design for a textile fabric, as shown.

44,012. CARPET. MILTON R. LOUDON, Brooklyn, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,500. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,013. CARPET. MILTON R. LOUDON, Brooklyn, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,501. Term of patent 3½ years.



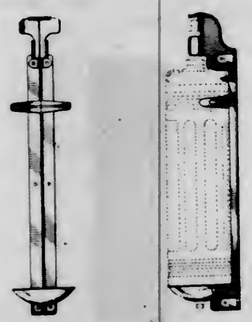
The ornamental design for a carpet, as shown.

44,014. CARPET. MILTON R. LOUDON, Brooklyn, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,502. Term of patent 3½ years.



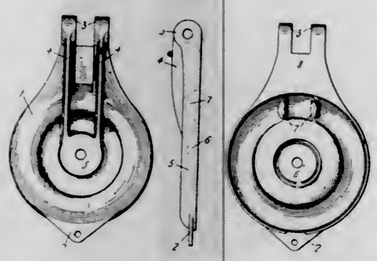
The ornamental design for a carpet, as shown.

44,015. BRACKET FOR HOLDING FIRE-EXTINGUISHERS. PETER G. MACGREGOR, New York, N. Y. Filed Feb. 13, 1913. Serial No. 748,249. Term of patent 7 years.



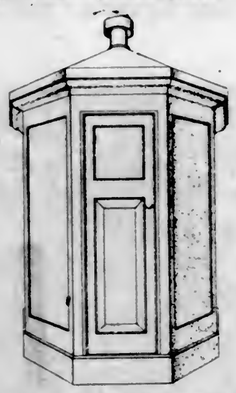
The ornamental design for a bracket for holding fire extinguishers, or similar article, as shown and described.

44,016. BLOCK SIDE. FREDERICK B. MALLORY, Portland, Oreg. Filed Apr. 7, 1913. Serial No. 759,542. Term of patent 14 years.



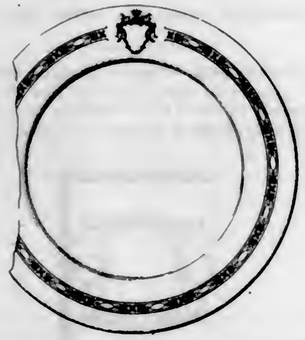
The ornamental design for a block-side substantially as shown and described.

44,017. PORTABLE CONCRETE HOUSE. CHARLES F. MASSEY, Chicago, Ill. Filed Dec. 19, 1912. Serial No. 737,739. Term of patent 7 years.



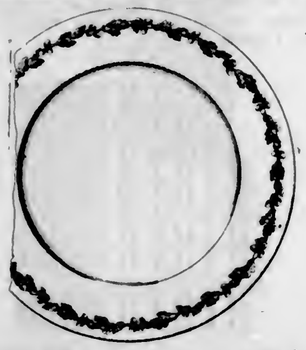
The ornamental design for a portable concrete house, as shown.

44,018. PLATE OR SIMILAR ARTICLE. CHARLES A. MAY, Trenton, N. J., assignor to Maddock Pottery Company, Trenton, N. J. Filed Mar. 14, 1913. Serial No. 754,394. Term of patent 7 years.



The ornamental design for a plate or similar article, as shown.

44,019. PLATE OR SIMILAR ARTICLE. CHARLES A. MAY, Trenton, N. J., assignor to Maddock Pottery Company, Trenton, N. J. Filed Mar. 18, 1913. Serial No. 755,254. Term of patent 7 years.



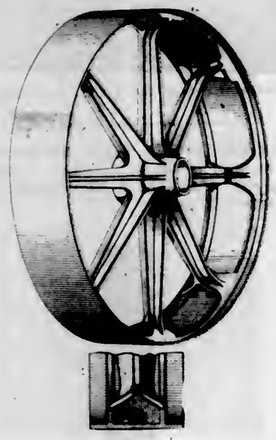
The ornamental design for a plate or similar article, as shown.

44,020. CARPET. JOHN B. MOFFAT, Bronxville, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,508. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,021. VEHICLE-WHEEL. JACQUES MOHAT, Yonkers, N. Y., assignor to Isaac G. Johnson & Co., New York, N. Y., a Corporation of New York. Filed Feb. 28, 1913. Serial No. 751,364. Term of patent 14 years.



The ornamental design for a vehicle wheel, as shown.

44,022. HANDLE FOR PIERCED SPOONS, FORKS, OR SIMILAR ARTICLES. GEORGE E. NERNEY, Attleboro, Mass. Filed Apr. 3, 1913. Serial No. 758,719. Term of patent 3½ years.



The ornamental design for a handle for a pierced spoon, fork or similar article, as shown.

44,023. CARPET OR RUG. JULIUS G. PEGEL, Thompsonville, Conn., assignor to The Hartford Carpet Corporation, Thompsonville, Conn., a Corporation of Connecticut. Filed Feb. 20, 1913. Serial No. 749,737. Term of patent 3½ years.



The ornamental design for a carpet or rug as shown.

44,024. BUTTON. GEORGE L. PHILLIPS, Newkirk, Okla. Filed Mar. 29, 1913. Serial No. 757,704. Term of patent 14 years.



The ornamental design for a button, as shown.

44,025. TEXTILE FABRIC. ROBERT RUEPP, Paris, France, assignor to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Oct. 8, 1912. Serial No. 724,655. Term of patent 3½ years.



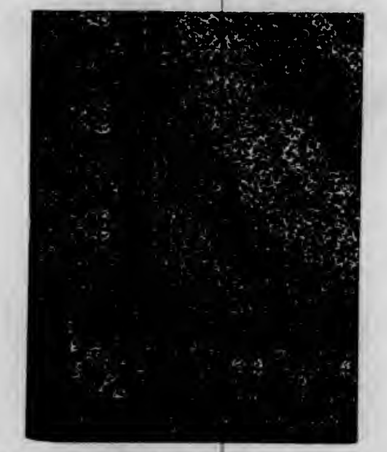
The ornamental design for a textile fabric, as shown.

44,026. MOLASSES-JUG. ANDREW J. SANFORD, Newark, Ohio, assignor to A. H. Heisey & Co., Newark, Ohio, a Copartnership. Filed Jan. 2, 1913. Serial No. 739,890. Term of patent 14 years.



The ornamental design for a molasses jug, as shown.

44,027. RUG. EMIL G. SAUER, Richmond Hill, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,503. Term of patent 3½ years.



The ornamental design for a rug, as shown.

44,028. CARPET. EMIL G. SAUER, Richmond Hill, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,504. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,029. RUG. EMIL G. SAUER, Richmond Hill, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,505. Term of patent 3½ years.



The ornamental design for a rug, as shown.

44,030. CARPET. EMIL G. SAUER, Richmond Hill, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,506. Term of patent 3½ years.



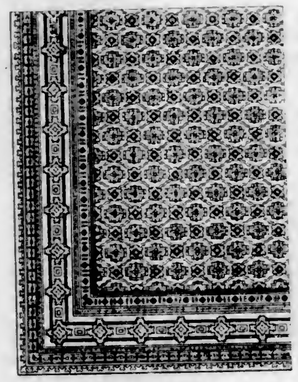
The ornamental design for a carpet, as shown.

44,031. RUG. EMIL G. SAUER, Richmond Hill, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,507. Term of patent 3½ years.



The ornamental design for a rug, as shown.

44,032. CARPET OR RUG. WILLIAM EDWARD SAYERS, Thompsonville, Conn., assignor to Hartford Carpet Corporation, Thompsonville, Conn., a Corporation of Connecticut. Filed Apr. 2, 1913. Serial No. 758,511. Term of patent 3½ years.



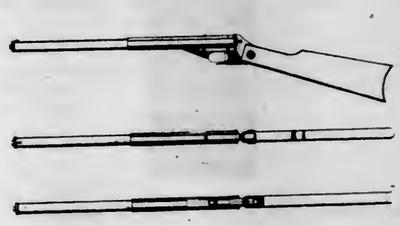
The ornamental design for a carpet or rug as shown.

44,033. CARPET OR RUG. WILLIAM EDWARD SAYERS, Thompsonville, Conn., assignor to Hartford Carpet Corporation, Thompsonville, Conn., a Corporation of Connecticut. Filed Apr. 2, 1913. Serial No. 758,512. Term of patent 3½ years.



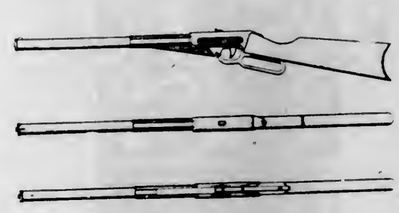
The ornamental design for a carpet or rug as shown.

44,034. AIR-RIFLE. ELBERT HAMILTON SEARLE, Springfield, Mass. Filed Jan. 29, 1912. Serial No. 674,218. Term of patent 14 years.



The ornamental design for an air rifle, as shown.

44,035. AIR-RIFLE. ELBERT HAMILTON SEARLE, Springfield, Mass. Filed Jan. 29, 1912. Serial No. 674,219. Term of patent 14 years.



The ornamental design for an air rifle, as shown.

44,036. TEXTILE FABRIC. EMILE SINS, Paris, France, assignor to Cheney Brothers, South Manchester, Conn., a Corporation of Connecticut. Filed Oct. 8, 1912. Serial No. 724,653. Term of patent 3½ years.



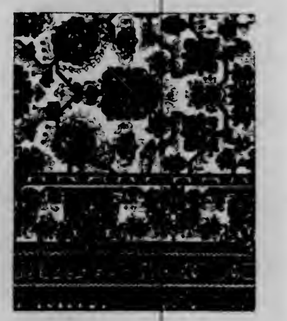
The ornamental design for a textile fabric, as shown.

44,037. CARPET. JOHN SPRING, New York, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,509. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,038. CARPET. JOHN SPRING, New York, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,510. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,039. BADGE. DAVID STEWART, New York, N. Y., assignor to American Boy Scouts, New York, N. Y., a Corporation of New York. Filed Mar. 8, 1913. Serial No. No. 753,101. Term of patent 7 years.



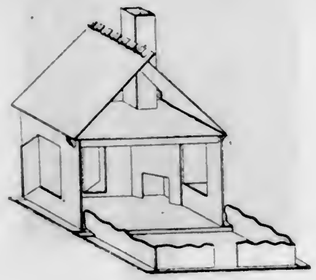
The ornamental design for a badge, as shown.

44,040. SPOON, FORK, OR SIMILAR ARTICLE. SAMUEL STOHR, Meriden, Conn., assignor to International Silver Co., Meriden, Conn., a Corporation of New Jersey. Filed Mar. 19, 1913. Serial No. 755,551. Term of patent 7 years.



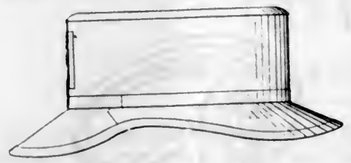
The ornamental design for a spoon, fork or similar article, as shown.

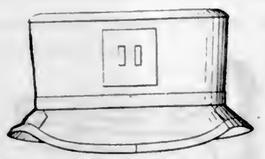
44,041. FOLDING PLAYHOUSE. EMMA R. LEE THAYER and ELIZABETH H. CASSARD, New York, N. Y. Filed Feb. 25, 1913. Serial No. 750,693. Term of patent 14 years.



The ornamental design for a folding play house, as shown.

44,042. WATERPROOF CAP-COVERING. PERLEY G. TILTON, Melrose, Mass. Filed Nov. 14, 1912. Serial No. 731,427. Term of patent 7 years.





The ornamental design for a waterproof cap covering, as shown.

44,043. DRINKING VESSEL OR SIMILAR ARTICLE. GEORGE TRUOG, Jr., Cumberland, Md., assignor to The Potomac Glass Company, Cumberland, Md., a Corporation of Maryland. Filed Apr. 10, 1913. Serial No. 760,320. Term of patent 7 years.



The ornamental design for a drinking vessel or similar article, as shown.

44,044. WATCH-FOB OR BADGE. WILLARD L. VAN NESS, Toledo, Ohio. Filed Mar. 1, 1913. Serial No. 751,654. Term of patent 3½ years.



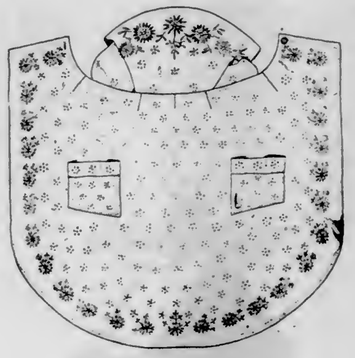
The ornamental design for a watch fob or badge, as shown.

44,045. RUG. IGNATIUS J. VETTER, New York, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 2, 1913. Serial No. 758,513. Term of patent 3½ years.



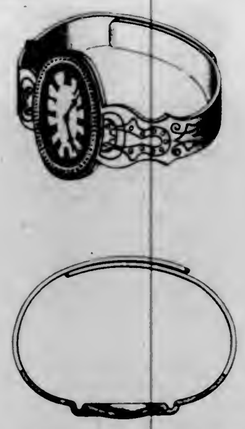
The ornamental design for a rug, as shown.

44,046. APRON. MARGARETH VOLKE, Bovey, Minn. Filed Jan. 27, 1913. Serial No. 744,581. Term of patent 7 years.



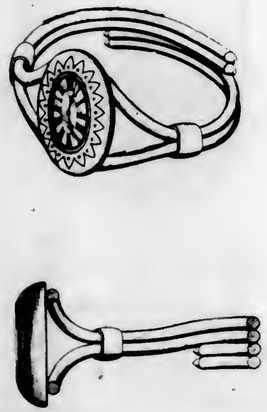
The ornamental design for an apron, as shown.

44,047. BRACELET. RALPH WORMS, Chicago, Ill., assignor to Worms & Loeb, Chicago, Ill., a Corporation. Filed Mar. 10, 1913. Serial No. 753,436. Term of patent 3½ years.



The ornamental design for a bracelet, as shown.

44,048. BRACELET. RALPH WORMS, Chicago, Ill., assignor to Worms & Loeb, Chicago, Ill., a Corporation. Filed Mar. 10, 1913. Serial No. 753,437. Term of patent 3½ years.



The ornamental design for a bracelet, as shown.

TRADE-MARKS

PUBLISHED MAY 18, 1913.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 21,057. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HENRY HEIDE, New York, N. Y. Filed July 21, 1906.

YANKEE

Particular description of goods.—Candy.
Claims use since about the year 1890.

Ser. No. 43,043. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE G. FOX COMPANY, Boston, Mass. Filed June 16, 1909.



Particular description of goods.—Pies.
Claims use since Sept. 25, 1908.

Ser. No. 54,368. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) IDA REID BLAIR, New York, N. Y. Filed Feb. 7, 1911.



Triangular-shaped field and the border being red.
Particular description of goods.—Cleansing and Abrasive Powders.
Claims use since Nov. 23, 1910.

Ser. No. 57,420. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE IMPERIAL MILL COMPANY, Clarksville, Mo. Filed June 30, 1911.

IMPERIAL

Particular description of goods.—Wheat-Flour.
Claims use since October, 1853.

Ser. No. 59,728. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HAARER & SONS, Ann Arbor, Mich. Filed Nov. 15, 1911. Under ten-year proviso.

WONDER

Particular description of goods.—Salves and Ointments.
Claims use since about November, 1889.

Ser. No. 61,988. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HOLLAND COOKIE COMPANY, Chicago, Ill. Filed Mar. 7, 1912.

"JUST-IT"



Particular description of goods.—Cookies, Cakes, and Crackers.
Claims use since Jan. 1, 1911.

Ser. No. 62,081. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) MAIN BELTING COMPANY, Philadelphia, Pa. Filed Mar. 9, 1912.

ANACONDA

Particular description of goods.—Machine-Belting.
Claims use since Mar. 1, 1912.

Ser. No. 62,204. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) LARS L. FILSTRUP, Chicago, Ill. Filed Mar. 16, 1912. Under ten-year proviso.



Particular description of goods.—Key for Stringed Instruments.
Claims use since Jan. 1, 1885.

Ser. No. 62,362. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) BRIDGEPORT BRASS COMPANY, Bridgeport, Conn. Filed Mar. 23, 1912.



Particular description of goods.—Wastes, Overflows, Combined Wastes and Overflows, Waste-Strainers, Overflow-Strainers, Flanges, Elbows, T's, L's, Stoppers for Basins and Bath-Tubs, Traps, Pipe-Couplings, Nuts for Pipe and other Couplings, Sink Connections, Piping, Tubing, Vent-Tubes, Low-Down-Tank Bends, Friction Rings and Collars.
Claims use since Feb. 1, 1912.

Ser. No. 62,408. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) KATHARIN H. HOUGH, Franklin, Pa. Filed Mar. 25, 1912.

STEELEX

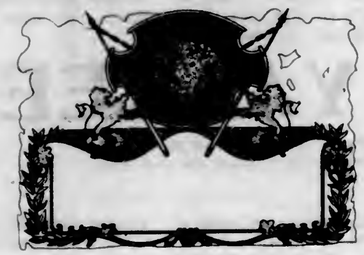
Particular description of goods.—Oil-Well Pumps and Deep-Well Pumps.
Claims use since Dec. 23, 1911.

Ser. No. 62,409. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) KATHARIN H. HOUGH, Franklin, Pa. Filed Mar. 25, 1912.

BRONZEX

Particular description of goods.—Oil-Well Pumps and Deep-Well Pumps.
Claims use since Dec. 23, 1911.

Ser. No. 62,781. (CLASS 37. PAPER AND STATIONERY.) ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y. Filed Apr. 9, 1912.



Particular description of goods.—Toilet-Paper.
Claims use since July 18, 1911.

Ser. No. 62,797. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) JOHNSON & JOHNSON, New Brunswick, N. J. Filed Apr. 10, 1912. Under ten-year proviso.

JOHNSON'S

Particular description of goods.—Surgical Dressings of Gauze and Cotton and Wool, Adhesive Plasters, Sputum-Cups, Rubber Protectives, and First-Aid or Emergency Cases.
Claims use since 1887.

Ser. No. 62,950. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) GILMAN B. SMITH, New York N. Y. Filed Apr. 17, 1912.



Particular description of goods.—Tapes, Garment-Bontags, Hair Rolls, Hair-Pads, Waist-Lengtheners, Belts for Personal Wear, and Garment-Bands.
Claims use since about Dec. 1, 1909.

Ser. No. 64,393. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE DANAHY PACKING CO., Buffalo, N. Y. Filed June 26, 1912.

EASTER

Particular description of goods.—Fresh and Cured Pork.
Claims use since Jan. 1, 1898.

Ser. No. 65,920. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) PITTSBURGH LAMP, BRASS & GLASS COMPANY, Pittsburgh, Pa. Filed Sept. 23, 1912.

PITTSBRASSCO

Particular description of goods.—Metal Light Reflectors and Shades, Fixtures for Holding or Supporting Light Reflectors and Shades, Oil and Gas Lamps, and Lamp-Burners.
Claims use since about Aug. 26, 1912.

Ser. No. 66,029. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JOHN CALLAHAN, Seattle, Wash. Filed Sept. 28, 1912.

John Callahan

The trade-mark being a facsimile of my signature.
Particular description of goods.—Soap.
Claims use since Aug. 28, 1912.

Ser. No. 66,089. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE E. E. SUTHERLAND MEDICINE CO., Paducah, Ky. Filed Oct. 2, 1912.

PODOLAX

Particular description of goods.—A Remedy for Diseases of the Liver and Stomach.
Claims use since Dec. 1, 1911.

Ser. No. 66,552. (CLASS 40. FANCY GOODS. FURNISHINGS, AND NOTIONS.) HENSEL & SCHUMANN, Berlin, Germany. Filed Oct. 26, 1912.



The word "Marke" being disclaimed.
Particular description of goods.—Tassels, Trimmings, Scarfs, Sashes, and Cords.
Claims use since Sept. 7, 1911.

Ser. No. 66,693. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WHITMAN AGRICULTURAL COMPANY, St. Louis, Mo. Filed Nov. 4, 1912.



No claim being made to the name "Whitman's" and no claim being made to the words "World's Standard Line."
Particular description of goods.—Hay-Presses, Lard-Presses, Cotton-Presses, Paper-Presses, Rag-Presses, Wool-Presses, Cotton-Hull Presses, Straw-Presses, Shavings-Presses, Excelsior-Presses, Hand-Presses, Fruit-Presses, Cider-Presses, Wine-Presses, Winches, Side-Saw Tables, Swing-Saw Tables, Drag-Saws, Gasolene and Kerosene Spraying Outfits, Moss-Presses, Broom-Corn Presses, Cut-Hay Presses, Sawdust-Presses, Tobacco-Presses, Hemp-Presses, Tobacco-Stems Presses, Manure-Presses, Peat-Presses, Cornstalks-Presses, Alfalfa-Presses, Pea-Vine Presses, Hair-Presses, Corn-Mills, Cob-Mills, Grinding-Mills, Feed-Mills, Corn-Cutters, Stalk-Cutters, Straw-Cutters, Vegetable-Cutters, Corn-Drills, Corn-Shellers, Ear-Corn Crushers, Seed-Sowers, Gas-Engines, Harrows, Lawn-Rollers, Warehouse-Skids, Oats-Mills, Barley-Mills, Corncob-Crushers, Cylinder Feed-Cutters, Bale-Tie Machines, Lifting-Jacks, Horse-Tread Powers.
Claims use since Oct. 28, 1912.

Ser. No. 66,703. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIS A. WILKINS, El Paso, Tex. Filed Nov. 5, 1912. Under ten-year proviso.

CARBOLIC CREAM

Particular description of goods.—Remedy for Diseases of the Skin.
Claims use since Jan. 1, 1890.

Ser. No. 67,173. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MENZO CLINTON, Spokane, Wash. Filed Nov. 30, 1912.



The portrait being that of the applicant, Menzo Clinton.

Particular description of goods.—A Dressing for Leather, Especially Boots and Shoes.

Claims use since Nov. 1, 1911.

Ser. No. 67,273. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WARREN PACKING COMPANY, Portland, Oreg. Filed Dec. 6, 1912.



The numeral "1" and the outer circles and ornamental brackets being colored in gold.

Particular description of goods.—Canned Salmon.

Claims use since 1869.

Ser. No. 67,435. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE E. CLARK, East Cleveland, Ohio. Filed Dec. 16, 1912.



Particular description of goods.—Popped Corn and Salted Peanuts.

Claims use since March, 1883.

Ser. No. 67,647. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) J. L. STIFEL & SONS, Wheeling, W. Va. Filed Dec. 30, 1912.



No claim being made to the exclusive use of the name "Stifel."

Particular description of goods.—Cotton Piece Goods.

Claims use since December, 1912.

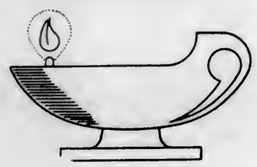
Ser. No. 67,688. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. H. CAIN & SONS, Jacksonville, Ill. Filed Jan. 3, 1913.

CAINSON

Particular description of goods.—Wheat-Flour.

Claims use since on or about the 27th of December, 1912.

Ser. No. 67,843. (CLASS 27. HOROLOGICAL INSTRUMENTS.) HAMBURG-AMERIKANISCHE UHRENFABRIK, Schramberg, Germany. Filed Jan. 11, 1913.



Particular description of goods.—Clocks and Parts Thereof.

Claims use since the year 1911.

Ser. No. 67,980. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) BRAUDRY & COMPANY, INC., Boston, Mass. Filed Jan. 18, 1913.

CHAMPION

Particular description of goods.—Power-Hammers and Trip-Hammers.

Claims use since 1894.

Ser. No. 68,096. (CLASS 17. TOBACCO PRODUCTS.) THEO. KELLER CO., Houston, Tex. Filed Jan. 24, 1913.

ROTARY

Particular description of goods.—Cigars.

Claims use since Dec. 31, 1912.

Ser. No. 68,170. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) FRANZ SWATY, Marburg, Styria, Austria. Filed Jan. 28, 1913.

SWATYN

Particular description of goods.—Hones, Grindstones, and Stones for Polishing Nails and Corns.

Claims use since Oct. 1, 1902.

Ser. No. 68,199. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) ADAMS & ELTING COMPANY, Chicago, Ill. Filed Jan. 30, 1913.

WAXELITE

Particular description of goods.—Floor-Dressing.

Claims use since September, 1897.

Ser. No. 68,200. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) ADAMS & ELTING COMPANY, Chicago, Ill. Filed Jan. 30, 1913.

SPAR-ITE

Particular description of goods.—Varnish.

Claims use since Oct. 1, 1911.

Ser. No. 68,268. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) ROLLER POLISHER COMPANY, New York, N. Y. Filed Feb. 1, 1913.



No claim being made to the representation of the buffer or hand polisher.

Particular description of goods.—Manicuring Hand Polishers, Buffers, and Enamelers.

Claims use since Jan. 17, 1911.

Ser. No. 68,298. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHRISTINE THACKER, Seattle, Wash. Filed Feb. 3, 1913.

LaChristina

Particular description of goods.—Hair-Tonic.

Claims use since Dec. 15, 1912.

Ser. No. 68,337. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN HOMINY COMPANY, Indianapolis, Ind. Filed Feb. 6, 1913.

BOXER

Particular description of goods.—Stock Feed.

Claims use since Jan. 20, 1913.

Ser. No. 68,377. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WHITE-STOKES CO., INC., Chicago, Ill. Filed Feb. 6, 1913.

MALO

Particular description of goods.—Icing, Dressing for Salad, Fruits, Hot Chocolate, and Ice-Cream.

Claims use since September, 1912.

Ser. No. 68,407. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NOVELTY CANDY COMPANY, Jersey City, N. J. Filed Feb. 8, 1913.

LAFAYETTE

Particular description of goods.—Candy.

Claims use since October, 1905.

Ser. No. 68,520. (CLASS 7. CORDAGE.) PLYMOUTH CORDAGE COMPANY, Plymouth, Mass. Filed Feb. 12, 1913.

PREMAX

Particular description of goods.—Fibrous and Textile Rope and Twine.

Claims use since Nov. 23, 1912.

Ser. No. 68,593. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) U-ZIT SPECIALTIES COMPANY, Dover, Del., and Chicago, Ill. Filed Feb. 17, 1913.

U-Zit

Particular description of goods.—Disinfectants.

Claims use since November, 1912.

Ser. No. 68,603. (CLASS 30. CROCKERY, EARTHENWARE, AND PORCELAIN.) CHARLES L. DWENGER, New York, N. Y. Filed Feb. 18, 1913.

CLASSIC

Particular description of goods.—Chinaware.
Claims use since Sept. 1, 1912.

Ser. No. 68,686. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HOOSIER REMEDY CO., Indianapolis, Ind. Filed Feb. 24, 1913.

LAXASPIRIN.

Particular description of goods.—Cold-Tablets.
Claims use since Jan. 31, 1913.

Ser. No. 68,695. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LAKE OF THE WOODS MILLING COMPANY LIMITED, Montreal, Canada. Filed Feb. 24, 1913.

KEETOBA

Particular description of goods.—Wheat-Flour.
Claims use since January, 1909.

Ser. No. 68,697. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LAKE OF THE WOODS MILLING COMPANY LIMITED, Montreal, Canada. Filed Feb. 24, 1913.

MANABERTA

Particular description of goods.—Wheat-Flour.
Claims use since January, 1909.

Ser. No. 68,756. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) V Co., Wheeling, W. Va. Filed Feb. 26, 1913.



The trade-mark, which includes the portrait of a fictitious person.
Particular description of goods.—Toilet Preparations Named Olive-Cream, Cold-Cream, Nail-Polish, Nail-Enamel, Pomade, Rouge, Liquid Powder, Skin-Lotion, Smelling-Salts, Complexion-Powder, Massage-Cream, Violet Perfume, Talcum Powder, and Lilac Toilet Water.
Claims use since Feb. 20, 1913.

Ser. No. 68,791. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) TRAUN RUBBER COMPANY, Hoboken, N. J., and New York, N. Y. Filed Feb. 28, 1913.

GOLDDUST

Particular description of goods.—Dental Rubber.
Claims use since Mar. 1, 1905.

Ser. No. 68,832. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) PIONEER BROOM COMPANY, INC., Amsterdam, N. Y. Filed Mar. 3, 1913.

ECONOMY

Particular description of goods.—Brooms.
Claims use since Nov. 20, 1912.

Ser. No. 68,837. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ALEXANDER W. BIDDLE, Philadelphia, Pa. Filed Mar. 5, 1913.

SKOOTER

Particular description of goods.—Golf-Clubs.
Claims use since Dec. 21, 1912.

Ser. No. 68,840. (CLASS 17. TOBACCO PRODUCTS.) CAYEY-CAGUAS TOBACCO COMPANY, New York, N. Y. Filed Mar. 5, 1913.

IMPORICO

Particular description of goods.—Cigars, Cheroots, and Cigarettes Made of Cigar-Tobacco.
Claims use since Dec. 16, 1912.

Ser. No. 68,848. (CLASS 17. TOBACCO PRODUCTS.) JAYNES DRUG COMPANY, Boston, Mass. Filed Mar. 5, 1913.



The trade-mark, which is a portrait of Dean Richmond, who died many years ago.
Particular description of goods.—Cigars.
Claims use since Jan. 2, 1901.

Ser. No. 68,910. (CLASS 5. ADHESIVES.) AMERICAN GUM PRODUCTS CO., Boston, Mass. Filed Mar. 8, 1913.

GOULAC

Particular description of goods.—Manufactured Gum.
Claims use since Feb. 15, 1913.

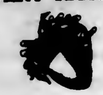
Ser. No. 68,954. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) VAUGHAN & BUSHNELL MANUFACTURING COMPANY, Chicago, Ill. Filed Mar. 10, 1913.



The trade-mark consists of a red circle.
Particular description of goods.—Plain Braces, Ratchet-Braces, Corner-Braces, Drill-Braces, Ratchet-Drills, Hammers, Scutches, Chuck-Bits, Reamers, Countersinks, Machine-Punches, Belt-Punches, Nail-Sets, Rivet-Sets, Machinists' Chisels, Carpenters' Chisels, Saws, Drawing-Knives, Planes, Snips, Tongs, Pincers, Pliers, Nippers, Wire-Cutters, Meat-Triers, Meat-Stringers, Meat-Hooks, Hay-Hooks, Box-Hooks, Cotton-Hooks, Earth-Augers, Hoof-Parers, Wrenches, Awls, Hardies, Headers, Flatters, Swages, Cold-Cutters, Hot-Cutters, Block-Scrapers, Screw-Drivers, Star-Drills, Claw-Bars, Crate-Openers, and Horseshoers' Knives.
Claims use since Feb. 28, 1913.

Ser. No. 68,958. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHAPIN & COMPANY, INCORPORATED, Hammond, Ind. Filed Mar. 11, 1913.

ACORN
DAIRY RATION



No claim of exclusive right to the use of the words "Dairy Ration" being made.
Particular description of goods.—Horse and Stock Feed.
Claims use since June 15, 1908.

Ser. No. 68,989. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) BURK BROTHERS, Philadelphia, Pa. Filed Mar. 13, 1913.

OXIDE

Particular description of goods.—Calf, Kid, and Goat Skins.
Claims use since Nov. 5, 1892.

Ser. No. 68,994. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) COWAN TRUCK COMPANY, Holyoke, Mass. Filed Mar. 13, 1913.

Transveyor

Particular description of goods.—Trucks.
Claims use since Oct. 1, 1912.

Ser. No. 69,004. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LAZELL, PERFUMER, New York, N. Y. Filed Mar. 13, 1913.



Particular description of goods.—Perfume and Toilet Water.
Claims use since Jan. 1, 1913.

Ser. No. 69,014. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SEABOARD RICE MILLING CO., Galveston, Tex. Filed Mar. 13, 1913.



Particular description of goods.—Cereal Breakfast Food.
Claims use since Nov. 8, 1912.

Ser. No. 69,042. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HUMPHREYS, CANNON & CO., Memphis, Tenn. Filed Mar. 14, 1913.



Particular description of goods.—Baking-Powder.
Claims use since Nov. 1, 1912.

Ser. No. 69,048. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) CASTNER, CURRAN & BULLITT, INC., Philadelphia, Pa. Filed Mar. 15, 1913.

SOVEREIGN

Particular description of goods.—Coal.
Claims use since Oct. 23, 1912.

Ser. No. 69,076. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) SAMUEL C. BECK, Chicago, Ill. Filed Mar. 17, 1913.



The name "S. C. Beck's" appearing therein is a facsimile of my signature in the possessive form. I do not claim the exclusive right to the word "Rubber" as applied to such goods.

Particular description of goods.—Rubber and Rubber Compounds.

Claims use since Mar. 12, 1913.

Ser. No. 69,119. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROBERTS BROTHERS, Warsaw, N. Y. Filed Mar. 17, 1913.

MATADOR

Particular description of goods.—Wheat-Flour.
Claims use since Jan. 24, 1913.

Ser. No. 69,140. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WABASH BAKING POWDER CO., Wabash, Ind. Filed Mar. 17, 1913.

Bako

Particular description of goods.—Baking-Powder.
Claims use since Mar. 1, 1913.

Ser. No. 69,141. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ROSE O'NEILL WILSON, New York, N. Y. Filed Mar. 17, 1913.

KEWPIE

Particular description of goods.—Dolls.
Claims use since Dec. 21, 1912.

Ser. No. 69,144. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) THE RUDOLPH WURLITZER CO., Cincinnati, Ohio. Filed Mar. 17, 1913.

Rolo-Artis

Particular description of goods.—Music-Rolls.
Claims use since Jan. 4, 1913.

Ser. No. 69,145. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ZILENE CHEMICAL COMPANY, Pittsburgh, Pa. Filed Mar. 17, 1913.

FLASH-LIGHT

Particular description of goods.—Headache-Powders.
Claims use since Feb. 6, 1913.

Ser. No. 69,161. (CLASS 1. RAW OR PARTY-PREPARED MATERIALS.) THE HILL & GRIFFITH COMPANY, Cincinnati, Ohio. Filed Mar. 18, 1913.

EBONY

Particular description of goods.—Core Compound.
Claims use since Apr. 11, 1908.

Ser. No. 69,172. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN R. SLOAN and DANIEL N. FARMER, Stanley, Kans. Filed Mar. 18, 1913.



Particular description of goods.—A Remedy for Hog-Cholera.
Claims use since Oct. 10, 1912.

Ser. No. 69,206. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) MILTON BRADLEY COMPANY, Springfield, Mass. Filed Mar. 20, 1913.

RUMME

Particular description of goods.—Games.
Claims use since Jan. 25, 1913.

Ser. No. 69,207. (CLASS 5. ADHESIVES.) MILTON BRADLEY COMPANY, Springfield, Mass. Filed Mar. 20, 1913.

ADHEZO

Particular description of goods.—Library-Paste.
Claims use since Feb. 1, 1913.

Ser. No. 69,221. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE FORMACONE COMPANY, Newark, N. J. Filed Mar. 21, 1913.



Particular description of goods.—Disinfectants, Deodorizers, and Fumigators.
Claims use since Jan. 2, 1905.

Ser. No. 69,224. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE FORMACONE COMPANY, Newark, N. J. Filed Mar. 21, 1913.

RES-PI-FORM

Particular description of goods.—Disinfectants, Deodorizers, and Fumigators.
Claims use since Jan. 2, 1905.

Ser. No. 69,267. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) THE STERLING COMPANY, Derby, Conn. Filed Mar. 22, 1913.

STERLITONE

Particular description of goods.—Player-Pianos.
Claims use since November, 1912.

Ser. No. 69,308. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BEAUMONT RICE MILLS, Beaumont and El Campo, Tex. Filed Mar. 25, 1913.

LEADER

Particular description of goods.—Rice.
Claims use since Dec. 1, 1912.

Ser. No. 69,318. (CLASS 39. CLOTHING.) E. EMMERS & CO., Royersford, Pa. Filed Mar. 25, 1913.

E-CUT

Particular description of goods.—Women's Undervests.
Claims use since Dec. 6, 1912.

Ser. No. 69,338. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Mar. 25, 1913.

CARDINAL

Particular description of goods.—Toilet-Paper.
Claims use since Mar. 1, 1911.

Ser. No. 69,342. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed Mar. 25, 1913.

HAWK

Particular description of goods.—Toilet-Paper.
Claims use since Sept. 1, 1911.

Ser. No. 69,343. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed Mar. 25, 1913.

ONEITA

Particular description of goods.—Toilet-Paper.
Claims use since Dec. 11, 1910.

Ser. No. 69,344. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed Mar. 25, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Jan. 1, 1912.

Ser. No. 69,352. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FORT MYERS CITRUS GROWERS ASSOCIATION, Fort Myers, Fla. Filed Mar. 26, 1913.



Particular description of goods.—Citrus Fruits—Namely, Oranges, Lemons, Limes, Tangerines, and Grape-Fruit.
Claims use since Jan. 20, 1913.

Ser. No. 69,371. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE AMERICAN COTTON HULL & FIBRE COMPANY, Memphis, Tenn. Filed Mar. 27, 1913.

CYCLONE

Particular description of goods.—Cattle Feed.
Claims use since Mar. 11, 1913.

Ser. No. 69,379. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) PARKER BROTHERS, Portland, Me., and Salem, Mass. Filed Mar. 27, 1913.

PARQUET

Particular description of goods.—Card Games.
Claims use since Mar. 5, 1913.

Ser. No. 69,397. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROSENBERG BROS. & Co., San Francisco, Cal. Filed Mar. 28, 1913.

APEX

Particular description of goods.—Raisins.
Claims use since Dec. 2, 1912.

Ser. No. 69,419. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. A. FOLGER & COMPANY, Kansas City, Mo. Filed Mar. 29, 1913.

LATONA

The background being red.
Particular description of goods.—Coffee.
Claims use since September, 1910.

Ser. No. 69,422. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. A. FOLGER & COMPANY, Kansas City, Mo. Filed Mar. 29, 1913.

EL ARDO

Particular description of goods.—Coffee.
Claims use since April, 1911.

Ser. No. 69,424. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. A. FOLGER & COMPANY, Kansas City, Mo. Filed Mar. 29, 1913.

COMRADE

Particular description of goods.—Coffee.
Claims use since September, 1909.

Ser. No. 69,431. (CLASS 5. ADHESIVES.) THE MINDEASE COMPANY, Louisville, Ky. Filed Mar. 29, 1913.

Mindease

Particular description of goods.—A Preparation for Filling Automobile-Tires.
Claims use since Mar. 17, 1913.

Ser. No. 69,432. (CLASS 15. OILS AND GREASES.) THE OHIO GREASE LUBRICANT CO., Loudonville, Ohio. Filed Mar. 29, 1913.



Particular description of goods.—Cylinder-Grease, Cup-Grease, Fiber-Grease, Journal-Grease, Auto-Grease, Bearing-Grease, and Commutator Compound.
Claims use since Mar. 5, 1913.

Ser. No. 69,437. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ATLANTIC MACARONI CO., Long Island City, N. Y. Filed Mar. 31, 1913.

TRAMONTE

Particular description of goods.—Alimentary Paste Products.
Claims use since Mar. 8, 1913.

Ser. No. 69,438. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ATLANTIC MACARONI CO., Long Island City, N. Y. Filed Mar. 31, 1913.

ABBAZIA

Particular description of goods.—Alimentary Paste Products.
Claims use since June 28, 1912.

Ser. No. 69,441. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ATLANTIC MACARONI CO., Long Island City, N. Y. Filed Mar. 31, 1913.

SOVRANA

Particular description of goods.—Alimentary Paste Products.
Claims use since June 28, 1912.

Ser. No. 69,442. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ATLANTIC MACARONI CO., Long Island City, N. Y. Filed Mar. 31, 1913.

IDEALE

Particular description of goods.—Alimentary Paste Products.
Claims use since May 15, 1912.

Ser. No. 69,443. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ATLANTIC MACARONI CO., Long Island City, N. Y. Filed Mar. 31, 1913.

TAMACO

Particular description of goods.—Alimentary Paste Products.
Claims use since Mar. 8, 1913.

Ser. No. 69,455. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELLSWORTH MILL & ELEVATOR CO., Ellsworth, Kans. Filed Mar. 31, 1913.



Particular description of goods.—Wheat-Flour.
Claims use since Jan. 22, 1913.

Ser. No. 69,457. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) FLOCKTON, TOMPKIN & Co. LD., Sheffield, England. Filed Mar. 31, 1913. Under ten-year proviso.



Particular description of goods.—Tool-Steel and Steel in Bar, Rod, Sheet, Plate, Hoop, Ingot, and Wire Form, Also Castings and Forgings of Steel.
Claims use since the year 1889.

Ser. No. 69,469. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MCKENNA BROS. BRASS CO., Pittsburgh, Pa. Filed Mar. 31, 1913. Under ten-year proviso.

HOME BOTTLER

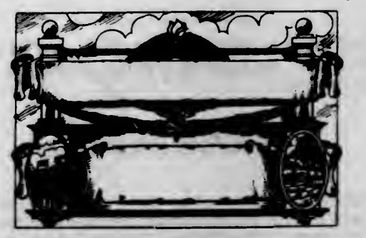
Particular description of goods.—A Bottling Device.
Claims use since Jan. 1, 1895.

Ser. No. 69,482. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed Mar. 31, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Aug. 9, 1912.

Ser. No. 69,484. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed Mar. 31, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Jan. 30, 1912.

Ser. No. 69,487. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.



Particular description of goods.—Toothpicks.
Claims use since about Jan. 1, 1908.

Ser. No. 69,494. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.

Wampum

Particular description of goods.—Toothpicks.
Claims use since about Jan. 1, 1907.

Ser. No. 69,502. (CLASS 15. OILS AND GREASES.) THE ALDEN SPEARE'S SONS CO., Cambridge, Mass. Filed Apr. 1, 1913.

TASSCO

Particular description of goods.—Lubricating, Illuminating, and Road Oils and Lubricating-Greases.
Claims use since the year 1905.

Ser. No. 69,551. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

FAR AWAY

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 11, 1909.

Ser. No. 69,554. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

SEMPER PARATUS

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 2, 1902.

Ser. No. 69,556. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

SIGNATURE

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 10, 1902.

Ser. No. 69,562. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

Crony

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 5, 1913.

Ser. No. 69,564. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

LATTICE

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 1, 1913.

Ser. No. 69,565. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

Martha Washington

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 10, 1913.

Ser. No. 69,567. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.



Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 5, 1913.

Ser. No. 69,568. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

Ryckets

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 1, 1913.

Ser. No. 69,569. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.



Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 1, 1913.

Ser. No. 69,570. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.



Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 1, 1913.

Ser. No. 69,574. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

SCHOLARSHIP

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 1, 1913.

Ser. No. 69,577. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

The Campus

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Aug. 30, 1902.

Ser. No. 69,578. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

SENTINEL

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 21, 1906.

Ser. No. 69,579. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

SILVER KING

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 11, 1901.

Ser. No. 69,580. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

WE TWO

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 12, 1908.

Ser. No. 69,595. (CLASS 7. CORDAGE.) HENRY C. KELLEY COMPANY, New York, N. Y. Filed Apr. 4, 1913. Under ten-year proviso.

PEARL

Particular description of goods.—Cords, Twines, Ropes, and Lines, Said Lines Being of the Nature of Clothes-Lines Made of Cotton or other Yarn.
Claims use since a date prior to May, 1883.

Ser. No. 69,597. (CLASS 7. CORDAGE.) HENRY C. KELLEY COMPANY, New York, N. Y. Filed Apr. 4, 1913. Under ten-year proviso.

DAUNTLESS

Particular description of goods.—Cords, Twines, Ropes, and Lines, Said Lines Being of the Nature of Clothes-Lines Made of Cotton or other Yarn.
Claims use since a date prior to May, 1877.

Ser. No. 69,603. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) TAYLOR INSTRUMENT COMPANIES, Rochester, N. Y. Filed Apr. 4, 1913.

STORMOGRAPH

Particular description of goods.—Recording-Barometers.
Claims use since Feb. 4, 1913.

Ser. No. 69,717. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) GEO. BORGFELDT & CO., New York, N. Y. Filed Apr. 11, 1913.

Trianon

Particular description of goods.—Toilet-Brushes.
Claims use since Apr. 7, 1913.

Ser. No. 69,867. (CLASS 15. OILS AND GREASES.) STANDARD OIL CO. (KENTUCKY), Louisville, Ky. Filed Apr. 17, 1913.

NO 5

Particular description of goods.—Cylinder-Oil.
Claims use since 1909.

Ser. No. 69,868. (CLASS 15. OILS AND GREASES.) STANDARD OIL CO. (KENTUCKY), Louisville, Ky. Filed Apr. 17, 1913.

PALMETTO

Particular description of goods.—Cylinder-Oil.
Claims use since 1906.

TRADE-MARKS

REGISTERED MAY 13, 1913.

91,541. MUSTARD. ERNST EULERT, New York, N. Y.
Filed December 16, 1912. Serial No. 67,434. PUBLISHED FEBRUARY 11, 1913.

91,542. STOCK FEED. AMERICAN HOMINY COMPANY, Indianapolis, Ind.
Filed December 16, 1912. Serial No. 67,442. PUBLISHED MARCH 11, 1913.

91,543. WRITING AND PRINTING PAPER. AMERICAN WRITING PAPER COMPANY, Holyoke, Mass.
Filed January 26, 1912. Serial No. 61,049. PUBLISHED MARCH 11, 1913.

91,544. MOLDABLE MATERIAL FOR DENTISTS' USE. CLAUDIUS ASH SONS AND COMPANY LIMITED, London, England.
Filed January 14, 1913. Serial No. 67,914. PUBLISHED MARCH 11, 1913.

91,545. CERTAIN MACHINERY, TOOLS, AND PARTS THEREOF. ATLANTA UTILITY WORKS, East Point, Ga.
Filed December 3, 1912. Serial No. 67,206. PUBLISHED FEBRUARY 18, 1913.

91,546. METALLIC PACKINGS. AURORA METAL COMPANY, Aurora, Ill.
Filed August 28, 1912. Serial No. 65,465. PUBLISHED MARCH 11, 1913.

91,547. TARRED FELT ROOFING. BARRETT MANUFACTURING COMPANY, New York, N. Y.
Filed October 21, 1911. Serial No. 59,262. PUBLISHED MARCH 4, 1913.

91,548. CERTAIN FLAT WARE, HOLLOW WARE, AND TABLEWARE. THE BENNETT-MERWIN SILVER COMPANY, New Milford, Conn.
Filed December 14, 1912. Serial No. 67,400. PUBLISHED MARCH 11, 1913.

91,549. CERTAIN NAMED BRUSHES. THE BIGELOW BRUSH CO., Baltimore, Md.
Filed October 17, 1912. Serial No. 66,332. PUBLISHED MARCH 4, 1913.

91,550. CERTAIN NAMED BRUSHES. THE BIGELOW BRUSH CO., Baltimore, Md.
Filed October 17, 1912. Serial No. 66,331. PUBLISHED MARCH 4, 1913.

91,551. CERTAIN NAMED PAPER AND STATIONERY. J. C. BLAIR COMPANY, Huntingdon, Pa.
Filed June 17, 1908. Serial No. 35,494. PUBLISHED MARCH 11, 1913.

91,552. CERTAIN NAMED PAPER AND STATIONERY. J. C. BLAIR COMPANY, Huntingdon, Pa.
Filed June 17, 1908. Serial No. 35,507. PUBLISHED MARCH 11, 1913.

91,553. CANNED FRUITS AND VEGETABLES. BOLLINGER-BABBAGE COMPANY, Louisville, Ky.
Filed August 7, 1912. Serial No. 65,137. PUBLISHED MARCH 11, 1913.

91,554. SKETCHES, DRAWINGS, PRINTS OF FASHIONS, AND FOLDERS CONTAINING THE SAME. BUCHSBAUM FASHION COMPANY, INC., New York, N. Y.
Filed December 13, 1912. Serial No. 67,378. PUBLISHED MARCH 4, 1913.

91,555. OIL STOVES, OVENS, AND WICKS. THE CLEVELAND FOUNDRY COMPANY, Cleveland, Ohio.
Filed October 24, 1912. Serial No. 66,486. PUBLISHED MARCH 11, 1913.

91,556. PHENOL-METHYLENE LIQUID, SEMISOLID, AND SOLID PLASTIC COMPOUNDS. CONDENSITE COMPANY OF AMERICA, Glen Ridge, N. J.
Filed May 15, 1911. Serial No. 56,372. PUBLISHED MARCH 11, 1913.

91,557. GASOLENE. CONSUMERS REFINING COMPANY, Chicago, Ill.
Filed January 6, 1913. Serial No. 67,744. PUBLISHED MARCH 11, 1913.

91,558. WRAPPING-PAPERS. CONTINENTAL PAPER BAG COMPANY, Rumford, Me., and New York, N. Y.
Filed January 21, 1913. Serial No. 68,032. PUBLISHED MARCH 11, 1913.

91,559. ABRASIVE MATERIALS FOR GRINDING VALVES AND METALS GENERALLY. DIAMANT-GESELLSCHAFT M. B. H., Kahl-on-the-Main, Germany.
Filed July 17, 1912. Serial No. 64,791. PUBLISHED MARCH 11, 1913.

91,560. RYE STRAIGHT WHISKY. E. E. DOWNHAM CO., Alexandria, Va.
Filed March 19, 1912. Serial No. 62,267. PUBLISHED MARCH 11, 1913.

91,561. APERITIVE WINE. EDOUARD DUBONNET & DE LA BUSSIÈRE, Montreuil, Seine, France.
Filed July 3, 1912. Serial No. 64,573. PUBLISHED MARCH 11, 1913.

91,562. SAFETY BLASTING-FUSES. EMPIRE DYNAMITE CO., Chicago, Ill.
Filed October 23, 1912. Serial No. 66,467. PUBLISHED MARCH 4, 1913.

91,563. CHAIRS. RALPH CHILD ERSKINE, Tryon, N. C.
Filed March 29, 1912. Serial No. 62,511. PUBLISHED MARCH 4, 1913.

91,564. EMBROIDERY-FLOSS. FISHEL & GORMAN, INC., Brooklyn, N. Y.
Filed November 25, 1912. Serial No. 67,093. PUBLISHED MARCH 11, 1913.

91,565. WATERPROOF LEATHER BELTING. THE FISHER LEATHER BELTING CO., INC., Philadelphia, Pa.
Filed December 3, 1912. Serial No. 67,211. PUBLISHED MARCH 11, 1913.

91,566. LAGGING. FOSTER'S ADHESIVE COMPOSITION COMPANY LIMITED, Auckland, New Zealand.
Filed December 18, 1912. Serial No. 67,474. PUBLISHED MARCH 4, 1913.

91,567. FIRE-BRICKS. FULTON FIRE BRICK COMPANY, Fulton, Mo.
Filed December 2, 1912. Serial No. 67,198. PUBLISHED MARCH 4, 1913.

91,568. CERTAIN NAMED JEWELRY AND PRECIOUS-METAL WARE. EDITH BOLLING GALT, Washington, D. C.
Filed December 5, 1910. Serial No. 53,137. PUBLISHED MARCH 11, 1913.

91,569. VENTILATORS. GALVANIZED STEEL CUPOLA CO., Owatonna, Minn.
Filed September 3, 1912. Serial No. 65,546. PUBLISHED MARCH 11, 1913.

91,570. CERTAIN METAL FRICTION CIGAR-LIGHTERS. HARRY N. GOLDSMITH, Philadelphia, Pa.
Filed December 5, 1912. Serial No. 67,240. PUBLISHED MARCH 11, 1913.

91,571. FIELD AND GRASS SEEDS. H. W. GORDINIER AND SONS CO., Troy, N. Y.
Filed October 21, 1912. Serial No. 66,397. PUBLISHED MARCH 11, 1913.

91,572. CYLINDRICAL CONTAINERS COMPRISING CASKS AND BARRELS. THE GREIF BROS. COOPERAGE CO., Cleveland, Ohio.
Filed January 10, 1913. Serial No. 67,815. PUBLISHED MARCH 4, 1913.

91,573. CYLINDRICAL CONTAINERS COMPRISING CASKS AND BARRELS. THE GREIF BROS. COOPERAGE CO., Cleveland, Ohio.
Filed January 10, 1913. Serial No. 67,816. PUBLISHED MARCH 4, 1913.

91,574. CYLINDRICAL CONTAINERS COMPRISING CASKS AND BARRELS. THE GREIF BROS. COOPERAGE CO., Cleveland, Ohio.
Filed January 10, 1913. Serial No. 67,817. PUBLISHED MARCH 4, 1913.

91,575. ASTROLOGICAL PAMPHLETS, CHARTS, AND ALMANACS. I. N. HALLEYTON, New York, N. Y.
Filed July 2, 1912. Serial No. 64,542. PUBLISHED MARCH 4, 1913.

91,576. CERTAIN NAMED RANGES, STOVES, AND HEATERS. HIBBARD, SPENCER, BARTLETT & CO., Chicago, Ill.
Filed December 16, 1912. Serial No. 67,437. PUBLISHED MARCH 11, 1913.

91,577. SNAP BUTTONS AND CLASPS. FELIX HOMBERG, Barmen, Germany.
Filed July 31, 1912. Serial No. 65,006. PUBLISHED MARCH 11, 1913.

91,578. VEGETABLE PRODUCT TO BE USED AS BASIS FOR PASTE. CHAS. W. JACOB & ALLISON, New York, N. Y.
Filed January 10, 1913. Serial No. 67,821. PUBLISHED MARCH 11, 1913.

91,579. CLASPS MADE OF BASE METAL. WILLIAM THOMAS JAMES, Chicago, Ill.
Filed January 27, 1913. Serial No. 68,142. PUBLISHED MARCH 11, 1913.

91,580. BIRD FOOD. FREDERICK KAEMPFER, Chicago, Ill.
Filed January 23, 1913. Serial No. 68,075. PUBLISHED MARCH 11, 1913.

91,581. CAKES AND CRACKERS. KAHN-BECK COMPANY, Los Angeles, Cal.
Filed February 12, 1912. Serial No. 61,429. PUBLISHED MARCH 11, 1913.

91,582. FRESH LEAF-LETTUCE AND FRESH LIMES. W. H. J. KAVANAGH, Chicago, Ill.
Filed August 9, 1912. Serial No. 65,177. PUBLISHED MARCH 11, 1913.

91,583. EAVES-TROUGH HANGERS. F. D. KEES MFG. CO., Beatrice, Nebr.
Filed May 14, 1910. Serial No. 49,723. PUBLISHED MARCH 11, 1913.

91,584. SENSITIZED PHOTOGRAPHIC PAPER AND CARDBOARD. KRAFT & STEUDEL FABRIK PHOTOGRAPHISCHER PAPIERE GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Dresden, Germany.
Filed November 26, 1912. Serial No. 67,129. PUBLISHED MARCH 11, 1913.

91,585. PIANO-BACKS. LECHNER & SCHOENBERGER COMPANY, Pittsburgh, Pa.
Filed December 5, 1912. Serial No. 67,243. PUBLISHED MARCH 11, 1913.

91,586. PREPARED MUSTARD. ROY A. LUSK, New York, N. Y.
Filed January 13, 1913. Serial No. 67,882. PUBLISHED MARCH 11, 1913.

91,587. CANDIES, CHOCOLATES, AND BONBONS. PASQUALE MARGARELLA, New York, N. Y.
Filed September 28, 1912. Serial No. 66,027. PUBLISHED MARCH 11, 1913.

91,588. JOCK-STRAPS AND SUSPENSORIES. EDWARD EDWIN MAYER, Jersey City, N. J.
Filed July 6, 1912. Serial No. 64,602. PUBLISHED MARCH 11, 1913.

91,589. CIGARETTES. M. MELACHRINO & CO., New York, N. Y., assignor to M. Melachrino & Co., Incorporated, a Corporation of New York.
Filed June 6, 1912. Serial No. 64,015. PUBLISHED DECEMBER 10, 1912.

91,590. GALVANIZED IRON AND STEEL SHEETING. THE MONMOUTHSHIRE STEEL AND TINPLATE COMPANY LIMITED, Pontymister, near Newport, England.
Filed January 30, 1913. Serial No. 68,208. PUBLISHED MARCH 11, 1913.

91,591. BAKING-POWDER, HOUSEHOLD AMMONIA, AND BLUING. THE MOREY MERCANTILE COMPANY, Denver, Colo.
Filed September 20, 1912. Serial No. 65,872. PUBLISHED JANUARY 21, 1913.

91,592. PLUMBAGO CRUCIBLES. THE MORGAN CRUCIBLE COMPANY LIMITED, Battersea, London, England.
Filed February 24, 1912. Serial No. 61,709. Renewal of No. 9,245, March 28, 1882. PUBLISHED MARCH 11, 1913.

91,593. TOOTHPICKS. NEW ENGLAND SELLING CO., New York, N. Y.
Filed January 13, 1913. Serial No. 67,900. PUBLISHED MARCH 11, 1913.

91,594. HOSIERY. NEW JERSEY TEXTILE ART CORPORATION, Newark, N. J.
Filed February 4, 1913. Serial No. 68,317. PUBLISHED MARCH 11, 1913.

91,595. PAPER BAGS. OLD DOMINION PAPER CO., Norfolk, Va.
Filed January 9, 1913. Serial No. 67,809. PUBLISHED MARCH 4, 1913.

91,596. PAPER BAGS. OLD DOMINION PAPER CO., Norfolk, Va.
Filed January 9, 1913. Serial No. 67,810. PUBLISHED MARCH 4, 1913.

91,597. CLOTHES-LINE REELS. WM. M. PALMER, New York, N. Y.
Filed September 16, 1912. Serial No. 65,784. PUBLISHED MARCH 4, 1913.

91,598. NON-ALCOHOLIC TONIC BEVERAGE AND SYRUP FOR MAKING THE SAME. THE PARFAY COMPANY, Louisville, Ky.
Filed February 6, 1913. Serial No. 68,369. PUBLISHED MARCH 11, 1913.

91,599. OLIVE-OIL. JOSEPH PETROCELLI & COMPANY, New York, N. Y.
Filed February 5, 1913. Serial No. 68,328. PUBLISHED MARCH 11, 1913.

91,600. COFFEE. O. R. PIEPER, Milwaukee, Wis.
Filed January 31, 1913. Serial No. 68,247. PUBLISHED MARCH 11, 1913.

91,601. WHEAT-FLOUR. THE PORTLAND FLOURING MILLS COMPANY, Portland, Oreg.
Filed November 25, 1912. Serial No. 67,099. PUBLISHED MARCH 11, 1913.

91,602. CARTRIDGES, CARTRIDGE-SHELLS, CAPS, PRIMERS, BULLETS, SHOT, AND WADS. REMINGTON AMMUNITION CO., Weehawken, N. J., assignor to Remington Arms and Ammunition Company, Ilion, N. Y., a Corporation of New York.
Filed December 14, 1911. Serial No. 60,228. PUBLISHED MARCH 4, 1913.

91,603. CERTAIN MILLINERY ORNAMENTS OF PRECIOUS METAL OR SET WITH JEWELS. ALICE ALMA ROBERTS, New York, N. Y.
Filed October 8, 1912. Serial No. 66,199. PUBLISHED MARCH 11, 1913.

91,604. HOSIERY. I. ROME & SONS, Worcester, Mass.
Filed September 13, 1912. Serial No. 65,726. PUBLISHED DECEMBER 10, 1912.

91,605. TRACTION-ENGINES. M. RUMELY COMPANY, Laporte, Ind.
Filed December 30, 1912. Serial No. 67,648. PUBLISHED MARCH 11, 1913.

91,606. CANNED SALMON. GEORGE W. SANBORN & SON, Astoria, Oreg.
Filed February 3, 1913. Serial No. 68,295. PUBLISHED MARCH 11, 1913.

91,607. CANNED SALMON. GEORGE W. SANBORN & SON, Astoria, Oreg.
Filed February 3, 1913. Serial No. 68,292. PUBLISHED MARCH 11, 1913.

91,608. STRAIGHT WHISKY. THE SCHUSTER COMPANY, Cleveland, Ohio.
Filed October 29, 1912. Serial No. 66,604. PUBLISHED FEBRUARY 4, 1913.

91,609. BICYCLES. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed December 16, 1912. Serial No. 67,419. PUBLISHED MARCH 4, 1913.

91,610. VIOLIN-STRINGS. SHERMAN, CLAY & CO., San Francisco, Cal.
Filed July 1, 1912. Serial No. 64,508. Renewal of No. 9,574, July 25, 1882. PUBLISHED MARCH 11, 1913.

91,611. SEWING-MACHINE NEEDLES. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J.
Filed January 4, 1913. Serial No. 67,728. PUBLISHED MARCH 11, 1913.

91,612. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES. SOCIETE "SAVOIA FILM," Turin, Italy.
Filed July 27, 1912. Serial No. 64,966. PUBLISHED MARCH 11, 1913.

91,613. MOVING-PICTURE FILMS. SOCIETE FRANCAISE DES FILMS ET CINEMATOGRAPHES ECLAIR, New York, N. Y.
Filed November 8, 1912. Serial No. 66,757. PUBLISHED MARCH 11, 1913.

91,614. DRAWING-PENCILS. EDWARD G. SOLTMANN, New York, N. Y.
Filed May 31, 1912. Serial No. 63,918. PUBLISHED MARCH 11, 1913.

91,615. CERTAIN MACHINERY AND TOOLS AND PARTS THEREOF. SPROUT, WALDRON & CO., Muncy, Pa.
Filed October 3, 1912. Serial No. 66,116. PUBLISHED MARCH 11, 1913.

91,616. CYLINDER-OIL, ENGINE-OIL, MACHINE-OIL, DYNAMO-OIL, TURBINE-OIL, AND TRANSFORMER-OIL. STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill.
Filed January 11, 1913. Serial No. 67,854. PUBLISHED MARCH 11, 1913.

91,617. HOSIERY. CHAS. A. STEVENS & BROS., Chicago, Ill.
Filed March 11, 1912. Serial No. 62,103. PUBLISHED MARCH 11, 1913.

91,618. CERTAIN NAMED RECEPTACLES. TOWER MANUFACTURING & NOVELTY CO., New York, N. Y.
Filed October 25, 1912. Serial No. 66,493. PUBLISHED FEBRUARY 4, 1913.

91,619. TYPE-WRITER OIL. TOWER MANUFACTURING & NOVELTY CO., New York, N. Y.
Filed October 25, 1912. Serial No. 66,499. PUBLISHED MARCH 11, 1913.

91,620. FLOOR AND WALL COVERINGS OF WATERPROOFED FIBROUS MATERIALS. UNITED ROOFING AND MANUFACTURING CO., Philadelphia, Pa.
Filed February 8, 1913. Serial No. 68,414. PUBLISHED MARCH 11, 1913.

91,621. LITTLE CIGARS. CARL UPMANN, New York, N. Y.
Filed May 1, 1905. Serial No. 3,788. PUBLISHED MARCH 11, 1913.

91,622. CASTINGS AND FORGINGS FOR CERTAIN NAMED USES. HARRY VISSERING & COMPANY, Louisville, Ky., and Chicago, Ill.
Filed December 18, 1911. Serial No. 60,340. PUBLISHED MARCH 11, 1913.

91,623. CERTAIN MACHINERY, TOOLS, AND PARTS. S. R. WHITE'S SONS, Norfolk, Va., assignor to S. R. White's Sons, Inc., Norfolk, Va., a Corporation of Virginia.
Filed February 7, 1912. Serial No. 61,344. PUBLISHED MARCH 11, 1913.

91,624. MOLASSES TO BE USED IN FOOD OF HORSES AND CATTLE. WALDO MASON WATTLES, Litchfield, Mich.
Filed January 29, 1913. Serial No. 68,196. PUBLISHED MARCH 11, 1913.

91,625. BREAD, ROLLS, BISCUITS, CAKES, COOKIES, AND CRACKERS. WARD BAKING COMPANY, New York, N. Y.
Filed November 16, 1912. Serial No. 66,932. PUBLISHED MARCH 11, 1913.

91,626. APRONS, RUBBER APRONS, SLIP-COVERS, AND COOLER-FROCKS. WEISSFELD BROS., New York, N. Y.
Filed September 30, 1911. Serial No. 58,948. PUBLISHED MARCH 11, 1913.

91,627. COFFEE AND TEA. FRANK YOUNG, Knights Landing, Cal.
Filed January 27, 1913. Serial No. 68,161. PUBLISHED MARCH 11, 1913.

LABELS

REGISTERED MAY 13, 1913.

16,994.—*Title:* "FABRICA DE TABACOS CIGARROS DE PRIMEROS." (For Cigars.) AMERICAN LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 12, 1913.

16,995.—*Title:* "QUALITY CIGARS." (For Cigars.) AMERICAN LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 12, 1913.

16,996.—*Title:* "BLEACH-IT." (For Bleaching and Washing Powders.) BROOKMAN MANUFACTURING COMPANY, Chicago, Ill. Filed March 24, 1913.

16,997.—*Title:* "LA MARGARITA." (For Green Olives.) ALEXANDER L. CAPRINI, Pittsburgh, Pa. Filed March 15, 1913.

16,998.—*Title:* "PUNCTURE CURE." (For a Puncture-Curing Compound.) WILLIAM CHURCH, Chicago, Ill. Filed April 24, 1913.

16,999.—*Title:* "EAGLE CONES." (For Cones.) EAGLE MANUFACTURING CO., INC., Baltimore, Md. Filed April 25, 1913.

17,000.—*Title:* "STAR SEAL." (For Cigars.) A. C. HENSCHEL & Co., Chicago, Ill. Filed April 28, 1913.

17,001.—*Title:* "CIGARS." (For Cigars.) A. C. HENSCHEL & Co., Chicago, Ill. Filed April 28, 1913.

17,002.—*Title:* "STARBRIGHT SILVERPOLISH." (For a Compound for Cleaning and Polishing.) Howell & Company, Chicago, Ill. Filed February 15, 1913.

17,003.—*Title:* "SUNBRIGHT METAL POLISH." (For a Polish.) HOWELL & COMPANY, Chicago, Ill. Filed February 15, 1913.

17,004.—*Title:* "AUTOL." (For a Polish.) HOWELL & COMPANY, Chicago, Ill. Filed February 15, 1913.

17,005.—*Title:* "JAVA-JULEP." (For Java-Julep.) THE JAMOKA COMPANY, Birmingham, Ala. Filed March 29, 1913.

17,006.—*Title:* "RUSSIAN MIXTURE." (For Smoking-Tobacco.) LOUIS KAPLOWITZ, New York, N. Y. Filed February 21, 1913.

17,007.—*Title:* "CABARET CHOCOLATES." (For Chocolate Confectionery.) PRATT KLINE, Jersey City, N. J. Filed March 29, 1913.

17,008.—*Title:* "ADVANTAGE." (For Cigars.) THE MOEHLE LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 24, 1913.

17,009.—*Title:* "DOUBLE GUARANTEE." (For Cigars.) THE MOEHLE LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 24, 1913.

17,010.—*Title:* "HENRY WILSON." (For Cigars.) THE MOEHLE LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 24, 1913.

17,011.—*Title:* "LA CUBITANA." (For Cigars.) THE MOEHLE LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 24, 1913.

17,012.—*Title:* "JAMES WEAVER." (For Cigars.) THE MOEHLE LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 24, 1913.

17,013.—*Title:* "EL ARTE CUBANO." (For Cigars.) THE MOEHLE LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 24, 1913.

17,014.—*Title:* "EL IMPORTADOR." (For Cigars.) THE MOEHLE LITHOGRAPHIC COMPANY, New York, N. Y. Filed April 24, 1913.

17,015.—*Title:* "WAXSIPAHTI." (For Spring-Water.) NEW ULM BOTTLING WORKS, New Ulm, Minn. Filed March 29, 1913.

17,016.—*Title:* "POLVERE DI RISO." (For Rice Complexion-Powder.) THE J. A. POZZONI PHARMACAL Co., Chicago, Ill. Filed April 29, 1913.

17,017.—*Title:* "TABLE PRIDE BREAD." (For Bread.) CARL RUST, Frederick, Md. Filed April 12, 1913.

17,018.—*Title:* "TRADING POST." (For Cigars.) SCHMIDT & Co., New York, N. Y. Filed April 30, 1913.

17,019.—*Title:* "SCHBRO." (For Tooth-Powder.) SCHORN & BROWER, New York, N. Y. Filed March 2, 1911.

17,020.—*Title:* "BENGAL." (For Toilet-Paper.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed April 8, 1913.

17,021.—*Title:* "ELASTIC CLOSED CROTCH." (For Underwear.) SWISS AMERICAN KNITTING MILLS, Grand Rapids, Mich. Filed January 6, 1913.

17,022.—*Title:* "VAN CAMP'S SAUER KRAUT." (For Sauer-Kraut.) THE VAN CAMP PACKING COMPANY, Indianapolis, Ind. Filed April 28, 1913.

17,023.—*Title:* "CARDINAL LIQUEUR." (For Alcoholic Liquor.) ADOLPH VOLTTER, New York, N. Y. Filed March 24, 1913.

17,024.—*Title:* "OLD SAMOSET." (For Whisky.) WEBSTER-WARNOCK CHEMICAL CO., Memphis, Tenn. Filed October 28, 1912.

17,025.—*Title:* "SUPREMA." (For Ginger-Ale.) WESTERN BOTTLING & EXTRACT CO., Los Angeles, Cal. Filed April 12, 1913.

17,026.—*Title:* "CHAMPAGNE FIZZ." (For a Celery Tonic.) WESTERN BOTTLING AND PACKING COMPANY, Boise, Idaho. Filed December 9, 1912.

PRINTS

REGISTERED MAY 13, 1913.

3,255.—*Title:* "A-DRU-CO." (For a Corn-Remover.) AMERICAN DRUG CO., Washington, D. C. Filed March 7, 1913.

3,256.—*Title:* "ARROW WING COLLARS WITH INSERTED TIPS." (For Collars.) CLUETT, PEABODY & COMPANY, Troy, N. Y. Filed April 29, 1913.

3,257.—*Title:* "COLGATE'S CASHMERE BOUQUET TALC POWDER." (For Talc Powder.) COLGATE & Co., Jersey City, N. J., and New York, N. Y. Filed April 18, 1913.

3,258.—*Title:* "PLAYING HOOKEY." (For Wheat Breakfast Food.) CREAM OF WHEAT Co., Minneapolis, Minn. Filed April 28, 1913.

3,259.—*Title:* "KUZ." (For Pepsin Cough-Candy.) NELSON M. WIEGAND, Truxton, N. Y. Filed Apr. 29, 1913.

3,260.—*Title:* "TAKE OUT THESE BOTTLES AND SHAKE THEM." (For Salt.) WORCESTER SALT Co., Silver Springs and New York, N. Y. Filed April 15, 1913.

3,261.—*Title:* "YECKER'S CHOCOLATE NOUGAT BRICKS." (For Chocolate.) YECKER CHOCOLATE COMPANY INC., New York, N. Y. Filed April 9, 1913.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE DE WITT WIRE CLOTH COMPANY.

Decided April 17, 1913.

TRADE-MARKS—COLORED FIBER CORE FOR WIRE ROPE—NOT REGISTRABLE.

A trade-mark for wire rope described as "a fiber core in the wire rope, which core is colored purple," *Held* not registrable where it appears that it was old to use cores for such ropes made of asbestos, of fiber soaked in tar, and of tarred hemp or Manila rope.

ON APPEAL.

TRADE-MARK FOR WIRE ROPE HAVING A FIBER CORE.

Messrs. Browne & Phelps for the applicant.

MOORE, *Commissioner:*

This is an appeal from the decision of the Examiner of Trade-Marks refusing to register a mark for wire rope having a fiber core, which mark is described as—

a fiber core in the wire rope, which core is colored purple.

The Examiner rejected this mark on the ground that it did not constitute proper trade-mark subject-matter, being merely an ingenious attempt to obtain a trade-mark in color disconnected with any symbol or design, and on the ground that as it was an inherent right of any manufacturer of wire rope to interiorly mark these goods applicant had no right to claim the exclusive right to such mark. In the statement on appeal reference was made to three patents showing wire rope having a fiber core.

Under the decision of the Court of Appeals of the District of Columbia in *A. Leschen & Sons Rope Co.* v. *American Steel & Wire Company of New Jersey* (164 O. G., 978; 36 App. D. C., 456) a trade-mark for a fiber core colored purple would give applicant the *prima facie* right to exclude any one from using a rope having a fiber core of any other color.

The patents to Tilghman, Gore, and Tangring, all of which were granted before applicant's claimed date of use, show wire ropes having fiber cores. In the patent to Tilghman this core is made of asbestos; in the patent to Gore it is made of fiber soaked in tar or some other lubricant, and in the patent to Tangring it is made of tarred hemp or Manila rope. Upon the expiration of these patents the public will undoubtedly have the right to make rope in accordance with the disclosures therein. These ropes have a color which, it is true, is different from that said to be used by applicant; but, as pointed out above, the registration of this mark would give applicant a *prima facie* right to stop any other person from using a rope having a colored fiber core. For this reason the mark is believed to have been properly refused.

Furthermore, as the fiber core appears to be a structural feature of the wire rope applicant's mark resides in color alone and is therefore not registrable. (*Ex parte Landreth*, 31 O. G., 1441; *A. Leschen & Sons Rope Company* v. *Broderick & Bascom Rope Co.*, 201 U. S., 166; *Newcomer & Lewis* v. *Scriven*, 168 Fed. Rep., 621.)

The decision of the Examiner of Trade-Marks is affirmed.

EX PARTE GILES.

Decided April 24, 1913.

FEE—APPLICATION ALLEGED TO HAVE BEEN FILED IN NAME OF WRONG PARTY—FEE NOT RETURNED.

An allegation that an application was filed in the name of one party under a misapprehension and that, as a matter of fact, another party was the real and true inventor *Held* not sufficient ground to warrant the return of the fee for the purpose of applying it to another application filed by such other party.

ON PETITION.

GARMENT-CLASP.

Messrs. Serrell & Son for the applicant.

MOORE, *Commissioner:*

This is a petition that the above-entitled application may be withdrawn and the fee refunded in order that said fee may be applied to an application to be filed by the alleged real inventor. Waldemar Kops.

This application was filed March 18, 1913, by Harvey Giles, who alleged that he was the inventor of the device disclosed therein. In an affidavit accompanying the petition the applicant, Giles, now states that at the time the application was filed he was laboring under a misapprehension and that he is now advised and believes that Waldemar Kops is the first real and true inventor of the improvement shown and described in the application.

It is well settled that this is not such a mistake as warrants the return of the application fee. In the case of *ex parte Olsen*, (101 O. G., 2079,) where an application was filed by a party as the sole inventor, whereas he was a joint inventor with another party, it was held that the application fee

could not be transferred to a new application to be filed by the joint inventors. The decision in that case states:

It seems that the applicant upon consulting counsel has discovered that he is not in contemplation of law the sole inventor of the device disclosed in this case, but is a joint inventor with Hart. He therefore wishes to abandon this application and file a joint application for the same invention.

This application was complete in all of its parts when filed and received an examination upon its merits, since the Office had no means of knowing that the applicant had made a mistake and was not the sole inventor. Section 4934, Revised Statutes, requires that the fee of fifteen dollars be paid upon the filing of each application for a patent without regard to the question what subsequently becomes of that application, whether it is allowed, rejected, or abandoned, and there is no provision for the return of that fee unless it was paid by mistake. (Sec. 4936, R. S.; Rule 209.) The mistake which will warrant a return of money is not a mistake of judgment in supposing that the application filed will be valid and allowable, but a mistake in making the payment itself. Here the applicant intended to pay the fee in this case, and the law required him to pay it if the case was to be considered by the Patent Office, and therefore it is clear that the mistake was nothing more than what he now conceives to have been an error of judgment in filing the application.

The transfer of a fee from one application to another can be considered in no other way than as a return of the fee to the applicant and a payment by him in the other case.

Rule 208 expressly provides that the desire of an applicant to withdraw his application for a patent will not entitle him to a return of the application fee. (See also *ex parte Ayres*, 51 O. G., 1944; *ex parte Erne and Bridges*, 81 O. G., 2247; *ex parte Weithaler*, 173 O. G., 864.)

The rules and practice of the Patent Office do not permit the return of a complete application or the transfer of parts thereof to a new and different application. (Rule 72; *ex parte Van Etten*, 80 O. G., 1760; *ex parte Priest*, 103 O. G., 428; *ex parte Gordon*, 108 O. G., 561, and *ex parte Weil and Grant*, 173 O. G., 1081.)

Although applicant cannot withdraw his application, he may abandon the same, if he so desires.

The petition is denied.

EX PARTE KING.

Decided May 1, 1913.

APPLICATION — PROSECUTION — REQUIREMENT FOR DIVISION — ELECTION — EXAMINATION.

Where after requirement for division applicant states on the record that he elects to prosecute one set of the claims, but does not cancel the other claims, *Held* that the Examiner should act on the merits of the claims to the invention elected by the applicant and that if such claims are finally rejected a single appeal may be made to the Examiners-in-Chief both as to such claims and as to requirement for division.

ON PETITION.

CHANGE-SPEED GEARING.

Messrs. Parker & Burton for the applicant.

BILLINGS, *First Assistant Commissioner:*

This is a petition from the action of the Examiner refusing to examine and rule upon any of the claims contained in the above-entitled application on their merits prior to the final disposition of the question of division which has been required in this case. The petition also asks that the Examiner be directed to enter a rejection in the application on the ground that the two groups of claims are improperly joined.

It appears from the record that the applicant has presented for consideration a series of claims and that the Examiner has required that division be made between a group of claims which are drawn to cover a "lever mechanism" and the remaining claims, which are drawn to cover a "gearing."

The applicant responded by filing an amendment, and at the beginning of the "remarks" it is stated:

Applicant wishes to prosecute the claims relating to gearing and he therefore elects those claims. We ask that those claims be examined.

It is further stated:

If it is thought that there are other claims that should be divided from the gearing claims, we ask that they be rejected for this reason, as being improperly joined, so that in case it should be necessary to take the opinion of the appellate board all matters can be brought up before them in one appeal.

It is believed that the Examiner has, in effect, responded to this latter request by requiring division between the two separate groups of claims on the ground that these claims cover two independent inventions. Therefore so much of the petition as requests that the Examiner be required to change the form of the ruling relating to his requirement for division is dismissed. Where an applicant is required to divide his application on the ground that two or more groups of claims are presented covering, respectively, independent inventions, the requirements of the rules and practice on this point have been satisfied.

Rule 133, providing for an appeal to the Examiners-in-Chief, states, among other things:

Every applicant for a patent, any of the claims of whose application have been twice rejected for the same reasons * * * and every applicant who has been required to divide his application * * * may * * * appeal from the decision of the Primary Examiner to the Examiners-in-Chief.

Rule 134 provides in part that—

* * * all the claims must have been passed upon, and except in cases of division all preliminary and intermediate questions relating to matters not affecting the merits of the invention settled, before the case can be appealed to the Examiners-in-Chief.

In *ex parte Snyder* (110 O. G., 2236) it was held that where division is required that question must be settled before the Office will examine the merits of each separate claim to determine the question of patentability, for the reason that an examination of two or more independent inventions will not be made in one case. This ruling was based upon the principle announced in *ex parte Pickles*, (109 O. G., 1888,) in which case it was requested that all the claims be examined before appeal was taken to the Examiners-in-Chief upon the question of division. It was therein said:

It is supposed that by his request for action upon the claims the petitioner means that the Examiner should make an examination as to the patentability of each claim separately in addition to requiring division, so that the applicant may appeal upon patentability as well as upon division. To follow this practice would make it necessary for this Office to examine in one application as many different inventions as the applicant might choose to present. The Office has uniformly refused to examine upon their merits two or more independent inventions in one application, and no reason is seen for changing that practice merely because a requirement for division is now appealable to the Examiners-in-Chief instead of petitionable to the Commissioner. The refusal to make such examination was founded upon sound reason, and that reason applies now as well as it did heretofore.

In *ex parte Wallace* (125 O. G., 992) it was said that—

* * * the case awaits action responsive to the requirement for division, and such action must take the form either of compliance with the requirement or an appeal to the Board of Examiners-in-Chief.

In *ex parte Weston* (173 O. G., 285) it was said that—

as was stated in *ex parte Snyder*, (C. D., 1904, 242; 110 O. G., 2236,) the Office cannot undertake to examine into the patentability of more than one invention in a single application, and where division is required on the ground that the case presents a plurality of inventions that question must be first settled. (See also *ex parte Crain*, C. D., 1907, 18; 126 O. G., 758.)

It appears from the consideration of the decisions above referred to that the practice requiring a final disposition of the question of division on appeal before an examination upon the question of patentability is in order is based principally upon the reason that to proceed otherwise would oftentimes require the examination in the same application of several sets of claims, each of which is drawn to cover independent subjects of invention. It is well settled that the applicant has no right to demand this plural examination in a single application.

There are other considerations which arise in determining the procedure to be followed in those cases where division is required. To illustrate: Should the decision of the Examiner upon the question of division be reversed by the Commissioner on appeal and the rejection entered as to one of the groups of claims be affirmed by the Commissioner on appeal, then the application would be in a condition where the inventor would be required to complete his appeal to the Court of Appeals of the District of Columbia within the time required by the rules of that court, should he desire to appeal upon the merits of the claims; yet it would also be necessary to remand the application to the Examiner to consider the claims relating to the other invention which the Examiner had ruled to be independent, but which ruling had been reversed by the Commissioner. Such a state of affairs would cause the applicant much confusion and perhaps necessitate two appeals, inasmuch as the Commissioner has no authority to extend the time specified in the rules of the court of appeals within which appeal must be taken, if at all.

I am of the opinion, however, that in view of the long delays which result from taking appeals in applications for patents the case should be considered as fully as possible in as many aspects as possible before appeal is required. Therefore in cases such as the present one, where the applicant without actually dividing has made his election, an examination should be made of the claims elected, so that any of them may be rejected, if that action be found necessary, in order that a single appeal may be made to the Examiners-in-Chief upon both questions.

If the requirement for division is reversed by any tribunal on appeal, then the application will have to go back to the Examiner for consideration of the other set of claims, whereas if the requirement for division is affirmed on appeal the applicant will have no right to demand an examination in this application of the claims not elected. This examination can be had, if at all, only upon the filing of a divisional application containing them. The applicant having elected the claims which he will prosecute in this application has sufficiently met the requirements of the rule that the question of division must be settled before an examination upon the merits of the claims can be had, and in those cases, therefore, where an election is made the Examiner will proceed also to examine the claims so elected.

The petition is granted to the extent indicated.

EX PARTE LÖW.

Decided April 4, 1913.

1. TRADE-MARKS — DECLARATION — SUBSCRIBING CLAUSE MUST BE IN ENGLISH.

   In printing certificates of trade-marks the declaration and subscribing clause are included, and it is obvious that both should be, as required by the rules, in the English language.

2. SAME — SAME — OATH BEFORE NOTARY — AUTHORITY MUST BE DIRECTLY CERTIFIED TO.

   Where an oath is taken before a notary public in a foreign country, *Held* that such notary's authority must be directly proved by a certificate of a diplomatic or consular officer.

ON PETITION.

TRADE-MARK FOR NON-ALCOHOLIC BEVERAGES, ALCOHOLIC BEVERAGES, FRUIT-JUICES, FRUIT-SYRUPS, LEMONADE-SYRUPS, SUGAR ARTICLES OF ALL KINDS, ETC.

Mr. Henri van Oldenneel for the applicant.

TENNANT, *Assistant Commissioner:*

This is a petition from the action of the Examiner of Trade-Marks requiring a new declaration.

The Examiner objected to the declaration on file on the ground that it is not written entirely in the English language, that it is written on both sides of the paper, and that the authority of the notary was not certified to directly by a United States consul.

Section 2 of the Trade-Mark Act provides that an application such as specified in section 1 of that act in order to create any right whatever in favor of the party filing it must be accompanied by a written declaration, verified by the applicant or by a member of the firm or an officer of the corporation or association applying. The same section further provides that where the applicant resides in a foreign country the certification may be made before any minister, *chargé d'affaires*, consul, or commercial agent of the United States or before any notary public, judge, or magistrate having an official seal and authorized to administer oaths in a foreign country, whose authority shall be proved by a certificate of a diplomatic or consular officer of the United States.

In the present case the declaration is signed by Fannie Löw, who states that she is a member of the firm applying for registration. On the back of the declaration there is a certificate in German, signed by a notary, and a series of certifications as to the authenticity of the next preceding signature, the last signature and the seal of the I. and R. Ministry for Foreign Affairs of Austria-Hungary

being certified as genuine by the United States vice and deputy consul-general.

In printing certificates of trade-marks the declaration and the subscribing clause are included. It is obvious that this declaration and subscribing clause should be, as required by the rules, in the English language. As pointed out in *ex parte Rose*, (180 O. G., 322,) the purpose of the statute was to require that the authority of a notary public be approved directly by a certificate of a diplomatic or consular officer. Furthermore, the certification that the signature of the notary is genuine is not such a certification as required by the Trade-Mark Act—namely, a certification that the notary has authority to administer oaths. According to the official translator of this Office the certificate of the notary in this case does not state that Fannie Löw has sworn to this declaration, but merely that it was signed by her in the presence of the notary.

A new declaration was therefore properly required. Whether the mere fact that the certifications were placed on the back of the declaration would be sufficient to justify requiring a new declaration if the declaration were otherwise in proper form need not be decided. It may, however be stated that the better practice and the one which is almost uniformly followed is to place the certifications at the foot of the affidavit where there is sufficient room for that purpose and when there is not to attach a paper bearing the certifications to the margin of the face of the affidavit.

The petition is denied.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

G & J TIRE COMPANY *v.* G. J. G. MOTOR CAR COMPANY.

Decided January 6, 1913.

1. TRADE-MARKS—OPPOSITION—JUDGMENT ON THE RECORD—APPEAL.

Where the Examiner of Interferences overruled a demurrer to a notice of opposition and the applicant having not filed any further pleading rendered a judgment sustaining the opposition, *Held* that from this judgment appeal lay to the Commissioner of Patents.

2. SAME—SIMILARITY—NO CONFUSION IN TRADE UNLESS GOODS ARE OF SAME DESCRIPTIVE PROPERTIES.

"Before it can be held that the similarity of the marks will cause confusion in trade, it must appear that the marks are to be applied to goods of the same general class and of the same descriptive properties. Unless this be true, the mere similarity of the marks becomes immaterial. The law places no inhibition upon the use of the same mark by different persons, so long as the goods to which it is applied are so distinctive in class and quality as to forbid the probability of confusion in trade."

3. SAME—GOODS OF SAME DESCRIPTIVE PROPERTIES—RUBBER TIRES AND AUTOMOBILES ARE NOT.

Rubber tires and automobiles *Held* not to constitute goods of the same descriptive properties within the meaning of the trade-mark law.

Mr. E. W. Vaill, Jr., for the appellant.

Mr. C. Hugh Duffy for the appellee.

VAN ORSDEL, *J.:*

Appellant, G & J Tire Company, appeals from the decision of the Commissioner of Patents dismissing its opposition to the registration by appellee, G. J. G. Motor Car Company, of the trade-mark "G J G," inclosed in a triangular border, to be used on automobiles.

The material parts of the amended notice of opposition are as follows:

1. The G & J Tire Company has adopted and used in its business continuously since October 1st, 1903, a trade-mark for rubber tires, which consists of the letters and symbols "G & J" inclosed in a triangular border having certain features of ornamentation.
2. Said trade-mark is used in the business of said G & J Tire Company upon rubber or elastic vehicle-tires.
3. That said vehicle-tires, having said mark applied thereto, have been sold in intrastate and interstate commerce continuously since said adoption of said trade-mark up to the present time.
4. The trade-mark sought to be registered by the applicant, G. J. G. Motor Car Company, is so similar to the trade-mark of the said G & J Tire Company as to cause confusion in trade and damage to said G & J Tire Company.

Appellee demurred to the notice, which demurrer was overruled by the Examiner, and time given appellee to answer. No answer was filed within the time, and the Examiner gave notice that judgment would be rendered sustaining the motion of opposition on a fixed date, unless for good and sufficient cause shown. Within the time named, appellee filed a motion to dismiss the notice of opposition on the ground of insufficiency. The Examiner denied the motion, and rendered judgment sustaining the opposition and denying the right of appellee to register its mark. It was insisted before the Commissioner that the judgment being rendered *pro confesso*, appeal could not be taken from the decision of the Examiner. The Commissioner held, however, that the case was properly before him, and his ruling assuming jurisdiction of the appeal is challenged here. We think appeal lay from the decision of the Examiner to the Commissioner upon the single question of the sufficiency of the notice of opposition. A decree *pro confesso* rendered in an equity proceeding in the Federal courts is final, but it is appealable upon the single question of the sufficiency of the averments of the bill to support the decree. (*Masterson* v. *Howard*, 18 Wall., 99.) The refusal of appellee to answer or further plead was equivalent to standing upon its demurrer and permitting judgment to be entered against it, from which section 8 of the Trade-Mark Act provides a right of appeal to the Commissioner.

The opposition is based chiefly upon the probability of the use of the marks creating confusion in trade. Before it can be held that the similarity of the marks will cause confusion in trade, it must appear that the marks are to be applied to goods of the same general class and of the same descriptive properties. Unless this be true, the mere similarity of the marks becomes immaterial. The law places no inhibition upon the use of the same mark by different persons, so long as the goods to which it is applied are so distinctive in class and quality as to forbid the probability of confusion in trade.

While rubber tires are used on automobiles, they belong to an entirely different classification from vehicles. The production of rubber tires is as foreign to the construction of vehicles as is the production of any of the other elements entering into their construction. In fact, rubber tires are not essential

to vehicle construction. Even automobiles are operated with tires composed of other materials. In *Phoenix P. & V. Co.* v. *John T. Lewis & Bros.* (32 App. D. C., 285) Mr. Justice Robb, speaking for the court, said:

We think two trade-marks may be said to be appropriated to merchandise of the same descriptive properties, in the sense meant by the statute, when the general and essential characteristics of the goods are the same. The rule that the goods must be identical would defeat the purpose of the statute and destroy the value of trade-marks. The test is whether there is such a sameness in the distinguishing characteristics of the goods as to be likely to mislead the general public. If there is, only one mark should be registered.

Applying this test to the case before us, the characteristics of the goods to which the marks are applied are essentially different. The rubber tire is an independent article of commerce, and may be, or may not be, applied to an automobile. To grant the contention of the opposer would be to give it a monopoly in its mark which would dominate every article of commerce to which a rubber tire is applied. No evidence was taken in this case; hence it does not appear that any confusion has arisen from the use of the respective marks, and we confidently assume that no such showing could be made.

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings in accordance with law.

Affirmed.

Court of Appeals of the District of Columbia.

IN RE HIGGINS.

Decided February 3, 1913.

1. PATENTABILITY—BOILER-HEADERS.

Claims for a wrought-metal seamless water-tube-boiler header *Held* not patentable in view of the prior art.

2. SAME—SAME—SUPERIORITY IN POINT OF UTILITY NOT CONTROLLING.

Where seamless cast headers were old and welded wrought-metal headers were also old, *Held* that "the superiority of wrought metal over cast being apparent, the problem which confronted him [appellant] was to perfect a process and devise machinery that would enable him to duplicate the cast metal header in wrought metal. The function of the header produced by him is identical with the cast and wrought headers of the prior art. It does not follow that, because it is superior in point of utility to those preceding it, appellant is entitled to a patent."

Mr. Livingston Gifford and *Mr. J. Edgar Bull* for the appellant.

Mr. Robert F. Whitehead for the Commissioner of Patents.

ROBB, *J.:*

This is an appeal from a decision of the Commissioner of Patents refusing the following article claims:

1. As an article of manufacture, a wrought metal water-tube boiler header made of a single plate without seam or weld.
2. As an article of manufacture, a wrought metal water-tube boiler header longitudinally sinuous and made of a single plate without seam or weld on its sides or ends.
5. As an article of manufacture, a wrought metal water-tube boiler header without seam or weld, the material of which consists of a plate transformed into a substantially non-thinned, closed ended weldless blank, substantially as described.

The notice of appeal included two process claims but, as those have been waived by appellant, we omit them here. The application originally contained broad process claims which, being held unpatentable in view of the prior art, appellant was content with the allowance of claims restricted to the particular steps of his process. He had previously, according to the opinion of the Commissioner, been granted patents on the machines by which his process is carried out. He now seeks to patent the boiler-header which is the product of his particular process. He claims his header to be superior to those of the prior art and distinguishable from them because it is made from a single plate, without seam or weld. The utility and superiority of this header over the prior art is not disputed by the Patent Office, but it is nevertheless insisted that appellant was not the first to conceive a seamless boiler-header made from one piece of metal. Appellant admits that it was old to cast such boiler-headers, and that welded wrought-metal headers were also old; but he contends that the conception of producing a one-piece wrought-metal header involved invention. What he has really done is to devise a particular process and machinery by which the seamless single-plate header of the prior art may be produced in wrought metal and, in doing this, he has had recourse to the patent to Stampacchia (April 5, 1898, No. 601,738) and the patent to Gault, (October 30, 1906, No. 834,291.) The patent to Stampacchia relates to apparatus for manufacturing closed-ended vessels from single pieces of metal. By this apparatus the original thickness of the metal may be maintained, as in appellant's, and articles of any desired depth may be obtained by subjecting them to a series of operations in the dies described in the patent. We shall not attempt a critical analysis of the patent, as we do not deem it necessary. It is objected to this reference that the process there disclosed is practised without heating the plate or sheet of metal. As pointed out by the Patent Office, it was well known that the flow of metal would be greatly assisted by the addition of heat. The required temperature could be easily ascertained by experimentation. Other objections are urged but these may be disposed of with the suggestion that appellant has been given a patent covering the difference between his process and that of the prior art. What we are now seeking to determine is whether the conception that a one-piece cast boiler-header could be made of wrought metal, involved invention; and we find in this Stampacchia patent a process at least analogous to appellant's. The patent to Gault discloses a process of forming from a flat sheet of metal a vessel of irregular outline. As an example, a cream-pitcher which, from its bottom first increases in diameter, then decreases, and then increases to form the top flare. Here again, as in appellant's process, it is necessary to subject the metal to a series of successive operations. Appellant's process is but a step in advance of the disclosures of these patents. In effect, he has admitted this to be true by acquiescing in the disallowance of broad and the allowance of narrow process claims. He did not, then, originate the idea of the use of a series of

dies in the production of one-piece metal objects having the general characteristics of his header.

A single-plate metal boiler-header without seam or weld was old. Appellant has perfected a process whereby such a header may be made of wrought metal; in other words, searching the prior art he found a seamless one-piece cast header. He found welded wrought-metal headers. The superiority of wrought metal over cast being apparent, the problem which confronted him was to perfect a process and devise machinery that would enable him to duplicate the cast-metal header in wrought metal. The function of the header produced by him is identical with the cast and wrought headers of the prior art. It does not follow that, because it is superior in point of utility to those preceding it, appellant is entitled to a patent.

Smith v. *Goodyear Vulcanite Co.*, (93 U. S., 486,) relied upon by appellant, is clearly distinguishable from this case. There the article patented was new *per se*, "different in kind or species from all other devices." Neither is *Krementz* v. *S. Cottle Co.* (148 U. S., 556) controlling here, in our view. That case involved a patent for a collar-button having a hollow head and stem, formed and shaped out of a single continuous plate of sheet metal. It appeared that Krementz was the first to make such a button. The court sustained the patent because Krementz was the first to conceive that a hollow collar-button, having the characteristics described, could be produced from a single piece of metal. Here appellant did not conceive the idea of a seamless single-piece boiler-header, nor did he conceive the idea of a wrought-metal header. His conception had to do with the substitution of wrought for cast metal *in the single-piece seamless header then in use.* He has been granted a patent on the novel features of his discovery and, in our opinion, is not entitled to a patent on the product.

The decision is affirmed.

Affirmed.

ADJUDICATED PATENTS.

(U. S. C. C. A.) The Starr patent, No. 533,095, for a drawing instrument, claim 3 *Held* not infringed. *Houser* v. *Starr*, 203 Fed. Rep. 264.

(U. S. D. C.) The Cheatham patent, No. 612,702, for a switching device, *Held* valid and infringed. *Cheatham Electric Switching Device Co.* v. *Transit Development Co.*, 203 Fed. Rep., 285.

(U. S. C. C. A.) The Claude and Hess patent, No. 664,383, for an apparatus for storing and distributing acetylene gas, expired June 30, 1910, with the expiration of the British patent, No. 29,750 of 1896, to the same patentees for the same invention; also, *Held* not infringed. *Commercial Acetylene Co.* v. *Schroeder*, 203 Fed. Rep., 276.

(U. S. C. C. A.) The Richardson and Langston patent, No. 669,489, for an improved railroad mileage-ticket, *Held* not infringed. *Exchange Scrip Book Co.* v. *Rand, McNally & Co.*, 203 Fed. Rep., 278.

(U. S. C. C. A.) The Starr patent, No. 683,809, for a cutting instrument, *Held* valid and infringed as to claims 11, 19, and 20, void for lack of invention as to claims 1–10, 12, 14, and 21, and not infringed as to claims 16 and 17. *Houser* v. *Starr*, 203 Fed. Rep., 264.

(U. S. C. C. A.) The Cox patent, No. 686,591, for a lifting-jack, claims 2 to 5, inclusive, are void for anticipation in the prior art. Claim 1, if conceded validity, *Held* not infringed. *St. Clair Foundry Co.* v. *Union Jack Co.*, 203 Fed. Rep., 279.

(U. S. D. C.) The Merz patent, No. 722,030, for a combined electric measuring and indicating apparatus, *Held* not anticipated, valid, and infringed. *Minerallac Electric Co.* v. *Cleveland Electric Illuminating Co.*, 203 Fed. Rep., 280.

(U. S. C. C. A.) The Starr patent, No. 766,158, for a machine for cutting curves, claims 9, 10, 12, and 13, *Held* void for lack of invention over a prior patent to the same patentee. *Houser* v. *Starr*, 203 Fed. Rep., 264.

(U. S. D. C.) The Cheatham patent, No. 917,541, for a switching device, *Held* valid and infringed, *Cheatham Electric Switching Device Co.* v. *Transit Development Co.*, 203 Fed Rep., 285.

(U. S. D. C.) The Lawson patent, No. 983,295, for a gem-setting, *Held* void for lack of patentable invention. *Lawson* v. *Metal Products Corporation*, 203 Fed. Rep., 284.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 7, 1913.

James H. Carrington, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Rudolph Well, of 123 Williams street, New York, N. Y., for registration of a trade-mark and trade-mark registered April 22, 1884, No. 11,119, to James H. Carrington, of New York, N. Y., and a notice of such declaration sent by registered mail to said James H. Carrington at the said address having been returned by the post-office undeliverable, notice is hereby given that unless James H. Carrington, his assigns or legal representatives, shall within thirty days from the first publication of this order enter an appearance therein the interference will be proceeded with as though by default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 30, 1913.

Leo Rex Canning & Preserving Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frank Herfort, of Baraboo, Wis., for registration of a trade-mark, the trade-mark registration of Diehm-Fansler Grocer Co., 402–404 Missouri avenue, East St. Louis, Ill., and trade-mark registered August 6, 1907, No. 64,425, to the Leo Rex Canning & Preserving Co., of the borough of Manhattan, 381 Fourth avenue, New York, N. Y., and a notice of such declaration sent by registered mail to the said Leo Rex Canning & Preserving Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Leo Rex Canning & Preserving Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

THE
OFFICIAL GAZETTE
OF THE
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Labels	11—No.	17,027 to No.	17,037, inclusive.
Prints	10—No.	3,262 to No.	3,271, inclusive.
Reissues	5—No.	13,563 to No.	13,567, inclusive.
Total	775		

TO RESIDENTS OF THE UNITED STATES.

States.	Patents and Designs.	Trade-Marks, Labels, and Prints.	States.	Patents and Designs.	Trade-Marks, Labels, and Prints.
Alabama	2	.....	North Carolina	4	1
Arizona	1	1	North Dakota	3	.....
Arkansas	4	.....	Ohio	34	15
California	37	2	Oklahoma	1	1
Colorado	7	1	Oregon	8	.....
Connecticut	17	.....	Pennsylvania	70	9
Delaware	1	2	Rhode Island	8	2
Florida	4	.....	South Carolina	5	1
Georgia	3	.....	South Dakota	3	.....
Idaho	3	.....	Tennessee	4	2
Illinois	60	8	Texas	13	.....
Indiana	15	.....	Utah	1	.....
Iowa	14	1	Vermont	1	3
Kansas	7	1	Virginia	1	1
Kentucky	5	1	Washington	10	2
Louisiana	5	3	West Virginia	3	.....
Maine	3	.....	Wisconsin	8	.....
Maryland	6	1	Wyoming	1	.....
Massachusetts	27	5			
Michigan	17	1	Alaska, District of	.....	.....
Minnesota	13	3	Canal Zone	.....	.....
Mississippi	2	.....	District of Columbia	3	.....
Missouri	15	4	Hawaii Territory	.....	.....
Montana	1	.....	Philippine Islands	.....	.....
Nebraska	4	.....	Porto Rico	1	.....
Nevada	.....	.....	U. S. Army	.....	.....
New Hampshire	1	1	U. S. Navy	.....	.....
New Jersey	34	4			
New Mexico	2	.....	Total to residents of the United States	508	109
New York	76	33			

TO RESIDENTS OF FOREIGN COUNTRIES.

Countries.	Patents and Designs.	Trade-Marks.	Countries.	Patents and Designs.	Trade-Marks.
Argentina	.....	.....	Netherlands	.....	.....
Austria-Hungary	5	2	Newfoundland	.....	.....
Belgium	1	.....	New South Wales	.....	.....
Brazil	.....	.....	New Zealand	.....	.....
British West Indies	.....	.....	Norway	.....	.....
Canada	12	.....	Queensland	.....	.....
Cape Colony	.....	.....	Roumania	.....	.....
Chile	.....	.....	Russia	1	.....
China	.....	.....	Scotland	1	.....
Costa Rica	.....	.....	South Australia	.....	.....
Cuba	.....	1	Spain	.....	.....
Denmark	.....	1	Sweden	3	4
Ecuador	.....	.....	Switzerland	1	1
England	13	2	Transvaal, South Africa	1	.....
France	7	3	Victoria	1	.....
Germany	27	5	Western Australia	.....	.....
Ireland	.....	.....			
Isle of Jersey	.....	.....			
Italy	1	.....	Total to residents of foreign countries	74	19
Japan	.....	.....			
Mexico	.....	.....			

Important Information.

In ordering manuscript copies much time will be saved if the order states specifically what is desired, viz:

Application as originally filed. (Petition, specification, oath, and drawings as received.) Application as amended. (Petition, specification, oath, and drawings with amendments entered.)

Application as allowed. (Petition, specification, oath, and drawings as passed by the Examiner for issue.)

Original application. (Facsimile petition, specification, oath, and drawings at present time.)

Specification as originally filed. (As received in Office.)

Specification as amended. (With amendments entered.)

Specification as allowed. (As passed by the Examiner for issue.)

Original specification. (Facsimile at present time.)

File-wrapper. (File-wrapper only.)

File-wrapper and contents. (File-wrapper, contents of record, including photoprints of any tracings or of prints within file-wrapper. In patented cases, printed copy of the specification and drawings of the patent is furnished.)

File-wrapper, contents, and drawings. (File-wrapper and all of the contents of record, including photoprints of any tracings, exhibits, or prints within the file-wrapper. In pending cases, photoprints of the pending drawings only, omitting any canceled. If patented, copy of the specification and drawings of the patent being furnished, photoprints are not made of the original drawings unless specially ordered. If canceled drawings are wanted, they must also be specially ordered.)

Assignment. (Give the liber and page of the record as well as the name of the inventor.)

Printed publications in possession of the Office. (Give title and date of publication, also page and exact portion to be copied.)

Orders for copies of any other records not mentioned above must state specifically the exact papers to be copied.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business May 17, 1913.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended	No. of applications awaiting action.
313	1. Fences; Harrows and Diggers; Plows; Seeders and Planters; Trees, Plants, and Flowers.	Mar. 14	Mar. 10	740
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Pneumatic Despatch; Pneumatics; Presses; Store-Service; Tobacco.	Feb. 6	Mar. 6	673
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Metal-Founding; Metallurgy; Plastic Metal Working.	Apr. 18	May 5	257
232	4. Bridges; Conveyers; Excavating; Hoisting; Hydraulic Engineering; Loading and Unloading; Metallic Building Structures; Traversing Hoists.	Jan. 6	Apr. 3	659
167	5. Bookbinding; Harvesters; Jewelry; Music.	Mar. 10	Mar. 12	589
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Medicines; Preserving; Sugar and Salt; Substance Preparation.	Feb. 8	Mar. 12	749
312	7. Educational Appliances; Clutches; Games and Toys; Mechanical Motors; Optics; Velocipedes.	Jan. 10	Feb. 27	999
131	8. Beds; Chairs; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Feb. 1	Apr. 18	617
142	9. Air and Gas Pumps; Fluid-Pressure Regulators; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Wind-Wheels.	Dec. 27	Feb. 8	583
235	10. Carriages and Wagons	Jan. 2	Mar. 10	1166
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whips and Whip Apparatus.	Mar. 24	Apr. 4	379
322	12. Elevators; Journal-Boxes, Pulleys, and Shafting; Lubrication; Machine Elements.	Feb. 19	Mar. 6	1127
329	13. Arms, Projectiles, and Explosive Charges, Making; Bolt, Nail, Nut, Rivet, and Screw Making; Boring and Drilling; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 21	Feb. 27	749
307	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Metal-Ornamenting; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 1	Apr. 11	520
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Liquid Coating Compositions; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastic Compositions; Plastics.	Dec. 16	Mar. 11	1327
109	16. Radiant Energy; Telegraphy; Telephony.	Jan. 21	Mar. 8	555
303	17. Matrix-Making; Paper Manufactures; Printing; Type-Bar Making.	Apr. 5	Apr. 17	303
327	18. Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 10	Apr. 8	236
236	19. Dampers, Automatic; Furnaces; Heat-Distributing Systems; Stoves and Furnaces.	Feb. 11	Apr. 4	546
179	20. Artificial Limbs; Builders' Hardware; Dentistry; Locks and Latches; Safes; Undertaking.	Mar. 12	Apr. 18	174

Applications Under Examination—Continued.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended	No. of applications awaiting action.
112	21. Brakes and Gins; Carding; Cloth-Finishing; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 14	Feb. 26	571
249	22. Aeronautics; Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Firearms; Marine Propulsion; Ordnance; Ships.	Feb. 7	Apr. 16	390
379	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Time-Controlling Mechanism.	Feb. 3	Mar. 20	521
144	24. Apparel; Apparel Apparatus; Sewing-Machines.	Feb. 10	Apr. 12	596
315	25. Butchering; Mills; Threshing; Vegetable Cutters and Crushers.	Apr. 16	Apr. 26	228
106	26. Electricity, Generation; Motive Power.	Dec. 5	Feb. 3	642
372	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Mar. 26	Mar. 29	530
65	28. Internal-Combustion Engines	Jan. 2	Jan. 11	1165
147	29. Coopering; Fire-Escapes; Ladders; Roofs; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Wood-working; Wood-working-Tools.	Nov. 21	Mar. 22	846
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Feb. 17	Apr. 26	431
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue.	Feb. 8	Feb. 8	528
278	32. Carbonating Beverages; Dispensing Beverages; Dispensing-Cans; Ornamentation; Packaging Liquids; Refrigeration.	Jan. 18	Apr. 18	389
71	33. Cutlery; Domestic Cooking Vessels; Masonry and Concrete Structures; Paving; Tents, Canopies, Umbrellas, and Canes.	Dec. 27	Mar. 20	385
304	34. Railways; Railway-Brakes; Railway Rails and Joints; Railway Rolling-Stock; Railway Ties and Fasteners.	Mar. 12	Mar. 10	457
244	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Garment-Supporters; Toilet.	Feb. 25	Apr. 17	832
264	36. Drafting; Driers; Engraving; Measuring Instruments; Photography.	Mar. 20	Mar. 17	885
107	37. Electric Lamps; Electricity, Conductors; Electricity, Conduits; Electricity, General Applications.	Nov. 8	Jan. 25	942
378	38. Animal Husbandry; Artesian and Oil Wells; Fishing and Trapping; Stationery; Stone-Working.	Jan. 20	Mar. 6	862
321	39. Water Distribution	Feb. 25	Apr. 15	486
280	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Feb. 10	Mar. 14	995
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Mar. 24	Mar. 31	556
279	42. Electric Railways; Electric Signaling; Railway Signaling; Signals.	Jan. 28	Feb. 10	783
382	43. Baths and Closets; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Mar. 18	Apr. 9	308

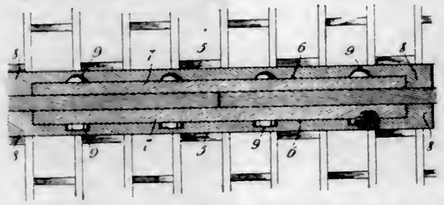
Oldest new case, Nov. 8; oldest amended, Jan. 11.
Total number of applications awaiting action..... 27,271

161	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.			
	Trade-Marks	Mar. 20	Apr. 2	903
	Designs	Apr. 1	Apr. 30	279
	Labels and Prints	May 8	May 8	72

PATENTS

GRANTED MAY 20, 1913.

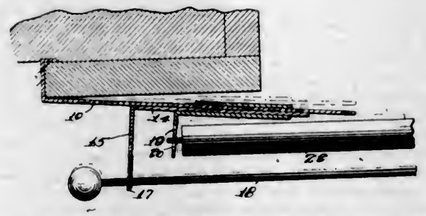
1,061,967. PROTECTOR FOR RAILROAD-RAILS. EDWARD ALCOTT, Manassas, Va. Filed Jan. 10, 1913. Serial No. 741,295. (Cl. 239—9.)



1. A protector for rail connections comprising a block of wood shaped to be carried by the side of a rail and presenting a smooth outer wall to the abutting paving, the inner surface of the block being cut-away to provide a recess for the reception of a rail connection, the ends of the recess abutting the rail webs, the base of the recess being provided with sockets for the reception of the ends of connection fasteners.

2. A protector for rail connections comprising a block of wood shaped to be carried by the side of a rail and presenting a smooth outer wall to the abutting paving, the inner surface of the block being cut-away to provide a longitudinal recess for the reception of a rail connection, the base of the recess abutting the connection fasteners, the formation of the recess providing angular end portions that overlap the ends of the rail connection plate and abut the web of the rail.

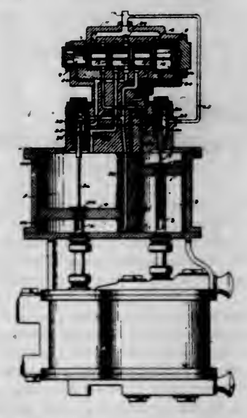
1,061,968. SHADE AND CURTAIN HANGER. CHRISTOPHER ALPHIN, Kinston, N. C., assignor to Emma P. Webb, Kinston, N. C. Filed July 13, 1912. Serial No. 709,214. (Cl. 156—24.)



1. A bracket of the character described comprising a resilient strip having one end portion adapted to be connected with a support and having its free end portion positioned in spaced relation to the support, an article support adjustably mounted upon said strip, and a second article support having one end portion passing between said strip and said first mentioned article support.

2. A bracket of the character described comprising a resilient strip having one end portion formed into an attaching means and having its free end portion extending across the window and being inclined away from the window frame, a curtain support slidably mounted upon said strip, and a portière support having its inner end portion extending parallel to said strip and passing between said strip and curtain support whereby said curtain and portière supporters will be slidably mounted upon said strip.

1,061,969. COMPOUND STEAM-PUMP. ROBERT C. AUGUR, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 11, 1907. Serial No. 406,020. (Cl. 121—7.)



1. In a compound pump, the combination with a high pressure steam piston and cylinder, a low pressure steam piston and cylinder and valve mechanism for controlling the supply and exhaust of steam to and from the high pressure cylinder, of means governed by the low pressure piston for relieving pressure on an exhaust or low pressure side of either piston.

2. In a compound pump, the combination with a high pressure steam piston and cylinder, a low pressure steam piston and cylinder, and a distribution valve mechanism governed by the high pressure steam piston for controlling the steam pressure on said pistons, of means governed by the low pressure piston for relieving pressure upon the low pressure side of the high pressure piston.

3. In a compound pump, the combination with a high pressure steam piston and cylinder, a low pressure steam piston and cylinder and valve means governed by the high pressure piston for controlling the admission and exhaust of fluid to and from said cylinders, of means actuated by the low pressure piston in completing its traverse for relieving pressure on one side of said high pressure piston.

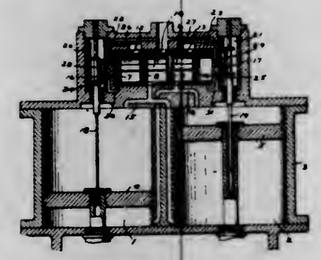
4. In a compound pump, the combination with a high pressure steam piston and cylinder and a low pressure steam piston and cylinder, of a main valve device controlled by the high pressure piston and adapted in one position to establish communication from one side of said high pressure piston to one side of said low pressure piston and valve means operated by the low pressure piston in completing its traverse, for relieving steam pressure on said communicating sides of the pistons.

5. In a compound pump, the combination with a high pressure steam piston and cylinder and a low pressure steam piston and cylinder, of a main valve mechanism operated by the movement of the high pressure steam piston for admitting high pressure steam to one side of said piston and for establishing communication from the other side thereof to one side of the low pressure steam piston, and a relief valve device operated upon the

movement of the low pressure piston to the end of the stroke, for relieving steam pressure from the low pressure side of the high pressure piston.

[Claims 6 to 12 not printed in the Gazette.]

1,061,970. STEAM-PUMP. ROBERT C. AUGUR, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Dec. 11, 1907. Serial No. 406,021. (Cl. 121—7.)



1. In a steam pump, the combination with two steam cylinders and pistons therein adapted to operate independently, of valve means governed by the conjoint action of both pistons, for controlling the simultaneous admission and exhaust of steam to and from both of said steam cylinders.

2. In a steam pump, the combination with two steam cylinders and independently movable pistons, of a main distribution valve device for controlling the simultaneous admission of steam to said steam cylinders and pistons, and means actuated only by the movement of both pistons to the end of their respective traverses, for governing the operation of said main distribution valve.

3. In a steam pump, the combination with two steam cylinders and pistons, of a main valve for controlling the admission and exhaust of steam to and from said cylinders, a valve device operated by each piston, and means, necessitating the movement of both of said valve devices, for effecting the actuation of said main valve.

4. In a steam pump, the combination with two steam cylinders and independently movable pistons therefor, of a valve device for controlling the simultaneous admission and exhaust of steam to and from said cylinders, and means operated by the final movement of both pistons in completing their respective strokes, for governing the action of said valve device.

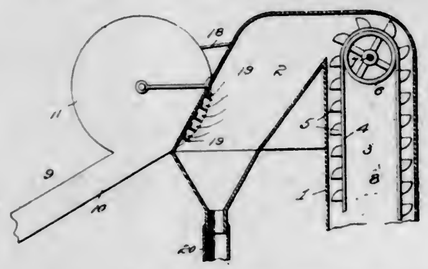
5. In a steam pump, the combination with two steam cylinders and independently movable pistons therefor, of a valve device for controlling the admission and exhaust of steam to and from said cylinders, and a reversing valve operated by each piston for conjointly governing the action of said valve device.

[Claims 6 to 11 not printed in the Gazette.]

1,061,971. GRAIN-CLEANER. CHARLES L. AMEN, Carthage, S. D. Filed June 9, 1911. Serial No. 632,131. (Cl. 130—17.)

1. A grain cleaner for grain elevators comprising a housing at the upper end of the elevator casing, said housing extending downwardly at an angle with the casing, a cylindrical fan casing disposed at one side of and communicating with the housing, a suction fan revolubly mounted in the fan casing, and a series of alined angle iron deflector plates on the inner wall of the housing and disposed at an angle with a vertical plane for deflecting the grain downward.

2. A grain cleaner for grain elevators comprising a housing, a series of alined horizontally disposed and vertically spaced angle iron deflector plates arranged on the inner wall of the housing and disposed at an angle with a vertical plane for deflecting the grain downward and a



suction fan near the upper end of the housing for removing the chaff and smut from the grain.

1,061,972. FOLDING-MACHINE. PETER BELLAN, Chicago, Ill. Filed June 5, 1911. Serial No. 631,255. (Cl. 223—3.)



1. A folding machine comprising a frame; a carriage mounted to reciprocate on said frame; means for reciprocating said carriage; feeding means arranged on said carriage; a pinion carried by said carriage and connected to drive said feeding means; two rack bars arranged in operative relation with said pinion; and means for causing said pinion to mesh with one of said rack bars during its movement in one direction and with the other of said rack bars during its movement in the other direction, substantially as described.

2. A folding machine comprising a frame, a carriage mounted to reciprocate on said frame, means for reciprocating said carriage, feeding means arranged on said carriage, a pinion carried by said carriage and connected to drive said feeding means, two rack bars arranged in operative relation with said pinion, a guide arranged adjacent the rack bars for holding the said pinion into engagement with said rack bars, said guide being provided with flexible ends adapted to shift said pinion from one rack bar to the other at the reversal of movement of the carriage, substantially as described.

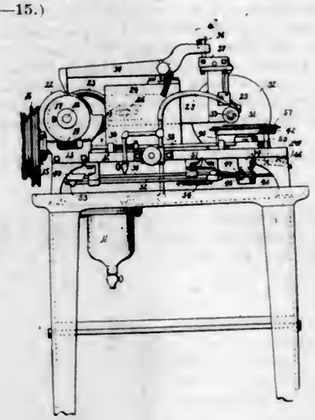
3. A folding machine comprising a frame; a carriage mounted to reciprocate horizontally on said frame, said carriage being provided with a vertical slot; a sprocket chain mounted at one side of said carriage; a pin on said chain engaging said slot; means for driving said chain; feeding means arranged on said carriage, a pinion carried by said carriage and connected to drive said feeding means; two rack bars arranged in operative relation with said pinion; and means for causing said pinion to mesh with one of said rack bars during its movement in one direction and with the other of said rack bars during its movement in the other direction, substantially as described.

4. A folding machine comprising a frame; a carriage mounted to reciprocate on said frame; means for reciprocating said carriage; downwardly discharging rollers on said carriage; feed aprons arranged to feed to said rollers; a driving shaft connected to operate said rollers and aprons; a pinion having a universal joint connection with said driving shaft; oppositely disposed rack bars arranged above and below the path of travel of said pinion and at a distance apart slightly greater than the outside diameter of said pinion; and a guide for said pinion arranged to hold said pinion in mesh with one of said rack bars during its movement in one direction and with the other of said rack bars during its movement in the other direction, substantially as described.

5. A folding machine comprising a frame; a carriage mounted to reciprocate on said frame; means for reciprocating said carriage; downwardly discharging rollers on said carriage; feed aprons arranged to feed to said rollers; a drive shaft connected to operate said rollers and aprons; a pinion having a universal joint connection with said drive shaft; oppositely disposed rack bars arranged above and below the path of travel of said pinion and at a distance apart slightly greater than the outside diameter of said pinion, and a guide for said pinion arranged to hold said pinion in mesh with one of said rack bars during its movement in one direction and with the other of said rack bars during its movement in the other direction, said guide being provided with flexible ends adapted to shift said pinion from one rack bar to the other at each end of its reciprocation, substantially as described.

[Claims 6 to 12 not printed in the Gazette.]

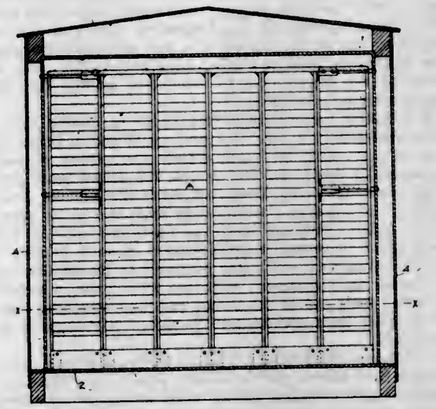
1,061,973. MILLING-MACHINE. CLARENCE E. BILTON, Bridgeport, Conn., assignor to The Standard Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 17, 1911. Serial No. 621,695. (Cl. 90—15.)



1. In a milling machine of the class described, the combination with a rotary cutting tool, of a bed, a driving shaft, a vertical spindle mounted in the bed, a pawl and ratchet for intermittently rotating the spindle, a connecting rod beneath the bed and connected with the pawl for operating the ratchet, a vertical slide operated by the driving shaft to manipulate the said rod, a slidable holding stop also arranged beneath the bed and adapted to engage the ratchet, a vertical slide operated by the driving shaft and adapted to operate the holding stop to secure the ratchet in position, a horizontally arranged work carrying table mounted on the spindle, and means for securing the work in position upon the table.

2. In a milling machine of the class described, the combination with a rotary cutting tool, of a bed, a driving shaft, a vertical spindle mounted in the bed, a pawl and ratchet for intermittently rotating the spindle, a spring actuated horizontal slide beneath the bed and connected with the pawl for operating the ratchet, a vertical slide operated by the driving shaft to manipulate the said slide, a spring actuated slidable holding-stop also arranged beneath the bed and adapted to engage the ratchet, a vertical slide operated by the driving shaft and adapted to operate the holding-stop to secure the ratchet in position, a rotary work carrying table mounted on the spindle and having a hole therein, a spring actuated stop pin to engage the table and having an operating handle for its withdrawal, and means for securing the work in position upon the table.

1,061,974. REFRIGERATOR-CAR. GEBHARD C. BOHN, St. Paul, Minn. Filed Jan. 17, 1912. Serial No. 671,614. (Cl. 62—12.)

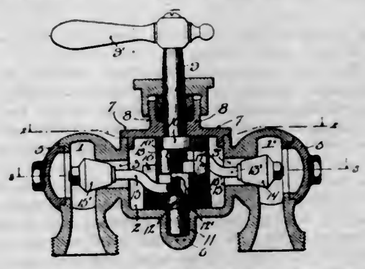


1. In combination with a refrigerator car, a transverse metal bulkhead supported therein and spaced from the adjacent end of the car, said bulkhead comprising top and bottom cross bars angular in cross section, a plurality of uprights secured at their ends within said cross bars and spaced to form frame openings, and ported frame sections consisting of uprights and connecting port walls supported within said frame openings.

2. In combination with a refrigerator car, a transverse metal bulkhead supported therein and spaced from one end of the car, said bulkhead comprising top and bottom cross bars angular in cross section, a plurality of spaced uprights secured at their ends within said top and bottom cross bars, said spaced uprights being angular in cross section whereby said cross bars and uprights constitute inwardly channeled frame openings, and ported frame sections secured within the channels of said frame openings.

3. In combination with a refrigerator car, a transverse metal bulkhead supported therein and spaced from one end of the car, said bulkhead comprising top and bottom cross bars and connecting spaced uprights, said cross bars and uprights being channeled upon their inner faces and forming frame openings, horizontally ported frame sections fitted within the channels of said frame openings, and corner brackets securing said frame sections and cross bars.

1,061,975. ANTISCALD-FAUCET. JOHN R. BOUTELL, Milwaukee, Wis., assignor of one-half to Siebers & Raisch Pattern Works, Milwaukee, Wis. Filed May 28, 1912. Serial No. 700,210. (Cl. 137—26.)



1. A faucet comprising a housing having a mixing chamber provided with a pair of supply ports and a discharge port, a valve for each supply port, independent actuating eccentrics connected to the respective valves, a tappet carried by one of the eccentrics, a pair of tappet opposing members carried by the other eccentric adapted to be en-

gaged by the tappet, and an operating spindle for one of said eccentrics.

2. A faucet comprising a housing having a mixing chamber provided with a pair of supply ports and a discharge port, a valve for each supply port, independent actuating eccentrics connected to the respective valves, a tappet carried by one of the eccentrics, a pair of tappet opposing lugs projecting from the other eccentric in the path of travel of the tappet, and an operating spindle for the tappet-carrying eccentric.

3. A faucet comprising a housing for a mixing chamber provided with a pair of supply ports and a discharge port, a ball valve for each supply port, stems extending inwardly from said ball-valves, the stems being provided with apertured hubs, an operating spindle journaled in the housing, a stud spindle journaled in the housing in axial alinement with the operating spindle, but independent therefrom, a head carried by each spindle, a pin extending from each head eccentric to its spindle, the pins being in engagement with the stem hubs, a tappet extending from one of the heads, and lugs extending from the opposite head arranged to be alternately engaged by the tappet.

4. A faucet comprising a housing having a mixing chamber provided with a pair of supply ports and a discharge port, a valve for each supply port, a headed operating spindle journaled in the housing, a headed stud spindle journaled in said housing in axial alinement with the operating spindle, an eccentric carried by each spindle head, stems connecting the valves with the respective eccentrics, a tappet extending from the operating spindle head, and a pair of lugs extending from the stud spindle head adapted to be engaged by the tappet, one of the lugs being adapted to engage one of said valve stems to effect a locking movement of its valve member when the latter is closed.

1,061,976. TOOTH-BRUSH HOLDER. WILLIAM S. BREEDEN, Millville, N. J. Filed Sept. 23, 1912. Serial No. 721,888. (Cl. 132—11.)



1. A holder of the character described, comprising a strip of sheet metal having its lower end bent at a right angle, the lower bent end constituting a fixed support, said strip of metal having its upper end bent outwardly, a collar removably supported on the upper end of the strip, and a casing fitting the collar and adapted to move therein, and said casing having a closed upper and an open lower end, substantially as described.

2. A holder of the character described, comprising a bracket formed of a strip of sheet metal having its lower end bent at right angles and constituting a fixed support, said bracket having its upper end bent outwardly, a cylindrical casing closed at its upper end and open at its lower end, and a support for said casing comprising a strip of spring metal bent into circular form at one end to receive and clamp the casing, and at its other end bent forming a transversely elongated sleeve snugly fitting the upper end of the strip, substantially as described.

3. A holder of the character described, comprising a bracket formed of a strip of sheet metal having its lower end bent at right angles, a cup supported in the lower bent end of the bracket, said bracket having its upper end bent outwardly, a clamp removably supported on the outwardly bent upper end of the bracket, said clamp comprising a spring collar thereon, and a casing open at its lower end and slidably mounted in said spring collar, substantially as described.

1,061,977. PROCESS FOR THE PRODUCTION OF FORMYLCELLULOSES. EMILE BRONNERT, Niedermorschweiler, Germany, assignor to Vereinigte Glanzstoff Fabriken Aktiengesellschaft, Elberfeld, Germany. Filed Apr. 13, 1911. Serial No. 620,832. (Cl. 23—24.)

1. The process of producing formylcelluloses, which comprises subjecting to the action of concentrated formic acid weakly hydrolyzed cellulose hydrates precipitated *en masse* from their solutions.

2. The process of producing formylcelluloses, which comprises subjecting to the action of concentrated acid weakly hydrolyzed and weakly hydrated cellulose hydrates precipitated *en masse* from their solutions.

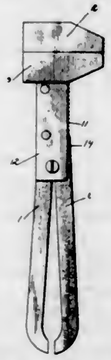
3. The process of producing formylcelluloses, which comprises precipitating weakly hydrolyzed cellulose hydrates from their solutions, and then subjecting the said hydrates to the action of concentrated formic acid.

4. The process of producing formylcelluloses, which comprises precipitating *en masse* weakly hydrolyzed cellulose hydrates from their solutions, and then subjecting the said hydrates to the action of concentrated formic acid.

5. The process of producing cellulose formates, which comprises precipitating a cuprammonia cellulose solution, washing and drying the so-formed cellulose hydrate, and subjecting the same to the action of concentrated formic acid.

[Claims 6 and 7 not printed in the Gazette.]

1,061,978. WRENCH. JAMES H. BROWN and ROBERT C. BROWN, Cuddy, Pa. Filed Aug. 3, 1912. Serial No. 713,180. (Cl. 81—135.)



1. A wrench consisting of a handle having a fixed jaw thereon, members on the opposing sides of said handle adapted to form a channel, a lever pivoted away from its outer end to said handle, said outer end being toothed, a jaw slidable on said members and engageable by said end.

2. A wrench consisting of a handle having a fixed jaw thereon, members on the opposing sides of said handle adapted to form a channel, a lever pivoted away from its outer end to said handle, said outer end being toothed, a jaw slidable on said members and engageable by said end, said end adapted to be raised above the surface of said channel to engage said movable jaw.

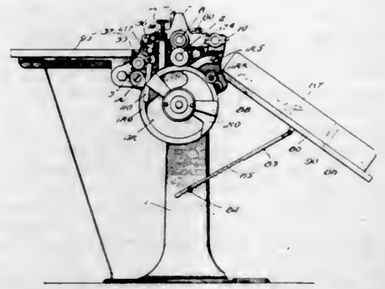
3. A wrench consisting of a handle formed of a shank and a lever, said lever having its outer end toothed, said lever being pivoted to said shank between said toothed portion and its inner end, a fixed jaw on said shank and a toothed movable jaw straddling said shank and toothed portion of said lever.

4. A wrench consisting of a handle formed of a shank and a lever, said lever having its outer end toothed, said lever being pivoted to said shank between said toothed portion and its inner end, a fixed jaw on said shank and a toothed movable jaw straddling said shank and toothed portion of said lever, a recess in said shank and a lug on said lever adapted to seat in said recess.

5. A wrench consisting of a handle, a fixed jaw thereon, a slidable jaw having a toothed surface on said handle, a lever having a toothed surface adapted to engage said slidable jaw, said handle and lever being pivoted together, means for relieving said pivot from strain, said means consisting of a lug on said handle and a recess in said lever to receive said lug, and a lug on said lever and a recess in said handle to receive said last-named lug.

[Claim 6 not printed in the Gazette.]

1,061,979. PERFORATING-MACHINE. CHARLES A. BURTON, Chicago, Ill. Filed Jan. 23, 1912. Serial No. 672,801. (Cl. 164—99.)



1. In combination, a bed, a striker member movable from and toward the bed from an idle position to a working position, means for supporting said member in its working position, and yieldable devices on said member engaging with the bed in the working position of said member.

2. In combination, a bed, a striker movable from and toward said bed, said striker having yielding members adapted to engage with said bed, and means for supporting the striker at the time said members engage with the bed so as to leave only the pressure of the yieldable members on the bed.

3. In combination, a bed, a striker movable from and toward the bed, fingers on said striker, means for arresting the striker before its fingers engage with said bed, and devices loosely mounted on said fingers and adapted to rest upon the bed in the working position of the striker.

4. A striker having fingers, sleeves loosely mounted on the fingers, and means connecting the sleeves to the fingers so as to permit the sleeves to have a limited endwise movement on the fingers.

5. A striker having fingers, thimbles loosely fitting over the ends of said fingers, and means for permitting limited relative endwise movement between the fingers and the thimbles.

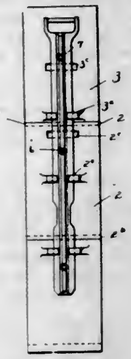
[Claims 6 to 33 not printed in the Gazette.]

1,061,980. COMBINED SHOVEL AND AUTOMOBILE TRACTION. BERNARD CAHN, San Diego, Cal. Filed Nov. 29, 1912. Serial No. 733,993. (Cl. 104—45.)

1. A device of the class described comprising a plurality of traction pieces connected together end to end and a bar detachably mounted longitudinally in the middle thereof rigidly connecting and reinforcing said pieces.

2. A device of the class described comprising a plurality of traction pieces joined end to end by rabbeted joints and a bar detachably mounted longitudinally in the middle thereof rigidly connecting and reinforcing said pieces.

3. A device of the class described comprising a plurality of notched surface traction pieces joined together by means of rabbeted joints and a bar provided with a handle piece adapted to engage said lugs, and rigidly attached to said traction pieces for connecting and reinforcing them.

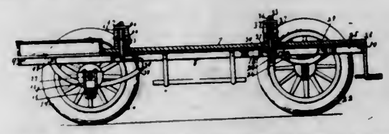


4. A device of the class described comprising a shovel consisting of a rectangularly shaped shovel piece, a handle piece adapted to be readily and rigidly connected to said shovel piece and a plurality of rectangularly shaped pieces adapted to engage said handle piece, which, when rigidly connected together by said handle piece form a single traction piece.

5. A device of the class described comprising a plurality of rectangularly shaped pieces joined together at their ends and a bar provided with a handle on one end rigidly connecting together and reinforcing said rectangularly shaped pieces.

[Claims 6 and 7 not printed in the Gazette.]

1,061,981. MOTOR-VEHICLE RUNNING-GEAR. HOWARD G. CARR, Hoopeston, Ill. Filed July 8, 1911. Serial No. 637,513. (Cl. 21—105.)



1. In a vehicle running-gear, axles having supporting wheels, a frame comprising side members, a rear end member, a front end member, transversely extending intermediate members secured at their respective ends to the said side members, longitudinally extending members secured at their respective ends to said intermediate members and other members of the said frame, means for suspending said frame from said axle permitting movements of said frame bodily only with respect to said axles whereby torsional stresses of said frame are avoided.

2. In a vehicle running-gear, axles having supporting wheels, a frame, carriers pivotally secured to said frame and connected to said axles, resilient devices secured to said frame, connecting means between said resilient devices and said axles, said means being arranged at opposite sides of said frame, and connecting means between each of said opposite carriers.

3. In a vehicle running-gear, axles having supporting wheels, a frame, carriers pivotally secured to said frame at both sides thereof and connected to said axle, means connecting said carriers whereby a movement of one of said carriers is transmitted to the other of said carriers, a resilient device secured between said connecting means and said frame, said resilient device being operatively associated with said connection.

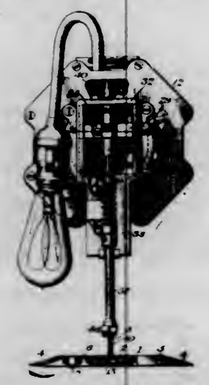
4. In a vehicle running-gear, an axle having supporting wheels, a frame, carriers each secured at one end to said frame, and operatively connected intermediate its ends with said axle, a member movably mounted upon said

frame, links connecting said carriers and said member, a rod controlled by said member, and a resilient device secured between said rod and said frame.

5. In a vehicle running-gear, an axle having supporting wheels, a frame, carriers pivotally secured at one of its ends to said frame and extending transversely of said axle, means of securing said axle and said carriers together, a shaft pivotally mounted upon said frame and having rigid arms, links connecing said arms and said carriers, a resilient device mounted upon said frame, a plate secured to said resilient device, a rod suspended from said plate, said shaft having a rigid arm pivotally secured to said rod.

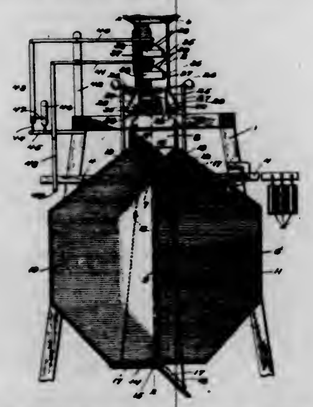
[Claims 6 to 9 not printed in the Gazette.]

1,061,982. CLOTH OR FABRIC CUTTER. MORRIS Z. CLAVANS, Philadelphia, Pa., assignor of one-half to William Goldstein, Philadelphia, Pa. Filed Oct. 24, 1911. Serial No. 656,507. (Cl. 164—75.)



In a cloth-cutter, a central base-plate portion, universally movable casters beneath the front of such portion, a separate outer continuous frame having beveled edges and hinged at its inner rear edge to the rear edge of said central portion to have free movement and to contact by gravity with the work-table, and universally movable casters beneath the rear portion of said frame.

1,061,983. AUTOMATIC WEIGHING-MACHINE. WILLIS CLOTHIER, New Castle, Del. Filed Dec. 3, 1912. Serial No. 734,695. (Cl. 73—168.)



1. The combination with a support, a spout, a scale beam, and a weighing receptacle secured to the scale beam below the spout, of pivoted gates in the spout, fingers supported by the gates and adapted to be moved into position with one set of fingers between the other set of fingers, and means for moving said fingers toward each other when the gates are moved toward each other, substantially as described.

2. The combination with a support, a spout, a scale beam, and a weighing receptacle secured to the scale beam below the spout, of pivoted gates in the spout, parallel shafts supported in the gates, segments on the shafts compelling them to move in opposite directions, relatively long fingers on the lowermost shafts, and other fingers on the upper shafts adapted when engaged by the moving material in the spout to move the lower set of fingers together, substantially as described.

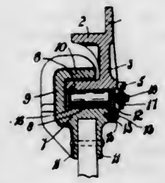
3. The combination with a support, a spout, a scale beam, and a weighing receptacle secured to the scale beam below the spout, of pivoted gates in the spout, fingers supported by the gates and adapted to be moved into position with one set of fingers between the other set of fingers, and means for moving said fingers toward each other when the gates are moved toward each other, weighted arms on said gates tending to close the gates, and posts on the receptacle engaging the arms and holding the gates normally in open position, substantially as described.

4. The combination with a support, a spout, a scale beam, and a weighing receptacle secured to the scale beam below the spout, of pivoted gates in the spout, parallel shafts supported in the gates, segments on the shafts compelling them to move in opposite directions, relatively long fingers on the lowermost shafts, and other fingers on the upper shafts adapted when engaged by the moving material in the spout to move the lower set of fingers together, weighted arms on said gates tending to close the gates, and posts on the receptacle engaging the arms and holding the gates normally in open position, substantially as described.

5. The combination with a support, a spout, a scale beam, and a weighing receptacle secured to the scale beam below the spout, of pivoted gates in the spout, means on the receptacle normally holding the gates in open position, a movable frame in the spout, and means operated by the frame to momentarily hold the beam elevated after the receptacle has received a predetermined quantity of material, substantially as described.

[Claims 6 to 15 not printed in the Gazette.]

1,061,984. CAR BODY AND TRUCK LOCKING DEVICE. JAMES MCCUTCHEON COLEMAN, Westmount, Quebec, Canada. Filed Nov. 14, 1911. Serial No. 660,207. (Cl. 105—115.)

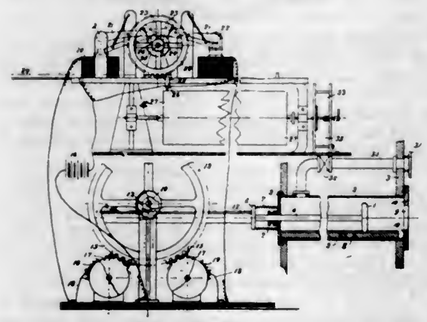


1. In truck construction, an upper bearing member having a web portion formed between lateral flanges and a vertical flange above said web portion adapted to be rigidly connected with the car body, a lower bearing member having a track surface on the upper side of the body thereof, a wall at the rear of said track portion and a flange extending over said track portion from said wall and over the lower flange of the said upper member and a flange extending downwardly from said body portion and adapted to be rigidly connected with the truck and rollers traveling on said trackway under the lower flange of said upper member.

2. In truck construction, an upper member having an inwardly extending flange at the lower end thereof and a toothed rack, a lower member having at the upper end thereof a recess portion into which said flange extends and at the lower end flanges rigidly connected with the truck, a plate slidably arranged on the outer side of said lower bearing member and closing in said recess, rollers journaled in said plate and suitably supported at their inner sides, and a pinion journaled from and supported by said plate and coacting with said rack in sliding said plates and rollers.

3. In a device of the class described, the combination with the body and truck bolsters of a car, of a joint between said bolsters comprising two members, one an upper member rigidly secured to said body bolster, and the other a lower member rigidly secured to said truck bolster, said upper member through said bolster forming a rigid downward extension from the body and having an under surface adapted to bear on an upper surface of the lower member one of said members having a horizontal flange engaging a corresponding horizontal flange formed on the other member and forming a flexible means of joining the bolsters and adapted to form a bearing to share the weight of the car body.

1,061,985. APPARATUS FOR INDICATING AND RECORDING THE SPEED OF SHIPS. ALFRED JOPLING COOPER, Totland Bay, Isle of Wight, England. Filed May 11, 1912. Serial No. 696,561. (Cl. 73—122.)



1. In apparatus for indicating or recording the speed of ships, a tube or cylinder placed within the skin of the ship, and in free communication at one end with the water; a piston arranged within the tube, and movable longitudinally therein, and arranged and adapted to cause the resistant pressure on the water due to speed or horizontal movement to act on the face of same, and the diameter of which is substantially less than that of the cylinder; an indicator; and means operated by the piston for operating the indicator; substantially as set forth.

2. In apparatus for indicating or recording the speed of ships, the combination of a piston, a tube or cylinder of larger diameter than the piston, and having a regulated aperture in its forward end, for directing the pressure of water on the piston; springs adapted to move the piston in the opposite direction to the water; an indicator; and means operated by the piston for operating the indicator; substantially as described.

3. In apparatus for indicating or recording the speed of ships, the combination of a piston, a tube or cylinder of larger diameter than the piston and open at one end to receive the pressure of the water, a spring or springs adapted to move the piston in the opposite direction to the water; a relief pipe at the after end of the cylinder to allow water behind the piston to escape; an indicator; and means operated by the piston for operating the indicator; substantially as set forth.

4. In apparatus for indicating or recording the speed of ships, a tube or cylinder placed within the skin of the ship, and in free communication at one end with the water; and a piston arranged within the tube, and movable longitudinally therein, and arranged and adapted to cause the resistant pressure on the water due to speed or horizontal movement to act on the face of same, and the diameter of which is substantially less than that of the cylinder; an electrically toothed wheel contact making and breaking mechanism, wherein the teeth of the different contact wheels are insulated at one side, and oppositely, in the two sets, and recording or indicating mechanism operated by the electrical mechanism in the one direction, or the other; substantially as described.

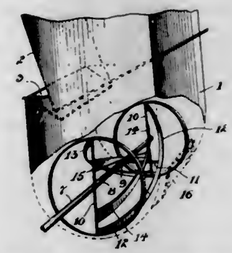
1,061,986. SOFA-BEDSTEAD. RUDOLPH COOPERSMITH, St. Louis, Mo. Filed Oct. 7, 1910. Serial No. 585,793. (Cl. 5—46.)



1. A sofa-bedstead including a base section having side frames comprising leg members, fixed upper and lower horizontal rails and transverse connecting members; an outer folding section comprising leg members, transverse connecting members and side rails; a folding supporting frame comprising leg members to which the end portions of the side rails of said outer section are pivoted, and transverse connecting members; and an intermediate folding section comprising side rails pivoted at one end to the respective leg members of said supporting frame so as to abut against the ends of the side rails of said outer section, the ends of said leg members bearing against the side rails of both of said two folding sections when in open position, the side rails of said intermediate section having their opposite ends extended at an angle and pivoted to the side frames of said base section between the upper and lower horizontal rails thereof so that the side rails of the two folding sections are supported the one upon the other throughout on the upper horizontal side rails of said base section when in closed position and lie in the same horizontal plane with the lower side rails of said base section when in open position.

2. In a sofa-bedstead, a pivotally supported reversible folding section having side rails, a coöperating folding section having side rails, and a transverse folding supporting frame having leg members at its ends, the meeting end portions of the side rails of said folding sections being pivoted to the leg members of said supporting frame on opposite sides of the middle thereof so that the ends of said rails abut and the ends of said leg members abut against the respective rails of both of said sections when in open position, whereby said supporting frame moves to supporting position as said coöperating folding sections are moved to open position and folds between said sections when they are moved to closed position.

1,061,987. FEED-MIXER. JAMES ARCHIBALD CRAIG, Toronto, Ontario, Canada, assignor of one-half to Jules Marius Wogan, New Orleans, La. Filed Apr. 30, 1912. Serial No. 694,140. (Cl. 99—2.)



1. In a feed mixer, a casing, a rotor journaled in the end walls of said casing, a longitudinal plate or board

extending downwardly and inwardly from the upper edge of said casing and deflecting the foodstuffs to the longitudinal center of the rotor, and a hopper having a sloping wall terminating intermediate of the depth of said deflecting plate and an inclined sliding bottom in its closed position extending to said deflecting plate and sloping wall.

2. In a feed mixer, a casing of substantially semi-cylindrical form at the lower end thereof and having a hopper top and shaft bearings in the end walls thereof and a rotor having its shaft journaled in said bearings and radial rods projecting therefrom and rigidly secured thereto adjacent to the end walls of said casing, a radial rod midway between the aforesaid rods and extending through the shaft and rigidly secured thereto and blades each describing a semi-spiral curve from one rod through and to the others and supported by said rods.

3. In a feed mixer, a casing having bearings in the end walls thereof, and a rotor having its shaft journaled in said bearings, rods secured to said shaft adjacent to the end walls of the casing, a rod at right angles secured to the shaft midway between the other rods and blades each describing a semi-spiral curve from the end of one of said rods to the end of another rod at the opposite side of the shaft and intermediately supported by the mid way rod, a similarly arranged and of semi-spiral formation and secured to the other ends of said rods and supported by the other end of the midway rod, intermediate blades between the said blades and the shaft and following similarly in semi-spiral curves.

1,061,988. CURTAIN-FIXTURE. ALEXANDER A. CURRIE, Monessen, Pa. Filed Dec. 28, 1912. Serial No. 738,998. (Cl. 156—19.)



In an extensible curtain fixture, the combination with angle brackets, of flat metallic bars, said bars having the outer ends thereof provided with barrels adapted to fit upon said brackets, a hook-shaped guide carried by the inner end of one of said bars and adapted to receive the other of said bars, a hook carried by the last mentioned bar and adapted to fit over the edge of the other bar, equally spaced screws detachably mounted in said bars, and hooks carried by said screws.

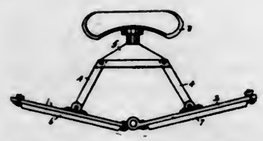
1,061,989. TROLLEY-WHEEL CONSTRUCTION. HARRY CUTLER, Pittsburgh, Pa. Filed Apr. 13, 1910. Serial No. 555,142. (Cl. 191—78.)



1. A trolley pole, bearings thereon, a shaft mounted thereon, brackets each having an upper surface at right angles thereto said brackets mounted on said shaft, a wheel mounted on said shaft, between said brackets, and guards pivoted to the brackets and bearing on the right angular upper surfaces thereof, springs operating said guards, said springs secured to the free ends of said guards and to the right angular surfaces of said brackets.

2. A device as described consisting of a trolley pole, bearings thereon, a shaft having its ends reduced to form shoulders, brackets mounted between said shoulders and bearings, a wheel on said shaft, said brackets having horizontal flanges, guards pivotally mounted on said flanges, a plurality of springs for controlling each of said guards, said springs engaging the opposite ends of said flanges respectively and being connected at one point to the guards respectively.

1,061,990. SMOOTHING-DRAG. MORGAN DAVISON, Almeda, Tex. Filed Feb. 4, 1913. Serial No. 746,247. (Cl. 55—22.)



1. A device of the character described, including a plurality of flat runners hinged together along their adjacent edges, and having their outer edges free, a transverse cross bar on the under side of each of said runners, the inner ends of said cross bars being pivoted to the runners, and the outer ends thereof being adjustably secured thereto.

2. A device of the character described consisting of two flat runners hinged together along their adjacent edges, and having their outer edges free, a plurality of transverse cross bars carried by the under side of each runner, the inner ends of said cross bars being pivoted to their respective runners and the outer ends of said cross bars being adjustably secured thereto.

3. A device of the character described consisting of two flat runners hinged together along their adjacent edges, and having their outer edges free, a plurality of transverse cross bars carried by the under side of each runner, the inner ends of said cross bars being pivoted to their respective runners and the outer ends of said cross bars being adjustably secured thereto, a seat for said device, and a plurality of legs pivoted at one end to said seat, and at the other ends to the respective runners.

1,061,991. BONNET. MARTHA B. DRULLARD, Los Angeles, Cal. Filed Sept. 18, 1912. Serial No. 721,056. (Cl. 2—118.)



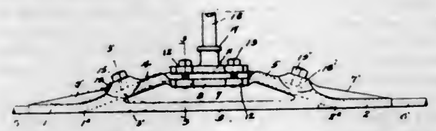
1. A bonnet comprising a gathered portion for the hair having contiguous therewith an expansible band for covering the forehead and ears, said band composed of shirred fabric normally held together by an elastic band, strings attached to the ends of the shirrs whereby the band may be expanded and fitted closely to the head, and a plurality of streamers contiguous with said shirred band and being adapted to encircle the neck, said streamers being for a portion of their length sewed together.

2. A bonnet consisting of a gathered portion for covering the hair and having contiguous therewith a band forming substantially a hood portion, said band being formed into shirrs sewed together and expansible relatively to each other, an elastic means to normally hold the shirrs drawn, a beading to loosely hold said elastic in position, said elastic being provided with means to prevent same from being drawn through said beading, strings on the inside of said band and in line with said elastic for expanding and holding expanded said elastic and shirrs, and streamers on the outer edge of said band and being sewed together for a portion of their length.

3. A head dress comprising a hair covering consisting of soft fabric gathered together in a radial fashion, the gathers being fastened at their ends and provided with a button to cover the ends of the gathers, said gathered covering having contiguous therewith a band composed of shirrs sewed together to render the same expansible and having a beading near one edge, an elastic tape extended through said beading and folded upon itself at its ends to prevent same from being drawn through said beading, a loop to hold said folded ends of said elastic in normal position, strings to fasten said shirred band on the head, and streamers fastened to said shirred band.

4. A bonnet comprising a crown portion having an expansible band composed of shirred fabric, means to hold said band normally contracted, strings on said band arranged to be tied under the hair to secure said band to the head, and streamers on said band and crown portion, said streamers being for a portion of their length sewed together.

1,061,992. TROLLEY-WIRE SPLICE. WILLIAM J. DUKRO, Lima, Ohio. Filed May 24, 1912. Serial No. 699,388. (Cl. 173—263.)



1. A splice comprising an integral member formed with tubular end portions open at the bottom and having their edges adapted to be bent flush with wire ends, an upwardly inclined sleeve forming an extension of each tubular portion and formed with an open end and a set screw adapted to secure a wire in each sleeve, a base plate adapted to receive the wire ends, and means for clamping said ends on the base plate.

2. A splice comprising an integral member formed with slotted tubular end portions and open end sleeves, a base plate having in its upper face a groove extended from each sleeve and the wire ends arranged parallel in said grooves, combined with a complementarily grooved cap plate and bolts securing said cap plate to the base plate.

1,061,993. METALLIC DOOR. JOHN OSCAR EMRICH, Pittsburgh, Pa. Filed July 28, 1910. Serial No. 574,408. (Cl. 189—46.)

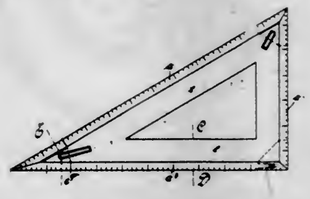


1. In a metallic door, stiles having their sides extended in contracted parallel relation toward a plane between the stiles, grooves formed lengthwise in said stiles, unitary panel and rail members in said plane between the stiles, the panel portions of said unitary members engaging the extended parallel parts of the stiles, and the rail parts of said members engaging the grooves of the stiles, and pins engaging said extended parts to combine the same.

2. In a metallic door, stiles having their sides extended in contracted parallel relation toward a plane between the stiles, grooves formed lengthwise in the stiles, unitary panel and rail members in said plane between the stiles, the panel portion of said unitary members fitting slidably between said extended parts and the rail portions of said unitary members fitting slidably into said grooves, pins engaging said extended parts and the panel portions of the unitary members to combine the same, and a molding fitting within said grooves and engaging the ends of said extended parts.

3. In a metallic door, stiles having grooves formed lengthwise on the inner edge of the stile, parts of said stiles being extended in contracted parallel relation to the sides thereof, a unitary rail and panel member in a plane between the stiles, the panel portion of said unitary members fitting slidably between said extended contracted parts, and the rail portion engaging the grooves of the stile, and a sash portion formed on the stiles above said unitary member by the transverse intersection of the extended parts of the stiles.

1,061,994. SCALE FOR DRAWING UTENSILS. HERMANN WILHELM ENGEL, Hamburg, Germany. Filed Nov. 4, 1911. Serial No. 658,456. (Cl. 33—8.)



1. A drawing utensil provided with a recess at one of its corners combined with a scale of U-shaped cross section adapted to straddle said utensil and having a lug adapted to enter said recess.

2. A drawing utensil provided with a tongued edge and a recessed corner combined with a scale of U-shaped cross section adapted to straddle said edge and having a lug adapted to enter said corner.

3. A drawing utensil provided with corner recesses and springs having locking pins combined with scales of U-shaped cross section adapted to straddle said utensil and having apertured lugs adapted to enter the recesses and to be engaged by the pins.

4. A drawing utensil having recessed corners combined with a plurality of scales of U-shaped cross section having lugs adapted to enter said corners, one of said lugs having a slot while the adjoining end of the abutting scale is provided with a pin adapted to enter said slot.

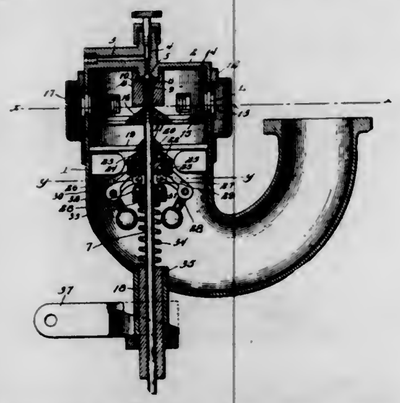
1,061,995. CARBURETER. CHARLES F. ERICKSON, Brooklyn, N. Y. Filed Dec. 8, 1911. Serial No. 664,597. 48—155.1.)

1. A carbureter comprising a body having a fuel inlet and an air inlet and adapted to have the gaseous mixture drawn therethrough by the action of the engine, a valve for regulating the fuel inlet, an air regulator for varying the effective size of the air inlet, and a centrifugal governor mechanism having connection with the fuel controlling valve and the air regulator and adapted to be actuated by the passage of the gaseous mixture through the carbureter to uncover the fuel and air inlets to a greater or less extent proportionately to the speed of the engine.

2. A carbureter for internal combustion engines, the same comprising a hollow body having fuel and air inlets, independent means for regulating the inlets to admit of obtaining the proper proportion of air and fuel, a valve for closing the fuel inlet, an air regulator for the air inlet, and centrifugal governor mechanism having connection with said valve and air regulator and adapted to be actuated by the passage of the gaseous mixture through

the carbureter to move the said valve, an air regulator to uncover the fuel and air inlets to a greater or less extent proportionately to the speed of the engine.

3. A carbureter for internal combustion engines comprising a hollow body adapted to have the gaseous mixture drawn therethrough by the action of the engine, said hollow body having fuel and air inlets, a valve for closing the fuel inlet, an air regulator for the air inlet, a governor mechanism adapted to be actuated by the passage of the gaseous mixture through the carbureter to move the said valve and air regulator to admit a greater or less amount of fuel and air proportionately to the speed of the engine, and means for retarding the action of the governor mechanism by manual control thereof to meet existing conditions.

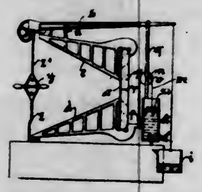


4. A carbureter for internal combustion engines comprising a hollow body provided with fuel and air inlets, means for controlling said inlets, and a governor mechanism adapted to be actuated by the passage of the gaseous mixture through the carbureter and having connection with the inlet controlling means to admit of varying the supply of fuel and air proportionately to the speed of the engine, said mechanism including a fan for mixing the air and gas and adapted in turn to operate the governor mechanism.

5. A carbureter having a fuel inlet, a nozzle having connection with the fuel inlet and formed with a tapered opening, a valve arranged to operate within the tapered opening of the nozzle and adapted to close the fuel inlet, and a governor mechanism adapted to be operated by the passage of the gaseous mixture through the carbureter to unseat the said valve to a greater or less extent proportionately to the speed of the engine.

[Claims 6 to 9 not printed in the Gazette.]

1,061,996. APPARATUS FOR TESTING CONCRETE AND THE LIKE. RICHARD FÄRBER, Frankfort-on-the-Main, Germany, assignor to The Firm of Buchheim & Heister, Frankfort-on-the-Main, Germany. Filed Jan. 4, 1912. Serial No. 669,333. (Cl. 73—51.)



1. Apparatus for testing concrete and the like comprising means for holding a test piece, a lever adapted to engage and bend a test piece held by said holding means, a scale beam poised on said lever so that the weight of the beam tends to actuate the lever, means for loading one arm of said scale beam, means for maintaining said scale beam in equilibrium while said arm is loaded, and means indicating the load on said beam at any given moment.

2. Apparatus for testing concrete and the like comprising means for holding a test piece, a lever adapted to engage and bend a test piece held by said holding means, a scale beam poised on said lever so that the weight of the beam tends to actuate the lever, a liquid receptacle carried by one arm of said scale beam, a liquid supply vessel adapted to deliver liquid to said receptacle, a float in said supply vessel, means for maintaining said beam in equilibrium under varying loads of liquid in said receptacle, and an indicating device connected to said float so as to move in proportion with the delivery of liquid from said supply vessel to said receptacle.

3. Apparatus for testing concrete and the like comprising means for holding a test piece, a lever adapted to engage and bend a test piece held by said holding means, a scale beam poised on said lever so that the weight of the beam tends to actuate the lever, means for progressively loading one arm of said scale beam, means for maintaining said scale beam in equilibrium during progressive loading of said arm, an indicator moving in accordance with the progressive loading of said arm, and means automatically locking said indicator when the test piece is fractured by the bending strain.

4. Apparatus for testing concrete and the like comprising means for holding a test piece, a lever adapted to engage and bend a test piece held by said holding means, a scale beam poised on said lever so that the weight of the beam tends to actuate the lever, means for progressively loading one arm of said scale beam, means for maintaining said scale beam in equilibrium during progressive loading of said arm, an indicator moving in accordance with the progressive loading of said arm, and a locking device connected to the scale beam for locking said indicator when the lever and beam are dropped consequent upon fracture of the test-piece.

5. Apparatus for testing concrete and the like comprising two members having hooked ends adapted to severally engage the ends of a test piece and struts adapted to abut against central parts of said test piece, a scale beam poised on one of said members so that its weight tends to bend the test piece, means for loading one arm of said scale beam, means for maintaining said scale beam in equilibrium while said arm is loaded, and means indicating the load on said beam at any given moment.

[Claims 6 to 8 not printed in the Gazette.]

1,061,997. SIGN. FLOYD EDISON FERGUSON, Walla Walla, Wash. Filed Oct. 12, 1912. Serial No. 725,496. (Cl. 40—125.)



A sign member comprising a plate having its opposite end edges formed with inwardly bent flanges, in combination with spaced supporting strips which are adapted to be secured at one longitudinal edge to a suitable support, the longitudinal free edge of said strips being offset whereby pockets are formed between the offset portions and the support, said offset portions extending outwardly in opposite directions, the lower edge of each of said offset portions of the strips being formed with a flange, said flanges extending inwardly and upwardly, the upwardly extending portion of the flanges being adapted to rest against the support to entirely close the space between the lower edge of said strips and said support, the end flanges of the sign member being adapted for engagement between the support and the offset portions of said supporting strips, and the flanges on the lower edge of said strips being adapted to limit the downward movement of said sign member.

1,061,998. MANUFACTURE OF ARMOR-PLATES FOR THE PROTECTION OF SHIPS AND OTHER STEEL OBJECTS. FEDERICO GIOLITTI, Rome, Italy, assignor to Societa Anonima Italiana Gio. Ansaldo Armstrong & Co., Genoa, Italy, a Corporation of Italy. Filed Sept. 6, 1906. Serial No. 333,409. (Cl. 148—40.)



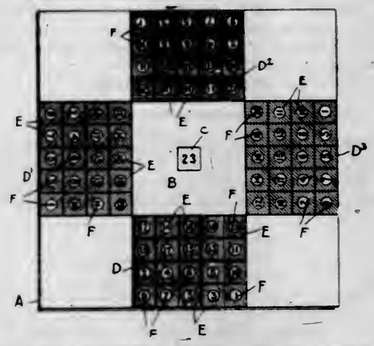
1. The process of forming a unitary steel plate or other article consisting in subjecting the steel article to a surface treatment in contact with a carbonizing substance at a temperature sufficient to cause diffusion, whereby a zone is formed in the article in which the percentage of carbon united with the iron to form steel is increased, next subjecting the article to a surface treatment in contact with an oxidizing material, whereby the proportion of carbon in the said zone is decreased at the outer part of the said zone to form a sub-zone, and thereupon subjecting the article to a surface treatment in contact with a carbonizing substance to increase the carbon in the outer part of the said sub-zone to form another zone at the outer part of the article in which the proportion of carbon is greater than that of the next inner zone.

2. The process of forming a unitary steel plate or other article consisting in subjecting the steel article to a surface treatment in contact with a carbonizing substance at a temperature sufficient to cause diffusion, whereby a zone is formed in the article in which the percentage of carbon united with the iron to form steel is increased, next subjecting the article to a surface treatment in contact with an oxidizing material, whereby the proportion of carbon in the said zone is decreased at the outer part of the said zone to form a sub-zone, and thereupon subjecting the article to a surface treatment in contact with a carbonizing substance to increase the carbon in the outer part of the said sub-zone to form another zone at the outer part of the article in which the proportion of carbon is greater than that of the next inner zone, and in which the proportion of carbon differs from the other two zones.

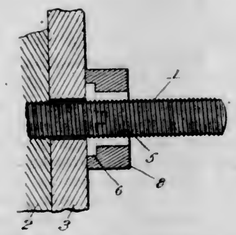
3. The process of forming a unitary steel plate or other article consisting in subjecting the steel article to a surface treatment in contact with a carbonizing substance at a temperature sufficient to cause diffusion, whereby a zone is formed in the article in which the percentage of carbon united with the iron to form steel is increased, next subjecting the article to a surface treatment in contact with an oxidizing material, whereby the proportion of carbon in the said zone is decreased at the outer part of the said zone to form a sub-zone, and thereupon subjecting the article to a surface treatment in contact with a carbonizing substance to increase the carbon in the outer part of the said sub-zone to form another zone at the outer part of the article in which the proportion of carbon is greater than that of the next inner zone, and in which the proportion of carbon differs from the other two zones, and also differs from the article beyond the said zones.

1,061,999. GAME APPARATUS. EINAR L. GRONDAHL, Seattle, Wash. Filed Aug. 13, 1912. Serial No. 714,796. (Cl. 46—64.)

A game apparatus, comprising a game board and counters, the game board having a central plain field and a series of differently colored fields grouped around the said plain center field, each colored field being subdivided into squares and the squares in each colored field being provided with consecutive numbers, the said counters consisting of sets of counters and an extra counter, the sets of counters having faces colored corresponding to the fields and the counters in each set being numbered consecutively corresponding the numbers in the fields, the said extra counter and the said plain center field having corresponding numbers different from the numbers on the said sets of counters and the colored fields.



1,062,000. NUT CONSTRUCTION. ELGY HAHN, Milwaukee, Wis. Filed Dec. 31, 1912. Serial No. 739,554. (Cl. 85—32.)



1. A nut including a pair of substantially semicylindrical nut sections provided with threaded inner faces adapted to engage the bolt, and also formed at one end thereof with a marginal flange, and a collar having a polygonal exterior and a substantially cylindrical bore adapted to receive the nut sections, one end of the bore being rabbeted to receive the flange of the nut sections, means being provided for securing an interlocking connection between the collar and the nut sections.

2. A nut including a pair of substantially semicylindrical nut sections provided with threaded inner faces and formed at one end thereof with an outstanding flange and also with a lug at the base of the flange, and a collar formed with a polygonal exterior and a substantially cylindrical bore adapted to receive the nut sections, one end of the bore being rabbeted to receive the outstanding flanges of the nut sections and sockets being formed at the base of the rabbeted portion to receive the before mentioned lugs of the nut sections.

3. The combination of a bolt, a series of complemental nut sections having threaded faces adapted to engage the bolt, a collar receiving the nut sections to hold the same together, claws adapted to engage the collar, a cap for the end of the bolt, means for connecting the nut engaging claws to the cap, and a screw carried by the cap for engagement with the end of the bolt for forcing the cap outwardly and withdrawing the collar from the nut sections.

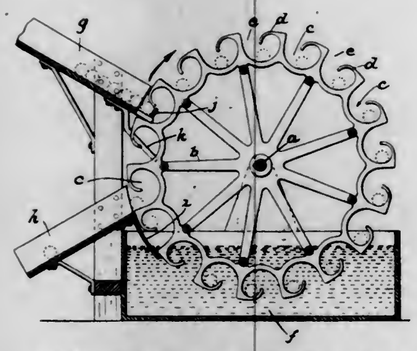
4. A nut including complemental nut sections adapted to be applied to the bolt from the sides thereof, a collar adapted to receive the complemental nut sections for holding the same in operative position, and a locking pin carried by the collar for engagement with the nut sections to hold the collar positively in position.

5. A nut including complemental nut sections provided with threaded faces adapted to engage the bolt and to be

applied thereto from opposite sides thereof, a collar adapted to be fitted upon the nut sections to hold the same in position, the said collar having a dove-tail groove in one end thereof, a locking member including a prismatic body portion adapted to be slipped into the dove-tail groove, and a pin at one end of the prismatic body portion adapted to engage one of the nut sections.

[Claim 6 not printed in the Gazette.]

1,062,001. DIPPING-MACHINE. HIRAM P. HALL, New York, N. Y., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Mar. 26, 1912. Serial No. 686,316. (Cl. 91—46.)



1. In a dipping machine, the combination with a vat adapted to contain a liquid, of a shaft, a plurality of wheels spaced apart upon said shaft and suspended so as to revolve in said liquid in the revolution of the shaft, each wheel having a series of grooves in its periphery, the grooves of one wheel alining with the corresponding grooves of the other wheels and forming transversely extending receptacles or pockets for the reception and carriage of the articles to be dipped, each pocket having an inner wall curved from one end to the other in substantially a spiral form, the last named end of the pocket wall extending toward, but terminating short of the wall, to permit the pockets to receive the articles, convey them through the vat and discharge them.

2. In a dipping machine, the combination with a vat adapted to contain a liquid, of a shaft and a drum thereon provided with pockets each having a peripheral receiving and discharging mouth of substantially less width than, and located at one side of, the pocket, the wall of the pocket extending around from one side of the pocket and mouth to the other side of the pocket and thence over to the other side of the mouth, thus forming a main pocket opening outwardly and a supplemental pocket opening inwardly and thereby permitting the articles to roll from one end to the other of the wall as the drum revolves and be retained in the pockets during nearly a complete revolution of the drum, and a delivery and discharge chute located one above the other on the same side of the machine and adapted to respectively deliver and receive the articles to be dipped.

3. In a dipping machine, the combination with a vat adapted to contain a liquid, of a shaft, a drum carried thereon provided with peripheral pockets, each pocket having a concave inner wall extending from the peripheral part of the drum inward, thence curved around toward the periphery and thence curved inward toward itself, whereby the pocket is provided with a mouth between its opposite ends adapted to both receive and discharge the article and with a supplemental pocket near its last named end to contain the articles during their passage through the vat.

4. In a dipping machine, the combination with a vat adapted to contain a liquid, of a shaft, a drum carried thereon provided with peripheral pockets, each pocket having a concave inner wall extending from the peripheral part of the drum inward, thence curved around toward the periphery and thence curved inward toward itself, a delivery chute arranged on one side of the machine from which the articles are delivered to the first named end of the pocket, and a discharge chute arranged on the same side of the machine below the delivery chute and adapted to receive the articles from the same end of the pocket after the same have, in nearly a complete revolution of the wheel, traveled from one end of the pocket to the other and dropped back to the first named end thereof.

5. In a dipping machine, the combination with a vat adapted to contain a liquid, of a shaft and a drum carried thereon provided with peripheral pockets each pocket having an inner wall which extends inward from the periphery toward the axis and thence is of concave form to substantially the opposite end of said wall, said last named end extending inwardly, whereby a pocket is formed adapted to hold the article to be dipped throughout the greater part of a complete revolution of the drum.

[Claims 6 to 11 not printed in the Gazette.]

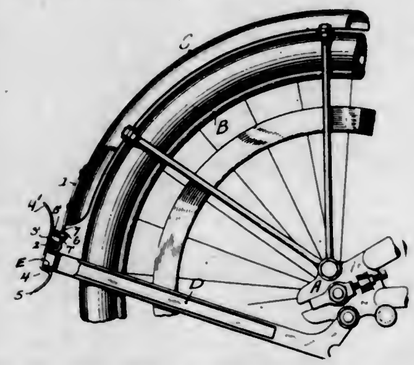
1,062,002. PAPER-WALLED CAN. JERVIS R. HARBECK, Detroit, Mich., assignor to Detroit Can Company, Detroit, Mich., a Corporation of New Jersey. Filed June 19, 1911. Serial No. 634,021. (Cl. 229—5.)



1. The vessel having walls made of layers of paper united to each other by a fused cement, substantially as specified.

2. The can body composed of oblong layers of paper cemented to each other step fashion by a fused cement and having its stepped ends cemented together by the fusible cement and caused to adhere to each other by the application of heat, substantially as specified.

1,062,003. STAND-LATCH FOR MOTOR-CYCLES. WILLIAM S. HARLEY, Milwaukee, Wis. Filed Nov. 1, 1912. Serial No. 729,050. (Cl. 208—75.)

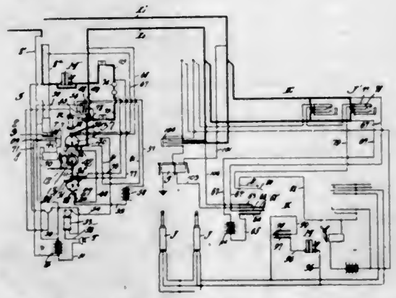


1. In a motorcycle, its frame having a rear mud-guard, and a swinging stand; the combination of a latch for said stand comprising a rigid leaf member secured to and projecting beyond the lower end of the mud-guard, the leaf member being provided with a journal at its end, a pintle fitted within the journal, a latch having ears in engagement with said pintle, a stand engaging nose at one end of the latch having a jaw that in conjunction with the leaf-journal forms a stand-receiving throat, an actuating tail at the opposite end of the latch, and a spring interposed between said tail and leaf-member.

2. In a motorcycle, its frame having a mud-guard and swinging stand; the combination of a latch therefor comprising a leaf-member secured to and projecting beyond the lower end of the mud-guard, the leaf-member being provided with a journal at its end, a spring-controlled latch in pivotal union with the journal having a tail portion extending in one direction, and a locking jaw extending in the opposite direction, the same in conjunction with the leaf-journal forming an engaging throat for the swinging stand.

3. In a motorcycle, its frame having a rear mud-guard and a swinging stand; the combination of a latch for the stand comprising an apertured leaf-member secured to and projecting beyond the lower end of the mud-guard, the leaf member being upturned at its end to form a journal, a pintle fitted within the journal, a latch having ears engageable with the pintle, an actuating tail extending from one end of the latch, an obliquely disposed jaw-piece extending from the opposite end of the latch having a nose portion projecting therebeyond, a stud carried by the tail end of said latch and extending through the leaf aperture, a head upon the end of the stud arranged to engage the leaf-member to form a stop therefor, and a spring surrounding said stud interposed between the leaf and tail member of the aforesaid latch.

1,062,004. TELEPHONE SYSTEM. RUBEN C. M. HASTINGS, Columbus, Ohio, assignor to The International Telephone Co., Columbus, Ohio. Filed Apr. 22, 1912. Serial No. 692,467. (Cl. 179—85.)



1. The combination, in a telephone substation, a receiver, a transmitter, a local battery circuit, and a shunting and lock-out device, said last device having a shaft rotatably supported, a pawl-and-ratchet device for operating said shaft, an electro-magnetically operated means for actuating said pawl-and-ratchet device to impart to the shaft a step-by-step movement, means controlled by the shaft to open the local battery circuit, and a line shunt for shunting the sub-station from the line, said shunt and local battery circuit being operated alternately to be connected and disconnected from the line by the movement of the shaft.

2. In a telephone system, a line controlled relay, and a sub-station having a local circuit, a transmitter and a receiver, a normally open shunt to, when closed, isolate the sub-station from the line, a pair of co-acting terminals in said shunt, and means for actuating said terminals controlled through the line control relay for opening and closing said shunt, said means comprising a rotatable shaft, a toothed disk carried by the shaft, and capable of a sliding movement thereon, one of said terminals being normally in contact with the toothed portion of the disk, a lock carried by said terminal engaging the disk, an electromagnet disposed to slide the disk to cause the disk to engage the lock of the terminal during the rotation of the shaft and disk, means actuated by the line relay for imparting to the shaft and disk a step-by-step movement, a circuit controlling the last electro-magnet, and means operated by the shaft for alternately opening and closing the last circuit, the shaft during its rotation alternately opening and closing the shunt and the last circuit.

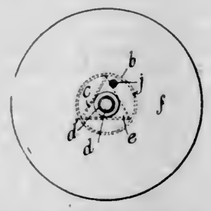
3. In a telephone system, an exchange station and a sub-station connected for the transmission of intelligence, a selecting device at the exchange station, a line relay at the sub-station and a normally opened shunt connection around the sub-station to the line; said sub-station having a transmitter, a receiver, a receiver hook, a local battery circuit, an electro-magnet, an open circuit including said electro-magnet, said circuit being controlled by the line relay from the exchange station, a rotatable mechanism controlled by the electro-magnet to open and close the shunt connection, and an electro-magnet and spring actuated means for controlling the shunt connection opening and closing mechanism.

4. In a telephone system, an exchange station and a sub-station connected for the transmission of intelligence, a selecting device at the exchange station, a line relay at the sub-station and a normally opened shunt connection around the sub-station to the line; said sub-station having a transmitter, a receiver, a receiver hook, a local battery circuit, an electromagnet, an open circuit including said electromagnet, said circuit being controlled by the line relay from the exchange station, a rotatable mechanism controlled by the electromagnet to open and close the shunt connection, and having a slidable member thereon to regulate the opening and closing of the shunt connection, and a circuit including a battery, an electromagnet, and two sets of contacts controlled respectively by the receiver hook and rotatable mechanism to operate the sliding member to regulate the closure of the shunt connection.

5. In a telephone system, an exchange station and a sub-station connected for the transmission of intelligence, a selecting device at the exchange station, a line relay at the sub-station and a normally opened shunt connection around the sub-station to the line; said sub-station having a transmitter, a receiver, a receiver hook, a local battery circuit, an electromagnet, an open circuit including said electromagnet, said circuit being controlled by the line relay from the exchange station, a rotatable shaft controlled by the electromagnet, a disk slidable thereon and rotatable therewith to open and close the shunt connection, and an electromagnet and spring actuated means for sliding the disk to effect the opening and closing of the shunt connection.

[Claim 6 not printed in the Gazette.]

1,062,005. JACK-SPOOL. JOHN C. HEBDEN, Providence, R. I. Filed Nov. 18, 1910. Serial No. 593,054. (Cl. 242—124.)



1. In a knock-down jack-spool, the combination with an axially arranged stringer providing a three-point longitudinal bearing, of gudgeons on which the spool rotates fixedly secured at the ends of the stringer, a rigid, tubular barrel supported on the stringer concentric with the axes of the gudgeons, and flanges detachably secured at the ends of the stringer to adapt them to be removed to allow the removal of the barrel without removing the gudgeons.

2. In a knock-down jack-spool, the combination with an axial stringer providing a three-point longitudinal bearing, of gudgeons on which the spool rotates fixedly secured to the ends of the stringer, a rigid, tubular barrel supported on the stringer concentric with the axes of the gudgeons, and flanges mounted on the gudgeons abutting the ends of the stringer and adapted to be secured thereto to allow the flanges to be removed without removing the gudgeons.

3. In a knock-down spool or beam, the combination with a stringer *c* formed of angle-iron, of blocks *e*, *e* fitted to the trough of the angle-iron at the ends of the stringer, studs *d*, *d* extending axially from said blocks, flanges *f*, *f* mounted on the studs abutting the blocks, a rigid, tubular barrel supported on the stringer, and means to detachably secure the flanges in position against the ends of the stringer to allow them to be removed without removing the studs.

4. In a knock-down spool or beam, the combination with an axially arranged stringer having three bearing faces equidistant from the axis of the spool, a rigid, tubular barrel mounted on the stringer and held concentric with the axis of the spool by the three bearing surfaces, axial gudgeons extending from the ends of the stringer, and flanges detachably secured to the ends of the stringer and adapted to be removed therefrom to allow the removal of the barrel without removal of the gudgeons.

1,062,006. CENTRIFUGAL FAN OR PUMP. WALDEMAR HESSLING, London, England, assignor to Sturtevant Engineering Company, Limited, London, England. Filed Aug. 25, 1911. Serial No. 645,970. (Cl. 230—11.)



1. In a centrifugal fan or pump, the combination with a plurality of blades arranged in substantially drum form, of a plurality of strengthening plates projecting inwardly beyond the inner edges of the blades, the inwardly projecting portion of the plates being shaped in the direction of their rotation to a curve conforming substantially to a logarithmic spiral with the advancing face of such portion convex and means for supporting the blades and plates, substantially as described.

2. In a centrifugal fan or pump, the combination with a plurality of blades arranged in substantially drum form, of a plurality of strengthening plates projecting inwardly beyond the inner edges of the blades, the inwardly projecting portion of the plates being shaped in the direction of their rotation to a curve conforming substantially to a logarithmic spiral with the advancing face of such portion convex and supporting arms attached to and corresponding in curvature with the plates, substantially as described.

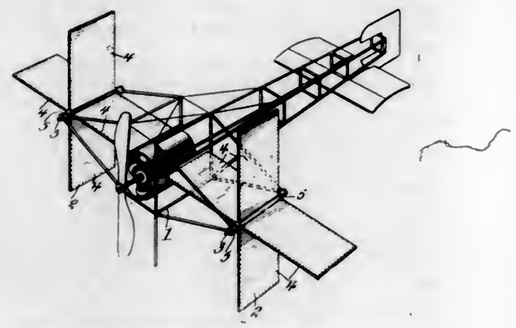
3. In a centrifugal fan or pump, the combination with a plurality of blades arranged in substantially drum form, certain of said blades projecting inwardly beyond the inner edges of the other blades, the inwardly projecting portions of said blades being shaped in the direction of their rotation to a curve conforming substantially to a logarithmic spiral with the advancing faces of such projections convex, of supporting arms attached to said inwardly projecting blades, substantially as described.

4. In a centrifugal fan or pump, the combination with a plurality of blades arranged in substantially drum form, of a plurality of supporting arms shaped in the direction of their rotation to a curve conforming substantially to a logarithmic spiral with the advancing faces of the arms convex, substantially as described.

5. In a centrifugal fan or pump, the combination with a plurality of blades arranged in substantially drum form, the advancing faces of the blades being concave, certain of said blades projecting inwardly beyond the inner edges of the other blades, the inwardly projecting portions of said blades having their advancing faces convex and shaped in the direction of their rotation to a curve conforming substantially to a logarithmic spiral, and means for supporting the blades, substantially as described.

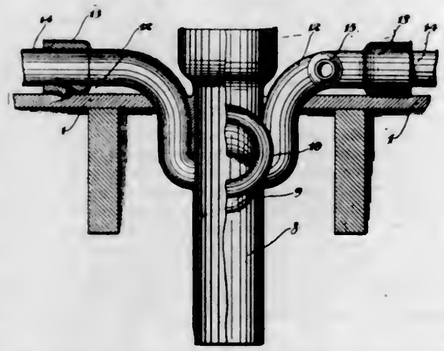
[Claim 6 not printed in the Gazette.]

1,062,007. FLYING-MACHINE. OREN HILL, North Conway, N. H. Filed Mar. 16, 1912, Serial No. 684,243. Renewed Apr. 11, 1913. Serial No. 760,568. (Cl. 244—14.)



A flying machine including a main frame, upper and lower lateral extensions from the sides of the main frame, the extensions at each side being arranged in converging relation, horizontal longitudinal shafts at the opposite sides of the main frame and carried by said extensions, and supporting surfaces carried by the respective shafts, said surfaces being freely revoluble in planes at right angles to the line of flight, and each surface embodying a plurality of angularly related vanes.

1,062,008. SOIL-PIPE FITTING. JOSEPH G. HUSS and WILLIAM A. SMITH, Minneapolis, Minn. Filed Dec. 21, 1911. Serial No. 667,192. (Cl. 137—75.)



1. A fitting adapted to be interposed in a stack and having an integrally formed closet connection, and also having an integrally formed double bend tapping said stack at a point at least as far down as the discharge end of said closet connection, and with its intermediate portion extending substantially parallel with said stack.

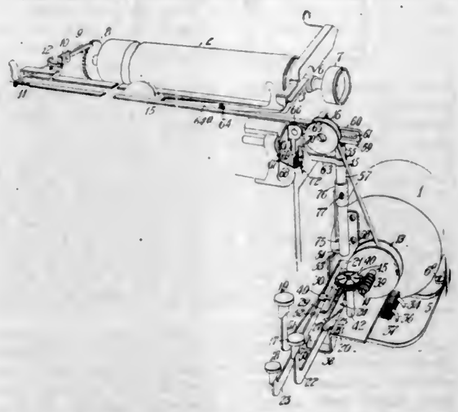
2. A fitting adapted to be interposed in a stack and having an integrally formed closet connection, and also having an integrally formed double bend tapping said stack at a point at least as far down as the discharge end of said closet connection, and with its intermediate portion extending substantially parallel with said stack, and a normally closed clean-out on said bend.

3. A fitting adapted to be interposed in a stack and having an integrally formed closet connection, adapted to project below the floor, and also having an integrally formed double bend, adapted to project above the floor between the walls of a partition, said bend tapping said stack at a point at least as far down as the discharge end of said closet connection and with its intermediate portion extending substantially parallel with said stack.

4. A fitting adapted to be interposed in a stack and having an integrally formed closet connection, adapted to project below the floor, and also having an integrally formed double bend, adapted to project above the floor, between the walls of a partition, said bend tapping said stack at a point at least as far down as the discharge end of said closet connection, and with its intermediate portion extending substantially parallel with said stack, and a normally closed clean-out on said bend, adapted to project through the partition.

5. A fitting adapted to be interposed in a stack and having an integrally formed closet connection, adapted to project below the floor, and also having a pair of integrally formed diametrically opposite bends, adapted to project above the floor and between the walls of a partition, the discharge ends of said closet connection and said bends extending in substantially the same horizontal plane, and integrally formed normally closed clean-outs on said bends, adapted to project through the partition.

1,062,009. TYPE-WRITING MACHINE. BENJAMIN F. HUTCHES, Jr., Allendale, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 23, 1911. Serial No. 610,145. (Cl. 197—66.)



1. In a typewriting machine, the combination of a carriage, a motor, connections from the motor to the carriage for returning the latter to starting position, and key-controlled means for driving the motor at different speeds by varying the torque with which it turns.

2. In a typewriting machine, the combination of a carriage, an electrical motor, connections from the motor to the carriage for returning the latter to starting position, and key-controlled means for varying the current driving the motor to drive it at different speeds.

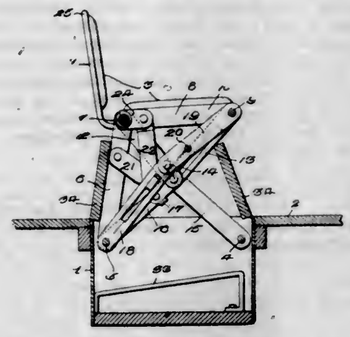
3. In a typewriting machine, the combination of a carriage, an electrical motor, connections from the motor to the carriage for returning the latter to starting position, a source of electricity in circuit with the motor for driving the same, and key-controlled means for varying the resistance of the circuit.

4. In a typewriting machine, the combination of a carriage, an electrical motor, connections from the motor to the carriage for returning the latter to starting position, a source of electricity in circuit with the motor for driving the same, a resistance adapted to be included in the circuit, a key for closing the circuit with the resistance included therein to cause the motor to be driven at one speed, and a second key for closing the circuit without said resistance to cause the motor to be driven at a higher speed.

5. In a typewriting machine, the combination of a carriage, an electrical motor, connections from the motor to the carriage for returning the latter to starting position, a source of electricity in circuit with the motor for driving the same, a resistance adapted to be included in the circuit, a key for closing the circuit with the resistance included therein to cause the motor to be driven at one speed, a second key for closing the circuit without said resistance to cause the motor to be driven at a higher speed, and means for automatically stopping the motor after a predetermined length of drive of the same at the higher speed.

[Claims 6 to 47 not printed in the Gazette.]

1,062,010. CHAIR. ANDREW E. JACOBSON, Kamrar, Iowa. Filed July 31, 1912. Serial No. 712,556. (Cl. 155—13.)



1. A folding chair comprising a supporting rod, standards pivotally mounted on said supporting rod, a chair frame pivotally mounted on said standards, said frame consisting of side bars, a front and a rear rod, foldable members connecting said supporting rod and the front rod of the chair frame, plates pivotally mounted upon the rear rod of said chair frame, links connecting said foldable members and said plates, a back member pivotally mounted upon said rear rod, said plates adapted to lockingly engage the back member of the chair, and means mounted on said rod for removably locking said plates in engagement with the back member of the chair.

2. A folding chair comprising a supporting rod, standards pivotally mounted on said rod, a chair frame pivotally mounted on said standards, said chair frame comprising side bars and a front and a rear rod, foldable members connecting said supporting rod and the front rod of the chair frame, a chair back pivotally mounted on the rear rod of said chair frame, plates formed with lugs rotatably and slidably mounted on said rear rod adjacent the pivotal points of the chair back, said chair back being formed with recesses for engagement with the lugs on said plates, links connecting said foldable members and said plates, and means for limiting the movement of said foldable members, as and for the purpose described.

3. A folding chair comprising a supporting rod, standards pivotally mounted on said supporting rod, a chair frame pivotally mounted on said standards, said frame consisting of side bars, a front and a rear rod, foldable members connecting said supporting rod and the front rod of the chair frame, a plate pivotally mounted on the rear rod of said chair frame, links connecting said foldable members and said plate, a back member pivotally mounted upon said rear rod, said plate adapted to lockingly engage the back member of the chair, an expansion spring mounted on said rod for removably locking said plate in engagement with the back member of the chair, and means for automatically folding said chair when the plate is released from the back thereof.

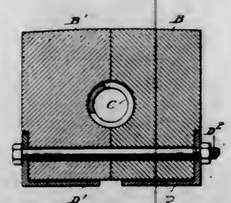
4. A folding chair comprising a supporting rod, standards pivotally mounted on said supporting rod, a chair frame pivotally mounted on said standards, said frame consisting of side bars, a front and a rear rod, foldable link members connected to said supporting rod and the front rod of the chair frame, plates pivotally mounted upon the rear rod of said chair frame, links pivotally connected at their other end to said foldable members, a back member piv-

otally mounted upon said rear rod, said plates adapted to lockingly engage the back member of the chair, and means mounted on said rod for removably locking said plates in engagement with the back member of the chair, said links adapted to limit the movement of the back of the chair in one direction, as and for the purpose set forth.

5. A folding chair comprising a supporting rod, standards pivotally mounted on said rod, a chair frame pivotally mounted on said standards, said chair frame comprising side bars and a front and rear rod, foldable members connecting the supporting rod and the front rod of the chair frame, a chair back pivotally mounted on the rear rod of said chair frame, plates pivotally mounted on said rear rod of said chair frame and adapted to lockingly engage said chair back, links connecting said foldable members and said plates, said links being slidably connected to said foldable members, means for limiting the sliding movement of said links, and means mounted on the rear rod of said frame for holding said plates in locking engagement with said chair, as and for the purpose described.

[Claim 6 not printed in the Gazette.]

1,062,011. VEHICLE-TIRE. CHARLES FRANCIS JENKINS, Washington, D. C. Filed June 27, 1912. Serial No. 706,188. (Cl. 152—9.)



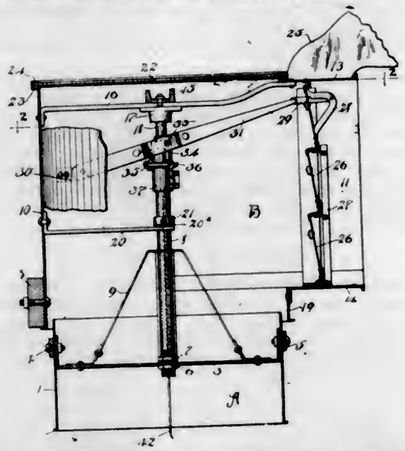
The combination of a tire body made up of an annular series of wood blocks, divided in its own plane and having the meeting faces of the two rings of blocks provided with annular registering grooves forming an annular closed channel, a longitudinally extensible spring, adapted to lie in said channel, formed into a continuous ring having its internal diameter normally less than that of the annular channel, and means for forcing and binding together the two annular members of said body, to extend said spring and inclose it in said channel.

1,062,012. VENTILATOR. ANTON JOCH, Cleveland, Ohio, assignor to The Ohio Blower Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 10, 1910. Serial No. 581,352. (Cl. 98—3.)

1. A ventilator comprising in combination a rotatably mounted cowl, said cowl having a laterally opening window and a wind vane adapted to turn said window in the direction to which the wind blows, louvers in said window, a bar pivoted to the cowl at a point opposite said louvers and operatively connected to said louvers, and means connected to said bar at the axis of the cowl, whereby the bar can be moved to operate said louvers.

2. A ventilator comprising in combination a stationary part adapted to be attached to a roof, a tubular support extending vertically upward from the center of said stationary part, a cowl pivoted on said support, means carried by said cowl for regulating the draft therethrough, a sleeve slidably mounted upon said support, a flexible member depending through said support and attached to said sleeve, and connections between said sleeve and said regulating means, whereby a longitudinal movement of said sleeve upon said support shall operate said regulating means.

3. A ventilator comprising in combination a stationary part adapted to be attached to a roof, a tubular support extending vertically upward from the center of said stationary part, a cowl pivoted on said support, means carried by said cowl for regulating the draft therethrough, a bar pivoted at one side of the cowl and extending diametrically thereacross, a sleeve slidably and rotatably mounted on said support and pivoted to said bar, the free end of said bar being connected to said regulating means, and a cord or chain depending through said support and associated with said sleeve, and adapted to slide the same to move said bar to operate said regulating means.

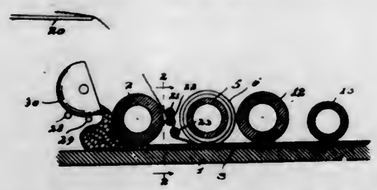


4. A ventilator comrising in combination a stationary part aapted to be attached to a roof, a tubular support extending vertically upward from the center of said stationary part, a cowl pivoted on said support, means carried by said cowl for regulating the draft therethrough, a bar pivoted at one side of the cowl and extending diametrically thereacross, a sleeve slidably and rotatably mounted on said support and pivoted to said bar, the free end of said bar being connected to said regulating means, a second sleeve slidably mounted on said support and swiveled to said first mentioned sleeve, and a cord or chain depending through said support and connected to said second mentioned sleeve.

5. A ventilator comprising in combination a stationary part adapted to be attached to a roof, a tubular support extending vertically upward from the center of said stationary part, a cowl pivoted on said support, said cowl having a laterally opening window and a wind vane adapted to turn said window in the direction to which the wind blows, louvers in said window, a sleeve slidably mounted upon said support, a flexible member depending through said support and attached to said sleeve, and connections between said sleeve and said louvers whereby a longitudinal movement of said sleeve upon said support shall operate said louvers.

[Claims 6 to 8 not printed in the Gazette.]

1,062,013. METHOD OF MAKING WIRE-GLASS. CLEMENT J. JUNGERS, Streator, Ill. Filed May 27, 1909. Serial No. 498,648. (Cl. 49—86.)



1. An improved single-pour process of making wire glass, which consists in rolling out a single-thick sheet, concurrently, but in sequence to the spreading of the sheet, pressing into one side thereof a sheet of wire netting and disposing the same approximately mid-thickness of the glass and in substantially undeviating parallelism with the surfaces thereof, progressively pressing the wire inset sheet between a roller and an opposed surface, the acting portions of which pressing devices are maintained substantially in accurate parallelism with each other and at a distance apart substantially the mean thickness of the sheet being acted upon, whereby the side of the sheet opposite that through which the wire is inserted and the wire itself remain practically undisturbed by said pressing operation, and continuing such progressive formation of the sheet until completed.

2. The improvement in the art of making wire glass, which consists in rolling out a single-thick sheet, progressively, but in sequence to the spreading of the sheet, insetting a sheet of wire netting through one side of the sheet and disposing it in a substantially undeviating plane remote from, and parallel with, the surfaces of the sheet, concurrently and progressively pressing the wire inset sheet between forming surfaces accurately parallel with each other, spaced and maintained apart a distance just equal to the mean thickness of the pre-formed sheet and thereby restoring the integrity of that side of the sheet through which the wire is inset, and continuing the operation progressively until the sheet is formed.

3. An improved single-pour process of making wire glass, consisting in spreading a sheet of molten glass on a normally flat surface, progressively, but in sequence to the spreading of the sheet, pressing a sheet of wire netting into one side of the sheet and placing it in substantially undeviating parallelism with the top and bottom surfaces of the sheet, and as the insetting of the wire proceeds pressing the wire inset sheet between progressively-acting forming surfaces whose acting portions are, during the moment of pressing contact with the sheet, maintained accurately parallel despite the distorting action of the heat from the sheet of glass, and the pass between which forming surfaces is during such pressing operation maintained of a width substantially equal to the mean thickness of said preformed sheet, whereby the integrity of the latter is restored without substantially disturbing or redistributing the glass of the lower half of the sheet and without substantially disturbing the inset wire netting, and continuing such forming and wire insetting process progressively until the sheet is completed.

1,062,014. TARGET FOR SWITCH-STANDS. WILLIAM C. KIDD and JAMES BOORMAN STRONG, Hillburn, N. Y., assignors to Standard Equipment Company, Hillburn, N. Y., a Corporation of New Jersey. Filed May 8, 1911. Serial No. 625,860. (Cl. 246—41.)



1. In a switch stand target, a plurality of sections of signaling members united in pairs each pair consisting of two angularly disposed integrally formed sections, said pairs being formed with openings at the junction of the sections positioned to permit each opening in each pair to receive a correspondingly positioned portion of another pair, the engagement of the said openings with the said corresponding portions forming a socket, and a spindle disposed in said socket coöperating with the socket for holding the pairs together.

2. In a switch stand target, a plurality of sections of signaling members united in pairs each pair consisting of two angularly disposed integrally formed sections, said pairs being formed with openings at the junction of the sections positioned to permit each opening in each pair to receive a correspondingly positioned portion of another pair, the engagement of the said openings with the said corresponding portions forming a socket, a spindle disposed in said socket for locking the pairs together, and means for holding the signaling members against independent rotation relative to the spindle.

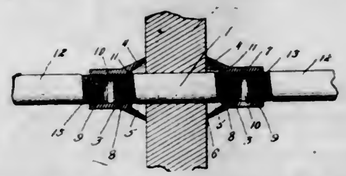
3. In a switch stand target, a plurality of sections of signaling members united in pairs each pair consisting of two angularly disposed integrally formed sections, said pairs being formed with openings at the junction of the sections positioned to permit each opening in each pair to receive a correspondingly positioned portion of another pair, the engagement of the said openings with the said corresponding portions forming a socket, a spindle disposed in said socket for locking the pairs together, and means on said spindle for holding said signaling members against downward displacement with respect to the spindle.

4. In a switch stand target, a plurality of sections of signaling members united in pairs each pair consisting of two angularly disposed integrally formed sections, said pairs being formed with openings at the junction of the sections positioned to permit each opening in each pair to receive a correspondingly positioned portion of another pair, the engagement of the said openings with the said corresponding portions forming a socket, a spindle disposed in said socket for locking the pairs together, and means on the spindle for holding the signaling members against downward displacement and against rotation with respect to the spindle.

5. In a switch stand target, a plurality of sections of signaling members united in pairs, spaced bent necks integrally formed on the pairs for uniting them, the said necks of the respective pairs interlocking, a spindle, and a reduced portion at the top of said spindle disposed in said interlocking necks.

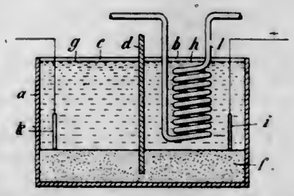
[Claims 6 to 8 not printed in the Gazette.]

1,062,015. PIPE-COUPLING. NATHAN C. LANE, Philadelphia, Pa. Filed June 18, 1912. Serial No. 704,453. (Cl. 137—28.)



A coupling comprising an intermediate pipe section provided with threaded ends and a plain unthreaded central portion, said pipe section adapted to pass through a wall or floor, a coupling member connected to each end of said pipe section, said coupling members each having an interiorly recessed flaring portion provided with an annular biting edge to intimately engage the opposite surfaces of the wall or floor, said coupling members being interiorly screw threaded to engage the opposite ends of said pipe section and to engage the ends of pipes coöperating with said pipe section, and a wrench engaging portion integral with the coupling members.

1,062,016. PROCESS OF PRECIPITATING ULMIC COMPOUNDS FROM THE BLACK LIQUORS OF SODA PULP-MILLS. NILS ABRAHAM LANGLET, Gottenborg, Sweden. Filed July 30, 1909. Serial No. 510,469. (Cl. 204—1.)



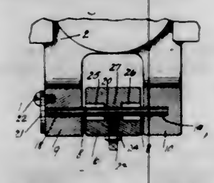
1. The process of treating black liquors from soda pulp mills, in order to regenerate caustic soda, which

consists in increasing the salt concentration of the liquor, exposing the said liquor at an elevated temperature, preferably not lower than 65° centigrade, to electrolysis for precipitating in a filterable form dissolved organic substances, and separating the precipitate from the liquor, substantially as and for the purpose set forth.

2. The process of treating black liquors from soda pulp mills, in order to regenerate caustic soda, which consists in adding a sodium salt to the liquor, exposing the said liquor at an elevated temperature, preferably not lower than 65° centigrade, to electrolysis for precipitating in a filterable form dissolved organic substances, and separating the precipitate from the liquor, substantially as and for the purpose set forth.

3. The process of treating black liquors from soda pulp mills, in order to regenerate caustic soda, which consists in adding sodium chlorid to the liquor, exposing the said liquor at an elevated temperature, preferably not lower than 65° centigrade, to electrolysis for precipitating in a filterable form dissolved organic substances, and separating the precipitate from the liquor, substantially as and for the purpose set forth.

1,062,017. ARMATURE-LEVER PIVOT FOR ALTERNATING-CURRENT MAGNETS. DAVID LARSON, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 14, 1908. Serial No. 462,615. (Cl. 175—21.)



1. In an electromagnetic device, the combination with a member provided with a cylindrical opening, of a pivot rod rotatable in the opening, a removable stop in position to prevent longitudinal movement of the rod, said member being also provided with a cylindrical bore forming a bearing and an abutment for the end of the rod opposite said stop, a second member provided with an opening through which the rod extends, and a set screw securing said second member to the rod.

2. In an electromagnetic device, the combination with a bifurcated member having alined openings in the bifurcations, of a pivot rod journaled in the openings, one of said openings extending only part way through the bifurcation and forming an abutment to limit the movement of the rod in one direction, a stop device for preventing or limiting longitudinal movement of the rod in the opposite direction, but permitting the removal of the rod, and a second member secured to the rod between the bifurcations.

3. In an electromagnetic device, the combination with a bifurcated member having an opening extending through one of the bifurcations and a second opening in alinement therewith and extending into but only part way through the other bifurcation, a pivot rod in said openings, a stop device movable over the end of said first named opening and preventing longitudinal movement of the rod, a pivot member mounted on the rod between the bifurcations and adjustable longitudinally of the rod, and means for securing it in adjusted position.

4. An alternating current electromagnet having a pivoted armature, the pivot rod of which is of elastic material to prevent the transmission of vibrations.

5. In an electromagnetic device, the combination with a magnet frame provided with spaced lugs or bifurcations formed with alined openings one of said openings extending part way through the lug, a pivot rod journaled in said openings, an armature lever mounted on the rod between the lugs and spaced therefrom, a set-screw securing the lever to the rod, and a removable stop covering one of said openings and preventing longitudinal movement of the rod.

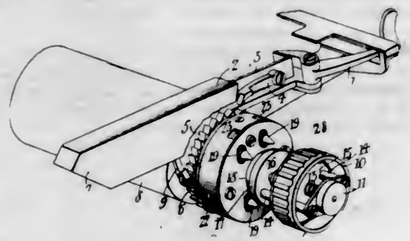
[Claims 6 to 8 not printed in the Gazette.]

1,062,018. CURTAIN SHADE AND POLE FIXTURE. CHARLES W. LEACH, Jr., Wheeling, W. Va. Filed Feb. 9, 1912. Serial No. 676,636. (Cl. 156—23.)



A fixture for the purpose set forth comprising a pair of shade roller supports each consisting of a length of wire bent upon itself to provide a pair of parallel arms, the ends of the arms of each support overlapping and slidably connected to the arms of the other support, each of said supports having its outer portion bent forwardly at right angles to provide a bracket, the top wall of each of said brackets bent downwardly intermediate its ends to form a bearing for the pintle of a shade roller combined with a pair of curtain pole supports, each including a vertically disposed portion extending at the rear and overlapping the front of a pair of arms inwardly of a bracket for connecting said arms together, each of said curtain pole supports further including an upwardly disposed right angular portion projecting from the top of the vertically disposed portion and terminating in a supporting loop positioned in a plane above the plane of said arms.

1,062,019. TYPE-WRITING MACHINE. CARL F. LUNDEBERG, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed May 28, 1912. Serial No. 700,158. (Cl. 197—123.)



1. In a typewriting machine, a revoluble platen, a line-space wheel loose on the platen axle having a rim extending therefrom, a head attached to said rim, dogs mounted in radial ways in said head, said dogs having pins projecting within said rim, springs engaging said pins, and a toothed wheel connected to said platen and engaged by said dogs, said toothed wheel being situated in a recess in said head.

2. In a typewriting machine, a platen axle, a line-space wheel loose on said axle, a head secured to said wheel, said head having radial ways formed therein, and a central recess in continuation with said ways, a toothed wheel connected to the axle and situated within said recess, and a plurality of dogs slidably mounted in said ways and movable radially inward into engagement with said toothed wheel.

3. In a typewriting machine, a platen axle, a line-space wheel loose on said axle, a head secured to said wheel, said head having radial ways formed therein, and a central recess in continuation with said ways, a toothed wheel connected to the axle and situated within said recess, a plurality of dogs slidably mounted in said ways and movable radially inward to engage said toothed wheel, projections extending outwardly from said dogs, and a member having a beveled edge slidably mounted on the platen axle and adapted to engage said projections and move them radially outward to released position.

4. In a typewriting machine, a platen axle, a line-space wheel loose on said axle, a rim secured to said wheel, a head secured to said rim, a plurality of dogs mounted on said head, a toothed wheel secured to the axle and engaged by the dogs, projections extending from said dogs within said rim, springs fastened to the projections of opposite dogs to hold them in engagement with the toothed wheel, projections extending outwardly from said dogs, and a disk having a beveled edge slidably mounted on the platen axle and adapted to engage said outwardly extending projections to force the dogs out of engagement with the wheel.

5. In a typewriting machine, a platen axle, a line-space wheel loose on said axle, a rim secured to said wheel, a head secured to said rim, a plurality of dogs mounted on said head, a toothed wheel secured to the axle and engaged by the dogs, springs to hold the dogs in engagement with the toothed wheel, conical projections extending outwardly from said dogs, and a disk having a beveled edge slidably mounted on the platen axle and adapted to engage said outwardly extending conical projections, to force the dogs out of engagement with the wheel.

[Claims 6 to 9 not printed in the Gazette.]

1,062,020. DISPLAY DEVICE. LORNE H. MACORQUODALE, Revere, Mass., assignor to The Forbes Lithograph Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed May 27, 1912. Serial No. 699,879. (Cl. 40—146.)



1. In a device of the character specified, in combination, a supporting body of sheet material provided with flaps flexibly secured thereto at intervals along the same and in a manner whereby said flaps may assume an angular position with respect to said body, cards carried by said flaps, and releasable means for supporting said body in an inclined position and said cards and flaps carrying the same angularly disposed with relation to said body.

2. A device of the character specified having a body of sheet material having a vertical base portion and a portion flexibly connected therewith and upwardly and backwardly inclined therefrom, flaps flexibly secured to the inclined portion of said body at intervals along the same and arranged whereby they may assume a substantially vertical position angular with respect to said inclined portion of the body, cards carried by said base portion of the body and flaps, and a releasable back for supporting said body and cards carried thereby.

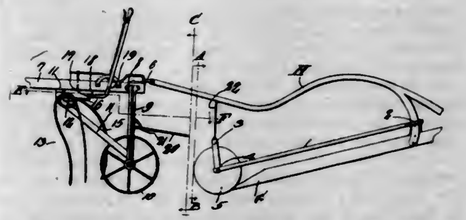
3. A device of the character specified having in combination a body of sheet material provided with flaps flexibly secured thereto at intervals along the same and in a manner whereby said flaps may assume an angular position with respect to said body, cards carried by said flaps, and a folding back having hinged connection with said body for supporting the same in an inclined position and which back is adapted in part, also, to extend beyond the face of said body for supporting the cards carried thereby.

4. A device of the character specified having a body of sheet material having a vertical base portion and a portion flexibly connected therewith and upwardly and backwardly inclined therefrom, flaps flexibly secured to the inclined portion of said body at intervals along the same and arranged whereby they may assume a substantially vertical position angular with respect to said inclined portion of the body, cards carried by said base portion of the body and flaps, and a back flexibly connected with the base portion of said body and against the forward edge of which back said inclined portion of the body is adapted to bear.

5. A device of the character specified having in combination a supporting body of sheet material and provided with flaps flexibly secured thereto at intervals along the same, said body having, also, slots formed therein, cards carried by said flaps, and a back for supporting said body in an inclined position and which back is adapted in part to pass through the slots in said body to extend forward therefrom for supporting said cards.

[Claims 6 and 7 not printed in the Gazette.]

1,062,021. POTATO-VINE ARRANGER. JOSEPH P. MANSON, Hartland, Me. Filed Nov. 9, 1912. Serial No. 730,479. (Cl. 55—9.)



1. A machine for arranging potato vines, including opposed series of vine-engaging teeth, and a rearwardly and laterally curved drag device back of the space between said series and out of contact with the ground.

2. A machine for arranging potato vines, including a cross bar, spring teeth secured to said bar and extending downwardly therefrom, said teeth being arranged in series and the lower ends of the teeth of the two series being arranged along lines converging rearwardly, and a rearwardly and laterally curved drag device supported out of contact with the ground back of the space between the two series of teeth.

3. A machine for arranging potato vines, including spaced vine engaging teeth, a drag device back of the space between the teeth, and spaced wheels supported back of the drag device.

4. A machine for arranging potato vines, including spaced vine engaging teeth, a drag device back of the space between the teeth, and oppositely disposed spaced conical wheels supported back of the drag device and mounted to move freely upwardly and downwardly.

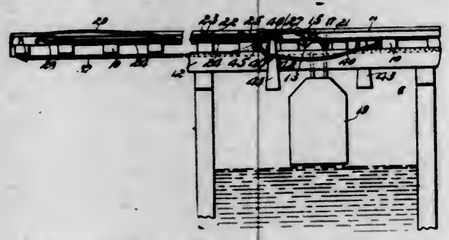
5. A machine for arranging potato vines, including spaced vine engaging teeth, a drag device back of the space between the teeth, and opposed conical wheels supported back of the drag device and spaced to receive a plow therebetween.

[Claims 6 and 7 not printed in the Gazette.]

1,062,022. MECHANISM FOR SIGNALING TRACK CONDITIONS. JAMES M. MATSLER and BENJAMIN T. MATSLER, Chappel, Tex. Filed Apr. 4, 1910. Serial No. 553,254. (Cl. 246—14.)

1. In mechanism of the class described, a member mounted for oscillation; a crank shaft; a connection between said member and the crank shaft; a trip arm; a rod connected to the trip arm; links connecting the shaft and the rod; a weight connected with the links; releasable means for supporting the weight; and means carried by the weight to uphold the links.

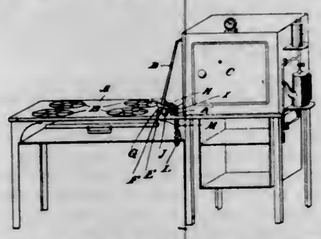
2. In mechanism of the class described, a member mounted for oscillation; a rock shaft; an operative connection between the member and the rock shaft; a trip arm; a rod operatively connected with the trip arm; links connecting the rod with the rock shaft; a weight having connection with one of said links; rock shafts having crank portions at corresponding ends engaging the weight; and means for actuating the last mentioned rock shafts.



3. In mechanism of the class described, a member mounted for oscillation; a rock shaft; an operative connection between the member and the rock shaft; a trip arm; a rod operatively connected with the trip arm; links connecting the rod and the rock shaft; a weight having connection with one of said links; rock shafts having crank portions at corresponding ends engaging the weight; and a flexible connection between the weight and said links, at the point of juncture of the links; and means for actuating the last mentioned rock shafts.

4. In mechanism of the class described, a member mounted for oscillation; a rock shaft; an operative connection between the member and the rock shaft; a trip arm; the rock shaft at one end having a crank portion; a rod operatively connected with the trip arm; a link pivoted to one end of the rod; a link pivoted to the crank portion of the rock shaft; the two links being pivoted together; one of the links having a rigid finger; a weight connected at its upper end to the finger; rock shafts having crank portions at corresponding ends, engaging and supporting the weight; and means for actuating the last mentioned rock shafts.

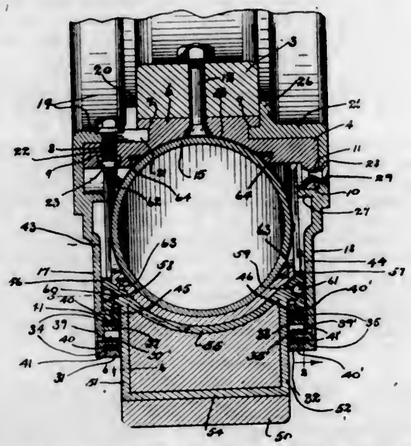
1,062,023. STOVE. ALBERT W. MEYER, New York, N. Y. Filed Feb. 3, 1911. Serial No. 606,285. (Cl. 126—39.)



A stove having a top and a burner; a griddle hinged thereto at one side of the burner so that when lowered it will be in proper position relative to the burner to be heated thereby; a pulley wheel; a cord connected to said griddle and passing over said pulley wheel and through an opening formed in the stove top; and a spring the upper end of which abuts the under side of said stove top and the lower end of which is connected to said cord so that when the griddle is lowered the spring will be compressed to counterbalance the weight of the griddle.

1,062,024. PNEUMATIC TIRE. ARTHUR H. MORTON, Cleveland, Ohio. Filed May 4, 1912. Serial No. 695,155. (Cl. 152—10.)

1. The combination with the felly of a wheel, of a rim, an annular side plate secured at each side of said rim, said side plates having flanges which overlap the upper surface of the said rim, bolts securing said side plates to said rim, a pair of annular grooves formed in each side plate on the inner surfaces thereof, packing rings arranged in said grooves, a channel formed in each side plate intermediate of said grooves and arranged to communicate with the outer surface of said plate, a pneumatic tube arranged between the side plates adjacent the rim and a hard rubber tire arranged between said side plates around said pneumatic tube.



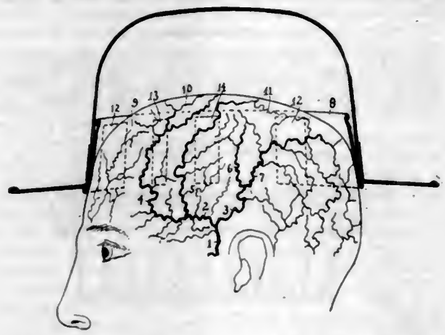
2. The combination with the felly of a wheel, of a rim arranged around the felly, side plates secured to said rim and having radial guideways in their inner surfaces, a pneumatic tube arranged between said side plates adjacent said rim, a hard rubber tire arranged outside said pneumatic tube between said side plates, a series of plates embedded at each side of said hard rubber tire, the surfaces of said plates being flush with the surfaces of the tire, heads arranged at the upper ends of said plates and adapted to travel in said guideways formed in the inner faces of said side plates, a socket formed in each head and a ball arranged in each socket, for the purpose set forth.

3. The combination with the felly of a wheel, of a rim arranged around the felly, side plates secured to said rim, said side plates being provided on their inner surfaces with radial guideways and annular grooves, a pneumatic tube arranged between said side plates adjacent said rim, a hard rubber tire arranged outside said pneumatic tube between said side plates, a series of plates embedded at each side of said hard rubber tire, heads arranged at the upper ends of said plates and adapted to travel in the radial guideways formed in the inner surfaces of said side plates and washers arranged in the annular grooves in the inner surfaces of said side plates so as to bear against the sides of said hard rubber tire.

4. The combination with the felly of a wheel, of a rim arranged around the felly, side plates secured to said rim, said side plates being provided on their inner surfaces with guideways and annular grooves, each plate being also provided with a channel intermediate of the annular grooves, a pneumatic tube arranged between said side plates adjacent said rim, a hard rubber tire arranged outside of said pneumatic tube between said side plates, a series of plates embedded at each side of said hard rubber tire, heads provided with sockets arranged at the upper ends of said plates and adapted to travel in the radial grooves formed in the inner surfaces of said side plates, balls arranged in said sockets and washers arranged in the annular grooves.

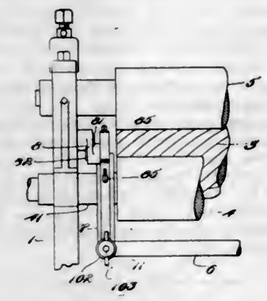
1,062,025. HAT. BERNARD H. NICHOLS, Ravenna, Ohio. Filed Oct. 15, 1910. Serial No. 587,148. (Cl. 2—114.)

As a new and improved article of manufacture, a band for a hat having corrugations on the sides thereof which form protrusions and depressions, the depressions being at points 50, 70 and 100 degrees of arc from the front point of the hat, the front and rear protrusions tapering



toward the front and rear of the hat respectively, and backing for the protrusions, substantially as described.

1,062,026. MACHINE FOR TREATING HIDES, SKINS, AND LEATHER. DANIEL P. O'BRIEN, Woburn, Mass. Filed Aug. 1, 1911. Serial No. 641,797. (Cl. 149—16.)



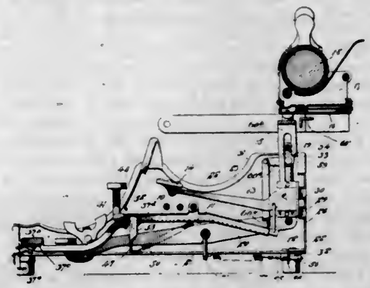
1. In a machine of the class described, the combination with a work-cylinder and a roll which holds the hide up to the action of said cylinder, movable relative to each other to separate them to permit a hide to be thrown over the said roll and to close them together upon the hide, of means for presenting the loosely-hanging portion of the hide to the action of the work-cylinder, to be operated upon thereby before arriving at the nip between the roll and work-cylinder.

2. In a machine of the class described, the combination with a work-cylinder and a bed-roll which are relatively-movable so that they approach and separate, of a rod or roll which is actuated through such relative movement and in the approach of the bed-roll and work-cylinder engages the hanging portion of a hide entered between them and holds such portion up to the action of the work-cylinder to receive a preliminary action therefrom prior to arriving at the nip between the work-cylinder and bed-roll.

3. In a machine of the class described, the combination with a work-cylinder and a movably-mounted bed-roll, of a rod or roll, carriers therefor mounted to accompany the bed-roll back and forth, and means for causing the said carriers to move the rod or roll to hold the hanging portion of a hide entered between the bed-roll and work-cylinder up to the action of the latter prior to arriving at the nip between bed-roll and work-cylinder.

4. In a machine of the class described, the combination with a work-cylinder and a bed-roll, of a rod or roll, swinging carriers therefor mounted to swing concentrically with the bed-roll, and links connecting said carriers with relatively stationary portions of the machine, the bodily movement of the bed-roll operating the said carriers and in the approach to the work-cylinder causing the rod or roll to hold the portion of hide hanging from the bed-roll up to the action of the work-cylinder.

1,062,027. TYPE-WRITING-MACHINE CONSTRUCTION. OTTO PETERMANN, Groton, N. Y., assignor to Standard Typewriter Company, a Corporation of New York. Filed Sept. 15, 1910. Serial No. 582,214. (Cl. 197—186.)



1. In a typewriting machine, a frame having its rear portion and sides formed of a single piece of sheet metal, the upper and lower edges of which are provided with inwardly-extending flanges to adapt the same to be made light and strong, integral means located at the rear corners for holding the sides at substantially right angles to the rear portion, and a transversely-extending and substantially C-shaped bar at the forward part of said frame connecting the sides together.

2. In a typewriting machine, a substantially rectangular frame having its rear portion and sides formed of a single piece of sheet metal and provided with flanges to adapt the same to be made light and strong, means connecting the sides together, and overlapping integral corner pieces for holding the frame in shape.

3. In a typewriting machine, a frame having its rear portion and sides formed of a single piece of sheet steel, the upper and lower edges of which are provided with inwardly-extending flanges to adapt the same to be made light and strong, and means located at the rear corners for holding the frame in shape.

4. In a typewriting machine, a frame having its rear portion and sides formed of a single piece of sheet metal, the upper and lower edges of which are provided with inwardly-extending flanges to adapt the same to be made light and strong, said sides and rear portion having inwardly-extending parts at the corners projecting from the flanges, each part having an opening therethrough and together serving as guiding means, platen shift mechanism having a part movable in said guiding means, and a transversely-extending bar at the forward part of said frame connecting the sides together.

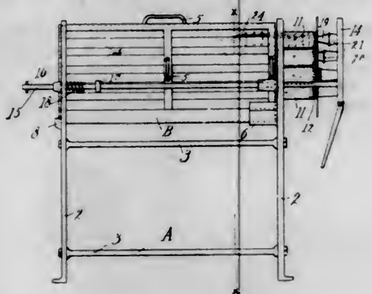
5. In a typewriting machine, a frame formed of sheet metal and having inwardly-extending overlapping portions at the rear corners, said overlapping portions having openings therein, and platen shift mechanism having a part thereof passing through said openings.

[Claims 6 to 32 not printed in the Gazette.]

1,062,028. TRIMMER FOR PASTRY CONES. SIMEON F. PIERCE, St. Paul, Minn., assignor, by mesne assignments, to Cream Cone Machine Company, St. Paul, Minn., a Corporation of Minnesota. Filed July 1, 1910. Serial No. 569,959. (Cl. 107—20.)

1. In a machine of the class described, a plurality of open ended tubes, each tube being formed at its outer end with a plurality of teeth, said teeth being directed laterally into the central opening of the tube to form a smaller area than the interior of the tube, whereby to spread and break up any surrounding material into which the tube

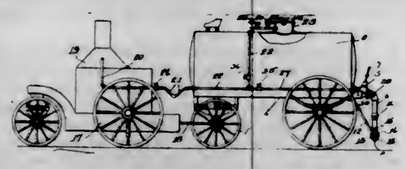
may be forced, and a plurality of plungers supported in coöperation with the cutting ends of said tubes, said plungers being formed with supporting shanks tapered away from the ends of said tubes for the purpose set forth.



2. In a trimmer for pastry cones, the combination with a plurality of open ended tubes, of toothed cutting edges carried by the outer ends of said tubes, means for centering pastry cones in the outer ends of said tubes and forcing them through said tubes comprising a plurality of slidable plungers of progressively increasing length having tapered ends arranged to enter the outer ends of said tubes and each plunger carrying a contacting stop for the pastry cone adjacent to the inner portion of the tapered end of the plunger.

3. In a trimmer for pastry cones, the combination with a plurality of open ended tubes, of toothed cutting edges carried by the outer ends of said tubes, and a plurality of plungers of progressively increasing length slidably supported in connection with the outer ends of said tubes, each plunger being formed with an outwardly tapered free end, and an inwardly tapered spindle for the purpose set forth.

1,062,029. APPARATUS FOR SPRAYING OIL ON ROAD-SURFACES. FRANKLIN C. PILLSBURY, Boston, Mass., assignor to Walter Cressy, Gloucester, Mass. Filed Mar. 27, 1911. Serial No. 617,049. (Cl. 137—63.)

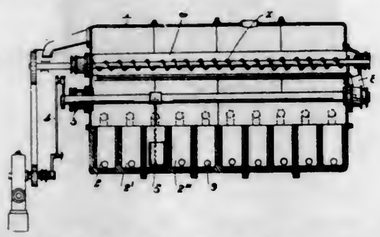


1. The combination with a tank wagon having a discharge pipe and a valve in said pipe, of a spray pipe communicating with the discharge pipe, a steam pipe communicating with said discharge pipe intermediate the valve and the tank whereby steam may be admitted to the tank through the discharge pipe, a steam pipe communicating with said discharge pipe in rear of the valve whereby steam may be blown through the spray pipe, and means for applying a pressure to the tank above the liquid therein.

2. The combination with a tank wagon having an outlet pipe and a valve in said pipe, of a steam pipe communicating with said outlet pipe intermediate the valve and the tank whereby steam may be admitted to the tank through the outlet pipe, a steam pipe communicating with said outlet pipe in rear of the valve whereby steam may be blown through the spray pipe, and a spray pipe secured to the end of said outlet pipe.

3. The combination with a tank wagon having an outlet pipe and a valve in said pipe, of a steam pipe communicating with said outlet pipe intermediate the valve and the tank whereby steam may be admitted to the tank through the outlet pipe, a steam pipe communicating with said outlet pipe in rear of the valve whereby steam may be blown through the spray pipe, and a spray pipe removably secured to said outlet pipe in rear of the steam pipes.

1,062,030. APPARATUS FOR CONCENTRATING, DRYING, AND CRYSTALLIZING. MORITZ PRAGER, Berlin, Germany. Filed Nov. 22, 1912. Serial No. 732,999. (Cl. 127—9.)

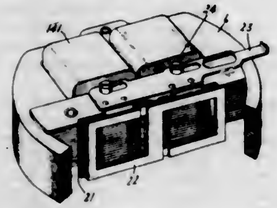


1. In an apparatus for concentrating, drying, and crystallizing, a casing, transverse partitions forming chambers in the lower part thereof, a spindle rotating in said casing, scooping blades thereon, a discharge trough into which the scooping blades discharge the material, whereby the material in each chamber is treated independently.

2. In an apparatus for concentrating, drying and crystallizing, a casing, transverse partitions forming chambers in the lower part thereof, a spindle rotating in said casing, scooping blades thereon, a discharge trough into which the scooping blades discharge the material, and a conveyer in said groove, whereby the material in each chamber is treated independently.

3. In an apparatus for concentrating, drying and crystallizing, a casing, transverse partitions forming chambers in the lower part thereof, a spindle rotating in said casing, scooping blades thereon adapted to pass very close to the walls of the chambers, a discharge trough, arranged above said spindle, into which the scooping blades discharge the material, whereby the material in each chamber is treated independently.

1,062,031. ELECTRIC METER. WILLIAM H. PRATT, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 13, 1911. Serial No. 614,057. (Cl. 171—309.)



1. In an electric meter, a disk armature, potential coils in operative relation therewith, and a magnetic circuit therefor having two adjacent main polar projections for said coils, members separated therefrom by air gaps adjacent to the main projections, and a magnetic member between the main projections, the said members forming shunt paths for the potential fluxes about the armature.

2. An electric meter comprising in combination, a disk armature, potential coils and a series coil in operative relation therewith, and a magnetic circuit therefor comprising a plurality of punchings having two adjacent main polar projections for the potential coils, a polar projection for the series coil facing the potential poles separated therefrom by a gap through which extends the armature and members furnishing shunt paths for the potential fluxes about the armature.

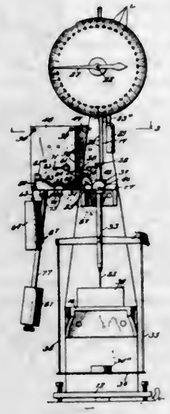
3. An electric meter comprising in combination, a disk armature, potential coils and a series coil in operative relation therewith, and a magnetic circuit comprising a plurality of punchings having two adjacent main polar projections for the potential coils, a polar projection for the series coil facing the potential poles extending part way across the faces of both poles and separated therefrom by a gap through which extends the armature and members furnishing shunt paths for the potential fluxes about the armature.

4. An electric meter comprising in combination, a disk armature, potential coils and a series coil in operative relation therewith, and a magnetic circuit comprising a plurality of single punchings having two adjacent main polar projections for the potential coils, a polar projection for the series coil facing the potential poles extending part way across the faces of both poles and separated therefrom by a gap through which extends the armature and members furnishing a shunt path for the potential fluxes about the armature.

5. An electric meter comprising in combination, a disk armature, in operative relation therewith, a potential winding, a magnetic circuit therefor comprising a plurality of punchings having two adjacent main polar projections for said winding, projections adjacent thereto separated therefrom by air gaps forming shunt paths for the potential fluxes about the armature, a polar projection facing the main projections separated therefrom by an air gap through which extends the armature, a series coil energizing said projection, and a magnetic member between the main projections also forming a shunt path for the potential fluxes about the armature.

[Claims 6 to 14 not printed in the Gazette.]

1,062,032. PENETRATION-MACHINE. DONALD RAWSTRON, Chicago, Ill., assignor to American Asphaltum and Rubber Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 2, 1910. Serial No. 541,425. (Cl. 73—51.)



1. A machine of the class described, comprising a penetrator, a penetrator bar, means for gripping said bar, means for releasing said gripping mechanism, time measuring mechanism, means for setting said time mechanism in operation simultaneously with said releasing mechanism, and means including said time measuring mechanism for causing said gripping mechanism to grip said bar on the expiration of a predetermined interval of time.

2. A machine of the class described, comprising a penetrator, a penetrator bar, means for gripping said bar, means for releasing said gripping mechanism, time measuring mechanism, means for setting said time mechanism in operation simultaneously with said releasing mechanism, means including said time measuring mechanism for causing said gripping mechanism to grip said bar on the expiration of a predetermined interval of time, and means for measuring the length of travel of said penetrator.

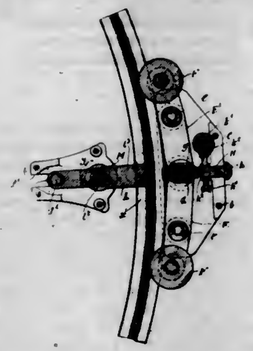
3. A machine of the class described, comprising a penetrator, a penetrator bar, means for applying various weights thereto, means for gripping said bar, means for releasing said gripping mechanism, time measuring mechanism, means for setting said time mechanism in operation simultaneously with said releasing mechanism, means including said time measuring mechanism for causing said gripping mechanism to grip said bar on the expiration of a predetermined interval of time, and means for measuring the length of travel of said penetrator.

4. A machine of the class described, comprising a penetrator, a penetrator bar, means for gripping said bar, means for releasing said gripping mechanism, time measuring mechanism, means for automatically setting said time mechanism in operation simultaneously with said releasing mechanism, and means including said time measuring mechanism for causing said gripping mechanism to grip said bar on the expiration of a predetermined interval of time.

5. A machine of the class described, comprising a penetrator, a penetrator bar, means for gripping said bar, means for releasing said gripping mechanism, time measuring mechanism, means for setting said time mechanism in operation simultaneously with said releasing mechanism, and means including said time measuring mechanism for automatically causing said gripping mechanism to grip said bar on the expiration of a predetermined interval of time.

[Claims 6 to 16 not printed in the Gazette.]

1,062,033. BENDING-MACHINE. EDGAR RHODES, Scholes, Leeds, England, assignor to Continuous Rail Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 18, 1912. Serial No. 720,919. (Cl. 153—38.)



1. In a bending machine of the class described, the combination of a frame, resisting rollers carried thereby and arranged to engage one side of a longitudinally extending workpiece, a pressing member for engaging the other side of the workpiece at a point intermediate of the place where the workpiece is engaged by the resisting rollers and means for forcing the pressing member in a transverse direction against the work and for causing that portion of the pressing member which engages the work and one of the resisting rollers to relatively approach each other in a longitudinal direction when the latter is in engagement with the workpiece.

2. In a bending machine, a frame, levers pivoted thereto, each of the levers having at one of the ends thereof resisting rollers arranged to engage one side of a longitudinally extending workpiece, a reciprocating pressing member that moves transversely to the workpiece when the latter is in operative position in the machine, and means between the frame and the lever to adjust the position of the resisting rollers whereby the curvature of the workpiece may be controlled.

3. In a bending machine, the combination of a frame, levers pivoted thereto having the adjacent ends connected to a nut, resisting rollers carried on the levers and arranged to engage one side of a longitudinally extending workpiece, a reciprocating pressing member arranged to

engage the other side of the workpiece, and a screw connected to the frame and seated in the threaded portion of the nut for positioning the resisting rollers.

4. In a bending machine the combination of a frame, movable resisting members arranged to engage one side of a longitudinally extending work piece at different places along its length, a transversely moving pressing member arranged to engage the opposite side of the longitudinally extending work piece, and means for moving the pressing member so that a portion thereof will engage and bend the work piece and so that said portion of the pressing member will move in a longitudinal direction relative to the frame.

5. In a bending machine the combination of a frame, levers pivoted thereto carrying resisting rollers thereupon, means between the levers and the frame for adjusting the position of the resisting rollers, a pressing member which is movably supported on or by the frame, a motor carried by the frame and means between the motor, the frame and the pressing member for reciprocating the pressing member in a direction transversely to the resisting rollers which are arranged longitudinally along the frame.

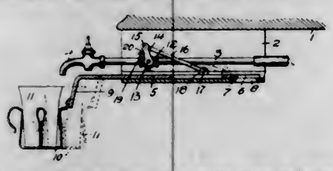
[Claims 6 to 9 not printed in the Gazette.]

1,062,034. RAIL-JOINT. THOMAS P. RICHARDS, Castle Shannon, Pa. Filed Jan. 9, 1913. Serial No. 741,044. (Cl. 239—6.)



A rail joint comprising a pair of splice bars, each of a length to extend upon a pair of ties and each having each end formed with a lateral flange mounted upon and adapted to be secured to a tie, each of said splice bars having the intermediate portion thereof overlapping the rail bases and depending below the bases and between the ties, said intermediate depending portions of a length equal to the distance between the ties, each of said intermediate portions being reversely curved with respect to each other and each having its lower terminus provided with a hook, said hooks being oppositely disposed with respect to each other and capable of interlocking whereby said intermediate portions are secured together, each of said splice bars further provided with depressed portions to form protuberances and capable of engaging in the webs of the rails, the protuberances of one bar being arranged opposite and abutting against the protuberances of the other bar.

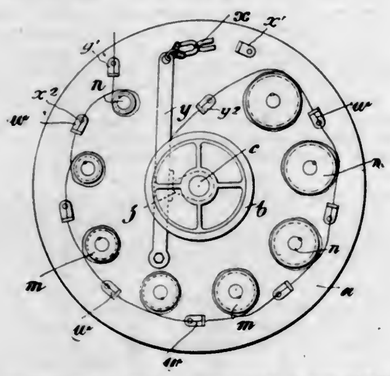
1,062,035. AUTOMATIC REGISTERING-FAUCET. HARRY W. RITCHEY, Vandergrift, Pa. Filed Dec. 7, 1912. Serial No. 735,538. (Cl. 235—94.)



1. In a registering faucet, in combination, a hanger provided with grooves at its lower portion, an outlet pipe extending through said hanger, a two-way valve carried thereby, a slide mounted in said grooves, means for limiting the inward movement of said slide, a glass holder carried by the slide exteriorly of the hanger, a vertically disposed crank connected to one side of said valve, a counter arranged within the hanger, means actuated by the other side of said valve for operating the counter, and an inclined link connected to the crank and to said slide for opening and closing the valve when the slide is shifted.

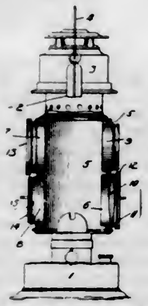
2. In a registering faucet, in combination, a hanger provided with grooves at its lower portion, an outlet pipe extending through said hanger, a two-way valve carried thereby, a slide mounted in said grooves, means for limiting the inward movement of said slide, a glass holder carried by the slide exteriorly of the hanger, a vertically disposed crank connected to one side of said valve, a counter arranged within the hanger, means actuated by the other side of said valve for operating the counter, an inclined link connected to the crank and to said slide for opening and closing the valve when the slide is shifted, said outlet pipe projecting forwardly of said hanger, and a faucet connected to said projecting portion.

1,062,036. CONTINUOUS-WIRE-DRAWING MACHINE. MICHAEL ROOKE, Handsworth, Birmingham, England. Filed Feb. 8, 1912. Serial No. 676,272. (Cl. 205—13.)



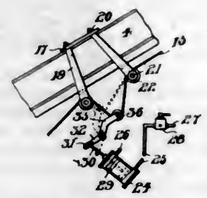
A wire drawing machine comprising in combination, a series of winders mounted to rotate about different axes and being of successively increased size from the first or starting to the last or delivery winder, devices for reducing the wire during its passage from one winder to the other, and mechanisms for driving said winders at the same number of revolutions per minute whereby the increasing surface speed of successive winders serves to take up wire length increase of the reduced wire, substantially as described.

1,062,037. LANTERN. PATRICK J. ROONEY, Broughton, Pa. Filed Dec. 18, 1912. Serial No. 737,476. (Cl. 240—23.)



In a lantern, a cylindrical body, lens holders carried thereby, reflector holders carried by said body and arranged diametrically opposite said lens holders with one set of holders reversely arranged relatively to the other set, lenses of different color mounted in said lens holders, and a cap capable of being detachably mounted upon either of said lens holders.

1,062,038. GATE-OPENING DEVICE FOR EXCAVATORS. ALBERT JOHN SCHARDING and PATRICK JAMES DOYLE, Pittsburgh, Pa. Filed Apr. 24, 1912. Serial No. 692,836. (Cl. 37—16.)

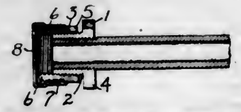


1. In a gate releasing device for excavators, the combination of a walking beam provided with a shovel having a gate, a latch for closing said gate, of a boom, a flexible element for releasing said latch, said element having one end engaging with the latch and its other end fixed to said walking beam, a sheave suspended from said walking beam and over which said element travels, a rock shaft supported by said boom, a crank carried by said shaft and provided with a rotatable element engaging said flexible element, and a fluid pressure operated device carried by the boom and connected to said rock shaft for operating it for pulling said flexible element to release the latch of the gate.

2. In a gate releasing device for excavators, the combination of a walking beam provided with a shovel having a gate, a latch for closing said gate, of a boom, a flexible element for releasing said latch, said element having one end engaging with the latch and its other end fixed to said walking beam, a sheave suspended from said walking beam and over which said element travels, a rock shaft supported by said boom, a crank carried by said shaft and provided with a rotatable element engaging said flexible element, a second crank carried by said rock shaft, and a fluid pressure operated device including a piston slidably connected to said second crank and adapted when operated to shift said rock shaft whereby said first crank will shift said flexible element to release the latch to open the gate.

3. In a gate releasing device for excavators, the combination with a walking beam provided with a shovel having a gate, a latch for closing said gate, of a boom, a flexible element for releasing said latch, said element having one end engaging with the latch and its other end fixed to said walking beam, a pair of sheaves suspended from said beam and over which said flexible element travels, a rock shaft supported by said boom and provided with a pair of cranks, one of said cranks carrying a rotatable element engaging said flexible element at a point between said sheaves, and a fluid pressure operated device connected by the other of said cranks and adapted when operated to shift the rock shaft thereby pulling said flexible element to release the latch to open the gate.

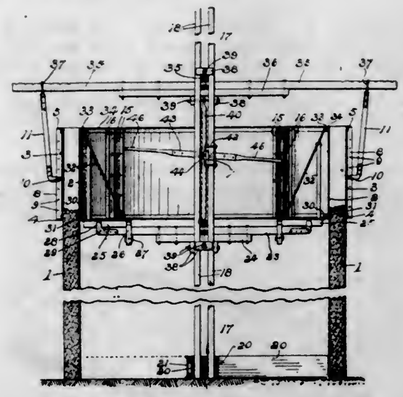
1,062,039. LOCK-NUT. FRIDOLIN SCHIMMEL, Faribault, Minn., assignor to Schimmel, Reid & Company, Faribault, Minn., a Corporation of Minnesota. Filed June 26, 1912. Serial No. 705,937. (Cl. 151—19.)



1. A lock-nut comprising a split nut provided with a shoulder having an external tapered thread, a secondary nut adapted to engage the afore-mentioned thread and provided with a shoulder having an external thread, a cap adapted to engage the latter external thread.

2. A lock-nut for a hollow shaft in combination: a nut provided with an external tapered thread, split part way the length of the nut; a secondary nut adapted to engage said thread provided with an outside thread; a cap adapted to engage the latter external thread, covering the end of the shaft.

1,062,040. MACHINE FOR BUILDING CONCRETE STRUCTURES. HENRY G. SELLMAN, Ann Arbor, Mich. Filed Dec. 18, 1911. Serial No. 666,462. (Cl. 25—124.)



1. In a device of the character described, the combination of a supporting mast, means adjustable vertically upon said mast for carrying a mold, a lever, means for adjustably securing and pivotally supporting said lever upon said mast, means actuated by said lever for raising the mold supporting means vertically upon the mast, and means on the mast for holding said supporting means in the position to which it is adjusted.

2. In a device of the character described, the combination of a supporting mast formed of a plurality of vertically extending parallel bars, cross beams extending between said bars for supporting and carrying a mold, said beams being adjustable vertically between said bars, and means for clamping the bars of the mast to frictionally hold the beams in the position to which they are adjusted.

3. In a device of the character described, the combination of a mast comprising four vertically extending spaced parallel bars, beams extending between said bars and crossing at right angles to each other for carrying a mold, means for raising said beams vertically between said bars, and means for forcing the bars of the mast toward each other to clamp the beams between them.

4. In a device of the character described, the combination of a mast, radially extending carrying beams supported by said mast and adapted to support an outer wall of a mold, radially extending beams carried by the mast at a distance below the other beams, extension bars carried by the lower beams adapted to be attached to an inner wall of a mold, a ratchet bar connecting the upper and lower beams, a lever adjustably and pivotally supported upon the mast, and a pawl carried by said lever to engage the ratchet bar and lift the beams.

5. In a device of the character described, the combination of a mast comprising four spaced vertically extending bars, cross beams between the bars of the mast and adapted to be connected to a mold for forming a circular wall, means on the mast for raising the beams and holding the same in their raised position, a foot anchor for said mast comprising four members arranged at right angles to each other with overlapping connected inner ends forming between them a rectangular box to receive the lower ends of the bars forming the mast, the other ends of said members

being adapted to engage the circular wall formed by the mold carried by the beams and center the mast therein.

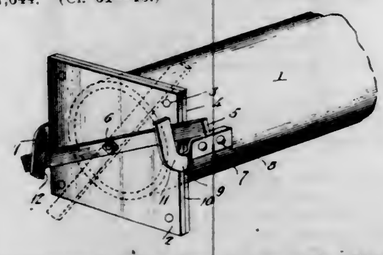
[Claims 6 and 7 not printed in the Gazette.]

1,062,041. BRUSH. ROBERT DE SENNEVOY, Paris, France. Filed Oct. 15, 1910. Serial No. 587,258. (Cl. 15—29.)



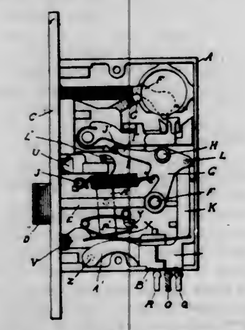
In a brush, the combination with a back, having an undercut ledge arranged near the edge of the said back, and provided with a dove-tailed opening; a series of lateral brush sections provided with beveled ends adapted to engage said ledge; and a central wedge-shaped brush section adapted to be inserted among the lateral brush sections through the dove-tailed opening in the ledge.

1,062,042. IRRIGATION WATER-GATE. URIAH SERVISS, Gridley, Cal. Filed Feb. 11, 1913. Serial No. 747,644. (Cl. 61—46.)



The combination with a flume or pipe having diametrically opposed hooks opening in opposition to each other, of a gate comprising a disk, a washer secured to the inner surface of the disk to engage the end of the pipe, a lever pivotally mounted upon the outside of the disk and designed to ... minally engage the hooks of the pipe, said hooks being provided with inclined bearing surfaces adapted to contact with the lever whereby to tension the lever when in locking position to induce pressure upon the disk.

1,062,043. LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Apr. 10, 1911. Serial No. 620,138. (Cl. 70—46.)



1. In a latch, a case, a latch bolt therein, means to retract said latch bolt, and means to dog and release said retracting means directly, including a thumb-stop having provision for holding the latch bolt in retracted position; substantially as described.

2. In a latch, in combination with a latch bolt, a lever pivoted to the inner end thereof, said lever having an arm provided with a hook, a thumb push member, and a hook adapted to be carried into engagement with the lever hook by said push member to hold the latch bolt retracted, substantially as described.

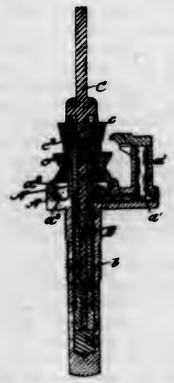
3. In a latch, a case, a latch bolt therein, manual retracting means for said latch bolt, and manually adjustable means accessible at the exterior of the case, having one position in which it dogs said retracting means and another position in which it holds said latch bolt retracted; substantially as described.

4. In a latch, a case having a face plate, a latch bolt projecting through the face plate, manual retracting means for said latch bolt, and manually adjustable slide mechanism projecting through the face plate and having one position in which it dogs said retracting means and another position in which it holds said latch bolt retracted; substantially as described.

5. In a latch, a case, a latch bolt therein, separate manual retracting devices for said latch bolt at opposite sides of the door, and night latch mechanism for dogging one of said devices directly, comprising a thumb-stop projecting through the face of the case and having means to hold the latch bolt in retracted position; substantially as described.

[Claims 6 to 24 not printed in the Gazette.]

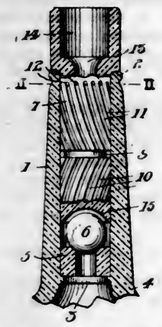
1,062,044. SPINDLE-BASE. OSCAR C. SIDILAU, Shirley, Mass., assignor to Samson Cordage Works, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 9, 1907. Serial No. 351,404. (Cl. 118—19.)



In a spindle, a blade having a downwardly projecting sleeve, a base having an upwardly projecting flange surrounding and overlapping the lower edge of said sleeve and forming a cup, said sleeve forming a sliding fit with the interior edge of said cup, terminating just within said cup, and serving as a closure therefor, a bolster to receive said blade, said sleeve surrounding said bolster and receiving in its interior oil pumped up thereby and delivering it from the lower edge thereof to said flange, said base having an oil passage communicating with said bolster and out of communication with said cup, and an oil reservoir communicating with said oil passage and extended above the level of said flange.

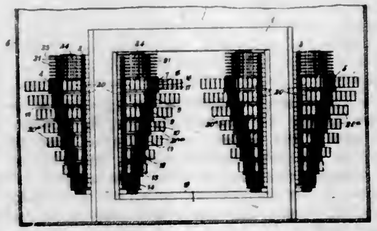
1,062,045. ANTIREFILLABLE BOTTLE. ALEKSANDER E. SMITH, Jersey City, and LUDWIG ZEGLENSKI, Bayonne, N. J. Filed Nov. 11, 1912. Serial No. 730,760. (Cl. 215—65.)

In an anti-refillable bottle, the combination with a bottle neck, of a tubular valve seat supported therein, a spherical valve mounted upon said seat, a closure including an inner portion, an intermediate portion and an outer portion, said intermediate and inner portions connected together by a neck provided with an annular groove, said inner portion having its inner end recessed for the reception of said valve and its periphery formed with spiral grooves, said intermediate portion having its periphery formed with spiral grooves reversed with respect



to the spiral grooves of the inner portion, said outer portion enlarged for seating upon the outer edge of the neck and hollowed, said intermediate portion provided with radially disposed ports communicating with the outer ends of the spiral grooves of said portion and further communicating with the recess in said intermediate portion, said recess communicating with said outer portion.

1,062,046. ELECTRICAL APPARATUS. HAROLD B. SMITH, Worcester, Mass., assignor, by mesne assignments to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1908. Serial No. 410,155. (Cl. 171—124.)



1. In electric apparatus, the combination with current-conducting coils immersed in an insulating fluid, of a plurality of barrier plates of conducting material disposed in parallel planes adjacent to the coils, said plates being immersed directly in the insulating fluid and constituting a series of condensers of equal capacity.

2. In a transformer, the combination with a magnetizable core member, current-carrying coils, and a fluid-containing tank in which said parts are located, of barrier-plates of conducting material immersed directly in the insulating fluid and disposed in parallel planes between the coils, and the magnetizable core member to constitute series of condensers of equal capacity.

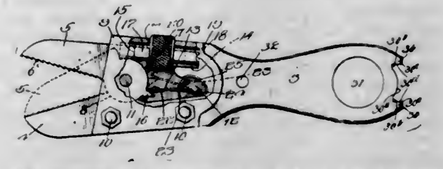
3. In a transformer, the combination with a substantially rectangular magnetizable core member, a current-conducting coil that surrounds one leg of the core and is materially separated from the adjacent leg, and a liquid-containing tank in which the magnetizable core is located, of a plurality of tubular barriers of conducting material immersed directly in the insulating liquid and disposed one within another between the coil and the core leg which it surrounds to constitute a series of equal-capacity condensers in connection with the insulating liquid contained within the tank.

4. In a transformer, the combination with a substantially rectangular magnetizable core member, a current-conducting coil that surrounds one leg of the core and is materially separated from the adjacent leg, and a fluid-containing tank in which the magnetizable core is located, of a plurality of tubular barriers of conducting material disposed one within another between the coil and the core leg which it surrounds to constitute a series of equal capacity condensers solely in connection with the insulating fluid contained within the tank.

5. In a transformer, the combination with a magnetizable core member, a substantially cylindrical large-current winding surrounding the core, a high-voltage winding of materially larger mean diameter of turn surrounding the secondary winding, and a liquid-containing tank in which the core and winding are located, of substantially cylindrical sheet metal barrier-tubes which are interposed between the high-voltage and large-current windings and divide the insulating liquid in which the parts are immersed to provide alternate films of insulating and conducting material.

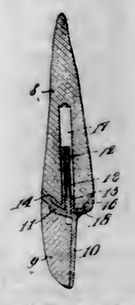
[Claims 6 to 8 not printed in the Gazette.]

1,062,047. WRENCH OF THE ADJUSTABLE ALLIGATOR TYPE. HENRY ADALBERT SMITH, Elgin, Ill. Filed July 13, 1911. Serial No. 638,331. (Cl. 81—111.)



In a wrench, the combination of a fixed jaw, a pivoted jaw, a handle having a recess in its forward end back of said pivoted jaw, a spring one end of which engages said pivoted jaw and tends to open the same and the other end of which spring is bent upon itself and sprung into the recess in the handle, means for closing the pivoted jaw against the tension of said spring, means for engaging the spring intermediate its ends during part of the movement of the pivoted jaw whereby said jaw is held under two different tensions during its movement, said means comprising an abutment formed by the extremity of the bent over portion of the spring, and a saddle attached to the fixed jaw and incasing the devices for operating the pivoted jaw.

1,062,048. TOOTH-CROWN. CARROLL J. SPAIN, Beloit, Kans. Filed Nov. 4, 1912. Serial No. 729,416. (Cl. 32—9.)



1. A tooth crown embodying an angular backing having a root entering stem, and a molded impression capping secured to the base of the backing and adapted for the irregularities of the butt end of the root.

2. A tooth crown embodying an angular backing having a root entering stem and an impression capping secured to

the base of the backing and adapted for the root, the capping having a single flange to engage a single rabbeted portion at the lingual side of the root.

3. A tooth crown embodying a backing having a tubular root entering stem, and a facing secured to the backing and normally closing the passage through the stem.

4. A tooth crown embodying a backing having a tubular root entering stem and a facing having a tang secured thereto to enter the stem.

5. A tooth crown embodying an angular backing having a tubular root entering stem, an impression capping secured to the base of the backing and adapted for the root, and a facing secured to the backing and normally closing the passage through the stem.

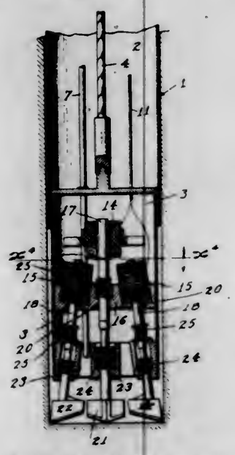
[Claims 6 and 7 not printed in the Gazette.]

1,062,049. CUFF-BUTTON. AMOS J. STETLER, West Point, Pa. Filed Aug. 14, 1912. Serial No. 714,969. (Cl. 24—47.)



A device of the character described, comprising a base plate having a central opening therein, a pin having a threaded end and projecting through the opening in the plate, said pin then bent at right angles and extending radially across the bottom of the plate, said pin then bent upon itself and extending diametrically across the bottom of the plate forming a clamping head, a hook on the end of the pin adapted to be projected through a support, said plate having a series of slots therein, in any one of which the hooked end may project, and a head screwed on the threaded portion of the pin, securing the parts together and clamping the support between the clamping head and the base plate, substantially as described.

1,062,050. WELL-DRILLING APPARATUS. ALFRED C. STEWART, Los Angeles, Cal. Filed Oct. 10, 1911. Serial No. 653,950. (Cl. 166—3.)



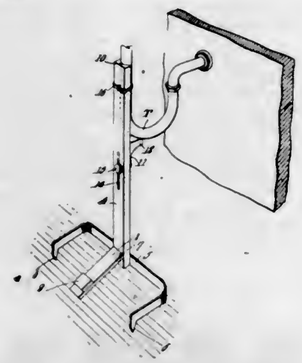
1. A well drilling apparatus comprising an open-bottomed caisson, means for lowering and raising said caisson, means for supplying compressed air to said caisson to maintain a portion thereof free of water, drilling devices located in said caisson and motive means for said drilling devices located adjacent the drilling devices and operating directly thereon.

2. A well drilling apparatus comprising an open-bottomed caisson, means for lowering and raising said caisson, means for supplying compressed air to said caisson to maintain a portion thereof free of water, means for supplying water to said caisson, drilling devices located in the lower part of said caisson, and motive devices for said drilling devices located in the upper part of said caisson.

3. In a well drilling apparatus, an open-bottomed caisson, a cable connected to said caisson, means for operating said cable for lowering said caisson in the well, drilling devices in said caisson, electric motive devices in said caisson connected to operate said drilling devices, means for supplying compressed air to said caisson to exclude water from said motive devices and electrical supply connections extending to said motive devices from the top of the well.

4. In a well drilling apparatus, the combination of a caisson, means for raising and lowering said caisson, drills mounted to reciprocate in said caisson so as to move in paths inclined to the vertical, cutters carried by said drills and moving in the operation of the drills so as to project when in their lower positions beyond the wall of the caisson, and motive means within the caisson for operating said drills.

1,062,051. TRAP-HOLDER. HENRY STOFFEL, Tulsa, Okla. Filed Nov. 21, 1912. Serial No. 732,796. (Cl. 113—102.)



1. A trap holder embodying an upright, a U-shaped member having its intermediate portion secured to the lower end of the upright with its arms projecting forwardly at the sides of the upright and provided with floor engaging fulcrums at their ends so that downward pressure on the upright will constrain it to swing rearwardly, and means for clamping a trap to the rear side of the upright.

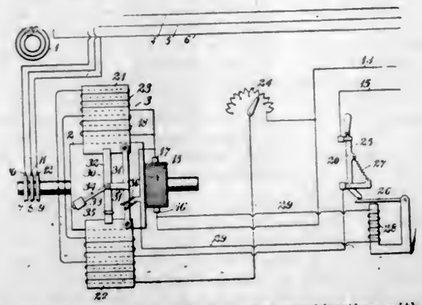
2. A trap holder embodying an upright, forwardly projecting arms attached to the lower end of the upright and arranged at the sides of the upright, the free ends of the arms having floor engaging fulcrums, so that downward pressure on the upright will constrain it to swing rearwardly, means for clamping a trap against the rear side of the upright, and a trap rest adjustable longitudinally on the upright.

3. A trap holder embodying an upright having a longitudinal trap receiving groove, forwardly projecting arms attached to the lower end of the upright and arranged at the sides of the upright, the free ends of the arms having floor engaging means, means for holding the trap in the upper end of the said groove, and a trap rest adjustably mounted in the said groove.

4. A trap holder embodying an upright having a longitudinal groove in its rear face, a U-shaped member having its intermediate portion secured to the lower end of the upright with its arms projecting forwardly and provided with depending floor engaging spurs at their ends, means for holding a trap in the upper end of the said groove, a block slidable in the groove, and means for clamping the block in position.

5. A trap holder embodying an upright having a longitudinal groove in its rear face and having a longitudinal slot, a U-shaped member having its intermediate portion secured to the lower end of the upright with its arms projecting forwardly and provided with depending floor engaging spurs at their ends, a strap adapted to embrace the upper end of the upright and a trap fitting in the said groove, a block slidable in the groove and having a projection at its upper end forming a trap rest, and a clamping bolt carried by the block and working through the said slot.

1,062,052. OVERSPEED DEVICE FOR DYNAMO-ELECTRIC MACHINES. HENRY G. STOTT, New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 5, 1907. Serial No. 366,498. (Cl. 175—294.)



1. In a system of distribution, the combination with a direct current circuit, a dynamo-electric machine connected thereto, and an interrupting device for said circuit, of a magnetizable member pivotally mounted between two adjacent pole pieces of the field magnet of the machine and provided with means for automatically closing the tripping circuit of the interrupting device upon a material reduction in the magnetic leakage flux between said adjacent field magnet pole pieces.

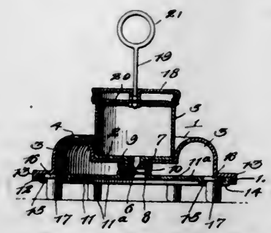
2. The combination with the field magnet of a dynamo-electric machine, of a relay contact member, a magnetizable block and an adjustable counter-weight rigidly connected together and pivotally mounted between two adjacent pole pieces of said machine, and a relay contact terminal with which said contact member engages when said counter-weight overcomes the force exerted by the magnetic field.

3. The combination with the field magnet of a dynamo-electric machine, and a magnetizable body pivotally supported between two adjacent pole pieces of said field magnet and provided with an adjustable counterweight and a contact member, of a stationary contact member which is engaged by the movable contact member when the counter-weight overcomes the force exerted upon the magnetizable body by the magnetic field.

4. The combination with a dynamo-electric machine, of a stationary frame supported by the field magnet of said machine, a magnetizable strip located in the path of a magnetic flux of said field magnet, a magnetizable block rotatably mounted on said frame adjacent to said strip, an interrupter in the armature circuit of said machine, a stationary contact terminal for the tripping coil circuit of said interrupter, an arm projecting from the magnetizable block and having a contact terminal that is held in open-circuit position by a normal magnetic flux through said strip and said block, and a weight adjustably mounted on said arm for effecting engagement between the contact terminals to close the tripping circuit when the magnetic flux through the strip and the block is decreased a predetermined amount.

1,062,053. SHAMPOO-BRUSH. HARRY N. STRONG, Chicago, Ill. Filed Sept. 28, 1912. Serial No. 722,986. (Cl. 15—48.)

1. A shampoo brush, including a casing provided with a water inlet and a water outlet, rubbing fingers carried by said casing, a reservoir secured to the casing, the device being provided with a discharge opening leading from the reservoir out through the bottom of the casing, and means carried by the reservoir for expressing the contents of the reservoir out through said last named opening.



2. A shampoo brush, comprising a casing provided with a water chamber, with a water inlet leading into said chamber and with jet orifices leading out from said chamber, a reservoir connected to said casing and provided with a discharge opening communicating with the lower face of the casing, a piston mounted in said reservoir, a rod connected to the piston and arranged for manual actuation, and means engaging said rod for guiding the piston in the reservoir.

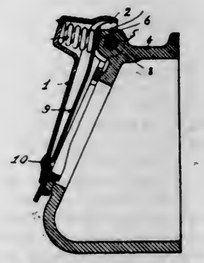
3. A shampoo brush, including a casing embodying a water chamber and provided with a water inlet opening and jet orifices leading from said chamber, a reservoir connected to said casing and having a discharge opening leading out through the bottom of the casing, a removable cover for the reservoir, a piston movable in said reservoir, and a piston rod connected to the piston and extending through the removable cover.

4. A shampoo brush, comprising a casing embodying a body member, and a perforated base plate connected thereto, said body member being provided with an annular water chamber and with a water inlet leading into said chamber, rubbing fingers carried by the casing and extending downwardly through the base plate thereof, the base plate being formed with an upstanding neck, a reservoir secured to the casing and having an opening leading into said neck, a piston movable in said reservoir, and means for manually actuating said piston.

5. A shampoo brush, comprising a casing embodying a body member, and a perforated base plate connected thereto, said casing being provided with a water chamber and a water inlet opening leading into said chamber, the base plate being formed with openings independent of its perforations, and rubbing fingers extending through the said openings in the base plate and provided with heads clamped between the base plate and the body member.

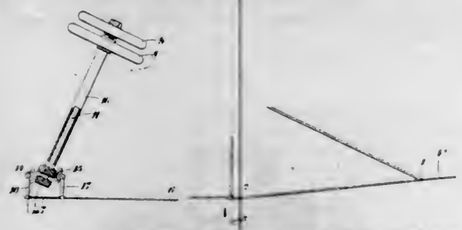
[Claims 6 to 9 not printed in the Gazette.]

1,062,054. JOURNAL-BOX LID. CHARLES A. SWALLOW, Buffalo, N. Y. Filed Nov. 29, 1912. Serial No. 734,018. (Cl. 64—23.)



In combination with the body of a journal box having a lug, a box lid, a leaf spring secured to the box lid, a spiral spring interposed between said lid and said spring and means on said lid for holding said spiral spring in place.

1,062,055. STEERING-GEAR FOR AEROPLANES. RENÉ TAMPIER, Paris, France. Filed Oct. 23, 1911. Serial No. 656,139. (Cl. 244—29.)



1. Steering mechanism for aeroplanes and the like comprising a rudder mounted at three triangularly arranged points, said rudder adapted to be actuated bodily about one of said points and adapted to be actuated about axes formed by said point and either of the remaining points.

2. Steering mechanism for aeroplanes and the like comprising a rudder mounted for universal movements about one point, means to actuate the rudder bodily about said point, said means connected to the rudder at two points forming with the first-named point a triangle, the rudder being movable about axes formed by said first-named point and either of the last-named points.

3. Steering mechanism for aeroplanes and the like comprising a rudder flexibly mounted at one point, independently movable members for actuating said rudder bodily about said point, said members connected to the rudder at two points forming with the first-named point a triangle, and said rudder adapted to be actuated by either of said members about an axis formed by said first-named point and the point of connection of the other member.

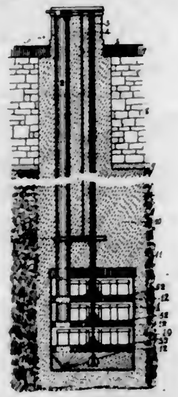
4. A steering gear for aeroplanes and the like comprising a rudder mounted for universal movements at one point, independently movable actuating members, connected to said rudder at two other points, said members being held against lateral movements to prevent the rudder from being actuated by wind forces.

5. A steering gear comprising a rudder mounted for universal movements at one point, means to actuate the rudders about said point comprising independently movable actuating members connected to the rudder at two points forming with said first named point a triangle, each of said actuating members being mounted for pivotal movements about a point intermediate the ends thereof.

[Claims 6 and 7 not printed in the Gazette.]

1,062,056. SAFE AND VAULT. DAVID K. THOMAS, Kansas City, Mo. Filed Feb. 17, 1912. Serial No. 678,366. (Cl. 109—1.)

1. A fire and burglar proof depository composed of steel and reinforced concrete comprising a subterranean, cylindrical metallic chamber of one or more compartments arranged in vertical order and each provided with a circular shelf extending close to and around the wall in the compartment and adapted to support containers or receptacles for valuables and adjusted to revolve horizontally; a top face upon which is fastened an indicating disk and in which is an opening into a tube or shaft, and also an opening for the grooved top of a cut-off rod; a rod for each of said shelves, one working within another, and extending from said disk, each to its respective shelf, to which it is rigidly fastened in the subterranean chamber, and provided at the top with an arm or crank adapted to revolve it; a metallic tube or shaft extending from the upper face to the compartments in the said chamber of suitable caliber to permit the passage through it of the containers or receptacles; a cut-off moved by means of said cut-off rod mentioned above to open and close communication through the shaft; containers or receptacles suitable for receiving valuables, each having a lid secured within its top which lid is provided with a clasp loosely axled on its top; a flexible connection; a carrier adapted to move through said shaft and provided with an eye to receive said flexible connection, and also provided with two firmly attached clasps adapted to hold said containers while they are lowered to and raised from their places on said shelves, substantially as shown.



2. A fire and burglar proof depository comprising a subterranean cylindrical chamber of one or more compartments arranged in vertical order; a circular shelf extending close to and around the wall in each compartment, adjusted to revolve on ball bearings and adapted to support containers of valuables and to hold them in exact position by means of guards; a tube or shaft communicating from a top face with said compartments; containers for valuables; a top face with an opening through it into the tube or shaft, and provided with an indicating circular disk firmly fastened to it and disposed vertically above said chamber, center with center, said disk having grooves diametrically set and concentrically arranged; a rod for each shelf respectively, extending from the upper surface of said disk at its center to the center of its respective shelf to which it is rigidly attached; an arm or crank for each rod firmly attached to it at the upper surface of said disk and provided with a hinge joint by which it may be flexed and sunken into or released from the grooves of said disk and adapted to move around horizontally over the face of said disk, thus revolving the shelf so as to bring any container upon it centrally under said shaft, substantially as indicated.

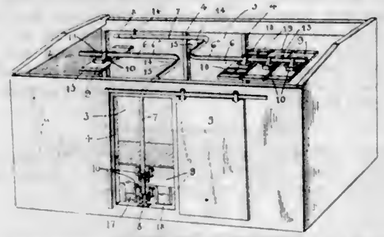
3. A fire and burglar proof depository comprising a subterranean cylindrical chamber of one or more compartments arranged in vertical order, each having a revolving shelf and a central rod extending to the top face; a top face with an indicating disk upon it, an opening through it into a tube or shaft suitable for the passage through it of receptacles for valuables and extending from the upper face to the compartments of said chamber and consisting of two sections between which may be interposed a metallic plate or cut-off; a cut-off horizontally across the opening of said shaft at any desired distance above said chamber, and consisting of a box, a movable metallic plate with a laterally extending rack, a pinion adapted to engage this rack, and a rod extending from the pinion in which it is firmly set to the top face, where it has a deeply grooved end to receive a bar adapted to turn it and thus move the metallic plate substantially as shown.

4. A fire and burglar proof depository comprising a subterranean cylindrical chamber of one or more compartments arranged in vertical order, each provided with a horizontally revolving shelf extending close to and around the wall in its compartment and adapted to receive containers for valuables and, by means of guards, on said shelves, to hold such containers in exact position; a top face having an indicating disk secured upon it centrally over said chamber, an opening through it into a shaft or tube, and also an opening for the top of a cut-off rod; a metallic cut-off plate horizontally disposed across said shaft and adjusted to be moved to and from position by

means of said rod; a rod extending from each of said shelves to the center of which it is rigidly fastened, to the indicating disk and adapted to revolve one within the other; an arm or crank fitted to the top of each rod at the face of the disk; a metallic tube or shaft suitable for the passage through it of containers for valuables and extending from the top face to said compartments, and provided with two flanges or guide-strips disposed diametrically opposite each other on the inner surface of the shaft and in line with the center of the disk; a flexible connection; a carrier having grooves on opposite sides adapted to receive the guide-strips in the shaft, and having an eye in which to fasten said flexible connection; and provided at the other end with two firmly fixed clasps, one longer and with more open hook than the other; metallic containers adapted to receive valuables and to pass through said flanged shaft, each provided with a lid and the means of securing it in the top, and also provided with an outer band around the top projecting outward at its lower edge, each of said lips having a clasp on its top to engage with the shorter clasp of the carrier and also having a spring so set and adjusted as to guide the long clasp of the carrier under the axle of the lid-clasp when the carrier is lowered upon said lid substantially as described.

5. A fire and burglar proof depository comprising a subterranean chamber of one or more compartments; a hollow, metallic shaft; a cut-off for said shaft and means to move it; an upper face upon which is a circular indicating disk and a cushion surrounding it, an opening into said hollow shaft and a cushion surrounding it, and an opening for the knobs of locks; a heavy circular metallic cap or cover hinged at one point so as to cover said disk when let down and to rest upon said cushion, this cover being provided with bolts to secure it firmly in place and by a slight curve to depress the cover upon said cushion when the bolts are plunged into their sockets; a circular metallic cover for an opening in the top face into a tube or shaft; a heavy metallic rectangular cover extending over the opening in the top face into said shaft, the top of a cut-off rod and over the knobs of said locks, provided with securing bolts, and adapted to slide horizontally in grooved bearings substantially as shown.

1,062,057. SECTIONAL DOOR FOR CARS. GEORGE THOMPSON, Grand Rapids, Mich. Filed Dec. 7, 1912. Serial No. 735,401. (Cl. 20—32.)



1. The combination with a box car of a track extending horizontally near the roof of the car, an upright member movably connected to the track and extending vertically across the doorway, and door sections mounted traversable on the track and upright member.

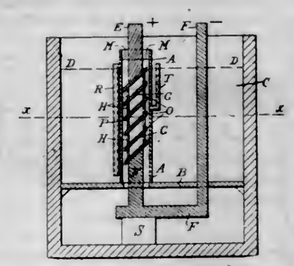
2. The combination with a box car of a track located near the roof thereof, said track being pivotally supported at one end and movable transversely of the car at its other end, an upright member having its upper end curved to join the track and rotatably attached thereto, said upright member being adapted to extend vertically across the doorway or to be raised to a horizontal position, means for retaining the upright member in either of its positions and door sections traversable on the track and upright member.

3. The combination with a box car of an overhead tubular track suspended from the roof of the car, a tubular upright member extending vertically across the doorway and curved at its upper end to join the overhead track, hangers having yoke jaws to partially surround the track and upright member and traversably supported thereby, door sections pivotally attached to the hangers and a raised portion extending along the upper surface of the track and positioned between the ends of the yoke jaws.

4. The combination with a box car of an overhead track located near the roof of the car and extending longitudinally thereof, a stud projecting from the roof of the car to pivotally support one end of the track, a T-head stud projecting from the roof of the car and extending through a slot in the track to movably support the same, an upright member curved at its upper end to join the movable end of the overhead track and rotatably connected thereto, said upright member being adapted to extend vertically across the doorway or to be raised to horizontal position, an extensible foot on the lower end of the upright member adapted when extended to enter a recess in the door sill, a hook in the roof of the car to support the upright member in horizontal position and door sections traversably mounted on the track and upright member.

5. The combination with a box car of an overhead tubular track extending longitudinally of the car and having one end turned at right angles toward the doorway, a stud projecting from the roof of the car to pivotally support the straight end of the track, a T-head stud projecting from the roof of the car and extending through a slot in the track to support the other end of the same, a tubular upright member curved at its upper end to join the end of the track and rotatably attached thereto, said upright member being adapted to extend vertically across the doorway or to be suspended in horizontal position, an extensible foot on the lower end of the upright member, adapted when extended to enter a recess in the door sill, a hook projecting from the roof of the car to suspend the upright member in horizontal position, hangers having yoke jaws to partially surround the track and upright member and traversably supported thereby, door sections pivotally attached to the hangers and provided with openings, closures for said openings and a raised portion or rib extending along the upper surface of the track and embraced by the ends of the yoke jaws.

1,062,058. ELECTROLYTIC CELL. RICHARD THRELFALL, Birmingham, England. Filed Feb. 27, 1912. Serial No. 680,280. (Cl. 204—5.)



1. An electrolytic apparatus consisting of a receptacle for the electrolyte, a non-conducting inner tube or vessel therein and opening thereinto, eventual main electrodes in the inner vessel, a plurality of intermediate electrodes between the eventual electrodes at an angle to the walls of the vessel and so arranged as to provide ducts or passages by which the gases and liquid products of the electrolysis can escape and the electrolyte circulate.

2. An electrolytic apparatus, consisting of a receptacle for the electrolyte, a non-conducting inner tube or vessel therein and opening thereinto, eventual main electrodes in the inner vessel, a plurality of intermediate electrodes between the eventual electrodes at an angle to the walls of the vessel and so arranged as to provide ducts or passages by which the gases and liquid products of the electrolysis can escape and the electrolyte circulate, and

means separating and supporting the intermediate electrodes by which the electrolytic gaps are automatically maintained practically constant in length parallel to the lines of flow of the current irrespective of wear or chemical action on their surfaces.

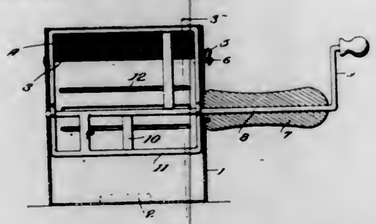
3. An electrolytic apparatus consisting of a receptacle for the electrolyte, a non-conducting inner tube or vessel therein and opening thereinto, eventual main electrodes in the inner vessel, a plurality of intermediate electrodes between the eventual electrodes at an angle to the walls of the vessel and so arranged as to provide ducts or passages by which the gases and liquid products of the electrolysis can escape and the electrolyte circulate, a pipe of non-conducting material connecting the inner vessel at a point normally above the level of the electrolyte in the outer vessel with such outer vessel at a point practically lower than the lowest electrode therein.

4. An electrolytic apparatus consisting of a receptacle for the electrolyte, a non-conducting inner tube or vessel therein and opening thereinto, eventual main electrodes in the inner vessel, a plurality of intermediate electrodes between the eventual electrodes at an angle to the walls of the vessel and so arranged as to provide ducts or passages by which the gases and liquid products of the electrolysis can escape and the electrolyte circulate, a gas discharge pipe from the inner vessel terminating at a point above the level of the electrolyte.

5. An electrolytic apparatus consisting of a receptacle for the electrolyte, a non-conducting inner tube or vessel therein and opening thereinto, eventual main electrodes in the inner vessel, a plurality of intermediate electrodes between the eventual electrodes at an angle to the walls of the vessel and so arranged as to provide ducts or passages by which the gases and liquid products of the electrolysis can escape and the electrolyte circulate, and means separating and supporting the intermediate electrodes by which the electrolytic gaps are automatically maintained practically constant in length parallel to the lines of flow of the current irrespective of wear or chemical action on their surfaces, a pipe of non-conducting material connecting the inner vessel at a point normally above the level of the electrolyte in the outer vessel with such outer vessel at a point practically lower than the lowest electrode therein.

[Claims 6 and 7 not printed in the Gazette.]

1,062,059. COMBINED MIXER AND SIFTER. SOZABURO TODA, New York, N. Y. Filed Apr. 25, 1912. Serial No. 693,228. (Cl. 83—60.)



1. A sifter and mixer comprising a body having an opening, a curved sieve hinged to the body and arranged to lie over said opening, a handle mounted at the end of the body and located eccentrically thereon, a shaft journaled in the handle and extending into the body, means for turning the shaft, and mixing and sifting members mounted on the shaft and located in the body and arranged to move in close contact with the sieve but out of contact with the surface of the body.

2. A mixer and sifter comprising a body having an opening and a sieve hinged to the body and arranged to lie over said opening, a handle fixed to the end of the body and located eccentrically, a shaft journaled in the handle and extending into the body, mixing members carried by the shaft, and a handle mounted upon the shaft.

1,062,060. SHUTTLE. WILLIAM TOWNEND, Philadelphia, Pa., assignor to Charles E. Richards, Bradford, England, Edward W. Atkinson, Brookline, Mass., and Arthur A. Haserick, Boston, Mass., Copartners as Richards, Atkinson & Haserick, Boston, Mass. Filed Mar. 22, 1912. Serial No. 685,553. (Cl. 139—89.)

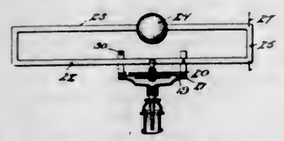


1. In combination with a shuttle, a spindle, and means effecting a lateral movement with relation to the spindle for adjustably centering bobbins laterally on said spindle.

2. In a shuttle, a spindle having an eccentric collar mounted thereon and a bobbin adapted to slide over the collar and be centered thereby.

3. In a shuttle, a spindle having a shoulder, an eccentric collar to engage said shoulder and a set nut to clamp said collar against said shoulder.

1,062,061. HEATING SYSTEM. JAMES A. TRANE, La Crosse, Wis. Filed Apr. 11, 1911. Serial No. 620,334. (Cl. 236—6.)



1. A heating-system boiler and its furnace combined with a highly sensitive draft regulator for the furnace comprising a flexible device under the influence of boiler-pressure, a lever in connection with said flexible device having unobstructed surface over its fulcrums in opposite directions therefrom, and a weight adjustable longitudinally of said surface to be neutral immediately over said fulcrum or to preponderate in one direction therefrom, the weight being permanent in adjusted position.

2. A heating-system boiler and its furnace combined with a highly sensitive draft regulator for the furnace comprising a flexible device under the influence of boiler-pressure, a lever in connection with said flexible device having an auxiliary arm extending in opposite directions from the fulcrum of the lever and unobstructed from end to end, and a weight adjustable longitudinally of said arm to be neutral immediately over said fulcrum or to preponderate in one direction therefrom, the weight being permanent in adjusted position.

1,062,062. METHOD OF BLOCKING AND FINISHING HATS. ARNOLD TURNER, Danbury, Conn. Filed May 31, 1911. Serial No. 630,377. (Cl. 223—30.)

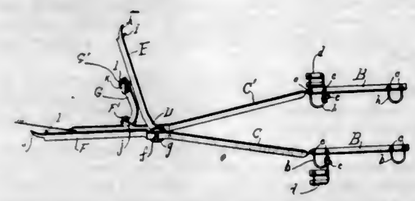


1. The herein described method of forming and finishing hats, which consists in first shaping the same to the desired form including an oblong shaped crown, next in pressing said crown to a round shape, then to pounce the surface of the said round crown, and finally in repressing the hat body back to form the original oblong shaped crown.

2. The herein described method of forming and finishing stiff hats, which consists in first shaping the same to the desired form, then to press said crown to a round form, next to pounce and finish the surface of the said round crown, and finally to repress the hat body back to form the original oblong shaped crown.

3. The herein described method of forming and finishing stiff hat bodies, which consists in first shaping the same to the desired form to include a scoop in the brim, next to press said crown to a different form and the brim to include a scoop in the underside of each inner side edge portion, then to pounce the surface of the said crown, and finally to repress the hat body and brim back to the original shape.

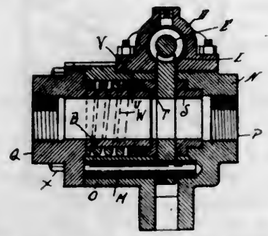
1,062,063. HARROW ATTACHMENT. WILLIAM G. VANCE, Hagie, Wyo. Filed July 5, 1912. Serial No. 707,706. (Cl. 55—34.)



1. The combination with a harrow, braces freely secured to the bars thereof and adapted to permit a limited rocking movement of the bars, clamps securing the braces against lateral movement on the bars, of a fork pivoted in the braces and having prongs adapted to be thrown into contact with the ground, and means for throwing the prongs into contact whereby the rear of the harrow is raised as the harrow moves.

2. The combination with a harrow of braces secured to the rear thereof, a fork with prongs pivotally supported by the braces and adapted to be thrown into engagement with the ground while the harrow is moving, a trigger pivoted to one of the braces for throwing the fork forward to engage the ground, a catch pivoted to the trigger to hold the fork against backward pressure of the prongs, and a wire secured to the trigger by which the same is operated.

1,062,064. VALVE. CHARLES W. WARD, Hancock, Mich. Filed Jan. 19, 1912. Serial No. 672,200. (Cl. 137—5.)

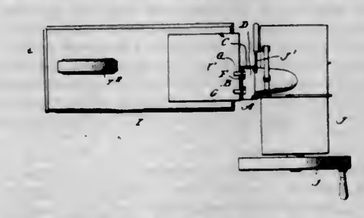


1. A valve comprising a casing having a straightway passage formed therethrough and a transversely extending chamber open at one side, of a seat bushing insertible through one end of said straightway passage and having a bearing on the opposite side of said transverse chamber, a gate valve in said chamber bearing against said seat, a seat bushing on the opposite side of said gate valve and bearing thereagainst, a bushing on which said last-mentioned seat bushing is sleeved, a packing gland thereon, and resilient means for constantly pressing upon said packing gland and last-mentioned seat bushing.

2. A valve comprising an integral casing having a straightway passage formed therethrough and a transversely extending chamber open at one end, a seat bushing insertible through one end of said straightway passage and having a bearing therein on the opposite side of said transverse chamber, a gate valve in said chamber bearing against said bushing, a seat bushing bearing against the opposite face of said valve, a bushing secured to the outer end of said straightway passage, a spring surrounding said bushing and located in an enlarged portion of said straightway passage, and a packing gland surrounding said fixed bushing against which said spring bears, the pressure on said packing gland also operating upon said last-mentioned seat bushing.

3. A valve comprising an integral casing having a straightway passage formed therethrough and a transversely extending chamber open at one side, a seat bushing insertible through one end of said straightway passage and having a bearing on the opposite side of said transverse chamber, a gate in said transverse chamber bearing against said seat bushing, a second seat bushing bearing against the opposite side of said gate, a bushing having a longitudinal slidable engagement with said second seat bushing and fixedly secured to said casing, a spring surrounding said fixed bushing, a packing gland surrounding said fixed bushing against which said spring bears, said gland having bearing against said second seat bushing by which the latter is resiliently pressed against said gate.

1,062,065. ATTACHMENT FOR WEIGHING AND SLICING MACHINES. WALTER WERTH, New York, N. Y. Filed June 16, 1909. Serial No. 502,500. (Cl. 73—3.)



1. In a device of the class described, the combination of a slicing machine, a weighing scales, a receiving hopper having members connected adjustably together whereby the operative length of said hopper may be varied in order to position said hopper in coöperative relation to the slicing machine, and means for connecting said hopper to a movable part of said weighing scales.

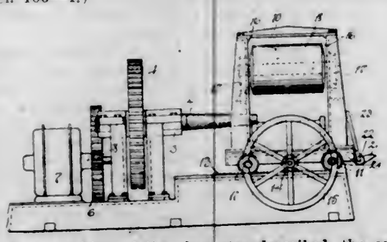
2. In a device of the class described, the combination of a slicing machine, a weighing scales, a receiving hopper having members fitted together for adjustment relative to each other, clamping means for retaining the said members in fixed relation to each other at any point of their relative adjustment, whereby the operative length of said hopper may be varied in order to position the hopper in coöperative relation to the slicing machine, and a plurality of attaching devices for fastening said hopper to a movable part of said weighing scales.

3. An attachment for weighing scales and adapted for coöperation with slicing devices, comprising a receiving and retaining hopper composed of a bottom, a side wall, and a back wall, foldably connected to each other, means for retaining said walls in their unfolded operative positions, and means for suspending the hopper from the scale, whereby the hopper is positioned below the delivery end of the slicing devices for receiving sliced material directly therefrom.

4. An attachment for weighing scales and adapted for coöperation with slicing devices, comprising a hopper having a bottom, a side wall, and a back wall, one of said walls consisting of sections adjustable relative to each other, means for holding said sections of the wall in rigid relation to each other, and means for suspending said hopper from the scales.

5. An attachment for weighing scales and adapted for coöperation with slicing devices, comprising a hopper composed of an extensible back wall having means for rigidly holding its parts in fixed relation, a side wall foldable relatively to the back wall, a foldable bottom, means for retaining said walls in their operative positions, and means for attaching the hopper to a scale.

1,062,066. BALING-MACHINE. HARRY E. WHEELER, Cuyahoga Falls, Ohio, assignor to The Turner, Vaughn & Taylor Company, Cuyahoga Falls, Ohio, a Corporation of Ohio. Filed Oct. 25, 1912. Serial No. 727,688. (Cl. 100—1.)



1. In a machine of the character described, the combination with a suitable base; of a rotatable mandrel supported at one end on said base and adapted to receive material to be baled; and a stripping frame slidably mounted on said base to move in a direction parallel with said mandrel and through a distance equal to the length of said mandrel, said frame being independent of said mandrel but adapted to engage the material thereon and strip the same entirely from off said mandrel.

2. In a machine of the class described, the combination with a suitable base; of a rotatable mandrel supported from one end horizontally above said base and adapted to receive material to be baled; a frame slidably mounted on said base to move in a direction alined with said mandrel; and a combined feed box and stripping plate mounted on said frame and adapted in the normal inoperative position of said frame to guide material to be baled to said mandrel, said combined feed box and stripping plate being also adapted, upon movement of said frame away from said mandrel, to strip such baled material therefrom.

3. In a machine of the class described, the combination with a suitable base; of a rotatable mandrel supported from one end horizontally above said base and adapted to receive material to be baled; a frame slidably mounted on said base to move in a direction alined with said mandrel; a roller adjustably and rotatably mounted on said frame in a position to coöperate with said mandrel; and a combined feed box and stripping plate mounted on said frame and adapted in the normal inoperative position of said frame to guide material to be baled to said mandrel, said combined feed box and stripping plate being also adapted, upon movement of said frame away from said mandrel, to strip such baled material therefrom.

4. In a machine of the class described, the combination with a suitable base; of a rotatable mandrel supported from one end horizontally above said base and adapted to receive material to be baled; a frame slidably mounted on said base to move in a direction alined with said mandrel; a roller adjustably and rotatably mounted on said frame in a position to coöperate with said mandrel; and a combined feed box and stripping plate mounted on said frame and adapted in the normal inoperative position of said frame to guide material to be baled to said mandrel, said combined feed box and stripping plate being also adapted upon movement of said frame away from said mandrel, to strip such baled material therefrom; and means for retaining said frame in its inoperative position.

5. In a machine of the class described, the combination with a suitable base; of a rotatable mandrel supported from one end horizontally above said base and adapted to receive material to be baled; a frame slidably mounted on said base to move in a direction alined with said mandrel; a roller adjustably and rotatably mounted on said frame in a position to coöperate with said mandrel; and a combined feed box and stripping plate mounted on said frame and adapted in the normal inoperative position of said frame to guide material to be baled to said mandrel, said combined feed box and stripping plate being also adapted, upon movement of said frame away from said mandrel, to strip such baled material therefrom; and means adapted to move said frame.

[Claims 6 to 10 not printed in the Gazette.]

1,062,067. PROCESS FOR TEMPERING COPPER. WILLIAM H. WHITE, Hazleton, Pa., assignor of one-half to Winifred B. White, Hazleton, Pa., and one-third to Jacob M. Schappert and Margaret Schappert, Dorranceton, Pa. Filed Mar. 2, 1912. Serial No. 681,307. (Cl. 148—12.)

1. The process of tempering copper comprising the following steps; heating a piece of copper to a high temperature, immersing it in a hardening bath until it blows, and on removing it therefrom, placing it upon a hard surface and striking it with another hard surface.

2. The process of tempering copper comprising the following steps; heating a piece of copper to a high temperature, immersing it in a hardening and cleansing bath until it blows and on removing it therefrom, placing it on a hard surface and striking it with another hard surface.

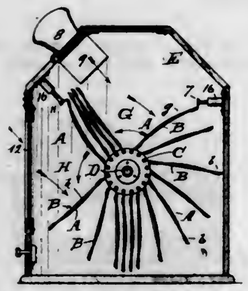
3. In a process of tempering copper, the step of immersing a piece of copper heated to a high temperature in a bath containing lime water and as soon as it blows removing it therefrom.

4. The process of tempering copper comprising the following steps; heating a piece of copper to a high temperature, immersing it in a hardening bath containing lime water, after a brief period removing it therefrom; then placing it on a hard surface and striking it a hard blow with another hard surface, both surfaces being preferably iron, steel or stone plates, the upper plate being permitted to remain on the piece of copper until it turns from red to a golden tint.

5. In a process of tempering copper, the step of immersing a piece of copper heated to a high temperature in a bath containing lime water and a cleansing ingredient of a vegetable nature and after a brief period removing it therefrom.

[Claims 6 and 7 not printed in the Gazette.]

1,062,068. CARD-EXHIBITING DEVICE. RICHARD R. WHITING, Norwood, Ohio. Filed Nov. 13, 1911. Serial No. 660,057. (Cl. 40—72.)



1. In a card-exhibiting device, the combination of a hub, means to rotate it, yielding arms carried thereon which have lateral projections on each side near each of their ends and cards having notches in opposite edges adapted to be occupied by portions of said arms, the cards being held in position against the arms by the projections mentioned which extend over and engage the opposite edges of the notches.

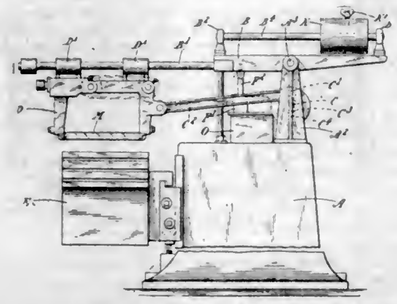
2. In card-exhibiting devices, means for holding view-cards in position having notches in opposite edges and which means consist of holding-arms provided with lateral projections on each side near each end, said projections being adapted to hold the cards against the arms by engaging the opposite edges of the notches therein.

3. In a card-exhibiting device, arms which have lateral projections near each end, in combination with cards which have notches in opposite edges and are adapted to be held in place against said arms by the projections on these latter while in engagement with the notched portions of the cards.

4. In a card-exhibiting device, the combination of view-cards having rectangular notches in opposite edges

in combination with means adapted to hold them in position by being in engagement with the opposite parallel edges of the notched portions of said cards and with part of the cards between the notches on one side thereof.

1,062,069. MACHINE-SAW. CHARLES WICKSTEED and RALPH WICKSTEED, Kettering, England. Filed Apr. 29, 1911. Serial No. 624,055. (Cl. 29—73.)



1. In mechanism for removing a machine saw from its work during the return stroke the combination of, a cylinder, a ram therein, a pump whose delivery communicates with the ram cylinder, a reservoir for fluid communicating with the suction valve of the pump, means for putting the ram cylinder into free communication with the pump, means for discharging the ram cylinder, and means for preventing creation of pressure in the pump when the ram is not to be advanced, substantially as set forth.

2. In mechanism for removing a machine saw from its work during the return stroke the combination of, a cylinder, a ram therein, a pump whose delivery communicates with the ram cylinder and that has a relief port so placed as to be covered and uncovered by the pump plunger, a reservoir for fluid communicating with the suction valve of the pump, means for putting the ram cylinder into free communication with the pump, means for discharging the ram cylinder, and means for preventing creation of pressure in the pump when the ram is not to be advanced, substantially as set forth.

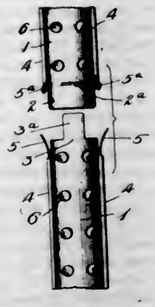
3. In mechanism for removing a machine saw from its work during the return stroke the combination of, a cylinder, a ram therein, a pump whose delivery communicates with the ram cylinder and whose plunger has an intermittent action, a reservoir for fluid communicating with the suction valve of the pump, means for putting the ram cylinder into free communication with the pump, means for discharging the ram cylinder, and means for preventing creation of pressure in the pump when the ram is not to be advanced, substantially as set forth.

4. In mechanism for removing a machine saw from its work during the return stroke the combination of, a cylinder, a ram therein, a pump whose delivery communicates with the ram cylinder, a lost motion device for the pump plunger, a reservoir for fluid communicating with the suction valve of the pump, means for putting the ram cylinder into free communication with the pump, means for discharging the ram cylinder, and means for preventing creation of pressure in the pump when the ram is not to be advanced, substantially as set forth.

5. In mechanism for removing a machine saw from its work during the return stroke the combination of, a cylinder, a ram therein, a pump whose delivery communicates with the ram cylinder and that has a relief port so situated as to be covered by the plunger approximately at the beginning of the in-stroke, means for intermittently reciprocating the plunger, a reservoir for fluid communicating with the suction valve of the pump, means for putting the ram cylinder into free communication with the pump, means for discharging the ram cylinder, and means for preventing creation of pressure in the pump when the ram is not to be advanced, substantially as set forth.

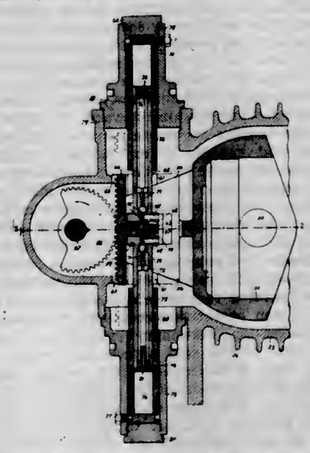
[Claims 6 to 8 not printed in the Gazette.]

1,062,070. TIRE-ARMOR. SIDNEY F. WILCOX, Garden City, N. Y. Filed Mar. 20, 1912. Serial No. 684,934. (Cl. 152—16.)



A tire armor comprising an integral annular casing of flexible sheet metal concaved to the shape of a tire tread, having overlapping ends, and having a slot formed adjacent one end thereof and a tongue projecting from the other end thereof adapted to be inserted through said slot and bent to lock the overlapping ends of the casing together, said tongue being of such length as to afford adjustment means for varying the circumferential size of the tire armor; inturned flanges formed at the lower edges of the annular casing terminating adjacent the point of greatest overlap of the ends thereof; and binding wires inclosed within and carried by said flanges and adapted to be interlocked at their abutting ends.

1,062,071. SPEED-ADJUSTING MEANS FOR ROTARY HYDRAULIC DEVICES. HARVEY D. WILLIAMS and REYNOLD JANNEY, New York, N. Y., assignors to Waterbury Tool Company, Waterbury, Conn., a Corporation of Connecticut. Filed June 3, 1911. Serial No. 631,092. (Cl. 103—44.)



1. The combination of a ported valve plate, a rotary barrel having cylinders arranged to communicate with the ports of the said plate, pistons in said cylinders, a rotary ring and means connecting it with the pistons in such a manner that rotation of the barrel and ring will be simultaneous with reciprocation of the pistons, a tilting box provided with a race on which said ring is mounted to turn, a piston operatively connected with said box to vary its inclination, stationary spaced cylinders in which the respective ends of said piston are movable, said piston having two passages leading from the respective stationary cylinders, check valves controlling said passages, an operating member having a limited movement lengthwise

of the piston to first unseat one of the check valves and then engage the piston, and means for actuating said member.

2. The combination of a ported valve plate, a rotary barrel having cylinders arranged to communicate with the ports of the said plate, pistons in said cylinders, a rotary ring and means connecting it with the pistons in such a manner that rotation of the barrel and ring will be simultaneous with reciprocation of the pistons, a tilting box provided with a race on which said ring is mounted to turn, a piston operatively connected with said box to vary its inclination, stationary spaced cylinders in which the respective ends of said piston are movable, said piston having two passages leading from the respective stationary cylinders, check valves controlling said passages, an operating member movable relatively to the piston and adapted to unseat one or the other of said check valves, and means for actuating said member.

3. The combination of a ported valve plate, a rotary barrel having cylinders arranged to communicate with the ports of the said plate, pistons in said cylinders, a rotary ring and means connecting it with the pistons in such a manner that rotation of the barrel and ring will be simultaneous with reciprocation of the pistons, a tilting box provided with a race on which said ring is mounted to turn, a piston operatively connected with said box to vary its inclination, and having a transverse aperture or socket in its central portion, stationary cylinders in which the respective ends of said piston are movable, an operating member having a portion or lug projecting into said socket and capable of an independent movement therein, and means, controlled by such independent movement, for opening an outlet from one or the other of said cylinders.

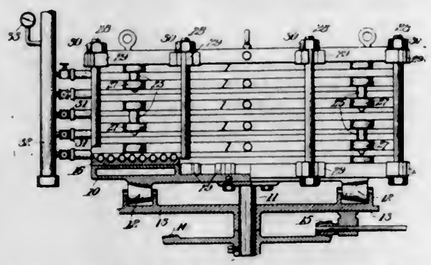
4. The combination of a ported valve plate, a rotary barrel having cylinders arranged to communicate with the ports of the said plate, pistons in said cylinders, a rotary ring and means connecting it with the pistons in such a manner that rotation of the barrel and ring will be simultaneous with reciprocation of the pistons, a tilting box provided with a race on which said ring is mounted to turn, a piston operatively connected with said box to vary its inclination and provided at its central portion with a transverse aperture or socket, and with communicating ports and also provided with passages leading from the piston ends to said ports, stationary cylinders in which the respective piston ends are movable and with which said passages communicate, check valves located in said passages and opening toward the cylinders and an operating member having a portion projecting into said socket and capable of an independent movement therein to unseat one or the other of said check valves.

5. The combination of a ported valve plate, a rotary barrel having cylinders arranged to communicate with the ports of the said plate, pistons in said cylinders, a rotary ring and means connecting it with the pistons in such a manner that rotation of the barrel and ring will be simultaneous with reciprocation of the pistons, a tilting box provided with a race on which said ring is mounted to turn, a piston operatively connected with said box to vary its inclination, stationary cylinders in which the respective ends of the said piston are movable, sleeves into which said cylinders are fitted loosely, means for securing the outer portions of the cylinders to the sleeves in such a manner as to allow some relative play, an operating member movable relatively to the piston, and means, controlled by such movement of the operating member, for opening an outlet from one stationary cylinder or the other.

[Claims 6 to 12 not printed in the Gazette.]

1,062,072. APPARATUS FOR VULCANIZING RUBBER ARTICLES AND THE LIKE. JAMES S. WILSON, Chelsea, Mass. Filed July 21, 1909. Serial No. 508,850. (Cl. 18—17.)

1. A vulcanizing apparatus comprising two mold sections, each formed upon its face with a continuous coiled channel, the channel of the two sections when the two sections are assembled, forming a continuous coiled chamber to hold the article to be vulcanized, a steam chamber or chambers formed in each of said sections, a feeding device comprising a reel and carriage, feeding rolls mounted thereon, a guide wheel mounted in said carriage engaging one of said mold sections, an arm projecting from said carriage, and a placing roll mounted in said arm.

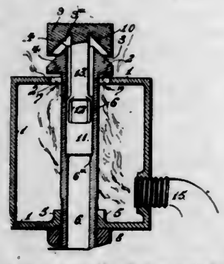


2. In a vulcanizing apparatus, the combination with a vulcanizing mold provided with a spiral channel of a feeding device comprising a reel, a carriage, feeding rolls mounted therein, and a guide wheel mounted in said carriage and engaging said channel.

3. In a vulcanizing apparatus, the combination with a vulcanizing mold provided with a spiral channel of a feeding device comprising a reel, a carriage, feeding rolls mounted therein, a guide wheel mounted in said carriage and engaging one course of said channel, and a placing roll mounted in said carriage and located adjacent a contiguous course in said channel.

4. In a vulcanizing apparatus, the combination with a vulcanizing mold, of a feeding device comprising a reel, a carriage, feeding rolls mounted therein, and a guide wheel mounted in said carriage and engaging said mold, said feeding rolls being hollow to receive talc or the like and provided with perforated peripheries whereby the unvulcanized material is prevented from adhering to said rolls.

1,062,073. CRUDE-OIL BURNER. AUGUSTUS A. WINTEMUTE, Fresno, Cal. Filed Nov. 25, 1912. Serial No. 733,464. (Cl. 158—75.)



1. A heating drum, an oil pipe passing through said drum, said oil pipe having a conical baffle at one end provided with a flat under face, said drum having an opening surrounding the pipe beneath the baffle to coöperate therewith, means for adjustably securing the oil pipe to vary the distance between said baffle and the head of the drum, a head having a stem projected into said oil pipe, said head being spaced from said baffle to allow the passage of oil.

2. In a crude oil burner a drum, an oil pipe projecting through said drum, said oil pipe having a conical baffle with a flat under face at its upper end, said drum having a steam passage coöperative with said under face, a head mounted over said baffle, and means for mounting said head on said oil pipe for movement toward and from said baffle to provide an oil discharge between said head and said baffle.

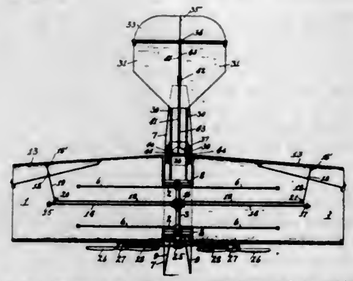
3. In a crude oil burner a drum, an oil pipe projecting through said drum, said oil pipe having a conical baffle with a flat under face at its upper end, said drum having a steam passage coöperative with said under face, a head mounted over said baffle, and means for mounting said head on said oil pipe for movement toward and from said baffle to provide an oil discharge between said head and said baffle, said last named means including a stem carried by said head of less cross sectional area than the cross sectional area of the bore of the said oil pipe, and means for holding said head with its axis coincident with the axis of said oil pipe.

4. In a crude oil burner a drum, an oil pipe projecting through said drum, said oil pipe having a conical baffle with a flat under face at its upper end, said drum having a steam passage coöperative with said under face, a head mounted over said baffle, and means for mounting said head on said oil pipe for movement toward and from said baffle to provide an oil discharge between said head and said baffle, said last named means including a stem carried by said head of less cross sectional area than the cross sectional area of the bore of the said oil pipe, and means for holding said head with its axis coincident with the axis of said oil pipe, said holding means including a hollow piston like portion secured to said stem and mounted within said oil pipe.

5. In a crude oil burner a heating drum, an oil pipe passing through said drum and having a baffle at one end, said drum having an opening surrounding said pipe beneath the baffle to coöperate therewith, a head held over said baffle and coöperative with the same, said head having a stem projecting into said oil pipe, said oil pipe having a shoulder on which said stem is adapted to rest to maintain a space between said head and said baffle through which the oil from the oil pipe may flow in a sheet like form.

[Claim 6 not printed in the Gazette.]

1,062,074. AUTOMATIC LATERAL AND LONGITUDINAL BALANCE FOR AEROPLANES. PETER ALLINIO, Rust, Cal. Filed Nov. 20, 1912. Serial No. 732,489. (Cl. 244—29.)



1. In an aeroplane, the combination of a main-plane; ailerons carried by said plane, symmetrically disposed on each side of its transverse middle; a pendulous swaying car hung from the transverse middle of the main-plane; a drum having faces of different diameters; a line connected at its extremities with opposite sides of the car and thence extending in opposite directions to and guided through the outer end portions of the main-plane and thence to and engaging the larger face of the drum with a gripping turn whereby said drum is turned by the swaying of the car; arms on the ailerons extending above and below them; a line connecting the lower ends of the arms of the opposite ailerons; and a line connected at its extremities with the upper ends of the aileron-arms and engaging at its middle the smaller face of the drum, whereby said ailerons are operated from said drum.

2. In an aeroplane, the combination of a main-plane; ailerons carried by said plane; a frame rigidly secured to and rising from said car; a pivotal connection between the tops of the two frames whereby the car and plane may have lateral relative movement; a drum mounted in the plane of said pivotal connection, said drum having faces of different diameters; a line connected with the car and engaging the larger face of the drum to turn said drum by the swaying of the car; and a line engaging the smaller face of the drum and connected with the ailerons to operate them from said drum.

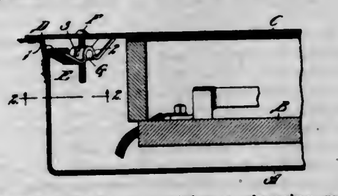
3. In an aeroplane, the combination of a main-plane; ailerons carried by said plane, symmetrically disposed on each side of its transverse middle; a frame rigidly secured to the main-plane at its transverse middle; said frame rising above and extending below the plane; a car; a frame rigidly secured to and rising from said car; a pivotal connection betwen the tops of the two frames whereby the car and plane may have lateral relative movement; a drum mounted in the plane of said pivotal connection, said drum having faces of different diameters; a line connected at its extremities with opposite sides of the car and thence extending in opposite directions to and guided through the outer end portions of the main-plane and thence to and engaging the larger face of the drum with a gripping turn whereby said drum is turned by the swaying of the car; arms on the ailerons extending above and below them; a line connecting the lower ends of the arms of the opposite ailerons; and a line connected at its extremities with the upper ends of the aileron-arms and engaging at its middle the smaller face of the drum, whereby said ailerons are operated from said drum.

4. In an aeroplane, the combination of a main-plane; a frame rigidly secured to the main-plane at its transverse middle, said frame rising above and extending below the plane; a car; a frame rigidly secured to and rising from said car; a pivotal connection between the top of the two frames whereby the car and plane may have lateral relative movement, said connection having a vertical play; a laterally moving connection between the two frames at their bases, said connection having a vertical play equivalent to the vertical play of the pivotal connection above; ailerons carried by the main-plane; a drum mounted in the plane of the pivotal connection between the two frames; a line connected with the car and engaging said drum to turn it by the movement of the car; and a second line engaging said drum and connected with the ailerons to operate them from said drum.

5. In an aeroplane, the combination of a main-plane; ailerons carried by said plane; a frame rigidly secured to and extending above and below the main-plane; a car; a frame rigidly secured to and rising from said car; a pivotal connection between the tops of the two frames; connections between the two frames for limiting the relative movement of the main-plane and car; connections from the car to the ailerons to operate the latter by the movement of the car; a motor carried by the frame of the main-plane; propellers carried by the main-plane and located at points to one side of the perpendicular plane in which the motor is located; and driving connections from the motor to the propellers.

[Claims 6 and 7 not printed in the Gazette.]

1,062,075. FASTENING DEVICE. LLOYD H. ARENS, St. Louis, Mo., assignor to Frank Adam Electric Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 22, 1912. Serial No. 727,116. (Cl. 70—3.)



1. A fastening device comprising a clamping member adapted to engage a movable part and a stationary part

of the structure, an adjustable actuating member passing through one part of the structure, and a bearing member coöperating with said actuating member and permanently connected to said clamping member in such a manner that said clamping member can assume an acute angular position with relation to said actuating member.

2. A fastening device comprising a clamping member consisting of a strip of metal bent intermediate its ends to form a curved portion, a bearing member permanently arranged in the curved portion of said clamping member, and an actuating device passing through an elongated slot in the curved portion of said clamping member and through an opening in said bearing member.

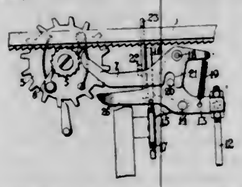
3. A fastening device consisting of a screw-threaded actuating member, a bearing member mounted on said actuating member, and a clamping member rockably mounted on said bearing member and consisting of a strip of metal bent intermediate its ends so as to form a curved part which partially surrounds said bearing member.

4. A fastening device comprising a screw-threaded actuating member provided with a head, a bearing member mounted on said actuating member, a clamping member rockably mounted on said bearing member and having laterally projecting portions which are bent upwardly or toward the head of said actuating member.

5. A fastening device comprising an adjustable actuating member and a clamping member joined together by a universal connection which permits the clamping member to rotate and also rock transversely of the actuating member.

[Claim 6 not printed in the Gazette.]

1,062,076. TYPE-WRITING MACHINE. WALTER E. BARNARD, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed May 3, 1910. Serial No. 559,153. (Cl. 197—91.)



1. In a typewriting machine, a power-driven carriage having an escapement rack, a back-spacing dog normally out of engagement with the rack, a support on which the dog is pivoted, said support being also pivotally mounted in the machine, interlocking means on the dog and its support whereby the pivotal movement of the dog on its support is limited in both directions, a spring tending to turn the dog on its pivot into engagement with the rack, but normally restrained from so doing by said interlocking means in one direction, means for moving the support on its pivot to bring the dog to the rack without movement of the dog on its own pivot, and for thereafter moving the dog with the rack to back-space the latter, the rack acting during the back-spacing movement to move the dog on its pivot against the action of said spring until such pivotal movement of the dog is stopped by the engagement of the interlocking means in the other direction.

2. In a typewriting machine, a power-driven carriage having an escapement rack, a back-spacing dog normally out of engagement with the rack, a support on which the dog is pivoted, said support being also pivotally mounted in the machine, interlocking means on the dog and its support whereby the pivotal movement of the dog on its support is limited in both directions, a spring tending to turn the dog on its pivot into engagement with the rack, but normally restrained from so doing by said interlocking means in one direction, means for moving the support on its pivot to bring the dog to the rack without movement of the dog on its own pivot, and for thereafter moving the dog with the rack to back-space the latter, the rack acting during the back-spacing movement to move the dog on its pivot against the action of said spring until such pivotal movement of the dog is stopped by the engagement of the interlocking means in the other direction, the position of the interlocking means in the latter direction with respect to the position of the pivots of the dog and its support, and with respect to the rack, being such that further movement of the support and overthrow of the rack is impossible.

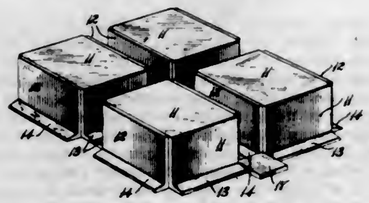
3. In a typewriting machine, a power-driven carriage having an escapement rack, a back-spacing dog normally out of engagement with the rack, a support on which the dog is pivoted, said support being also pivotally-mounted in the machine, a stop on the dog support to limit the movement of the dog on its pivot toward the rack, a spring tending to turn the dog on its pivot toward the rack, but normally prevented from so doing by the stop, and means for moving the support on its pivot to bring the dog to the rack without movement of the dog on its own pivot, and for thereafter moving the dog with the rack to back-spacing position, the dog, during back-spacing movement, accommodating itself to the angular movement of the support by reason of the aforesaid spring.

4. In a typewriting machine, a power-driven carriage having an escapement rack, a back spacing dog, a support on which the dog is pivoted, said support being also pivoted in the machine and being movable on its pivot with the dog to back-space the rack, resilient means controlling the movement of the dog on its pivot for keeping the dog from binding with the rack or becoming disengaged therefrom during the back-spacing movement, the dog being in the form of a hook which extends from its pivot in the direction of forward feed of the rack and exerts a pull on the latter in the back-spacing operation.

5. In a typewriting machine, a power-driven carriage having an escapement rack, a back-spacing dog, a support on which the dog is pivoted, said support being also pivoted in the machine and being movable on its pivot with the dog to back-space the rack, resilient means controlling the movement of the dog on its pivot for keeping the dog from binding with the rack or becoming disengaged therefrom during the back-spacing movement, the dog being in the form of a hook which extends from its pivot in the direction of forward feed of the rack and exerts a pull on the latter in the back-spacing operation, and the pivot of the dog lying substantially in a perpendicular line from the pivot of the support to the rack, whereby the angular movement of the pivot of the dog with respect to the rack is slight.

[Claims 6 to 9 not printed in the Gazette.]

1,062,077. HOLLOW TILE. WILLIAM H. BURK, St. Louis, Mo. Filed Jan. 25, 1911. Serial No. 604,687. (Cl. 72—66.)



1. A hollow tile unit composed of two tile sections comprising side portions and a connecting web portion, the distance between the opposite sides of each section being as great as the length of the sides and web of the other section, said sections being arranged with the sides of each embracing the web of the other, whereby one section constitutes the bottom and two sides of the unit and the other section constitutes the top and the two remaining sides of said unit.

2. A hollow tile unit composed of two tile channel sections of equal height, one of said sections being arranged to constitute the bottom and two sides of the unit and the other being arranged to constitute the top and two remaining sides of the unit, both the length and the distance between the opposite sides of the top section being equal to each other and also being equal to the length and the distance between the opposite sides of the bottom section, said sections interlocking with their sides straddling the top and bottom of the unit.

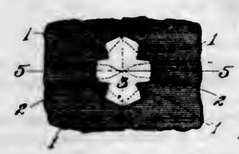
3. An open end box tile having its side walls scored midway between its top and bottom, the clear distance between said side walls being as great as the length of the tile, and a bridge wall connecting said side walls at points adjacent to said scores.

4. An open end box tile having its side walls scored midway between its top and bottom, the clear distance between said side walls being as great as the length of the tile, a bridge wall connecting said side walls at points adjacent to said scores, and laterally extending flanges on said sides along the lower edges thereof and immediately above said scores.

5. A hollow unit composed of two tiles of equal height arranged with their axes transverse to each other, each tile comprising a web and two oppositely arranged side walls, the side walls of each tile being spaced apart a distance equal to the length of the other tile and arranged to embrace the web of the other tile.

[Claims 6 to 8 not printed in the Gazette.]

1,062,078. BELT-FASTENER. CHARLES E. COE, St. Louis, Mo., assignor to William F. Morrison, St. Louis, Mo. Filed Feb. 20, 1911. Serial No. 609,664. (Cl. 24—36.)

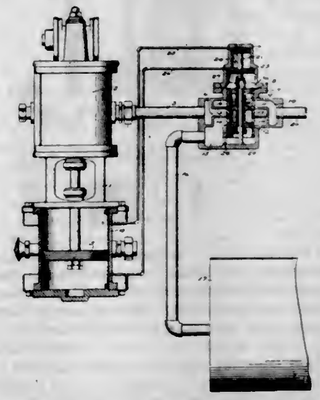


As a new article of manufacture, a belt fastener, constructed of a single diamond-shaped piece of sheet metal forming a substantially flat body portion, having at opposite ends three teeth defined by slits in the body portion and bent at right angles to the body of the fastener, the outermost teeth being bent on lines nearer to the center of the fastener than the bending lines of the innermost teeth, the bending lines of the innermost teeth being at right angles to the bodies of the teeth, and the bending lines of the outermost teeth being at an angle relative to the bending lines of the innermost teeth, the margins of the outermost teeth being continuous straight lines from their bases to their points, the outermost of said margins being perpendicular to the body of the fastener, the innermost of said margins being at angles relative to the outermost margins, the margins of the innermost teeth tapering from their bases to points adjacent the free ends and from these points converging to the free ends, said teeth and said flat body portion utilizing all of the pieces of sheet metal without waste.

1,062,079. EXHAUST-STEAM-CONTROLLING APPARATUS. FRANK F. COGGIN, New York, N. Y., assignor to The Economy Car Heating Company, New York, N. Y., a Corporation of Maine. Filed Sept. 13, 1909. Serial No. 517,416. (Cl. 230—24.)

1. In exhaust steam controlling apparatus for steam driven pumps, the combination with the exhaust steam supply conduit, a storage chamber, and a free exhaust outlet, of means operated by the pressure from the pump cylinder to open communication from the exhaust conduit through the free exhaust outlet during the latter part of the stroke of the pump.

2. In exhaust steam controlling apparatus for steam driven pumps, the combination with the exhaust steam supply conduit, a storage chamber, and a free exhaust outlet, of a valve mechanism subject to pressure from the pump cylinder, and operating to close communication from the exhaust conduit through the free exhaust outlet and to establish communication from the exhaust conduit to the storage chamber during the first part of the stroke of the pump and to open communication from the exhaust conduit through the free exhaust outlet during the latter part of the stroke.



3. In exhaust steam controlling apparatus for steam driven pumps, the combination with the exhaust steam supply conduit, a storage chamber, and a free exhaust outlet, the exhaust conduit being connected to the storage chamber and to the free exhaust outlet, of means governed by the pressure in the pump cylinder for controlling the communication from the exhaust conduit through the free exhaust outlet.

4. In exhaust steam controlling apparatus for steam driven pumps, the combination with the exhaust steam supply conduit, a storage chamber, and a free exhaust outlet, the exhaust conduit being connected to the storage chamber and to the free exhaust outlet, of valve mechanism operated by the pressure in the pump cylinder for controlling the communication from the exhaust conduit through the free exhaust outlet.

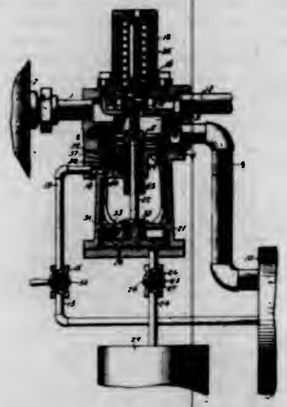
5. In exhaust steam controlling apparatus for steam driven pumps, the combination with the exhaust steam supply conduit, a storage chamber, and a free exhaust outlet, of valve mechanism adapted to normally close communication from the exhaust conduit through the free exhaust outlet and establish communication from the exhaust conduit to the storage chamber, and operated by a predetermined degree of pressure in the pump cylinder to open communication from the exhaust conduit through the free exhaust outlet.

[Claims 6 to 9 not printed in the Gazette.]

1,062,080. MECHANISM FOR CONTROLLING THE FLOW OF EXHAUST-STEAM. FRANK F. COGGIN, Matawan, N. J., assignor to The Economy Car Heating Company, New York, N. Y., a Corporation of Maine. Filed Nov. 15, 1910. Serial No. 592,492. (Cl. 237—12.)

1. In an exhaust steam apparatus, the combination with a source of exhaust steam having two outlet passages, and a steam receptacle or reservoir, said passages communicating respectively with the normal exhaust outlet and with said receptacle, of a piston device for controlling said passages and exposed on one side to the pressure of exhaust steam from said source tending to operate said device to close the passage to the normal exhaust, means serving to permit communication from the receptacle to the opposite side of said piston, and means governed by the movement of said piston device for controlling com-

munication from the reservoir to the last mentioned side of said piston device.



2. In an exhaust steam apparatus, the combination with a source of exhaust steam having two outlet passages, and a reservoir, said passages communicating respectively with the normal exhaust outlet and with said reservoir, of a piston device for controlling said passages and exposed on one side to the pressure of exhaust steam, means of communication from the reservoir to the opposite side of said piston device, and a valve governed by the movement of the piston for controlling said communication.

3. In an exhaust steam apparatus, the combination with a source of exhaust steam having two outlet passages, and a steam receptacle or reservoir, said passages communicating respectively with the normal exhaust outlet and with said receptacle, of a piston device for controlling said passages and exposed on one side to the pressure of exhaust steam, means of communication from the receptacle to the opposite side of said piston device when the device is in an extreme position, and means operating to cut off communication from the receptacle to said opposite side of the piston as the same moves from said extreme position to its opposite position.

4. A steam controlling device comprising a casing having an inlet passage, a normal exhaust outlet, and another outlet for diverting a portion of the steam, a piston device for controlling the normal exhaust outlet and exposed on one side to the inlet steam pressure, said casing also having a return passage for admitting the diverted steam to the space at the opposite side of the piston, and means governed by the movement of the piston for controlling communication through said return passage.

5. In a steam controlling apparatus, the combination with a casing and a piston therein forming a chamber on each side of the piston, of a reservoir, said casing having an inlet passage communicating with one of said chambers, a normal exhaust outlet, and another outlet passage leading to the reservoir, a return conduit from the reservoir to the chamber at the other side of the piston, and means governed by the movement of the piston for controlling the normal exhaust outlet and also the return conduit.

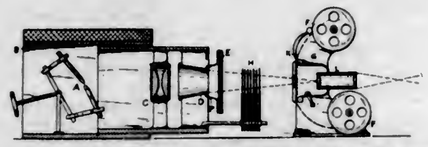
[Claims 6 and 7 not printed in the Gazette.]

1,062,081. PICTURE-PROJECTING APPARATUS. CHARLES H. CONVERSE and WILLIAM H. C. RIDER, Chicago, Ill. Filed Mar. 14, 1911. Serial No. 614,388. (Cl. 88—17.)

1. In a picture projecting apparatus, the combination with the lamp, the condensing lens, and the film, of a heat arresting celluloid screen interposed between the lens and the film.

2. In a picture projecting apparatus, the combination with the lamp, the condensing lens, and the film, of a heat arresting celluloid sheet coated with a gelatinous solution interposed between the lens and the film.

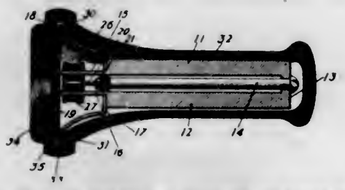
3. In a picture projecting apparatus, the combination with a lamp, and a film of celluloid material, of a heat arresting screen of celluloid material interposed between the lamp and the film.



4. In a picture projecting apparatus, the combination with a lamp, and a film of inflammable material, of a heat resisting screen composed of like material and interposed between the lamp and the film.

5. In a picture projecting apparatus, the combination with a lamp, and a film, of a heat arresting screen composed of a plurality of sheets of celluloid material spaced apart, and interposed between the lamp and the film.

1,062,082. TELEPHONE-RECEIVER. EDWARD B. CRAFT, Hackensack, N. J., and JOHN N. REYNOLDS, Greenwich, Conn., assignors to Western Electric Company, New York, N. Y., a Corporation of Illinois. Filed Jan. 2, 1912. Serial No. 668,829. (Cl. 179—117.)



1. In a magnet system for telephone receivers, a permanently magnetized steel bar and a soft iron pole-piece welded thereto.

2. In a magnet system for telephone receivers, a soft iron pole-piece and a hardened steel bar welded together end to end.

3. In a telephone receiver, in combination a magnet system comprising two straight bar sections, a heel piece therefor welded thereto at one end, a cup having slots therein and abutting against the bar sections, pole pieces welded to the bar sections at the end remote from the heel piece and passing through the slots in the cup, and means passing through the heel piece for clamping the cup to the bar sections.

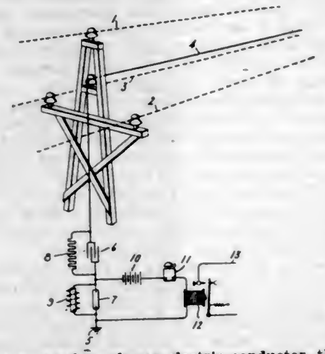
4. In a telephone receiver, the combination of a magnet comprising bars and a heel piece welded together, a cup, pole pieces welded to said bars and extending through perforations in said cup, non-magnetic clamping means for clamping said cup to said magnet bars on said pole pieces, and a diaphragm clamped to said cup in position to be acted upon by said pole pieces.

5. In a telephone receiver, in combination a magnet system comprising bars and a heel piece welded together, pole pieces for said bars welded thereto at the end remote from the heel piece, a cup having perforations fitting over said pole pieces and abutting against the magnet bars, a threaded bolt passing through a perforation in the heel piece and through a threaded hole in the cup, whereby the cup is clamped to the magnet system and in fixed relation thereto.

[Claim 6 not printed in the Gazette.]

1,062,083. STORM AND SURGE ALARM FOR TRANSMISSION-LINES. ELMER E. F. CREIGHTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 2, 1908. Serial No. 451,299. (Cl. 177—311.)

1. In a surge alarm for an electric conductor, the combination of a coherer, means connected in shunt to said coherer to render it insensible to oscillations of the normal frequency of the current in said conductor but responsive to oscillations of abnormally high frequency, means for impressing upon said coherer oscillations of a frequency dependent upon the oscillations on said conductor, and an indicating device responsive to current flow on said coherer.



2. In a surge alarm for an electric conductor, the combination of a coherer, an indicating device responsive to flow of current through said coherer, and a wire in inductive relation to said conductor and in operative relation to said coherer for impressing upon said coherer the potential induced in said wire by potential variations on said conductor.

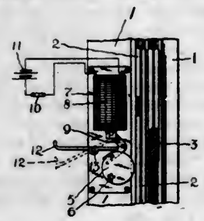
3. In a surge alarm for transmission lines, the combination of a coherer, indicating means responsive to flow of current through said coherer, a condenser connected in series with said coherer, and an alarm wire mounted in inductive relation to said transmission line and connected to said condenser to impress upon said condenser and said coherer the potential induced in said alarm wire by variations of potential on said transmission line.

4. In a surge alarm for an electric conductor, the combination with a coherer responsive to oscillations on said conductor, indicating means responsive to flow of current through said coherer, and means for rendering said coherer insensible to oscillations of normal frequency on said conductor and responsive to oscillations of abnormally high frequency.

5. In a surge alarm for an electric conductor, the combination with a coherer, means for subjecting said coherer to oscillations dependent upon the oscillations on said conductor, an indicating device responsive to flow of current through said coherer, and an inductance in shunt to said coherer proportioned to render said coherer insensible to oscillations of the normal frequency derived from the conductor but responsive to oscillations of abnormally high frequency.

[Claims 6 and 7 not printed in the Gazette.]

1,062,084. ELECTRICALLY-OPERATED SASH-HOLDER. HAROLD C. DESBECKER, Schenectady, N. Y., assignor to Herman W. Block, New York, N. Y. Filed Mar. 9, 1910. Serial No. 548,134. (Cl. 16—19.)



1. A window controlling apparatus comprising a cam adapted to engage a window and hold it in any position throughout its travel, an electro-magnet normally inactive and connected with said cam and a circuit closer connected in the circuit of said electro-magnet, whereby the same may be energized to retain said holding means free of the window until the window has traveled the desired extent.

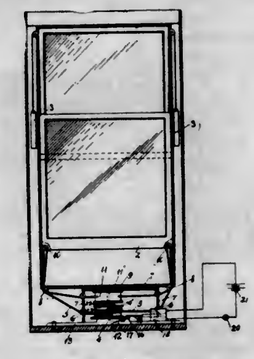
2. A window controlling device comprising a cam adapted to hold a window in any position throughout its travel, an electro-magnet adapted to rotate said cam to free the window, means pivotally connecting the movable part of said magnet and said cam and a circuit controller connected in the circuit of said electro-magnet whereby the same may be actuated to hold said cam free of the window.

3. A window controlling apparatus comprising a cam adapted to engage a window and hold it in any position throughout its travel, an electro-magnet having a movable core and an elbow lever mounted on a fixed pivot and connecting said magnet and said cam, whereby the actuation of said core will rotate said cam and free the window.

4. A window controlling device comprising a cam adapted to hold a window in any position throughout its travel, an electro-magnet adapted to rotate said cam to free the window, means pivotally connecting said magnet and said cam and a circuit closer connected in the circuit of said electro-magnet whereby the same may be energized to hold said cam free of the window.

5. A window controlling device comprising a cam adapted to hold a window in any position throughout its travel and an electro-magnetic device pivotally connected with said cam and adapted, when actuated, to rotate said cam to free the window.

1,062,085. WINDOW-OPERATING APPARATUS. HAROLD C. DESBECKER, Schenectady, N. Y., assignor to Herman W. Block, New York, N. Y. Filed Mar. 30, 1909, Serial No. 486,703. Renewed Oct. 5, 1911. Serial No. 652,964. (Cl. 16—148.)



1. The combination of a window adapted to be operated in one direction by hand, a spring connected with the window and adapted to operate the same in the reverse direction, a detent wheel for holding the spring out of action at any one of the positions at which the window may be placed by hand, a spring actuated catch adapted to normally engage the detent wheel, an electromagnet normally inactive and adapted to withdraw the catch and a circuit closer connected to the circuit of said electromagnet whereby the catch may be withheld until the window has traveled under the influence of the spring to the desired extent.

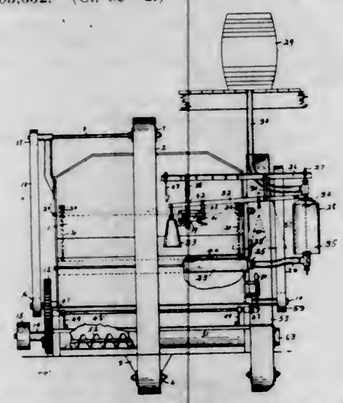
2. The combination of a window having means whereby the same may be held at any desired point against the action of gravity, a spring connected with the window and adapted to close the same against the action of the force tending to open it, detent mechanism for holding the spring out of action at any point at which the window may be placed, an electromagnet for releasing said detent mechanism and a circuit closer connected to the circuit of said electromagnet.

3. The combination of a window having a suitable counter-balance whereby the same may be held at any desired point against the action of gravity, a spring connected with the window and adapted to close the same against the action of the counter-balance, a detent wheel for holding the spring out of action, a spring actuated catch adapted to normally engage the detent wheel, an electromagnet for withdrawing the catch and a circuit closer connected to the circuit of said electromagnet.

4. The combination with a window and a power actuated drum connected with the window, cords connected with the window and secured at one end to said drum and a supplemental spring actuated drum to which the other ends of said cords are secured whereby the slack of said cords is taken up on said supplemental drum when the window is operated by hand.

5. The combination, substantially as described, of a window having counter-balance weights, a spring actuated drum upon which are wound cords connected to the window, a detent-wheel connected to said drum, a catch for holding the spring out of action and adapted to allow free rotation of the drum to any desired point when the window is moved by hand so as to wind up the spring, an electromagnet for actuating said catch and a circuit closer connected with the circuit of the magnet whereby the same may be energized to withhold the catch from the detent wheel until the window has traveled under the influence of the spring to the desired extent.

1,062,086. FEED-MIXER. ELBERT S. DIXON and HENRY E. WERNER, Houston, Tex. Filed June 24, 1912. Serial No. 705,652. (Cl. 99—2.)



1. A mixing device composed of a measuring chamber and a mixing chamber arranged therebelow, a conveyer arranged to discharge the contents thereof into said measuring chamber, a means for discharging the contents of the measuring chamber into the mixing chamber, a conveyer arranged adjacent to the mixing chamber and provided to receive the contents of said chamber and a gate controlling the passage of the contents of said mixing chamber to said conveyer.

2. A mixing device including a measuring chamber and a mixing chamber therebeneath, a suitable agitator arranged in said mixing chamber, a means controlling the passage of the contents of the measuring chamber to the mixing chamber, a conveyer arranged adjacent to the mixing chamber and provided to receive the contents thereof, a gate controlling the passage of the contents of the mixing chamber to said conveyer, means for operating said agitator, means for operating said conveyer.

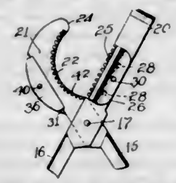
3. A mixing device including a suitable measuring chamber and a conveyer discharging therein, a mixing chamber arranged beneath said measuring chamber and provided with a discharge outlet therefrom, a gate arranged at the bottom of said measuring chamber for controlling the passage of the contents of the former chamber to the latter, a manual mechanism for operating said trap door, an agitator within said mixing chamber, a conveyer arranged adjacent to the mixing chamber and so disposed as to receive the contents of said mixing chamber passing through the outlet passageway thereof, means for operating said agitator and means for operating said conveyer.

4. A mixing device including a measuring chamber and a suitable elevating mechanism discharging therein, a gate arranged in the bottom of said measuring chamber and a mechanism for opening and closing the same, a mixing chamber arranged beneath said measuring chamber and having an outlet passageway therein, a gate controlling said passageway and means for opening and closing the same, a conveyer adjacent to said mixing chamber so disposed as to receive the contents discharged through said outlet passageway, an agitator within said mixing chamber, means for operating said agitator, means for operating said conveyer and a rotatable receptacle arranged in the mixing chamber for containing a fluid ingredient, said receptacle having orifices in one side thereof for the discharge of the contents of said receptacle.

5. A mixing device composed of a suitable casing having an upper and lower compartment and provided with a suitable passage way from the former to the latter, a gate controlling said passageway and a manual mechanism for opening and closing the same, an agitator in the lower compartment and means for operating the same, said lower compartment being provided with a discharge outlet and a slidable gate controlling said outlet, a mechanism for operating said gate, a conveyer adjacent to said lower compartment, positioned so as to receive the contents thereof discharged through said discharge opening, an elevator arranged to receive the contents of said conveyer, said elevator having a plurality of discharges and a means controlling the passage of the elevator contents through said discharges.

[Claims 6 to 11 not printed in the Gazette.]

1,062,087. EMASCULATOR. ERNEST D. DOUGLASS, Chicago, Ill., assignor to Frank S. Betz, Hammond, Ind. Filed Apr. 16, 1910. Serial No. 555,870. (Cl. 128—27.)



1. An instrument of the class described, comprising a pair of levers, the shorter arms of which have coacting cutting edges, one of said arms comprising an upper member and a lower member, said upper member being serrated transversely of said arm, a longitudinally serrated jaw removably mounted on said upper member, a transversely serrated jaw removably mounted on the other arm, and a longitudinally serrated jaw removably mounted upon said transversely serrated jaw.

2. An emasculator comprising in combination a cutting jaw a sustaining jaw, provided with a knife edge, the sustaining jaw being provided with a slot through which to project the cutting jaw, both of said jaws being provided with transverse serrations and longitudinal serrations respectively opposing each other, the longitudinal serrations in one jaw being in a plane outwardly beyond the adjacent transverse serrations of that jaw, and in the other jaw in a plane inwardly beyond the transverse serrations thereof, whereby a cutting action by, and between, said serrations is prevented and a crushing action is exclusively maintained between the jaws.

1,062,088. SOLDERING-TOOL. NATHAN I. DRYFOOS, Cleveland, Ohio. Filed Sept. 27, 1911. Serial No. 651,608. (Cl. 113—109.)

1. A soldering tool, comprising a head provided with a chamber having an outlet, and with a tube opening into the chamber; a valve controlling said outlet; and a second tube reciprocable in the first tube and extending within said chamber and formed of good heat conducting material from its inner end to adjacent the end of said head, the second tube forming a longitudinal channel for the passage of solder.



2. A soldering tool, comprising a head provided with a chamber having an outlet, and with a tube opening into the chamber; a second tube reciprocable in the first tube, said second tube forming a longitudinal channel for the passage of solder; and a valve reciprocable with said second tube and controlling the said outlet.

3. A soldering tool, comprising a head provided with a chamber having an outlet, and with a tube opening into the chamber, said tube having one or more longitudinally extending openings; a second tube reciprocable in the first tube, said second tube forming a longitudinal channel for the passage of solder; and a valve reciprocable with said second tube and controlling said outlet.

4. A soldering tool, comprising a head provided with a chamber having an outlet, and with a tube opening into the chamber, said tube having one or more longitudinally extending openings; a second tube reciprocable in the first tube, said second tube forming a longitudinal channel for the passage of solder, and having a longitudinal opening registering with one of the openings in the first tube; and a valve reciprocable with said second tube and controlling said outlet.

5. A soldering tool, comprising a head provided with a chamber having an outlet, and with a tubular handle opening into the chamber, said handle having one or more longitudinally extending openings; a tube reciprocable in said handle and extending into said chamber, said tube having an opening extending longitudinally from a point outside of the head toward the outer end of the handle and registering with one of the openings in the handle; and a valve secured to said tube and controlling said outlet.

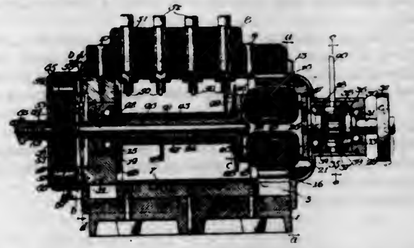
[Claims 6 and 7 not printed in the Gazette.]

1,062,089. MAGNETO-GENERATOR. LOUIS J. FLINT, Chicago, Ill., assignor to Grip Nut Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 13, 1910. Serial No. 581,915. (Cl. 123—149.)

1. In a machine of the character described the combination with an electrical generator, a casing therefor, a core fastened to said casing and a condenser wound about said core.

2. A device of the character described, an armature, permanent field magnets for said armature, and spark distributing apparatus mounted on the same shaft with the armature and arranged within and lengthwise of the field magnets.

3. A device of the character described having an armature, a spark distributing device mounted on the same shaft with and arranged to one side of said armature, and field magnets for said armature arranged about said spark distributing device.

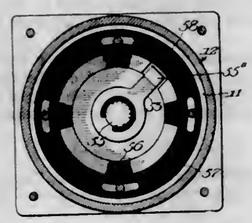


4. A device of the character described having an armature, a spark distributing device movable with and arranged to one side of said armature, field magnets for said armature arranged about said spark distributing device, a shaft on which said armature and spark distributing device are mounted, and a heel piece for said magnets into which said shaft projects.

5. A device of the character described having an armature, a spark distributing device movable with and arranged to one side of said armature, field magnets for said armature arranged about said spark distributing device, a shaft on which said armature and spark distributing device are mounted and a conductor within said shaft to which the armature windings are connected.

[Claims 6 to 32 not printed in the Gazette.]

1,062,090. INTERRUPTER. LOUIS J. FLINT, Chicago, Ill., assignor to Grip Nut Company, Chicago, Ill., a Corporation of Illinois. Original application filed Sept. 13, 1910, Serial No. 581,915. Divided and this application filed May 18, 1911. Serial No. 627,957. (Cl. 123—166.)



1. An interrupter comprising a rotary shaft, a pair of contact springs carried by and rotating with said shaft, and a ring supported in position surrounding said shaft, but with space between the ring and shaft, in which space said contact springs rotate, said ring and springs being provided with coöperating devices by which the springs are caused to make and break contact with one another.

2. An interrupter comprising a rotary shaft, a pair of springs mounted upon and rotating with said shaft, a ring supported in position surrounding the shaft, but with space between the ring and shaft, in which space said springs revolve, said ring being provided with radially extending projections arranged to coöperate with said springs to cause contact and separation of the same.

3. The combination of a rotary shaft, a pair of springs mounted upon and rotating with said shaft, a ring surrounding said shaft with space between said ring and said shaft, said ring being provided with inwardly extending radially disposed projections arranged in the path of travel of the outer ends of said springs to act upon the same.

4. The combination with a rotary shaft of a pair of contact members mounted upon and rotating with said shaft, a ring surrounding said shaft but with space between said ring and shaft, in which space said contact

members revolve, said ring and contact members being provided with coöperating instrumentalities to bring about a make and break action of said contact members, and means whereby said ring may be given a rotary adjustment.

5. The combination of a rotary shaft, a pair of spring contact members mounted upon and rotating with said shaft, an insulating ring surrounding said shaft, but with space between said ring and said shaft, in which space said contact members revolve, said ring being provided with radially extending projections adapted to bring about a make and break action on the part of said contact members, said ring being also provided with segmental slots and pins extended through said slots.

[Claims 6 to 9 not printed in the Gazette.]

1,062,091. WATERPROOFING CONSTRUCTION FOR BUILDING-WALLS. BENJAMIN FOSTER, Philadelphia, Pa. Filed Nov. 5, 1912. Serial No. 729,577. (Cl. 72—127.)



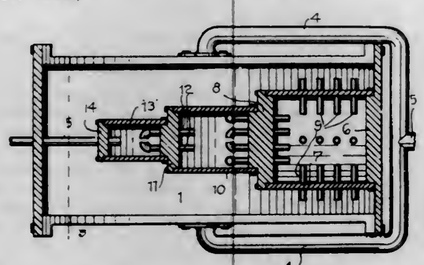
1. A protector for water-proofing sheets comprising a sheet of water-proofing material, a re-inforcing sheet on said protector, and said re-inforcing sheet and protector adapted to be folded and inclose the ends of water-proofing sheets, substantially as described.

2. A protector for water-proofing sheets comprising a sheet of water-proofing material adapted to be folded upon the ends of water-proofing sheets, and pads secured to said protector and located at opposite sides of the water-proofing sheets, substantially as described.

3. A protector for water-proofing sheets comprising a sheet of water-proofing material, a reinforcing backing secured to said sheet, and pads secured to said sheet spaced apart and spaced from the ends of the sheet, substantially as described.

4. In combination with a footing, a plurality of sheets of water-proofing material located on the footing, a wall on said sheets, and a protector folded upon itself and inclosing the outer ends of said sheets, substantially as described.

1,062,092. MUFFLER. ORVILLE Z. FRAZIER, Elkhart, Ind. Filed Jan. 31, 1913. Serial No. 745,458. (Cl. 121—116.)



1. A muffler comprising a main casing, a plurality of chambers arranged therein, said chambers being graduated in size and having the upper edges thereof in the same horizontal plane as the upper edges of the side and end walls of said main casing, communicating means between said chambers and the main casing, means to supply exhaust gases to the smallest chamber, and discharge pipes leading from said main casing.

2. A muffler comprising a main casing, a plurality of graduating chambers arranged therein, said chambers being increased in size downwardly, the one end wall of said casing forming the one end wall of the largest of said chambers, and the one end wall of each of said chambers forming an end wall for each successive chamber, communicating means between said chambers and said main casing, means to supply exhaust gases to the smallest of said chambers, and discharge pipes leading from said main casing.

1,062,093. PROCESS OF TREATING TOBACCO. DEMETRIUS A. GALLAGHER, York, Pa. Filed Dec. 12, 1912. Serial No. 736,433. (Cl. 131—6.)

1. The process of treating tobacco to free it of impurities and improve its flavor and burning qualities which consists in subjecting the tobacco to a solution having hot water as a base, at a temperature of 105° to 110° F., then placing the tobacco upon screens or racks and gradually raising the temperature of the surrounding air to approximately 115° F., and maintaining this temperature until all dripping ceases, then quickly raising the temperature to 135° to 160° F. and sustaining this temperature until the tobacco is thoroughly hot and limp and its cells open, then shaking the tobacco to free it from impurities, and finally sealing the cells by suddenly cooling it.

2. The process of treating tobacco to free it of impurities and improve its flavor and burning qualities which consists in subjecting the tobacco to a solution having hot water as a base, at a temperature of 105° to 110° F., then placing the tobacco upon screens or racks and gradually raising the temperature of the surrounding air to approximately 115° F., and maintaining this temperature until all dripping ceases, then quickly raising the temperature to 135° to 160° F. and sustaining this temperature until the tobacco is thoroughly hot and limp and its cells open, and finally sealing the cells by suddenly cooling it.

1,062,094. ROTARY GRINDING-MACHINE. WILLIAM GOWAN, Johannesburg, Transvaal. Filed Jan. 23, 1912. Serial No. 672,957. (Cl. 83—9.)



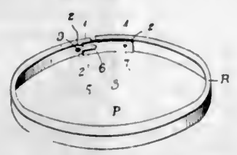
1. A rotary grinding machine comprising a single barrel or shell of elliptical shape in cross-section, the barrel or shell having a continuous and uniform twist from end to end, as set forth.

2. A rotary grinding machine comprising a barrel or shell of elliptical shape in cross-section, the major axis of the ellipse at one end being at right angles to the major axis of the ellipse at the other end and tapered from end to end.

3. A rotary grinding machine comprising a barrel or shell, end covers therefor, means for supporting said barrel or shell, means for rotating the same, means for introducing the material into the barrel or shell, the barrel or shell being of elliptical shape in cross-section from end to end, the major axis of the larger ellipse representing the receiving end of the barrel or shell being at right angles to the major axis of the smaller ellipse representing the delivery end of the barrel or shell, and means for withdrawing the ground product from the delivery end of the barrel or shell.

4. A rotary grinding machine comprising a barrel or shell, end covers therefor, means for supporting said barrel or shell, means for rotating the same, means for introducing the material into the barrel or shell, the barrel or shell being of elliptical shape in cross-section from end to end, the major axis of the larger ellipse representing the receiving end of the barrel or shell being at right angles to the major axis of the smaller ellipse representing the delivery end of the barrel or shell, and a pipe for withdrawing the ground product, said pipe projecting through the delivery end of the shell or barrel and being carried up to a suitable height and fitted with a box or launder, as set forth.

1,062,095. PISTON PACKING-RING. NORBERT DANES HAMEL, Gardner, Mass. Filed Dec. 27, 1912. Serial No. 738,948. (Cl. 121—108.)

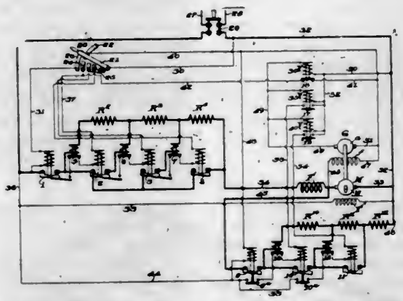


1. The combination with a split piston ring whose ends are recessed in both edges; of a reinforcing member channeled at one end with the base of the channel fitting inside one ring-end and the flanges thereof fitting in its recesses and adapted to slide into the recesses of the other ring-end, the base of said channel being longitudinally slotted, and a screw inside the other ring-end engaging said slot.

2. The combination with a split piston ring whose ends are cut off oblique; of a channeled member secured inside one end of the ring and projecting beyond the extremity thereof, the base of this member being continued beyond its sides in a tongue having a deep notch in its extremity, and a device inside the other end of the ring with which said notch engages.

3. The combination with a split piston ring whose ends are cut off on an irregular line and each of which is recessed in both edges; of a re-inforcing member channeled at one end with the base of the channel fitting inside one ring-end and the flanges thereof fitting in its recesses and adapted to slide into the recesses of the other ring-end, the base of said channel being continued beyond its flanges and longitudinally slotted, and a stud inside the other ring-end engaging said slot.

1,062,096. CONTROLLER FOR ELECTRIC MOTORS. CLARK T. HENDERSON, Milwaukee, Wis., assignor to the Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed July 10, 1909. Serial No. 506,960. (Cl. 172—179.)



1. In a controller for electric motors operating under variable loads, in combination, means responsive at different predetermined voltages for reducing the speed of the motor, and means for causing variations in the voltage impressed upon said first mentioned means proportional to but wider in range than the variations in the speed of the motor.

2. In a controller for electric motors operating under variable loads, in combination, means responsive at different predetermined voltages for reducing the speed of the motor, and means for causing variations in the voltage impressed upon said first mentioned means proportional to but wider in range than the variations in the speed of the motor.

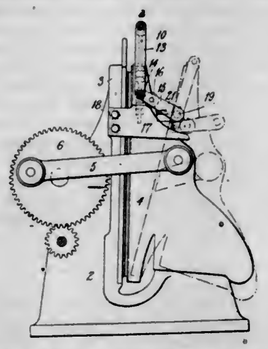
3. In a controller for electric motors operating under variable loads, in combination, means responsive at different predetermined voltages for reducing the speed of the motor, and a generator driven by the motor for causing variations in the voltage impressed upon said means proportional to but wider in range than the variations in the speed of the motor.

4. In a controller for electric motors operating under variable loads, in combination, means responsive at different predetermined voltages for reducing the speed of the motor, and a generator driven by the motor for causing variations in the voltage impressed upon said means proportional to but wider in range than the variations in the speed and electromotive force of the motor.

5. In a controller for electric motors operating under variable loads, in combination, a resistance connected in series with the motor armature, a resistance connected in shunt with the motor armature, electroresponsive devices arranged to respond at different predetermined voltages for varying said resistances to slow down the motor, and means for causing variations in the voltage impressed upon said devices proportional to but wider in range than the variations in the speed of the motor.

[Claims 6 to 27 not printed in the Gazette.]

1,062,097. SAFETY DEVICE FOR PRESSES OR THE LIKE. EDWARD HILFRANK, Castleton, N. Y., assignor of two-thirds to Emmons Bryant and Peter C. Brashear, Castleton, N. Y. Filed Sept. 7, 1911. Serial No. 648,182. (Cl. 101—13.)



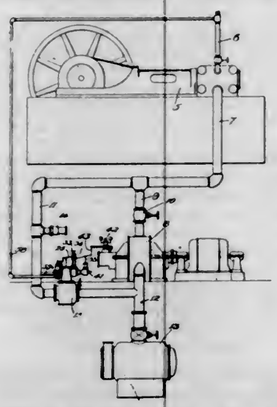
1. A safety device for presses, or the like, comprising a safety-bar, guide rods carrying said safety-bar and connected with one jaw of the press, a plate with a sloping edge fixed to the other jaw of the press, a contact surface connected with the said first mentioned jaw of the press and adapted to move along the sloping edge of said fixed plate as the press closes, and actuating levers connected with said surface and said safety-bar.

2. A safety device for presses, or the like, comprising a safety-bar attached to one jaw of the press, guiding means adapted to confine the movement of the safety-bar to a plane parallel to the plane of the face of the jaw to which the bar is attached, actuating means for the safety-bar comprising a pair of supports connected to the safety-bar, a lever carrying a contact surface attached to one of said supports, and an inclined surface fixedly attached to the other jaw and with which the contact surface coöperates as the press closes.

1,062,098. FLUID-PRESSURE MOTOR. FRANCIS HODGKINSON, Edgewood Park, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 1, 1909. Serial No. 515,554. (Cl. 121—118.)

1. In combination with a high pressure engine, a low pressure turbine having its inlet connected to the exhaust

of said engine, a by-pass leading from the exhaust of said high pressure engine to the exhaust of said turbine, automatic mechanism for controlling the effective area of said by-pass in accordance with the load on said turbine, an augmenting source of fluid supply adapted to communicate with the turbine, and automatic mechanism for effecting communication between the augmenting source of fluid supply and the turbine when the by-pass is closed.



2. In combination with an exhaust steam supply, a turbine designed to operate on steam from said supply and to exhaust to a lower pressure, a connection for leading steam from said supply to a point where the pressure is substantially the same as the exhaust pressure of said turbine, means responsive to the speed variations of said turbine for automatically shunting all or a portion of the steam from said supply around said turbine, a source of high pressure steam, and automatic means for admitting high pressure steam into the turbine or closing communication between the source of high pressure steam in the turbine in accordance with the load on said turbine.

3. In combination with an exhaust steam supply, an engine designed to operate on steam from said supply, a speed responsive agent connected to said engine, means controlled by said agent for shunting all or a portion of the steam from said supply around said engine, said means being effective to cause all of the steam to be fed into said engine, a source of high pressure steam adapted to communicate with said engine and means controlled by the speed responsive agent to admit steam from the high pressure source to said engine.

4. In a fluid pressure motor, two sources of supply, valves for controlling the delivery from said sources of supply, actuating means connected to said valves and having variable fulcrums, and means for actuating said last named means.

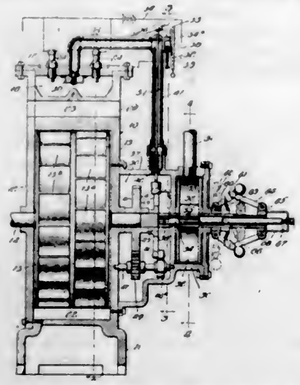
5. In a fluid pressure motor, two sources of supply, valves for said sources of supply, springs for normally closing said valves, the spring for one of said valves being stronger than the spring for the other valve, a lever connected to said valves, and means for actuating said lever.

[Claims 6 to 16 not printed in the Gazette.]

1,062,099. EXPLOSIVE-ENGINE. GUSTAVE E. HOGLUND, Chicago, Ill., assignor of one-half to Oliver C. Dennis, Chicago, Ill. Filed Aug. 18, 1911. Serial No. 644,820. (Cl. 60—4.)

1. In an explosive engine, the combination of a casing, an impact-wheel in the casing, a combustion chamber, ignition-means, a centripetal pump driven by the engine for compressing the fluid, a pump-shaft having a passage therein for the compressed fluid, and means for conducting the compressed fluid from said passage to the combustion-chamber.

2. In an explosive engine, the combination of a casing, an impact-wheel in the casing, a shaft to which the wheel is secured having a passage therein, a combustion-chamber, ignition means, a rotary pump comprising a piston secured to said shaft and forcing fluid into said passage, a valve operating in said passage for controlling supply of compressed fluid to the combustion-chamber, and valve operating mechanism operated by said shaft.



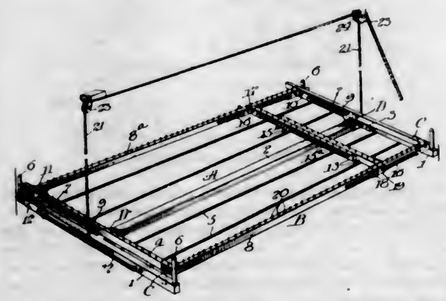
3. In an explosive engine, the combination of a casing, an impact-wheel, a combustion-chamber, a pump driven by the engine, for compressing the fluid supplied to the combustion-chamber, a jet in the casing for directing the motive agent from the combustion-chamber against the impact-wheel, and an air-duct around said jet and opening into the combustion chamber, for supplying air to the agent impacted against the wheel.

4. In an explosive engine, the combination of a casing, an impact-wheel, a combustion-chamber, a rotary pump driven by the engine, for compressing the fluid supplied to the combustion-chamber, a jet in the casing for directing the motive agent from the combustion-chamber against the impact-wheel, and an air-duct around said jet, for supplying air to the agent impacted against the wheel.

5. In an explosive engine, the combination of a casing, having expansion-pockets therein, an impact-wheel, a combustion-chamber, a pump driven by the engine, for compressing the fluid supplied to the combustion-chamber, a jet in the casing for directing the motive agent from the combustion-chamber against the impact-wheel, and an air-duct around said jet, for supplying air to the agent impacted against the wheel.

[Claims 6 to 9 not printed in the Gazette.]

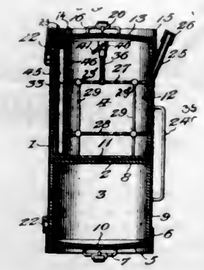
1,062,100. COMBINED CLOTHES-DRIER AND CURTAIN-STRETCHER. FRANK HUNYADY, Chicago, Ill. Filed Nov. 29, 1912. Serial No. 734,005. (Cl. 45—24.)



1. A device of the kind specified comprising a suspended substantially I-shaped main-frame, parallel end-rails rigidly secured to and spaced away from the cross-arms of said main-frame, longitudinal rails connecting said end-rails one of said longitudinal rails being adjustable longitudinally on the ends of said end-rails, and an extensible rail adjustably connecting said longitudinal rails between said rigid end-rails.

2. A device of the kind specified comprising a suspended substantially I-shaped supporting-frame, a substantially U-shaped superimposed frame that is spaced away therefrom a suitable distance and the parallel arms of which are parallel to and rigidly secured to the cross-members of said supporting-frame, a longitudinal rail adjustably secured to the free end of said parallel arms, and an extensible transverse rail connecting said longitudinal rail to the longitudinal connecting member of the U-shaped frame and adjustable on said rails.

1,062,101. POWDER-CAN. EDWARD J. JOHNSON, Graycreek, Colo. Filed Oct. 18, 1911. Serial No. 655,302. (Cl. 206—3.)



1. In a device of the class described, a casing, a holding frame arranged therewithin and comprising a normally expanded convoluted body bearing against the wall of the casing, a split threaded shank having its split portions connected to opposite sides of the said body, and a nut threaded upon the shank and rotatable to contract the arms and to allow them to expand.

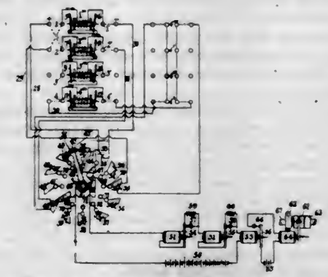
2. In a device of the class described, a casing, a normally expanded article supporting frame arranged within the casing, the said frame including a convoluted body coöperating with the wall of the casing to hold an article to be supported, the ends of the body being bent to form article gripping hooks, and means for contracting the body.

3. In combination, a casing, an upper holding frame comprising a normally expanded convoluted member bearing against said casing, a split threaded shank having its split portions connected to opposite sides of said member, a nut threaded upon said shank to contract said arms, standards secured at their upper ends to said member, and a lower counterpart holding frame comprising a normally expanded convoluted member bearing against said casing and secured to said standards a suitable distance above the bottom of said casing, the ends of both of said members being bent to form article gripping hooks, as and for the purpose set forth.

1,062,102. ACCOUNTING-EXCHANGE. WILLIAM F. KEMBLE, Rockaway Beach, and CHARLES R. UNDERHILL, Yonkers, N. Y., assignors, by direct and mesne assignments, of one-half to Charles S. Champion, Ridgewood, N. J. Filed Feb. 3, 1908. Serial No. 414,001. (Cl. 235—92.)

1. An accounting exchange, comprising a series of sets of accounting components, each set embodying debit and credit components, and means for selectively grouping a plurality of pairs of debit and credit components of different sets.

2. An accounting exchange, comprising a series of sets of accounting components, each set embodying debit and credit components, and means for selectively grouping a plurality of pairs of debit and credit components of different sets to form an accounting chain the first and last elements of which are debit and credit components of the same set.



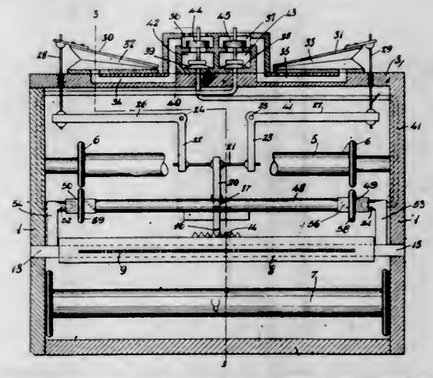
3. An accounting exchange, comprising a series of sets of accounting components, each set embodying debit and credit components, and electrical means for selectively grouping a plurality of pairs of debit and credit components of different sets.

4. An accounting exchange, comprising a series of sets of accounting components, each set embodying debit and credit components, means for selectively grouping a plurality of pairs of debit and credit components of different sets to form an accounting chain the first and last elements of which are debit and credit components of the same set, and means for indicating the existence of an accounting chain.

5. An accounting exchange, comprising a series of sets of accounting components, each set embodying debit and credit components, means for selectively grouping a plurality of pairs of debit and credit components of different sets to form an accounting chain the first and last elements of which are debit and credit components of the same set, and means controlled by a completed accounting chain for indicating the existence thereof.

[Claims 6 to 65 not printed in the Gazette.]

1,062,103. COMBINED TRANSPOSITION AND AUTOMATIC TRACKING DEVICE FOR PLAYER-PIANOS. JOSEPH LEISCH, Tryon, N. C., assignor to The John Church Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 11, 1911. Serial No. 659,736. (Cl. 84—161.)



1. In a device of the character specified, a tracker board adapted to be moved laterally, a tracking bar also adapted to be moved laterally, a common support for said board and bar, a power pneumatic controlled by the lateral movement of the tracking bar, and connecting mechanism intermediate the power pneumatic and the tracker board, whereby the movement of the tracking bar will automatically shift the tracker board.

2. In a device of the character specified, a tracker board adapted to be moved laterally, a tracking bar also adapted

to be moved laterally, a common support for said board and bar, a pair of power pneumatics controlled respectively by the lateral movement of the tracking bar in opposite directions, and connecting mechanism intermediate the pneumatics and the tracker board, whereby the movement of the tracking bar will automatically shift the tracker board in the same direction with the movement of the tracking bar.

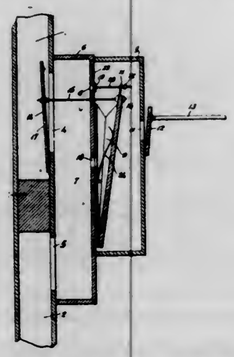
3. In a device of the character specified, a tracker board, and a laterally movable support in which the board is mounted, with means for adjustably connecting the board and its support, a tracking bar also adapted to be moved laterally, supporting means therefor integral with the said movable support, a power pneumatic controlled by the lateral movement of the tracking bar, and connecting mechanism intermediate the power pneumatic and the tracker board whereby the movement of the tracking bar will automatically shift the tracker board.

4. In a device of the character specified, a tracker board, and a laterally movable support in which the board is mounted, with means for adjustably connecting the board and its support, a tracking bar also adapted to be moved laterally, supporting means therefor integral with the said movable support, a pair of power pneumatics controlled respectively by the lateral movement of the tracking bar in opposite directions, and connecting mechanism intermediate the pneumatics and the tracker board, whereby the movement of the tracking bar will automatically shift the tracker board in the same direction with the movement of the tracking bar.

5. In a device of the character specified, a tracker board and a laterally movable support in which the board is adjustably mounted, a lever bar common to the support and the tracker board for locking the two parts in adjusted position and for shifting same laterally, a tracking bar laterally movable, a power pneumatic controlled by the lateral movement of the tracking bar, and connecting mechanism intermediate the power pneumatic and the lever bar, whereby the movement of the tracking bar will automatically shift the lever to move the tracker board to correspond with the movement of the tracking bar.

[Claim 6 not printed in the Gazette.]

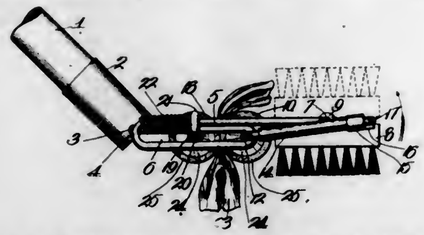
1,062,104. PNEUMATIC PLAYER-PIANO. JOSEPH LEISCH, Tryon, N. C., assignor to The John Church Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Dec. 30, 1911. Serial No. 668,747. (Cl. 84—168.)



1. In a piano player, in combination with the passageway from the means for creating the vacuum to the pneumatic chest, a valve to close said passageway, with a small opening therethrough, a pneumatic, a connection between said pneumatic and said passageway and connections between said pneumatic and said valve to hold the same open, an air chamber in which said pneumatic is located, a bleed opening intermediate the passageway and said chamber, and a valve to close the air chamber to subject the air chamber to the vacuum, whereby the pneumatic will be released to close the choke valve.

2. In a piano player, in combination with the passageway from the means for creating the vacuum to the pneumatic chest, a valve to close said passageway, with a small opening therethrough, a power pneumatic actuated from said passageway and connections with said valve to hold the same open, an air chamber in which said pneumatic is located, a bleed opening to said air chamber with a valve closed opening intermediate the passageway and said air chamber, with said valve connected with said pneumatic, and a valve for closing the air chamber to subject the same to the vacuum to release the pneumatic to close the choke valve.

1,062,105. COMBINED SCRUBBER AND MOP. ADDISON T. LEMON, Kansas City, Kans. Filed Nov. 6, 1911. Serial No. 658,846. (Cl. 15—44.)



1. In a device of the character described, a handle, a wire frame secured to the same and provided with forwardly projecting arms, terminating in inturned horizontally disposed portions, and a scrubbing brush pivoted to said inturned portions and extending transversely of the handle.

2. In a device of the character described, a handle, a wire frame secured to the same and provided with forwardly projecting arms, terminating in inturned horizontally disposed hooks opening rearwardly, a scrubbing brush, and keepers secured to the back of the scrubbing brush and pivotally engaging the transversely extending portions of the inturned hooks between said arms and the terminals of the hooks.

3. In a device of the character described, a handle, a wire frame secured to the same and provided with forwardly-projecting arms, terminating in inturned horizontally-disposed portions, a scrubbing brush pivoted to said inturned portions and extending transversely of the handle, and means for preventing the brush from swinging upwardly at its front edge.

4. In a device of the character described, a handle, a frame carried thereby bearing wringer rolls and pivoted to a brush back, and an actuating crank for one of the rolls, provided with a handle adapted for adjustment into or out of engagement with the brush back.

5. In a device of the character described, a handle, a frame secured thereto bearing wringer rolls pivoted to a brush back, an actuating crank for one of the rolls, and a handle swiveled to said crank and adapted to extend inwardly over the brush back or to project outwardly away from the same.

1,062,106. PROCESS FOR PRODUCING CELLULOSE FORMATIONS. RUDOLF LINKMEYER, Bremen, Germany. Filed May 28, 1909. Serial No. 499,000. (Cl. 18—54.)

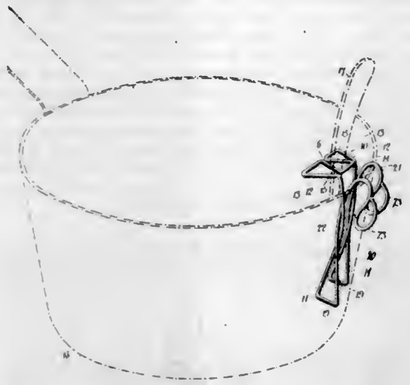
1. The process for the production of cellulose formations, which comprises shaping a cupro-ammonium-cellulose solution, and coagulating the shape formed by an acidulated solution containing a chlorid of the magnesium group substantially as described.

2. The process for the production of cellulose formations which comprises shaping a cupro-ammonium cellulose solution and coagulating the shape so formed by an acidulated solution containing a chlorid of the magnesium group and an organic substance.

3. The process for the production of cellulose formations, which comprises shaping a cupro-ammonium cellulose solution and coagulating the shape so formed by a solution containing a chlorid of the magnesium group and an organic substance.

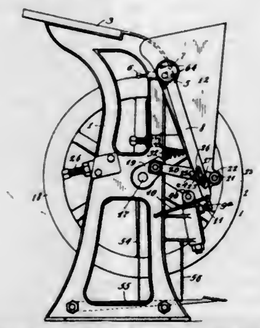
4. The process for the production of cellulose formations, which comprises shaping a cupro-ammonium cellulose solution and coagulating the shape by an acidified solution of magnesium chlorid containing a small quantity of alcohol.

1,062,107. SPOON-HOLDER. SARAH E. LYON, Menominee, Mich. Filed May 22, 1912. Serial No. 699,015. (Cl. 65—65.)



A spoon holder formed of a single strand of wire bent intermediate of its ends to provide leg portions having their upper extremities bent inwardly to assume a horizontal position and having their connected portion bent in an opposite direction therebetween to provide a triangular socket for receiving a spoon, said leg portions being rebent upwardly and intertwisted with the leg portions and then curved outwardly and downwardly to provide clamping portions to engage a receptacle and the extremities of the leg portions being bent upwardly and inwardly to provide spaced gripping loops.

1,062,108. MACHINE FOR TREATING PAPER. CHARLES W. MEARS, Cleveland, Ohio. Filed Feb. 23, 1912. Serial No. 679,359. (Cl. 92—70.)



1. In a machine of the character set forth, the combination of a clamping device comprising a pair of members adapted to receive and clamp therebetween a plurality of sheets or plies of paper with their ends projecting therebeyond, a gage for limiting the amount of projection of such ends, said gage having a substantially V-shaped surface adapted to engage such projecting ends, the apex of the V being located substantially opposite the center of the opening between the members of the clamping device, a device adapted to engage the projecting ends of the paper, and means for reciprocating one of said devices with reference to the other.

2. In a machine of the character set forth, the combination of a pair of clamping members arranged to form a downwardly extending chute therebetween and to clamp a plurality of plies or sheets of paper with their ends projecting therebelow, a gage located beneath the lower ends of said clamping members, a device for engaging the projecting ends of the paper to flex the same, means for reciprocating one of said devices with respect to the other to flex the projecting ends of the sheets or plies of paper, means for separating said clamping members, and means for moving the gage out of operative relation to said members.

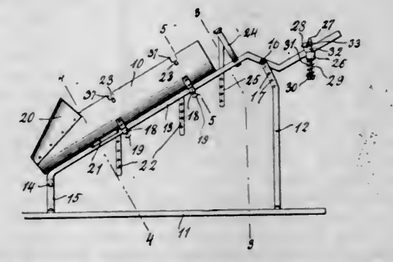
3. In a machine of the character set forth, the combination of a pair of downwardly directed clamping members arranged to clamp a plurality of sheets of paper with their ends projecting therebelow, a device for engaging the projecting ends of the paper to flex the same, means for reciprocating one of said devices with respect to the other to flex the projecting ends of the sheets or plies of paper, and means for separating said clamping members.

4. In a machine of the character set forth, the combination of a clamping device comprising a pair of downwardly extending clamping members arranged to form a chute and to clamp a plurality of sheets or plies of paper with their ends projecting, a gage below the lower ends of said clamping members arranged to engage the projecting ends of the sheets or plies of paper, means for adjusting said gage toward and from the lower ends of said members, a device arranged in the path of the projecting ends of the paper and adapted to engage and flex the same, means for reciprocating the clamping device across the last-mentioned device, means for moving the gage out of the path of the lower ends of the sheets or plies of paper, and means for separating the clamping members.

5. In a machine of the character set forth, the combination of a pair of members adapted to clamp a plurality of sheets or plies of paper therebetween with their ends projecting, a spring tending to force one of said members toward the other, means for limiting the movement of the former member by the spring, a device for engaging the projecting ends of the paper, and means connected with the second clamping member for moving both members across said device.

[Claims 6 to 16 not printed in the Gazette.]

1,062,109. ANIMAL-HOLDER. JOHN MILLER, Radnor, Ohio. Filed Jan. 11, 1913. Serial No. 741,560. (Cl. 119—103.)



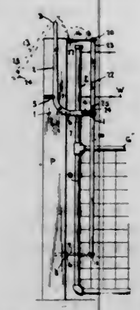
1. An animal holder comprising a support, a trough mounted thereon and having at one end openings to accommodate the animal's front legs and a hood to extend around the animal's head, straps carried by the trough on one side thereof, means on the other side of the trough for securing said straps, a cross bar carried by the support to the rear of the trough, and means carried by said cross bar for securing the animal's hind legs.

2. An animal holder comprising a support, a trough mounted thereon, means for securing the animal in the

trough, and means carried by the support for securing the animal's hind legs, said last-mentioned means being adjustable toward and from the trough.

3. An animal holder comprising a support, a trough mounted thereon, means for securing the animal in the trough, a cross bar carried by the support and adjustable toward and from the rear end of the trough, and means carried by said cross bar for securing the animal's hind legs.

1,062,110. GATE-LATCH. CALVIN MOORE, New Providence, Iowa. Filed Oct. 17, 1912. Serial No. 726,332. (Cl. 70—28.)



1. In a gate latch, the combination with a U-shaped latch whose cross bar is hingedly connected with the inner face of the latch-post and whose arms are adapted to pass astride the outer bar of the gate, one of said arms having an eye near its outer end; of an L-shaped lever pivoted at its angle to the side of the latch post and having a slot in its lower arm adapted to aline with said eye, a pivotal connection between said eye and slot, and a keeper on the post with which the upright arm of said lever is engaged when its other arm stands horizontal, for the purpose set forth.

2. In a gate latch, the combination with a plurality of U-shaped latches whose cross bars are pivoted to the inner face of the latch-post and whose arms are adapted to stand astride the outer gate-bar, one arm of each latch being pierced with an eye, a connecting rod, and pivots through said rod near its ends and the eyes of said latches, one of said pivots being extended and pierced with a transverse perforation; of an L-shaped lever pivoted at its angle to the side of the latch-post and having a slot in its lower arm engaging said extended pivot, a fastening device through the perforation in the latter outside said slotted arm, and means for retaining the other arm of said lever in upright position when said latches stand astride the outer bar of the gate.

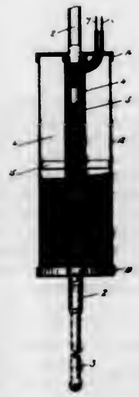
3. In a gate latch, the combination with a pair of U-shaped latches whose cross bars are hingedly connected with the inner face of the latch-post and whose arms are adapted to stand astride the outer bar of the gate when the latter is latched, a lever pivoted between its ends to the side of the post and having its inner arm slotted, a rod pivotally connected with the lower latch, and a pivotal connection between the upper latch and the upper end of said rod and passing through the slot in the inner arm of said lever; of a plate hingedly connected to the inner face of said latch post at a higher point than the uppermost latch and adapted to stand across the upper end of the outer bar of the gate, a link pivotally connected with the free end of said plate, and detachable connections between the lower end of said link and the upper end of said rod.

4. In a gate latch, the combination with a pair of U-shaped latches whose cross bars are hingedly connected with the inner face of the latch-post and whose arms are adapted to stand astride the outer bar of the gate when the latter is latched, a lever pivoted to the post and having its inner arm slotted, a rod pivotally connected with the lower latch, and a pivot bolt connecting the upper latch and the upper end of said rod and passing through the slot in the inner arm of said lever and perforated; of a plate hinged to said latch-post and adapted to stand across the upper end of the gate, a link pivotally connected with said plate and having an eye in its lower end adapted to be passed over the outer end of said bolt, and a latch hook pivoted to said link with its bill in position to pass through the perforation in said pivot bolt.

5. In a gate latch, the combination with a U-shaped latch whose cross bar is pivoted to the inner face of the latch post and whose arms are adapted to stand astride the outer bar of the gate when the latter is latched, one of said arms having an eye, and means for turning this latch on its pivot; of a plate hinged at one end to the inner face of said latch post and adapted to extend over the upper end of said inner bar of the gate, a strap secured across the other end of said plate and having a projecting pin provided with a perforation, a link having eyes at its extremities, one of them mounted on said pin, a split pin through the perforation in the latter, a bolt passing through the other eye in said link and the eye in said latch, and means for holding said bolt removably in place.

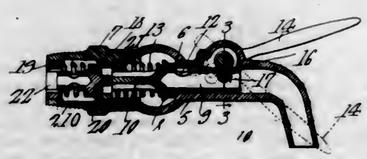
[Claim 6 not printed in the Gazette.]

1,062,111. ELECTRIC HEATER. JOSEPH L. NYLANDER, Seattle, Wash. Filed Nov. 27, 1912. Serial No. 733,914. (Cl. 219—39.)



In a device for administering injections, the combination, with a flexible pipe provided with a catheter at its outlet end, of a handle of wire gauze encircling the said pipe, caps secured to the ends of the said handle, a heating tube secured to the said caps and slidable by means of the said handle upon the flexible pipe, a resistance coil encircling the said heating tube, an air space being formed between the resistance coil and the handle, and a stiffening ring secured to the middle part of the handle to prevent the wire ganze from being collapsed by the pressure of the hand.

1,062,112. FAUCET. JOHN A. PETRO, Lorain, Ohio. Filed Apr. 12, 1911. Serial No. 620,656. (Cl. 137—4.)



1. In a faucet, a body formed interiorly with a valve seat, a valve including a stem fitted slidably in the body and formed with a recess, and means for sliding the stem to move the valve from its seat, said means comprising an oscillatory shank, and a finger upon the shank working between the walls of the recess in the stem and adapted to bind against one of said walls when the shank is oscillated a predetermined degree.

2. In a faucet, a body formed interiorly with a valve seat, a valve including a stem fitted slidably in the body and formed with a recess, and means for sliding the stem to move the valve from its seat, said means comprising an oscillatory shank, and a finger upon the shank working between the walls of the recess in the stem, the shank being movable to bring the finger at its extremity into binding engagement with the upper edge of one wall of the recess with the finger extending bodily in a line between the said edge and the axis of the shank.

3. In a faucet, a body formed interiorly with a valve seat, a valve including a stem fitted slidably in the body, and means for sliding the stem to move the valve from its seat, said means comprising an oscillatory shank, and means projecting from the shank and engaging directly with the valve stem, the said means upon the shank being arranged to bind the stem when the shank is oscillated a predetermined distance.

1,062,113. ROAD-MAKING MACHINE. MICHAEL A. POPKESS, Kansas City, Mo., assignor to Bituminized Road Company, Phoenix, Ariz., a Corporation of Arizona. Filed June 28, 1909. Serial No. 504,930. (Cl. 94—6.)



1. A road-working machine, comprising a frame, ground-engaging supports therefor, a shell extending longitudinally of the machine and pivotally supported at its rear end from said frame, means for depressing and elevating the front end of the shell, means in advance of the shell to gather up loose earth in its path for delivering it into the shell, means for rotating the shell, a rotary agitator within the shell, and means to revolve the agitator at a higher rate of speed than the shell.

2. A road-working machine, comprising a frame, ground-engaging supports therefor, a shell extending longitudinally of the machine and pivotally supported at its rear end from said frame, means for depressing the front end of the shell, means in advance of the shell to gather up loose earth in its path for delivering it into the shell, means for rotating the shell, a rotary agitator within the shell, means to revolve the agitator at a higher rate of speed than the shell, and means to generate heat and discharge it into the shell at the front end thereof.

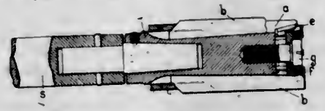
3. A road-working machine, comprising a frame, ground-engaging supports therefor, a shell extending longitudinally of the machine and pivotally supported at its rear end from said frame, means for depressing the front end of the shell, means in advance of the shell to gather up loose earth in its path for delivering it into the shell, means for rotating the shell, a rotary agitator within the shell, means to revolve the agitator at a higher rate of speed than the shell, means to generate heat and discharge it into the shell at the front end thereof, and means for spraying a binder in liquid condition into the agitated earth within the shell.

4. A road-working machine, comprising a frame, ground-engaging supports therefor, a shell extending longitudinally of the machine and pivotally supported at its rear end from said frame, means for depressing the front end of the shell, means in advance of the shell to gather up loose earth in its path for delivering it into the shell, means for rotating the shell, a rotary agitator within the shell, means to revolve the agitator at a higher rate of speed than the shell, means to generate heat and discharge it into the shell at the front end thereof, means for spraying a binder in liquid condition into the agitated earth within the shell, and means underlying the rear or elevated end of the shell for compacting the earth upon which fall the discharge from the rear end of the shell.

5. A road-working machine, comprising a wheeled-frame, a rotatable shell arranged longitudinally thereof and provided with internal cleats and pivotally supported from said frame at its rear end, means for depressing and raising its front end, a scraper supported at the front end of the shell and adapted to gather up loose earth and deliver the same into the shell slowly, a shaft extending axially through the shell and journaled, a rotary earth agitator mounted on said shaft and rotatable therewith, and means for spraying a binder in liquid condition into the earth as the same is agitated and forced through the shell toward its rear end.

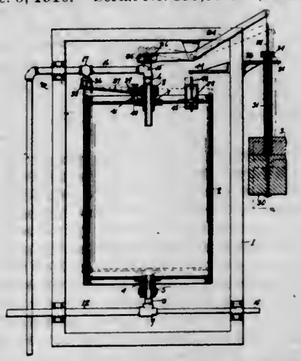
[Claims 6 to 13 not printed in the Gazette.]

1,062,114. ADJUSTABLE REAMER, TAP, AND THE LIKE. FREDERICK PRICE, Coventry, England. Filed July 5, 1912. Serial No. 707,838. (Cl. 77—76.)



In an adjustable reamer, or tap, the combination of a body having separate blades, with wedge pieces fitting into a taper recess in the body between the blades, and means for forcing said wedges into the taper recess in the body and securing the blades in any desired position in said body, substantially as described.

1,062,115. BOILER-FEEDER AND WATER-LEVEL-MAINTAINING APPARATUS. THOMAS G. RAKESTRAW, Detroit, Mich., assignor of three-fourths to Elias H. Sellers and Albert F. Sellers, Detroit, Mich. Filed Dec. 5, 1910. Serial No. 595,579. (Cl. 137—101.)

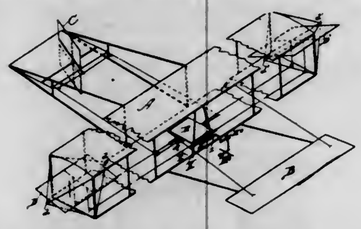


1. A steam boiler feeder comprising a vertically movable tank, a fixed frame, fixed pipes mounted on said frame and having vertically alined terminals which enter the ends of the tank and on which said tank is adapted to slide, the pipe communicating with the upper end of said tank leading to a source of steam pressure and the pipe communicating with the lower end of said tank being a water educt and a water induct pipe, a counterpoise for said tank, a valve in the steam pipe, a lever for said valve connected to the tank to be actuated as the tank moves vertically, a relief valve in the tank adapted to be actuated as the tank moves upwardly, a check valve in the water educt pipe, and a water supply pipe communicating with the tank through said educt pipe.

2. A steam boiler feeder, comprising a vertically movable tank, a fixed frame, a steam boiler, fixed pipes mounted on said frame communicating with the ends of said tank and having stationary vertical portions on which said tank is adapted to slide, the pipe communicating with the upper end of the tank leading to the steam space of the boiler, the pipe communicating with the lower end of said tank leading to the water space of the boiler, an automatically variable counterpoise for the tank, the maximum weight of which is opposed to the tank when the tank is in its lowermost position and the minimum weight of which is opposed to the tank when the tank is in its uppermost position, a valve in the steam pipe connected to the tank to be actuated as the tank moves vertically, a relief valve in the tank adapted to be opened as the tank moves upwardly, and a water supply pipe communicating with said tank.

3. A steam boiler feeder comprising a stationary frame, a vertically movable tank mounted on said frame, stationary pipes communicating with said tank, said pipes having axially alined fixed terminal portions which pass through the ends of said tank on which said tank slides vertically, a steam boiler, the pipe communicating with the upper end of said tank leading to the steam space of said boiler, the pipe communicating with the lower end of said tank leading to the water space of said boiler and its upper end terminating on a plane with the bottom of the tank when said tank is raised, a valve in the steam pipe connected with said tank to be actuated as the tank moves vertically, a vent valve in the tank adapted to be actuated as the tank moves upwardly, a pipe communicating with the water space of the boiler and connected to said steam pipe on the plane of the normal water level, and a valve-controlled water supply pipe communicating with said tank.

1,062,116. AEROPLANE. EGBERT J. RANDALL, Pontiac, Mich., and SHERMAN A. RANDALL, Rochester, N. Y. Filed Aug. 15, 1910. Serial No. 577,262. (Cl. 244—29.)



1. In an aeroplane, stabilizing planes, a rudder, a movable platform, slidable elements adapted to be engaged with said platform to move thereby, cables connecting the rudder with said slidable means, another set of cables connecting the stabilizing planes with said slidable means, whereby said stabilizing means and rudder are actuated to restore the normal balance of the aeroplane, and means whereby the platform and the slidable means may be thrown out of coöperation so that the rudder and stabilizing planes may be actuated manually.

2. In an aeroplane, stabilizing planes, a rudder, a movable platform, a plurality of sliding elements, connections between one of the slidable elements and the rudder and other connections between the stabilizing planes and the other sliding elements, and means whereby upon swinging movement of the platform said sliding elements are actuated to manipulate the stabilizing planes and rudder to maintain the normal balance of the aeroplane.

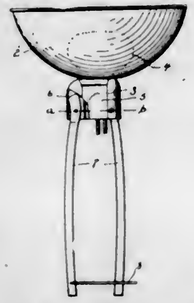
3. In an aeroplane, stabilizing planes, a rudder, a movable platform, a plurality of sliding elements adapted to be engaged with said platform whereby they may move with the platform, and cables connecting the rudder with one set of sliding elements, another set of cables connecting the stabilizing planes with the other sliding elements, for the purpose described.

4. In an aeroplane, stabilizing planes, a rudder, a swinging platform, a plurality of sliding elements, means for interlocking said sliding elements with the platform, and cables connecting one of said sliding elements with the rudder and other cables connecting the stabilizing planes with the other sliding elements.

5. In an aeroplane, stabilizing planes, a rudder, a swinging platform, a plurality of sliding elements, a set of cables connecting one of said sliding elements with the rudder, another set of cables connecting the other sliding elements with the stabilizing planes, means for engaging said sliding elements with the swinging platform whereby they may move therewith, and means for tripping said engaging means, substantially as described.

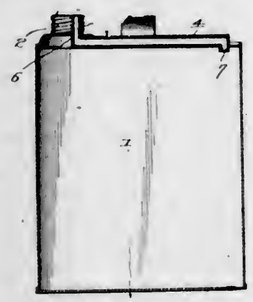
[Claims 6 to 14 not printed in the Gazette.]

1,062,117. PORTABLE HAND ELECTRIC LAMP. ADOLPH C. RECKER, Oakville, Conn., assignor to Waterbury Mfg. Co., Waterbury, Conn., a Corporation. Filed Nov. 11, 1912. Serial No. 730,662. (Cl. 240—53.)



A portable hand electric lamp comprising a holder, a plurality of arms hinged at one end to the back of said holder, the outer end of one of said arms formed with a perforation, and a ring extending through said arm and adapted to be snapped over the outer ends of the other arms when they are brought together.

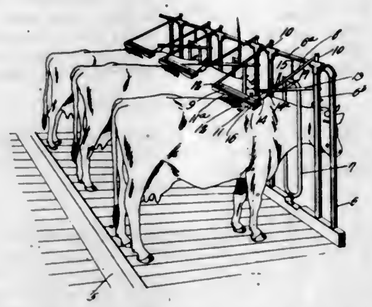
1,062,118. CAN. LOUIS N. RITTER, Cherokee, Iowa. Filed May 1, 1912. Serial No. 694,329. (Cl. 221—20.)



The combination with a can having a spout, and screw cap adapted to fit thereover, of a vent tube extending upwardly into the spout upon one side, the upper end of said tube being flush with the top of said spout, and adapted to be engaged and inclosed by the said cap, the inner side of said tube being curved upon an arc substantially concentric with the curvature of the walls of the said spout, as and for the purpose set forth.

1,062,119. STALL. WAYLAND L. ROOT, Spokane, Wash. Filed Sept. 12, 1912. Serial No. 720,074. (Cl. 119—27.)

1. In a stall, a stanchion frame, a member pivoted to the frame and designed to contact with an animal's back, a binding member slidable on the said member, and a brace pivoted to the frame and pivoted eccentrically to the said binding member to bind same on the first mentioned member when the latter is given a swinging tendency.



2. In a stall, a stanchion frame, a U-shaped yoke pivoted at its ends to the frame, the intermediate portion being designed to contact with an animal's back, a binding member slidable on one arm of the yoke, and a brace pivoted to the frame and pivoted eccentrically to the said binding member in order to cause the same to bind on the said arm when the yoke is given a swinging tendency.

3. In a stall, a stanchion frame, a yoke pivoted to the frame, and designed to contact with an animal's back, a binding member slidable on the yoke and having a projection and a brace pivoted to the said frame and connected to the said projection.

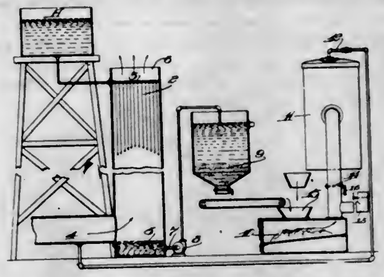
4. In a stall, a stanchion frame, a U-shaped yoke pivoted at its ends to the frame, the intermediate portion being designed to contact with an animal's back, a binding member slidable on one arm of the yoke and having a projection extending along said arm toward the fulcrum thereof, and a brace pivoted to the frame and connected to the said projection.

5. In a stall, a stanchion frame, a U-shaped yoke pivoted at its ends to the yoke, the intermediate portion of the yoke being designed to contact with an animal's back, a binding member slidable on one arm of the yoke and having a projection extending toward the fulcrum of the yoke, an adjustable stop on the said arm for limiting the downward movement of the binding member, and a brace pivoted to the said frame and adjustably connected to the said projection of the binding member.

1,062,120. PROCESS OF OBTAINING SULFUR FROM SMELTER-GASES. HAMILTON SANBORN, HENRY GRATTAN MCMAHON, and JOHN TRUMBULL OVERBURY, San Francisco, and STEWART WOODFORD YOUNG, Palo Alto, Cal., assignors, by direct and mesne assignments, to The Thiogen Company, San Francisco, Cal., a Corporation of Delaware. Filed July 26, 1911. Serial No. 640,571. (Cl. 23—10.)

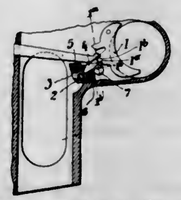
1. A continuous or cyclical process for treating the sulfurous fumes arising from the smelting of ores and the like, which consists in passing these fumes into intimate association with a suitable sulfid to absorb the sulfur dioxid, collecting the solid particles resulting from such absorption, separating the free sulfur from said solids, subjecting the residue to the action of heat and carbon to regenerate the sulfid and re-using the regenerated sulfid in the continued cycles of operation.

2. A continuous or cyclical process for treating the sulfurous fumes arising from the smelting of ores and the like, which consists in passing these fumes into intimate association with a suitable sulfid to absorb the sulfur dioxid, collecting the solid particles resulting from such absorption, separating the free sulfur from said solids, subjecting the residue to the action of heat and carbon to regenerate the sulfid and re-using the regenerated sulfid in the continued cycles of operation, using lime or lime-



stone as the initial active agent, the first cycle producing calcium sulfid for use in the subsequent cycles of operation.

1,062,121. SEMI-AUTOMATIC LOCKING DEVICE FOR THE TRIGGERS OF SMALL-ARMS. HANS SAUER, Suhl, Germany, assignor to The Firm of J. P. Sauer & Sohn, Suhl, Germany. Filed Dec. 30, 1912. Serial No. 739,261. (Cl. 42—70.)



1. In an automatic small-arm, the combination with the casing and the trigger, having a stop, mounted therein, of a spring-influenced pair of levers mounted to rock in the casing, one of the levers being adapted to rock into and out of the path of the magazine and the second lever being adapted to bear against said stop, and a spring-influenced pin slidable in the casing and normally locking the second lever against said stop.

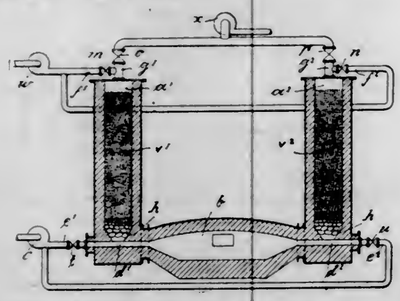
2. In an automatic small-arm, the combination with the casing and the trigger, having a stop, mounted therein, of a spring-influenced pair of levers mounted to rock in the casing, one of the levers being adapted to rock into and out of the path of the magazine and the second lever being adapted to bear against said stop, a spring tending to press the second lever against said stop and simultaneously tending to drive the former lever into the path of the magazine, and a spring-influenced pin slidable in the casing and normally locking the second lever against said stop.

3. In an automatic small-arm, the combination with the casing and the trigger, having a stop, mounted therein, of two levers mounted to rock about a common fulcrum in the casing, a spring compressed between the two levers, one of the levers being adapted to rock into and out of the path of the magazine and the second lever being adapted to bear against said stop, a spring tending to press the second lever against said stop and simultaneously tending to drive the former lever into the path of the magazine, the latter spring being weaker than the former spring, and a spring-influenced pin slidable in the casing and normally locking the second lever against said stop.

4. In an automatic small-arm, the combination with the casing and the trigger, having a stop, mounted therein, of a spring-influenced pair of levers mounted to rock in the casing, one of the levers being adapted to rock into and out of the path of the magazine and the second lever being adapted to bear against said stop, a recessed pin slidable in and projecting out of the casing, and a spring tending to drive the pin out of the casing, the top face of the pin normally locking the second lever against

said stop, and the recess in the pin being adapted to receive the second lever when the pin is pushed inward against the action of the spring, for the purpose specified.

1,062,122. REGENERATOR OR HOT-BLAST STOVE. MAX SCHROEDER, Berlin, and HUGO REINHARD, Oberhausen, Germany. Filed Apr. 30, 1912. Serial No. 694,201. (Cl. 75—94.)

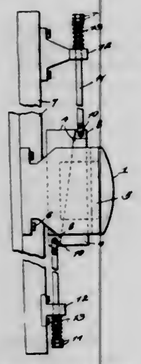


1. In a regenerator, hot blast stove or the like, a compact filling of granular refractory material consisting of pieces of such a size that the total resistance offered thereby to the flow of gases therethrough is such as to require the gases to be forced through the said filling by mechanical means other than the draft of a chimney.

2. In a regenerator, hot blast stove or the like, a filling of granular refractory material, the size of the particles decreasing from the lower to the upper end of said filling, and mechanical means for forcing the gases therethrough.

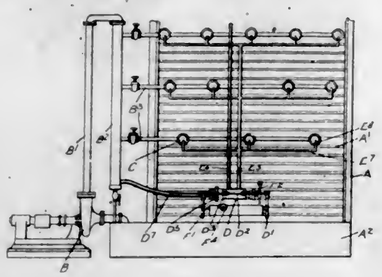
3. In combination with a furnace, a regenerator tower on each side thereof, a compact filling of granular refractory material in each of said towers consisting of pieces of small size, a connection between said towers, a branch pipe from said connection to said furnace, mechanical means for supplying under pressure air to the one tower and combustible gas to the other tower first in one direction and then in the opposite direction alternately, whereby the air or gas after passing through the one tower into said connection is divided, one part thereof passing to the furnace and the other part thereof passing into the other tower and being used for creating combustion in the latter.

1,062,123. DRAW-BAR-SLACK-ADJUSTING SAFETY APPLIANCE. GEORGE SELLS, East Las Vegas, N. Mex., assignor of one-half to Virgil A. Wolfe, East Las Vegas, N. Mex. Filed Nov. 8, 1911. Serial No. 659,093. (Cl. 213—3.)



A device of the character described, including a buffer block provided with a neck formed with a recess in one wall thereof, a casing formed with a longitudinal slot adapted to receive the neck for a guiding movement therein, means for connecting the casing to a car, a beam carried by the car, journal members secured to said beam, connecting bars movable longitudinally through said members, springs encircling the outer extremities of said bars and adapted to move the bars away from each other, and wedges pivotally connected to the inner ends of said bars and received within the recess, one of said wedges bearing against the inner side of the slot of the casing.

1,062,124. AIR-WASHER. SIDNEY RANDOLPH SHELDON, Galt, Ontario, Canada. Filed July 30, 1912. Serial No. 712,346. (Cl. 137—58.)



1. An air washer comprising a series of spray heads having spray openings, and a flush mechanism whereby such openings are enlarged, a valve, and means for operating the valve at predetermined intervals to supply water pressure to the spray heads for operating the flush mechanism thereof, as and for the purpose specified.

2. An air washer comprising a series of spray heads having spray openings, and a flush mechanism whereby such openings are enlarged, a valve, means for operating the valve at predetermined intervals to supply water pressure to the spray heads for operating the flush mechanism thereof, and means for automatically releasing such water pressure to the atmosphere when the valve is carried to its normal position, as and for the purpose specified.

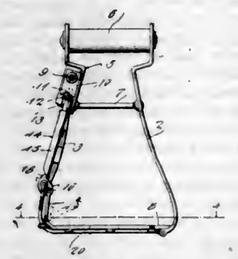
3. In an air washer, the combination with a spray head having a spray opening, a central spindle, and means for moving the spindle longitudinally operated by water pressure, of a valve, and means controlled thereby for conveying water pressure to the spray head to carry the central spindle of the spray head longitudinally, as and for the purpose specified.

4. In an air washer, the combination with the spray head provided with a central operating spindle, a major and a minor operating member connected to the spindle, means for conveying water pressure into the spray head to form the spray, and exert pressure against the minor member, of a valve, and means controlled by the valve for conveying water pressure to one side of the major member to oppose the pressure against the minor member and carry the spindle longitudinally, and means for relieving the pressure against the major member to the atmosphere when the valve is in its normal position, as and for the purpose specified.

5. In an air washer, the combination with a spray head having a major and a minor diaphragm, of means for conveying water to the spray head to form the spray and exert pressure against the minor diaphragm, of a valve designed to convey water pressure against the major diaphragm to oppose the pressure against the minor diaphragm, means for relieving the pressure against the major diaphragm to the atmosphere when the valve is in its normal position, and means for operating the valve by the water falling from the spray head, as and for the purpose specified.

[Claims 6 to 9 not printed in the Gazette.]

1,062,125. SAFETY-STIRRUP. ALFRED M. SIPES, Mobectie, Tex. Filed Aug. 16, 1912. Serial No. 715,414. (Cl. 54—49.)



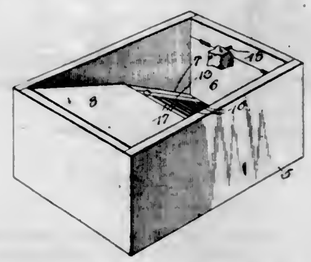
1. In a safety stirrup, a strap engaging member having on one end a keeper, side members, one of which is rigidly connected with one end of said strap engaging member and the other of which has a detachable engagement with said keeper, a bottom or base member fixed to the keeper engaging side member and having a hinged connection with the opposite rigid side member, a catch to fasten the upper end of the hinged side of the stirrup in said keeper, a catch fastening and releasing member, and a detent operated by the foot of the rider to hold said catch fastening member in operative position.

2. A safety stirrup comprising a strap engaging member having on one end a keeper, a stationary side member having a fixed connection at its upper end with one end of a strap engaging member, an integrally-formed side and base member hingedly connected at one end to the lower end of said stationary side member and having a detachable engagement with said keeper, a catch pivotally secured to the upper end of said hinged side and base member and adapted to be engaged with the keeper on said strap engaging member, whereby said hinged side member is held in a closed and operative position, a catch fastening and releasing member hingedly connected to said hinged side member, whereby the catch thereon is held in operative engagement with the keeper and a foot actuated detent adapted to lock said fastening member in operative position.

3. In a safety stirrup, a strap engaging member having on one end a keeper provided with a catch receiving lug, a stationary side member having a fixed connection at its upper end with the opposite end of said strap engaging member, an integrally formed side and base member hingedly connected at one end to the lower end of the stationary side of the stirrup and having in its side portion a recess, a catch pivotally-mounted on the upper end of the recessed side portion of said hinged member and having therein a notch adapted to be engaged with the lug in said keeper, whereby said hinged member is held in a closed or operative position, a catch fastening and releasing member hingedly connected to the recessed side portion of the hinged member of the stirrup and adapted to be swung into engagement with the lower side of the lug in said keeper, whereby the catch is held in operative engagement with the lug, a detent pivotally mounted on the stirrup and having an operative engagement with the catch fastening member, and a foot bar pivotally-mounted on the base portion of said hinged side member and having an operative connection with said detent, whereby when the foot of the rider is engaged with the stirrup said detent will be held in operative engagement with the catch fastening member and whereby when the foot is swung up in the stirrup the detent will be released, and catch fastening member swung back to release the catch and permit the stirrup to open.

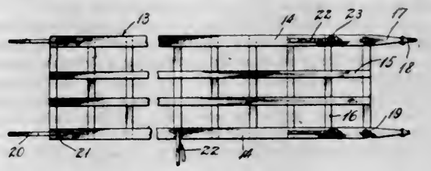
1,062,126. TRAP. FRANKLIN SMITH, Dallas, Iowa. Filed Aug. 3, 1912. Serial No. 713,127. (Cl. 43—34.)

A trap comprising a frame having a swinging door mounted in one end, glass plates arranged at an inclination upon the inner faces of the side walls of the frame and terminated at one of their ends at the lower edge of the swinging door, a metal plate mounted upon said glass plates, a grid mounted upon said glass plates and disposed at an obtuse inclination to said plate, said grid consisting of parallel side bars and a plurality of parallel plates



arranged between said side bars, the ends of the alternate plates contacting with the respective side bars, insulating strips disposed between the adjacent plates, and positive and negative current conducting wires connected to said metallic side bars.

1,062,127. DETACHABLE BED-GUARD. MARJORIE F. SMITH, Redlands, Cal. Filed Oct. 17, 1910. Serial No. 587,376. (Cl. 5—41.)



1. A bed guard consisting of a pair of longitudinally disposed flexible strips, straps and buckles attached at the inner end of said strips for securing the same to a bed post, detachable snap hook devices at the opposite ends of said strips adapted to secure the same to the opposite bed post, intermediate strips disposed between said first strips, transverse rigid slats connecting all of said strips, takeup devices disposed on said first strips for taking up the slack thereof, and means on said guard for securing the same at an intermediate point to the side rail of the bedstead.

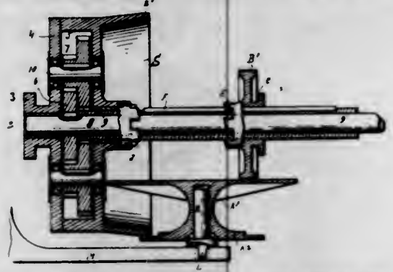
2. A bed guard consisting of upper and lower longitudinally disposed flexible strips, straps and buckles attached at one end of said strips for securing the same to a bed post, detachable snap hook devices at the opposite ends of said strips adapted to secure the same to the opposite bed post, intermediate strips disposed between said first strips and lying in the same plane as the said upper and lower strips, means mounted on said flexible strips to adjust the length of said bed guard and transverse rigid slats connecting all of said strips whereby the longitudinally disposed flexible strips are prevented from sagging when the guard is attached to a bed.

1,062,128. GEARING. ERICK J. SWEDLUND, Williston, N. D. Filed Mar. 2, 1912. Serial No. 681,116. (Cl. 74—34.)

1. In transmission gearing, a driving mechanism embodying a gear case constituting a fly wheel, a driven mechanism, a controlling mechanism embodying a friction wheel in coöperative relation with the driving mechanism, and means for effecting a direct drive to allow the driving and driven mechanisms to rotate as one.

2. In transmission gearing, a driving mechanism embodying a gear case constituting a fly wheel, a driven mechanism, a controlling mechanism embody an adjustable friction wheel in coöperative relation with the driving

mechanism, and means for effecting a direct drive to rotate the driving and driven mechanisms together as one.



3. In transmission gearing, a driving mechanism embodying a gear case constituting a fly wheel, a driven mechanism, a controlling mechanism embodying a friction wheel in coöperative relation with the driving mechanism, and means for effecting a direct drive to allow the driving and driven mechanisms to rotate together as one, said friction wheel being movable out of engagement with the driving mechanism to permit such direct drive.

4. In transmission gearing, a driving mechanism embodying a gear case constituting a fly wheel, a driven mechanism, a controlling mechanism embodying a friction device mounted for engagement with the driving mechanism, and means for effecting a direct drive to allow the driving and driven mechanisms to rotate together as one.

5. In transmission gearing, a driving mechanism embodying a gear case constituting a fly wheel, a driven member, a controlling mechanism embodying a friction device mounted for engagement with the driving mechanism, means for adjusting said friction drive and means for effecting a direct drive to cause the driving and driven mechanisms to rotate together as one.

[Claims 6 to 18 not printed in the Gazette.]

1,062,129. TOY. EDWARD SWEENEY, Trenton, N. J. Filed Nov. 23, 1912. Serial No. 733,222. (Cl. 46—40.)

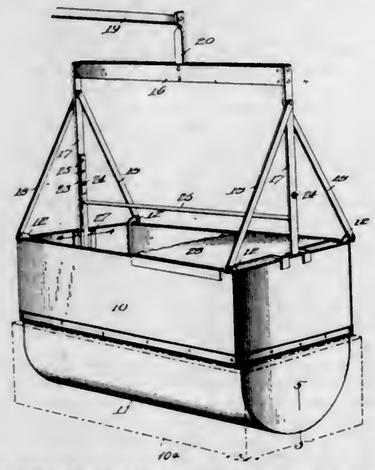


1. A toy, including a tubular handle having a sealed end, a bellows mounted therein and having one end fixedly connected to the sealed end, a spring incased within the bellows and having a normal tension to extend without the open end of the tubular member, a solid head member mounted in the outer end of the bellows and disposed to be projected by the spring, a flexible cord connected to said head and slidably mounted in the sealed end of the tubular member and operable exteriorly thereof, and means mounted upon the outer end of the flexible connection for closing the open end of the tube to retain the solid head and spring contracted within the tubular member.

2. A toy, including a tubular handle having a sealed end, a bellows mounted therein and having one end fixedly connected to the sealed end, a spring incased within the bellows and having a normal tension to extend without the open end of the tubular member, a solid head member mounted in the outer end of the bellows and disposed to be projected by the spring, a flexible cord connected to said head and slidably mounted in the sealed end of the tubular member and operable exteriorly thereof, an operating button mounted upon the flexible connection adjacent the free end and providing a short terminal upon the flexible connection, said button and short terminal coacting to engage the wall at the open end of the tubular member to lock the button therewithin and retain the spring contracted with the head within the tubular member.

3. A toy, having a tubular member provided with a sealed end having a concentric aperture therethrough, a bellows having one end connected within the tubular member, a solid head connected to the opposite end of the bellows, a coiled spring inclosed within the bellows, said spring within the bellows normally exerting a tension to project a portion thereof and the solid head exteriorly of the tubular member, a cord slidably mounted through the concentric aperture of the tubular member and having one end connected to the head while the other end is projected exteriorly of the tubular member, a button of substantially the same diameter as the open portion of the tube disposed upon the cord adjacent the opposite end to the head and providing a short terminal of greater length than the diameter of the button, and a knot formed upon the extreme end of the short terminal, whereby when the head and spring are contracted within the tubular member, the button and short terminal of the cord coact with the walls of the open end of the tube to seal the same and lock the spring against outward displacement.

1,062,130. WASHING-MACHINE. WILLIAM E. THOMPSON, Ranger Lake, N. Mex. Filed June 3, 1912. Serial No. 701,240. (Cl. 68—37.)



1. A washing machine comprising a receptacle, a rubber in the receptacle, said rubber comprising opposite sections brought together at their lower ends and pivotally connected, means for swinging said sections toward and from one another, a reciprocatory plunger working between the rubber sections, and means for operating the plunger.

2. A washing machine comprising a receptacle, a rubber in the receptacle, said rubber comprising opposite sections brought together at their lower ends and pivotally connected, means for swinging said sections toward and from one another, a reciprocatory plunger working between the rubber sections, said plunger traveling downward when the sections spread, and upward when they swing toward each other, and means for operating the plunger.

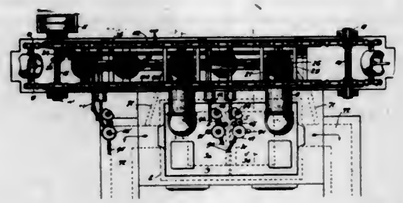
3. A washing machine comprising a receptacle, a rubber in the receptacle, said rubber comprising opposite sections brought together at their lower ends and pivotally connected, means for swinging said sections toward and from one another, a vertically adjustable reciprocatory plunger working between the rubber sections, and means for operating the plunger.

4. A washing machine comprising a receptacle, a rubber in the receptacle, said rubber comprising opposite sections brought together at their lower ends and pivotally connected, a reciprocatory cross-head, depending bars carried by the cross-head, pivoted arms carried by the bars and extending downward and outward therefrom in opposite directions and connected respectively to the rubber sections, and a reciprocatory plunger working between the rubber sections.

5. A washing machine comprising a receptacle, a rubber in the receptacle, said rubber comprising opposite sections brought together at their lower ends and pivotally connected, a reciprocatory cross-head, depending bars carried by the cross-head, pivoted arms carried by the bars and extending downward and outward therefrom in opposite directions and connected respectively to the rubber sections, and a plunger carried by the aforesaid depending bars and working between the rubber sections.

[Claims 6 and 7 not printed in the Gazette.]

1,062,131. PITCHING-MACHINE. HARRY TORCHIANI, Chicago, Ill. Filed Nov. 9, 1911. Serial No. 659,329. (Cl. 91—11.)



1. A pitching machine comprising in combination, a plurality of traveling nozzles adapted to project into the packages to be coated with pitch, a kettle containing pitch, conduits extending from the kettle, nozzles on said conduits, means for moving said first named nozzles relatively to said conduits to bring the same successively into opposition with said second named nozzles and means for discharging pitch from the kettle through the nozzles into the packages.

2. A pitching machine comprising in combination, a plurality of traveling nozzles adapted to project into the packages to be coated with pitch, a kettle containing pitch, conduits extending from the kettle, nozzles on said conduits, means for moving said first named nozzles intermittently and relatively to said conduits to bring the same succesively into opposition with said second named nozzles and means for discharging pitch from the kettle through the nozzles into the packages.

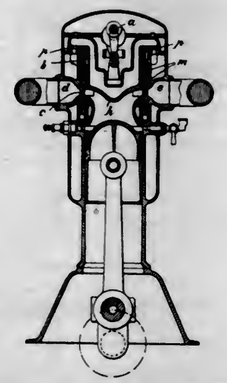
3. A pitching machine comprising in combination, a plurality of nozzles adapted to project into the packages to be coated with pitch, a kettle containing pitch, conduits extending from the kettle, nozzles on said conduits, means for moving said first named nozzles intermittently and relatively to said conduits to bring the same successively into opposition with said second named nozzles and for stopping the same when they are in said position, and means for discharging pitch from the kettle through the nozzles when said first named nozzles are at rest.

4. A pitching machine comprising in combination, a plurality of supports for the packages to be coated with pitch, nozzles secured to said supports and projecting into said packages, a kettle containing pitch, conduits extending from the kettle, nozzles on said conduits, conveying chains carrying said supports, continuously driven disks about which said conveying chains are guided, means for converting the continuous movement of said disks into an intermittent movement of said conveying chains, and means for discharging pitch from the kettle through said nozzles when the conveying chains are at rest.

5. A pitching machine comprising in combination, a plurality of traveling nozzles adapted to project into packages to be coated with pitch, a kettle containing pitch, conduits extending from the kettle, nozzles on said conduits, means for discharging pitch through said conduits when said first named nozzles are in opposition to said second nozzles, and means for preventing loss of pitch between said first named and said second named nozzles.

[Claims 6 to 13 not printed in the Gazette.]

1,062,132. EXPLOSION-MOTOR. JOSEPH VOLLMER, Berlin, Germany. Filed July 21, 1910. Serial No. 573,116. (Cl. 123—188.)



1. In an explosion-motor, in combination, a cylinder presenting a piston-slideway having an upward axial extension in the cylinder-head; a cover provided with a cylindrical prolongation fitting into the said slideway-extension; and two concentric cylindrical slide-valves located in the annular space between the inner wall of the said slideway-extension and the cover-prolongation, whose bottom end shuts off the said annular space from the main chamber of the cylinder, substantially as described.

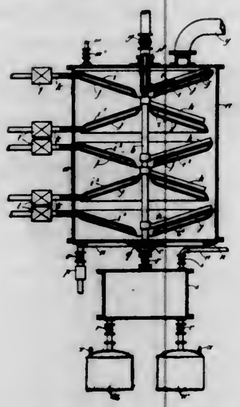
2. In an explosion-motor, in combination, a water-cooled cylinder presenting a piston-slideway having an upward axial extension in the cylinder-head; a cover provided with a cylindrical prolongation fitting into the said slide-way-extension; and two concentric cylindrical slide-valves located in the annular space between the inner wall of the said slideway-extension and the cover-prolongation, whose bottom end shuts off the said annular space from the main chamber of the cylinder, the two valves being guided respectively by the inner wall of the slideway-extension and the outer wall of the cover-prolongation; substantially as described.

3. In an explosion-motor, in combination, a cylinder presenting a piston-slideway having an upward axial extension in the cylinder head; a cover, having a mutilated fixing-flange, secured to the cylinder-head, and provided with a cylindrical prolongation fitting into the said slideway-extension; two concentric cylindrical slide-valves, having lugs passing through the said cylinder-flange, located in the annular space between the inner wall of the said slideway-extension and the cover-prolongation, whose bottom end shuts off the said annular space from the main chamber of the cylinder; cross-members attached to the said lugs; and valve-actuating mechanism connected with the said cross-members; substantially as described.

1,062,133. PROCESS OF MANUFACTURING CONDENSED MILK. MAURICE VOUGA, Cortaillod, Switzerland. Filed June 11, 1912. Serial No. 702,968. (Cl. 99—5.)

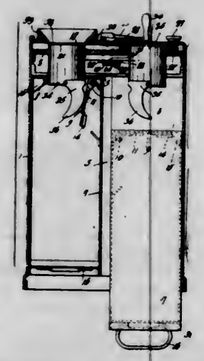
The improved process of manufacturing condensed milk consisting in flowing the milk to be treated, while under reduced pressure and protected from impure air down a series of inclined surfaces simultaneously spreading it out in a film in a direction at an angle to that of its flow, and independently heating each surface to a temperature

lower than that of the preceding one so as to heat the milk successively to lower temperatures corresponding to



the increase of its degree of concentration, substantially as described.

1,062,134. FARE-COLLECTING APPARATUS. CHARLES H. WOODS, Decatur, Ill. Filed July 20, 1912. Serial No. 710,674. (Cl. 232—7.)



1. The combination with a main housing, of a plurality of tills within the housing, each till having a closure at its upper end, fixed fare conveying members projecting and discharging into the respective tills and constituting means for holding the till closures open and extended downwardly into the tills, said tills being removable downwardly from the housing to withdraw from the conveying means therein, means for automatically shutting the closures when the tills are removed, and means for automatically locking the closures when shut.

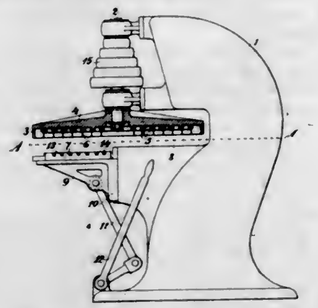
2. The combination with a main housing, of a plurality of tills within the housing, each till having a closure at its upper end, fixed fare conveying members projecting and discharging into the respective tills and constituting means for holding the till closures open and extended downwardly into the tills, said tills being removable downwardly from the housing to withdraw them from the conveying means therein, means for automatically shutting the closures when the tills are removed, means for automatically locking the closures when shut, and a receiver adjustable angularly on the housing for directing fares into any one of the conveying members.

3. The combination with a housing, and conveyers fixedly mounted therein, of tills mounted in the housing for receiving in the upper ends thereof the respective conveyers, fingers extending from the conveyers, closures upon the tills and adapted to be held open by the fingers, said closures, when open, projecting downwardly into the tills, a top plate mounted for rotation on the housing and having an aperture adapted to register with any one of the conveyers, a receiver movable with the top plate for directing fares into the aperture, and coöperating means upon the top plate and the housing for holding said plate in adjusted position.

4. The combination with a housing having separate compartments therein and a till removably mounted in each compartment, of a fixed top plate having a central opening, there being additional openings in said plate and above the respective compartments, a revoluble top plate, a boss thereon mounted for rotation within the central opening, there being an aperture in the top plate, a shutter normally closing the aperture, means mounted within the boss for shifting the shutter out of normal position, means for automatically returning the shutter to normal position.

5. The combination with a housing having separate compartments therein and a till removably mounted in each compartment, of a plate having a central opening, there being additional openings in said plate and above the respective compartments, a revoluble plate, a boss on the revoluble plate and mounted for rotation in said central opening, there being an aperture in the revoluble plate, a shutter normally closing the aperture in the revoluble plate, and coöperating means upon the two plates for holding the revoluble plate in adjusted position, the aperture in the revoluble plate being adapted to register with any one of the openings above the compartments.

1,062,135. APPARATUS FOR MANUFACTURING RIMS FOR WOODEN BELT-PULLEYS. HANS WOTTLE, Vienna, Austria-Hungary. Filed June 8, 1911. Serial No. 632,004. (Cl. 144—2.)



1. An apparatus for manufacturing rims for wooden belt pulleys comprising in combination a rotating plate, a series of circular concentrically arranged saws fitted to said plate, a work-table extending substantially from the center of said plate to its periphery, sets of stops or ledges on said work-table which converge toward substantially the center of said plate and inclose an angle which is a factor of 360°, spaces between said stops or ledges for allowing said saws to pass freely in their circular movement when cutting the triangular blanks between said stops or ledges, and means for actuating the work-table to bring same into operative position relatively to said saws.

2. An apparatus for manufacturing rims for belt pulleys comprising a frame, a rotatable plate thereon, a series of circular concentrically arranged saws fitted to said plate, a work-table extending substantially from the center of said plate to its periphery, sets of stops or ledges on said work-table which converge toward substantially the center of said plate and inclose an angle which is a factor of 360°, spaces between said stops or ledges for allowing said saws to pass freely in their circular movement when cutting the triangular blanks held between said stops or ledges, a bent lever mounted on said frame, and connected to said table and a hand lever actuating said bent lever to move said table.

1,062,136. THERMOSTAT. THEODORE H. WURMB and ROBERT BAUMANN, St. Louis, Mo., assignors to The National Clock and Electric Mfg. Co., St. Louis, Mo., a Corporation of Missouri. Filed May 12, 1910. Serial No. 560,842. (Cl. 177—128.)

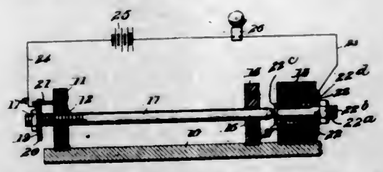


1. In combination with a pair of electric conducting members, one of which is thermally movable bodily relative to the other, and a fixed contact point, an elastic element carried by one of said members and adapted to electrically contact with the other of said members when the said members are in juxtaposition, said elastic element arranged to spring toward said fixed contact when said member carrying it is thermally acted upon.

2. In combination with a pair of members which are thermally movable bodily relative to each other and a pair of fixed contact points, an elastic bifurcated member carried by one of said pair of members arranged to embrace the other one of the pair of said members to form an electrical connection between said pair of members and arranged to spring to engage with said fixed contacts when said pair of members are thermally moved.

3. In combination with a pair of members one of which is thermally movable bodily relative to the other and a fixed contact point, a pair of elastic elements carried by one of said members arranged to embrace the other member of the pair to form an electrical connection between said pair of members and also arranged to spring toward and electrically connect said movable member with said fixed contact when said member is thermally moved.

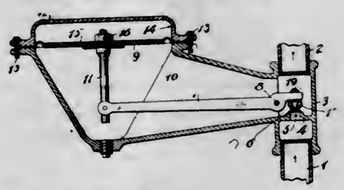
1,062,137. ELECTRIC FIRE-ALARM. HERMAN BARDITZKY, Memphis, Tenn. Filed May 11, 1912. Serial No. 696,664. (Cl. 177—128.)



1. A fire alarm comprising a base, two standards composed of materials which are non conductors of electricity, a rod secured in one standard and terminating near the second standard which standard is provided with an opening in line with the rod, a non-conducting guide block in which said rod is slidable, a contact plate secured on the outside of the second standard having an opening in line with the opening of said standard, a second rod of conducting material slidably mounted in the opening of the second standard, having a headed inner end, and a threaded outer end projecting through the opening in the contact plate, an expanding spring in the opening of the second standard around the second rod therein, between its headed inner end and the contact plate, and an electric circuit containing a battery and alarm and having its terminals in the ends of the two rods.

2. A fire alarm comprising a base of material but slightly expansible under the influence of heat, a standard of material which is a non-conductor of electricity erected at one end of the base and having a central threaded opening, a second standard of non-conducting material erected at the opposite end of the base and provided with a smooth central opening, a rod of conducting material more expansive than the base under influence of heat having one end threaded and engaged in the threaded opening of the first standard and the other end smooth and terminating near the second standard, a contact plate on the outside of the second standard having an opening in line with the highly expansive rod, a contact rod slidably fitted in the opening of the second standard and the contact plate and having a threaded end, a nut on said threaded end outside of the contact plate, a graduated dial secured on the threaded end of the highly expansive rod and having notches in its periphery, a pawl secured to the first standard and engaging said notches, and an electric circuit containing a battery and alarm and having its terminals in the threaded ends of the two rods.

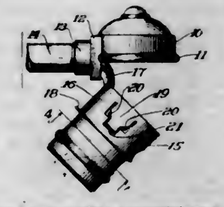
1,062,138. FLUID-PRESSURE REGULATOR. ROBERT N. BAYLIS, East Orange, N. J. Filed Jan. 14, 1913. Serial No. 741,925. (Cl. 50—21.)



1. In a fluid pressure regulator, a head having a fluid passage therethrough, a ball valve for said passage arranged to seat at the edge of said passage, a diaphragm controlled means, a presser head for said ball, said presser head being carried by said diaphragm controlled means and being arranged to engage the ball on the opposite side from its seat, said ball being laterally movable on said head, and a ball centering means arranged to hold the same in substantially the proper position relatively to its seat.

2. In a fluid pressure regulator, a head having a fluid passage therethrough, a ball valve for said passage arranged to seat at the edge of said passage, a diaphragm controlled lever, a pivotal mounting therefor, an adjustable carrier for said ball, said carrier being mounted at one end of said lever and including a presser head for engaging the ball on the opposite side from its seat, upon which head said ball is laterally movable, and means coacting with said ball to hold it in substantially the proper position between said presser head and said seat, said means permitting said ball to move laterally sufficiently to find its seat.

1,062,139. ELECTRIC-LAMP SOCKET. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 9, 1908. Serial No. 466,733. (Cl. 173—362.)



1. An electric lamp socket comprising a cap, a laterally extending supporting bushing secured to said cap, a shell detachably secured to said cap and supported thereby, said shell being formed with a recess registering with the inner

end of said supporting bushing when said cap and shell are assembled, and a lamp-contact-supporting insulating base contained in said shell and supported thereby.

2. An electric lamp socket comprising a cap formed with a lateral boss extending below the edge thereof, a supporting bushing secured to said boss, and a shell connected to said cap and supported thereby, said shell being formed with a recess for receiving the projecting lower part of said boss when said cap and shell are assembled.

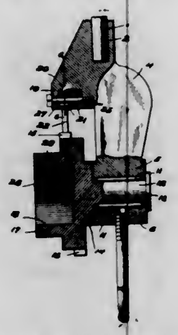
3. An electric lamp socket comprising a cap formed with a rectangular boss extending beyond the edge thereof, a supporting bushing secured to said boss, and a shell connected to said cap and supported thereby, said shell having a portion of its edge cut away to receive said boss when said cap and shell are assembled.

4. An electric lamp socket comprising a cap, hollow supporting means extending laterally from the cap, a shell connected to said cap and supported thereby, and an insulating base carried by said shell, said base being formed with a channel registering at its end with said supporting means when the said cap and shell are assembled.

5. An electric lamp socket comprising a cap, hollow supporting means extending laterally from the cap, a shell connected to said cap, and an insulating base carried by said shell, said base being formed with a channel in its upper face registering at its end with said supporting means when said cap and shell are assembled.

[Claim 6 not printed in the Gazette.]

1,062,140. RATCHET-WRENCH. FLOYD BISCH, Philadelphia, Pa. Filed Sept. 30, 1912. Serial No. 723,125. (Cl. 81—62.)



1. A wrench of the character described, comprising a rotary head having a nut receiving opening therein, two circular series of oppositely disposed ratchet teeth integral with the head, a journal integral with the head, a casting, a bearing at one end of the casting, a roller mounted in the bearing and supporting the said journal, a sleeve at the other end of the casting, a handle secured in the sleeve, an enlargement on the casting directly over the ratchet teeth and having a recess therein, pawls, and heads on the pawls pivotally secured in the recess, substantially as described.

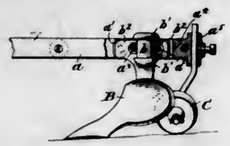
2. A wrench of the character described, comprising a rotary head having a nut receiving opening therein, two circular series of oppositely disposed ratchet teeth integral with the head, a journal integral with the head, a casting, a bearing at one end of the casting supporting the said journal, a handle at the other end of the casting, an enlargement on the casting directly over the ratchet teeth, gravity actuated, oppositely disposed pawls pivotally secured in the enlargement, an eye on either side of the enlargement, an eye on each pawl, a spring secured to each eye on the enlargement and each spring having a hook at its free end adapted to engage an eye on a pawl and hold the pawl out of engagement with the ratchet teeth, substantially as described.

3. A wrench of the character described, comprising a rotary head having a circular series of ratchet teeth thereon, of a member mounted to oscillate on the rotary head, said member having a recess therein, a pawl engaging the ratchet teeth, said pawl at one end positioned in the recess, and a pin projected across the recess and through an opening in the pawl appreciably larger than the pin, whereby when pressure is applied upon the pawl by the movement of the oscillating member, the end of the pawl will bear against the wall of the recess, substantially as described.

4. A wrench of the character described, comprising a rotary head having a nut receiving opening therein, two circular series of oppositely disposed ratchet teeth integral with the head, a journal integral with the head, a casting, a bearing at one end of the casting supporting the said journal, a handle at the other end of the casting, an enlargement on the casting directly over the ratchet teeth, and having a recess therein, gravity actuated, oppositely disposed pawls, heads on the pawls having openings therein, and a bolt positioned in the openings and secured in the enlargement, forming a pivot for the pawls, said openings larger than the bolt and said recess larger than the heads, whereby the pressure on the pawls is received by the enlargement, substantially as described.

5. A wrench of the character described, comprising a rotary head having a nut receiving opening therein, two circular series of oppositely disposed ratchet teeth integral with the head, a journal integral with the head, a casting, a bearing at one end of the casting supporting the said journal, a handle at the other end of the casting, an enlargement on the casting directly over the ratchet teeth, and having a recess therein, gravity actuated, oppositely disposed pawls, heads on the pawls having openings therein, and a bolt positioned in the openings and secured in the enlargement, forming a pivot for the pawls, said openings larger than the bolt and said recess larger than the heads, whereby the pressure on the pawls is received by the enlargement, one of said pawls being always in engagement with one series of teeth, and means for holding either pawl out of engagement, substantially as described.

1,062,141. PLOW. CARL A. BROSTROM, Moline, Ill. Original application filed Nov. 16, 1911, Serial No. 660,570. Divided and this application filed June 21, 1912. Serial No. 705,043. (Cl. 97—21.)

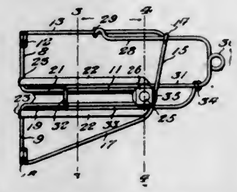


1. In a plow, a beam comprising a pair of connected spaced bars, a pair of blocks positioned between said bars and provided with curved portions in the adjacent faces thereof, a standard provided with a cylindrical shaped portion fitting between the curved portions of said blocks, said standard being provided with a projection extending laterally therefrom and positioned between the spaced bars of the plow beam, means carried by the beam and adjustably engaging said portion to adjust the standard relative to said beam, and clamping bolts passing between the bars of the beam and the interposed block.

2. In a plow, a plow beam comprising a pair of spaced bars, blocks positioned between the bars of said beam and provided with curved portions in the adjacent faces thereof, a standard provided with a cylindrical portion fitting between the curved portions of said blocks, said standard being provided with a projection extending therefrom, and set screws threaded in the bars of said beam and engaging opposite sides of the projection extending from said standard.

3. In a plow, a beam comprising a pair of connected spaced bars, a pair of blocks positioned between said bars and provided with curved portions in the adjacent faces thereof, a standard provided with a cylindrical shaped portion fitting between the curved portions of said blocks, having collars positioned above and below said blocks and with a projection extending laterally therefrom, means carried by the beam and adjustably engaging said projection to adjust the standard in the beam, and clamping bolts connecting the spaced bars of the beam.

1,062,142. ADJUSTABLE WINDOW-SHADE BRACKET. JAMES R. BROWN, Pampa, Tex. Filed Aug. 3, 1912. Serial No. 713,174. (Cl. 156—24.)



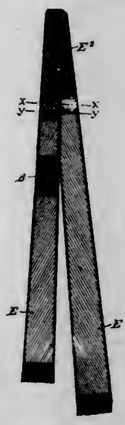
1. A bracket of the character described, having in combination, a channel plate having one end crimped and apertured and the opposite end provided with securing nibs, of a stationary wire bracket forming member held to said crimp and within said nibs having a guide stem, a wire sliding carrying member having a bolt eye and a terminal ear engaging said guide stem, and a bolt within said aperture and eye, to clamp said wire members to said plate, as and in the manner set forth.

2. In combination, a channel plate, a wire supporting frame having two straight end portions held within the channel of said plate said supporting frame having two stand portions each including a securing eye, said supporting frame further including an upper guide stem and a lower brace forming portion, a wire carrying member including a terminal ear engaging said guide stem and having a retrorse section including two parallel stems held within the channel of said plate and adjacent to said parallel portions, said carrying member having a suitable stud holding eye, and a bolt to clamp said wire members to said plate, as and in the manner set forth.

3. In combination, a one piece wire supporting frame having two straight end portions held in parallel spaced relation, each end portion terminating in a curved tip said tips contacting, each end portion continued at right angles in an upper and lower stand section, each ending in a securing eye, said stand sections being alined and extending in opposite directions, a guide stem extending from said upper eye parallel to said stem portions ending in a guide ear, from which the wire is continued at an angle in a forward stem portion, ending in a bolt eye, registering with said curved tip, from which the wire is continued in a brace portion forming an integral part of said lower securing eye, a channel guide plate having two nibs encircling said stand portions at one end, and an aperture and crimp at the opposite end, a bolt within said aperture, the tips of said parallel portions held between said bolt and crimp, said parallel portions held within the channel of said plate, a wire carrying member including a terminal ear engaging said guide and contained in a stem passing through said guide ear and continued to form a stub holding eye from which extends a retrorse section including two parallel guide stems held adjacent to said parallel end portions, a bolt within said apertures and passing through said bolt eye, and a nut upon said plate to clamp said parallel members between said plate and bolt eye.

1,062,143. TUBULAR FABRIC. EVAN CARDOT, Pottsville, Pa., assignor to The Phoenix Silk Manufacturing Company, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 24, 1911. Serial No. 610,655. (Cl. 139—72.)

1. As an article of manufacture a tubular body and linings located within said body only at the ends thereof, so as to leave the central portion unlined, the warps of the body and of the linings being interwoven with the same weft, but more loosely in the linings than in the body.

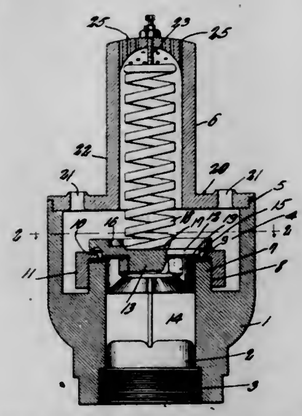


2. As an article of manufacture a tubular body and linings located within said body only at the ends thereof, so as to leave the central portion unlined, the warps of the body and of the linings being interwoven with the same weft.

3. As a new article of manufacture a tubular body and a lining within said body, said body and lining having a weft common to the warps of both interwoven with the warps of the lining proportionately less frequently than with the warps of the body, whereby the lining may be bent crosswise more readily than the tubular body.

4. As an article of manufacture a tubular body and linings located within said body only at the ends thereof, so as to leave the central portion unlined, the warps of the body and of the linings being interwoven with the same weft, but more loosely in the linings than in the body, and those ends of the warps of the linings which are adjacent to the unlined central portion of the body, being concealed within the tubular body.

1,062,144. VALVE. ARTHUR L. DELVAUX, Champaign, Ill. Filed Jan. 28, 1913. Serial No. 744,776. (Cl. 136—9.)



1. A valve comprising a casing provided with a cylindrical chamber therein, and a cylindrical bore communicating therewith, a valve seat secured within said chamber, a plurality of flat valve seat plates positioned there-

on, means for holding said valve seat plates in position, a valve head, a valve stem secured thereto, a spider secured to said valve stem and slidably engaging the side walls of said cylindrical bore, a plurality of valve head plates disposed between said spider and said valve head, a cap secured to said casing at the upper extremity thereof, resilient means disposed between said valve head and said cap adapted to maintain said valve head in a seated position.

2. In a valve of the character described the combination of, a casing provided with a valve chamber provided with a cylindrical bore communicating therewith, an upstanding valve seat disposed within said chamber, a plurality of valve seat plates secured upon the upper extremity thereof, means for holding said valve seat plates in position thereon, a valve head disposed within said cylindrical chamber, a valve stem depending therefrom, a spider slidably engaging the side walls of said cylindrical bore secured to said valve stem, a plurality of valve head plates disposed between and held in position by said valve head and said spider, said valve head provided with a wrench-engageable recess therein, said spider provided with a wrench-engageable surface thereon, a cap secured to the upper extremity of said valve casing, a compression spring disposed between said cap and said valve head.

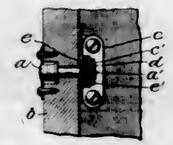
3. In a valve of the character described, a casing provided with a cylindrical valve chamber therein and with a cylindrical bore communicating therewith, a valve seat disposed within said cylindrical chamber and externally threaded, a plurality of valve seat plates positioned upon the upper surface of the valve seat, a ring provided with a depending flange extending therefrom threadedly engaging said valve seat and adapted to secure said valve seat plates in position, a valve head, a valve stem extending therefrom, said valve stem externally threaded, a spider slidably engaging the side walls of said cylindrical bore and threadedly engaging said valve stem, a plurality of valve head plates secured between said valve head and said spider, said valve head and said spider provided with wrench engaging surfaces, a cap threadedly engaging the upper portion of said valve casing, a compression spring disposed within said cap and contacting with said valve head, means secured to the upper portion of said cap to vary the compression of said spring.

4. A pressure safety valve comprising a casing, said casing provided with a cylindrical valve chamber therein, and with a cylindrical bore communicating therewith, an upstanding rim disposed within said valve chamber, said rim provided with external threads thereon, a plurality of valve seat plates positioned upon the upper extremity of said rim, a ring provided with a depending cylindrical flange therefrom threadedly engaging said rim and adapted to secure said valve seat plates in position, a valve head comprising two cylindrical plates of different diameters, the upper of said plates provided with a wrench engaging recess therein, and provided with a nut engaging and spring engaging recess therein, said lower plate provided with a threaded valve stem extending therefrom, a spider threadedly secured to said valve stem and slidably engaging the side walls of said cylindrical bore, a plurality of valve head plates disposed between said spider and said lower plate of said valve head, a valve cap threadedly engaging the upper portion of said valve casing and provided with a spring housing extending upwardly therefrom, a spring disposed within said housing and contacting with said valve head, means to vary the compression of said spring, said cap provided with apertures therein.

1,062,145. FASTENING DEVICE. AMOS F. DIXON, Chicago, Ill., assignor to Western Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1907. Serial No. 378,359. (Cl. 70—3.)

1. In a device for temporarily uniting two parts, the combination with a nut mounted upon one part to have a limited lateral movement in all directions, and a cooperating rotatable bolt mounted upon the other part adapted when actuated to cause the opening in said nut to be automatically alined with said bolt to receive and hold it.

2. In a device for temporarily uniting a fixed and a movable part, the combination with a nut mounted upon the fixed part to have a limited lateral movement in all directions, and a coöperating rotatable bolt mounted upon the movable part to lie approximately in operative relation to said nut when the parts are together, and adapted when actuated to cause the opening in said nut to be automatically alined with said bolt to receive and hold it.



3. In combination, a case and door, a threaded bolt rotatably movable within an opening in said door, a threaded locking sleeve therefor mounted non-rotatably within an opening in a coöperating part of said case but free to have a limited lateral movement therein, whereby the actuation of said bolt causes the opening in said threaded sleeve to be automatically alined with said bolt to receive and hold it.

4. In a fastening device the combination with a bolt, of a support having an opening therein, a locking nut mounted in said opening, and flange plates upon the locking nut preventing the removal and rotation of the nut but permitting a free lateral movement thereof.

5. In a fastening device, the combination with a bolt, of a plate having an opening therein, a tubular sleeve projecting loosely through said opening, and a plate secured at each end of the sleeve, said latter plates overlapping the sides of the opening in said first named plate.

[Claim 6 not printed in the Gazette.]

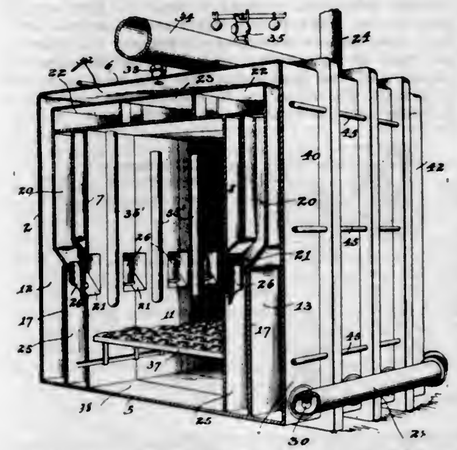
1,062,146. EMASCULATOR. ERNEST D. DOUGLASS, Chicago, Ill., assignor to Frank S. Betz, Hammond, Ind. Filed Sept. 28, 1912. Serial No. 722,995. (Cl. 128—27.)



1. In an instrument of the class described, the combination of a pair of operating levers movable toward and away from each other and provided with coacting cutting edges and coacting crushing jaws located at one side of said cutting edges, said crushing jaws being provided with opposed sets of transverse serrations and opposed sets of longitudinal serrations, the transverse serrations being located between the longitudinal serrations and the cutting edges, and one of said jaws being pivotally mounted on its respective lever on an axis transverse to the cutting edge and located substantially midway between the ends of its crushing face.

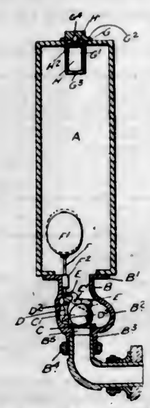
2. In an instrument of the class described, the combination of a pair of operating levers movable toward and away from each other and provided with coacting cutting edges and coacting crushing jaws located at one side of said cutting edges, said crushing jaws being provided with opposed sets of transverse serrations and opposed sets of longitudinal serrations, the transverse serrations being located between the longitudinal serrations and the cutting edges and lying in a different plane from that of said longitudinal serrations, and one of said jaws being pivotally mounted on its respective lever on an axis transverse to the cutting edge and located substantially midway between the ends of its crushing face.

1,062,147. FURNACE. FRANCIS J. DOYLE, Chicago, Ill. Filed July 19, 1909. Serial No. 508,410. (Cl. 122—225.)



In a furnace, the combination with a longitudinally extending fire box of substantially the same height as the furnace, a boiler extending around said fire box, a plurality of combustion chambers extending along either side of said fire box between the latter and the boiler, said combustion chambers terminating at points above the base of the fire box, inlet conduits at the lower end of said combustion chambers, a common air chamber beneath each row of combustion chambers and communicating with the latter, a pair of flues extending longitudinally of the furnace above the combustion chambers, air conduits extending from said air chamber to the tops of said combustion chambers and to said flues, a common exhaust flue intermediate the other flues and a chimney connected with said latter flue, the inlet and outlet ports of said flues being at opposite ends.

1,062,148. FLUSHING SYSTEM. WILLIAM ALEXANDER FRASER, Georgetown, Ontario, Canada. Filed July 12, 1912. Serial No. 708,982. (Cl. 4—5.)

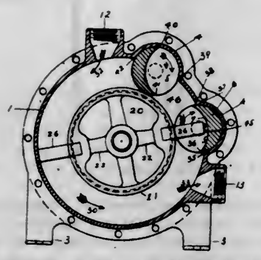


1. In a flushing system, the combination with a tank and flushing pipe extending from the bottom thereof and having a suitable seat and ball resting on such seat, and a hollow boss designed to receive the ball when shifted from its seat, of means for shifting the ball from its seat into the seat in the boss, a lever suitably fulcrumed and located above the ball, and means for throwing the lever downwardly as the ball is shifted from its seat and for raising the end of the lever above the ball when the tank is emptied in order to permit the ball being drawn by suction on to its seat as and for the purpose specified.

2. In a flushing system, the combination with a tank and flushing pipe extending from the bottom thereof and having a suitable seat and ball resting on such seat, and a hollow boss designed to receive the ball when shifted from its seat, of means for shifting the ball from its seat into the seat in the boss, a lever suitably fulcrumed and located above the ball, a rod connected to the end of the lever remote from the ball, and a float located on the top of the rod and a suitable guide-way for the rod as and for the purpose specified.

3. In a flushing system, the combination with a tank and flushing pipe extending from the bottom thereof and having a suitable seat and ball resting on such seat, and a hollow boss designed to receive the ball when shifted from its seat, of means for shifting the ball from its seat into the seat in the boss, a substantially Z-shaped lever suitably fulcrumed and located above the ball, said lever having at its forward end a laterally extending lip narrowed to extend substantially over the center of said ball, a rod connected to the end of the lever remote from the ball, and a float located on the top of the rod and a suitable guide-way for the rod as and for the purpose specified.

1,062,149. BLOWER. NELSON E. FUNK, New York, N. Y., assignor to Funk Machine Co., a Corporation of New York. Filed Apr. 5, 1910. Serial No. 553,526. (Cl. 230—30.)

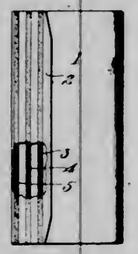


1. The combination of an exterior substantially cylindrical wall of a complete circumference, an inner concentric drum forming with said wall an annular passage extending a complete circumference and provided with an inlet and an outlet and being otherwise continuously sealed against passage of fluid, means carried by said drum for impelling a fluid under compression through said annular passage, and means for maintaining a continuous fluid seal between said inlet and said outlet on one side of said annular passage, said means comprising a plurality of valves disposed in said annular passage on said one side between said inlet and said outlet, said valves being housed in uninterrupted portions of said substantially cylindrical wall.

2. The combination of an exterior substantially cylindrical wall of a complete circumference having two spaced offsets, the peripheries of which are continuous with the remainder of said wall, said wall being further provided with an inlet and an outlet and being otherwise continuously sealed against passage of fluid laterally into and from said annular passage, said two spaced offsets being disposed on one side between said inlet and said outlet, an inner concentric drum forming with said wall an annular passage of a complete circumference, two valves respectively housed in said spaced offsets, said valves alternately coöperating with said drum and the inner surfaces of their respective offsets to seal against the longitudinal passage of fluid from said inlet to said outlet through said one side of said annular passage, two arms carried by said drum for impelling fluid from said inlet to said outlet through the other side of said annular passage, means for rotating said drum, and means for synchronously rotating said valves at a greater angular speed than said drum.

3. The combination of an exterior substantially cylindrical wall of a complete circumference having two openings serving respectively as an inlet and an outlet, said wall being otherwise continuously sealed against the passage of gas, said wall further having two spaced offsets disposed on one side between said inlet and said outlet, an inner concentric rotatable drum forming with said exterior wall an annular passage of a complete circumference, two crescent-shaped valves disposed respectively in said two offsets, means for rotating said valves to alternately effect a continuous seal against passage of gas through the annular passage on said one side between said inlet and said outlet, two arms fixed to said rotatable drum for impelling gas under compression through the annular passage on the other side from said inlet to said outlet, means for rotating said drum, and gears driven by said drum rotating means for rotating said valves at a greater angular speed, the solid portions of said crescent-shaped valves being disposed with relation to each arm as the latter passes through each valve to provide a clearance for the passage of gas.

1,062,150. ADJUSTABLE PROTECTOR FOR LAUNDRIED SHIRTS. NATHAN J. GOODMAN, St. Louis, Mo. Filed Feb. 12, 1912. Serial No. 676,972. (Cl. 229—87.)



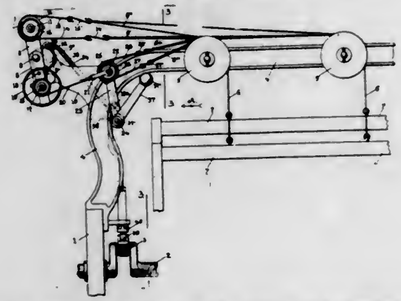
As a new article of manufacture, an adjustable protector for laundried shirts, comprising a rectangular section of inflexible material having adjacent one of its side margins a number of spaced-apart gummed lines extending the length of the section, and a relatively flexible section having one of its side margins adhesively secured to the side margin of the inflexible section opposite the gummed lines, the flexible section having greater width than the inflexible section and arranged to be secured adjacent its free margin to one or the other of said gummed lines, whereby the protector may be made in different sizes to accommodate shirts of different widths, and also to provide for resealing of the protector.

1,062,151. SHEDDING MECHANISM FOR LOOMS. ALBERT A. GORDON, Jr., Worcester, Mass., assignor to Crompton & Knowles Loom Works, a Corporation of Massachusetts. Filed Sept. 25, 1911. Serial No. 651,018. (Cl. 139—80.)

1. In shedding mechanism for loom harnesses, a system of compound levers, and connections therefrom to the harnesses, a movable fulcrum for one of said levers, means to lock said fulcrum in its normal position, and means to unlock and to move said fulcrum, to allow the connections to the harnesses to slack, to even the harnesses and bring the warps into the same plane.

2. In shedding mechanism for looms, the combination with the harnesses, and a pivotally mounted lever having a movable fulcrum, and rocking members mounted on said lever, and connections intermediate said rocking members and said harnesses, of means for manually moving said fulcrum, to allow said connections to slack, to even the harnesses, and bring the warps into the same plane.

3. In shedding mechanism for looms, the combination with the harnesses, and a pivotally mounted lever having a movable fulcrum, and rocking members mounted on said lever, and connections intermediate said rocking members and said harnesses, of means for manually moving said fulcrum, comprising a crank member, or disk, carrying said fulcrum, and fast on a rotary shaft, and said rotary shaft mounted in a bearing on a stationary stand, and an arm fast on said shaft, a connection on said arm to a second arm, and said second arm fast on a shaft, and said shaft, and an arm also fast on said shaft, to be manually operated to move said fulcrum.

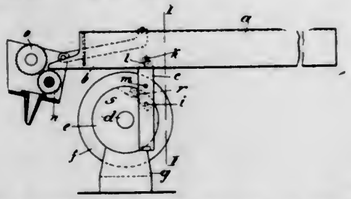


4. In shedding mechanism for looms, the combination with the harnesses, and a pivotally mounted lever having a movable fulcrum, and rocking members mounted on said lever, and connections intermediate said rocking members and said harnesses, of means for manually moving said fulcrum, comprising a crank member, or disk, carrying said fulcrum, and fast on a rotary shaft, and said rotary shaft mounted in a bearing on a stationary stand, and an arm on said shaft, a connection on said arm to a second arm, and said second arm fast on a shaft, and said shaft, and an arm also fast on said shaft, to be manually operated to move said fulcrum, and a pin or stop to limit the movement of said fulcrum.

5. In a shedding mechanism for looms, the combination with the harnesses, and a pivotally mounted lever having a movable fulcrum, and rocking members mounted on said lever, and connections intermediate said rocking members and said harnesses, of means for manually moving said fulcrum to allow said connections to slack, to even the harnesses and bring the warps into the same plane, and means to move the mechanism for evening the harnesses into its operative position, if the operator starts the loom without resetting the mechanism for evening the harnesses.

[Claim 6 not printed in the Gazette.]

1,062,152. MECHANISM FOR SUPPLYING SINGLE HAIRS TO A SPINNING-MACHINE. REINHOLD GRABEIN, Forst, Germany. Filed Jan. 14, 1911. Serial No. 602,617. (Cl. 28—21.)



1. In a device of the class described, in combination, a horizontally disposed trough adapted to hold the hair, said trough being fixed, said trough being provided with a slot in its lower portion extending in the direction of its length, feed rolls, rotatable pincers positioned below said trough and adapted to pass through said slot in the direction of the length of the trough to grasp the hair and convey it from said trough to said feed rolls, said pincers being positioned tangentially with respect to the direction of rotation, and means to rotate said pincers.

2. In a device of the class described, in combination, a horizontally disposed trough adapted to hold the hair, said trough being fixed, said trough being provided with a slot in its lower portion extending in the direction of its length, feed rolls, rotatable pincers positioned below said trough and adapted to pass through said slot in the direction of the length of the trough to grasp the hair and convey it from said trough to said feed rolls, means comprising a cam member for controlling the opening-and-closing movement of said pincers, said pincers being positioned tangentially with respect to the direction of rotation, and means to rotate said pincers.

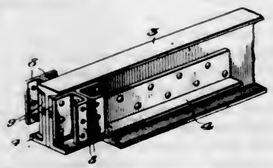
3. In a device of the class described, in combination, a horizontally disposed trough adapted to hold the hair, said trough being fixed, said trough being provided with a slot in its lower portion extending in the direction of its length, feed rolls, rotatable pincers positioned below said trough and adapted to pass through said slot in the direction of the length of the trough to grasp the hair and convey it from said trough to said feed rolls, said pincers being positioned tangentially with respect to the direction of rotation, a reciprocatable pin engaging one of the arms of said pincers, a spring normally holding the arms of said pincers in closed position, means for reciprocating said pin during the rotation of said pincers whereby they will be opened and closed, and means to rotate said pincers.

4. In a device of the class described, in combination, a horizontally disposed trough adapted to hold the hair, said trough being fixed, said trough being provided with a slot in its lower portion extending in the direction of its length, feed rolls, rotatable pincers positioned below said trough and adapted to pass through said slot in the direction of the length of the trough to grasp the hair and convey it from said trough to said feed rolls, said pincers being positioned tangentially with respect to the direction of rotation, means to rotate said pincers, and adjustable means positioned adjacent the gripping ends of said pincers to control the quantity of hair which is gripped thereby.

5. In a device of the class described, in combination, a fixed trough adapted to hold the hairs and povided with a slot extending in the direction of its length, a rotatable member positioned below said slot, a pair of pincers carried thereby, said pincers being positioned tangentially with respect to the direction of rotation of said member, whereby the pincers will pass through said slot in the direction of the length of the hair, means to rotate said member, and means to close and open said pincers, whereby they will grasp the hair and carry it along the trough.

[Claims 6 and 7 not printed in the Gazette.]

1,062,153. METAL UNDERFRAME FOR CAR CONSTRUCTION. WILLIAM C. GREGG, Hackensack, N. J., assignor to The Gregg Company, Limited, Hackensack, N. J., a Corporation of New York. Filed May 10, 1912. Serial No. 696,419. (Cl. 105—76.)

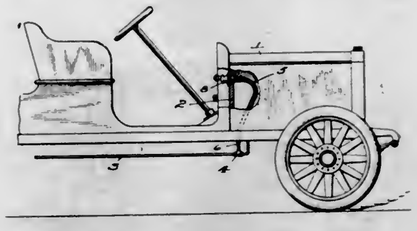


1. A metal under-frame for car construction, comprising an I-beam center sill, a bolster, L-shaped bars attached to the sides of the center-sill and entering the bolster, draft-sills parallel with and extending beyond the center-sill and its attached bars, and spacing members connecting the draft-sills with the center-sill and its attached bars.

2. A metal under-frame for car construction, comprising an I-beam center-sill having its lower portion at the ends cut-away to reduce its depth, a bolster, L-shaped bars attached to the sides of the I-beam to continue the I-beam construction within the bolster, bottom and top bolster plates, and means connecting the top flanges of the I center-sill and the bottom flanges of the L-bars to the bolster plates.

3. A metal under-frame for car construction, comprising an I-beam center-sill, a bolster, L-shaped bars attached to the sides of the center sill and entering the bolster, draft-sills parallel with and extending beyond the center-sill and its attached bars, spacing members connecting the draft-sills with the center-sill and its attached bars, top and bottom bolsterplates, and means connecting said plates to the draft-sills and to the top flanges of the center-sill and bottom flanges of the L-shaped bars.

1,062,154. LOCKING DEVICE FOR FUEL-SUPPLY VALVES. ALBERT K. HARNLY, Reading, Pa. Filed Nov. 14, 1912. Serial No. 731,278. (Cl. 70—91.)



1. A locking device for fuel control valves comprising a sleeve formed with an internal annular groove, and a flange formed with a dished surface, a portion of which is rectangular in outline; a body portion formed with a rectangular shank for engagement with the dished portion of the sleeve; a key barrel; a pin carried by said barrel and adapted to travel in the groove in the sleeve whereby the body is locked or unlocked with relation to the sleeve; and a key for turning said barrel.

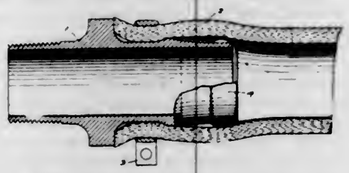
2. A device of the character described comprising a sleeve formed with an internal annular groove and a flange having a dished surface, a portion of which is rectangular in outline; a body portion having a stem at its inner end, and a rectangular shank for engagement with the dished portion of the sleeve; a key barrel; a pin carried by said barrel and adapted to travel in the groove in the sleeve whereby the body is locked or unlocked with relation to the sleeve; an annularly grooved sleeve secured to the stem of the body portion, and a flexible member secured in the grooves of said sleeve and adapted to rotate therewith.

3. In a locking device for fuel control valves, a sleeve formed with an internal annular groove, a flange, means for securing the flange to a body, said flange having a dished face, a portion of which is rectangular in form; a body adapted to rotate in the sleeve and having an enlarged end formed with a rectangular shank for engagement with the dished surface in the flange; a key barrel in said body provided with a pin adapted for engagement with the internal groove in the sleeve to lock the body against movement with relation to the sleeve, and key operated means for releasing said pin engagement.

1,062,155. FLEXIBLE-HOSE PROTECTOR. JOSEPH D. HARRIS, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 29, 1908. Serial No. 440,796. (Cl. 137—28.)

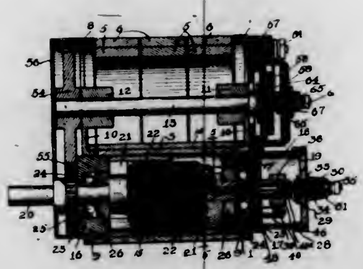
1. A device for protecting flexible hose, comprising a metallic cap adapted to fit over the end of a nipple, and a non-metallic cushion carried by the cap for engaging the flexible hose.

2. A device for protecting flexible hose ends, comprising a metal cap adapted to fit over the end of a nipple, and a



rubber cushion mounted on the cap to engage the inner tube of the flexible hose.

1,062,156. IGNITION-MAGNETO. ALEXANDER L. HEIZER, Chicago, Ill., assignor to Vesta Accumulator Company, a Corporation of Illinois. Filed Mar. 2, 1910. Serial No. 546,811. (Cl. 123—149.)

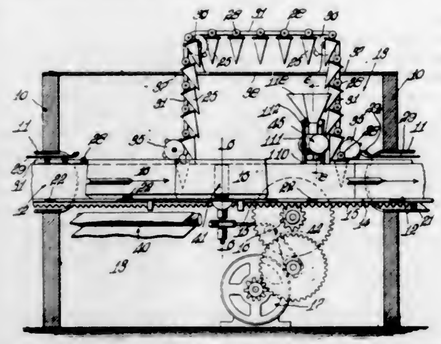


1. In a magneto, a casing, an armature in said casing, adjustable poles for said armature, a shiftable non-magnetic shell connected to said poles to control the position of the latter and acting as a closure for one end of said armature, a lever for shifting said shell and armature poles, a brake engaging said shell to retain it and said poles in any adjusted position, a shaft journaled in said casing and geared to said armature, and a distributing mechanism operated by said shaft.

2. In a magneto, a casing, an armature in said casing, adjustable poles for said armature, a shiftable non-magnetic shell connected to said poles to control the position of the latter and acting as a closure for one end of said armature, a lever for shifting said shell and armature poles, a brake engaging said shell to retain it and said poles in any adjusted position and consisting of a split ring fixed to said casing and provided with lugs at its split ends and a spring-pressed adjusting screw engaging said lugs, a shaft journaled in said casing and geared to said armature, and a distributing mechanism operated by said shaft.

1,062,157. BAKING CONES. MINOR L. HITCHCOCK, Los Angeles, Cal. Filed May 18, 1912. Serial No. 698,174. (Cl. 107—58.)

1. In combination, a bake oven structure, a circularly arranged tube extending continuously through said structure and having ends communicating with space exterior thereto, a continuous circular ring extending around through said tube and across a space between the ends thereof, means to continuously move said ring around through the tube, exterior forms carried by said ring each comprising two separable parts, interior forms adapted normally to fit within the exterior forms, a continuous flexible carrier for said interior forms, guiding means for said flexible carrier to move the interior forms away from the exterior forms during the portion of the travel between the two ends of the tube, means to normally press the interior forms tightly into place in the exterior forms, charging mechanism operated by the movement of the exterior forms to supply each form with a suitable charge of raw material during that portion of its travel when the interior forms are removed therefrom, and means to move and part the separated parts of the exterior forms to discharge the finished article therefrom during their travel between the ends of the tube.



2. In combination with a heating means, a revoluble form carrying ring supported on suitable bearings, exterior forms carried by said ring each comprising a relatively stationary half and a relatively movable half hinged to the stationary half at its upper edge, an inner form normally resting within the exterior form and having a cap resting upon the upper surfaces of the exterior form halves, means to normally hold the exterior form halves together, and means to move the relatively movable half away from the other.

3. In combination with a heating means, a revoluble form carrying member supported on suitable bearings, exterior forms carried by said member each comprising a relatively stationary half and a relatively radially movable half, means to normally hold the movable half against the stationary half, and means to separate the halves during a portion of the member's revolution.

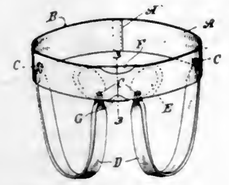
4. In combination with a heating means, a movable mold construction embodying a ring supported on suitable bearings in a horizontal plane to rotate about its own axis, said ring having in its peripheral face a plurality of recesses, a plurality of members hinged to the upper peripheral edge of said ring and normally pressing against the peripheral face thereof, said members having in their faces recesses adapted to register with the first mentioned recesses to form a complete mold and being capable of swinging outwardly on their hinges to open the mold below.

5. In combination with a heating means, a movable mold construction embodying a ring supported on suitable bearings in a horizontal plane to rotate about its own axis, said ring having in its peripheral face a plurality of recesses, a plurality of members hinged to the upper peripheral edge of said ring and normally pressing against the peripheral face thereof, said members having in their faces recesses adapted to register with the first mentioned recesses to form a complete mold, means to normally hold said members in position against the said ring, and means to swing said members outwardly at their lower ends during a portion of the rotary travel of said ring.

[Claims 6 and 7 not printed in the Gazette.]

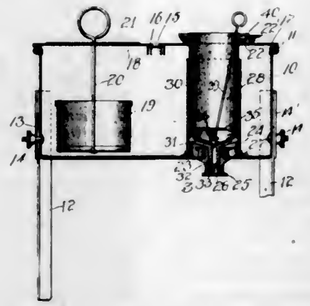
1,062,158. TRUSS. AMAND MARTIN HUBEL, New York, N. Y. Filed Dec. 19, 1911. Serial No. 666,769. (Cl. 128—26.)

A truss comprising an endless band of elastic material folded upon itself, a pad on said band, means for connecting the folds of said band together at intervals, and endless doubled loops slidable over said connecting means



and arranged to extend about the legs of the wearer for securing said band in position.

1,062,159. VISCOSIMETER. FRIMAN KAHRS, East Haddam, Conn.; Marie Kahrs executrix of said Friman Kahrs, deceased. Filed Feb. 5, 1910. Serial No. 542,252. (Cl. 73—51.)



1. In a viscosimeter, a materials receptacle having a bottom delivery outlet, and a wide open horizontal top opening through which the upper surface of the materials therein contained is visible at any level, said opening constituting the upper reading level, a radial web in the bottom of said receptacle extending from one side thereof inwardly, a vertical stem movably mounted upon the inner edge thereof, a gage member upon the upper end of said stem at a level above the web but considerably below said reading level, the lower end of said stem being screw-threaded, and a screw for micrometer adjustment of said gage member to determine an exact lower reading level.

2. In a viscosimeter, a materials receptacle having a bottom delivery opening and a horizontal top opening of the full width of the receptacle interior, said opening constituting the upper reading level and being the opening through which to view the descending surface of the material when the viscosimeter is in operation, a suitable gage located centrally within the receptacle near its bottom visible from said wide top opening when it breaks through the descending surface of the material, and a radial web extending from a wall of said receptacle inwardly and tending to prevent rotation of the material around said bottom outlet, said web lying wholly below the reading level determined by said gage.

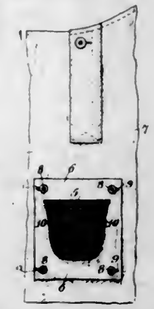
3. In a viscosimeter, a materials receptacle comprising a cylinder open at its top end and having its top edge arranged to indicate the upper reading level, a nozzle detachably secured to the lower end of said cylinder, and a lower reading gage member carried by said nozzle member and located adjacent the axis of the cylinder.

4. In a viscosimeter, a water tank, a materials receptacle penetrating said water tank provided with a nozzle opening through the water tank, and a body of material of good heat conductivity surrounding said nozzle throughout the length to impart thereto the water heat.

5. In a viscosimeter, a heating tank having alining top and bottom openings, a heat conductive nozzle bushing in the bottom opening, a receptacle extending through the top opening provided with a bottom gage nozzle entering and terminating within the nozzle bushing.

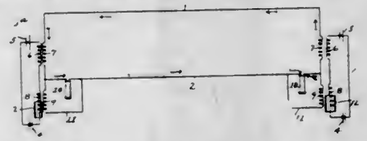
[Claims 6 to 11 not printed in the Gazette.]

1,062,160. ELASTIC POCKET FOR GARMENTS. ROBERT EMMETT KELLY, Cocoanut Grove, Fla. Filed May 23, 1911. Serial No. 628,951. (Cl. 2—15.)



In a detachable pocket, a relatively stiff supporting sheet forming the inner wall of the pocket, a sheet of elastic material constituting the outer wall of the pocket, said elastic sheet secured flat against the supporting sheet by a line of stitching extending across the bottom of the elastic sheet and divergently up opposite sides thereof to the open upper end of the pocket to form a relatively wide mouth, said elastic outer wall lying within the edges of the supporting sheet and being held flat against the same by reason of the stiffness of the supporting sheet, and means for detachably buttoning the supporting sheet to a garment.

1,062,161. TELEPHONY. ISIDOR KITSEE, Philadelphia, Pa. Filed Mar. 16, 1907, Serial No. 362,714. Renewed July 19, 1912. Serial No. 710,487. (Cl. 179—1.)



1. A telephonic circuit and means in said circuit to duplex the same, said means comprising for each of the stations connected to said circuit, two inductoriums, the secondary of said inductoriums connected one to the line proper and one with the interposition of a receiver to a localized shunt of part of said line, and means to neutralize the home impulses in the shunt secondary.

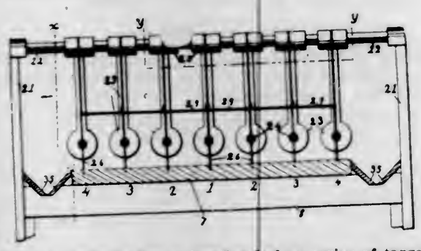
2. The method of duplexing a telephonic circuit, which consists in causing to be generated the home impulse in two secondaries of inductoriums, causing the impulse in one secondary to be neutralized and causing the impulse of the far-off station to travel through one of the secondaries and receiving device.

1,062,162. BOWLING-ALLEY. PAUL S. KNAPP, Akron, Ohio. Filed Dec. 12, 1912. Serial No. 736,342. (Cl. 46—66.)

1. In a bowling alley, a bowling bed; a series of targets suspended over the foot of the bed; a tongue suspended to hang in front of each target; a bell located in the path of the tongue, and wings projecting laterally from the tongues to engage adjacent tongues.

2. In a bowling alley, a bowling bed; a series of targets suspended over the foot of the bed; a tongue suspended in front of each target; a bell located in the path of the

tongue; wings projecting laterally from the tongues and having slanting ends for engagement with adjacent tongues in their return movement.



3. In a bowling alley, a bowling bed; a series of targets suspended over the bed; a tongue suspended in front of each target and narrower than the target, and a bell fixed in the path of the tongue.

4. In a bowling alley, a bowling bed; targets suspended over the bed, and a tongue narrower than each target hung in front thereof, substantially as shown and described.

1,062,163. MANUFACTURE OF INVERTED MANTLES. ELMER LUVESTUS KNOEDLER, Gloucester City, N. J., assignor to Welsbach Light Company, Gloucester City, N. J., a Corporation of New Jersey. Filed Feb. 17, 1911. Serial No. 609,194. (Cl. 67—100.)

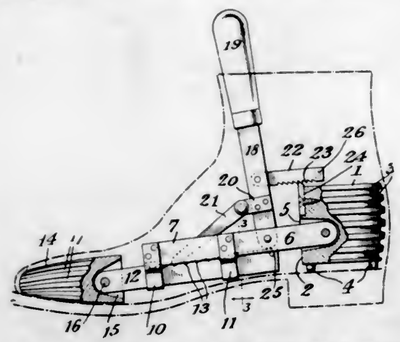


1. In mantle manufacture, a cylindrical post of larger diameter than the normal diameter of the mantle, a central boss on the top of said post for engaging the inner wall of the mantle ring for centering said ring, a pin extending upwardly from said boss, said post being provided with top slots for receiving the mantle ring legs; substantially as described.

2. In mantle manufacture, a cylindrical post of larger diameter than the normal diameter of the mantle, a central boss on the top of said post for engaging the inner wall of the mantle ring for centering said ring, a pin extending upwardly from said boss, said post being provided with top slots for receiving the mantle ring legs, and a weighted ring coöperating with said pin for retaining the mantle ring in position on the post; substantially as described.

3. In mantle manufacture, a cylindrical post of larger diameter than the normal diameter of the mantle, a central boss on the top of said post for engaging the inner wall of the mantle ring and extending slightly above the mantle ring when in position on the post, said post being provided with top slots for receiving the mantle ring legs, and a weighted ring supported on the top of said boss for retaining the mantle ring in position, substantially as described.

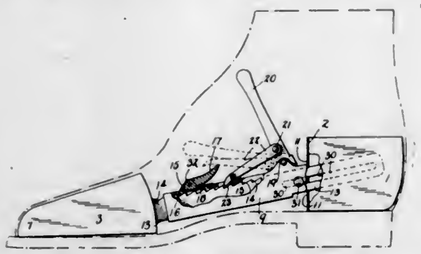
1,062,164. SHOE-TREE. EDWARD J. KOBERT, Woodside, N. Y. Filed May 7, 1912. Serial No. 695,593. (Cl. 12—130.)



1. A shoe-tree comprising a heel block and a toe block, a bar pivoted in the front face of the heel block and composed of separate parallel side members, a bar pivoted in the toe block and slidably connected with the bottom of the first named bar and provided in its top edge with ratchet teeth, a lever pivoted in the rear end portion of the bar that is pivoted in the heel block, a pawl connected with said lever and operating in connection with said ratchet teeth and adapted to force the toe block forwardly when the lever is swung forwardly, and means for holding said lever in its foremost position.

2. A shoe-tree comprising a heel block and a toe block, a bar pivoted in the front face of the heel block and composed of parallel side members, a bar pivoted in the toe block and slidably connected with the first named bar and provided with ratchet teeth, a lever pivoted in the rear end portion of the bar that is pivoted in the heel block, a pawl connected with said lever and operating in connection with said ratchet teeth and adapted to force the toe block forwardly when the lever is swung forwardly, and means acting upon the lever for holding said toe block in its foremost position.

1,062,165. SHOE-TREE. EDWARD J. KOBERT, Woodside, N. Y. Filed Nov. 22, 1912. Serial No. 732,850. (Cl. 12—130.)



1. A shoe-tree comprising a heel block and a toe block, a barrel or casing pivoted in the front portion of the heel block and having parallel side members, a bar pivoted in the toe block and movable longitudinally through said barrel or casing and the top edge of which is provided with ratchet teeth, a lever pivoted to the rear end portion of said barrel or casing and provided with a ratchet dog which operates in connection with said teeth, and a spring operated lock pawl pivoted in the top of the front end portion of the barrel or casing and operating in connection with said ratchet teeth.

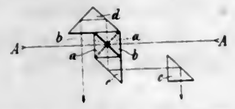
2. A shoe tree comprising a heel block and a toe block, a longitudinally ranging member pivoted in the front portion of the heel block, a bar pivoted in the toe block and movable longitudinally of and in connection with

said member and the top edge of which is provided with ratchet teeth, a lever pivoted to the rear end portion of said member and provided with a ratchet dog which operates in connection with said teeth, a spring operated lock pawl pivoted to the front portion of said member and also operating in connection with said ratchet teeth.

3. A shoe tree comprising a heel block and a toe block divided centrally and longitudinally into separate parts pivotally connected at their front ends, a longitudinally ranging member pivoted in the front portion of the heel block, a ratchet bar movable longitudinally of and in connection with said member, the front end of which is provided with pivoted links which are pivotally connected with the separate parts of the toe block, a lever pivoted to the rear end portion of said member, a ratchet dog pivoted to said lever and operating in connection with the teeth of said ratchet bar, and a spring operated pawl pivoted to the front end portion of said member and also operating in connection with the teeth of said bar.

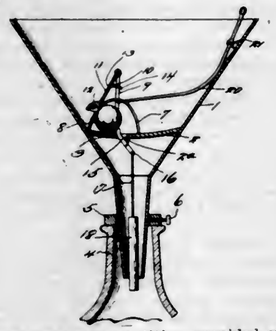
4. A shoe tree comprising a heel block and a toe block divided centrally and longitudinally into separate parts pivotally connected at their front ends, a longitudinally ranging member pivoted in the front portion of the heel block, a ratchet bar movable longitudinally of and in connection with said member, the front end of which is provided with pivoted links which are pivotally connected with the separate parts of the toe block, hand operated devices for forcing said ratchet bar forwardly, and an automatic device for preventing the backward movement of said bar.

1,062,166. STEREOSCOPIC TELEMETER. ALBERT KÖNIG, Jena, Germany, assignor to The Firm of Carl Zeiss, Jena, Germany. Filed Nov. 30, 1912. Serial No. 734,310. (Cl. 88—3.)



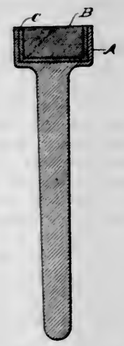
In a stereoscopic telemeter, in which the base-line is contained within the instrument, two objective reflecting systems, one at either end of the said base-line, two objective lenses, two oculars and a separating prism system lying between the said objective lenses, the said separating prism system adapted to present to either of the said oculars a double image, the part-images of which are both erect, belong to opposite ends of the said base-line and are contiguous to each other in a line of coincidence parallel to the said base-line, and measuring means consisting of a deflecting device adapted to alter the relative distance between the lower part-images and that between the upper part-images by equal but opposite amounts.

1,062,167. FUNNEL. ARTHUR O. KOTT, Johnson City, Tex. Filed Apr. 11, 1912. Serial No. 690,075. (Cl. 226—33.)



In a funnel having a partition provided with a valve seat and valve opening, a ball valve to coöperate therewith, guide rods arching over the seat, one on each side of the valve for preventing its displacement, a supporting rod arching over the guide rod at right angles thereto and having vertical side portions, a gravitating oscillatory member suspended from the arch of the supporting rod and having a dished lower end to embrace the valve to hold the same closed, and a bracket carried by the gravitating oscillatory member having laterally extending arms to engage the vertical sides of the arch of the supporting rod, a lever pivoted to the funnel with its lower end in contact with the gravitating member, for oscillating the gravitating member to release the valve, and a float actuated lever extending through said opening to unseat the valve.

1,062,168. ARC-LIGHT ELECTRODE. ISADOR LADOFF, Cleveland, Ohio, assignor, by mesne assignments, of thirty one-hundredths to Walter D. Edmonds, Boonville, N. Y. Filed Feb. 21, 1911. Serial No. 609,899. (Cl. 176—136.)



1. As a new article an arc light electrode comprising an inner core of metal having an uncovered arcing surface and elsewhere a covering of other metal, the said covering being, on any line projected therethrough from, and at right angles to, the central longitudinal axis of said electrode, of uniform measurement smaller than that of said core and the said two metals being cemented together by an intervening therewith mutually cohering zone of alloy thereof.

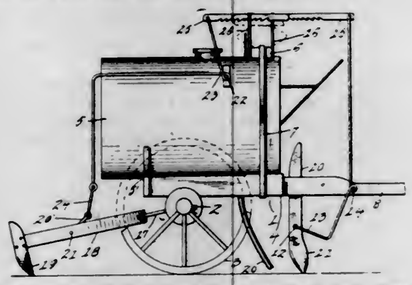
2. As a new article an arc light electrode comprising an inner core of copper having an uncovered arcing surface and elsewhere a covering of iron, the said covering being, on any line projected therethrough from, and at right angles to, the central longitudinal axis of said electrode, of uniform measurement smaller than that of said core and the said iron and copper being cemented together by an intervening therewith mutually cohering zone of alloy thereof.

1,062,169. SUBSOIL-IRRIGATING IMPLEMENT. JOSEPH A. LA RUE, Salmon, Tex. Filed Jan. 10, 1913. Serial No. 741,308. (Cl. 97—34.)

1. In a device of the character described, the combination of an axle, wheels supporting the same, spaced parallel beams mounted upon said axle, a tank mounted upon said beams, a vertically adjustable plow point carried by said beams and disposed in front of the tank, a discharge pipe projecting downwardly from the tank at the rear of the plow point, means for controlling the outlet of water from the tank to the discharge pipe, a U-shaped bracket having its ends secured to the rear of the axle, supporting bars having their inner ends pivotally mounted upon the intermediate portion of said bracket, shovel points secured to the outer ends of said bars, and means mounted upon the tank for raising and lowering said shovel points.

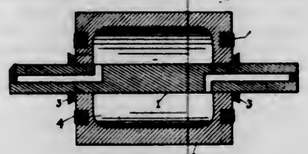
2. In a device of the character described, the combination of an axle, wheels supporting the same, spaced parallel beams mounted upon said axle, a tongue pivotally mounted between the forward ends of said beams and

provided with a longitudinal slot, a standard adjustable within said slot, a plow point formed at the lower end of said standard, a rod having its intermediate portion pivotally mounted upon the tongue and its lower end pivotally secured to said standard adjacent the plow end, means for manipulating said rod to adjust the standards, a tank mounted upon said beams, a discharge pipe projecting downwardly from the tank at the rear of the plow point, and spaced shovel points adjustably mounted at the rear of the tank to close the furrow made by the plow point after the water has been discharged therein.



3. A device of the character described, including a shaft, supports therefor, beams mounted upon said shaft, a tank mounted upon said beams, a plow point carried by the beams and disposed in front of the tank, a discharge pipe projecting downwardly from the tank at the rear of the plow point, means for controlling the outlet of water from the tank to the discharge pipe, a U-shaped bracket having its ends secured to the rear of the shaft, supporting bars having their inner ends pivotally mounted upon the intermediate portion of said bracket, covering devices carried by the outer ends of said bars, and means for raising and lowering said covering devices.

1,062,170. ROLL. FRANK LAUHOFF, Detroit, Mich. Filed Dec. 22, 1909. Serial No. 534,479. (Cl. 83—12.)



1. In a flaking mill, a shaft, a roll thereon of cast metal having annular grooves in its end faces and a hollow cylindrical chamber between its ends adjacent to said grooves and in communication with passages in the shaft extending from the chamber to the shaft ends, and annular wrought metal inserts embedded in said grooves and shrunk upon that portion of the roll which they encircle for the purpose specified.

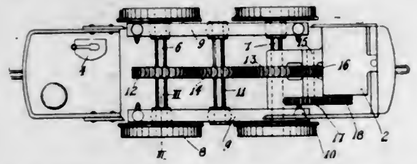
2. A roll for a mill comprising a shaft, a hollow cast metal cylindrical body pressed on the shaft and having an annular groove formed in each end face mid-way between its periphery and shaft, said body being provided with means for circulating a cooling medium through the body of the roll in proximity to said groove, and an annular wrought metal insert in each groove shrunk upon that portion of the roll it encircles.

1,062,171. CLOTHING CONTAINER AND TRANSFERRER. GREGORY A. LEE, San Francisco, Cal., assignor of one-third to S. J. Taylor and one-third to F. L. Taylor, San Francisco, Cal. Filed Apr. 22, 1912. Serial No. 692,479. (Cl. 206—7.)

A clothing container comprising an envelop having side members connected together at their side edges, which members are separable at their lower edges, and have their upper edges connected together a portion of their length to form a perforation centrally thereof, a supporting member for the envelop comprising a bar extending between the side members and projecting through the perforation in the upper end thereof, means for removably attaching the envelop to the bar, a spring clamp adjustably mounted on the bar for engaging the envelop, a hanger formed on the upper end of the bar, and means on the lower end of the bar for engaging a garment supporter.



1,062,172. MOTOR-VEHICLE. NILS DAVID LEVIN, Chicago, Ill., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed June 19, 1908. Serial No. 439,341. (Cl. 105—220.)



1. In combination in a motor vehicle, a frame, two sets of journal boxes mounted for universal movement in the frame, an axle journaled in each set of boxes, a spur gear with rounded teeth on each axle, a counter-shaft intermediate the axles carrying a spur gear with rounded teeth engaging the spur gears on the axles, and drive means for one of the spur gears on the axles.

2. In combination in a motor vehicle, a frame, three sets of journal boxes mounted for universal movement in the frame, a shaft journaled in each set of boxes, wheels and an intermediate spur gear with rounded teeth on each of the end shafts, and a spur gear with rounded teeth on the third shaft in engagement with the spur gears on the other shafts and means for driving one of the spur gears.

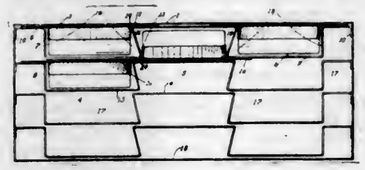
3. In combination in a motor vehicle, a frame, a driving motor, a pair of driving axles each provided with a pair of flanged wheels, universally mounted journal boxes carrying the axles, a counter-shaft between the axles, spur gears on the axles, and a spur gear on the counter-shaft, such gears having rounded teeth and a driving connection with the motor.

4. In combination in a motor vehicle, a frame, a driving motor, a pair of driving axles each provided with a pair of flanged wheels, universally mounted journal boxes carrying the axles, a counter-shaft between the axles, universally mounted journal boxes therefor, spur gears on the axles, and a spur gear on the counter-shaft, such gears having rounded teeth and a driving connection with the motor.

5. In combination in a motor vehicle, a body frame, auxiliary frames on each side of the body frame, a journal box mounted for universal movement in each of the auxiliary frames, an axle journaled in the boxes and carrying drive wheels and a driving member, and a driving mechanism engaging the driving member.

[Claims 6 to 12 not printed in the Gazette.]

1,062,173. CARTON FOR HATS. FRANK S. LOGEE, Westwood, N. J. Filed Nov. 15, 1912. Serial No. 731,528. (Cl. 206—9.)



1. As an article of manufacture, a carton for the packing, shipment and exhibition of hats, which consists of a container provided with a lid and internal partitions at right angles to the lid, each said partition being deflected to form a plurality of three-sided chambers of a size to contain and inclose the crown of a hat and having an opening or a mouth disposed toward the hat brim, the adjacent chambers formed by any one partition being oppositely disposed, the corresponding chambers of the different partitions being alined and disposed in the same direction, and the adjacent partitions being spaced at their nearest points by a distance substantially equal to twice the thickness of the hat brims.

2. As an article of manufacture, a carton for the packing, shipment and exhibition of hats, which consists of a container provided with a lid and internal partitions at right angles to the lid, each said partition being deflected to form a plurality of three-sided chambers having a back wall and two side walls, the latter being spaced at their edges which are remote from the backs by a distance equal to the diameter of the crown of the hat to be packed at its base, the back being of a width greater than this distance, and the corresponding chambers of the different partitions being alined and disposed in the same direction, so that the forward end of each side wall, *i. e.*, the portion remote from the back wall of that chamber overlies the back wall of the corresponding chamber of the next partition.

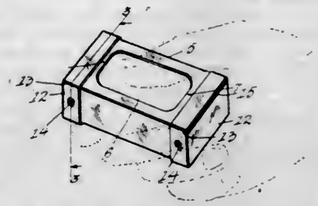
3. As an article of manufacture, a carton for the packing, shipment and exhibition of hats, which consists of a container provided with a lid and internal partitions at right angles to the lid, each said partition being deflected to form a plurality of three-sided chambers having a back wall and two side walls, the latter being spaced at their edges which are remote from the backs by a distance equal to the diameter of the crown of the hat to be packed at its base, the back being of a width greater than this distance, and the corresponding chambers of the different partitions being alined and disposed in the same direction, so that the forward end of each side wall, *i. e.*, the portion remote from the back wall of that chamber overlies the back wall of the corresponding chamber of the next partition, the said ends of the side walls being spaced from the said back wall of the corresponding chamber of the next partition by a distance sufficient to admit the overlapping brims of two hats.

4. A package consisting of a box with hats therein arranged in horizontal tiers and vertical columns, the adjacent hats in each tier having the crowns oppositely disposed, but all the hats in each column being disposed in the same direction, and partitions within the box, one for each tier, each partition being deflected to form chambers, one chamber inclosing the crown of each hat on three sides.

5. A package consisting of a box with hats therein arranged in horizontal tiers and vertical columns, the adjacent hats in each tier having the crowns oppositely disposed, but all the hats in each column being disposed in the same direction, and partitions within the box, one for each tier, each partition being deflected to form chambers, one chamber inclosing the crown of each hat on three sides, a side wall of the intermediate chambers having its upper portion engaging the crown and brim corner of one hat, while its lower portion engages the corresponding corner of the next hat in the same tier.

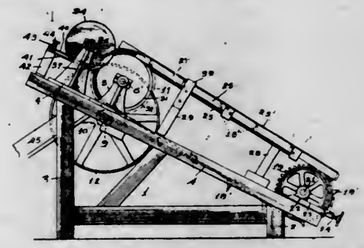
[Claim 6 not printed in the Gazette.]

1,062,174. TICKET-HOLDER. CLARENCE E. LONG, Fort Wayne, Ind. Filed Jan. 4, 1913. Serial No. 740,190. (Cl. 206—39.)



A ticket holder comprising a body constructed of resilient sheet metal and open at both ends, one wall of said body being provided with a finger-receiving opening, said wall at the ends of the opening being longitudinally split, means arranged within the body to yieldingly hold a plurality of tickets in position beneath said opening, closure caps for the ends of said body, each of said caps having marginal flanges to engage over the body walls, the corresponding flanges and walls of said caps and body having co-engaging means to removably retain the caps on said body, each of said caps at the juncture of one of the marginal flanges of the body therewith being provided with a slot through which the tickets are adapted to be projected, said caps being adapted for arrangement upon the ends of the body to dispose the slots therein adjacent the wall of the body which is opposite the finger-receiving opening in the opposed wall thereof.

1,062,175. AUTOMATIC STAVE-EQUALIZING MACHINE. HENRY F. MARTEN, HENRY GRAHN, and JULIUS C. ANDRESEN, San Francisco, Cal. Filed Apr. 23, 1912. Serial No. 692,597. (Cl. 143—49.)



1. In a stave equalizing machine, the combination with an endless conveyer for the staves to be equalized, supporting sprockets for the conveyer, rotary cutting devices in the path of movement of the staves and positioned adjacent to certain of said sprockets, and disks loosely mounted adjacent to certain of said sprockets and in coöperative relation with said rotary cutting devices for positioning the staves to the cutters at an inclined position for the proper cutting and beveling of the ends thereof.

2. In a stave equalizing machine, the combination with an endless conveyer for the staves to be equalized, supporting sprockets for the conveyer, rotary cutting devices in the path of movement of the staves and positioned adjacent to certain of said sprockets, and disks of different diameters loosely mounted adjacent to certain of said sprockets and in coöperative relation with said rotary cutting devices for positioning the staves to the cutters at an inclined position for the proper cutting and beveling of the ends thereof.

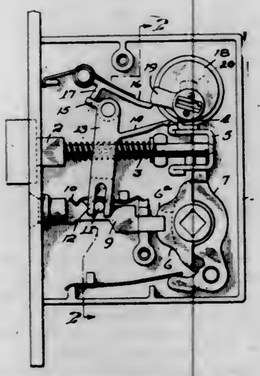
3. In a stave equalizing machine, the combination with an endless conveyer for the staves to be equalized, supporting sprockets for the conveyer, rotary cutting devices in the path of movement of the staves and positioned adjacent to certain of said sprockets, disks loosely mounted adjacent to certain of said sprockets and in coöperative relation with said rotary cutting devices for positioning

the staves to the cutters at an inclined position for the proper cutting and beveling of the ends thereof, and devices for forcing the staves against the disks while the same are being cut.

4. In a stave equalizing machine, the combination with a supporting frame, a pair of endless conveyer chains for the staves to be equalized, supporting sprockets for the conveyer chains, a pair of rotary cutting devices in the path of movement of the staves and positioned adjacent to certain of said sprockets, and a pair of disks loosely mounted adjacent to certain other of said sprockets and in coöperative relation with said rotary cutting devices for positioning the staves to the cutters at an inclined position for the proper cutting and beveling of the ends thereof.

5. In a stave equalizing machine in which the parts thereof are adjustable to accommodate staves of various lengths, the combination of a supporting frame, a pair of parallel spaced endless conveyer chains for the staves to be equalized, parallel spaced supporting sprockets for the conveyer chains, means for imparting movement thereto, a pair of rotary cutting devices in the path of movement of the staves and positioned adjacent to certain of said sprockets, parallel spaced guide rails for guiding the staves in their path of movement toward the cutting devices, a pair of disks of different diameters loosely mounted adjacent to certain other of said sprockets and in cooperative relation with said rotary cutting devices for positioning the propelled staves to the rotary cutters at an inclined position for the proper cutting and beveling of the ends thereof, and a pair of parallel spaced spring pressed arms for forcing the staves against the positioning means while the same are being cut.

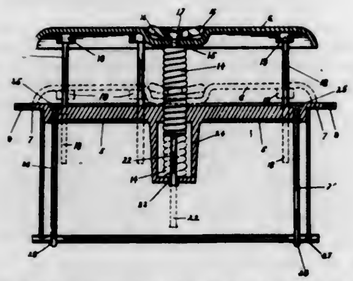
1,062,176. VESTIBULE-LATCH. GEORGE N. MASON, Reading, Pa., assignor to Reading Hardware Company, Reading, Pa., a Corporation of Pennsylvania. Filed Sept. 5, 1912. Serial No. 718,648. (Cl. 70—46.)



1. In a latch the combination of a casing, with a latch bolt; inside and outside knob operated means including a two-part hub for retracting the latch bolt; one part of which is formed with a lock engaging slot; a yoke on the inner end of the bolt; a boss on said yoke; outside key operated means for retracting the bolt by engaging said boss; a slide for locking the outside knob operated means; a lever in engagement with said slide; a long arm on one side and a short arm on the other side of said lever and means, operable from the inside only including a cam adapted to engage said long arm, for moving said slide out of engagement with the outside knob operated means.

2. In a latch the combination of a casing; a latch bolt; a yoke on the inner end of the bolt; a boss on the yoke; inside and outside knob operated means for retracting the latch bolt; outside key operated means including a cam adapted to engage said boss; for retracting the latch bolt; a locking slide for the outside knob operated means; a pivoted lever in engagement with and adapted to move said slide into and out of engagement with the outside knob operated means; a supplemental lever adapted to move said pivoted lever in one direction, and a key operated cam adapted to move said lever in the opposite direction whereby the outside knob operated means are locked or unlocked by the locking slide.

1,062,177. REGISTER. JAMES T. MCELFATRICK, Denver, Colo. Filed Apr. 19, 1912. Serial No. 691,866. (Cl. 126—325.)



1. A register, comprising a frame, a closure, a screw journaled at its opposite extremities in parts of said register and connecting said closure with said frame, the register having a threaded opening intermediate the journaled extremities of said screw, the screw passing through said threaded opening and coöperating with the threads of the latter when the screw is turned for moving the closure to and from the said frame.

2. A register, comprising a frame adapted to surround the heat or ventilating opening, a closure, a screw connecting said closure with said frame, the register having parts in which the opposite extremities of said screw are journaled, the register having a threaded opening intermediate the journaled extremities of said screw, the screw passing through the said threaded opening and coöperating with the threads of the latter when the screw is turned to move the closure to and from the said frame, and guide rods connecting said closure with the frame for preventing turning of the closure.

3. A register, comprising a frame, a closure, a screw connection between said frame and the closure, one extremity of the said screw having a reduced extension, the frame having a centrally located member in which the said reduced extension of said screw is journaled, and guide rods for said closure, the said guide rods preventing turning of the said closure.

4. A register, comprising a frame adapted to surround a heat or ventilating opening, a closure, a screw connection between said frame and the closure, one extremity of the said screw having a reduced part, the frame having a centrally located member and the said reduced part of said screw being journaled in said centrally located member, and guide rods for preventing turning of the closure.

1,062,178. AUTOMATIC GAS-VALVE. ELMER E. MILLER, Valley View, Pa. Filed Sept. 23, 1912. Serial No. 721,999. (Cl. 67—117.)

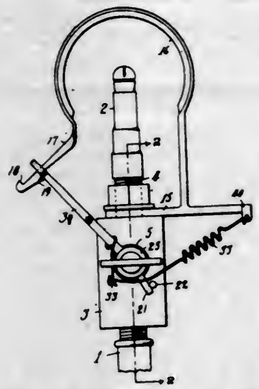


1. In an automatically operated gas valve the combination of a plug valve, an extension on the plug thereof, a spring to close the valve, a loosely mounted sleeve on said extension and a trigger arm carried by the sleeve, a gas burner, a thermal member located above the burner in vertical alinement therewith, a trigger rod pivotally attached to the free end of the thermal member, a guide for the trigger rod and means carried by the trigger rod for engagement with the trigger arm while the thermostat is in both contracted and expanded positions.

2. In a device of the character described, the combination of a plug valve, an extension of the plug thereof, a closing spring for the valve, a sleeve loosely mounted on the said extension and a trigger arm carried by said sleeve, a hook on the end of the trigger arm, a gas burner, means for conveying gas from the valve to the burner, a thermal member in close proximity to the burner, a trigger rod pivotally attached to the free end of the thermal member, a guide for said trigger rod, means on the rod for engaging said hook when the thermal member is in contracted condition and means thereon for engaging the trigger arm when the thermal member is expanded.

3. In a device of the character described the combination of a spring actuated plug valve; a loosely mounted sleeve carried by the valve plug and a trigger arm formed integrally with the sleeve, said arm having a lip formed on its free end; a hook attached to the free end of said trigger arm and projecting beyond the lip thereof, said hook having an engaging lip formed thereon; a gas burner; means for conveying gas from the valve to the burner; a thermal member located immediately above the burner; a trigger rod pivotally secured to the free end of the thermal member and adapted for engagement at its opposite end with the trigger arm; a guide for said trigger rod and a lug on the free end of the trigger rod adapted for engagement with the lip on the hook of the trigger arm.

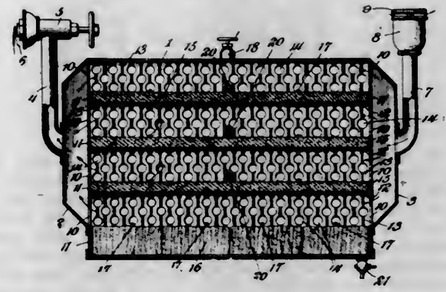
1,062,179. GAS-VALVE. ELMER E. MILLER, Valley View, Pa. Filed Feb. 28, 1913. Serial No. 751,238. (Cl. 67—117.)



In a device of the character described the combination of a gas supply pipe, a burner, a thermostat provided with two latch points at its free end, a valve casing, a plug valve therefor, a pin carried by said valve, a sleeve loosely mounted on said valve and provided with a ledge for engaging said pin, and a spring actuated arm carried by said sleeve, said arm having means at its free end for engaging the latch points on the free end of the thermostat.

1,062,180. CARBURETER. CHARLES H. MYERS, Buffalo, N. Y. Filed Feb. 24, 1910. Serial No. 545,778. Renewed Oct. 12, 1912. Serial No. 725,537. (Cl. 48—156.)

1. A carbureter comprising a suitable casing having division walls separating the interior of the casing into a series of superposed compartments, a hood at each end of the casing opening separately into each compartment, one hood having means for connecting it to an air conduit and the other having means for connecting it to a gas conduit, absorbent material on the division walls and on the bottom of the casing stopping short of top wall of the respective compartment, and means for introducing a volatile liquid on to the absorbent material in each compartment above a respective division wall.



2. A carbureter comprising a suitable casing having pervious division walls separating the interior of the casing into a series of superposed compartments, a hood at each end of the casing opening separately into each compartment, one hood having means for connecting it to an air conduit and the other having means for connecting it to a gas conduit, absorbent material on the division walls and on the bottom of the casing stopping short of the top wall of the respective compartment, and means for introducing a volatile liquid on to the absorbent material in each compartment above a respective division wall.

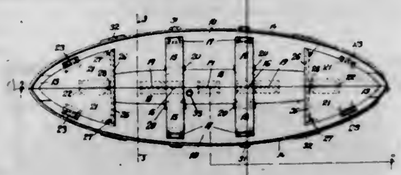
3. A carbureter comprising a suitable casing having division walls separating the casing into a series of superposed compartments, perforated partitions in each compartment and extending from one division wall to the next thereabove and also engaging the top and bottom members of the casing, the partitions separating each chamber into longitudinal passages, hoods at the ends of the casing each communicating with all the superposed chambers, one hood having means for the inlet of air and the other hood having means for the outlet of gas, and means for exposing volatile liquid in each chamber to air currents passing therethrough.

4. A carbureter comprising a suitable casing having division walls separating the casing into a series of superposed compartments, perforated corrugated partitions in each compartment and extending from one division wall to the next thereabove and also engaging the top and bottom members of the casing, the partitions separating each chamber into longitudinal passages, hoods at the ends of the casing each communicating with all the superposed chambers, one hood having means for the inlet of air and the other having means for the outlet of gas, and means for exposing volatile liquid in each chamber to air currents passing therethrough.

5. A carbureter comprising a casing with spaced division walls separating the interior of the casing into superposed compartments, the ends of the casing adjacent to the division walls having openings therethrough, hoods at the ends of the casing each communicating with all the chambers through the passages in the walls of the casing, an air inlet conduit communicating with one hood, a gas conduit communicating with the other hood, absorbent material on each division wall and on the bottom wall of the casing of a depth to leave a free air passage thereover from one hood to the other between the exposed surface of the absorbent material and the top member of the respective compartment, supporting partitions within the casing dividing the compartments into longitudinal passages, and a feed pipe for a volatile liquid having branches entering each compartment above a division wall and discharging on to the surface of the absorbent material therein.

[Claim 6 not printed in the Gazette.]

1,062,181. COLLAPSIBLE LIFE-BOAT. SOPHUS NYBOE, Brooklyn, N. Y. Filed Jan. 13, 1913. Serial No. 741,677. (Cl. 9—2.)



1. In a collapsible boat the combination of two sides, a plurality of hinges for hinging the said two sides together, the said hinges forming a keel, a packing member interposed between said hinges and the said sides, deck members and bottom members hinged to the said sides and adapted to be folded upwardly in the center and vertical collapsible partition members hinged to the said sides and extending from the said deck members to the said bottom members and adapted to be folded endwise of the boat.

2. In a collapsible boat the combination of two sides, means for folding the same together along the keel line of the boat, collapsible deck members and collapsible bottom members hinged to the said sides, collapsible vertical partition members hinged to the sides of the boat and extending from the said deck members to the said bottom members, air-tight joint between all of the abutting edges of all of the aforesaid members whereby an air chamber is formed between the sides of the boat and the said deck members, bottom members and vertical partition members.

3. In a collapsible boat the combination of two non-collapsible sides, means for folding the same together along the keel line, a collapsible deck at each end of the said boat, a collapsibe bottom and vertical collapsible partitions for separating the space below the said decks and the said bottom from the interior of the boat.

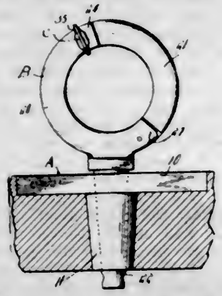
4. In a collapsible boat the combination of two non-collapsible sides, a plurality of hinges secured to said sides along the keel lines thereof, a deck member, a bottom member and a vertical partition member hinged to each of the said sides, all the said members on the one side of the boat being hinged to the corresponding members on the opposite side of the boat, whereby when the said sides are folded together along the keel line, the said deck and bottom members fold upwardly between the sides and the said partition members fold endwise of the boat below the said deck members.

5. In a collapsible boat the combination of two sides adapted to be folded together, deck members secured at each end of the boat to the sides thereof, said deck members having a depending flange, vertical partitions secured to the sides of the boat below said deck members and extending from the latter to the bottom of the boat and means for forcing the upper edge of said partition members against the said depending flanges whereby an air-chamber is formed between the deck members and the sides of the boat.

[Claims 6 to 9 not printed in the Gazette.]

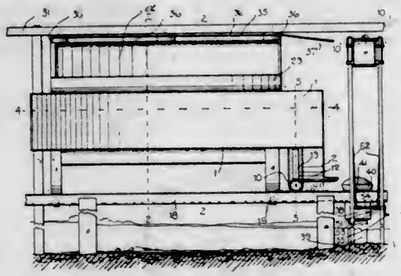
1,062,182. OAR-LOCK. ELIGA EDWIN OTEY, Junction City, Oreg. Filed Nov. 14, 1912. Serial No. 731,399. (Cl. 9—26.)

In an oar lock, a socket member, an oar receiving ring formed of a pair of sections, one of said sections having a stem fixed thereto and rotatable in the socket member, the other section of the ring having one end pivotally connected to the corresponding end of the first named section, spring means constantly tending to move the free end of the second named section away from the corresponding end of the first named section, an ear formed on the free end of the second named section, spaced arms on the corresponding end of the first named section adapted to receive said ear therebetween, a locking pin engaged through said arms and ear for detachably securing same together,



and means whereby the rotation of said locking pin will release the free end of the second named section.

1,062,183. RURAL-MAIL DELIVERING AND COLLECTING APPARATUS. WILLIAM R. PAISLEY, Lewisville, Minn. Filed Mar. 1, 1913. Serial No. 751,561. (Cl. 104—4.)



1. A mail delivering and collecting system comprising a delivering car, means for receiving the contents of the delivering car, means for causing the delivering car to deliver its contents to the receiving means, a mail delivering box, a trough carried by the delivering car for receiving the contents of the delivering box, said trough being provided with a guard portion, and means carried by the guard portion of the trough for causing the delivering box to deliver its contents to the trough.

2. A delivering and collecting apparatus comprising a movable car, matter containing compartments within the car, a receiving compartment, a receiving box, a delivering box, means for moving the compartment within the car and causing one of said compartments to deliver its contents to the receiving box, means for operating the compartment moving means, a collecting or receiving compartment carried by the car, and having an open side and a lower trough portion, and means for causing the delivering box to deliver its contents to the trough portion of the receiving compartment.

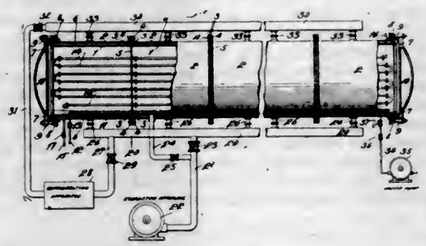
3. A mail delivering and collecting apparatus comprising a delivering car, an open collecting compartment secured to the delivering car, a closed receiving box, a closed delivering box, means for supporting the boxes, a track for the car, means for opening the receiving box and delivering thereto the contents of the delivering car, means for opening the delivering box to cause the same to deliver its contents to the collecting compartment of the car, and means for operating the car.

4. A mail delivering and collecting apparatus comprising a car having a collecting compartment with a trough portion and a guard portion, a track for said car, wheels carried by the car and engaged with the track, means for receiving matter from the delivering car, means adjacent one of the tracks to cause the delivering car to deliver matter to the receiving means, and means for delivering matter to the trough portion of the collecting compartment.

5. A delivering and collecting apparatus comprising a movable delivering car, a collecting compartment carried by the car and having a trough portion, a hinged cover for said trough portion, a track for said car, the car having an open depending end, the collecting compartment having a guard portion with one side open, means for raising the cover of the trough portion of the collecting compartment, means for depositing mail matter in the trough portion when the cover is raised, and means for receiving matter from the delivering car, said means being adapted to be opened by the depending end of the delivering car.

[Claims 6 to 16 not printed in the Gazette.]

1,062,184. APPARATUS FOR TREATING WOOD. FRANK A. PALEN, New York, N. Y. Filed Aug. 3, 1912. Serial No. 713,095. (Cl. 99—12.)



1. In wood-treating apparatus, in combination, a closed container having inner and outer spaced shells, an exhauster apparatus, valve-controlled connections between said apparatus and the space between said shells, a refrigerating apparatus and valve controlled connections between said refrigerating apparatus and said space.

2. In wood-treating apparatus, in combination, a closed container having inner and outer spaced shells, an exhauster apparatus, valve-controlled connections between said apparatus and the space between said shells, valve controlled connections between said exhauster apparatus and the interior of said container, a refrigerating apparatus and valve controlled connections between said refrigerating apparatus and said space.

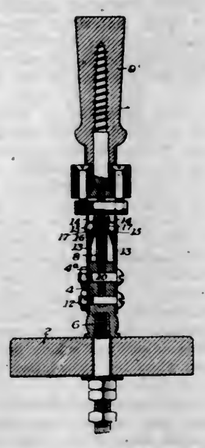
3. In wood-treating apparatus, in combination, a closed cylinder having inner and outer spaced shells, an exhauster apparatus, valve controlled connections between said apparatus and the space between said shells, a refrigerating apparatus, and valve controlled connections between said refrigerating apparatus and said space whereby an insulating vacuum may be produced in said space and whereby a refrigerant may be introduced into said space, alternately.

4. In wood-treating apparatus, in combination, a closed cylinder having inner and outer spaced shells, an exhauster apparatus, valve controlled connections between said apparatus and the space between said shells, separate valve controlled connections between said exhauster apparatus and the interior of said cylinder, a refrigerating apparatus, and valve controlled connections between said refrigerating apparatus and said space.

5. In wood-treating apparatus, in combination, a container having inner and outer spaced shells and having end heads in air tight connection with the ends of said shells and formed with insulating spaces therein, an exhauster apparatus, valve controlled connections between said apparatus and the space between said shells, a refrigerating apparatus, and valve controlled connections between said refrigerating apparatus and said space.

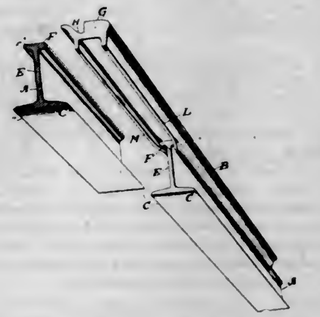
[Claims 6 to 12 not printed in the Gazette.]

1,062,185. ELECTRIC SWITCH. LONNIE J. PIERCE, Pittsburgh, Pa., assignor to Window Glass Machine Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Sept. 24, 1912. Serial No. 722,028. (Cl 175—282.)



An electric switch having a terminal member and a blade pivoted thereto, said terminal member having parallel spring contact members between which the blade is adapted to move, and each of the said contact members having a ball-retaining seat or cage near its free end portion, together with balls seated therein and adapted to contact with the blade, the latter having depressions to receive portions of the balls when the blade is in certain positions, substantially as described.

1,062,186. COMPOUND-RAIL TRACK CONSTRUCTION. EDGAR RHODES, Scholes, Leeds, England, assignor to Continuous Rail Company, Wilmington, Del., a Corporation of Delaware. Original application filed Jan. 27, 1912, Serial No. 673,788. Divided and this application filed Aug. 28, 1912. Serial No. 717,437. (Cl. 239—16.)



1. A railroad track including in combination therein base girder rail sections arranged end to end and top wearing sections supported thereupon, the adjacent base sections being engaged by the same top section which top sections are the primary electrical conducting means between said base sections, the wearing sections and the base sections being held in assembled position by bent holding lips which have been materially reduced in thickness while the top sections were in place on the base sections.

2. A railroad track including in combination therein base or girder rail sections arranged end to end and top

wearing sections thereupon arranged end to end, the joints between the base sections and the joints between the wearing sections being staggered relative to each other, said top sections and base sections being mechanically held in place and electrically connected by bent lips on one of the sections engaging the other section, the lips when in final position being materially reduced in thickness and having the outer portions transversely extended whereby the inner portion of the lip members are forced into firm contact with the portions of the sections engaged thereby.

3. A railroad track including in combination therein base rail sections arranged end to end and top wearing sections supported thereupon, the adjacent base sections being engaged by the same top section, each of the top sections being the electrical conducting means between the base sections engaged thereby, the wearing sections and the base sections being held in assembled position by bent-holding lips which have been materially reduced in thickness after the sections have been assembled.

4. The combination in a railroad track of adjacent rail baae sections arranged end to end and a top wearing section supported thereupon and engaging said base sections, the top section and base sections being held in position by bent holding lips which are materially reduced in thickness when the top section is placed on the base sections.

5. A railroad track construction having a tread or wearing section and a base section together constituting a compound rail, which sections are held together by bent holding lips that have been materially reduced in thickness and also elongated transversely of the rail.

[Claim 6 not printed in the Gazette.]

1,062,187. PROCESS OF TREATING VEGETABLE FIBERS. ROBERT R. ROBERTS, Washington, D. C., assignor of one-tenth to Eugene Ernest Allwine, Washington, D. C. Filed July 22, 1912. Serial No. 710,947. (Cl. 92—15.)

1. The process herein described for treating fibrous material, which consists in boiling the material in an alkaline solution containing ammonia and animal fat.

2. The process herein described for treating fibrous material which consists in boiling the material in an alkaline solution under pressure containing ammonia and animal fat.

3. The process herein described for treating fibrous material, which consists in boiling the material in an alkaline solution containing ammonia, animal fat and soap.

4. The process herein described for treating fibrous material which consists in boiling the material in an alkaline solution containing ammonia, and animal fat, washing the material and subsequently treating the material in a boiling solution containing borated soap, vegetable oil and oleic acid.

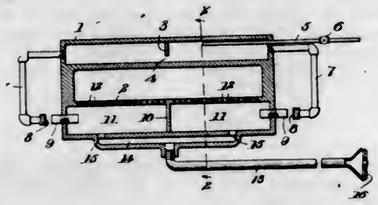
5. The process herein described for treating fibrous material which consists in boiling the material in an alkaline solution under pressure containing ammonia and animal fat, washing the material, and subsequently treating the material in a boiling solution under pressure containing borated soap, vegetable oil and oleic acid.

[Claim 6 not printed in the Gazette.]

1,062,188. OIL VAPORIZER AND BURNER. WALTER F. SCHAFER and JOHN H. COOK, Mena, Ark., assignors, by direct and mesne assignments, to D. B. Pate, Hornbeck, La. Filed Feb. 17, 1912. Serial No. 678,210. (Cl. 158—65.)

1. A burner having a burner chamber provided with a perforated portion, a superposed fuel chamber offset from the burner chamber, fuel supply means for the fuel chamber, a partition extending partially across the fuel chamber, a partition in the burner chamber, said burner chamber provided with an inlet at each end, pipe means leading from each end of the fuel chamber to the inlets and stopping short thereof, substantially as described.

2. A burner having a burner chamber provided with a perforated portion, a superposed fuel chamber offset from the burner chamber, fuel supply means for the fuel chamber, a partition extending partially across the fuel chamber, a partition in the burner chamber, pipe means at each end of the burner communicating with the fuel chamber and burner chamber, an air pocket having inlets to the burner chamber, one on each side of the partition, and air intake means leading to the pocket, substantially as described.



3. A burner having an integral body consisting of a burner chamber having a perforated wall, a superposed fuel chamber offset from the burner chamber and an air pocket connected to the burner chamber, a partition in the fuel chamber extending partially across the same, fuel supply means, a partition in the burner chamber, an inlet opening between the pocket and chamber on each side of the partition of the burner chamber, a valved air intake pipe leading to the pocket, inlets on opposite sides of the burner chamber and pipe means leading from the fuel chamber to each inlet and stopping short of the same, substantially as and for the purposes set forth.

1,062,189. FORK WITH MOVABLE SUPPLEMENTARY PRONG. WILHELM SCHLOEMILCH, Berlin, Germany. Filed Dec. 2, 1910. Serial No. 595,251. (Cl. 30—5.)



The combination of a fork with a supplementary movable prong adapted to coöperate with one of the prongs of the fork and grip fish-bones and the like, the said supplementary prong fulcrumed to the fork furnished with a bend whereby it extends into the plane of the other prongs movable in the plane of the other prongs and coöperating with one of the prongs.

1,062,190. FOLDING STAND. JACOB O. SCHMIDT, Sheboygan, Wis. Filed Sept. 10, 1912. Serial No. 719,576. (Cl. 211—14.)

1. A device of the class described comprising an upper step or shelf, rigid front legs, swinging rear legs, connecting struts pivoted intermediate their ends at an intermediate point of the front legs and extending out therefrom and carrying a lower step or shelf on their extended outer ends, said struts having their rear ends fitting between the rear legs in the normal position of the lower step or shelf, rigid horizontal supports provided on the rear legs and on which supports the rear ends of the struts are caused to rest, and locking members provided on the rear legs in the path of movement of the struts and adapted to engage with the upper face of the struts when the latter are seated upon the supports, said locking members serving to hold the struts firmly upon the supports.



2. The combination of a top step or shelf, fixed front legs, and swinging rear legs therefor, with a lower folding step or shelf comprising normally horizontally disposed struts pivoted intermediate their ends to the front fixed legs and provided on the lower edges of their rear ends with notches, horizontally disposed supports carried by the rear swinging legs to engage the said notches when the struts are swung downwardly, and locking members mounted on the rear legs and adapted to spring outwardly upon such downward movement of the struts and to spring inwardly and engage over the same to maintain the struts in engagement with the said supports, the outer ends of the struts being extended beyond the front legs, and a lower shelf mounted on said extended outer ends.

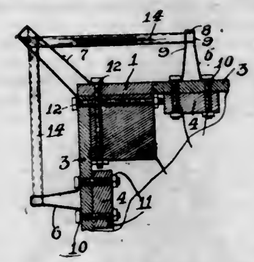
3. The combination of a top step or shelf, fixed front legs, and swinging rear legs therefor, with a lower folding step or shelf comprising normally horizontally disposed struts pivoted intermediate their ends to the front fixed legs and provided on the lower edges of their rear ends with notches, rigid horizontally disposed supports carried by the inner sides of the rear legs and engaging with said notches, and spring locking catches carried by the front sides of the rear legs and having overhanging portions located in the path of movement of the struts when the latter are swung downwardly upon the supports and also at right angles to said struts and in advance of the supports, said locking catches being adapted to spring outwardly by the engagement of the struts therewith and to spring inwardly and engage over the upper edges of the struts to maintain said struts in engagement with the supports, the outer ends of the struts being extended beyond the front legs, and a lower shelf mounted on said extended outer ends so as to extend over the pivot of the struts.

1,062,191. LADDER FOR CARS. HARRY H. SCHROYER, Chicago, Ill., assignor to The Acme Supply Company, a Corporation of Illinois. Filed Nov. 9, 1911. Serial No. 659,325. (Cl. 228—1.)

1. A device of the class described embracing channeled stile members, integral legs extending therefrom at each end thereof, bearing feet on said legs and integral therewith adapted for attachment to a car, and a plurality of rungs connected into each of said channeled stile members.

2. In a device of the class described channeled stile members having apertures therein, a plurality of tubular rungs having a longitudinal slot on the under side thereof and the ends of said rungs extending into said apertures in the stiles and the corners thereof flanged over to rigidly engage the ends in said stiles.

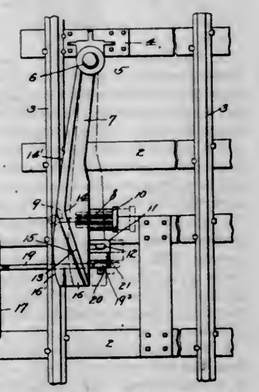
3. In a device of the class described a ladder rung comprising a tubular member having a longitudinal slot on the underside thereof, said ladder rung flattened on the upper surface affording a step, and the ends of said rungs adjacent said longitudinal slot adapted to be flanged outwardly for attachment.



4. In a device of the class described channeled stile members having apertures in one wall thereof, tubular rung members having a longitudinal slot in the underside thereof and extending into the apertures and bearing against the opposite wall of said channeled members, and the lower end of said rungs within said channeled members adapted to be expanded to rigidly secure the rungs in said stile members.

5. In a device of the class described a tubular rung, the upper surface thereof flattened to afford a step, the lower surface rounded and having a longitudinal slot therein, and the ends of said member open adapting the same to be expanded for attachment.

1,062,192. AUTOMATIC DERAILER. MARTIN C. SLODERBECK, Marion, Ind., assignor of one-third to Edward E. Leapley and one-third to William A. Leapley, Marion, Ind. Filed Oct. 30, 1911. Serial No. 657,689. (Cl. 104—127.)



1. The combination with a derailer, of a mechanism for shifting the same, an oscillating lever for operating said mechanism, a lock and a catch adapted to be engaged by said lever, said catch being provided with means for throwing the lever toward the lock when released.

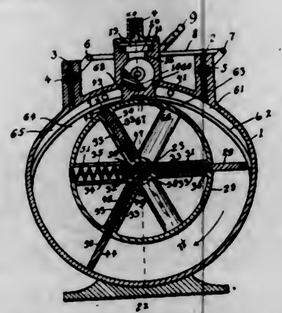
2. In a derailer, the combination with a spring-actuated derailing block, of a mechanism for operating said block, an oscillating lever for operating said mechanism, a lock arranged in the path of travel of said lever to one side, a catch arranged in the path of travel to the other side, and means carried by said catch for throwing the lever into engagement with the lock when released thereby.

3. In a derailer, the combination with a pivoted derailing block, of mechanism for operating said block, an oscillating lever for operating said mechanism, a catch arranged in the path of travel of said lever and a spring carried by said catch for forcing said oscillating lever upwardly when released by said catch.

4. In a derailer, the combination with a pivoted spring-actuated derailing block, of mechanism for operating said

block, a lever for operating said mechanism, a catch arranged in the path of travel of said lever, and a spring adapted to be engaged and compressed by said lever when in locked position, whereby said lever will be thrown upwardly when released.

1,062,193. ROTARY ENGINE. LESTER G. SMITH, Rochester, N. Y. Filed May 20, 1911. Serial No. 628,575. (Cl. 121—74.)



1. The combination in a rotary engine of an engine cylinder, a drum mounted to rotate therein, piston blades mounted to move radially in said drum, stems on said piston blades extending through the axis of the drum, piston heads mounted on said stems, said piston heads working in cylinders carried in said drum, a steam chest for said engine, connections between said steam chest and said cylinders in the drum whereby said piston blades are moved positively in one direction by steam pressure radially in the drum during the operation of the revolution thereof and a spring for moving each of said pistons in the opposite direction.

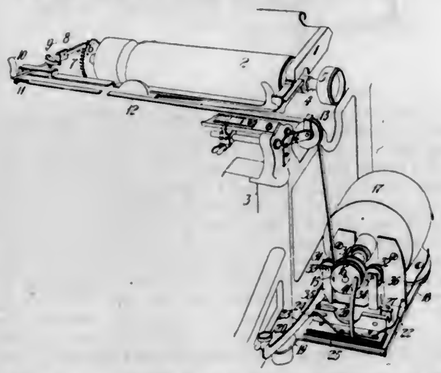
2. The combination in a rotary engine of an engine cylinder, a drum mounted to rotate therein, piston blades mounted to move radially in said drum, stems on said piston blades extending through the axis of the drum, piston heads mounted on said stems, said piston heads working in cylinders carried in said drum, a steam chest for said engine, connections between said steam chest and said cylinders in the drum whereby said piston blades are moved positively by steam pressure radially in the drum during the operation or the revolution thereof, a compression spring mounted in each of said cylinders for positively moving said piston blade in the reverse direction, the steam pressure operating to draw the blade in radially during the exhaust of the engine, and the spring pressure operating to push the blade out and hold it out during the admission of steam.

3. The combination in a rotary engine of an engine frame and a cylinder therein, a drum and shaft mounted to rotate therein, piston blades moving radially in said drum, a steam cylinder and piston mounted in said drum for operating each of said blades in one direction, a hub for said drum, steam ports passing through said hub parallel to the shaft and communicating with said cylinders at one end, a steam chest mounted at one end of the engine and surrounding said shaft, with which said ports communicate successively on the rotation of said drum.

4. The combination in a rotary engine of a drum and a shaft therefor, piston blades mounted to move radially in said drum on one side of said shaft, cylinders mounted in said drum on the opposite side of said shaft, piston heads mounted to reciprocate in said cylinders and stems connecting said piston heads with said blades, said stems passing through perforations in said shaft, causing said piston heads and said piston blades to reciprocate together, means for admitting steam to said piston head for moving the piston blade toward the axis of the drum when the exhaust begins.

5. The combination in a rotary engine of a drum and a shaft therefor, piston blades mounted to move radially in said drum on one side of said shaft, cylinders mounted in said drum on the opposite side of said shaft, piston heads mounted to reciprocate in said cylinders and stems connecting said piston heads with said blades, said stems passing through perforations in said shaft, causing said piston heads and said piston blades to reciprocate together, steam connections passing along said shaft and communicating with the inner end of said cylinders, admitting steam during a predetermined part of the revolution for causing each of said piston heads to move in one direction and compression springs for causing each of said piston heads to move in the opposite direction.

1,062,194. TYPE-WRITING MACHINE. JACOB SOKOLOV, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 12, 1911. Serial No. 602,163. (Cl. 197—65.)



1. In a typewriting machine, the combination of a carriage, a carriage-return mechanism comprising a drive shaft, means for driving said shaft, a friction member fast to said shaft, a second friction member normally disconnected from said shaft, a drum connected to said second friction member, a draw-band connected to said drum and to the carriage, key-controlled means for relatively moving said friction members into operative engagement with one another, and means for adjusting the throw of said key to vary the load at which said friction members will slip.

2. In a typewriting machine, the combination of a carriage, a carriage-return mechanism comprising a drive shaft, means for driving said shaft, a friction member fast to said shaft, a second friction member loose on said shaft, a drum connected to said second friction member, a draw-band connected to said drum and to the carriage, key-controlled means for relatively moving said friction members into operative engagement with one another, and means for adjusting the throw of said key to vary the load at which said friction members will slip.

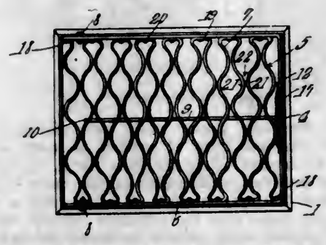
3. In a typewriting machine, the combination of a carriage, a carriage-return mechanism comprising a drive shaft, normally inactive means for driving said shaft, a friction member fast to said shaft, a second friction member normally loose on said shaft, a drum connected to said second friction member, a draw-band connected to said drum and to the carriage, key-controlled means for relatively moving said friction members into operative engagement with one another, and for rendering active said shaft driving means, and means for adjusting the throw of said key to determine the load at which said friction members will slip.

4. In a typewriting machine, the combination of a carriage, a power-shaft, connections from the power shaft to the carriage for returning the latter, said connections comprising two friction members, one of which members carries a cam or wedge whereby the two members may be moved relatively with driving contact, key-controlled means for coöperating with said cam or wedge to establish driving contact of said friction members, and means for adjusting the throw of said key to determine the load at which said friction members will slip.

5. In a typewriting machine, the combination of a carriage, a power-shaft, connections from the power shaft to the carriage for returning the latter, said connections comprising two friction members movable relatively into and out of driving contact with each other, said members having oppositely inclined faces, and key-controlled means for engaging said inclined faces with a wedge or cam-like action to force the friction members together.

[Claims 6 to 33 not printed in the Gazette.]

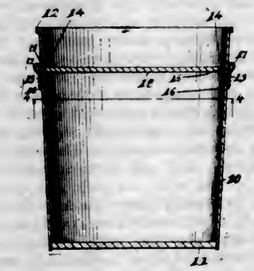
1,062,195. DOOR-MAT. CHRISTIAN SPICKERMAN, Sandwich, Ill. Filed Feb. 1, 1912. Serial No. 674,781. (Cl. 15—2.)



1. In a device of the class described, a pan; a scraper pivoted intermediate its ends in the pan; and a support upstanding from the bottom of the pan, the upper edge of the support being adapted to engage the lower face of the scraper, to hold the scraper in position to serve as a closure for the pan, one end of the support being spaced from one end of the pan, said end of the support being engageable by one end of the scraper, to limit the rearward swinging movement of the scraper, when the scraper is swung into open position with respect to the pan.

2. In a device of the class described, a pan; a partition extended longitudinally of the pan, and terminating short of one end of the pan; and a scraper pivoted in the pan, adjacent said end of the pan, the scraper being adapted to rest upon the upper edge of the partition, when the scraper is in closed relation with respect to the pan, one end of the scraper being engageable by one end of the partition, when the scraper is swung into open position with respect to the pan.

1,062,196. WELL-BUCKET. LUTHER B. STANTON and EARL G. DOWDA, Columbia, S. C.; said Dowda assignor to said Stanton. Filed Oct. 11, 1912. Serial No. 725,348. (Cl. 103—35.)



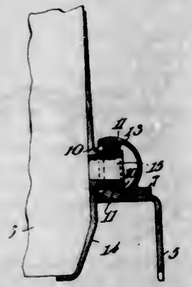
1. The combination with a receptacle, of recessed members carried upon the inner sides thereof, and a brace member having its opposite ends engaged in the recesses to brace the sides of the receptacle apart.

2. A brace device for buckets comprising socketed blocks secured upon the inner sides of the bucket, and a removable rod engaged in the blocks under resilient strain against the sides of the bucket.

3. A well bucket comprising a cylindrical receptacle, socketed blocks secured upon the inner surface thereof at diametrically opposite points, bail ears disposed upon the outer surface of the bucket in line with the blocks, fastening members through the blocks the ears, and the intermediate portions of the bucket, and a brace rod engaged in the sockets of the blocks under outward pressure against the walls of the bucket and a bail member engaged with said ears.

4. In a device of the class described, the combination with a receptacle, of recessed block members secured upon the opposite inner sides thereof, said blocks beveled faces above the recesses and a brace rod adapted to be forced downwardly against the beveled portions of the blocks to snap into the recesses thereof.

1,062,197. BEARING FOR SUPPORTING RADIATORS IN AUTOMOBILE-FRAMES. OSCAR STEGEMAN, Denver, Colo. Filed Aug. 19, 1909. Serial No. 513,588. (Cl. 21—90.)



1. In a device of the class described, the combination with a bearing box having a clearance space, of a bearing member arranged for gyratory movement in said box and being insertible and removable through said clearance space when in one position, said bearing member being tiltable from such position into interlocking engagement with the bearing in the box, and a supporting element detachably engaging the bearing member and arranged to permit gyratory movement thereof.

2. In a device of the character described, the combination with a bearing box having internal curved bearing surfaces with a clearance space between them, and a bearing member having a circular bearing surface that is capable of gyratory movement on the bearing surface of the box, said member when tilted to one position being capable of passage through the clearance space and detachment from and engagement with the box and when in all other positions being interlocked with said box.

3. In a device of the character described, the combination with a bearing box having internal curved bearing surfaces with a clearance space between them, and a bearing member having a circular bearing surface that is capable of gyratory movement on the bearing surface of the box, said member when tilted to one position being capable of passage through the clearance space and detachment from and engagement with the box, said surfaces of the box and member being one concave and the other convex and when in other than said predetermined position, being interfitted and maintaining the parts against detachment.

4. In a device of the character described, the combination with a bearing box having internal curved bearing surfaces with a clearance space between them, of a bearing ring having a circular bearing surface that is capable of gyratory movement on the bearing surface of the box, said ring having a width that permits it to pass through the clearance space when tilted to one position and being capable of turning so as to interfit with the bearing sur-

face of the box, said ring when the surfaces are so interfitted being maintained against detachment.

5. In a device of the character described, the combination with a bearing box having internal curved bearing surfaces with a clearance space between them, of a bearing ring having a circular bearing surface that is capable of gyratory movement on the bearing surface of the box, said ring having a width that permits it to pass through the clearance space when tilted to one position and being capable of turning so as to interfit with the bearing surface of the box, said ring when the surfaces are so interfitted being maintained against detachment, and a trunnion that engages in the bearing box and in the ring to maintain the surfaces in interfitted relation.

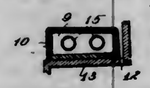
[Claim 6 not printed in the Gazette.]

1,062,198. SUBSOIL-PLOW ATTACHMENT. WILLIAM A. STEPHENS, Little Rock, Ark. Filed Jan. 14, 1911. Serial No. 602,626. Renewed Oct. 15, 1912. Serial No. 725,930. (Cl. 97—32.)



A subsoil attachment for a turning plow, the same comprising a beam having a flange at its rear end provided with apertures to receive fastenings, said beam having a recess in a side near its front end to receive the standard of the plow and having openings at the sides of the recess for receiving fastenings by means of which the attachment is secured to the turning plow, said beam being further provided near its front end in the rear of the side recess with an eye, a standard having a shovel, means for securing the standard to the flanged end of the beam in the required adjusted position, and an adjustable brace interposed between the lower portion of the standard and the eye at the front end of the beam.

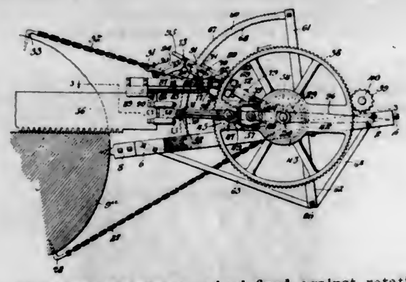
1,062,199. STEP AND TREAD PLATE. WILLIAM P. STEPHENSON, London, Ontario, Canada. Filed June 13, 1912. Serial No. 703,549. (Cl. 219—19.)



1. The combination with a door step having perforations therethrough, of a fibrous base plate, an integral metallic rearwardly sloping, step-shaped body having a plurality of chambers therein and mounted upon said plate, two series of resistance coils positioned through all of said chambers, two sets of terminals for said coils projecting exteriorly of said plate, means for connecting one set of terminals with a ground wire, service wires connected to the other set of terminals, a trolley wheel lead wire, and controlling means positioned between the latter and said service wires and in circuit with said feed and lead wires.

2. The combination with a step having an opening therethrough at the rear edge thereof, of an insulating base plate resting thereon, an inverted member U-shaped in cross-section mounted on said base plate, the upper surface of said member being roughened and sloping rearwardly, said base plate and member being spaced from said opening to present an unrestricted passage, and an electrical heating unit disposed within said member.

1,062,200. DRAG-SAW. ALFRED THOMAS STIMSON, Lodi, Cal. Filed May 9, 1912. Serial No. 696,173. (Cl. 143—63.)



1. In a drag saw, a gear wheel fixed against rotation, a radially disposed train of gearing in mesh with and mounted to revolve about the gear wheel, a crank arm carried by and fast to the gear of the train of gearing remote from the first-named gear wheel, and a saw secured to the crank arm for actuation thereby, the crank arm and gearing being related to cause the end of the crank arm secured to the saw to describe an elongated flat ellipse.

2. In a drag saw, a rotatable member for the reception of power, a radially disposed train of gearing carried by the rotatable member with one end member of the train of gearing concentric with the axis of rotation of said rotatable member and the other end member provided with a crank arm fast thereto, a saw provided with means for attachment to the crank arm for actuation thereby, and feeding means for the saw connected to the axially disposed gear of the train of gearing and holding the said gear against participation in rotative movements of the rotatable member.

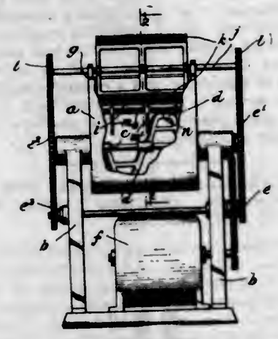
3. In a drag saw, means for imparting a reciprocatory and rocking movement to the saw, and means for feeding the saw to the work comprising a ratchet member, an arm movable along the ratchet member in operative relation thereto, a pawl carried by the arm in position to engage the ratchet member, a rock shaft carried by the arm and provided with engaging means for the pawl, a rock arm carried by the rock shaft and movable therewith, and another rock arm movable independently of the rock shaft and provided with means for engaging the saw, said second named rock arm being connected to the first named rock arm for actuating the latter.

4. A drag saw provided with a train of gearing, a support for one end member of the train of gearing about which said member may move axially, an arm connected to the other end member of the train of gearing and provided with means for attachment to a saw, and feeding means for the saw comprising a relatively fixed rack, an arm carried by the first named end member of the train of gearing, releasable connections between the arm and the rack, rock members carried by the arm in position to be engaged by the saw and in turn controlling the engagement of the arm with the rack, and means for rotating the train of gearing about the axis of the end member of the train to which the arm is connected.

5. A drag saw provided with means for imparting reciprocatory rocking motion to the saw, and means for feeding the saw to the work comprising a relatively fixed ratchet member, an arm in operative relation to and movable with reference to the ratchet member, pawls carried by the arm and adapted to engage the ratchet member, a rock shaft carried by the arm and provided with an engaging means for one of the pawls to move the latter to release position, a rock arm on the shaft, another rock arm movable with relation to the first rock arm and provided with adjusting means for the first named rock arm, and saw engaging means carried by the second named rock arm.

[Claim 6 not printed in the Gazette.]

1,062,201. DOUGH-MIXING MACHINE. CHARLES STIRIZ, New York, N. Y., assignor of one-half to Anna A. Stiriz, New York, N. Y. Filed Feb. 26, 1910. Serial No. 546,058. (Cl. 107—40.)



1. In a dough mixing machine, the combination with a tilting mixing trough, a rotary mixing blade mounted upon a transverse shaft therein, and a driving gear attached to said shaft, of a frame pivotally mounted adjacent to the rear edge of the open top of said trough, a sifter or sieve carried by said frame and projecting into said trough to a point above said mixing blade, a transverse rotary shaft mounted in said frame, a gear carried by said shaft and adapted to mesh with the driving gear of said mixing blade, whereby said frame may be raised in its entirety from above said trough to permit access thereto, and said driving gear upon said last named shaft will be automatically thrown into and out of gear with said main driving gear, and a frame carried by said shaft and said sifter frame, said frame carrying a plurality of flexible agitators.

2. In a dough mixer, the combination with a trough, and a rotary mixing blade therein, of a laterally reciprocatory scraper adapted to engage, move along and scrape the dough from, the edge of said blade.

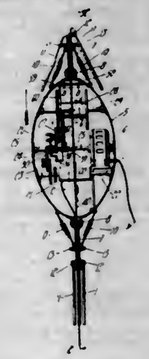
3. In a dough mixer, the combination with a trough and a rotary helicoidal blade therein, of a scraper mounted in said trough and projecting into the path of said mixer blade, whereby said blade will move said scraper laterally along its edge and scrape the dough from said edge, and means restoring said scraper to its normal position after disengagement with said blade.

4. In a dough mixer, the combinaton wth a trough and a rotary helicoidal mixer blade therein, of a shaft in said trough, above said mixer blade, said shaft being held against rotation and having mounted thereon a non-rotary scraper mounted in said trough and projecting into the path of said mixer blade, whereby said blade will move said scraper laterally along its edge and scrape the dough from said edge, and means restoring said scraper to its normal position after disengagement with said blade.

5. In a dough mixer, the combinaiton with a trough and a plurality of rotary helicoidal mixer blades therein, pitched toward each other, of a plurality of scrapers mounted in said trough, one of said scrapers projecting into the path of one of said mixer blades whereby each said blade will move said scraper laterally along its edge and scrape the dough from said edge, and a connection between said scrapers whereby the operative movement of one of them will force the other into position to be engaged by its blade.

[Claims 6 and 7 not printed in the Gazette.]

1,062,202. LINE-RETRIEVER. CHARLES W. TAYLOR, Los Angeles, Cal. Filed Aug. 28, 1912. Serial No. 717,480. (Cl. 114—221.)



1. A line retriever, comprising a frame, a motor thereon, a line transmitting device, a line winding device, and means for operatively connecting either the line transmitting or winding device to the motor.

2. A line retriever, comprising a frame, a motor thereon, a line transmitting device, a line winding device, a line cutter, means for connecting either the line transmitting or winding device to the motor, and means for operating said connecting means and for simultaneously operating the line cutter.

3. In combination with a line having a suitable obstruction thereon, a retriever comprising a frame, a motor thereon, a line transmitting device, a line winding drum having an eye through which the line may pass and with which the obstruction thereon may engage, a line cutting device, mechanical connective means between the motor and either the line transmitter or winder, and means operatively connected with the said eye on the line winding drum to operate the said connective means and to cause the operation of the line cutter.

4. In combination with a line having a suitable obstruction thereon, a retriever comprising a frame, a motor thereon, a pair of line transmitting drums rotating in opposite directions to transmit the line between them, a line winding drum, an eye on the periphery of the winding drum through which the line passes and with which said obstruction thereon may engage, trains of gearing between the motor and the transmitting and winding drums, a clutch adapted to connect either of said trains of gearing to the motor shaft, means to hold said clutch in position to operatively connect either of said trains, a line shearing device, spring means for operating the same, a trigger normally holding said shearing device open for the free passage of the line therethrough, a pivoted arm having connection with said clutch and with said trigger, and a finger mounted on said arm and normally engaging with the eye on the winding drum, the arrangement being such that the transmission of the line causes its obstruction to engage with the eye and move it to operate said pivoted arm to operate the shear trigger and the clutch.

1,062,203. MANUFACTURE AND PRODUCTION OF ALKYL DERIVATIVES AND SUBSTITUTED ALKYL DERIVATIVES OF HYDROCUPREINE. HEINRICH THRON and CARL FREUND, Frankfort-on-the-Main, Germany, assignors to Vereinigte Chininfabriken Zimmer & Co., G. M. B. H., Frankfort-on-the-Main, Germany. Filed July 23, 1912. Serial No. 711,105. (Cl. 23—24.)

1. The process of producing alkyl derivatives of hydrocupreine which comprises treating hydrocupreine with a suitable alkylizing agent.

2. The process of producing alkyl derivatives of hydrocupreine which comprises treating hydrocupreine with an alkali alcoholate and an alkyl haloid.

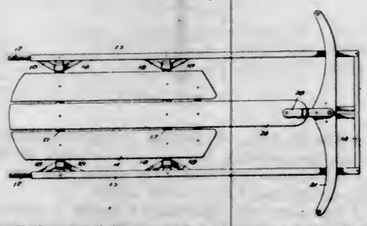
3. The process of producing alkyl derivatives of hydrocupreine which comprises treating hydrocupreine with a sodium alcoholate and an alkyl chlorid.

4. The process of producing ethyl-hydrocupreine which comprises treating hydrocupreine with an ethylating agent.

5. The process of producing ethyl-hydrocupreine which comprises treating hydrocupreine with sodium ethylate and ethyl chlorid.

[Claims 6 to 9 not printed in the Gazette.]

1,062,204. SLED. JOHN C. VAN AKEN, Ridgway, Pa. Original application filed Feb. 12, 1912, Serial No. 677,086. Divided and this application filed May 29, 1912. Serial No. 700,447. (Cl. 21—94.)

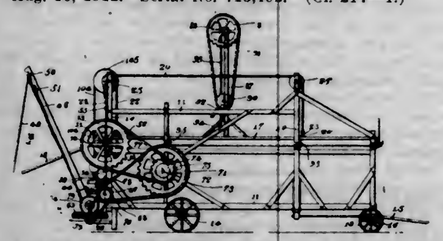


1. A sled comprising runners, a top or body, bars extending across said top or body and secured thereto and having lateral bearing portions, and uprights each comprising a single member bent over one of said bars and having a pair of downwardly extended legs secured to said runners, said uprights being cut away to embrace said bars and closely engage the lateral bearing portions thereof.

2. A sled comprising runners, a top or body, bars extending across said top or body and secured thereto and having undercut lateral bearing portions, and uprights each comprising a single member bent over one of said bars and having a pair of downwardly extending legs secured to said runners, said members being cut away to fit and closely engage said undercut portions of said bars.

3. A sled comprising runners, a top or body, channel bars extending across said top and secured thereto and having side flanges bent inwardly for portions of their length to form parts substantially triangular in cross section, and uprights comprising channel bars bent over said first named channel bars and having downwardly extended legs secured to said runners, said uprights having side flanges cut away to fit and closely engage the triangular portions of said first named channel bars.

1,062,205. AUTOMATIC GRAIN UNLOADER AND ELEVATOR. CLARENCE F. WALL, Holton, Kans. Filed Aug. 16, 1912. Serial No. 715,492. (Cl. 214—1.)

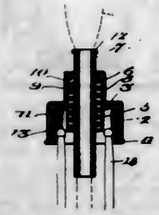


1. In an unloading and elevating machine, a vertically movable platform, an elevator, means actuated by sinking of the platform for actuating said elevator, means for yieldably holding said platform in raised position, and means for automatically returning said platform to raised position after the platform arrives at its lowest limit of movement.

2. In an unloading and elevating machine, a vertically movable platform, an elevator, a revoluble shaft, supporting cables carried by said platform adapted to actuate said shaft upon sinking movement of said platform, means carried by said shaft for actuating said elevator, means for yieldably holding said platform in raised position, and a counterbalancing weight operatively connected to said shaft for rotating said shaft and returning said platform to raised position after the platform arrives at its lowest limit of movement.

3. In an unloading and elevating machine, a supporting frame, a vertically movable platform carried by said frame, a shaft carried by said frame, gears on said shaft, cables secured to said platform, sprocket chains on said cables held permanently in mesh with said gears, said cables actuating said shaft upon sinking movement of said platform, an elevator, clutch controlled means actuated by said shaft during sinking movement of said platform and actuating said elevator, a drum fixed on said shaft, a cable carried by said drum, and a counterbalancing weight on said cable serving to rotate said shaft and elevate said platform to raised position after the platform arrives at its lowest limit of movement.

1,062,206. UMBRELLA ATTACHMENT. OTTO W. WALTER, Baltimore, Md. Filed Feb. 7, 1913. Serial No. 746,945. (Cl. 135—44.)



1. An umbrella attachment comprising two concentric sleeves relatively rotatable, the one with respect to the other, and spaced apart to form an annular tape receptacle, means for attaching said sleeves slidably to the rod or handle of an umbrella, and means for preventing relative longitudinal movement of said sleeves.

2. An umbrella attachment comprising two concentric sleeves relatively rotatable, the one with respect to the other, and spaced apart to form an annular tape receptacle, means for attaching said sleeves slidably and yieldably to the rod or handle of an umbrella, and means for preventing relative longitudinal movement of said sleeves.

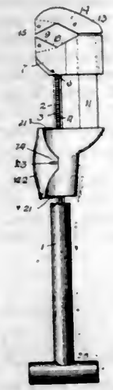
3. An umbrella attachment comprising two concentric sleeves relatively rotatable, the one with respect to the other, and spaced apart to form an annular tape receptacle, and means for attaching said sleeves slidably to the rod or handle of an umbrella comprising a tube adapted to be applied fixedly to an umbrella rod or handle, a sleeve surrounding said tube and slidable on the same, and means for holding said concentric sleeves on said slidable sleeve.

4. An umbrella attachment comprising two concentric sleeves relatively rotatable, the one with respect to the other, and spaced apart to form an annular tape receptacle, and spring means for attaching said sleeves slidably and yieldably to the rod or handle of an umbrella comprising a tube adapted to be applied fixedly to an umbrella rod or handle, a sleeve surrounding said tube and slidable on the same, a spring within said sleeve for holding the same yieldably in normal position, and means for holding said concentric sleeves on said slidable sleeve.

5. An umbrella attachment comprising two concentric sleeves provided with inwardly extending flanges at one end for so supporting the same as to permit of relative rotation thereof, an outwardly extending flange at the other end of the inner of said sleeves forming with the outer sleeve a closed annular tape receptacle, a tape slot in said outer sleeve, tape attaching means on said inner sleeve, whereby a tape may be wound into said annular receptacles by relative rotation of said sleeves, and means for attaching said sleeves at their inwardly extending ends slidably to the rod or handle of an umbrella.

[Claims 6 to 9 not printed in the Gazette.]

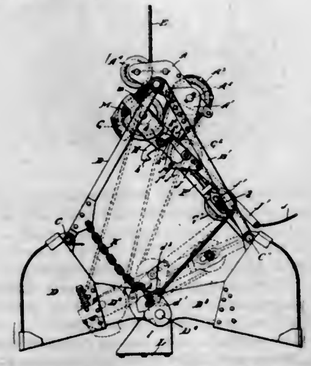
1,062,207. WRENCH. GEORGE J. WHITE, Washington, Pa. Filed July 8, 1912. Serial No. 708,261. (Cl. 81—159.)



1. A wrench comprising a shank, a longitudinal threaded tongue carried thereby, a jaw loosely connected to the outer end of said shank, said jaw having a longitudinal opening formed therein, a nut body movable relatively to said shank, a bar carried thereby and extending through the opening of said jaw, a jaw carried by the outer end of said bar, and a yoke in connection with said nut body for locking said body relatively to said shank.

2. A wrench comprising a shank, a longitudinal threaded tongue carried thereby, a jaw movably connected to the outer end of said shank, said jaw having an opening formed therein, a nut body movably arranged upon said shank and having a longitudinal groove providing clearance for the tongue of said shank, a bar carried by said nut body and extending through the opening of said jaw, a jaw carried by the outer end of said bar and confronting the jaw of said shank, and a spring pressed yoke carried by said nut body and coöperating therewith whereby said nut body can be shifted relatively to said shank.

1,062,208. CLAM-SHELL BUCKET. CHARLE C. WILLIAMS, Cleveland, Ohio. Filed Dec. 2, 1911. Serial No. 663,539. (Cl. 37—30.)



1. In a clam-shell bucket, the combination of a frame-member; two oscillatory scoop-members hung from said frame-member; a closing-member suitably pivoted; means for detachably connecting said closing-member and scoop-members; and a closing-line having running engagement with said frame and closing-member and positively connected with said scoop-members.

2. In a clam-shell bucket, the combination of a frame-member; two oscillatory scoop-members hung from said frame-member; a closing-member suitably pivoted; means for detachably connecting said closing and scoop-members; sheaves mounted upon said frame-member and closing member; and a closing-line positively connected with said scoop-members and passing around said sheaves.

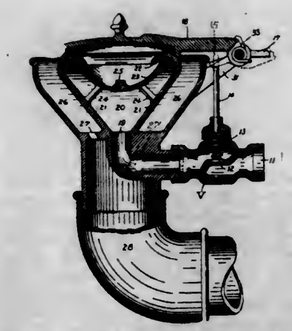
3. In a clam-shell bucket, the combination of a frame-member; two oscillatory scoop-members hung from said frame-member; a closing-member suitably pivoted; means for detachably connecting said closing and scoop-members; and a closing line positively connected with said scoop-members and having a running engagement with said frame and closing member, a point of engagement of said line with the closing-member being adjustable on the latter.

4. In a clam-shell bucket, the combination of a frame-member; two oscillatory scoop-members hung from the latter; a closing-member suitably pivoted; two sheaves mounted upon the latter; a sheave mounted upon the frame-member; and a closing-line permanently attached to said scoop-members, then passing around a sheave on said closing-member; around the sheave on said frame-member, and then around the other sheave on said closing-member.

5. In a clam-shell bucket, the combination of a frame-member; two oscillatory scoop-members hung from the latter; a closing-member suitably pivoted; two sheaves mounted upon the latter; a sheave mounted upon the frame-member; and a closing-line permanently attached to said scoop-members, then passing around a sheave on said closing-member; around the sheave on said frame-member, and then around the other sheave on said closing-member; said first-named sheave being adjustable longitudinally of said closing-member.

[Claims 6 and 7 not printed in the Gazette.]

1,062,209. SANITARY DRINKING-FOUNTAIN. JOHN L. WILLIAMS, Jr., Jackson, Tenn. Filed Sept. 27, 1911. Serial No. 651,481. (Cl. 137—11.)



1. In a fountain head, an induction pipe, an eduction pipe, a cover, a valve in said induction pipe, a stem for said valve, a horizontal arm on said stem, a lug on the cover in position to contact with said horizontal arm when the cover is raised to raise the valve stem, and a spring for returning the valve to position when said lug is out of contact with said horizontal arm.

2. In a fountain head, an induction pipe, a conical chamber into which said induction pipe discharges, a bowl supported within said chamber and a nib in the bottom of said bowl.

3. In a fountain head, an induction pipe, a conical chamber into which said induction pipe discharges, a depending lip on the upper edge of said chamber, and an imperforate bowl supported within said chamber and under said lip.

4. In a fountain head, an induction pipe, a conical chamber into which said induction pipe discharges, a depending lip on the upper edge of said chamber, a bowl supported within said chamber and under said lip, and a nib in the bottom of said bowl.

5. In a fountain head, an induction pipe, a conical chamber into which said induction pipe discharges, a depending lip on the upper edge of said chamber, a bowl supported within said chamber and under said lip, a nib in the bottom of said bowl and an outer discharge bowl surrounding the conical chamber and spaced therefrom.

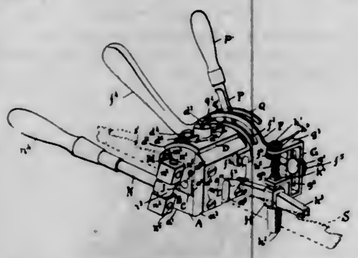
[Claims 6 to 9 not printed in the Gazette.]

1,062,210. SHEET-METAL CONSTRUCTION. MORRIS ANDERSON, Jamestown, N. Y. Filed Apr. 7, 1911. Serial No. 619,506. (Cl. 189—46.)



In a sheet metal door, stiles and cross rails, oppositely placed seams on the opposite sides of the door to connect said parts having inwardly and oppositely turned edges, a binding strip fitting over said oppositely turned edges to hold the same, the edges of said seams turned in angular flanges to lock the same against withdrawal, said binding strips having grooves bent therein, and a strip of metal fittitng within said grooves on the oppositely placed binding strips to hold said parts a spaced distance apart.

1,062,211. SAW-SWAGE. JOSEPH ARENZ, Milwaukee, Wis. Filed June 24, 1912. Serial No. 705,389. (Cl. 76—54.)



1. In a saw-swage, the combination with the swaging-block of the fixed die, a movable die journaled to rotate in bearings and having a flattened portion and an endwise play, of a manipulating handle mounted on said swaging-die and a guard-finger extending outside of said handle and adapted to limit the amount of endwise play of said die.

2. In a saw-swage, a clamp adapted to secure it to a saw-tooth comprising a fixed die adapted to abut on one face of the tooth, an endwise movable die adapted to abut against the other face thereof and a clamping-lever having a cam-surface abutting against the outer end of said movable die and adapted to force it inward when said lever is turned on its pivot.

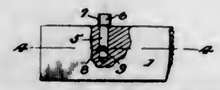
3. In a saw-swage, a clamp adapted to secure it to a saw-tooth comprising a fixed die adapted to abut on one face of the tooth, an endwise movable die adapted to abut against the other face thereof, a clamping-lever having a cam-surface abutting against the outer end of said movable die and adapted to force it inward when said lever is turned on its pivot, and a retracting spring engaging the outer end of said movable die and adapted to retract the same in the nonclamping position of said lever.

4. In a saw-swage, a swaging-block having a transverse horizontal slot, supporting-blocks for dies fitting in said slot and laterally shiftable therein, said slot having a width greater than the combined width of said blocks, and adjustment means for shifting said blocks laterally in said slot and securing them in the adjusted position therein.

5. In a saw-swage, a swaging-block having a transverse horizontal slot, supporting-blocks for dies fitting in said slot and laterally shiftable therein, said slot having a width greater than the combined width of said blocks, one or more adjusting screws turning in threaded holes on one side of said swaging-block and abutting against one side of one of said supporting blocks, and one or more adjusting screws turning in threaded holes in the opposite side of said swaging-block and abutting against the other supporting-block in opposition to the first adjusting screws.

[Claims 6 to 16 not printed in the Gazette.]

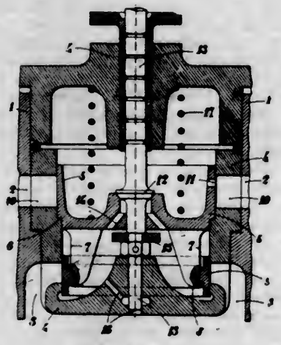
1,062,212. DIE OR CHASER FOR PIPE-THREADING TOOLS. MILTON W. BECHTEL, Warren, Ohio, assignor to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed June 7, 1910. Serial No. 565,486. (Cl. 10—96.)



1. A die or chaser having a lug extending transversely thereof, such lug having a post fitted in an opening in the die or chaser, and means engaging such post for limiting its axial rotation.

2. A die or chaser having a lug extending transversely thereof, such lug having a post fitted in an opening in the die or chaser, such post having a groove extending partially therearound, and a retaining pin projecting through said groove.

1,062,213. VALVE. ROBERT DELAUNAY-BELLEVILLE, St. Denis, Seine, France, assignor to Société Anonyme des Etablissements Delaunay-Belleville, St. Denis, Seine, France, a Corporation of France. Filed Feb. 20, 1911. Serial No. 609,777. (Cl. 137—4.)



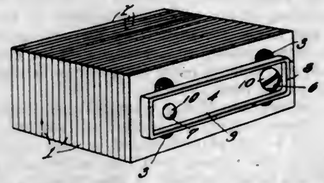
1. In a slide valve, a valve casing provided with a valve seat, a valve to coöperate with said seat, means to allow live steam to exert a seat maintaining pressure on the valve when the same is seated, means operative in the closing movement of the valve to entrap steam between the valve and valve seat before the steam is allowed to exert said pressure on the valve, and means to release said pressure to allow the valve to be unseated.

2. In a slide valve, a valve casing provided with upper and lower passages, a main valve guided in said casing, a valve seat to coöperate with said main valve, said main valve having an upper portion and a lower portion adapted to close the upper and lower passages respectively, an auxiliary valve in the upper portion of said main valve, means to operate the main valve, means to entrap steam between said main valve and said valve seat in the closing of the main valve, the entrapping of the steam enabling the auxiliary valve to be closed, means to allow steam to exert a seat maintaining pressure on said main valve after the closing of the auxiliary valve, and means to open said auxiliary valve to allow said main valve to be unseated.

3. A slide valve comprising a valve casing provided with upper and lower passages, a main valve having upper and lower portions to close said passages, a valve seat to coöperate with said main valve, a valve stem carrying said main valve, an auxiliary valve seat in said main valve, a valve on said stem to coöperate with said auxiliary valve seat, a passage in said casing adapted to be opened and closed by said stem, means to allow live steam to exert a seat maintaining pressure on the main valve when the same is seated, said auxiliary valve constituting means to release said pressure, and means to entrap steam between the main valve and said valve seat when the valve is seating.

4. A slide valve comprising a casing, upper and lower passages in said casing, a main valve having an upper and lower portion to form closures to said passages, a valve stem upon which said main valve is loosely mounted, an auxiliary passage in said casing controlled by said valve stem, a seat in said casing with which the upper portion of the main valve coöperates, an auxiliary valve disposed in said upper portion of the main valve adapted to be operated when said stem makes a stroke in one direction, means to cause said main valve to move in advance of the stem when said stem makes its return stroke to maintain the auxiliary valve in its opened condition, means to entrap a quantity of steam between said main valve and the seat with which it coöperates to check the movement of said main valve and thereby allow the auxiliary valve to close before the stem closes the said auxiliary passage in the casing, and means to allow live steam to exert a seat maintaining pressure on said main valve when seated.

1,062,214. SANDPAPER-HOLDER. OSCAR A. BERGMAN, Seattle, Wash. Filed Feb. 13, 1911. Serial No. 608,327. (Cl. 51—1.)

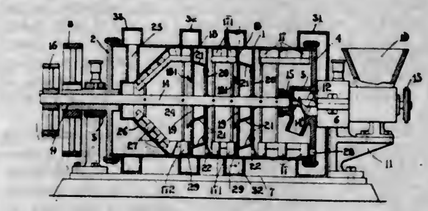


In a device of the kind described, a body formed of a plurality of rectangular rigid elements arranged side by side, each of said elements being provided adjacent each end with a transversely-extending opening, rectangular plates extending longitudinally of the outer elements of said body each provided with an upstanding peripheral flange, and fastening means extending through said plates and rectangular elements, said plates and rectangular elements being elongated in a direction transverse the line of movement of the device whereby a sheet of paper stretched over the surface of the rectangular elements and having its ends lying in said plates may be firmly grasped.

1,062,215. CENTRIFUGAL SEPARATOR. JOHN J. BERRIGAN, East Orange, N. J., assignor to Francis J. Arend, New York, N. Y., and John Bernstrom, Stockholm, Sweden. Filed May 11, 1908, Serial No. 432,224. Renewed Sept. 8, 1911. Serial No. 648,403. (Cl. 127—3.)

1. A centrifugal separator comprising in combination a rotatable drum provided with one or more transverse orificed partitions therein and means for conveying material from near the periphery of such drum along such partition or partitions to the orifices thereof, comprising a rotatable continuous spiral blade.

2. A centrifugal separator comprising in combination a rotatable drum provided with one or more transverse orificed partitions therein and means for conveying material from near the periphery of such drum along such partition or partitions to the orifices thereof comprising a rotatable continuous spiral blade, the edge of which is in a plane perpendicular with respect to the axis of rotation.



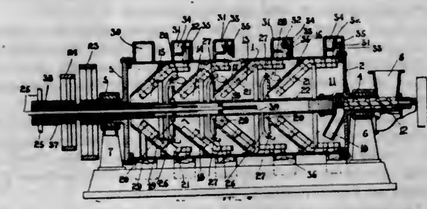
3. A centrifugal separator comprising in combination a rotatable drum provided with one or more transverse orificed partitions therein and means for conveying material from near the periphery of such drum along such partition or partitions to the orifices thereof comprising a rotatable continuous spiral blade, the edge of which is in a plane perpendicular with respect to the axis of rotation, said blade located in close proximity to the said partition.

4. A centrifugal separator comprising in combination a rotatable drum provided with one or more orificed partitions, one or more corresponding disks located in proximity to such partitions and provided with a spiral elevator blade in the space between such disk and corresponding partition.

5. A centrifugal separator comprising in combination a rotatable drum provided with one or more orificed partitions, one or more corresponding disks located in proximity to such partitions and provided with a spiral elevator blade in the space between such disk and corresponding partition, said disk having a lip adapted to feed material into the range of action of said elevator blade.

[Claims 6 to 14 not printed in the Gazette.]

1,062,216. APPARATUS FOR SEPARATING SOLIDS AND LIQUIDS AND WASHING OR OTHERWISE TREATING THE SEPARATED SOLIDS. JOHN J. BERRIGAN, Orange, N. J., assignor to Francis J. Arend, New York, N. Y., and John Bernstrom, Stockholm, Sweden. Original application filed Mar. 6, 1908, Serial No. 419,487. Divided and this application filed June 8, 1909, Serial No. 500,904. Renewed Aug. 28, 1912. Serial No. 717,620. (Cl. 127—3.)



1. In a centrifugal separator, a rotating drum having its interior divided longitudinally into a plurality of chambers, means for supplying material to be treated to one of said chambers, means for conveying the material from one chamber to another successively, and means for supplying liquid to one of said chambers.

2. In a centrifugal separator, a rotating drum having its interior divided longitudinally into a plurality of chambers, means for supplying material to be treated to one of said chambers, means for conveying the material from one chamber to another successively, means for supplying liquid to one of said chambers, and means for separating such material from such liquid.

3. In a centrifugal separator, a rotating drum having its interior divided into a plurality of chambers, means for supplying material to be treated to one of said chambers, means for conveying the material from one chamber to another successively, means for supplying liquid to

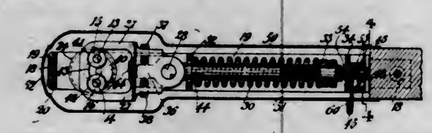
one of said chambers, and means for discharging liquid from certain of said chambers.

4. In a centrifugal separator, a rotating drum having its interior divided into a plurality of chambers, means for supplying material to be treated to one of said chambers, means for conveying the material from one chamber to another comprising a conveyer having a hollow conveyer shaft, said shaft having a connection to one of said chambers, and means for supplying liquid to said shaft.

5. In a centrifugal separator, a rotating drum having its interior divided into a plurality of chambers, means for supplying material to be treated to one of said chambers, means for conveying the material from one chamber to another comprising a conveyer having a plurality of liquid passages each communicating with one of said chambers, and means for supplying liquid to said passages.

[Claims 6 and 7 not printed in the Gazette.]

1,062,217. SPRING-HINGE. EMIL BOMMER, New York, N. Y. Filed May 20, 1911. Serial No. 628,384. (Cl. 16—25.)



1. In a spring-hinge, a post, a frame pivoted thereto, two bearing-members spaced apart on the post, and a jointed reciprocating member carried by the frame and spring-actuated against the bearing-members and having two recesses spaced apart, and a third recess between said two recesses, said third recess being adapted to hold the door in open position.

2. In a spring-hinge, a reciprocating-member comprising a yoke, a spring-actuated rod pivoted thereto, said rod having an end extended beyond the point of pivoting, and located opposite the reciprocating member, and set-screws passing through the side-walls of the yoke and abutting against the extended end of the rod for adjusting the angle of the rod to said yoke.

3. In a spring-hinge, a floor-post having a circular flange, bearing-members on said post above and within the periphery of said flange, and a reciprocating member having recesses engaging said bearing-members and straight sides tangential to said bearing-members.

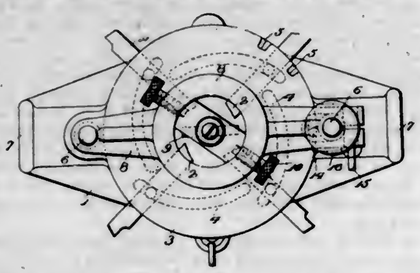
4. In a spring-hinge, the combination, with the frame of the hinge, of coöperating frame-actuating members, a spring-actuated catch movable in and out of the path of one of said members, and means limiting the movement of said catch.

5. In a spring-hinge, the combination, with the frame of the hinge, of coöperating frame-actuating members, means for retaining said members out of coöperation, and a spring normally actuating said retaining means from retaining to non-retaining position.

[Claims 6 to 8 not printed in the Gazette.]

1,062,218. PIPE-THREADING TOOL. BRADFORD BORDEN, Toronto, Ontario, Canada, assignor to The Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Sept. 30, 1910. Serial No. 584,735. (Cl. 10—122.)

1. In combination with a rotatable and longitudinally movable chaser-carrier, a series of radially arranged chasers, and a cam plate mounted on said chaser-carrier for engaging the chasers, a post having a diagonally arranged portion for interlocking with the cam plate for controlling the axial turning thereof independently of its rotation with the chaser-carrier, a member carrying said post, and an element mounted on said member for engaging the article being threaded to prevent the post from partaking of the longitudinal travel of the chaser-carrier, and means connecting said post to said member for permitting the post to be turned axially to disengage its diagonally arranged portion from the cam plate to permit the latter to be turned independently of the post.



2. In combination with a rotatable and longitudinally movable chaser-carrier, a series of radially arranged chasers, and a cam plate mounted on said chaser-carrier for engaging the chasers, said cam plate having a plurality of spaced-apart cut-outs in its periphery, a post having a diagonally arranged lug for entering any one of said cut-outs, said post being rotatable with said chaser-carrier but not partaking of its longitudinal movement, and means for permitting said post to be turned on its axis to disengage its lug from a cut-out in said cam plate to allow the latter to be turned independently of the post.

3. In combination with a rotatable and longitudinally movable chaser-carrier, a series of radially arranged chasers, and a cam plate mounted on said chaser-carrier for engaging the chasers, said cam plate having one or more cut-outs in its periphery, two oppositely disposed posts, one of said posts having a diagonally arranged portion for engaging the cut-outs of the cam plate to effect the axial turning thereof independently of its rotation with the chaser-carrier, a cross member carrying said posts, an element mounted on said cross member for engaging the article being threaded to prevent the posts from partaking of the longitudinal travel of the chaser-carrier, and means for permitting the post carrying the lug to be turned axially to disengage said lug from a cut-out in said cam plate to allow the latter to be turned independently of the post.

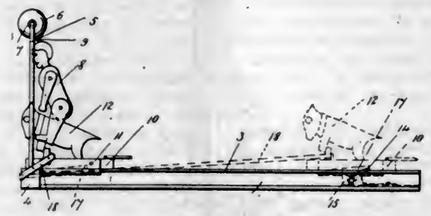
4. In combination with a rotatable and longitudinally movable chaser-carrier, a series of radially arranged chasers, and a cam plate mounted on said chaser-carrier for engaging the chasers, said cam plate having one or more cut-outs in its periphery, a post having a diagonally arranged portion for engaging the cut-outs of the cam plate, a cross member split at one end, a clamping screw therefor, said post being held in said split end, an element for permitting the post carrying the lug to be turned axially to disengage its lug from a cut-out in said cam plate to allow the latter to be turned independently of the post.

5. In combination with a rotatable and longitudinally movable chaser-carrier, a series of radially arranged chasers, and a cam plate mounted on said chaser-carrier for engaging the chasers, said cam plate having one or more cut-outs in its periphery, a post having a diagonally arranged lug for entering any one of said cut-outs, said post being rotatable with said chaser-carrier but not partaking of its longitudinal movement, a cross-member having a central opening, said post being connected to said cross-member, and a stop removably held to said cross-member, in line with said central opening, said stop being designed to be removed when it is desired to cut a straight thread, and said central opening in the cross member being of sufficient diameter to allow of the passage of a pipe.

[Claim 6 not printed in the Gazette.]

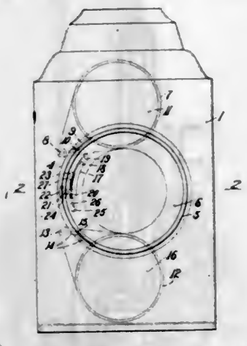
1,062,219. TOY. GOVERNOR L. BREWER, Beach, N. D., assignor of one-half to Joseph Musil, Beach, N. D. Filed Aug. 5, 1912. Serial No. 713,364. (Cl. 46—40.)

1. In a toy, a longitudinal guide bar, a block and an animal figure slidable on the guide bar, a spring for propelling the block along the guide bar, a support secured to one end portion of the guide bar, and a human figure mounted to revolve upon the upper part of the said support and arranged in the path of the animal figure.



2. In a toy, a longitudinal guide bar having a crosspiece at one end, a block and an animal figure slidable on the guide bar, a spring attached to the said block and crosspiece, an arch-shaped support projecting from the crosspiece, and a human figure having a bearing rigidly secured to its head portion and mounted to revolve on the top part of the said support, said human figure being arranged in the path of the said animal figure.

1,062,220. LANTERN OR LAMP. CHARLES C. BRIAND, Revere, Mass., assignor to Peter Gray & Sons, a Corporation of Massachusetts. Filed Oct. 8, 1908. Serial No. 456,834. (Cl. 240—23.)



1. In a lantern, the combination of a body part provided with an opening which shows the light therethrough, two holders having glass of different colors mounted therein, independent pivots for pivoting said holders to the body part of the lantern, a rotatable bezel mounted in the opening in the body part of the lantern, means connecting the bezel and holders for positioning the glass of either one of said holders in front of the opening in the body part of the lantern, and means for locking the bezel when one of the holders is in operative position and the other holder in inoperative position.

2. In a lantern, the combination of a body part having an opening therein for the radiation of light, two adjustable holders secured to the body of the lantern by independent pivots, glass of different colors mounted in said holders, a rotatable bezel mounted in the opening of the body part of the lantern having means connecting it to the holders for positioning either of the holders in front of the opening to cause the radiation of light through the colored glass mounted therein, and a locking pin operable from the outside of the lantern body for positively locking the rotatable bezel in such position as to present one or the other of said holders in operative position.

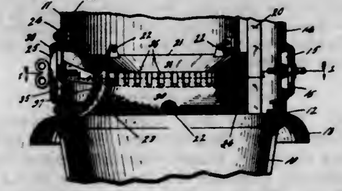
3. In a lantern, the combination of a body part having an opening for the radiation of light, a stationary casing secured in said opening, a revoluble casing revolubly mounted in said opening; holders pivoted to the body part contiguous to the opening, slots in said holders, pins secured in the revoluble casing slidable in the slots in the holders, a spring mounted on the revoluble casing, a grooved pin secured to the free end of the spring, a hole in the revoluble casing in which the pin is slidable, a plurality of holes in the stationary casing through which the pin is slidable, and slots connecting said plurality of holes and arranged to permit the grooved portion of the pin to slide therein.

4. In a signal lantern, the combination of a body part having an opening, a lens mounted in said opening, lens-holders independently pivoted to the body part of the lantern and having angular slots therein, a movable ring mounted in said opening, and pins secured in said movable ring and arranged to slide in the angular slots in the lens-holders to position either of said holders in operative position and the other in inoperative position, or to position both said holders in inoperative position.

5. In a signal lantern, the combination of a body part having an opening, a lens mounted in said opening, lens-holders independently pivoted to the body part having angular slots therein, a rotatable ring mounted in said opening, pins secured in said rotatable ring and arranged to slide in the angular slots in the lens-holders to position either of said holders in operative position and the other in inoperative position, or to position both said lens-holders in inoperative position; means extending outside the lantern to rotate said rotatable ring, and means extending outside the lantern to lock said rotatable ring.

[Claims 6 and 7 not printed in the Gazette.]

1,062,221. HOT-BLAST STOVE. WILLIAM J. BROWN, Indianapolis, Ind., assignor to Indianapolis Stove Company, Indianapolis, Ind., a Corporation of Indiana. Filed Mar. 13, 1912. Serial No. 683,582. (Cl. 126—77.)



1. A hot blast stove, comprising the combination of a firepot, a superposed stove casing, a door frame mounted in said casing, and a pair of castings extending rearwardly from the sides of said door frame around the inside of the casing, each of said castings having an upper, a lower, and a medial wall which engage the inner surface of the casing and with it form upper and lower chambers, the lower wall of each casting being imperforate and curved upwardly and inwardly with the convexity inward, the medial wall of each casting being cut away at the forward end to allow communication between said two chambers, and the upper chamber in each casting being provided with a plurality of openings in its inner wall, and walls closing the front ends of both chambers in each casting and the rear end of the upper chamber, the rear end of the lower chamber having communication with the air outside of the stove.

2. A hot blast stove, comprising the combination of a firepot, a superposed stove casing, a door frame mounted in said casing, and a pair of castings extending rearwardly from the sides of said door frame around the inside of the casing, each of said castings having an upper, a lower, and a medial wall which engage the inner surface of the casing and with it form upper and lower chambers, the medial wall of each casting being cut away at the forward end to allow communication between said two chambers, and the upper chamber in each casting being provided with a plurality of openings in its inner wall, and walls closing the front ends of both chambers in each casting and the rear end of the upper chamber, the rear

end of the lower chamber having communication with the air outside of the stove.

3. A hot blast stove, comprising the combination of a firepot, a superposed stove casing, a door frame mounted in said casing, a pair of castings extending rearwardly from the sides of said door frame around the inside of the casing, each of said castings having an upper, a lower, and a medial wall which engage the inner surface of the casing and with it form upper and lower chambers, the lower wall of each casting being imperforate and curved upwardly and inwardly with the convexity inward, the medial wall of each casting being cut away at the forward end to allow communication between said two chambers, and the upper chamber in each casting being provided with a plurality of openings in its inner wall, and walls closing the front ends of both chambers in each casting and the rear end of the upper chamber, the rear end of the lower chamber having communication with the air outside of the stove, and a casting fitting between the rear ends of the aforesaid two castings and forming a chamber which communicates with the rear ends of the lower chambers in the first two castings and with the atmosphere outside the stove.

4. A hot blast stove, comprising the combination of a firepot, a superposed stove casing, a door frame mounted in said casing, a pair of castings extending rearwardly from the sides of said door frame around the inside of the casing, each of said castings having an upper, a lower, and a medial wall which engage the inner surface of the casing and with it form upper and lower chambers, the medial wall of each casting being cut away at the forward end to allow communication between said two chambers, and the upper chamber in each casting being provided with a plurality of openings in its inner wall, and walls closing the front ends of both chambers in each casting and the rear end of the upper chamber, the rear end of the lower chamber having communication with the air outside of the stove, and a casting fitting between the rear ends of the aforesaid two castings and forming a chamber which communicates with the rear ends of the lower chambers in the first two castings and with the atmosphere outside the stove.

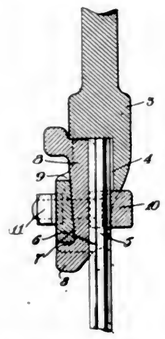
1,062,222. PROCESS FOR THE PREPARATION OF CONCENTRATED SOLUTIONS OF CELLULOSE. ACHILLE CHAUMAT, Fresnoy-le-Grand, France, assignor to Compagnie Francaise Des Applications De La Cellulose, Paris, France, a Corporation of France. Filed June 26, 1911. Serial No. 635,333. (Cl. 106—40.)

A process for the manufacture of concentrated solutions of cellulose in which separately prepared copper hydroxid is mixed with cellulose in the form of a paste after which the cupro-cellulose obtained is pressed and reduced to the size of wheat grains the product being then moistened with sufficient ammonia to dissolve it subjected to further treatment in a kneading or agitating apparatus a small quantity of caustic soda lye being subsequently added thereto.

1,062,223. CHUCK. BENJAMIN COCK, Camborne, England, assignor to Holman Brothers, Limited, Camborne, England, a Corporation of Great Britain. Filed Apr. 9, 1912. Serial No. 689,659. (Cl. 125—3.)

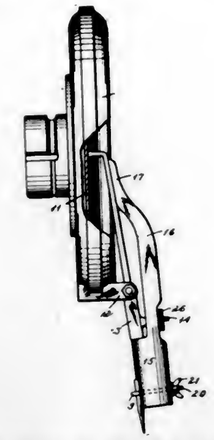
1. A chuck or tool-holder which comprises a head provided with a longitudinal recess adapted to receive the shank of a tool and having one of its walls inclined to the axis of the chuck, a wedge-bushing adapted to rest and to move forward and backward upon the inclined wall of the recess, and means providing a bearing for the shank of the tool in the wall of the recess opposite said inclined wall and wedge-bushing which is fixed longitudinally but is transversely adjustable.

2. A chuck or tool-holder comprising a head provided with a longitudinal recess adapted to receive the shank of a tool one wall of which is inclined to the axis of the chuck and is cut away at the inner end of the recess, a wedge-bushing bearing against the inclined wall of the recess and having at its rear end a projection or lug extending outwardly through the opening in the wall or recess by which the forward movement of the bushing



is limited, and a U-bolt adapted to embrace the shank of a tool and the wedge-bushing and to secure them to the inclined wall of the recess.

1,062,224. TONE-MODIFYING DEVICE. WILLIAM H. COOK, Webster City, Iowa. Filed May 28, 1912. Serial No. 700,498. (Cl. 181—11.)



1. In a tone modifying device for phonographs, the combination of a pivotally supported metallic stylus arm member, a non-metallic stylus arm member in engagement with the metallic member on both sides of its pivotal support, and a stylus carried by the non-metallic member.

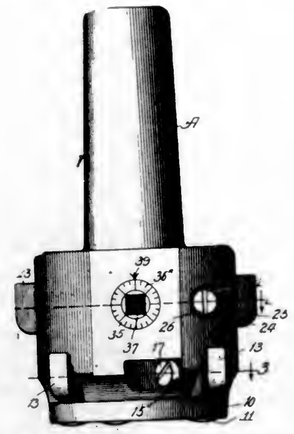
2. In a tone modifying device for phonographs, the combination of a pivotally supported stylus arm member, a non-metallic stylus arm member spaced apart from the metallic member at its pivotal point and in engagement with the metallic member at opposite sides of said pivotal point, and a stylus carried by the non-metallic member.

3. In a tone modifying device for phonographs, the combination of a pivotally supported stylus arm member, a non-metallic stylus arm member spaced apart from the metallic member at its pivotal point and in engagement with the metallic member at opposite sides of said pivotal point, a stylus carried by the non-metallic member, and means for adjustably holding the non-metallic member in engagement with the metallic member.

4. In a device of the class described, the combination of a diaphragm, a stylus arm comprising a metallic member connected to the diaphragm, means for pivotally supporting the metallic member, a non-metallic member comprising a relatively large body portion, means connected thereto for supporting a stylus, said non-metallic member also comprising an arched portion extending past the pivotal support of the metallic member and engaging the metallic member adjacent to the diaphragm, and means for holding the non-metallic member firmly in engagement with the metallic member on both sides of the pivotal center of the metallic member.

5. In a device of the class described, the combination of a diaphragm, a stylus arm comprising a metallic member connected to the diaphragm, means for pivotally supporting the metallic member, a non-metallic member comprising a relatively large body portion, means connected thereto for supporting a stylus, said non-metallic member also comprising an arched portion extending past the pivotal support of the metallic member and engaging the metallic member adjacent to the diaphragm, and adjustable means for holding the non-metallic member firmly in engagement with the metallic member on both sides of the pivotal center of the metallic member.

1,062,225. TOOL-HOLDER. CORNELIUS J. CROWLEY, Burlington, Iowa. Filed May 27, 1911. Serial No. 629,811. (Cl. 77—58.)



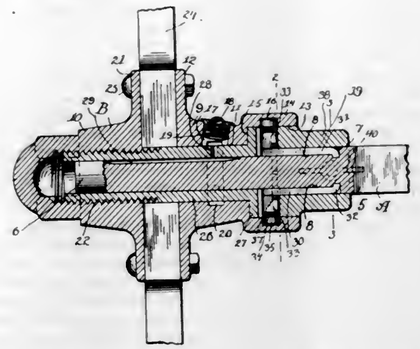
1. In a device of the class described, a head, said head being provided with sockets, a pair of tool holders carried in said sockets, each of said tool holders having its inner end formed with a projection on one side and with a depression on the opposite side whereby when said ends of said holders are in contact a boss will be formed on one side by said projections and a cavity on the other side by said depressions, and means coacting with said boss and said cavity to adjust said holders and said head.

2. In a device of the class described, a head, said head being provided with sockets, a pair of tool holders carried in said sockets, each of said tool holders having its inner end formed with a projection on one side and with a depression on the opposite side whereby when said ends of said holders are in contact a boss will be formed on one side by said projections and a cavity on the other side by said depressions, and means coacting with said boss and said cavity to adjust said holders and said head, said means being adapted to lock said holders in adjusted position.

3. In a device of the class described, a shank and a head, said head being provided with sockets, a pair of tool holders carried in said sockets, said tool holders having their inner ends formed of semi-conical bosses on one side and with semi-conical cavities on their opposite sides whereby when said ends of said holders are in contact a conical boss will be formed on one side and a conical socket on the other side, and means coacting with said holders to adjust the same in relation to said head, said means comprising a pair of plugs adjustably engaging apertures in said head, one being provided with a seat for said conical boss and one with a conical extremity seating on said conical seat at the ends of said tool holders whereby when said first named plug is withdrawn, said second named plug may be advanced to separate the said ends of said holders to advance the holders and tools carried thereby and vice versa.

4. In a device of the class described, a shank and a head carried thereby, said head being provided with sockets and slots leading from said sockets at right angles thereto, a pair of tool holders carried in said sockets, a combined adjusting and locking means coacting with said tool holders to adjust and hold the same in adjusted position, and means to hold the tools firmly in said tool holders, said means being adapted to slide in the slots in said heads when said tools are adjusted.

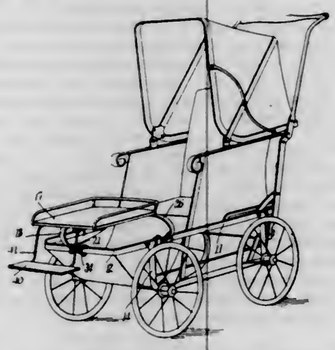
1,062,226. HUB AND AXLE CONNECTION. THOMAS J. CUPSTID, Blaney, S. C. Filed Apr. 22, 1912. Serial No. 692,388. (Cl. 21—30.)



1. The combination with an axle having a spindle, the axle being formed with opposed transverse grooves and longitudinal seats communicating with the spindle and grooves, of a hub on said spindle, a lateral flange projecting inwardly from the inner end of the hub and disposed around and in spaced relation to the axle, and an opposed pair of clutch elements connecting the hub and axle, each element including a shank engageable within the seat of the axle, a finger extending from one end of the shank and disposed within a communicating transverse groove of the axle, and a head projecting from the other end of the shank and having a loose connection with the flange of the hub.

2. The combination with an axle having a spindle, the axle being formed with opposed transverse grooves and longitudinal seats communicating with the spindle and grooves, of a hub on said spindle, a lateral flange projecting inwardly from the inner end of the hub and disposed around and in spaced relation to the axle, the inner face of the flange being centrally formed with an annular groove, an opposed pair of clutch elements connecting the hub and axle, each element including a shank engageable within a seat of the axle, a finger extending from one end of the shank and disposed within a communicating transverse groove of the axle, a head projecting from the other end of the shank, an anti-friction roller carried by the head and engageable within the groove of the hub, a spring connected to the heads of the clutch elements to hold them in spaced relation when the hub is disconnected from the axle.

1,062,227. JUMP-SEAT FOR GO-CARTS. MARGARETTE MAUDE DANIELS, Dalton, Nebr. Filed Apr. 15, 1912. Serial No. 691,020. (Cl. 21—44.)



1. A jump seat attachment for go-carts comprising longitudinal and transverse spring bars supporting the seat and having downwardly and inwardly curved ends, the lower ends of the spring bars each forming a spring clamping jaw, mating spring jaws secured to the spring bars, and shackles having members adapted to pass between the said spring jaws and with which the said jaws have detachable clamping engagement.

2. A jump seat attachment for go-carts, comprising longitudinal and transverse spring bars carrying a seat, separable spring clamp jaws on the lower ends of the springs, detachable securing means consisting of a front plate carrying a hinge pin adapted to be detachably gripped by the clamp jaws of the spring, adjustable means for holding the jaws in clamping position and U-shaped shackle bolts for clamping said front plates.

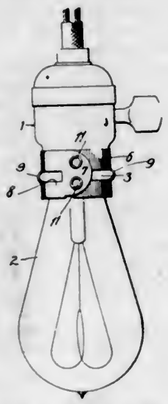
3. A jump seat attachment for folding go-carts comprising a longitudinal spring bar and a transverse spring bar, said bars having inwardly curved spring ends, and a shackle for securing each of said ends, the said shackle comprising a front plate having forwardly extending cheeks carrying a hinge pin and provided with pairs of lateral ears at the bases of said cheeks, and U-bolts and nuts engaging said ears for clamping said plate to the go-cart frame, the ends of the spring bars being each provided with movable spring jaws and a clamping device for the jaws to detachably engage said jaws with the hinge pins on the shackle plates.

4. A jump seat attachment for go-carts comprising spring bars supporting the seat and having downwardly and inwardly curved ends, shackles provided with hinge pins, spring jaws on the lower ends of the bars for engaging the hinge pins, and sliding rings on the said bars for opening and closing the spring jaws.

5. A jump seat attachment for go-carts, comprising spring bars supporting the seat and having downwardly and inwardly curved ends, the lower ends of the bars being each formed into a jaw, spring mating jaws having extensions at one end secured to the spring bars, the said jaws being concave on their inner faces, shackles for connection with the go-cart frame and having hinge pins adapted to pass between the spring jaws, and means carried by the spring bars for opening the jaws, or for holding the same in engagement with the said hinge pins.

1,062,228. INCANDESCENT-LAMP LOCK AND SEAL. HUGH DAVIES and JAMES COOKE, West New York, N. J. Filed July 9, 1912. Serial No. 708,461. (Cl. 173—356.)

1. The combination of a lamp socket having an annular bead near its open end, a lamp bulb provided with a screw plug adapted to fit said lamp socket, a sealing and locking band adapted to embrace the lamp socket and to receive the bead of said socket, a locking flange on said band adapted to engage the plug on the lamp bulb to prevent its withdrawal from the lamp socket, the ends of said band extending outwardly and being formed of readily bendable, non-resilient material and adapted to be bent back upon themselves to bring them close to the side of the body of the band, and readily removable means for rigidly connecting together the ends of the band.



2. The combination of a lamp socket having an annular bead near its open end, a lamp bulb provided with a screw plug adapted to fit said lamp socket, a sealing and locking band adapted to embrace the lamp socket and to receive the bead of said socket, a locking flange on said band adapted to engage the plug on the lamp bulb to prevent its withdrawal from the lamp socket, the ends of said band extending outwardly and being formed of readily bendable, non-resilient material and adapted to be bent back upon themselves to bring them close to the side of the body of the band, and readily removable, soft metal fastening means for rigidly connecting together the ends of the band.

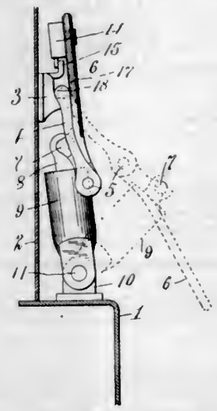
3. The combination of a lamp socket having an annular bead near its open end, a lamp bulb provided with a screw plug adapted to fit said lamp socket, a sealing and locking band adapted to embrace the lamp socket and to receive the bead of said socket, a locking flange on said band adapted to engage the plug on the lamp bulb to prevent its withdrawal from the lamp socket, the ends of said band extending outwardly and being formed of readily bendable, non resilient material and adapted to be bent back upon themselves to bring them close to the body of the band, and a soft metal eyelet for rigidly connecting together the ends of the band.

4. A lamp lock and seal consisting of a single piece of metal bent to form an annular band and provided with an annular internal groove adapted to receive a bead of a lamp socket, and an annular inwardly extending flange adapted to engage the threaded plug of a lamp to lock the lamp to the socket and formed with outwardly extending bendable ends which may be bent to bring them close to the side of the body of the lock, and means for riveting the said bendable ends together to contract the band and permanently secure the lock in position.

5. A lamp lock and seal comprising an annular band adapted to encircle the lower end of a lamp socket and provided with means to receive an annular external bead on said socket, said band being also provided with an inwardly extending flange adapted to engage the screw plug of a lamp to lock the lamp to the socket, and formed with outwardly extending readily bendable ends, and soft metal rivets for rigidly securing said ends together to permanently secure the locking band to the socket, the riveted ends being adapted to be bent transversely to cause them to lie close to the side of the body of the band.

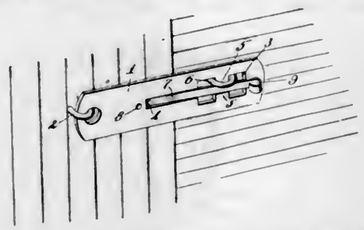
[Claim 6 not printed in the Gazette.]

1,062,229. HOOD AND DRIP-PAN FASTENER. CLARK L. DORNEY, Dayton, Ohio, assignor of one-half to Jos. E. Sells, Dayton, Ohio. Filed Dec. 30, 1912. Serial No. 739,198. (Cl. 70—82.)



In a device of the type specified, a pivotally mounted cylinder, a spring-controlled plunger in said cylinder, said plunger having its upper exposed end terminated in a cross-head, a double arm lever pivotally connected to the cross-head of said plunger, said pivot lying on one side of the plane of the lever arms, and the space between said lever arms being occupied by the said cross-head, a double arm link pivotally connected to the ends of the lever arms the upper ends of said double arm link being joined by a cross-bar, and a double hook member adapted to engage the cross-bar of said link to hold the same while the double arm lever is being thrown upwardly on the pivots which connect said lever with the cross-head of the plunger and with said link, and to hold said link after tension is applied to the spring in the operation of said lever, substantially as specified.

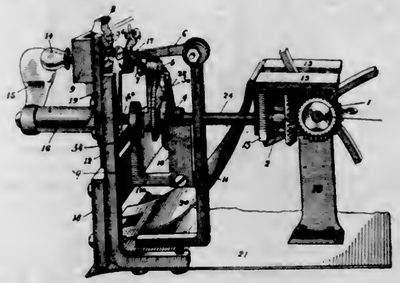
1,062,230. HASP. JAMES NOBLE EDELIN, Los Angeles, Cal., assignor to The Safety Hasp Manufacturing Co. Inc., Los Angeles, Cal., a Corporation of California. Filed Sept. 25, 1912. Serial No. 722,329. (Cl. 70—83.)



A hasp having a staple receiving opening, a lug extending into said opening to engage the staple, and a spring finger secured at one end to the under face of the hasp and passing through said staple receiving opening adjacent the lug.

1,062,231. VENDING-MACHINE. CHARLES EDWARD FANNING, Davenport, Iowa, assignor, by mesne assignments, to Fred Wernentin, Jr., Davenport, Iowa. Filed Nov. 27, 1911. Serial No. 662,713. (Cl. 211—8.)

1. A vending machine comprising a package supporting frame, a main frame, a transverse shaft journaled in the supporting frame, a paddle wheel fixed on the transverse shaft and having a multiplicity of arms located in the same plane, an intermediate shaft journaled in the main frame, gearing connecting the transverse and intermediate shafts, a ratchet wheel fixed on the intermediate shaft, a rock shaft journaled in the main frame and having an extension and a cam fixed on the shaft extension and provided with a pawl adapted to engage the ratchet wheel.



2. A vending machine comprising a package supporting frame, a main frame, a transverse shaft journaled in the supporting frame, a paddle wheel fixed on the transverse shaft and having a multiplicity of arms located in the same plane, an intermediate shaft journaled in the main frame, gearing connecting the transverse and intermediate shafts, a ratchet wheel fixed on the intermediate shaft, a rock shaft journaled in the main frame and having an extension, a cam fixed on the shaft extension and provided with a pawl adapted to engage the ratchet wheel and a spring connecting the cam with the main frame for returning the cam to normal position after each operation.

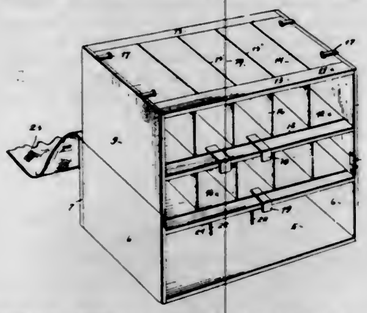
3. A vending machine comprising a package supporting frame, a main frame, a lock bar pivoted to the main frame, a transverse shaft journaled in the supporting frame, a paddle wheel fixed on the transverse shaft and having a multiplicity of arms located in the same plane, an intermediate shaft journaled in the main frame, gearing connecting the transverse and intermediate shafts, a ratchet wheel fixed on the intermediate shaft, a rock shaft journaled in the main frame and having an extension, and a cam having a detent adapted to be engaged by the lock bar and fixed on the shaft extension and provided with a pawl adapted to engage the ratchet wheel.

4. A vending machine comprising a package supporting frame, a main frame, a transverse shaft journaled in the supporting frame, a paddle wheel fixed on one end of the transverse shaft, and having a multiplicity of arms located in the same plane and working through the top of the supporting frame, a bevel gear wheel fixed on the other end of the transverse shaft, an intermediate shaft journaled in the main frame, a bevel gear wheel fixed on one end of the intermediate shaft and meshing with the bevel gear wheel on the transverse shaft, a ratchet wheel fixed on the other end of the intermediate shaft, a rock-shaft journaled in the main frame and having an extension, a cam fixed on the shaft extension and provided with a pawl adapted to engage the ratchet wheel.

1,062,232. LETTER-CASE. ALLEN P. FRYAR, Ashton, Idaho. Filed Jan. 24, 1912. Serial No. 673,162. (Cl. 190—16.)

A case of the class described including in combination, a bottom, end walls, a shelf disposed above the bottom and fixedly secured to the end walls to form a compartment, a plurality of movable shelves disposed above the stationary shelf, flexible partitions connecting the shelves,

extensions connected to the end walls to swing inwardly, and fastening means connecting the top shelf and the ex-



tensions for respectively holding said shelves and extensions in spaced relation.

1,062,233. REMOVABLE BRIDGE FOR TEETH. HARRY A. GOLLOBIN and NEWTON A. BORNSTEIN, Newark, N. J., assignors to The Dental Denture Improvement Company, Newark, N. J., a Corporation of New Jersey. Filed Dec 11, 1911. Serial No. 664,954. (Cl. 32—12.)



1. Means for attaching a removable bridge to an abutment in the mouth comprising an abutment member having a recess in the crown portion of the tooth and a bridge member having a flat split tongue of resilient material, the branches of the tongue being arranged to be forced out of their normal position to enter said recess and frictionally engage the walls thereof.

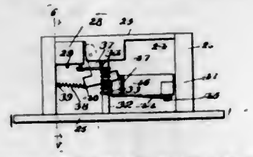
2. Means for hinging a removable bridge to an abutment in the mouth comprising an abutment hinge member having an undercut recess in the crown portion of the tooth and a bridge hinge member having a flat split tongue of resilient material, the branches of the tongue being arranged to be forced out of their normal position to enter the said recess and having an interlocking and frictional engagement with the walls thereof.

3. Means for attaching a removable bridge to abutments in the mouth comprising abutment members having recesses in the crown portions of the teeth and bridge members having flat split tongues of resilient material, the branches of the tongue of one bridge member being arranged to be forced out of their normal position to enter the recess of one abutment member and having an interlocking and frictional engagement therewith and the branches of the tongue of the other bridge member being arranged to be forced out of their normal position to enter the recess of the other abutment member and frictionally engage the walls thereof.

4. Means for attaching a removable bridge to abutments in the mouth comprising abutment members having recesses in the crown portions of the teeth and bridge members having flat split tongues, one arranged to have an interlocking and frictional engagement with the walls of the recess of one abutment member and the other arranged to have a frictional engagement with the walls of the recess of the other abutment member, the last-named tongue and recess also having a wedge connection.

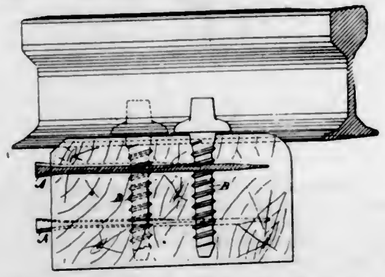
1,062,234. AUTOMATIC WINDOW-LOCK. FREDERICK GRIMSHAW, Wanaque, N. J. Filed May 7, 1912. Serial No. 695,731. (Cl. 16—145.)

In a lock, the combination with a keeper having a bolt receiving socket, of a lock casing, spring pressed bolts mounted in said casing, means for manually retracting both of said bolts, means for locking one of said bolts in



retracted position, and means operable by the retracting of the other bolt for releasing the first bolt.

1,062,235. FIXING RAILS ON PERMANENT WAYS. ALBERT HENRY, Paris, France. Filed Aug. 24, 1911. Serial No. 645,860. (Cl. 238—4.)

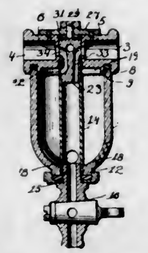


1. The combination of a railroad sleeper having a rail thereon, a screw clamping said rail to the sleeper and pegs driven into the sleeper to engage between the threads on each side of the screw.

2. The combination of a railroad sleeper having a rail thereon, a screw for holding the rail to the sleeper and means engaging between the threads on each side of the screw for securing the screws in the sleeper.

3. The combination of a railroad sleeper having a rail thereon, a screw for holding the rail to the sleeper and a peg in the sleeper engaging between the threads of the screw securing the screw in the sleeper.

1,062,236. GASOLENE-FILTER TRAP. FORREST L. HITCHCOCK, Indianapolis, Ind., assignor of one-half to Eva R. Templeton, Indianapolis, Ind. Filed Aug. 19, 1912. Serial No. 715,883. (Cl. 210—16.)



1. The combination with a head formed with a valve chamber and an inlet and an outlet leading from the valve chamber, there being elongated ports forming communication between the valve chamber and the inlet and the outlet, a filtering chamber carried by the head, a perforated tube extending from the valve chamber and provided with fluid openings, a drain cock connected with the end of the tube opposite the valve chamber and a three way valve within the valve chamber adapted when in one position to direct the flow of fluid from the inlet directly to the outlet, in a second position to direct the fluid into the

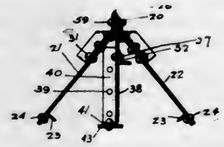
tube whence it passes to the filtering chamber, and in a third position to cut off the flow of fluid to the inlet of the valve chamber.

2. The combination with a head, of a valve chamber carried thereby and having an inlet and an outlet, there being vertical elongated ports therein forming communication between the valve chamber and the inlet and the outlet, of a filter chamber, a filtering element in said chamber and a three way valve in the valve chamber having oppositely disposed vertical channels and a transverse channel located above the vertical channels, said valve being operated to control the flow of fluid to the valve chamber and to the filter chamber.

3. The combination with a head, of a valve chamber carried thereby and having an inlet and an outlet passage, said head having a groove formed in the underside thereof, of a filter chamber seated at one end in the groove and open at its opposite end, a tube extending from the valve chamber through the filtering chamber and projecting through the open end of the latter, a drain cock connected to the projecting end of the tube, a filtering element within the chamber located below and covering a recess in the underside of the head, and a valve in the valve chamber controlling the flow of fluid therethrough.

4. The combination with a head, of a valve chamber carried thereby and provided with an inlet and an outlet, of a filter chamber mounted below the head, a tube depending from the head into the filter chamber and communicating with the valve chamber, said tube having an outlet opening in the bottom portion, the end of said tube being open and projected through an opening in the bottom of the filter chamber, a drain cock connected with the end of the tube, a filtering screen at the upper portion of the tube and below an opening formed in said upper portion, and a three-way plug valve in the valve chamber having a transverse port and two oppositely disposed vertical channels, said plug valve being operated to control the flow of fluid to the valve chamber and the filter chamber.

1,062,237. HOPPER-CAR. FRANK L. IRWIN and JOHN E. TESSEYMAN, Columbus, Ohio, assignors to The Ralston Steel Car Company, Columbus, Ohio, a Corporation of Ohio. Filed May 26, 1911. Serial No. 629,712. (Cl. 105—185.)



1. In a hopper car having a center sill, a cross hood formed of a sheet folded along its upper edge, secured to the center sill and to the sides of the car, a cross bearer secured to the center sill and to the side of the car and having its upper end positioned within the fold of said sheet and being secured thereto, and a member mounted transversely upon said center sill and being secured thereto and to said cross bearer.

2. In a hopper car having a center sill and sides, a cross hood formed of a sheet of metal bent to form a substantially vertical fold in the upper portion thereo , a cross bearer or reinforcing member positioned within said fold and secured thereto, and means for connecting said cross bearer at its ends to said center sill and a side of the car.

3. In a hopper car having a center sill and sides, a cross hood construction at each side of said center sill formed of a sheet of metal bent to form a substantially vertical fold in the upper portion thereof, a cross bearer or reinforcing member positioned within said fold in each of said cross hood constructions, and secured thereto along its upper edge, and means for connecting said cross bearer at its ends to said center sill and a side of the car and a member overlying said center sill and secured thereto and to said cross bearer, in each of said cross hoods.

4. In a hopper car having a center sill and sides, a cross hood construction at each side of said center sill formed of a sheet of metal bent to form a substantially vertical fold in the upper portion thereof, a cross bearer or reinforcing member positioned within said fold in each of said cross hood constructions, and secured thereto along its upper edge, and means for connecting said cross bearer at its ends to said center sill and a side of the car and a member overlying said center sill and secured thereto and to said cross bearer, in each of said cross hoods, and a connecting member uniting the inner ends of said cross hood constructions and continuing said cross hood over said center sill.

5. In a hopper car having a center sill and sides, a cross hood construction at each side of said center sill formed of a sheet of metal bent to form a substantially vertical fold in the upper portion thereof, a cross bearer or reinforcing member positioned within said fold in each of said cross hood constructions, and secured thereto along its upper edge, and means for connecting said cross bearer at its ends to said center sill and a side of the car, and a connecting member uniting the inner ends of said cross hood constructions and continuing said cross hood over said center sill.

[Claims 6 and 7 not printed in the Gazette.]

1,062,238. HOLSTER-WEB AND METHOD OF WEAVING THE SAME. VICTOR H. JENNINGS, Worcester, Mass., assignor to Mills Woven Cartridge Belt Company, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 8, 1911. Serial No. 607,310. (Cl. 139—72.)



1. The improved method of weaving holster-units, consisting in weaving two barrel-portions opposed and side by side, then weaving a body-portion, then weaving two flap-portions opposed, then weaving a second body-portion, and then weaving two-barrel portions opposed and so on.

2. The improved method of weaving holster-units, consisting in weaving them alternately reversed, end for end, with flap-portions overlapping each other, weaving body-portions intermediate such flap-portions and the barrel-portions, and weaving the said barrel-portions lapping side by side.

3. The improved method of weaving holster-units, consisting in weaving flap-sections in overlapping plies unconnected along their edges, a tubular body-portion, barrel-portions lying side by side, and a tubular body-portion, and repeating the sequence in the order named.

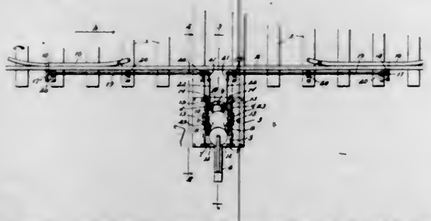
4. The improved method of weaving holster-units, consisting in weaving two flap-portions simultaneously, then weaving a body-portion separately, then weaving two barrel-portions simultaneously, then weaving a body-portion separately, and so on in continued succession.

5. A continuous woven fabric or web constituting a series of holster-units each comprising a flap, a body, and a

barrel, the units alternating end for end, with the flaps of adjacent units overlapping and the barrels lying side by side.

[Claim 6 not printed in the Gazette.]

1,062,239. MAIL-CRANE. CHARLES JONES, Topeka, Kans. Filed Sept. 20, 1912. Serial No. 721,433. (Cl. 105—232.)



1. The combination with track rails, of a mail bag crane pivoted to operate toward and away from the train, means to hold the crane at an incline from the vertical away from the track, means for releasing said holding means and means for returning the crane to vertical position.

2. The combination with track rails, of a crane pivoted adjacent the rails and adapted to move toward and away from the same, means for holding the crane at an incline away from the rail, train operated means for releasing said holding meana and means for returning the crane to vertical position.

3. The combination with track rails, of a crane pivoted adjacent the rails and adapted to move toward and away from the same, means for holding the crane at an incline away from the rail, train operated means for releasing said holding means and a weight for returning the crane to vertical position.

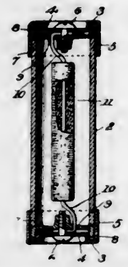
4. The combination with track rails, of a support arranged adjacent the track thereof, a crane pivoted on the support for movment toward and away from the track thereof, means including a sliding bolt for holding the crane at an incline from the vertical away from the track thereof, train operated means for operating the bolt to release the holding means and a weighted arm extending laterally from the crane and adapted to return the same to the vertical.

5. The combination with track rails, of a support arranged adjacent the same, a crane pivotally mounted in the support and adapted for operation toward and away from the track, a toothed disk carried by the crane, a sliding bolt mounted upon the support and adapted to engage a tooth of said disk to hold the crane in inclined position away from the track, a wheel flange operated lever pivoted to the track, a crank shaft connected to said lever and a link connecting one of the cranks of said shaft with the sliding bolt, together with a laterally extended weighted arm on the crane for returning the same to normal when the locking bolt is released from the tooth.

1,062,240. REFILLABLE FUSE-PLUG. FRANK H. KAISER, Buffalo, N. Y. Filed Oct. 3, 1911, Serial No. 652,556. Renewed Jan. 10, 1913. Serial No. 741,348. (Cl. 175—273.)

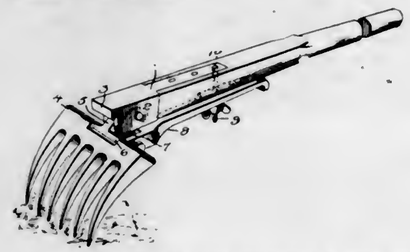
1. A fuse plug including a hollow insulating shell, a fuse wire supported within the shell and having angularly bent ends, clamping members mounted upon the ends of the shell between which the angularly bent ends of the fuse wire are received, said clamping members comprising disk-like washers, and caps, each cap having a marginal flange embracing the adjacent end of the shell, said clamping members being formed, one with an annular recess and the other with an annular flange adapted to be received in said recess whereby to provide a dust-proof engagement between the clamping members.

2. A fuse plug comprising an insulating shell, disk like washers supported one at each end of the shell and having perforations through which the ends of the fuse wire pass, said washers each having a marginal flange extending outward from the shell, caps at each end of



the shell, each cap having a marginal flange embracing the adjacent end of the shell, and a depressed central portion, and screws for forcing said caps toward the said washers and into clamping engagement with the ends of the fuse wire.

1,062,241. COMBINED RAKE AND FORK. JOHN R. KELLY, Chapin, S. C. Filed June 5, 1912. Serial No. 701,850. (Cl. 55—25.)



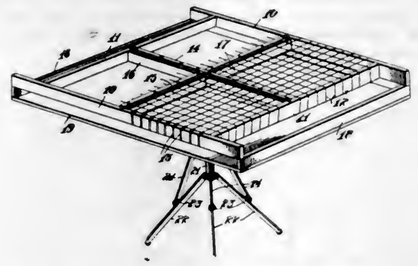
1. A combined fork and rake comprising a head having at its end a transverse projecting lug portion, a rake member pivoted to the head and having a transverse recess in one face adjacent its edge adapted to receive the lug portion, and a locking bar pivoted to the rake member and adapted to be adjusted with relation to the head.

2. A combined fork and rake comprising a head having a recess and a projecting lug portion, a rake member having a shank pivoted in the recess of the head and provided with a recess adapted to receive the lug portion of the head, said rake member also having a lug, and a locking bar pivotally connected with the lug.

3. A combined fork and rake comprising a head having a recess and a projecting lug portion, a rake member having a shank pivoted in the recess of the head, said rake member being provided at its side with a recess adapted to receive the lug upon the head, said rake member also having a lug disposed approximately at a right angle to the shank, a bar pivoted to the rake member, and means for securing the bar at an adjusted position with relation to the head.

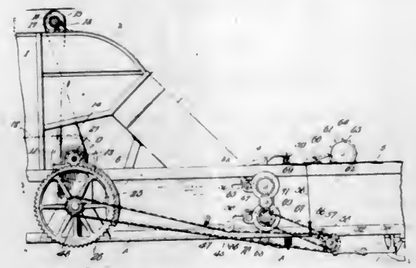
1,062,242. SEED-CORN RACK AND STAND. LOUIS W. KLUG, Woonsocket, S. D. Filed July 31, 1912. Serial No. 712,613. (Cl. 34—26.)

The combination with a rack comprising an end and side frame members, means for bracing the members, means above the bracing means for dividing the rack in sections, longitudinal and transverse wires for supporting ears of corn, said wires being secured to the upper face of the frame members, a second set of wires secured to the under face of the frame members, and a support secured to the under side of the frame members; of a



stand to receive thereupon the support secured to the rack.

1,062,243. BALING MECHANISM. OTTO KLUGE, Golconda, Ill. Filed July 10, 1912. Serial No. 708,724. (Cl. 100—20.)



1. In a baling press the combination with a press box and a follower mounted to reciprocate therein, of a needle normally mounted beyond one wall of said box and movable to convey a tie between the follower and the compresed material and across the box, normally registering fixed and movable holding members for the reception of said tie, means for actuating the movable member to engage one strand of the tie during the return movement of the needle, means for twisting the meeting portions of the tie, means for severing said twisted portion from the unused portion of the tie, and means under the control of the compressed material for actuating the needle, the movable holding member, the twisting means, and the severing means in properly timed relation.

2. The combination with a press box and a follower therein, of a fixed and a movable holding member, said members normally registering, a needle movable between the follower and the compressed material to convey a tie to the holding members, means for automatically shifting the movable holding member to engage one strand of the tie upon the completion of the movement of the needle toward the holding members, means for automatically spreading apart the strands of the tie during the return of the needle to normal position, and means for automatically engaging and twisting said strands together.

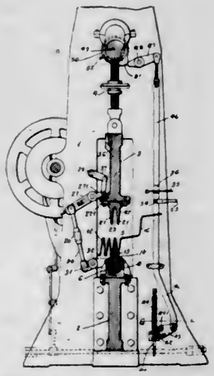
3. The combination with a press box and a follower therein, of a fixed and a movable holding member, said members normally registering, a needle movable between the follower and the compressed material to convey a tie to the holding members, means for automatically shifting the movable holding member to engage one strand of the tie upon the completion of the movement of the needle toward the holding members, means for automatically spreading apart the strands of the tie during the return of the needle to normal position, means for automatically engaging and twisting said strands together, and means under the control of the material being pressed for actuating the movable holding member, the spreading means and the twisting means and the needle in properly timed relation.

4. The combination with a press box and a follower therein, of a fixed and a movable holding member, said members normally registering, a needle movable between the follower and the compressed material to convey a tie to the holding members, means for automatically shifting the movable holding member to engage one strand of the tie upon the completion of the movement of the needle toward the holding members, means for automatically spreading apart the strands of the tie during the return of the needle to normal position, means for automatically engaging and twisting said strands together, a cutting element, and means for actuating the movable holding member to sever the twisted portion of the tie from the unused portion and to bind the end of the unused portion of the tie between the fixed and the movable holding members.

5. The combination with a press box and a follower therein, of a fixed and a movable holding member, said members normally registering, a needle movable between the follower and the compressed material to convey a tie to the holding members, means for automatically shifting the movable holding member to engage one strand of the tie upon the completion of the movement of the needle toward the holding members, means for automatically spreading apart the strands of the tie during the return of the needle to normal position, means for automatically engaging and twisting said strands together, a cutting element, means for actuating the movable holding member to sever the twisted portion of the tie from the unused portion and to bind the end of the unused portion of the tie between the fixed and the movable holding members, and means under the control of the material being pressed, for operating the holding, twisting and severing mechanism in properly timed relation.

[Claims 6 and 7 not printed in the Gazette.]

1,062,244. SHEET-METAL-BENDING MACHINE. FRANK LOY, Newark, N. J., assignor to Loy and Nawrath Company, a Corporation of New Jersey. Filed May 24, 1910. Serial No. 563,076. (Cl. 153—76.)



1. The combination with a press, of corrugating bending dies one comprising a trough-like base member with side walls providing forming edges at their outer portions and a slideway at their inner portions and a movable member adapted to slide in said slideway with a projecting forming edge, the other die having two forming edges adapted to enter between the said forming edges of the base member and to receive between themselves the said forming edge of the movable member, means normally holding said movable member with its forming edge projected beyond the base member a distance greater than the depth of corrugation to be formed and allowing it to retract when the dies come together, and means for moving said dies toward and away from each other.

2. In combination with a press, corrugating bending dies one comprising a trough-like base member with sidewalls providing forming edges at their outer portions and a slideway at their inner portions and a movable member adapted to slide in said slideway with a forming edge, the other die having two forming edges adapted to coöperate with said forming edges of the base member and a recess between to receive said forming edge of the movable member, means normally holding said movable member with its forming edge projected beyond the base member a distance greater than the depth of corrugation to be formed and allowing it to retract when the dies come together, and means for moving said dies toward and away from each other.

3. The combination of a trough-like base portion of a lower die providing shaft bearings in the bottom of its cavity, a shaft journaled in said bearings, cams on said shaft at intervals of its length, the cavity of said base portion being enlarged to receive said cams and forming a slideway above said shaft, a movable die member having a base in said slideway, an upper die adapted to coöperate with the lower die, means for reciprocating said upper die, and means for oscillating said shaft to turn its cams into and out of engagement with said movable die member.

4. The combination of a trough-like base portion of a lower die, the cavity of said base portion having its side walls stepped at a distance above its bottom, a die member having a base adapted to seat on the steps and move away therefrom, the side walls of the trough cavity being again stepped above said base of the said movable die member, lateral die blocks fixed on said upper stepped portions of the walls of the cavity and adapted to form with said die member, a die surface, an upper die adapted to coöperate with the lower die, means for reciprocating said upper die, and means in the lower part of the cavity of said trough-like base portion for raising said movable die member upward from its seat.

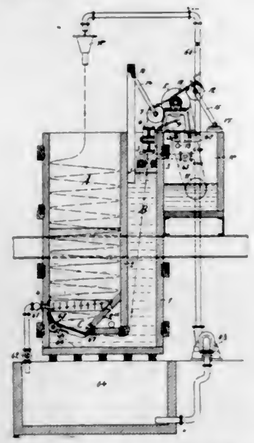
5. The combination of a trough-like base portion of a lower die, a shaft journaled in the bottom of the cavity of said base portion, cams on said shaft at intervals of its length, the cavity of said base portion being enlarged to receive said cams and having its sides stepped above said shaft, a movable die member having a base in said stepped portion of the trough, the side walls of the trough cavity being again stepped above said base of said movable die member, lateral die blocks fixed on said upper stepped portion of the walls of the cavity, an upper die adapted to coöperate with the lower die, means for reciprocating said upper die toward and away from the lower die, means for reciproeating said upper die toward and away from the lower die, and means for oscillating said shaft.

[Claims 6 to 22 not printed in the Gazette.]

1,062,245. APPARATUS FOR TREATING FABRIC WITH LIQUIDS. WALTHER MATHESIUS and MORITZ FREIBERGER, Charlottenburg, Germany. Filed Dec. 28, 1911. Serial No. 668,315. (Cl. 8—19.)

1. The improved apparatus for subjecting textile fabric in rope form to the action of liquid comprising the combination with a vessel having a substantially vertical partition not extending entirely to the bottom thereof, whereby said vessel is divided into a fabric storage compartment and a fabric withdrawal compartment communicating with each other beneath said partition, and means for passing the fabric successively through said compartments; of means for supplying liquid to said withdrawal compartment and an overflow outlet for the liquid in said storage compartment, whereby a liquid current is created in a direction through said compartments opposite to the movement of the fabric therethrough.

2. The improved apparaus for bleaching cotton and like fabric in rope form, comprising, in combination, a plurality of contiguous vessels each having a substantially vertical partition not extending entirely to the bottom thereof, whereby each vessel is divided into a fabric storage compartment and a fabric withdrawal compartment communicating with each other beneath said partition, means for passing the fabric successively through the several compartments of said vessels, a washer intermediate the first and second vessels through which the fabric is also passed, means for supplying bleaching solutions to the withdrawal compartments of said vessels, and overflow outlets in the storage compartments of said vessels.



3. The improved apparatus for bleaching cotton and like fabric in rope form, comprising in combination a plurality of contiguous vessels, each having a substantially vertical partition not extending entirely to the bottom thereof, whereby each vessel is divided into a fabric storage compartment and a fabric withdrawal compartment communicating with each other beneath said partition, means for passing the fabric successively through the several compartments of said vessels, a washer intermediate the first and second vessels through which the fabric is also passed, means for supplying bleaching solutions to the withdrawal compartments of said vessels, and overflow outlets in the storage compartments of said vessels.

4. The improved apparatus for subjecting textile fabric in rope form to the action of liquid, comprising the combination with a vessel having a substantially vertical partition not extending entirely to the bottom thereof, whereby said vessel is divided into a fabric storage compartment and a fabric withdrawal compartment communicating with each other beneath said partition, and means for passing the fabric successively through said compartments, of means for supplying liquid to said withdrawal compartment, an overflow outlet for the liquid in said storage compartment whereby a liquid current is created in a direction through said compartments opposite to the movement of the fabric therethrough, a liquid reservoir and a heating element therein.

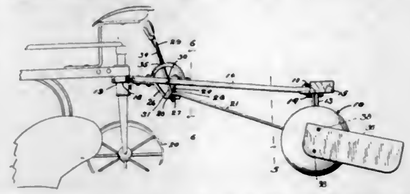
5. The improved apparatus for bleaching cotton and like fabric in rope form, comprising, in combination, a plurality of contiguous vessels, each having a substantially vertical partition not extending entirely to the bottom thereof, whereby each vessel is divided into a fabric storage compartment and a fabric withdrawal compartment communicating with each other beneath said partition, means for passing the fabric successively through the several compartments of said vessels, means for supplying bleaching solutiona to the withdrawal compartments of said vessels, overflow outlets in the storage compartments of said vessels, reservoirs for said solutions and heating elements therein.

[Claim 6 not printed in the Gazette.]

1,062,246. SUBSOIL-DISK. DAVID S. MCCANN, Ambrose, N. D. Filed Aug. 30, 1912. Serial No. 717,916. (Cl. 97—44.)

A subsoil disk including a draft beam, a gang of disks carried at the rear end of said draft beam, oppositely

movable rods carried by said disks, a manually operable shift link connected to said rods for actuating the same and moving said disks to angular positions relatively to said draft beam, a yoke carried in upright position by said disks, a guide plate secured to the terminals of said



yoke and extending rearwardly beyond said disks, a horizontally extending frame carried by said disks, and a rod pivotally connected to the rear end of said plate and adjustably connected to the intermediate portion of said frame.

1,062,247. CAMERA ATTACHMENT. SELEST E. MOINE, Tulia, Tex. Filed Oct. 21, 1911. Serial No. 655,936. (Cl. 95—65.)



1. An attachment for a camera comprising a casing, interchangeable cut-off slides carried by said casing and spaced apart and having openings of varying areas to provide means for increasing or decreasing the exposed area, coacting blending plates having recesses and mounted for independent movement in one direction through the casing and across the openings of the cut-off slides, and another coacting blending plate having recesses and mounted for independent movement in the opposite direction and across the openings of the cut-off slides.

2. In an attachment for cameras, a casing, a plurality of blending plates carried by said casing and superimposed and having recesses for controlling the exposed area, a cut-off slide having an opening and detachably disposed in said casing, and means for independently operating said blending plates.

3. In an attachment for a camera, a casing open at the front and rear, means for adjustably coupling said casing to a camera, blending plates having recesses for controlling the exposed area and independently movable in one direction through the casing, and other plates having recesses and independently movable in the reverse direction through the casing.

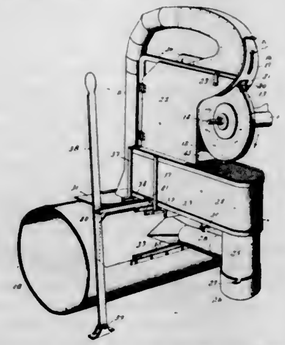
4. The combination with a casing open at the front and rear, a cut-off slide having an opening and detachably disposed in said casing, a plurality of blending plates having recesses for disclosing the exposed area and superimposed and independently movable through said casing, and a plurality of rods mounted for rotation and each connected to one of said blending plates to adjust the same.

5. The combination with a casing open at the front and rear, of a plurality of blending plates superimposed and independently movable through said casing, frame members connected to said casing and adapted to be adjustably clamped to a camera, and a plurality of rods mounted for rotation upon said frame members, and means for connecting said rods respectively to said blending plates.

[Claims 6 to 10 not printed in the Gazette.]

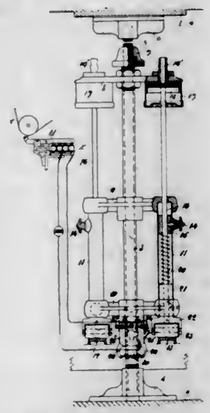
1,062,248. SUCTION-HOOD FOR ABRADING-TOOLS. PHILIP MUELLER, Decatur, Ill., assignor to H. Mueller Mfg. Co., Decatur, Ill., a Corporation of Illinois. Filed June 3, 1912. Serial No. 701,266. (Cl. 51—17.)

1. A device of the class described comprising an exhaust trunk having an opening in its side, two pairs of guideways exterior to said opening, a sliding plate mounted in each pair of guideways, said plates lying perpendicular to each other and adapted to be moved longitudinally of said trunk, a hood partly encircling an abrading or polishing wheel, a receptacle below said hood and separated therefrom, said receptacle projecting forward of the hood and beneath the abrading or polishing wheel, a suction pipe mounted on one of said sliding plates connected to the hood, and a second suction pipe on the other sliding plate connected to the receptacle.



2. A device of the class described comprising an exhaust trunk having an opening in its side, two pairs of guideways exterior to said opening, a sliding plate mounted in each pair of guideways, said plates lying perpendicular to each other and adapted to be moved longitudinally of said trunk, a hood partly encircling an abrading or polishing wheel, a receptacle below said hood and separated therefrom, said receptacle projecting forward of the hood and beneath the abrading or polishing wheel, a suction pipe mounted on one of said sliding plates connected to the hood, a second suction pipe on the other sliding plate connected to the receptacle, and means for simultaneously moving the hood, the receptacle, the suction pipes and the sliding plates longitudinally of the exhaust trunk and axially of the abrading or polishing wheel.

1,062,249. APPARATUS FOR AUTOMATICALLY OPERATING PIANO-PEDALS. CARL WILHELM NYSTRÖM, Karlstad, Sweden. Filed Apr. 27, 1910. Serial No. 558,026. (Cl. 84—176.)



1. An apparatus for automatically operating a piano pedal comprising a rod mounted to rest on the pedal, a spring operatively associated with said rod, said spring being strong enough to overcome the pedal spring whereby

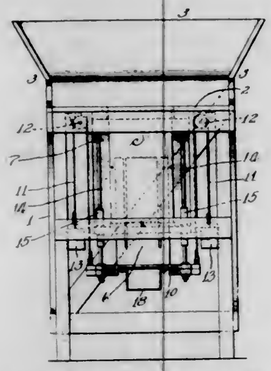
said first-mentioned spring will tend to depress the rod to hold the pedal in its lower position, means normally holding said rod in its raised position, whereby the pedal will be normally raised and means controlled by a music strip to render said holding means operative or inoperative.

2. An apparatus for automatically operating a piano pedal comprising a rod mounted to rest on the pedal, a spring operatively associated with said rod, said spring being strong enough to overcome the pedal spring whereby said first-mentioned spring will tend to depress the rod to hold the pedal in its lower position, means for adjusting the tension of said spring, means normally holding said rod in its raised position, whereby the pedal will be normally raised and means controlled by a music strip to render said holding means operative or inoperative.

3. An apparatus for automatically operating a piano pedal comprising a rod mounted to rest on the pedal, a piston fixed to said rod, a spring operatively associated with said rod and strong enough to overcome the pedal spring, pneumatic means for actuating said piston against the action of said first-mentioned spring, and a valve, controlled by a music strip, controlling said pneumatic means.

4. An apparatus for automatically operating a piano pedal comprising a rod mounted to rest on the pedal, a piston fixed to said rod, a spring operatively associated with said rod and strong enough to overcome the pedal spring, pneumatic means for actuating said piston against the action of said first-mentioned spring, an electromagnet, a valve, controlling said pneumatic means and controlled by said electromagnet, and means, controlled by a music strip for rendering said electromagnet operative or inoperative.

1,062,250. APPARATUS FOR FACILITATING THE LOADING OF BOBBIN-MAGAZINES. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed Dec. 2, 1910. Serial No. 595,228. (Cl. 118—13.)



1. An apparatus for facilitating the loading of bobbin magazines comprising a support for a bobbin magazine, and a false bottom for a magazine placed on said support, said bottom being movable toward and away from the inlet end of the magazine.

2. An apparatus for facilitating the loading of bobbin magazines comprising means for supporting a bobbin magazine with its inlet end uppermost, and a false bottom vertically movable within a magazine placed on said supporting means.

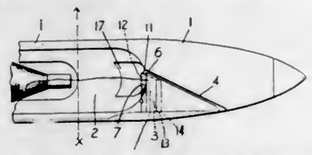
3. An apparatus for facilitating the loading of bobbin magazines comprising a support for a bobbin magazine having a plurality of compartments therein, a plurality of bobbin-supporting members insertible into the magazine through the end opposite its inlet end, each of said members being adapted to enter one of said compartments, and means for supporting said plurality of members for movement toward and away from the inlet end of the magazine.

4. An apparatus for facilitating the loading of bobbin magazines comprising a support for a bobbin magazine, said support having an opening therein, a carrier movable toward and away from the support, and bobbin-supporting means on said carrier, which means is adapted to pass through said opening and enter a magazine placed on said support.

5. An apparatus for facilitating the loading of bobbin magazines comprising a support for a bobbin magazine, a carrier, guide sheaves, flexible connections attached at one end to said carrier and extending over said sheaves, weights attached to the other ends of said connections, and bobbin-supporting means mounted on said carrier and adapted to support bobbins placed in a magazine set upon said support.

[Claims 6 to 9 not printed in the Gazette.]

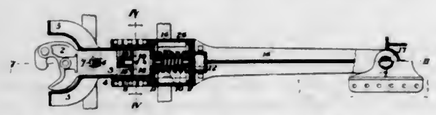
1,062,251. HAND-THREADING SHUTTLE. CHARLES G. PETZOLD, Providence, R. I. Filed Feb. 19, 1913. Serial No. 749,327. (Cl. 139—46.)



1. A hand-threading shuttle having a bobbin-receiving chamber, a delivery eye, a threading passage leading to said eye, said passage comprising a vertical portion extending from the bobbin-receiving chamber outwardly, and a horizontal portion connecting the vertical portion with said eye, a thread-delivery bushing in said eye having a threaded slot in its under side which communicates with the threading passage, the inner end of said bushing extending beyond the axial line of the bobbin-receiving chamber and being formed with an inclined face extending substantially parallel to the vertical inclined portion of the threading pasage, said bushing having in its side facing the bobbin-receiving chamber a knot-catching slot which extends from the inner end of the bushing approximately to said axial line.

2. A hand-threading shuttle having a bobbin-receiving chamber, a delivery eye, a thread-delivery bushing in said eye, the inner end of said bushing extending beyond the axial line of the shuttle, said bushing having a knot-catching slot extending from its inner end outwardly and situated on the side thereof facing the bobbin-receiving chamber, and also having an aperture between the knot-catching slot and its delivery end, which aperture prevents the thread from being drawn into the eye by suction.

1,062,252. DRAFT-GEAR. HENRY F. POPE, Cleveland, Ohio, assignor to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 9, 1907. Serial No. 367,170. (Cl. 213—42.)



1. A draft member mounted to swing radially, and having a coupler and stop device adapted to maintain approximate alinement of adjacent draft members under buffing stress, said coupler being mounted to have some rearward longitudinal motion, independent of the stop device

2. A draft member mounted to swing radially and having a coupler and guiding connections to the car truck and stops situate beyond the outer sides of the coupler head, forming part of the draft member and moving longitudinally with the draft rigging and adapted to prevent buckling of adjacent draft members under buffing stress and reinforcing the action of the guiding connections, said stops being connected to the draft rigging and adapted to move with the draft spring.

3. A draft member mounted to swing radially and having a coupler, and stops situate beyond the outer sides of the coupler-head, forming part of the draft-member and moving longitudinally with the draft rigging and adapted to prevent buckling of adjacent draft-members under buffing stress, said stops being attached to the draft rigging proper, and adapted to move with the draft spring, and permitting a slight longitudinal motion independent of the coupler.

4. A draft member mounted to swing radially, and having a coupler, stops situate beyond the outer sides of the coupler-head, forming part of the draft member and moving longitudinally with the draft-rigging and adapted to prevent buckling of adjacent draft members under buffing stress, said stops being attached to the draft rigging proper, and adapted to move with the draft spring, and permitting a slight independent longitudinal motion of the coupler, and a second spring which cushions the initial independent movement of the coupler.

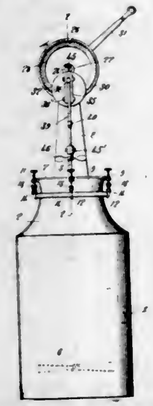
5. A draft member mounted to swing radially and having a coupler with a swinging knuckle, and a coupler pocket backed by the draft spring and embracing the coupler with its forward end in position to engage a corresponding device on another car when the couplers are coupled and buffing stress is applied thereto.

[Claims 6 to 17 not printed in the Gazette.]

1,062,253. COMPOSITION FOR CRAYONS. THOMAS H. POPE, Brooklyn, N. Y. Filed June 12, 1912. Serial No. 703,244. (Cl. 106—5.)

A crayon consisting of a mixture of pulverized burned paper, plaster of Paris, water, glue and vinegar.

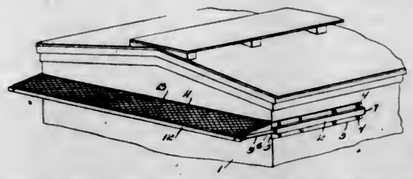
1,062,254. CHURN. BYNUM J. REID, Milan, Ga. Filed Aug. 27, 1912. Serial No. 717,377. (Cl. 31—30.)



1. A churn comprising a receptacle, a lid removably fitted thereto, a crank wheel supported by the lid, means for revolving the wheel, the said wheel having a radial slot therein, a screw support located at one side of the wheel and closing against one side of the slot and provided at one end with a bifurcated portion extending into the slot, a crank rod, a dasher rod reciprocating in the lid and connected with said crank rod, a member adjustably mounted in the slot of the wheel and provided with a pin extending through the slot of the screw support and operatively connected with the crank rod, and a screw swiveled in the bifurcated portion of the support and threadedly adjustable in said sliding member and operable to adjust said member with relation to the center of said crank wheel.

2. A churn comprising a receptacle, a lid fitting within the neck of the receptacle, vertically adjustable screws carried by the lid, the said receptacle having an external annular concavity, hooks located beneath the screws and adapted to be extended into the concavity of the receptacle, whereby to hold the lid close against the receptacle when the screws are adjusted to one position, and pins connecting the screws with the hooks and provided with spherical lower portions associated with the hooks whereby to permit the latter to be adjusted angularly of the screws and laterally of the concavity of the receptacle.

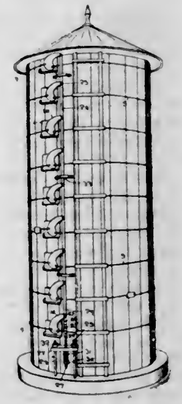
1,062,255. SAFETY ATTACHMENT FOR FREIGHT-CARS. THEODORE RIVARD, Newport, Vt. Filed June 28, 1912. Serial No. 706,454. (Cl. 105—21.)



1. In a safety attachment for cars, the combination of a car body, flanged brackets secured to the sides of the car body and provided with guideways, plungers movable in said guideways, and projecting beyond the ends of the car body, springs within the guideways and backing said plungers, an inner transverse bar secured to the end of the car body, an outer transverse bar pivotally connected with the outer ends of the plungers, and a flexible netting stretched between said bars.

2. In a safety attachment for cars, the combination of a car body, guides secured to the sides of the car body, plungers movable in said guides and projecting beyond the ends of the car body, springs within the guides and backing said plungers, an inner angle metal bar extending across and secured to the end of the car body, an outer angle metal bar arranged in parallel relation to said inner angle metal bar, a flexible netting stretched between and secured to said bars, and brackets upon the ends of the outer angle metal bar and pivotally connected with the projecting ends of the plunger.

1,062,256. SILO. CHAUNCEY A. ROOSE, Atlanta, Nebr. Filed Aug. 29, 1912. Serial No. 717,780. (Cl. 217—94.)



1. The combination with a tank formed of sections; of means for holding said sections together comprising

a plurality of bands adapted to encircle said tank, tightening members secured to the ends of each of said bands, and means to simultaneously operate all of said tightening members.

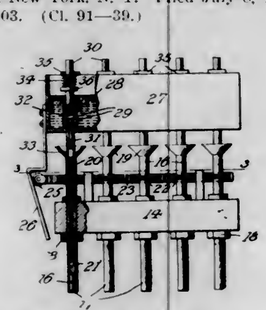
2. The combination with a tank; of means for strengthening the same comprising a plurality of bands adapted to extend around said tank, a tightening lever connected to the ends of each of said bands, and means secured to each of said levers whereby all of said bands may be simultaneously tightened.

3. The combination with a tank; of means for strengthening the same comprising a plurality of bands arranged therearound, a tightening lever connected to the ends of each of said bands, an operating bar connected to the opposite end of each of said levers, and means to move said operating bar whereby all of said bands may be simultaneously tightened.

4. The combination with a cylindrical tank formed of sections; of means for holding said sections together comprising a plurality of bands extending around said tank, tightening levers having one end connected to the ends of each of said bands, an operating bar connected to the opposite ends of said levers, and means whereby said bar may be moved longitudinally.

5. The combination with a tank; of means for strengthening said tank comprising a plurality of bands extending therearound, tightening levers for said bands, an operating bar connected to each of said levers, a plate receiving said bar therethrough and arranged transversely thereof, a stop on said bar beyond said plate, a spring interposed between said stop and said plate, and means to move said plate whereby said tightening lever will be operated.

1,062,257. COLORING-MACHINE FOR APERTURES IN BELTS AND SIMILAR ARTICLES. RALPH SCHEUER, New York, N. Y. Filed July 8, 1912. Serial No. 708,203. (Cl. 91—39.)



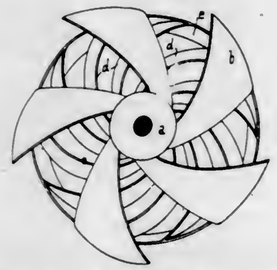
1. A machine of the character described, comprising a vertically reciprocable rod having a liquid duct, a saturable stocking removably fitted on the lower portion of said rod, means for securing the upper end of the stocking to the rod, means for supplying a coloring liquid to said duct, a pinion secured to the rod, a rack engaging said pinion and participating in the vertical reciprocation of the rod, and an inclined fixed guide for horizontally shifting said rack.

2. A machine of the character described, comprising a vertically reciprocable rod having a liquid duct, a saturable stocking removably fitted on the lower portion of said rod, means for securing the upper end of the stocking to the rod, means for supplying a coloring liquid to said duct, a pinion secured to the rod, a spring-influenced rack engaging said pinion and participating in the vertical reciprocation of the rod, a roller on said rack, and an inclined fixed guide engaged by said roller.

3. A machine of the character described, comprising a vertically reciprocable rod having an upper funnel and a liquid duct, a saturable stocking removably fitted on the lower portion of said rod, means for securing the upper end of the stocking to the rod, a stationary liquid magazine above said rod and funnel, a valve within the magazine and extending downwardly through the bottom thereof, a spring for holding said valve in operative engagement with the funnel, and means for limiting the descent of the valve.

4. A machine of the character described, comprising a vertically reciprocable plunger, a cross head carried thereby, a row of coloring implements depending from the cross head, funnels formed at the upper ends of said rods, saturable stockings removably fitted over the lower portions of the rods, a stationary liquid magazine above the funnels, spring-influenced valves extending downwardly through the bottom of the magazine into engagement with the funnels, and means for limiting the descent of said valves.

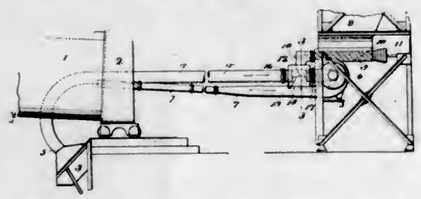
1,062,258. PROPELLER. GEORG ARTHUR SCHLOTTER, Dresden, Germany. Filed July 7, 1911. Serial No. 637,263. (Cl. 170—159.)



1. The combination of a screw-propeller and an outlet-mechanism in which the curved guide-blades are arranged in a direction opposite to the curvature of the propeller-blades in such a manner that the edges of the propeller-blades are approximately at right angles to the edges of the curved guide-blades of the outlet-mechanism.

2. The combination with propeller-blades, of an outlet mechanism consisting of curved outlet guide-blades at the interior thereof and having their edges adjacent the edges of the propeller-blades, and a circumferential rim, tapered from its thicker outer portion toward its inner sharper edge and toward the edges of the propeller-blades.

1,062,259. ROTARY CEMENT-KILN. SAMUEL M. SEDDON, Salt Lake City, Utah. Filed Jan. 28, 1913. Serial No. 744,708. (Cl. 110—104.)



1. In a rotary cement kiln, the combination with a hot air suction pipe leading from the clinker spout, a fuel pipe leading to the kiln, and a blower connected at its inlet or suction side to said hot air pipe and at its outlet to said fuel pipe, of a mixing chamber communicating with the hot air pipe and having means for effecting the subdivision of the fuel and the intermingling of the hot air therewith, and means for delivering the fuel to said mixing chamber from which it is exhausted by the current of hot air, and mixed therewith prior to its entrance into the blower.

2. In a rotary cement kiln, the combination with a hot air suction pipe leading from the clinker spout, a fuel pipe leading to the kiln, and a blower connected at its inlet or suction side to said hot air pipe and at its outlet to said fuel pipe, of a mixing chamber incorporated in the hot air pipe, a baffle section open at its lower side next to the bottom of the chamber, and a fuel inlet in the top of the chamber over the said baffle section.

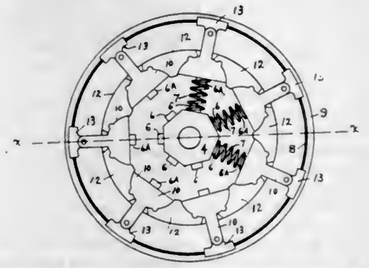
3. In a rotary cement kiln, the combination with a hot air suction pipe leading from the clinker spout, a fuel pipe leading to the kiln, and a blower connected at its suction side with the hot air pipe and at its outlet or exhaust side to the fuel pipe, of a fuel mixer incorporated in the hot air pipe in advance of the blower to thoroughly mix the fuel and hot air prior to the entrance thereof into the blower, and a fuel supply for the said mixer, and valves or dampers at the inlet and outlet sides of the fuel mixer.

4. In a rotary cement kiln, the combination with a hot air pipe leading from the clinker spout, a fuel pipe leading to the kiln, and a blower connected at its suction side with the hot air pipe and at its outlet or exhaust side to the fuel pipe, of a fuel mixing box or chamber incorporated in the hot air pipe and provided in its top with a fuel inlet, a baffle in the box or chamber below the said inlet down opposite sides of which the fuel runs to the bottom of the box from which it is sucked by the current of air through the hot air pipe, and a valve for regulating the outlet from the box or chamber to the said hot air pipe.

5. The combination of a fuel mixing chamber having a fuel inlet in its top and air inlet at one end, a fuel outlet at its opposite end, and a longitudinal baffle section between said end openings and down opposite sides of which the fuel may run, with a blower connected at its suction side with the outlet side of said mixing chamber, and a fuel delivery pipe leading from the exhaust side of the blower to the point of combustion.

[Claim 6 not printed in the Gazette.]

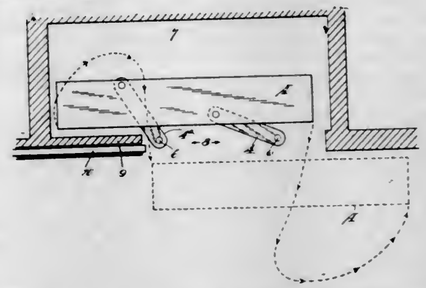
1,062,260. WHEEL FOR VEHICLES. CHARLES CALVIN SILL, Seattle, Wash. Filed Aug. 7, 1911. Serial No. 642,680. (Cl. 152—29.)



In a wheel for vehicles, the combination with a flexible wheel-rim made of a plurality of convolutions of spring-steel ribbon to adapt it normally to maintain the form of a true circle, of a hub provided with two flanges, movable radial spokes provided with enlarged inner ends and disposed to project outwardly from the space between said flanges, stop-blocks fixed between said flanges and between adjacent spokes normally to engage with the enlarged inner end of said spokes to limit their outward movement, elastic means disposed between said hub and the inner end of each of said spokes, a wheel-rim support hingedly connected with the outer end of each of said spokes and disposed to engage with said wheel-rim, whereby said wheel-rim normally may be maintained in a position concentric with the axis of said hub, and a flexible tire of suitable wearing material mounted on said wheel-rim.

1,062,261. MOUNTING FOR WALL-BEDS AND THE LIKE. STERLING W. SMITH and ALBERT W. SMITH, Berkeley, Cal. Filed Apr. 17, 1912. Serial No. 691,393. (Cl. 5—18.)

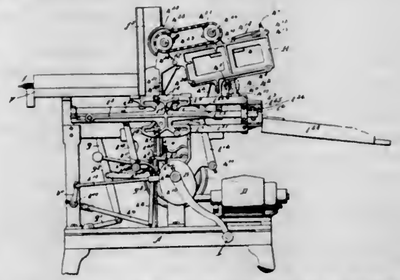
1. In a structure such as described, a supporting base movable in a horizontal plane, and horizontally movable crank arms on which the base is mounted journaled on fixed axes spaced apart, and each movable from an angular position on one side to an angular position on the other, of a straight line intersecting both said fixed axes, whereby the base may be moved endwise through a narrow opening and positioned parallel with the said opening on either side of the same.



2. In a structure such as described, the combination with a supporting base movable in a horizontal plane, of crank arms on the free ends of which the base is mounted, said crank arms being journaled on fixed axes spaced apart and each movable in an arc intersecting a straight line between the said fixed axes, whereby the base may be moved endwise through a narrow opening and positioned parallel with the fixed axes on opposite sides of the same.

3. A mounting for furniture embodying a horizontally movable base, horizontally movable swinging arms journaled on vertical axes spaced apart and each at its outer end having pivotal connection with the base for guiding the movements of the base, said arms being both movable in arcs each extending on both sides of a straight line intersecting the axes of the arms.

1,062,262. WRAPPING-MACHINE. RICHARD F. STEWART, Briarcliff Manor, N. Y. Filed Jan. 5, 1912. Serial No. 669,606. (Cl. 63—2.)



1. In a machine of the class described, the combination of the following instrumentalities: article feeding means, wrapping mechanism, a feeding hopper, a feed board operable to deliver a stack of articles to said hopper, and a receiving table adjacent said feed board.

2. In a machine of the class described, the combination of the following instrumentalities: article feeding mechanism, wrapping mechanism, means for driving said mechanisms, start and stop mechanism for said driving means, a feeding hopper, means in said hopper controlled by the hopper contents to operate said start and stop mechanism, and means to prevent the stopping of said driving means except when said article feeding mechanism is in a retracted position.

3. In a machine of the class described, the combination of the following instrumentalities: article feeding mechanism, wrapping mechanism, means for driving said mechanisms, electric start and stop mechanism for said driving means, a feeding hopper, an electric switch controlling

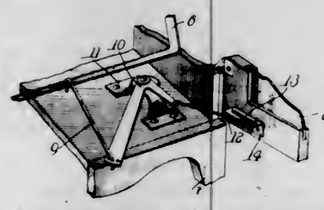
said start and stop mechanism, and a movable bottom in said hopper having connection with said switch to actuate said start and stop mechanism.

4. In a machine of the class described, the combination of the following instrumentalities: article feeding mechanism, wrapping mechanism, means for driving said mechanisms, start and stop mechanism for said driving means, a feeding hopper, a movable bottom in said hopper, a pivoted arm secured to said movable bottom and controlling said start and stop mechanism, and means on said arm coöperating with said article feeding mechanism to prevent stopping of the driving means except when said article feeding mechanism is in retracted position.

5. In a machine of the class described, the combination of the following instrumentalities: article feeding mechanism, wrapping mechanism, means for driving said mechanisms, start and stop mechanism for said driving means, a feeding hopper, a movable bottom in said hopper, a weighted pivoted arm supporting said movable bottom, means carried by said arm for controlling said start and stop mechanism, and a projection on said arm to engage said article feeding mechanism and prevent movement of said arm and stopping of the driving means except when said article feeding mechanism is in retracted position.

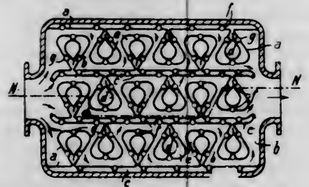
[Claims 6 to 14 not printed in the Gazette.]

1,062,263. MUSIC-CABINET. CLAUS L. SUNDQUIST, Rockford, Ill. Filed May 21, 1912. Serial No. 698,824. (Cl. 45—64.)



In a music cabinet, the combination of a case; a plurality of movable shelves supported therein, means having connection with and adapted to move said shelves, a swinging door to said case, a bracket attached to the lower inside portion of said door, the bracket formed with a longitudinal slot, the end of the slot near the free end of the door being formed with opposite transverse notches projecting beyond the sides of the longitudinal slot, and a connection having one end secured to said shelf-moving means and the other end adapted to be located in the slot in said bracket.

1,062,264. APPARATUS FOR SEPARATING OIL FROM STEAM. HEINRICH OSKAR WISCHNER, Leipzig-Entritzsch, Germany. Filed July 30, 1912. Serial No. 712,313. (Cl. 83—90.)



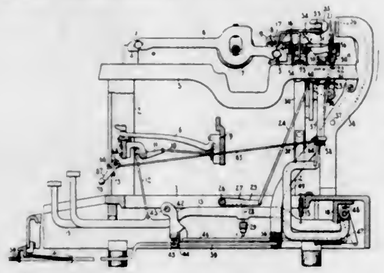
1. An apparatus for separating oil from steam provided with a steam path, continuous separate oil draining chambers arranged at both sides of the steam path but outside the passage of the steam, a collecting chamber, and a bed plate for conducting the separated oil into said collecting chamber.

2. An apparatus for separating oil from steam, provided with a steam path, continuous separate oil draining chambers arranged at the both sides of the steam path, but outside the passage of the steam, said chambers having pear shaped protuberances projecting from them arranged in staggered relation to one another, and having semicircular grooves with horizontally disposed mouths formed in the chambers.

3. On apparatus for separating oil from steam, provided with a steam path, continuous separate oil draining chambers arranged at the both sides of the steam path, but outside the passage of the steam, said chambers having pear shaped protuberances projecting from them arranged in staggered relation to one another, and having semicircular grooves with horizontally disposed mouths formed in the chambers, and tubes inserted in the pear shaped protuberances.

4. An apparatus for separating oil from steam provided with a steam path, continuous separate oil draining chambers arranged at both sides of the steam path but outside the passage of the steam, and a bed plate serving as an oil conducting organ and having channels forming deep gutters placed closely together.

1,062,265. TYPE-WRITING MACHINE. CLIO B. YAW, Arlington, N. J., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Dec. 23, 1912. Serial No. 738,235. (Cl. 197—176.)



1. In a typewriting machine, the combination of key controlled tabulating mechanism effective to arrest the carriage at predetermined points in either direction of its travel, carriage releasing devices, and means for at will rendering said devices effectively operative by the tabulator keys.

2. In a typewriting machine, the combination of key controlled tabulating mechanism effective to arrest the carriage at predetermined points in either direction of its travel, carriage releasing devices, and separate key controlled means for at will throwing said devices into and out of the control of the tabulator keys.

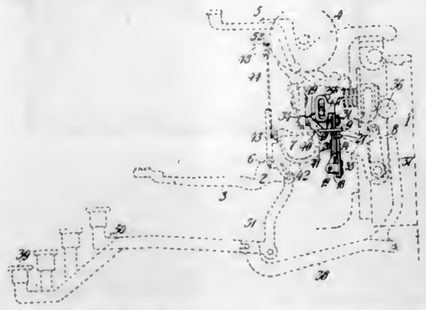
3. In a typewriting machine, the combination of key controlled tabulating mechanism effective to arrest the carriage at predetermined points, carriage releasing devices normally operative by the tabulator keys, and means for rendering the tabulator keys inoperative on said carriage releasing devices.

4. In a typewriting machine, the combination of key controlled tabulating mechanism effective to arrest the carriage at predetermined points, carriage releasing devices normally operative by the tabulator keys, and a separate key controlled switching mechanism effective to throw said devices out of the control of the tabulator keys, said switching mechanism comprising a pair of lever members and a connecting link, one of said lever members being provided with a finger key.

5. In a typewriting machine, the combination of key controlled tabulating mechanism effective to arrest the carriage at predetermined points; carriage releasing devices normally operative by the tabulator keys; and a separate key controlled switching mechanism effective to throw said devices out of the control of the tabulator keys, said switching mechanism comprising an upright shaft provided with crank arms one connected to the releasing devices and the other to a link, and a finger piece also connected to said link.

[Claims 6 to 16 not printed in the Gazette.]

1,062,266. TYPE-WRITING MACHINE. FRANK A. YOUNG, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 24, 1911. Serial No. 604,308. (Cl. 197—157.)



1. In a typewriting machine, the combination of a universal bar, a ribbon vibrator, an actuator constantly engaging said vibrator and connected to said universal bar, means for locking said actuator to said universal bar in different positions adapted to give said vibrator different movements respectively, and means for holding said actuator in a position adapted to leave said vibrator unaffected by the movement of said universal bar, substantially as set forth.

2. In a typewriting machine, the combination of a universal bar, a vibrator, a ribbon lever connected with said vibrator, an actuator connected to said universal bar and having a head adapted to assume different positions in engagement with said lever to give said vibrator a different amount of movement, and means for holding said actuating head in a released position with respect to said universal bar to permit the actuation of said universal bar without effectively moving said actuator.

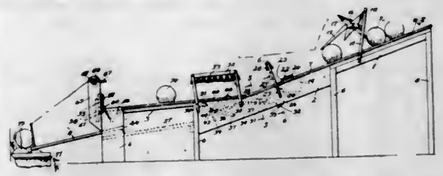
3. In a typewriting machine, in combination, a universal bar, a vibrator, a lever connected to said vibrator having a pair of wrists at different distances from the pivot point of said lever and adapted to give said vibrator a different amount of movement, and an actuator mounted on said universal bar adapted to shift laterally so as to engage either of said wrists separately, said actuator being arranged so that it normally advances with said universal bar, said actuator having a position in which it releases itself from said universal bar and in which the connection of one of said wrists is maintained.

4. In a typewriting machine, in combination, a universal bar, a vibrator, a ribbon lever connected to said vibrator and having actuating wrists adapted to give said lever different amounts of movement, an actuator connected with said universal bar, and means for holding said actuator in engagement with one only of said wrists, said actuator connection enabling the universal bar to move without effecting the movement of said lever.

5. In a typewriting machine, in combination, a universal bar, a vibrator, a ribbon lever connected to said vibrator, an actuator adapted to engage said lever at different points so as to produce a different amount of movement thereof, means for holding said actuator in a position to lock the same to said universal bar so as to advance with said universal bar when said universal bar is actuated, and means for holding said actuator in a releasing position to be released from said universal bar when it advances, said actuator and said lever being maintained in connection with each other when said actuator is in its releasing position.

[Claims 6 to 40 not printed in the Gazette.]

1,062,267. GRAVITATION LABELING-MACHINE. ARTHUR BYRON AINSWORTH, Leavenworth, Kans. Filed Jan. 2, 1912. Serial No. 669,144. (Cl. 216—44.)



1. A device of the class described comprising a supporting structure; a label holder yieldably supported therein; a paste pot pivotally connected to the supporting structure, a metal roller mounted therein and adapted to rest upon the label holder, adjacent to the rear end thereof; means upon the paste pot, engageable by a rolling vessel, to lift the metal roller of the paste pot free of the label holder; and means for applying paste to the vessel before the vessel arrives at the forward end of the label holder.

2. A device of the class described comprising a supporting structure; a label holder pivotally supported therein; a paste pot pivotally carried by the supporting structure, the roller of which extending below is adapted to rest upon the rear end of the label holder; means carried by the paste pot, and engaged by a rolling vessel, to lift the roller of the paste pot free of the label holder; a roller operating in the paste pot and controlled by a rolling vessel, to admit paste upon a label holder; and means for applying paste to the vessel, before the vessel reaches the forward end of the label holder.

3. A device of the class described comprising a supporting structure; links pivoted to the supporting structure; a label holder pivotally carried by the links; a lever fulcrumed intermediate its ends in the supporting structure, and adapted to bear at one end against the label holder, to uphold the same yieldingly; a hook-shaped member fixed with respect to the supporting structure, and overhanging the rear end of the label holder, to hold the labels thereon; means for applying paste to the rear end of the labels which are upon the label holder; and means for applying paste to a rolling vessel, before the vessel passes the forward end of the label holder.

4. A device of the class described comprising a supporting structure; a lever fulcrumed thereon; a star wheel journaled for rotation upon the lever; a stop upon the supporting structure, adapted to engage one arm on the star wheel, whereby the star wheel will be held rigid, to serve as a stop for vessels rolling along the supporting structure, the lever being liftable by a passing vessel, to cause the star wheel to engage with the stop; means for applying paste to the vessel, after the same has passed free of the lever; means for applying one end of the label to the pasted portion of the vessel; and means for applying paste to the other end of the label.

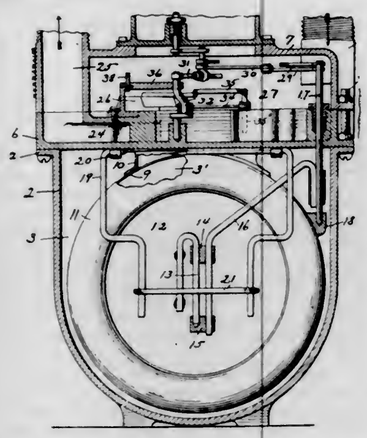
5. In a device of the class described, comprising a supporting structure along which a vessel is adapted to roll, means for applying paste to the vessel, a label supporting frame adapted to contact with said vessel, a paste holder adjacent to one end of said label holder, a roller mounted in said paste holder to engage one end of the said labels mounted upon the label holder, the said vessel adapted to depress said paste holder and a ratchet mechanism adapted to engage said roller to turn the same substantially as described.

[Claim 6 not printed in the Gazette.]

1,062,268. GAS-METER. JAMES R. ARMSTRONG, Pittsburgh, Pa., assignor of one-third to William H. Irvin, Pittsburgh, Pa. Filed Sept. 16, 1912. Serial No. 720,499. (Cl. 73—1.)

1. In a gas meter, the combination of an open-top main chamber, a supplemental chamber within the main chamber and provided with a flexible wall, a body constituting a closure for the main chamber and ported to admit

gas to the latter and to the supplemental chamber and also provided with an outlet port, a valve for the ports, and actuating means for said valve mounted on the body and operatively connected to the flexible wall of the supplemental chamber.



2. In a gas meter, the combination of an open-top main chamber, a body constituting a closure for the chamber, a supplemental chamber carried by the body and extending into the main chamber and provided with a flexible wall, the body being ported to admit gas to both chambers and also provided with an outlet port, a valve for the ports and actuating means for said valve operatively connected to the flexible wall of the supplemental chamber.

3. In a gas meter, the combination of an open-top chamber, a body forming a closure therefor, a casing open on one side and secured to the body and depending into the chamber, a flexible diaphragm secured to the casing and closing the open side thereof, the body being ported to admit gas to the casing and to the chamber and also provided with an outlet port, a valve for the ports, and actuating means for said valve operatively connected to the flexible diaphragm and to the valve.

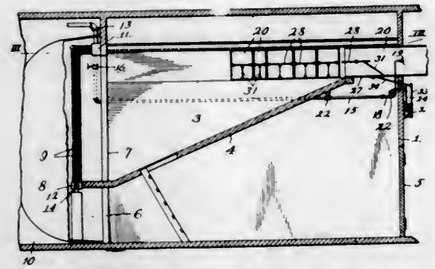
4. In a gas meter, the combination of an open-top main chamber, a body constituting a closure for the chamber, a supplemental chamber secured to the body and depending into the main chamber, the supplemental chamber consisting of a casing having one side closed by a flexible wall, the body being ported to admit gas to each of said chambers and also provided with an outlet port, a valve for the ports, a flag rod mounted on the body and extending into the main chamber and operatively connected to the flexible wall of the supplemental chamber, and means connecting the flag rod and valve.

5. In a gas meter, the combination of a casing partitioned to form two open-top main chambers, a body fitting the casing and closing each of said chambers, two supplemental chambers—one within each main chamber and having one side closed with a flexible wall, the body being formed with two sets of ports, each set consisting of two inlet ports and an outlet port with the inlet ports communicating with the main chamber and with the supplemental chamber located therein, a valve for each set of ports, and actuating mechanisms for said valves operatively connected to the movable walls of the supplemental chambers.

[Claims 6 to 10 not printed in the Gazette.]

1,062,269. HUMIDITY-CONTROLLING APPARATUS. JOSEPH H. BRADY, Kansas City, Mo. Filed Nov. 13, 1911. Serial No. 659,957. (Cl. 98—39.)

1. In an apparatus of the character described, in combination, an air-duct having two inlets, one to admit temperate air and the other to admit hot air, dampers to alternately open and close said inlets, a nozzle arranged to discharge moist fluid into said duct, a hot-air chamber communicating with the hot-air inlet, and a temperate air-chamber communicating with the temperate air inlet.

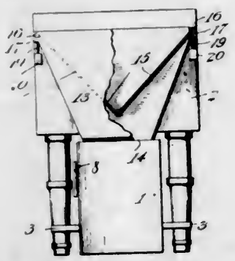


2. In an apparatus of the character described, in combination, an air-duct having two inlets, one to admit temperate air and the other admit hot air, dampers to alternately open and close said inlets, a nozzle arranged to discharge moist fluid into said duct, a hot-air chamber communicating with the hot-air inlet, a temperate air-chamber communicating with the temperate air inlet, and automatic means to simultaneously control said dampers and the flow of fluid to said nozzle.

3. In an apparatus of the character described, in combination, an air-duct having two inlets, one to admit temperate air and the other to admit hot air, dampers to alternately open and close said inlets, a nozzle arranged to discharge moist fluid into said duct, a hot-air chamber communicating with the hot-air inlet, a temperate air-chamber communicating with the temperate air-inlet, said chambers having inlets, means for forcing air through said inlets into the chambers, and a heating-coil interposed between said means and the inlet to the hot-air chamber.

4. In an apparatus of the character described, in combination, a plurality of air-ducts each having a hot-air inlet and a temperate air inlet, a hot-air chamber communicating with the hot-air inlets, a temperate air-chamber communicating with the temperate air inlets, dampers to control the admission of air to said inlets, a nozzle in each duct to discharge moist fluid therein, and automatic means to control said dampers and the flow of fluid to the nozzles.

1,062,270. REFUSE-RECEPTACLE. ADOLPH BURGGALLER, West Hoboken, N. J. Filed Feb. 19, 1912. Serial No. 678,465. (Cl. 220—115.)



1. A receiver for waste material comprising a feeder, a receptacle, a scraper pivotally mounted in the receptacle and having a free lower end, a guard over which the scraper swings, said guard having its upper surface curved to conform to the arc in which the free end of the scraper swings and having an enlarged end that serves as an abutment for preventing material getting behind said scraper, said guard having its upper surface curved to conform to the arc in which the lower end of the scraper swings, and means for operating the scraper.

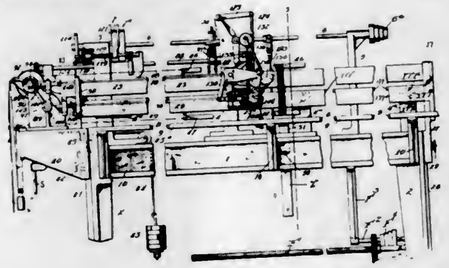
2. A receiver for waste material comprising a feeder, a receptacle, a scraper having its upper end pivotally mounted in the receptacle, a ring carried by the scraper, a rocker shaft in the receptacle and having a projecting end, a crank carried by the shaft and engaging the ring, and a handle carried by the projecting end of the rocker shaft.

3. In an apparatus of the character described the combination of a feeder adapted to be carried by a chopping table, a receiver adapted to be fitted beneath the table and provided with table leg-engaging lugs, and a cover for the receiver provided with an opening with which the discharge outlet of the feeder communicates.

4. An apparatus of the character described comprising a receiver, a scraper pivotally mounted therein, a rocker shaft within the receiver, an eye carried by the scraper, a crank carried by the rocker shaft and having a curved free end that extends through said eye, means for operating the shaft, and means for feeding material to the receiver.

5. A device of the character described comprising a hopper-shaped feeder provided with pivot ears at opposite portions of its inlet end, the ears being arranged in pairs, doors within the hopper and having pivot shafts at their upper ends, arms projecting from said shafts that are mounted in the ears, weights carried by said arms for normally holding the lower ends of the doors in contact, and a receiver in communication with the outlet of the feeder.

1,062,271. WARP-DRAWING MACHINE. HOWARD D. COLMAN, Rockford, Ill., assignor, by mesne assignments, to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed May 18, 1908. Serial No. 433,459. (Cl. 139—94.)



1. A warp-drawing machine having a stationary harness-supporting bar; withdrawable means at each end of said bar for supporting it, whereby the harness may be inserted over or slipped off the ends of said bar without removing said bar from the machine; a drawing-in mechanism; and means for traversing the harness on said bar past said mechanism.

2. A warp-drawing machine having a stationary harness-supporting bar; withdrawable means for supporting one end of said bar; withdrawable means for supporting said bar when the first mentioned supporting means is withdrawn; a drawing-in mechanism; and means for moving the harness past said mechanism.

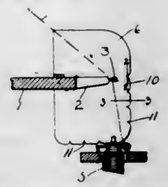
3. A warp-drawing machine having a stationary harness-supporting bar; withdrawable means for supporting one end of said bar; intermediate means for supporting said bar; and means for preventing the other end of said bar from tilting upon said intermediate support when the first mentioned bar-supporting means is withdrawn.

4. A warp-drawing machine having two stationary harness bars; means comprising mechanism supported upon said bars for operating upon heddles; and a withdrawable support for said bars carrying actuating mechanism for the mechanism on said bars.

5. A warp-drawing machine having two stationary harness bars; means comprising mechanism carried by said bars for operating upon heddles; and a withdrawable support for one end of said bars, said support carrying actuating mechanism having a separable connection with the mechanism on said bars.

[Claims 6 to 66 not printed in the Gazette.]

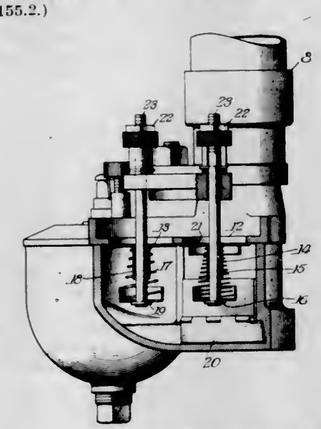
1,062,272. COMBINATION SEPARATOR AND STRAY-YARN SEVERER FOR SPINNING AND TWISTING MACHINES. CHARLES E. COLLINS, Pawtucket, R. I., assignor to Collins Brothers Machine Co., Inc., Providence, R. I., a Corporation of Rhode Island. Filed Feb. 1, 1912. Serial No. 674,726. (Cl. 118—16.)



1. In spinning and twisting machines, a separating plate having a plurality of notches formed in its edge, the edges of said notches being sharpened or roughened and adapted to engage and sever a stray yarn that may be drawn therein.

2. In spinning and twisting machines, a sheet metal separator having a plurality of notches on its edge, the edges of said notches being sharpened or roughened and adapted to engage and sever a stray yarn that may be drawn therein, and the stock between the notches being smooth and unabrasive.

1,062,273. CARBURETER. EDWARD R. CONKLIN, Aurora, Ill. Filed Mar. 16, 1911. Serial No. 614,883. (Cl. 48—155.2.)



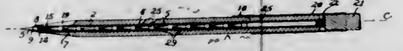
1. A carbureter provided with constant and auxiliary air channels, a channel for engine connection whose opening for the admission of carbureted air that is to be passed to the engine is in communication with the discharge ends of the constant and auxiliary air channels, a main valving mechanism serving to vary the volume of air admitted to the auxiliary air channel upon variation of engine speed, and a gravity closed valve located in position to be passed by auxiliary air and serving to regulate the volume of auxiliary air that may flow on the lower engine speeds.

2. A carbureter provided with constant and auxiliary air channels, a channel for engine connection whose opening for the admission of carbureted air that is to be passed to the engine is in communication with the discharge ends of the constant and auxiliary air channels, a

main valving mechanism serving to vary the volume of air admitted to the auxiliary air channel upon variation of engine speed, and a gravity closed valve located in position to be passed by auxiliary air and serving to regulate the volume of auxiliary air that may flow on the lower engine speeds, there being present fuel receiving space in direct communication with the auxiliary air channel for holding a supply of fuel to assist in starting the engine.

3. A carbureter provided with constant and auxiliary air channels, and a channel for engine connection whose opening for the admission of carbureted air that is to be passed to the engine is in communication with the discharge ends of the constant and auxiliary air channels, the constant air channel having a bight therein where the fuel inlet is located and having a sinuous portion between the liquid fuel intake and the channel for passing carbureted air to the engine.

1,062,274. PENCIL. HOWARD L. FISCHER, St. Paul, Minn. Filed Dec. 29, 1910. Serial No. 599,789. (Cl. 120—14.)



1. In a magazine pencil, a barrel having a magazine therein for loose points and a gripping jaw at the writing end of said barrel having a diameter normally less than the diameter of a point used in connection with the pencil and adapted to receive the same from said magazine under stress, said jaw having an edge for abrading said point as it enters and fitting it in said jaw rigid against writing pressure.

2. A magazine pencil, comprising in combination, a barrel having a magazine chamber therein, means fixed at the writing end of said barrel for holding a point to write, said parts being non-reciprocable with relation to each other and a capsule extending substantially the full length of said barrel removably positioned in said magazine and adapted to maintain a plurality of points in operative relation with said holding means.

3. A magazine pencil, comprising, in combination, a barrel having a magazine chamber within adapted to hold loose marking points, a point holder fixed at the writing end of said pencil adapted to receive points therefrom freely, a single expansible jaw of less diameter than said holder adapted to encircle and engage one of said points to hold it against writing pressure, and means for preventing a backward movement of said point.

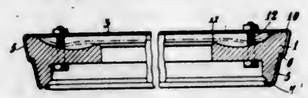
4. A magazine pencil comprising a barrel having a magazine therein for loose points, a point holding jaw at one end of said barrel adapted to receive points from said magazine said jaw being in the form of a single expansible point gripping member of equal cross section throughout its length extending around substantially the entire circumference of said point and adapted to fix it against movement by writing pressure.

5. A magazine pencil, comprising, in combination, a barrel having a magazine therein, a point holder having a single gripping jaw, fixed in said magazine and adapted to hold a point for writing, a removable capsule having a substantially cylindrical body and a closed upper end adapted to convey a plurality of points into said magazine and maintain them freely in connection with said holder, said holder being apertured to permit a point in said magazine to be engaged and forced through said gripping jaw.

[Claims 6 to 10 not printed in the Gazette.]

1,062,275. SOUNDING-BOARD. FRIDOLF FRANKEL, Stockholm, Sweden. Filed Sept. 30, 1911. Serial No. 652,124. (Cl. 84—30.)

1. In musical instruments, the combination of a sounding board, a frame, a sheet-metal plate resting on and secured to the frame, and screws forcing the sheet metal plate out of the plane of the bearing surface of the frame, substantially as and for the purpose set forth.

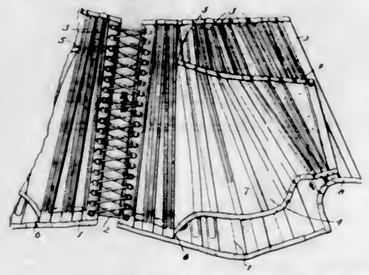


2. In musical instruments, the combination of a sounding-board, a frame, a sheet-metal plate having a slitted edge extending beyond the outer edge of the frame and secured thereto, and screws forcing the sheet-metal plate out of the plane of said edges, substantially as and for the purpose set forth.

3. In musical instruments, the combination of a sounding-board, a frame having an outer edge and an inner edge extending at a lower level than the outer one, a sheet-metal plate having a slitted edge extending beyond the outer edge of the frame and secured thereto, and screws placed in the frame between the outer edge and the inner one and forcing the sheet-metal plate against the inner edge of the frame.

4. In musical instruments the combination of a sounding-board, a frame having an outer edge and an inner edge extending at a lower level than the outer one and separated from the latter by a recess in the frame, a sheet-metal plate having a slitted edge extending beyond the outer edge of the frame and secured thereto, and screws placed in the frame between the outer edge and the inner one and forcing the sheet-metal plate against the inner edge of the frame.

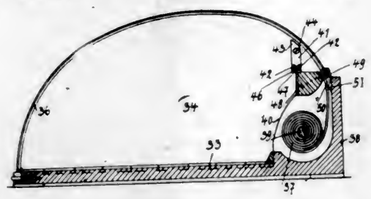
1,062,276. CORSET. WILLIAM R. GREENFIELD, Verona, N. J., assignor to Van Orden Corset Company, Newark, N. J., a Corporation of New Jersey. Filed May 28, 1912. Serial No. 700,270. (Cl. 2—73.)



A corset comprising an outer corset member and an inner abdominal belt member consisting solely of two opposed sections each secured rigidly inside the rear of said corset member by stitching extending from a region near the lower margin upward above the waist line to a point substantially adjacent the top of the corset, said belt members embracing the hips and extending down under the lower front extremity of the abdomen, being smaller in circumference than the corset member at the top of belt line and graduating or growing still smaller comparatively relatively to said corset member, from this point to bottom of belt, thereby giving uplift support to abdomen and tending to throw the chest of the wearer forward by pressure above the waist line at the rear.

1,062,277. TRAVELING-CASE FOR TYPE-WRITING MACHINES, CALCULATING-MACHINES, AND THE LIKE. ARTHUR BERNHARDT GUAICKE, Glashütte, Germany. Filed Sept. 7, 1910. Serial No. 580,872. (Cl. 45—52.)

A calculator or typewriter traveling case comprising a portable base plate adapted to receive the machine, divided end plates composed of fixed parts having journal bearings and hinged parts having grooved ways, means for holding said hinged parts in upright position, a spring roller supported above said base plate in bearings of the



fixed parts of the end plates, and a flexible roll top connected at its rear with said spring roller and movable at its opposite ends in said grooved ways of the hinged parts of said end plates.

1,062,278. PROCESS OF MAKING POTASH ALUM. EDWARD HART, Easton, Pa. Filed Mar. 27, 1911. Serial No. 617,008. (Cl. 23—13.)

1. The process hereinbefore described which comprises heating feldspar with sulfate of soda and carbon, and treating the product with a suitable acid.

2. The process hereinbefore described which comprises heating feldspar with sulfate of soda and carbon, and treating the product with sulfuric acid.

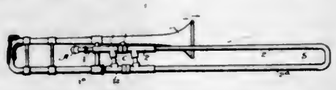
3. The process hereinbefore described which comprises heating feldspar with sulfate of soda and carbon, treating the product with a suitable acid, and separating the soluble and the insoluble products of the reaction.

4. The process hereinbefore described which comprises heating feldspar with sulfate of soda and carbon, treating the product with sulfuric acid, and separating the soluble and the insoluble products of the reaction.

5. The process hereinbefore described which comprises heating feldspar with sulfate of soda and carbon, treating the product with sulfuric acid, separating the soluble and the insoluble products of the reaction and removing from the soluble product the potash alum.

[Claim 6 not printed in the Gazette.]

1,062,279. TROMBONE-SLIDE. ALFRED W. HARTHILL and IRA E. STAMETS, Elkhart, Ind. Filed Feb. 19, 1912. Serial No. 678,455. (Cl. 84—8.)



1. A trombone having fixed tubes, a slide having tubes telescoping with the fixed tubes and provided at their inner ends with ball cages carrying balls engaging the fixed tubes and springs which press the balls inward against the tubes.

2. A trombone having fixed tubes provided with stockings on their outer ends, a slide having tubes telescoping with the fixed tubes and provided at their inner ends with ball cages having shoulders adapted to engage the stockings and carrying balls engaging the fixed tubes.

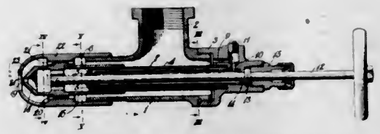
3. The combination with the inner and outer tubes of a trombone, of a ball cage removably connected with the inner end of the outer tube and provided with radial pockets carrying balls engaging the inner tube, and a spring engaging the balls and pressing them inward.

4. The combination with the inner and outer tubes of a trombone, of a ball cage formed with radial ball pockets and detachably connected with the inner end of the outer tube, and a split spring ring arranged in the cage surrounding the balls and pressing them inward into engagement with the inner tube.

5. The combination with the inner and outer tubes of a trombone, of a ball cage detachably connected with the inner end of the outer tube, carrying balls engaging the inner tube and formed with an inwardly projecting extension, an enlargement on the inner tube formed with a chamber into which said extension on the ball cage enters when the instrument is closed and a sliding bolt operating in said chamber and adapted to engage with said extension on the ball cage.

[Claim 6 not printed in the Gazette.]

1,062,280. OIL-BURNER. JULIUS C. HINZ, Detroit, Mich. Filed June 21, 1912. Serial No. 704,959. (Cl. 158—76.)



1. An oil burner comprising a casing having an air and a fuel inlet, a jet nozzle rotatable in the casing in communication with the fuel inlet, a head in screwthreaded engagement with the casing and in non-rotatable, sliding engagement with the nozzle, having a discharge jet opening in communication with the air inlet and with the jet nozzle opening, means controlling communication between the fuel inlet and nozzle, and means extending into the casing for turning the nozzle to shift the head.

2. An oil burner comprising a casing having an air and a fuel inlet, a jet nozzle rotatable in the casing in communication with the fuel inlet, a head in screwthreaded engagement with the casing and in non-rotatable, sliding engagement with the nozzle, having a discharge jet opening in communication with the air inlet and with the jet nozzle opening, a sleeve having a lateral inlet in communication with an air duct from the casing interior and having an apertured end within the jet nozzle, means controlling communication between the fuel inlet and nozzle, and means extending into the casing for turning the nozzle to shift the head.

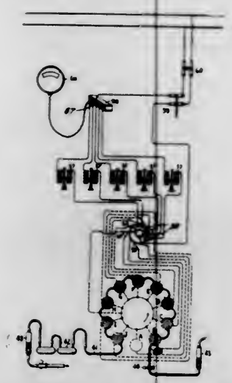
3. An oil burner comprising a casing having an air and a fuel inlet, a jet nozzle rotatable in the casing in communication with the fuel inlet, a head in screwthreaded engagement with the casing and in non-rotatable, sliding engagement with the nozzle, having a discharge jet opening in communication with the air inlet and with the jet nozzle opening, means controlling communication between the fuel inlet and nozzle, and means rotatable within the sleeve secured to the nozzle to turn the latter and shift the head.

4. An oil burner comprising an air and a fuel inlet, a valve controlling the fuel inlet, a barrel in the casing in communication with the fuel inlet, a jet nozzle rotatable on the barrel, a head in screwthreaded engagement with the casing and in non-rotatable, longitudinally reciprocable engagement with the nozzle, provided with a discharge jet opening in alinement substantially with the nozzle discharge, a sleeve within the barrel having a discharge opening adjacent the nozzle discharge and in communication with the air inlet of the casing, and means rotatable through the casing and sleeve secured to the nozzle to turn the latter.

5. An oil burner comprising an air and a fuel inlet, a valve controlling the fuel inlet, a barrel in the casing in communication with the fuel inlet, a jet nozzle rotatable on the barrel, a head in screwthreaded engagement with the casing and in non-rotatable, longitudinally reciprocable engagement with the nozzle, provided with a discharge jet opening in alinement substantially with the nozzle discharge, a sleeve within the barrel having a discharge opening adjacent the nozzle discharge and in communication with the air inlet of the casing, and a stem rotatable through the casing and a sleeve secured to the nozzle to turn the latter.

[Claims 6 to 9 not printed in the Gazette.]

1,062,281. FORMING-MACHINE FOR TUNGSTEN FILAMENTS. JOHN W. HOWELL, Newark, N. J., assignor to General Electric Company, a Corporation of New York. Filed May 7, 1908. Serial No. 431,323. (Cl. 176—4.)



1. In a filament machine, the combination of a plurality of receptacles for filaments, connections whereby a stream of fluid may be passed through said receptacles, and controlling means for varying said connections to cause the fluid to traverse only a portion of said receptacles and to cause each receptacle in turn to form one of the number which is traversed by the fluid.

2. In a filament machine, the combination of a plurality of receptacles for filaments, connections whereby a stream of fluid may be passed through said receptacles, and controlling means for varying said connections to cause a stream of fluid to flow through some of said receptacles, and to make each receptacle in turn one of those through which the stream of fluid flows.

3. In a filament machine, the combination of a plurality of receptacles for filaments, connections whereby a stream of fluid may be passed through said receptacles, and controlling means for varying said connections to pass a stream of fluid through some of said receptacles and to disconnect one receptacle from the stream of fluid and simultaneously connect another receptacle to said stream, whereby the number of receptacles traversed by the stream of fluid remains constant.

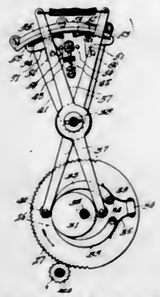
4. In a filament machine, the combination of a plurality of receptacles for filaments, connections whereby a stream of fluid may be passed through said receptacles, and means for varying said connections to cause each receptacle in turn to form one of a number less than the whole and traversed in succession by a stream of fluid and then in turn to be disconnected from the stream of fluid.

5. In a filament machine, the combination of a plurality of receptacles for filaments, means for moving said receptacles in a circular path, connections whereby a stream of fluid may be passed through said receptacles in succession, and controlling means for varying said connections to cause the stream of fluid to flow in succession through a part of said receptacles and for cutting off the remainder of said receptacles from the stream of fluid.

[Claims 6 to 21 not printed in the Gazette.]

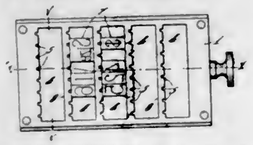
1,062,282. AUTOMATIC CLOCK WINDING MEANS. MARTIN KARSCH, Los Angeles, Cal. Filed July 31, 1912. Serial No. 712,579. (Cl. 58—41.)

1. The combination of a device for actuating clock mechanism, a shaft operatively connected therewith, a clutch wheel splined on said shaft, a second wheel loose on said shaft and adapted to co-act with the clutch wheel, electric motive means operatively connected with the second wheel, a cam device operatively connected with said shaft, pivotally mounted arms operatively connected with the cam device, and mechanism operatively connected with the arms and adapted to intermittently operate the clutch wheel and govern the circuit through the electric motive means.



2. The combination of a device for actuating clock mechanism, a shaft operatively connected therewith, a clutch wheel splined on said shaft, a second wheel loose on said shaft and adapted to co-act with the clutch wheel, electric motive means operatively connected with the second wheel, a cam device operatively connected with said shaft, pivotally mounted arms operatively connected with the cam device, a pivotally mounted plate, spring-pressed dogs pivotally mounted on the plate and operatively connected with said arms, a stationary part with which said dogs co-act, a pivotally mounted lever operatively connected with the clutch wheel and adapted to close the circuit through the electric motive means, and pivotally mounted horizontal angular arm operatively connected with the lever and with the plate.

1,062,283. TYPE-CHASE. FREDERICK KOHNLE, Dayton, Ohio, assignor to Harry H. Prugh and Theodore Meuche, trustees. Filed May 11, 1911. Serial No. 626,631. Renewed Jan. 9, 1913. Serial No. 741,129. (Cl. 101—169.)



1. A type chase comprising a hollow frame open upon each face, transverse partitions therein formed with grooves open at each end, leaf spring members interposed between opposing faces of the partitions, and type formed with endwise ribs for engaging into said grooves when inserted from either face of the frame.

2. A type chase comprising a hollow frame open upon each frame, transverse partitions therein formed with grooves open at each end, leaf spring members secured in the partitions and bearing laterally into the chambers defined thereby, and type formed with endwise ribs for engaging into said grooves when inserted from either face of the frame.

3. A type chase comprising a hollow frame open upon each face, transverse partitions therein formed with grooves open at each end, spring members held by the partition walls and formed with grooves coincident with the partition grooves, and type formed with endwise ribs for engaging into said grooves when inserted from either face of the frame.

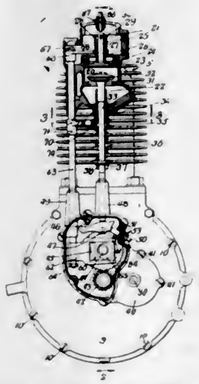
1,062,284. SAFETY-CATCH. ROY ABRAHAM LEE, San Francisco, Cal. Filed Sept. 11, 1911. Serial No. 648,595. (Cl. 24—156.)

The combination with a plate having a recess, of a one piece resilient catch member having a straight flat central portion seated in said recess in the plate with one arm extending outwardly and slightly curved to form a guard while the opposite arm is extended outwardly and similarly curved in an opposite direction with the extremity thereof bent around and toward the central portion of the catch to form a pin holding portion, and a pin con-



nected with the plate and adapted to be passed between the guard arm and the pin holding portion of the catch and then into said pin holding portion.

1,062,285. VALVE FOR EXPLOSIVE-ENGINES. AXEL LEVEDAHL, Aurora, Ill., assignor to Aurora Automatic Machinery Company, Aurora, Ill., a Corporation of Illinois. Filed July 23, 1908. Serial No. 444,957. (Cl. 123—91.)



1. An explosive engine, comprising an intake valve adapted to be opened by suction, a spring applied to close said intake valve, and means including a member against which said spring constantly bears, operated by the engine, for controlling the tension of said spring during all of the strokes of the engine piston, adapted to decrease the tension of said spring by permitting the same to expand at the time of the suction stroke of the engine piston and increase the tension of said spring by compressing the same during the remaining strokes of the engine piston.

2. An explosive engine comprising an exhaust valve, a spring applied to close said valve, means for opening said exhaust valve against the action of the spring, and means operated by the engine for decreasing the normal tension of the spring just preceding the time of the exhaust stroke and maintaining the decreased tension of the said spring during said exhaust stroke of the engine piston.

3. An explosive engine comprising an intake valve, a spring adapted to close said intake valve, an exhaust valve, a spring applied to close said exhaust valve, and means operated by the engine for increasing and decreasing the tension in both of said springs, adapted to decrease the tension of the intake valve spring during the suction stroke and to increase the tension of the same during the remaining strokes of the engine piston and also adapted to increase the normal tension of the exhaust valve spring at a time just preceding the exhaust stroke and to maintain the increased tension during the remaining strokes of the engine piston.

4. An explosive engine comprising an intake valve adapted to be opened by suction and embracing a valve disk provided with a valve stem, a coiled spring surrounding said valve and which tends to always close said inlet valve, an arm upon which said spring rests, an endwise movable rod to which said arm is attached, and means operated by the engine in time with the piston stroke acting to decrease the tension of the spring during the suction stroke and to increase the tension in the said spring during the intervening strokes of the engine piston.

5. An explosive engine comprising a power cylinder, a piston, intake and exhaust valves, each embracing a valve disk provided with a valve stem, an endwise movable rod arranged parallel with said valve stem and provided with two laterally extending arms, coiled springs surrounding the said valve stems and bearing severally against said arms, said disks being arranged to move toward each other in the opening of the valves, and the said springs acting in opposite directions to effect the closing of the valves, and means operated by the engine giving endwise movement to said rod, said rod being shifted in a direction to decrease the tension of the intake valve spring and to increase the tension of the exhaust valve spring at the time of the suction stroke of the engine.

[Claims 6 to 9 not printed in the Gazette.]

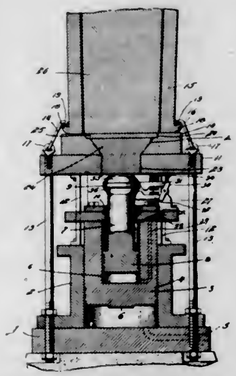
1,062,286. PROCESS OF PRESERVING WOOD FROM DECAY AND FIRE. HENRY J. LIVINGSTON, Baltimore, Md. Filed Nov. 14, 1912. Serial No. 731,339. (Cl. 99—12.)

1. The process of preserving wood from decay which consists in first impregnating it with a heated strong saline solution, drying it, coating it with any suitable inflammable material, igniting it and continuing the application of flame until the incipient combustion of the surface takes place, then applying with a brush a mixture of waste gas-house lime and fine ashes in equal parts and coal tar to its entire surface, and finally filling up the end pores of the wood and any shakes or rents with a plastic mixture of the last named ingredients.

2. The process of preserving wood which comprises first, impregnating with a fireproofing saline solution, then coating with a combustible material, then igniting the said material, whereby the wood, the unburnt portion of the combustible material, and the exuding fireproofing salt unite to give a protective coating.

3. The described process of rendering wood incombustible which consists in impregnating it with a strong hot solution of common salt in which it is submerged and allowed to cool slowly until it is thoroughly impregnated.

1,062,287. METHOD OF MAKING CASTINGS. DAVID MAXWELL, Detroit, Mich., assignor to The Liquid Forged Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 9, 1911. Serial No. 601,742. (Cl. 22—216.)



1. The method of casting, which includes the step of imparting a succession of impacts to the casting while pouring, and varying the character of the impacts.

2. The method of casting, which includes the step of imparting a succession of vertical impacts to the casti-

ing while pouring, and varying the character of the impacts.

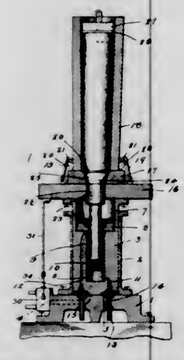
3. The method of casting, which includes the step of imparting a succession of impacts to the casting in a straight line while being poured, and varying the character of the impacts.

4. The method of casting, which includes the step of imparting a succession of impacts to the casting in a straight vertical line while being poured, and varying the character of the impacts.

5. The method of casting, which consists in subjecting the casting to a succession of impacts applied longitudinally thereto in a straight line while the casting is being poured, and varying the character of the impacts.

[Claims 6 to 52 not printed in the Gazette.]

1,062,288. APPARATUS FOR TREATING CASTINGS. DAVID MAXWELL, Detroit, Mich., assignor to The Liquid Forged Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 9, 1911. Serial No. 601,744. (Cl. 22—67.)



1. An apparatus for applying impacts to and stripping castings including a reciprocatory mold support, means for lifting and dropping the support, and means for pushing the casting out of its mold.

2. An apparatus for applying impacts to and stripping castings, including a reciprocatory mold support, means for lifting and dropping the support, means for varying the lifting and dropping movement of the support, and means for pushing the casting out of its mold.

3. An apparatus for applying impacts to and stripping castings including a reciprocatory mold support, means for lifting and dropping the support, and means for pushing the casting upwardly out of its mold.

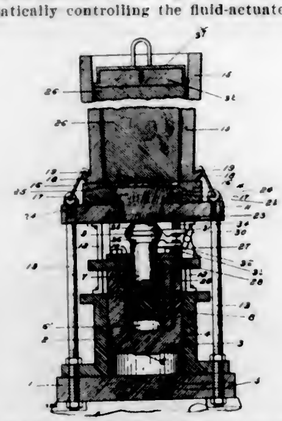
4. An apparatus for applying impacts to and stripping castings including a reciprocatory mold support, means for lifting and dropping the support, and a stripping device telescoping within the lifting and dropping means.

5. An apparatus for making castings including a mold support having an opening, means to lift and drop the support, an endwise movable stripper element carried by the support, working in the opening therein, and forming a closure for the open bottom of a mold, and means to effect relative movement between the support and the stripper element to strip a casting.

[Claims 6 to 9 not printed in the Gazette.]

1,062,289. APPARATUS FOR MAKING CASTINGS. DAVID MAXWELL, Detroit, Mich., assignor to The Liquid Forged Steel Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Jan. 9, 1911, Serial No. 601,742. Divided and this application filed Mar. 9, 1911, Serial No. 613,391. Renewed Oct. 4, 1912. Serial No. 723,999. (Cl. 22—67.)

1. An apparatus for applying impacts to castings while solidifying including a reciprocating impact member, fluid actuated means for reciprocating said member, and means for automatically controlling the fluid-actuated means.



2. An apparatus for applying impacts to castings while solidifying, including an impact member, fluid actuated means for reciprocating the impact member, means actuated by a moving part of the impacting means for controlling the supply and discharge of fluid pressure and means to vary the character of the impacts without stopping the operation of the apparatus.

3. An apparatus for applying impacts to castings while solidifying, including a reciprocating impact member, fluid actuated means for reciprocating the impact member, means actuated by moving part of the impacting means for controlling the supply and discharge of fluid pressure and means to vary the stroke of the fluid actuated means without stopping the operation of the apparatus.

4. An apparatus for applying impacts to castings while solidifying, including a reciprocating impact member, fluid actuated means for reciprocating the impact member, means actuated by a moving part of the impacting means for controlling the supply and discharge of fluid pressure and means for varying the rate of operation of the fluid actuated means without stopping the operation of the apparatus.

5. An apparatus for applying impacts to castings while solidifying, including a reciprocating impact member, fluid actuated means for reciprocating the impact member, means actuated by a moving part of the impacting means for controlling the supply and discharge of fluid pressure and means for varying the stroke and rate of operation of the fluid actuated means without stopping the operation of the apparatus.

[Claims 6 to 20 not printed in the Gazette.]

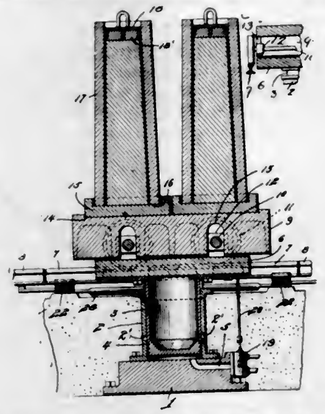
1,062,290. APPARATUS FOR MAKING CASTINGS. DAVID MAXWELL, Detroit, Mich., assignor to The Liquid Forged Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 9, 1911, Serial No. 601,743. Renewed Apr. 18, 1913. Serial No. 762,093. (Cl. 22—67.)

1. An apparatus for applying impacts to castings while solidifying including a reciprocatory mold support, and a fluid actuated piston connected directly to the support for reciprocating the same.

2. An apparatus for applying impacts to castings while solidifying including a reciprocatory mold support, fluid actuated means for reciprocating the support, and means for varying the reciprocating movement of the support while the apparatus is in operation.

3. An apparatus for applying impacts to castings while solidifying including a reciprocatory mold support, fluid actuated means for reciprocating the support, and means for controlling the stroke of the mold support while the apparatus is in operation.

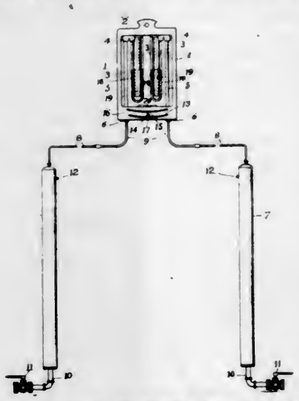
4. An apparatus for applying impacts to castings while solidifying including a reciprocatory mold support, fluid actuated means for reciprocating the support, and means for varying the rate of reciprocation of the mold support while the apparatus is in operation.



5. An apparatus for applying impacts to castings while solidifying including a reciprocatory mold support, fluid actuated means for reciprocating the support, and means for varying the rate of reciprocation and stroke of the mold support while the apparatus is in operation.

[Claims 6 to 10 not printed in the Gazette.]

1,062,291. DRAFT-INDICATOR FOR SHIPS. ALEXANDER MCNAB, Bridgeport, Conn., assignor to The McNab Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 16, 1912. Serial No. 691,225. (Cl. 73—23.)



1. A draft indicator for ships, comprising a U-shaped tube partly filled with a liquid whose specific gravity is comparatively great, a closed tubular system having its upper extremity connected to one end of said tube while its lower extremity opens into the water outside the ship, an air vent valve in said system, and a three way cock located in the lower extremity of said system whereby the latter may be opened to the water outside the ship or closed thereto and the water in the system allowed to drain into the bilge of the ship.

2. A draft indicator for ships, comprising similar U-shaped tubes provided with registering scales adjacent thereto and partly filled with a liquid whose specific gravity is comparatively great and whose normal level is denoted on such scale as the light water draft line of the ship, separate closed tubular systems each having its upper extremity connected to one end of said tubes while the other extremity opens into the water outside the ship at suitable locations and on a level with the keel thereof, air vent valves in said systems, and three way cocks located in the lower extremities of said systems and adapted to be operated to open the latter to the water outside the ship or to close the same thereto and allow the water in the systems to drain into the bilge of the ship.

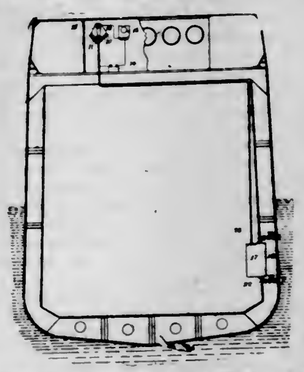
3. A draft indicator for ships, comprising a suitable frame pivotally connected to a stationary support on the ship and suitably located, U-shaped gage tubes secured within said frame, registering scales adjacent said tubes, closed tubular systems, flexible connections which connect the upper extremities of said systems with one leg of said tubes, the lower extremities of said systems opening into the water outside the ship at suitable locations and on a level with the keel thereof, and cocks within the lower extremities of said systems whereby the latter may be opened or closed.

4. A draft indicator for ships, comprising a frame pivotally connected to a stationary element on the ship and having at its lower extremity an arcuately disposed slot and an arcuate scale above the latter, a stationary pin extending freely through said slot and carrying an index pointer which registers with said scale, a set screw driven on said pin whereby the latter may be secured at any location throughout said slot, a spirit level carried by the lower portion of said frame, a pair of U-tubes supported in vertical disposition by said frame and partly filled with a liquid whose specific gravity is comparatively great, gage scales secured in position between the legs of said tubes, closed tubular systems which open at their lower extremities into the water outside the ship and on a level with the keel thereof, flexible tubular connections between the upper extremities of said systems and one of the legs of said U-tubes, air vent valves in said systems, and three way cocks located in the lower extremities of said systems and adapted to be opened to permit the flow of outside water in said systems or be closed against such flow and thereby afford drainsge from the systems into the bilge of the ship.

5. An indicator for ships comprising a pivotally mounted support, means carried thereby for indicating the inclination of a ship, means carried by the support for indicating the fore and aft draft of the ship, and sea water admitting means for actuating the fore and aft draft indicating means.

[Claim 6 not printed in the Gazette.]

1,062,292. AUDIBLE SIGNAL FOR DETERMINING THE TEMPERATURES OF SEA-WATER. ALEXANDER MCNAB, Bridgeport, Conn., assignor to The McNab Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 25, 1912. Serial No. 693,211. (Cl. 177—302.)



1. A device of the character described, comprising a closed chamber secured within a ship at a location below the surface of the sea and divided into two compartments by a thin partition made of a substance that is a

good conductor of heat, one compartment having inlet and outlet communications whereby sea water is admitted and discharged, the other compartment having all its walls especially constructed whereby the interior of said compartment will not be affected by external temperatures, a U-shaped tube of glass secured within this last mentioned compartment and having legs which are vertically disposed and terminate in hermetically sealed large bulbs, said tube being partly filled with mercury, the leg and its bulb above one column of mercury being completely filled with creosote while the other leg and bulb are only partially filled with creosote, in combination with a series of spaced platinum points extending within the completely filled leg to the interior thereof, insulated contacts, connections between said points and said insulated contacts, an insulated switch lever adapted to be swung against said contacts, a battery, a platinum point extending within the bottom of said tube in contact with the mercury and connected to one pole of said battery the other pole being connected to the switch lever, and an electric alarm bell interposed in the circuit between said lever and battery.

2. A device of the character described comprising a closed chamber secured within a ship and divided into two compartments by a thin partition made of a substance that is a good conductor of heat, one compartment having inlet and outlet communications whereby sea water is admitted and discharged, a U-shaped tube of glass secured within the other compartment and having legs which are vertically disposed and terminate in hermetically sealed large bulbs, said tube being partly filled with mercury, the leg and its bulb above one column of mercury being completely filled with creosote while the other leg and bulb are only partially filled with creosote, in combination with a series of spaced platinum points extending within the completely filled leg to the interior thereof, insulated contacts, connections between said points and contacts, an insulated switch lever adapted to be swung against said contacts, a battery, a platinum point extending within the lower portion of said tube at a point below the first named platinum points and connected to one pole of said battery, the other pole of the battery being connected to the switch lever, and an electric signal interposed in the circuit between said lever and battery.

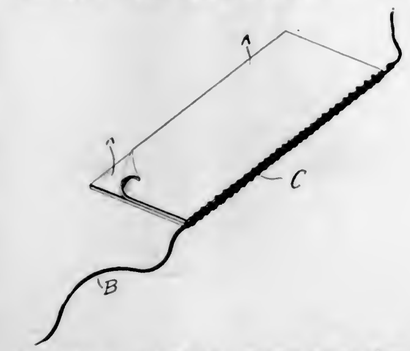
3. A water temperature annunciator comprising a receptacle, a heat conducting partition dividing the receptacle into compartments, means for admitting water to one of the compartments, means for discharging water therefrom, an expansible liquid thermometer in the other compartment, a plurality of electricity conducting points in the path of contractile movement of the liquid in the thermometer, an insulated support provided with contacts corresponding in number with the points, circuit connections between the points and contacts, a manually operable switch carried by the support and adapted for selective engagement with the contacts, a battery, an alarm, and a circuit connection between the thermometer, battery, switch, and alarm.

4. A sea water temperature annunciator comprising a receptacle adapted to be carried by a ship and disposed below the plane of the surface of the sea, means for discharging sea water into the receptacle, means for discharging sea water therefrom, a thermometer in the receptacle, means for preventing the water contacting with the thermometer but permitting the temperature of the water to affect the thermometer, a signal, an electric circuit including the thermometer and signal, a source of electrical energy in said circuit, and manually operable means for controlling the circuit.

5. A sea water temperature annunciator comprising a receptacle adapted to be carried by a ship and disposed in a plane below the plane of the surface of the sea, means for admitting sea water to the receptacle, means for discharging sea water therefrom, means for insulating the receptacle from the heat of the ship, an indicator in the receptacle, means for insulating the indicator from the water in the receptacle but permitting the same to be affected by the temperature thereof, an alarm, a source of electricity, a circuit including the source of electricity, the indicator, and the alarm, and manually operable means for controlling the circuit.

[Claims 6 to 9 not printed in the Gazette.]

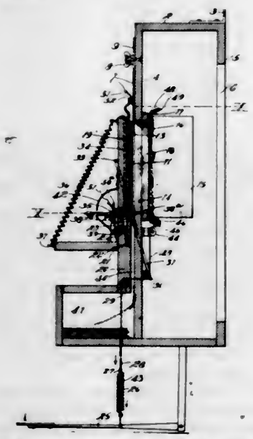
1,062,293. SEAM FOR SEWED ARTICLES. CHESTER MCNEIL, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 27, 1906. Serial No. 298,228. (Cl. 112—34.)



1. A seam composed of two fabrics whose edges meet, a cord laid along the meeting edges of said fabrics, and a line of overseaming stitches uniting the fabrics, and passing around the cord and binding the same in position against said fabrics, and means for fastening said cord to the seam at a certain point, whereby it will act as a shirring string; substantially as described.

2. A seam composed of two fabrics whose edges are superposed, a cord laid along the edges of said fabrics, and a line of overseaming stitches passing through said fabrics along one side of said cord, and around the free edges of said fabrics and said cord, whereby the edges of the fabric are secured together and a cord is held in position against said fabrics the ends of said cord projecting beyond the ends of said fabric; substantially as described.

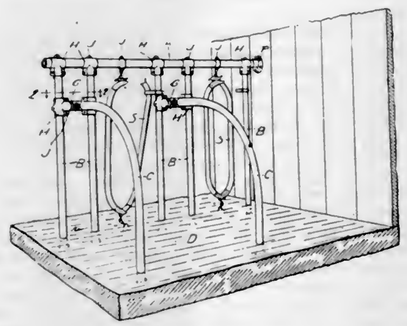
1,062,294. PHOTOGRAPHIC-PRINTING APPARATUS. LOUIS J. MITCHELL, Fresno, Cal. Filed June 8, 1911. Serial No. 632,083. (Cl. 95—73.)



1. A photographic printing apparatus comprising a suitable casing having a front and a back, each having an opening, shutters pivoted at the sides of the openings and operating inside of the casing, a foot pedal, a link connecting the shutters for simultaneously moving the same, a spring for maintaining the shutters closed, a flexible, resilient device connecting the pedal and one of the shutters whereby, when the pedal is moved, the shutters are opened, a tiltable actuator journaled on the casing, a medium connecting the actuator and said pedal, an automatically opening platen pivoted on the back and bearing upon the tiltable actuator, and a plate holder adjustable upon the back over the opening therein against a plate in which may be held a sensitized sheet, said actuator being effective when the pedal is pressed to force the platen up, further movement of the lever acting through the flexible device to open the shutters.

2. In a photographic printing apparatus, the combination of a casing having a back with an aperture, shutters pivoted at the sides of the opening, a link connecting the shutters to operate the same in unison, a spring for automatically closing the shutters, a plate holder on the back and adjacent to the opening, a collecting box below the aperture, a sheet stop at the lower edge of the plate-holder in a recess formed for its reception in the casing, springs projecting the stop forward beneath the edge of the plate-holder, a conduit extending from the stop to the collecting box, a tripper connected to the stop for pulling it back to open the conduit to allow printed sheets to drop, a platen for pressing sheets on a negative, its retracting spring, a resilient arm on the platen for engaging the tripper, a tiltable actuator journaled on the case for pressing the actuator against the plate-holder, a pedal, a connection coupling the pedal and the actuator, and an extensible connection coupling the pedal and the shutters, the initial movement of the pedal lifting the platen and the subsequent movement opening the shutters and operating conversely on the release of the pedal.

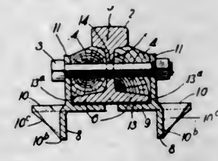
1,062,295. CATTLE-STALL. ALBERT H. NELLER, Fairfield, Iowa, assignor to Louden Machinery Company, Fairfield, Iowa, a Corporation of Iowa. Filed Oct. 2, 1909. Serial No. 520,706. (Cl. 119—27.)



1. In cattle stalls, the combination with a top rail, of vertically disposed posts spaced apart and arranged in pairs, a horizontally disposed member inserted in the space between each pair of posts below the top rail with its ends abutting the adjacent sides of the posts, clamps connecting the ends of the member to the posts, and a stall partition having its lower end connected to the stall floor, and its upper end spaced apart from the posts and connected to the central portion of the horizontal member.

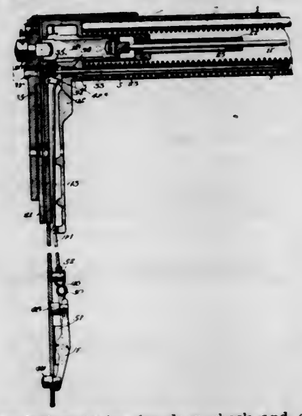
2. In cattle stalls, the combination with a top rail, of vertically disposed posts spaced apart and arranged in pairs, a short horizontally disposed member placed between the posts below the top rail, vertically disposed clamps connecting the ends of the horizontally disposed member to the respective posts, a stall partition having its lower end connected to the stall floor, and a horizontally disposed clamp connecting the upper end of the partition to the horizontally disposed member.

1,062,296. INSULATED RAIL-JOINT. JOHN P. NOONAN, Pittsburgh, Pa. Filed Feb. 21, 1912. Serial No. 679,020. (Cl. 239—5.)



A rolled splice bar comprising a base, an integral substantially vertical flange extending lengthwise of the base at the longitudinal center thereof, the middle portion of the base at one side only of the flange having a girder portion bent downwardly into a substantially vertical part and inclined parts connecting the ends of the vertical part with the horizontal part of the base, the base at the opposite side of the flange being continuous from end to end of the splice bar, substantially as described.

1,062,297. REGULATING DEVICE FOR DOOR CHECKS AND CLOSERS. PER ERIK NORDQVIST, Chicago, Ill., assignor to Concealed Door Check Company, Santa Barbara, Cal. Filed May 3, 1910. Serial No. 559,207. (Cl. 16—88.)



1. A regulating device for door check and closer comprising a fluid cushioning means, a valve for controlling the flow of fluid, and means for adjusting said valve, in combination with a push-button device having means for controlling said adjusting means to arrest the action of said door check to maintain said door in any desired open position.

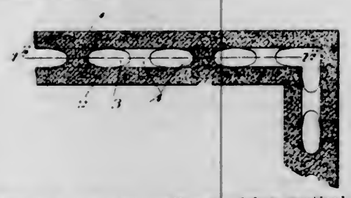
2. A regulating device for door check and closer comprising a fluid cushioning means, a valve for controlling the flow of fluid, and means for adjusting said valve, in combination with a double push-button device having means for controlling said adjusting means to arrest the action of said door check to maintain said door in any desired open position, said device including a rocker arm, and a plurality of push buttons for actuating said arm.

3. A regulating device for door check and closer comprising a fluid cushioning means, a valve for controlling the flow of fluid, and means for adjusting said valve, in combination with a push-button device having means for controlling said adjusting means to arrest the action of said door check to maintain said door in any desired open position, said device including a rocker arm, a plurality of push buttons for actuating said arm, and a spring adapted to hold said arm in either of its two limiting positions.

4. A regulating device for door check and closer comprising a fluid cushioning means, a valve for controlling the flow of fluid, and means for adjusting said valve, in

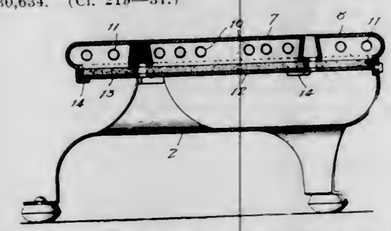
combination with a push-button device having means for controlling said adjusting means to arrest the action of said door check to maintain said door in any desired open position, said device including a rocker arm, a plurality of push buttons for actuating said arm, and a spring adapted to hold said arm in either of its two limiting positions, a valve controlling arm, and a link connecting said controlling arm and rocker arm.

1,062,298. MONOLITHIC CONCRETE WALL. JOHN A. PETERSON, Minneapolis, Minn. Filed Dec. 9, 1912. Serial No. 735,635. (Cl. 72—47.)



A monolithic concrete wall comprising vertical plates spaced laterally to form an intervening air space and connected by staggered vertical and horizontal rows of integrally formed cross ties, said cross ties being made flaring at their junction with the said wall plates, the flaring portions of the cross ties of one of the horizontal rows extending substantially into the flaring portions of the cross ties of the adjacent horizontal rows.

1,062,299. ELECTRIC STOVE. CARL A. PFANSTIEHL, North Chicago, Ill. Filed Nov. 11, 1912. Serial No. 730,634. (Cl. 219—37.)



1. An electric stove having a central circular part, an outer annular part concentric therewith, resistors for heating each part independently of the other, and means to lead current to said resistors independently, said two parts being separated to afford between them an annular air-space whereby, when the central part is heated alone the conduction of heat to the outer annulus is substantially prevented.

2. An electric stove having a central circular part, an annular part concentric therewith, resistors for heating said parts independently, means to lead current to said resistors, said parts being separated to afford between them an annular heat-insulating space whereby when the central part is heated alone the outer annulus remains substantially unheated.

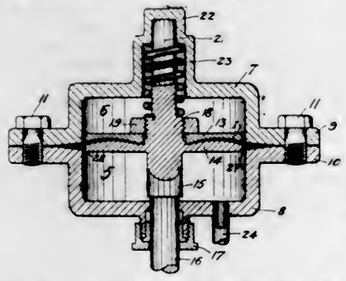
3. An electric stove having a central part and an outer annulus, a resistor in each of said parts, means to lead current to said resistors independently or simultaneously in parallel or in series, said means consisting of four plugs, one connected to one end of both resistors, one to the other end of one resistor and the other to the end of the other resistor, and a fourth having two parts, one of which is connected to one end of one resistor and the other is connected to the corresponding end of the other resistor, and jacks adapted to fit the first-named plug and either of the others, or alternatively, to fit simultaneously the second and third-named plugs, the second, third and fourth plugs being arranged as described at such intervals that the jacks can not fit adjacent plugs of the second, third and fourth simultaneously.

4. An electric stove having a central part and an outer annulus, a resistor in each part, a series of four plugs, the first of which is connected to one end of both resistors, the second of which is connected to the opposite end of one resistor, the fourth of which is connected to the opposite end of the other resistor and the third of which has two parts, one having electrical connection with the second and the other electrical connection with the fourth plugs, jacks adapted to fit said plugs, the second, third and fourth plugs being so placed that the jacks can not simultaneously be placed on adjacent plugs thereof but the first plug being placed at sufficient distance from the second that both jacks can fit the first and second plugs, for the purpose set forth.

5. In an electric stove, a top-plate having a circular depression between its center and circumference whereby it is divided into a central part and an outer annulus, a resistor in each part, a plastic-insulating material surrounding the resistors and filling the top-plate.

[Claims 6 to 11 not printed in the Gazette.]

1,062,300. MEANS FOR FORMING AND SUPPORTING DIAPHRAGMS. GUY CARLETON PIERCE, Los Angeles, Cal., assignor to California Valve and Air Brake Company, Los Angeles, Cal., a Corporation of California. Filed Apr. 18, 1912. Serial No. 691,769. (Cl. 50—21.)



1. In a diaphragm device, a diaphragm, a pair of diaphragm supports, means to fasten said supports together on opposite sides of said diaphragm, one of said supports having a concave face and the other support having a convex face extending into said concave face, said diaphragm being adapted to make a free preliminary movement from one to the other of said faces and to conform to the face with which it is in contact.

2. In a diaphragm device, a diaphragm, and a pair of reciprocatory diaphragm supports having faces directed toward said diaphragm, said faces maintaining the said diaphragm in a constant convexity toward one of said supports and being separated to permit a limited vibration of the diaphragm independently of the supports.

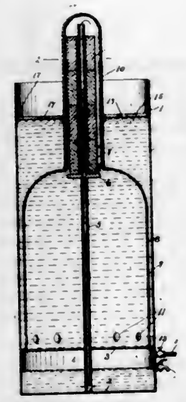
3. In a diaphragm device, a diaphragm, and a pair of diaphragm supports having faces directed toward said diaphragm, said faces maintaining the said diaphragm in a constant convexity toward one of said supports, there being an outwardly widening space between said faces.

4. In combination, a casing, disk-like diaphragm supports adapted to reciprocate in said casing, a diaphragm inclosed within the casing and attached to the casing and forming a partition which divides the interior of said casing into two compartments, said supports being spaced apart to permit the diaphragm to have a limited vibration independently thereof, one of said supports being concaved and that portion of the diaphragm between the supports being dished, and means projecting from the diaphragm supports to the exterior of said casing to transmit movement to the parts controlled by the diaphragm.

5. In combination, a casing, disk-like diaphragm supports adapted to reciprocate in said casing, a diaphragm inclosed within the casing and attached to the casing and forming a partition which divides the interior of said casing into two compartments, said supports being spaced apart to permit the diaphragm to have a limited vibration independently thereof, one of said supports being concaved and that portion of the diaphragm between the supports being dished, and means projecting from the diaphragm supports to the exterior of said casing to transmit movement to the parts controlled by the diaphragm, and stop means limiting the movement of said supports to prevent said diaphragm from moving far enough to reverse the curvature thereof.

[Claims 6 to 8 not printed in the Gazette.]

1,062,301. GAS-GENERATOR. CHARLES ROSANZ, New York, N. Y. Filed Aug. 4, 1910, Serial No. 575,428. Renewed May 4, 1912. Serial No. 695,323. (Cl. 48—22.)



1. In a gas generator, the combination with a tank having a bottom, of a false bottom in said tank spaced apart from said first-mentioned bottom to form a storing chamber, a pipe extending in said chamber and having a communicating opening therein letting into said chamber and also extending above said false bottom to form a holder adapted to receive blocks of chemical having openings therein, and a cap in said tank adapted to cover said chemical and having an extension portion forming a chamber around the chemical on said holder, said pipe having an opening in the top thereof, whereby gas generated from said chemical may pass into said storing chamber.

2. The combination with a tank divided into upper and lower compartments by a false bottom, said upper compartment being adapted to contain a fluid, and said lower compartment being adapted to contain a washing fluid, forming a washing chamber for gas to be generated, a pipe extending from the bottom of said tank through said false bottom and above the top of said tank, said pipe having communicating openings therein between its interior and said gas-washing compartment, a collar on said pipe adapted to form the sole support for a column of carbid mounted on said pipe, a cap for said carbid and said pipe, comprising a large dome and an extension of somewhat smaller dimensions adapted to surround said carbid, said cap having openings therein, whereby the fluid in said tank may enter into said cap, a floating cover for said tank, means for locking said cover in said tank, and an outlet for said lower gas-washing compartment.

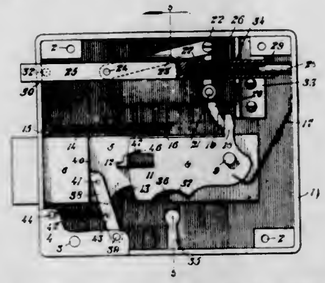
3. In a gas generator the combination with a tank adapted to contain water, a pipe extending from the bottom of said tank to a point above the top thereof and provided with a gas outlet near its bottom, the upper end of said pipe being open, means carried by said pipe to support carbid near its upper end, a cap comprising a lower, larger dome-like part open at its lower end and extending a considerable distance below the carbid support on the pipe, and an upper, central contracted part extending upward from the carbid support and inclosing the upper end of the pipe whereby said contracted part projects above the tank and forms a handle part by which the cap may be readily lifted, the contracted portion of the cap forming a gas chamber of small capacity surrounding the carbid and the upper end of the pipe.

4. The combination with a tank divided into upper and lower compartments by a false bottom, the lower compartment forming a washing chamber for the gas, a gas outlet pipe extending from the bottom of said tank through the false bottom and above the top of the tank, the upper end of said pipe being open and the lower end opening into the washing chamber, a carbid support on said pipe near its upper end, a cap comprising a lower large dome portion open at its lower end and extending a considerable distance below the carbid support, and an upper central contracted portion extending upwardly from the carbid support and completely inclosing the upper part of the outlet pipe, whereby said contracted part will form a gas chamber of small dimensions and will project above the tank and serve as a handle.

5. The combination with a tank, a removable cap extending near the bottom of the tank, said cap being formed with a portion of large diameter wholly below the normal water level of the tank and open at its lower end and with a long comparatively narrow dome portion extending upwardly from the top of the larger portion, said dome portion being closed at its upper end and forming a gas space, the lower end of said dome portion being below the normal water level of the tank and having a diameter no greater than any other part of the dome, a holder for a cake of gas generating material, the support thereof being below the normal water level and adjacent the contracted portion of the cap whereby when the cake of gas generating material is in place it forms a substantial closure for the lower end of the said contracted portion of the cap.

[Claim 6 not printed in the Gazette.]

1,062,302. LOCK. CHARLES SCHOENFELD, Canton, Ohio. Filed May 20, 1912. Serial No. 698,369. (Cl. 70—75.)



1. In a lock of the character described, a casing, a bolt carried within said casing, a stud located upon said bolt, tumblers pivoted within said casing, said tumblers provided with slots adapted to register with said stud, means for normally projecting said bolt out of said casing, means for limiting the movement of said bolt, springs connected to said tumblers and adapted to throw said slots out of alinement with said stud, a spring pressed bar slidably mounted within said casing, the outer end of said bar being provided with a beveled face, means for limiting the movement of said bar and means connected to said bar and adapted to contact with said tumblers.

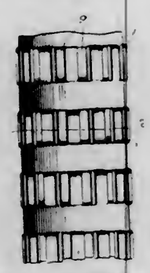
2. In a lock of the character described, a casing, a bolt carried by said casing, a stud located upon said bolt, tumblers pivoted within said casing, said tumblers provided with slots adapted to register with said stud, means for normally projecting said bolt out of said casing, means for limiting the movement of said bolt,

springs connected to said tumblers and adapted to throw said slots out of alinement with said stud, a spring pressed bar slidably mounted within said casing, the outer end of said bar being provided with a beveled face, means for limiting the movement of said bar, means connected to said bar and adapted to contact with said tumblers, and means for indicating when said bolt is in locked position.

3. In a lock of the character described, a casing, a bolt carried within said casing, a stud located upon said bolt, tumblers pivoted within said casing, said tumblers provided with slots adapted to register with said stud, means for normally projecting said bolt out of said casing, means for limiting the movement of said bolt, springs connected to said tumblers and adapted to throw said slots out of alinement with said stud, a spring pressed bar slidably mounted within said casing, the outer end of said bar being provided with a beveled face, means for limiting the movement of said bar, and means connected to said bar and adapted to contact with said tumblers, said tumblers adapted to be raised to bring the slots into alinement with said stud and the bolt adapted to be withdrawn by a single operation of a suitable key.

4. In a lock of the character described, a casing, a bolt carried within said casing, said bolt provided with slots, a stud carried by the bolt adapted to register with the slots, means for normally projecting said bolt out of said casing, means for limiting the movement of said bolt, said bolt provided with a shoulder adapted to be engaged by a key, tumblers located upon either side of said bolt, said tumblers provided with concave edges adapted to contact with the key, springs adapted to throw said slots out of alinement with said stud, tails provided upon said tumblers, a lever pivoted intermediate its ends to said casing, a post located at one end of said lever adapted to contact with said tails, a link pivoted at the other end of said lever and a spring pressed bar pivoted to said link.

1,062,303. DRAINAGE-CASING. ANDREW SMITH, San Mateo, Cal., assignor to Smith Metal Perforating Company, San Mateo county, Cal. Filed June 2, 1911. Serial No. 630,888. (Cl. 166—8.)

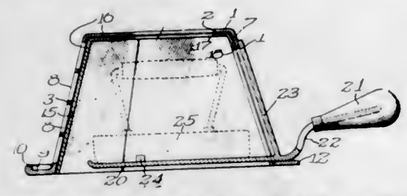


1. A drainage casing comprising a sheet of metal having a plurality of slits formed therein by shearing the metal of the plate to form projections whose planes are parallel with the surface of the plate, the outer surfaces of the projections then lying out of the general plane of the sheet in opposite directions on opposite sides thereof, and the inner surfaces of the projections upon one side lying within the plane of the sheet.

2. A drainage casing comprising a sheet of metal having a plurality of slits formed therein by shearing the metal of the plate to form projections whose planes are parallel with the surface of the plate, the outer surface of the projection then lying out of the general plane of the sheet in opposite directions on opposite sides thereof and the inner surfaces of the projections lying within the plane of the sheet, substantially as described.

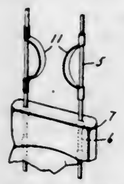
3. A drainage casing comprising a sheet metal body having a plurality of parallel slits formed therein by shearing the metal of the plate to form projections extending alternately in opposite directions, each projection being substantially the thickness of the plate throughout its extent and comprising the metal between adjacent slits, the main body of each of said projections being straight and parallel with the plane of the plate to thereby form slots between the adjacent edges of the oppositely extending projections which are of uniform width.

1,062,304. KITCHEN APPLIANCE. MARGARETHA STEINEKE, Chicago, Ill. Filed July 8, 1911. Serial No. 637,519. (Cl. 126—227.)



In an appliance of the kind described, the combination of a sheet metal shell, comprising a plurality of upwardly and inwardly inclined flat sides, a top provided with an opening therethrough, one of said sides provided with an opening therethrough, and the remainder of said sides provided with perforations therethrough, a removable lining for said shell corresponding substantially in contour therewith, and having an opening through one side thereof arranged to register with the opening through said shell side, means for supporting a sad iron within said shell, comprising an iron support provided with a suitable handle and with a closure for said opening in said shell.

1,062,305. INCANDESCENT LAMP. CHARLES P. STEINMETZ, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 8, 1908. Serial No. 452,057. (Cl. 176—16.)



1. The combination of an evacuated envelop, an incandescing conductor disposed therein, means for supplying the same with current, and means for furnishing gas-absorbing material during operation of the lamp by the disintegrating action of an electrical discharge taking place across a portion of the evacuated space.

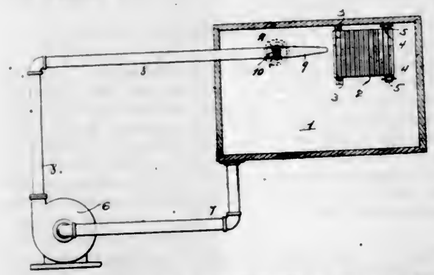
2. The combination of an evacuated envelop, a filament disposed therein, and a conductor containing metal whose vapors have great affinity for gases connected with said filament so as to form a terminal for the easiest path for electrical discharges across the filament during operation of the lamp.

3. The combination of an evacuated envelop, filaments disposed therein, leading-in wires supplying current to said filaments and conductors consisting of metals having great affinity for gases when vaporized electrically connected to said leading-in wires; the distance at some point between said conductors being less than that between the leading-in wires, said conductors forming at said point terminals for the easiest path for electrical discharges across the filament circuit and being adapted to vaporize by such discharges upon a deterioration of the vacuum in the envelop during operation of the lamp.

4. The combination in an incandescent lamp of an evacuated envelop, filaments disposed therein, means for supplying said filaments with current, and means made operative by a deterioration of the vacuum in said envelop during the life of the lamp for producing therein a metal vapor having a great affinity for gases and thereby automatically acting to restore the vacuum during operation of the lamp.

5. The combination in an incandescent lamp of an evacuated envelop, filaments disposed therein, means for supplying said filaments with current, and means made operative by the electrical discharge occurring upon a deterioration of the vacuum in said envelop for producing therein a metal vapor having a great affinity for gases and thereby automatically acting to restore the vacuum during operation of the lamp.

1,062,306. APPARATUS FOR DISINTEGRATING FIBROUS MATERIAL USED IN THE MANUFACTURE OF PAPER-PULP. WILLIAM H. STOBIE, Waterville, Me., assignor to Hollingsworth & Whitney Company, Boston, Mass. Filed Apr. 26, 1912. Serial No. 693,477. (Cl. 92—1.)



1. In apparatus for disintegrating or dividing fibrous paper stock, the combination of a serrated surface, a pump and a nozzle connected with the pump for discharging the stock against said serrated surface, the said nozzle being so located with relation to the serrated surface that the stock will strike the latter a glancing blow.

2. In apparatus for disintegrating or dividing fibrous paper stock, the combination of a tank, a pump, a pipe leading from the tank to the pump, a pipe leading from the pump to the tank, a nozzle on said last mentioned pipe, and a serrated plate located in the path of discharge from said nozzle.

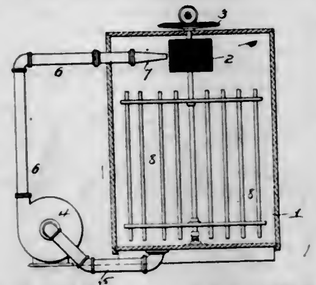
3. In apparatus for disintegrating or dividing fibrous paper stock, the combination of a serrated surface, means for adjusting same, a pump, a nozzle connected with the pump for discharging the stock against said serrated surface, and means for changing the position of the nozzle with relation to said serrated surface whereby the angle of incidence may be changed.

1,062,307. APPARATUS FOR DISINTEGRATING FIBROUS MATERIAL USED IN THE MANUFACTURE OF PAPER-PULP. WILLIAM H. STOBIE, Waterville, Me., assignor to Hollingsworth & Whitney Company, Boston, Mass. Filed Apr. 26, 1912. Serial No. 693,479. Renewed Feb. 20, 1913. Serial No. 749,728. (Cl. 92—1.)

1. In apparatus for disintegrating and dividing fibrous matter in the formation of pulp, the combination of a cylinder having a grooved or roughened surface and mounted to turn, and means for discharging a stream of pulp stock tangentially against said roughened surface.

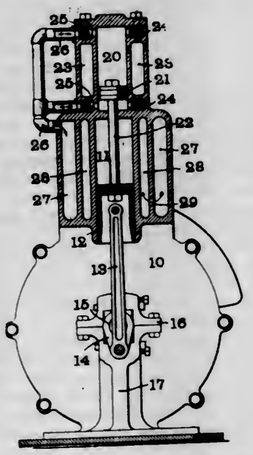
2. In apparatus for disintegrating and dividing fibrous matter in the formation of pulp, the combination of a grooved or roughened cylinder mounted to turn and oppositely disposed nozzles for projecting streams of pulp stock against opposite sides of the cylinder.

3. In apparatus for disintegrating and dividing fibrous matter in the formation of pulp stock, the combination of a grooved or roughened cylinder, mounted to turn, gearing for turning same and means for discharging a stream of pulp tangentially against the cylinder.



4. In apparatus for disintegrating and dividing fibrous matter in the formation of pulp stock, the combination of a tank, a grooved or roughened cylinder located within the tank and mounted to turn, means for continuously withdrawing the pulp from the tank and discharging it in the form of a jet tangentially against the cylinder, and an agitator located within the tank below the cylinder.

1,062,308. INTERNAL-COMBUSTION ENGINE. WILLIAM G. THUMMEL, St. Louis, Mo. Filed Apr. 10, 1911. Serial No. 619,973. (Cl. 123—6.)

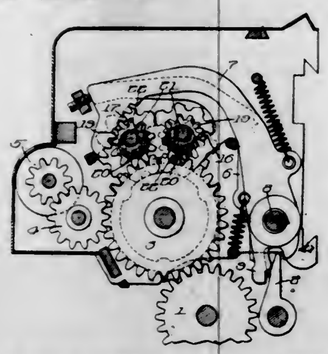


1. The combination with the cylinder of an internal combustion engine, of an air compressor arranged in tandem therewith, said cylinder and air compressor having a common head, whereby the heat from the head of said cylinder is dissipated by said air compressor, an air jacket surrounding said cylinder and receiving the air from said compressor, and an auxiliary motor receiving the air from said jacket.

2. The combination with the cylinder of an internal combustion engine, of an auxiliary fluid pressure motor, a valve opening automatically to connect said cylinder and auxiliary motor to reduce the pressure in the former to a predetermined amount at the beginning of the power stroke, and mechanically operated means for opening said valve to exhaust said cylinder into said auxiliary motor at the end of the power stroke.

3. In an internal combustion engine, the combination with a casing having cylinders in its upper part and bifurcated at its lower part, of a pair of turbines housed in the bifurcations and mounted upon the crankshaft of the engine, and means for delivering the products of combustion from said cylinders to said turbines.

1,062,309. CALCULATING-MACHINE. JOHN C. WAHL, Chicago, Ill., assignor, by mesne assignments, to Wahl Adding Machine Company, Wilmington, Del., a Corporation of Delaware. Filed Aug. 17, 1911. Serial No. 644,575. (Cl. 235—139.)



1. In a calculating-machine totalizer, a series of carrying gears, a series of carried pinions, each carried pinion serving as a connection between a carrying gear and the next higher carrying gear of the series, a series of eccentrics upon which said carried pinions are mounted, and means for rotating the eccentrics.

2. In a calculating-machine totalizer, a series of carrying gears, a series of carried pinions, each carried pinion serving as a connection between a carrying gear and the next higher carrying gear of the series, a series of eccentrics upon which said carried pinions are mounted, and a series of gear sectors for operating said eccentrics.

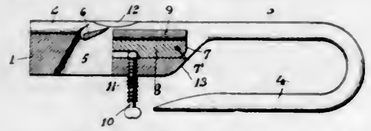
3. In a calculating-machine totalizer, a series of carrying wheels, a series of carried pinions, each of the carried pinions serving as a connection between a carrying wheel and the next higher carrying wheel of the series, a series of eccentrics supporting the carried pinions, said eccentrics being distributed into two groups, a series of arms for operating said eccentrics, said arms being likewise distributed in two groups, each arm of one group being furnished with a spur gear sector while each arm of the other group is furnished with an annular gear sector, and a series of gears formed integrally with the eccentrics and meshing with the gears formed upon the arms, for the purpose described.

4. In a calculating-machine totalizer, a series of carrying gears, a series of carried pinions, each of said carried pinions being adapted to serve as a connection between a carrying gear and the next higher carrying gear of the series, a series of eccentrics upon which the carried pinions are mounted and by means of which they are approached to and receded from the carrying gears, said series of eccentrics being distributed in two groups, to thereby gain more room and to allow the strengthening of the parts.

5. In a calculating-machine totalizer, a series of carrying gears, a series of carried pinions, each of the carried pinions serving as a connection between a carrying gear and the next higher carrying gear of the series, a series of eccentrics mounted upon two shafts and spaced alternately upon said shafts, a series of gears rigidly attached to said eccentrics, the carried pinions being mounted upon the eccentrics, a means for rotating the eccentrics upon the shaft to thereby bring the carried pinions into mesh with their cooperating carrying gears and to withdraw the carried pinions away from their cooperating carrying gears, for the purpose described.

1,062,310. TOOL. HARRY S. WAITE, Yucca, Ariz. Filed Feb. 24, 1912. Serial No. 679,786. (Cl. 81—9.5.)

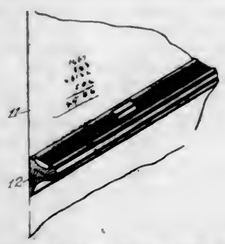
1. A tool of the class described comprising a wire engaging member provided with a wire receiving groove, a cutting blade projecting within the surface of the groove and inclined upwardly with respect thereto, and an adjusting member comprising a block pivoted within said wire engaging member and provided with a groove designed to coöperate with the first-mentioned groove, said block being adjustable relatively to the blade whereby the depth of the cut may be regulated.



2. A tool of the class described comprising a wire engaging member provided with a wire receiving groove and having an opening formed therein below the groove, a cutting blade carried by said member and projecting within the surface of the groove above the said opening, a block pivoted within said wire engaging member and adjustable relatively to the blade whereby the depth of the cut may be regulated, and means for swinging said block.

3. A tool of the class described comprising a wire engaging member provided with a wire receiving groove and having an opening formed therein below the groove, a cutting blade carried by said member and projecting within the surface of the groove above the said opening, a block pivoted within said wire engaging member and adjustable relatively to the blade whereby the depth of the cut may be regulated, means for swinging said block, and a handle connected to said wire engaging member whereby the latter may be pulled along the length of wire to strip the same.

1,062,311. APPARATUS FOR CLEANING CHALK-BOARD ERASERS. THOMAS WALLACE, Valparaiso, Ind. Filed Aug. 1, 1910. Serial No. 575,038. (Cl. 35—15.)



1. The combination with a blackboard, of an eraser-cleaning device in the form of a grid supported adjacent to said board and comprising side-members extending lengthwise of said board and cross-bars extending transversely thereof to afford transversely extending cleaning ribs.

2. The combination with a blackboard, of a trough supported adjacent to said board and a grid supported to extend over said trough for cleaning said erasers when the latter are rubbed across said grid and comprising side-members extending lengthwise of said trough and cross-bars extending transversely thereof to afford transversely extending cleaning ribs.

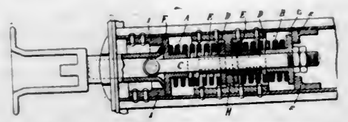
3. The combination with a blackboard, of a trough supported adjacent to said board, a grid supported to extend over said trough, and comprising side-members extending lengthwise of said trough and cross-bars extending transversely thereof to afford transversely extending cleaning ribs and a ledge extending along the front edge of said grid, for the purpose set forth.

4. The combination with a blackboard and its trough at the lower end thereof, of a grid supported to extend over said trough for cleaning erasers when the latter are rubbed across the grid, and comprising side-members extending lengthwise of said trough and cross-bars extending transversely thereof to afford transversely extending cleaning ribs, for the purpose set forth.

5. The combination with a blackboard and its trough at the lower end thereof, of a grid supported to extend over said trough for cleaning erasers when the latter are rubbed across the grid, and comprising side-members extending lengthwise of said trough and cross-bars extending transversely thereof to afford transversely extending cleaning ribs, and a ledge extending along the front edge of the grid, for the purpose set forth.

[Claims 6 and 7 not printed in the Gazette.]

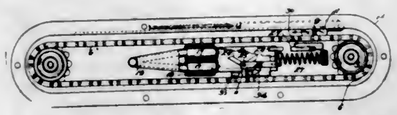
1,062,312. BUFFING AND DRAFT GEAR FOR RAILWAY AND OTHER ROLLING-STOCK. CECIL WATSON, London, England. Filed Oct. 23, 1911. Serial No. 656,162. (Cl. 213—42.)



1. For a combined buffing and draw gear and similar purposes, a drawbar, springs in tandem on said drawbar, flanged ferrules sliding one within the other separating said springs, said ferrules being oppositely arranged, slotted sleeves on said ferrules projecting within the springs and ferrules having sleeve portions projecting inside the outer ends of the springs, the sleeves of the various ferrules coöperating on contact one with the other to regulate the sequence of the action of the springs substantially as described.

2. For a combined buffing and draw gear and similar purposes, a drawbar, springs in tandem on said drawbar, a stop bracket separating said springs, a flanged slotted ferrule passing through said bracket and adapted to compress one spring, a second flanged slotted ferrule passing through the first ferrule and adapted to compress the other spring, and ferrules having sleeve portions projecting inside the outer ends of the springs, the sleeves of the various ferrules coöperating on contact one with the other to regulate the sequence of the action of the springs substantially as described.

1,062,313. REEL-ACTUATING DEVICE FOR CAMERAS. ALFRED R. WHITMAN, Berkeley, Cal. Filed May 31, 1912. Serial No. 700,654. (Cl. 95—31.)



1. In a camera, the combination of a film winding reel, and means for revolving the reel, to wind on exposed area of the film, said means including a reciprocating actuator and an endless carrier, and operating connections between the carrier and the reel, said connections adapted to positively engage the carrier in one direction of the movement of the actuator and yieldable relatively to the carrier on the return movement of the actuator.

2. In a camera, a film winding apparatus including a reel upon which the film is windable, a rotary element detachably engaged by the reel, means including an endless carrier for revolving said element to turn the reel, a reciprocating actuator, and a clutch device on the actuator operative on the carrier in one direction only.

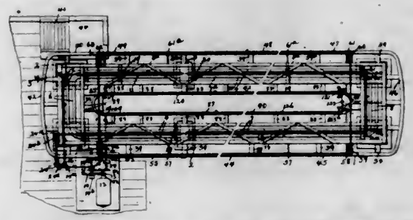
3. The combination in a camera, of a film winding apparatus, said apparatus including an endless carrier, a slidable actuator engageable therewith having a clutch member operative upon the carrier in one direction only, said carrier designed to wind an exposed portion of the film, an air compressing mechanism, and means controlled by a returning portion of the carrier adapted to operate said mechanism simultaneously with the film shifting reciprocation of the actuator.

4. The combination in a camera, of a film winding apparatus, said apparatus including a slidable actuator and an endless carrier engaged thereby and adapted to wind an exposed portion of the film, an air compressing mechanism operated simultaneously with and by a returning portion of the carrier, and manually controlled means for releasing the air compressing mechanism after the film has been adjusted.

5. In a camera, the combination of a web and a winding reel therefor, a rotary driver to which the reel may be attached, and a means for actuating the driver to wind an exposed area of film, said means including an endless chain engageable with the driver and a reciprocating clutch operative upon the chain in one direction only.

[Claim 6 not printed in the Gazette.]

1,062,314. AMUSEMENT DEVICE. WILLIAM F. WITTICH, Erie, Pa. Filed Oct. 18, 1909. Serial No. 523,246. (Cl. 104—111.)



1. In an amusement device the combination with a body of water; of a plurality of tracks making complete circuits; carriers on said tracks; means for driving said carriers, said means being deflected at the point in the track to permit entrance into and egress from the carriers.

2. In an amusement device the combination with a body of water; of a track arranged above the water making a complete circuit; a carrier on the track; means for driving the carrier, said means being deflected out of the path of the carrier to permit the entrance to and egress from the carrier.

3. In an amusement device the combination with a body of water; of a plurality of tracks making complete circuits in the form of loop above the water, said tracks being declined at the end of the loop to move the carrier around the ends of the loop by gravity; carriers on said tracks; means for driving said carriers, said means being deflected out of the path of the carriers at the ends of the loops.

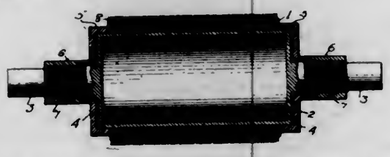
4. In an amusement device the combination with a body of water; of a plurality of tracks making complete circuits in the form of a loop above the water and having inclines at the end of the loop for moving a carrier around the end of the loop; carriers on said tracks; means for driving said carriers, said means being deflected out of the paths of the carriers at the ends of the loop and out of the path of carriers on the other track.

5. In an amusement device the combination with a body of water; of a first track making a complete circuit in the form of a loop above the water approaching and receding from the water along the sides of the loop, a decline at the end of the loop; carriers suspended from said track and having a boat thereon brought into engagement with the water at the bottom of the declines; means for driving the said carrier adapted to engage said carrier on the inclines and disengage therefrom on the declines; a second track making a complete circuit outside the first track and having a carrier thereon, having a wheel adapted to be rotated by the water and to throw water on the occupant of the car-

rier; means for driving the carrier on the second track; a third track within the first track making a complete circuit in the form of a loop; a carrier on said track having devices for carrying an occupant in a swimming position in the water; means for driving said third carrier, said driving means for the several carriers being arranged to move the carriers in opposite directions.

[Claim 6 not printed in the Gazette.]

1,062,315. IMPALING-ROLL FOR FRUIT-SEEDING MACHINES. WILLIAM CLARENCE ANDERSON, San Jose, Cal. Filed Feb. 21, 1910. Serial No. 545,222. (Cl. 146—5.)



An impaling roll section for fruit seeding machines, comprising a cast metal ring with a plurality of circumferential rows of impaling pins embedded therein and projecting therefrom, the pins in adjacent rows being in staggered relation and the pins being arranged in equidistant relation.

1,062,316. SIDE FRAME FOR RAILWAY-CARS. ALBERT J. BATES, Chicago, Ill. Filed Nov. 8, 1912. Serial No. 730,206. (Cl. 105—243.)

1. A side frame for railway cars comprising an upset and shortened compression member and an elongated tension member integrally connected at their ends.

2. A side frame for railway cars comprising an upset and shortened compressioned member and an elongated tension member formed from a rolled steel beam, the ends of the tension member being integrally connected with the ends of the compression member intermediate of the ends of the beam.

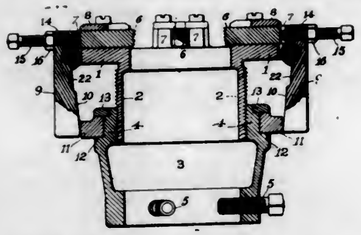
3. A side frame for railway cars comprising a compression member and a tension member formed from a rolled steel beam, the ends of the tension member being integrally connected with the ends of the compression member intermediate of the ends of the beam, said compression member comprising a part of the beam upset and shortened and retained in its original plane and said tension member comprising a part of the beam corresponding to said compression member part but stretched to form the tension member.

4. A side frame for railway cars comprising a compression member and a tension member formed from a rolled steel beam, said beam being slit longitudinally between its ends to form an upper and a lower part, the lower part being stretched to form the tension member and the upper part being contracted lengthwise to form the compression member.

5. An integral side frame for railway cars comprising an upset compression member and an elongated stretched tension member.

[Claims 6 to 14 not printed in the Gazette.]

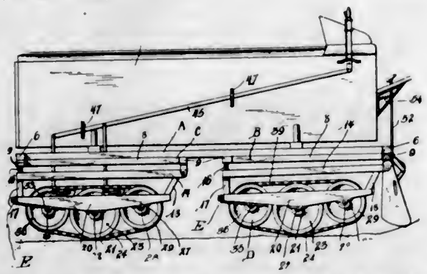
1,062,317. DIE-STOCK. PAUL E. BECKER, Bridgeport, Conn., assignor to The Handy Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 31, 1913. Serial No. 745,461. (Cl. 10—120.)



1. A die stock, comprising a work holder, a die carrying head supported by and movably guided toward and away from said holder, thread cutting dies slidably carried by said head, levers pivoted to said head and having surfaces which recede as the dies perform their functions against which surfaces said dies abut, said levers having extensions which are provided with inclines on their inner edges, and an annular element having a minimized contact with said inclines which contact is constant owing to the thrust of the dies against such levers during the thread cutting operation.

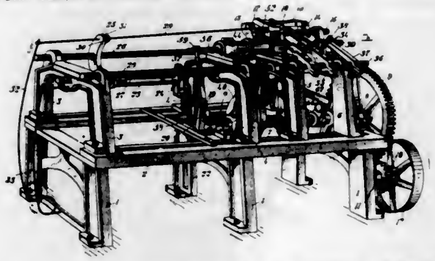
2. A die stock, comprising a work holder, a die carrying head supported by and movably guided toward and away from said holder, thread cutting dies slidably carried by said head, levers pivoted to said head and having upward extensions beyond their pivotal points against which extensions the rear ends of said dies abut, said levers also having downward extensions beyond their pivotal points which extensions are provided with inclines on their inner edges, and a comparatively narrow annular protuberance carried by the work holder and stationary as to lateral movement, with which protuberance different portions of said inclines are successively brought into minimized contact during inward or outward movement of the die carrying head.

1,062,318. DRIVING-GEAR. GEORGE C. BERLIN, Caldwell, Idaho. Filed Mar. 16, 1911. Serial No. 614,921. (Cl. 21—114.)



A vehicle comprising in combination, a main frame, front and rear supplemental frames secured thereto, pairs of driving elements respectively connected at its forward end to each supplemental frame for vertical movements, and compression springs disposed intermediate the rear ends of each supplemental frame and the driving elements, each element consisting of an end member, a longitudinal member, a diagonal member connecting the first mentioned members, diverging legs depending from either end of the longitudinal member, a frame connected to the lower ends of said legs including spaced longitudinal members a plurality of tractor wheels disposed between and journaled in the last mentioned longitudinal members, and an endless belt operating over said wheels.

1,062,319. AUTOMATIC TURNING-LATHE. JAMES R. BINNS, Canton, Ohio, assignor of one-half to Edwin D. Myers, Canton, Ohio. Filed Oct. 16, 1912. Serial No. 726,050. (Cl. 142—17.)



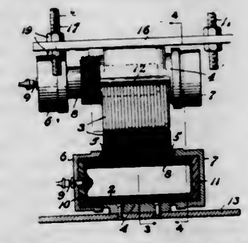
1. In an automatic turning lathe of the class described, the combination of a suitable frame, a driving shaft, said driving shaft provided with a series of cams, a crank secured to one end of the driving shaft, a link pivotally connected to said crank, a block pivoted to said link, means for guiding the block, a chain connected to said block at one end, a sliding head and one end of said chain connected to said sliding head, a rod located through said head and provided with an adjustable block, a sliding rock arm provided with a cutting knife and slid by said rod, a pattern plate adapted for contact with said rock arm, a rock shaft provided with rock arms, said rock arms provided with end forming knives, a trip lever adapted to be actuated by one of the cams of the series, an actuating arm secured to the rock arm carrying the end cutting knives, a rod pivotally connected to said rock arm and a spring located around said rod and adapted for engagement with the trip lever, substantially as and for the purpose specified.

2. In an automatic turning lathe, the combination of a frame, a driving shaft, a crank secured at one end of the driving shaft, a link pivotally connected to said crank, a block pivoted to said crank, means for guiding the block, a sliding head, guide rods adapted to guide said sliding head, means intermediate the block and the sliding head, adapted to move the sliding head in one direction, a rod located through said sliding head, said rod provided with an adjustable block, a sliding rock arm secured to said rod to be slid thereby, said rock arm provided with a turning knife, a pattern plate adapted to actuate said rock arm, a socket shaft, means for rotating said socket shaft, a reciprocating tail-bar, means for reciprocating said tail-bar, a spring adapted to move the sliding head in one direction, a rock shaft provided with rock arms, said rock arms provided with end forming knives, a stop arm adapted to limit the movement of the rock arms, a cam adapted to actuate the rock shaft and yielding means between said rock arm and cam, substantially as and for the purpose specified.

3. In an automatic turning lathe the combination of a frame, a driving shaft, a series of cams mounted upon said driving shaft, a series of standards supported upon said frame and spaced from each other, guide rods carried by said standards, a head slidably mounted upon said guide rods, means for imparting sliding movement to said head, a rod located through said head, said rod provided with an adjustable block adapted for contact with said sliding head, a sliding rock arm secured to said rod to be slid thereby, said rock arm provided with a turning knife, a pattern plate adapted to actuate said rock arm, a rotatable socket shaft and a reciprocating tail bar, a rock shaft adapted to be rocked by one of the cams of the series upon the drive shaft, rock arms secured to said rock shaft, said rock arms provided with cutting knives and means for limiting the rocking movement of the rock arms and cutting knives, substantially as and for the purpose specified.

4. In an automatic turning lathe the combination of a frame, a driving shaft, a series of cams mounted upon said driving shaft, a series of standards supported upon said frame and spaced from each other, guide rods carried by said standards, a head slidably mounted upon said guide rods, means for imparting sliding movement to said head, a rod located through said head, said rod provided with an adjustable block adapted for contact with said sliding head, a sliding rock arm secured to said rod to be slid thereby, said rock arm provided with a turning knife, a pattern plate adapted to actuate said rock arm, a rotatable socket shaft and a reciprocating tail bar, a rock shaft adapted to be rocked by one of the cams of the series upon the drive shaft, rock arms secured to said rock shaft, said rock arms provided with cutting knives and means for imparting sliding movement to said head, a rod located through said head, said rod provided with an adjustable block adapted for contact with said sliding head, a sliding rock arm secured to said rod to be slid thereby, said rock arm provided with a turning knife, a pattern plate adapted to actuate said rock arm, a rotatable socket shaft and a reciprocating tail bar, a rock shaft adapted to be rocked by one of the cams of the series upon the drive shaft, rock arms secured to said rock shaft, said rock arms provided with cutting knives and means for limiting the rocking movement of the rock arms and cutting knives, and an end cutting knife located adjacent the socket shaft and means for actuating said end cutting knife, substantially as and for the purpose specified.

1,062,320. SHOCK-ABSORBER. JOSEPH BOLAND, Pittsburgh, Pa. Filed July 3, 1912. Serial No. 707,444. (Cl. 21—105.)



1. A shock absorber comprising a resilient body, a buffer head shorter than the body and projecting therefrom with opposite ends of the body extending beyond the head, and a casing having an opening between its ends through which the buffer head extends with the ends of the body confined in the ends of the casing.

2. A shock absorber comprising a resilient body, a buffer head projecting from the body between the ends of the latter, and a casing having an opening through which the buffer head extends with the casing ends embracing the ends of the resilient body and with one of the casing ends removable.

3. A shock absorber comprising a resilient body, a buffer head projecting from the body between the ends of the latter, a casing having an opening through which the buffer head projects, the casing being open at one end with the buffer-head opening extending through said end and with the opposite end of the casing adapted to embrace one end of the resilient body, and a cap-like device for closing the open end of the casing and confining therein an end of the resilient body.

4. A shock absorber comprising a tubular flexible body open at its ends, a buffer head projecting from the body, a tubular casing adapted to embrace the body and having an opening through which the buffer head extends, a removable cap fitting and closing one end of the casing, and an inflatable tube fitting within the tubular body with the ends of the tube bearing against opposite ends of the casing.

5. A shock absorber comprising a tubular flexible body, a body-inclosing casing open for subjecting the body to shocks, a removable head for the casing, and an inflatable tube secured to the head and adapted to be entered in the tubular body.

[Claims 6 to 8 not printed in the Gazette.]

1,062,321. SLIDING RULE. JESSE W. BUZZELL, Oakland, Cal. Filed Oct. 23, 1912. Serial No. 727,274. (Cl. 235—70.)

1. A device of the class described comprising a body frame having a guide channel therein, a disk revolubly mounted thereon spaced from the channel, a slide member in the channel, a clutch member mounted lon-

gitudinally thereof normally spaced from the disk and yieldably mounted for movement into engagement with the disk, manually operated means on the frame to engage the clutch member to bear it against the disk, means for operating the slide, scales and pointers being formed on the frame, slide, and disk in form and relation for the purposes described.



2. A device of the class described comprising a body frame having a guide channel therein, and being enlarged laterally of the channel, a slide member mounted in the channel, means for moving the slide, a disk mounted revolubly on the enlargement with a portion of its periphery exposed, a longitudinally disposed laterally movable clutch member carried by the slide, adapted to engage the exposed periphery of the disk, resilient means tending to hold it out of such engagement, a push rod carried by the frame adapted to bear upon the clutch member when operated, for rotation of the disk under movement of the slide, the frame disk and slide having coördinated scales and pointers for the purpose named.

3. A device of the class described comprising a body frame having a guide channel therein, a slide member mounted in the channel, means for moving the slide, a disk revolubly mounted on the frame, having a portion of its periphery exposed toward the slide, a plate having a plurality of fingers slidably engaged in the slide, said plate being adapted to be moved into engagement with the disk, resilient elements coengaged between the slide and fingers to yieldably hold the plate out of said engagement, a transversely disposed push rod extended from the side of the frame and having its inner end disposed to bear on the plate, and coördinated scales and pointers on the frame slide and disk for the purposes named.

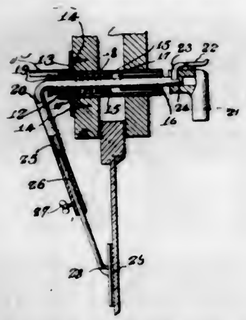
4. A device of the class described, comprising a frame having a guide channel therein, and being enlarged laterally of the channel, a circular opening being formed centrally of the enlargement spaced from the channel and rabbeted on its inner side, a disk snugly and revolubly engaged therein, a bridge member across the opening on the under side of the frame, a shaft engaged therethrough to bear upon the disk at its center, the shaft being threaded in the bridge, and adapted to be operated to hold the disk against the rabbet of the opening against casual rotation, a slide in the channel, a movable clutch member extended longitudinally thereof means to move clutch member against the disk for rotation of the disk under movement of the slide, means to hold the clutch member yieldably out of engagement with the disk, and scales and pointers on the frame slide and disk, for the purposes named.

5. A device of the class described comprising a body frame, having a guide channel therein, a disk revolubly mounted on the frame laterally of the channel, a slide in the channel, means operable at will for converting sliding movement of the slide into the rotary movement of the disk, an open frame slidable on the frame over the channel and slide a hair-line element in the last named frame disposed transversely of the channel, scales adjacent the channel and disk and on the slide, and pointers on the slide and disk for the purposes named.

[Claim 6 not printed in the Gazette.]

1,062,322. WINDOW-CLEANER. CLARENCE FRANKLIN CONANT, Portland, Oreg. Filed Nov. 20, 1912. Serial No. 732,484. (Cl. 51—59.)

A window wiper including an outer tube having internal stop lugs, an inner tube slidably and revolubly fitted in said outer tube and having oppositely disposed longitudinal slots receiving said stop lugs, a flange on the outer end of said inner tube, a helical spring on said inner tube confined between said flange and said stop lugs and normally holding said inner tube at the outer



limit of its movement, a substantially V-shaped rod having one leg projecting through said inner tube and terminally equipped with a removable grip, and a wiper on the other leg of said rod.

1,062,323. EXPLOSION-ENGINE. CHARLES LEE COOK, Louisville, Ky. Filed Aug. 23, 1909. Serial No. 514,251. (Cl. 123—170.)



1. In an explosion engine, having a cylinder and a piston, a piston comprising a web more highly conductive of heat than the balance thereof and supports on the opposite sides thereof; said web being in contact with the walls of the cylinder and with said supports.

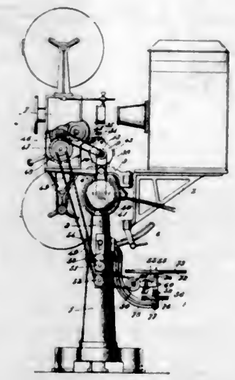
2. In an explosion engine, having a cylinder and a piston, a piston rod provided with a core of solid material more highly conductive of heat than the balance of the rod.

3. In an explosion engine, having a cylinder and a piston, a piston rod provided with a core of solid material more highly conductive of heat than the balance of the rod, said core being connected outside the cylinder with means for conducting heat rapidly therefrom.

4. In an explosion engine, having a cylinder and a piston, a piston-head comprising a copper web and a piston rod comprising a copper core; said web being in contact with the walls of the cylinder and with said core; said core having an extension outside the cylinder and the rod.

1,062,324. MOTION-PICTURE AND VOICE-REPRODUCING MACHINE. HENRY THEODORE CRAPO, New York, N. Y., assignor to George Regester Webb, Baltimore, Md. Filed Jan. 10, 1912. Serial No. 670,496. (Cl. 88—16.)

1. A motion-picture and sound reproducer machine comprising a motion-picture device, a sound reproducer device, said devices being geared to run at relatively different speeds, a drive member, and a governor-coupling controlled by the drive member and connecting both of said devices and said drive member so as to produce unison of action between the picture device and the sound reproducer without change in the relative speeds under fluctuations of speed derived from the drive member, substantially as described.



2. A motion picture and sound reproducer machine comprising a motion-picture device, a sound reproducer device, said devices being geared to run at relatively different speeds, a drive member, a governor-coupling controlled by the drive member and connecting both of said devices and the drive member to produce unison of action between the picture device and sound reproducer without change in their relative speeds under fluctuations of speed derived from the drive member, and means for positively moving one of the elements of the governor-coupling to and fro, with relation to the other, to fix the normal running speed of the picture and sound reproducer devices in unison with each other, substantially as described.

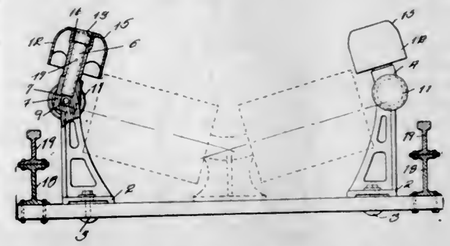
3. A motion picture and sound reproducer machine comprising a motion-picture device, a sound reproducer device, said devices being geared to run at relatively different speeds, a drive member, a governor-coupling controlled by the drive member and connecting both of said devices and the drive to produce unison of action between the picture device and sound reproducer without change in their relative speeds under fluctuations of speed derived from the drive member, and means for positively limiting to and fro movement of elements of the governor-coupling in adjustment of the governor-coupling to and from position for the normal running speed of the picture and sound reproducer devices, substantially as described.

4. A motion-picture and sound reproducer machine, comprising a motion-picture device, a sound reproducer device, said devices being geared to run at relatively different speeds, a drive member, a governor-coupling controlled by the drive member and connecting both of said devices and the drive member to produce unison of action between the picture device and sound reproducer, and means for actuating the governor-coupling to start the picture device and the sound reproducer in unison at a low speed and raise the speed of both devices to the requisite normal running speed in unison with each other, substantially as described.

5. A motion picture and sound reproducer machine, comprising a motion picture device, and sound reproducer device, a drive member, and a coupling connecting the motion picture device, sound reproducer device, and drive member, said motion picture device and coupling being tiltable independent of the sound reproducer device, and the sound reproducer device having a yielding connection with said tiltable members, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,062,325. BELT CONVEYER. JOSEPH DIEBOLDT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, a Corporation of Ohio. Filed Apr. 24, 1911. Serial No. 623,023. (Cl. 193—27.)



1. The combination of a conveyer belt guide idler having its operative face at one end tapered toward its axis and provided with an axial opening, and a supporting shaft within the opening and having one end flush with the smaller end of the idler.

2. The combination of a conveyer belt guide idler having the upper portion of its active face tapered toward its axis and provided with an axial opening the upper end of which is enlarged, a supporting shaft positioned within the opening, and a cap secured on the end of the shaft and located entirely within the enlarged portion of the said opening.

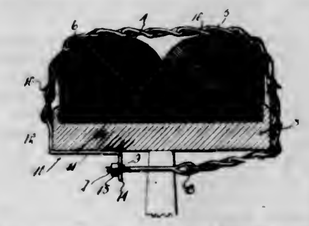
3. The combination of a conveyer belt guide idler having its active face tapered inward at one end in an unbroken surface to the periphery of an axial opening in the idler, and a supporting shaft positioned within the said opening and terminating at one end flush with the smaller end of the idler.

4. The combination with a conveyer belt guide idler having its upper active face continued in a curved unbroken surface to the edge of an axial opening in the idler, of the supporting shaft positioned within the said opening, and means confined entirely within the opening for preventing axial movement of the idler on the said shaft in the driection of its smaller end.

5. The combination of a conveyer belt guide idler having an axial opening enlarged at its upper end, the active face of the idler being continued in a curved unbroken surface at its upper end to the edge of the said opening, the supporting shaft located in the opening, and a cap secured upon the upper end of the shaft and fitting snugly within the enlarged portion of the opening.

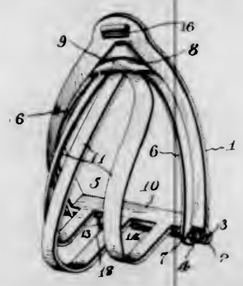
[Claim 6 not printed in the Gazette.]

1,062,326. ANTISLIPPING DEVICE. ELLSWORTH A. DUNNING, Minneapolis, Minn. Filed Feb. 6, 1912. Serial No. 675,695. (Cl. 152—2.)



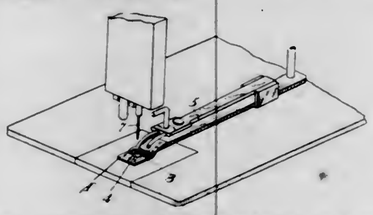
An anti-slipping device for wheels comprising a clamping member having a body portion adapted to engage the under surface of one edge of the wheel rim, said body portion terminating in oppositely directed upper and lower ends, the upper end engaging the edge of the wheel rim, an opening formed in the lower end for adjustably receiving an eye-bolt, a chain having one end secured to the upper end of the clamp member and passed over the tires and having its other end connected to the eye-bolt.

1,062,327. STIRRUP. CHRISTOPHER ERBE, Tamaqua, Pa. Filed Feb. 5, 1912. Serial No. 675,511. (Cl. 54—49.)



A stirrup of the class described comprising a yoke, the lower ends of the same being formed with sleeves, a rod having its end journaled in the sleeves, means for preventing accidental rotation of said rod, a depression formed in the bight portion of the yoke, a foot-piece pivotally connected at its lower end to the rod, and having a lip formed upon its upper end, said lip being adapted to seat in said depression, an annular flange formed upon the rod, said flange being provided with a series of perforations, a coil spring surrounding a portion of the rod and having one of its terminals engaged in one of the perforations of the flange and its other terminal secured to the foot-piece, whereby when said rod is rotated the tension of the spring is regulated to firmly hold the lip seated in the recess.

1,062,328. BUTTON-SEWING-MACHINE ATTACHMENT. BERTRAM J. GANS, Napa, Cal., assignor to Cameron and Company Incorporated, Napa, Cal., a Corporation of California. Filed Apr. 8, 1912. Serial No. 689,110. (Cl. 112—32.)



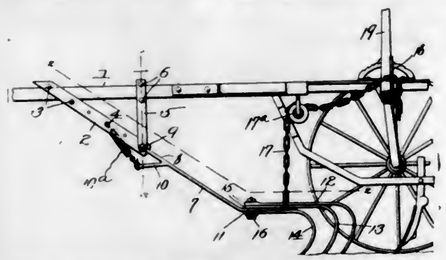
1. The combination in a sewing machine, of a button holder, and a reinforcing-piece holder on the same, said holder having a perforation for receiving the reinforcing piece, said holder having a portion overlying a part of the perforation and under which the reinforcing piece is slipped and held.

2. The combination with a button sewing machine, having button holding means, of a detachable disk holder thereon having an aperture for the reception of a reinforcing disk, and means on the holder for temporarily restraining the reinforcing disk in said aperture.

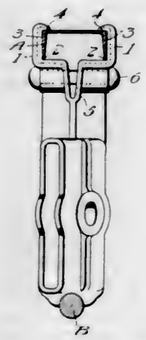
3. The combination in a button sewing machine, of a button holding mechanism, a detachable disk holder comprising a thin plate provided with an aperture adapted to receive a reinforcing disk and hold the same in position, and a retaining plate mounted upon said detachable disk holder in such manner as to cover a portion of said aperture.

1,062,329. CULTIVATOR ATTACHMENT. EUGENE I. GORHAM, Mount Union, Iowa. Filed Mar. 18, 1912. Serial No. 684,620. (Cl. 97—34.)

A device of the kind described, comprising parallel bars adapted to be hung from a cultivator frame in an oblique position, a pair of vertically suspended bars overlapping the bars first mentioned, a rod provided with a forked upper end, a bolt passing through said forked ends and through said bars thereby pivotally connecting the bars and the rod, a branched arm carried by the forked portion of the rod, a spring having one end connected thereto, a bolt adjustably carried by the first mentioned bars, the opposite end of the spring being secured to said bolt, a curved tooth pivotally connected to the lower end of the rod, and a chain secured to said teeth, as and for the purpose set forth.



1,062,330. BRAKE-BEAM FULCRUM. PHILIP T. HANDIGES, East Cleveland, Ohio, assignor to The Damascus Brake Beam Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 18, 1911. Serial No. 621,953. (Cl. 188—22.)

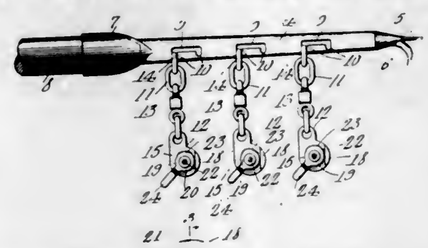


A brake beam comprising a compression member, a tension member and a strut having its ends provided with bearings to receive said compression and tension members; the compression member bearing comprising a pair of jaws adapted to receive the compression member between them, whereby they bear upwardly and downwardly upon the compression member; said jaws being recessed to conform to the compression member, whereby each is adapted to bear forwardly and rearwardly against the compression member; and said jaws being separated by a slot extending inwardly from the compression member bearing to give resiliency to the jaws and having a rivet extending through the jaws across said slot adjacent to but not intersecting the compression member bearing.

1,062,331. WIRE-STRETCHER. JAMES HARRISON, Anderson, S. C. Filed July 12, 1912. Serial No. 709,100. (Cl. 39—54.)

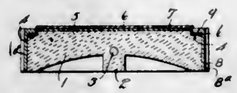
1. A wire stretcher embodying a lever comprising a flat bar having post engaging means at one end, the bar having a plurality of longitudinal slots therein and notches at the ends of the slots directed toward one edge of the bar, a plurality of chains having links engaging through the various slots, and a wire clamp secured to the free end of each chain.

2. A wire stretcher embodying a lever comprising a flat bar of metal having a complementing spear point and bill at one end, and a handle socket at the other end, the bar having a plurality of longitudinal slots therein at



intervals along its length with notches at the ends of the slots directed toward one edge of the bar, and a plurality of chains having links engaging through the various slots, and a wire clamp secured to the free end of each chain.

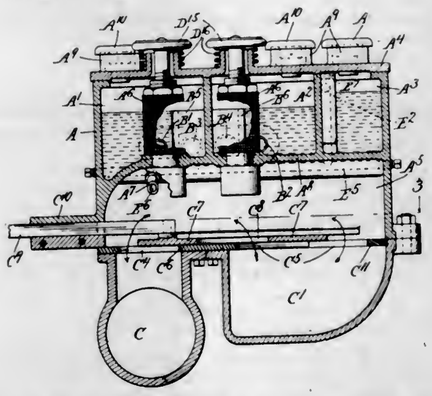
1,062,332. SAD-IRON CLEANER AND WAXER. WESLEY G. HARVEY, Wellsville, N. Y. Filed July 16, 1912. Serial No. 709,792. (Cl. 68—27.)



1. A sad-iron cleaner and waxer comprising a body having an abrasive surface, a waxed fabric, a protecting plate interposed between the waxed fabric and the abrasive surface, and a clamping ring arranged to detachably clamp said waxing fabric to the body.

2. A sad-iron cleaner comprising an abrasive body having a handle, and diametrically opposite projections, a waxed fabric, a protecting plate interposed between the said waxed fabric and the abrasive body, and a clamping ring provided with bayonet slots adapted to receive and engage the projections on the body.

1,062,333. CARBURETER. WILLIAM H. C. HIGGINS, Jr., Laporte, Ind. Filed July 9, 1910. Serial No. 571,167. (Cl. 48—155.1.)



1. A carbureter comprising a mixing chamber, a plurality of fluid containing reservoirs integral with and communicating with said chamber, a passageway leading from the bottom of one of said reservoirs upwardly through the wall of the carbureter, downwardly and laterally within the casing wall to the mixing chamber and means for interrupting the automatic action of the siphon-like passage so formed.

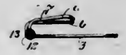
2. A carbureter comprising a mixing chamber, a plurality of liquid containing reservoirs integral with and communicating with said chamber, and a siphon leading from one of said reservoirs to the mixing chamber.

3. A carbureter comprising a mixing chamber, a plurality of liquid containing reservoirs integral with and communicating with said chamber, and a siphon leading from one of said reservoirs to the mixing chamber, said siphon perforated at its uppermost point to interrupt the siphon action.

4. A carbureter comprising a vacuum chamber, air inlet and mixture discharge passages controlled by a single integral valve, fuel and water reservoirs integral with said carbureter and discharging into said carbureting chamber, valves controlling the supply from said reservoirs to said reservoir, and an auxiliary priming fluid chamber integral with said carbureter and a siphon like connection between said carbureting chamber and said priming fluid reservoir.

5. In a carbureter, a vacuum carbureter chamber having fuel and water inlets each having a nozzle opening into the carbureting chamber separate and distinct one from the other and adapted to vary their feeds responsive to variations in the vacuum in the carbureter chamber, an air inlet and a mixture outlet in combination with means for simultaneously but unequally varying both of their respective areas during operation, one fluid reservoir placed higher than its nozzle and provided with a passage from the nozzle to the reservoir through which the fluid is fed only in response to a negative pressure in said vacuum chamber.

1,062,334. TROUSERS-HOOK AND BELT-SUPPORTER. HENRY L. HILLEGEIST, Baltimore, Md., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md., a Corporation of Maryland. Filed Nov. 16, 1912. Serial No. 731,728. (Cl. 241—9.)



1. A combined trousers hook and belt supporter, comprising a trousers hook and a supplemental bill pivoted to the trousers hook and adapted to be extended forwardly of the hook to engage the tongue of a belt buckle so as to support the belt and hold it in proper relation to the garment, and capable of being folded back upon the main bill of the trousers hook when the belt is not used, and then engaged along with the hook in the complemental part to be engaged by the trousers hook to fasten the garment.

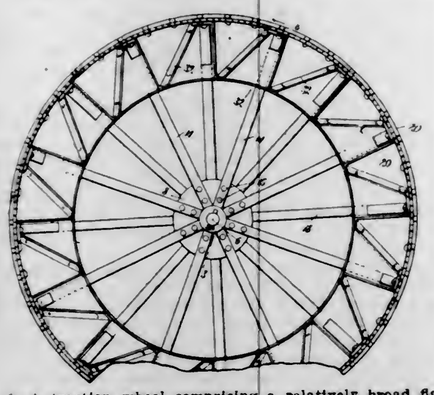
2. A combined trousers hook and belt supporter, comprising a base plate having a reverted bill with a central opening, and a supplemental bill pivoted to the base plate in line with the central opening of the bill of the hook and adapted to be turned out in front of the hook to engage the belt buckle and to be turned over upon the bill of the hook when not used with a belt buckle.

3. A combined trousers hook and belt supporter, comprising a trousers hook having a base plate and a reverted bill made with a central opening, and a supplemental bill hinged to the base plate in line with the opening in the bill of the hook, the pintle of the hinge being on one member and the knuckle of the hinge being on the other member, and the supplemental bill adapted to be folded back upon the bill of the hook and with said hook engaged with the complemental member of the trousers fastener.

4. A combined trousers hook and belt supporter, comprising a trousers hook proper having a base plate and a reverted bill made with a central opening, the base plate provided with a pintle arranged in line with the opening in the bill, and a supplemental bill provided with a knuckle engaged with the pintle, and said supplemental

bill thereby adapted to be turned out forward of the hook and also turned back over the bill of the hook as desired.

1,062,335. TRACTION-WHEEL. DON B. HUSTED, Auburn, Ohio. Filed Jan. 29, 1912. Serial No. 673,978. (Cl. 21—215.)



1. A traction wheel comprising a relatively broad flat rim, and a plurality of Y-shaped lugs mounted flatwise and snugly on the outside of said rim, the tems of said lugs adjoining one another in a continuous line and in end to end relation.

2. A traction wheel comprising a relatively broad flat rim, a plurality of Y-shaped lugs mounted on the ouside of said rim, the stems of said lugs being in a continuous line and adjoining one another, coincident with the median line of the rim, and means having connection with the arms of each of said Y-shaped lugs and removably fastening said lugs to said rim.

3. A traction wheel comprising a relatively broad flat rim, and a plurality of Y-shaped lugs mounted on the outside of said rim, the stems of said lugs being in a continuous line, the crotch of each of said Y-shaped lugs having an undercut pocket adapted to receive the mitered end of the stem of the next adjacent lug.

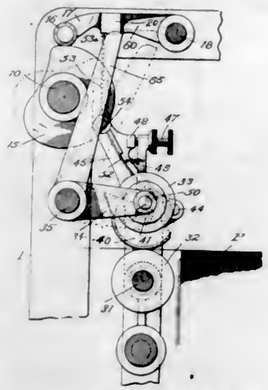
4. A traction wheel comprising a relatively broad flat rim, a plurality of Y-shaped lugs mounted snugly on the outside of the rim, the stems of the lugs being in a continuous line and adjoining one another around the rim, and the branches of said lugs having sections adjacent their extremities which extend substantially at right angles to the stems and each provided with a hooked projection extending rearwardly through a conformable opening in the rim and engaging the under surface of the latter.

1,062,336. PAPER-FEEDING MACHINE. RICHARD E. JONES, Pearl River, N. Y., assignor to Dexter Folder Company, a Corporation of New York. Filed Jan. 24, 1912. Serial No. 673,231. (Cl. 101—36.)

1. The combination with a machine through which sheets of paper are passed, of sheet delivery mechanism adapted to be intermittently operated, means movable into and out of position to hold said mechanism inoperative, other means for holding the first said means inoperative, and sheet calipering means movable into operative engagement with said other means.

2. The combination with a machine through which sheets of paper are passed, of sheet delivery mechanism adapted to be intermittently operated, a rock arm adapted to move into a position in which it holds said delivery mechanism inoperative, means normally retaining said rock arm inoperative, and sheet calipering means adapted to be moved into positive operating engagement with said rock arm retaining means by an abnormal thickness of sheets to release said rock arm.

3. The combination with a machine through which sheets of paper are passed, and a drop roller rock shaft provided with an arm projecting therefrom, a controlling rock shaft also provided with an arm projecting therefrom, a lever normally holding said controlling rock shaft inoperative with its projecting arm normally out of the path of the arm projecting from the drop roller rock shaft and a calipering device adapted to be moved into displacing engagement with said holding lever, by an abnormal thickness of sheets.

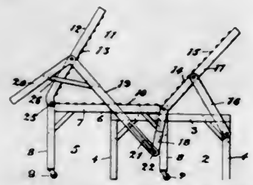


4. The combination with a machine through which sheets of paper are passed, drop roller delivery mechanism for said machine, and suitable throw out mechanism adapted to arrest the operation of said machine, of a sheet calipering device adapted to be operated by an abnormal thickness of sheets, a lever controlling said throw out mechanism and adapted to be positively engaged by said calipering device, and means actuated by said throw out mechanism adapted to independently arrest the operation of said drop roller mechanism.

5. The combination with a machine through which sheets of paper are passed, drop roller delivery mechanism for said machine, suitable throw out mechanism adapted to arrest the operation of said machine and operating means for said throw out mechanism, of a sheet calipering device adapted to be operated by an abnormal thickness of sheets, a lever controlling said throw out operating means adapted to be displaced by positive engagement with said calipering device, and means actuated by said throw out operating means adapted to independently engage and arrest the operation of said drop roller mechanism.

[Claims 6 to 8 not printed in the Gazette.]

1,062,337. DIVANETTE. JOHN F. KAMPE, Brooklyn, N. Y. Filed Oct. 25, 1912. Serial No. 727,734. (Cl. 5—46.)



1. A divanette comprising a sliding middle section, a pair of swinging sections hinged thereto at opposite sides, and means including connecting means between said swinging sections whereby on the swinging of one of the swinging sections in one direction the other swinging section will be swung in the opposite direction and the middle section will be shifted thereby to form a full length bed.

2. A divanette comprising a sliding middle section, a pair of swinging sections hinged thereto, means including connecting means between said swinging sections whereby on the shifting of one of the swinging sections in one direction the other swinging section will be swung in the opposite direction and the middle section will be shifted thereby to form a full length bed, and means for supporting each of the swinging sections.

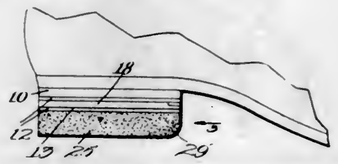
3. A divanette comprising a sliding middle section, a pair of swinging sections hinged thereto, means including connecting means between said swinging sections whereby on the swinging of one of the swinging sections in one direction the other swinging section will be swung in the opposite direction and the middle section will be shifted thereby to form a full length bed, and means for supporting each of the swinging sections, the means for supporting one of the swinging sections being formed as a part of the connection between said swinging sections.

4. A divanette comprising a shiftable middle section, a pair of swinging sections hinged thereto at opposite sides and connected together, means whereby on the swinging of one of the swinging sections in one direction the other swinging section will be swung in the opposite direction and the middle section will be shifted thereby to form a full length bed, and means for supporting each of the swinging sections, the means for supporting one of said swinging sections resting under the middle section when the structure is in the form of a divan.

5. A divanette comprising a shiftable middle section, a pair of swinging sections hinged thereto at opposite sides and connected together, means whereby on the swinging of one of the swinging sections in one direction the other swinging section will be swung in the opposite direction and the middle section will be shifted thereby to form a full length bed, and means for supporting each of the swinging sections, the means for supporting one of said swinging sections being formed as a part of the connection between said swinging sections and the means for supporting the other of said swinging sections resting under the middle section when the structure is in the form of a divan.

[Claims 6 to 18 not printed in the Gazette.]

1,062,338. DETACHABLE BOOT OR SHOE HEEL. PATRICK KANE. North Brookfield, Mass. Filed Feb. 15, 1912. Serial No. 677,818. (Cl. 36—36.)



1. As an article of manufacture, a boot or shoe heel comprising a rubber part having horizontal sockets along its vertical edges and a movable frame provided with a series of pins for entering said sockets to hold the rubber part in position.

2. As an article of manufacture, a heel having a hollow casing, a movable member, a rubber portion having a reduced projection at the top entering said casing and provided with horizontal sockets in the edges of said reduced projection, horizontally movable pins carried by said movable member for entering said sockets and holding the rubber portion in place.

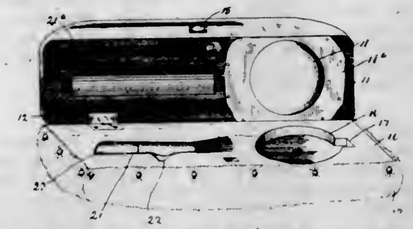
3. As an article of manufacture, a heel having at the bottom thereof a fixed metallic casing provided with side passages therethrough, and a pair of pivoted arms adapted to swing into said passages so as to be flush with their outer sides and having inwardly extending projections for holding a removable attachment.

4. As an article of manufacture, a heel having at the bottom thereof a fixed metallic casing provided with side passages therethrough, a pair of arms pivoted to said casing and adapted to swing into said passages and having inwardly extending projections for holding a removable attachment, and means for locking said arms in position.

5. As an article of manufacture, a heel having a casing of substantially the shape of the heel and provided with a horizontal slot surrounding the heel, and movable members located in said slot and forming a continuation of the outer surface of the heel on their outer sides, and provided with inwardly extending means for detachably holding a rubber attachment at the bottom of the heel.

[Claims 6 to 12 not printed in the Gazette.]

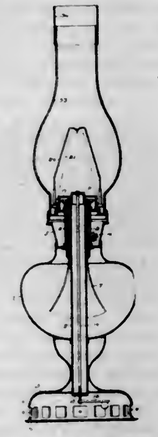
1,062,339. BLACKING SET. GEORGE W. KELLY, Elizabeth, N. J. Filed July 26, 1912. Serial No. 711,743. (Cl. 15—15.)



1. As an improved article of manufacture, a blacking set comprising a two-part case, one part having means for holding a box of blacking, and the opposite part having a pad adapted to fit over and cover the said blacking box.

2. As an improved article of manufacture, a blacking set comprising a two-part casing, one part having therein a socket shaped to hold a blacking box, and the opposite part having a yielding pad adapted to fit over and cover the said blacking box.

1,062,340. LAMP. HENRY N. KERR, Philadelphia, Pa., assignor to Mary E. Kerr, Philadelphia, Pa. Filed Mar. 15, 1911. Serial No. 614,734. (Cl. 67—38.)



1. The combination, in an oil lamp, of an outer wick tube, a mantle carrier, a support therefor, and a throttling flange forming part of said mantle carrier and serving to direct air inwardly over the top of the outer wick tube and against the flame at the top of the wick.

2. The combination, in an oil lamp, of an outer wick tube, an air throttling flange which, when in position, serves to direct air inwardly over the top of said outer tube and against the flame at the top of the wick, and a support for said flange from which it is detachable.

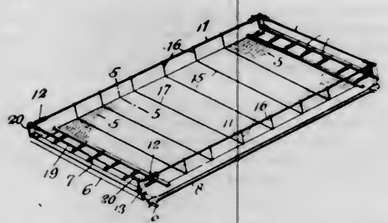
3. The combination, in an oil lamp, of an outer wick tube, an air throttling flange which serves to direct air inwardly over the top of said outer wick tube and against the flame at the top of the wick, said throttling flange having a support upon which it is adjustable vertically in respect to the wick tube so as to vary the area of the air passage between said wick tube and flange.

4. The combination, in an oil lamp, of means for guiding and retaining the upper end of the wick, a mantle carrier, a support therefor, and means for effecting vertical adjustment of said mantle carrier in respect to the wick.

5. The combination, in an oil lamp, of an outer wick tube, a mantle carrier having an inwardly projecting throttling flange which serves to direct air inwardly over the top of the outer wick tube and against the flame at the top of the wick, a support for said mantle carrier, and means for effecting vertical adjustment of said mantle carrier so as to vary the area of the air passage between its throttling flange and the top of the outer wick tube.

[Claims 6 to 9 not printed in the Gazette.]

1,062,341. SIDE GUARD. AUGUST J. KREUZKAMP, Brooklyn, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y., a Corporation of New York. Filed Feb. 28, 1912. Serial No. 680,401. (Cl. 5—39.)



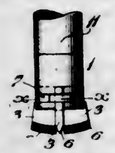
1. A bed spring comprising a pair of rigid transverse end irons spaced apart and a spring bottom supported thereby, lugs secured to said irons, side-guards extending lengthwise at the sides of said bottom and connected with said lugs and each comprising a cable and a coiled spring for maintaining the cable under constant lengthwise tension, and supplementary wires having integral upright portions connecting one guard with its companion guard and extending crosswise of the bottom.

2. A bed spring comprising a pair of rigid transverse end irons spaced apart and a spring bottom supported thereby, lugs secured to said irons, side-guards extending lengthwise at the sides of said bottom and connected with said lugs and each comprising a cable and a coiled spring for maintaining the cable under constant lengthwise tension, and supplementary wires having integral upright portions connecting one guard with its companion guard and extending crosswise of the bottom and threaded through the bottom.

3. A bed spring comprising a pair of rigid transverse end members, a spring bottom connected to said members, lugs secured to said members, side-guards extending along the sides of said spring and connected with said lugs and each comprising a lengthwise inelastic and an elastic portion, and means supplementary to the bottom and having upright integral portions and connecting one side-guard with its companion guard and extending crosswise of such bottom.

4. A bed spring comprising a pair of rigid transverse end members, a spring bottom connected to said members, lugs secured to said members, side-guards extending along the sides of said spring and connected with said lugs and each comprising a lengthwise inelastic and an elastic portion, and a series of integral wires supplementary to the bottom connecting one side-guard with its companion guard and threaded cross-wise through such bottom.

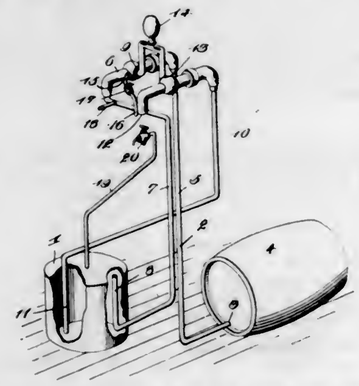
1,062,342. DRILL. JOHN MACCONNELL, Philadelphia, Pa., assignor to N. Harper Steward, Philadelphia, Pa. Filed May 18, 1912. Serial No. 698,100. (Cl. 255—63.)



1. In a drill, a bit having a groove in the side of its shank, a head having a recess longitudinally therein adapted to receive said shank, and a groove circumferentially in its side, said grooves being adapted to register, and a divided resilient collar which is adapted to occupy said grooves and control said bit in locked position in said head.

2. In a drill, a plurality of bits each formed of a plate with a cutting edge, and a slot partly occupying a portion of the shank of the bit, said bits with their appurtenances being matched, a head having crossed grooves adapted to receive the shanks of the bits, said head having a groove circumferentially therein, the sides of the shanks of said bits having grooves therein, and a divided resilient collar adapted to embrace said bits, and head in the respective grooves thereof and control the bits locking them in position on the head.

1,062,343. DISPENSING APPARATUS. JAMES H. MAHONEY, Worcester, Mass. Filed Sept. 25, 1911. Serial No. 651,032. (Cl. 225—9.)

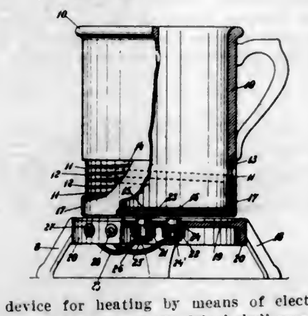


1. Dispensing apparatus of the class described comprising a pressure reducing vessel, a prime-acting duct discharging into the said vessel, a dispensing duct leading from said vessel and means to cause the prime-acting duct to supply a measure of liquid to the pressure reducing vessel, and a dispensing duct to simultaneously discharge a like quantity of liquid from said pressure reducing vessel.

2. Dispensing apparatus of the class described comprising a prime-acting duct to connect to a barrel or the like and having a cut-off device, a pressure reducing vessel into which the prime-acting duct discharges near the top of said vessel, a dispensing duct leading from the pressure reducing vessel at a point near the bottom thereof and also provided with a cut-off device, and means to simultaneously operate the cut-off device of the prime-acting duct and the dispensing duct.

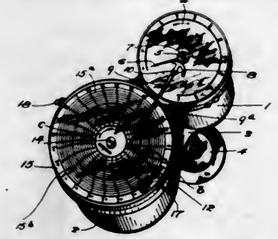
3. Dispensing apparatus of the class described comprising a pressure reducing vessel, a vent device therefor and means to close said vent device, a prime-acting duct discharging into said pressure reducing vessel, a dispensing duct leading from the said pressure reducing vessel, and means to cause the prime-acting duct to supply a measure of liquid to the pressure reducing vessel, and the dispensing duct to simultaneously discharge a like quantity of liquid from said pressure reducing vessel.

1,062,344. COOKING AND DOMESTIC UTENSIL HEATED BY ELECTRICITY. JAN MANN, Prague, Austria-Hungary. Filed Dec. 17, 1912. Serial No. 737,271. (Cl. 219—43.)



In a device for heating by means of electricity, the combination with an inner cylindrical shell open at its top, of an upper portion, a relatively thinner lower portion, an electric heating medium, grooves in said thinner portion adapted to receive said electric heating medium, a coating upon said thinner portion adapted to fill the grooves containing the heating medium, and to fill the space between the vertical surface plane of the upper portion and the lower portion, and means carried by the heating medium and contained within the thinner portion and the coating to receive electric contact terminals.

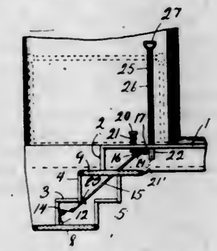
1,062,345. INDICATING AND RECORDING DEVICE. BURTON MARKER, Chester, Pa. Filed Mar. 19, 1912. Serial No. 684,896. (Cl. 234—30.)



In a device of the class described the conbination of a pair of cylindrical casings of different diameters, of which the smaller casing contains speedometer mechanism and of which the larger casing contains a clock movement which clock movement rotatably supports a record disk, plates arranged in parallelism connecting the tops and bottoms respectively of said casings the upper plate having an opening extended therethrough to form communication between said casings, a partially rotatable stud for the speedometer said stud carrying a speed indicating pointer, a toothed wheel fixed to said stud and a recording pointer for coöperating with said disk pivoted to a fixed part of the speedometer and having its recording part extended through said opening said pointer having formed integral therewith a toothed segment for meshing with the aforesaid toothed wheel and by which toothed wheel, said pointer is positively and solely operated.

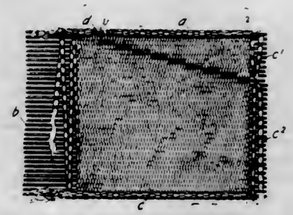
1,062,346. FOLDING CAR-STEP. EDWIN B. MAYHEW, Levita, Tex. Filed Feb. 13, 1913. Serial No. 748,189. (Cl. 105—86.)

1. In a car step of the class described, the combination with a platform, of stationary steps depending therefrom, a supplemental step section swingingly connected thereto, keepers carried by the supplemental step section, spring pressed bolts carried by the stationary step section and adapted to engage said keepers when the supplemental step section swings to its extended position, chains connected to said bolts, a rock shaft supported by the platform, rods connecting said chains and rock shaft, a foot lever connected to the rock shaft which when operated rocks said shaft to disengage said bolts from the keepers to permit the supplemental step section to swing inwardly, and means for swinging the supplemental step section upwardly and behind the stationary steps.



2. In a car step of the class described, the combination with a platform, of stationary steps depending therefrom, a supplemental step section swingingly connected thereto, keepers carried by the supplemental step section, bolts carried by the stationary steps for engaging the keepers to hold the supplemental step section in its extended position, means for operating the bolts to disengage the keepers to permit the supplemental step section to swing inwardly, a chain connected to the supplemental step section, tubular guides carried by the platform and through which the chain passes, a tube connected to one of the guides, a slot formed in the tube for the passage of said chain, a hand grip for the upper end of the chain, said chain serving to swing the supplemental step section upwardly and behind the stationary steps, whereby said hand grip engages the upper end of the tube to hold the supplemental step section in its raised position and behind the stationary step.

1,062,347. METHOD OF FORMING CABLE. FRANK R. MCBERTY, New Rochelle, N. Y., assignor to Western Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 9, 1909. Serial No. 511,984. (Cl. 139—9.)



1. The process of making ribbon cable which consists in weaving two separate woof-portions upon a warp of parallel wires, and progressively increasing the width of one woof portion while correspondingly decreasing the width of the other woof portion, whereby the different wires one after another are accessible for electrical connections at points located along the diagonal line of meeting of the two woof-portions.

2. The process of making ribbon cable which consists in interweaving two threads across a warp of parallel wires, passing said threads alternately from each side of the ribbon over and under the warp wires up to a predetermined intermediate wire and back again, said intermediate wire not being embraced at this point by the loops of either of said threads, whereby it is left exposed for electrical connection therewith.

3. The process of making ribbon cable which consists

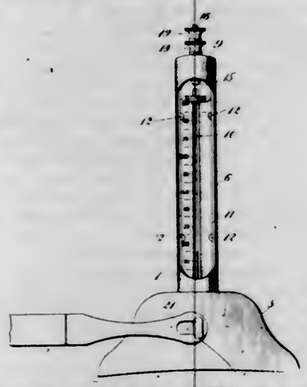
in interweaving two threads across a warp of parallel wires, passing said threads alternately from each side of the ribbon to an intermediate point and back again, forming loops which embrace the warp wires between the sides of the ribbon, respectively, and said intermediate point, and progressively increasing, at successive intervals, the scope of the loops from one side of the ribbon while correspondingly decreasing the scope of the loops from the other side thereof.

4. The process of making ribbon cable which consists in interweaving insulating thread with a warp of parallel bare wires, and varying the travel of the woof thread to progressively omit all of the wires one after another for short intervals, to leave portions of said wires exposed for electrical connections.

5. The process of making ribbon cable which consists in interweaving two separate woof portions upon a warp of parallel wires, progressively increasing the width of one woof portion while correspondingly decreasing the width of the other woof portion, and in such interweaving omitting the different wires one after another for short intervals to leave portions of said wires exposed between the woof portions.

[Claim 6 not printed in the Gazette.]

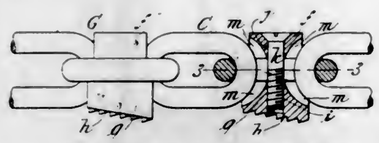
1,062,348. THERMOSTATIC DEVICE FOR DETERMINING THE TEMPERATURE OF HEATED SURFACES. EDWARD J. MCDONNELL, Jr., Boston, Mass. Filed Feb. 17, 1910. Serial No. 544,488. (Cl. 73—52.)



In a device of the character specified, the combination of a primary casing adapted to form a hot air chamber and having an opening in the top wall thereof, a secondary casing mounted upon said primary casing and connecting with said primary casing around the opening therein, said secondary casing having a closed bottom end and closed top end and a longitudinal opening along the side thereof, a thermometer and backing therefor located within said secondary casing and adjustable longitudinally therein, the said thermometer projecting downwardly through the bottom of said secondary casing into the chamber of said primary casing, a threaded member secured to the upper end of said backing and projecting upwardly through the head of said secondary casing, a spring located upon said threaded member and interposed between the end of said backing and the interior side of said head, and a nut upon the end of said threaded member bearing against said head on the outside thereof.

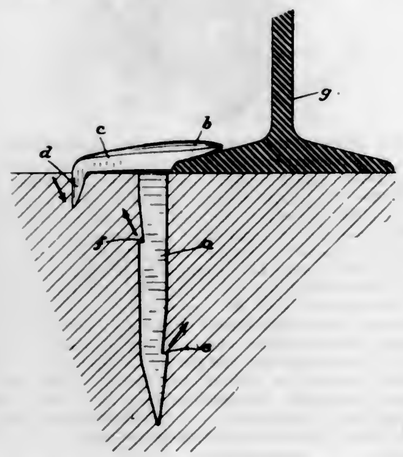
1,062,349. CHAIN PIPE-WRENCH. ALLAN MCKINNON, Holyoke, Mass. Filed Nov. 11, 1912. Serial No. 730,675. (Cl. 81—68.)

1. The combination with a chain pipe wrench having a chain of the cable type, of gripping devices for the links, each comprising a pair of blocks, one of the blocks having a serrated outer face, the opposite face of the block being flat and of sufficient width to engage the opposite parallel sides of an open link and having a central hole and a recess in such face on each side of the hole to receive the end portions of the adjacent links respectively for free movement of the links therein, the other block of the device having its inner face of sufficient width to engage the parallel sides of the link opposite said sides and having a central hole with a recess on each side of the hole to receive and permit free movement of the end portions of the said adjacent links respectively, and a screw tapped in the said hole in one of the blocks and passing through the hole in the other block to clamp the blocks to the said opposite faces of the link.



2. The combination with a chain pipe wrench having a chain of the cable type, of gripping devices for the links, each comprising a pair of blocks, one of the blocks having a serrated outer face, the opposite face of the block being flat and of sufficient width to engage the opposite parallel sides of an open link and having a central hole and a recess in such face on each side of the hole to receive the end portions of the adjacent links respectively for free movement of the links therein, the other block of the device having its inner face of sufficient width to engage the parallel sides of the link opposite said sides and having a central hole with a recess on each side of the hole to receive and permit free movement of the end portions of the said adjacent links respectively, and a screw tapped in the said hole in one of the blocks and passing through the hole in the other block to clamp the blocks to the said opposite faces of the link, the said serrated face of the block being inclined longitudinally to the opposite link engaging face.

1,062,350. RAILWAY-SPIKE. CLARENCE G. METZGAR, Kane borough, Pa. Filed Oct. 27, 1909. Serial No. 524,856. (Cl. 85—29.)



A railroad spike comprising a head having a flat under surface terminating at its forward end in an undercut portion, said under-cut portion terminating in a plane above the flat under surface of the head and adapted to engage a rail flange, a main shank formed integral with said head and depending from the under surface thereof and at the point of juncture of the flat under surface and the under-cut portion, an auxiliary shank formed integral with the head and depending therefrom and in parallel relation with the first-named shank, said auxiliary shank being arranged at the rear of the said head relative to the under-cut portion, said head being formed at its longitudinal edges to provide shoulders, said shoulders projecting laterally relative to the said shanks, and merging into said under-cut portion, said under surface and shoulders adapted to bear directly upon the tie, and said under-cut portion adapted to be spaced from the tie and to conform to the contour of the rail flange whereby to securely hold the same in position.

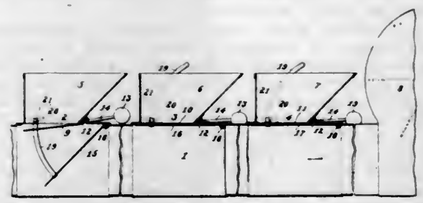
1,062,351. PROCESS FOR THE MANUFACTURE OF MONOVALENT PHENOLS FROM MONO-CHLORO-SUBSTITUTION PRODUCTS OF AROMATIC HYDROCARBONS. KURT H. MEYER, Munich, and FRIEDRICH BERGIUS, Hanover, Germany. Filed Nov. 11, 1912. Serial No. 730,788. (Cl. 23—24.)

1. The process of manufacturing monovalent phenols from mono-chloro-substitution products of aromatic hydrocarbons, which consists in heating the mono-chloro-substitution products with water to a high temperature under pressure.

2. The process for the manufacture of mono-valent phenols from mono-chloro-substitution products of aromatic hydrocarbons, which consists in heating said substitution products under pressure at a high temperature with water containing caustic alkali for neutralizing the hydorchloric acid that may be formed.

3. The process for the manufacture of mono-valent phenols from mono-halogen-substitution products of aromatic hydrocarbons, which consists in heating said substitution products under pressure at a high temperature with water.

1,062,352. PNEUMATIC CONVEYER APPARATUS. HARRY N. MIDDLETON, Philadelphia, Pa., assignor to B. F. Sturtevant Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 1, 1911. Serial No. 641,819. (Cl. 193—10.)

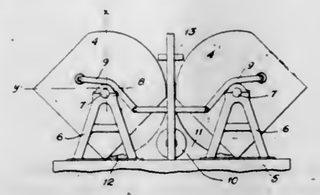


1. A pneumatic conveyer apparatus having, in combination, a conveyer pipe provided with a series of inlet ports leading into said pipe, a freely movable back pressure valve for each of said ports constructed and arranged to be automatically closed by the back pressure produced upon the introduction of material through the corresponding port, a deflector projecting partially across the interior of said pipe in advance of each of the ports, certain of said deflectors having provision for adjustment to leave the pipe substantially unobstructed thereby.

2. A pneumatic conveyer apparatus having, in combination, a conveyer pipe provided with a series of inlet ports leading into said pipe, a freely movable back pressure valve for each of said ports, constructed and arranged to be automatically closed by the back pressure produced upon the introduction of material through the corresponding port, a hinged deflector projecting partially across the interior of said pipe in advance of each of said ports, certain of said deflectors having provision for swinging them against the wall of the pipe to leave it substantially unobstructed.

3. A pneumatic conveyer apparatus having, in combination, a horizontal conveyer pipe, a series of ports in the top of the pipe, hinged back pressure valves for closing the ports arranged to be automatically closed by the back pressure produced upon the introduction of material through the corresponding port, a deflector plate hinged at the top of the pipe in advance of each port, and means for retaining each deflector plate in position across the interior of the pipe, or in position overlying the corresponding back pressure valve.

1,062,353. DUMPING-CAR. GEORGE ALEXANDER MINETTY, Davenport, Iowa. Filed Apr. 30, 1912. Serial No. 694,125. (Cl. 105—188.)

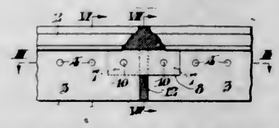


1. In a dumping car, the combination of outwardly swinging box-like hoppers extending longitudinally thereof, stop members for preventing inwardly swinging movement of said hoppers beyond an upright position thereof, suspension supports for said hoppers, located at the ends thereof, outwardly and upwardly with respect to their axes of gravity, whereby they tend normally to remain in upright position against said stop members, and auxiliary supporting means for said hoppers intermediate the ends thereof, substantially as described.

2. In a dumping car, the combination of outwardly swinging box-like hoppers extending longitudinally thereof, stop members for preventing inwardly swinging movement of said hoppers beyond an upright position thereof, suspension supports for said hoppers, located at the ends thereof, outwardly and upwardly with respect to their axes of gravity, whereby they tend normally to remain in upright position against said stop members, and auxiliary supporting means for said hoppers intermediate the ends thereof, comprising bearing members carried by the car body and adapted to engage with the under side of said hoppers, substantially as described.

3. In a dumping car, the combination of outwardly swinging box-like hoppers extending longitudinally thereof, stop members for preventing inwardly swinging movement of said hoppers beyond an upright position thereof, suspension supports for said hoppers, located at the ends thereof, outwardly and upwardly with respect to their axes of gravity, whereby they tend normally to remain in upright position against said stop members, and means for limiting the outwardly swinging movement of said hoppers to prevent a preponderance of weight of the hopper bodies from lying outwardly with respect to their axes of gravity, substantially as described.

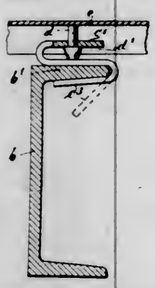
1,062,354. METAL SASH-BAR. THEODORE F. OECHSLE, Philadelphia, Pa. Filed Feb. 21, 1911. Serial No. 610,071. (Cl. 189—36.)



Crossing metal sash bars, one of which has the tongue mortised; and the other of which is a compound bar divided into halves along its median plane and broken so that its ends abut the sides of the solid bar; one half of

each compound bar projecting as a tenon from its abutting end; two of these tenons overlapping and being received within the mortised tongue of the first named bar.

1,062,355. CLIP FOR FASTENING ROOF-SHEETS. WILLIAM PFEIFER, Jersey City, N. J. Filed Oct. 12, 1912. Serial No. 725,507. (Cl. 189—35.)



1. A clip for fastening roof sheets comprising a top portion having a central opening, a middle portion parallel to the top portion, an inwardly inclined bottom portion, and means permanently secured between the top and middle portions passing through the opening in said top portion and extending beyond the same for securing the roof sheet.

2. A flat metallic clip for fastening roof sheets comprising a top portion having a central opening, a slightly longer middle portion parallel to the top portion, an inwardly inclined bottom portion, and a rivet permanently secured with its head between the top and middle portions passing through the opening in said top portion and extending beyond the same for securing the roof sheet.

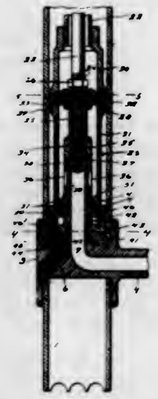
3. In roof constructions, in combination, a purlin, a flat metallic clip composed of a top portion having a central opening, an integral middle portion parallel to the top portion, an integral parallel bottom portion, and a rivet permanently secured with its head between the top and middle portions passing through the opening in the top portion and extending beyond the same, said middle and bottom portions of the clip surrounding the top portion of the purlin.

4. In metallic roof constructions, in combination, roof trusses, purlins thereon, flat metallic clips composed each of a top portion with central opening, an integral middle portion parallel to the top portion, an integral parallel bottom portion, and a rivet permanently secured with its head between the top and middle portions passing through the opening in the top portion and extending beyond the same, said middle and bottom portions of each clip surrounding the top portions of a purlin, and a roof sheet pierced by the rivet.

5. In metallic roof constructions, in combination, flat metallic clips composed each of a top portion with central opening, an integral middle portion parallel to the top portion, an integral bottom portion, and a rivet permanently secured with its head between the top and middle portions passing through the opening in the top portion and extending beyond the same.

1,062,356. HYDRANT. MARTIN N. PHILLIPS, Elizabethtown, Ky. Filed May 15, 1912. Serial No. 697,434. (Cl. 137—13.)

1. A hydrant of the character described, comprising an outer casing, a coupling connected with the lower portion thereof to be connected with a water supply pipe, an intermediate casing connected with a portion of the coupling, a conducting pipe connected with the upper end of the intermediate casing, a spout connected with the upper end of the conducting pipe and extending through the outer casing, a valve stem extending through the conducting pipe, an operating screw connected with the lower end of the valve stem, a spider having a screw-threaded opening to receive the operating screw and held stationary within the intermediate casing, a tubular valve casing connected with the operating screw, a valve mounted in the tubular valve casing, and a tubular valve seat telescoping the tubular valve casing and having free communication with the water supply pipe.



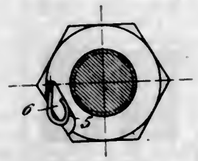
2. A hydrant of the character described, comprising an outer casing, a coupling connected with the lower end thereof and adapted to be connected with a water supply pipe, an intermediate casing disposed in the lower portion of the outer casing, a head closing the lower end of the intermediate casing, a tubular valve seat mounted upon the head and having its axial opening in free communication with the opening of the coupling, said intermediate casing being provided with a drain opening, a tubular valve casing telescoping the tubular valve seat and provided with an opening and carrying a ring adapted to cover and uncover said drain opening, a freely rotatable ball valve disposed in the valve casing above the tubular valve seat, a conducting pipe connected with the upper end of the intermediate casing, and means to raise and lower the tubular valve casing.

3. A hydrant of the character described, comprising an outer casing, an intermediate casing formed of two sections having screw-threaded engagement, a spider provided with a screw-threaded opening and having its arms clamped between portions of the sections of the intermediate casing, an operating screw passing through the screw-threaded opening of the spider, a valve casing connected with the operating screw, a valve mounted within the valve casing above the tubular valve seat, a conducting pipe connected with the upper section of the intermediate casing, and a stem connected with the operating screw.

4. A hydrant of the character described, comprising an outer casing, an intermediate casing disposed therein, a conducting pipe connected with the intermediate casing, a spout extending through an opening in the outer casing and detachably connected with the conducting pipe, a cap detachably connected with the upper end of the outer casing, a combined stuffing box and coupling engaging the cap and having connection with the conducting pipe, a stem extending through the cap, combined stuffing box and coupling, and conducting pipe, and means operated by said stem to control the flow of water through the conducting pipe.

5. A hydrant of the character described, comprising an outer casing, a coupling connected with the lower end thereof and provided with a web extending therethrough having a port and forming diametrically arranged openings upon opposite sides of said web, a drain cup connected with the lower portion of the coupling and having free communication with the lower portion of the outer casing through said diametrically arranged openings, an intermediate casing disposed within the outer casing and provided with a drain opening, a valve casing operating within the intermediate casing and carrying means to cover and uncover the drain opening, a tubular valve seat in free communication with said port and telescoping the tubular valve casing, a valve disposed within the valve casing, a conducting pipe connected with the intermediate casing, and means to raise and lower the valve casing.

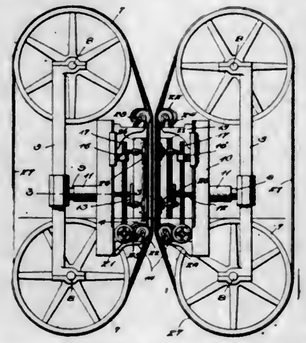
1,062,357. NUT-LOCK. SCHLAMA PIUS, Warsaw, Russia, assignor of two-fifths to Aktien-Gesellschaft Warschauer Schrauben und Drahtfabriken, Warsaw, Russia. Filed May 31, 1912. Serial No. 700,606. (Cl. 151—25.)



1. In a nut lock, the combination with a bolt and a nut provided with a transverse bore of a resilient locking member passing through said bore, said locking member having one end formed as a pawl for engaging the threads of the bolt and the opposite end formed into a loop and engaging the wall of a recess in said nut, whereby the end of said loop engaging the wall of said recess will maintain said pawl in engagement with the threads of the bolt.

2. In a nut lock, the combination with a bolt, of a nut having a transverse bore therein near one edge thereof and a recess formed in one face of said nut, and a resilient locking member having a portion thereof passing through said bore, one end of said locking member formed as a pawl to engage the threads of the bolt and the other end of said locking member formed as a loop bearing against a wall or edge of said recess.

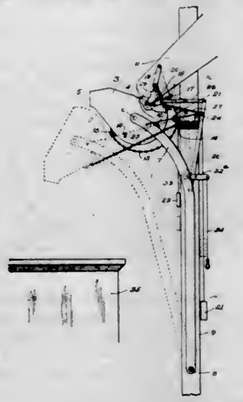
1,062,358. BAND RESAW-MACHINE. SAMUEL E. RANGER, Hilts, Cal. Filed Apr. 9, 1912. Serial No. 689,613. (Cl. 143—22.)



1. The combination with a frame structure, spaced pairs of upper and lower band saw guide wheels mounted therein, of laterally movable vertical supports mounted in said frame, lower stationary crowding wheels mounted upon said supports, upper crowding wheels vertically movable upon the supports, means mounted upon said supports for adjusting the upper crowding wheels with relation to the lower crowding wheels and varying the cutting length of the band saws, and additional means for adjusting each pair of supports laterally with relation to each other to space the opposed portions of the band saw.

2. The combination with a frame structure, spaced pairs of upper and lower band saw guide wheels mounted therein, of horizontally disposed inwardly extending arms rigidly secured to the frame structure, vertical supports, sleeves carried by said supports telescopically engaged upon said arms, adjusting screws threaded in the supports and connected to the arms to adjust the supports of each pair laterally with relation to each other, stationary lower crowding wheels mounted upon each of the supports, vertically movable upper crowding wheels mounted upon said supports, and means carried by the supports for adjusting said upper crowding wheels to vary the cutting length of the band saws.

1,062,359. AUTOMATIC COALING-BUCKET. JERRE T. RICHARDS, Chicago, Ill. Filed Mar. 22, 1911. Serial No. 616,194. (Cl. 214—3.)



1. A coaling bucket, movable bucket carriers between which the bucket is mounted, a coal chute adjacent to the coaling bucket, an end chute gate, a movable bar positioned adjacent to the coaling bucket and chute, an intermediate controlling lever attached to said movable bar, a gate-actuating lever secured to said movable bar and end chute gate, a connecting member attached to the intermediate controlling lever, said intermediate controlling lever having retainers for engaging the coaling bucket when in normal position, and for releasing the bucket therefrom when advanced forward to discharging position, and means for restoring the coaling bucket from discharging to normal position, substantially as described.

2. A coaling bucket, movable bucket carriers between which the bucket is mounted, a coal chute adjacent to the coaling bucket, an end chute gate, a movable bar positioned adjacent to the coaling bucket and chute, an intermediate controlling lever attached to said movable bar, a gate-actuating lever secured to said movable bar and end chute gate, a connecting member attached to the intermediate controlling lever, said intermediate controlling lever having retainers for engaging the coaling bucket when in normal position, and for releasing the bucket therefrom when advanced forward to discharging position, means for restoring the coaling bucket from discharging to normal position, and means for releasing the bucket carriers for discharging the bucket, substantially as described.

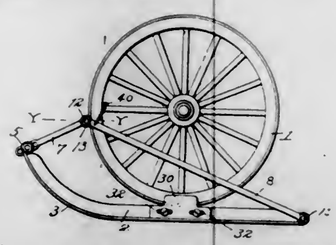
3. In a device of the class described, the combination of a bucket, a movable supporting member to which the bucket is pivotally attached, a coal chute adjacent the bucket, a chute gate, a movable forked member, a connection between said forked member and gate, the fingers of said forked member lying upon opposite sides of the rear wall of the bucket, substantially as described.

4. In a device of the class described, the combination of a bucket, a movable supporting member to which the bucket is pivotally attached, a coal chute adjacent the bucket, a chute gate, a movable forked member, a connection between said forked member and gate, the fingers of said forked member lying upon opposite sides of the rear wall of the bucket, the forward of said fingers being of less length than the rear whereby said bucket releases itself from engagement with said forked member when

the bucket has been carried forward a predetermined distance and means for holding the chute gate in position after the release of the forked member from the bucket, substantially as described.

5. In a device of the class described, the combination of a bucket, a movable supporting member to which the bucket is attached, a coal chute adjacent the bucket, a chute gate, a movable forked member, a connection between said forked member and gate, and a connection between said forked member and bucket, substantially as described.

1,062,360. RUNNER FOR VEHICLE-WHEELS. EDWARD ROGERS, New York, N. Y. Filed Dec. 7, 1911. Serial No. 664,375. (Cl. 21—96.)



1. A runner for vehicle wheels, comprising a runner body, laterally adjustable side supporting members freely attached to the rear end of said runner body, and means adjustably attached to the forward end of the runner body and secured to the side supporting members at a point in front of the wheel and below the axis of the same.

2. A runner for vehicle wheels, comprising a runner body, parallel side supporting members adjustable in parallel relation and attached to the rear end of the runner body, and means capable of adjustment attached to the forward end of said runner body and secured to the side supporting members at a point in front of the wheel and below the axis of the same.

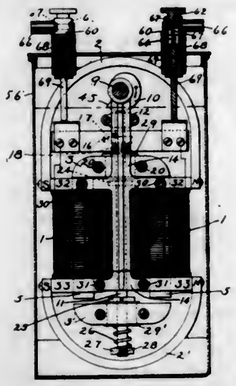
3. In a runner for vehicle wheels, the combination of a runner body adapted to be placed under a vehicle wheel, a metal runner attached to said runner body, side supporting members pivotally attached to said metal runner at the rear end thereof and a link attached to said metal runner on the forward end of said metal runner, said link and supporting members being pivotally attached together in front of the wheel and below the axis of the same.

4. In a runner for vehicle wheels, the combination of a runner body, a metal runner attached to said runner body, side supporting members pivotally attached to the rear end of said metal runner, a link attached to the forward end of said metal runner and pivotally attached to said supporting members in a manner to engage the periphery of said wheel and means for fastening said supporting members to the rim of the wheel.

5. In a runner for vehicle wheels, the combination of a runner body, a metal runner attached to said runner body, side supporting members pivotally attached to the rear end of said metal runner, a link attached to the forward end of said metal runner and pivotally attached to said supporting members in a manner to engage the periphery of said wheel, means for fastening said supporting members to the rim of the wheel and adjustable means carried by the runner body for engaging the wheel at its base.

1,062,361. GENERATOR OF INTERMITTENT ELECTRIC CURRENTS. MALCOLM P. RYDER, White Plains, N. Y. Filed Jan. 3, 1906. Serial No. 294,380. (Cl. 171—209.)

1. In a generator of electric currents, the combination of generating coils and cores therefor, two sources of magnetic flux adapted respectively to produce flux in opposite directions through the coils and two reciprocating armatures each adapted to be moved into and out of contact with the core so as to close and break a magnetic shunt circuit around the coils for one source and a magnetic circuit through the coils for the other source, said armatures acting in coöperation alternately, each to close a magnetic circuit through the coils and a shunt circuit around them during the breaking action of the other.



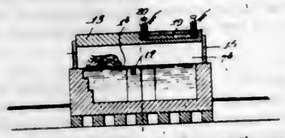
2. In a generator of intermittent electric currents, the combination with a coil and its core, of two sources of magnetic flux adapted respectively to produce flux in opposite directions through said coil and a reciprocating armature adapted to move into and out of contact with the core and means for detaching it from the core to simultaneously break a magnetic circuit of one source through the coil and a magnetic shunt for the other source around the coil.

3. The combination with two sets of generating coils and their cores, of two permanent magnets adapted respectively to produce a magnetic flux through said coils in opposite directions and two reciprocating armatures adapted to engage and be disengaged from contact with said cores and coöperating to change the flux, each being adapted on disengagement to break a magnetic shunt for one of the permanent magnets around the coils and at the same time break the magnetic circuit for the other permanent magnet through the coils, while the other armature is engaging to establish the magnetic circuit for the permanent magnet whose shunt is broken and at the same time close a magnetic shunt for the magnet whose circuit through the coils is broken.

4. The combination with a generating coil and core therefor, of two permanent magnets adapted respectively to produce a magnetic flux through said core in opposite directions, a reciprocating armature adapted in one position to engage the core and close the magnetic circuit for one permanent magnet through the coil and establish a magnetic shunt for the other permanent magnet around said coil and in the other position to be disengaged or out of contact with the core so as to break said shunt and circuit, and a coöperating armature adapted to close a shunt and a magnetic circuit for said permanent magnets respectively during the breaking of shunt and magnetic circuit by the first armature.

1,062,362. ELECTRIC FURNACE FOR THE CONTINUOUS MANUFACTURE OF GLASS. MARIUS SAUVAGEON, Colombes, France. Filed Aug. 5, 1909. Serial No. 511,375. (Cl. 204—64.)

1. An electric furnace for the continuous production of glass, comprising in combination, a single melting and refining means comprising a melting and refining chamber of relatively small capacity, a mass of molten glass in said chamber, constituting a heating resistance and serving to support by flotation a mass of glass-producing material, and electrodes immersed in the molten glass in said chamber, the heat produced by current through the said mass of molten glass serving to melt the glass-producing material and to refine the resulting glass; and a working chamber receiving glass from the melting and refining chamber.



2. An electric furnace for the continuous production of glass, comprising in combination, a single melting and refining means comprising a combined melting and refining chamber, a mass of molten glass therein constituting a heating resistance and serving to support by flotation a mass of glass producing material, and electrodes immersed in the molten glass in the said chamber and arranged to give a relatively short current-path through the glass whereby to permit the use of low tension current; and a working chamber located out of the direct path of the current and arranged to receive refined glass from the said melting and refining chamber.

3. In an electric furnace for the continuous production of glass, in combination, a single melting and refining means comprising a combined melting and refining chamber, a mass of molten glass in said chamber, constituting a heating resistance and serving to support by flotation a mass of glass-producing material, and electrodes immersed in the mass of molten glass in said chamber and arranged relatively close together whereby to give a short current-path through the glass and permit the employment of current of low voltage; and a working chamber located out of the direct path of the current and arranged to receive refined glass from the said melting and refining chamber, and means associated with the working chamber for maintaining the molten glass therein at a suitable working temperature.

4. In an electric furnace for the continuous production of glass, in combination, a combined melting and refining chamber having an outlet passage, a mass of molten glass in said chamber, constituting a heating resistance and serving to support by flotation a mass of glass-producing material, electrodes immersed in the molten glass in said chamber and arranged relatively close together whereby to give a short current path through the glass and permit the employment of current of low voltage, a working chamber receiving refined glass from the melting and refining chamber but located out of the direct path of the current, and having a roof, and an electrical heating resistance carried by the roof, for maintaining the glass in the working chamber at a suitable working temperature.

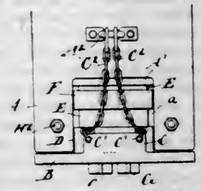
5. An electric furnace for the continuous production of glass, comprising in combination, a single melting and refining means comprising a combined melting and refining chamber having an outlet passage at its end, a mass of molten glass in said chamber, constituting a heating resistance and serving to support by flotation a mass of glass producing material, and electrodes immersed in the mass of molten glass at the sides of the melting and refining chamber whereby the current will flow across the chamber; and a working chamber located at the end of the said melting and refining chamber and arranged to receive refined glass therefrom through said outlet passage.

[Claim 6 not printed in the Gazette.]

1,062,363. PILE-CAP. MAX SCHALSCHA, Summit, N. J. Filed Nov. 1, 1912. Serial No. 729,004. (Cl. 61—37.)

1. In a device of the character set forth, a rectangular plate matching the lower face of a hammer, a socket on the upper face of said plate, a block received in said socket and arranged to receive blows of the hammer-ram, wings on said plate, loose flexible connections from said wings to said hammer, and means on the under face of said plate for engaging the end of a pile.

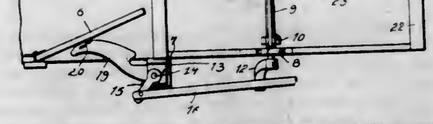
2. In a device of the character set forth, a rectangular plate matching the lower face of a hammer, a socket on the upper face of said plate, a block received in said socket and arranged to receive blows of the hammer-ram, a band inclosing said block near the upper end of the latter, wings on said plate, loose flexible connections from said wings to said hammer, and bosses on the under face of said plate, arranged to engage the end of a sheet-pile.



3. The pile-cap described comprising a plate, upwardly projecting wings and a socket on the upper face of such plate, means on the lower face of said plate for engaging a pile-end, said wings, socket, and engaging means cast integrally with said plate.

4. The combination of a hammer having openings in its sides at the lower end and a reciprocating ram in said hammer, with a rectangular plate matching the under face of said hammer, upwardly projecting wings on said plate received in said openings, loose flexible connections from said wings to said hammer, a socket on the upper face of said plate, a block received in said socket and arranged to serve as a cushion to receive the blows of said ram, and means on the under face of said plate for engaging the end of a pile.

1,062,364. FLUME-GATE. JOHN E. SCHNEIDER, Cortez, Colo. Filed Nov. 12, 1912. Serial No. 731,003. (Cl. 61—47.)



1. An automatic flume gate comprising the gate proper mounted in one of the side walls of the flume for transverse swinging movement, a rocker arm mounted upon the flume to move said gate, and operating means for said arm actuated by the increase of pressure beyond a predetermined point to automatically move the gate to its opened and closed positions.

2. An automatic flume gate comprising the gate proper mounted in one of the side walls of the flume for transverse swinging movement, a rock shaft, an arm fixed upon said rock shaft to bear against the free end of the gate, a flexible connection between said gate and the arm, and means mounted upon the flume and connected to the rock shaft and actuated by the increase of water pressure in the flume beyond a predetermined point to rock the shaft and alternately open and close the gate.

3. An automatic flume gate comprising the gate proper mounted in one of the side walls of the flume for transverse swinging movement, a rocker arm mounted upon the flume wall at the free end of the gate and adapted to bear against said gate and force the same inwardly, and operating means for said arm mounted upon the flume and actuated by the increase of water pressure in the flume beyond a predetermined point.

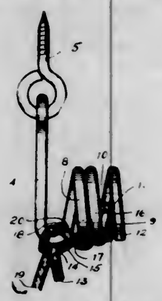
4. An automatic flume gate comprising the gate proper mounted in one of the side walls of the flume for transverse swinging movement, a perpendicular rock shaft mounted upon the flume, an arm fixed upon said shaft to bear against the gate and force the same inwardly, a flexible connection between said arm and the gate, a transverse shaft journaled upon the side walls of the flume, blades fixed to said shaft and extending into the flume, said shaft being rotated by the water pressure

against said blades, and means connecting said shaft to the rock shaft to actuate the latter and alternately move the gate to its opened and closed positions.

5. An automatic flume gate comprising the gate proper mounted in one of the side walls of the flume for transverse swinging movement, a perpendicular rock shaft mounted upon the flume wall at the free end of the gate, a longitudinally curved arm fixed to said shaft to bear against the gate and force the same inwardly into the path of the water, a transverse shaft mounted upon the flume, blades fixed to said shaft and extending into the flume to receive the impact of the water and rotate said shaft, an arm fixed to one end of said shaft, an arm fixed to the rock shaft, a bar pivotally connected to one end of the latter arm, and coengaging means on the arm of said transverse shaft and said bar to reverse the movement of the rock shaft and alternately open and close said gate.

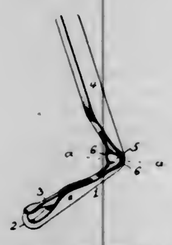
[Claims 6 and 7 not printed in the Gazette.]

1,062,365. HOOK. HENRY P. SCHULTE, Wheaton, Ill., assignor to William Snyder and Charles A. Dollinger. Filed Jan. 26, 1911. Serial No. 604,827. (Cl. 24—131.)



A hook of the class described, comprising a single length of wire, extending forwardly from a support and then rearwardly to provide an elbow for the reception of a rope or the like, then looped a plurality of times with the convolutions of the loops spiraling upward and forwardly to provide an abutment, and then looped to provide another convolution lying at an angle to the aforesaid convolutions to provide a wedge shaped opening between the lower portion of an abutment loop and the last mentioned loop, whereby a rope or the like may be extended from the elbow and have its end portion intertwined with the wedge shaped slot, substantially as and for the purpose set forth.

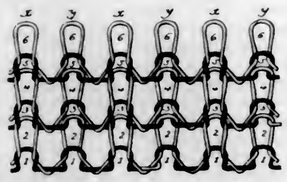
1,062,366. NEEDLE FOR KNITTING-MACHINES. ROBERT W. SCOTT, Leeds Point, N. J., assignor, by direct and mesne assignments, to Scott & Williams, Incorporated, Camden, N. J., a Corporation of New Jersey. Filed June 4, 1908. Serial No. 436,706. (Cl. 66—5.)



1. A knitting machine needle having a stem bent so as to present members at an angle to one another, the metal of which the bent portion of the stem is composed being expanded laterally.

2. A knitting machine needle having a stem bent so as to present members at an angle to one another, said stem having a grooved and rigid lateral expansion at the bend.

1,062,367. RIBBED KNITTED WEB AND MAKING SAME. ROBERT W. SCOTT, Leeds Point, N. J., assignor, by direct and mesne assignments, to Scott and Williams, Incorporated, Camden, N. J., a Corporation of New Jersey. Filed Apr. 28, 1910. Serial No. 558,223. (Cl. 66—4.)



1. A ribbed knitted web having sinker wales of some of the courses passing downwardly behind, forwardly beneath and upwardly in front of sinker wales of other courses.

2. A ribbed knitted web having successive courses produced with different yarns and having the sinker wales of some of the courses passing downwardly behind, forwardly beneath, and upwardly in front of sinker wales of other courses.

3. A ribbed knitted web having sinker wales of some of the courses passing downwardly behind, forwardly beneath, and upwardly in front of sinker wales of other courses whose stitches differ in size from those of the courses first mentioned.

4. A ribbed knitted web having sinker wales of some of the courses passing downwardly behind, forwardly beneath, and upwardly in front of sinker wales of other courses, the latter courses being composed of different yarn from the courses first mentioned, and having stitches differing in size from those of said first mentioned courses.

5. The mode herein described of producing a ribbed knitted web, said mode consisting in forming a course of loops disposed alternately in different faces of the web, knitting a course of stitches alternating with said loops, and drawing loops in one face of the web through stitches in the other face of the same.

1,062,368. DEVICE FOR CLOSING TABLET-CAPSULES. WILHELM SIMON, Nuremberg, Germany, assignor to Johann Schmidt, Nuremberg, Germany. Filed May 11, 1911. Serial No. 626,624. (Cl. 128—32.)



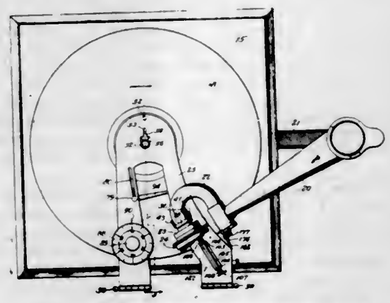
1. A device for closing tablet capsules, comprising a case consisting of two halves hinged together, the lower half of the case having openings corresponding in diameter to the lower halves of the tablet capsules of maximum size and the upper half of the case having openings corresponding in diameter to the upper half of the tablet capsules of maximum size, tubes adapted to be placed one into the other and into the openings of the two halves of the case, two plates with projections fitting the smallest size of said tubes, and removable pins passing through the lower side portions of the case for limiting the stroke of the two plates.

2. A device for closing tablet capsules, comprising a case consisting of two halves hinged together, the lower half of the case having openings corresponding in diameter to the lower halves of the tablet capsules of maximum size and the upper half of the case having openings corresponding in diameter to the upper half of the tablet capsules of maximum size, tubes adapted to be placed one into the other and into the holes of the two halves of the case, two plates with projections fitting the smallest size of said tubes, and means for securing said tubes in the holes of the two halves of the case.

3. A device for closing tablet capsules, comprising a case consisting of two halves hinged together having each holes in their lower side portions, the lower half of the case having openings corresponding in diameter to the lower halves of the tablet capsules of maximum size and the upper half of the case having openings corresponding in diameter to the upper half of the tablet capsules of maximum size, tubes adapted to be placed one into the other and into the holes of the two halves of the case, two outer plates with projections fitting the smallest size of said tubes, pairs of intermediate plates adapted to connect said tubes of corresponding size, removable pins fitting the holes of the side portions of the halves of the case for limiting the stroke of the outer plates, and projections on the intermediate plates for coupling said plates in the two halves of the case.

4. A device for closing tablet capsules, comprising a case consisting of two halves hinged together having each holes in their lower side portions, the lower half of the case having openings corresponding in diameter to the lower halves of the tablet capsules of maximum size and the upper half of the case having openings corresponding in diameter to the upper half of the tablet capsules of maximum size, tubes adapted to be placed one into the other and into the holes of the two halves of the case, two outer plates with projections fitting the smallest size of said tubes, pairs of intermediate plates adapted to connect said tubes of corresponding size, and means for selectively securing said intermediate plates in the two halves of the case comprising removable pins adapted to be passed through the holes in the lower side portions of said case.

1,062,369. SOUND-REPRODUCING INSTRUMENT. BEN R. SMITH, Chicago, Ill., assignor to Smith Repeatostop Company, Chicago, Ill., a Corporation. Filed June 3, 1912. Serial No. 701,195. (Cl. 181—3.)



1. The combination with a sound-reproducing instrument including a sound box, and a rotating table, of a shelf arranged below the path of travel of said sound box, a screw fixed to said rotating table and rotated thereby, a member carried by said shelf for engaging with said screw, a part extending from said shelf over said record disk and adapted for engagement with said sound box in the travel of the latter, and means acting through the movement of such part to bring said screw engaging member into engagement with such screw and incline said shelf.

2. The combination with a sound-reproducing instrument including a rotating table, of a horizontal shelf arranged above said rotating table, means for detachably securing said shelf to the instrument, a screw carried by said rotating table and rotated thereby, a movable member secured to said shelf for engaging with said screw, a lever extending from said shelf to engage with the sound box in the travel of the latter, and means for transmitting the movement of said lever to the movable member in said shelf.

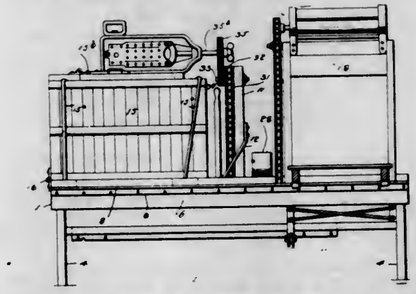
3. The combination with a sound-reproducing instrument including a rotating table, of a horizontal shelf arranged above said rotating table, means for detachably securing said shelf to the instrument, a screw carried by said rotating table and rotated thereby, a movable member secured to said shelf for engaging with said screw, a lever extending from said shelf to engage with the sound box in the travel of the latter, and means for transmitting the movement of said lever to the movable member in said shelf, said lever being adjustable with respect to a radius of said rotating table.

4. The combination with a sound-reproducing instrument including a sound box, and a rotating table, of a shelf arranged above said rotating table, a sliding block in the end of said shelf, a pivoted lever for moving said block, said lever having a cam-shaped portion, and a latch engaging with said cam-shaped portion to yieldingly maintain said sliding block in one of its positions.

5. The combination with a sound-reproducing instrument including a sound box, and a rotating table, of a shelf arranged above said rotating table, a sliding block in the end of said shelf, a pivoted lever for actuating said sliding block, and another lever extending over the record disk and engaging with said first lever.

[Claims 6 to 14 not printed in the Gazette.]

1,062,370. DRIVING MECHANISM. JOHN H. SPEAS, Cazenovia, Ill., assignor, by mesne assignments, to Power Washing Machine Co., Peoria, Ill., a Corporation of Illinois. Original application filed July 6, 1908, Serial No. 441,982. Divided and this application filed Dec. 3, 1912. Serial No. 734,682. (Cl. 74—7.)



1. In a machine of the character described, a machine support, a driving shaft, a machine mounted on said support, an operating means for said machine movably mounted thereon and including a shaft and a driving member, a driving mechanism operated by the driving shaft, said driving member of the operating means on the machine adapted to be moved into and out of operative relation with said driving mechanism.

2. In a machine of the character described, a machine support, a driving shaft, an upright frame on said support, a short shaft journaled at the upper end of said frame, a wheel on said short shaft, a wheel on the driving shaft, a belt connecting said wheel on the driving shaft and said wheel on the short shaft, a gear wheel also carried by said short shaft, a machine mounted on said support, an operating means for said machine including a gear wheel, said operating means being movable on said machine, and said gear wheel of said operating means being adapted to be moved into and out of meshing relation with the gear wheel on said short shaft.

3. In a machine of the character described, a machine support, a machine mounted on said support, an operating

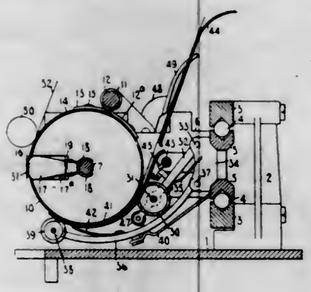
means for said machine, said operating means including a gear wheel, a driving shaft, a gear wheel with which the gear wheel of the operating means of the machine may be moved into and out of meshing relation, and means for operating said second mentioned gear wheel from said driving shaft.

4. In a machine of the character described, a machine support, a machine mounted on said support and having a hinged member, an operating means carried by said member, said operating means including a shaft and a gear wheel, a driving shaft, a gear wheel with which the gear wheel of the operating means of the machine may be moved into and out of meshing relation, and means for operating said second mentioned gear wheel from said driving shaft.

5. In a machine of the character described, a machine support, a machine mounted thereon, said machine having a hinged member, an operating means carried by said member and including a shaft, a driving shaft, a driving mechanism operated by said driving shaft, said shaft of the operating means of the machine and said driving mechanism adapted to be connected and disconnected for operating said operating means from said driving shaft.

[Claims 6 to 8 not printed in the Gazette.]

1,062,371. TYPE-WRITING MACHINE. HERBERT H. STEELE, Marcellus, N. Y., assignor to The Monarch Typewriter Company, Syracuse, N. Y., a Corporation of New York. Original application filed Dec. 31, 1909, Serial No. 539,744. Divided and this application filed May 11, 1912. Serial No. 696,562. (Cl. 197—144.)



1. In a typewriting machine, the combination of a frame, a shaft thereon, a hollow casing on said shaft, and a platen within said casing and detachably secured to said shaft.

2. In a typewriting machine, the combination of a frame, a shaft thereon, a casing mounted on said shaft, said casing having a hinged cover and being provided with a longitudinal slot, and an anvil platen mounted within said casing opposite said slot, said platen being provided with clips by which it is detachably secured to said shaft.

3. In a typewriting machine, the combination of a frame, a hollow casing, a shaft on said frame supporting said casing, a platen within said casing and devices on said frame for holding said casing from turning when said shaft is turned, said platen having connections with said shaft which are independent of said casing.

4. In a typewriting machine, the combination of a frame, a hollow casing, a shaft on said frame supporting said casing, a platen in said casing, a rod on said frame, and hooks on said rod connected to said casing.

5. In a typewriting machine, the combination of a traveling carriage, a hollow casing fixed thereto, means for affording access to the interior of said casing, an anvil platen within said casing, and connections between said platen and said casing for preventing movements of said platen relative to said casing.

[Claims 6 and 7 not printed in the Gazette.]

1,062,372. PIPE-HANGER. JOHN PUTNAM SWAN, Providence, R. I., assignor to General Fire Extinguisher Company, Providence, R. I., a Corporation of New York. Filed Aug. 30, 1911. Serial No. 646,792. (Cl. 248—34.)



1. A pipe hanger comprising a supporting bracket, a pipe-supporting device pivotally suspended therefrom and means for adjusting the same vertically, and guides to permit swinging movements of the pipe-supporting device transversely to the length of the pipes.

2. A pipe hanger comprising a bracket adapted to be attached to a vertical wall and having an outwardly-extending arm, a hook passing through said arm and having a threaded shank with an adjusting nut thereon, and a plate provided with a series of pipe-receiving perforations and pivotally suspended on said hook in position to swing toward and away from the wall transversely to the length of the pipe carried thereby.

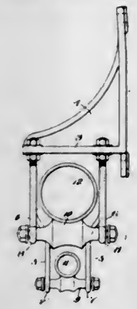
3. A pipe hanger comprising a supporting bracket having an outwardly-extending arm, a perforated plate suspended from said bracket, and a pair of fixed guides extending transversely to the length of the pipes and having the lower portion of said plate located between them.

4. A pipe hanger comprising a bracket adapted to be attached to a vertical wall and having an outwardly-extending arm, a hook passing through said arm and having a threaded shank with an adjusting nut thereon, a pipe-supporting device pivotally suspended from said hook, and fixed guides located below said bracket and arranged to permit swinging movements of the pipe-supporting device toward and from the wall and to prevent movement of said pipe-supporting device in the direction of the length of the pipes.

5. A pipe hanger comprising a bracket adapted to be attached to a vertical wall and having an outwardly-extending arm, a hook having a threaded shank passing vertically through said arm and provided above the latter with an adjusting nut, a plate pivotally suspended on said hook and having one or more pipe-receiving perforations therein, and a supplementary bracket adapted to be attached to the wall and having a pair of outwardly-extending guiding arms between which the lower portion of said plate is located.

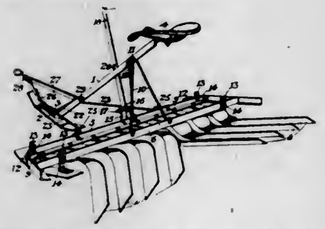
1,062,373. PIPE-HANGER. JOHN PUTNAM SWAN, Providence, R. I., assignor to General Fire Extinguisher Company, Providence, R. I., a Corporation of New York. Filed Aug. 30, 1911. Serial No. 646,793. (Cl. 248—34.)

A pipe hanger comprising a bracket having a horizontal arm, two pairs of independent supporting rods having threaded shanks passing through opposite edge portions of said arm, respectively, and provided with adjusting nuts, and two pipe supports carried by said pairs of rods respectively and located one above and in advance of the other, said supporting rods being spaced to receive the lower pipe



between the rods of one pair and the upper pipe between the rods of both pairs.

1,062,374. CULTIVATOR. FREDERICK N. TAFF, Millington, N. J., assignor to Duane H. Nash Inc., Millington, N. J., a Corporation of New Jersey. Filed July 1, 1912. Serial No. 706,871. (Cl. 55—149.)



1. A cultivator comprising a standard, a shoe attached to the lower end of the standard, a gang bar, a cross bar rigidly secured to said gang bar and jointedly connected with the standard, runners adjustably connected with the gang bar, spaced colters, one end of each of which is secured to said gang bar and said cross bar, and means for adjusting the colters relatively to the ground.

2. A cultivator comprising a standard, a shoe attached to the lower end of the standard, a gang bar having its ends bent rearwardly at an angle to form guard arms, a cross bar rigidly secured to said arms and jointedly connected with the standard, spaced colters, one end of each of which is secured to said gang bar and said cross bar, and a hand lever for adjusting the colters relatively to the ground.

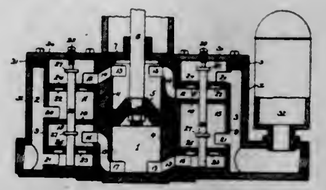
3. A cultivator comprising a standard, a shoe attached to the lower end of the standard, a gang bar having its ends bent rearwardly at an angle to form guard arms, a cross bar, hangers forming jointed connections between said cross bar and said standard, spaced colters, one end of each of which is secured to said gang bar and said cross bar, and a hand lever for adjusting the colters relatively to the ground.

4. A cultivator comprising a standard, a shoe attached to the lower end of the standard, a gang bar, a cross bar, jointedly connected with the standard, runners adjustably connected to the gang bar, spaced colters, one end of each of which is secured to said gang bar and said cross bar, and a hand lever for adjusting the colters relatively to the ground.

5. A cultivator comprising a standard, a shoe attached to the lower end of the standard, a gang bar, having its ends bent rearwardly at an angle to form guard arms, a cross bar secured at its respective ends to said arms, jointed connections between said cross bar and the standard, runners adjustably connected to the gang bar and to said cross bar, spaced colters, one end of each of which is secured to said gang bar and to said cross bar, and a hand lever for adjusting the colters relatively to the ground.

[Claims 6 and 7 not printed in the Gazette.]

1,062,375. PUMP. FRANK TYSON, Canton, Ohio. Filed Jan. 20, 1908. Serial No. 411,774. (Cl. 103—66.)



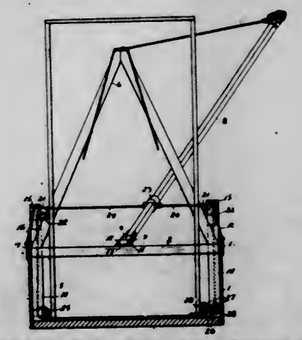
1. The combination of the pump casing with a detachable open-ended shell containing upper and lower valves and having a partition whereby the chamber above the lower valve is separated from the chamber below the upper valve irrespective of whether the valves are open or closed, and a detachable valve seat in each of said chambers, the upper valve seat being so far above the partition as to provide a flow chamber between the two.

2. The combination of a pump casing with a detachable open-ended cage containing upper and lower valves and having a partition whereby the chamber above the lower valve is separated from the chamber below the upper valve, and detachable valve seats in each of said chambers, the partition being also detachable, whereby both valves, both valve seats and the partition can be removed from the top of the cage.

3. The combination of a pump casing with a detachable cage closed at one end and open at the other, and containing upper and lower valves, a detachable partition in the said cage whereby the chamber above the lower valve is separated from the chamber below the upper valve, and a detachable valve seat in each of said chambers.

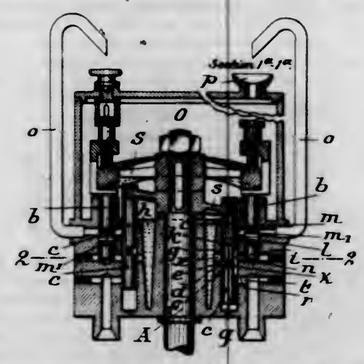
4. The combination of a pump casing with a detachable cage closed at one end and open at the other, and containing upper and lower valves, a detachable partition in said cage whereby the chamber above the lower valve is separated from the chamber below the upper valve, and a detachable guide rod for the valves with stops for limiting the opening movement of the same.

1,062,376. APPARATUS FOR SWINGING BOOMS. ROBERT M. WILSON, Victoria Island, Cal. Filed Apr. 30, 1912. Serial No. 694,195. (Cl. 212—66.)



In combination with a boom, and a support upon which the boom is rotatably mounted, standards secured to said support at a distance from the boom, one on each side thereof, upper and lower bearings on said standards, shafts rotating in said bearings, housings secured to said shafts, sheaves rotatable in said housings, cables around said sheaves and secured to the boom, and means for drawing said cables around said sheaves.

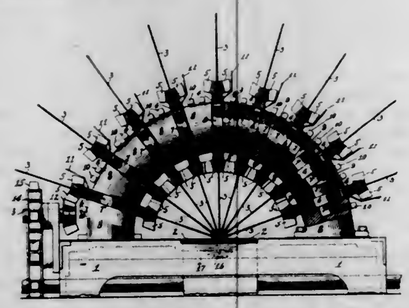
1,062,377. LUBRICATING SYSTEM. EUGEN WOERNER, Cannstatt, Germany, assignor to The Firm of Robert Bosch, Stuttgart, Germany. Filed Aug. 30, 1910. Serial No. 579,662. (Cl. 184—27.)



1. In a lubricating system, a feed pump for the lubricant having a plunger, a plurality of conduits leading from said pump, a reciprocating valve for distributing the oil fed from said pump to the said conduits in succession, driving mechanism for reciprocating said plunger, and driving mechanism for reciprocating said valve, the said driving mechanisms being so timed that for each reciprocation of the valve the pump plunger is reciprocated a number of times equal to the number of conduits, whereby the individual quantities of oil fed from the pump by successive strokes thereof are delivered to the said conduits in rotation, substantially as described.

2. In a lubricating system, an oil receptacle, a plurality of oil pumps arranged concentrically with respect to the receptacle and having suction passages communicating therewith, a plunger for each pump, a plurality of conduits leading from each pump, a reciprocating valve for each pump for distributing the oil fed therefrom to its conduits in succession, said valves being likewise arranged concentrically with respect to said receptacle, a cam-wheel S for reciprocating said plungers, and a cam-wheel *s* for reciprocating the valves, the said cam-wheels being so shaped that for each reciprocation of a valve its pump plunger is reciprocated a number of times equal to the number of its conduits, substantially as described.

1,062,378. SLICING-MACHINE. WILLIAM C. ANDERSON and ALBERT R. THOMPSON, San Jose, Cal., assignors to Anderson-Barngrover Mfg. Co., San Jose, Cal., a Corporation of California. Filed May 3, 1911. Serial No. 624,816. (Cl. 146—11.)



1. In a slicing machine of the described class, the combination of a frame; a plurality of spaced cutting disks assembled in semi-circular series and in radial planes; a plurality of shafts, one shaft in the axis of each cutting disk; a semi-circular series of blocks the terminal ones resting on the frame and the intervening ones lying between the cutting disks, said blocks receiving and supporting the shafts of said disks; and means for presenting the material to and passing it between the convergent lower portions of the cutting disks.

2. In a slicing machine of the described class, the combination of a frame; a plurality of spaced cutting disks assembled in semi-circular series and in radial planes; a plurality of shafts, one shaft in the axis of each cutting disk, and upon which it rotates; a semi-circular series of blocks the terminal ones resting on the frame and the intervening ones lying between the cutting disks, said blocks receiving and supporting the shafts of said disks; means for rotating all of said disks; means for fixing said shafts in said blocks; and means for presenting the material to and passing it between the convergent lower portions of the cutting disks.

3. In a slicing machine of the described class, the combination of a frame; a plurality of spaced cutting disks assembled in semi-circular series and in radial planes; a plurality of shafts one in the axis of and projecting from each side of each disk, each of said shafts having a central portion eccentric to the axis of its end portions and upon which central portion the disk is mounted; means for turning each shaft in the axis of the disk it supports, to adjust the relative position of the disk in the series; a semi-circular series of blocks the terminal ones resting on the frame and the intervening ones lying between the cutting disks, said blocks receiving and supporting the shafts of said disks; and means for presenting the material to and passing it between the convergent lower portions of the cutting disks.

4. In a slicing machine of the described class, the combination of a frame; a plurality of spaced cutting disks assembled in semi-circular series and in radial planes; a plurality of shafts one in the axis of and projecting from each side of each disk, each of said shafts having a central portion eccentric to the axis of its end portions and upon which central portion the disk is mounted; means for turning each shaft in the axis of the disk it supports, to adjust the relative position of the disk in the series; a semi-circular series of blocks the terminal ones resting on the frame and the intervening ones lying between the cutting disks and within their peripheries, said blocks receiving and supporting the projecting ends of the disk shafts; releasable means for fixing the shaft ends in said blocks; means for rotating all of said disks; and means for presenting the material to and passing it between the convergent lower portions of the cutting disks.

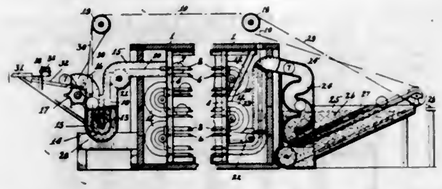
5. In a slicing machine of the described class, the combination of a plurality of spaced cutting disks assembled in semi-circular series and in radial planes; annular gears secured on each face of each cutting disk around its center, adjacent gears intermeshing; means for rotatably mounting and supporting said series of cutting disks; power transmitting connections to one of the gears for rotating all the disks; and means for presenting the material to and passing it between the convergent lower portions of the cutting disks.

[Claims 6 to 10 not printed in the Gazette.]

1,062,379. COOKER. WILLIAM C. ANDERSON and ALBERT R. THOMPSON, San Jose, Cal., assignors to Anderson-Barngrover Mfg. Co., San Jose, Cal., a Corporation of California. Filed Nov. 9, 1911. Serial No. 659,314. (Cl. 126—272.)

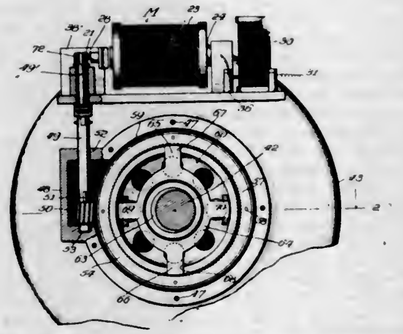
1. In a cooker, the combination with the heating box thereof, conveyer means for conveying a pair of recumbent alined cans through the box, a feed runway in which the cans advance in single file and upright position, a pivoted switch in the path of such can file, and operative under the pressure of said file to direct the cans alternately to the right and left and tip them from the edges of the chute, a spring associated with said switch and adapted to positively shift the same in either direction after initial engagement thereof by the can, and means for delivering the tipped cans onto the conveyer means.

2. In a cooker, the combination with the heating box thereof, said box having a pair of parallel can tracks adapted to receive a pair of recumbent aline cans, of a pair of conveyer supporting rails positioned above said can tracks, a traveling carrier chain positioned between the



can tracks and thereabove, and arms projecting laterally from said chain and engaging the conveyer tracks, said arms serving as a support for the conveyer chain and as a means for engaging the cans to propel the same on their tracks.

1,062,380. REGULATOR FOR DYNAMO-ELECTRIC MACHINES. VINCENT G. APPLE, Dayton, Ohio, assignor to The Apple Electric Company, Dayton, Ohio, a Corporation of Ohio. Filed Oct. 2, 1911. Serial No. 652,381. (Cl. 171—229.)

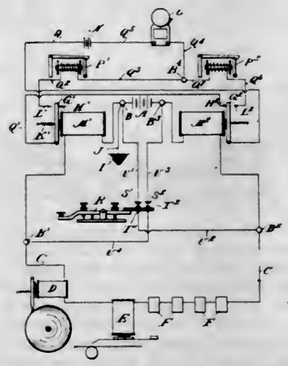


1. The combination of a dynamo having a longitudinal shaft, a casing, reduction gearing therein comprising a cam on the shaft, an annular member loose on the cam, a surrounding annular member co-acting therewith for rotation at reduced speed, the exterior of said surrounding member being formed into a worm, a rotatable vertical shaft supported in said casing, a worm at one end of said vertical shaft coöperating with the worm provide by said surrounding annular member, an electrical contact on the other end of said vertical shaft for rotation thereby at greatly reduced speed, and suitable coöperating electrical contacts for purposes described.

2. The combination of a dynamo having a longitudinal shaft, a casing, reduction gearing therein including a slowly rotating worm, a vertical shaft mounted in the casing, a co-acting worm wheel on one end thereof, a contact on the other end rotatable by the dynamo at greatly reduced speed through the medium of said reduction gearing and worm, and coöperating contacts vibratable into and out of electrical connection with said rotating contact.

3. The combination with a dynamo having a shaft and a dynamo-energized circuit, a vibratable contact, means responsive to a predetermined condition in said dynamo-energized circuit to vibrate said contact, a vertical shaft, a rotatable contact on one end of said shaft, the other end extending down into horizontal alinement with said dynamo shaft, and connections between the other end and the dynamo shaft for rotation of the rotatable contact at a speed slower than but in proportion to the speed of the dynamo shaft.

1,062,381. SIGNALING SYSTEM. CLARENCE E. BEACH, Binghamton, N. Y., assignor to George O. Knapp, New York, N. Y. Filed Sept. 23, 1910. Serial No. 583,463. (Cl. 178—50.)



1. A signaling system comprising a circuit having signal transmitting and receiving devices therein and a battery, one terminal of which is grounded, a normally energized relay connected to said grounded end of the battery and to one side of the signal circuit, a local battery circuit controlled by said relay and containing a signaling device, a second normally energized relay connected to the other terminal of the battery and to the other side of the signal circuit and having its armature included in the local circuit, a second signaling device and means for including it in circuit with the local battery when the second relay is deënergized.

2. A signaling system comprising a circuit having signal transmitting and receiving devices therein and a battery, one terminal of which is grounded, relays connected to opposite sides of said battery and signal circuit, a local battery circuit including the armature of both relays and a signaling device, and a branch local circuit including a signaling device controlled only by the relay connected to the nongrounded end of the battery.

3. A signaling system comprising a circuit having signal transmitting and receiving devices therein and a battery, one terminal of which is grounded, relays connected to opposite sides of said battery and signal circuit, a local battery circuit including the armature of both relays and a signaling device, and a branch local circuit including a signaling device controlled only by the relay connected to the non-grounded end of the battery, said signal transmitting device being connected to transmit current in a direction opposite to that of the normal current flow.

4. A signaling system comprising a circuit having a battery therein and having signal-receiving devices and magnetic-controlling means having coils connected on each side of the battery and on each side of the signal circuit, a local battery circuit containing a signaling device and controlled by such magnetic-controlling means, and a signal-transmitting device adapted to connect the said signal-receiving devices directly to the said battery.

5. A signaling system comprising a normally closed circuit having signal transmitting and receiving devices therein and a battery, magnetic controlling means having coils connected on each side of the battery and on each side of the signal circuit, and a local battery circuit containing a signaling device and controlled by such magnetic controlling means, said signal transmitting device being connected to transmit current in a direction opposite to that of the normal current flow.

[Claims 6 to 26 not printed in the Gazette.]

1,062,382. TRACTION-WHEEL. SAMUEL M. BOWER, Tutwiler, Miss. Filed May 20, 1912. Serial No. 698,421. (Cl. 21—64.)

1. In a traction wheel the combination of a rim, feet independently mounted upon the rim for movement with

respect thereto, bearing bridges interposed between the feet and rim each bridge spanning two adjacent feet, links corresponding with the respective bridges, each link being pivoted at one end to a corresponding bridge end, and the opposite extremities of the bridge and link being respectively pivoted to a foot and to the rim above said foot.



2. In a traction wheel, the combination of a rim, feet independently mounted upon the rim for movement with respect thereto, bearing bridges interposed between the feet and rim each bridge spanning two adjacent feet, links corresponding with the respective bridges, each link being pivoted at one end to a corresponding bridge, and the opposite extremities of the bridge and link being respectively pivoted to a foot and to the rim above said foot, the axis of pivotal connection between said foot and bridge being near the bearing surface of the bridge, and the axis of pivotal connection between the link and rim being near the bearing plane of the rim.

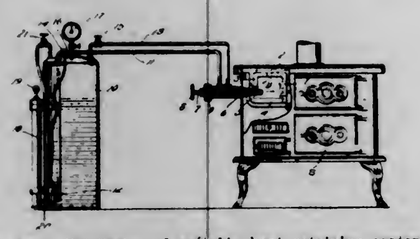
3. In a traction wheel the combination of a rim having outwardly extending flanges, feet carried by the rim, each having inwardly extending side flanges substantially interfitting with the side flanges of the rim, and lying exteriorly thereto, bridges interposed between the feet and rim, and means for communicating traction strain from said rim to said feet through said bridges.

4. In a traction wheel, the combination of a rim, feet independently mounted on the rim to be carried in rotation thereby, bridge members between the feet and rim each said bridge member spanning between points on adjacent feet oppositely beyond the longitudinal center of said feet, and at one end pivotally connected with one of said feet, link members for the bridges connecting the free end of each bridge with a point on the rim above the foot to which the bridge member is pivotally connected, and side flanges on the feet embracing the sides of the rim.

5. In a traction wheel, the combination of a rim, feet independently mounted on the rim to be carried in rotation thereby, bearing bridges interposed between the feet and rim, each bridge having end portions out of alinement with the end portions of adjacent bridges for overlapping arrangement of all the bridges and each bridge extending beyond the longitudinal centers of the underlying feet spanned thereby, and links corresponding with the respective bridges, each link being pivoted at one end to a bridge, and the opposite extremities of the bridge and link being pivoted respectively to a foot and to the rim above said foot.

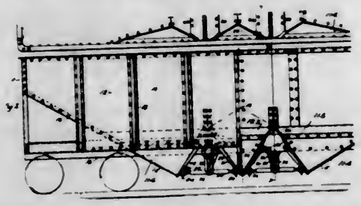
[Claims 6 and 7 not printed in the Gazette.]

1,062,383. OIL-BURNER. JAMES H. BOWLING, Russellville, Ky. Filed Oct. 29, 1912. Serial No. 728,409. (Cl. 158—73.)



A heat distributer of suitable heat retaining material as fire clay, comprising a three sided member including a perforated back having an imperforate central portion, a perforated top, an imperforate front section of half the width of said back section and two bottom brackets extending from said back parallel with said top, as and for the purpose set forth.

1,062,384. HOPPER-BOTTOM CAR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1912. Serial No. 688,591. (Cl. 105—185.)

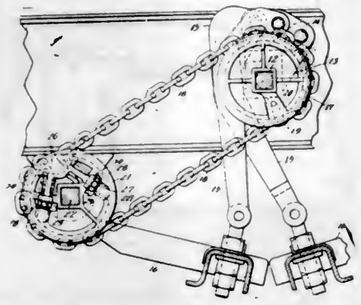


A hopper car of the character described, having vertical end walls; sides; inclined bottoms sloping from said end walls toward the center of the car and passing over the trucks to points therebetween, the distance between the outer side sheets of the hoppers on one side of the car and the outer side sheets of the hoppers on the other side of the car being greater than the distance between the rails; end-hopper triangular-shaped side and center hopper-sheets, transverse hopper sheets, and end-hopper central, longitudinal hopper-sheets disposed in planes below the level of the tops of the car sides and adjacent the car center sill, said bottoms and end-hopper hopper-sheets coöperating to form four end hoppers, a pair at each end of the car, said end hoppers being disposed below the level of the tops of said central, longitudinal hopper-sheets; end-hopper doors on each side of the car center sill hinged along their upper edges to said transverse hopper-sheets and adapted to close the lower ends of said end hoppers; supplemental V-shaped hoppers on each side of the car center sill intermediate the end hoppers, said supplemental-hoppers being formed by supplemental-hopper, longitudinal hopper-sheets disposed in planes below the level of the car sides, supplemental-hopper triangular shaped side and center hopper-sheets, supplemental-hopper transverse hopper-sheets and supplemental-hopper swinging doors hinged along their upper edges to said last named transverse hopper-sheets, the supplemental hoppers being disposed below the level of the tops of said last named central, longitudinal hopper-sheets; and mechanism for operating and closing all of said doors, including transversely arranged operating shafts, all of the end and supplemental-hoppers being arranged so as to obtain a low center of gravity for the load, increased capacity, larger door opening area, and the transverse hopper-sheets meeting at their upper edges at acute angles to thereby prevent bridging of the load, substantially as specified.

1,062,385. HOPPER-CAR-DOOR-OPERATING MECHANISM. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 30, 1913. Serial No. 745,057. (Cl. 105—185.)

1. A door operating mechanism of the character described including, a chain, a sheave wheel over which said chain winds and to which one end of the chain is secured, and means for adjustably securing said end of the chain to the sheave wheel, said means including an eye-bolt, a recess in the sheave wheel through which the bolt passes, said recess having a slotted portion in which the eye of the eye-bolt is slidable but is prevented from turning, substantially as specified.

2. A door operating mechanism of the character described including, a sheave wheel, said sheave wheel being provided with a pair of recesses, each recess being provided with a slotted portion, and two chain ends adjustably secured to said sheave wheel by means including an eye-bolt, the eye of which is adjustable up and down said slotted portion, but is prevented from twisting therein, substantially as specified.



3. A door operating mechanism of the character described, including a chain, a sheave wheel over which said chain winds and to which one end of the chain is secured, and means for adjustably securing said end of the chain to the sheave wheel, said means including an eye-bolt, a recess in the sheave wheel through which the bolt is adapted to pass, said recess being provided with a pair of slots arranged at right angles to each other, one of said slots being adapted to receive the eye of the eye-bolt, and the other of which is adapted to receive the end link of the chain, said slots preventing turning of the eye-bolt and end link, substantially as specified.

4. A door operating mechanism of the character described, including a chain, a sheave wheel, and two sets of devices for independently and adjustably attaching the two ends of said chain to the sheave wheel, each set of devices including an eye-bolt secured to the end link of the chain, a recess in the sheave wheel through which the eye-bolt is adapted to pass, said recess having slotted portions arranged at right angles to each other, one of the slotted portions being adapted to receive the eye of the eye-bolt and the other being adapted to receive the end link of the chain, substantially as specified.

5. A door operating mechanism of the character described including a sheave wheel, a chain, and devices for independently adjustably connecting each end of said chain to the sheave wheel, said devices including an eye-bolt, and means integral with the sheave wheel for preventing the eye-bolt from turning, substantially as specified.

1,062,386. TYPE-WRITING MACHINE. CORNELIUS B. CORCORAN, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 5, 1913. Serial No. 746,275. (Cl. 197—133.)



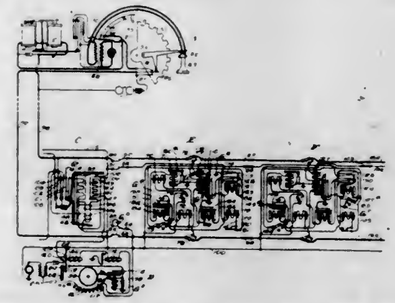
1. In a typewriting machine, the combination of a platen frame and a platen mounted thereon, of brackets mounted in the ends of the platen frame and adjustable in an arc conforming with the curvature of the platen, and a cutting blade extending along the platen and secured to said brackets.

2. An attachment for the platen frames of typewriting machines, comprising a cutting blade extending along the platen, and means on the end of the platen frame to enable said cutting blade to be brought into position at various distances from the writing line circumferentially of the platen with the distance between the blade and the platen remaining substantially constant.

3. In a typewriting machine, the combination with a platen and paper feeding devices therefor, of a cutting blade extending along the platen and mounted for adjustment around the platen, the range of adjustment extending from a point at the front of the platen in proximity to the printing point, to a point in rear of the top of the platen.

4. In a typewriting machine, the combination with a revoluble platen and types arranged to strike on the front thereof, of a cutting blade extending along the platen, and means for supporting said blade, said supporting means comprising ears on the platen frame at the ends of the platen, said ears being provided with slots extending around the top of the platen to the rear of the top side thereof concentric with the platen, and clamping devices connected with said blade and adjustable along said slots.

1,062,387. MEASURED-SERVICE TELEPHONE SYSTEM. JOHN ERICKSON, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 22, 1911. Serial No. 661,786. (Cl. 179—7.)



1. In a telephone system, a plurality of subscribers' lines, means for establishing a talking circuit between any two lines, a coin-collecting device upon one of said lines, means for rendering said talking circuit inoperative, and means controlled by depositing a plurality of coins in said coin-collecting device for rendering said talking circuit operative.

2. In a telephone system, a calling and a called subscriber's line, means for establishing a talking circuit between said lines, means on said calling line to render the calling telephone inoperative for talking when the called subscriber answers, and means operated by a plurality of coins for rendering said telephone operative.

3. In a telephone system, a calling and a called subscriber's line, means for establishing a talking connection between said lines, a coin-collecting device associated with said calling line, means controlled by said device for rendering said calling telephone inoperative when the called subscriber answers, and means for operating said coin-collecting device by depositing a plurality of coins therein to render said calling telephone operative.

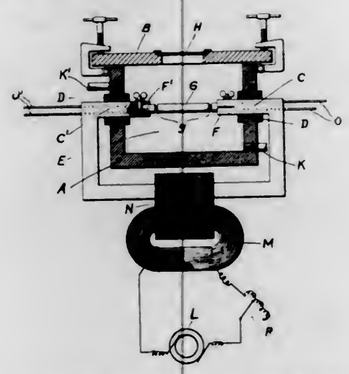
4. In a telephone system, a calling and a called subscriber's line, means for establishing a talking circuit between said lines, a coin-collecting device on said calling subscriber's line, means for reversing the current upon said line upon the response of the called subscriber, means controlled by said reversal of current for rendering said calling telephone inoperative, and means controlled by depositing a plurality of coins in said coin-collecting device for again rendering said calling telephone operative.

5. In a telephone system, a calling and a called subscriber's line, means for establishing a talking circuit between said lines, a coin-collecting device on said calling subscriber's line, a magnet and an armature controlled

thereby in said coin-collecting device, means controlled by said armature for rendering inoperative said calling telephone, and means controlled by depositing a plurality of coins in said device for again rendering said telephone operative.

[Claims 6 to 13 not printed in the Gazette.]

1,062,388. METHOD OF CHANGING THE COMPOSITION OF IRON AND STEEL. BRUCE FORD, Philadelphia, Pa. Filed Jan. 12, 1909. Serial No. 471,873. (Cl. 219—11.)



1. In the process of changing the composition of iron and steel by electrically heating it between contacts and in the presence of a suitable medium, that improvement which consists in increasing the electrical resistance of the metal at or near the contacts to provide heat to compensate for heat conducted away by the contacts.

2. In the art of changing the composition of iron and steel by interposing it in an electric circuit in the presence of a suitable medium, that improvement which consists in interposing in the circuit resistance at or near the ends of the part to be treated higher than the resistance of the rest of the circuit.

3. In the process of changing the composition of iron and steel by electrically heating it between contacts and in the presence of a suitable medium, that improvement which consists in increasing the electrical resistance of the circuit at or near the contacts to provide heat to compensate for heat conducted away by the contacts.

4. In the process of electrically heating an object between contacts that improvement which consists in heating the object uniformly by increasing the electrical resistance of the circuit at or near the contacts to provide heat to compensate for heat conducted away by both contacts.

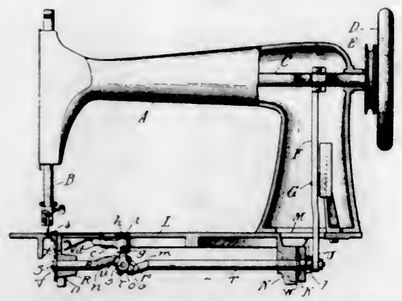
5. In the process of electrically heating an object between contacts that improvement which consists in reducing the cross-sectional area of the ends of the body and thereby increasing the electrical resistance of the circuit at or near both contacts to provide heat to compensate for heat conducted away by the contacts.

1,062,389. SEWING-MACHINE. WILLIAM C. FREE, Chicago, Ill. Filed Apr. 16, 1912. Serial No. 691,160. (Cl. 112—22.)

1. In a sewing machine, a shuttle mechanism comprising a rotary shaft, an inclined bearing thereon, a member journaled on the bearing and an oscillating shuttle-carrier pivotally connected to said member.

2. In a sewing machine, a shuttle mechanism comprising a rotary shaft, an inclined bearing thereon, a member mounted on the bearing, an oscillating head pivoted to and supported by said member and a vertical arbor about which said shuttle carrier oscillates.

3. In a sewing machine, a shuttle operating mechanism comprising a rotary shaft having an inclined bearing, a member sleeved upon the bearing, a shuttle-carrier pivotally connected to the sewing machine head plate on an axis transverse to the shaft and pivotal connection between the sleeved member and said shuttle carrier.



4. In a shuttle operating mechanism, a shaft having a bearing thereon inclined to the axis of the shaft, a sleeve on the bearing, an oscillating head carrying a shuttle carrier and pivoted on the head plate on an axis transverse to the shaft and a pivotal connection between the sleeved member and the oscillating head, the axis of the connection being transverse to the bearing on the shaft and also to the axis on which the oscillating head is pivoted.

5. In a shuttle operating mechanism for a sewing machine, an oscillating head pivotally guided upon the head plate of the machine and having capacity for axial movement with relation to its pivot, a rotary shaft arranged substantially at right angles to the axis of the oscillating head, an inclined bearing on the shaft, a member sleeved upon the bearing and pivoted to the oscillating head, there being provision for axial movement on the pivot between the sleeved member and the oscillating head.

[Claims 6 to 8 not printed in the Gazette.]

1,062,390. HANDLE-FASTENING FOR BAG-FRAMES. FRANZ A. FULLER, Newark, N. J., assignor to The J. E. Mergott Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 13, 1910. Serial No. 577,061. (Cl. 190—58.)

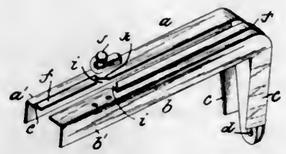


1. A handle attachment for bag frames, comprising a chambered base provided with integral tongues adapted to be secured to a bag frame section, the sides of said base midway of its length being contracted to form a centrally arranged longitudinally-curved tubular bearing extending upwardly from said base, and further provided with a recess, and a handle supporting element provided with a contracted portion, said contracted portion embracing said bearing and passing through said recess, and an open loop extending from the contracted portion to prevent separation of said supporting element and base.

2. A handle attachment for bag frames, comprising a chambered base provided with integral tongues adapted to be secured to a bag frame section, the longitudinal sides of said chambered base midway of its length being contracted to form a centrally-arranged upwardly-curved tubular bearing, and further provided with a recess and a handle supporting element provided with a contracted portion, said contracted portion embracing said bearing and passing through said recesses and an open loop extending from the contracted portion to prevent separation of said supporting element and base.

3. A handle attachment for bag frames, comprising a chambered base adapted to be secured to a bag frame section, the longitudinal sides of said chambered base midway of its length being contracted to form a centrally-arranged upwardly extending tubular bearing, and further provided with a recess, and a handle supporting element provided with a contracted portion, said contracted portion embracing said bearing and passing through said recess and an open rectangular loop extending from the contracted portion of said handle supporting element to prevent separation of said supporting element and base.

1,062,391. BAG-FRAME. FRANZ A. FULLER, Newark, N. J., assignor to The J. E. Mergott Company, Newark, N. J., a Corporation of New Jersey. Filed Sept. 2, 1911. Serial No. 647,317. (Cl. 150—20.)



1. A bag frame comprising hinged members, each member formed from a single piece of material, part of the material of one half of each frame member along its inner edge lying outside of the plane of said member, so that said material will overlap that portion of the other frame member which is plain, the offset edge of the material lying outside of the plane of one member abutting against the inner edge of the plain portion of the other member, so as to provide a continuous raised surface on one side of the frame and a continuous flat surface on the other side thereof.

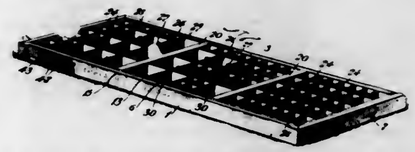
2. A bag frame comprising hinged members, each member formed from a single piece of flat material and of uniform width throughout, and comprising a main body member and hinge members, one hinge member and a portion of the main body member of each frame member provided with a struck-up portion and a plain portion, so that the struck-up portion of one frame member will overlap the plain portion of the other member, the offset edge of the struck-np portion of one member abutting against the edge of the plain portion of the other member to limit the inward movement when the frame members are in locked position.

3. A bag frame comprising hinged frame members, each member formed from a metallic strip rectangular in cross-section, one half of each frame member being provided with an integral marginal raised edge portion extending along the inner edge of the frame member, and a plain portion, so that the raised edge portion of one half of one member will overlap the plain portion of the other member, the offset edge of the raised portion of one member abutting against the edge of the plain portion of the other member.

4. A bag frame comprising hinged frame members, each member formed from a single piece of flat material, and of uniform thickness throughout, one half of each frame member being provided with an integral marginal bead projecting inward from the inner edge of the frame member, said bead lying outside of the plane of the other half of said frame member, the other half of said frame member being left plain, so that the marginal bead of one half of one member will overlap the plain portion of the other frame member, the offset edge of the marginal bead of one member abutting against the edge of the plain portion of the other member, so as to limit the inward movement of said frame member.

1,062,392. TYPE-CASE. JOSEPH E. GAGNON and ANTON KAUFMANN, Philadelphia, Pa. Filed Nov. 18, 1912. Serial No. 731,929. (Cl. 101—149.)

1. A type-case comprising a frame formed from hollow sheet-metal rails having slots in their inner walls, open at their lower ends and closed at their upper ends, sheet-metal partitions having tongues at their ends secured in said slots, and a sheet-metal bottom secured with its edges in the rails of said frame.



2. A type-case comprising a frame formed from hollow sheet-metal rails the inner walls of which have outwardly-bent foot-flanges and the outer walls of which have inwardly-bent bottom-flanges, and a sheet-metal bottom having its edges inserted between and secured to such flanges.

3. A type-case comprising a frame formed from hollow sheet-metal rails the inner walls of which are composed of webs and outwardly-bent foot-flanges and slots in said flanges and partly in their webs and the outer walls of which have inwardly-bent bottom-flanges, a sheet-metal bottom having its edges inserted between and secured to said flanges, and sheet-metal partitions having tongues at their ends inserted through the slots in the rails.

4. A type-case comprising a frame formed from hollow sheet-metal rails the inner walls of which have outwardly-bent foot-flanges and the outer walls of which have inwardly-bent bottom-flanges, longitudinally corrugated for a part of their width, and a sheet-metal bottom having its edges inserted between and secured to such flanges.

5. A type-case comprising hollow sheet-metal rails forming a rectangular frame and formed with foot and bottom flanges and with slots in the inner walls, a sheet-metal bottom having its edges secured between the foot and bottom flanges, and partitions formed with tongues at their ends secured in the slots of the rails of the frame.

[Claims 6 to 11 not printed in the Gazette.]

1,062,393. RAZOR-STROP SCRAPER AND SURFACER. HENRY J. GAISMAN, New York, N. Y., assignor to Auto Strop Company, New York, N. Y., a Corporation of New York. Filed Aug. 17, 1912. Serial No. 715,562. (Cl. 51—16.)



1. A device of the character described comprising a soft metal body, and a relatively hard scraping strip projecting beyond said body.

2. A device of the character described comprising an annular soft metal body, and a relatively hard scraping strip projecting beyond the surface of said body.

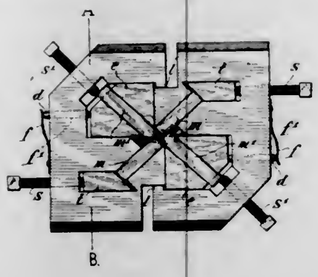
3. A device of the character described comprising a soft metal tube, and a relatively hard scraping strip entering said tube and projecting beyond the surface thereof.

4. A device of the character described comprising a rod, a soft metal tube surrounding said rod and having a slot on one side, and a scraping strip passing through said tube and secured in said rod, a portion of said scraping strip projecting beyond the surface of said tube.

5. A device of the character described comprising a handle provided with an inwardly extending flange at one end, a soft metal finishing body adapted to slide through said flange, and a scraping strip projecting beyond the surface of said soft metal body, said flange having a slot to permit the passage of said scraping strip.

[Claim 6 not printed in the Gazette.]

1,062,394. CUTTER-BOX FOR MAKING THE POINTS OF WIRE NAILS AND THE LIKE. HERMANN GÄRTNER, Lintorf, near Dusseldorf, Germany. Filed May 23, 1912. Serial No. 699,102. (Cl. 10—31.)



1. In a nail making machine, a pair of box halves, a fixed cutter and a movable cutter fitted within each box half, means for automatically pushing back the movable cutters upon a closing of the box halves and for automatically advancing said movable cutters upon an opening of the box halves.

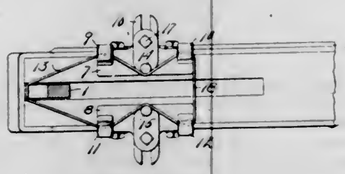
2. In a nail making machine, a pair of box halves, a fixed cutter and a movable cutter fitted within each box half, the fixed cutter of one box half being adapted to push back the movable cutter of the other box half, and springs for advancing the movable cutters.

3. In a nail making machine, a pair of box halves, blocks laterally movable therein, cutters slidable within the blocks, and a pair of coacting fixed cutters fitted within the box halves.

4. In a nail making machine, a pair of box halves, blocks laterally movable therein, yielding members engaging the blocks, cutters slidable within the blocks, and a pair of coacting fixed cutters fitted within the box halves.

5. In a nail making machine, a pair of box halves, blocks laterally movable therein, pins engaging the blocks, springs engaging the pins, cutters slidable within the blocks, and a pair of coacting fixed cutters fitted within the box halves.

1,062,395. SHUTTLE AND PICKER-STICK CHECK. DAVID E. GRAY, White Plains, N. Y. Filed June 26, 1908. Serial No. 440,518. (Cl. 139—22.)



1. A checking device for a loom comprising two pairs of end guides spaced apart laterally, a checking strap passing around said guides and lateral guides outside of the checking strap and between the end guides, one or more of said guides being laterally adjustable relative to the others for varying the effective length of the strap.

2. A checking device for a loom comprising two pairs of end guides spaced apart laterally, a checking strap passing around said guides and lateral guides outside of the checking strap and between the end guides, said lateral guides being adjustable toward and from each other.

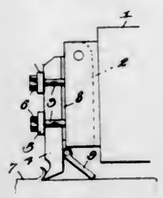
3. A checking device for a loom comprising a strap, two pairs of end guides therefor, a guide between the guides of each pair of end guides and adjustable with relation thereto for varying the effective length of said strap.

4. A checking device for a loom comprising a traveling checking strap in the form of a loop, guides therefor, one or more of said guides being adjustable with relation to the others for varying the effective length of the strap.

5. A checking device for a loom comprising a traveling checking strap in the form of a loop, guides therefor, two of said guides being adjustable with relation to the others for varying the effective length of the strap.

[Claims 6 to 10 not printed in the Gazette.]

1,062,396. ATTACHMENT FOR METAL PLANERS AND SHAPERS. ARTHUR D. GREGORY and FRED G. SANDERS, Albany, Oreg. Filed July 3, 1912. Serial No. 707,532. (Cl. 90—55.)



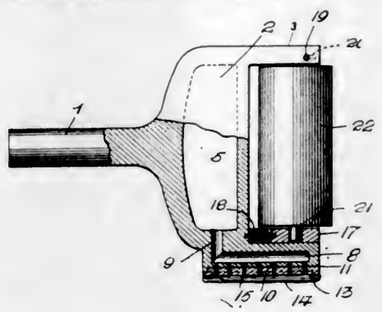
1. In a machine of the class described, the combination with a carriage, a tool post pivoted thereto, and a tool carried by the post; of a plate adjustably carried between the post and tool and having a pivotal portion thereon projecting below the cutting edge of the latter to prevent said tool from contacting with the surface of the work upon the return movement of said carriage.

2. In a machine of the class described, the combination with a carriage, a tool post pivotally carried thereon, and a tool carried by the post; of a strip clamped between said tool and tool post, and a plate hinged to the lower end of said strip, the hinging point being disposed below the lower face of said tool post and said plate being adapted to project below the cutting edge of said tool.

3. In a machine of the class described, the combination with a carriage, a tool post pivotally carried thereon, and a tool removably clamped to said post; of a strip disposed between said post and tool and secured in position by the clamping means for the latter, the lower end of said strip being disposed to a point slightly below the lower end of said post, and a plate hinged to the lower end of said strip and adapted to project below the lower cutting edge of said tool.

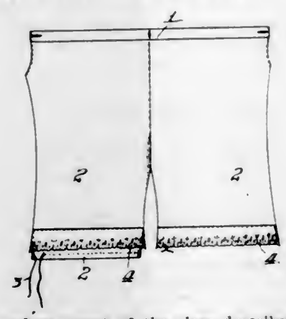
1,062,397. ENVELOP-MOISTENER. DANIEL L. HARRISON, Pittsburgh, Pa. Filed Nov. 25, 1911. Serial No. 662,317. (Cl. 120—75.)

A device for the purposes set forth comprising a flat head formed with a chamber constituting a reservoir, an arm projecting forwardly from one end of said head at right angles with respect thereto and provided with a longitudinally extending passage closed at its forward end, said head provided with a passage extending in the direction of the length thereof and opening into the other end of said longitudinal passage, said passages disposed at right angles with respect to each other, said arm having one side formed with a series of openings extending at right angles with respect to and in communication with its passage and further provided with a longitudinally extending dove-tailed groove, a pad holder seated in said groove and having a series of openings registering with the



openings of the arm, an absorbent pad connected to said holder, and a handle projecting rearwardly from said head.

1,062,398. UNDERGARMENT. BENJAMIN L. HEACOCK, Reading, Pa., assignor to The Schuitz Underwear Company, Reading, Pa., a Corporation of Pennsylvania. Filed Aug. 5, 1912. Serial No. 713,231. (Cl. 2—122.)



In an undergarment of the class described comprising a body portion and two relatively short leg portions, each of said leg portions having in its lower extremity means for contracting the same, and a ruffle attached to the outside of each leg portion in close proximity to its contracted end, said ruffles depending below the line of said contracted ends.

1,062,399. WRINKLE-REMOVER. ABBIE M. HESS and ALFRED LEE TIBBALS, Kansas City, Kans. Filed July 1, 1911. Serial No. 636,527. (Cl. 128—3.)



In a device of the character described, a pair of ear engaging members, each comprising a single strand of wire bent to provide a shank having a laterally outturned U-shaped portion and an upturned forwardly directed angular portion, a rearwardly directed stepped leg formed on the angular portion at right angles to the U-shaped portion and adapted to engage the concha of an ear, a supplemental shank integral with said first named shank and at an acute angle thereto, and elastic means connected to the said shanks for joining the members together.

1,062,400. WATERPROOF ROOFING-SHEET. SAMUEL C. IRVING, Berkeley, Cal. Filed May 18, 1910. Serial No. 561,944. (Cl. 91—68.)

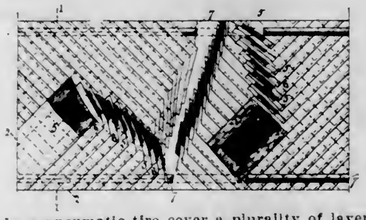


1. A compound roofing sheet having a foundation saturated with a waterproof composition provided with a weatherproof coating, fibrous or foliated mineral matter partially embedded in said coating, and a cementing wash or plaster applied to the protruding portion of mineral matter.

2. A compound roofing sheet having a foundation saturated with a waterproof composition, one side coated with a non-adhesive material, and the other side provided with a weatherproof coating, fibrous or foliated mineral matter partially embedded in said latter coating, and a cementing wash or plaster applied to the protruding portion of mineral matter.

3. A compound roofing sheet containing a foundation saturated with a waterproofing composition, a waterproof coating on both the lower and upper sides of the roofing sheet of a harder material than said waterproof composition for the foundation, fibrous or foliated mineral matter partially embedded throughout all of the upper coating except along one edge thereof, and a cementing wash or plaster applied to the protruding fibrous or foliated mineral matter.

1,062,401. PNEUMATIC-TIRE COVER. JOHN THOMAS JOHNSON and FREDERICK GEORGE MASON, Caulfield, Victoria, Australia. Filed July 5, 1912. Serial No. 707,729. (Cl. 152—13.)



1. In a pneumatic tire cover a plurality of layers, each layer comprising strips of fabric extending in the same general direction and each strip overlapping the next adjacent strip on one side thereof and being overlapped by the next adjacent strip on the other side thereof each of said fabric strips being faced on one surface with sheets of rubber said rubber sheets extending beyond the longitudinal edges of said strips.

2. In a pneumatic tire cover, a plurality of layers, each of said layers comprising a plurality of overlapping strips, the strips of each layer running in the same direction, a sheet of material for each strip covering one face thereof and a second sheet of material for each of said strips covering the other face thereof, said sheets being of greater width than said strips, the strips and sheets of one layer extending at right angles to the strips of the next adjacent layer, all of said sheets and strips being formed into one integral mass.

1,062,402. WIND-SCREEN FOR MOTOR-CARS AND THE LIKE. WILLIAM THOMAS JOLLIFFE, Rossett, England. Filed Dec. 17, 1910. Serial No. 597,848. (Cl. 21—148.)

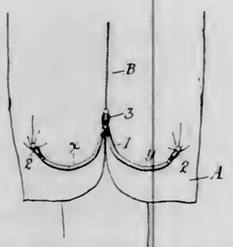
A wind screen for vehicles comprising a central supporting device rigidly mounted on the vehicle, a pair of

lateral wings pivotally connected with said device, means for angularly adjusting and securing one of said wings, said means consisting of a bar, means for mounting said



bar on a side door of the vehicle, a sliding piece on said bar, a pivotal joint connecting said sliding piece with the wing, and means for clamping the sliding piece and the pivotal joint.

1,062,403. GARMENT-WEIGHT. THEODORE KAHN, Jennings, La. Filed Aug. 23, 1912. Serial No. 716,754. (Cl. 2—136.)

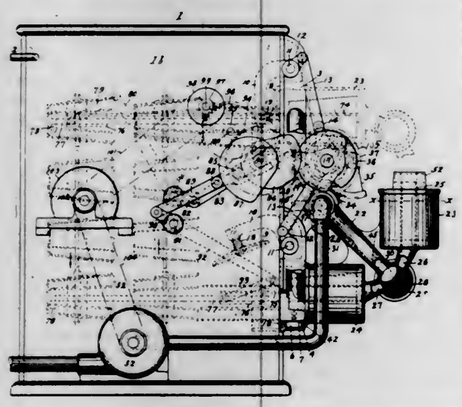


1. A garment weight comprising a flexible inextensible weighted strip of definite length having a clasp at each end thereof.

2. A garment weight comprising a flexible weighted strip of definite length having a clasp at each end thereof and a third clasp secured thereto at a point intermediate its ends.

3. A weighted strip consisting of a tube formed of flexible fabric, said tube comprising a series of separate compartments, and heavy granular material in each compartment.

1,062,404. PROCESS OF STERILIZATION. RAYMOND A. KIEFER, Ramsey, N. J. Filed Dec. 16, 1911, Serial No. 666,215. Renewed Oct. 8, 1912. Serial No. 724,675. (Cl. 167—3.)



1. The sterilizing process hereinbefore described, consisting in first, subjecting the article to be treated to a gaseous germicide in a closed chamber; secondly, removing the article from said chamber with a portion of the gas to a second chamber, and finally removing the gas from said second chamber to deodorize the article.

2. The sterilizing process hereinbefore described, which consists in first, subjecting the article to be treated to a gaseous germicide in a closed chamber, then directly transferring the article with a portion of the gas to a second chamber and finally withdrawing the gas from said second chamber and neutralizing the odor attaching to the article.

3. The process of sterilizing which consists in subjecting an article to be treated to the action of a gaseous germicide within a closed chamber, transferring the article from said chamber to a second closed chamber, and removing residual germicide from the article while it remains within said second chamber.

4. The process of sterilizing which consists in subjecting an article to be treated to the action of gaseous germicide within a closed chamber, transferring the article from said chamber to a second closed chamber, removing the gaseous germicide from said second chamber, and establishing a flow of innocuous gas past the article while the latter is in said second chamber.

5. The process of sterilizing which consists in subjecting an article to be treated to the action of a gaseous germicide within a closed chamber, transferring the article from said chamber to a second closed chamber, exhausting the gaseous germicide from said second chamber, and establishing a flow of air past the article while the latter is in said second chamber.

[Claims 6 to 13 not printed in the Gazette.]

1,062,405. COMPRESSOR. ERNST WILHELM KÖSTER, Frankfort-on-the-Main, Germany. Filed Apr. 26, 1910. Serial No. 557,750. (Cl. 230—6.)

1. In a compressor, the combination with a compression cylinder and a piston arranged to travel in said cylinder to compress fluid therein, of a cooler having a path one end of which has a constantly open communication with said cylinder, and means connected with the other end of said path, for controlling the admission and delivery of the fluid to and from said cylinder, so that the said fluid will travel through the same path of the cooler both on its way to the cylinder and on its passage therefrom.

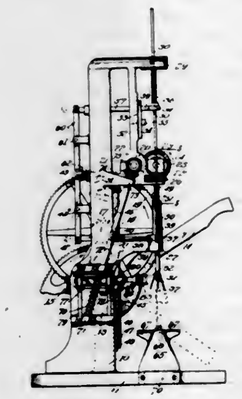
2. The combination, with a compressor, of a set of tubes having their delivery ends connected with said compressor, a suction valve controlling the admission of uncompressed fluid to the other ends of said tube, and means for cooling the fluid passing through said tubes.

3. In a compressor, the combination with a structure having chambers for higher and lower pressures, of a gas controlling element interposed between said chambers to simultaneously control the delivery from said chamber of lower pressure and the admission to said chamber of higher pressure, and a cooler comprising two sections constantly communicating with the said chambers of higher and lower pressure respectively, said gas controlling element being located between the sections of said cooler.

4. In a compressor, the combination with a structure having chambers for relatively high and low pressures respectively, of a valve controlling the passage of fluid from the low pressure chamber, a connection from said valve to the high pressure chamber, and a cooler comprising a plurality of tubes connected in parallel and interposed in said connection between the valve and the high pressure chamber and forming part of said connection so that the fluid will pass through the several tubes of the cooler on its way from said valve to the high-pressure chamber, said cooler being in permanently open communication with the high-pressure chamber.

5. In a compressor, the combination with a structure having chambers for relatively high and low pressures respectively, of a valve controlling the passage of fluid from the low-pressure chamber, a connection from the said valve to the high-pressure chamber, a cooler comprising a plurality of tubes connected in parallel and interposed in said connection between the valve and the high-pressure chamber and forming part of said connection so that the fluid will pass through the several tubes of the cooler on its way from said valve to the high-pressure chamber, said cooler being in permanently open communication with the high-pressure chamber, and another valve controlling the delivery of fluid from the high-pressure chamber, said delivery valve being located at the end of the cooler opposite to that which is in permanent communication with the high-pressure chamber, so that the compressed fluid on its way from the high-pressure chamber to said delivery valve, must pass in contact with the cooling surface of the cooler.

1,062,406. APPARATUS FOR PARING AND PITTING FRUIT. FRANCIS W. LANCASTER, Flippin, Ark. Filed Jan. 23, 1912. Serial No. 672,824. (Cl. 146—6.)



1. In an apparatus for paring and pitting fruit, a rotatable and longitudinally movable holder for the fruit, a pitting device, means for rotating the holder for the paring operation, a latch for locking the holder against longitudinal movement, a releasing device for the latch in the path of the holder rotating means, and means for advancing the holder when the latch is released therefrom to engage the fruit with the pitting device.

2. In an apparatus for paring and pitting fruit, a rotatable and longitudinally movable holder for the fruit, a pitting device, means for rotating the holder for the paring operation, a latch for locking the holder against longitudinal movement, a spring coiled around the holder for moving the same longitudinally to engage the fruit with the pitting device, an abutment for one end of the spring, a holding device for the abutment, and releasing means for the latch and the holding device.

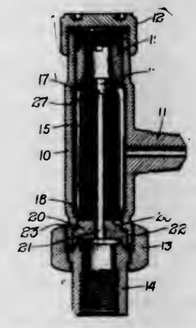
3. In an apparatus for paring and pitting fruit, a rotatable and longitudinally movable holder for the fruit, a pitting device, means for rotating the holder for the paring operation, a latch for locking the holder against longitudinal movement, a spring coiled around the holder for moving the same longitudinally to engage the fruit with the pitting device, an abutment for one end of the spring, a holding device for the abutment, said holding device comprising a longitudinally movable stem carrying jaws, one of which jaws is movable, and said jaws closing around the holder beneath the abutment and the movable jaw opening when the stem is retracted and closing when the stem is advanced, and means for releasing the latch and for retracting the aforesaid stem.

4. In an apparatus for paring and pitting fruit, a rotatable and longitudinally movable fruit holder, a pitting device toward and from which the fruit holder is movable, means for rotating the fruit holder for the paring operation, means for coupling the fruit holder to said means, said holder uncoupling when it moves toward the pitting device, a latch for holding the fruit holder against movement toward the pitting device, means for releasing the latch, and means for advancing the fruit holder toward the pitting device when the latch is released.

5. In an apparatus for paring and pitting fruit, a rotatable and longitudinally movable stem, a fork carried by the stem, a pitting device toward and from which the fork is movable, said fork being adapted to straddle the pitting device, means for rotating the stem for the paring operation, a latch for holding the stem retracted during the paring operation, means for releasing the latch, means for guiding the stem to center the fork with respect to the pitting device, and means for advancing the stem to carry the fork toward the pitting device.

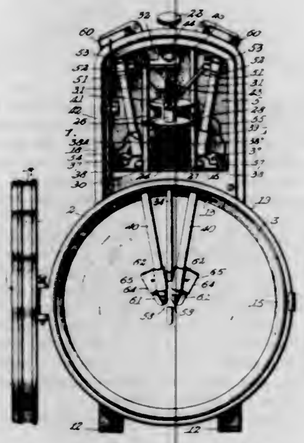
[Claims 6 and 7 not printed in the Gazette.]

1,062,407. AIR-VALVE FOR RADIATORS. FRED W. LEUTHESSER, Chicago, Ill. Filed Dec. 20, 1911. Serial No. 666,930. (Cl. 237—19.)



In an air valve for radiators the combination of a casing having an outlet in the lower end thereof and an inlet intermediate the ends thereof, an expansible member within the casing, having a tapered upper end and a flat lower end and provided with a central longitudinal bore, an upper adjustable abutment for said member, located above said inlet, and provided with a tapered opening to receive said tapered upper end of the expansible member, a ring like abutment for the lower end of said member provided with a flat seating face for said flat lower end and with a central bore in alinement with the bore of the expansible member, said expansible member being freely detachable from said abutments, said casing having a shoulder adjacent its lower end, said ring like abutment being cut away to provide a shoulder to engage therewith, and formed to have a sliding fit within said casing, a tube centrally extending from the lower abutment and entering the bore in the expansible member, a circumferential flange around the lower end of the lower abutment, a nipple having a tapered upper end arranged to engage said flange and a nut for joining said nipple to said casing and forming the sole means of holding said lower abutment and expansible member in place, substantially as described.

1,062,408. FLAMING-ARC HEADLIGHT. LEWIS M. MCBRIDE, Denver, Colo., assignor to The Arcturus Electric and Manufacturing Company, Denver, Colo., a Corporation of Colorado. Filed June 12, 1911. Serial No. 632,663. (Cl. 176—51.)



1. A headlight, having a casing with a light-regulating mechanism and a curved light reflector within the casing, arc-producing electrodes within the casing, having their ends adjacent the focal point of the reflector, and a pair of magnet poles in the casing adjacent the ends of said electrodes, the ends of said magnet poles being in the same plane with the center of the arc, and the focal point of the reflector.

2. A headlight, having a casing with a light-regulating mechanism and a curved light reflector within the casing, arc producing electrodes within the casing having their ends adjacent the focal point of the reflector, a pair of magnet poles in the casing terminating one above and one below the ends of said electrodes, said poles, the center of the arc, and the focal point of the reflector being in the vertical plane containing the focal axis of the reflector.

3. A headlight having a casing and a light-regulating mechanism within said casing, arc-producing electrodes within the casing, a pair of solenoids within the casing, fixed poles in the lower portion of the bores of said solenoids, extensions adjustably pivoted to said fixed poles for movement in a vertical plane and extending into the casing to points adjacent the ends of said electrodes.

4. A headlight having a casing and a light-regulating mechanism within the casing, arc-producing electrodes within the casing, a pair of solenoids within the casing, fixed poles in the lower portion of the bores of said solenoids, extensions adjustably pivoted to said fixed poles for movement in a vertical plane and extending into the casing to points respectively above and below the ends of said electrodes.

5. A headlight having a casing with a light-regulating mechanism and a curved light reflector within the casing, arc-producing electrodes inclined rearwardly within the casing toward the reflector at an angle to the vertical, and a pair of magnet-poles in the casing terminating one directly above and one directly below the ends of said electrodes.

[Claims 6 and 7 not printed in the Gazette.]

1,062,409. WINDOW-CABINET FOR PROVISIONS. ERNEST N. MCCOLL, Brooklyn, N. Y. Filed Mar. 22, 1913. Serial No. 756,161. (Cl. 45—104.)

1. A window cabinet for provisions comprising an apron below the window, a frame movable on said apron and having a top cross bar movable in the grooves of the upper window sash, a food cabinet in said movable frame, and means in connection with said movable frame for raising and lowering the cabinet and locking and releasing it in the raised position.



2. A window cabinet for provisions comprising an apron below the window, a frame movable on said apron and having a top cross bar movable in the grooves of the upper window sash, a shelved food cabinet in said movable frame, a supplemental frame hinged to the bottom of the main frame and to the lower edge of the cabinet, and means in connection with said supplemental frame for raising and lowering the cabinet and locking and releasing it in the raised position.

3. A window cabinet for provisions comprising an apron below the window, a movable frame on said apron, curved metal guides at the top side ends of said frame, a crossbar connecting said guides and movable in the grooves of the upper window sash, a food cabinet in the movable frame, a supplemental frame below hinged to the main frame and cabinet, a cord attached to the supplemental frame, sheaves for said cord, and a windlass attached to the top of the apron for the operation and control of the movable frame and cabinet by means of the cord.

4. A window cabinet for provisions comprising an apron below and outside of the window, a movable frame on said apron, grooved metal guides at the top side ends of said frame, a cross bar connecting the guides and movable in the grooves of the upper window sash, a food cabinet in the movable frame, a supplemental frame below hinged to the main frame and cabinet, a cord attached to the supplemental frame, sheaves for said cord, a windlass attached to the top of the apron comprising a frame, a spindle in said frame, a drum on said spindle, a lever adapted to revolve said drum for winding the cord, and a cover for protecting the operating parts.

5. In a window cabinet for provisions, an apron located outside and below the window and composed of two outer uprights, two inner uprights at equal distance to the center line of the apron forming a slot, a movable frame on the apron, a food cabinet in said frame, a supplemental frame hinged to the bottom ends of the main frame and cabinet, a cord secured to the supplemental frame and traveling in the slot formed by the inner uprights of the apron, sheaves for said cord, means for operating the cord, and means for locking and releasing the cabinet when in the raised position.

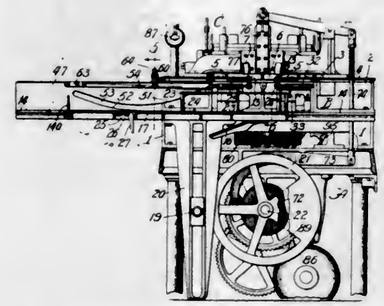
[Claim 6 not printed in the Gazette.]

1,062,410. WRAPPING-MACHINE. FREDERICK H. MERRELL and WILLIAM S. AMIDON, Milwaukee, Wis., assignors to National Wrapping Machine Company, Milwaukee, Wis., a Corporation of West Virginia. Filed July 17, 1911. Serial No. 638,873. (Cl. 93—2.)

1. In a machine of the character set forth, the combination with a wrapper-folding chute and a reciprocatory package-pusher therein, of a wrapper-support above said chute with means enabling the package to be lowered into the chute, and reciprocating gate adapted to serve as a guide in the lowering operation.

2. In combination with package-wrapping mechanism, including means for supporting a wrapper and enabling

the package to be dropped therethrough, of a vertically-reciprocating gate adapted to engage the article to be wrapped, and means located in the rear thereof serving to feed wrappers intermittently beneath said gate and onto the wrapper-support during the intervals when the gate is raised.



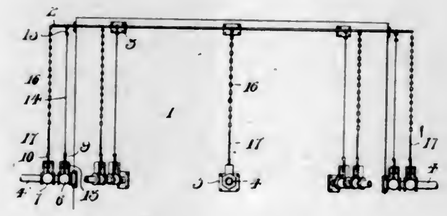
3. In a wrapping-machine, a plate equipped with a top-folder and end-folders, the top-folder being spring-projected with relation to the plate, and a package-engaging stop connected with the top-folder and adapted to retract the same with relation to the plate.

4. In a wrapping-machine, the combination with a wrapper-folding chute having an opening, a removable wrapper-supporting plate mounted in said opening and having a well with side-folders thereat, a package-pusher reciprocable in said chute, wrapper-feeding mechanism, a bridge spanning the opening to said chute in front of the wrapper-feeding mechanism, and a vertically reciprocating gate having guide connections with said bridge.

5. In a wrapping-machine, the combination of a wrapper-folding chute equipped with wrapper-folding devices and a reciprocating package-pusher slide, of means for intermittently feeding wrappers to the wrapper-folding mechanism, and a vertically reciprocating gate located between the wrapper-feeding means and the wrapper-folding mechanism and timed to descend after the feeding of each wrapper, said gate adapted to engage the article to be wrapped.

[Claims 6 to 10 not printed in the Gazette.]

1,062,411. AUTOMATIC OIL-RELEASE. LUTE D. OWREY, Pittsburgh, Pa. Filed Sept. 25, 1912. Serial No. 722,292. (Cl. 220—121.)



1. The combination with an oil tank having release pipes, of normally closed and normally open spring actuated valves in connection with each release pipe, and fuses in proximity to said valves and adapted to be burned out to permit of an automatic operation of said valves.

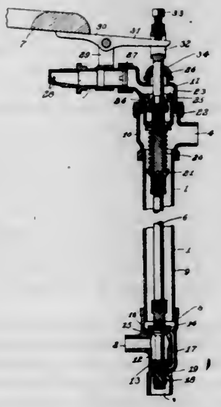
2. The combination with an oil tank having release pipes, of normally closed and normally open valves carried by each release pipe, fuses maintaining said valves normally closed and normally open, and means for automatically operating said valves when said fuses are burned out.

3. The combination with an oil tank having a release pipe, of normally closed and normally open valves carried thereby, spring actuated valve stems in connection with said valves, and fuses connected to said valve stems and adapted to be burned out to release said stems.

4. In an automatic release for oil tanks, an oil tank, release pipes in proximity to the bottom thereof, spring actuated valves carried by each release pipe, and fusible means in connection with said tank and said valves for retaining one of said valves normally open and the other of said valves normally closed.

5. In an automatic release for oil tanks, a tank, release pipes adjacent to the bottom thereof, valves carried by each pipe, spring actuated valve stems in connection with said valves, outriggers carried by said tank, and fuses connected to said valve stems and supported by said outriggers and adapted to be burned out to automatically release said valve stems.

1,062,412. FROST-PROOF WATER-CLOSET VALVE. THOMAS F. PAYNE, Pittsburgh, Pa. Filed June 3, 1912. Serial No. 701,217. (Cl. 4—28.)

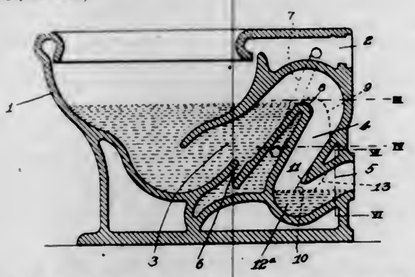


1. In a frost proof water-closet valve, the combination of a casing having a water inlet, a discharge outlet, and a reservoir connection between said inlet and outlet, a fixed valve seat within said casing between said outlet and said connection, a movable valve rod extending through said casing and provided with a valve closure co-operating with said valve seat, and a compression spring below said valve seat surrounding said rod and yieldingly holding said valve closure in open position, the lower end of said spring operatively engaging said valve rod and the upper end thereof exerting its pressure against the lower side of said valve seat.

2. In a frost-proof water-closet valve, the combination of a casing provided at its lower end with a water inlet and a drain orifice, and at its upper end with a discharge outlet and a reservoir connection, a cap forming the upper part of the said casing and provided with a valve seat, a valve rod extending through the said casing and held yieldingly in its downward position by a spring engaging at its lower end the said rod, and a skeleton cage extending from the under side of the cap valve-seat to the upper end of the said spring.

3. In a frost proof water-closet valve, the combination of a casing having a water inlet, a discharge outlet, and a reservoir connection between said inlet and outlet, a fixed valve seat within said casing between said outlet and said connection, a movable valve rod extending through said casing and provided with a valve closure co-operating with said valve seat, a compression spring below said valve seat surrounding said rod and yieldingly holding said valve closure in open position, and a member permitting the free flow of water therethrough extending from the underside of said valve seat to the upper end of said spring.

1,062,413. WATER-CLOSET. THOMAS F. PAYNE, Pittsburgh, Pa. Filed Aug. 1, 1912. Serial No. 712,808. (Cl. 4—22.)

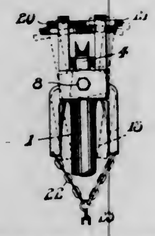


1. In a back-outlet siphon water-closet, the combination with a bowl and a tortuous siphon passage leading from said bowl and having an up-leg and a down-leg inclined beneath the said up-leg; of an outlet channel leading from the said passage inclined upwardly from the lower end of and beneath the said down-leg, the lowermost edge of the outlet orifice of the said channel being at a lower level than the rim of the dam formed at the junction of the down leg and the said channel, the bottom of said outlet channel being plane faced at and adjacent to the outlet orifice thereof.

2. In a back-outlet siphon water-closet, the combination of a bowl, a tortuous siphon passage extending from the said bowl and having the down-leg thereof inclined beneath the up-leg, a dam at a bend in the said passage and at one end of the said inclined leg, the rim of the said dam extending in a substantially straight horizontal line, and a depression interrupting the continuity of the said straight-lined rim and causing near the close of the siphoning operation a break in the sheet of water flowing over the rim.

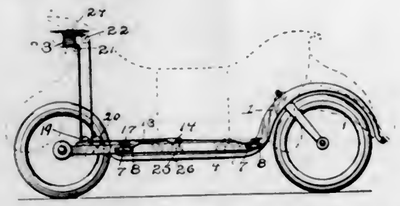
3. In a back-outlet siphon water-closet, the combination of a bowl, a tortuous siphon passage leading from said bowl and having an up-leg and a down-leg inclined beneath said up-leg, an outlet-channel leading from and upwardly inclined beneath the said down-leg, a dam at the junction of said down-leg and outlet-channel, the rim of the said dam extending in a substantially straight horizontal line having its continuity interrupted by a depression therein, the lowermost edge of the outlet-orifice of the said outlet-channel being at a lower level than the said dam, and a trough below said dam and of greater depth than the difference in levels of the said dam and lower edge of said outlet orifice.

1,062,414. TROLLEY. JOSEPH PULIT, New Haven, Conn. Filed Mar. 19, 1912. Serial No. 684,732. (Cl. 191—80.)



The combination with a trolley pole having an enlarged upper end, of a horizontally disposed harp inclining upwardly from each end toward the center, one of the ends of said harp being closed and the other formed integral centrally with the enlarged upper end of said pole, a trolley wheel revolubly mounted centrally of said harp, guard members vertically disposed with respect to said harp, inwardly extending lugs carried by said members and provided with trunnions journaled in the enlarged end of the pole at the sides of that end of the harp integral with the pole, inwardly extending arms integral with the rear edges of said members overlapping each other and opposing the free end of the harp, horizontally disposed means for pivotally connecting said arms to the free end of said harp, each of said members provided with a horizontally disposed rectangular slot at the top thereof, guard wheels mounted in said slots for projecting over said trolley wheel and overlapping each other, and means secured to the sides of the harp centrally thereof and engaging the lower portions of said members for maintaining said guard wheels in overlapping position.

1,062,415. GYROMOTOR-BODY SHIFTER. RICHARD SHELTON RICHESON, St. Louis, Mo. Filed Nov. 3, 1911. Serial No. 658,360. (Cl. 21—90.)



1. In combination with a gyromotor, bearings formed in the same, reciprocating rods in said bearings, means for connecting the reciprocating rods to the body of the machine, and means journaled on the supporting frame for operating the reciprocating rods in the bearings so that the body of the machine may be controlled with relation to the supporting frame.

2. In a gyromotor, the combination with the body of the same having an independent relation to the supporting frame, of bearings formed in the supporting frame, reciprocating rods journaled in the bearings and adapted to be connected to the body of the machine, means connected to the frame and to the body to give the frame and body a lateral movement with regard to each other, and means for actuating the shifting means.

3. In a gyromotor, the combination with the body of the machine, of a frame adapted to support the same, bearings formed in said frame, reciprocating rods operating in said bearings, means for connecting the reciprocating rods to the body of the machine, operating means journaled on the supporting frame to control the body, and means for actuating the operating means.

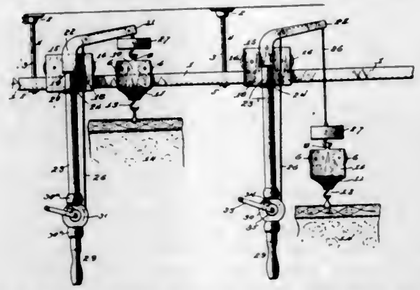
4. In combination with a gyromotor, a supporting frame for the same, said supporting frame having lateral reciprocating rods having spring-supporting ends, and springs upon said rods to support the machine.

5. In combination with a gyromotor, a supporting frame for the same, lateral reciprocating rods journaled in the supporting frame, a shift rod pivotally connected to the frame, cables connected to the shift rod and to the reciprocating rods, cables connected to the ends of the shift rod, and means for operating the last mentioned cables to operate the shift rod.

1,062,416. DISPLAY-HANGER. WILLIAM O. RITTER, French Lick, Ind. Filed Sept. 24, 1912. Serial No. 722,099. (Cl. 212—65.)

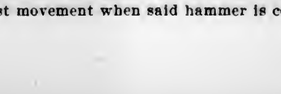
1. In an apparatus for displaying rugs, a traveling crane comprising a trolley having a pair of parallel projections on one side thereof, a rod extending through the projections and depending therefrom for propelling the trolley, an arm attached to the upper end of the rod and supported by one of the projections so as to be revolved above the trolley, and means for connecting the arm with the rugs.

2. In an apparatus for displaying rugs, a traveling crane comprising a trolley having a pair of parallel projections on one side thereof, a rod extending through the projections and depending therefrom for propelling the trolley, an arm having a screw-socket fitting the upper end of



the rod and supported by one of the projections so as to be revolved above the trolley, a collar on the rod under the other projection, and means for connecting the arm with the rugs.

1,062,417. ADJUSTABLE HAT-PIN. FLORICEL A. ROJAS, Providence, R. I. Filed Mar. 2, 1911. Serial No. 611,871. (Cl. 24—150.)



1. In an adjustable hat pin, the combination with a head having a sleeve-like extension externally screw threaded and longitudinally split and tapered at one end to provide clamping jaws, the bore of said sleeve being reduced in diameter at its tapered end, a pin slidable in said sleeve provided with a crown, the diameter of said crown being slightly less than the inner diameter of said sleeve, but larger than the diameter of the reduced portion of its bore, and an internally threaded cap provided with a tapered end, the threads of said cap being adapted to mesh with those of said sleeve, whereby the tapered end of said cap will engage the tapered end of said sleeve, substantially as and for the purpose specified.

2. In an adjustable hat pin, the combination with a head having a sleeve-like extension longitudinally split and tapered at one end to provide clamping jaws, the bore of said sleeve being reduced in diameter at its tapered end, a pin slidable in said sleeve provided with a crown, the diameter of said crown being slightly less than the inner diameter of said sleeve, but larger than the diameter of the reduced portion of its bore, a cap provided with a tapered end, and means for securing said cap to said sleeve and forcing the tapered end of said cap against the jaws of said sleeve, substantially as and for the purpose specified.

1,062,418. FIRING MECHANISM. HENRY F. ROJOHN and WILLIAM DICK, Greenock, Pa. Filed Jan. 9, 1913. Serial No. 741,124. (Cl. 42—65.)



1. In a firing mechanism for guns, a spring actuated hammer, a release lever for holding said hammer cocked, a double conical-shaped spring pressed shiftable member normally engaging said lever for moving said lever to release said hammer and means whereby said member can be shifted through one side or the other, and an arm movable above said release lever for locking said lever against movement when said hammer is cocked.

2. In a firing mechanism for guns, a spring actuated hammer, a release lever for holding said hammer cocked, a double conical-shaped spring held shiftable member normally engaging said release lever, means to facilitate shifting said member and means whereby said member can be shifted through one side or the other, and means located above said lever for locking said lever against movement when said hammer is cocked.

3. In a firing mechanism for guns, a spring actuated hammer, a release lever for holding said hammer cocked, a double conical-shaped spring held shiftable member normally engaging said release lever, and means to facilitate shifting said member from either one side or the other.

4. In a firing mechanism for guns, the combination with a gun stock, and a spring actuated hammer, of a pivoted release lever arranged in the stock of said gun for holding said hammer cocked, a double conical-shaped member supported by offset portions of the walls of said stock and normally engaging said release lever whereby said lever can be moved out of engagement with said hammer by shifting said member and means whereby said member can be shifted from either one side or the other, and means within the stock of said gun for restoring said member to its normal position after each actuation thereof.

1,062,419. VARNISH AND PROCESS OF MAKING THE SAME. HERMAN ROSENBERG, New York, N. Y., assignor to Standard Varnish Works, Elm Park, Port Richmond, Staten Island, N. Y., a Corporation of New York. Filed Nov. 4, 1912. Serial No. 729,199. (Cl. 134—81.)

1. The process of making varnish compositions which comprises preparing a suitable varnish base and subjecting said base to a prolonged heat treatment, said heat treatment being continued until a dry film of the base deposited from a suitable solution thereof shows a wax-like or semi-gloss finish.

2. The process of making varnish compositions which comprises preparing a suitable varnish base and subjecting said base to prolonged heat treatment in the presence of a facilitating agent, said heat treatment being continued until a dry film of the base deposited from a suitable solution thereof shows a wax-like or semi-gloss finish.

3. The process of making varnish compositions which comprises preparing a suitable varnish base and subjecting said base to prolonged heat treatment in the presence of a metallic oxid, said heat treatment being continued until a dry film of the base deposited from a suitable solution thereof shows a wax-like or semi-gloss finish.

4. The process of making varnish compositions which comprises preparing a suitable varnish base, subjecting said base to a prolonged heat treatment, said heat treatment being continued until a dry film of the base deposited from a suitable solution thereof shows a wax-like or semi-gloss finish, and dissolving the treated base in sufficient thinning solvent to produce a ragging varnish having a viscosity of about 140° Tagliabue under standard conditions.

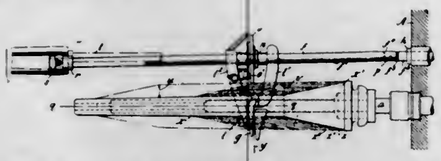
5. The process of making varnish compositions which comprises preparing a suitable varnish base, subjecting said base to a prolonged heat treatment, said heat treatment being continued until a dry film of the base deposited from a suitable solution thereof shows a wax-like or semi-gloss finish, and dissolving the treated base in a suitable quantity of a hydrocarbon solvent.

[Claims 6 to 15 not printed in the Gazette.]

1,062,420. WINDING-MACHINE. CLAES RYDEN, Providence, R. I., assignor to Universal Winding Company, Portland, Me., a Corporation of Maine. Filed Feb. 23, 1910. Serial No. 545,434. (Cl. 242—31.)

1. In a winding machine, the combination with a rotating winding spindle and a reciprocating thread-guide, of a friction wheel adapted to contact with the winding to feed the guide along the spindle, and means to guide said

wheel to move gradually toward the axis of said spindle as it feeds outward.



2. In a winding machine, the combination of a rotating winding spindle, a reciprocating traverse-bar arranged opposite and inclined toward the outer end of the spindle, a thread-guide mounted on said bar, and a friction wheel adapted to contact with the winding to feed the guide along the bar.

3. In a winding machine, the combination of a rotating winding spindle, a bar arranged opposite said spindle and inclined toward the axis thereof at its outer end, a thread-guide mounted on said bar, means to cause a relative reciprocation between the guide and spindle, and means to feed the guide outward along the bar.

4. In a winding machine, the combination of a winding spindle, a thread-guide, means to cause a relative reciprocation between said spindle and guide, means to cause a relative advance between the spindle and guide, and contact means engaged by the cop to operate the guide-advancing means, said contact means arranged to move in toward the axis of the spindle with each successive reciprocation to build the cop with a tapered periphery.

5. In a winding machine for winding cops or bobbins on tapered tubes, the combination with a rotating spindle, a reciprocating thread-guide, means to rotate the spindle, means to reciprocate the guide, contact means engaged by the cop to feed the guide along the spindle, and means to cause said contact means to travel in a path substantially parallel to the tapered surface of the tube on which the cop is wound.

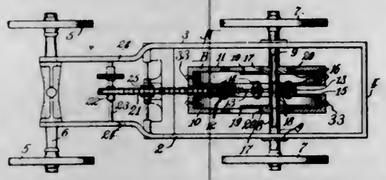
[Claim 6 not printed in the Gazette.]

1,062,421. HAT-IDENTIFYING DEVICE. GUSTAF VON SCHANTZ, New Britain, Conn. Filed Mar. 7, 1912. Serial No. 682,253. (Cl. 40—9.)



The combination of a hat having a sweat band, a marking device made from a flexible card bent on itself to form a shank and an indicating portion at right angles to each other, and a pivot for connecting said shank to the sweat band for swinging movement, said shank being movable to carry the indicating portion below the opening of the hat or up into the crown of the hat, and being flat and also adapted to frictionally engage the hat band, said indicating portion extending partly across said opening.

1,062,422. PROPELLER MEANS FOR SELF-PROPELLED VEHICLES. WILLIAM A. SORG, Minneapolis, Minn. Filed May 27, 1912. Serial No. 699,846. (Cl. 21—90.)



1. In a self propelled vehicle having a supporting frame and carrying elements therefor, a propelling wheel having a concentric impelling surface and a bearing carried by said frame against which said impelling surface is adapted to impinge freely, the point of contact between said bearing and impelling surface being changed during the operation of the vehicle.

2. In a self propelled vehicle having a supporting frame and carrying elements therefor, a propelling wheel having a concentric impelling surface, a bearing carried by said frame against which said impelling surface is adapted to impinge freely, the contact between said bearing and impelling surface being changed from one point to another when the propelling wheel is reversed and means for driving said propelling wheel.

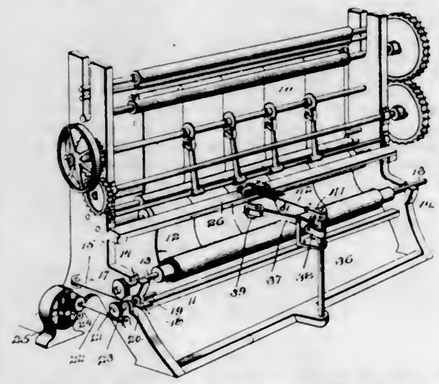
3. In a self propelled vehicle having a supporting frame and carrying elements therefor, a propelling wheel having a concentric impelling surface, a bearing carried by said frame against which said impelling surface is adapted to impinge freely, the point of contact between said bearing and impelling surface being changed when the propelling wheel is reversed and adjustable means for driving said wheel adapted to compensate for the change of said contact.

4. In a self propelled vehicle having a supporting frame and carrying wheels therefor, an annular propelling wheel adapted to engage the surface of the ground, means carried by said frame for revolving said propelling wheel and a bearing carried by said frame within said wheel, said wheel being freely disposed as regards said bearing and adapted to impinge against said bearing when revolving forwardly or backwardly to propel said vehicle.

5. In a self propelled vehicle having a supporting frame and carrying wheels therefor, a propelling wheel having a circular impelling surface concentric with its periphery, means for revolving said propelling wheel and a bearing carried by said frame against which the propelling surface of said propelling wheel is adapted to revolve and drive said vehicle, said wheel being freely disposed as regards said bearing.

[Claims 6 to 16 not printed in the Gazette.]

1,062,423. CLOTH-GUIDING MACHINE. BERNARD T. STEBER, Utica, N. Y., assignor to New Hartford Cotton Manufacturing Company, New Hartford, N. Y., a Corporation of New York. Filed Nov. 9, 1912. Serial No. 730,519. (Cl. 164—65.)



1. The combination with a cloth slitting machine embodying means for moving a web of cloth, of a longitudinally movable beam carrying the web of cloth, movable means to follow between two predetermined warp threads throughout the length of the web of cloth, and means to move the beam longitudinally in the direction opposite to the movement of the warp following means.

2. The combination with a cloth slitting machine, of a beam carrying a web of cloth, movable means to take the cloth from the beam, a motor adapted to move the beam longitudinally, means to follow predetermined warp threads throughout the length of the web, and means controlled by the following means for actuating the motor selectively in opposite direction.

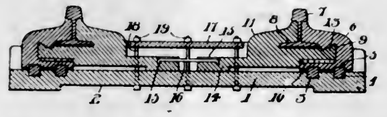
3. The combination with a cloth handling mechanism embodying a longitudinally movable beam carrying the web of cloth, of a motor adapted to move the beam longitudinally, means capable of following between predetermined warp threads throughout the length of the web, an electric circuit including the motor, and means controlled by the following means for energizing the motor selectively in opposite directions.

4. The combination with a cloth handling machine, of a beam mounted to rotate and move longitudinally, an electric motor capable of moving the beam longitudinally, said motor being provided with a field, means to follow between predetermined warp threads throughout the length of the cloth web, an electric circuit including the motor and field and means carried by the following means to reverse the field as said following means is moved in opposite directions.

5. The combination with a rotatable and longitudinally slidable beam, of a motor mounted adjacent the beam, a screw adapted to be actuated by the motor, means whereby the rotation of the screw in either direction moves the beam longitudinally, means mounted adjacent the beam adapted to follow a given line of a web wound from the beam, spaced contact members in circuit with the motor, and means carried by the following means to selectively engage either of said spaced contacts.

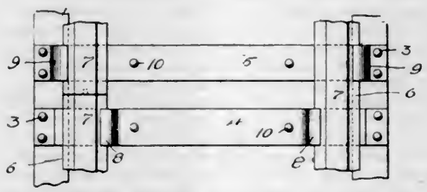
[Claim 6 not printed in the Gazette.]

1,062,424. METALLIC TIE AND RAIL-FASTENER. FLORYAN WAJDA, East Hammond, Ind., assignor of one-half to Barney J. Glinski, Chicago, Ill. Filed Nov. 27, 1912. Serial No. 733,840. (Cl. 238—5.)



In a metallic tie and rail fastener, the combination with rails, of a channel-shaped tie supporting the base flanges of said rails, cushioning blocks arranged transversely within said tie adjacent to the ends thereof, outer rail fasteners arranged upon said blocks and engaging the outer sides of said rails, cushioning strips carried by said outer rail fasteners, rail chairs arranged in said tie and bracing the inner sides thereof, said chairs resting upon the cushioning strips of said outer fasteners and having tongues interlocked with said outer fasteners, cushioning strips carried by said chairs and supporting the base flanges of said rails, tie rods connecting said rail chairs intermediate the ends of said tie, a top plate arranged upon said tie between said rail chairs, and vertical bolts connecting said top plate to the bottom of said tie and engaging the side edges of said chairs.

1,062,425. METALLIC TIE AND RAIL-FASTENER. FLORYAN WAJDA, Hammond, Ind., assignor of one-half to August M. Bakala, Hammond, Ind. Filed Dec. 28, 1912. Serial No. 739,078. (Cl. 238—5.)



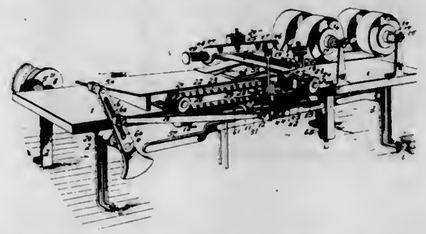
A metallic tie and rail fastener comprising a pair of longitudinally extending flat metallic stringers, a pair of flat metallic ties arranged in close relation with respect to each other and having their ends flush with the outer longitudinal edges of said stringers, rail supporting tie plates positioned upon said ties and adapted to have their ends support the bases of rails, outer rail fasteners carried by one of said tie plates, means for securing the last mentioned tie plate and its respective tie to said stringers, inner rail fasteners carried by the other tie plates, means for securing that tie supporting that tie plate provided with the inner fasteners to the stringers, and means for securing the tie plates to their respective ties.

1,062,426. PUNCTURE-CLOSING COMPOUND. WILLIAM J. WATKINS, Fort Worth, Tex., assignor of one-half to Nannie G. Drumm, Fort Worth, Tex., and one-fourth to John A. Wisherd, Stanton, Nebr. Filed Nov. 5, 1912. Serial No. 729,617. (Cl. 152—25.)

1. A composition for closing punctures in inflatable tires consisting of two pounds of fiber, two pounds of dextrin, one pound of gum arabic, four ounces of shellac, ten ounces of wood alcohol, ten ounces of aqua ammonia, one ounce of oil of cedar, and enough water to make five gallons.

2. A liquid composition for closing punctures in inflatable tires consisting of fiber, dextrin, gum arabic, shellac, wood alcohol, aqua ammonia, oil of cedar, and water.

1,062,427. PAPER-CUTTING MACHINE. ANDREW ZANETTI and JOSEPH ZANETTI, San Francisco, Cal. Filed Dec. 11, 1912. Serial No. 736,051. (Cl. 164—42.)



1. A machine for dividing ribbon into pieces of uniform lengths, in which is included a plurality of feeding rolls, a ribbon severing mechanism, said mechanism including a movable cutter, a feeding means including a reciprocable constantly movable slide head, a device for raising and lowering the movable cutter, a driven shaft, a crank thereon, a connection that joins the crank and the slide head, and means on the crank for intermittently engaging the device that shifts the movable cutter whereby to move the said cutter to sever the ribbon.

2. A machine for dividing ribbon into lengths, having in combination: means for cutting the ribbon, means for supporting a roll of ribbon, means for feeding the ribbon from the roll to the cutting means, said feeding means including an endless belt, a reciprocable and constantly movable slide head, means on the head for gripping the belt to cause it to move forwardly with the slide head on the forward thrust of the said belt, means for imparting motion to the slide head, and other means that coöperates with the slide head moving means, for actuating the cutting means at predetermined times.

3. A machine for dividing ribbon into pieces of uniform lengths, having in combination the following elements: ribbon rolls, supports therefor, a cutting means, feeding rolls that receive the ribbons from the ribbon rolls and discharge the ribbon to the cutting means, said cutting means including a swingable cutter blade, a pull rod pendent from the front end to the swingable cutter, an endless belt drive for the feed rolls, a power shaft, and means connecting the shaft, the endless belt and the pendent rod, said means including a reciprocable slide, a crank member on the shaft, and means connecting the

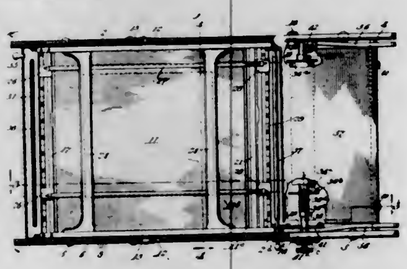
said crank member and the slide and for engaging the pull rod for the swinging cutter and for transmitting continuous movement to the slide and intermittent movement to the cutter.

4. In a machine of the character described, the combination with the ribbon feeder rolls, cutter mechanism and an endless belt drive for the rolls; of a power shaft, a crank thereon, a slide head, a rod connection between the head and the crank, said head including an anvil portion and a pinch pawl opposing said anvil portion, said pawl operating to grip the belt and move it on one movement of the slide head and slip back over the belt on the reverse movement of the said head.

5. In a machine for cutting paper ribbon into uniform lengths, the combination with ribbon feeding rolls, the cutting mechanism disposed in parallelism with the feeding rolls and serving to shear the ribbon; of a flattened funnel shaped tubular body located at the delivery end of the feeding rolls for holding the ribbon in the horizontal plane as it passes from the rolls and guiding it to the cutting means.

[Claim 6 not printed in the Gazette.]

1,062,428. PLATEN FOR TYPE-WRITING MACHINES. GEORGE S. ANDERSON, Harrisburg, Pa., assignor to Elliott-Fisher Company, Harrisburg, Pa., a Corporation of Delaware. Filed June 20, 1908. Serial No. 439,567. (Cl. 197—3.)



1. The combination with a stationary platen and a traveling machine, of a swinging frame, work-holding means carried by the frame, a carbon carrier also mounted on the frame, and means for causing the frame to be swung by the machine to elevate the work-holding means from the platen.

2. The combination with a platen frame and platen, of a work-holding frame mounted to swing in the platen frame, work-holding means carried by the frame, carbon carriers mounted on the work-holding frame beyond opposite ends of the platen, a cam arm extended at one end of the work-holding frame, and a machine mounted to travel on the platen frame and arranged to engage the cam arm.

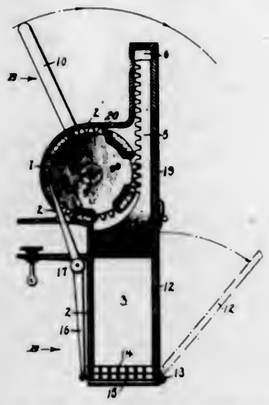
3. The combination with a flat platen, tracks or guides, and a traveling machine, of a swinging work-holding frame movable independently of the tracks or guides and including independently adjustable work-holding or guarding members disposed longitudinally and transversely of the platen respectively, and means for causing the machine, when moved back beyond the printing area, to automatically swing the work-holding frame.

4. The combination with a platen, of a work-holding structure including a supporting frame, and a pair of work-holding members rigidly secured at their front ends to the supporting frame and having their rear ends yieldable with respect to said frame.

5. The combination with a platen, of stationary tracks or guides for a traveling machine, a work-holding structure including a swinging supporting frame and work-holding means mounted on said supporting frame and yieldable relative thereto to accommodate different thicknesses of paper.

[Claims 6 to 16 not printed in the Gazette.]

1,062,429. BUTTER-CUTTER. EDWARD BALOD, Vancouver, British Columbia, Canada. Filed Jan. 8, 1913. Serial No. 740,816. (Cl. 31—65.)



1. A device for subdividing butter, comprising the combination with a rectanguiuar chamber having a grid across one end, of a plunger vertically movable within the chamber, a second grid corresponding with the fixed grid and slidable across its lower face, means for endwise moving the plunger, and means coöperative therewith for reciprocating the movable grip.

2. A device for subdividing butter, comprising the combination with a rectangular chamber having a grid across one end and one of its sides hinged to form a door, a second grid slidable across the under face of the aforesaid grid, a plunger vertically slidable in the chamber, means for operating said plunger, and means coöperative therewith for moving the movable grid at predetermined intervals across the fixed grid.

3. A device for subdividing butter, comprising the combination with a rectangular chamber having a grid removably secured in one end and one of its sides hinged to form a door, a second grid slidable across the under face of the aforesaid grid, a plunger having its under end grooved to correspond with the bars of the grid, means for operating said plunger and means coöperative therewith for moving at predetermined intervals the movable grid through a distance equivalent to the pitch of the bars of the grid.

4. A device for subdividing butter, comprising the combination with a rectangular chamber having one of its sides hinged to afford access to the interior, a plunger endwise movable within the chamber said plunger having a rack integral with or secured to it with the teeth of which rack mesh those of a pinion secured on a rotatable shaft, a fixed grid secured to the lower end of the chamber, a movable grid slidable across the under face of the fixed grid, said movable grid being operated by a pivotally mounted lever one end of which is connected to the grid and the other adapted to engage a circumferential groove in the face of the pinion.

5. A device for subdividing butter, comprising the combination with a chamber of rectangular cross section having one of its sides hinged to afford access, a plunger endwise movable within the chamber, said plunger having rack teeth which mesh with those of a gear wheel secured on a shaft rotatable in bearings in the frame of the machine, one face of said pinion having a circumferential cam groove, a grid subdividing the cross section area of the rectangular chamber, a corresponding grid movable across the under face of the fixed grid, a lever connected to the movable grid at one end and pivoted intermediate of its ends to the machine, the other end of the lever having a roller projecting into the cam groove of the toothed wheel and means for changing the angular position of the wheel on the shaft.

[Claim 6 not printed in the Gazette.]

1,062,430. ALLOY. FREDERICK M. BECKET, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, New York, N. Y., a Corporation of West Virginia. Filed Aug. 8, 1910. Serial No. 576,175. (Cl. 75—1.)

1. An alloy comprising manganese, titanium and silicon, the manganese and titanium together being in excess of fifty per cent.

2. An alloy comprising manganese, titanium, silicon and carbon, the manganese and titanium together being in excess of fifty per cent.

3. An alloy comprising manganese, titanium and carbon, the manganese and titanium together being in excess of fifty per cent.

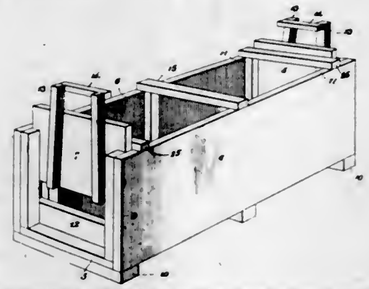
1,062,431. METHOD OF PURIFYING CARBON FOR CARBON FILAMENTS. JEAN BILLITER, Vienna, Austria-Hungary. Filed Sept. 25, 1911. Serial No. 651,246. (Cl. 204—64.)

1. A method to obtain a carbon containing less than one-tenth of one per cent. impurities, which comprises transferring the carbon into colloidal carbon, by disintegration, and thereafter separating the colloidal carbon.

2. A method to obtain carbon containing less than one-tenth of one per cent. impurities, which comprises transferring the carbon into colloidal carbon, by disintegration with an electric current and thereafter separating the colloidal carbon.

3. A method to obtain carbon containing less than one-tenth of one per cent. impurities, which comprises transferring the carbon into colloidal carbon, by heat disintegration, repeating the disintegration, and thereafter separating the colloidal carbon.

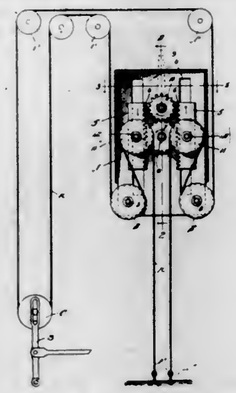
1,062,432. COMBINATION HEAD-GATE AND WATER MEASURING DEVICE. WILLIAM P. BORDER, Bozeman, Mont. Filed May 10, 1911. Serial No. 626,304. (Cl. 73—167.)



The herein described measuring apparatus, comprising a box-like body having opened ends, a regulating gate mounted in one end of the body for vertical sliding movement, a measuring gate mounted in the other end of the body for vertical sliding movement, said gates being provided on their outer faces with upwardly converging longitudinally extending beams, the same rising a slight distance above the transverse edges of said gates, cross bars fixed to the upper ends of the opposed faces of the beams and disposed in spaced parallel relation with the uppermost transverse edges of said gates, a flash board below the measuring gate and a plurality of cross rails, said rails being mounted upon the upper longitudinal edges of the side sections of the box-like body, one of said cross rails being disposed at a point intermediate of the body while the other of said rails are disposed at points adjacent to the said gates thereby reinforcing the same at the open top of the box-like body.

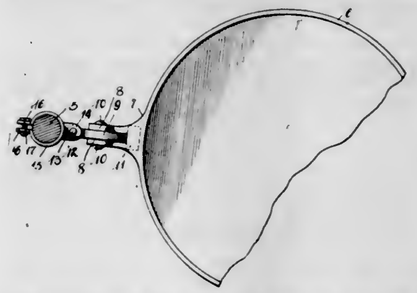
1,062,433. ELEVATOR-CONTROLLER. CHARLES OSCAR BOSSE, Tacoma, Wash. Filed June 3, 1912. Serial No. 701,405. (Cl. 187—44.)

In an elevator controller, the combination with a rope looped at its center and having its stretches disposed throughout the length of an elevator well in which the cage travels, a pulley engaging said loop, a switch lever, and connections between said lever and pulley for moving the former by the rotation of the latter in either direction; of controlling mechanism, consisting of a casing fixed within said cage and having a pair of upright guides, rack bars slidably mounted in said guides with



their teeth disposed inward, a gear pivoted in the casing and engaging the teeth of both bars, a power gear in mesh with this gear and having an operating handle, pulleys separately journaled on said rack bars and over which the stretches of said rope pass, and idle pulleys journaled on the casing and under which said stretches respectively pass.

1,062,434. BED ATTACHMENT. OLIVER E. BROOKS, Robblin, Manitoba, Canada. Filed May 28, 1912. Serial No. 700,314. (Cl. 45—58.)



The combination with a pair of clamping rings having bearing ears, of a pintle hub having a wing longitudinally disposed thereon, a pintle passed through the hub and fastened in the bearing ears, a lip formed on the wing and disposed at right angles thereto, a ring-like member having a bifurcated limb receiving the said wing, eyes formed on the bifurcated limb and disposed at opposite sides of the wing, and a pivot passed through the eyes and wing for swingingly connecting the ring-like member to the latter and permitting it to rest upon the lip when in horizontal position.

1,062,435. LIFE-PRESERVER SUIT. JAMES W. BUCHANAN, Asheville, N. C. Filed Sept. 13, 1912. Serial No. 720,212. (Cl. 9—30.)

A life preserver suit comprising body, arm and leg portions formed integrally and inseparable from one another, a hood portion formed on the back of the suit at the top thereof, the top portion of the suit being provided with an open-

ing sufficiently large to allow ingress of a person to the suit, the said suit comprising an outer water-proof layer and an inner air tight layer, the lower body portion and leg portions of the suit being provided with a cold resisting filling material, the central body portion of the suit between the two layers providing an air chamber, an air pump connected to the said air chamber to inflate the same, a vent communicating with the said air chamber to deflate the same, the entire body portion of the suit being provided with a plurality of pockets available from the inside of



the suit, the upper body portion of the suit adjacent the hood portion being provided with a draw string to close the said opening and to cause the said suit to snugly encompass the neck of the wearer, the outer portion of the hood being provided with a draw string to cause the said hood to snugly encompass the head of the wearer in such manner that the face alone is exposed, and a suitable weight arranged under each foot portion of the suit, substantially as described and for the purposes set forth.

1,062,436. CONCRETE RAILROAD-TIE. HENRY E. BURGESS, Brooklyn, N. Y. Filed Aug. 23, 1912. Serial No. 716,662. (Cl. 238—3.)



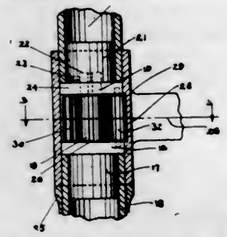
1. A plastic tie being provided with passages arranged adjacent its opposite transverse ends, substantially U-shaped yokes having their arms formed with rectangular plates embedded within the tie, the connecting member of each of the yokes partially closing the passage upon one of the faces of the tie, a cushion for each of the passages, and means for removably connecting the cushions to the yokes.

2. A plastic tie having transverse dove-tailed passages, spaced suitable to the track gage, of a pair of cushion rail bearing members fitted within and frictionally engaging the walls provided by the passages, substantially U-shaped yoke members having their opposite arms provided with angular rectangular plates, the said plates and side arms of the yoke being embedded within the tie, and the connecting member of each of the yokes straddling the passage upon one of the faces of the tie, and removable elements passing through the said connecting members of the yokes and engaging with the cushion members of the tie.

3. The combination with a plastic tie having transverse dove-tailed passages spaced suitable to the track gage, of substantially U-shaped metallic yokes, each of the said yokes having its side arms provided with substantially rectangular angularly arranged plates which project both above and below the yoke, the side arms as well as the plates of the yoke adapted to be embedded within the tie, retaining elements passing through the plates and within the plastic body of the tie, the connecting member of each of the yokes being provided with an opening and being arranged flush with one of the faces of the tie, a pair of cushion rail bearings arranged within the passages to frictionally engage therewith and to contact with the connecting members of the yokes and headed threaded members passing through the openings in the said connecting members of the yokes and engaging the cushion bearings.

4. A plastic tie having its upper face enlarged adjacent its ends and said enlarged portions being provided with dove-tailed depressions, dove-tailed cushions within the depressions and lying flush with the upper face of the tie, a tie reinforcing and cushion sustaining member, said member having its ends provided with substantially U-shaped yokes, the outer members of which being flush with one of the faces of the tie, removable means for securing this member to the cushions, the ends of the yokes having extensions provided with openings, U-shaped sustaining members arranged within the tie, a bowed connecting member for the yokes, said member being provided with openings, and sustaining members passing through the openings and embedded within the tie.

1,062,437. HINGE. WILLIAM CARLSON, Jamestown, N. Y. Filed Dec. 12, 1911. Serial No. 665,218. (Cl. 16—25.)

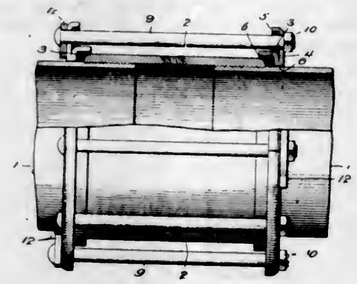


1. In a hinge, the combination with a pair of bushings, of a spindle provided with a longitudinal channel interposed between said bushings, a leaf spring encircling the said spindle and having one terminal thereof secured thereto, a sectional sleeve encircling said bushing and spindle, means whereby the sleeve may engage the outer terminal of said spring for increasing the tension thereof, and an adjustable screw whereby the tension of said spring is increased or decreased by rotation of said spindle.

2. In combination with a hinge, an upper and lower tubing, a collar mounted on the lower tubing, a casing surrounding said tubing, members adapted to be supported by said collar, bushings formed in the ends of the tube members, a spindle mounted on the lower bushing, a recess formed in the upper bushing adapted to receive one end of said spindle, a leaf spring having one of its ends attached to the spindle and a groove formed in said casing adapted to receive the other end of said spring.

1,062,438. WROUGHT-METAL RING FOR COLLAR-CLAMPS, &c. JAMES CLARK, Bradford, Pa., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa., a Corporation of Pennsylvania. Filed Dec. 30, 1912, Serial No. 739,401. (Cl. 137—28.)

1. A divided ring for collar clamps and the like formed of wrought metal and comprising an annular plate member provided with bolt holes and an annular portion projecting from one face of the plate member, said rings being formed in sections separated on a line passing through bolt holes in the plate members, said sections having plane meeting ends accurately fitted, so as to make the adjacent surfaces of adjacent sections continuous, the plate member portions of said sections being provided with locking apertures adjacent to their ends, and bridge pieces formed of wrought metal and provided with a central bolt hole, and having integral lugs projecting from one face to fit the locking apertures of adjacent sections and maintain the meeting ends thereof in fitted relation.



2. A divided ring for collar clamps and the like formed of wrought metal and comprising an annular plate member provided with bolt holes and an annular portion projecting from one face of the plate member, said rings being formed in sections separated on a line passing through bolt holes in the plate members, the said sections being divided parts of an integrally formed ring and having their meeting end faces smooth and close fitting to secure substantial continuity of surface from one section to another, said sections being provided with locking apertures adjacent to their ends, and bridge pieces formed of wrought metal and provided with a central bolt hole and having integral lugs projecting from one face to fit said locking apertures and hold the meeting ends of said sections in fitted relation.

3. A divided ring for collar clamps and the like formed of wrought metal and comprising an annular plate member provided with bolt holes and an annular portion projecting from one face of the plate member, said rings being formed in sections separated on a line passing through bolt holes in the plate members, said sections having plane meeting ends accurately fitted, so as to make the adjacent surfaces of adjacent sections continuous, the plate member portions of said sections being provided with locking apertures adjacent to their ends, and bridge pieces formed of wrought metal and provided with a central bolt hole having unequal diameters to hold the bolt head from rotation and relieve the ends of the sections from lateral strain, and having integral lugs projecting from one face to fit the locking apertures of adjacent sections and maintain the meeting edges of the sections in fitted relation.

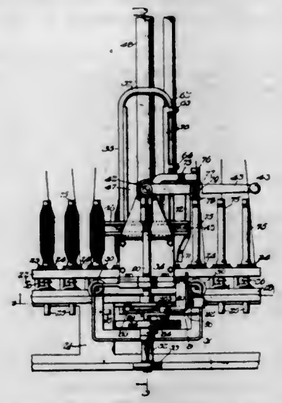
4. A bridge piece for connecting the sections of a divided ring formed of wrought metal and comprising a plate provided with a bolt hole and with integral lugs projecting from one face of the plate and located on opposite sides of the bolt hole, to engage locking apertures in the plate member portions of the ring sections whereby the sections may be rigidly united and the use of bolts and rivets dispensed with.

1,062,439. DOFFER. HOWARD D. COLMAN and BURT A. PETERSON, Rockford, Ill., assignors to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed July 22, 1908. Serial No. 444,698. (Cl. 118—13.)

1. In a doffer for spinning frames, a framework, reciprocatory means for engaging a full bobbin, and a guide movable with said engaging means and with relation to said framework, for conducting doffed bobbins away from said engaging means.

2. In a doffer for spinning frames, reciprocatory means adapted to embrace and engage a full bobbin, and a conduit alined with said engaging means for conducting the engaged bobbins away from said engaging means.

3. In a doffer for spinning frames, reciprocatory means adapted to embrace and engage a full bobbin, and a conduit alined with said engaging means and reciprocable therewith for conducting the engaged bobbins away from said engaging means.

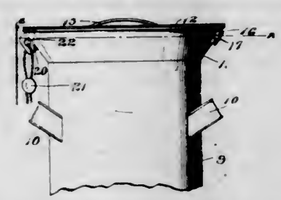


4. In a doffer for spinning frames, a carriage; bobbin-engaging means mounted on the carriage and reciprocable vertically with relation to the carriage in the veritcal plane of the bobbin spindles, said engaging means being automatically yieldable to permit the engaging means to pass downward over a bobbin, and a guide movable with said engaging means to receive bobbins engaged by said engaging means and conduct them away from said engaging means.

5. In a doffer for spinning frames, bobbin-engaging means, means for vertically reciprocating said engaging means in the vertical plane of the bobbin spindles, said engaging means being automatically yieldable to permit the engaging means to pass downward over a bobbin, a bobbin conduit alined with and movable with said engaging means to receive bobbins engaged by said engaging means and conduct them away from said engaging means, and means for giving said engaging means and conduit an intermittent advancing movement to bring them into vertical alinement with successive spindles on the spinning frame.

[Claims 6 to 14 not printed in the Gazette.]

1,062,440. CAN. CHARLES E. COMBS, Kansas City, Mo. Filed Oct. 15, 1912. Serial No. 725,921. (Cl. 31—78.)



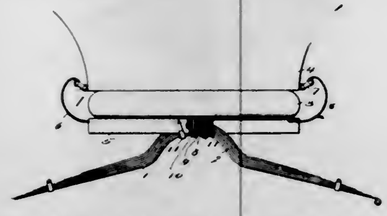
1. A can body having a flaring flange provided with a keyhole slot and a rectangular slot, and a lid having a corresponding flaring flange, a headed stud on the underside of the lid flange to engage the keyhole slot of the body flange, and a flat spring secured on the lid flange and having a free end provided with a lip extending through said flange, said lip being positioned to engage the slot in the flange of the can body when the lid is adjusted with the headed stud in engagement with the narrow end of the keyhole slot.

2. A can body having a flaring flange provided with a keyhole slot and a rectangular slot, and a lid having a corresponding flaring flange, a headed stud on the underside

of the lid flange to engage the keyhole slot of the body flange, and a flat spring secured on the lid flange and having a free end provided with a lip extending through said flange, said lip being positioned to engage the slot in the flange of the can body when the lid is adjusted with the headed stud in engagement with the narrow end of the keyhole slot; said lip being apertured for the reception of a seal.

3. A can body and a can lid having corresponding flaring flanges, said flanges being provided with interengaging locking means including a headed stud on the lid flange, a spring secured on the lid flange and having a free end provided with a lip projecting through said flange, the body flange being provided with a keyhole slot and a rectangular slot to be engaged, respectively, by the headed stud and by the lip.

1,062,441. SHOCK-ABSORBER. WALTER H. COOK, New Orleans, La. Filed Nov. 14, 1912. Serial No. 731,355. (Cl. 21—50.)



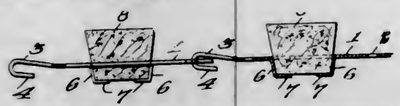
1. In a shock absorber, a transverse main spring, a shock-transmitting element rigidly secured over and to the central portion of said spring, spring connections between the ends of said shock-transmitting element and the body of the vehicle, and a cushioning element which normally seats on the shock-transmitting element and is arranged between the latter and the body of the vehicle.

2. In a shock absorber, a transverse main spring having a central hump, a shock-transmitting bar rigidly secured at its center to said hump, curved leaf springs connecting the ends of said bar and the body of the vehicle, and an elongated air cushion which normally seats on said bar and is arranged between the latter and the body of the vehicle.

3. In a shock absorber, a transverse main spring, a shock-transmitting bar rigidly secured over and to the central portion of said spring, curved leaf springs connecting the ends of said bar and the sides of the vehicle body, and an elongated air cushion which normally seats on said bar and is arranged between the latter and the vehicle body.

4. In a shock absorber, a transverse main spring having a central hump, a shock-transmitting bar rigidly secured at its center to said hump, spring connections between the ends of said bar and the vehicle body, and a cushioning element which normally seats on the shock-transmitting element and is arranged between the latter and the vehicle body.

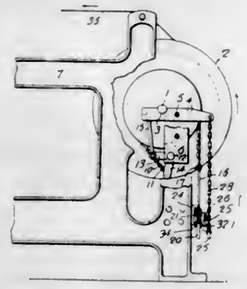
1,062,442. BRAKE-BELT LINK. IGNACE COULOMBE, Fall River, Mass. Filed May 21, 1912. Serial No. 698,728. (Cl. 74—37.)



1. A brake belt composed of a plurality of interengaging detachable links, each link having a transverse slot at one end and a hook at the other for engaging the slot of the adjacent link, said link having a central opening, and a laterally extending lug at each end of the opening, each lug having an inwardly extending flange at its free end and a block of cork seated in the opening and engaging the flanges at one of its ends.

2. In a brake belt, a link formed from sheet material having at one end a slot and at the other a hook and having a central opening, said link having inwardly extending holding flanges at each end of the opening and offset laterally from the plane of the link and connected to the link, and a block of cork in the said opening and engaging the flanges.

1,062,443. LET-OFF MOTION FOR LOOMS. IGNACE COULOMBE, Fall River, Mass. Filed Feb. 8, 1913. Serial No. 747,099. (Cl. 139—58.)



1. The combination with the loom and the warp beam having a brake wheel at one end, of a lever pivoted intermediate its ends to the frame of the loom and having a bearing recess at the inner side of the pivot for receiving the adjacent spindle of the warp beam, an elbow lever pivoted to the frame below the lever, a link connecting one of the arms of the elbow lever with the inner end of the bearing lever, a brake band encircling the wheel and having one of its ends connected with the other arm of the elbow lever, a rod connected at one end with the other end of the band and having its other end threaded, a lever pivoted to the frame of the loom near one end and having an opening at the end adjacent to the pivot for receiving the rod, a nut threaded on to the rod below the lever, a second lever arranged adjacent to the first-named lever and pivoted to the loom frame at the end remote from the brake wheel, a chain connecting the free end of the last-named lever to the bearing lever at the opposite end from the bearing recess, each of the said levers having a longitudinal slot, a headless bolt engaging the slots of the two levers and having an annular rib between the levers, the outer end of the bolt being threaded, and a nut engaging the said end for clamping the bolt to the lever.

2. The combination with the loom and the warp beam having a brake wheel at one end, of a lever pivoted intermediate its ends to the frame of the loom and having a bearing recess at the inner side of the pivot for receiving the adjacent spindle of the warp beam, an elbow lever pivoted to the frame below the lever, a link connecting one of the arms of the elbow lever with the inner end of the bearing lever, a brake band encircling the wheel and having one of its ends connected with the other arm of the elbow lever, a rod connected at one end with the other end of the band and having its other end threaded, oppositely arranged levers pivoted to the frame and extending alongside each other, a pivotal connection between the levers intermediate their ends, said connection being adjustable with respect to the levers, one of the levers being extended beyond its pivot and having an opening in the extension for receiving the rod, a nut threaded onto the rod and a connection between the outer end of the bearing lever and the free end of the other of the last-named levers.

3. The combination with the loom and the warp beam thereof, of a lever pivoted intermediate its ends to the loom and having a bearing recess at the inner side of the pivot for receiving the adjacent spindle of the warp beam, a brake chain or band engaging the beam, an elbow lever pivoted to the loom, a link connecting one of the arms of the elbow lever with the inner end of the bearing lever, the other arm of the elbow lever being connected to one end of the brake band, a pair of levers

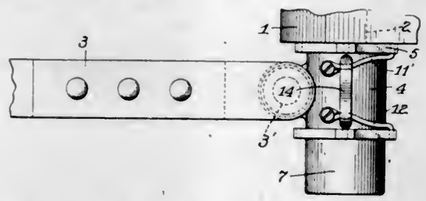
arranged alongside each other and pivoted at opposite ends to the loom, one of the levers being extended beyond its pivotal connection and having an adjustable connection with the other end of the brake band, a pivotal connection between the levers intermediate their ends, said connection being adjustable with respect to the levers, and a connection between the outer end of the bearing lever and the free end of the other lever of the pair.

4. The combination with the loom and the warp beam thereof, of a bearing lever for the beam, said lever being pivoted to the frame intermediate its ends, a brake chain or band engaging the beam, an elbow lever pivoted to the loom and having one of its arms connected to one end of the band, a connection between the other arm and the end of the bearing lever adjacent to the beam, a pair of levers arranged alongside each other, said levers being pivoted to the loom frame at their opposite ends, a connection between the free end of one lever and the end of the bearing lever remote from the beam, an adjustable pivotal connection between the lever intermediate their ends, the other lever being extended beyond its pivot at one end, and an adjustable connection between the extended end and the other end of the brake chain.

5. The combination with the loom and the warp beam, of a lever pivoted intermediate its ends to the loom, the beam resting on the lever on one side of the pivotal connection, a brake band for the beam, a connection between one end of the bearing lever and one end of the band for tightening the said band when the lever end is pressed downward by the weight of the beam, levers pivoted at one end to the loom, said levers being oppositely arranged and lying alongside each other, a pivotal connection between the levers intermediate their ends, said connection being adjustable with respect to the levers, a connection between the free end of one lever and the other end of the bearing lever, the other lever being extended beyond its pivot, and an adjustable connection between the extension of the lever and the other end of the brake band.

[Claims 6 to 8 not printed in the Gazette.]

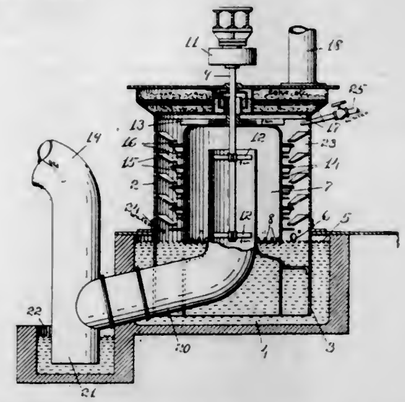
1,062,444. PITMAN CONNECTION FOR HARVESTING-MACHINES. ALBERT C. DICKHUTE, Shelby, Nebr. Filed Dec. 30, 1912. Serial No. 739,395. (Cl. 74—17.)



In combination with a crank pin having a threaded end, a boxing mounted thereon, a gland screw threaded into connection with the boxing therewith at one end, a cap for holding lubricant screw threaded into connection with the other end of the boxing, the said cap inclosing the threaded end of the crank pin, and spring locking members secured to the boxing, extending circumferentially part way about the same, the said gland and cap having a series of openings to receive the laterally bent ends of the said springs, substantially as described.

1,062,445. GAS-CLEANER. ALFRED ERNST, Pittsburgh, Pa. Filed Nov. 14, 1912. Serial No. 731,385. (Cl. 48—141.)

1. Apparatus for cleaning gas, comprising an interiorly flanged cylindrical casing, a central upward passage, an extension thereof forming a closed passageway for conducting the gas thereto, a rotary inverted cylindrical deflector having a horizontal series of passages around the bottom portion of its wall, a water holder at the bottom of the casing having an overflow at about the level of said series of passages, and a passage around said deflector for conducting the gas upward and within the flanged casing.



2. Apparatus for cleaning gas, comprising a circular casing, an upward central passage, a passagewy for conducting the gas thereto, an overflow water holder, an inverted cup deflector for conductin the gas therefrom, by which the gas is deflected downward and subjected to a bubbling passage through water, a flanged passage between said cup deflector and said casing through which the gas flows upward, means for rotating said deflector and thereby subjecting the gas to centrifugal force during such upward flow, and means for supplying water to said flanged passage.

3. Apparatus for cleaning gas, comprising a water holder, an overflow therefor, a casing extending into said water holder, an upward passage, a passageway for conducting the gas thereto, a rotary downward deflector cylinder for the gas, means for subjecting the gas to subdivision through a bubbling action at the water level, a second passage around the deflector cylinder for conducting the gas upward from the water level, a water supply in said passage, fan blades and means above said passage for holding drying material.

4. Apparatus for cleaning gas, comprising a casing, a water seal for said casing, means in the upper portion of the casing for spraying the gas, a cylindrical deflector having a series of horizontal passages at the water level for separating the gas into small portions and subjecting said small portions to bubbling passage through water, means for rotating said deflector, a circular flanged passage around the cylindrical deflector for conducting the gas upward from the water level to the spraying means, a fan and drying means in the top of the casing communicating with said flanged passage.

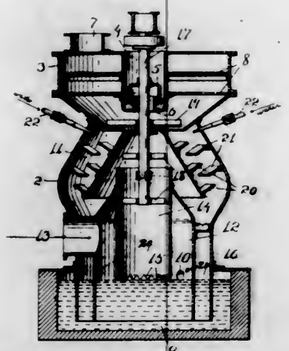
5. Apparatus for cleaning gas, comprising a casing, a water seal tank, a water level opening of said tank, spraying devices, a central vertical gas inlet pipe, a rotary deflecting cup extending downward around the gas inlet pipe within the casing and having a horizontal series of passages operating in connection with the water of said tank at the water level to separate the gas into small portions for separate passage through the water into the outer portion of the casing and upward toward the spraying devices and fan glades carried by said cup.

[Claims 6 to 8 not printed in the Gazette.]

1,062,446. GAS-CLEANER. ALFRED ERNST, Pittsburgh, Pa. Filed Dec. 13, 1912. Serial No. 736,597. (Cl. 48—141.)

1. Apparatus for cleaning gas, comprising a casing having an entrance chamber and a washing chamber, a water holder at the bottom of said entrance chamber, an overflow for said water holder, an inverted deflecting cup

within the washing chamber, and a tubular partition passage within the entrance chamber extending upward into said deflecting cup and downward into the water holder, said passage being provided with rotary blades above and passages at the water level for causing the gas to bubble through the water from the entrance chamber into the partition passage.



2. Apparatus for cleaning gas, comprising a casing having an entrance chamber and a washing chamber above said entrance chamber, a water holder at the bottom of said entrance chamber, an overflow for said water holder, a rotary inverted deflecting cup within the washing chamber, and a partition passage extending upward into said deflecting cup and downward through the entrance chamber into the water holder, said passage being provided with a series of serrations at the water level to subdivide and direct the gas through the water from the entrance chamber into the partition passage.

3. Apparatus for cleaning gas, comprising a casing having a water holder at its bottom, an overflow discharge an entrance chamber extending into said water holder, a washing chamber above said entrance chamber a drying chamber above the washing chamber, a rotary inverted deflecting cup within the washing chamber, and a tubular partition passage between the entrance chamber and the washing chamber having a circumferential series of passages at the water level for the passage of the gas from the entrance chamber through the partition passage inward to the washing chamber.

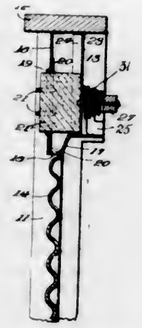
4. Apparatus for cleaning gas, comprising an overflow water holder an entrance chamber extending downward into the water holder, a washing chamber above the entrance chamber, an inverted deflecting cup within the washing chamber, a water spray in said washing chamber, and a partition passage extending through the entrance chamber for communication between said entrance chamber and said washing chamber, said partition passage having openings at the water level rotary means to cause centrifugal movement of the spray water, and means to cause the gas to pass through the water from the entrance chamber into the passage of communication.

5. Apparatus for cleaning gas, comprising an entrance chamber, a washing chamber above the entrance chamber, an upper drying chamber opening into the washing chamber, a bottom overflow water holder, an inverted deflecting cup within the washing chamber, a partition passage of communication extending upward under said deflecting cup and having a series of passages at the water level, and jet devices in the entrance chamber for keeping these passages clear.

[Claims 6 to 8 not printed in the Gazette.]

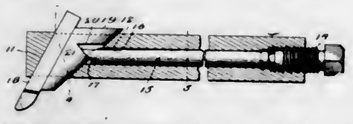
1,062,447. WASHBOARD. MARY B. FEINEN, Jersey City, N. J. Filed Apr. 15, 1911. Serial No. 621,420. (Cl. 68—29.)

1. A washboard including spaced side members and a head member, a head plate extending between said side members and beneath said head member and provided with an opening, a drainage trough having perforations and extending rearwardly of the head plate at its lower edge, a rubbing member extending between said side members and beneath said trough in position to receive the drainage therefrom, a frame having an opening corresponding to the opening of the head member and bearing against the rear face of said head plate with its opening registering with the opening of the same, said frame bearing at its lower edge upon the bottom of the said drainage trough and supported thereby, supporting wires carried by said frame and extending through said head plate opening and adapted to support cakes of soap, and means adapted to hold soap against said wires.



2. A washboard including a head plate having an opening and a rubbing member below the head plate, a bottom plate having a rear imperforate portion and with a perforated drainage trough at its forward side, said trough extending in advance of the rubbing member, and means for supporting soap upon said imperforate bottom portion and above said trough and in the head plate opening.

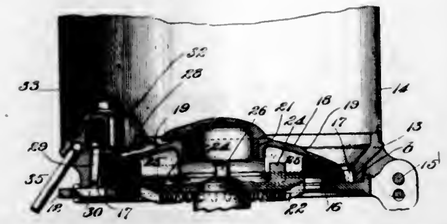
1,062,448. TOOL-HOLDER. HAROLD FISH, Stratford, Conn., assignor to The Ready Tool Company, Bridgeport, Conn., a Corporation of Connecticut. Filed July 20, 1911. Serial No. 639,647. (Cl. 29—96.)



1. A tool holder comprising a bar, having a transverse flaring bore therethrough adjacent one end thereof a longitudinal bore therethrough from the opposite end to said transverse bore, a wedge block in said transverse bore occupying but a portion of said bore, a tool in said bore between said wedge block and the end of said bore adjacent the near end of the holder, a cam face formed in the edge of said wedge block opposite from the tool engaging face, said cam face being formed intermediate of the ends so as to permit the wedge block to have bearing surface at each side thereof, a bar carried by said holder in the longitudinal bore adapted to engage said wedge block to control its movement in one direction and means to move said longitudinally movable bar.

2. A tool holder comprising a bar having a flaring transverse bore adjacent one end thereof, a longitudinal bore communicating with said transverse bore, a wedge block in said transverse bore adapted to engage a tool with one edge and the end wall of bore with its opposite edge, the edge adapted to engage the bore being rounded, said wedge block having a recess formed in the rounded edge intermediate of its length so as to produce bearing surfaces at each side thereof, said recess having a cam face substantially perpendicular to the general line of the rounded edge of said wedge block, a longitudinally slidable bar in said longitudinal bore having a bevel face formed on one end thereof corresponding to the cam face of the wedge block, the end of said bar having the general configuration of said recess in said wedge block, and a set screw carried by said holder adapted to control the longitudinal movement of said bar in one direction.

1,062,449. DROPPING DEVICE FOR CORN-PLANTERS. RALPH L. FORD, Decatur, Ill., assignor to Pioneer Implement Company, Council Bluffs, Iowa, a Corporation of Iowa. Filed Mar. 9, 1912. Serial No. 682,809. (Cl. 111—6.)



1. In a planter, a rotary seed agitating member having a ridge on its upper surface extending in a spiral completely around said member.

2. In a planter, a rotary seed agitating member having its upper surface sloping downward toward its periphery and having a ridge on said upper surface extending in a spiral from its center to its periphery.

3. In a planter, the combination with a rotary seed plate having seed cups at its outer periphery, of a cover plate resting on and movable with said seed plate, arms extending over said cover plate, and a downwardly extending center bearing for said cover plate carried by said arms, said center bearing having a downwardly sloping head extending over said cover plate, the upper surface of said cover plate sloping downwardly from said center bearing toward its periphery.

4. In a planter, the combination with a rotary seed plate having seed cups at its outer periphery, of a cover plate movable therewith and having its upper surface sloping downward toward its periphery, and arms arranged tangentially and above said cover plate and arranged to cooperate with the sloping portion thereof to distribute the seed outwardly.

5. In a planter, the combination with a seed plate, of a cover plate having an outwardly extending ridge on its upper surface, and an arm extending across the upper surface of said cover plate and across the ridge thereon and arranged to coöperate with said cover plate to distribute the seed outwardly.

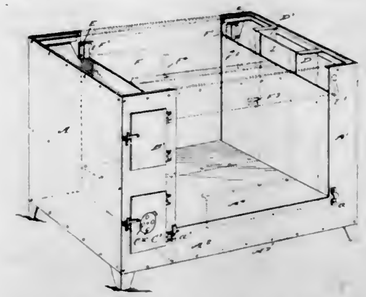
[Claims 6 to 10 not printed in the Gazette.]

1,062,450. TAKE-DOWN COOK-RANGE. GEORGE FRAZER, Eugene, Oreg. Filed Dec. 4, 1912. Serial No. 734,848. (Cl. 126—9.)

1. A take-down cook range comprising a substantially U-shaped casing, intermediate oven parts removably associated with the casing and adapted to coöperate therewith, and a removable top adapted to coöperate with the upper portion of the casing and the oven parts when the latter are in position.

2. A take-down cook range comprising a substantially U-shaped casing, the sides of which are formed with inner and outer walls and are open at their tops, intermediate oven parts removably associated between the said side portions of the casing and adapted to coöperate therewith to form the oven, and a top plate removably associated with the upper portions of the casing sides and the oven parts and coöperating therewith for the purpose described.

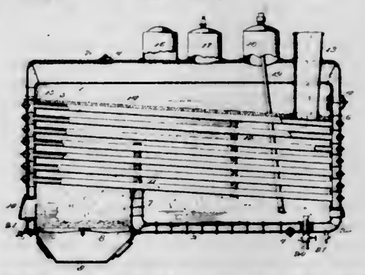
3. A take-down cook range comprising a casing having inner and outer U-shaped walls which are spaced apart, the inner wall at one side of the casing extending from the top to the bottom of the same whereby to prevent communication with the other portions of the casing, a fire pot formed within said casing side and having an ash pit below the same, a smoke flue formed within the other side portion of the casing and extending downwardly therein and partially across the base of the casing, an oven top removably connecting the said side portions of the casing below their upper ends, forward and rear oven doors having removable hinged connections with the casing, and a top plate supported upon the upper ends of the casing sides and the said oven top.



4. A cook range comprising a U-shaped casing, the upper portions of which are provided with internal brackets, an oven top having outstanding corner plates adapted for detachable engagement within the said casing brackets whereby to removably associate the said oven top between the side portions of the casing, upstanding handles carried by the said oven top whereby to permit of its convenient withdrawal, and a top plate removably supported by the upper portions of the casing sides above the said oven top for the purpose described.

5. A cook range comprising a U-shaped casing, the side portions of which are provided with interior brackets adjacent their upper ends, an oven top plate having extending corner plates adapted for detachable engagement within said casing, brackets whereby to connect the casing sides adjacent their upper ends, said oven top plate having upstanding flanges at its forward and rear portions which are provided with keepers, bearings carried by the lower portions of the casing sides adjacent their lower ends, oven doors having lower outstanding trunnions adapted for engagement within the said bearings whereby to form hinged connections, handles carried by the said oven doors and provided with catches adapted for engagement with the said keepers, and a removable top plate supported by the upper portions of the said casing sides above the oven top.

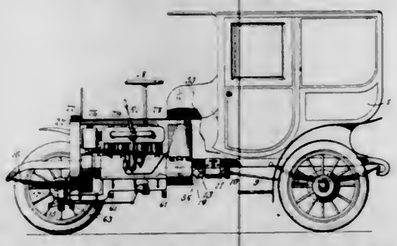
1,062,451. STEAM-BOILER. JOSEPH OMER GAGNÉ, Sherbrooke, Quebec, Canada. Filed Mar. 26, 1912. Serial No. 686,236. (Cl. 122—153.)



A steam boiler comprising inner and outer shells each consisting of a top, ends, sides, and bottom spaced apart throughout their extent to define an intervening water space, the bottoms of the shells terminating short of the front ends thereof and being up-turned to form a water leg in direct communication with the water space, grate

bars supported by and extending between said water leg and the front end of the inner shell, a bridge wall supported by and rising from the water leg, water tubes extending between the ends of the inner shell, some of the tubes passing through the bridge wall, a refractory partition between said bridge wall and the rear ends of the shells, a refractory roof between the ends of the shells above the tubes, and a stack rising from said roof adjacent the rear end thereof and extending through and beyond the shells.

1,062,452. MOTOR-VEHICLE. EDWARD B. GALLAHER, New York, N. Y., assignor to Clover Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1907. Serial No. 402,982. (Cl. 21—90.)



1. A motor vehicle embracing wheels and axles and a frame therefor; in combination with a section of driving shafting geared to the rear wheels and journaled at its front end in a bearing sustained by the frame; together with a power unit embracing a motor and all of the necessary operative accessories supported upon a common rigid base, said power unit and base being detachable as a whole from the vehicle and provided with means means for detachably connecting the motor to the driving shaft, substantially as described.

2. A motor vehicle embracing wheels and axles, a frame therefor, and driving gear; in combination with a power unit supported by a base, said base being detachably and slidably sustained upon the frame; together with a slip or separable coupling between the power unit and the driving gear which transmits the power from the unit to the wheels, the entire arrangement being such that the power unit as a whole may be removed and that the act of such removal severs the connection between said power unit and the driving gear, substantially as described.

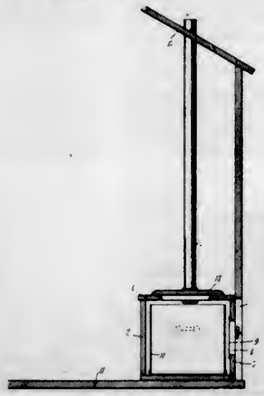
3. A motor vehicle embracing wheels and axles and a frame therefor; a motor and a sustaining base for such motor, said base being provided at its sides with supporting means for removably sustaining it upon the frame in such manner that it may be moved endwise in the direction of the length of the vehicle; in combination with means for so connecting the motor to the driving wheels of the vehicle that the act of removing the motor and its sustaining base effects disconnection between it and said driving wheels, substantially as described.

4. A motor vehicle embracing wheels and axles and a frame therefor; in combination with a motor sustained by a base provided with two or more lateral or side supports adapted to be sustained by the frame and in such manner that said motor and its base may be moved bodily in the direction of the length of the frame; together with means for detachably connecting the motor shaft to the driving wheels of the vehicle by the act of withdrawing the motor from the frame, substantially as described.

5. A motor vehicle embracing wheels and axles and a frame therefor; a motor supported by a base provided with slidable supporting means at its opposite sides; together with means for effecting its alinement in the direction of the length of the frame; in combination with means for detachably effecting interconnection between the driving shaft of the motor and the shaft which connects the same to the driving wheels by the act of withdrawing the motor from the frame, substantially as described.

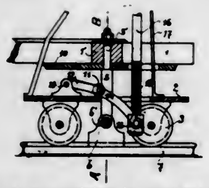
[Claims 6 to 33 not printed in the Gazette.]

1,062,453. SANITARY CLOSET. JAMES J. GRAHAM, Jacksonville, Fla. Filed July 20, 1912. Serial No. 710,672. (Cl. 4—21.)



In a device of the character described, the combination with a house formed with an opening therein, of a housing arranged in said house with the back registering with said opening, a door arranged in the back of said housing formed of such a size as to swing through the opening in said house whereby the interior of said housing is exposed, said door being formed with an aperture therein, a screen arranged in said aperture, a seat arranged on said housing, a receptacle positioned in said housing below said seat, a vent pipe arranged on one side of said seat and extending from a position below the seat to a position above the roof of said house whereby air may circulate through the opening in the housing and said door and through said housing and from thence out said vent pipe to a position above the roof of said house, and a lid for said seat pivotally mounted on said vent pipe and adapted to be swung over said seat when the same is not in use.

1,062,454. SAFETY TRANSPORT DEVICE FOR MOUNTAIN-RAILWAYS. ALAJOS GRAMLING, Borossebes, Austria-Hungary. Filed Nov. 18, 1911. Serial No. 661,139. (Cl. 188—47.)

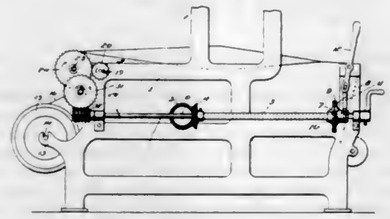


1. A hauling car comprising in combination, a car frame, a main truck therefor comprising running wheels and a truck frame, levers pivoted on said truck frame, brake shoes for engaging the rails, a brake shoe frame guided by said truck and pivotally connected in supporting relation with said car frame, and means carried by said truck for engaging said levers with said car frame to support the latter on said truck or disengaging said levers therefrom to throw the weight of the car frame onto said brake frame, substantially as described.

2. A hauling car for inclined railways comprising in combination, a car frame, a truck therefor, brake shoes for engaging the rails, a brake shoe frame supportingly connected with said car frame, devices carried by the truck for holding said brake shoe frame to a straight up and down adjusted movement, and mechanism for throwing the weight of the car frame either onto said truck or onto said brake shoe frame, substantially as described.

3. A hauling car for inclined railways comprising in combination, a car frame, a truck therefor, brake shoes for engaging the rails, a brake shoe frame supportingly connected with said car frame, devices carried by said truck for guiding said brake shoe frame, and mechanism movable in one direction for raising the brake shoes and disposing the weight of the car frame on said truck or movable in another direction for lowering the brake shoes upon the rails and throwing the weight of the car frame on said brake frame, substantially as described.

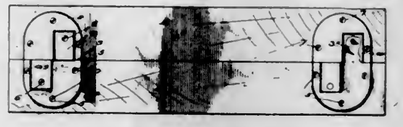
1,062,455. LET-OFF MECHANISM FOR LOOMS. JOHN H. GREENHALGH, Woonsocket, R. I., and HARRY GREENHALGH, Blackstone, Mass. Filed Jan. 11, 1910. Serial No. 537,515. (Cl. 139—59.)



1. In a let-off mechanism for looms, the combination of a loom driving mechanism including a main drive shaft, a warp roll having a let-off motion solely under the feed pull of the warp threads by the take-up and beating-in devices, primary and secondary guide rolls, intermeshing gears fixed to said guide rolls, a feed controlling gear loose on the shaft of the secondary guide roll alongside the gear thereon and provided with internal ratchet teeth, an auxiliary drive shaft in gear with said feed controlling gear for imparting a regulated and positive feed motion thereto, means for throwing said auxiliary drive shaft into and out of gear with the main drive shaft, pawls carried by the gear on the secondary guide roll for coöperation with the ratchet teeth of the feed controlling gear, whereby the guide rolls and warp roll are adapted to rotate for a let-off action at a fixed speed controlled by the speed of said controlling gear and are coupled to said controlling gear for a reverse action to impart backward motion to the warp threads, and means for manually operating said auxiliary drive shaft for imparting backward motion to said guide rolls through the feed controlling gear when said auxiliary drive shaft is disconnected from the main drive shaft.

2. In a let-off mechanism for looms, the combination of a loom driving mechanism including a main drive shaft, a warp roll freely revoluble for a let-off motion solely under the feed pull of the warp threads by the take-up and beating-in devices, primary and secondary guide rolls, intermeshing gears fixed to said rolls, a feed controlling gear loose on the shaft of the secondary guide roll alongside of the gear thereon and provided with internal ratchet teeth, an auxiliary drive shaft having at one end a drive gear meshing with said feed controlling gear for imparting a positive feed controlling motion thereto, spring actuated pawls on the gear of the secondary guide roll cooperating with the internal ratchet teeth of the feed controlling gear to adapt said guide rolls and warp roll to have a let-off motion at a speed controlled by the speed of said feed controlling gear, and to adapt said guide rolls to be reversely turned for imparting a backward motion to the warp threads, an elongated hollow shaft inclosing a portion of the auxiliary drive shaft and in gear at one end with the main drive shaft, clutch mechanism at the take-up end of the loom for throwing said hollow shaft into and out of gear with the auxiliary drive shaft, and an operating handle upon the auxiliary drive shaft at the take-up end of the loom, whereby said auxiliary drive shaft, when thrown out of gear with the main drive shaft, may be turned in a reverse direction to transmit motion through the feed controlling gear to the guide rolls to feed the warp threads backwardly.

1,062,456. JOINTING DEVICE. WILLIAM H. GREENLEAF, Jr., and PHILIP P. MOORE, Gloucester, Mass. Filed Sept. 11, 1912. Serial No. 719,886. (Cl. 20—92.)

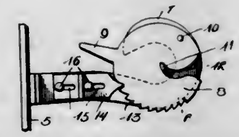


1. A device for jointing contiguous elements comprising mating flat plates, each having perforations whereby it may be attached to said elements, each plate having a raised portion forming a socket and a laterally adjacent tongue projecting in a direction opposite to the socket, the tongue of one plate engaging in the socket of the other plate.

2. The combination with contiguous elements, of mating flat plates disposed upon the faces of said elements and opposed to each other, fastening devices holding the plates to the elements, each element being formed with a slightly raised socket and a laterally adjacent tongue, said tongue being perforated and each socket being perforated correspondingly, the tongue of one plate entering into the socket of the other plate and screws passing through said sockets and tongues.

3. As an article of manufacture a joint plate perforated for attachment having a straight edge with a flat perforated tongue projecting therefrom, the plates adjacent the inner line of said tongue being pressed outward to form a socket of the same width as the tongue, said socket being perforated.

1,062,457. CLOTHES-LINE HOLDER. WALTER E. HADLEY, Coatesville, Pa. Filed July 19, 1912. Serial No. 710,511. (Cl. 24—132.)



1. A device of the class described comprising a base, a hook-like member projecting outwardly from the base at right angles thereto, an eccentric having spaced cheeks integrally formed with each other and swingingly connected to the hook-like member, the said cheeks being provided with alining slots adapted to receive a clothes line when engaged in the hook-like member, a plurality of ratchet teeth formed on the outer peripheries of the cheeks, and catches slidably mounted upon the hook-like member and engageable with the ratchet teeth for locking the eccentric member in adjusted position.

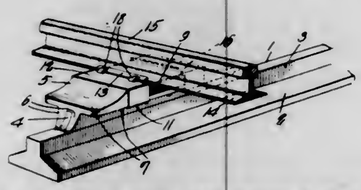
2. A device of the class described comprising a base, a hook-like member projecting outwardly from the base at right angles thereto, an eccentric having spaced cheeks integrally formed with each other and swingingly connected to the hook-like member, the said cheeks being provided with alining slots adapted to receive a clothes line when engaged in the hook-like member, a plurality of ratchet teeth formed on the outer peripheries of the cheeks, catches slidably mounted upon the hook-like member and engageable with the ratchet teeth for locking the eccentric member in adjusted position, and a finger extension formed on the eccentric member.

1,062,458. CORK-EXTRACTOR. VICTOR HAINISCH, Vienna, Austria-Hungary. Filed May 12, 1910. Serial No. 560,969. (Cl. 65—48.)



As a new article of manufacture, a cork screw having a number of convolutions substantially V-shaped in cross section and successively increasing in diameter from the upper end to a point adjacent to the lower end.

1,062,459. RAILROAD-TIE AND RAIL-SEAT. JAMES M. HALFPENNY, Juniata, Pa., assignor to James M. Halfpenny and Lewis D. Roberts, Juniata, Pa. Filed Jan. 15, 1913. Serial No. 742,294. (Cl. 238—5.)



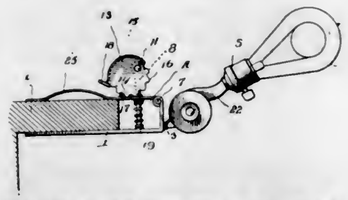
1. A railroad tie, having a base member, a longitudinal rib carried thereby, a rail carrying member, a pair of spaced ribs carried thereby for interlocking with the rib of the first member, means for connecting the ribs rigidly together, and a spike receiving rail supporting block disposed in the rail carrying member.

2. A railroad tie, having a base member, a longitudinal rib carried thereby, a rail carrying member, a pair of spaced ribs carried thereby for interlocking with the rib of the first member, means for connecting the ribs rigidly together, said rail carrying member being recessed transversely, a spike receiving block disposed in said recess, means carried by the rail carrying member for retaining the block within the recess, and spikes disposed through said last means into the block and engaging the base of the rail.

3. A railroad tie, having a base member, a longitudinal rib carried thereby, a rail carrying member, a pair of spaced ribs carried thereby for interlocking with the rib of the first member, means for connecting the ribs rigidly together, said rail carrying member being recessed transversely, a spike receiving block disposed in said recess, means carried by the rail carrying member for retaining the block within the recess, a metal wearing plate disposed upon the upper surface of the spike receiving block, and spikes piercing the block holding means and for engaging the base of a rail.

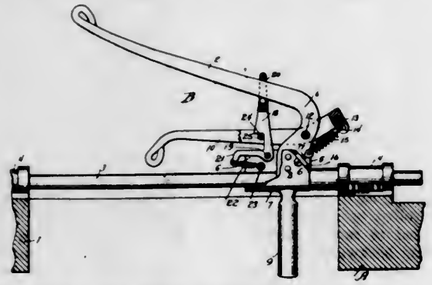
1,062,460. ELECTRIC-LAMP HOLDER. BENJAMIN R. HANNAN, Lawtey, Fla. Filed June 20, 1912. Serial No. 704,891. (Cl. 240—53.)

A device of the class described comprising a clamp composed of a bottom plate having pivot lugs extending upwardly from one edge thereof and spaced apart, a movable plate having a barrel formed integral with one end thereof and disposed between said pivot lugs, and a pivot pin passed through said lugs and barrel, said movable plate being provided with an elongated slot adjacent to one edge thereof and formed with toothed portions at the opposite sides of said slot, a shank carried by said stationary plate and extending upwardly through said elongated slot and terminating in an eye, a pivot pin disposed



within said eye, a cam upon said pivot pin and having teeth formed on the periphery thereof adapted to engage the toothed portions of said movable plate to swing the latter toward the stationary plate to produce a clamping action, a spring surrounding said shank between said plates and holding the same normally spaced apart, a lamp socket, and connections between said lamp socket and clamp.

1,062,461. MAIL-BAG CATCHER. FREDERICK HANSEN, Woodbine, Iowa. Filed Mar. 15, 1913. Serial No. 754,488. (Cl. 105—230.)



1. A mail bag catcher comprising a hook, said device having an opening through which the hook passes, a retaining device mounted at the elbow of the hook, a spring for actuating said device toward the hook, and a latch mounted at the base of the hook for holding the said retaining device in operative position, said latch being disposed in front of the elbow of the hook to be struck by the mail bag for releasing the retaining device.

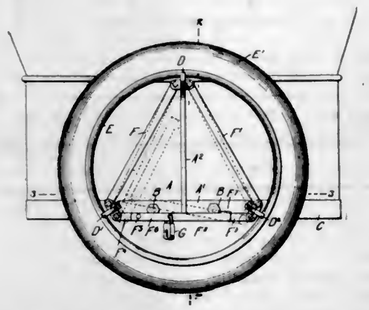
2. A mail bag catcher comprising a supporting bar, a hook, a base on the bar to which the hook is fastened, a bag-retaining device pivoted on the elbow portion of the hook, and having its rear portion extending rearwardly from the hook, a spring connected with the rear portion of the said device and with said base for urging the device toward the hook, and a spring-actuated bag-released latch mounted on the base and engaged with the device for holding the same in set position.

3. A mail bag catcher comprising a supporting bar, a U-shaped base or saddle piece straddling the bar, a hook having its root fastened between the side portions of the saddle piece, a latch pivoted between the side portions of the saddle piece and extending toward the hook, and a spring-actuated retaining device mounted on the hook between the elbow and root thereof and arranged to be held in operative position by said latch.

4. A mail bag catcher comprising a supporting bar, a U-shaped base or saddle piece mounted on the bar and having its rear corners bent oppositely, a hook fastened between the side portions of the saddle piece, a retaining device movably mounted on the hook, a latch mounted on the saddle piece for holding the retaining device in set position, and springs connected with the said device and the outwardly-bent corners of the saddle piece for urging the said device into bag-engaging position when the latch is struck and released by a bag.

5. A mail bag catcher comprising a base piece, a hook extending therefrom, a retaining device through which the hook extends, means for pivotally mounting the device on the hook, spring means between the base and rear portion of the device for urging the forward portion toward the hook, a latch pivoted on the base and extending through the said device toward the hook, to be engaged by a mail bag, means on the device with which the latch engages, and a spring between the latch and base for holding the latch in engagement with said means.

1,062,462. TIRE-SUPPORT. ALEXANDER HARNISHFEGER, Evansville, Ind., assignor of one-half to Moses A. Strouse, Evansville, Ind. Filed Oct. 11, 1912. Serial No. 725,231. (Cl. 224—29.)



1. A support for a tire on a demountable rim, comprising a bracket having a plurality of spaced transversely extending arms adapted to engage the inner face of the rim, and links connecting the arms with each other, one of the links being in sections pivotally connected with each other.

2. A support for a tire on a demountable rim, comprising a bracket having a plurality of spaced transversely extending arms adapted to engage the inner face of the rim, and links connecting the outer ends of the arms with each other, one of the links being in sections pivotally connected with each other, one of the sections having an extension forming a handle for opening or closing the sectional link.

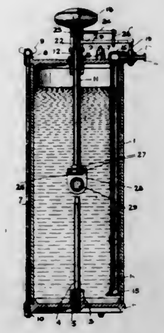
3. A support for a tire on a demountable rim, comprising a bracket having a plurality of spaced transversely extending arms provided with seats for the inner face of the rim to rest in, one of the arms being on top, and links pivotally connecting the outer ends of the said arms with each other, the bottom link being made in sections pivotally connected with each other to allow of opening or closing the bottom link, one of the sections of the bottom link being provided with a handle extension for manipulating the bottom link.

4. A support for a tire held on a demountable rim, comprising a bracket, transverse arms extending from the said bracket and arranged at the corners of an equilateral triangle for engaging the rim at the inner face thereof, and a bottom link pivotally connecting the outer end of the lowermost arms with each other, the said bottom link being made in sections pivotally connected with each other to allow of opening or closing the said bottom link.

5. A support for a tire held on a demountable rim, comprising a bracket having a bottom bar for attachment to a support, an upwardly and outwardly-extending bar projecting from the center of the bottom bar, arms extending transversely from the ends of the said bottom bar, an arm extending from the upper end of the said upwardly and outwardly extending bar, and means for moving the arms at the ends of the bottom bar toward or from each other.

[Claim 6 not printed in the Gazette.]

1,062,463. FIRE-EXTINGUISHER. SUMPTER LEA HARWOOD, Dublin, Ga. Filed May 2, 1912. Serial No. 694,605. (Cl. 169—7.)



1. In an improvement of the kind described, the combination of a hollow body having a discharge nozzle, a valve for controlling the same, a sliding rod passing through the wall of said body, a vessel carried on the inner end of said rod, said body and said vessel being adapted to contain chemicals, means carried by the interior of the body adjacent said vessel to strike and break the same, said rod being mounted to rotate with respect to said body, and a connection between said valve and said rod, whereby the rod can be turned to open the valve and then moved to force the vessel against the projection inside the body to break the same and allow the chemicals to react, part of the products of said reaction passing outward through said nozzle.

2. In an improvement of the kind described, the combination of a hollow body having a discharge nozzle, a projection inside of said hollow body, a rod passing through the wall of said body into the same, a vessel carried by said rod at its inner end adjacent said projection, said body and said vessel being adapted to contain chemicals, a valve for said nozzle, means carried by said valve for engaging the rod, to keep the vessel away from the projection, and means carried by the rod to engage the valve to open the same and move said holding means out of position, whereby the rod can be forced inward to strike the vessel against the projection and break the same to allow the chemicals to react, part of the products of said reaction passing outward through the nozzle.

3. In a device of the kind described, the combination of a hollow body, a projection inside of said body, a rod extending through the wall of said body, a vessel carried at the inner end of said rod, said vessel and said body containing chemicals, a discharge nozzle for said body, a valve in said nozzle having an arm with a thickened end, said thickened end having a recess receiving the outer end of said rod, and an arm non-rotatably secured to said rod beyond said valve arm and having pin and slot engagement with said valve arm, whereby when the rod is turned the valve will be opened and the arm thereof swung away from the rod to permit the rod to be forced inward to break the vessel against the projection and allow the chemicals to react, part of the products of said reaction passing outward through said nozzle.

4. In an improvement of the kind described, the combination of a hollow body having a discharge opening, means for controlling said discharge opening, an arm carried by said controlling means having a stop thereon, means for movably mounting a fragile vessel containing a chemical in said body engaged by said stop, and an arm car-

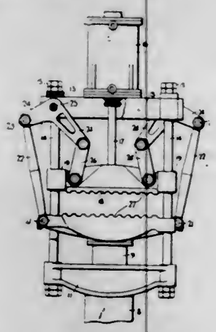
ried by said last-named means engaging the first arm to move the controlling means to open position before the said vessel can be broken.

1,062,464. TACK-PLACER. HORART F. HAYNES, Syracuse, N. Y. Filed Dec. 4, 1911. Serial No. 663,758. (Cl. 145—30.)



A tack placer comprising a rod bent to a loop with the ends brought into contact with each other and sufficiently rigid longitudinally to operate as a means for starting a tack, while the ends have notches to receive the head of a tack and resiliently hold the same and are beveled on their inner faces below the notches so that the device may be pressed endwise into engagement with a partially driven tack.

1,062,465. COTTON-COMPRESS. WILLIAM HILL, Alexandria, La., assignor to Hill Cotton Compress Co., Ltd., Alexandria, La. Filed Dec. 17, 1912. Serial No. 737,210. (Cl. 100—19.)



1. A compress, having a plurality of platens; a power member connected with one of said platens to operatively move the same; and means operatively connecting said platens to move the same toward each other at a rate of speed greater than the movement of said power member.

2. A compress, having a plurality of platens; means operatively connecting said platens to cause the same to move toward each other at a progressively diminishing rate of speed; and a power member operatively connected with one of said platens to move the same toward the other.

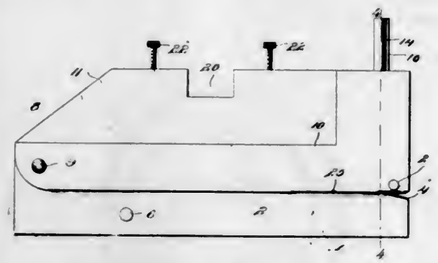
3. A compress, having a plurality of platens; a power member operatively connected with one of said platens; and a mechanism operatively connecting said platens, to move the platen not connected with said power member toward the platen connected with said power member at a rate of speed greater than the movement of the platen connected with said power member.

4. A compress, having a plurality of platens; a power member connected with one of said platens to move the same toward the other; means operatively connecting said platens to move the platen not connected with the power member toward the platen connected with the power member, at an initial rate of speed greater than the speed of the platen connected with said power member, and diminishing progressively.

5. A compress, having a plurality of platens; a relatively low-speed power member connected with, to move, one of said platens; a relatively high-speed power member operatively connected with, to move, the other of said platens; a guide frame for said platens; and anchoring means mountable on said frame to prevent the recession of the platen connected with the high-speed power member from the platen connected with the low-speed power member during the forward movement of said last-mentioned platen.

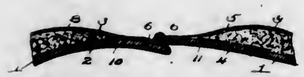
[Claims 6 to 9 not printed in the Gazette.]

1,062,466. SAW-SET. ZACHARIAH HOGAN, Amite, La. Filed May 13, 1911. Serial No. 626,885. (Cl. 76—70.)



In a device of the class described, a base, an anvil fitted in said base, an inverted U-shape combined gage and saw-holding member straddling said base, and pivoted to the rear end thereof, spaced superimposed head members arranged at the forward end of said member, a hammer disposed within said U-shaped member and supported by said head members, said saw-holding member and base being adapted to receive a saw therebetween, shoulders provided by the opposite sides of said saw-holding member and adapted to engage and limit the movement of the saw, the free end of said saw-holding member being adapted to bear against the saw at the opposite sides of the base to securely retain the saw properly positioned upon the anvil for the purpose specified.

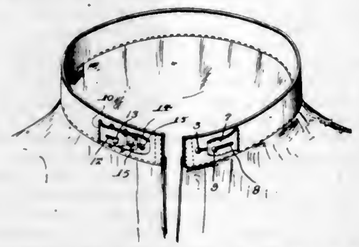
1,062,467. CORSET-COVER. IDA R. HUNTZINGER, Scranton, Pa. Filed July 13, 1911. Serial No. 638,307. (Cl. 2—73.)



1. In a corset cover covering each half of the corset, a bag structure sewed at opposite sides, one edge of the bag being closed by a strip of openwork, and means independent of the corset secured to the open edges of the bag for temporarily closing said open edges, whereby the halves of the corset cover completely surround the corset halves without being secured thereto.

2. In a corset cover comprising a pair of cloth strips having their edges adjacent one another, a cloth bag structure formed by sewing three sets of adjacent edges together, and an open edge designed to slip over the corset, one side of said open edge being provided with openings, and a plurality of buttons secured to the other side of said open edge and adapted to enter the openings when the cover is over the corset, whereby the cover is held to the corset without mutilating the corset.

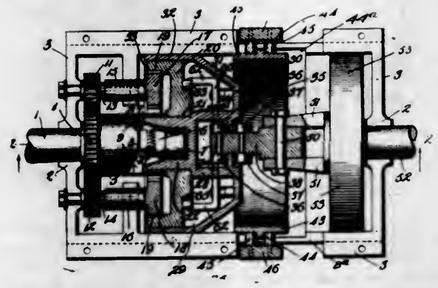
1,062,468. COLLAR-BAND FOR SHIRTS. CARL O. JOHNSON, Tekoa, Wash. Filed Feb. 13, 1912. Serial No. 677,352. (Cl. 2—41.)



1. A collar band to be secured to the body of a shirt having a plurality of button receiving tags secured to its outer side, said tags being disposed to successively recede from the end of the band and being provided with registering slots, the outermost tag having a circular opening at the outer end of the slot therein, and the inner tags having circular openings at both ends of the slots therein, one end of the band being imperforate and the other end being provided with a longitudinal slot.

2. A collar band to be secured to the body of a shirt consisting of co-extensive plies provided with a longitudinal slot at one end and being imperforate at the opposite end, the outer ply having a single transverse slit near said longitudinal slot and having a plurality of transverse slits near the imperforate end of the band, and a series of longitudinally slotted tags, each tag having one end inserted through one of said slits and secured to and between the plies of the band, the remaining portion of each tag being free of and external to the band.

1,062,469. REVERSIBLE GEARING. ROBERT HENRY JOHNSON, Washington, D. C. Filed Dec. 21, 1912. Serial No. 738,108. (Cl. 74—59.)



1. Mechanism for transmitting rotary motion comprising a drive shaft, a driven shaft, an intermediate clutch member, an internal gear revolubly mounted in said clutch member, gearing connecting the drive shaft and said internal gear, means for locking the drive shaft to said clutch member when the latter is moved in one direction and for releasing the engagement between said drive shaft and said clutch member when the clutch member is moved in the reverse direction, means operated during the reverse movement of said clutch member for connecting said member and said internal gear, and a hinged connection between said clutch member and said driven shaft, substantially as described.

2. Mechanism for transmitting rotary motion comprising a drive shaft, a driven shaft, an intermediate clutch member, an internal gear revolubly mounted in said clutch member, gearing connecting the drive shaft and said internal gear, means for locking the drive shaft to said clutch member when the latter is moved in one direction and for releasing the engagement between said drive shaft and said clutch member when the clutch member is moved in the reverse direction, means operated during the reverse movement of said clutch member for connecting said member and said internal gear, and a hinged connection between said clutch member and said driven shaft, substantially as described.

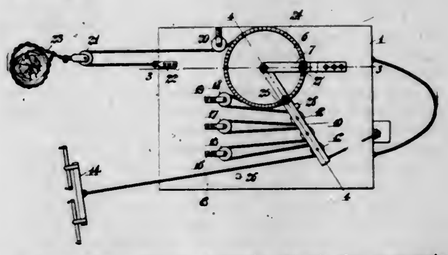
3. Mechanism for transmitting rotary motion comprising a drive shaft, a driven shaft, an intermediate clutch member, an internal gear revolubly mounted in said clutch member, gearing connecting the drive shaft and said internal gear, means for locking the drive shaft to said clutch member when the latter is moved in one direction and for releasing the engagement between said drive shaft and said clutch member when the clutch member is moved in the reverse direction, means operated during the reverse movement of said clutch member for connecting said member and said internal gear, and a hinged connection between said clutch member and said driven shaft comprising a lever hinged to the driven shaft, and a cam plate on said clutch member with means for swinging said lever and thus moving said clutch member axially, substantially as described.

4. Mechanism for transmitting rotary motion comprising a drive shaft, a driven shaft, an intermediate clutch member, an internal gear revolubly mounted in said clutch member, gearing connecting the drive shaft and said internal gear, spring-operated hinged dogs for locking the drive shaft to said clutch member when the latter is moved in one direction and for releasing the engagement between said drive shaft and said clutch member when the clutch member is moved in the reverse direction, means operated during the reverse movement of said clutch member for connecting said member and said internal gear, and a hinged connection between said clutch member and said driven shaft comprising a lever hinged to the driven shaft, and a cam plate on said clutch member with means for swinging said lever and thus moving said clutch member axially, substantially as described.

5. Mechanism for transmitting rotary motion comprising a drive shaft, a driven shaft, an intermediate clutch member, an internal gear revolubly mounted in said clutch member, gearing connecting the drive shaft and said internal gear, means for locking the drive shaft to said clutch member when the latter is moved in one direction and for releasing the engagement between said drive shaft and said clutch member when the clutch member is moved in the reverse direction, means operated during the reverse movement of said clutch member for connecting said member and said internal gear, and a hinged connection between said clutch member and said driven shaft, substantially as described.

[Claims 6 to 14 not printed in the Gazette.]

1,062,470. STUMP-PULLER. JAMES O. JOHNSTON, Athol, Idaho. Filed Sept. 10, 1912. Serial No. 719,599. (Cl. 57—105.)

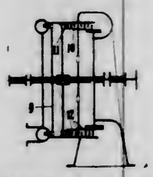


1. In a stump puller, a frame, wheels for supporting the frame, a drum journaled on the frame, a sweep pivoted

to the frame and carrying pulleys, pulleys on the frame, a cable passing over the pulleys, on the frame and sweep, and over the drum, means carried by the sweep for actuating the drum in one direction, means for preventing retrograde movement of the drum, and means for connecting the cable to a stump to be pulled.

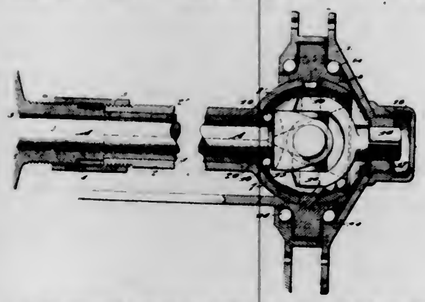
2. In a stump puller, a frame, wheels for supporting the same, a drum journaled on the frame and having a ratchet face, a sweep pivoted on the frame and carrying pulleys, pulleys on the frame, a cable passing over the pulleys on the frame and sweep and over said drum, means for connecting the cable to the stump to be pulled, a pawl carried by the sweep for actuating the drum in one direction, means for preventing retrograde movement of the drum, and means for returning the sweep to normal position when the cable is released.

1,062,471. MULTISTAGE TURBINE. EMIL JOSSE, Berlin, and PAUL CHRISTLEIN, Charlottenburg, Germany. Filed Apr. 15, 1911. Serial No. 621,417. (Cl. 121—58.)



A multi-stage turbine having impulse and reaction stages containing fixed blades and comprising a plurality of rotors having blades; pressure-fluid admitting means having parallel walls, said fluid admitting means and said rotors being so proportioned that at each stage a velocity exceeding 450 m. per second is attained whereby the loss of flow in the passages between the fixed and movable blades is reduced.

1,062,472. WHEEL. SAMUEL KAYE, Columbus, Miss. Filed July 12, 1911. Serial No. 638,143. (Cl. 21—90.)



1. The combination with a bearing ring, of an axle-housing made in sections terminating at one end in semi-spherical shells, the adjacent edges of which are at an obtuse angle to the adjacent edges of the axle-housing sections, whereby, when the edges of the semi-spherical shells are together, they are capable of insertion into the bore of the bearing-ring, wherein they are held against removal when the adjacent edges of the axle-housing proper are together.

2. The combination with a bearing-ring, of an axle-housing made in sections terminating at one end in semi-spherical shells, the adjacent edges of which are at an obtuse angle to the adjacent edges of the axle-housing sections, whereby, when the edges of the semi-spherical shells are together, they are capable of insertion into the bore of the bearing-ring, wherein they are held against removal when the adjacent edges of the axle-housing proper are together, and means for locking the semi-spherical shells to the bearing-ring when the housing edges are locked together.

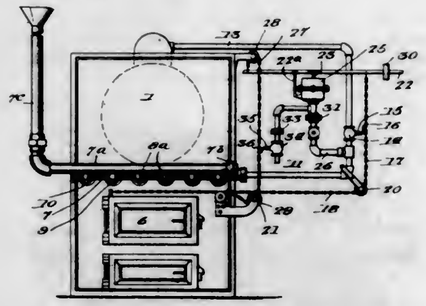
3. The combination with a bearing-ring, of an axle-housing made in sections terminating at one end in semi-spherical shells, the adjacent edges of which are at an obtuse angle to the adjacent edges of the axle-housing sections whereby, when the edges of the semi-spherical shells are together, they are capable of insertion into the bore of the bearing-ring, wherin they are held against removal when the adjacent edges of the axle-housing proper are together, means for locking the semi-spherical shells to the bearing-ring when the housing edges are locked together, and means for locking the housing sections together whereby the semi-spherical shells are held in their locked engagement with the bearing-ring.

4. The combination with a bearing ring having a grooved inner bore and alined inwardly-projecting studs, of an axle housing made in sections, the ends of which terminate in semi-spherical bearings having orifices therein, which bearings are adapted to enter the bore of the bearing ring when compressed and their orifices to receive the studs when expanded, and means for securing the sections of the housing together.

5. The combination with a bearing ring having a grooved inner bore and alined inwardly-projecting studs, of an axle housing made in sections, the ends of which terminate in semi-spherical bearings having orifices therein, which bearings are adapted to enter the bore of the bearing ring when compressed, and their orifices to receive the studs when expanded, means for securing the sections of the housing together, a wheel hub rotatably mounted on said bearing ring, and ball-bearings interposed between the bearing ring and the hub.

[Claim 6 not printed in the Gazette.]

1,062,473. SMOKE-CONSUMER. WILLIAM KELLY, Memphis, Tenn. Filed Aug. 3, 1912. Serial No. 713,077. (Cl. 110—55.)

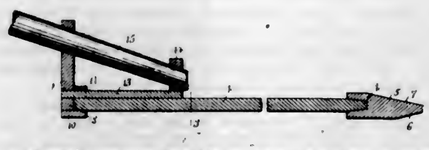


1. In a smoke consumer for furnaces, the combination with a furnace having a fuel feed door, of a manifold provided with air inlets and discharge nozzles, the latter communicating with the fire box of the furnace, a steam feed pipe arranged within the manifold and having jet nozzles communicating with said discharge nozzles, a steam supply pipe connected with the feed pipe and having a controlling valve therein, a branch pipe leading from said supply pipe at a point between said manifold and valve, a diaphragm casing connected with the branch pipe, a diaphragm arranged therein and provided with an outwardly projecting stem, a pivotally mounted weighted lever supported by said stem, a regulator in the branch pipe for controlling the feed of steam to the diaphragm casing, a controlling valve in said branch pipe between the regulator and supply pipe, a relief pipe communicating with the branch pipe between the diaphragm casing and regulator and provided with a controlling valve, connections between the furnace fuel door and the lever and valves whereby when the door is opened the valves in the supply and relief pipes will be respectively opened and closed, and means operated by the lever through the action of the diaphragm for closing the valve in the steam supply pipe and opening the valve in the relief pipe.

2. In a smoke consumer for furnaces, the combination with a furnace having a fuel feed door, of a manifold provided with air inlets and discharge nozzles, the latter communicating with the fire box of the furnace, a steam feed pipe arranged within the manifold and having jet nozzles communicating with said discharge nozzles, a steam supply pipe connected with the feed pipe and having a controlling valve therein, a branch pipe leading from said supply pipe at a point between said manifold and valve, a diaphragm casing connected with the branch pipe, a diaphragm arranged therein, a regulating disk disposed in the branch pipe and having a constricted opening for controlling the feed of steam to the diaphragm casing, a controlling valve in said branch pipe between the regulating disk and supply pipe, a relief pipe communicating with the branch pipe between the diaphragm casing and regulating disk and provided with a controlling valve, connections between the furnace fuel door and the valves whereby when the door is opened the valves in the supply and relief pipes will be respectively opened and closed, and means operated by the diaphragm for closing the valve in the steam supply pipe and opening the valve in the relief pipe.

3. In a smoke consumer for furnaces, the combination with a furnace having a fuel feed door, of a manifold provided with air inlets, and discharge nozzles, the latter communicating with the fire box of the furnace, a steam feed pipe arranged within the manifold and having jet nozzles communicating with said discharge nozzles, a steam supply pipe connected with the feed pipe and having a controlling valve therein, a branch pipe leading from said supply pipe at a point between said manifold and valve, a diaphragm casing connected with the branch pipe, a diaphragm arranged therein, a regulator in the branch pipe for controlling the feed of steam to the diaphragm casing, a controlling valve in said branch pipe between the regulator and supply pipe, a relief pipe communicating with the branch pipe between the diaphragm casing and regulator and provided with a controlling valve, and connections between the furnace fuel door and the valves whereby when the door is opened the valves in the supply and relief pipes will be respectively opened and closed, and means operated by the diaphragm for closing the valve in the steam supply pipe and opening the valve in the relief pipe.

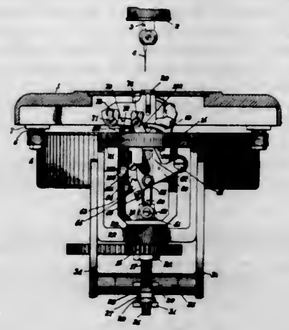
1,062,474. SHOVEL. WILLIAM SARSFIELD KELLY, Cosmopolis, Wash., assignor to Mary Helen Kelly, Aberdeen, Wash. Filed July 11, 1912. Serial No. 708,819. (Cl. 55—14.)



A shovel comprising a flat rectangular blade, a bracket extending upwardly at right angles to the rear of said blade, a bracing bracket disposed parallel to said rear bracket and fastened to the top of said blade, means connecting said brackets, and a handle having its lower end positioned in said bracing bracket and extending through said rear bracket.

1,062,475. BUTTONHOLE-SEWING MACHINE. JOHN KIEWICZ, Hyde Park, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed May 23, 1912. Serial No. 699,119. (Cl. 112—4.)

1. For a button hole sewing machine of the type having means for controlling the upper thread, an under sewing mechanism comprising in combination, a shiftable stock and the following elements supported by said stock, namely: a movable under needle carrier fitted to travel in an inclined plane, a movable thread looper, a movable actuator adapted to be exteriorly operated independently of the stock's shifting, and connections whereby said actuator actuates said carrier and said looper, such connections comprising an inverted T shaped one-piece, intermediary, swinging lever having a cross arm and an upward arm, a horizontal pivot for one end of the cross arm of said intermediary lever at one side of the stock, a link connecting the lever's cross arm to said actuator, and a link connecting the lever's upward arm to said carrier, said last named link having universal joints at its two ends.



2. For a button hole sewing machine of the type having means for controlling the upper thread, an under sewing mechanism comprising in combination, a shiftable stock and the following elements supported by said stock, namely: a movable under needle carrier, a movable thread looper, a vertically sliding actuator bar adapted to be exteriorly operated independently of the stock's shifting, and connections whereby said actuator bar actuates said carrier and looper, said connections comprising an intermediary which is distinct from, movable relatively to, and driven by, said actuator, and possesses an upward and a transverse arm, a train of mechanical connections from the upward arm of said intermediary to the needle carrier, and an independent train of mechanical connections from the transverse arm of said intermediary to the looper.

3. For a button hole sewing machine of the type having means for controlling the upper thread, an under sewing mechanism, comprising in combination, a shiftable stock and the following elements supported by said stock, namely: a movable under needle carrier, a movable thread looper, a vertically sliding actuator bar adapted to be exteriorly operated independently of the stock's shifting, and connections whereby said actuator actuates said carrier and looper, said connections comprising an intermediary which possesses an upward and a transverse arm, and is swung by connection from the actuator, a rock-arm and shaft, a connection from the said transverse arm to said rock shaft and connections whereby the rock-arm oscillates the looper, and connections from said upward arm to the carrier which are independent of the looper actuating connections.

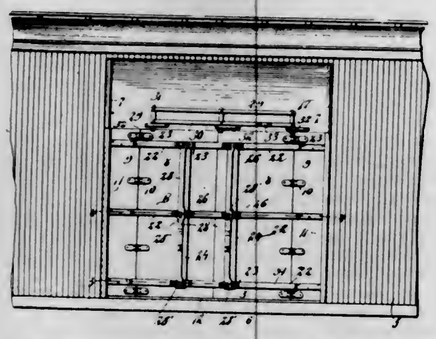
4. For a button hole sewing machine of the type having means for controlling the upper thread, an under sewing mechanism comprising in combination, a shiftable stock and the following elements supported by said stock, namely: a movable under needle carrier fitted to travel in an inclined plane, a movable thread looper, a movable actuator adapted to be exteriorly operated independently of the stock's shifting, and connections whereby said actuator actuates said carrier and said looper, such connections comprising an inverted T shaped one-piece, intermediary, swinging lever having a cross arm and an upward arm, a horizontal pivot for one end of the cross arm of said intermediary lever at one side of the stock, a link connecting the lever's cross arm to said actuator, a link connecting the lever's upward arm to said carrier, said last named link having universal joints at its two ends, and means at

the swinging end of said cross arm for causing the operation of said looper.

5. For a button hole sewing machine of the type having means for controlling the upper thread, an under sewing mechanism comprising in combination, a shiftable stock and the following elements supported by said stock, namely: a movable under needle carrier, a movable thread looper, a movable actuator adapted to be exteriorly operated independently of the stock's shifting, and connections whereby said actuator actuates said carrier and looper, said connections comprising a rock-arm and shaft for oscillating the looper, an intermediary lever having a cross arm and an upward arm, said lever pivoted to the stock at one side and said cross arm having at the opposite side a cam connection for operating the rock shaft, and said upward arm having connection to the carrier, and a connection from the actuator to the lever.

[Claims 6 to 21 not printed in the Gazette.]

1,062,476. GRAIN-CAR DOOR. HENRY H. KING, Gresham, Oreg. Filed July 19, 1912. Serial No. 710,394. (Cl. 20—28.)



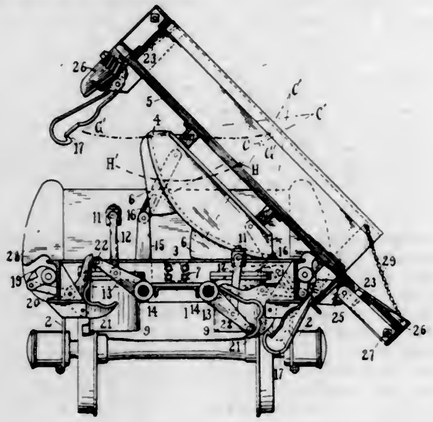
1. The combination with a doorway, of a door comprising a plurality of sections adapted to swing horizontally, hinges connecting the swinging sections, guide rods mounted vertically within the doorway and slidably engaged by the horizontal swinging sections, reinforcing strap frames hinged to the outermost swinging sections and adapted to overlap each other, keepers carried by the innermost swinging sections and engageable with the said overlapped ends of the frames, and means on the frames and engageable with the keepers for locking the sections closed.

2. The combination with a doorway, of a door comprising a plurality of sections adapted to swing horizontally, hinges connecting the swinging sections, guide rods mounted vertically within the doorway and slidably engaged by the horizontal swinging sections, reinforcing strap frames hinged to the outermost swinging sections and adapted to overlap each other, keepers carried by the innermost swinging sections and engageable with the said overlapped ends of the frames, and means on the frames and engageable with the keepers for locking the sections closed, the said frames being formed of a plurality of hinged straps.

1,062,477. DUMPING-VEHICLE. JOHN WARBURTON KING, New York, N. Y., assignor to King Mechanism & Engineering Company, a Corporation of New York. Filed Aug. 8, 1910. Serial No. 576,114. (Cl. 105—191.)

1. In a vehicle, the combination of an underframe with laterally extending tracks, and a dumping body provided with rockers bearing upon the tracks, the alinements of the tracks and of the rockers being such that the center of gravity of the body and its load will have an initial downward movement on tilting and an upward movement on approaching the limit of its tilting movement, substantially as described.

2. In a vehicle, the combination of an underframe with laterally extending tracks, and a dumping body provided with rockers bearing upon the tracks, the alinements of the tracks and of the rockers being such that the center of gravity of the body and its load will have an initial downward movement on tilting and an upward movement on approaching the limit of its tilting movement, and the center of gravity of the body will have a downward movement on the return from the limit of its tilting movement, substantially as described.



3. In a vehicle, the combination of an underframe with laterally extending tracks, and a dumping body provided with rockers bearing upon the tracks, the curvature of the rockers at their middle points being centered below the center of gravity of the body and its load, and the alinement of the tracks and curvature of the rockers being such that the center of gravity of the body and its load will have an initial downward movement on tilting and an upward movement on approaching the limit of its tilting movement, substantially as described.

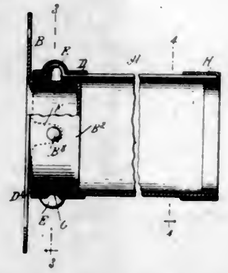
4. In a vehicle, the combination of an underframe with laterally extending tracks, and a dumping body provided with rockers bearing upon the tracks, the curvature of the rockers at their middle points being centered below the center of gravity of the body and its load, and the alinement of the tracks and curvature of the rockers being such that the center of gravity of the body and its load will have an initial downward movement on tilting and an upward movement on approaching the limit of its tilting movement, and the center of gravity of the body will have a downward movement on the return from the limit of its tilting movement, substantially as described.

5. In a vehicle, the combination of an underframe with horizontal laterally extending tracks, and a dumping body provided with rockers bearing upon the tracks, the alinement of the rockers being such that the center of gravity of the body and its load will have an initial downward movement on tilting and an upward movement on approaching the limit of its tilting movement, substantially as described.

[Claims 6 to 18 not printed in the Gazette.]

1,062,478. EXTENSION CURTAIN-POLE. JOHN KRODER, New York, N. Y. Filed Feb. 27, 1912. Serial No. 680,192. (Cl. 156—22.)

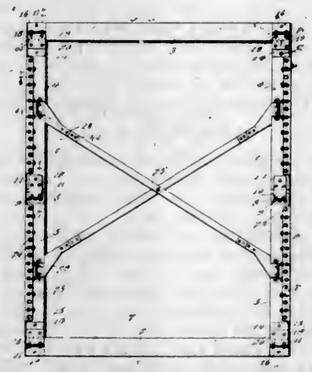
1. An extension curtain pole, comprising supporting brackets provided with attaching flanges and bosses integral with the flanges, the bosses having struck-up retaining lugs, and split pole sections telescoping one in the other and adapted to engage at their outer ends the said bosses, each split pole section being provided at its outer end with a ferrule having an inwardly-bent flange for receiving the outer terminal of the pole section between the ferrule and its flange, the said ferrule and pole section being provided adjacent the inner end of the said flange with an annular bead, the said ferrule, its flange and the pole section being provided with slots leading to the said bead for the passage of the said boss lugs to engage the latter with the bead and thereby lock the pole section in place on the corresponding bracket.



2. An extension curtain pole, comprising supporting brackets provided with bosses having peripheral retaining lugs and telescoping pole sections adapted to engage with their outer ends the said bosses, each pole section being split lengthwise and being provided at its outer end with a ferrule, the ferrule and each of the pole sections being provided with a bead and slots leading to the bead, to allow of engaging the bead with the said retaining lugs, and a stop lug integral on the bead intermediate the said slots to limit the turning motion of the pole section.

3. An extension curtain pole, comprising supporting brackets provided with retaining flanges and bosses integral with the flanges, the bosses having struck-up retaining lugs, and split pole sections telescoping one in the other and adapted to engage at their outer ends the said bosses, each split pole section being provided at its outer end with a ferrule having an inwardly-bent flange for receiving the outer terminal of the pole section between the ferrule and its flange, the said ferrule and pole section being provided adjacent the inner end of the said flange with an annular bead, the said ferrule, its flange and the pole section being provided with slots leading to the said bead for the passage of the said boss lugs to engage the latter with the bead and thereby lock the pole section in place on the corresponding bracket, and a stop lug formed by bending a portion of the bead inward at a point between the slot to limit the turning motion of each pole section on the corresponding boss.

1,062,479. KNOCKDOWN OR FOLDING SCENERY. GEORGE KUNKEL and GEORGE H. WILLIAMS, Cincinnati, Ohio. Filed Apr. 27, 1912. Serial No. 693,538. (Cl. 46—70.)



1. A foldable or knock down scenery comprising a canvas, top and bottom rails secured to the corresponding upper and lower sides of the canvas, side stiles, the said side stiles and the corresponding portions of the canvas being provided with means to detachably secure the sides or ends of the canvas to the said side stiles, and means to detachably secure the top and bottom rails to the side stiles, the said side stiles being foldable and being provided with means to secure and stiffen them when in set up position.

2. In knock down scenery, in combination with side stiles, and top and bottom rails detachably secured to the side stiles, canvas permanently secured to the top and bottom rails, and detachably secured to the side stiles.

3. In combination, in a knock down scenery frame, with a side stile and a rail, canvas permanently secured to the rail and also detachably secured to the side stile and forming a flexible connection on one side of and between the side stile and rail, coacting means on the opposite side of the side stile and rail to secure them together when in set up position, the said securing means comprising studs projecting from one of said members, and a spring plate secured to and projecting from the other member and having openings for engagement by said studs.

4. In combination with the side stiles of scenery frames, braces arranged between the side stiles and provided at their ends with pairs of plates projecting therefrom and bearing on the front and rear sides of the side stiles, each side stile having studs and certain of the plates of said braces having openings for engagement by the said studs.

5. In knock down scenery, the combination of side stiles having dowels at their ends, top and bottom rails on the ends of the side stiles and having mortises engaged by the dowels, canvas on one side of and secured to the said side stiles and top and bottom rails, and fastening means to detachably secure the top and bottom rails to the side stiles, said fastening means being on the opposite side of said rails and stiles from said canvas.

1,062,480. TOOTH-BRUSH ATTACHMENT. NAZAIRE E. LAROCQUE, Worcester, Mass. Filed Sept. 17, 1912. Serial No. 720,869. (Cl. 15—52.)



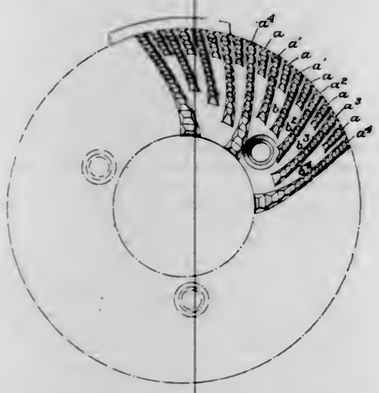
1. The combination with a tooth brush, of a bracket hingedly connected to the handle thereof, a holding element including semicircular bands rotatably mounted in said bracket, and a container supported in said holding element and adapted to be swung to a position for depositing a cleaning substance upon said brush.

2. The combination with a tooth brush, of a bracket hingedly connected to the handle thereof, a holding element including semi-circular bands rotatably mounted in said bracket, a container supported in said holding element and adapted to be swung to a position for depositing a cleaning substance upon said brush, said container having a plurality of compartments therein.

1,062,481. GRINDING-MILL. GEORGE LANE, Poughkeepsie, N. Y., assignor to Lane Brothers Company, a Corporation of New York. Filed May 23, 1912. Serial No. 699,215. (Model.) (Cl. 83—3.)

1. In a grinding mill, a disk the face of which is formed with a series of groups of obliquely arranged serrated ribs, each of said groups having ribs of different lengths, the longest in the lead and the others shorter in succession, with channels between said ribs, diminishing in depth from eye to skirt.

2. In a grinding mill, a disk the face of which is formed with a series of groups of obliquely arranged, serrated ribs, said ribs increasing in size toward the eye, each of said groups having ribs of different lengths, the longest in the lead and the others shorter in succession, and a single channel between the inner ends of successive leading ribs communicating with channels between the shorter ribs.



3. In a grinding mill, a disk the face of which is formed with a series of groups of ribs of different lengths, the longest in the lead and extending from eye to skirt and the others shorter in succession, a single channel between the inner ends of the leading ribs of successive groups communicating with channels between the shorter ribs, said channel diminishing in depth from eye to skirt.

4. In a grinding mill, a disk the face of which is formed with a series of groups of ribs of different lengths, the longest in the lead and extending from eye to skirt and the others shorter in succession, a single channel between the inner ends of the leading ribs of successive groups communicating with channels between the shorter ribs, said channel diminishing in depth from eye to skirt and circumferential channels in the ribs, forming the teeth, said channels increasing in depth toward the eye.

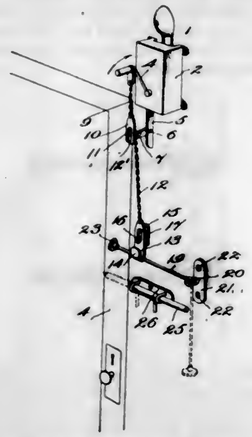
5. In a grinding mill, a disk the face of which is formed with a series of groups of ribs of different lengths, the longest in the lead and extending from eye to skirt and the others shorter in succession, a single channel between the inner ends of the leading ribs of successive groups communicating with channels between the shorter ribs, said channel diminishing in depth from eye to skirt and circumferential channels in the ribs, forming the teeth, said channels increasing in depth toward the eye and at all the points of intersection less in depth than the radial channels which they cross.

[Claims 6 to 10 not printed in the Gazette.]

1,062,482. BURGLAR-ALARM. ORVILLE D. LANKFORD, Brooklyn, N. Y. Filed Apr. 26, 1912. Serial No. 693,302. (Cl. 116—44.)

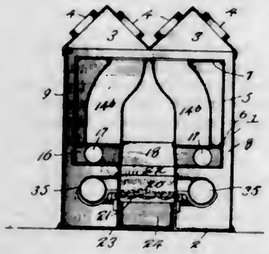
1. In a closure controlled burglar alarm, the combination with a closure of an automatic signal including a crank; a spring actuated latch; a keeper connected to the crank and adapted to be engaged by the latch; a hook connected to the said latch for holding the signal inoperative and means connected to the said hook adapted to be operated by the closure for unlatching the latch, substantially as described.

2. In a closure controlled burglar alarm, the combination with a closure, and a support; of an automatic signal connected to the support; a latch; a hook connected to said latch for holding the signal inoperative, a stud mounted on said support for engaging said hook and a rod mounted on said support and co-acting with said



hook, said rod adapted to be operated by the closure for releasing the hook, substantially as described.

1,062,483. FURNACE. ALBERT R. LEGGETT, Niagara Falls, N. Y. Filed July 23, 1910. Serial No. 573,510. (Cl. 126—99.)

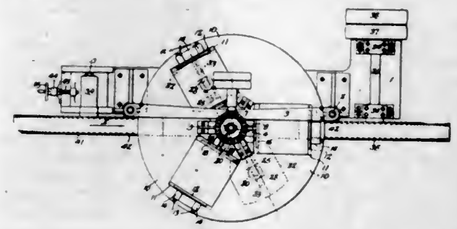


In a device of the character described, the combination of an outer casing, an inner casing, said inner casing provided with a horizontal header at its lower portion, two sets of vertical air heating tubes communicating at their lower ends with said header and extending through said inner casing, and a cover for said outer casing having the form of two gable roofs, arranged side by side and forming hot air receiving and distributing chambers with which said sets of air heating tubes respectively communicate, each roof being formed with air discharge openings in each of its sides, the meeting edges of said roofs tending to maintain the body of air heated by one set of tubes separated from the body of air heated by the other set of tubes.

1,062,484. MACHINE FOR SAWING SHINGLES. BERT E. LINCOLN, Cusick, Wash., assignor of one-half to John Shean, Philadelphia, Pa. Filed Apr. 25, 1912. Serial No. 693,028. (Cl. 143—15.)

1. The combination in a shingle machine, of a frame; band wheels mounted thereon; a band saw mounted on the wheels and having teeth at each edge and also having a horizontal run; a rotating table mounted above the horizontal run of the band saw and having an opening therein; a clamp at the opening for holding the shingle block; with two gage plates located under the table, one at each side of the saw; means for adjusting the plates so that they can be set at opposite angles; a cam for releasing the clamps to allow the shingle block to drop first on one gage

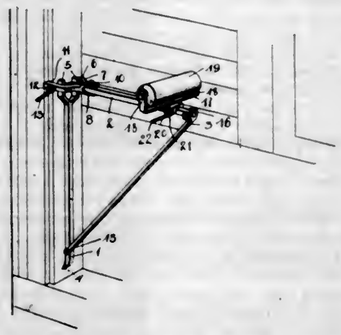
plate and then on the other gage plate after it passes over the saw so that two shingles are cut from the block at each revolution of the table.



2. The combination in a shingle machine, of a base; two band wheels mounted thereon; a band saw mounted on the wheels having teeth at each edge and having an extended horizontal portion; a vertical shaft; a table carried by the shaft adapted to rotate above the horizontal run of the saw, the center of rotation being the center of the saw blade; said table having openings therein; clamps at each opening for holding a shingle block therein; two gage plates under the table, one at each side of the saw; said gage plates being set at opposite angles; with a fixed cam for actuating the clamps so as to allow the shingle blocks to drop onto the gage plates on each side of the saw as the table rotates in order that two shingles are cut from each block at each revolution of the table.

3. The combination in a machine for sawing shingles, of a base; two band wheels mounted thereon and spaced apart; a band saw mounted on the wheels having teeth at each edge and having an extended horizontal run; bearings extending above the band saw; a vertical shaft in the bearings located midway between the band wheels and directly above the saw; a table carried by the shaft and adapted to travel over the saw; said table having openings therein; clamps at each opening; a fixed cam on the bearing for engaging one clamp of each set; a bar mounted on the frame under the saw; two standards carried thereby; each standard having a head at its upper end; a gage plate pivotally mounted on each head; and means for adjusting and holding the plates in the position to which they are adjusted; said plates being located on each side of the saw directly under the table so that as the table is rotated, the shingle blocks will be released and adjusted on each side of the saw before the shingle is cut by the saw so that two shingle blocks are cut from each block on each revolution of the table.

1,062,485. CAR-LOADER. JOHN A. LINDGREN, Sandpoint, Idaho. Filed Oct. 4, 1912. Serial No. 723,927. (Cl. 214—6.)

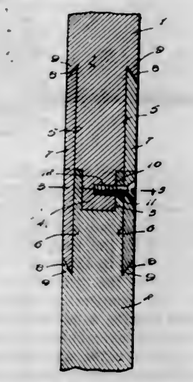


1. A car loader, comprising an upright base, an arm extending outward from the base and pivotally connected thereto, a brace connecting the arm and base and adjustably connected to the arm, a roller supported on said arm, and attaching means for fastening said base to an upright of the car.

2. A car loader, comprising an upright base, an arm extending outward from the base, a brace connecting the arm and base, a roller supported on said arm, and attaching means for fastening said base to an upright of the car, embodying clamping jaws adapted to embrace and engage said upright, and means for operating one of said jaws.

3. A car loader, comprising an upright base, an arm extending outward from the base, a brace connecting the arm and base, a roller supported on said arm, attaching means for fastening said base to an upright of the car, embodying clamping jaws adapted to embrace and engage said upright, and means for operating one of said jaws, and a spur at the lower end of the base.

1,062,486. DRILL. CHARLES LORD, Minersville, Pa. Filed Jan. 3, 1913. Serial No. 740,042. (Cl. 255—30.)



1. A drill comprising a cutting portion and a striking shank portion, the cutting portion having longitudinally extending grooves therein at diametrically opposite points, the shank portion having longitudinal grooves therein at diametrically opposite points, the grooves of the shank alining with the grooves of the cutting portion, the first and second named grooves having undercut walls, plates lying within the grooves and having beveled extremities underlying the undercut walls whereby the plates are held against lateral displacement, and a single fastening device extending through one of the plates and removably fitted with the shank portion and the cut portion.

2. A drill comprising a cutting portion and a shank portion, the cutting portion having a rectangular socket therein, the shank portion having a rectangular tang extending into the socket, the cutting portion having grooves therein at diametrically opposite sides, the shank having grooves therein at diametrically opposite sides adapted to register with each other when the tang is extended into the socket, means for holding the plates against lateral displacement, and a fastening device extending through one of the plates and through the cutting portion and removably fitted in the tang.

1,062,487. TYPE-GUARD. WILLIAM G. MACMILLAN, New York, N. Y. Filed July 25, 1912. Serial No. 711,436. (Cl. 101—50.)



1. In a type guard, a member having an end, and a second end spaced therefrom, there being an opening in the second end, a second member disposed through the

opening and extending beyond the second end, a flange on the second member disposed between and substantially parallel with the ends of the first member, and a spring disposed between the flange and the first-mentioned end, for holding the second member yieldingly extended relatively to the first member.

2. In a type guard, a member having sides and ends with an opening through one of the ends, and a sleeve extending around the opening, a second member extending through the opening and the sleeve and having a flange disposed between the ends of the first member and inclosed by the sides and the ends of the first member, and a spring disposed between the ends of the first member for engaging the flange for pressing the second member outward relatively to the first member.

1,062,488. AUTOMATIC FISHING-REEL. MARSHALL H. MCCLUER and ALBERT C. MUNN, Muskegon, Mich. Filed Apr. 9, 1912. Serial No. 689,466. (Cl. 43—33.)

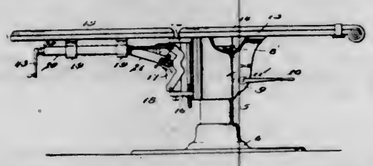


1. In a reeling device, the combination with a head, of a reel mounted thereon, a motor mounted on the head and connected with a battery, and an operating lever mounted to swing on the head and movable to simultaneously connect the said motor with the said reel and close the circuit from the said battery to the said motor.

2. In a reeling device, the combination with a head, of a tubular handle for connection therewith, a battery mounted in the said handle, a motor mounted on the head and connected with the said battery, a reel mounted on the said head, and means for simultaneously connecting the said motor with the said reel and closing the circuit from the said battery to the said motor.

3. In a reeling device, the combination with a head, of a motor mounted thereon, a reel mounted on the head, a battery connected with the said motor, means for simultaneously connecting the said motor with the said reel and closing the circuit from the said battery to the said motor, a cap for connection with the said battery, contact members mounted in the said cap and connected with the battery, and a contact tip for removable engagement with the cap to close the circuit to the said battery.

1,062,489. OSTEOPATHIC TABLE. JOHN V. MCMANIS, Baird, Tex., and WALKER L. SHERWOOD, Kirksville, Mo.; said Sherwood assignor to said McManis. Filed June 17, 1912. Serial No. 704,204. (Cl. 128—16.)



1. In an osteopathic table, a main table section, an auxiliary table section resiliently suspended in relation to the main table section and also laterally movable, and means for neutralizing the increased tension of the resilient means due to the depression of the auxiliary section.

2. In an osteopathic table, a main table section, an auxiliary table section suspended from said main table section and free to be moved in opposite lateral and vertical directions, spring tension means coöperating with the auxiliary table section, and neutralizing means for the increased tension of the spring means arising from the descent of the auxiliary table section.

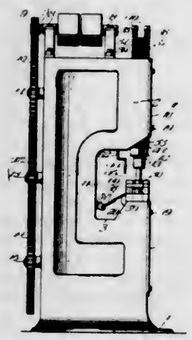
3. In an osteopathic table, a main table section, an auxiliary table section suspended in relation thereto and having adjustable resilient tension means to regulate the said auxiliary table section in accordance with varying weight pressures imposed thereon, the said auxiliary table section automatically returning to its normal adjusted position when released, and an equalizing means associated with the auxiliary section and resilient tension means.

4. An osteopathic table comprising a main table section having a swinging auxiliary table section suspended in relation thereto, the auxiliary section automatically assuming a normal position when released, and means for neutralizing the increased tension exerted on the auxiliary section when the latter is depressed.

5. In an osteopathic table, a swinging auxiliary table section having resilient tension means coöperating therewith, the auxiliary section automatically returning to a normal position when released, and means for neutralizing and equalizing the resilient tension on the auxiliary section during movement of the latter.

[Claims 6 to 10 not printed in the Gazette.]

1,062,490. WASHER-FORMING MACHINE AND PUNCH-PRESS. CHARLES F. MENNIG, Pottsville, Pa. Filed Apr. 20, 1912. Serial No. 692,135. (Cl. 164—13.)



1. In a machine of the class described, a punch, a second punch concentric with the first punch, a stationary die coöperative with the second punch, a movable die cooperative with the first punch, means for operating the first punch and movable die simultaneously, and means for actuating the second punch subsequent to the operation of the first punch and movable die.

2. In a machine of the class described, a punch, a second punch, a stationary die coöperative with one of said punches, a movable die coöperative with the other punch, means for operating the movable die and the respective punch simultaneously, and means for actuating the other punch to engage the stationary die subsequent to the operation of the first punch and movable die.

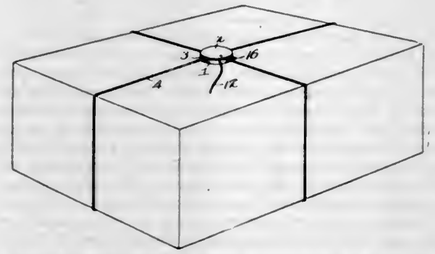
3. In a machine of the class described, a punch, a second punch concentric with the first punch, a stationary die coöperative with one of said punches, a movable die disposed within the stationary die and coöperative with the first punch, means for operating the first punch and movable die simultaneously, and means for operating the second punch to engage the stationary die subsequent to the operation of the first punch and movable die.

4. In a machine of the class described, a punch, a second punch concentric with the first punch, a stationary die coöperative with the second punch, a movable die coöperative with the first punch and disposed normally below the stationary die and movable into said die, means for operating the first punch and movable die simultaneously, said means including a pair of actuating shafts and a cam on each shaft, and means for actuating the second punch to engage the stationary die subsequent to the operation of the first punch and movable die, said last-named means including an eccentric mounted upon one of said actuating shafts and adapted to operate its respective punch subsequent to the operation of the other punch.

5. In a machine of the class described, a punch carrying head adapted for sliding movement and provided at its lower end with a socket member, a second punch carrying head slidably disposed within the first head, a punch carried by the last-mentioned head and extending outwardly of the lower end of such second head and through the socket member thereof, a second punch carried by the socket member of the first-mentioned head and arranged concentrically of the first punch, a stationary die coöperative with the second punch, a movable die coöperative with the first punch, means for operating the first-mentioned punch carrying head and a punch carried thereby and the movable die simultaneously, and means for actuating the second punch carrying head and the respective punch carried thereby subsequent to the operation of the first punch and movable die.

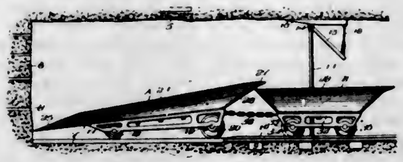
[Claims 6 and 7 not printed in the Gazette.]

1,062,491. CLUTCH. ARTHUR U. MERSHON, Colorado Springs, Colo. Filed July 16, 1912. Serial No. 709,713. (Cl. 24—18.)



A rope clutch carrying device comprising a casing having a pair of diametrically arranged apertures in its side walls and other apertures, an arcuate rib struck up from the casing and arranged between one of said pair of apertures and one of said other apertures and adapted to guide a rope, a rope connected to said casing and passing through said apertures on opposite sides of the rib, a second arcuate rib struck up from the center of the casing and arranged to permit the free end of the rope to pass through the opposite aperture of said pair of apertures and around said second arcuate rib to form a loop and out one of said other apertures, a lever pivoted in the casing between said last-named apertures and the last-named arcuate rib and having apertures to receive the opposite sides of the rope loop, said lever having an offset end exposed through the casing.

1,062,492. CHARGE-RECEIVING TRUCK. SOREN C. MONBERG, Leadville, Colo. Filed Aug. 27, 1912. Serial No. 717,374. (Cl. 105—15.)



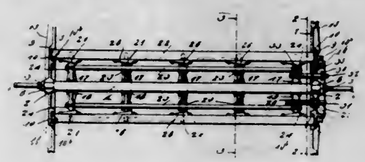
1. In a mine truck, a body having a resilient packing between its inner and outer surfaces throughout the area thereof, the said body being forwardly inclined, and a shovel-like extension at its lowermost end.

2. In a mine truck, a body having a resilient packing between its inner and outer surfaces throughout the area thereof, the said body being forwardly inclined, a shovel-like extension at its lowermost end, and a lip projecting outwardly from the opposite end of the body.

3. In a mine truck, a body having a resilient packing between its inner and outer surfaces throughout the area thereof, the said body being forwardly inclined, a shovel-like extension at its lowermost end, a lip projecting outwardly from the opposite end of the body, and a trailing truck having loose connection with said first named truck whereby one end of the said trailing truck will be overlapped by the lip on the first named truck.

4. In a mine truck, a body having a resilient packing between its inner and outer surfaces throughout the area thereof, the said body being forwardly inclined, a shovel-like extension at its lowermost end, a lip projecting outwardly from the opposite end of the body, a trailing truck having loose connection with said first named truck whereby one end of the said trailing truck will be overlapped by the lip on the first named truck, and wheels supporting said trucks respectively, and adapted to travel upon a track.

1,062,493. REVOLVING COLLAPSIBLE BEAM FOR DYEING-MACHINES. FRANK M. MORTON, Phoenix, Ala., assignor of one-third to H. L. Woodruff and one-third to W. H. Dismuke, Columbus, Ga. Filed Apr. 4, 1912. Serial No. 688,420. (Cl. 8—19.)



1. In a revolving collapsible dyeing beam, a supporting shaft, heads fixed thereon, a plurality of slat expanding rings slidably mounted on said shaft, a plurality of radially movable slats supported and expanded by said rings, means on said heads to receive the ends of the slats and to provide a substantially fluid tight engagement between the heads and ends of the slots when the latter are collapsed, and means whereby said expanding rings are adjusted to expand the slats or to permit the latter to collapse.

2. In a revolving collapsible dyeing beam, a supporting shaft, heads fixedly mounted thereon and having in their inner sides a plurality of radially disposed slat receiving notches, a plurality of yarn supporting slats having their ends slidably and closely engaged with said recesses, a plurality of slat engaging lugs arranged on said heads between said recesses to provide a substantially fluid tight engagement with the slats, said lugs projecting inwardly beyond the inner faces of the heads and adapted to be engaged by the yarn on the beam when the slats are collapsed, whereby the dye liquor will be prevented from passing between the inner side faces of the heads and the end portions of the body of the yarn on the beam, said recesses being of greater length than the width of the slats, whereby, the latter are permitted to move freely between the lugs, a series of slat expanding rings slidably mounted on the shaft and having an operative engagement with said slats, and means whereby said rings are adjusted to expand the slats and to permit the latter to collapse.

3. In a revolving collapsible dyeing beam, a supporting shaft, slat supporting heads fixed on said shift, a plurality of yarn supporting slats having an adjustable, substantially fluid tight engagement with said heads, a plurality of slat expanding rings slidably mounted on said shaft and having an operative engagement with said slats, whereby, the latter are expanded and permitted to retract, a ring adjusting screw swiveled in one of said heads and having its threaded inner end engaged with the adjacent endmost expanding ring, whereby, said rings are adjusted to expand said slats and to permit the same to collapse, an ad-

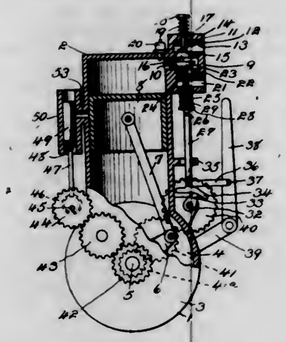
justable gage adapted to limit the movement of said expanding rings thereby regulating the expansion of said slats, and means to connect said rings together, whereby, they are moved in unisou.

4. In a revolving collapsible dyeing beam, a supporting shaft, slat supporting heads fixed on said shaft, a plurality of yarn supporting slats having an adjustable, substantially fluid tight engagement with said heads, a plurality of slat expanding rings slidably mounted on said shaft and having an operative engagement with said slats, whereby, the latter are expanded and permitted to retract, a ring adjusting screw swiveled in one of said heads and having its threaded inner end engaged with the adjacent endmost expanding ring, whereby, said rings are adjusted to expand said slats and to permit the same to collapse, a gage screw having a threaded engagement with one of said expanding rings and having a sliding engagement with the adjacent head of the beam, a stop flange on said screw to engage the outer side of said head, whereby, the movement of said expanding rings is limited in one direction and a stop collar adjustably secured to the screw adjacent to the opposite side of said head, whereby, the adjustment of the expanding rings in the opposite direction is controlled or regulated.

5. In a hollow revolving collapsible dyeing beam, the combination with a series of spaced apart, collapsible slats and means for shifting the same, of fixedly connected beam heads provided with guideways for the ends of the slats, and elements extending inwardly from the inner faces of the heads and adapted to be engaged by the yarn on the beam when the slats are collapsed, whereby the dye liquor is prevented from passing between the inner faces of the heads and the end portions of the body of yarn on the beam.

[Claims 6 and 7 not printed in the Gazette.]

1,062,494. INTERNAL-COMBUSTION ENGINE. JOSEPH MUNDEN, Bradenville, Pa. Filed Feb. 13, 1911. Serial No. 608,224. (Cl. 123—125.)

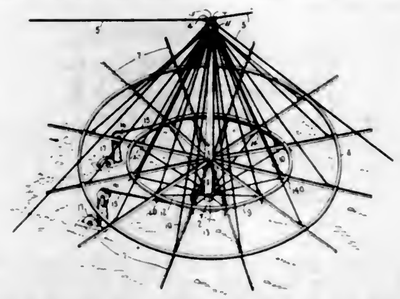


1. An internal combustion engine of the four stroke type comprising a cylinder and a piston, an intake valve arranged to admit combustible mixture to the engine cylinder, an exhaust valve, a mechanical means for opening said exhaust valve to exhaust the products of combustion from the engine cylinder, a port arranged in the wall of the engine cylinder at a point intermediate the ends of the stroke of the piston, and a valve commanding said port to open and close the same, said valve being arranged to open said port as the piston reaches the limit of its power stroke and to maintain said port open until the piston closes the said port on its exhaust stroke, the said exhaust valve being arranged to be opened at a time prior to the closing of the said port by the said piston on its exhaust stroke in such manner as to complete the exhaust of the said cylinder through the said exhaust valve, said exhaust valve being arranged to be maintained in an opened position during the early portion of the intake or suction stroke of the piston, the said intake valve being arranged to be opened upon the closing of the said exhaust valve to admit to the engine cylinder a combustible mixture, the said valve commanding the said port maintaining the said port closed during the whole of the intake or suction stroke and being arranged to open the said port during the early portion of the compression stroke of the piston in such manner as to provide a passage from the said port for the residue of the exhaust gases left from the preceding operation of the engine and for the exit of the air which was drawn in through the exhaust valve during the early portion of the intake or suction stroke of the piston, substantially as described and for the purposes set forth.

2. An internal combustion engine of the four stroke type comprising a cylinder and a piston, an intake valve arranged to admit a combustible mixture to the engine cylinder, an exhaust valve, means for opening and closing said exhaust valve mechanically to exhaust the said engine cylinder, a port arranged in the wall of the engine cylinder, a valve commanding said port to open and close the same, said valve commanding said port being adapted to open the said port as the piston reaches the limit of its power stroke and to maintain said port in open position to exhaust the said cylinder during the early portion of the exhaust stroke of the piston, the said piston closing said port on its exhaust stroke, the said exhaust valve being arranged to be opened at a time prior to the closing of the said port so as to complete the exhaust of the engine cylinder through the said exhaust valve, said exhaust valve being arranged to be maintained in an open position during the early portion of the intake stroke of the piston in such manner as to draw into the engine cylinder air through the exhaust valve, the intake valve being arranged to open upon the closing of the said exhaust valve, the said valve commanding the said port maintaining the said port closed during the whole of the intake or suction stroke of the piston and being arranged to open the said port during the early portion of the compression stroke so as to permit passage of the residue of the exhaust gases and the air which was drawn into the engine cylinder through the exhaust valve in such manner that the engine cylinder is scavenged and cooled, substantially as described and for the purposes set forth.

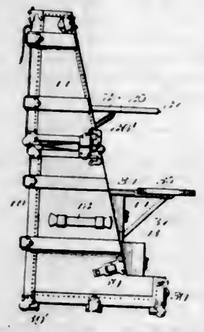
3. An internal combustion engine of the four stroke type comprising a cylinder and a piston, an intake valve arranged to admit a combustible mixture to the engine cylinder, an exhaust valve, means for opening and closing said exhaust valve mechanically to exhaust the said engine cylinder, a port arranged in the wall of the engine cylinder, a valve commanding said port to open and close the same, said valve commanding said port being adapted to open the said port as the piston reaches the limit of its power stroke and to maintain said port in open position to exhaust the said cylinder during the early portion of the exhaust stroke of the piston, the said piston closing said port on its exhaust stroke, the said exhaust valve being arranged to be opened at a time prior to the closing of the said port so as to complete the exhaust of the engine cylinder through the said exhaust valve, said exhaust valve being arranged to be maintained in an open position during the early portion of the intake stroke of the piston in such manner as to draw into the engine cylinder air through the exhaust valve, the intake valve being arranged to open upon the closing of the said exhaust valve, the said valve commanding the said port maintaining the said port closed during the whole of the intake or suction stroke of the piston and being arranged to open the said port during the early portion of the compression stroke so as to permit passage of the residue of the exhaust gases and the air which was drawn into the engine cylinder through the exhaust valve in such manner that the engine cylinder is scavenged and cooled, and means for regulating the time of closing of the exhaust valve so as to control the time of opening of the inlet valve, substantially as described and for the purposes set forth.

1,062,495. EXERCISING DEVICE FOR HORSES. CLARENCE GRANT OLIN, Windsor, Ohio. Filed Aug. 7, 1911. Serial No. 642,595. (Cl. 119—29.)



An exercising device comprising a revoluble mast with sweeps having their inner ends connected thereto adjacent to the lower end thereof, the upper end of the mast being reduced and having a pivot pin projecting therefrom, a plate loosely mounted upon the upper reduced end of the mast and held in position by the pin projecting therefrom, said plate having a plurality of hooks projecting upwardly therefrom, guy ropes or cables, one end of which is detachably connected to the hooks of the plate and having their opposite ends properly anchored beyond the free ends of the sweeps, a ring secured to the mast below said plate, brace rods having their upper ends connected to the ring and their lower ends spaced from each other and secured to the sweeps, cleats secured to the under surfaces of the sweeps and provided with hooks, short brace rods secured to one end of the cleats opposite the hooks thereof and having their opposite ends attached to the mast adjacent to the lower end thereof, the brace rods to the sweeps being oppositely disposed, two rings of different diameters secured to the upper surface of the sweeps and located adjacent to the connecting ends of the braces to said sweeps, whereby the parts are rigidly connected, an endless cable passing over the hooked ends of the cleats, and a plurality of pulleys located between and below the rings over which the cable passes, the free ends of the sweeps extending a considerable distance beyond the outer ring of the device for the purpose described.

1,062,496. TRUNK. VICTOR PALER, Harvey, Ill. Filed Aug. 31, 1912. Serial No. 718,092. (Cl. 190—11.)



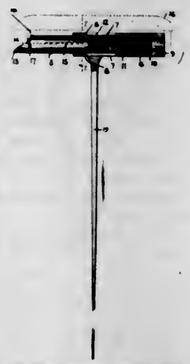
A trunk comprising a body, a top hinged thereto, a series of drawers being of various sizes with respect to each other, and the other set of drawers being of corresponding size with respect to each other, a support swingingly pivoted to one side of the body and adapted to move between adjacent drawers of both sets, a stool seat mounted upon said support, and a closure member hinged to one side of the body and adapted to conceal the support and stool seat mounted thereon when in inoperative position.

1,062,497. BARBER'S APRON. OTIS K. PARKHURST, Mulvane, Kans. Filed May 15, 1912. Serial No. 697,507. (Cl. 2—54.)



A barber's apron, consisting of a radially split substantially circular piece of fabric having a hem at its outer margin and a collar at its inner margin, a circular stiffener detachably inserted in said hem and divided into two semi-circular sections which meet disconnectedly at one end and overlap at the opposite end, and means for detachably fastening the overlapping ends of the sections together, the stiffener as a whole causing the marginal hem to stand up from the body of the apron.

1,062,498. HAT-PIN. DOUGLAS PERKINS, Jr., Piano, Cal. Filed June 8, 1912. Serial No. 702,504. (Cl. 24—150.)



1. In an article of the class described, a plurality of tubular telescopic members with open ends, means for holding the tubular members yieldingly extended, and a breast pin normally extending longitudinally of and through the tubular members and detachably secured thereto and an attaching means for the article secured to one of the telescopic members.

2. In an article of the class described, a plurality of tubular telescopic members, with open ends, resilient means for holding the tubular members yieldingly extended, and a breast pin normally extending longitudinally of and through the tubular members and provided with members for engaging the tubular members for holding them against the tension of said resilient means, and an attaching means for the article secured to one of the tubular members.

3. In an article of the class described, a tubular member with open ends and having a slot, a second tubular member with open ends and having a pin disposed in the slot, means for holding the tubular members yieldingly extended, and a stick pin secured to the side of one of the tubular members and extending therefrom at an angle to the tubular members.

4. In an article of the class described, a tubular member with open ends and having a slot, a second tubular member with open ends and telescoping with the first tubular member and having a pin disposed for moving in the slot, the outer end of one of the tubular members having a cut-away portion to permit the insertion of a finger in the said outer end, means for holding the tubular members yieldingly extended, and a pin secured to one of the tubular members.

1,062,499. BED-BOTTOM. JOHN H. PIELERT, Bengies, Md. Filed Oct. 17, 1912. Serial No. 726,231. (Cl. 5—69.)



1. In a bed bottom the combination of tubular sleeves, rods fitting telescopically into said sleeves, spring mechanism for tensioning said rods relatively to said sleeves, members each extending from a rod carried by one sleeve to a rod carried by another sleeve, and a cable extending from one of said members to another.

2. A device of the character described comprising a sleeve, bars fitted telescopically therein and provided with threaded portions, rotary nuts mounted upon said threaded portions, springs disposed between said nuts and said sleeves for the purpose of tensioning said bars relatively to said sleeves, cross members connected with said bars, and a cable extending from one of said cross members to another.

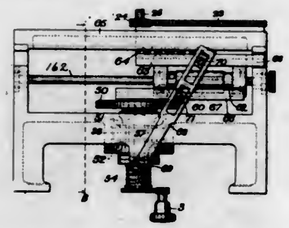
3. A device of the character described comprising a frame including angle bars provided with flanges and spaced apart, rollers mounted upon stub shafts, said rollers extending between said angle bars, and said stub shafts engaging said flanges, and a single cable engaging said rollers and threaded back and forth for the purpose of forming a supporting surface.

4. A device of the character described comprising angle bars provided with flanges and with means for spacing said flanges apart, rollers extending between said flanges and provided with stub shafts engaging said flanges, said stub shafts and said rollers being free to travel along said flanges in a direction coinciding with the length thereof, a cable wound back and forth and engaging said rollers for the purpose of forming a supporting surface, and a casing telescopically engaging said flanges and hiding said rollers and said stub shafts.

5. A device of the character described comprising a frame provided with cross members, rollers provided with stub shafts engaging said cross members, said stub shafts being adapted to roll slightly in relation to said cross members, and a cable engaging said rollers and extending back and forth from one of said cross members to another in order to form a supporting surface.

1,062,500. BALL-AND-DISK VARIABLE-SPEED MECHANISM. ARTHUR H. POLLEN, London, and HAROLD ISHERWOOD, York, England. Filed Nov. 5, 1912. Serial No. 729,643. (Cl. 74—26.)

1. Variable-speed mechanism comprising a driving element, a driven element, a steel ball intermediate said elements and in frictional contact with one of them, a fork carrying said ball, a member connected rotatably to the other element and contacting with said ball, a frame wherein said member is carried, means to displace said frame so as to travel said ball radially relatively to the element with which it frictionally contacts, and means to produce the requisite degree of frictional contact between said ball and that element.



2. Variable-speed mechanism comprising a driving element, a driven element, a steel ball intermediate said elements and in frictional contact with one of them, a fork carrying said ball, a pair of rollers mounted above said ball and contacting therewith, a frame carrying said pair of rollers, means to displace said frame so as to travel said ball along a diameter of the element with which it frictionally contacts, said fork constraining said ball to travel a distance equal to half the distance traveled by said frame, and means to produce the requisite degree of frictional contact between said ball and that element.

3. Variable-speed mechanism comprising a horizontal driving disk, a driven shaft, a steel ball intermediate said disk and said shaft, said ball being in frictional contact with said disk, a fork carrying said ball, a pair of rollers mounted above said ball and contacting therewith, one of said rollers being keyed to said shaft, a frame carrying said pair of rollers, ball-slides supporting said frame, means to displace said frame longitudinally of said ball-slides so as to travel said ball along a diameter of said disk, said fork constraining said ball to travel a distance equal to half the distance traveled by said frame, and means to produce the requisite degree of frictional contact between said ball and said disk.

4. Variable speed mechanism comprising a horizontal driving disk, a driven shaft, a steel ball intermediate said disk and said shaft, said ball being in frictional contact with said disk, a fork carrying said ball, a pair of rollers mounted above said ball and contacting therewith, one of said rollers being keyed to said shaft, a frame carrying said pair of rollers, ball-slides supporting said frame, means to displace said frame lengthwise of said ball-slides in a direction at right angles to the axes of said rollers so as to travel said ball along a diameter of said disk, means connecting said fork with said frame to cause the fork to move parallel to the direction of motion of the frame, said fork constraining said ball to travel a distance equal to half the distance traveled by said frame, and means to produce the requisite degree of frictional contact between said ball and said disk.

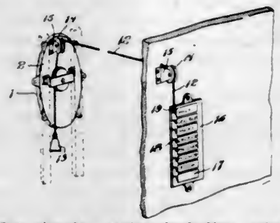
1,062,501. METHOD OF PRODUCING COMPOUNDS OF FORMALDEHYDE WITH SUGARS. FRITZ QUADE, Berlin, Germany, assignor to Johann Abraham von Wilfing, Berlin, Germany. Filed Sept. 16, 1912. Serial No. 720,650. (Cl. 23—24.)

1. The process of producing a compound containing one molecule of biose and one to five molecules of formaldehyde which process consists in heating the molecular admixtures of a formaldehyde forming body and biose under pressure substantially above atmospheric at temperatures up to 110° cent.

2. The process of producing a compound containing one molecule of biose and one to five molecules of formaldehyde which process consists in heating the molecular admixture of biose and concentrated acqueous solution of a formaldehyde-forming body under pressure substantially above atmospheric to prevent escape of formaldehyde, and removing the water by evaporation.

3. The process of producing a compound containing one molecule of biose and one to five molecules of formaldehyde which process consists in heating the molecular admixtures of biose and paraformaldehyde exclusively under pressure substantially above atmospheric, whereby indifferent diluting materials such as talc are added to the mass before the commencement of the reaction.

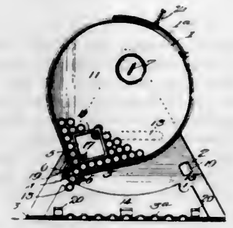
1,062,502. SIGNALING DEVICE. FRANK REED and WERNER RICKARDSON, Eureka, Cal. Filed Feb. 7, 1912. Serial No. 676,027. (Cl. 40—70.)



1. A flat circular casing including suitably connected front and rear members, the rear member being provided with a keeper, a dial having a drum extending through the rear member of the casing and an axial shaft supported for rotation in the front casing member and in the keeper on the rear member of the casing, a suitably guided cord wound about the drum and having a tension weight at one end and a loop at the other end, and a plurality of suitably spaced hooks adapted to be engaged by the looped end of the operating cord; the casing being provided with a radial slot through which a portion of the dial is visible.

2. A flat circular casing comprising a front member having a radial slot, and a back member having a keeper, said front and back members being provided with apertured lugs and fastening members extending therethrough, a dial mounted to rotate within the casing, said dial having a drum extending through the back member and an axial shaft journaled in the front member and in the keeper of the back member, a bracket on the back member having a guide pulley, and an operating cord wound about the drum having a tension weight at one end and having its other end guided over the pulley.

1,062,503. HOLDER AND DELIVERER FOR DRINKING-STRAWS. ROBERT MINARD REID, Colorado Springs, Colo. Filed Aug. 3, 1912. Serial No. 713,151. (Cl. 211—8.)



1. A straw containing and delivering apparatus, comprising a container proper, supports for the same in which it is pivoted and adapted to oscillate, and means arranged exteriorly of and beneath the same and serving to prevent delivery of straws when the container is in normal position and permitting such delivery when the container is swung laterally, as described.

2. A straw containing and delivering apparatus, comprising a container proper, vertical supports for the same in which it is pivoted, the pivot being applied eccentrically or between the center and periphery of the container, whereby the latter is adapted to maintain a certain normal position due to gravity, and means exterior of the container and fixed beneath the same and serving when the container hangs normally pendent to prevent escape of a straw, as described.

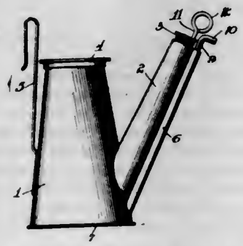
3. In a straw containing and delivering apparatus, the combination with a straw container proper and supports in which the same is pivoted and adapted to swing laterally, of guards fixed in position beneath the container and consisting of bars or strips whose upper edges are concentric with the pivot of the container, whereby said guards serve to prevent delivery of straws until the container is swung laterally so that its mouth passes beyond the concentric portions of the guards, as described.

4. In a straw containing and delivering apparatus, the combination with a straw container proper, vertical supports in which it is pivoted eccentrically so as to swing laterally, and straw guards and receivers fixed in position below the container and having their upper portions formed concentrically with the pivots of the container and provided adjacent to the ends of such concentric portions with notches adapted to receive and support an individual straw when delivered thereto at the limit of oscillation of the container, as described.

5. In a straw containing and delivering apparatus, the combination with vertical supports having horizontal slots, of the straw container proper, a rod passing through the lower portion of the latter and also through the aforesaid slots, whereby it is adapted to serve as a stop for limiting the lateral throw of the container, as described.

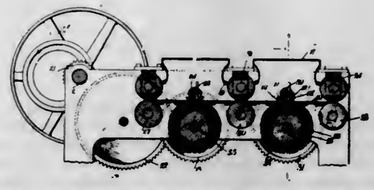
[Claims 6 to 11 not printed in the Gazette.]

1,062,504. MINER'S LAMP. WILLIAM P. RICE, Regina, Ky. Filed Sept. 11, 1912. Serial No. 719,795. (Cl. 67—21.)



In a miner's lamp a body having a wick tube projecting outwardly therefrom and having a wick arranged therein, an air tube coextensive with the wick tube and arranged within the same on the underside, the inner end of said tube extending into the body and terminating in an open vertical extension, a heating tube rotatably mounted in the outer end of the air tube and having a right angular extension adapted to be swung into and out of the path of the flame of the wick when ignited.

1,062,505. BOOK-COVER-CLEANING MACHINE. CHARLES J. RICH, Norwood, Mass. Filed Aug. 22, 1911. Serial No. 645,379. (Cl. 41—7.)



1. In a book-cleaning machine, a bed having an opening extending vertically therethrough, a cylindrical wire-bristle

brush revolubly mounted below said bed, the top of said brush extending through said opening slightly above the top of said bed, inverted T-shaped bearing plates disposed above said brush, the heads of which bearing plates are slightly inclined upward at the forward and rear ends to form a beveled incline to meet the work as it is advanced between said bearing plates and brush, and a support on which the stems of said bearing plates are adjustably mounted.

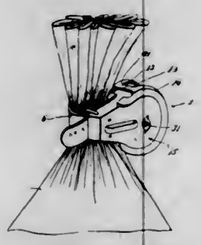
2. In a book-cleaning machine, a bed having an opening extending vertically therethrough, a cylindrical wire-bristle brush revolubly mounted below said bed, the top of said brush extending through said opening slightly above the top of said bed, a spring-supported rod disposed parallel with and above said brush, and a series of inverted T-shaped bearing plates adjustably mounted on said rod adapted to maintain the work in engagement with said brush, as the work is fed between the brush and bearing plates.

3. In a book-cleaning machine, a bed having an opening extending vertically therethrough, a cylindrical wire-bristle brush revolubly mounted below said bed, the top of said brush extending through said opening slightly above the top of said bed, a supporting means disposed parallel to and above said brush, and a plurality of independent bearing plates, each adjustably mounted on said supporting means adapted to bear on the work fed between said plates and brush, to bring said work in contact with said brush.

4. In a book cleaning machine, a supporting framework, a driving shaft mounted on said framework, a bed having a plurality of openings extending therethrough, a series of feed rollers journaled in said framework, a gear train actuated by said driving shaft and rotating said rollers, cylindrical brushes on shafts of members of the gear train, the said shafts being located below the bed and the tops of said brushes extending through the openings in said bed slightly above the top of the bed, a supporting means disposed parallel to and above each of the said brushes, and a plurality of independent bearing plates, each adjustably mounted on said supporting means and adapted to bear on the work fed between said plates and brushes to bring the work in contact with said brushes.

5. In a book cleaning machine, a bed having an opening therethrough, a cylindrical brush revolubly mounted below the bed, the top of said brush extending through said opening slightly above the top of said bed, a rod spring-supported at each end and disposed parallel with and above said brush, and bearing plates for engaging the work and having stems adjustably mounted on said rod.

1,062,506. MAIL-POUCH LOCK. CHARLES S. RICKARD, Traverse City, Mich. Filed May 6, 1911. Serial No. 625,426. (Cl. 70—2.)



1. A securing device for mail bags comprising a strap having a staple, a lock hingedly connected with the strap, pivoted detent within the lock casing, a swinging locking bolt within the casing, means provided by the detent for sustaining the bolt in either a locking or unlocking position, and means for automatically bringing the bolt to a locking position when the staple has been inserted within the lock casing.

2. A locking device for mail bags including a strap provided with a staple, and means whereby the said strap may be removably connected with the bag, a lock pivotally connected with the strap, said lock comprising an upper and a lower casting, the said lock being also provided with a back plate having a bulging portion, the said plate being rounded and positioned away from the rear edges of the casting, and means provided within the lock casing for automatically locking the staple within the casing.

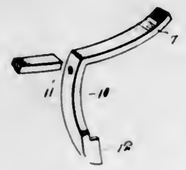
3. A mail bag securing device comprising a strap having a staple and a lock pivotally connected with the strap, said lock having its rear face provided with a compartment adapted for the reception of an identification card, and said lock being further provided with means for automatically locking the staple thereon, substantially as described.

4. A securing device for mail bags comprising a strap having a staple and a lock connected with the strap and adapted to engage with the staple, a pivoted locking bolt within the lock casing, a detent also pivotally connected within the lock casing, means between the bolt and detent for locking the said bolt in either a locking or unlocking position, and means provided by the detent whereby the bolt is swung from an unlocked to a locked position after the detent has been contacted by the staple.

5. A lock provided with a card receiving pocket, said lock having one of its faces formed with an opening, a pivoted locking bolt having an off-set head normally positioned above the opening, a pivoted detent also provided with a head normally lying above the opening, the bolt having spaced teeth, the detent being provided with a pocket adapted to engage alternately with the teeth, means for forcing the said pocket into engagement with one of the teeth, and a key for retracting the bolt to permit of the pocket of the detent engaging with the second tooth to sustain the bolt away from the opening of the casing.

[Claims 6 and 7 not printed in the Gazette.]

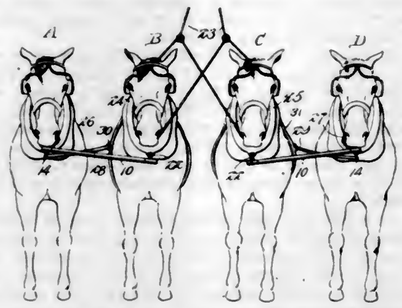
1,062,507. WASHBASIN-HOLDER. EARL V. SANDERS, Pawnee, Ill. Filed Nov. 11, 1911. Serial No. 659,778. (Cl. 45—38.)



In a device for the purpose set forth, a lug having an under-curved face and its outer edge provided with a projecting lip, a split ring, said ring having a downturned portion on one of its ends which has its extremity offset, the said downturned portion being pivoted to the lug adjacent the lip thereof, and the ring adapted to be engaged by the lip of the lug and the offset of the downturned portion adapted to engage with the lower face of the lug simultaneously when the ring is swung horizontally of the lug.

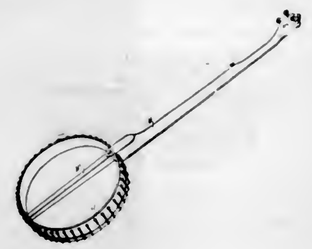
1,062,508. DEVICE FOR GUIDING HORSES. WALTER SCHAPER and WILLIAM SCHAPER, Charles City, Iowa. Filed Oct. 1, 1912. Serial No. 723,385. (Cl. 54—71.)

In a device for guiding horses, the combination with the harness of the horses comprising saddles, collars, bridle bits and bit rings, of a guide bar, an attaching member on one end of the guide bar and having connection with the collar of the harness of one of the horses, a plate on the other end of the guide bar and having connection with the bit rings of the harness on the other horse, and a ring carried by the guide bar and having a strap of the bar-



ness of one of the horses connected thereto and extending rearwardly to connect with the saddle of the other horse.

1,062,509. NECK FOR BANJOS OR THE LIKE. OSCAR SCHMIDT, Jersey City, N. J. Filed Jan. 11, 1911. Serial No. 601,976. (Cl. 84—123.)



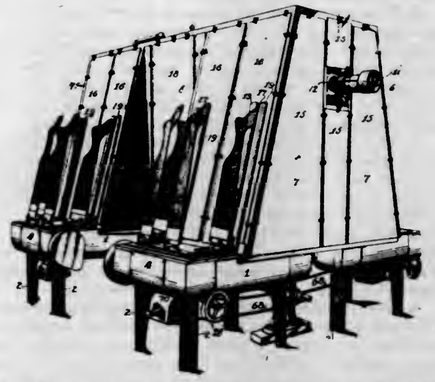
1. A banjo, comprising an apertured rim, a neck having a shoulder engaging the outer face of the rim and an extension projecting through the aperture of said rim, an inclined guideway on each side of the extension of the neck adjacent to the said shoulder, a wedge formed of side arms and an apertured connecting cross bar, said wedge straddling the extensions of the neck and engaging the guideway and the inner face of the rim, and a screw passing through the aperture of the cross bar into the extension.

2. A banjo, comprising an apertured rim, a neck having a shoulder engaging the outer face of the rim and an extension projecting through the aperture of said rim and provided with an inclined groove in each side adjacent to the shoulder, a wedge formed of spaced arms having inwardly extending flanges and a connecting cross bar provided with an opening, said wedge straddling the extension of the neck with its flanges in the said grooves, and a screw passing through the aperture of the cross bar of the wedge into the extension.

1,062,510. MACHINE FOR DRYING HOSIERY. WALTER M. SCHWARTZ and HARRY COULSTON, Philadelphia, Pa., assignors to The Philadelphia Textile Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 14, 1912. Serial No. 715,058. (Cl. 34—12.)

1. The combination in a hosiery drier, of a drying chamber; a series of detached carriers; a hosiery form mounted on each carrier; and means for traversing the said forms into and through the drying chamber.

2. The combination in a hosiery drier, of a table; a drying chamber; detached carriers; a hosiery form mounted on each carrier; and means for traversing the carriers over the table and through the drying chamber.



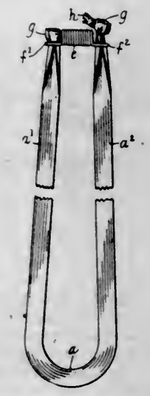
3. The combination in a hosiery drier, of a drying chamber, a table; an endless guide extending over the table and into the drying chamber; and a series of detached carriers each having a stocking form thereon and adapted to travel on the guide; with means for traversing the carriers.

4. The combination in a hosiery drier, of a table; a casing inclosing the drying chamber; an endless guide on the table extending into the drying chamber; the front of the casing having two vertical slots aligning with the guide; with a series of carriers each having a stocking form thereon; and means for traversing the carriers on the guide so that the stocking forms will pass from the table through one slot and into the drying chamber and out through the other slot.

5. The combination in a hosiery drier, of a table; a casing inclosing a drying chamber; said table having a quadrangular endless guideway; the casing of the drier having two vertical slots aligning with the guideway; a series of carriers adapted to travel in the guideways; each carrier having a hosiery form thereon; with means for traversing the carriers in the quadrangular guideways so that the hosiery forms will pass over the table through one slot in the casing and into and through the drying chamber and out through the other slot.

[Claims 6 to 25 not printed in the Gazette.]

1,062,511. BOOT-LACE. HENRY WILLIAM SHORT, London, England. Filed June 19, 1912. Serial No. 704,559. (Cl. 24—143.)



1. An improved endless shoe lace consisting of a lace proper having its ends provided with knots, and a spring

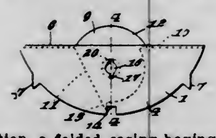
coupling for the ends of the lace which is formed of a wire coil having its ends formed as eyes of less diameter than the knots, as described.

2. The combination with a lace shoe having hooks on its opposite flaps, of a lace adapted for application to the shoe in the usual way and provided with knots adjacent to its ends, a spring coupling for said ends, the same consisting of a spirally coiled spring having its ends formed as eyes adapted for application to the lace, but made of less diameter than the knots, as described.

3. The combination with a spring-coupling consisting of a coiled spring provided with eyes at its opposite ends, both of said eyes extending in substantially one plane which is parallel to the axis of the spring-coil and approximately tangential to the surface of the coil, of a boot-lace whose members are threaded through the respective eyes of the spring-coupling and provided with knots to prevent complete retraction of said members through the eyes, substantially as described.

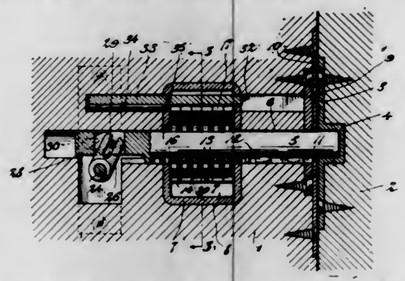
4. The combination with a spring-coupling consisting of a coil of spring wire whereof the terminal convolutions are bent out of their original positions to constitute eyes, said terminal convolutions when thus displaced extending both in substantially one plane which is parallel to the axis of the coil and approximately tangential to the surface of the latter, and each extremity of the wire being further displaced so as in effect to reverse the direction of winding of the convolution which forms the corresponding eye, of a boot-lace whose members are threaded through the respective eyes of the spring-coupling and provided with knots to prevent complete retraction of said members through the eyes, substantially as described.

1,062,512. LOCK. HENRY M. SMALL, Melrose, Mass. Filed Sept. 12, 1911. Serial No. 648,861. (Cl. 70—78.)



In combination, a folded casing having a key slot therein, a rotating bolt mounted in the casing and having a circular key opening, projections extending into said opening and forming segmental keyholes, and a key having casing wards adapted to enter the slot and engage the projections to turn the bolt, together with limiting stops carried by the bolt and casing.

1,062,513. LOCK. GEORGE F. SMITH, Philadelphia, Pa. Filed Nov. 20, 1912. Serial No. 732,549. (Cl. 70—53.)



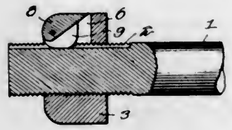
1. In a lock, a casing, a bolt slidably mounted in the casing, locking tumblers journaled on the bolt and exposed through opposite sides of the casing, coacting means on the tumblers and bolt for locking the bolt, and means slidably mounted in the casing for locking the tumblers in set or unset position.

2. In a lock, a casing, a bolt slidably mounted in the casing and having a series of spaced and alined keys, tumblers rotating upon the bolt and having a notched web adapted to move between the keys, said tumblers exposed through the casing on opposite sides thereof and means for locking the tumblers in set or unset position against rotation in either direction.

3. In a lock, a casing, a bolt slidably mounted in the casing and having a series of spaced and alined keys, tumblers rotating upon the bolt and having a notched web adapted to move between the keys, said tumblers exposed through the casing on opposite sides thereof, projections on said tumblers, and a locking member carried by the casing and adapted to engage said projections to lock the tumblers in set or unset position against rotation in either direction.

4. In a lock, a casing, a bolt slidably mounted therein, tumblers journaled upon the bolt and having notches therein, a series of alined and spaced keys on the bolt adapted to pass through the notches of the tumblers when all are alined, projections on the periphery of the tumblers, means slidably mounted in the casing for engaging the projections to lock the tumblers against rotation, said tumblers being exposed through the opposite sides of the casing and locating pins removably mounted in the tumblers and exposed through opposite sides of the casing whereby the combination may be changed without disconnecting the lock parts together with means for operating the bolt.

1,062,514. NUT-LOCK. JAMES WAUCOP TABOR, Sumpter, Oreg. Filed Oct. 28, 1911. Serial No. 657,301. (Cl. 151—6.)



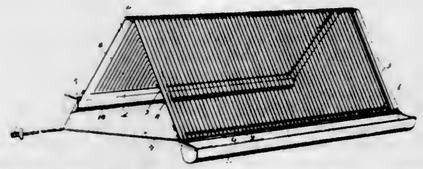
A nut lock, the combination with a bolt having a plurality of longitudinally arranged depressions, and a nut for the bolt, said nut having a longitudinally arranged recess forming a pocket, the lower wall of which being inclined from the bore of the nut toward the upper face of the nut, the said inclined wall adjacent one of the longitudinal walls of the pocket being recessed to provide a communication with the bore of the nut, the inclined wall having a depression, a flat spring having one of its ends arranged within the depression, a locking dog having an inner lower inclined face pivotally secured within the pocket, the inner edge of the said dog terminating a distance away from the inner edge of the pocket, the said dog having one of its sides provided with a reduced cam member which is adapted to be arranged within the recess portion of the pocket and to engage with one of the depressions of the bolt, and the spring adapted to contact with the lower inclined face of the dog beyond its pivot, all substantially as and for the purpose set forth.

1,062,515. RAIL-JOINT. HAKULYO CHUHACHI TANABE, Marysville, Cal. Filed May 17, 1912. Serial No. 697,947. (Cl. 239—8.)



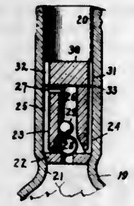
In a rail joint, two rail ends having their heads and bases scarf jointed on oblique lines, the said joints being located in longitudinally spaced relation to one another and also inclined reversely with respect to one another, each of said joints being stepped and all of the faces which define the steps being oblique to the length of the rail and also disposed at angles which permit the rails to be moved longitudinally toward and away from each other at the same time effecting a lateral interlock which prevents relative lateral movement of the rail ends in both directions, the web of each rail terminating between the vertical planes of the head joint and base joint and forming an overlapping support for the projecting head of the contiguous rail.

1,062,516. ELECTRIC FLY-KILLER. JAMES A. TATE, Monticello, Ark. Filed Jan. 25, 1911. Serial No. 604,610. (Cl. 43—34.)



An electric fly killer including rectangular frames inclined upwardly and inwardly with relation to each other and connected at their upper ends, alternately disposed positive and negative wires extended from the base of one frame to the base of the other leading over the apex formed by the connected frames, and troughs connected to the base of each frame and forming supports for the structure.

1,062,517. NON-REFILLABLE BOTTLE. JOSEPH Q. TAYLOR, Taunton, and CHARLES T. EATON, Somerville, Mass. Filed July 17, 1912. Serial No. 709,901. (Cl. 215—103.)

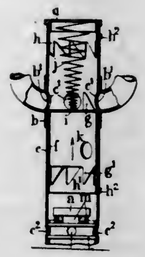


In an improvement of the kind described, the combination of a neck having a contracted portion, a perforated member engaging the inner surface of said contracted portion, a plug having a central bore containing one-way movable valve means resting upon said perforated member, and said plug also having longitudinal grooves on its exterior surface communicating with said bore at its end adjacent the perforated member, and having a port establishing communication with the inner end of said bore and one of said passages, and a second plug secured to the outer end of the first plug and having passages forming continuations of the longitudinal passages of the first plug.

1,062,518. HORN FOR MOTOR-CARS, MOTOR-CYCLES, AND CYCLES. ETIENNE TESTE, Paris, France. Filed June 22, 1910. Serial No. 568,297. (Cl. 116—19.)

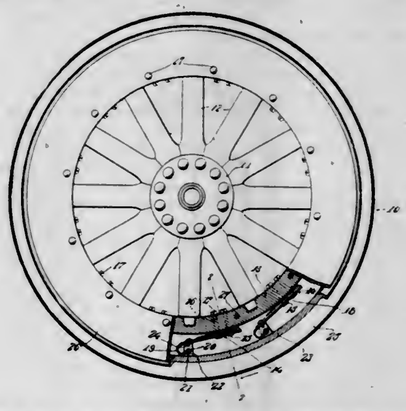
1. In an apparatus of the kind described, a cylinder, a plurality of trumpets communicating with the cylinder, a piston slidably mounted within said cylinder, an air bulb at one end of the cylinder to develop pressure for moving said piston in one direction, a spring for moving said piston in the opposite direction, and means whereby to give the said piston a step by step rotation during its sliding movement.

2. In an apparatus of the kind described, a cylinder, a plurality of trumpets communicating with the cylinder, an air bulb placed at the end of the cylinder, a hollow piston arranged in the cylinder and apertured to communicate with the trumpets, said piston being movable in one direction by the pressure developed by the air bulb, a pair of prongs projecting longitudinally from each of the ends of said piston, a pair of toothed crowns placed in the cylinder in the path of movement of said prongs, and a spring for moving the piston in the opposite direction.



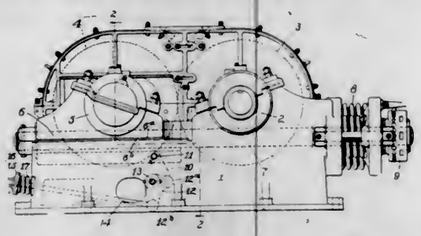
3. In an apparatus of the kind described, a cylinder, a plurality of trumpets communicating with the cylinder in a circular series, a hollow piston slidably mounted within the cylinder, said piston being closed at one end and provided with side openings to communicate with certain of the trumpets during its sliding movement, an air bulb at one end of the cylinder to develop pressure for moving said piston in one direction, a spring for moving the piston in the opposite direction, and means whereby to give said piston a step by step rotation, said means being operative at the limits of movement of said piston in opposite directions.

1,062,519. VEHICLE-WHEEL. WILLIAM T. THORP, Litchfield, Ill. Filed Oct. 27, 1911. Serial No. 657,033. (Cl. 152—37.)



In a vehicle wheel, the combination with a wheel body, of spaced cushions secured to the wheel body, each cushion comprising a series of superimposed springs, with the largermost spring of each cushion bent backward upon itself, a rim encircling the wheel body, spaced standards projecting from the inner face of the rim, an eye formed at the end of each backwardly bent portion of the larger spring of each cushion and extending between the standards, a pin connecting the standards and passing through the eye of each cushion, rollers carried by the standards and engaged by each cushion adjacent the backwardly bent portion of the larger spring of each cushion, a tire carried by the said rim, and circular plates secured to the said wheel body and overlapping the said rim adjacent the peripheral edges thereof.

1,062,520. CRUSHER. BRUCE W. TRAYLOR, Allentown, Pa., assignor to Traylor Engineering & Manufacturing Company, a Corporation of Delaware. Filed Feb. 28, 1913. Serial No. 751,384. (Cl. 83—12.)



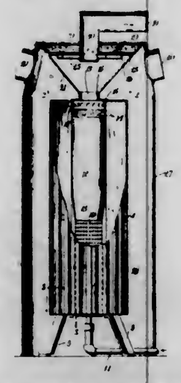
1. A crusher having a pair of rolls journaled in relatively fixed and movable bearings, and yielding hold-down means for said movable bearings.

2. In a crusher, a roll mounted in stationary bearings, a second roll mounted in bearings slidable toward and from said first named roll, and yielding hold-down means connecting said slidable bearings with the bed of the machine.

3. A crusher comprising a pair of rolls journaled in relatively fixed and movable bearings, links connected to said movable bearings and depending within the main frame of the machine, and means for exerting tension upon said links.

4. In a crusher, a roll journaled in fixed bearings, a second roll, bearing slides supporting said second roll, so as to be movable toward and from the first roll, bell crank levers pivotally mounted in the machine frame below said movable bearings, links connecting said movable bearings with said bell crank levers, and rods provided with adjustable spring tension means connected to the other arms of said bell crank levers.

1,062,521. GAS-FURNACE. EDGAR HUBERT TROTTER, Columbus, Ohio. Filed Aug. 24, 1911. Serial No. 645,728. (Cl. 126—116.)



1. In a hot air furnace, a vertically disposed and vertically corrugated radiator, a gas burner disposed in the lower half of said radiator, and a receptacle positioned on said burner, said receptacle having a heat-retaining substance therein, the interior of the corrugations of said radiator facing said burner and said receptacle, whereby the heat will be directly radiated from said burner and said receptacle into said corrugations.

2. In a hot air furnace, a vertically disposed and vertically corrugated radiator, a gas burner disposed in the lower portion of said radiator, a receptacle positioned on said burner, said receptacle having a heat-retaining substance therein, the interior of the corrugations of said radiator facing said burner and said receptacle, whereby the heat will be directly radiated from said burner and said receptacle into said corrugations, and means for conveying the products of combustion from said radiator.

3. In a hot air furnace, a jacket having heat conveying pipes at its upper end, a vertically disposed radiator in the jacket and having an outlet at its top and provided with radial boxes forming between them vertical V-shaped flues, a burner in the radiator, a funnel secured over the outlet of the radiator and opposite the heat conveying pipes and receiving the products of combustion from the burner, and a smoke pipe leading from said funnel.

4. In a hot air furnace, a jacket having heat conveying pipes at its upper end, a radiator within the jacket and having an outlet at its top, a burner arranged in the radiator, a funnel arranged opposite the heat conveying pipes and into which the products of combustion from said outlet are discharged, and a smoke pipe having a closed inner end projecting into the funnel and provided with lateral openings.

5. In a hot air furnace, a jacket having heat pipes extending outward from its upper end, a radiator within said jacket, a burner within said radiator, a funnel-shaped member carried by said radiator and in communication therewith and disposed opposite said heat pipes, and a smoke pipe having one end terminating within said funnel-shaped member, said pipe having radially-disposed pipes in communication therewith and extending to the side of said funnel-shaped member, whereby the heated products of combustion from said burner will be brought in contact with the side of said funnel-shaped member before they can escape through the heat pipes, thereby heating the side of said funnel-shaped member.

[Claims 6 and 7 not printed in the Gazette.]

1,062,522. SEPARATION OF SUBSTANCES BY THE WET MAGNETIC PROCESS. GEORG ULLRICH, Magdeburg, Germany, assignor to Fried. Krupp Aktiengesellschaft Grusonwerk, Magdeburg, Germany. Filed Dec. 23, 1909. Serial No. 534,713. (Cl. 83—71.)



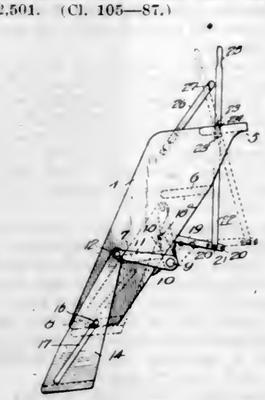
1. A wet magnetic process for separating material consisting in the formation of a vertically and downwardly flowing liquid wall in a magnetic field, delivering material to be separated to said wall in a direction transverse to the flow of liquid; and in magnetically raising the magnetizable particles of said material in said liquid wall and then conveying them out of said wall to a point of deposit.

2. A wet magnetic process for separating material consisting in the formation of a vertically and downwardly flowing liquid wall in a magnetic field, delivering material to be separated to said wall in a direction transverse to the flow of liquid; and in magnetically raising the magnetizable particles of said material in said liquid wall and then magnetically conveying them out of said wall to a point of deposit.

3. A method of separating substances, consisting in creating a downward stream of liquid in a magnetic field, passing the material to be separated transversely through said stream, magnetically intercepting the magnetizable material in said stream and removing the same out of the normal path of material through said stream.

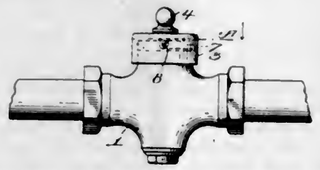
4. A method of separating substances, consisting in creating in a magnetic field a laterally unsupported wall of dawnwardly flowing liquid, delivering material to be separated into said wall transversely to the flow, magnetically delivering the magnetizable particles out of the normal path of delivery to the wall and against the flow, and separately discharging the separated particles.

1,062,523. ADJUSTABLE CAR-STEP. JAMES H. VAUGHAN, Mobile, Ala. Filed Sept. 26, 1912. Serial No. 722,501. (Cl. 105—87.)



In an adjustable car step, the combination of a stair provided with a plurality of steps, pins carried by said stair, side bars carrying an additional step and mounted upon opposite sides of said stair, said side bars being provided with slots for receiving said pins, said slots being oblique relatively to the general direction in which said stair extends, cranks pivotally connected with said side bars, a shaft carrying said cranks, another crank rigidly mounted upon said shaft, a pitman pivotally connected with said last mentioned crank and provided with a plurality of holes, a hand lever journaled upon said stair and adapted to rock, said hand lever being adjustably connected with said pitman by aid of said holes thereof, and means carried by said stair for holding said hand lever in a predetermined position.

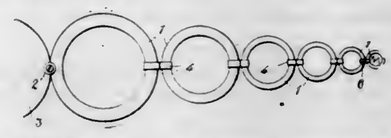
1,062,524. TURNING-PLUG. CHARLES WALKER, Knoxville, Tenn. Filed Jan. 17, 1912. Serial No. 671,707. (Cl. 137—7.)



A valve of the type set forth, comprising a casing having a fixed stop lug at the upper end thereof, a rotary valve body in the casing, a cap fitting over the upper end of the casing and inclosing the fixed stop lug, a handle having an end which projects through the cap and engages in the valve body, a stop lug associated with the cap and forming a companion of the fixed stop lug, the second-named stop lug being disposed within the cap and having an opening, and a screw which passes laterally through the cap, and through the opening of the second-named stop lug, and is adapted to engage the inturned end of the handle, the screw thereby serving to bind the cap and the handle for rotation together and to secure the second-named stop lug to a position at either side of the fixed stop lug, the second-named stop lug being positioned at either side of the fixed stop lug by a turning movement about the screw as an axis.

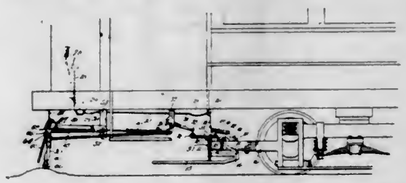
1,062,525. GAGE. WALTER HENRY WARD, San Juan, Porto Rico. Filed May 8, 1912. Serial No. 695,923. (Cl. 73—147.)

1. A gage of the class described comprising a series of gage rings differing in diameter so that one may be folded or nested in another, and hinge connections between the said gage rings to enable the gage rings to be arranged in extended relation.



2. A gage of the class described comprising a series of gage rings differing in diameter so that one may be folded or nested in another, and hinge connections between the said gage rings to enable the gage rings to be arranged in extended relation, and a cover pivotally connected to the largest gage ring and adapted to be arranged thereon or swung outwardly therefrom.

1,062,526. CAR-FENDER. WILLIAM THOMAS WATSON, Vancouver, British Columbia, Canada. Filed Mar. 24, 1911. Serial No. 616,581. (Cl. 105—130.)



1. In combination with a scoop fender such as described, means for suspending the scoop fender embodying a supporting latch; a pivotally mounted trip fender frame; a thrust member operatively connecting said frame and said latch; a locking member for said frame; and means yieldingly mounted in front of said frame to release said lock and permit the frame to move said latch to drop said scoop fender.

2. In combination with a scoop fender such as described, means for suspending said scoop fender embodying a supporting latch; a swinging trip fender frame disposed in front of said scoop fender and operatively connected with said latch; and a locking member for said frame, pivotally connected therewith in front of said frame, to release the same and permit the swing thereof when said locking member is moved toward said frame.

3. In combination with a scoop fender such as described, means for suspending the scoop fender embodying a suporting latch; a swinging trip fender frame disposed in front of said scoop fender and operatively connected with said latch; a lock for preventing the swing of said frame; a yielding member operatively mounted on said frame to release said lock and permit the frame to remove said latch from the support of said scoop fender; and means mounted on said frame for lifting the same vertically when moved thereto by a variation in the road-bed.

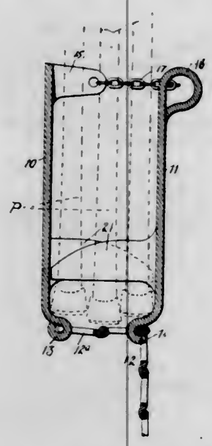
4. In combination with a scoop fender such as described, means for suspending said scoop fender embodying a supporting latch; a swinging trip fender frame disposed in front of said scoop fender and operatively connected with said latch, a lock for preventing the swing of said frame; a fender bar pivotally mounted on said frame and extended across the face thereof above the lower edge of said frame, said bar being adapted to release said lock when the bar is moved toward said frame; and rollers mounted on said frame to support the same on the road-bed.

5. In combination with a scoop fender such as described means for suspending said scoop fender embodying a supporting latch, a trip fender frame disposed in front of said scoop fender and having carrying wheels for supporting the same on the road-bed; means operatively connecting said frame and said latch to move the latch to release the scoop fender when said frame is moved toward said scoop fender; means for locking said frame to prevent

the movement thereof toward said scoop fender; and a bar suspended in front of said frame to be moved by an obstacle on the road-bed toward said frame to unlock the same.

[Claim 6 not printed in the Gazette.]

1,062,527. PICK-HOLDER. SAMUEL YOUNG, Cedar Point, Ill. Filed July 20, 1912. Serial No. 710,667. (Cl. 24—17.)



1. In a pick holder, the combination of a pair of rigid side plates, one of said side plates being provided with guard members integral with it and extending toward the other side plate for the purpose of spacing said side plates apart, one of said side plates being provided with an eye and the other with a hook, a chain secured to said eye and adapted to be connected by any one of its links to said hooks, one of said side plates being provided with a pair of spaced ears adapted to lie on opposite sides of the pick handle and the other being provided with a loop, and a chain connected with said ears and extending through said loop.

2. In a pick holder, the combination of a pair of side plates, each provided with a pair of guards integral with it, the guards of one plate being parallel with each other and extending between the guards of the other plate when the plates are in operative position, a chain extending from one of said side plates to the other at a point adjacent to said guards for the purpose of holding pick heads between said guards and said chain, and mechanism connected with said side plates at the ends thereof opposite said chain for the purpose of preventing said ends from moving apart.

1,062,528. DITCHING-MACHINE. WILLIAM J. ABBOTT, Algiers, Ind. Filed May 3, 1912. Serial No. 694,847. (Cl. 37—25.)



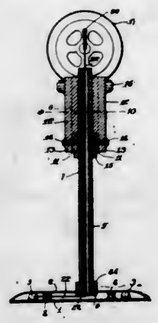
1. A ditching machine, comprising a truck, an elevating conveyer extending centrally and longitudinally of the truck, a plow having a jointed connection with the advance end of the conveyer, means for raising and lowering the advance end of the conveyer and the plow, and means for adjusting the pitch of the plow irrespective of the elevation of the advance end of the conveyer comprising a standard extending upward from the plow, and a manually operated device for shifting said standard forward and backward.

2. A ditching machine comprising a truck, an elevating conveyer extending centrally and longitudinally of the truck, a plow having a jointed connection with the advance end of the conveyer, means for raising and lowering the advance end of the conveyer and the plow, an arched yoke connecting the plow and the conveyer, a standard extending upward from said yoke, and a manually controlled shiftable guide through which said standard passes.

3. A ditching machine comprising a truck, an elevating conveyer extending centrally and longitudinally of the truck, a plow having a jointed connection with the advance end of the conveyer, means for raising and lowering the advance end of the conveyer and the plow, an arched yoke pivotally connected to the conveyer and fixedly connected to the plow, a standard extending upward from said yoke, and a manually controlled shiftable guide through which said standard passes.

4. A ditching machine, comprising a truck, an elevating conveyer extending centrally and longitudinally of the truck, a plow having a jointed connection with the advance end of the conveyer, an arched yoke connecting the plow and conveyer, a standard extending upward from said yoke, a manually controlled shiftable guide through which said standard passes, a windlass journaled on the machine frame, and a rope wound thereon and connected to said yoke.

1,062,529. CLOTH-CUTTING MACHINE. PHILIP SALTMAN, Philadelphia, Pa., assignor of one-fifth to David Blumberg, one-fifth to William Forman, one-fifth to Isidor Green, and one-fifth to Louis Greenberg, Philadelphia, Pa. Filed Nov. 23, 1911. Serial No. 661,959. (Cl. 164—75.)



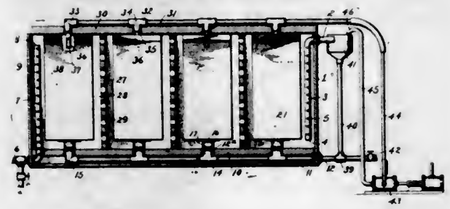
1. A cloth cutting machine, comprising a tubular standard, a head having an opening slidingly receiving the standard, said head and standard being slotted, a key block secured to the head and arranged in the slots of the head and standard to prevent rotation of the head, means for holding the head in an adjusted position on the standard, a flexible cutting element passing through the standard and along-side of the same, and operating means for the flexible cutting element mounted on said head.

2. A cloth cutting machine, comprising a tubular standard, a head having an opening slidingly receiving the standard, said head and standard being oppositely slotted, key blocks detachably secured to the head and arranged in the slots of the head and standard to prevent rotation of the head, a nut threaded on the standard for adjusting the head, a flexible cutting element passing through the standard and along-side of the same, and operating means for the flexible element mounted on said head and movable therewith.

3. A cloth cutting machine, comprising a standard and a base therefor, a flexible cutting element extending from the base alongside of the standard, operating means for said element, a slotted cloth holding member adjustable on the standard, and rollers carried by the cloth holding member and being arranged on opposite sides of the said slot, said cutting element passing through the slot in said cloth holding member and between said rollers.

4. In a cloth cutting machine, a hollow base, a tubular standard, a headblock vertically adjustably mounted on the upper end of the standard, means between the headblock and the standard for preventing rotation of the former, a cutting element passing through the standard through the hollow base and alongside the standard with the latter portion radially disposed relatively to the standard, a motor mounted on the headblock and having a shaft disposed diametrically above the standard, said shaft having cranks, one alined with the cutter section that extends through the standard and the other alined with the cutter section that extends alongside the standard, and the cutter sections being connected with the respective alined cranks.

1,062,530. APPARATUS FOR MANUFACTURING ICE. WILLIAM E. ARMISTEAD, Sandersville, Ga. Filed Aug. 23, 1911. Serial No. 645,517. (Cl. 62—6.)



1. In an ice making apparatus, the combination of a brine tank, an inlet and an outlet pipe for the brine tank, ice forming cans arranged in the tank, extensions of said pipes arranged vertically at the opposite ends of the tank, the extensions being perforated through their sides to cause on even flow of brine around the cans from their tops to bottoms, and a pipe fitted with a shut-off valve for permitting the withdrawal of the brine from the tank, substantially as described.

2. In an ice making apparatus, the combination of a brine tank provided with a plurality of transverse division plates each having a vertical series of apertures therein, ice forming cans in the compartments formed by the division plates, an inlet pipe entering near the top of one of the end compartments and an outlet pipe projecting from the other end compartment near the bottom thereof, an extension of the inlet pipe turning downwardly and provided with apertures through its sides, an extension of the outlet pipe turning upwardly and having its sides perforated, and a pipe extending from the outlet pipe for withdrawing the brine from the tank, substantially as described.

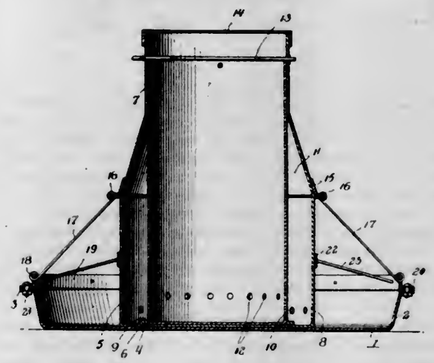
3. In an ice making apparatus, the combination of a brine tank provided with a plurality of transverse division plates each having a series of apertures therein, ice forming cans in the compartments formed by the division plates, a water pipe disposed below said cans, the bottoms of the cans being removably connected with the water pipe, a second water pipe above and communicating with the upper portions of said cans, a filter in alinement with the upper edges of said cans and connected to the first water pipe, a circulating pump connected with the second mentioned water pipe, and a conduit extending from the circulating pump to said filter, substantially as described.

4. An ice making apparatus, comprising a brine vat, a can mounted in said vat, a water supply pipe having a nozzle projecting up above the bottom of said vat, said nozzle being provided with a perforated lining of insulating material, and terminating in a hemispherical portion, and a short pipe connected to the bottom of said can, and provided with a socket to receive said hemispherical portion of the nozzle, the two forming a ball and socket joint supporting said can, with a perforated insulating lining for said short pipe, forming with said nozzle a continuous insulating passage for the inflow of water into the can, with means for supplying the brine to and drawing off the brine from said vat, substantially as described.

5. An ice making apparatus, comprising a brine vat having a raised, insulating false bottom, a can mounted in said vat, a water supply pipe having a nozzle projecting up above the insulating bottom of said vat, said nozzle being provided with a perforated lining of insulating material, and terminating in a hemispherical portion, and a short pipe connected to the bottom of said can, and provided with a socket to receive said hemispherical portion of the nozzle, the two forming a ball and socket joint supporting said can, with a perforated insulating lining for said short pipe, forming with said nozzle a continuous insulating passage for the inflow of water into the can, with means for supplying the brine to and drawing off the brine from said vat, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,062,531. POULTRY-FOUNTAIN. ROSE I. BATZ, Pittsfield, Ill. Filed Nov. 26, 1912. Serial No. 733,655. (Cl. 119—73.)

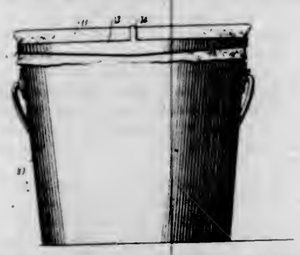


. A drinking fountain comprising a pan having an upstanding marginal wall, and an upstanding annular rib at the center portion thereof, a receptacle disposed in the center of said pan and having a groove formed in the under surface of the bottom thereof to receive said rib, and an annular rib on the inner surface of the bottom thereof, said receptacle having a restricted open top and provided with discharge orifices opening into said pan, a relatively small water container mounted within said receptacle and resting upon the bottom thereof inwardly of said last-named rib, said container being spaced apart from the side wall of said receptacle, whereby an air space is formed, and having discharge orifices opening into said receptacle, and a cap closing the open ends of said receptacle and water container.

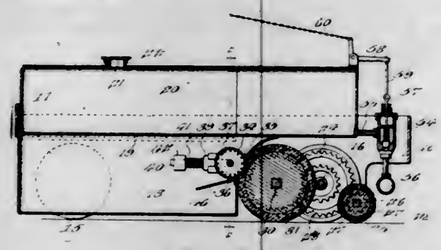
1,062,532. ATTACHMENT FOR MILK-PAILS. JOHN A. BLAIR, Steuben township, Crawford county, Pa. Filed May 20, 1912. Serial No. 698,472. (Cl. 31—14.)

As a new article of manufacture, an attachment for holding a filter cloth on a milk pail, comprising a single

strip of resilient material having overturned ends lying adjacent each other, and a plurality of hooks extending upwardly from the said strip of material, the hooks being adapted to engage the edge portion of the pail.

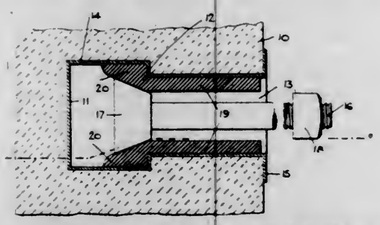


1,062,533. SCRUBBING-MACHINE. FRANKLIN A. BRETT, Oak Park, Ill. Filed Dec. 2, 1911. Serial No. 663,536. (Cl. 15—14.)



In a device of the kind described the combination of a fluid receiving reservoir, a mop roller disposed exteriorly thereof, a roller disposed transversely in said reservoir and projecting therefrom partially, said roller being formed with a longitudinally spaced series of circumferentially disposed openings, and with instruck flanges forming the bounds of said openings, said series of openings being disposed in a staggered relation whereby raised portions are formed upon said roller adapted to impinge against said mop roller, and a shelf downwardly inclined in said fluid-receiving reservoir and having its base in contact with said second-named roller.

1,062,534. DETACHABLE ANCHOR-BOLT. COOLEY BUTLER, New York, N. Y. Filed July 10, 1912. Serial No. 708,568. (Cl. 85—2.4.)



1. In combination, a rigid socket piece, adapted to be secured in a wall, and having a plurality of shoulders, a bolt having its head projected into the rear part of said socket piece, and a plurality of keys between the bolt and the walls of the socket piece, said keys having heads adapted to interlock with said shoulders and to be engaged by the bolt head, substantially as set forth.

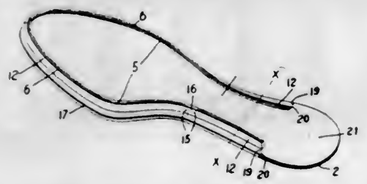
2. The combination of a socket piece made of rigid material and having a pair of oppositely disposed square shoulders, a bolt having a tapered head introduced into said socket piece beyond the said shoulders, and a pair of keys introduced between said bolt and the opposite walls of the socket piece, said keys having tapered heads for engagement with the tapered head of the bolt and adapted to interlock with the aforesaid square shoulders, substantially as set forth.

1,062,535. COMPOSITION OF MATTER TO BE INTRODUCED INTO THE INNER TUBES OF PNEUMATIC TIRES FOR RENDERING THE TIRES PUNCTURE-PROOF. THOMAS S. CAUSEY, Arlington, Tex., assignor of one-twelfth to Wm. Dugan, Arlington, Tex. Filed Dec. 16, 1912. Serial No. 736,985. (Cl. 152—25.)

1. The herein described composition of matter, consisting of dextrin, ground asbestos, magnesia, glycerin, wood alcohol and water, substantially as described and for the purpose specified.

2. The herein described composition of matter for preventing leaks in pneumatic tires, consisting of dextrin, one pound; ground asbestos, one pound; magnesia, one pound; glycerin, one and one-half ounces; wood alcohol, one-half pint; and enough water to produce a gallon of the composition.

1,062,536. INSOLE. GEORGE COLEMAN, Lynn, Mass., assignor of one-half to Reece Shoe Machinery Company, Boston, Mass., a Corporation of Maine, and one-fourth to Lewis Murr, Swampscott, Mass. Filed Feb. 8, 1913. Serial No. 747,030. (Cl. 36—22.)



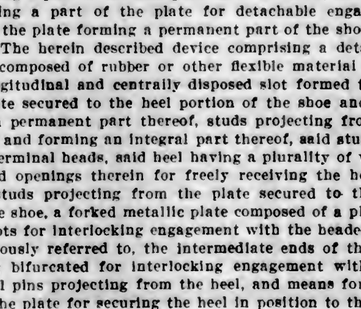
1. An insole composed of two superimposed plies or layers, one of said plies having its edges upturned and the other having its edges folded back on themselves and then upturned to overlie the upturned edges of the first-named ply, said two upturned edges being bent inwardly at an acute angle and constituting the lip of the insole.

2. An insole composed of two layers, each having a heel portion and a body portion, one layer having the edges thereof in front of the heel portion turned up, and the other layer having wings or extensions on its sides in front of the heel portion which are folded back against that portion of the face of said layer outside of the upturned edges of said other layer, thereby to form the feather edge of the insole, the edges of said wings being bent upwardly to overlie the upturned edges of said first-named layer thereby to form the lip of the insole.

3. An insole comprising two layers of thin leather, the layer on the lip-bearing face of the insole having a heel portion of the full width of the heel of the insole and a body portion of less width than the body of the insole whereby a shoulder 20 is presented on each side of said layer, said layer having upturned edges at the side of the body, and the other layer having a heel portion co-extensive with that of the first-named layer, a body portion, and wings on the sides of the body portion which are folded over against that part of the body outside of said upturned edges, the edges of said wings being upturned to overlie the upturned edges of the first-named layer, the heel ends of the folded over wings abutting the shoulders 20 formed on the first-named layer.

1,062,537. LIQUID-SUPPLY REGULATOR. WILLIAM C. CULBERTSON, Rushville, Ind. Filed May 24, 1912. Serial No. 699,474. (Cl. 137—104.)

A floating level regulator, comprising in combination with a tank, an air-tight float, a valve neck at the bottom of the float provided with a valve seat and opening therein, a valve normally closing said opening and adapted to be unseated by coming into contact with an underlying support, and a liquid supply pipe passing diametrically through the float from top to bottom and discharging into the valve neck.



1,062,538. REVERSIBLE HEEL. LOUIS CUVELIER, Halifax, Nova Scotia, Canada, assignor of one-half to Reginald Edmund Verge, Halifax, Nova Scotia, Canada. Filed Nov. 25, 1912. Serial No. 733,467. (Cl. 36—36.)

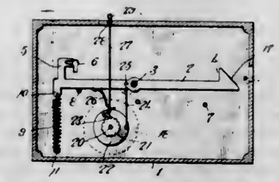
1. In a reversible shoe heel composed of yielding material having a plurality of vertical openings formed therethrough, a plate secured to the heel portion of the shoe, studs projecting downwardly therefrom and provided with heads, the latter being adapted to freely pass through the openings formed in the heel, a plate adapted to be snugly received by a longitudinal and horizontal opening formed in the intermediate portion of the heel and slidingly engaged therewith, said plate being provided with slots for engagement with the studs projecting from the plate forming a part of the heel portion of the shoe, and means forming a part of the plate for detachable engagement with the plate forming a permanent part of the shoe.

2. The herein described device comprising a detachable heel composed of rubber or other flexible material having a longitudinal and centrally disposed slot formed therein, a plate secured to the heel portion of the shoe and forming a permanent part thereof, studs projecting from said plate and forming an integral part thereof, said studs having terminal heads, said heel having a plurality of vertical alined openings therein for freely receiving the heads of the studs projecting from the plate secured to the heel of the shoe, a forked metallic plate composed of a plurality of slots for interlocking engagement with the headed studs previously referred to, the intermediate ends of the plate being bifurcated for interlocking engagement with additional pins projecting from the heel, and means for securing the plate for securing the heel in position to the plate secured to the heel of the shoe.

3. The herein described device comprising a detachable heel composed of ribber or other flexible material having a longitudinal and centrally disposed slot formed therein, a plate secured to the heel portion of the shoe and forming a permanent part thereof, studs projecting from said plate and forming an integral part thereof, said studs having terminal heads, said heel having a plurality of vertical alined openings therein for freely receiving the heads of the studs projecting from the plate secured to the heel of the shoe, a forked metallic plate composed of a plurality of slots for interlocking engagement with the headed studs previously referred to, the intermediate ends of the plate being bifurcated for interlocking engagement with additional pins projecting from the heel, a lip secured to said plate and projecting therefrom, and a tongue for interlocking engagement with an opening formed in the projecting end of the plate secured to the heel of the shoe.

4. The herein described shoe heel consisting of resilient material having vertical transverse openings formed therein and a longitudinal space intersecting said openings and extending the full length of the heel, the opposite ends of said transverse openings being of conical formation, headed studs projecting from the heel portion of the shoe, said studs having rounded heads for primarily engaging the conical shaped formation of the openings in the head when the heel is applied, a locking plate adapted for sliding engagement with the longitudinal space in the heel and adapted to be brought into binding contact with the heads of the studs, and means for temporarily locking the plate when the heel is properly positioned.

1,062,539. REGISTERING CAR-LOCK. GEORGE DANIEL and EDWARD G. LEWIS, Mabscott, W. Va. Filed Dec. 28, 1912. Serial No. 739,097. (Cl. 70—6.)



1. A registering car lock, comprising a lock casing having a hasp entrance, a key operated latch bolt pivotally mounted therein and having a hasp engaging shoulder, a dial, an indicator hand, a ratchet wheel fast on the arbor of said hand, a disk loose on said arbor, a pawl on said disk engaging the ratchet wheel, and a connection between said disk and latch bolt whereby the movements of the latch bolt are transmitted to and indicated by the hand upon the dial.

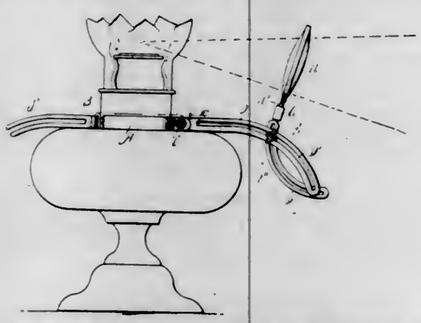
2. A registering car lock, comprising a lock casing having a hasp entrance, a key operated latch bolt pivotally mounted therein and having a hasp engaging shoulder, a spring acting to normally sustain the latch bolt yieldingly in a horizontal position, a dial, an indicator hand, a ratchet wheel fast on the arbor of said hand, a disk loose on said arbor, a pawl on said disk engaging the ratchet wheel, and a connection between said disk and latch bolt whereby the movements of the latch bolt are transmitted to and indicated by the hand upon the dial.

3. A registering car lock, comprising a lock casing having a hasp entrance, a key operated latch bolt pivotally mounted therein and having a hasp engaging shoulder, a dial, an indicator hand, a ratchet wheel fast on the arbor of said hand, a disk loose on said arbor, a pawl on said disk engaging the ratchet wheel, a connection between said disk and latch bolt whereby the movements of the latch bolt are transmitted to and indicated by the hand upon the dial, and means for resetting the registering mechanism embodying a device for lifting the pawl from engagement with the ratchet wheel.

1,062,540. LENS-SUPPORT. WILLIAM T. FIELD, CHARLES E. JONES, and FREDERICK T. FIELD, Sanford, Fla. Filed Sept. 13, 1912. Serial No. 720,180. (Cl. 240—117.)

1. A lens support, comprising a clamping band adapted to encircle a part of a lamp and provided with a slotted arm, a second slotted arm, a clamping bolt connecting the said arms with each other, and a socket secured to the free end of the said second arm and adapted to receive the handle of a reading lens, whereby the lens can be moved bodily toward and from the lamp and adjusted at different angles thereto.

2. A lens support, comprising a clamping band adapted to encircle a part of a lamp and provided with a slotted arm, a second slotted arm having at one end a transversely-extending flange, a clamping bolt connecting the said arms with each other, a split socket for the reception of the handle of a reading lens and provided with integral flanges straddling the said arm flange, and a bolt fastening the said flanges to the arm flange to hold the lens handle in the socket and permit the socket to be swung to adjust the lens.

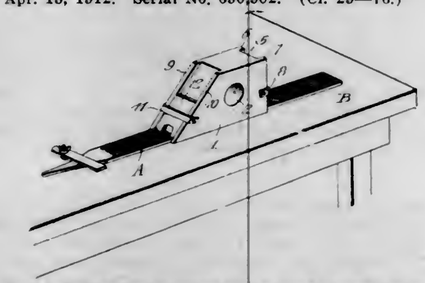


3. A lens support, comprising a split clamping band adapted to encircle a part of a lamp, the ends of the bands having parallel flanges, a slotted arm extending at one end between the said flanges, a bolt fastening the said arm to the said flanges, a second slotted arm having at one end a transversely-extending flange, a clamping bolt connecting the said arms with each other, a split socket for the reception of the handle of a reading lens and provided with flanges engaging the said slotted arm flange, and a bolt connecting the said socket flanges and the said arm flange with each other.

4. A lens support, comprising a clamping band adapted to encircle a part of a lamp and provided with a slotted arm, a second slotted arm, a clamping bolt connecting the said arms with each other, a socket secured to the free end of the said second arm and adapted to receive the handle of a reading lens, and a slotted hook arm provided with a hook adapted to engage the said clamping band, the said hook arm being adapted to carry another slotted arm provided with a socket.

5. A lens support for lamps, comprising a clamping band, an arm adjustably secured to the band, a second arm adjustable longitudinally and transversely of the first arm, and a lens socket adjustably secured to the second arm.

1,062,541. MITERING DEVICE. CHARLES E. HICKS and JOHN NATHAN HOFFMAN, Forest Grove, Oreg. Filed Apr. 15, 1912. Serial No. 690,902. (Cl. 29—76.)



1. A mitering device comprising a block having its front end inclined downwardly from its upper toward its lower edge and with laterally spaced work guides thereon, and laterally spaced guides on its lower face.

2. A mitering device comprising a work holder having an inclined front end provided with forwardly extending laterally spaced flanges to provide a work guide, a strap extending transversely across said flanges to hold the work in operative position, the lower face of said holder having depending laterally spaced longitudinally extending flanges to form guides for a tool to be used in connection with said holder.

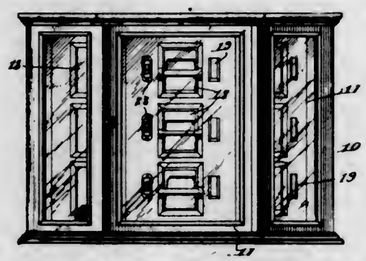
3. A mitering device comprising a work holder having an inclined front end provided with forwardly extending laterally spaced flanges to provide a work guide, a strap extending transversely across said flanges to hold the work in operative position, the lower face of said holder having depending laterally spaced longitudinally extending flanges to form guides for a tool to be used in connection with said holder, the rear end of said holder being arranged at right angles to said lower face and provided with longitudinally extending laterally spaced flanges to form work guides.

1,062,542. MILK-BOTTLE. FRANK J. KENDRICK, Schenectady, N. Y., assignor of forty-nine one-hundredths to Daniel E. McCarthy, Schenectady, N. Y. Filed Jan. 7, 1913. Serial No. 740,594. (Cl. 229—1.)



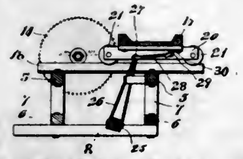
A conically formed bottle made of light fibrous material, impervious to water, with a closure comprising a thin resilient disk, an annular flange at the edge thereof closely engaging the sides of the bottle; an outwardly projecting lip around the edge of the flange adapted to penetrate the inner walls of the bottle when in position, substantially as described.

1,062,543. STORE FURNITURE. LOUIS F. KONIAKOWSKY, Ellinger, Tex. Filed Oct. 11, 1911. Serial No. 654,093. (Cl. 73—9.)



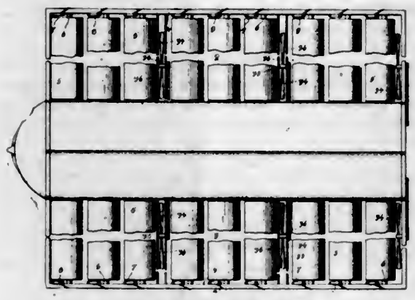
In a ribbon case containing drawers, a plurality of shafts in said drawers one for each drawer for mounting spools of ribbon thereon, a train of gears connected to each of the several shafts for indicating the amount of ribbon withdrawn from the case, a pin seated in the walls of the case adapted to lock the gears and the shafts to prevent the withdrawal of ribbon from particular spools, and an upwardly curved spring in the bottom of each drawer to press the terminal of the ribbon into engagement with the spool.

1,062,544. WOOD-SAWING MACHINE. WILLIAM KROPP, Maple City, Mich. Filed June 6, 1911. Serial No. 631,573. (Cl. 143—52.)



In a device of the kind described a combination with a supporting frame, and an elongated work supporting carriage movable laterally thereof; of means to urge said carriage in one direction including a plurality of levers having widened lower ends forming elongated sockets, pivot means for supporting said levers intermediate their ends, links connecting said carriage and the upper ends of said levers, and a weight member fixedly secured in said elongated sockets whereby said levers are compelled to move in unison.

1,062,545. AIRSHIP. CHESTER ARTHUR LEWIS, St. Louis, Mo. Filed May 20, 1911, Serial No. 628,468. Renewed Oct. 11, 1912. Serial No. 725,308. (Cl. 244—14.)



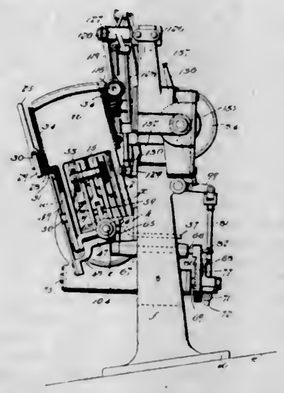
1. An air ship comprising an elongated car extending longitudinally in the line of flight, wing frames secured to the opposite sides of the car and extending laterally therefrom, said wing frames being substantially coextensive in length with the car, transverse axles upon the wing frames having passages leading therethrough to the interior of the car, a longitudinal series of wings pivotally mounted upon the axles of each wing frame, and controlling means for tilting said wings including flexible elements extending through the passages of the axles.

2. An air ship comprising an elongated car extending longitudinally in the line of flight, wing frames attached to and projecting laterally from the sides of the car, a longitudinal series of vanes pivoted to tilt vertically on hollow axes carried by each wing frame, connections leading from said vanes through said hollow axes to the interior of the car, and controlling mechanism operating through said connections for tilting the wings, said mechanism being operative to tilt the wings simultaneously upwardly or downwardly or simultaneously in opposite directions vertically.

3. An air ship comprising an elongated car extending longitudinally in the line of flight, wing frames attached to and projecting laterally from the sides of the car, hollow transverse axles carried by each wing frame and communicating with the interior of the car, a series of vanes pivoted to tilt vertically upon the axles of each wing frame and provided with guide arms, curved guides upon the wing frames engaged by said guide arms, flexible connections attached to the guide arms and extending in guided relation to the guides inwardly to the car through the hollow axles, and means coupled to said connections whereby tilting motion may be imparted to the vanes.

4. An air ship comprising an elongated car extending longitudinally in the line of flight, wing frames attached to and projecting laterally from the car, vanes pivotally mounted to tilt vertically on hollow axes carried by each wing frame, shafts disposed longitudinally within the car, flexible connections between said shafts and the vanes for tilting the latter up or down, said connections extending through said hollow axes, control shafts, gearing between said control shafts and the first named shafts, and controlling mechanism operative for rocking said control shafts in the same direction or in opposite directions simultaneously.

1,062,546. BROOM-SEWING MACHINE. ANDREW E. MILLER, Baltimore, Md., assignor to Hamilton Cassard, Baltimore, Md. Filed Oct. 5, 1910. Serial No. 585,525. (Cl. 112—43.)



1. In a broom sewing machine, the combination of a support; a vise pivotally mounted on said support; a rotatable gear wheel; a band adapted to clamp the vise to said gear wheel whereby to move the vise; a screw gear meshing with said gear wheel for actuating the same; and means for intermittently rotating said screw gear, substantially as described.

2. In a broom sewing machine, the combination of a support; a vise pivotally mounted on said support; a clamp comprising a pair of jaws vertically movable within said vise; members pivotally mounted on the vise and provided with geared elements; connections between said jaws and said pivoted members; means for moving said members whereby to raise and lower the jaws; and means for imparting an intermittent movement to said vise, substantially as described.

3. In a broom sewing machine, the combination of a support; a vise pivotally mounted on said support; a clamp comprising a pair of jaws vertically movable within said vise; a pair of arms pivotally mounted on the vise and provided with intermeshing sector gears; rods connecting said arms with the clamp jaws; means for swinging one of said arms whereby to raise and lower the jaws; and means for imparting an intermittent movement to said vise, substantially as described.

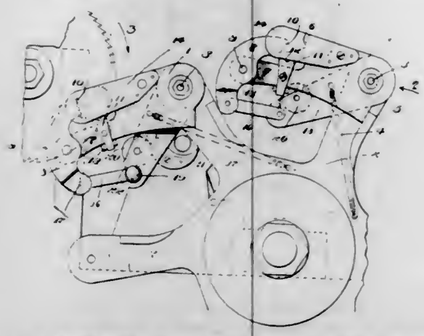
4. In a broom sewing machine, the combination of a support; a vise pivotally mounted on said support; a worm gear journaled on said support coaxial with the vise pivot; an arm connected to said vise; a lever and band carried by said arm, said band adapted to engage with said worm gear whereby to swing the vise, and said band lever adapted for manipulating the band; a shaft journaled on the support; a screw gear on said shaft meshing with said worm gear; and means for imparting intermittent rotation to said screw gear shaft, substantially as described.

5. In a broom sewing machine, the combination of a support; a vise pivotally mounted on said support and

adapted to receive brooms of different widths; means for imparting an intermittent swinging movement to the vise comprising a rotatable shaft; a pawl and ratchet, an arm for actuating the pawl, a rod having slidable engagement with said arm, and actuating mechanism for moving the rod; a slidable sleeve; connections between the sleeve and the vise for sliding the sleeve in accordance with the thickness of broom inserted in the vise; a shaft journaled on the support; an arm mounted on the shaft and engaging with said sleeve; a second arm mounted on the shaft; and a link connected to said second arm; said link having connection with the rod slidable on the pawl actuating arm whereby to control the operation of the pawl to determine the rate of swinging movement of the vise, substantially as described.

[Claims 6 to 28 not printed in the Gazette.]

1,062,547. WORK-HOLDER. THOMAS F. MORRISSEY, West Orange, N. J., assignor to United Button Company, a Corporation of New York. Original application filed July 25, 1910, Serial No. 573,799. Divided and this application filed Nov. 6, 1911. Serial No. 658,710. (Cl. 143—57.)



1. In a machine of the character set forth, a work-holder comprising: a fixed jaw, a movable jaw, a cradle pivotally supported at an angle to the fixed jaw, and means for exerting closing force on the movable jaw thereby holding the work against the fixed jaw and the cradle.

2. In a machine of the character set forth, a work-holder comprising: a fixed jaw, a movable jaw, a cradle pivotally supported at an angle to the fixed jaw, means for exerting closing force on the movable jaw thereby holding the work against the fixed jaw and the cradle, and confining gages carried by the fixed jaw embracing the work at an angle to the fixed and movable jaws and at an angle to the cradle.

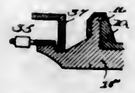
3. In a device of the character set forth, a work-holder comprising: a fixed jaw, a movable jaw, a cradle straddling the fixed jaw, cushioning means between the fixed jaw and said cradle, and means for operating the movable jaw.

4. A work-holder of the character set forth, comprising: a supporting member pivotally supported at one end and provided with a fixed jaw, a movable jaw pivoted on the opposite end of the supporting member, a toggle connected between the movable jaw and a center concentric with the pivotal support of the supporting member, and means acting on the toggle to normally hold the movable jaw in its closed position.

5. A work-holder of the character set forth, comprising a supporting member pivotally supported at one end and provided with a fixed jaw, a movable jaw pivoted on the opposite end of the supporting member, a cradle pivotally mounted on the supporting member at a point intermediate the relatively fixed and movable jaws, a toggle connected between the movable jaw and a center concentric with the pivotal support of the supporting member, and means acting on the toggle to normally hold the movable jaw in its closed position.

[Claims 6 to 13 not printed in the Gazette.]

1,062,548. CONVEYER. WILLIAM F. MURPHY, Iowa City, Iowa. Original application filed Feb. 11, 1911, Serial No. 608,089. Divided and this application filed Nov. 29, 1911. Serial No. 663,081. (Cl. 193—2.)



1. A conveyer comprising sections arranged close together and having ribs and end portions extending outward beyond the ribs, belts connected to the said extended end portions of the sections, and a covering of refractory material overlying the top and the front and rear sides of each section and overhanging the ribs thereof; the said ribs and the overhanging portions of the refractory coverings serving to form continuous retaining walls on the upper stretch of the conveyer.

2. A conveyer comprising sections arranged close together and having ribs and end portions extending outward beyond the ribs and having depressions, belts connected to the said extended end portions of the sections, a covering of refractory material overlying the top and the front and rear sides of each section and overhanging the ribs thereof; the said ribs and the overhanging portions of the refractory coverings serving to form continuous retaining walls on the upper stretch of the conveyer, and longitudinal fixed guards having depending portions disposed in the said depressions in the end portions of the sections for the purpose set forth.

1,062,549. HINGE MECHANISM. ALONSON D. PERKINS, Los Angeles, Cal. Filed June 27, 1911. Serial No. 635,682. (Cl. 21—81.)

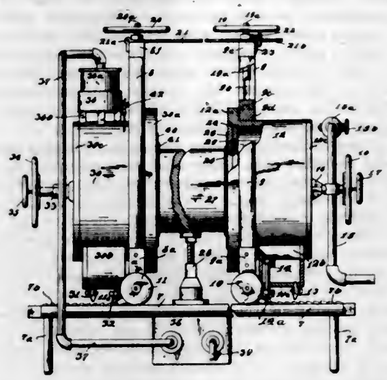


A friction-locked hinge comprising complementary hinge-members, one of said members having an annular interior friction surface and forming a housing for a clutch device, segmental friction blocks disposed in said housing and having an arcuate outer contour to engage said friction surface, springs interposed between said blocks and bearing upon opposite ends thereof, and the other hinge-member having a disk-shaped head bearing against the side-periphery of the complementary member and having separate lugs adapted to engage said friction blocks intermediate said springs.

1,062,550. APPARATUS FOR TREATING WOOD. JOHN PETSCHAUER, Chicago, Ill. Filed June 10, 1912. Serial No. 702,640. (Cl. 99—12.)

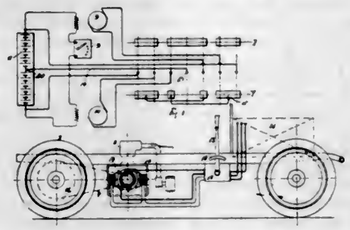
1. In an apparatus for coloring wood in log form, a main supporting frame, an auxiliary frame mounted on rollers and longitudinally adjustable on said main frame, a charging cylinder vertically and laterally adjustable on said auxiliary frame, flexible means for conducting coloring fluid to said cylinder, a second frame mounted on rollers and adjustably mounted on said main frame, an exhaust cylinder vertically and longitudinally adjustable

on said second auxiliary frame, a filter arranged in said exhaust cylinder, means for locking the tops of said auxiliary frames together, means for exhausting air from said exhaust cylinder, means for withdrawing residues from said charging and exhaust cylinders, and means for centering a log relative to said cylinders.



2. In an apparatus for coloring wood in log form, a main supporting frame, a roller supported auxiliary frame longitudinally adjustable on said main frame, means for holding said frame in an adjusted position, a charging cylinder vertically and laterally adjustable on said auxiliary frame, log centering means passing through said cylinder, means for conducting coloring fluid to said cylinder, means for drawing off surplus fluid from said cylinder, a second auxiliary frame longitudinally adjustable on said main frame, an exhaust cylinder vertically and laterally adjustable on said auxiliary frame, log centering means passing through said cylinder, means for drawing off residues from said exhaust cylinder, means for locking said frames together, and means for effecting tight joints between the ends of a log and said cylinders.

1,062,551. ELECTROMECHANICAL SYSTEM FOR THE PROPULSION OF AUTOMOBILES. HENRI PIEPER, Liege, Belgium. Filed Sept. 25, 1906. Serial No. 336,122. (Cl. 171—315.)



1. In an electro-mechanical propulsion means for vehicles, the combination with independently rotatable coaxial driving wheels on the opposite sides of a vehicle, of a plurality of electro-mechanical units each comprising a thermal motor and an electric machine mechanically connected, means for mechanically connecting the electric machine and thermal motor of each unit with a driving wheel, each of the electric machines being capable of operating either as a generator or as a motor and being arranged to drive the wheel connected thereto independently of the other wheel and unit, an accumulator, and means including electric connections between the electric machines and the accumulator and a controller adapted to connect the electric machines in series or in parallel with one another and the accumulator.

2. In an electro-mechanical propulsion means for vehicles, the combination with independently rotatable driving wheels, of a plurality of electro-mechanical units each comprising a thermal motor mechanically connected to an electric machine, means for mechanically connecting each unit with a driving wheel independently of the other wheel and unit, an accumulator, and means for electrically connecting the electric machine with the accumulator and for insuring the independent electrical operation of said machines arranged to prevent one machine from reversing the other, each electric machine being capable of operating either as a generator or as a motor.

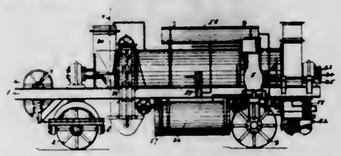
3. In an electro-mechanical propulsion means for vehicles, the combination with the independently rotatable driving members of the vehicle, of a plurality of units each including a dynamo, means mechanically connecting each unit with a driving member, independently of the other member and unit, an accumulator, means for connecting said dynamos in series to said accumulator, and an electrical connection from the junction of said dynamos to an intermediate point on the accumulator.

4. In an electro-mechanical propulsion means for vehicles, the combination with the independently rotatable driving members of the vehicle, of a plurality of electro-mechanical units, each comprising a thermal motor and a dynamo mechanically connected, means mechanically connecting each unit with a driving member, independently of the other member, and unit, an accumulator, means electrically connecting the dynamos in series, and means for electrically connecting a portion of the accumulator between the terminals of one dynamo and another portion thereof between the terminals of another dynamo, said dynamos being capable of operating either as generators or motors.

5. In an electro-mechanical propulsion means for vehicles, the combination with the independently rotatable driving members of the vehicle, of a plurality of electro-mechanical units, each comprising a thermal motor and a dynamo mechanically connected, means mechanically connecting each unit with a driving member, independently of the other member and unit, an accumulator, means for connecting said dynamos in series between the terminals of the accumulator, and means connecting an intermediate point of said accumulator with the junction of said dynamos, said dynamos being capable of operating either as generators or motors.

[Claim 6 not printed in the Gazette.]

1,062,552. ROAD-SURFACING MACHINE. MICHAEL A. POPKESS, Kansas City, Mo. Filed Aug. 21, 1911. Serial No. 645,229. (Cl. 94—6.)



1. A machine for treating earthy material to form a waterproof surface for roadways and the like, comprising in combination, a combined pulverizer and drier, comprising a shell containing pulverizing means adapted to feed the material through the same, means to introduce the material into the front end of the shell and means to cause a current of heated gases to flow through the same in the same direction as the material travels, means at the rear end of the shell to allow the gases to escape while retaining the pulverized material, a mixer below said rear end into which the material is delivered, and means to introduce a liquefied binder into said mixer.

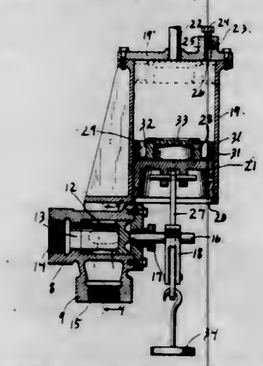
2. A machine for treating earthy material to form a waterproof surface for roadways and the like, comprising in combination, a combined pulverizer and drier, comprising a shell containing pulverizing means adapted to feed the material through the same, means to introduce the material into the front end of the shell and means to

cause a current of heated gases to flow through the same in the same direction as the material travels, means at the rear end of the shell to allow the gases to escape while retaining the pulverized material, a mixer below said rear end, a weighing box above said mixer into which the pulverized material falls and which, in turn, delivers predetermined quantities of the material into said mixer, and means to introduce measured quantities of a liquefied binder into said mixer.

3. In a machine for treating earthy material to form a waterproof surface for roadways and the like, the combination of a combined pulverizer and drier, comprising a shell containing pulverizing means adapted to feed the material through the same, means to introduce the material into the front end of the shell and means to cause a current of heated gases to flow through the same in the same direction as the material travels, means connected to the discharge end of the shell to allow the gases to escape while retaining the pulverized material, a mixer into which the material from said last mentioned means is delivered, and means to introduce a liquefied binder into said mixer.

4. In a machine for treating earthy material to form a waterproof surface for roadways and the like, the combination of a combined pulverizer and drier, comprising a shell containing pulverizing means adapted to feed the material through the same, means to introduce the material into the front end of the shell and means to cause a current of heated gases to flow through the same in the same direction as the material travels, a dust collector connected to the rear end of the shell to allow the gases to escape while retaining the pulverized material, a mixer, weighing box between said mixer and said dust collector, and means to introduce measured quantities of a liquefied binder into said mixer.

1,062,553. AUTOMATIC VALVE-CONTROLLING MEANS. RAY W. PRESTON, Connersville, Ind., assignor to United Vacuum Appliance Company, Paterson, N. J., a Corporation of New Jersey. Filed June 24, 1912. Serial No. 705,518. (Cl. 137—26.)



1. An automatic controlling means, comprising a vacuum cylinder, a main member positioned within the cylinder and movable therein by atmospheric pressure, and an auxiliary member positioned within the cylinder and movable in one direction by the main member and independently movable in the opposite direction.

2. An automatic controlling means, comprising a vacuum cylinder, a main piston positioned within the cylinder and movable therein by atmospheric pressure, and an auxiliary piston positioned within the cylinder and movable in one direction by the main member and independently movable in the opposite direction, said auxiliary piston adapted to be held in a position of rest by atmospheric pressure.

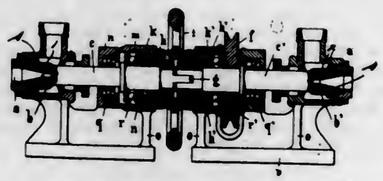
3. An automatic controlling means, comprising a vacuum cylinder provided with an outlet opening and an inlet opening, a main piston within the cylinder and movable therein in one direction by atmospheric pressure, and an auxiliary piston positioned within the cylinder and movable in one direction by the main piston to a position to seal the outlet opening of the cylinder.

4. An automatic controlling means, comprising a vacuum cylinder provided with an opening through which the air is exhausted from the cylinder and also provided with an air inlet opening, means for adjusting the size of said inlet opening, a main piston within the cylinder and movable therein in one direction by atmospheric pressure, and an auxiliary piston positioned within the cylinder and movable in one direction by the main piston to seal the outlet opening of the cylinder, said auxiliary piston adapted to be held in its sealing position while the main piston is dropping to its normal position of reat.

5. An automatic controlling means, comprising a vacuum cylinder provided with an opening through which the air is exhausted from the cylinder and also provided with an air inlet opening, means for adjusting the size of said inlet opening, a main piston within the cylinder and movable therein in one direction by atmospheric pressure, a connecting member depending from said piston, an auxiliary piston positioned within the cylinder and movable in one direction by the main piston to a position to seal the exhaust opening of the cylinder, and a sealing member carried by the auxiliary piston, said auxiliary piston adapted to be held in its sealing position while the main piston is dropping to its normal position of rest.

[Claim 6 not printed in the Gazette.]

1,062,554. ARRANGEMENT FOR MIXING EMULSIONS. EDUARD SCHMIDT, Lübeck, Germany, assignor to The Firm of Wilh. G. Schröder, Lübeck, Germany. Filed Feb. 8, 1912. Serial No. 676,361. (Cl. 99—2.)



1. In an apparatus for mixing emulsions, the combination of a fixed and a revoluble member disposed in axial relation, one of said members being of a convex construction and having a stepped acting face; the other of said members being of concave construction and having a stepped coacting face, said coacting faces adapted to work the material; and means for axially adjusting one of said members to vary the extent of space between said coacting faces, substantially as described.

2. In an apparatus for mixing emulsions, the combination of a fixed and a revoluble member disposed in axial relation, one of said members having a central opening for feeding the liquid, and being of convex construction and having a stepped acting face; the other of said members being of concave construction and having a stepped and coacting face, said coacting faces adapted to work the material; and means for axially adjusting one of said members to vary the extent of space between said coacting faces, substantially as described.

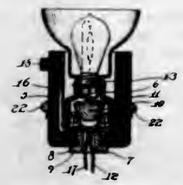
3. In an apparatus for mixing emulsions, the combination of a fixed member of convex construction and having a stepped acting face; a revoluble shaft having a complementary coacting working face; a pulley fixed on said revoluble shaft; a screw-threaded collar mounted to move axially on said shaft; a thrust bearing interposed between said collar and said pulley; and a hand-turning wheel having screw-threaded engagement with said collar and adapted to adjust the same for varying the degree of thrust on said revoluble shaft, substantially as described.

4. In an apparatus for mixing emulsions, the combination of oppositely disposed fixed members having stepped acting faces; a divided and revoluble shaft mounted coaxially with and intermediate said fixed members, said shaft having the respective ends thereof constructed with complementary stepped coacting faces; a pulley mounted on said shaft; a pair of collars axially movable on said shaft; thrust bearings interposed between the shaft sections and said collars; and a hand-turning wheel having screw-threaded connection with said collars and operable to move the same for varying the degree of thrust on said shaft sections, substantially as described.

5. In a homogenizer two coacting homogenizing elements having stepped squeezing surfaces, and means for admitting fluid between the surfaces.

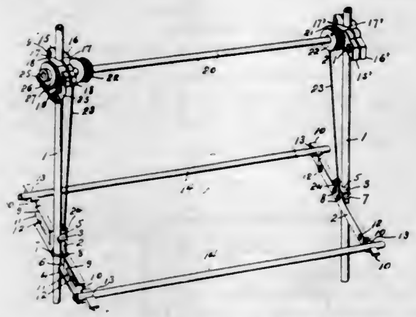
[Claim 6 not printed in the Gazette.]

1,062,555. ELECTRIC FIXTURE. EDWARD L. SIMONS, Lansdowne, Pa., assignor of one-half to Henry Eneu Johnson, Lansdowne, Pa. Filed Oct. 1, 1912. Serial No. 723,296. (Cl. 173—355.)



In an electrical fixture, in combination, a shell of insulating material, a metallic socket carried by the interior of said shell, an electrical connection one pole of which is carried by but insulated from said socket, a spring carried by said socket and in electrical connection with the other pole of the electrical connection, an electrically operated device adapted to be removably carried by the neck of said socket one pole of which is in contact with the pole carried by and insulated from said socket, and a means whereby said spring may be moved at will into contact with the other pole of said device in order to complete the circuit.

1,062,556. ADJUSTABLE SHELF MECHANISM. MICHAEL H. SMITH, Kansas City, Mo. Filed June 20, 1912. Serial No. 704,860. (Cl. 211—27.)



1. In an adjustable shelf mechanism, two vertical posts, two shelf members slidable on said posts respectively, two shafts supports provided with means for being clamped to said posts respectively, a shaft rotatively mounted in said shaft supports, a worm wheel secured to said shaft, a worm rotatively mounted on one of said shaft supports and meshing with said worm wheel, and means actuated by said shaft for lifting said shelf members.

2. In an adjustable shelf mechanism, two vertical posts, two shelf members slidable on said posts respectively, two shaft supports mounted respectively on said posts, each shaft support comprising two post clamping members and bolts connecting said post clamping members, one member of each shaft support having a shaft bearing at one side of the adjacent post, a shaft rotatively mounted in said bearings, means for rotating the shaft, and means actuated by the shaft for lifting the shelf members.

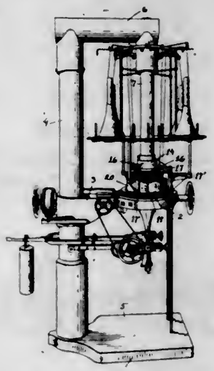
3. In an adjustable shelf mechanism, two vertical posts, two shaft supports mounted respectively on said posts, each shaft support comprising two clamping members and bolts extending therethrough, one of the clamping members of one shaft support having two arms, a shaft rotatively mounted in said two shaft supports and disposed between said two arms, a worm wheel secured to said shaft, a worm rotatively mounted in said arms and meshing with said worm wheel, a shelf slidably engaging said posts, and means actuated by said shaft for lifting said shelf.

4. In an adjustable shelf mechanism, two vertical posts, two shaft supports mounted respectively on said posts, a shaft rotatively mounted in said shaft supports, means for rotating said shaft, two channel shelf members respectively slidably mounted on said posts, each channel shelf member having in its flanges notches in which the adjacent post is mounted, guides in said shelf members between the flanges thereof and respectively engaging said posts for retaining the posts in said notches, and means connected with said shaft for lifting said shelf members.

5. In an adjustable shelf mechanism, a shaft support comprising two members one of which is provided with a shaft bearing, and means for clamping the two members together, one of the members having two arms, a shaft rotatively mounted in said shaft bearing, a worm wheel secured to the shaft, and a worm meshing with the worm wheel and rotatively mounted in said two arms.

[Claim 6 not printed in the Gazette.]

1,062,557. KNITTING-MACHINE. BERNARD T. STEBER, Utica, N. Y., assignor to The Steber Machine Company, Utica, N. Y., a Corporation of New York. Filed Nov. 29, 1910. Serial No. 594,803. (Cl. 66—22.)



1. In a knitting machine, two needle carriers, two sets of needles in one carrier, two sets of needles in the other carrier, four yarn feeds, cams for actuating one set of needles in one of the needle carriers arranged to successively operate the needles of such set to knit two successive yarns and to be idle with the remaining two yarns, similar cams for the other set of needles of the last-mentioned carrier for similarly operating such needles, and cams for the other needle carrier arranged to operate the needles of each set successively.

2. In a knitting machine, two needle carriers, a set of needles in one of said carriers, cams for actuating the needles of said set a multiplicity of times in succession adapted to allow the needles to remain inactive during a portion of the operation of the machine, a second set of needles in the same carrier, and cams for similarly actuating the second set of needles and allowing the same to remain inactive, the cams of the two sets being disposed

to cause one set to be actuated while the other remains inactive, a plurality of needles in the other carrier, cams for actuating the latter sets successively, and yarn feeds for said needles.

3. In a knitting machine, the combination of two needle carriers, herein identified as first and second, two sets of needles in each carriers, yarn feeds for the needles, cams for actuating the needles of the first needle carrier for causing one set of such needles to take yarn from alternate feed only and for causing the other set of the first carrier to operate, for taking yarn from other alternate feeds only, cams for actuating one set of needles of the second carrier for taking yarn from two successive feeds, and cams for actuating the other set of needles of the second carrier for causing the same to take yarn from two other successive feeds.

4. In a knitting machine, the combination of two needle carriers, herein identified as first and second, two sets of needles in each carrier, yarn feeds for the needles, cams for actuating the needles of the first needle carrier for causing one set of such needles to take yarn from alternate feeds only and for causing the other set of the first carrier to operate for taking yarn from other alternate feeds only, cams for actuating one set of needles of the second carrier for taking yarn from two successive feeds, and cams for actuating the other set of needles of the second carrier for causing the same to take yarn from two other successive feeds, the needles of the second carrier being disposed for taking yarn first at one side of the space between active needles of the first carrier and then from the other side of the space between other active needles of the first carrier, there being an equal number of needles in each set in both carriers.

5. In a knitting machine, two needle carriers, herein identified as first and second, a set of needles in the second carrier, two sets of needles in the first carrier, yarn feeds for the needles, a cam for actuating the needles of one set of the first carrier to take yarn from one yarn feed, a cam for actuating the needles of the other set of the first carrier to take yarn from another feed, and cams for actuating the needles of the set in the second carrier for taking first a yarn of one feed and a yarn of the other feed, the needles of the set in the second carrier being equal in number to one half the total number of needles in the first carrier.

[Claims 6 to 14 not printed in the Gazette.]

1,062,558. SAFETY ATTACHMENT FOR WAGON-REACHES. ALVIN C. STOPP, Stoppington, Alberta, Canada. Filed Oct. 30, 1912. Serial No. 728,640. (Cl. 21—39.)



1. A safety attachment for reaches, including a reach engaging structure, flexible means for connecting opposite sides of said structure to the load, and a spacing element extending upwardly from the structure.

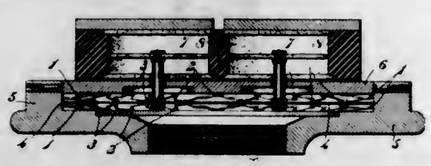
2. A safety attachment for reaches, including a structure for attachment to the intermediate portion of a retch, flexible devices for connecting opposite sides of the structure to opposite sides of the load, said flexible means cooperating to limit the downward movement of the reach and the structure thereon, and an upwardly extending spacing device upon said structure for limiting the upward movement of the reach relative to the load.

3. A safety attachment for reaches, including oppositely disposed arched top and bottom plates for engaging a reach, means for securing the plates together, means extending from the sides of said plates for engaging the load to hold the plates against downward movement, and a spacing element upstanding from the top plate.

4. A safety attachment for reaches, including oppositely disposed arched top and bottom plates for engaging a reach, means for securing the plates together, means extending from the sides of said plates for engaging the load to hold the plates against downward movement, and a spacing plate detachably mounted within and extending upwardly from the top plate.

5. The combination with a vehicle including a reach, of top and bottom plates detachably secured together and extending around the reach adjacent the center thereof, an upwardly extending spacing device carried by the top plate, and means extending in opposite directions from the plates for engaging the wagon load to limit the downward movement of the plates and reach relative to the load.

1,062,559. CUSHION FOR DIAPHRAGMS OF TELEPHONIC AND LIKE INSTRUMENTS. WILLIAM PRESTON STUNZ, Lansdowne, Md., assignor to George Regester Webb, Baltimore, Md. Filed Sept. 23, 1912. Serial No. 721,783. (Cl. 179—115.)



1. A cushion for the diaphragm of a telephonic or like instrument comprising an elastic loop-formed member having undulatory deflected branches.

2. A cushion for the diaphragm of a telephonic or like instrument comprising an elastic loop-formed member having oppositely deflected undulatory branches.

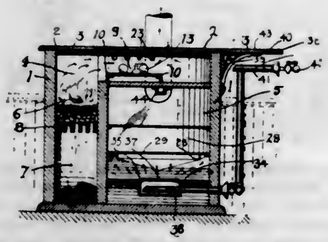
3. A cushion for the diaphragm of a telephonic or like instrument comprising an elastic loop-formed annulus having deflected undulatory branches.

4. A cushion for the diaphragm of a telephonic or like instrument comprising an elastic loop-formed annulus having undulatory branches, the inner portions of which are deflected.

5. A cushion for the diaphragm of a telephonic or like instrument comprising an elastic loop-formed annulus having undulatory branches, the inner portions of which are deflected in opposite directions.

[Claims 6 and 7 not printed in the Gazette.]

1,062,560. STOVE. WILLIAM H. VAHL and WILLIAM J. PETRASEK, Chicago, Ill. Filed Nov. 20, 1912. Serial No. 732,586. (Cl. 126—36.)

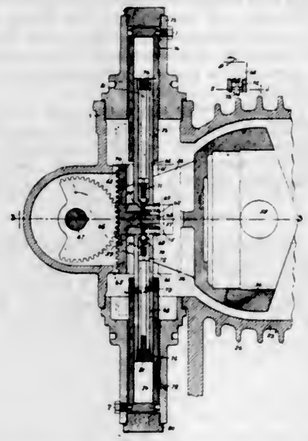


1. In combination with a stove, of guide members arranged therein, transverse bars having their ends slidably mounted upon said guide members, a burner mounted upon said bars for sliding movement within the stove, a water coil above said burner and means connecting said coil with a supply tank whereby the water therein will be readily heated.

2. The combination with a stove body having a longitudinal chamber, of guide members arranged within said chamber, a burner slidably mounted upon said guide members, an L connected to said burner, a mixer upon the other end of said L, a feed pipe having one end slidably mounted in said mixer, a main pipe in which the other end of the feed pipe is mounted and means carried by said feed pipe for limiting the sliding movement thereof.

3. The combination with a stove body having a longitudinal chamber, guide members arranged within said chamber, a burner slidably mounted upon said guide members, an L connected to said burner, a mixer on the other end of said L, a feed pipe having one end slidably mounted in said mixer, a main pipe in which the other end of the feed pipe is mounted, an enlarged portion formed on said feed pipe and arranged within the main pipe to prevent the entire removal of the feed pipe, and packing arranged within the main pipe around the feed pipe.

1,062,561. OSCILLATION-CONTROL MECHANISM. HARVEY D. WILLIAMS and REYNOLD JANNEY, New York, N. Y. Original application filed June 3, 1911, Serial No. 631,092. Divided and this application filed June 29, 1912. Serial No. 706,612. (Cl. 74—69.)



1. In a mechanical structure, the combination of an adjustable part which during the operation of said structure is subjected to pulsations, a piston operatively connected with said part to vary its position, stationary spaced cylinders in which the respective ends of said piston are movable, said piston having two passages leading from the respective stationary cylinders, check valves controlling said passages, an operating member having a limited movement lengthwise of the piston to first unseat one of the check valves and then engage the piston, and means for actuating said member.

2. In a mechanical structure, the combination of an adjustable part which during the operation of said structure is subjected to pulsations, a piston operatively connected with said part to vary its position, stationary spaced cylinders in which the respective ends of said piston are movable, said piston having two passages leading from the respective stationary cylinders, check valves controlling said passages, an operating member movable relatively to the piston and adapted to unseat one or the other of said check valves, and means for actuating said member.

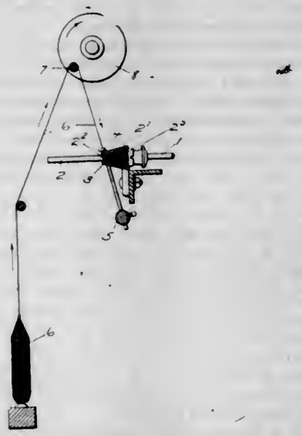
3. In a mechanical structure, the combination of an adjustable part which during the operation of said structure is subjected to pulsations, a piston operatively connected with said part to vary its position and having a transverse aperture or socket in its central portion, stationary cylinders in which the respective ends of said piston are movable, an operating member having a portion or lug projecting into said socket and capable of an independent movement therein, and means controlled by such independent movement, for opening an outlet from one or the other of said cylinders.

4. In a mechanical structure, the combination of an adjustable part which during the operation of said structure is subject to pulsations, a piston operatively connected with said part to vary its position and provided at its central portion with a transverse aperture or socket, and with communicating ports and also provided with passages leading from the piston ends to said ports, stationary cylinders in which the respective piston ends are movable and with which said passages communicate, check valves located in said passages and opening toward the cylinders and an operating member having a portion projecting into said socket and capable of an independent movement therein to unseat one or the other of said check valves.

5. In a mechanical structure, the combination of an adjustable part which during the operation of said structure is subjected to pulsations, a piston operatively connected with said part to vary its position, stationary cylinders in which the respective ends of the said piston are movable, sleeves into which said cylinders are fitted loosely, means for securing the outer portions of the cylinders to the sleeves in such manner as to allow some relative play, an operating member movable relatively to the piston, and means, controlled by such movement of the operating member, for opening an outlet from one stationary cylinder or the other.

[Claims 6 to 8 not printed in the Gazette.]

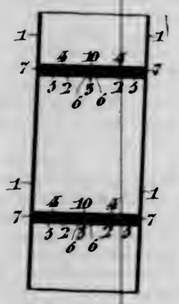
1,062,562. WINDING-MACHINE FOR YARN AND THREAD. THOMAS A. BOYD, Glasgow, Scotland. Filed Aug. 31, 1912. Serial No. 718,154. (Cl. 242—45.)



1. In a winding machine, a thread guide having a back and forth motion to build the conical nose of a pirn or the like and a positively driven rotary compensator engaging the thread in advance of said guide and having a positive take-up and let-off motion to maintain the speed of delivery from the feed, substantially constant irrespective of the variation of speed at which the thread is taken up by the pirn in winding from the base to the apex and vice versa on the conical nose of the latter.

2. In a winding machine, a thread guide having a back and forth motion to build the conical nose of a pirn or the like and a positively driven eccentric engaging the thread in advance of said guide and having a positive take-up and pay-off motion to maintain the speed of delivery from the feed, substantially constant irrespective of the variation of speed at which the thread is taken up by the pirn in winding from the base to the apex and vice versa on the conical nose of the latter.

1,062,563. FIRE-RETARDING CLOSURE. JOAH BROGDEN and JOHN W. WATKINS, Philadelphia, Pa., assignors to David Lupton's Sons Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 24, 1907. Serial No. 407,976. (Cl. 189—46.)



1. A hollow fire closure formed wholly of non-combustible material and consisting of separated walls having an air space between them, each wall being formed of a series of discontinous self-sustaining channel shaped sheet metal sections in close parallel juxtaposition to each other, said sections being connected and supported wholly by the inseparable interlocking in fixed relation of the side edges of one section with the side edges of the adjacent section, and said walls being connected and supported solely by spaced non-combustible cross partitions.

2. A hollow fire closure formed wholly of non-combustible material and consisting of separated walls having an air space between them, each wall being formed of a series of discontinuous self-sustaining channel shaped sheet metal sections in close parallel juxtaposition to each other, said sections being connected and supported wholly by the inseparable interlocking in fixed relation of the side edges of one section with the side edges of the adjacent section, and said walls being connected and supported solely by spaced non-combustible cross partitions, interlocked with the interlocking parts of the adjacent edges of said sheet metal sections.

3. A fire-retarding closure comprising a series of hollow sheet metal sections, each formed of a pair of plates having their side edges bent to form interlocking portions, united by unions, and the ends of said plates having portions bent at right angles and then back parallel to the sides of the sections; and locking members slidably engaging the bent ends of said sections.

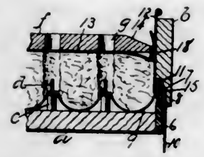
4. A fire-retarding closure comprising a series of hollow sheet metal sections, each formed of a pair of plates having their side edges bent to form interlocking portions, united by unions and the ends of said plates having portions bent at right angles, and then back parallel to the sides of the sections; a cap member fitted in the end of each section; and locking members slidably engaging the bent ends of said sections.

5. A fire-retarding closure comprising a series of hollow sheet metal sections, each formed of a pair of plates having their side edges bent to form interlocking portions, united by unions, and the ends of said plates having portions bent at right angles and then back parallel to the sides of the sections; and locking members having their edges formed with complementary bends for slidably engaging and interlocking the bent ends of said sections.

[Claim 6 not printed in the Gazette.]

1,062,564. MANUFACTURE OF CUSHIONS. WILLIAM R. DONEGAN, Hartford, Conn., assignor, by mesne assignments, to Pope Manufacturing Company, a Corporation of Connecticut. Filed July 22, 1908. Serial No. 444,757. (Cl. 155—43.)

1. A base having a welt supporting edge projecting upward therefrom, a box having a recess in its edge so formed that the sewed edge of the welt and cover will project above the lining when depressed for final fastening, a follower for packing the material within the box, and a guide to close said recess and prevent contact of the follower with the edges of the welt and cover.



2. A base having a welt supporting edge projecting upward therefrom, a box having a recess so formed with respect to said welt supporting edge as to support the sewed edge of the welt and cover above the lining when depressed, and a follower to depress the stuffed cushion and lining and having means to permit sewing of the lining to the cover while so depressed.

3. A base having a welt supporting edge projecting upward therefrom, a box having a recess so formed with respect to said welt supporting edge as to support the sewed edge of the welt and cover above the lining when depressed, and a follower to depress the stuffed cushion and lining, the edge of the follower being beveled to permit the sewing of the lining to the welt and cover while in its depressed condition.

4. A base having a welt supporting edge projecting upward therefrom, a box, and a follower located within the box to depress the stuffed cushion and lining, the edge of the follower being beveled to permit sewing of the lining to the cover while in its depressed condition.

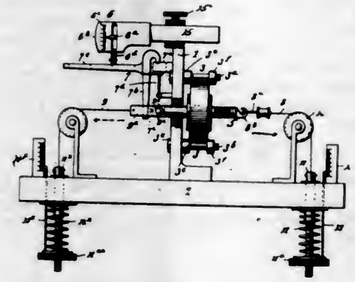
1,062,565. COMMERCIAL PACKAGE FOR EXPLOSIVE VOLATILE LIQUIDS. HARRY B. FRENCH, Philadelphia, Pa., assignor to Smith, Kline & French Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 11, 1912. Serial No. 696,557. (Cl. 215—3.)



1. A protecting covering for glass receptacles, adapted to contain explosive volatile liquids, consisting of loosely woven textile fabric surrounding the body of said glass receptacle, said covering being of such dimensions as to provide a free interspace between the walls of the glass receptacle and the textile covering.

2. A container for explosive volatile liquids, comprising a tubular glass receptacle having a projecting neck sealed by fusing the glass, and a covering for said glass receptacle, consisting of loosely woven textile fabric surrounding the body portion of said glass receptacle and having an opening therein through which said neck projects, said covering being of such dimensions as to provide a free interspace between the walls of the body portion of the glass receptacle and the textile covering.

1,062,566. MECHANISM FOR MEASURING THE PLAY BETWEEN RELATIVELY MOVABLE PARTS. MAX GOHLKE, Berlin, and WILHELM DAHLMANN, Tegel, near Berlin, Germany. Filed Jan. 29, 1910. Serial No. 540,892. (Cl. 73—51.)



1. In a mechanism for measuring the extent of play between relatively movable parts which are independent of the mechanism, the combination of means for displacing one of the parts relatively to the other to take up the play, and an indicating device adapted to be actuated by the displaced part and operating to indicate the amount of movement of said part.

2. In a mechanism for measuring the extent of the play between relatively movable parts which are independent of the mechanism, the combination of means for supporting one of the parts, means for relatively displacing the other part to take up the play, and an indicating device adapted to be actuated by the displaced part and operating to indicate the amount of movement of the displaced part.

3. In a mechanism for measuring the extent of play between the parts of anti-friction bearings, the combination of means for displacing the parts of the bearing relatively to take up the play, and an indicating device adapted to be actuated by the displaced part and operating to indicate the amount of displaced movement of said part.

4. In a mechanism for measuring the extent of play between the parts of anti-friction bearings comprising outer and inner casing elements and interposed rolling members, the combination of means for fixedly holding one of the elements, means for displacing the other element relatively to take up the play, and an indicating device adapted to be actuated by the displaced member, and operating to indicate the amount of movement of said displaced part.

5. In a mechanism for measuring the extent of play between relatively movable parts, the combination of means for supporting one part, a movable member connected with the other part, means for applying a displacing strain to said movable member to displace said part and take up the play, and an indicating device adapted to be acted on by the movable member, and operated to indicate the amount of play.

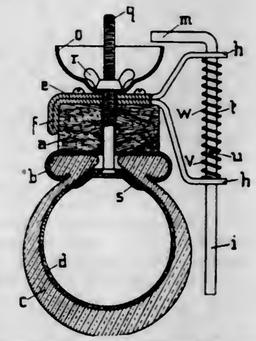
[Claims 6 and 7 not printed in the Gazette.]

1,062,567. TIRE-DEFLATION INDICATOR. HERMANN JACOBY, Eberstadt, near Darmstadt, Germany. Filed Oct. 23, 1911. Serial No. 656,202. (Cl. 116—1.)

1. In combination with a pneumatic tire and a wheel structure, of a device for indicating deflation of the tire comprising a bell, an element movably mounted on the structure for striking the bell and engaging the road and having a spring engaging member, and a rotatably mounted spiral spring engaging said member to control said element and adapted to be rotated to alter its spring action on said element, substantially as described.

2. In combination with a pneumatic tire and a wheel structure, of a device for indicating deflation of the tire comprising a bell, an element movably mounted on the structure for striking the bell and engaging the road, and a spiral spring, said element having means engaging the convolutions of the spring at a point nearer one end of the spring than the other, whereby, one portion of the spring acts as an operator and the other portion as a buffer, substantially as described.

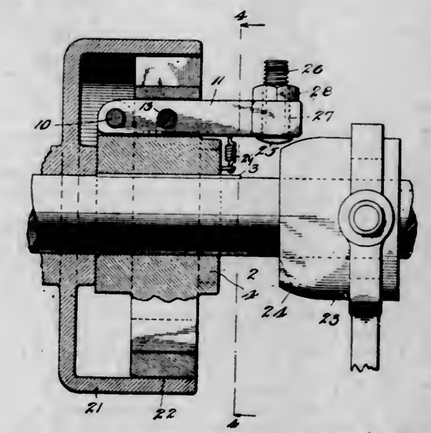
3. In combination with a pneumatic tire and a wheel structure, of a device for indicating deflation of the tire comprising a bell, a single rigid element having a bell striking portion and a road engaging portion, guiding means for said element carried by said wheel structure and maintaining the road engaging portion in range of the road for retraction of the bell striking portion away from said bell upon deflation of the tire, and an actuating spring for returning said element and engaging the striking portion with said bell, substantially as described.



4. In combination ith a pneumatis tire and a wheel structure, of a device carried by said structure for indicating deflation of the tire and comprising a bell, a road engaging and bell striking device, and a spring mechanism comprising actuating and bumper portions for engaging and freeing said device with and from the bell subsequent to actuation of said device upon deflation of the tire, substantially as described.

5. In combination with a pneumatic tire and a wheel structure, of a device for indicating deflation of the tire comprising a bell, an element movably mounted on said structure for striking the bell and engaging the road, a spiral spring for controlling said element, and means carried by said element and engaging the convolutions of said spring between the ends thereof whereby a differential spring action is imparted to said element upon deflation of the tire, substantially as described.

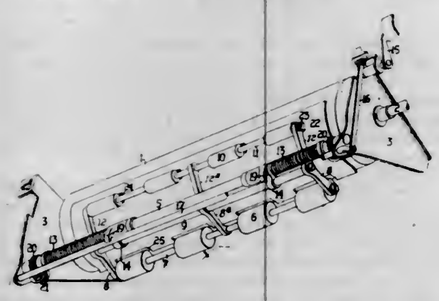
1,062,568. FRICTION-CLUTCH. PAUL B. MARFIELD, Cincinnati, Ohio, assignor of one-fourth to Dwight S. Marfield and one-fourth to Neale P. Riley, Cincinnati, Ohio. Filed Feb. 19, 1910, Serial No. 544,842. Renewed Nov. 30, 1912. Serial No. 734,378. (Cl. 192—13.)



In a clutch, the combination with a driven shaft, of a shell pulley loosely mounted thereon, a carrier block se-

cured on the shaft and located within the shell or rim of the shell pulley, a lug projecting from one side of the carrier block, a clutch ring having a pair of spaced lugs lying one on each side of said lug and in tight engagement therewith, a pair of ears formed on the carrier block diametrically opposite the lug thereon, radially extending arms formed on the carrier block at right angles to the ears and lug, said arms extending outward beyond the inner edge of the shell pulley and guiding the clutch ring, said ring having a break formed therein opposite the ears of the block and having inclined edges, a lever pivotally secured to the ears, a wedge block having inclined faces pivotally mounted upon the lever for engaging the inclined edges of the clutch ring, a spring having one end secured to the block and the other to the lever to hold the latter against centrifugal force, an adjustable abutment carried by the outer end of the lever, and a shifting cone collar mounted on the shaft and serving when shifted to raise the lever and force the wedge block between the ends of the ring to cause the latter to engage the shell pulley.

1,062,569. TYPE-WRITING MACHINE. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 18, 1910. Serial No. 544,543. (Cl. 197—127.)



1. In a typewriting machine, the combination with a platen frame and a platen therein, of a rod fixed in said frame, two levers pivoted about midway of their length on a shaft on swinging arms journaled on said fixed rod, shafts loosely connecting the ends of said levers, feed rolls for said platen on said shafts, and springs on said fixed rod and moving said swinging shaft to press said rolls against said platen.

2. In a typewriting machine, the combination with a platen frame and a platen therein, of a rod fixed in said frame, rock arms journaled on said rod, a distributer shaft resting on said rock arms and removable therefrom by lifting, a spring urging each rock arm against the platen, and feed rolls supported by said distributed shaft.

3. In a typewriting machine, the combination with a platen frame and a platen therein, of a rod fixed in said frame, rock arms journaled on said rod, a distributer shaft resting on said rock arms and removable therefrom by lifting, a spring for each arm encircling said rod and having adjustable tensioning means, and feed rolls supported by said distributer shaft.

4. In a typewriting machine, in combination, a platen frame, a platen mounted thereon, a roll-frame mounted in said platen frame, feed rolls carried by said roll-frame and engaging the surface of the platen on the front and rear sides thereof, said roll-frame comprising a swiveling shaft disposed between said rolls, the ends of the roll-frame being mounted for independent swiveling movement on the shaft, separate means for resiliently pressing each end of said shaft upwardly to apply said feed rolls to said platen, means for withdrawing said shaft so as to cast off the feed rolls, and a curved deflector conforming to the curvature of said platen, and supported on said roll-frame on a single axis of rotation.

5. In a typewriting machine, in combination, a platen frame, a platen mounted thereon, a roll-frame disposed under said platen, feed rolls carried by said roll-frame to contact with the surface of the platen at its forward and rear sides, said roll-frame comprising pressure distributing levers connecting said forward and rear feed rolls, rock arms in which the roll-frame is seated, means engaging said rock arms for forcing said arms and roll-frame upwardly, a curved deflector plate conforming to the curvature of said platen and pivotally attached at the forward edge thereof to said roll-frame, and means for withdrawing said roll-frame from said platen to cast off said feed rolls.

[Claims 6 and 7 not printed in the Gazette.]

1,062,570. SPADING-MACHINE. WALTER WIRT MOORE, Sioux City, Iowa. Filed Nov. 14, 1911, Serial No. 660,279. Renewed Oct. 14, 1912. Serial No. 725,707. (Cl. 97—25.)



1. The combination with drive wheels and a frame, parallel shafts rotatably supported by the frame and having a plurality of crank arms, and means connecting the drive wheels with the shafts for the operation of the shafts, of rods connecting the crank arms of each shaft, digging tools adapted for cultivation of the ground, means adjustably securing the tools to the connecting rods whereby the tools are forced into the ground, springs on the connecting rods for permitting a lateral yielding of the tools, and springs on the securing means for mitigating the vertical jar of contact with the ground.

2. The combination with drive wheels and a supporting frame and hang bars pivotally secured to the frame, of shafts having a plurality of crank arms rotatably supported by the hang bars, means connected with the wheels for driving the shafts, rods connected to and operated by the crank arms, blocks movable on the connecting rods, digging tools having shanks adjustable in said blocks and springs on the shanks for mitigating the jar of contact with the ground.

3. The combination with drive wheels, a supporting frame, hang bars pivotally secured to the frame and means for raising and lowering said hang bars, of parallel shafts having a plurality of crank arms rotatably supported by the hang bars, means for driving the shafts, rods connecting the crank arms on each shaft, blocks movable on the connecting rods, springs on the connecting rods in front of the blocks and digging tools having shanks adjustable in said blocks.

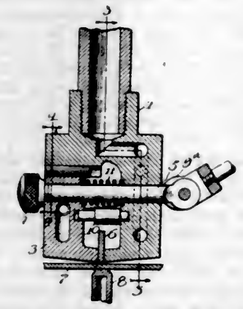
1,062,571. PROCESS OF ELECTRIC WELDING. CHARLES R. MURRAY, LEWIS R. BRINK, and WALTER K. MALMSTROM, Chicago, Ill., assignors to Barnhart Bros. & Spindler, Chicago, Ill., a Corporation of Illinois. Filed Apr. 15, 1912. Serial No. 691,017. (Cl. 219—10.)

1. The process of welding the straight edge of a metal strip to the face of a substantially plane plate which consists in clamping the strip with its straight edge facing the plate, supporting the plate on the side opposite said strip, forcing the edge of the strip firmly against the face of the plate, and passing an electric current through the strip and plate.

2. The process of welding an upstanding strip to the face of a plate which consists in engaging the strip on opposite sides substantially at the edge to be welded, engaging the plate substantially opposite the spot to be welded, and passing an electric current between the places of engagement.

3. The process of welding an upstanding strip to the face of a plate which consists in engaging the strip at

substantially the edge to be welded, engaging a small area of the plate opposite the spot to be welded, and passing an electric current between the places of engagement.



4. The process of welding contacting metal pieces together which consists in passing the electric current between points at opposite sides of the same part of one of the pieces to be welded, and a point on the other piece substantially opposite the locus of the weld.

5. The process of welding contacting metal pieces together which consists in causing the electric current to pass between substantially the edge portion to be welded of one piece, and a point on the other piece substantially opposite the locus of the weld.

[Claims 6 and 7 not printed in the Gazette.]

1,062,572. FLYING-MACHINE. CHARLES E. SMITH, Paterson, N. J. Filed Apr. 27, 1912. Serial No. 693,625. (Cl. 244—14.)



1. In a plane for a flying machine, a series of unitary plane-sections arranged in the same geometric plane, each plane-section having an individual frame and individual upper and lower sheet-like members attached respectively to the upper and lower sides of said frame, and means, extending between the upper and lower sheet-like members of said plane-sections, for securing said plane-sections rigidly together, substantially as described.

2. In a plane for a flying machine, a series of unitary plane-sections arranged in the same geometric plane, each plane-section having an individual frame and two transverse tubular members forming parts of said frame and an individual sheet-like member attached to said frame, the tubular members of the several plane-sections being alined with each, and means, penetrating the several tubular members of said plane-sections, for securing said plane-sections rigidly together, substantially as described.

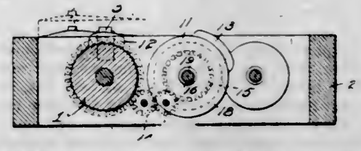
3. In a plane for a flying machine, a series of unitary plane-sections arranged in the same geometric plane, each plane-section having an individual frame and two transverse tubular members forming parts of said frame and an individual sheet-like member attached to said frame, the tubular members of the several plane-sections being alined with each, and means, including an elongated stiffening structure penetrating the several tubular members of said plane-sections, for securing said plane-sections rigidly together, substantially as described.

4. In combination, a horizontal plane, a structure to be carried thereby having bosses 7 projecting therefrom, and means for sustaining said structure from the plane including upper and lower sets of stay-rods, joint-members respectively alined with the stay-rods of one set and received by said bosses, a transverse pin penetrating each of the latter stay-rods and corresponding joint member, said pin being movable from a position exterior of, to a position within, the corresponding boss upon longitudinal movement of the stay-rod toward the boss, and means, engaging said structure and attached to the joint member, for drawing said stay-rod relatively toward the boss, substantially as described.

5. In combination, with the hollow carrier, means attached to the carrier for supporting the same comprising a hollow substantially horizontal plane comprising upper and lower sheet-like members converging together at the front and rear and arranged above a carrier, a motor arranged in the carrier, propellers, rotary shafts carrying the propellers and journaled in said plane between the members thereof, and means for transmitting power from the motor to said shafts, said means being inclosed within the carrier and the plane, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,062,573. PRINTING-PRESS. JOHN A. WHITTINGTON, Spartanburg, S. C. Filed Apr. 17, 1912. Serial No. 691,377. (Cl. 101—71.)



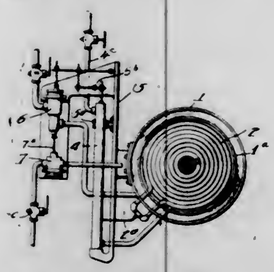
1. In a device of the kind described, the combination of a frame with a type roller and an ink roller, said type and ink rollers rotatably mounted in the frame, a depressible tripper to cause the rotation of the type roller, means secured to the type roller and the tripper to cause the rotation of the type roller in one direction when the tripper is pressed downward, and in a reverse direction while assuming an elevated position, a spring interposed between the under face of the tripper and the frame, said spring for the purpose of causing the tripper to assume an elevated position from a depressed one, thereby causing the reverse rotation of the type roller from that when the tripper is being pressed downward and means interposed between the type roller and the ink roller to cause the rotation of the ink roller in a reverse direction to that of the type roller, and means to cause the ink and type rollers to rotate at the same speed or travel the same distance when in contact.

2. In a device of the kind described, the combination of a frame with a type roller and ink roller rotatably mounted therein, a depressible tripper to cause the rotation of the type roller, means secured to the type roller and the tripper which causes the rotation of the type roller in one direction when being pressed downward and in a reverse direction when assuming an elevated position, a spring interposed between the under face of the tripper and the frame of the device to cause the tripper to assume a raised position from a lowered position, means interposed between the type roller and ink roller to cause the rotation of the ink roller in a reverse direction to that of the type roller, said means consisting of a plurality of gears, intermeshing, one of which is held to the shaft of the type roller and one of which is loosely mounted on the shaft of the ink roller, the others being interposed between them, and means to cause the ink roller and type roller to travel an equi-distance or travel at the same rate of speed when contacting, said last-named means comprising cams, one provided upon the type roller and one upon the ink roller, the last-mentioned cam having a series of teeth on its inner face, a ratchet secured upon the ink roller, said cams, when contacting, causing a series of teeth on the inner face of the cam secured to the ink roller to engage the ratchet of said roller thereby causing the rollers to rotate at the same speed while contacting and only while contacting and means to cause the cam provided for the ink roller to assume a normal position when the tripper assumes a

normal position, said means permitting the ink roller to rotate in a reverse direction only when contacted by the type roller.

3. In a device of the kind described, the combination of a frame with type roller and ink roller rotatably mounted therein, a depressible tripper to cause the rotation of the type roller, connecting means between the type roller and the tripper which causes the rotation of the type roller in one direction when being pressed downward and in a reverse direction when assuming an elevated position, a spring interposed between the under face of the tripper and the frame of the device to cause the tripper to assume a raised position from a lowered position, means interposed between the type roller and ink roller to cause the rotation of the type roller in a reverse direction to that of the type roller, said means consisting of a plurality of gears, intermeshing, one of which is held to the shaft of the type roller and one of which is mounted on a cuff loose on the shaft of the ink roller, the remaining gears being interposed between the aforesaid gears, a disk mounted loosely to the shaft of the ink roller, said disk and respective gear keyed to the identical cuff, a ratchet keyed to the shaft of the ink roller, a dog, having an enlarged end, pivoted to the disk, which dog engages the ratchet, and means to cause the ink and type rollers to travel equi-distances or at the same peripheral rate of speed, said last mentioned means comprising cams, one provided upon the type roller and the other being the enlarged end of said dog, said enlarged end having a series of teeth on its inner face, said cams, when contacting, throwing said dog out of engagement with the ratchet, and throwing said teeth on the enlarged end of the dog in engagement with the ratchet in lieu thereof, thereby causing the rollers to travel at the same rate of speed while the type is contacting the ink roller, and only while in contact, and means to cause the cam carried by the ink roller to assume a normal position, said means causing the ink roller to rotate in a reverse direction only when contacted, at other times the dog clicking over the teeth of the ratchet giving the same a new position upon the ratchet for each new stroke.

1,062,574. WATER-HEATER. CHARLES S. FOLSOM, San Diego, Cal. Filed Nov. 9, 1911. Serial No. 659,351. (Cl. 126—351.)



1. In a water heater, the combination of a multiple coil, provided with one inlet near its top, and two outlets near its bottom, a thermostat consisting of a single pipe in operative connection near its one end, with both of said outlets, said thermostat serving as a portion of the service pipe, a single valve provided with three inclosed springs regulated by means of said thermostat, a water valve for actuating said valve, and a single piece means for rigidly connecting said valves and the water heater, attached to the side of said water heater.

2. In a water heater, the combination with a multiple coil, provided with two outlets, of a thermostat consisting of a single pipe connected near its one end with both outlets of said coil, a water valve, and a single piece casting means in connection therewith for rigidly supporting said thermostat at one of its ends and a single valve provided with three inclosed springs regulated by means of said thermostat and actuated by said water valve.

3. In a water heater, the combination of a multiple coil, provided with two outlets near its lower end and an inlet at its upper end, a water-actuated valve, a one piece thermostat connected near its lower end with both of said outlets, a doubly actuated valve provided with three inclosed regulating springs in connection with said thermostat, one of its actuations being adapted to be produced by the temperature of the water in said thermostat and the other by the action of said water-actuated valve.

4. In a water heater, the combination with a thermostat composed of a single piece of pipe used also as a portion of the service pipe, of a multiple coil water receptacle divided into sections, a connection with a small opening from the lower end of the upper section to the thermostat near its lower end, a connection with a small opening from the upper end of the lower section to near the lower end of the thermostat, a large outlet from the lower end of the lower section and passing through said thermostat, an inlet connecting with the upper end of the upper section thereof, a gas valve provided with three inclosed springs, adapted to facilitate the actuation of said valve, and a single piece casting attached to the water heater and adapted to connect the one end of said thermostat and said gas valve rigidly.

5. The combination with a thermostat composed of a single pipe used also as a portion of the service pipe, of a water actuated valve, a multiple coil water receptacle provided with an inlet to the upper portion and two outlets from the lower portion, both of said outlets being connected, one above the other, to said thermostat near the lower end, and the upper one of said outlets being so arranged that the water will circulate in said water receptacle between the two outlets when the outlet from the thermostat or service pipe is closed, and a single valve provided with three inclosed springs regulated by means of said thermostat and actuated by said water-actuated valve.

[Claims 6 to 11 not printed in the Gazette.]

1,062,575. COMBINED DOOR CHECK AND SPRING. JAMES E. GIBBS, Covington, Ky. Filed Sept. 13, 1911, Serial No. 649,167. Renewed Oct. 24, 1912. Serial No. 727,624. (Cl. 16—87.)



1. A device of the class described comprising two telescoping tubes, a coiled spring arranged within one of the tubes and connected with each of the said tubes, a checking device arranged alongside the tubes and consisting of a cylinder and a piston, means for connecting the piston to one tube and the cylinder to the other tube, and means for connecting one tube to the door and the other tube to the door frame or casing.

2. A device of the class described including two telescoping tubes, a coiled spring arranged within the smaller tube and connected with each of the said tubes, a checking device consisting of a cylinder and piston, means for adjustably connecting the piston and the cylinder with the said tubes and means for connecting the tubes with a door and its frame or casing.

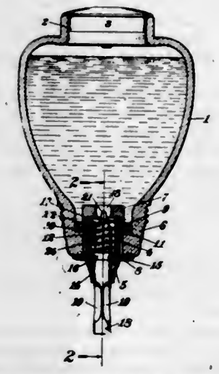
3. A device of the class described including two telescoping tubes, a coiled spring arranged within the smaller tube and connected with each of the said tubes, a cylinder arranged in parallelism with and carried by the larger tube, a piston operating within the cylinder and having a piston rod, a clip embracing the smaller tube and the piston rod and adjustably connecting the same, and means for adjustably connecting the tubes with a door and its frame or casing.

4. A device of the class described including two telescoping tubes, a coiled spring arranged within the smaller tube and connected with each of the said tubes, a cylinder arranged in parallelism with the larger tube, a piston operating within the cylinder and provided with a piston rod, clips embracing the tubes and connecting the same with the cylinder and the piston rod, and means for connecting the tubes with a door and its frame or casing.

5. A device of the class described including two telescoping tubes, a coiled spring arranged within the smaller tube and connected with each of the said tubes, a checking device composed of a cylinder and a piston adjustably connected one to each of the tubes, a bracket arranged to be secured to a door frame or casing, a plate adjustably secured to the bracket and provided with a pivot receiving and pivoting one of the tubes, and means for connecting the other tube with a door.

[Claims 6 and 7 not printed in the Gazette.]

1,062,576. LIQUID-DISPENSER. JAMES N. BASKETT and JOSEPH H. RODES, St. Louis, Mo. Filed May 3, 1912. Serial No. 694,918. (Cl. 73—159.)



1. A liquid dispenser comprising a receptacle, a valve-casing secured thereto and having a chamber and a discharge opening at the bottom of said chamber, a cap borne by said casing and having an inlet opening communicating with said chamber, a valve-seat in the bottom of said chamber, a conical valve in said chamber adapted to control said discharge opening, resilient means for holding said valve normally in engagement with said seat, a stem borne by said valve and extending through said discharge opening and having its sides flattened to permit the egress of liquid and, also, the ingress of air through said discharge opening, a member borne by said valve adapted to control said inlet opening, and a pair of diametrically opposed projections having tapered sides extending from the upper end of said member for guiding same in said inlet opening.

2. A liquid dispenser comprising a receptacle, a valve-casing secured thereto and having a chamber and a discharge opening at the bottom of said chamber, an adjustable member for varying the size of said chamber having an inlet opening communicating with the upper end of said chamber, a conical valve in said chamber adapted to control said discharge opening, a stem borne by said valve extending through said discharge opening and having its sides flattened to permit the egress of liquid through said discharge opening, and a member borne by said valve for controlling the inlet opening in said member.

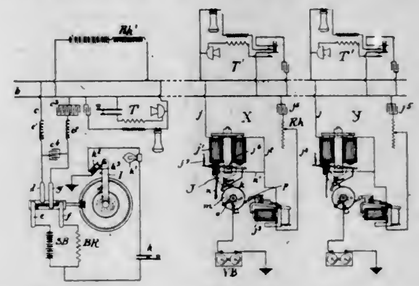
3. A liquid dispenser comprising a receptacle, a valve-casing secured thereto and having a chamber and inlet and discharge openings at the opposite ends of said chamber, a conical valve in said chamber adapted to control said discharge opening, a stem borne by said valve extending through said discharge opening and having its sides flattened to permit the egress of liquid and, also, the egress of air through said discharge opening, and an adjustable member borne by said valve for controlling said inlet opening.

4. A liquid dispenser comprising a receptacle, a valve-casing secured thereto and having a chamber and a discharge opening at the bottom of said chamber, an adjustable member having an inlet opening communicating with the upper end of said chamber, a conical valve in said chamber adapted to control said discharge opening, a stem borne by said valve extending through said discharge opening and having its sides flattened to permit the egress of liquid and, also, the ingress of air through said discharge opening, and an adjustable member borne by said valve for controlling said inlet opening.

5. A liquid dispenser comprising a receptacle, a valve-casing secured thereto and having a chamber and a discharge opening at the bottom of said chamber, an adjustable member having an inlet opening communicating with the upper end of said chamber, a conical valve in said chamber adapted to control said discharge opening, a stem borne by said valve extending through said discharge opening and having its sides flattened to permit the egress of liquid and, also, the ingress of air through said discharge opening, and an adjustable member borne by said valve for controlling said inlet opening, said members being so positioned that same can be adjusted simultaneously without changing their relative positions.

[Claims 6 to 9 not printed in the Gazette.]

1,062,577. TELEPHONE SYSTEM. EDWARD E. KLEINSCHMIDT, Brooklyn, N. Y., assignor to General Railway Equipment Company, a Corporation of Maine. Filed Sept. 8, 1910, Serial No. 581,009. Renewed May 29, 1911. Serial No. 630,121. (Cl. 179—35.)



1. A telephone system comprising two main conductors, a central station selector generator bridged across the conductors and a condenser in such bridge, selectors at a plurality of sub-stations each also bridged across the conductors and a condenser in each such bridge, a common telephone battery also bridged across the conductors and a telephone equipment at each sub-station also bridged across the conductors.

2. A telephone system comprising two main conductors, a central station selector generator bridged across the conductors and a condenser in such bridge, selectors at a plurality of sub-stations each also bridged across the conductors and a condenser interposed in each such bridge, a common telephone battery also bridged across the conductors, a telephone equipment at each sub-station also bridged across the conductors and a condenser in each telephone bridge connection.

3. A telephone system comprising two main conductors, a central calling station equipped with a calling generator, a bridge connection for the generator, a condenser in said bridge connection, a telephone equipment and a permanent bridge connection across the main conductors that includes the telephone equipment; selectors at a plurality of sub-stations each bridged across the conductors, a condenser in each such bridge, sub-station telephone equipments bridged across the conductors and a common telephone battery also bridged across the conductors.

4. A telephone system comprising two main conductors, a central calling station equipped with a calling generator, a bridge connection including the generator, a condenser in said bridge, a telephone equipment, a permanent bridge connection across the main conductors that includes the telephone equipment and a condenser in the telephone bridge connection; selectors at a plurality of sub-stations each bridged across the conductors, a condenser in each such bridge, sub-station telephone equipments bridged across the conductors, a condenser in each such bridge and a common telephone battery also bridged across the conductors.

5. A telephone system comprising two main conductors, a selector battery in a bridge circuit containing a condenser across the conductors, a plurality of selectors bridged across the conductors and respectively operated by corresponding series of current impulses from said battery and each having a pair of normally open signal contacts brought into contact when stepped around to selected position, a ground circuit from the selected station to the central office including a signal device at the selected station, said signal contacts, one of the main line conductors and the selector battery.

[Claim 6 not printed in the Gazette.]

REISSUES.

13,563. SAFETY-RAZOR. LYMAN H. COBB, Fitchburg, Mass., assignor, by mesne assignments, to Young Safety Razor Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Apr. 5, 1912. Serial No. 688,793. Original No. 996,617, dated July 4, 1911, Serial No. 335,867. (Cl. 30—12.)



1. In a safety razor, a clamping plate bent upon itself to form a flange parallel with said plate and having a screw threaded opening, a handle passing through said flange and provided with a shoulder, a second clamping plate attached to the end of said handle, and a screw threaded rotatable sleeve journaled on said handle and held from longitudinal movement between said second clamping plate and said shoulder, with its screw threads engaging the screw threaded opening in said flange.

2. In a safety razor, the combination with a handle and a pair of clamping plates for holding a razor blade held in parallel planes at the end of the handle, and a rotatable externally screw threaded sleeve journaled on the end of said handle and held from longitudinal movement and operatively connected with one of said clamping plates, whereby it is moved toward or away from the other clamping plate by the rotation of said sleeve.

3. In a safety razor, the combination with a handle and a clamping plate attached to one end of said handle, of a second movable clamping plate outside said attached clamping plate, and having a flange extending around one edge of said attached clamping plate and embracing said handle, and a screw threaded sleeve engaging said flange and rotatable on said handle, whereby said movable clamping plate is drawn toward said attached clamping plates.

4. In a safety razor, the combination with a handle, of a circular washer non-rotatably attached to the end of said handle, and provided with a series of peripheral notches, a head comprising means for holding a razor blade and rotatable about the end of said handle, and means carried by said head for engaging the notches in said washer.

5. In a safety razor, the combination with a handle and a rotatable head for holding a razor blade, of a washer non-rotatably held on the end of said handle, and a spring carried by said head and engaging said washer, whereby said head is locked in position.

6. In a safety razor, the combination with blade holding devices, of a handle oblique thereto, means securing the handle to said devices and permitting it to rotate about an axis other than its own while yieldingly resisting such movement, a blade in the plane of said holding devices, and means rigidly securing the blade to the holding devices and permitting rotation of the handle; whereby the blade and holding devices readily rotate upon the handle and in their own plane while rigidly locked together.

7. In a safety razor, the combination with a handle, of a guard and blade oblique to the axis of the handle and mounted upon the latter to rotate in their own plane, means for clamping the blade and guard together and means for locking the guard and blade clamped thereto at any desired point in their rotary path.

8. In a safety razor, the combination with a handle, of a guarded blade oblique to the axis of the handle and mounted upon the latter to rotate in its own plane while held against other displacement, and means for yieldingly holding it in any desired adjustment about its axis of rotation.

9. In a safety razor, the combination with blade holding means, of a blade, a guard, a handle and means for yieldingly and positively securing the handle to said blade holding means and arranged to revolve bodily through substantially a complete revolution about an axis lying outside of said handle.

10. In a safety razor, the combination with blade holding means, of a blade, a guard, a handle and means for yieldingly and positively securing the handle to said blade holding means at an angle to an axis which is substantially perpendicular to the plane of the blade, said handle being arranged to revolve bodily through substantially a complete revolution about said axis.

11. In a safety razor, the combination with blade holding means, of a blade, a guard, a handle, means for pivotally securing said handle to said blade holding means, said handle being arranged to revolve bodily through a complete revolution about the axis of said pivotal means said axis lying outside the said handle, and means for positively and yieldingly holding said handle in any desired position about said axis.

12. In a safety razor, the combination with blade holding means, of a blade, a guard, a handle, means for revolubly securing said handle to said blade holding means, the axis on said securing means being perpendicular to said blade and outside of said handle, and means for retaining said handle at any desired position during its adjustment.

13. In a safety razor, the combination with blade holding means, of a guard, a handle secured to said blade holding means and revolubie about an axis other than its own, and co-acting means carried by said blade holding means and said handle for retaining said handle at any desired position during its adjustment.

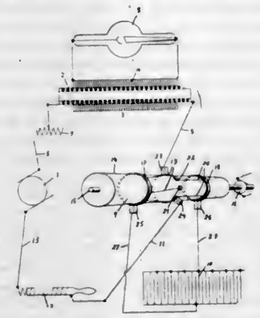
14. In a safety razor, the combination with a blade, of a guard against which said blade is clamped, blade holding means, a handle, and means at right angles to said blade for maintaining said handle in pivotal relation with said blade and guard to permit of adjustment in the plane of the blade without releasing the blade from the guard holding means, the axis of said handle being arranged at a fixed angle with the axis of said pivotal means.

15. In a safety razor, the combination with a blade, of a guard for said blade, a bed plate, a clamping plate between which and the bed plate the blade is clamped, a handle, and means at right angles to said blade for maintaining said handle in pivotal engagement with said clamping plate independently of the clamping action between the parts whereby the blade, guard and bed plate may be adjusted in the plane of the blade without being released from each other, the axis of said handle being arranged at a fixed angle with the axis of said pivotal means.

16. In a safety razor, the combination with a handle, of a guarded blade oblique to the axis of the handle and secured thereto by yielding devices allowing it to rotate in its own plane when rotary force exceeds a predetermined limit; whereby the position of the cutting edge with respect to the angle made with the handle's axis may, without preliminary manipulation or the separation of any part, be varied at will by rotating the blade in its own plane.

17. In a safety razor, the combination with a clamping plate, of a handle rotatably secured at a fixed oblique angle thereto, one of said parts being provided with a plurality of recesses and the other having a coöperating projection or projections to engage said recesses and a guard.

13,564. APPARATUS FOR THE PRODUCTION OF HIGH-POTENTIAL ELECTRIC CURRENTS. DAVID G. MCCAA, Lancaster, Pa. Filed Mar. 17, 1913. Serial No. 755,269. Original No. 1,047,545, dated Dec. 17, 1912, Serial No. 504,741. (Cl. 171—253.)



1. In a device of the character described, a source of current, a transformer with the primary in series with the source of current, a condenser in series with the primary and source of current, and a pole changer interposed between the primary of said transformer and said condenser for causing said source of current to successively charge, neutralize and recharge said condenser, and by such action supply pulsating unidirectional current in said primary of said transformer.

2. In a device of the character described, the combination with a direct current supply, of a transformer having its primary winding in series with the current supply, a condenser in series with the primary winding of the transformer and the current supply, and a continuously rotatable pole changer interspersed between the transformer and condenser for successively charging, neutralizing and recharging said condenser with electrical charges of opposite signs, whereby current is permitted to flow in successive impulses from said source of supply through said primary of said transformer for inducing a unidirectional pulsating current in the secondary of the transformer when the time constant of the primary is small.

3. In a device of the character described, the combination with a direct current supply, of a transformer having its primary winding in series with the current supply, a condenser in series with the primary winding of the transformer and the current supply, and a continuously rotatable pole changer interposed between the transformer and condenser for successively charging, neutralizing and recharging said condenser with electrical charges of opposite signs, whereby current is permitted to flow in successive impulses from said source of supply through said primary of said transformer for inducing an alternating current in the secondary of the transformer when the time constant of the primary is large.

4. In a device of the character described, the combination with a direct current supply, of a transformer device having its primary connected in series with said current supply, a condenser in series with said primary and said current supply, a pole changer interposed between said condenser and said primary, means for moving said pole changer for successively changing the polarity of the current supplied to the condenser in order to permit a pulsating current to flow through the primary, and means for varying the time constant of the circuit of which the primary is a part by varying the resistance of said circuit.

5. In a device of the character described, the combination with a direct current supply, of a transformer device having the primary connected in series with said current supply, a condenser in series with said primary and said current supply, a pole changer interposed between said condenser and said primary, means for moving said pole changer for successively changing the polarity of the current supplied to the condenser in order to permit a pulsating current to flow through the primary, and means for varying the time constant of the circuit of which the primary is a part by varying the self-inductance of said circuit.

6. In a device of the character described, the combination with a direct current supply, of a transformer device having its primary connected in series with said current supply, a condenser in series with said primary and said current supply, a pole changer interposed between said condenser and said primary, means for moving said pole changer for successively changing the polarity of the current supplied to the condenser in order to permit a pulsating current to flow through the primary, means for varying the ohmic resistance of the circuit of the primary; and means for varying the self-inductance of the circuit of which the primary is a part, said last mentioned means being independent of said ohmic resistance.

7. In a device of the character described, the combination with a source of current supply, of a transformer having the primary winding thereof in series with the current supply, a condenser in series with said current supply and said primary winding, and a pole changer interposed between the condenser and the primary winding of said transformer, said pole changer comprising a rotatable supporting member, a pair of spaced rings, brushes for connecting said rings and said transformer, a plurality of lugs connected alternately to said rings, a brush designed to engage said lugs successively as the same are rotated connected with said primary winding, and a second brush arranged to contact with said lugs connected with said source of current supply, the first mentioned brush contacting with said lugs and designed to complete a circuit through one of said rings, while said second mentioned brush contacts with said lugs and completes a circuit through the other of said rings.

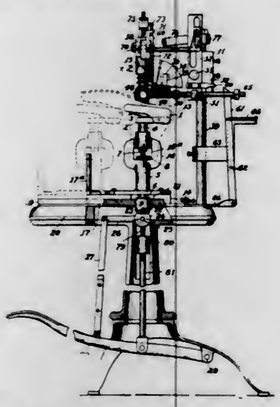
13,565. HEEL-BREASTING MACHINE. GEORGE T. MCLEOD, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed May 7, 1912. Serial No. 695,747. Original No. 957,986, dated May 17, 1910, Serial No. 196,164. (Cl. 12—47.)

1. In a machine for operating on boots and shoes, the combination of a movable work support; alternatively operative work gages movable toward and from operative position, said work gages being constructed and arranged to determine respectively the desired swing for a right or left shoe; and means to provide for movement of said gages into and out of operative position.

2. In a heel breasting machine the combination of a work support; a movable work gage; a cutter; means controlled by movement of the cutter to move the gage positively to inoperative position; and means independent of the cutter for retaining the gage in said position.

3. In a machine for operating on boots and shoes, the combination, with a work support, and a gage with reference to and against which the boot or shoe is turned about a center adjacent the heel for determining the right or left swing of a boot or shoe sustained by said support, said gage being normally held in inoperative position, of

means operable to bring said gage to operative position with respect to the boot or shoe.



4. In a heel breasting machine the combination with a presser plate and a work support, of a gage to determine the relative position of said plate and support and means interposed between said gage and support whereby said gage may be moved to operative position by movement of said support.

5. In a heel treating machine a tool and normally inoperative positioning gages constructed and arranged to determine the right and left angular adjustment of a heel operated upon, relative to said tool, and means permitting the shoe to be swung laterally into contact with one of said gages when it is in operative position, determining the right or left swing to be given the shoe.

6. In a heel breasting machine a cutter, and a gage having oppositely beveled faces to determine the right and left angular adjustment of a heel operated upon, relative to said cutter.

7. In a heel breasting machine the combination with a work support and a tool of a gage, means for holding said gage normally in inoperative position and means under the control of said support, to trip the gage to operative position.

8. In a heel breasting machine, the combination of a presser plate; a work support movable transversely thereof; a work gage for limiting movement of said support in one direction; and means to provide for placing the gage in operative position when the support is moved in the opposite direction.

9. In a heel treating machine the combination of a tool; a work gage movable to and from operative position; means to hold the gage in inoperative position; and a work support arranged to act on said means to release the gage and permit it to move to operative position.

10. In a heel breasting machine, the combination of a cutter; a work support movable transversely of the cutter; a movable gage to determine the position of the work; and means to provide for movement of the gage into and out of operative position.

11. In a heel breasting machine, the combination of a movable cutter, means for actuating said cutter, a movable heel support, a breast gage, and means interposed between said gage and cutter and between said gage and support, respectively, whereby said gage may be moved into and out of operative position by movement of said support and said cutter actuating means, respectively.

12. In a heel breasting machine, a cutter, a movable work support, a breast gage for positioning said support relatively to said cutter, a latch for holding said gage in inoperative position, and means whereby said latch may be tripped by said support.

13. In a heel breasting machine the combination with a reciprocating cutter and a work support movable transversely thereof, of a gage to limit the transverse movement of said support, and means positively actuated simultaneously with the cutting stroke of the cutter to move said gage to inoperative position.

14. In a heel breasting machine a pivoted jack, a cutter, and means toward and from which said jack is movable for determining the inclined position of said jack relatively to said cutter and a gage to determine the initial position of said jack prior to movement toward said means.

15. In a heel breasting machine, the combination of a cutter; a gage for determining the angles at breast-corners of the heels; and means for determining angles between heel breasts and treads.

16. In a heel breasting machine, the combination of a cutter; gages arranged for positioning heel breasts in different transverse angular relations to the cutter; and adjustable means for determining angles between heel breasts and treads.

17. In a heel breasting machine, the combination of a cutter; gages arranged for positioning the breasts of a pair of heels successively in reciprocal angular relations to the cutter; and means for determining uniform angles between said breasts and the heel treads.

18. In a heel breasting machine, the combination of a cutter; gages arranged for positioning the breasts of a pair of heels successively in reciprocal transverse angular relations to the cutter; and adjustable means for determining the angles between the heel breasts and treads.

19. In a heel breasting machine the combination of a cutter; relatively movable members including a work support having opposed pressure-sustaining surfaces to hold a heel between them; a breast gage for positioning the heel relatively to the cutter; latching means, for holding the gage in inoperative position, arranged to be tripped by movement of said work support.

20. In a machine for operating upon the bottoms of boots and shoes, the combination of a work support or jack for sustaining a lasted shoe; a tool; and alternatively-operative work-contacting gaging surfaces constructed and arranged to determine right and left relative swings of shoes and the tool, said gaging surfaces being movable into and out of gaging position, said work support or jack permitting the shoe to be swung into gaging contact with one or the other of said gaging surfaces when in gaging position.

21. In a machine for operating upon the bottoms of boots and shoes, the combination of a work support or jack; a tool; and normally inoperative work-contacting gaging surfaces constructed and arranged to determine right and left relative angular adjustments of shoes and the tool, said gaging surfaces being movable into operative position and said jack permitting the shoe to be swung to the right or left into contact with one or the other of said gaging surfaces when in gaging position.

22. In a machine for operating upon the bottoms of boots and shoes, the combination of a tool; a work support; gages, movable from inoperative to operative positions, and constructed and arranged to determine respectively right or left relative angular adjustments of a shoe and the tool; and provision for relatively moving said gages and work support for introducing one of said gages into position to be met by the shoe as the latter is swung laterally about a center adjacent the heel.

23. In a machine for operating upon the bottoms of boots and shoes, the combination of a tool; gaging means to determine a right or left relative angular adjustment of a shoe and the tool; and means to move the gaging means away from the shoe to an inoperative position.

24. In a machine for operating upon boots and shoes, the combination of a tool; alternatively operative gaging devices constructed and arranged to determine a right or left angular adjustment of a shoe and the tool; and treadle-controlled means for moving said gaging devices into operative position.

25. In a machine for operating on heels, the combination of a tool; an adjustable-pressure surface against which a heel is held to predetermine an inclined relation in which the tool shall act upon the heel; work-carrying means angularly adjustable to suit the inclination determined by adjustment of the pressure surface; gaging means whereby to locate the heel with relation to the tool and means to move the gaging means into and out of operative position during the operation of the machine.

26. In a machine for operating on heels, the combination of a tool; an adjustable pressure surface against which a heel is held to predetermine an inclined relation in which the tool shall act upon the heel; work-carrying means angularly adjustable to suit the inclination determined by adjustment of the pressure surface; gaging means by which the operator may locate the heel by moving the latter endwise into its proper relation to the tool and means for moving the gaging means into and out of gaging position.

27. In a heel breasting machine, the combination of a breasting tool and a jack, relatively movable from inoperative to operative relation; gaging means whereby the operator may determine the operative relation of the shoe and tool; operating devices for moving the gaging means into and out of gaging position and adjustable positioning means to coöperate with the jack for determining an inclined relation between a shoe and the breasting tool, said means and the jack being relatively movable.

28. In a machine for operating on the bottoms of boots and shoes, the combination of a tool; alternatively-operative work-contracting gaging surfaces constructed and arranged for determining right and left relative angular adjustments of the work and the tool; and means to determine an inclined relation in which the tool shall act upon the work.

29. In a heel breasting machine, the combination of a cutter; alternatively-operative gaging means constructed and arranged respectively for permitting the acting cutter to shape breasts of successive heels in reciprocal angular relations to the longitudinal medians of the respective heels; and means for determining uniform angles between said breasts and heel treads.

30. In a heel breasting machine, the combination of a cutter; alternatively-operative gaging means constructed and arranged respectively for permitting the acting cutter to shape breasts of a pair of heels successively in reciprocal angular relations to the longitudinal medians of the respective heels; and adjustable means for determining the angles between the heel breasts and treads.

31. In a heel breasting machine, the combination of a cutter; alternatively-operative means constructed and arranged for determining angles between the finished breasts and longitudinal medians of heels; and means for determining angles between heel breasts and treads.

32. In a heel breasting machine, the combination of a cutter; work-contacting means constructed and arranged for determining angles between the finished breasts and longitudinal medians of heels; and means for determining angles between heel breasts and treads.

33. In a machine for operating upon the bottoms of boots and shoes, the combination of a tool; alternatively-operative gaging means having provisions for positioning heel breasts in reciprocal angular relations to the tool; and adjustable means for determining the horizontal inclination of the work.

34. In a machine for operating on the bottoms of boots and shoes, the combination of a tool; means for determining right and left relative angular adjustments of the work and the tool; and variable means to determine an inclined relation in which the tool shall act upon the work.

35. In a machine for operating upon the bottoms of boots and shoes, the combination of a tool; a work gage whereby the work is positioned with relation to the tool; work clamping means adjustable to vary the inclined relation of the tool and work; and means operative while the work is clamped to remove the gage from operative position.

36. In a machine for operating on the heels of boots and shoes, the combination of a tool, means for causing it to act in a direction toward and from the heel to be treated, alternatively operating devices to determine right or left angular relation of the shoe with respect to the plane of action of the tool, and means for moving said devices into and out of operative position with respect to the shoe.

37. In a machine for operating upon the heels of boots and shoes, the combination of heel treating means; and means for presenting a shoe thereto, including a work support and gaging devices normally out of engagement therewith, said parts being constructed and arranged to permit said shoe to be swung to bring the shoe into contact with said gaging devices to determine the right or left alinement of the shoe with relation to the heel treating means.

38. In a machine for operating on boots and shoes, the combination of a work support, a normally inoperative gage, and means to cause said gage to be brought to an operative position out of engagement with said work support, said parts being constructed and arranged to permit said work support to be moved to bring the shoe thereon into contact with said gage when in said operative position.

39. In a machine for operating upon the bottoms of boots and shoes, the combination of a tool; a movable work support; and gaging means constructed and arranged to be introduced to operative position as the support is moved in one direction, and provisions whereby the work may be moved in the opposite direction to position it by means of said gage.

40. In a machine for operating on boots and shoes, the combination, with a work support and a gage toward and against which the shoe is swung for positioning the work on said support, said gage being movable toward and from operative position, of means operable to bring said gage to operative position to determine the extent of lateral swing to be given the shoe.

41. In a machine for operating on boots and shoes, the combination, with a tool and means for reciprocating said tool toward and from the work, of means for determining the lateral swing of a shoe relative to said tool comprising alternatively operative position determining devices, and mechanism for moving said devices into and out of operative position.

42. In a machine for operating on boots and shoes, the combination, with a tool and means for causing operative movement of said tool toward and from the work, of a plurality of position determining devices each of which is alone adapted to determine the lateral swing of a shoe relative to said tool, and devices for causing movement of said devices into and out of operative position.

43. In a machine for operating on boots and shoes, the combination of a normally inoperative work gage, a work support movable from a work receiving to a preliminary position, and means for bringing said gage to operative position when said work support is in said preliminary position, said work support being thereafter movable to a final position determined by said gage.

44. In a heel breasting machine, the combination, with breasting means and a work support, of alternatively operative devices constructed and arranged to engage the breast of the heel of a shoe on said support to position said heel relatively to said breasting means.

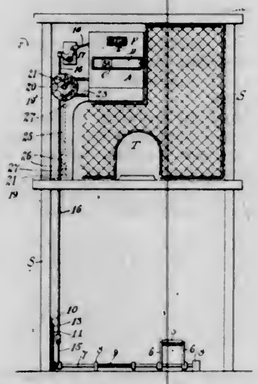
45. In a machine for operating upon the bottoms of boots and shoes, the combination of a tool, gaging means to determine respectively right and left relative angular adjustments of shoes and the tool, and means to move the gaging means upwardly away from the shoe to permit free manipulation of the shoe.

46. In a machine for working on the bottoms of boots or shoes, the combination of operating means, means for supporting a boot or shoe in a stationary position during operation of the operating means thereon, and gages adapted to be alternatively engaged by the work to determine the right or left angular adjustment thereof relative to the operating means.

47. A heel breasting machine having, in combination, a knife, a shoe support mounted for movement into and out of position under the knife, manually operable means for raising the shoe toward the knife, yieldingly supported heel engaging means arranged for contact with the shoe during the raising of the shoe and prior to its contact with the knife and stationary stop means for limiting relative movement of the shoe and knife to prevent cutting of the shank.

48. In a heel breasting machine, the combination of a breasting knife, a work support movable into and out of a position beneath said knife, a presser plate, a spring back of said plate, a manually operable device for elevating said work support to clamp the heel of a shoe between the work support and the presser plate, and a stationary stop device, mounted upon the machine frame, for limiting relative movement of the knife and shoe to prevent injury to the shank of the sole.

13,566. OPERATING MECHANISM FOR FARE-REGISTERS. JOHN F. OHMER, Dayton, Ohio, assignor to Ohmer Fare Register Company, Rochester, N. Y. Filed Dec. 13, 1910. Serial No. 597,169. Original No. 971,630, dated Oct. 4, 1910, Serial No. 416,418. (Cl. 235—44.)



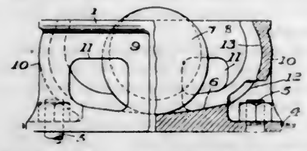
1. The combination with a series of registering counters, a corresponding series of indicators, a series of individual actuating members interposed between said counters and whereby the counters and the indicators are actuated, a main actuating member through which the individual actuating members are operated, means for selecting the individual actuating member of any particulaur counter, of a vertical actuating rod extending from a point adjacent to the register and connected therewith by a bell-crank lever, a horizontal rock shaft to which said vertical rod is flexibly connected, and a foot-treadle connected with the horizontal rock shaft whereby movement is imparted to said main actuating member through the rock shaft and the vertical rod, substantially as specified.

2. The combination with a register having a setting member, a rod operatively connected to said setting member, and means for actuating said register to register a fare, of an indicator independent of said register and comprising a dial and an axially movable pointer cooperating therewith to indicate the fare to be registered, and means actuated by said rod for setting said pointer to the desired indications.

3. The combination with a series of registering counters, corresponding series of indicators, a series of individual actuating members, a main actuating member through which the individual actuating members are operated, and means for selecting the individual actuating member of any particular counter, of a vertical actuating rod extending from a point adjacent to the register and connected therewith, a horizontal rock shaft to which said vertical actuating rod is flexibly connected, and a foot-treadle connected with the horizontal rock shaft, whereby movement is imparted to said main actuating member through the rock shaft and the vertical rod.

4. The combination with a register having a setting member, and an actuating member, of two longitudinally movable operating members operatively connected to said setting member and said actuating member respectively, a vertically disposed hand-operated member connected to one of the longitudinally movable operating members, and a vertically disposed foot-operated member connected to the other of said longitudinally movable operating members, whereby the setting member and actuating member are actuated to select and register fares.

13,567. ROLLER SIDE BEARING. ARNOLD STUCKI, Pittsburgh, Pa. Filed Apr. 21, 1913. Serial No. 762,754. Original No. 1,033,210, dated July 23, 1912, Serial No. 620,006. (Cl. 64—64.)



1. A side bearing for lower bolsters of railway cars comprising a housing having its bottom forming a bearing surface and provided with side and end walls or barriers, and a roller in said housing free to roll on said bearing surface, said side and end walls or barriers being connected to the bottom by posts or columns to provide on all sides large openings at the level of the bearing surface, said walls or barriers extending upwardly beyond the center of the roller, and the upper portions of the end walls being substantially vertical to prevent the escape of the roller.

2. A side bearing for lower bolsters of railway cars comprising a housing having its bottom forming a bearing surface inclining upwardly from its center toward its ends and provided with side and end walls or barriers, and a roller in said housing free to roll on said bearing surface, said side and end walls or barriers being connected to the bottom by posts or columns to provide on all sides large openings at the level of the bearing surface, said walls or barriers extending upwardly beyond the center of the roller and the upper portions of the end walls being substantially vertical to prevent the escape of the roller.

3. A side bearing for lower bolsters of railway cars comprising a housing having its bottom forming a bearing surface and provided with side and end walls or barriers, said side walls or barriers being arc-shaped, and a conical roller in said housing free to roll on said bearing surface, said side and end walls or barriers being connected to the bottom by posts or columns to provide on all sides large openings at the level of the bearing surface, said walls or barriers extending upwardly beyond the center of the roller and the upper portions of the end walls being substantially vertical to prevent the escape of the roller.

4. A side bearing for lower bolsters of railway cars comprising a housing having its bottom forming a bearing surface inclining upwardly from its center toward its ends and provided with side and end walls or barriers, said side walls or barriers being arc-shaped, and a conical roller in said housing free to roll on said bearing surface, said side and end walls or barriers being connected to the bottom by posts or columns to provide on all sides large openings at the level of the bearing surface, said walls or barriers extending upwardly beyond the center of the roller and the upper portions of the end walls being substantially vertical to prevent the escape of the roller.

5. A side bearing for lower bolsters of railway cars comprising a housing having its bottom forming a bearing surface and provided with side and end walls or barriers, and a roller in said housing free to roll on said bearing surface, said side and end walls or barriers being connected to the bottom by posts or columns and provided on all sides with large openings at the level of the bearing surface, said walls or barriers extending upwardly beyond the center of the roller, and the upper portions of the end walls being substantially vertical to prevent the escape of the roller, the side retaining walls or barriers flaring apart upwardly so that the roller ends contact at the bottom only.

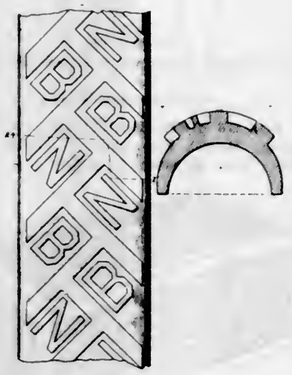
DESIGNS.

44,049. ELECTRIC TOASTER AND HEATER. HENRY E. BANDLOW, Chicago, Ill. Filed May 8, 1912. Serial No. 695,995. Term of patent 7 years.



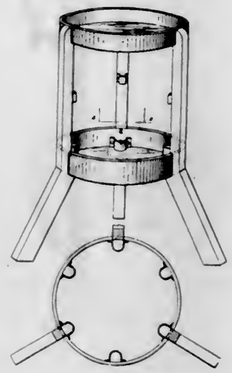
The ornamental design for an electric toaster and heater, as shown.

44,050. TIRE. HARRY E. BOYD and JOSEPH H. NEAL, Akron, Ohio. Filed Mar. 5, 1913. Serial No. 752,225. Term of patent 7 years.



The ornamental design for a tire, as shown.

44,051. SEWING-TABLE. WARNER BRANDER, Canton, S. D. Filed Feb. 24, 1913. Serial No. 750,425. Term of patent 3½ years.



The ornamental design for a sewing table, as shown.

44,052. FRATERNITY-EMBLEM. WILLIAM E. CLARKE, Oakland, Cal. Filed Feb. 6, 1913. Serial No. 746,676. Term of patent 3½ years.



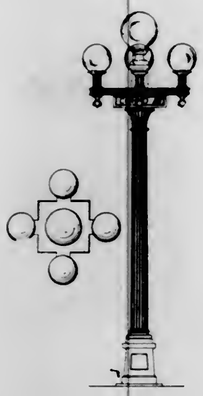
The ornamental design for a fraternity emblem as shown.

44,053. FRATERNITY-EMBLEM. WILLIAM E. CLARKE, Oakland, Cal. Filed Feb. 6, 1913. Serial No. 746,677. Term of patent 3½ years.



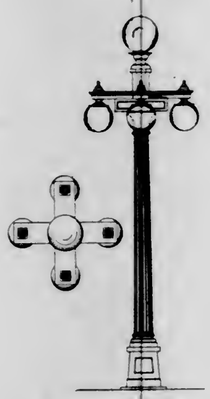
The ornamental design for a fraternity emblem as shown.

44,054. STREET-LIGHT STANDARD. SERENUS M. COLBURN, Minneapolis, Minn., assignor of one-half to Frederick Kees, Minneapolis, Minn. Filed Mar. 17, 1913. Serial No. 755,041. Term of patent 7 years.



The ornamental design for a street light standard, as shown.

44,055. STREET-LIGHT STANDARD. SERENUS M. COLBURN, Minneapolis, Minn., assignor of one-half to Frederick Kees, Minneapolis, Minn. Filed Mar. 17, 1913. Serial No. 755,042. Term of patent 7 years.



The ornamental design for a street light standard as shown.

44,056. STREET-LIGHT STANDARD. SERENUS M. COLBURN, Minneapolis, Minn., assignor of one-half to Frederick Kees, Minneapolis, Minn. Filed Mar. 17, 1913. Serial No. 755,043. Term of patent 7 years.



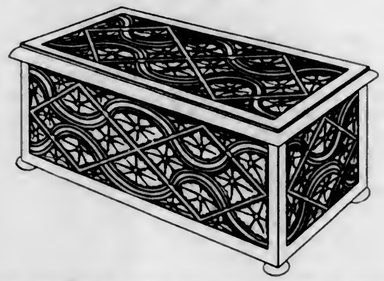
The ornamental design for a street light standard as shown.

44,057. STREET-LIGHT STANDARD. SERENUS M. COLBURN, Minneapolis, Minn., assignor of one-half to Frederick Kees, Minneapolis, Minn. Filed Mar. 17, 1913. Serial No. 755,044. Term of patent 7 years.



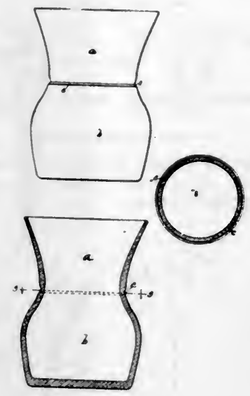
The ornamental design for a street light standard as shown.

44,058. BOX OR SIMILAR ARTICLE. JOHN R. FOSTER, Arlington, Mass. Filed Feb. 6, 1913. Serial No. 746,679. Term of patent 3½ years.



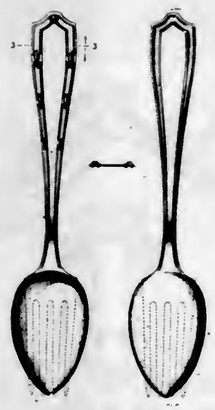
The ornamental design for a box or similar article, as shown.

44,059. DRINKING-GLASS. CHARLES GREER, New Castle, Pa. Filed Jan. 22, 1913. Serial No. 743,669. Term of patent 14 years.



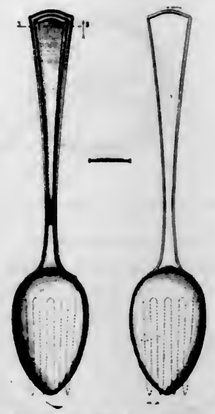
The ornamental design for a drinking glass, as shown.

44,060. HANDLE FOR SPOONS, FORKS, OR SIMILAR ARTICLES. CHARLES W. HARMAN, New Rochelle, N. Y., assignor to Joseph Fahys & Company, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1913. Serial No. 751,613. Term of patent 7 years.



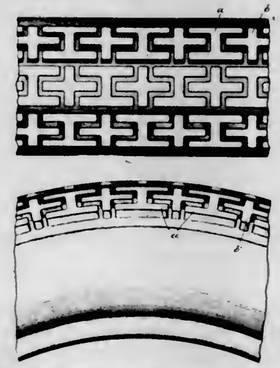
The ornamental design for a handle for a spoon, fork or similar article, as shown.

44,061. HANDLE FOR SPOONS, FORKS, OR SIMILAR ARTICLES. CHARLES W. HARMAN, New Rochelle, N. Y., assignor to Joseph Fahys & Company, New York, N. Y., a Corporation of New York. Filed Mar. 12, 1913. Serial No. 753,851. Term of patent 7 years.



The ornamental design for a handle for a spoon, fork or similar article, as shown.

44,062. RESILIENT TIRE. HERBERT H. HEWITT, Buffalo, N. Y. Filed Feb. 26, 1913. Serial No. 750,881. Term of patent 14 years.



The ornamental design for a resilient tire, as shown.

44,063. CLASP. FRED HIRSH, New York, N. Y. Filed Aug. 1, 1912. Serial No. 712,785. Term of patent 14 years.



The ornamental design for a clasp, as shown and described.

44,064. BROOCH, BADGE, OR SCARF-PIN. ADAM EMIL KELLER, New York, N. Y., assignor to The Keller Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Mar. 6, 1913. Serial No. 752,493. Term of patent 7 years.



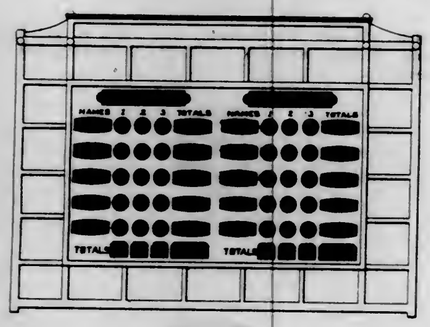
The ornamental design for a brooch, badge or scarf-pin, as shown.

44,065. HANDLE FOR SPOONS, FORKS, AND SIMILAR ARTICLES. JOHN L. KIMBELL, Jr., Shreveport, La., assignor to The National Society of the Children of the American Revolution, Washington, D. C., a Corporation of the District of Columbia. Filed Apr. 9, 1913. Serial No. 760,043. Term of patent 14 years.



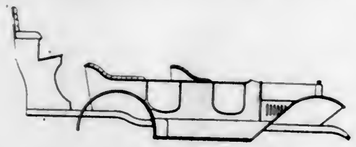
The ornamental design for a handle for spoons, forks, and similar articles, as shown.

44,066. BOWLING SCORE-BOARD. WALTER ROYAL KIRK, Boston, Mass. Filed Nov. 22, 1912. Serial No. 732,912. Term of patent 7 years.



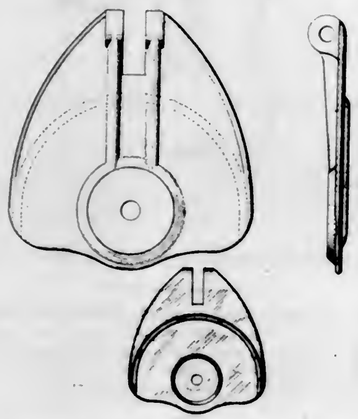
The ornamental design for a bowling score board, as shown.

44,067. AUTOMOBILE-BODY. THOMAS A. KOVÁTS, Philadelphia, Pa. Filed Nov. 20, 1912. Serial No 732,599. Term of patent 14 years.



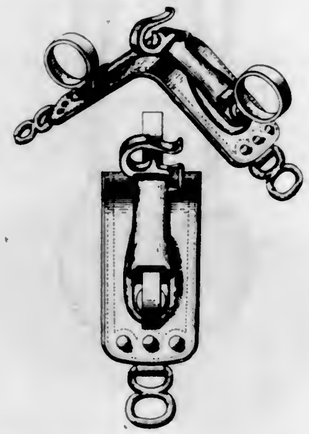
The ornamental design for an automobile body, as shown.

44,068. BLOCK SIDE. FREDERICK B. MALLORY, Portland, Oreg. Filed June 3, 1912. Serial No. 701,457. Term of patent 7 years.



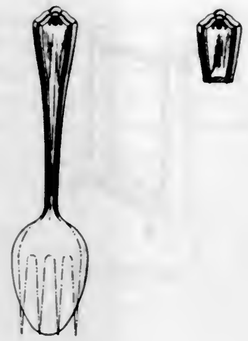
The ornamental design for a block-side as shown.

44,069. HARNESS-SADDLE. RICHARD MILLER, New Berlin, Ohio. Filed Feb. 5, 1913. Serial No. 746,383. Term of patent 7 years.



The ornamental design for a harness saddle, substantially as shown.

44,070. SPOON, FORK, OR SIMILAR ARTICLE. BURTON D. MYERS, Wallingford, Conn., assignor to Simeon L. and George H. Rogers Co., Wallingford, Conn., a Corporation. Filed Feb. 26, 1913. Serial No. 750,883. Term of patent 7 years.

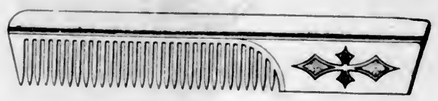


The ornamental design for a spoon, fork or similar article, as shown.

44,071. BINDING. AUGUST E. NEFF, Chicago, Ill. Filed Aug. 19, 1912. Serial No. 715,934. Term of patent 14 years.

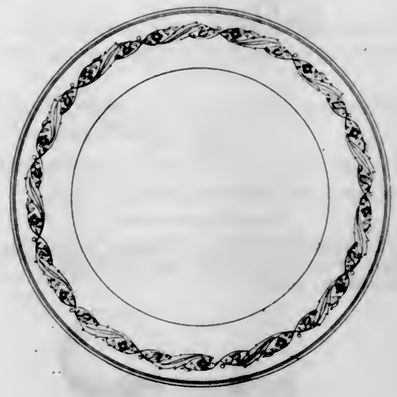
The ornamental design for a binding, as shown.

44,072. COMB. CARRIE M. PROCTER, Gloucester, Mass. Filed Nov. 27, 1912. Serial No. 734,180. Term of patent 7 years.



The ornamental design for a comb as shown.

44,073. PLATE OR SIMILAR ARTICLE. WILLIAM T. RAWLINS, Chicago, Ill., assignor to The Smith-Phillips China Company, East Liverpool, Ohio, a Corporation of Ohio. Filed July 18, 1912. Serial No. 710,257. Term of patent 7 years.



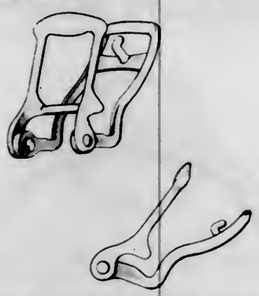
The ornamental design for a plate or similar article, as shown.

44,074. PLATE OR SIMILAR ARTICLE. WILLIAM T. RAWLINS, Chicago, Ill., assignor to The Smith-Phillips China Company, East Liverpool, Ohio, a Corporation of Ohio. Filed July 18, 1912. Serial No. 710,258. Term of patent 7 years.



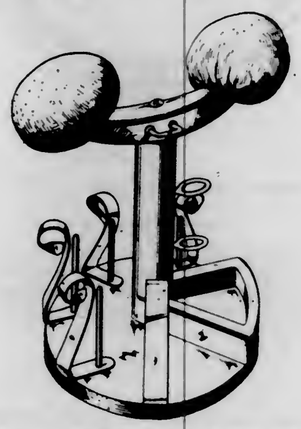
The ornamental design for a plate or similar article, as shown.

44,075. BUCKLE. WILLIAM A. SCHLEICHER, Cleveland, Ohio. Filed Jan. 9, 1913. Serial No. 741,103. Term of patent 14 years.



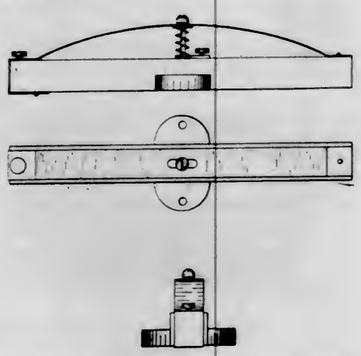
The ornamental design for a buckle, as shown.

44,076. SEWING-STAND. CHESTER SHANK, Marion, Mich. Filed Mar. 5, 1913. Serial No. 752,227. Term of patent 14 years.



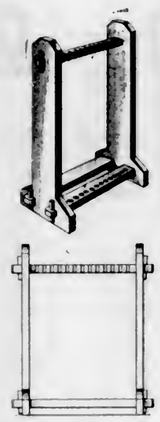
The ornamental design for a sewing stand, as shown.

44,077. THERMOSTAT. JULIA SWARTZENBURG, Omaha, Nebr. Filed Oct. 28, 1912. Serial No. 728,298. Term of patent 7 years.



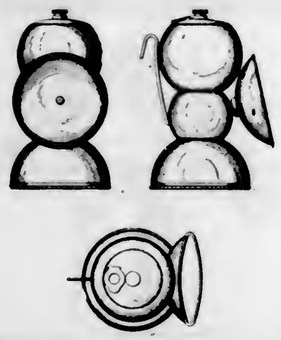
The ornamental design for a thermostat, as shown.

44,078. DISPLAY-RACK. MORTON C. TREADWAY, Bristol, Conn., assignor to The Horton Manufacturing Co., Bristol, Conn., a Corporation of Connecticut. Filed Mar. 1, 1913. Serial No. 751,653. Term of patent 14 years.



The ornamental design for a display rack as shown.

44,079. MINER'S LAMP. CHARLES VISTARD, Albert, W. Va. Filed Feb. 28, 1913. Serial No. 751,366. Term of patent 3½ years.



The ornamental design for a miner's lamp, as shown.

TRADE-MARKS

PUBLISHED MAY 20, 1913.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 39,901. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) "SELAS" GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Berlin, Germany, assignor to Selas Company, New York, N. Y., a Corporation of New York. Filed Jan. 14, 1909.

Selas

Particular description of goods.—Gas-Producing Plants, Gas-Burners, Gas-Mantles, Chimney-Caps, Burners, Lamp-Masts, Metal Reflectors, and Ventilators.
Claims use since Sept. 29, 1900.

Ser. No. 40,573. (CLASS 39. CLOTHING.) C. COMMICHAU & CO., LIMITED, Silkeborg, Denmark. Filed Feb. 16, 1909.



The head appearing in said trade-mark not being of any living individual.
Particular description of goods.—Linen, Linen-Wool, Linen-Cotton, and Linen-Silk Shirts, Drawers, Union Suits, Night-Shirts, Pajama-Suits for Men; Vests, Drawers, and Combinations for Ladies; Shirts, Drawers, Union Suits, and Night-Shirts for Youths; Vests, Drawers, and Union Suits for Girls, and Shirts and Drawers for Children.
Claims use since June 1, 1898.

Ser. No. 42,711. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) ERNST A. BROMUND, New York, N. Y. Filed May 27, 1909.

PEARL

Particular description of goods.—A Floor Polish or Finish.
Claims use since Nov. 15, 1908.

Ser. No. 51,616. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SALVADOR ANDREU GRAU, Barcelona, Spain. Filed Aug. 30, 1910.



The words "Doctor Andreu" being disclaimed. No claim is made to the words "Sello De Garantia."
Particular description of goods.—Medicated Pastils, Medicated Lozenges, Anti-Asthmatic Fumigating-Paper, and Anti-Asthmatic Cigarettes Containing No Tobacco.
Claims use since the year 1880.

Ser. No. 57,165. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) THE PHIL HOLLENBACH CO., Louisville, Ky. Filed June 19, 1911.

STONE HILL

Particular description of goods.—Straight Bourbon Whisky.
Claims use since the year 1881.

Ser. No. 57,623. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HENRY THAYER & COMPANY, Cambridgeport, Mass. Filed July 14, 1911.



Consisting of a three-sided or flat-iron shield in solid red, on which appears in yellow a letter "T" or so-called "tau cross."

Particular description of goods.—Dyspepsia-Tablets, Sulfur and Cream-Tartar Lozenges, Headache-Powders, Laxative Cold-Tablets, Children's Cough-Syrup, Croup-Syrup, Sore-Throat Remedy and Gargle, Whooping-Cough Remedy, Ginger with Aromatics, Catnip and Fennel Cough-Syrup, Liniment, Laxative Fig Compound, Blackberry-Root Cordial, Rheumatic Tablets, Kidney-Pills, Sodium Phosphate, Chlorate-of-Potash Tablets, Carbolated Witch-Hazel Compound, Soda-Mint Tablets, Liver-Pills, Toothache Remedy, Rhinitis Tablets, Catarrh and Hay-Fever Nasal Balm, Eye-Water, Cascara Tablets, Citrate of Magnesia, Cod-Liver Extract, and Blood-Tonic Pills.

Claims use since January, 1911.

Ser. No. 59,590. (CLASS 12. CONSTRUCTION MATERIALS.) CALIFORNIA CHINA PRODUCTS COMPANY, National City, Cal. Filed Nov. 7, 1911.

KAOSPAR

Particular description of goods.—Glazed and Unglazed and Vitrified and Semivitrified Floor-Tile, Mantel-Tile, Wall-Tile, Faience Tile and Terra Vitrea, Quarries, (Sometimes Called Mission-Blocks,) Hollow Burnt-Clay Building-Blocks, Pressed Brick, and Glazed Brick.

Claims use since Oct. 1, 1911.

Ser. No. 59,871. (CLASS 17. TOBACCO PRODUCTS.) THE JUAN F. PORTUONDO CIGAR MANUFACTURING CO., Philadelphia, Pa. Filed Nov. 23, 1911. Under ten-year proviso.

Juan F. Portuondo's "ALL ALIKE"

The signature being the personal signature of Juan F. Portuondo.

Particular description of goods.—Cigars.

Claims use since Oct. 17, 1890.

Ser. No. 60,511½. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE MECHANICAL RUBBER CO., New York, N. Y., and Cleveland, Ohio. Filed Dec. 29, 1911.

MERUCO

Particular description of goods.—Rubber Mats.

Claims use since 1906.

Ser. No. 60,512½. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE MECHANICAL RUBBER CO., New York, N. Y., and Cleveland, Ohio. Filed Dec. 29, 1911.

MERUCO

Particular description of goods.—Rubber Water-Bottles and Syringes.

Claims use since 1906.

Ser. No. 60,513½. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE MECHANICAL RUBBER CO., New York, N. Y., and Cleveland, Ohio. Filed Dec. 29, 1911.

MERUCO

Particular description of goods.—Rubber Tubing.

Claims use since 1906.

Ser. No. 61,226. (CLASS 48. MALT EXTRACTS AND LIQUORS.) JUNG BREWING COMPANY, Milwaukee, Wis. Filed Feb. 2, 1912.



The word "Jung" being disclaimed.

Particular description of goods.—Lager-Beer.

Claims use since in January, 1911.

Ser. No. 61,940. (CLASS 15. OILS AND GREASES.) STANDARD OIL CO. OF NEW YORK, New York, N. Y. Filed Mar. 5, 1912.



Particular description of goods.—Benzin, Naphtha, Lubricating-Oil, and Refined Oil for Illuminating, Heating, and Power Purposes.

Claims use since Feb. 16, 1912.

Ser. No. 62,096. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE ANGLO-INDIAN DRUG & CHEMICAL CO., Bombay, India. Filed Mar. 11, 1912.

KAMINIA

Particular description of goods.—Perfumed or Scented Hair-Oil.

Claims use since January, 1906.

Ser. No. 62,183. (CLASS 39. CLOTHING.) CHARLES W. DULLES, Philadelphia, Pa. Filed Mar. 15, 1912.

DUSELL

Particular description of goods.—Leggings.

Claims use since Jan. 26, 1911.

Ser. No. 63,720. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE H. B. CHALMERS COMPANY, Schenectady, N. Y. Filed May 22, 1912.



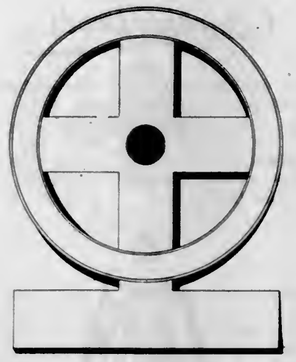
THE QUALITY GIRL

Showing a woman in short skirt, held by both hands, above the legend "The Quality Girl."

Particular description of goods.—Paint and Varnish Removers.

Claims use since Apr. 19, 1912.

Ser. No. 64,281. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) DUST-NO-MORE MANUFACTURING COMPANY, Ogden, Utah. Filed June 20, 1912.



Particular description of goods.—A Sweeping Compound.

Claims use since Jan. 1, 1912.

Ser. No. 64,751. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) J. C. AYER COMPANY, Lowell, Mass. Filed July 16, 1912. Under ten-year proviso.

J. C. Ayer & Co.

Particular description of goods.—Sarsaparilla, Medicines for the Treatment of Chills and Fever, Dumb Ague, Periodical Headache, Headache, Neuralgia, Colds, Coughs, Croup, Asthma, Influenza, Hoarseness, Bronchitis, Consumption, Whooping-Cough, La Grippe, Pneumonia, Affections of the Lungs and Throat, Constipation, Indigestion, Heartburn, Biliousness, Jaundice, Sick Headache, Nervousness, Anemia, General Debility, Affections Caused by a Constipated Condition of the Bowels or by the Inactivity of the Liver, Dandruff, Falling Hair, Baldness, Diseases Arising from Impure Blood, from Thin Blood, from Debility of the Nervous System, from Weakness of the Digestive Organs, and for General Tonics, Alteratives, Laxatives, Cathartics, Hair-Dressing, and Hair-Tonic.

Claims use since about the year 1851.

Ser. No. 65,426. (CLASS 15. OILS AND GREASES.) UNION OIL COMPANY OF CALIFORNIA, Oleum, Cal. Filed Aug. 26, 1912.

MOTOREZE

Consists of the word "Motoreze."

Particular description of goods.—A Lubricating Oil or Grease.

Claims use since Apr. 1, 1912.

Ser. No. 65,817. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) STRAUSS MANUFACTURING COMPANY, Rutherford, N. J., and New York, N. Y. Filed Sept. 16, 1912.

Duckie-Doodles

Particular description of goods.—Figure Toys.
Claims use since on or about Jan. 2, 1912.

Ser. No. 66,088. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROBT. G. JACKSON, Tacoma, Wash. Filed Oct. 2, 1912.



Particular description of goods.—A Compound Meal or Flour Composed of Wheat, Rye, and Flax for Cooking Purposes in Making Bread, Cakes, Puddings, Cookies, and the Like.
Claims use since Apr. 15, 1912.

Ser. No. 66,129. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DR. BAYER ÉS TÁRSA, Budapest, Hungary. Filed Oct. 4, 1912.

EMZAGA

Particular description of goods.—Salves.
Claims use since June 8, 1912.

Ser. No. 66,131. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DR. BAYER ÉS TÁRSA, Budapest, Hungary. Filed Oct. 4, 1912.

TRIGOSAN

Particular description of goods.—Mercurial Preparations of All Kinds for the Treatment of Venereal Maladies.
Claims use since Aug. 1, 1912.

Ser. No. 66,132. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DR. BAYER ÉS TÁRSA, Budapest, Hungary. Filed Oct. 4, 1912.

EBAGA

Particular description of goods.—Salves.
Claims use since Dec. 1, 1909.

Ser. No. 66,260. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) JOHN WANAMAKER, PHILADELPHIA, Philadelphia, Pa. Filed Oct. 12, 1912.

Rana

The trade-mark consists of the word "Rana."
Particular description of goods.—Pearls, Rubies, Sapphires, and Emeralds.
Claims use since about Sept. 10, 1912.

Ser. No. 66,269. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GEO. G. CROUCH, Atlanta, Ga. Filed Oct. 12, 1912.

EA

Particular description of goods.—A Liver and Stomach Remedy.
Claims use since June 10, 1912.

Ser. No. 66,725. (CLASS 11. INKS AND INKING MATERIALS.) CRESCENT TYPEWRITER SUPPLY COMPANY, Portland, Me., and Boston, Mass. Filed Nov. 6, 1912.

CRESCENT BRAND

The word "Brand" being disclaimed.
Particular description of goods.—Inked Ribbons and Carbon-Paper.
Claims use since January, 1897.

Ser. No. 67,016. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) RICHTER & HOFFMANN THE HARVARD DENTAL MANUFACTURING CO., Berlin, Germany. Filed Nov. 20, 1912.



The trade-mark consists of a shield inclosing two letters forming a monogram, the one of which is a flattened "C" and the other an "H," the upper arms of which are, however, connected by an arc, thus giving the letter "D" sidewise, or on the whole "H D C," meaning "Harvard Dental Company."
Particular description of goods.—Artificial Teeth, Tooth-Cements, Gutta-Percha Stoppings, Amalgams, Glass and Porcelain Stoppings for Teeth, Caoutchouc and Gold Preparations for Dental Purposes, Molding Compound for Dental Purposes, Dental Varnishes, Dental Blow-Lamps, Dental Forceps, Tweezers, and Tooth-Polishing Strips of Flint-Paper and Linen.
Claims use since Jan. 1, 1892.

Ser. No. 67,319. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) VICTOR G. DUPONT, San Francisco, Cal. Filed Dec. 9, 1912.

D.M.S.

Particular description of goods.—Mange Shampoo Preparation.
Claims use since Sept. 1, 1912.

Ser. No. 67,600. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FORT DEARBORN CO., Chicago, Ill. Filed Dec. 26, 1912.



Particular description of goods.—Face-Powder, Face-Lotions, and Face-Creams.
Claims use since Nov. 9, 1912.

Ser. No. 67,654. (CLASS 39. CLOTHING.) ARTHUR LETTS, Los Angeles, Cal. Filed Dec. 31, 1912.

Stonwer

Particular description of goods.—Hosiery.
Claims use since Sept. 27, 1909.

Ser. No. 67,829. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) BENJAMIN WEISBERG, Philadelphia, Pa. Filed Jan. 10, 1913.

MANUFACTURERS OF KNITTED CRAVATS
KNITTING MILLS

No exclusive claim is made to the words "Manufacturers of Knitted Cravats," "Knitted Mills," "B. Weisberg—Proprietor."
Particular description of goods.—Knitted Neckwear.
Claims use for one year.

Ser. No. 68,002. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE SEAMLESS RUBBER COMPANY, New Haven, Conn. Filed Jan. 18, 1913.



No claim being made to the words "The Seamless Rubber Company" or "New Haven, Conn."
Particular description of goods.—Rubber Abdominal Coils, Rubber Atomizers, Rubber Bandage-Gum, Rubber Bed-Pans, Rubber Breast-Pumps, Rubber Bulb Sets, Rubber Bulb-Syringes, Rubber Bulbs Used in Connection with Atomizers, Syringes, or Goods of a Similar Nature, Rubber Cushions, (Invalids',) Rubber Crutch-Tips, Combination Rubber Hot-Water Bottles and Fountain-Syringes, Rubber Dental Dams, Rubber Face-Bags, Rubber Finger-Cots, Hard-Rubber Pipes, Rubber Head-Coils, Rubber Ice-Caps, Rubber Ice-Bags, Rubber Medicine-Droppers, Rubber Nipples, Rubber Nipple-Shields, Rubber Nursing-Bottle Fittings, Rubber Operating-Cushions, Rubber Pacifiers, Rubber Politzer Air-Bags, Rubber Teething-Rings, Rubber Urinals, Rubber Water-Bottles, and Rubber Water-Bags.
Claims use since January, 1911.

Ser. No. 68,128. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) WALKER & PRATT MFG. CO., Boston, Mass. Filed Jan. 25, 1913.

Boston Beauty

Particular description of goods.—Heating Stoves, Furnaces, and Cooking-Ranges.
Claims use since 1909.

Ser. No. 68,165. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM LICHTERMANN, San Francisco, Cal. Filed Jan. 28, 1913.



Shampoo

Belladerma

The portrait being fanciful, the word "Shampoo" being disclaimed.
Particular description of goods.—A Shampoo Preparation.
Claims use since July 1, 1912.

Ser. No. 68,198. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) F. A. MARTOCCIO MACARONI COMPANY, Minneapolis, Minn. Filed Jan. 29, 1913.

FAMELITES

Particular description of goods.—Macaroni, Spaghetti, Vermicelli, and Egg-Noodles.
Claims use since Jan. 1, 1913.

Ser. No. 68,209. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE T. MATTHEWS & CO., New York, N. Y. Filed Jan. 30, 1913.



Particular description of goods.—Teas.
Claims use since Jan. 1, 1893.

Ser. No. 68,217. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE PIERCE-ARROW MOTOR CAR CO., Buffalo, N. Y. Filed Jan. 30, 1913.

PIERCE

The Pierce-Arrow Motor Car Company disclaims the right to the exclusive use of the word "Pierce."
Particular description of goods.—Motor-Cars and Automobiles.
Claims use since during the year 1901.

Ser. No. 68,248. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) O. R. PIEPER, Milwaukee, Wis. Filed Jan. 31, 1913.

BRIGHT SPOT

Particular description of goods.—Tomato Catsup, Flavoring Extracts for Foods, Fruit Preserves, Fruit Jellies, Tea, Crushed Fruits, Canned Fruits, Canned Berries, Canned Vegetables, and Chilli Sauce.
Claims use since 1909.

Ser. No. 68,289. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) STANDARD VARNISH WORKS, New York, N. Y. Filed Feb. 3, 1913.

TROCKENITE

Particular description of goods.—Concrete Coatings, Clear Liquids Which are Varnishes or Japans, and Oil-Paints, Ready-Mixed Paints, Enamels, Varnishes, and Varnish-Removers.
Claims use since Dec. 20, 1912.

Ser. No. 68,291. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE W. SANBORN & SON, Astoria, Oreg. Filed Feb. 3, 1913.



The picture is fanciful.
Particular description of goods.—Canned Salmon.
Claims use since June 20, 1912.

Ser. No. 68,303. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DROF CHEMICAL CO., Baltimore, Md. Filed Feb. 4, 1913.

DROF

Particular description of goods.—An Ointment for Skin Diseases.
Claims use since Aug. 22, 1912.

Ser. No. 68,308. (CLASS 17. TOBACCO PRODUCTS.) "KIOS" CIGARETTEN- & TABAK-IMPORT-ENGROS FABRIK TÜRK. TABAKE Ü CIGARETTEN E. ROBERT BÖHME, Dresden-A., Germany. Filed Feb. 4, 1913.

Kios

Particular description of goods.—Leaf-Tobacco, Smoking, Chewing, and Snuff Tobacco, and Cigarettes.
Claims use since Dec. 7, 1909.

Ser. No. 68,309. (CLASS 17. TOBACCO PRODUCTS.) "KIOS" CIGARETTEN- & TABAK-IMPORT-ENGROS FABRIK TÜRK. TABAKE Ü CIGARETTEN E. ROBERT BÖHME, Dresden-A., Germany. Filed Feb. 4, 1913.

Madame Butterfly

Particular description of goods.—Leaf-Tobacco, Smoking, Chewing, and Snuff Tobacco, and Cigarettes.
Claims use since Apr. 19, 1910.

Ser. No. 68,340. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SYLVESTER J. BETTS, Raleigh, N. C. Filed Feb. 6, 1913.

Hedsem

Particular description of goods.—Headache and Neuralgic Remedies.
Claims use since Jan. 15, 1913.

Ser. No. 68,367. (CLASS 38. PRINTS AND PUBLICATIONS.) POPULAR ENGINEERING PUBLISHING COMPANY, Boston, Mass. Filed Feb. 6, 1913.

Popular Engineering

Particular description of goods.—A Monthly Magazine.
Claims use since Jan. 9, 1913.

Ser. No. 68,436. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LEADER IRON WORKS, Decatur, Ill. Filed Feb. 10, 1913.

Leader

Particular description of goods.—Centrifugal Pumps, Reciprocating Pumps, Rotary Pumps, and Diaphragm-Pumps.
Claims use since on or about the first of April, 1906.

Ser. No. 68,513. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) G. W. CARNRICK CO., New York, N. Y. Filed Feb. 12, 1913.

HORMOTONE

Particular description of goods.—Internal Secretions to Supply Deficient Secretions of the Spleen, Thyroid, Pituitary, Ovary, Testis, and Pancreas.
Claims use since Jan. 17, 1913.

Ser. No. 68,514. (CLASS 31. FILTERS AND REFRIGERATORS.) GIBSON REFRIGERATOR CO., Greenville, Mich. Filed Feb. 12, 1913.

PORCELOID

Particular description of goods.—Non-Absorbent Coated Metallic Linings for Refrigerators.
Claims use since July 20, 1912.

Ser. No. 68,524. (CLASS 39. CLOTHING.) SELZ, SCHWAB & CO., Chicago, Ill. Filed Feb. 12, 1913.



Particular description of goods.—Men's, Women's, Misses', Children's, Boys', and Youths' Leather, Canvas, Velvet, Satin, and other Fabric Boots and Shoes.
Claims use since Dec. 30, 1912.

Ser. No. 68,526. (CLASS 39. CLOTHING.) SELZ, SCHWAB & CO., Chicago, Ill. Filed Feb. 12, 1913.



Particular description of goods.—Men's, Women's, Misses', Children's, Boys', and Youths' Leather, Canvas, Velvet, Satin, and other Fabric Boots and Shoes.
Claims use since Dec. 30, 1912.

Ser. No. 68,679. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) JOHN DEERE PLOW COMPANY OF MOLINE, Moline, Ill. Filed Feb. 24, 1913.

TRIUMPH

Particular description of goods.—Shoveling-Boards to be Attached to Wagons for Unloading Purposes.
Claims use since Nov. 1, 1912.

Ser. No. 68,716. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE H. B. CLAFLIN COMPANY, New York, N. Y. Filed Feb. 25, 1913.



Particular description of goods.—Silk Piece Goods.
Claims use since January, 1911.

Ser. No. 68,745. (CLASS 15. OILS AND GREASES.) EMILE F. KICK, Newark, N. J. Filed Feb. 26, 1913.

Cottonole

Particular description of goods.—Oil and Grease Products Used in Softening, Sizing, and Finishing Textile Fabrics.
Claims use since 1910.

Ser. No. 68,762. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM R. LOWMAN, Orangeburg, S. C. Filed Feb. 27, 1913.

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Particular description of goods.—Remedies for Dyspepsia, Biliousness, Rheumatism, Consumption, Coughs, Colds, Emaciation, Marasmus, and Low Vitality.
Claims use since Aug. 1, 1889.

Ser. No. 68,776. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DWIGHT EDWARDS COMPANY, Portland, Oreg. Filed Feb. 28, 1913.

DE LUXE

Particular description of goods.—Teas.
Claims use since Feb. 15, 1913.

Ser. No. 68,783. (CLASS 17. TOBACCO PRODUCTS.) B. MURATTI, SONS & CO., LIMITED, Manchester, England. Filed Feb. 28, 1913. Under ten-year proviso.

ARISTON

Particular description of goods.—Cigarettes.
Claims use since about June, 1890.

Ser. No. 68,784. (CLASS 17. TOBACCO PRODUCTS.) B. MURATTI, SONS & CO., LIMITED, Manchester, England. Filed Feb. 28, 1913. Under ten-year proviso.

NEB-KA

Particular description of goods.—Cigarettes.
Claims use since about January, 1887.

Ser. No. 68,794. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ISAAC COHEN, Philadelphia, Pa. Filed Mar. 1, 1913.

Romeu & Juliet

Particular description of goods.—Candies.
Claims use since Feb. 27, 1913.

Ser. No. 68,845. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GRIFFITH-DURNEY CO., San Francisco, Cal. Filed Mar. 5, 1913.

ANTELOPE

Particular description of goods.—Canned Fruits.
Claims use since July, 1906.

Ser. No. 68,866. (CLASS 39. CLOTHING.) HUGO DE BROCK AND COMPANY, Chicago, Ill. Filed Mar. 6, 1913.

Balkan

Particular description of goods.—Waists and Blouses.
Claims use since Feb. 1, 1913.

Ser. No. 68,867. (CLASS 39. CLOTHING.) LESS & ARENSON CO., Little Rock, Ark. Filed Mar. 6, 1913.

Rival

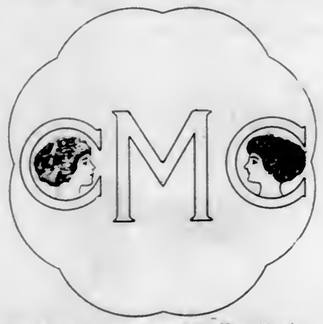
Particular description of goods.—Hosiery, Men's Top Shirts, Both Stiff Shirts and Soft Cotton and Woolen Shirts.
Claims use since Jan. 1, 1907.

Ser. No. 68,874. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) SOCIETE FRANCAISE DES FILMS ET CINEMATOGRAPHIES ECLAIR, New York, N. Y., and Fort Lee, N. J. Filed Mar. 6, 1913.



Particular description of goods.—Moving-Picture Films.
Claims use since Jan. 2, 1912.

Ser. No. 68,939. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) C. M. C. Co., Joplin, Mo. Filed Mar. 10, 1913.



Particular description of goods.—Hair-Tonic.
Claims use since Jan. 1, 1913.

Ser. No. 68,955. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) VAUGHAN & BUSHNELL MANUFACTURING COMPANY, Chicago, Ill. Filed Mar. 10, 1913.

Kingsteel.

Particular description of goods.—Plain Braces, Ratchet-Braces, Corner-Braces, Drill-Braces, Ratchet-Drills, Hammers, Scutches, Chuck-Bits, Reamers, Countersinks, Machine-Punches, Belt-Punches, Nail-Sets, Rivet-Sets, Machinists' Chisels, Carpenters' Chisels, Saws, Drawing-Knives, Planes, Snips, Tongs, Pincers, Pliers, Nippers, Wire-Cutters, Meat-Triers, Meat-Stringers, Meat-Hooks, Hay-Hooks, Box-Hooks, Cotton-Hooks, Earth-Augers, Hoof-Parers, Wrenches, Awls, Hardies, Headers, Flatters, Swages, Cold-Cutters, Hot-Cutters, Block-Scrapers, Screw-Drivers, Star-Drills, Claw-Bars, Crate-Openers, Horseshoers' Knives.
Claims use since Feb. 28, 1913.

Ser. No. 69,053. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HENRY P. KLEIN, St. Louis, Mo. Filed Mar. 15, 1913.



Particular description of goods.—Cough-Drops.
Claims use since Jan. 15, 1912.

Ser. No. 69,056. (CLASS 17. TOBACCO PRODUCTS.) GENNARO PISAPIA, Brooklyn, N. Y. Filed Mar. 15, 1913.



No claim of exclusive right to the use of the words "Spuntatura Fermentata Italiana" being made.
Particular description of goods.—Manufactured Tobaccos, Cigars, and Cigarettes.
Claims use since December, 1912.

Ser. No. 69,122. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) SHEFFIELD DENTIFRICE CO., New London, Conn., and New York, N. Y. Filed Mar. 17, 1913.

CRÊME
YVETTE

Sheffield Company

No claim being made to the exclusive use of the word "Crême" and the word "Company." The name "Sheffield Company" is in the handwriting of L. T. Sheffield.
Particular description of goods.—A Cordial.
Claims use since 1891.

Ser. No. 69,125. (CLASS 11. INKS AND INKING MATERIALS.) TECHNICAL SUPPLY COMPANY, Scranton, Pa. Filed Mar. 17, 1913.

TESCO

Particular description of goods.—Drawing-Inks.
Claims use since Jan. 1, 1913.

Ser. No. 69,154. (CLASS 39. CLOTHING.) CHAS. R. DE BEVOISE COMPANY, Newark, N. J. Filed Mar. 18, 1913.

Corssière

Particular description of goods.—A Combination Corset and Corset-Cover.
Claims use since Feb. 11, 1913.

Ser. No. 69,175. (CLASS 38. PRINTS AND PUBLICATIONS.) JAMES R. MCCLESKEY, St. Louis, Mo. Filed Mar. 15, 1913.

My

Particular description of goods.—Monthly Magazines.
Claims use since about Feb. 28, 1913.

Ser. No. 69,179. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES F. DARE & SON, Bridgeton, N. J. Filed Mar. 19, 1913.

"KIL-TONE"

Particular description of goods.—Insecticide, Fungicide, and Tonic for Plants or Trees.
Claims use since Jan. 1, 1913.

Ser. No. 69,180. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GOODALL BACKHOUSE & CO., Leeds, England. Filed Mar. 19, 1913. Under ten-year proviso.



Particular description of goods.—Sauces.
Claims use since the year 1864.

Ser. No. 69,208. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) The W. J. McCahan Sugar Refining Co., Philadelphia, Pa. Filed Mar. 20, 1913.

GRANULATED SUGAR

No claim, however, being made to the words "Granulated Sugar."
Particular description of goods.—Sugar.
Claims use since Dec. 16, 1912.

Ser. No. 69,214. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) Smith, Kline & French Co., Philadelphia, Pa. Filed Mar. 20, 1913.

10 O'CLOCKS

Particular description of goods.—Cathartic Capsules.
Claims use since Jan. 8, 1913.

Ser. No. 69,222. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) The Formacone Company, Newark, N. J. Filed Mar. 21, 1913.

FORMACONE

Particular description of goods.—Disinfectants, Deodorizers, and Fumigators.
Claims use since the 2d day of January, 1905.

Ser. No. 69,223. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) The Formacone Company, Newark, N. J. Filed Mar. 21, 1913.

FLORAFORM

Particular description of goods.—Disinfectants, Deodorizers, and Fumigators.
Claims use since Jan. 2, 1905.

Ser. No. 69,234. (CLASS 16. PAINTS AND PAINTERS' MATERIALS. Kro-Kuec Company, Chicago, Ill. Filed Mar. 21, 1913.

KRO-KUEC

Particular description of goods.—Furniture-Polish.
Claims use since Feb. 1, 1913.

Ser. No. 69,253. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) The International Druggists' and Chemists' Laboratories, Inc., New York, N. Y. Filed Mar. 22, 1913.

MAGNESURATE COMPOUND

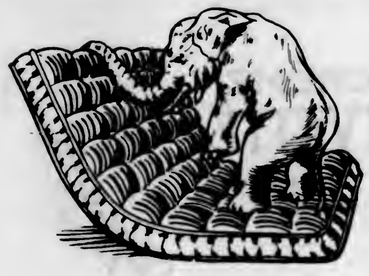
No claim is made for the use of the word "Compound."
Particular description of goods.—An Antacid.
Claims use since Jan. 1, 1913.

Ser. No. 69,290. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) Hackney Manufacturing Company, St. Paul, Minn. Filed Mar. 24, 1913.



Particular description of goods.—Autoplows.
Claims use since Mar. 22, 1912.

Ser. No. 69,291. (CLASS 32. FURNITURE AND UPHOLSTERY.) Jacob Kaiser Mfg. Co., St. Louis, Mo. Filed Mar. 24, 1913.



No claim being made to the representation of the mattress.
Particular description of goods.—Mattresses and Box-Springs.
Claims use since about Jan. 1, 1913.

Ser. No. 69,340. (CLASS 37. PAPER AND STATIONERY.) Sauquoit Toilet Paper Co., Inc., New Hartford, N. Y. Filed Mar. 25, 1913.



No claim being made to the words "Toilet Tissue."
Particular description of goods.—Toilet-Paper.
Claims use since Mar. 7, 1911.

Ser. No. 69,341. (CLASS 37. PAPER AND STATIONERY.) Sauquoit Toilet Paper Co., Inc., New Hartford, N. Y. Filed Mar. 25, 1913.



No claim being made to the words "Severed Roll" and "Toilet Paper."
Particular description of goods.—Toilet-Paper.
Claims use since Jan. 1, 1907.

Ser. No. 69,351. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) Samuel Cabot, Inc., Boston, Mass. Filed Mar. 26, 1913.

Mulsol

Particular description of goods.—An Antiseptic Wash for Sheep and Cattle.
Claims use since Feb. 26, 1913.

Ser. No. 69,356. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) George J. Hurwitt, New York, N. Y. Filed Mar. 26, 1913.

ELIMITON

Particular description of goods.—A Remedy to Reduce Fat.
Claims use since Feb. 15, 1913.

Ser. No. 69,382. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) Willis Bros., Bradshaw, Nebr. Filed Mar. 27, 1913.

Eureka

Particular description of goods.—Hog-Cholera Remedy.
Claims use since Dec. 24, 1912.

Ser. No. 69,388. (CLASS 33. GLASSWARE.) Glocker Sanitary Jar Company, Wilmington, Del. Filed Mar. 28, 1913.

OK

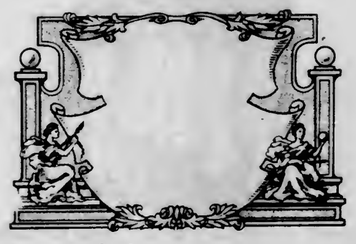
Particular description of goods.—Glass Bottles and Glass Jars.
Claims use since about January, 1913.

Ser. No. 69,480. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) Spokane Valley Orchard & Land Co., Spokane Bridge, Wash. Filed Mar. 31, 1913.



The portrait being that of Martha Washington, deceased.
Particular description of goods.—Cider, Sarsaparilla, Birch-Beer, Apple-Juice, Raspberry-Shrub, Grape-Juice, Champagne Cider, (Non-Alcoholic,) Root-Beer, Lime-Juice, and Also the Following to be Used as Flavoring for Soda-Fountain Beverages: Pineapple-Juice, Spiced Fruit-Juices, Mixed Apple and Grape Juices, and Fresh-Fruit Juices.
Claims use since Dec. 17, 1912.

Ser. No. 69,483. (CLASS 37. PAPER AND STATIONERY.) Sauquoit Toilet Paper Co., Inc., New Hartford, N. Y. Filed Mar. 31, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Jan. 20, 1911.

Ser. No. 69,492. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.

Wanikum

Particular description of goods.—Tacks.
Claims use since about Jan. 1, 1911.

Ser. No. 69,493. (CLASS 37. PAPER AND STATIONERY.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.

Wanikum

Particular description of goods.—Wrapping-Paper.
Claims use since about Jan. 1, 1907.

Ser. No. 69,515. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) JOSEPH E. ROSENFELD, Council Bluffs, Iowa. Filed Apr. 1, 1913.

Golden Ribbon

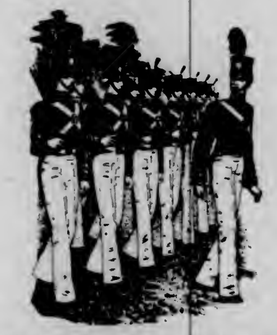
Particular description of goods.—A Non-Alcoholic Tonic Malt Beverage.
Claims use since Oct. 30, 1912.

Ser. No. 69,524. (CLASS 32. FURNITURE AND UPHOLSTERY.) THE E. T. BURROWES COMPANY, Portland, Me. Filed Apr. 2, 1913. Under ten-year proviso.

Burrowes

Particular description of goods.—Tables, Chairs, Settees, Stands, and Cedar Chests.
Claims use since on or about the year 1880.

Ser. No. 69,550. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.



Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Aug. 30, 1902.

Ser. No. 69,624. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) LOUIS M. PARK, Minneapolis, Minn. Filed Apr. 5, 1913.



Particular description of goods.—Spring-Water, Ginger-Ale, Sarsaparilla, Root-Beer, Birch-Beer, Lemonade, and Club-Soda.
Claims use since Nov. 1, 1912.

Ser. No. 69,633. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CLARK-SMITH HARDWARE COMPANY, Peoria, Ill. Filed Apr. 7, 1913.



Consists in painting the lower part of the shank of the article blue and the upper part gold, no claim being made to the representation of a fork.
Particular description of goods.—Hoes, Rakes, and Spading-Forks, Barley-Forks, Hay-Forks, and Dung-Forks.
Claims use since on or before the 1st day of January, 1913.

Ser. No. 69,634. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CLARK-SMITH HARDWARE COMPANY, Peoria, Ill. Filed Apr. 7, 1913.



Consisting in painting the lower part of the socket of the article blue and the upper part thereof with an annular gold or gilt strip, no claim being made to the representation of the article.
Particular description of goods.—Shovels, Spades, Post-Spades, Scoops, Hoes, Rakes, and Spading-Forks, Barley-Forks, Hay-Forks, and Dung-Forks.
Claims use since on or before the 1st day of January, 1913.

Ser. No. 69,635. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CLARK-SMITH HARDWARE COMPANY, Peoria, Ill. Filed Apr. 7, 1913.

Gold Tip

Particular description of goods.—Shovels, Spades, Post-Spades, Scoops, Hoes, Rakes, and Spading-Forks, Barley-Forks, Hay-Forks, and Dung-Forks.
Claims use since on or before the 1st day of January, 1913.

Ser. No. 69,647. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WHITMAN AGRICULTURAL COMPANY, St. Louis, Mo. Filed Apr. 7, 1913. Under ten-year proviso.

WHITMAN'S

Particular description of goods.—Hay-Presses, Lard-Presses, Cotton-Presses, Paper-Presses, Rags-Presses, Wool-Presses, Cotton-Hull Presses, Straw-Presses, Shavings-Presses, Excelsior-Presses, Hand-Presses, Fruit-Presses, Cider-Presses, Wine-Presses, Winches, Side-Saw Tables, Swing-Saw Tables, Drag-Saws, Corn-Mills, Cob-Mills, Grinding-Mills, Feed-Mills, Corn-Cutters, Stalk-Cutters, Straw-Cutters, Vegetable-Cutters, Corn-Drills, Corn-Shellers, Ear-Corn Crushers, Seed-Sowers, Gas-Engines, Harrows, Lawn-Rollers, Warehouse-Skids, Gasolene-Spraying Outfits, Kerosene-Spraying Outfits.
Claims use since about 1870.

Ser. No. 69,662. (CLASS 39. CLOTHING.) NEWMARK BROS., New York, N. Y. Filed Apr. 8, 1913.

GEM
REGISTERED
CORSET COVER BRASSIERE

No claim being made to the exclusive use of the words "Registered Corset Cover Brassiere."
Particular description of goods.—Corset-Cover Brassières.
Claims use since Apr. 2, 1913.

Ser. No. 69,695. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) C. S. EDWARDS & COMPANY, Houston, Tex. Filed Apr. 10, 1913.



Particular description of goods.—Varnish.
Claims use since Mar. 25, 1913.

Ser. No. 69,702. (CLASS 39. CLOTHING.) JULIUS HIRSH, Philadelphia, Pa. Filed Apr. 10, 1913.

Pandora

Particular description of goods.—Knitted Union Suits and Drawers.
Claims use since Mar. 26, 1913.

Ser. No. 69,716. (CLASS 32. FURNITURE AND UPHOLSTERY.) GEO. BORGFELDT & CO., New York, N. Y. Filed Apr. 11, 1913.

Trianon

Particular description of goods.—Mirrors and Picture-Frames.
Claims use since Apr. 7, 1913.

Ser. No. 69,725. (CLASS 39. CLOTHING.) PREMIER TAILORING CO., Syracuse, N. Y. Filed Apr. 11, 1913.

Particular description of goods.—Custom-Made Suits and Overcoats for Men and Boys.
Claims use since July 3, 1912.

Ser. No. 69,741. (CLASS 39. CLOTHING.) LORD & TAYLOR, New York, N. Y. Filed Apr. 12, 1913.

Marode

Particular description of goods.—Hosiery for Men, Women, and Children.
Claims use since Sept. 1, 1912.

Ser. No. 69,743. (CLASS 39. CLOTHING.) MANISTEE SHOE MFG. CO., Manistee, Mich. Filed Apr. 12, 1913.

ICELAND

Particular description of goods.—Sheepskin Moccasins, Sheepskin Slippers, Sheepskin Bootees, Sheepskin Balmorals, and Sheepskin Foot-Warmers.
Claims use since June 1, 1912.

Ser. No. 69,777. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE NUNGESSER CARBON & BATTERY CO., Cleveland, Ohio. Filed Apr. 14, 1913.

ACME

Particular description of goods.—Commutator-Brushes.
Claims use since about May 1, 1911.

Ser. No. 69,810. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) TREMONT & SUFFOLK MILLS, Lowell, Mass. Filed Apr. 15, 1913. Under ten-year proviso.



Particular description of goods.—Cotton Piece Goods.
Claims use since about March, 1845.

Ser. No. 69,821. (CLASS 39. CLOTHING.) THE BEACON FALLS RUBBER SHOE COMPANY, Beacon Falls, Conn. Filed Apr. 16, 1913.

ROCK RIBBED

Particular description of goods.—Boots and Shoes Made Partly or Wholly of Rubber.
Claims use since Apr. 10, 1913.

Ser. No. 69,848. (CLASS 39. CLOTHING.) WALTER S. FLETCHER, Gloversville, N. Y. Filed Apr. 17, 1913.

NEPTUNE

Particular description of goods.—Men's, Women's, and Children's Leather, Silk, and Cloth Gloves.
Claims use since Jan. 3, 1913.

Ser. No. 69,893. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) ELLIS J. HOFFORD, New York, N. Y. Filed Apr. 18, 1913.



Particular description of goods.—Stains and Varnishes.
Claims use since Apr. 7, 1913.

Ser. No. 69,918. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) H. L. GRIESEDIECK DISTILLING CO., St. Louis, Mo. Filed Apr. 19, 1913.



The picture shown being fanciful.
Particular description of goods.—Blended Whisky.
Claims use since Mar. 11, 1913.

Ser. No. 69,930. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE TRAUT & HINE MANUFACTURING COMPANY, New Britain, Conn. Filed Apr. 19, 1913.

MILITARY

Particular description of goods.—Safety-Razors.
Claims use since about Jan. 1, 1912.

Ser. No. 69,931. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE TRAUT & HINE MANUFACTURING COMPANY, New Britain, Conn. Filed Apr. 19, 1913.

COLLEGE

Particular description of goods.—Safety-Razors.
Claims use since about Jan. 1, 1912.

Ser. No. 69,981. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) SOLON EDGAR WALKER, Dallas, Tex. Filed Apr. 21, 1913.

S.E.W.

Particular description of goods.—Straight Kentucky Whisky.
Claims use since on or about Mar. 19, 1913.

Ser. No. 69,995. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) HUTCHISON SCOTT COMPANY, New York, N. Y. Filed Apr. 22, 1913.

TEMPO

Particular description of goods.—A Liquid Compound for Covering Wood, Cork, Metal, Stone, and Cement Which is Non-Conductive of Electricity.
Claims use since Mar. 1, 1909.

Ser. No. 70,001. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMES SHOVEL & TOOL COMPANY, Jersey City, N. J., and Boston, Mass. Filed Apr. 23, 1913. Under ten-year proviso.



Particular description of goods.—Shovels, Spades, and Scoops.
Claims use since 1844.

Ser. No. 70,002. Renewal. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMES SHOVEL & TOOL COMPANY, Jersey City, N. J., and Boston, Mass. Filed Apr. 23, 1913.

OK

Particular description of goods.—Shovels, Spades, and Scoops.
Claims use since February, 1881.

Ser. No. 70,005. (CLASS 32. FURNITURE AND UPHOLSTERY.) R. H. COMEY COMPANY, Camden, N. J. Filed Apr. 23, 1913.

KOMI

Particular description of goods.—Raffia, Grass, and Bamboo Porch-Curtains.
Claims use since 1902.

Ser. No. 70,024. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMES SHOVEL & TOOL COMPANY, Jersey City, N. J., and Boston, Mass. Filed Apr. 24, 1913. Under ten-year proviso.

O. AMES

Particular description of goods.—Shovels, Spades, and Scoops.
Claims use since 1812.

TRADE-MARKS

REGISTERED MAY 20, 1913.

91,628. PHARMACEUTICAL SOLUTION USED AS A CERTAIN REMEDY AND OPHTHALMIC. Aktien-gesellschaft vormals B. Siegfried, Zofingen, Switzerland.
Filed November 14, 1912. Serial No. 66,902. PUBLISHED MARCH 11, 1913.

91,629. MIXED DRINK OF ALCOHOLIC LIQUORS. Enrique Aldabó, Habana, Cuba.
Filed October 29, 1912. Serial No. 66,594. PUBLISHED MARCH 18, 1913.

91,630. SUSPENSION-CHAINS FOR ELECTRICAL FIXTURES. Flora S. Alden, Boston, Mass.
Filed October 18, 1912. Serial No. 66,344. PUBLISHED MARCH 18, 1913.

91,631. SALVES FOR THE TREATMENT OF CERTAIN NAMED AFFLICTIONS AND BLOOD-PURIFIERS. J. P. Allen Medicine Co., St. Paul, Minn.
Filed November 1, 1912. Serial No. 66,660. PUBLISHED MARCH 11, 1913.

91,632. WATERPROOF PAINT. Anthrol Wood Preserving Co., New York, N. Y.
Filed August 12, 1912. Serial No. 65,220. PUBLISHED MARCH 18, 1913.

91,633. CLARET-WINE AND CHAMPAGNE. D. Antolini & Co., New York, N. Y.
Filed February 28, 1912. Serial No. 61,796. PUBLISHED MARCH 18, 1913.

91,634. DRINK MADE FROM CELERY, GINGER-ALE, AND CLUB-SODA. L. C. Arny, New Orleans, La.
Filed December 9, 1912. Serial No. 67,317. PUBLISHED MARCH 4, 1913.

91,635. SHAMPOO PREPARATION. Barbers United Syndicate, Brooklyn, N. Y.
Filed November 18, 1911. Serial No. 59,786. PUBLISHED MARCH 18, 1913.

91,636. FACE-CREAM. William A. Bartlett, Aurora, Ill.
Filed October 28, 1912. Serial No. 66,584. PUBLISHED MARCH 4, 1913.

91,637. REMEDY FOR STOMACHIC DISORDERS. Joseph H. Zimmerman, New York, N. Y.
Filed September 19, 1912. Serial No. 65,854. PUBLISHED MARCH 18, 1913.

91,638. GO-CARTS. Belknap Hardware and Manufacturing Company, Louisville, Ky.
Filed December 6, 1911. Serial No. 60,106. PUBLISHED MARCH 18, 1913.

91,639. SLIGHTLY-POROUS WATER-HOLDING RECEPTACLES USED AS AIR-MOISTENERS. Harry Bentz, New York, N. Y.
Filed September 16, 1912. Serial No. 65,780. PUBLISHED MARCH 18, 1913.

91,640. CHEMICAL COMPOUND FOR ELECTROPLATING. William Berkel, Jersey City, N. J.
Filed November 26, 1912. Serial No. 67,144. PUBLISHED MARCH 11, 1913.

91,641. CHEMICAL COMPOUND FOR THE REFINING OF SUGAR. Bowker Chemical Company, New York, N. Y.
Filed January 13, 1913. Serial No. 67,861. PUBLISHED MARCH 18, 1913.

91,642. TONIC LAXATIVE, LAXATIVE, CATHARTIC, HEPATIC STIMULANT, AND CHOLAGOGUE. Bristol-Myers Company, Brooklyn and New York, N. Y.
Filed January 27, 1913. Serial No. 68,134. PUBLISHED MARCH 18, 1913.

91,643. CERTAIN NAMED ARTICLES MADE OF PORCELAIN OR EARTHENWARE. Burley & Tyrrell Company, Chicago, Ill.
Filed November 11, 1912. Serial No. 66,799. PUBLISHED MARCH 18, 1913.

91,644. TOOTH-POWDER. The Butler-Ivins Co., Wilmington, Del.
Filed January 16, 1913. Serial No. 67,940. PUBLISHED MARCH 18, 1913.

91,645. REMEDY FOR CERTAIN NAMED DISEASES. Laurence E. Cash, New York, N. Y., and Chicago, Ill.
Filed March 28, 1912. Serial No. 62,483. PUBLISHED NOVEMBER 5, 1912.

91,646. TOILET PREPARATION INTENDED TO BE ADDED TO THE BATH. Citro Chemical Co., Maywood, N. J.
Filed December 19, 1912. Serial No. 67,489. PUBLISHED MARCH 11, 1913.

91,647. REMEDY FOR FURUNCULOSIS AND ACNE. Chemische Fabrik Güstrow, Dr. Hillringhaus & Dr. Heilmann, Güstrow and Heideweg, Germany.
Filed June 17, 1911. Serial No. 57,139. PUBLISHED MARCH 11, 1913.

91,648. CERTAIN NAMED FOODS. W. H. Crawford Co., Baltimore, Md.
Filed March 27, 1911. Serial No. 55,322. PUBLISHED FEBRUARY 13, 1912.

91,649. WHEAT-FLOUR. Crown Mills Company, Belleville, Ill., and St. Louis, Mo.
Filed September 28, 1909. Serial No. 44,991. PUBLISHED DECEMBER 7, 1909.

91,650. PREPARATION FOR REMOVING WRINKLES. Walter C. Cunningham, Denver, Colo.
Filed October 19, 1912. Serial No. 66,376. PUBLISHED MARCH 11, 1913.

91,651. MEN'S OUTER SUITS AND OVERCOATS. Davidson & Finkelbrand, New York, N. Y.
Filed November 23, 1912. Serial No. 67,073. PUBLISHED MARCH 18, 1913.

91,652. BOX-SPRINGS, MATTRESSES, PILLOWS, AND METALLIC BEDSTEADS. Harry D. Dougherty, Philadelphia, Pa.
Filed February 6, 1913. Serial No. 68,343. PUBLISHED MARCH 18, 1913.

91,653. CERTAIN NAMED GASKETS AND PACKING MATERIALS FOR CERTAIN USES. Frank Duttenhofer, Cincinnati, Ohio.
Filed May 29, 1912. Serial No. 63,876. PUBLISHED MARCH 18, 1913.

91,654. CERTAIN NAMED KNITTED, NETTED, AND TEXTILE FABRICS. Henry E. Frankenberg Company, New York, N. Y.
Filed June 6, 1912. Serial No. 64,021. PUBLISHED MARCH 18, 1913.

91,655. CERTAIN NAMED ARTICLES OF POTTERY. FULPER POTTERY COMPANY, Flemington, N. J.
Filed September 13, 1911. Serial No. 58,655. PUBLISHED MARCH 18, 1913.

91,656. COUGH AND CROUP REMEDY. THE GLESSNER MEDICINE CO., Findlay, Ohio.
Filed January 13, 1913. Serial No. 67,875. PUBLISHED MARCH 18, 1913.

91,657. MATCHES. AKTIESELSKABET H. E. GOSCH & CO.'S TÆNDSTIKFABRIKER OG AKTIETÆNDSTIKFABRIKEN GODTHAAB, Copenhagen, Denmark.
Filed August 22, 1912. Serial No. 65,374. PUBLISHED MARCH 18, 1913.

91,658. CERTAIN NAMED GARMENTS MADE OF TEXTILE MATERIAL. GREENEBAUM, WEIL & MICHELS, San Francisco, Cal.
Filed June 26, 1912. Serial No. 64,404. PUBLISHED MARCH 18, 1913.

91,659. CALCULATING AND ADDING MACHINES. GRIMME, NATALIS & CO., COMMANDITGESELLSCHAFT AUF ACTIEN, Brunswick, Germany.
Filed October 21, 1912. Serial No. 66,410. PUBLISHED MARCH 18, 1913.

91,660. PREPARATION OF SULFUR IN SOLUBLE [illegible] HERMAN [illegible], New York, N. Y.
Filed December [illegible], 1912. Serial No. 67,225. PUBLISHED MARCH 18, 1913.

WITHDRAWN.

91,661. PERFUMES, TOILET WATERS, SACHET-POWDER, FACE-POWDER, AND TALCUM POWDER. CHARLES HEDDEN, INCORPORATED, New York, N. Y.
Filed November 25, 1912. Serial No. 67,103. PUBLISHED MARCH 18, 1913.

91,662. COFFEE, TEA, FLAVORING EXTRACTS, AND SPICES. THE HEEKIN SPICE COMPANY, Cincinnati, Ohio.
Filed May 8, 1911. Serial No. 56,233. PUBLISHED OCTOBER 31, 1911.

91,663. OINTMENT, FACE-CREAM, MASSAGE-CREAM, MANICURE-PASTE, BATH-TABLETS, AND FOOT-POWDER. HIGHLAND PHARMACEUTICAL CO., Rochester, N. Y.
Filed May 1, 1912. Serial No. 63,243. PUBLISHED MARCH 11, 1913.

91,664. REMEDY FOR INDIGESTION. COLUMBUS JACOB HINTON, Elizabeth City, N. C.
Filed January 16, 1913. Serial No. 67,943. PUBLISHED MARCH 18, 1913.

91,665. OINTMENT FOR ALL SKIN DISEASES. INDIAN CHEMICAL CO., Warriors Mark, Pa.
Filed January 15, 1913. Serial No. 67,933. PUBLISHED MARCH 18, 1913.

91,666. AUTOMOBILE-SPRINGS OF THE LEAF TYPE. THOS. B. JENKINS, Sumter, S. C., and St. Louis, Mo.
Filed January 8, 1912. Serial No. 60,690. PUBLISHED AUGUST 27, 1912.

91,667. WATER AND STEAM GAGES AND PARTS THEREOF. THE JERGUSON MANUFACTURING COMPANY, Boston, Mass.
Filed January 15, 1913. Serial No. 67,934. PUBLISHED MARCH 18, 1913.

91,668. MATCHES. JÖNKÖPINGS OCH VULCANS TÄNDSTICKSFABRIKSAKTIEBOLAG, Jönköping, Sweden.
Filed December 24, 1912. Serial No. 67,579. PUBLISHED MARCH 18, 1913.

91,669. MATCHES. JÖNKÖPINGS OCH VULCANS TÄNDSTICKSFABRIKSAKTIEBOLAG, Jönköping, Sweden.
Filed December 24, 1912. Serial No. 67,582. PUBLISHED MARCH 18, 1913.

91,670. MATCHES. JÖNKÖPINGS OCH VULCANS TÄNDSTICKSFABRIKSAKTIEBOLAG, Jönköping, Sweden.
Filed December 24, 1912. Serial No. 67,581. PUBLISHED MARCH 18, 1913.

91,671. LACING-TIPS. JOSLIN MFG. CO., Providence, R. I.
Filed January 18, 1913. Serial No. 67,991. PUBLISHED MARCH 18, 1913.

91,672. CHEMICAL COAL-SAVING COMPOUND. JOHN D. KINGSBURY, Washington, D. C.
Filed February 1, 1913. Serial No. 68,262. PUBLISHED MARCH 18, 1913.

91,673. CHEMICAL DISINFECTANT. KNUT HILMER CEDERBERG, Hagaström, Gefle, Sweden.
Filed September 5, 1912. Serial No. 65,588. PUBLISHED MARCH 18, 1913.

91,674. VARNISHES, STAINS, VARNISH-REMOVERS, ENAMELS, JAPANS, SHELLACS, PAINT-OIL, AND FILLERS. THE LA SALLE VARNISH CO., Chicago, Ill.
Filed January 24, 1913. Serial No. 68,097. PUBLISHED MARCH 18, 1913.

91,675. CANDY. LOOSE-WILES COMPANY, Boston, Mass.
Filed July 29, 1912. Serial No. 64,983. PUBLISHED NOVEMBER 26, 1912.

91,676. OINTMENT. WILLIAM E. LUDWIG, Toledo, Ohio.
Filed January 25, 1913. Serial No. 68,120. PUBLISHED MARCH 18, 1913.

91,677. SACHET SCENT AND PERFUME FOR TOILET AND BATH. HEINRICH MACK, Ulm, Germany.
Filed September 6, 1911. Serial No. 58,546. PUBLISHED MARCH 18, 1913.

91,678. CIGARETTES. M. MELACHRINO & CO., New York, N. Y., assignor to M. Melachrino & Co. Incorporated, a Corporation of New York.
Filed June 6, 1912. Serial No. 64,014. PUBLISHED MARCH 18, 1913.

91,679. REMEDY FOR CERTAIN FORMS OF SCLEROSIS. GEORGES MÉNARD, Fouras-les-Bains, France.
Filed June 8, 1910. Serial No. 50,190. PUBLISHED MARCH 18, 1913.

91,680. N-MONODIBROMOPROPYL-C,C-DIETHYLBARBITURIC ACID, PREPARED FOR PHARMACEUTICAL USE. E. MERCK, Darmstadt, Germany.
Filed January 14, 1913. Serial No. 67,920. PUBLISHED MARCH 18, 1913.

91,681. CHILDREN'S VEHICLES SUCH AS ARE USED AT PLAY. THE MOREHOUSE MANUFACTURING CO., Columbus, Ohio.
Filed December 18, 1912. Serial No. 67,470. PUBLISHED MARCH 18, 1913.

91,682. FANCY BAGS AND CASES. SAMUEL MORTENSON & CO., Chicago, Ill.
Filed December 13, 1912. Serial No. 67,387. PUBLISHED MARCH 18, 1913.

91,683. CORSETS. E. C. MCWATTY COMPANY, INCORPORATED, New York, N. Y.
Filed February 1, 1913. Serial No. 68,264. PUBLISHED MARCH 18, 1913.

91,684. ANTISEPTICS AND GERMICIDES. NEW YORK AND LONDON DRUG CO., New York, N. Y.
Filed January 16, 1913. Serial No. 67,947. PUBLISHED MARCH 18, 1913.

91,685. SERUM PREPARATIONS IN FORM FOR APPLICATION TO BOILS AND SIMILAR AFFLICTIONS. NITRITFABRIK AKTIENGESELLSCHAFT, Coepenick, near Berlin, Germany.
Filed August 22, 1912. Serial No. 65,375. PUBLISHED MARCH 11, 1913.

91,686. SELF-RISING BUCKWHEAT-FLOUR. NORTHERN LIGHT MILLING CO., Owatonna, Minn.
Filed January 18, 1912. Serial No. 60,881. PUBLISHED AUGUST 20, 1912.

91,687. HEAD-WASHES, HAIR-INVIGORATORS, AND DANDRUFF REMEDIES. ORANGEWOOD COMPANY, Worcester, Mass.
Filed March 14, 1912. Serial No. 62,158. PUBLISHED MARCH 11, 1913.

91,688. EYE-WASH. GEORGE W. PEAVEY, Minneapolis, Minn.
Filed January 20, 1913. Serial No. 68,018. PUBLISHED MARCH 18, 1913.

91,689. REMEDIES FOR CONSTIPATION, BILIOUSNESS, SICK HEADACHE, AND INDIGESTION. ROSS PORTER, Neodesha, Kans.
Filed January 10, 1912. Serial No. 60,714. PUBLSHED MARCH 11, 1913.

91,690. LEATHER SHOES. ABRAHAM POSNER, New York, N. Y.
Filed February 5, 1913. Serial No. 68,331. PUBLISHED MARCH 18, 1913.

91,691. CIGARETTES. POULIDES BROS., New York, N. Y.
Filed June 21, 1912. Serial No. 64,317. PUBLISHED NOVEMBER 26, 1912.

91,692. BEER. PROVIDENCE BREWING COMPANY, Providence, R. I.
Filed December 23, 1912. Serial No. 67,556. PUBLISHED MARCH 18, 1913.

91,693. PAINT AND SIZE. GEO. REED, Los Angeles, Cal.
Filed August 29, 1912. Serial No. 65,481. PUBLISHED MARCH 18, 1913.

91,694. BISCUITS IN WHICH ARE MIXED AN IRON PREPARATION. REINSCHILD CHEMICAL COMPANY, New York, N. Y.
Filed January 29, 1913. Serial No. 68,188. PUBLISHED MARCH 18, 1913.

91,695. DRIVING-CHAINS FOR VEHICLES AND SPROCKET-WHEELS USED IN CONNECTION THEREWITH. HANS RENOLD, LIMITED, Manchester, England.
Filed February 12, 1913. Serial No. 68,521. PUBLISHED MARCH 18, 1913.

91,696. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS. THE THEO. RICKSECKER CO., New York, N. Y.
Filed March 7, 1912. Serial No. 62,019. PUBLISHED MARCH 11, 1913.

91,697. DRESS-SHIELDS, DIAPERS, AND BIBS. HENRY P. RINDSKOPF, New York, N. Y.
Filed January 22, 1913. Serial No. 68,064. PUBLISHED FEBRUARY 25, 1913.

91,698. DRESS-SHIELDS, DIAPERS, AND BIBS. HENRY P. RINDSKOPF, New York, N. Y.
Filed January 22, 1913. Serial No. 68,063. PUBLISHED FEBRUARY 25, 1913.

91,699. AMMONIA-WATER. ROBINSON BROS., New York, N. Y.
Filed January 8, 1913. Serial No. 67,789. PUBLISHED MARCH 11, 1913.

91,700. BLEACHING MATERIAL. THE ROESSLER & HASSLACHER CHEMICAL COMPANY, New York, N. Y.
Filed August 1, 1912. Serial No. 65,038. PUBLISHED MARCH 18, 1913.

91,701. BLEND WHISKY. ROTHSCHILD BROS., Philadelphia, Pa.
Filed February 21, 1911. Serial No. 54,648. PUBLISHED MARCH 18, 1913.

91,702. LACTIC FERMENTS FOR TREATMENT OF THE INTESTINES AND STOMACH. FRANÇOIS ROY, Paris, France.
Filed January 29, 1913. Serial No. 68,187. PUBLISHED MARCH 18, 1913.

91,703. SHERRY-WINE. GEO. G. SANDEMAN, SONS & CO. LIMITED, London, England.
Filed November 26, 1912. Serial No. 67,124. PUBLISHED MARCH 18, 1913.

91,704. RAIN-COATS. THE SARTORIAL MANUFACTURING CO., New York, N. Y.
Filed October 7, 1912. Serial No. 66,186. PUBLISHED MARCH 18, 1913.

91,705. MILK AND CREAM. ELIZABETH COFFIN SAWYER, Dover, N. H., as substituted trustee of Susan E. Sawyer, deceased.
Filed April 12, 1912. Serial No. 62,861. PUBLISHED MARCH 18, 1913.

91,706. BATH-SALTS. SEL AMAIGRISSANT CLARKS CORPORATION, Richmond, Va., and New York, N. Y.
Filed January 20, 1913. Serial No. 68,020. PUBLISHED MARCH 18, 1913.

91,707. CERTAIN COMPRESSED CHEMICAL ADMIXTURE. SIX LITTLE YANKEES CO., Philadelphia, Pa.
Filed January 31, 1913. Serial No. 68,250. PUBLISHED MARCH 18, 1913.

91,708. WROUGHT-IRON. SLIGO IRON & STEEL CO., Connellsville, Pa.
Filed August 22, 1905. Serial No. 11,896. PUBLISHED MARCH 18, 1913.

91,709. WROUGHT-IRON. SLIGO IRON & STEEL CO., Connellsville, Pa.
Filed August 22, 1905. Serial No. 11,897. PUBLISHED MARCH 18, 1913.

91,710. DEVELOPERS, INTENSIFIERS, AND FIXING AGENTS FOR PHOTOGRAPHY. SOCIÉTÉ ANONYME "UTOCOLOR," La Garenne, Colombes, France.
Filed June 25, 1912. Serial No. 64,374. PUBLISHED MARCH 11, 1913.

91,711. MOVING-PICTURE FILMS. SOCIETE FRANCAISE DES FILMS ET CINEMATOGRAPHES ECLAIR, New York, N. Y.
Filed November 13, 1912. Serial No. 66,882. PUBLISHED JANUARY 14, 1913.

91,712. BLEACHING-POWDERS. JOHN T. STANLEY, New York, N. Y.
Filed January 10, 1913. Serial No. 67,825. PUBLISHED MARCH 18, 1913.

91,713. REMEDY FOR THROAT AND PULMONARY DISEASES. STANLEY REMEDY COMPANY, Chicago, Ill.
Filed January 11, 1913. Serial No. 67,856. PUBLISHED MARCH 18, 1913.

91,714. BUSH-HOOKS, BITS, BRACES, CHISELS, HANDLES, HAMMERS, HATCHETS, SAWS, AND SHOVELS. STAUFFER ESHLEMAN & CO. LTD., New Orleans, La.
Filed February 17, 1913. Serial No. 68,588. PUBLISHED MARCH 18, 1913.

91,715. SCALP-TONIC. MARTHA JANE STEBBINS, Churchville, N. Y.
Filed July 11, 1912. Serial No. 64,667. PUBLISHED NOVEMBER 12, 1912.

91,716. REMEDY FOR INGROWING NAILS. ROBERT STEWART, Jr., Hartsville, S. C.
Filed January 20, 1913. Serial No. 68,022. PUBLISHED MARCH 18, 1913.

91,717. PREPARATION FOR PREVENTING OBESITY AND FOR REDUCING FAT. THE SYLPH COMPANY, INC., Dover, Del., and New York, N. Y.
Filed December 13, 1912. Serial No. 67,380. PUBLISHED MARCH 18, 1913.

91,718. RAZORS AND RAZOR-BLADES. THE TEMPERITE COMPANY, Philadelphia, Pa.
Filed February 11, 1913. Serial No. 68,509. PUBLISHED MARCH 18, 1913.

91,719. CERTAIN NAMED PHARMACEUTICAL PREPARATIONS. FELIX UHRY, Chicago, Ill.
Filed July 15, 1912. Serial No. 64,733. PUBLISHED MARCH 11, 1913.

91,720. PILLS FOR USE AS A BLOOD REMEDY AND GENERAL TONIC. THE UPJOHN COMPANY, Kalamazoo, Mich.
Filed November 26, 1912. Serial No. 67,143. PUBLISHED MARCH 18, 1913.

91,721. LUBRICATING-OILS AND LUBRICATING-GREASES. FRANK D. VAN NOSTRAND, New York, N. Y.
Filed December 13, 1912. Serial No. 67,382. PUBLISHED MARCH 18, 1913.

91,722. CERTAIN NAMED SCIENTIFIC APPLIANCES. VICTOR ANIMATOGRAPH COMPANY, Davenport, Iowa.
Filed January 30, 1913. Serial No. 68,223. PUBLISHED MARCH 18, 1913.

91,723. MEDICINAL TONIC. VOIGT & Co., Chattanooga, Tenn.
Filed October 29, 1908. Serial No. 38,342. PUBLISHED MARCH 11, 1913.

91,724. SNAP-BUTTONS USED AS GARMENT-FASTENERS. WALDES & Co., Prague-Wrschowitz, Austria-Hungary.
Filed April 1, 1912. Serial No. 62,576. PUBLISHED MARCH 18, 1913.

91,725. GARMENT-FASTENERS KNOWN AS SNAP-BUTTONS. WALDES & Co., Prague-Wrschowitz, Austria-Hungary.
Filed December 11, 1912. Serial No. 67,350. PUBLISHED MARCH 18, 1913.

91,726. SCALP-TONICS. JOHN THOMAS WARNER, Holdenville, Okla.
Filed October 15, 1912. Serial No. 66,295. PUBLISHED MARCH 18, 1913.

91,727. DYES. WELLS & RICHARDSON COMPANY, Burlington, Vt.
Filed January 27, 1912. Serial No. 61,103. PUBLISHED MARCH 26, 1912.

91,728. TONIC, ALTERATIVE, LAXATIVE, AND DIURETIC MEDICINES. WELLS & RICHARDSON COMPANY, Burlington, Vt.
Filed January 27, 1912. Serial No. 61,104. PUBLISHED MAY 21, 1912.

91,729. PREPARATIONS FOR COLORING BUTTER. WELLS & RICHARDSON COMPANY, Burlington, Vt.
Filed January 27, 1912. Serial No. 61,101. PUBLISHED MARCH 26, 1912.

91,730. REMEDY FOR DISEASES OF THE GENITAL ORGANS. JOSEPH P. WERNER, St. Louis, Mo.
Filed September 28, 1912. Serial No. 66,038. PUBLISHED MARCH 11, 1913.

91,731. LIQUOR REMEDY. WHITE CROSS ANTI-LIQUOR SOCIETY, Kansas City, Mo.
Filed January 20, 1913. Serial No. 68,024. PUBLISHED MARCH 18, 1913.

91,732. CERTAIN NAMED KNITTED, NETTED, AND TEXTILE FABRICS. A. WIMPFHEIMER & BRO., New York, N. Y.
Filed June 21, 1911. Serial No. 57,206. PUBLISHED MARCH 18, 1913.

91,733. LOCAL ANESTHETIC FOR INTERNAL AND EXTERNAL USE. JULIUS C. WISE, Kansas City, Mo.
Filed December 27, 1910. Serial No. 53,485. PUBLISHED MARCH 11, 1913.

91,734. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. THE WOOSTER HARDWARE CO., Wooster, Ohio.
Filed May 15, 1912. Serial No. 63,543. PUBLISHED MARCH 18, 1913.

TRADE-MARKS CANCELED.

76,657. WOOL BLANKETS. THE PITTSBURGH DRY GOODS COMPANY, Pittsburgh, Pa.
Registered February 8, 1910. Canceled April 23, 1913.

77,057. WOOL BLANKETS. THE PITTSBURGH DRY GOODS COMPANY, Pittsburgh, Pa.
Registered March 8, 1910. Canceled April 23, 1913.

83,076. CERTAIN HARDWARE, PLUMBING, AND STEAM-FITTING SUPPLIES. LOCKE REGULATOR COMPANY, Salem, Mass.
Registered August 15, 1911. Canceled April 23, 1913.

LABELS

REGISTERED MAY 20, 1913.

17,027.—*Title:* "THE DRINK OF THE UNIVERSE. SUNOL. REGISTERED SMOOTH, SNAPPY, SATISFYING." (For a Drink.) CLIFFORD N. BOURNE, Syracuse, N. Y. Filed April 18, 1913.

17,028.—*Title:* "ALT HEIDELBERG LAGER BEER." (For Beer.) COLUMBIA BREWING CO., Tacoma, Wash. Filed September 16, 1912.

17,029.—*Title:* "CROW CORN CORER." (For a Corn Remedy.) LEON C. ELLIS, Lynn, Mass. Filed April 7, 1913.

17,030.—*Title:* "DOMINO." (For Rice.) RALPH GOLDSMITH, New Orleans, La. Filed April 21, 1913.

17,031.—*Title:* "PROGRESS PHOENIX." (For Cigars.) JOHN MCBRIDE, Phoenix, Ariz. Filed May 3, 1913.

17,032.—*Title:* "THE MILLER SOCK." (For Socks.) SOLOMON S. MILLER, Reading, Pa. Filed April 21, 1913.

17,033.—*Title:* "4 U." (For Hair-Nets.) E. MITTELSTAEDT, New York, N. Y. Filed April 25, 1911.

17,034.—*Title:* "PURENUT BRAND." (For Peanut-Butter.) G. A. REUTER, Chicago, Ill. Filed February 28, 1913.

17,035.—*Title:* "SELLERS GUARANTEE." (For Wearing-Apparel.) G. RYMARCZICK, Rutherford, N. J. Filed May 5, 1913.

17,036.—*Title:* "ASK FOR THE ECLIPSE SHIRT WITH ADJUSTO SLEEVES." (For Shirts.) SAMUEL STERNBERGER COMPANY, Philadelphia, Pa. Filed April 18, 1913.

17,037.—*Title:* "A V." (For Alcoholic Liquors.) ADOLPH VOLTER, New York, N. Y. Filed April 14, 1913.

PRINTS

REGISTERED MAY 20, 1913.

3,262.—*Title:* "THE WORLD GOES ROUND." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,263.—*Title:* "THE 'LIGHTEST' FOOD." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,264.—*Title:* "DON'T OUTGROW THE BREAD AND MILK HABIT." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,265.—*Title:* "FIFTY WAYS TO USE BREAD." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,266.—*Title:* "IN BREAD THERE IS STRENGTH." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,267.—*Title:* "THE 'HEALTH FOOD' FOR CHILDREN." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,268.—*Title:* "RAISING THE STANDARD." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,269.—*Title:* "BREAD IS KING!" (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,270.—*Title:* "THE HARVEST OF HEALTH." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 3, 1913.

3,271.—*Title:* "DANDERGONE." (For a Hair-Tonic.) R. P. LOCKLAYER, Nashville, Tenn. Filed February 12, 1913.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE MILIER.

Decided April 22, 1913.

DESIGNS—NEW MATTER—REJECTION—REVIEWABLE ON APPEAL.

Where the Examiner rejected a claim for a design as unpatentable in view of the prior art and thereafter applicant filed a new drawing which the Examiner refused to enter on the ground that it disclosed matter not contained in the case as originally filed and involved a departure from the invention disclosed, *Held* that his action is reviewable on appeal and not on petition to the Commissioner.

ON PETITION.

DESIGN FOR CAPS.

Mr. Percy B. Hills for the applicant.

MOORE, *Commissioner:*

This is a petition reading as follows:

Petition is hereby taken to the Commissioner in person from the action of the Primary Examiner, finally rejecting the above entitled application.

The grounds for this petition are as follows:—

The drawing of this application, originally filed, was prepared, as admitted by the Examiner, from the article marked "Exhibit A," and it is submitted that the Examiner is in error in holding that said drawing does not disclose the patentable subject matter found in said exhibit. It may be true that said original drawing is not, from an artistic standpoint, as accurate a reproduction of said exhibit as is the new drawing filed, but it is contended that it presents the essentials of said exhibit.

Petitioner's application is for a patent covering a design for caps. The claim reads:

An ornamental design for a cap as shown.

The Examiner has finally rejected the claim upon the ground that the design as disclosed in the original drawing is not patentable over certain references cited.

It appears from the record that applicant contends that his design is patentably novel over the references cited, but that the original drawing—

discloses the novel feature in an unsatisfactory manner—

and—

does not do full justice to this feature due to the fact that the drawing was made by a mechanical draftsman and not by an artist.

Applicant has submitted a cap (Exhibit A) which he states is the cap from which the original drawing was made, and he has filed a new drawing, which he contends is a "more artistic drawing" of his design. This drawing the Examiner has refused to enter, upon the ground that it discloses matter not contained in the case as originally filed and which involves a departure from the invention disclosed.

The Examiner in his statement points out that he had not ruled—

whether either the exhibit or the proposed new drawing does or does not disclose patentable subject matter—

and that the statement in the petition that the Examiner is in error in holding that the original drawing—

does not disclose the patentable subject matter found in said exhibit—

is—

at least inapt and inaccurate.

Applicant's remedy from the action of the Primary Examiner in finally rejecting his claim is clearly by appeal to the Examiners-in-Chief and not by petition to the Commissioner.

The claim is for the design as shown, and obviously any change in the drawing affects the claim. The question of whether a certain alleged novel feature shown in the new drawing is disclosed in the original drawing or whether it involved new matter is one reviewable in the first instance by the Examiners-in-Chief, since it relates to the merits of the claim. (*Ex parte Regan*, 45 O. G., 589; *ex parte Burt*, 49 O. G., 1986; *ex parte Nicolin and Ochsenreiter*, 56 O. G., 1565; *ex parte Harvey*, 58 O. G., 1257; *ex parte Baptist*, 97 O. G., 191; *ex parte Furness*, 104 O. G., 1655; *ex parte Nenninger*, 122 O. G., 1397.)

Applicant has mistaken his remedy, and his petition is accordingly dismissed.

EX PARTE OAKFORD AND FAHNESTOCK.

Decided May 6, 1913.

TRADE-MARKS—AMENDMENT AFTER ADVERSE DECISION IN INTERFERENCE OR OPPOSITION—PRACTICE.

Where after an adverse decision in an interference or opposition applicant files an amendment in an endeavor to eliminate the subject-matter involved in such proceeding, *Held* that the Examiner should enter the amendment, and if he is of the opinion that it is not sufficient and does not eliminate the matter in controversy he should refuse registration. When such action is made final, appeal will lie to the Commissioner.

ON PETITION.

TRADE-MARK FOR CANNED PEACHES, PEARS, APRICOTS, PLUMS, GRAPES, ETC.

Messrs. Taylor & Hulse and *Messrs. Stewart & Stewart* for the applicant.

BILLINGS, *First Assistant Commissioner:*

This is a petition that the Examiner of Trade-

Marks be directed to enter an amendment filed on February 28, 1913, and pass the case to issue.

The record shows that this application was involved in interference No. 33,568 with a registered trade-mark of F. B. Chamberlain Company, No. 78,038, in which the issue consisted of "the marks claimed for rolled oats and oatmeal," and that the decision in said interference was adverse to applicant.

Following the termination of the interference, petitioner, on February 28, 1913, filed the above-mentioned amendment, canceling the words "rolled oats" from his particular description of goods. The Examiner refused to enter the amendment on the ground that certain other articles among the large number mentioned in applicant's statement of the goods upon which he uses the mark are of the same descriptive properties as rolled oats, and he advised applicant that his remedy was by way of petition to the Commissioner. The action of the Examiner from which petition is taken reads as follows:

> The proposed amendment filed March 1, 1913, has not been entered for the reason that if it were entered by erasing the item "rolled oats," the goods remaining in this application would not be clearly different from the trade-mark right involved in interference No. 33,568. Among the goods remaining, for instance, are wheat farina and tapioca. The attention of the applicant is called to the recent decision of the court of appeals in the case of Boston Wine & Spirits Co., not yet published. Further prosecution of this application by way of amendment should be by way of petition to the Commissioner rather than by argument.

The practice which seems to prevail under the above-mentioned circumstances of refusing to enter the amendment and requiring applicant to petition from such refusal is not based upon the rules, and no good reason for it seems to exist. Trade-mark Rule 46 provides that—

> the practice in trade-mark interferences will follow, as nearly as practicable, the practice in interferences between applications for patents.

When an interference involving applications for patents is terminated, the Primary Examiner advises the defeated party, in accordance with Rule 132, that his claims involved in the interference stand finally rejected. Following this notice the applicant is permitted to amend, so as to avoid the issue of the interference, if possible. If his claims as amended are finally rejected, his remedy is by appeal. It is believed that a similar practice should prevail concerning applications for the registration of trade-marks and that when a defeated applicant in an interference or opposition proceeding files an amendment in an endeavor to eliminate the subject-matter involved in said proceeding the Examiner should enter the amendment, and if of the opinion that the amendment is not sufficient and does not eliminate the matter in controversy he should refuse registration, specifying his reasons therefor. Applicant may then further amend his case or ask the Examiner for a reconsideration of his action. If the Examiner adheres to his position and makes his action final, the applicant may file an appeal to the Commissioner, accompanied by the legal appeal fee, and from an adverse decision of the Commissioner an appeal will lie to the Court of Appeals of the District of Columbia.

In the case of *in re Boston Wine & Spirits Co.*, (189 O. G., 524,) cited by the Examiner, where an appeal was entertained by the Court of Appeals of the District of Columbia from a decision of the Commissioner rendered upon petition under circumstances similar to those presented in this case, no question of the jurisdiction of the court to entertain such an appeal was raised and the question was not formally considered by the court.

Inasmuch as the question involves applicant's right to registration, it is believed that the better practice under the above-mentioned circumstances would be for the Examiner to enter the amendment and reject the application if in his opinion the mark as presented by the amended application is not registrable. The applicant will then have a statutory right of appeal to the Commissioner and to the court.

The petition is granted in so far as it requests that the Examiner be directed to enter the amendment and is dismissed in so far as it requests that the Examiner be requested to pass the case to issue.

LOEWENSTEIN *v.* HERZ.

Decided July 18, 1912.

1. TRADE-MARKS — FEATURE OF PACKAGE INCIDENT TO METHOD OF MANUFACTURE—NOT A TRADE-MARK.
   Two short lines of transverse corrugations connected by a relatively long line of such corrugations appearing on paper tubes inclosing toothpicks *Held* to be merely a feature of the package incident to an old and well-known method of sealing the same and not capable of adoption as a trade-mark for toothpicks.
2. SAME—CANCELATION—SHOWING OF INTEREST.
   Where in a petition for the cancelation of a registration it is stated that goods bearing the registered trade-mark had been held up at a custom-house at the instance of the registrant, *Held* that the petitioner had alleged such interest as to bring himself within the statutory class of persons who may file applications for cancelation.

APPEAL from Examiner of Interferences.

TRADE-MARK FOR TOOTHPICKS.

Mr. Robert B. Killgore for Loewenstein.

Mr. Lucius E. Varney for Herz.

TENNANT, *Assistant Commissioner:*

This is an appeal by Herz from a decision of the Examiner of Interferences sustaining the petition of Loewenstein for the cancelation of registration No. 73,562, issued to Alexander Herz April 27, 1909, of a trade-mark for toothpicks.

The mark as shown in the certificate of registration consists of two short parallel lines made up of transverse grillings or corrugations connected by a relatively long line of such corrugations. It appears that the mark is embossed on paper tubes in which the toothpicks are inclosed.

The petition for cancelation alleges that the mark is not a trade-mark, but an incident to the toolwork necessary in fastening the edges of the packages, and that the registrant is not the owner of the mark, but that it had been used by a manufacturer of Paris, who exported goods bearing this mark to this country prior to the date of adoption alleged in the registration. Petitioner also alleges that he uses the mark and that he has been damaged by

the registration, since goods shipped to him from abroad have been held up in the custom-house in New York at the instance of the registrant.

The Examiner of Interferences found that the testimony was insufficient to establish that the mark had been used in this country prior to its adoption by the registrant. He held, however, that the mark is not proper subject-matter for trade-mark protection and that petitioner had been damaged by its registration. He therefore sustained the petition.

It is admitted that goods consigned to the petitioner were held up in the custom-house as alleged and that therefore the petitioner has alleged such interest as to bring himself within the statutory class of persons who may file applications for cancelation.

Registrant testifies that in the early part of 1905 he commenced to sell toothpicks inclosed in sealed paper tubes, that these tubes were sealed by pressure without the use of paste, and that he adopted the crimping in order to be able to point out that these tubes were different from those which had been sealed by paste. It appears, however, that the registrant was not the first to seal paper tubes in this manner. The testimony of Gluckman shows that crimping-machines had been used in the manufacture of cigarette-tubes since about 1896 or 1897, and certain tubes have been introduced in evidence as "Loewenstein exhibit cigarette-tubes," which show the longitudinal lines of corrugation. Herz himself admits on cross-examination that he was not the first to close tubes in this manner, (X-Q. 120,) and, furthermore, that he was not the first to use a toothpick-package having a longitudinal corrugated line—that is to say, a tube closed longitudinally by a crimping-machine—but he claims that he was the first to use crimped or corrugated lines on a toothpick-package in the form shown in his registration—that is, a tube crimped both longitudinally and at the ends. It appears, therefore, that these lines of corrugation are nothing more than the lines made in a common method of closing tubes. Herz testifies that it was not necessary to use a machine having corrugated wheels, but that the tubes could be closed by pressure without corrugation, and certain tubes have been introduced in evidence which he testifies were made in this manner. It does not appear, however, that any tubes were ever closed by pressure without the corrugations either for toothpick-holders or for any other purpose.

It is contended on behalf of Herz that, under the ruling in the case of *Capewell Horse Nail Co.* v. *Mooney*, (167 Fed. Rep., 575, and 172 Fed. Rep., 826,) this mark is a good trade-mark, notwithstanding the fact that these lines are made in the act of closing the tube. The present case, however, differs from the case cited in certain very material points. As stated above, the testimony shows that it was old to close tubes longitudinally by pressure, the act of closing leaving a line of corrugation, and it does not appear that tubes were ever closed by pressure commercially in any other manner. In the *Horse Nail Case*, as appears from the first of the decisions above cited, while it was old to use checks composed of or formed of lines crossing each other for gripping-surfaces, as in forceps, &c., and on the exterior surface of the handles of various tools, it does not appear that it was usual to form such corrugations either on horseshoe-nails or on similar articles, and it was held by the court below that it was not necessary in the manufacture of horseshoe-nails to use rollers having a gripping-surface which would produce the complainant's check-mark on the nail.

It is to be noted that the record shows that registrant's goods were known by the name "Hygeia," which appears on each of his packages, and although this word appears on the sealed tubes as part of the name "Hygeia Antiseptic Toothpick Company," the word "Hygeia" is written in different type and much larger than the other words constituting the name of the company.

I am of the opinion, therefore, that the so-called trade-mark is but a feature of the package incident to an old and well-known method of sealing the same, and so not capable of adoption as a trade-mark. In this view of the case it is not necessary to decide whether Loewenstein has established such use of the mark in this country by others than Herz as would invalidate the latter's registration.

The decision of the Examiner of Interferences is affirmed and it is adjudged that registration No. 73,562 to Alexander Herz should be canceled.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

BOYNTON *v.* TAGGART.

Decided February 25, 1913.

1. PATENTABILITY — PUBLIC USE — CIRCUMSTANCES OF EACH CASE TO BE CONSIDERED.
   "As no two cases are exactly alike, it is apparent that the character of the invention involved, the prior art, and the particular circumstances surrounding each case must be considered in weighing evidence of prior use."
2. SAME—SAME—PROCESS—SUPERIORITY OF MACHINE IMMATERIAL.
   In considering whether a process for making dental inlays and the like had been in public use for more than two years prior to the filing of the application upon which patent was granted *Held* that it was of no possible consequence that by the use of the patentee's machine gold inlays and the like may be produced more cheaply and rapidly than they were produced by the dentists who testified in the case.
3. SAME—SAME—PROCESS FOR MAKING DENTAL INLAYS.
   Evidence reviewed and *Held* to establish beyond reasonable doubt that a process for making dental inlays had been in public use for many years prior to the filing of the application upon which a patent for such process was granted.

Mr. E. T. Fenwick, *Mr. L. L. Morrill*, and *Mr. H. H. Bliss* for the appellant.

Mr. F. W. Phelps and *Mr. Russell Wiles* for the appellee.

ROBB, *J.:*

This appeal involves a decree in the Supreme Court of the District in an infringement suit sus-

taining the validity of Letters Patent numbered 872,978, granted December 3, 1907, to William H. Taggart, the appellee, upon a divisional application filed July 12, 1907, of original application filed January 12, 1907.

According to the specification the invention relates to—

a new and useful improvement in methods for making molds for dental inlays and the like.

It is further stated that these molds are particularly designed for the casting of dental fillings of the type known as inlay-fillings, but that—

they can obviously be used for certain other types of work of a fine grade, one of their principal fields of usefulness being in the formation of other types of dental metal work, as, for instance, bridge work and the like.

Searching the original specification we find that the phrase "certain other types of work of a fine grade" was intended to embrace the art of manufacturing special pieces of jewelry, for it is there written:

The process can also be used in the art of manufacturing jewelry wherever it is desired to make a single piece of any kind, as, for instance, where a piece of jewelry is made to order. The manufacturer can carve up a pattern in wax with comparative ease, as the graving operation in wax requires neither the high class of tools nor high manual skill required for graving in metal. • • • After the pattern is completed in wax, the process proceeds as herein set forth and an absolutely perfect duplicate can be obtained.

The claims are twelve in number, of which we reproduce the following five as representative:

1. The process of making patterns for dental inlays and the like, which consists in molding plastic material upon the tooth surface to the size and shape of the desired inlay.

3. The process which consists in making a pattern of a tooth filling within the cavity to be filled and in contact with the surface thereof, removing the pattern from the cavity, forming about the pattern a mold provided with a sprue, and melting out the pattern.

6. The process which consists in making a pattern for a cast tooth filling within the cavity to be filled and in contact with the surface thereof, from plastic material capable of being changed from its solid condition, supporting the pattern upon a sprue former, inclosing the pattern in a primary body of mold material, supporting the pattern and primary body of mold material within a flask by means of the sprue former, adding a secondary body of mold material, removing the sprue former and removing the pattern from the mold thus formed by way of the sprue.

8. The process of making molds for casting dental fillings and the like, which consists in forming a pattern of the desired size and shape, forming a mold about said pattern with a depression in the mold adapted to form a crucible forming a sprue hole extending from the depression to the pattern and then removing the pattern.

12. The method of forming patterns for casting dental inlays, which consists in forming moldable material to the size and shape of the desired inlay in the cavity to be filled and against its walls.

An examination of these claims discloses that they do not cover, nor purport to cover, a new process for filling teeth. On the contrary, they relate solely to the process of making *patterns* out of plastic material or wax and the process of forming a *mold* about such pattern, from which mold a duplicate of the pattern may be produced. The words "dental inlays and the like," as used in the claims of the patent, when read in connection with the specification, as they must be read, clearly embrace "bridge work and the like." It is unnecessary here to determine whether they have even broader signification, although, as previously stated, the specification specifically includes "certain other types of work of a fine grade."

To produce the pattern to which these claims relate, an impression in wax or other plastic material is obtained; that is to say, if a tooth-cavity is to be filled wax is first inserted therein, chilled and removed. When thus removed a pattern of the filling has been obtained. Substantially, the same process would be followed in obtaining a pattern for a bridge between other teeth. After obtaining this pattern it is put upon a short piece of wire, technically called a sprue-former, initially coated with investment material, and then inclosed in a secondary layer of investment material. This is allowed to set when it is sufficiently heated to volatilize the wax. The mold is then complete and the gold or other metal may be inserted through the sprue-hole.

We will here briefly review the prior art. It is not disputed that the art of producing metal castings by means of a mold formed of a wax pattern is very old. It is in evidence that this art was practised by the ancient Greeks and Romans and was extensively used in the Middle Ages for producing statuary and other accurate castings. This process is known as the "cire perdue" or "lost-wax" process. See Simpson Bolland's *Encyclopedia of Founding*, (p. 515.) It is conceded that Cellini used this process hundreds of years ago in casting one of his most celebrated statues. It is further conceded that the burnished-inlay process was also well known for many years prior to the application for this patent. See Patent No. 402,352 to Robinson, dated April 30, 1889. In that process a piece of platinum or gold foil is placed in the tooth-cavity and rubbed or burnished against the walls of the cavity. The foil, then called a matrix, is usually filled with wax so as to conform to the original shape of the tooth, then removed and precisely the same process followed as in the Taggart process; in other words, the only difference between the burnished-inlay process and the Taggart process lies in the use of the foil, which subsequently fuses with the "solder" or lower-carat gold. The patent to Hollingsworth, No. 708,811, dated September 9, 1902, covers machines for casting dental bridges. The wax pattern in the Hollingsworth process is treated in substantially the same manner disclosed by the Taggart patent, and the casting process disclosed by Hollingsworth in no material way differs from that disclosed by Taggart. The patent to Reese, No. 200,760, dated February 26, 1878, covers a mold for casting dental plates. it is thus seen that it was old long prior to the Taggart patent to manufacture dental castings by the lost-wax process.

It is conceded that appellant practised the process disclosed by the claims of the patent in suit, the defense being the invalidity of these claims. In addition to the prior art, as disclosed in the patents to which reference has been made, much testimony was introduced by appellant tending to show that the identical process disclosed by this patent was, for more than two years prior to the date of the original application, practised by dentists throughout the country. Of course, if the testimony amounts to proof beyond a reasonable doubt of such prior use, the defense must be sustained, as the claims must fall. (Sec. 4886, R. S.; *Forncrook*

v. Root, 127 U. S., 176; *Peters v. Active Mfg. Co.*, 129 U. S., 530.) We shall here review that evidence.

Dr. Oscar H. Simpson of Dodge City, Kans., a dental practitioner since 1882, a graduate of the Ohio College of Dental Surgery, a member of the State Board of Dental Examiners, at one time president of the State Dental Association, and a member of the National Board of Dental Examiners, testified that he gave his first inlay-clinic in about 1887, and had since given clinics at Topeka, Wichita, and Newton, Kans., at the World's Congress of Dentists at St. Louis, and at other places. The witness described his progress in inlay-work and further described, in detail, the method he employed in about 1898 to form a dental tip or crown for a boy by the name of Malcolm Judd. Without going into detail it is sufficent to say that the process described by the witness was substantially the process disclosed by the patent in suit. The original apparatus by which the process was practised was introduced in evidence. Not only this but the original work, which had been subsequently removed after performing a useful purpose, was also introduced. While this piece of work was attacked by experts for the complainant we, nevertheless, are fully convinced that the process by which it was made was the process disclosed by the Taggart patent in suit. Dr. Simpson gave other instances of employing this process in his practice. He further testified that in the clinic at Wichita, Kans., in about 1898 or 1899, he described the method which he employed to form the Malcolm Judd tip or crown. In this he was corroborated by Dr. B. L. Shobe, a dentist residing at Bartlesville, Okla., who remembered very distinctly the clinic at Wichita because he then thought the process adapted to a case which was troubling him. After watching the clinic, he returned to his home and tried to practise the process but failed. He then consulted Dr. Simpson at Dodge City, learned the cause of his failure, and was thereafter able to practise the process. In his testimony he gave the names and addresses of different persons for whom he did that kind of work. No matrix was employed in the clinic Dr. Simpson gave at Wichita, the wax pattern coming in direct contact with the tooth. A Mr. Lyle S. Henkel, now a locomotive engineer, an entirely disinterested witness, testified in direct corroboration of Dr. Simpson. From 1893 until March, 1897, he studied dentistry with Dr. Simpson, and his testimony is clear and convincing that Dr. Simpson, during that time, practised the process disclosed in complainant's patent in making cast inlays for teeth.

Dr. Judson O. Ball, of Mount Pleasant, Iowa, a dental practitioner since 1880, testified concerning inlay-work. In about 1889 he prepared a tooth-cavity, then ground a piece of porcelain to fit the cavity, and cemented the porcelain in place. This was his first work of that kind. In 1894, a Mrs. Shaffer, living at Merrimac, Iowa, sixteen miles from Mount Pleasant, came by appointment to have a Logan crown set. The crown had been ordered by mail but had not arrived. The doctor desiring, if possible, to complete the work upon that occasion, took a wax impression and from it, by practising the process disclosed by the patent in issue, produced a casting which he used successfully. He subsequently practised the same process in the spring of 1895 in doing work for Dr. A. O. Pitcher, of Mount Pleasant, Iowa. Some time between 1895 and 1899 he employed the process in doing work for Mrs. William Gladden, also of Mount Pleasant. In his testimony he described the work in detail. During September, 1903, the doctor set a large inlay for Mr. F. S. Finley, a lawyer of Mount Pleasant. This inlay was for the right central incisor decayed on the central proximal, involving both the facial or labial and lingual surfaces of the tooth, and also the lower cutting-edge surface. After the cavity was prepared wax was inserted to conform with the labial, lingual, and proximal surface of the tooth; in other words, a wax impression of the filling or casting was taken. A casting was then produced by a process substantially the same as that of the Taggart patent. This casting was then cemented in place and has since done service. The original apparatus by which this casting was made was introduced in evidence. The names and addresses of other parties for whom work of a similar character was done by Dr. Ball were given by the witness. Mr. Finley, formerly city solicitor of Mount Pleasant, Iowa, his home, testified in corroboration of Dr. Ball. He remembered that some time during the year 1903, when he and Dr. Ball were together in the city council, the doctor had filled a front tooth for him. The witness was asked what circumstances, if any, impressed this particular occurrence upon his mind, and replied:

The manner of putting this filling in was impressed upon my mind from the fact that the tooth was prepared and an impression taken of the tooth and the filling cast, and cemented into place, which was different from any other filling that Dr. Ball had ever put in for me, and I inquired of the doctor at the time the filling was put in about the manner of his doing it, and he explained it to me. He told me that he had taken the wax impression of the cavity. I knew that he had done this; he then showed me the apparatus where he had set the wax filling on a point of a cone and put a cylinder over it and then used some substance something like plaster Paris to get the form of the filling; he then removed the cylinder with the plaster cast, removed the metal cone, and explained to me how he heated the plaster cast or the wax in the plaster cast, how it would come out and leave the cavity. He then filled the cavity in some way with gold, making the cast which was cemented into my tooth. I merely have his explanation as to how he made the filling, aside from the fact that I knew he took the wax impression, that the filling was put in, in one piece, and he showed me the apparatus where he said he had made it, and explained to me the process of making it as I have explained it above.

The witness stated that the apparatus which had been introduced in evidence was exactly the same in principle and similar in fact to the one used in making the casting for his tooth. There was no cross-examination of this witness, nor was an examination sought to be made of the tooth which the testimony showed had been filled in 1903. One Robinson, who had been Dr. Ball's janitor for seventeen years, also testified concerning the doctor's use of the process here involved.

Dr. Valentine H. Hobson, of Richmond, Ky.,

testified to the circumstances surrounding the practise, in 1889, of the process of the patent in issue. The doctor subsequently practised the process for other patients and gave their names and addresses.

Dr. William E. Harper, of Chicago, Ill., a man of wide preliminary training, testified to casting dental bridges by the present process and to the giving of clinics in 1893 or 1894, in which he explained it. The names and addresses of people for whom he had made cast bridges were given.

Dr. Merrill W. Hollingsworth who, as we have seen, in 1902 patented a machine for casting dental bridges and who, therefore, was thoroughly familiar with the lost-wax process in the manufacture of dental castings, testified to having made bridge-castings by the process in issue as early as 1893, the names and addresses of different people for whom he had made castings being given. Dr. Hollingsworth's testimony was corroborated by Dr. George A. White.

Dr. Jacob G. Schottler, of Milwaukee, Wis., a practising dentist and also a teacher of dentistry, testified to the casting of a gold inlay in 1898 by the process in issue. This casting was for a patient who refused to have the work done in the old way, owing to nervousness. The name of the patient was given.

Dr. George W. Blaesser, of Cedarburg, Wis.; Dr. Emil M. Kapitan, of Manitowoc, Wis.; Dr. John M. Higgins, of Chilton, Wis., all testified in corroboration of Dr. Schottler. A Mr. Thomas H. Savage, a stenographer, testified that Dr. Schottler took a wax impression of one of his teeth that had been broken off, and from this produced a tip which was cemented in place. The witness was asked in cross-examination whether he had any objection to permitting an examination of this tooth by a dental expert, and replied that he did not. The record does not show that any such examination was made, however.

We come now to the testimony of Dr. George B. Martin, of Frankfort, Ind., who has been engaged in the practise of dentistry since 1884. In 1888 Dr. Martin organized the Indianapolis Post-Graduate School of Prosthetic Dentistry, and was president of the school, and also instructor, his subjects including crown, bridge, and inlay work. When he took up the practice of dentistry he was already familiar with the making of patterns for metal castings in other lines of work. The doctor testified in detail to practising the process here involved and to the disclosure of that process to his students and others. He introduced in evidence various apparatus by which his work was accomplished. His testimony covered a period from 1890 on. Dr. Blain H. Sellers, of Indianapolis, Ind., who attended the Indiana Dental College in 1891 and 1892, during the time Dr. Martin was an instructor and demonstrator of prosthetic dentistry, testified in corroboration of Dr. Martin. The witness was asked to describe the instruction he received in the casting of bridges and crowns, and replied:

> Well, we first took the crown, yourself, I always did, and then made the crown to suit take a piece of wax and place that into the mouth and have the patient bite down onto that, and that would form the bite for the articulation, and then carve the wax any size and shape that we would want the cast itself to be. We would invest that in the plaster of Paris, placing into the wax an instrument to act as a sprue, after that part of the investment became hardened we added to that another on top and after that had hardened we removed the two pieces separate and then removed the wax from the mold and we melt our gold and pour it into what we called the die, and then place the counter die on top of that, and the impression would form the cast bridge itself.

Drs. Cravens and Bloor, both of Indianapolis, also testified in corroboration of Dr. Martin. Dr. Myron E. Le Galley, of La Fayette, Ind., who was a student at the Indiana Dental College from 1892 to 1895, inclusive, testified in detail as to the instruction which he then received from Dr. Martin in the art of making cast bridges. The testimony of Dr. Le Galley is clear and leaves no room for doubt that the process of the patent in suit, as applied to dental bridges, was fully explained to, and understood by, him during the time mentioned. It was stipulated that Dr. Clarence Williams, of Terra Haute, Ind.; Dr. W. H. Upjohn, of La Fayette, Ind.; Drs. Johnson and Minnie Howes, of Indianapolis, Ind., if called as witnesses would testify exactly the same as Dr. Le Galley as to the instruction received by them while in attendance at the Indiana Dental College through Dr. Martin, their attendance upon said school covering a period between 1889 and 1897. In addition to these several witnesses, Miss Martha Vories, who was Dr. Martin's assistant for about a year, commencing in 1897, testified to seeing Dr. Martin practise the process in issue. The testimony of this witness shows that she thoroughly understood the process at the time she saw Dr. Martin practise it.

Dr. Joseph Head, of Philadelphia, Pa., whose article on inlays is incorporated in the *American Text Book of Prosthetic Dentistry*, who is a graduate of the Philadelphia Dental College, a graduate in medicine of the University of Pennsylvania, and a man evidently of wide experience and attainments, testified to the casting by him in the apparatus of Dr. Ball, which had been employed in making the Finley inlay, of a cast inlay. Dr. Head says:

> I find that the material and apparatus that I employed and which is stated to have been used by Dr. Ball to be capable of producing an inlay as perfect as any inlay I have ever seen.

Dr. Head also produced a cast gold inlay which he had made by the use of the same investment compound and apparatus used by Dr. Simpson, and to which reference has been made. There is other corroborative testimony in the record, but we do not deem it necessary to review it.

Has the defense of prior use been made out? As no two cases are exactly alike, it is apparent that the character of the invention involved, the prior art, and the particular circumstances surrounding each case must be considered in weighing evidence of prior use. The contention in this case that Dr. Taggart's discovery was revolutionary in character is not sustained. On the contrary, as appears from the record art at the time Dr. Taggart applied for his patent, dental castings produced by the lost-wax process were well known. Having this in mind, there is nothing improbable about the testimony of

appellant's witnesses. Indeed, Dr. Taggart himself, according to his own testimony, was in full possession of the idea involved in these claims more than ten years before he applied for his patent. The thing that most troubled him, and that deferred his patent application was the production of a machine by which the gold could be quickly and easily forced into the mold after its completion; in other words, the process of producing such patterns and molds, generally speaking, was already well known. The real difficulty, therefore, was in producing a device that would quicken the practise of the process and thus induce the profession generally to make use of it. This is apparent from an examination of Dr. Taggart's bill in this case, wherein he states:

> Your orator has expended large sums of money preparing for the market machines and apparatus with which the method of said patent can most readily and perfectly be practised and is now prepared to supply the demand for such machines and apparatus.

The doctor's testimony also shows, we think, that it was the production of these machines that consumed time, and not the evolution of the process.

The testimony which we have reviewed comes from witnesses whose standing is unchallenged in this record. Several of these witnesses are entirely disinterested. The cross-examination of nearly all of them was confined to a few questions as to the character of the investment material employed, and considerable stress is laid in the brief because one of these witnesses, when recalled, failed to include in the formula then given an ingredient contained in his former answer to a similar question. We attach no importance whatever to this. In the patent itself Dr. Taggart conclusively disproves the contentions of his counsel that it required any special skill to evolve a formula for investment material, for he says:

> The sprue former is then used as a handle to support the pattern and the entire pattern is covered with a primary coating of investing material. *This investing material may be any one of the various dental investing materials on the market.*

Moreover, the prior record art contained ample information concerning the investment feature of complainant's patent. The real question which we are called upon to determine from the evidence before us is whether the various dentists who have testified, or any of them, were in possession more than two years prior to the date of the original application for this patent, of the idea attempted to be covered thereby, and whether they, or any of them, gave expression of that idea in a practical and public way. It is of no possible consequence that by the use of Dr. Taggart's machine gold inlays and the like may be produced more cheaply and rapidly than they were produced by dentists who have testified. It is enough if those dentists took a wax impression in the manner described by these claims, and formed a mold around the pattern thus obtained for the purpose of casting a dental inlay or the like. To hold that this was not done would be arbitrarily to disregard and set at naught the testimony of witnesses whose character and reputation are unimpeached, and whose testimony is reasonable and in entire harmony with the circumstances of this case. We are unwilling to assume such a position. We are fully persuaded that the evidence shows beyond a reasonable doubt that for many years prior to the filing of the original application herein the process of making patterns and molds for dental inlays and the like, as expressed in these claims, had been publicly practised upon many occasions. This finding avoids the patent and renders it unnecessary to determine whether the claims thereof were anticipated by the prior record art.

It follows that the decree must be reversed, with costs, and the cause remanded with directions to dismiss the bill.

Reversed and remanded.

ADJUDICATED PATENTS.

(U. S. D. C.) The Laughlin and Reuleaux reissue patent, No. 11,666, (original No. 582,476,) for an improvement in a continuous heating-furnace for heating billets or ingots, is void for lack of invention in view of the prior art. *Morgan Const. Co.* v. *Forter-Miller Engineering Co.*, 203 Fed. Rep., 496.

(U. S. C. C. A.) The Rauscher patent, No. 574,822, for a coal-mining machine, construed and *Held* not infringed. *Morgan Gardner Electric Co.* v. *Buettner & Shelburne Mach. Co.*, 203 Fed. Rep., 490.

(U. S. C. C.) The Fowler patent, No. 609,800, for a radiator, *Held* not infringed by a licensee on the ground that the alleged infringing device, while within the patent, also came within the purview of the license. *Fowler & Wolfe Mfg. Co.* v. *National Radiator Co.*, 203 Fed. Rep., 514.

(U. S. C. C.) The Fowler patent, No. 609,800, for a radiator, construed and *Held* not infringed. *Fowler & Wolfe Mfg. Co.* v. *National Radiator* Co., 203 Fed. Rep., 514.

(U. S. D. C.) The Morgan patent, No. 632,020, for a furnace for heating ingots or billets, *Held* not anticipated and valid, but not infringed. *Morgan Const. Co.* v. *Forter-Miller Engineering Co.*, 203 Fed. Rep., 496.

(U. S. D. C.) The Culmer and Culmer patents, Nos. 635,429 and 635,430, for a process of making asphaltic fluxes by treating petroleum residuum and the resulting product, *Held* not anticipated, valid, and infringed. *Standard Asphalt & Rubber Co.* v. *American Asphaltum & Rubber Co.*, 203 Fed. Rep., 508.

(U. S. D. C.) The Gaulin patent, No. 756,953, for a machine for intimately mixing milk, *Held* not an-

ticipated, valid, and infringed. *Manton-Gaulin Mfg. Co.* v. *Dairy Machinery & Construction Co.*, 203 Fed. Rep., 516.

(U. S. C. C. A.) The Burgess patent, No. 906,099, for a compression pipe-coupling, *Held* void for prior use. *Imperial Brass Mfg. Co.* v. *Nelson*, 203 Fed. Rep., 484.

Disclaimers.

683,809.—*Ferdinand W. Starr*, Springfield, Ohio. CUTTING INSTRUMENT. Patent dated October 1, 1901. Disclaimer filed May 12, 1913, by the inventor.

Enters this disclaimer—

"To the claims in said specification, which read as follows:

"1. In a cutting-machine, the combination of a tool and a swivel-mount therefor, the blade of said tool being inclined laterally with its cutting edge extending rearwardly from the swivel-mount and constituting means for free bevel-curve cutting.

"2. The combination with means for outlining various curved figures, of a swiveling tool adjustably mounted with relation to said means, the blade of said tool being inclined laterally with its cutting edge extended rearwardly from its swiveling mount, said devices constituting means for bevel cutting.

"3. The combination with means for outlining various curved figures, of a tool which is swivelly mounted and the blade of which is inclined laterally with its cutting edge extended rearwardly from its swivel-mounting, said device constituting means for bevel cutting.

"4. In a cutting instrument, the combination with means for automatically outlining curved figures of different shapes and dimensions, of a cutting-tool having a swiveled connection with said means, the blade of said tool being inclined laterally with the cutting edge extended rearwardly from a vertical plane coincident with the juncture of the tool and the means for moving it.

"5. In a cutting-tool, the combination with a bar and means connected with said bar for moving it in the paths of curved figures of various shapes and dimensions, of a carrier mounted on said bar, a tool and means for swiveling said tool to the carrier, the blade of said tool being inclined laterally with its cutting edge extended rearwardly from the axis of the swiveling means.

"6. In a cutting-machine, the combination with a horizontal bar and means for moving said bar in the paths of curved figures of various shapes and dimensions, of a carrier mounted on said bar, a cutting-tool having a free swiveled connection with the carrier, said tool provided with an arm at its lower end terminating rearwardly of the axis on which the tool turns and provided with a blade inclined laterally.

"7. In a cutting-machine, the combination with a horizontal bar and means for moving said bar in the paths of curved figures of various shapes and dimensions, of a carrier mounted on said bar, a cutting-tool having a free swivel connection with the carrier, said tool provided with an arm at its lower end projecting rearwardly relatively to the axis on which the tool turns and provided with a blade inclined laterally.

"8. In a cutting-machine, the combination with a horizontal bar and means for moving said bar in the paths of curved figures of various shapes and dimensions, of a carrier mounted on said bar, a tool-holder provided with a vertical shank having a free swivel connection with said carrier, said tool-holder having an arm at its lower end terminating rearwardly of the axis of the vertical shank of the holder, and a blade rigid with said arm and inclined laterally, said cutter being the only moving element of the machine which engages the material.

"9. In a machine for cutting ovals and other figures, the combination with a carrier provided with a vertical socket to be disposed above the material, means for moving said carrier to mark the outline of a predetermined figure, a tool-holder having a shank freely swiveled in the vertical socket of the carrier and having a thrust bearing therein, an arm at the lower end of the shank of the holder, said arm terminating rearwardly of the axis of the shank, and a trailing cutter rigid with said arm and disposed to make a beveled cut.

"10. In a cutting-machine, the combination with a tool-carrier and means for moving said carrier in a path coincident with the outline of a curved figure, of a holder having a vertical spindle swiveled to said carrier and an inclined arm at the lower end of said spindle and a blade secured to said arm and inclined laterally so that its cutting edge will be disposed at an angle to said arm."

13,454. (Reissue.)—*William A. Allen*, New York, N. Y. SUPPORTING AND RETAINING DEVICE FOR SPARE TIRES. Patent dated August 6, 1912. Disclaimer filed May 13, 1913, by the inventor.

Enters this disclaimer—

"To that part of the claim in said specification which is in the following words, to wit:

"1. In combination, a locking clasp divided into separate compartments each adapted to retain an automobile tire or the like, the locking means being common to all compartments, and means for securing said clasp to the body of the vehicle.

"2. In combination, a locking clasp comprising rigid members adapted to embrace a plurality of vehicle tires, and means for fixedly securing one tire only or more than one tire therein.

"3. In combination, a locking clasp comprising rigid members adapted to embrace a plurality of vehicle tires, and means adjustable to various sizes of tires for fixedly retaining one tire only or more than one tire therein."

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 14, 1913.

Hansen-Schmitt Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frings Bros. Co., 3134 Market street, Philadelphia, Pa., for registration of a trade-mark and trade-mark registration No. 54,445, dated June 26, 1906, issued to Hansen-Schmitt Co., 334–336 East Water street, Milwaukee, Wis., and a notice of such declaration sent by registered mail to said Hansen-Schmitt Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Hansen-Schmitt Co., its assigns or legal representatives, shall within thirty days from the first publication of this order enter an appearance therein the interference will proceed as though by default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 7, 1913.

James H. Carrington, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Rudolph Weil, of 123 Williams street, New York, N. Y., for registration of a trade-mark and trade-mark registered April 22, 1884, No. 11,119, to James H. Carrington, of New York, N. Y., and a notice of such declaration sent by registered mail to said James H. Carrington at the said address having been returned by the post-office undeliverable, notice is hereby given that unless James H. Carrington, his assigns or legal representatives, shall within thirty days from the first publication of this order enter an appearance therein the interference will be proceeded with as though by default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 30, 1913.

Leo Rex Canning & Preserving Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frank Herfort, of Baraboo, Wis., for registration of a trade-mark, the trade-mark registration of Diehm-Fansler Grocer Co., 402–404 Missouri avenue, East St. Louis, Ill., and trade-mark registered August 6, 1907, No. 64,425, to the Leo Rex Canning & Preserving Co., of the borough of Manhattan, 381 Fourth avenue, New York, N. Y., and a notice of such declaration sent by registered mail to the said Leo Rex Canning & Preserving Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Leo Rex Canning & Preserving Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

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ISSUE OF MAY 27, 1913.

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Designs	41—No.	44,080 to No. 44,120, inclusive.
Trade-Marks	94—No.	91,735 to No. 91,828, inclusive.
Labels	9—No.	17,038 to No. 17,046, inclusive.
Prints	11—No.	3,272 to No. 3,282, inclusive.
Reissues	2—No.	13,568 to No. 13,569, inclusive.
Total	756	

TO RESIDENTS OF THE UNITED STATES.

States.	Patents and Designs.	Trade-Marks, Labels, and Prints.	States.	Patents and Designs.	Trade-Marks, Labels, and Prints.
Alabama	2	.....	New York	86	35
Arizona	1	.....	North Carolina	7	.....
Arkansas	4	.....	North Dakota	2	.....
California	26	6	Ohio	37	4
Colorado	6	.....	Oklahoma	3	.....
Connecticut	15	2	Oregon	5	1
Delaware	.....	.....	Pennsylvania	63	4
Florida	1	.....	Rhode Island	4	1
Georgia	2	2	South Carolina	4	.....
Idaho	.....	.....	South Dakota	1	.....
Illinois	65	4	Tennessee	3	2
Indiana	6	2	Texas	14	1
Iowa	16	.....	Utah	1	.....
Kansas	11	1	Vermont	.....	.....
Kentucky	3	.....	Virginia	6	.....
Louisiana	4	1	Washington	11	.....
Maine	.....	1	West Virginia	1	.....
Maryland	4	1	Wisconsin	8	1
Massachusetts	32	12	Wyoming	1	.....
Michigan	12	4			
Minnesota	10	.....	Alaska, District of	.....	.....
Mississippi	1	.....	Canal Zone	.....	.....
Missouri	12	6	District of Columbia	4	.....
Montana	1	3	Hawaii Territory	2	.....
Nebraska	3	.....	Porto Rico	.....	.....
Nevada	.....	.....	U. S. Army	1	.....
New Hampshire	2	.....			
New Jersey	38	7	Total to residents of the United States	541	101
New Mexico	.....	.....			

TO RESIDENTS OF FOREIGN COUNTRIES.

Countries.	Patents and Designs.	Trade-Marks.	Countries.	Patents and Designs.	Trade-Marks.
Argentina	.....	.....	Netherlands	.....	.....
Austria-Hungary	5	4	Newfoundland	.....	.....
Belgium	1	.....	New South Wales	.....	.....
Bermuda	.....	.....	New Zealand	1	.....
Brazil	.....	.....	Norway	.....	.....
British West Indies	.....	.....	Queensland	.....	.....
Canada	14	.....	Roumania	.....	.....
Cape Colony	.....	.....	Russia	1	.....
China	.....	.....	Scotland	2	.....
Costa Rica	.....	.....	South Australia	.....	.....
Cuba	.....	.....	Spanish Honduras	.....	.....
Denmark	.....	.....	Sweden	4	.....
Egypt	.....	.....	Switzerland	3	1
England	20	1	Transvaal, South Africa	.....	.....
Fiji Islands	.....	.....	Victoria	1	.....
France	6	1	Western Australia	.....	.....
Germany	40	6			
Ireland	.....	.....	Total to residents of foreign countries	99	13
Italy	.....	.....			
Japan	.....	.....			
Java	1	.....			

Drawings.

PRECAUTIONS TO BE OBSERVED IN FORWARDING DRAWINGS TO THE UNITED STATES PATENT OFFICE.

Where drawings are to be filed in connection with an application for Letters Patent in the United States Patent Office, each sheet, before it can be accepted by the Office as a part of the application, must be signed in the name of the inventor at the lower right-hand corner, either by him or by an attorney whose written authorization from the applicant is filed in connection with the application. This signature must also be attested by two witnesses, each of whom should sign the drawing at the lower left-hand corner of the sheet. The signatures should never be written on a line parallel with the longer edges of the sheet, one of the shorter edges being always regarded, for the purpose of locating the signatures, as the lower edge of the sheet. The signatures must all be within the margin-lines of the sheet and below the lines of the drawing. The title of the invention should be written with pencil on the back of each sheet of drawings.

When there are filed on the same day two or more applications by the same inventor, each of the documents and drawings belonging to the same application should have placed thereon the same letter or number, which should be different from the letter or number placed upon those of any other of the applications.

It is desirable that all parts of the complete application, including the drawings, be deposited in the Office at the same time. Should, however, the other parts of the application be filed before the drawings are sent, the latter when forwarded should be accompanied by a letter stating the number of sheets inclosed, and that the drawings are to be filed with the other parts of the application, giving the date at which such other parts were filed in the Office, the name of the inventor, and title of the invention. If the application has received a serial number, that should also be given, and it should be indorsed with pencil on the back of each sheet of drawings. The letter should also state, if such be the case, that the new drawings are to be substituted for those previously filed.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business May 24, 1913.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
313	1. Fences; Harrows and Diggers; Plows; Seeders and Planters; Trees, Plants, and Flowers.	Mar. 17	Mar. 24	755
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Pneumatic Despatch; Pneumatics; Presses; Store-Service; Tobacco.	Feb. 17	Mar. 31	668
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Metal-Founding; Metallurgy; Plastic Metal Working.	Apr. 25	May 12	254
232	4. Bridges; Conveyers; Excavating; Hoisting; Hydraulic Engineering; Loading and Unloading; Metallic Building Structures; Traversing Hoists.	Feb. 25	Apr. 9	638
167	5. Bookbinding; Harvesters; Jewelry; Music.	Mar. 15	Mar. 14	575
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Medicines; Preserving; Sugar and Salt; Substance Preparation.	Feb. 8	Mar. 17	783
312	7. Educational Appliances; Clutches; Games and Toys; Mechanical Motors; Optics; Velocipedes.	Jan. 14	Feb. 27	995
131	8. Beds; Chairs; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Feb. 3	May 2	626
142	9. Air and Gas Pumps; Fluid-Pressure Regulators; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Wind-Wheels.	Dec. 27	Apr. 23	607
235	10. Carriages and Wagons.....	Jan. 10	Mar. 21	1191
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whips and Whip Apparatus.	Apr. 2	Apr. 11	399
322	12. Elevators; Journal-Boxes, Pulleys, and Shafting; Lubrication; Machine Elements.	Mar. 1	Mar. 7	1121
329	13. Arms, Projectiles, and Explosive Charges, Making; Bolt, Nail, Nut, Rivet, and Screw Making; Boring and Drilling; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 24	Mar. 8	749
307	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Metal-Ornamenting; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 3	Apr. 25	512
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Liquid Coating Compositions; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastic Compositions; Plastics.	Dec. 23	Mar. 15	1298
109	16. Radiant Energy; Telegraphy; Telephony.	Jan. 21	Mar. 10	574
303	17. Matrix-Making; Paper Manufactures; Printing; Type-Bar Making.	Apr. 7	Apr. 24	289
327	18. Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 21	Apr. 11	236
236	19. Dampers, Automatic; Furnaces; Heat-Distributing Systems; Stoves and Furnaces.	Feb. 17	Apr. 7	550
179	20. Artificial Limbs; Builders' Hardware; Dentistry; Locks and Latches; Safes; Undertaking.	Mar. 12	May 2	184

Applications Under Examination—Continued.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
112	21. Brakes and Gins; Carding; Cloth-Finishing; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 26	Mar. 7	586
249	22. Aeronautics; Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Firearms; Marine Propulsion; Ordnance; Ships.	Feb. 7	Apr. 23	378
379	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Time-Controlling Mechanism.	Feb. 11	Mar. 27	533
144	24. Apparel; Apparel Apparatus; Sewing-Machines.	Mar. 1	Apr. 22	547
315	25. Butchering; Mills; Threshing; Vegetable Cutters and Crushers.	Apr. 23	May 2	216
106	26. Electricity, Generation; Motive Power.	Dec. 18	Feb. 17	625
372	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 2	Apr. 2	557
65	28. Internal-Combustion Engines.	Jan. 6	Jan. 21	1177
147	29. Coopering; Fire-Escapes; Ladders; Roofs; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking-Tools.	Dec. 4	Mar. 24	811
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Mar. 3	May 6	435
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue.	Feb. 13	Feb. 20	539
278	32. Carbonating Beverages; Dispensing Beverages; Dispensing-Cans; Ornamentation; Packaging Liquids; Refrigeration.	Feb. 14	Apr. 24	392
71	33. Cutlery; Domestic Cooking Vessels; Masonry and Concrete Structures; Paving; Tents, Canopies, Umbrellas, and Canes.	Dec. 27	Mar. 27	383
304	34. Railways; Railway-Brakes; Railway Rails and Joints; Railway Rolling-Stock; Railway Ties and Fasteners.	Apr. 3	Mar. 27	439
244	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Garment-Supporters; Toilet.	Mar. 6	Apr. 24	879
264	36. Drafting; Driers; Engraving; Measuring Instruments; Photography.	Mar. 29	Mar. 26	849
107	37. Electric Lamps; Electricity, Conductors; Electricity, Conduits; Electricity, General Applications.	Nov. 16	Jan. 28	977
378	38. Animal Husbandry; Artesian and Oil Wells; Fishing and Trapping; Stationery; Stone-Working.	Feb. 3	Mar. 17	826
321	39. Water Distribution.....	Mar. 5	Apr. 23	478
280	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Feb. 15	Mar. 15	999
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Apr. 5	Apr. 12	555
279	42. Electric Railways; Electric Signaling; Railway Signaling; Signals.	Feb. 10	Feb. 27	782
382	43. Baths and Closets; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Mar. 19	Apr. 14	269

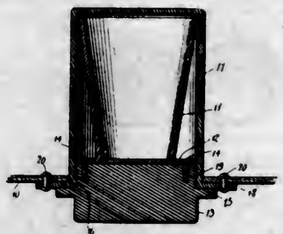
Oldest new case, Nov. 16; oldest amended, Jan. 21.
Total number of applications awaiting action..... 27,216

161	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.			
	Trade-Marks.....	Mar. 20	Apr. 15	884
	Designs.....	Apr. 12	May 1	242
	Labels and Prints.....	May 17	May 8	80

PATENTS

GRANTED MAY 27, 1913.

1,062,578. DRINKING-CUP. ROBERT M. AXFORD, Corvallis, Oreg. Filed Dec. 2, 1911. Serial No. 663,582. (Cl. 190—41.)

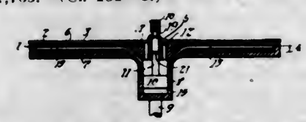


1. The combination with a bag, of a casing projecting through an opening in the wall of the bag and having a closed end and an open end, a flange located at the open end of the casing and adapted to lie against the outer face of the bag, fastening means securing the flange to the bag and retaining the casing in position, and a cup carrying member forming a closure for the casing and provided with a circumferentially threaded member adapted to cooperate with a correspondingly threaded portion located at the open end of the casing to retain the cup housed within such casing.

2. The combination with a bag having an opening in the wall thereof, of a casing projecting through said opening into the bag and having an open mouth portion, means attached to the outer wall of the bag for securing the casing in position relative to such bag, and a cup carrying member provided with a threaded portion adapted to engage with a correspondingly threaded portion located at the mouth of the casing and said cup carrying member being further provided with an intermediate flange designed to bear against the casing securing means and with the outer portion of said member forming a handle.

3. The combination with a bag having an opening therein, of a casing projecting through the opening in the bag, means for securing the casing to the bag, a cup having a flange at the bottom, a handle including a stock adapted for engagement with the cup bottom and having a circumferential flange, means removably connecting the cup flange to the stock, the casing securing means also having a flange at the mouth bearing against the stock flange.

1,062,579. TALKING-MACHINE. JONAS W. AYLSWORTH, East Orange, N. J., assignor, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Feb. 3, 1910. Serial No. 541,763. (Cl. 181—3.)



1. In a talking machine, a rotatable table or record support formed of compact porous material and having a smooth hard record-supporting surface, substantially as described.

2. In a talking machine, a rotatable table or record support having a non-porous annular portion and a portion formed of compact porous material and having a smooth hard record supporting surface, substantially as described.

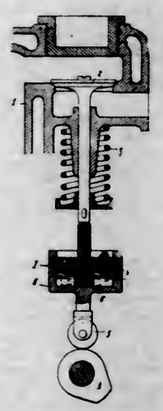
3. In a talking machine, a rotatable table having a hard smooth surface adapted to support a disk sound record, the said table having a non-porous portion positioned to be contacted by the rim of the record and a portion formed of compact porous material positioned to be contacted by that portion of the record the opposite side of which bears the sound record grooves, substantially as described.

4. In a talking machine, a rotatable table having a hard smooth surface adapted to support a disk sound record, the said table having a non-porous portion positioned to be contacted by the rim of the record, a non-porous portion adjacent the center thereof and a portion formed of compact porous material between said non-porous portions, substantially as described.

5. In a talking machine, in combination, a rotatable table having a surface portion formed of compact porous material adapted to support a sound record, and means for holding a record upon said surface by suction, substantially as described.

[Claims 6 to 18 not printed in the Gazette.]

1,062,580. VALVE-GEAR. AMÉDÉE BOLLÉE, Fils, Le Mans, France. Filed Apr. 20, 1911. Serial No. 622,230. (Cl. 121—97.)



1. The combination with a valve, a valve spring and means for operating said valve, of a cylinder adapted to contain a fluid and engaged by said valve operating means, a piston within said cylinder and contacting said valve, means for limiting the travel of the piston in both directions and a resilient body exerting pressure on said piston and oppositely of said valve spring, a liquid in the cylinder and means for enabling the liquid comprised between the cylinder and the corresponding piston to pass over the latter and conversely, for the purpose specified.

2. The combination with a valve, a valve spring and means for operating said valve, of a cylinder having a stem projecting therefrom and engaged by the valve operating means, a fluid and a piston immersed therein within said cylinder, a rod projecting from said piston and engaging the stem of the valve, means for limiting the travel of the piston in both directions and a spring interposed

between the piston and the end of the cylinder adjacent the valve operating means, a liquid in the cylinder and means for enabling the liquid inclosed between the cylinder and the corresponding piston to pass over the latter and conversely, for the purpose specified.

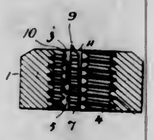
3. The combination with a valve, a valve spring and means for operating said valve, of a cylinder adapted to contain a fluid and engaged by said valve operating means, a piston within said cylinder and connecting said valve, means for limiting the travel of the piston in both directions, a liquid in the cylinder, a clearance provided between the cylinder and the piston for enabling the liquid to pass over the latter, a valve in the piston for enabling the liquid to reënter the cylinder, and a resilient body exerting pressure on said piston and oppositely of said valve spring, for the purpose specified.

4. The combination with a valve, a valve spring and the means for operating said valve, of a cylinder adapted to contain a fluid, a hollow piston within said cylinder and contacting said valve, a liquid in the cylinder and in the hollow piston, means adapted to prevent the liquid forming an emulsion, a clearance provided between the cylinder and the piston for enabling the liquid to pass over the latter, a valve in the piston for enabling the liquid to reënter the cylinder, and a resilient body exerting a pressure on said piston and oppositely of said valve spring, for the purpose specified.

5. The combination with a valve, a valve spring and means for operating said valve, of a cylinder adapted to contain a fluid, a hollow piston within said cylinder and contacting said valve, a liquid in the cylinder and in the hollow piston, means adapted to prevent the liquid forming an emulsion, a clearance provided between the cylinder and the piston for enabling the liquid to pass over the latter, a valve in the piston for enabling the liquid to reenter the cylinder, a conduit for insuring a supply of the fluid to the cylinder, and a resilient body exerting pressure on said piston and oppositely of said valve spring, for the purpose specified.

[Claims 6 and 7 not printed in the Gazette.]

1,062,581. NUT-LOCK. LEON ST. CLAIR BRACH, New York, N. Y. Filed Apr. 20, 1909. Serial No. 491,046. (Cl. 151—23.)



1. In a device of the class described, a nut, a longitudinally disposed slot in said nut, a detent in said slot, having threads corresponding with the threads of the nut, and a wire engaging in the gorges of the threads of said nut and extending into the gorges of the threads of said detent, whereby to hold the detent in place.

2. In a device of the class described, a nut having grooves in gorges of the threads, a longitudinal slot in said nut, a detent in said slot having threads corresponding to the threads of the nut, and a wire resting in the grooves in said gorges and holding said detent in place.

3. In a device of the class described, a nut having threads therein, a longitudinal slot intersecting said threads, a detent having threads corresponding to the threads of the nut and a spring wire having a portion bent into ring shape, and fitted in the gorges of the threads of said nut and having another portion bent to fit between said detent and the walls of said slot whereby said detent is properly held in said nut.

4. In a device of the kind described, a bolt, a nut thereon, a locking member between the nut and bolt, and spring means between the nut and bolt having a portion engaging the locking member to prevent movement thereof in one plane and having another portion engaging the locking member and urging the same to movement in a plane transverse to said first named plane.

5. In a device of the kind described, a nut provided with a slot having a bottom with one end closer to the axis of the nut than the other, a locking member bodily movable along the bottom of the slot and provided with threads corresponding to those of the nut, and a member having a portion engaging the threads of the nut and of the locking member, and having a spring portion engaging the locking member and urging it to movement within the slot.

[Claim 6 not printed in the Gazette.]

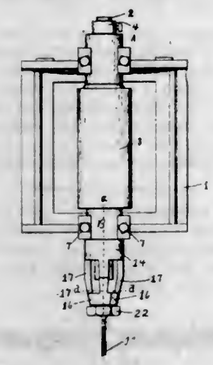
1,062,582. TRANSIT. DAVID W. BRUNTON, Denver, Colo. Original application filed July 3, 1911, Serial No. 636,751. Divided and this application filed Aug. 1, 1912. Serial No. 712,712. (Cl. 88—2.)



1. In a transit of the character described, a casing, a folding sight hinged to said casing, and provided with a peep sight hinged thereto at its free end and having a sight hole and a sight point, a cover also hinged to said casing, and an adjustable peep sight hinged to the free edge of the cover and adapted to be folded over upon the outside of said cover and also having a sight hole and a sight point, the two peep sights arranged for alinement one with the other, substantially as and for the purpose described.

2. In a transit of the character described, a casing, a hinged lid or cover therefor, and a peep sight hinged to the free edge of the lid or cover and adapted to be turned upwardly and outwardly at an angle to said cover and also to be folded over upon the outside of said lid or cover and provided with a sight point, combined with a complementary sight oppositely arranged on the instrument and having a sight hole and sight point.

1,062,583. MORTISING-MACHINE. NEWTON L. BUTTS, Norwich, N. Y., assignor to Joseph H. Fitch, Rochester, N. Y. Original application filed Feb. 3, 1910, Serial No. 541,900. Divided and this application filed Jan. 12, 1911. Serial No. 602,201. (Cl. 144—78.)



1. In a mortising machine, the combination with a bearing and a rotary bit support turning in the same, and projecting from said bearing, the projecting portion being provided with bit securing means of a holder for supporting a hollow chisel in coöperative relation with the bit support, having a portion tightly fitting about a portion of the bearing a chisel securing portion, and an opening in its side between the chisel securing portion and the portion secured to the bearing, said opening being located so that the bit securing means may be reached therethrough.

2. In a mortising machine, the combination with a bearing having a cylindrical portion and a rotary bit support turning in the bearing concentric with the cylindrical portion, and projecting from said bearing, the projecting portion being provided with bit securing means, of a holder for supporting a hollow chisel in coöperative relation with the bit support, having a ring portion tightly fitting the cylindrical portion of the bearing, a chisel securing portion and an opening in its side between the chisel securing portion and the portion secured to the bearing, said opening being located so that the bit securing means may be reached therethrough.

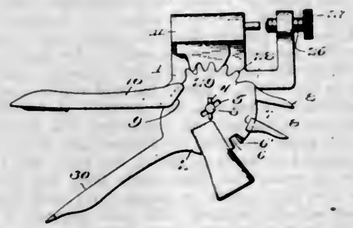
3. In a mortising machine, the combination with a divided bearing and a portion integral with one member thereof, of a rotary bit support turning in said bearing, and projecting through the integral portion, the projecting portion being provided with bit securing means, and a holder for hollow chisels supported by the portion that is integral with one member of the divided bearing, a chisel securing portion and an opening in its side between the chisel securing portion and the portion secured to the bearing, said opening being located so that the bit securing means may be reached therethrough.

4. In a mortising machine, the combination with a divided bearing, of an integral cylindrical extension on one member of the bearing concentric with the axis of the bearing, a rotary bit support turning in said bearing, and projecting through said extension, the projecting portion being provided with bit securing means, and a holder for a hollow chisel having a portion fitting about the cylindrical portion of the bearing, a chisel securing portion and an opening in its side between the chisel securing portion and the portion secured to the bearing, said opening being located so that the bit securing means may be reached therethrough.

5. In a mortising machine, the combination with a divided bearing, of a portion integral with one member of the bearing and surrounding the other member, a rotary bit support turning in said bearing, and a holder for a hollow chisel having a portion fitting the integral portion of the bearing member that surrounds the other bearing member.

[Claims 6 to 8 not printed in the Gazette.]

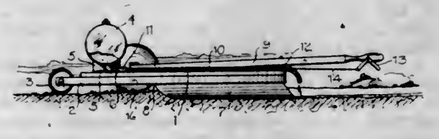
1,062,584. COMBINATION-TOOL. JAMES W. CROSSLEY, Banks, Ark. Filed Apr. 8, 1911. Serial No. 619,846. (Cl. 164—120.)



1. In a riveter and bradder, a member provided with an upwardly extending rectangular portion, said rectangular portion provided along its upper edge with an enlarged substantially circular portion provided with a groove therein, said groove terminating at one end in a cross piece integral with the enlarged portion, a large plunger provided with a bore of uniform diameter seated in said groove, said plunger provided with a downwardly extending lug or member provided with teeth above its lower edge, said large plunger adapted to reciprocate in the said groove and have its movement in one direction limited by the engagement of the said cross piece with a notch in the downwardly extending lug of the plunger, a small plunger provided with an enlargement on one end, said small plunger seated in the bore of the large plunger, said small plunger provided with a lug adapted to engage a notch in the upper edge of the downwardly extending lug on the large plunger, and a second member, substantially circular, detachably pivoted to the first mentioned member centrally thereof, said second member provided upon its upper edge with a number of teeth adapted to engage the teeth of the lug of the larger plunger to reciprocate said plunger.

2. In a riveter and bradder, a member provided with an upwardly extending rectangular portion and a downwardly extending circular portion, a handle integral with said member, said handle where it joins the member provided with an extension, a second member substantially circular in periphery, said member detachably pivoted to the first member centrally thereof by means of a key, the second member adapted to be guided and held in place by engagement of the extension to the handle bearing upon its outer face, said upwardly extending rectangular portion of the first mentioned member being provided with a bent over portion forming a groove, a large plunger adapted to reciprocate in the groove, said large plunger having a downwardly extending lug provided with teeth, the upper edge of the second member provided with teeth to engage the teeth on the lug to reciprocate the larger plunger, and a small plunger interlockable with the larger plunger, and adapted to reciprocate therewith.

1,062,585. TRANSPLANTER. JOHN S. DE LONG, Osborn, Ohio. Filed Jan. 16, 1913. Serial No. 742,464. (Cl. 55—72.)



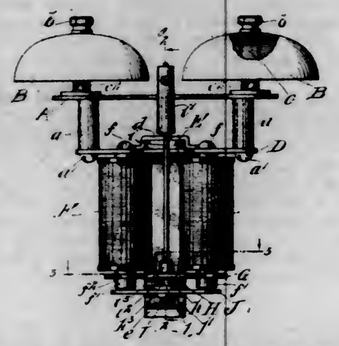
1. In a device of the character described, the combination of a platform, side bars secured to the longitudinal edges of the platform and projecting beyond the end thereof, a roller journaled in the projecting ends of the side bars, a shoe secured to the under side of the platform and adapted to open a furrow, a handle member secured to the platform and projecting rearwardly therefrom, a water tank mounted upon the platform, a tube having one end connected with the tank and the other end opening into the furrow made by said shoe, a spring valve arranged within said tube and means for actuating said valve for discharging water within the furrow at various intervals.

2. In a device of the character described, the combination of a platform, bars secured to the longitudinal edges of the platform and extending beyond one end thereof, a roller journaled between the extending ends of the bars, a shoe secured to the under side of the platform and adapted to open the furrow, a water tank mounted upon the platform at the forward end thereof, a tube having one end connected with the tank and the other end thereof opening into the furrow, a spring held valve arranged within said tube, a handle secured to said platform and projecting rearwardly and a bell crank lever mounted upon the rear end of the handle, a cord having one end connected to the valve and the other end to one end of the bell crank lever whereby the valve may be readily opened or closed to discharge water into the furrow and a row marker hingedly secured to the inner end of the handle member and adapted to be disposed upon either side of the platform.

3. In a device of the character described, the combination of a platform, side bars secured to the longitudinal edges of the platform and projecting beyond the end thereof, a roller journaled in the projecting ends of the side bars, a shoe secured to the under side of the platform and adapted to open a furrow, a handle member secured to the platform and projecting rearwardly

therefrom, a water tank mounted upon the platform, and means for discharging water from the tank into the furrow at various intervals.

1,062,586. SPRING-MOUNTING FOR MAGNET-ARMATURES. CHARLES J. ERICKSON, Chicago, Ill., assignor, by mesne assignments, to First Trust and Savings Bank, trustee, Chicago, Ill. Filed Dec. 14, 1905. Serial No. 291,680. (Cl. 177—7.)



1. An electric bell comprising gongs, electro-magnets, a striker, a flat spring extending at a right angle to the plane in which the striker vibrates, an armature carried by said spring and rigidly connected with the said striker, and means whereby the striker itself is adjusted toward and away from the armature.

2. In a telephone ringer, electromagnets having their cores extending slightly beyond the end of the coils thereof, a bridge extending across the electromagnets and apertured for the reception of said extended cores, a leaf spring mounted transversely by its ends on said bridge, and an armature and hammer rigidly supported by the spring between the ends thereof for torsional movement therewith in response to the electromagnets.

3. An electric bell or ringer comprising a pair of gongs, a pair of electromagnets, a torsional spring rigidly supported at its opposite ends, and an armature and striker rigidly mounted upon and supported by the middle portion of said spring, the spring being arranged with its length extending at a right-angle to the plane in which the armature and striker oscillate or vibrate.

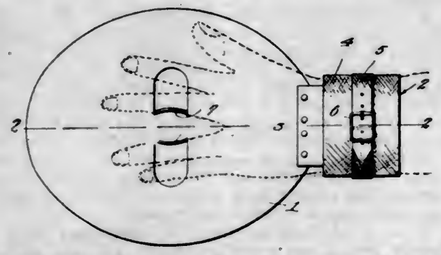
4. An electric bell comprising gongs, electromagnets, a striker, a torsional spring extending at a right-angle to the plane in which the striker vibrates, an armature carried by said spring and connected with said striker, and means whereby the striker itself is adjusted toward and away from the armature.

5. In a telephone ringer, electromagnets having their cores extending slightly beyond the end of the coils thereof, a bridge extending across the electromagnets apertured for the reception of said extended cores, a torsional spring mounted transversely by its ends on said bridge, and an armature and hammer rigidly supported by the spring between the ends thereof for torsional movement therewith in response to the electromagnets.

1,062,587. SWIMMING DEVICE. FRIEDRICH WM. J. GOERSCH, Cleveland, Ohio. Filed Aug. 16, 1912. Serial No. 715,463. (Cl. 9—21.)

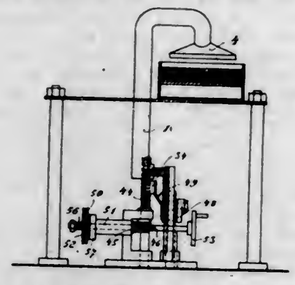
1. A device of the character described comprising a blade or paddle, a wrist band flexibly connected thereto, flaps cut from said paddle and bent upwardly, said flaps slightly convex and adapted to engage the third and fourth fingers of the wearer.

2. A device of the character described comprising a blade or paddle, a wrist band connected to said blade or paddle by means of a strip of leather, said blade or paddle slightly curved longitudinally in order to conform with the outline of the palm, flaps cut from said paddle and bent upwardly, said flaps slightly convex and adapted



to fit between the third and fourth fingers of the hand of the user.

1,062,588. APPARATUS FOR COMPOSING AND DECOMPOSING METAL-FOIL MOLDS OR FORMS. JACOB HEINRICH, Fürth, Bavaria, Germany, assignor to The Firm of Metallpapier-Bronzefarben-Blattmetallwerke Aktiengesellschaft, Munich, Germany. Filed Jan. 17, 1913. Serial No. 742,750. (Cl. 113—113.)



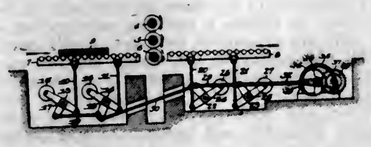
1. In an apparatus for composing and decomposing metal foil molds or forms, the combination, with a bottom plate adapted to carry a pile of the foils and a nozzle adapted to remove the foils singly from said pile, of a holder for said nozzle, a threaded cheek forming a support for said holder, a threaded spindle meshing with said cheek, and means for rotating said spindle, for the purpose as described.

2. In an apparatus for composing and decomposing metal foil molds or forms, the combination, with a bottom plate adapted to carry a pile of the foils, and a nozzle adapted to remove the foils singly from said pile, of a holder for said nozzle, a support for said holder, a threaded spindle meshing with said support, a spring attached to the latter, a holder for said spring, and means for rotating said spindle, substantially as described.

3. In an apparatus for composing and decomposing metal foil molds or forms, the combination, with a bottom plate adapted to carry a pile of the foils, and a nozzle adapted to remove the foils singly from said pile, of a holder for said nozzle, a support for said holder, a threaded spindle meshing with said support, a spring holding said support and said spindle in mesh with each other, a worm gear forming part of the driving gear for rotating said spindle, and means for rotating said gear by friction, substantially as described.

1,062,589. MOTOR-CONTROLLER. CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Oct. 17, 1908. Serial No. 458,267. (Cl. 172—239.)

1. The combination with an elevating table of a rolling mill, of means for raising and lowering said table, a motor for operating said means, an electromagnetically operated switch for starting said motor, an electromagnetically operated switch for connecting a dynamic braking circuit around said motor, a relay for controlling the operation of said switches, a limit switch for causing said relay to operate to stop said motor when said table is in its upper or lower position.



2. The combination with an elevating table of a rolling mill, of means for raising and lowering said table, a motor for operating said means, an electromagnetically operated switch for starting said motor, an electromagnetically operated switch for connecting a dynamic braking circuit around said motor, a relay for controlling the operation of said switches, a limit switch for causing said relay to operate to stop said motor when said table is in its upper or lower position, and a master switch for controlling said electromagnetically operated switches.

3. The combination with an elevating table of a rolling mill, of means for raising and lowering said table, a motor for operating said means, electromagnetically operated switches for starting said motor, electromagnetically operated switches for establishing a dynamic braking circuit for the motor, and a limit switch movable in unison with the motor in a single direction for causing said switches to stop the motor to bring said table to rest in its extreme upper and lower positions, said limit switch being adapted to first cause certain of said switches to operate to slow down the motor and then cause other of said switches to operate to stop the motor.

4. The combination with an elevating table of a rolling mill, of means for raising and lowering said table, a motor for operating said means, electromagnetically operated switches for starting said motor, electromagnetically operated switches for establishing a dynamic braking circuit for the motor, relays for controlling said switches, one of said relays being adapted to cause certain of said switches to slow down the motor, and the other relay being adapted to cause other of said switches to stop the motor, and a limit switch movable in unison with the motor for causing said relays to operate successively to stop the motor when said table is in its upper or lower position.

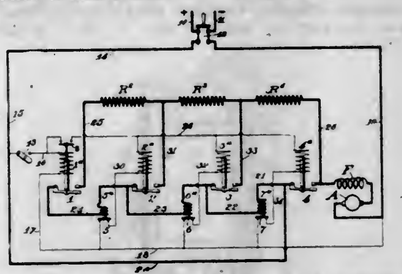
5. The combination with an elevating table of a rolling mill, of means for raising and lowering said table, a motor for operating said means, electromagnetically operated switches for starting said motor, electromagnetically operated switches for establishing a dynamic braking circuit for the motor, relays for controlling said switches, one of said relays being adapted to cause certain of said switches to slow down the motor, and the other relay being adapted to cause other of said switches to stop the motor, and a limit switch movable in unison with the motor for causing said relays to operate successively to stop the motor when said table is in its upper or lower position, and a master switch for controlling said electromagnetically operated switches.

[Claims 6 to 10 not printed in the Gazette.]

1,062,590. MOTOR-CONTROLLER. CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 23, 1909. Serial No. 491,669. (Cl. 172—288.)

1. In a controller for electric motors, in combination, a plurality of automatic resistance switches and automatic means adapted to operate immediately upon closure of the motor circuit to render said switches temporarily inoperative for varying periods.

2. In a controller for electric motors, in combination, a plurality of automatic resistance switches and electro-responsive means adapted to respond immediately upon closure of the motor circuit to temporarily prevent operation of said switches for varying periods.



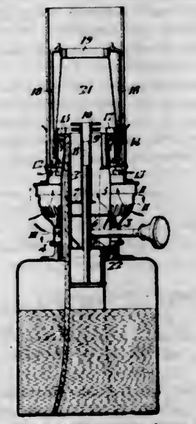
3. In a controller for electric motors, in combination, a plurality of automatic resistance switches and automatic means adapted to operate immediately upon closure of the motor circuit to render said switches inoperative and to thereafter cause said switches to operate successively as predetermined electrical conditions are established.

4. In a controller for electric motors, in combination, a plurality of automatic resistance switches and electro-responsive means adapted to respond immediately upon closure of the motor circuit to render said switches temporarily inoperative and to thereafter cause said switches to operate successively as predetermined electrical conditions are established.

5. In a controller for electric motors, in combination, a plurality of automatic resistance switches and a plurality of electro-responsive devices, one for controlling each of said switches, all of said devices being adapted to respond upon closure of the motor circuit and to thereafter cause successive operation of said switches as predetermined electrical conditions are established.

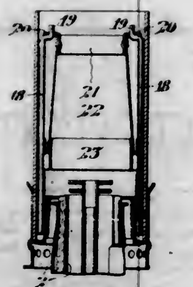
[Claims 6 to 10 not printed in the Gazette.]

1,062,591. INCANDESCENT LAMP. JOSEPH HERZOG, New York, N. Y., assignor to Arthur O. Granger, Montreal, Canada. Filed Aug. 21, 1908. Serial No. 449,578. (Cl. 67—38.)



In an incandescent wick lamp, a burner tube within the wick extending to the upper portion thereof, a tube on the exterior of the wick, the upper edge of which is slightly below the edge of the wick, an outwardly extending flange at the upper edge of the tube on the exterior of the wick, and a gallery having a burner cap provided with a flange extending inwardly over the flange on the exterior tube, the upper edge of the flange on the gallery being approximately on a line with the upper edge of the tube within the wick; substantially as described.

1,062,592. INCANDESCENT WICK-LAMP. JOSEPH HERZOG, New York, N. Y., assignor to Arthur O. Granger, Montreal, Canada. Filed Aug. 21, 1908, Serial No. 449,579. Renewed Mar. 4, 1912. Serial No. 681,610. (Cl. 67—101.)



1. In an incandescent wick burner, a mantle support carrying an upper ring to which the mantle is secured and a supplementary mantle cap the upper end of which is located within the mantle, said supplementary mantle cap being spaced above the burner cap to allow the entrance of air therebetween, the mantle support being adjustable to regulate the said distance.

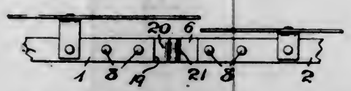
2. In an incandescent wick burner, a burner cap, a supplementary cap located thereabove, the upper end of which is adapted to enter and hold apart the lower end of the mantle, and means for regulating the distance between the burner cap and the supplementary cap.

3. In an incandescent wick burner, a mantle support having spaced apart side wires or rods carrying an upper ring to which the mantle is secured, the lower end of the mantle being spaced above the burner cap to allow the entrance of air between them, and means to hold the lower end of the mantle open; substantially as described.

4. In an incandescent wick burner, a mantle support having spaced apart side wires or rods carrying an upper ring to which the mantle is secured, the lower end of the mantle being spaced above the burner cap to allow the entrance of air between them, the wires being adjustable to adjust the space for the entrance of air, and means to hold the lower end of the mantle open; substantially as described.

5. In an incandescent wick burner, a mantle support having side wires or rods carrying an upper ring within the mantle and to which the mantle is secured, the lower end of the mantle being spaced above the burner cap to allow the entrance of air between them; substantially as described.

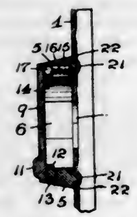
1,062,593. BAG-FRAME HINGE. JOSEPH S. ISIDOR, Newark, N. J. Filed Sept. 27, 1912. Serial No. 722,680. (Cl. 16—11.)



1. A hinge for the frame-sections of a bag-frame, comprising a pair of hinge-plates, one of said hinge-plates being provided with upwardly extending ear-like elements, each ear-like member being formed with a longitudinally extending finger-like member, normally in vertical alinement and parallel to the upper marginal edge of the ear-like element to provide a receiving opening, but adapted to have its end-portion bent downwardly upon said marginal edge-portion of the ear-like element, so as to provide a bearing-portion, and means connected with the other hinge-plate adapted to be brought into pivotal relation with said bearing-portions so as to connect the said hinge-plates in a hinge-like manner.

2. A hinge for the frame-sections of a bag-frame, comprising a pair of hinge-plates, one of said hinge-plates being provided with upwardly extending ear-like elements, each ear-like member being formed with a longitudinally extending finger-like member, normally in vertical alinement and parallel to the upper marginal edge of the ear-like element to provide a receiving opening, but adapted to have its end-portion bent downwardly upon said marginal edge-portion of the ear-like element, so as to provide a bearing-portion, a curved and upwardly projecting part projecting from one end-portion of the other hinge-plate, and extending over a portion of said first-mentioned hinge-plate and between the said ear-like elements, and pintle-like members integrally connected with and extending laterally from the marginal edge portion of said curved and upwardly projecting part adapted to be brought into pivotal relation with said bearing-portions so as to connect the said hinge-plates in a hinge-like manner.

1,062,594. LOCK. JOSEPH S. ISIDOR, Newark, N. J. Filed Feb. 5, 1913. Serial No. 746,339. (Cl. 70—8.)



1. In a lock, in combination with a face-plate provided with a key-hole, a chambered escutcheon mounted upon said face-plate and over the key-hole therein, said escutcheon being provided with a guiding means, a closing plate slidably arranged in said guiding means, and a spring-actuated rolling device connected with said escutcheon, said rolling device being in engagement with said closing plate, for retaining said closing plate in its variously-moved positions in said guiding means.

2. In a lock, in combination with a face-plate provided with a key-hole, a chambered escutcheon mounted upon said face-plate and over the key-hole therein, said escutcheon being provided with a guiding means, a closing plate slidably arranged in said guiding means, a spring-actuated rolling device connected with said escutcheon, said rolling device being in engagement with said closing plate, for retaining said closing plate in its variously-moved positions in said guiding means, and means connected with said closing plate for limiting the sliding movement of said plate.

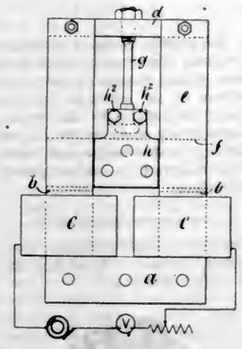
3. In a lock, in combination with a face-plate provided with a key-hole, a chambered escutcheon mounted upon said face-plate and over the key-hole therein, said escutcheon being provided with a guiding means, a closing plate slidably arranged in said guiding means, a spring-actuated rolling device connected with said escutcheon, said rolling device being in engagement with said closing plate, for retaining said closing plate in its variously-moved positions in said guiding means, and a stop-lug extending rearwardly from said closing plate and into the chambered portion of the escutcheon, said stop-lug being adapted to be brought into engagement with the opposite interior surface-portions of the escutcheon for limiting the sliding movement of said closing plate.

4. In a lock, in combination with a face-plate provided with a key-hole, a chambered escutcheon mounted upon said face-plate and over the key-hole therein, said escutcheon being provided with a guiding means, and a receiving socket, a closing plate slidably arranged in said guiding means, a spring in said receiving socket, and an anti-friction ball between one end of said spring and the back of said closing plate, said ball being in rolling engagement with the back of said closing plate, for retaining said closing plate in its variously-moved positions in said guiding means.

5. In a lock, in combination with a face-plate provided with a key-hole, a chambered escutcheon mounted upon said face-plate and over the key-hole therein, said escutcheon being provided with a guiding means, and a receiving socket, a closing plate slidably arranged in said guiding means, a spring in said receiving socket, and an anti-friction ball between one end of said spring and the back of said closing plate, said ball being in rolling engagement with the back of said closing plate, for retaining said closing plate in its variously-moved positions in said guiding means, and means connected with said closing plate for limiting the sliding movement of said plate.

[Claim 6 not printed in the Gazette.]

1,062,595. MEANS FOR TESTING THE DURABILITY OF MATERIAL WHICH IS EXPOSED TO REPEATEDLY-APPLIED STRESSES. GISBERT KAPP, Birmingham, England. Filed Oct. 14, 1911. Serial No. 654,617. (Cl. 73—51.)



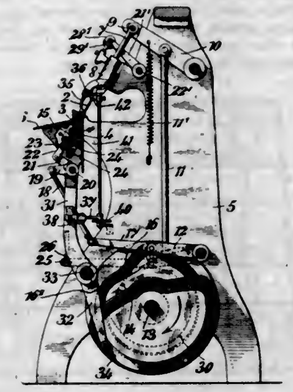
1. A contrivance whereby the material of a test-piece may be subjected to a rapid succession of repeated stresses comprising an electro-magnet, the armature thereof, means for energizing the electro-magnet by an alternating electric current and means for securing a test-piece to both the armature and the electro-magnet.

2. A contrivance whereby the material of a test-piece may be subjected to a rapid succession of repeated stresses comprising an electro-magnet, the armature thereof, means for energizing the electro-magnet by an alternating electric current, and means for securing a test-piece to both the armature and the electro-magnet so that the strain of the test-piece is equal to the displacement of the armature relative to the electro-magnet.

3. A machine whereby the material of a test-piece may be subjected to a rapid succession of repeated stresses by a load applied in alternately opposite directions, comprising two electro-magnets, the armatures thereof, means for securing one portion of the test-piece to the electro-magnets and another portion to the armatures, and means for energizing the electro-magnets by alternating electric currents.

1,062,596. BOOK-SEWING MACHINE. FRIEDRICH KUGLER, Frauenfeld, Switzerland, assignor to Martini-Buchbinderei & Textilmaschinenfabrik A.-G., Frauenfeld, Switzerland. Filed May 5, 1910. Serial No. 559,508. (Cl. 112—41.)

1. In a book-sewing machine, the combination with a signature support, of a sewing needle, a non-rotatable needle having a permanently open helical hook twisted through an angle of substantially 180 degrees relatively to the end of the needle, means to extend the thread in a loop from the sewing needle into the path of said hook, and means to move the needles rectilinearly through the signature.



2. In a book-sewing machine, the combination with a signature support, of a sewing needle, a non-rotatable needle having a permanently open helical hook twisted through an angle of substantially 180 degrees relatively to the end of the needle, the free end of said hook lying in the cylindrical contour of the needle, and means to extend the thread in a loop from the sewing needle into the path of said free end.

3. In a book-sewing machine, the combination with a signature support, of a sewing needle, a non-rotatable needle having a permanently open helical hook twisted through an angle of substantially 180 degrees relatively to the end of the needle, a needle bar, means for detachably securing the needles directly thereon, and rods carrying said bar reciprocally mounted in the machine frame to move the needles rectilinearly through the signature.

4. In a book-sewing machine, the combination with a signature support; of one reciprocable needle-bar extending substantially the whole length of and parallel to said support and having a plurality of transverse grooves formed therein, throughout the whole length of the bar, adapted to receive the sewing needles and hooked needles, and clamping plates for holding the needles in the grooves, the width of said clamping plates being such that they cover only one groove.

5. In a book-sewing machine, the combination with a signature support, of a reciprocable needle-bar having a plurality of transverse grooves formed therein adapted to receive the sewing needles and hooked needles, and clamping pieces adapted to fit into a longitudinal rabbet formed in the bar above the grooves and to extend over the latter, and means to detachably connect the clamping pieces to the bar whereby the needles are held in the grooves.

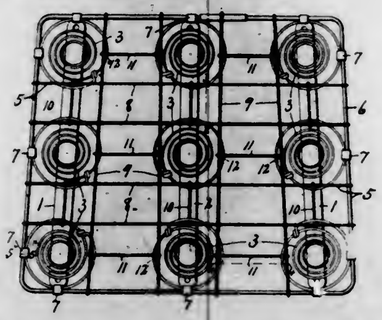
[Claims 6 to 14 not printed in the Gazette.]

1,062,597. SPRING-SEAT. WILLIAM LEWIS, Utica, N. Y. Filed June 28, 1912. Serial No. 706,378. (Cl. 5—29.)

1. A spring seat comprising an open wire frame, spiral springs arranged in rows within the margin of the frame, supports for the springs, a plurality of sets of crossing rods running lengthwise and transversely respectively of the frame and having their ends attached thereto and their intermediate portions bearing upon the upper sides of the outermost helices of the springs at two points of contact, and tie pieces extending parallel to one set of the crossing rods and connecting opposite rods of the other set.

2. A spring seat comprising an open frame, spiral springs within the frame and having their larger ends lying in substantially the same plane as that of the frame, supports for the opposite ends of the springs, crossing

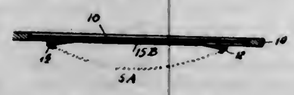
sets of separate rods running lengthwise and transversely respectively of the frame and having their ends attached thereto and their intermediate portions bearing against different points of the outer ends of the larger helices of the springs near the peripheries thereof, and tie pieces having loops within the larger helices of springs in the same row through which the rods are passed, said tie pieces being unattached to the springs.



3. A spring seat comprising an open frame, spiral springs within the frame and having their larger ends lying in substantially the same plane as that of the frame, supports for the opposite ends of the springs, crossing sets of separate rods running lengthwise and transversely respectively of the frame and having their ends attached thereto and their intermediate portions bearing against different points of the outer ends of the larger helices of the springs near the peripheries thereof, and tie pieces having loops within the larger helices through which the rods are passed, said tie pieces being unattached to the springs and having their terminal ends forming pins directed toward the smaller ends of the helices between the rods and adjacent portions of the larger helices.

4. A spring seat comprising an open frame, springs arranged in rows within the margin of the frame, a plurality of crossing rods running lengthwise and transversely, respectively, of the frame and having their ends attached thereto and their intermediate portions bearing upon the springs, tie pieces having loops within the helices of springs in the same row, through which the rods are passed, said tie pieces being unattached to the springs.

1,062,598. CAR-SIGN. NORMAN LITCHFIELD, Glen Ridge, N. J. Filed July 3, 1911. Serial No. 636,770. (Cl. 40—63.)

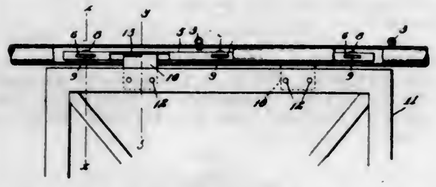


1. In a support for flexible signs, the combination with a pair of brackets at a fixed distance apart and a flat support substantially parallel to the plane of the brackets and at a fixed distance therefrom, the distance between said brackets and the distance between the plane of the brackets and the flat support being such that the flexible sign maintains a fixed position when sprung between the brackets and against the flat support.

2. In a support for flexible signs, the combination with a pair of parallel grooved brackets at a fixed distance apart, and a flat support parallel to the plane of the grooves in the brackets and at a fixed distance therefrom, the distance between said grooved brackets and the distance between the plane of the grooves and the flat support being such that the flexible sign maintains a fixed position when sprung between the brackets and against the flat support.

3. In a support for flexible signs the combination with a pair of brackets having parallel V-shaped grooves at a fixed distance apart and a transparent plate parallel to the plane of the grooves in the brackets at a fixed distance therefrom, the distance between said grooved brackets being less than the length of the sign which they are adapted to support and the distance between the plane of the grooves and the transparent plate being such that the flexible sign maintains a fixed position by reason of the pressure produced by its elasticity when sprung between the brackets and against the transparent plate with its opposite edges inserted in the grooves and both its surfaces are visible and unobstructed.

1,062,599. FREIGHT-CAR-DOOR HANGER. JAMES J. LONG, New York, N. Y. Filed Apr. 30, 1912. Serial No. 694,071. (Cl. 16—90.)



In a fixture for sliding doors, a carriage consisting of a channel bar having longitudinal slots in its side flanges and top, hangers having flanges at their upper ends fitted against the bottom of the carriage, fastenings for securing the flanges of the hanger to the carriage, wheels arranged to operate in the slots in the top of the carriage, and pins receiving said wheels and having their ends mounted in the longitudinal slots formed in the side flanges of the carriage.

1,062,600. WRINKLE-PREVENTER. CHARLOTTE J. MCDONALD, London, England. Filed Apr. 23, 1912. Serial No. 692,573. (Cl. 128—3.)



1. A wrinkle preventer, comprising a support formed of arched bands adapted to extend across the head of the wearer, a pair of cushions on the sides of the support, one of the cushions of each pair being on the inside of the support for engagement with the head of the wearer to space the side of the support from the side of the head and the other cushion of the pair being exterior of the support for engagement with a pillow to hold the side of the head out of contact with the pillow, and a clamping device at each side of the support and connected with the said cushions.

2. A wrinkle preventer, comprising a support formed of arched bands adapted to extend across the head of the water, and a pair of cushions on the sides of the support, one of the cushions of each pair being on the inside of the support for engagement with the head of the wearer to space the support from the side of the head and the other cushion of the pair being exterior of the support for engagement with a pillow to hold the side of the head out of contact with the pillow, buttons held on the outer surface of the exterior cushions, and a chin band adapted to engage at its middle the chin of the wearer the said band being provided with loops for engaging the buttons on the exterior cushions to hold the sides of the chin band spaced from the sides of the face.

3. A wrinkle preventer, comprising a support formed of a series of arched bands adapted to extend over the wearer's head and having slotted ends, clamping screws engaging the said slotted ends of the bands, inside cushions on the inner ends of the said clamping screws for engagement with the wearer's head to space the sides of the bands from the head, exterior cushions on the outer ends of the said clamping screws and adapted to rest on a pillow, a chin band having elastic side bands provided with loops, and buttons held centrally on the outer surface of the exterior cushions and adapted to be engaged by the said loops to hold the said elastic side bands spaced from the sides of the face.

4. A wrinkle preventer, comprising a support formed of a series of arched bands adapted to extend over the wearer's head, the rear one of the said bands extending across the back of the head, the front one of the said bands extending across the forehead of the wearer, and the said front band having at its middle and on the inside a pad for engagement with the middle of the forehead at a point directly above the nose, and the intermediate bands being spaced from each other and from the front and rear bands and extending across the top of the head, the ends of the said bands being pivotally connected with each other, inside spring cushions on the inside of the said support at the junction of the bands, and exterior spring cushions on the outside of the said support at the junction of the bands.

5. A wrinkle preventer, comprising a support formed of a series of arched bands adapted to extend over the wearer's head, the rear one of the said bands extending across the back of the head, the front one of the said bands extending across the forehead of the wearer, and the said front band having at its middle and on the inside a pad for engagement with the middle of the forehead at a point directly above the nose, and the intermediate bands being spaced from each other and from the front and rear bands and extending across the top of the head, the ends of the said bands being pivotally connected with each other, inside spring cushions on the inside of the said support at the junction of the bands, exterior spring cushions on the outside of the said support at the junction of the bands, and a chin rest having elastic side bands removably connected with the said exterior cushions.

[Claim 6 not printed in the Gazette.]

1,062,601. METAL BUNG. GEORGE E. MITTINGER, Jr., Sharon, Pa., assignor of fifteen-sixteenths to The Petroleum Iron Works Company, Sharon, Pa. Filed June 8, 1912. Serial No. 702,514. (Cl. 217—106.)



1. The combination with a bung-plug, of a ring U-shaped in cross-section and inclosing the periphery of the plug within the U thereof, said ring carrying means for attaching a connecting member thereto.

2. The combination with a bung-plug having a peripheral flange, of a ring U-shaped in cross-section, the U of the ring receiving the said peripheral flange, the ring provided with means for attachment of a connecting member.

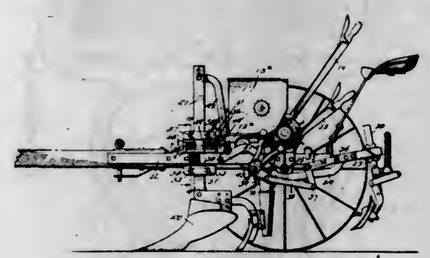
3. In a plug the combination of a bung member, a bung plug, a ring U-shaped in cross section, the U loosely inclosing the periphery of the bung-plug, the ring and the bung member having projecting arms, and a flexible connection between the said arms.

4. A ring for bung-plugs, formed from a blank of sheet metal into a substantially U-shaped ring in cross section to inclose the periphery of the plug and provided with an integral projecting arm for a connecting member.

5. A ring for bung-plugs made of sheet metal substantially U-shaped in cross-section to receive the periphery of the plug, the ring having an integral projecting arm doubled to form means for a connecting member.

[Claim 6 not printed in the Gazette.]

1,062,602. AGRICULTURAL IMPLEMENT. JOHN OLSON, Bradley, Ill., assignor to Sears, Roebuck and Company, Chicago, Ill., a Corporation of New York. Filed July 14, 1911. Serial No. 638,512. (Cl. 111—6.)



1. In an agricultural implement, the combination of a frame, a furrow-opener having an upright standard, a lever, means actuated by said lever for moving said standard vertically, and guiding members for said standard, one of said guiding members being adjustable independently of the other to vary the inclination of said standard.

2. In an agricultural implement, the combination of a frame, a furrow-opener having an upright standard, a lever, means actuated by said lever for moving said standard vertically, and guiding means for said standard comprising upper and lower guiding members, one of said members being adjustable longitudinally of the machine to vary the inclination of the standard.

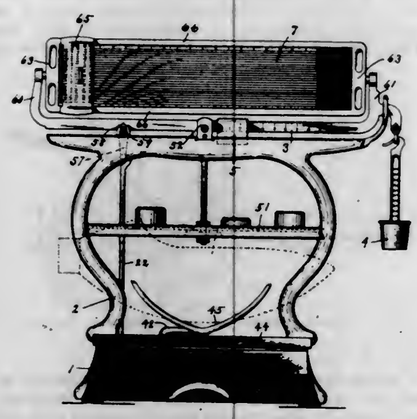
3. In an agricultural implement, the combination of a frame, a furrow-opener having an upright standard, a lever, means actuated by said lever for moving said standard vertically, and guiding means for said standard comprising upper and lower pairs of rollers between which said standard moves, one of said pairs of rollers being adjustable longitudinally of the machine to vary the inclination of the standard.

4. An agricultural implement comprising a frame, a transverse shaft mounted on said frame, a lever fixedly connected with said shaft for rocking the same, a lever loosely mounted on said shaft, locking mechanism for non-rotatably connecting the latter lever with said shaft, a vertically swinging member pivotally connected with the frame and extending rearwardly from such pivot, a covering shovel carried by said swinging member, and a bell crank lever pivoted between its ends upon the frame, one arm of said bellcrank lever being connected with said swinging member, its other arm being connected with said loosely mounted lever whereby said swinging member may be moved vertically by operating the latter lever.

5. An agricultural implement comprising a frame, a furrow opener, a transverse shaft mounted on said frame back of the furrow opener, a lever fixedly connected with said shaft for rocking the same, a lever loosely mounted on said shaft, locking mechanism for non-rotatably connecting the latter lever with said shaft, a vertically swinging member pivotally connected with the frame and extending rearwardly from such pivot, a covering shovel carried by said swinging member, means connecting said last-mentioned lever with said swinging member whereby said member may be swung vertically by operating the latter lever, an arm connected with said shaft and extending forward therefrom, said arm being adapted to be swung vertically when said shaft is rocked, and means connecting said arm with said furrow opener for moving the furrow opener vertically.

[Claim 6 not printed in the Gazette.]

1,062,603. COMPUTING-SCALE. FRANCIS C. OSBORN, Detroit, Mich., assignor to Standard Computing Scale Company, Detroit, Mich., a Corporation of Michigan. Filed July 22, 1908. Serial No. 444,716. (Cl. 73—104.)



1. In a scale, the combination of a frame, bearing blocks carried thereby, a scale beam provided with knife-edges adapted to rest on said blocks, a rod depending from said beam, and an eccentric adjusting poise pivotally mounted on said rod.

2. In a scale, the combination of a frame, bearing blocks carried thereby, a scale beam provided with knife-edges adapted to rest on said blocks, a rod depending from said beam, and a disk eccentrically and pivotally mounted on the rod.

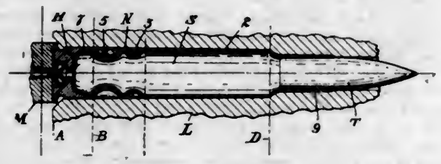
3. In a scale, the combination of a frame, bearing blocks carried thereby, a scale beam provided with knife-edges adapted to rest on said blocks, a vertical rod extending from said beam under the line of said knife-edges, and an eccentric disk pivotally mounted on said rod.

4. In a scale, the combination of a frame, bearing blocks carried thereby, a scale beam provided with knife-edges adapted to rest on said blocks, a rod depending from said beam under the line of said knife-edges, a disk eccentrically and pivotally mounted on the end of said rod to form an adjusting poise, and a shield mounted on said frame over said disk.

5. In a scale, the combination of a base, frame, beam and platform, of a platform supporting frame, and an arm pivotally connected to said frame and provided with scoop supporting means at its outer end, said arm adapted to be swung over the platform so the scoop may bear its weight on the platform.

[Claims 6 to 9 not printed in the Gazette.]

1,062,604. GUN-OPERATING CARTRIDGE. JOHN D. PEDERSEN, Jackson, Wyo. Filed Oct. 21, 1911. Serial No. 655,850. (Cl. 102—16.)



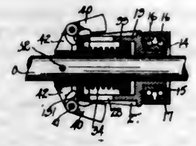
1. The herein described improvement in gun-operating cartridges, which consists in the combination in the cartridge shell, of three integrally joined component members, the forward tubular portion expansible into gripping contact with the bore of a gun by the gas pressure, the head portion slidable in the chamber of the gun while under the gas pressure, and the intermediate expansible connecting portion comprising a plurality of adjoining extensible members having, respectively, increasing resistances from said forward tubular portion of the shell rearwardly thereof, and elongatable by the reformation thereof by the gas pressure, whereby on the firing of the charge the said head portion will be slid rearwardly in the bore of the gun.

2. The herein described improvement in gun-operating cartridges, which consists in the combination in the cartridge shell, of a forward tubular portion, the head portion slidable in the bore of the gun while under the gas pressure, and the intermediate head-sliding connecting portion comprising a plurality of reformable cartridge-lengthening elements each elongatable by the expansion thereof, and having successively increasing widths and depths for obtaining successively increasing resistances, respectively, whereby on the firing of the charge the operation of these elements proceeds progressively, thereby to slide the said head portion rearwardly in the bore of the gun during the continuance of the gas pressure, substantially as described.

3. The herein described improvement in gun-operating cartridges, which consists in the combination in the cartridge shell of three integrally joined component members, the full-sized forward portion adapted to be held in gripping contact with the bore of the gun by the gas pressure, the head portion slidable in the bore of the gun while under the gas pressure, and the intermediate reduced portion shaped into a plurality of members of progressively increasing resistances respectively, and for simultaneous elongation and diametrical expansion by the gas pressure therein, whereby on the firing of the charge the said head portion will be slid rearwardly in the bore of the gun and said reduced portion of the shell will be made a full-sized rearward extension of the said full-sized forward portion, substantially as set forth.

4. The herein described improvement in gun-operating cartridges which consists in the combination in the cartridge shell, of three integrally-joined component members, the forward tubular portion expansible into gripping contact with the bore of the gun by the gas pressure, the head portion slidable in the chamber of the gun while under the gas pressure, and the intermediate head-sliding connecting portion comprising a plurality of expansible cartridge-lengthening elements having increasing widths, respectively, longitudinally of the cartridge and connected by a bearing ring, each of said expansible elements being elongatable by the expansion thereof, and the forward one of said elements having a lesser resistance than the element or elements rearward thereof, whereby on the firing of the charge the operation of these elements proceeds progressively from the forward part of said head-sliding connecting member of the cartridge toward the head of the cartridge, thereby to slide the said head portion rearwardly in the bore of the gun during the firing of the charge, substantially as and for the purpose set forth.

1,062,605. GOVERNOR. ROBERT H. PYLE, Indianapolis, Ind., assignor to Remy Electric Company, Anderson, Ind., a Corporation. Filed Oct. 4, 1912. Serial No. 723,898. (Cl. 121—112.)



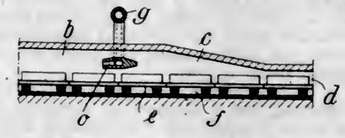
1. The combination with a shaft, of a centrifugal governor consisting of a casing surrounding the same and having at one end a reduced portion slidable on the shaft and at the other end an enlarged portion, means adapted to be actuated by the sliding movement of said casing for controlling the thing to be governed, a sleeve secured to and surrounding the shaft and projecting into the enlarged portion of the casing, a pair of weighted levers pivoted to opposite sides of said fixed sleeve and adapted when actuated by centrifugal force to slidably move said casing on the shaft, and a spring between said sleeve and casing tending to return the latter.

2. The combination with a shaft, of a centrifugal governor consisting of a casing surrounding the same and having at one end a reduced portion slidable on the shaft and at the other end an enlarged portion with a contracted end, means adapted to be actuated by the reduced portion of said casing for controlling the thing to be governed, a sleeve secured to and surrounding the shaft and projecting into the enlarged portion of the casing and externally threaded on its inner end, a collar on the threaded end of said sleeve, a helical spring within the enlarged portion of the casing and surrounding said sleeve and lying between said collar and the contracted end of the sleeve, arms extending from the portion of the sleeve outside the casing, and weighted levers fulcrumed to the ends of said arms with the ends engaging the contracted end of the casing so as to move the same under the influence of centrifugal force against said spring.

3. The combination with a shaft, of a centrifugal governor consisting of a casing surrounding the same and having at one end a reduced portion slidable on the shaft and at the other end an enlarged portion with a contracted end and cut partially away on opposite sides and the portions which are not cut away being reinforced by parallel longitudinal ribs and with an opening through the casing between said ribs, means adapted to be actuated by the reduced portion of said casing for controlling the thing to be governed, a sleeve secured to and surrounding the shaft and projecting into the enlarged portion of the casing and externally threaded on its inner end, a collar on the threaded end of said sleeve, a helical spring within the enlarged portion of the casing and surrounding said sleeve and lying between said collar and the contracted end of the sleeve, arms extending from the portion of the sleeve outside the casing, and weighted levers fulcrumed on the ends of said arms with the weighted portion operating through the openings in the side of said casing and with the other ends of the levers engaging the reduced ends of said casing for slidably moving the same against the action of the spring when the levers are influenced by centrifugal force.

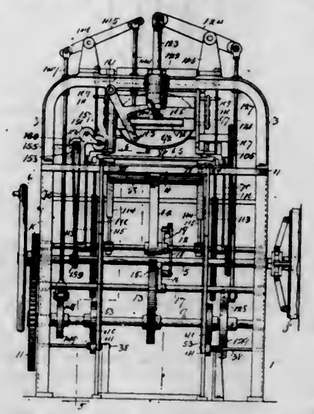
1,062,606. TUNNEL-FURNACE. ARTHUR RAMÉN, Olympia, Sweden. Filed Feb. 6, 1912. Serial No. 675,890. (Cl. 75—134.)

1. In a tunnel furnace, in combination, a cooling chamber, a combustion chamber, a chamber extending transversely of the furnace, said chamber being positioned between said combustion chamber and said cooling chamber and provided with an opening communicating with said combustion chamber, the upper and lower walls of said transverse chamber being spaced from the upper and lower wall of the furnace, whereby said cooling and combustion chambers are in communication with one another above and below said transverse chamber, and means for introducing gas under pressure into said transverse chamber.



2. In a tunnel furnace, in combination, a cooling chamber, a combustion chamber, a chamber extending transversely of the furnace, said chamber being positioned between said combustion chamber and said cooling chamber and provided with an opening communicating with said combustion chamber, the upper and lower walls of said transverse chamber being spaced from the upper and lower wall of the furnace, whereby said cooling and combustion chambers are in communication with one another above and below said transverse chamber, said transverse chamber being provided with a vertical, longitudinally extending wall dividing said chamber into compartments, and means for introducing gas under pressure into each of said compartments.

1,062,607. FABRIC-SAMPLE-CARDING MACHINE. PHILIP ROTTER and HENRY M. SMITH, New York, N. Y. Filed Apr. 26, 1912. Serial No. 693,470. (Cl. 216—2.)



1. In a machine of the character described, having sources of supply for articles of the character described, a downwardly swinging bed, means for taking sheets from the sources of supply and arranging them in super-imposed relation on said bed, an adhesive supplying device, means for pressing the sheets together on said bed, and a cam engaging the bed to hold it in position during the pressing operation and adapted to allow the bed to swing downwardly to discharge the product therefrom.

2. In a machine of the character described, having sources of supply for articles of the character described, a bed, a reciprocatable carrier movable over said bed and adapted to take sheets alternately from the sources of supply and to deposit them in superimposed relation upon said bed, means for supplying an adhesive to a sheet taken from one of the sources of supply and after it has been deposited upon the bed by the carrier, and means for pressing superimposed sheets together.

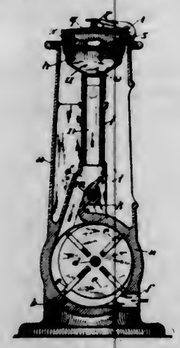
3. In a machine of the character described, having sources of supply for articles of the character described, a bed, means for taking sheets alternately from the sources of supply and depositing them in superimposed relation upon said bed, means for supplying an adhesive to a sheet when deposited upon said bed, and before another sheet is superimposed, means for pressing the sheets together, and means for rocking said bed to discharge the product.

4. In a machine of the character described, a bed, a plurality of means for feeding stacks of sheets upwardly to substantially the plane of said bed, a carrier reciprocated over said bed and adapted to take sheets alternately from said stacks and to deposit them in superimposed relation on said bed, pasting means and means for pressing superimposed sheets together.

5. In a machine of the character described, a downwardly swinging bed, a plurality of means for feeding stacks of sheets to substantially the plane of said bed, a carrier reciprocatable over said bed and between said stacks and adapted to take sheets alternately from said stacks and to deposit them in superimposed relation on said bed, pasting means, means for pressing superimposed sheets together, and means for swinging said bed to discharge the product.

[Claims 6 to 23 not printed in the Gazette.]

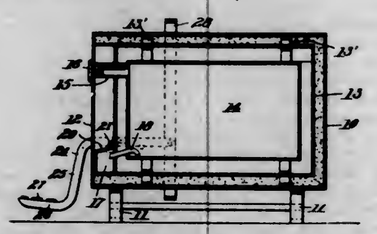
1,062,608. PRESSURE-AIR DEVICE. CHARLES SANDOZ-MORITZ, Tavannes, Switzerland. Filed Oct. 30, 1911. Serial No. 657,596. (Cl. 10—164.)



1. In a device of the character described, the combination with the work receiving bowl and the blower, of extensible means, airtightly connecting said bowl and said blower, and means for imparting to said work receiver a reciprocatory up and down movement.

2. In a device of the character described, in combination, a blower; driving means therefor; a work receiver, comprising a bowl, an airtightly closable cover, a removable false bottom having perforations, and a sloping bottom, said bowl having an air inlet above said false bottom and a discharge opening at the lowermost part; a telescoping air conduit, airtightly connecting said bowl and said blower; and means for imparting to said work receiver and to part of the said telescoping air conduit a reciprocatory up and down movement.

1,062,609. POULTRY DRINKING-FOUNTAIN. FRANK J. SCHISLER, Winthrop, Minn. Filed May 4, 1912. Serial No. 695,255. (Cl. 119—73.)



1. A poultry drinking fountain comprising a casing, a reservoir within the casing, a trough also within the casing, and in communication with said reservoir, a cover for said trough, a pivot rod for said cover, arms pivoted to the exterior of said casing and engaging said rods, said arms being provided with a platform at one end the other ends of said arms being weighted to hold said cover normally closed.

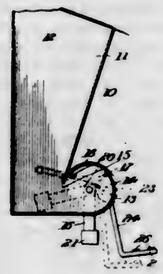
2. A poultry drinking fountain comprising a casing, a reservoir within the casing, a trough also within the casing and in communication with said reservoir, a cover for said trough, a pivot rod for said cover provided with crank arms at its ends, arms pivoted to the exterior of said casing and engaging said crank arms, said arms being provided at their forward ends with a platform, the rear ends of said arms being weighted to hold said cover normally closed.

3. A poultry drinking fountain comprising a casing, a reservoir within the casing, a trough also within the casing and in communication with said reservoir, arms pivoted to the exterior of said casing, and means for providing a removable engagement between said arms and cover, the forward ends of said arms being provided with a platform, the other ends of said arms being weighted to hold said cover normally closed.

4. A poultry drinking fountain comprising a casing, a reservoir within the casing, a trough also within the casing and in communication with said reservoir, and arms pivoted to the exterior of said casing and having open ended slots to receive the ends of said pivot rod, the forward ends of said arms being provided with a platform, the other ends of said arms being weighted to hold said cover normally closed.

5. A poultry drinking fountain comprising a casing, a reservoir within the casing, a trough also within the casing and in communication with said reservoir, a cover for said trough, a pivot rod for said cover, arms pivoted to the exterior of said casing and engaging said rod, the forward ends of said arms being provided with a platform, and a ring encircling said casing and connected with the rear ends of said arms.

1,062,610. FEED-HOPPER. FRANK J. SCHISLER, Winthrop, Minn. Filed May 4, 1912. Serial No. 695,257. (Cl. 119—55.)



1. A feed hopper comprising a casing provided with a trough, a pivoted cover for said trough, arms each pivoted at one end to the respective ends of the casing, and a poultry platform secured to the free ends of said arms, said cover being provided with means coöperating with said arms to sustain the weight of the latter at a point between their pivots and said platform, the latter being held in a normally elevated position.

2. A feed hopper comprising a casing provided with a trough, a cover for said trough, counterbalancing members pivotally connected to the ends of said casing and each having one end rigidly secured to said cover to support the same, arms each pivoted at one end to the respective ends of the casing, and a poultry platform secured to the free ends of said arms, said cover being provided with means coöperating with said arms to sustain the weight of the latter at a point between their pivots and said platform, the latter being held in a normally elevated position.

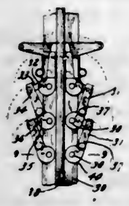
3. A feed hopper comprising a casing provided with a trough, a cover provided with end flanges extending downwardly over the sides of said casing, counterbalancing members pivotally connected to the ends of the casing and each provided with an offset portion rigidly connected to the end flanges of the cover to support the latter, a movable poultry platform the weight of which is sustained by said cover when the latter is in closed position, whereby said platform is normally supported in an elevated position.

4. A feed hopper comprising a casing provided with a trough, a cover provided with end flanges extending downwardly over the side of said casing, counterbalancing members pivotally connected to the ends of the casing and each provided with an offset portion rigidly connected to the end flanges of the cover to support the latter, arms each pivoted at one end to the respective ends of the casing, and a poultry platform carried by the free ends of said arms, said cover being provided with means cooperating with said arms to sustain the weight of the latter at a point between their pivots and said platform, the latter being held in a normally elevated position.

5. A feed hopper comprising a casing provided with a trough, a cover pivoted to said trough and mounted to slide in a curved path, arms each pivoted at one end to the respective ends of the casing, and a poultry platform carried by the free ends of said arms, said cover being provided with means coöperating with said arms to normally support the platform in an elevated position, said cover and trough being provided with complemental abutments to limit the opening movement of the cover.

[Claims 6 and 7 not printed in the Gazette.]

1,062,611. SAFETY DEVICE FOR ELEVATORS. MATHIAS SCHNUR, Chicago, Ill. Filed May 15, 1912. Serial No. 697,421. (Cl. 187—93.)



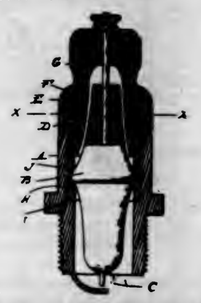
1. An attachment for elevators comprising a dog, a pivot therefor, one end of said dog being curved and the pivot being set eccentrically to said curve, a lever, an arm carried upon said lever, a stop pivoted to said arm, one face of said stop being beveled and the arm of said dog being normally in engagement with said beveled face, means upon said arm to limit the movement of said stop, and means to actuate said lever, thereby to cause said stop to ride off said arm.

2. An attachment for elevators comprising a plurality of dogs, means for connecting each dog to the dog next in the series, each of said dogs being a cam faced member adapted to grip the elevator shaft, each of said dogs being adapted to act independently of the others, means for locking the first dog in the series, and means for releasing said dog, thereby to release, successively, each of the other dogs in the series.

3. An attachment for elevators comprising a plurality of dogs, each being a cam faced member adapted to grip the elevator shaft, a pin upon each dog except the last dog in the series, a hook-like member engaging each pin, each hook-like member being secured to the dog next lower in the series than the dog which bears the pin engaged by said hook-like member; means for locking the first dog in the series, and means for releasing said dog at a predetermined time, thereby to release, successively, each of the other doga in the series.

4. An attachment for elevators comprising a plurality of dogs, each of which is a cam faced member adapted to grip the elevator shaft, a pivot for each dog, locking means connecting each dog to the dog next in the series, means for locking the first dog in the series, and means for releasing said dog, thereby successively to disconnect each of said connecting means.

1,062,612. SPARK-PLUG. ALBERT SCHMIDT, Flint, Mich., assignor to Champion Ignition Company, Flint, Mich., a Corporation of Michigan. Filed Mar. 16, 1912. Serial No. 684,117. (Cl. 123—169.)



1. In a spark plug, the combination with a metallic case, of an electrode insulator within said case having an enlarged central portion and a tapering end portion, securing means for said electrode insulator engaging the enlarged portion thereof, a metallic clamping sleeve for said securing means engaging said case, and an insulator lining for said clamping sleeve surrounding said electrode insulator and spaced therefrom.

2. In a spark plug, the combination with a metallic case, of an electrode insulator having an enlarged central portion and tapering end portions, a metallic ring surrounding said enlarged central portion and having a gas tight engagement therewith, a metallic clamping sleeve engaging said case and clamping said ring against a shoulder on the case, and an insulator lining within said metallic sleeve surrounding said electrode insulator and spaced therefrom.

3. In a spark plug, the combination with a metallic case, of an electrode, an insulator for the electrode arranged within said case, a metallic clamping sleeve for securing said insulator within the case, and an insulator lining for said metallic sleeve surrounding and spaced from said electrode insulator, said lining being secured to the metallic sleeve independent of the electrode.

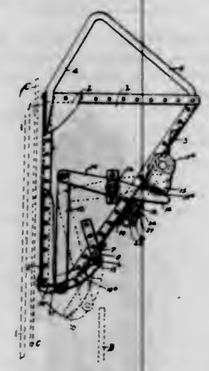
4. In a spark plug, the combination with a metallic case, of an electrode insulator within said case, a metallic ring engaging the insulator and seated in the case, a metallic clamping sleeve engaging said case and clamping the ring to its seat, and an insulator lining within said metallic sleeve and surrounding said electrode insulator.

5. In a spark plug, the combination with a metallic case, of an electrode insulator within the case having an enlarged portion, a metallic ring secured to the insulator and seated in said case, a metallic sleeve engaging said case and clamping the ring to its seat, and an insulator lining within said metallic sleeve and surrounding said insulator, said insulator lining and the metallic sleeve being secured together by a shoulder and socket joint.

1,062,613. CONCRETE-MIXTURE BUCKET. JOHN B. SMITH, near Knoxville, Tenn. Filed Aug. 5, 1911. Serial No. 642,518. (Cl. 57—13.)

1. The combination of a substantially acute V-shape concrete mixture bucket body having its front wall vertical and its rear wall inclined and having a narrow opening at its bottom end between the lower edges of the front and rear walls, the height of the body being so proportioned to the transverse width from front to rear as to produce a positive pressure head for the mixture, a bottom door extending across said bottom opening and having

a path of movement located rearward of said front wall, and door closing mechanism located and arranged to move in paths located rearward of said front wall and to hold the door inclined toward the lower edge of the front wall when the door is open, substantially as described.



2. In a concrete mixture bucket, the combination with a relatively high upright body having an upright front wall of approximately uniform width, a rear wall, approximately straight and parallel end walls and a bottom opening, a concave bottom door extending across said bottom opening and having a path of movement located rearward of said front wall, and door closing mechanism located and arranged to move in paths located rearward of said front wall and to hold the door inclined toward the lower edge of the front wall when the door is open, said walls being relatively high and the rear wall being steep and slanting toward the front wall from above downward and having its lower edge near enough to the lower edge of the front wall to make the bottom opening relatively narrow between said edges and to make the cross section of the stream of mixture passing through the bottom opening, when the door is open or partly open, restricted relative to the volume of material in the bucket when the latter is full, so that there is such degree of hydrostatic pressure, velocity, and concentration of momentum exerted upon the concrete mixture as will cause the mixture to be moved rapidly laterally through the passage between the lower edge of the front wall and the free edge of the door, substantially as described.

3. In a concrete mixture bucket, the combination with a relatively high upright body having an upright front wall of approximately uniform width, a rear wall, approximately straight and parallel end walls and a bottom opening, an inclined, concave bottom door extending across said bottom opening and having a path of movement located rearward of said front wall, and door closing mechanism located and arranged to move in paths located rearward of said front wall and to hold the door inclined toward the lower edge of the front wall when the door is open, said walls being relatively high and the rear wall being steep and slanting toward the front wall from above downward and having its lower edge near enough to the lower edge of the front wall to make the bottom opening relatively narrow between said edges and to make the cross section of the stream of mixture passing through the bottom opening, when the door is open or partly open, restricted relative to the volume of material in the bucket when the latter is full, so that there is such degree of hydrostatic pressure, velocity, and concentration of momentum exerted upon the concrete mixture as will cause the mixture to be moved rapidly laterally through the passage between the lower edge of the front wall and the free edge of the door, substantially as described.

4. In a concrete mixture bucket, the combination with an upright body having an upright front wall of approximately uniform width, a rear wall slanting toward the front wall from above downward, approximately straight and parallel end walls, and a bottom opening between the lower edges of said walls, of a bottom door extending across said bottom opening and having a path of movement located rearward of said front wall, and door closing mechanism arranged to move in paths located rearward of said front wall and comprising members engaging each end of said door and comprising also cams in operative relation with said members, and a shaft for actuating said cams, substantially as described.

5. In a concrete mixture bucket, the combination with an upright body having an upright front wall of approximately uniform width, a rear wall slanting toward the front wall from above downward, approximately straight and parallel end walls, and a bottom opening between the lower edges of said walls, of a bottom door extending across said bottom opening and having a path of movement located rearward of said front wall, and door closing mechanism arranged to move in paths located rearward of said front wall and comprising members engaging each end of said door, and a crank shaft for actuating said cams, substantially as described.

[Claims 6 to 10 not printed in the Gazette.]

1,062,614. FUEL-OIL-CONTROLLING VALVE. WILLIAM SNEDDON, Del Rio, Tex. Filed Nov. 26, 1912. Serial No. 733,721. (Cl. 158—120.)

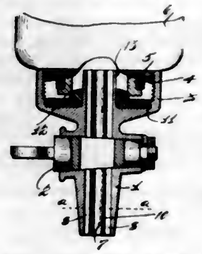


1. A valve including a casing provided with oppositely disposed fuel oil and steam admitting ports and a port for conducting the fuel oil to a burner, a sleeve mounted removably within the casing and providing a concentric chamber within the casing intermediate of its ends and in communication with the oil and steam ports, said sleeve being perforated adjacent the concentric chamber, and a plunger valve slidably mounted in said sleeve and for controlling the admission of fuel oil to the burner.

2. A valve including a casing having two oppositely disposed steam and oil ports, respectively, in communication with the casing intermediate of its ends and with a single port in one end of the casing, a sleeve formed with a valve seat fitting within the casing to provide an annular chamber between it and the casing, the portion of the sleeve adjacent to the chamber being perforated to provide communication between the interior of the sleeve and the oppositely disposed ports, detachable means connected to the casing for holding the sleeve seated, and a plunger valve slidably mounted in the sleeve and operable exteriorly of the casing for coaction with the valve seat of the sleeve and for covering and uncovering the perforated portion thereof.

3. The combination with valve controlled fuel oil and burner pipes, of a control valve connecting and forming the junction of said pipes, said controlling valve including a casing provided with a bore having an enlarged intermediate portion, said bore being open at one end of the casing, a sleeve insertible within the open end and fitting within the reduced portion of the bore of the casing to provide a surrounding chamber in conjunction with the enlarged portion of the bore, the portion of the sleeve adjacent the enlarged portion of the bore being perforated while the end remote from the open end of the casing is provided with an internal valve seat, a combined stuffing box and sealing cap mounted upon the open end of the casing for locking the sleeve in position, a valve stem slidably mounted in the cap, and a plunger valve carried by the stem and positioned slidably within the sleeve.

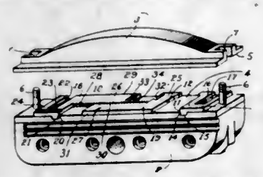
1,062,615. SELF-VENTING FAUCET FOR BOTTLES. WILLIAM E. SOPER, New York, N. Y., assignor to Ferdinand Strauss, Yonkers, N. Y. Filed Mar. 11, 1912. Serial No. 682,950. (Cl. 215—59.)



1. A bottle closure, comprising a cap, a body portion carried by said cap, the body portion having an interior tube extending longitudinally thereof, providing a central passage, a plurality of radially disposed partitions connecting the wall of said tube and the wall of said body portion, said partitions extending substantially throughout the length of said tube, whereby a plurality of passages are provided exteriorly of the central tube, and a valve to close said passages.

2. A bottle closure, comprising a cap, a faucet integral with said cap, comprising a body portion provided with a central passage extending longitudinally thereof, a neck carried by said cap and provided with a longitudinally disposed central passage in alinement with the central passage in said body portion, a circular wall in said body portion surrounding the central passage therein, said wall extending through said neck, and a plurality of radially disposed partitions connecting said circular wall and the wall of said body portion and said neck, said partitions extending throughout the length of said circular wall whereby a plurality of passages are provided, a valve carried by said body portion provided with an opening adapted to aline with the passages in said faucet, and a gasket located within said cap.

1,062,616. VARIABLE LINER FOR LINE-CASTING MOLDS. ASHTON G. STEVENSON, Chicago, Ill. Filed Oct. 2, 1911. Serial No. 652,348. (Cl. 199—13.)



1. A slug mold comprising a base and a cap having substantially parallel opposed mold faces in combination with a fixed and a variable liner interposed between said faces and holding said parts spaced apart, said variable liner comprising a fixed and a movable part, said movable part being alined by and with the fixed part and being adjustable thereon longitudinally, and freely separable transversely therefrom without the removal of said parts from the mold, substantially as described.

2. A slug mold comprising a base and a cap having substantially parallel opposed mold faces in combination with a fixed and a variable liner interposed between said faces and holding said parts separated, said variable liner comprising a fixed part and a part adjustable in relation thereto, said adjustable part being freely movable transversely and longitudinally between the mold faces to adjust the length of the slug spaces, substantially as described.

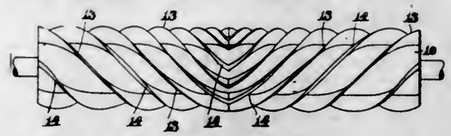
3. A slug mold comprising a base and a cap having substantially parallel opposed mold faces in combination with a fixed and a variable liner interposed between said faces and holding said parts separated, said variable liner comprising a fixed part and a part adjustable in relation thereto, said adjustable part being freely movable transversely and longitudinally between the mold faces to adjust the length of the slug space, said adjustable part being movable to adjust the length of the liner without raising the cap of the mold, substantially as described.

4. A variable liner for printers' line casting molds comprising a fixed section and a movable section, the movable section being adjustable upon the fixed section longitudinally of the mold and being separable transversely therefrom while clamped within the mold, substantially as described.

5. A variable liner for printers' line casting molds, comprising a stationary member and a movable member, said members having contacting edges by which the movable member is alined with the stationary member and with the mold, and said movable member having a portion lying in front of said fixed member and being freely separable transversely in the plane of the liner from the fixed member, substantially as described.

[Claims 6 to 21 not printed in the Gazette.]

1,062,617. KNIFE-CYLINDER FOR HIDE-WORKING MACHINES. JACOB STAYKER, Somerville, Mass. Filed Aug. 26, 1912. Serial No. 717,212. (Cl. 149—16.)



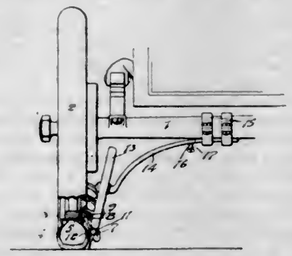
1. A knife cylinder for hide working machines consisting of a cylindrical body portion, and a plurality of helical knife blades of alternately thin and thick material all inclined forward with their edges in a cylindrical surface.

2. A knife cylinder for hide working machines consisting of a cylindrical body portion, and a plurality of helical knife blades, every alternate blade being of thinner material than the others and bent forward with the edges of all of said blades lying in a cylindrical surface.

3. A knife cylinder for hide working machines consisting of a cylindrical body portion, and a plurality of helical knife blades, every alternate blade being of thinner material than the others and curved forward with the edges of all of said blades lying in a cylindrical surface.

4. A knife cylinder for hide working machines consisting of a cylindrical body portion, and a plurality of helical knife blades extending in opposite directions with their pitch gradually decreasing from a point midway of said body portion, every alternate blade being of thinner material and bent forward and the edges of all of said blades lying in a cylindrical surface.

1,062,618. ATTACHMENT TO WHEELS. THOMAS TOWNEND, Winnipeg, Manitoba, Canada. Filed June 25, 1912. Serial No. 705,768. (Cl. 21—90.)

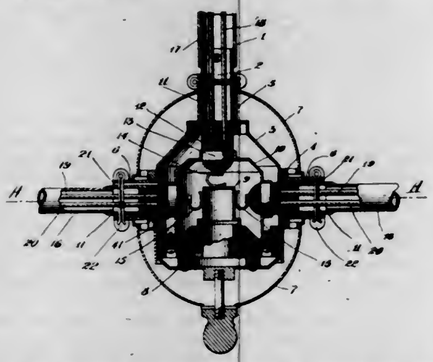


1. The combination with a rotatably mounted automobile wheel provided with the usual rim and a pneu-

matic tire, and the axle supporting the wheel, of a bar secured to the inner side of the rim of the wheel, said bar being provided with pairs of extending lugs, similar dogs having extending arms pivotally secured to the lugs, said dogs being provided on their inner sides with reinforcing ribs forming a runway, springs holding the dogs normally in a position within the circumference of the tire and an adjustable wheel carried by the axle and designed to ride on the runway formed by the backs of the ribs such wheel being provided to depress the dogs on the under side of the automobile wheel into a position beyond the circumference of the tire as the wheel rotates, as and for the purpose specified.

2. The combination with a rotatably mounted automobile wheel provided with the usual rim and a pneumatic tire, of a plurality of dogs pivotally secured to the rim of the wheel, said dogs having a substantially horizontal portion, means for normally holding said dogs off the ground, an adjustable wheel carried by the axle and designed to ride said horizontal portions to force said dogs outwardly radially as the wheel rotates.

1,062,619. ELECTRIC CHANDELIER. SAMUEL TROOD, New York, N. Y., assignor, by mesne assignments, to Plug Connection Electric Company, a Corporation of New York. Filed Mar. 30, 1912. Serial No. 687,520. (Cl. 240—78.)



1. An electric fixture comprising a supporting stem having contact members of a main circuit, one or more arms having contact members of branch circuits, and a base having a pair of concentric cylinders forming terminal members common to and adapted to be engaged by all of said contact members.

2. An electric fixture comprising a detachable supporting stem having contact members of a main circuit, one or more detachable arms having contact members of branch circuits, and a base having a pair of concentric cylinders forming terminal members common to and adapted to be engaged by all of said contact members.

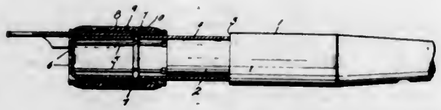
3. An electric fixture comprising a supporting stem, a connecting plug on said stem and having contact members, one or more detachable arms, a connecting plug on each of said arms and having contact members, and a base having a pair of concentric cylinders forming terminal members common to and adapted to be engaged by all of said contact members.

4. An electric fixture comprising a supporting stem, a connecting plug on said stem and having contact members, a carrying member, one or more arms carried thereby, a connecting plug on each of said arms and having contact members, and a base having a pair of concentric cylinders forming terminal members common to and adapted to be engaged by all of said contact members.

5. An electric fixture comprising a supporting stem, a connecting plug on said stem and having contact members, a carrying member, one or more arms carried thereby, a connecting plug on each of said arms and having contact members, a base having a pair of concentric cylinders forming terminal members, one of said terminal members being common to and adapted to be engaged by one of the contact members of each of said connecting plugs, the second of said terminal members being divided into parts, one of said parts being common to and adapted to be engaged by the second of the contact members of the connecting plugs of each of said arms, the other of said parts being adapted to be engaged by the second contact member of the connecting plug of said stem, and a switch arranged in series between the parts of said second terminal member.

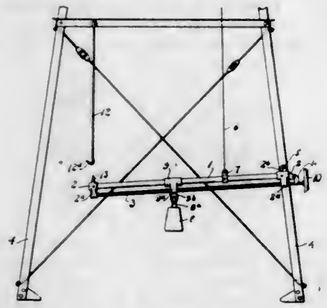
[Claims 6 to 10 not printed in the Gazette.]

1,062,620. PENHOLDER. JOHN COOKE TWEEDALE, Toronto, Ontario, Canada. Filed Jan. 24, 1912. Serial No. 673,270. (Cl. 120—101.)



A pen holder comprising a handle having a reduced portion formed at one of its ends, a tube having its inner end fixed to the reduced portion, and its outer end provided with a plurality of slits to produce flexible sections, each section being provided with a shoulder in advance of the bases of the slits, a metallic sleeve removably and slidably mounted on the tube and having an indenture adapted to engage any one of the shoulders to normally limit the outward movement of said sleeve to hold a pen point upon the tube, said sleeve being adapted to be removed from the tube when pressure is applied sufficient to flex one of said sections to permit said indenture to pass over the engaged shoulder carried by the section.

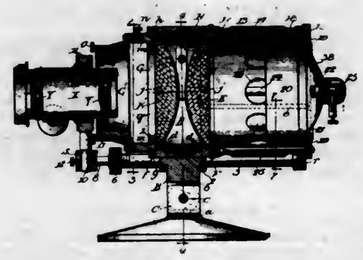
1,062,621. WINDMILL-REGULATOR. ALFRED UGSTAD, Carlisle township, Ottertail county, Minn. Filed July 22, 1912. Serial No. 710,828. (Cl. 170—48.)



A regulating lever for wind mills, comprising a guide bar provided with head members at its opposite ends, a threaded shaft rotatably mounted in said head members and provided at one end with a hand wheel, a weighted slide mounted on said guide bar and engaged by said threaded shaft, and bifurcated latch member for locking said threaded shaft in adjusted position.

1,062,622. STEREOPTICON. ALEXANDER FERDINAND VICTOR, Davenport, Iowa. Filed Feb. 26, 1912. Serial No. 679,940. (Cl. 88—27.)

1. A stereopticon comprising projecting lens, a slide holder, condensing lenses, and a housing for a lamp arranged in the order stated concentric to the same focal axis, and supported by said housing and carbon-electrodes disposed lengthwise at an angle to each other and at angles to said focal axis in said housing in the same horizontal plane and arcing at a point intersected by said axis.



2. A stereopticon comprising projecting lens, a slide-holder, condensing lenses, and a housing for a lamp, and a longitudinally adjustable rear end for said housing arranged in the order stated concentric to the same focal axis, and carbon-electrodes mounted in the same horizontal plane in said adjustable rear end and disposed lengthwise at an angle to each other and at angles to said focal axis in said housing and arcing at a point intersected by said axis.

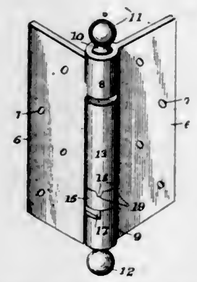
3. A stereopticon comprising projecting lens, a transversely rotatable slide-holder, condensing lenses, and a housing for a lamp arranged in the order stated concentric to the same focal axis, and carbon-electrodes disposed lengthwise at an angle to each other and at angles to said focal axis in said housing in the same horizontal plane and arcing at a point intersected by said axis.

4. A stereopticon comprising projecting lens, a slide-holder, condensing lenses, and a housing for a lamp arranged in the order stated concentric to the same focal axis, carbon-electrodes disposed lengthwise at an angle to each other and at angles to said focal axis in said housing and arcing at a point intersected by said axis, a telescopic end member in which said electrodes are mounted, and a single base supporting the aforesaid parts.

5. A stereopticon comprising a projecting lens, a slide holder, condensing lenses and lamp, a casing that supports the guides for said slide holder and incloses the condensing lenses and lamp, said casing having a removable portion above said condensing lenses and adapted to permit access to the same.

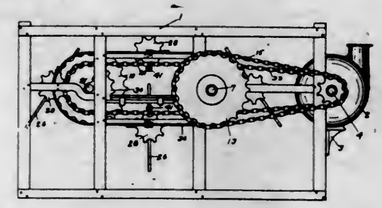
[Claims 6 to 27 not printed in the Gazette.]

1,062,623. DOOR-HINGE. JOHN K. WATERS, Banning, Cal. Filed May 8, 1912. Serial No. 695,909. (Cl. 16—110.)



A hinge comprising a pair of leaves, one of which is provided with a pair of spaced knuckles, one of said knuckles being cut away to provide a plurality of flat surfaces, a removable pintle engaging said knuckles, the other leaf of said hinge having a knuckle adapted to be interposed between the knuckles of the first mentioned leaf and slidable longitudinally of said pintle, and a locking sleeve mounted upon said pintle and adapted for inlocking relation with the knuckle of the second mentioned leaf, said locking sleeve being provided with an extension adapted for engagement with any one of the plurality of flat surfaces formed upon one of the knuckles of the first mentioned leaf for releasably retaining said leaves in an adjusted position.

1,062,624. CURRENT-MOTOR. GUSTAVE ADOLPH WENDT, Spokane, Wash. Filed Oct. 29, 1912. Serial No. 728,333. (Cl. 170—92.)



1. A current motor comprising in combination, endless track guides, shaft heads slidable on said guides, shafts rotatively mounted in said heads, blades rigidly mounted on said shafts and disposed abreast of the current, sprockets rigidly mounted on said shafts, chains connected with said heads and adapted to be driven by advancing movement of said blades, chains meshing with said sprockets, means for driving said second chain at a slower rate of speed than the rate of speed of the first named chain, and means carried by said heads for holding said sprockets in mesh with said second chain, substantially as described.

2. A current motor comprising in combination, endless track guides, shaft heads slidable on said guides, shafts rotatively mounted in said heads, blades rigidly mounted on said shafts and disposed abreast of the current to be actuated thereby, sprockets rigidly mounted on said shafts, chains connected with said heads and adapted to be driven by advancing movement of said blades, a second chain meshing with said sprocket, means for driving said second chain from said first chain and at a slower rate of speed, and means carried by said heads for holding said sprockets in mesh with said second chain, substantially as described.

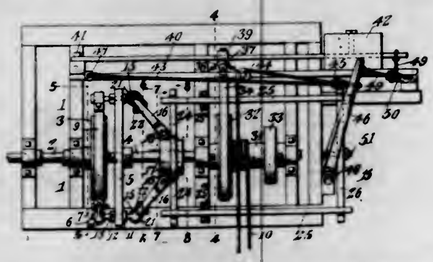
3. A current motor comprising in combination, endless track guides, shaft heads slidably mounted on said guides and held to a fixed relative position with respect thereto, shafts rotatively mounted in said heads, blades rigidly mounted on said shafts and disposed abreast of the current, sprockets rigidly mounted on said shafts, first chains connected with said heads to be advanced by advancing movement of the blades, second chains meshing with said sprockets, and means for driving said second chains from said first chains at a reduced rate of speed for altering the positions of said blades, substantially as described.

4. A current motor comprising in combination, endless track guides, shaft heads slidably mounted on said guides and held to a fixed relative position with respect thereto, shafts rotatively mounted in said heads, blades rigidly mounted on said shafts and disposed abreast of the current to be actuated thereby, sprockets rigidly mounted on said shafts, first chains connected with said heads and adapted to be operated by movement of the blades, second chains having inner and outer sections, sprocket wheels for the outer sections, the inner sections engaging the sprocket mounted on said shafts, and means for driving said second chain from said first chain to change the position of said blades from operative to inoperative positions, substantially as described.

1,062,625. CLUTCH-ACTUATING DEVICE. DAVID B. WHITEHILL, North Clarendon, Pa. Filed June 16, 1910. Serial No. 567,250. (Cl. 192—1.)

1. In mechanism of the class described, the combination of a driving shaft, a drum shaft, a lever located at the outer end of the drum shaft, a clutch wheel mounted

on the driving shaft, clutch mechanism for engaging the clutch wheel including a sleeve slidable on the drum shaft, a slidable frame composed of side bars located at opposite sides of the drum shaft, an inner end bar connecting the side bars with the sleeve, and an outer end bar connecting the side bars with the lever, and supporting means for the slidable frame.



2. In mechanism of the class described, the combination of a driving shaft, a drum shaft, a lever located at the outer end of the drum shaft, a clutch wheel mounted on the driving shaft, clutch mechanism for engaging the clutch wheel including a sleeve slidable on the drum shaft, spaced guides located at opposite sides of the drum shaft, and a slidable frame composed of side bars also located at opposite sides of the drum shaft and slidable in the guides, an inner end bar connecting the side bars with the sleeve, and an outer end bar connecting the side bars with the lever.

1,062,626. TOOL. CHARLES L. WIEDRICH, Buffalo, N. Y., assignor to U. S. Hame Company, Buffalo, N. Y. Filed Jan. 26, 1911. Serial No. 604,866. (Cl. 29—88.2.)



1. A tool for inserting a sleeve in a loop comprising a stem adapted to extend through the sleeve and project beyond the outer end thereof, said stem being provided at one end with a tapered head which is adapted to be inserted through the loop in advance of the sleeve, said head having a shoulder against which the entering end of the sleeve is adapted to abut and which is of sufficient diameter to hold the material of the loop out of contact with the entering edge of the sleeve, substantially as set forth.

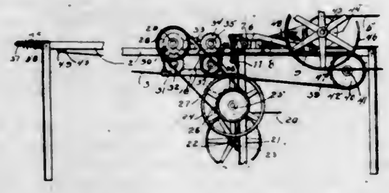
2. A tool for inserting a sleeve in a loop comprising a stem adapted to extend through the sleeve and provided at one end with a tapered head which is adapted to be inserted through the loop in advance of the sleeve, and at its opposite end with a handle for inserting the same, said head having a shoulder against which the entering end of the sleeve is adapted to abut and which is of sufficient diameter to hold the material of the loop out of contact therewith, said head and said handle being detachable from each other and being held in alinement by said stem, substantially as set forth.

3. A tool for inserting a sleeve in a loop comprising a stem adapted to extend through the sleeve and provided at one end with a tapered head which is adapted to be inserted through the loop in advance of the sleeve, and at its opposite end with a handle which is detachably mounted on said stem and has a part which is adapted to engage the rear end of the sleeve, said head being of sufficient diameter to hold the material of the loop out of contact with the front end of said sleeve, and said head and said handle being held in alinement by said stem, substantially as set forth.

4. A tool for inserting a sleeve in a loop, comprising a stem adapted to extend through the sleeve, a tapered head located at one end of said stem and having a shoulder against which one end of the sleeve is adapted to abut, and a handle located at the other end of said stem and adapted to engage the opposite end of the sleeve, said stem detachably connecting said handle and said head together, substantially as set forth.

5. A tool for inserting a sleeve in a loop, comprising a stem adapted to extend through the sleeve, a tapered head located at one end of said stem and having a shoulder against which one end of the sleeve is adapted to abut, said head being of at least the same diameter as said sleeve, and a handle adapted to engage the opposite end of said sleeve and having a socket in which the other end of said stem detachably engages, substantially as set forth.

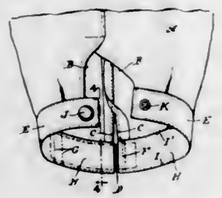
1,062,627. MACHINE FOR MAKING SHREDDED-WHEAT BISCUITS OR SIMILAR ARTICLES. WILLIAM EBASTUS WILLIAMS, Chicago, Ill. Filed Apr. 13, 1908. Serial No. 426,818. (Cl. 107—2.)



1. In apparatus of the class described, the combination with a table provided with narrow transverse slots, of an endless belt arranged to have one of its folds travel along the surface of the table over said slots, vertically adjustable rollers arranged to rotate in said slots, respectively, below the belt, cutting rollers mounted above the belt in registry with the rollers below the belt, respectively, to divide into separate masses the material passing on the belt, and means for delivering a continuous mass of shreds upon the belt.

2. In a machine of the class described the combination of a longitudinal frame supporting sections of a table or flat plates, a carrier belt moving over these tables or plate apertures in these tables or plates, cutting rollers mounted at these apertures to act on the material on the carrier, with a compression roll mounted to act upon the material of the carrier at a point where the carrier is supported by a plate or table.

1,062,628. BOY'S KNICKERBOCKERS. MORRIS H. ZIMMERMAN, New York, N. Y. Filed June 7, 1910. Serial No. 565,595. (Cl. 2—122.)



A pair of knickerbockers having the lower portion of the leg members formed of two independent sections, an elastic band connecting adjacent edges of said sections, said band being secured to one section and having its opposite end secured to the other section only at a substantial distance from the edge thereof so that said edge is free to move independently of said band, a case or covering for said band secured to said last named section, and rigid fastening devices for securing together the opposite edges of said sections.

1,062,629. TERMINAL CONNECTOR FOR SPARK-PLUGS FOR EXPLOSIVE-ENGINES FOR AUTOMOBILES AND OTHER USES. CHARLES W. BECK, Rockville Center, N. Y., assignor, by mesne assignments, to Michigan Motor Specialties Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 11, 1910. Serial No. 537,581. (Cl. 175—183.)



1. A terminal connector comprising a metal part adapted to be connected to the end of a terminal wire, a metal part adapted to be connected to a spark plug, a switch pivotally mounted on said latter part and formed with means to engage a spark plug terminal, said means being adapted to lock said part to a spark plug, each of said parts being provided with a supplemental sparking point, means for insulating said parts from each other, the switch plate in its locking position bridging the gap between the sparking points and electrically connecting the terminal wire to the spark plug.

2. A terminal connector comprising a block of insulation, two contacts connected thereto at opposite ends and separated from each other, each of said contacts being formed with a supplemental sparking point, a sparking gap being formed between said points, a movable switch carried by one of said contacts and formed with means to detachably lock one contact to a spark plug, means carried by the other contact for connecting it to a terminal wire, the switch device in its locking position bridging the space between the contacts and electrically connecting the terminal wire to the spark plug.

3. A terminal connector comprising a block of insulating material, two connector plates secured thereto, and insulated from each other, means carried by one of said plates for connecting it to a terminal wire, and rotatable means carried by the other plate to detachably connect it to a spark plug, said means in its locked position electrically connecting the terminal wire to the spark plug.

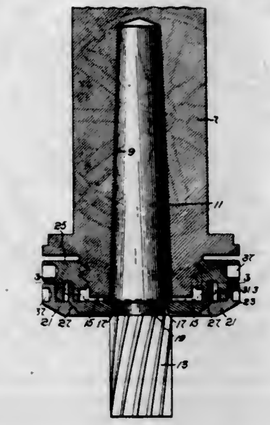
4. A terminal connector comprising a contact part adapted to be connected to a terminal wire, a contact part adapted to be connected to a spark plug, each of said parts being formed with a supplemental sparking point, a block of insulation for supporting and insulating said parts from each other, and movable means for bridging the gap between said points and electrically connecting the terminal wire to the spark plug.

5. A terminal connector comprising a block of insulating material formed with transverse grooves therein, a pair of contact plates formed with bendable straps adapted to fit the grooves in said block, each of said plates being formed with a supplemental sparking point, one of said plates being formed with means for attaching it to a terminal wire, the other plate being provided with an aperture and an entrance slot, a rotatable switch plate mounted on the latter contact plate and provided with an aperture and a contracted entrance slot, the aperture registering with the corresponding aperture in the contact plate and the entrance slot lying normally at right angles to the entrance slot in the contact plate, the main body of the switch device bridging the gap between the sparking points and electrically connecting the terminal wire with a spark plug when said device is in its locked position and its entrance slot is at right angles to the entrance slot on the contact plate.

[Claims 6 to 12 not printed in the Gazette.]

1,062,630. TOOL-HOLDING DEVICE. JOHN BECKER, Hyde Park, Mass. Filed Dec. 7, 1909. Serial No. 531,780. Renewed Oct. 5, 1911. Serial No. 653,059. (Cl. 29—141.)

1. A device of the class described comprising, in combination, tool receiving means having a bore therein, a tool having a shank adapted to be introduced into said bore, a shoulder on said tool extending transversely to the axis thereof, a nut on said tool receiving means, a ring threaded on said nut and tool engaging means adapted to be moved into engagement with said tool shoulder by relative movement of said nut and ring.



2. A device of the class described comprising, in combination, tool receiving means; a tool having a portion adapted to be introduced therein; and means for setting said tool in said tool receiving means, comprising tool engaging means and two-part means relatively adjustable to move said tool engaging means into engagement with the tool and adjustable as a whole relatively to said tool receiving means for setting the tool therein.

3. A device of the class described comprising, in combination, tool receiving means, a tool having a shank adapted to be introduced into said means, tool engaging means, positioning means to move the latter into a position positively to engage said tool and means to move said positioning means axially of said tool receiving means to force said tool shank therein.

4. A device of the class described comprising, in combination, tool receiving means; a tool having a shank adapted to be introduced into said means; jaws; cam means for forcing said jaws toward said tool; and means to move said cam means axially of said tool receiving means to force said shank therein.

5. A device of the class described comprising, in combination, tool receiving means having a tapered bore therein; a tool having a tapered shank for insertion into said bore; jaws; means to adjust said jaws into a recess in said tool; and means to adjust said jaws, means and tool bodily to thrust the tool shank into said tool receiving means, said jaws having portions guided by said thrusting means.

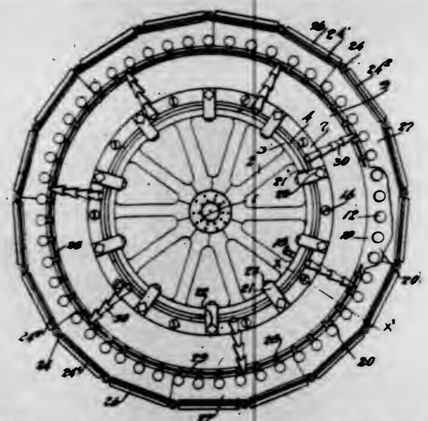
[Claims 6 to 21 not printed in the Gazette.]

1,062,631. TIRE-PROTECTOR. GEORGE BELLEMARE, Winnipeg, Manitoba, Canada. Filed June 15, 1911. Serial No. 633,329. (Cl. 152—16.)

1. The combination with the rim of a wheel and an inflated tire carried by the rim, of a plurality of similar flat metallic hinges having the wings thereof overlapping one on the other and secured together, strips of material secured to the inner faces of the hinges and containing the tread side of the tire and means fastening the strips to the rim to the wheel, as and for the purpose specified.

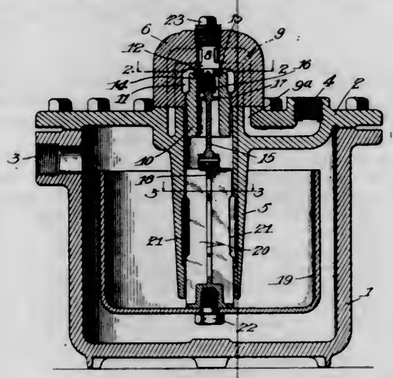
2. The combination with the rim of a wheel and an inflated tire carried by the rim, of a plurality of flat metallic hinges having the wings overlapping the one on the other, sections located on the outer faces of the outer wings, strips of material located on the inner faces of the

hinges, rivets passing through the strips hinges and sections and holding them together and means securing the



edges of the strips to the rim of the wheel as and for the purpose specified.

1,062,632. STEAM-TRAP. JOHN BOYLSTON, Chicago, Ill. Filed Jan. 30, 1911. Serial No. 605,362. (Cl. 137—103.)

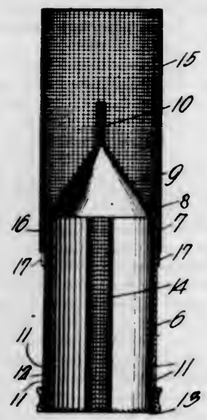


1. A steam trap comprising a casing, a cover therefor, a hollow projecting part on said cover projecting into said casing, a removable cap above said hollow projecting part, a guide removably connected with said cap one end of said guide projecting into the hollow part the other end thereof projecting beyond the top of said cover and into said cap, a valve seat clamped between said guide and a portion of said cap, a valve coöperating with said valve seat, a connecting piece with which said valve is removably connected a removable pin connecting said valve and connecting piece and a bucket in said casing connected with said connecting piece.

2. A steam trap comprising a casing, a cover therefor having an opening extending therethrough, a cap removably connected with said cover and having an opening in alinement with the opening in the cover, a guide removably connected with said cap and projecting into said opening said guide screw-threaded near its middle and having a portion at each end free from screw threads, one of said portions projecting above said cover and separated from the cap by a free space, a valve seat clamped between said guide and a portion of said cap said valve seat having an opening less in diameter than the opening in the cap, said guide projecting into the opening in the cover, a valve coöperating with said valve seat and a bucket in said casing connected with said valve.

3. A steam trap comprising a casing, a cover therefor having an opening extending therethrough, a cap removably connected with said cover and having an opening in alinement with the opening in the cover, a guide removably connected with said cap and projecting into said opening, said guide screw-threaded near its middle and having a portion at each end free from screw threads, one of said portions projecting above said cover and separated from the cap by a free space, a valve seat clamped between said guide and a portion of said cap, said valve seat having an opening less in diameter than the opening in the cap and located above the upper portion of said top, said guide also projecting into the opening in the cover, a valve having a connecting piece projecting through said cover so that the valve is outside of the casing and the cover and adapted to engage said valve seat and a bucket to which the connection for the valve is attached.

1,062,633. FLY-TRAP. DANIEL LUTHER BUCK, North Fort Worth, Tex. Filed May 10, 1912. Serial No. 696,527. (Cl. 43—22.)

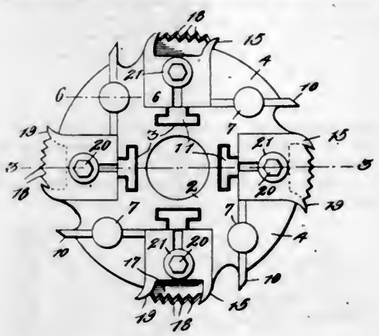


An insect trap comprising a casing having an inwardly projecting peripheral rib adjacent its upper edge and having constricted inlets in the lower end thereof, a removable bottom for the casing, an upstanding tubular meshed bait-holder secured to the bottom and extending to the top of the casing, a transparent funnel seated on the said rib and the upper edge of the casing being bent over the edge of the funnel, and a cylindrical open-ended cage having its open end fitting over the upper end of the casing.

1,062,634. CUTTER-HEAD. JAMES W. BUCKHART, Santa Clara, Cal. Filed Aug. 19, 1911. Serial No. 645,004. (Cl. 144—218.)

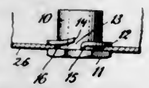
1. In a cutter head of the class described, the combination with a hub having a substantially circular head formed at one end thereof, said head having cut-away portions arranged at regular intervals therein, and said hub having vertical channels therein communicating with the cut-away portions of said head; of a plurality of strips adjustably mounted in the aforesaid channels, laterally extending foot pieces carried on the lower ends of said strips and snugly disposed in the cut-away portions of said head, bits adjustably carried on said foot pieces to project beyond the periphery of said head, and additional bits adjustably arranged on said head and alternating the aforesaid bits, said additional bits being so arranged as to permit the inner edges thereof to abut the aforesaid foot pieces when said bits are disposed in one position.

2. In a cutter head, a hub, an enlarged head formed at one end thereof, a plurality of bits carried on said head and projecting radially beyond the periphery of the latter, the outer edges of said bits being provided with pairs of curved teeth arranged at the ends of said edges, successive bits having the portions between said curved teeth



reduced in thickness from opposite faces thereof and the edges of said reduced portions provided with teeth inclined in the direction toward the curvature of the aforesaid teeth, and means for the adjustmacent of said bits radially and vertically of said head.

1,062,635. ATTACHMENT FOR SHEET-METAL CONSTRUCTIONS. CHARLES J. CLEMENTS, Brooklyn, N. Y., assignor to The Clements Co., New York, N. Y., a Corporation of New York. Filed Mar. 8, 1911. Serial No. 613,151. (Cl. 85—32.)



1. A sheet metal attachment comprising a hub having a non-continuous flange one extremity of which is oblique to the longitudinal axis of the hub, and the other extremity of which is laterally offset in the opposite direction to form an abutment.

2. A sheet metal attachment comprising a cylindrical hub having a collar thereon and a non-continuous flange spaced from the collar a distance about equal to the thickness of the sheet metal with which the attachment is to be employed, one extremity of the said flange being inclined obliquely to the axis of the hub.

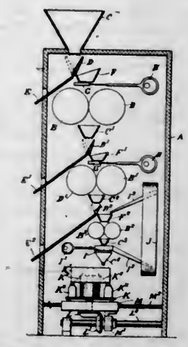
3. A sheet metal attachment comprising a cylindrical hub having a collar thereon and a non-continuous flange spaced from the collar a distance about equal to the thickness of the sheet metal with which the attachment is to be employed, one extremity of the said flange being inclined obliquely to the axis of the hub, and the other extremity thereof being offset in the opposite direction to form an abutment.

4. A sheet metal attachment comprising a hub having a collar thereon, and a non-continuous circumferential flange one extremity of which is longitudinally farther away from the collar than the other, the flange being secured fast to the hub in proximity to the end farthest away therefrom, and the other end being free to move under spring tension toward the said collar.

5. A sheet metal attachment comprising a hub having a collar thereon, and a non-continuous circumferential flange one extremity of which is longitudinally farther away from the collar than the other, the flange being secured fast to the hub in proximity to the end farthest away therefrom, and the other end being free to move under spring tension toward the said collar, the latter end of the flange being provided at its extremity with a laterally offset portion which extends in a direction toward the said collar.

[Claims 6 and 7 not printed in the Gazette.]

1,062,636. PLANT OR APPARATUS FOR THE SAMPLING OF ORES. ARTHUR STEBBINS CLIFT, London, England. Filed Dec. 3, 1912. Serial No. 734,664. (Cl. 73—21.)



1. In an ore sampling machine, the combination with pairs of rolls arranged in sequence, of containers for charges of material, deflectors intermediate to the containers and rolls, and means for controlling the position of the deflectors whereby a definite proportion of the charge in each container is passed to the appropriate rolls and the remainder diverted from the machine, as set forth.

2. In an ore sampling machine, the combination with pairs of rolls arranged in sequence, of containers for charges of material, intermittently operated deflectors intermediate to the containers and rolls for passing a definite proportion of the charge in each container to the appropriate rolls, and means for delivering the proportional charges continuously to said rolls, as set forth.

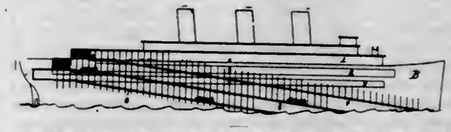
3. In an ore sampling machine, the combination with pairs of rolls arranged in sequence, of containers for charges of material, deflectors for passing a definite proportion of the charge in each container to the appropriate rolls, and means for delivering the product of the last pair of rolls of the series into a series of bottles, and means for varying the rate of such delivery whereby the filling of the bottles may be timed to coincide with the completion of the sampling operation, as set forth.

4. In a machine of the kind described, the combination with a series of rolls and coöperating mechanism for sampling and reducing the material, of a revolving distributer having radial chutes and adjustable with respect to the point of delivery for the material from the last rolls of the series, whereby the filling of receptacles of material deposited in the chutes may be timed to coincide with the completion of the sampling operation, as set forth.

5. In a sampling machine of the kind described, the combination with a series of rolls and coöperating mechanism for sampling and reducing the material, of a vibrating screen for receiving the material from the last of the series of rolls, a chute for the coarser particles intercepted by the screen, and a conveyer for returning said particles to a pair of rolls for regrinding, as set forth.

[Claim 6 not printed in the Gazette.]

1,062,637. RAPID-SERVICE LIFE-BOAT SYSTEM. MELVIN D. COMPTON, New York, N. Y. Filed Apr. 27, 1912. Serial No. 693,553. (Cl. 9—22.)



1. The combination with a vessel, of a life-boat track member extending from the deck down along the side of

the vessel to the water line, the member being supported to swing from a position extending transversely out from the vessel to a position lying against the side of the vessel.

2. The combination with a vessel, of a life-boat track member extending from the deck down along the side of the vessel to the water line, the member being supported to swing from a position extending transversely out from the vessel to a position lying against the side of the vessel, and a life-boat adapted to slide down the track member.

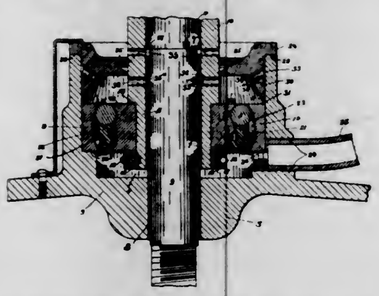
3. The combination with a vessel, of a life-boat track member extending from the deck down along the side of the vessel to the water line, the member being supported to swing from a position extending transversely out from the vessel to a position lying against the side of the vessel, and a life-boat adapted to slide down the track member and provided with a brake member arranged to be operated to engage the track member and control the passage of the boat along the track member.

4. The combination with a vessel, of a life-boat track member extending from the deck down along the side of the vessel to the water line, the member being supported to swing from a position extending transversely out from the vessel to a position lying against the side of the vessel, and a life-boat adapted to engage the track member.

5. The combination with a vessel, of a life-boat track member extending from the deck down along the side of the vessel to the water line, the member being supported to swing from a position extending transversely out from the vessel to a position lying against the side of the vessel, and a life-boat adapted to engage the track member, and also provided with a brake member to engage the track member and control the movement of the boat.

[Claims 6 to 22 not printed in the Gazette.]

1,062,638. VERTICAL BEARING. CHARLES A. DILLON, Canton, Ohio, assignor to The United Electric Company, Canton, Ohio, a Corporation of Ohio. Filed Mar. 30, 1911. Serial No. 617,984. (Cl. 64—56.)

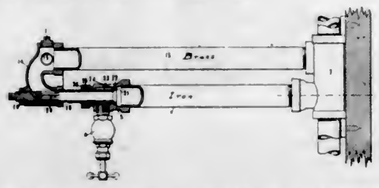


1. A bearing for a vertical spindle including a case around the spindle having a lubricating chamber therein, a cover for the case having a depending flange telescoped in the case, the inner face of the flange being conically inclined upward and inward and forming part of the wall of the chamber, and there being an annular receiving groove around the telescoped periphery of the flange, and inwardly-downwardly inclined ports from the receiving groove through the body of the flange into the cavity of the lubricating chamber above the height to which the oil rises therein.

2. A bearing for a vertical spindle including a case around the spindle having a lubricating chamber therein, a cover for the case having a depending flange telescoped in the case, the inner face of the flange being conically inclined upward and inward and forming part of the wall of the chamber, and there being an annular receiving groove around the telescoped periphery of the flange, and ports leading from the receiving groove inwardly through the body of the flange into the cavity of the lubricating chamber above the height to which the oil rises therein.

3. In a vertical bearing for a combined motor and fan blower, a covered case having an axial aperture in its bottom with an upwardly extending sleeve secured therein forming an annular lubricating chamber, a rotor-fan spindle within the case-sleeve and having a depending sleeve extending downward around the case-sleeve, with a bearing between the spindle-sleeve and the case, and ports through the spindle sleeve at the upper end of the case-sleeve and above the case cover.

1,062,639. HEATING SYSTEM. ROBERT M. DIXON, East Orange, N. J., assignor, by mesne assignments, to Standard Heat and Ventilation Company, Inc., New York, N. Y., a Corporation of New York. Filed May 9, 1907. Serial No. 372,759. (Cl. 237—12.)



1. In a heating system, in combination, a radiating system, a feed conduit leading thereinto, a discharge conduit leading therefrom, and a valve for controlling the admission of steam into said radiating system the operation of which is determined by the differential expansion and contraction of said feed and discharge conduits.

2. In a heating system, in combination, a radiating system, a feed conduit leading thereinto, a discharge conduit leading therefrom, and means controlled by the differential expansion and contraction of said feed and discharge conduits for regulating the amount of steam admitted into said feed conduit.

3. In a heating system, the combination with a radiating system, of a feed conduit leading thereinto, a source of air supply communicating with said feed conduit, means for injecting steam into said feed conduit, a discharge conduit for said radiating system, and a valve for controlling the injection of steam into said feed conduit the operation of which is determined by differential expansion and contraction of said feed and discharge conduits.

4. In a heating system, the combination with a radiating system, of a source of heat supply, a feed conduit connecting said source of supply with said radiating system, means for injecting steam into said feed conduit, a discharge conduit for said radiating system, and a valve for controlling the amount of steam injected into said feed conduit the operation of which is determined by differential expansion and contraction of said feed and discharge conduits.

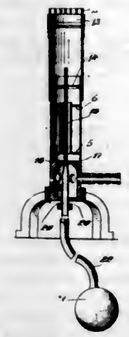
5. In a heating system, the combination with a radiating system, of a source of steam supply, a feed conduit connecting said source of supply with said radiating system, means for injecting the steam into said feed conduit, a discharge conduit for said radiating system having a co-efficient of expansion different from that of said feed conduit, and a valve for controlling the injection of steam into said feed conduit the operation of which is controlled by differential expansion and contraction of said feed and discharge conduits.

[Claims 6 to 32 not printed in the Gazette.]

1,062,640. HIGH-TEMPERATURE GAS-BURNER. AUGUST EIMER, New York, N. Y. Filed Feb. 3, 1912. Serial No. 675,263. (Cl. 158—111.)

1. A tubular gas burner having a foraminous cap, and an initial mixing chamber with air inlets, together with an internal draft tube wholly contained and supported in manner to be axially adjustable intermediate said cap and mixing chamber.

2. A tubular gas burner having a foraminous cap, and an initial mixing chamber, together with an internal draft tube located intermediate said cap and mixing chamber, and a flange upon said draft tube frictionally supporting it in axially adjustable manner within said burner tube.



3. A tubular gas burner having a foraminous cap, and an initial mixing chamber, together with an internal draft tube wholly contained and supported intermediate said cap and mixing chamber, and means for intensifying the pressure at a point between the draft tube and burner cap.

4. A tubular gas burner having a foraminous cap, and an initial mixing chamber with air inlets therefor, an internal draft tube between the initial mixing chamber and cap, an orifice in the mixing chamber, a hollow needle valve to regulate and close said orifice, an upward tubular extension of said needle valve, and means introducing pressure blasts through said extension to said cap.

5. A tubular gas burner formed of telescoping sections, a foraminous cap therefor and an initial mixing chamber, air inlets for said mixing chamber, an internal draft tube wholly contained and supported intermediate the initial mixing chamber and burner cap, and means for intenalifying the pressure at said burner cap.

[Claims 6 and 7 not printed in the Gazette.]

1,062,641. METHOD OF MAKING BUTT-WELDS. EMIL EINFELDT, Davenport, Iowa, assignor, by mesne assignments, to G. Watson French, Nathaniel French, and Joseph L. Hecht, composing the firm of French & Hecht, Davenport, Iowa. Filed July 9, 1909. Serial No. 506,707. (Cl. 78—92.)

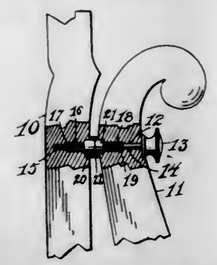


1. The method of forming a butt-weld between parts consisting of spring metal, which method consists in so disposing the ends to be welded that they will have a tendency to spring past each other in opposite directions, abutting said ends to cause them to contact forcibly, and finally applying heat sufficient to soften the abutting ends to permit them to become welded.

2. The method of butt-welding the ends of a strip or blank together, which consists in bending the blank between its ends in such manner that the ends will be brought together and will have a tendency to move past each other in opposite directions without the application of external force, abutting the ends of the bent blank to cause the said ends to contact forcibly, and finally applying sufficient heat to soften the abutting ends to permit them to become welded together.

3. The method of making wheel tires which consists in providing a metal blank or strip greater in length than the circumference of the finished tire, bending said blank into approximately circular form and so that its ends will have a tendency to spring past each other circumferentially, abutting said ends to cause them to contact forcibly, and finally applying heat sufficient to weld the abutting ends.

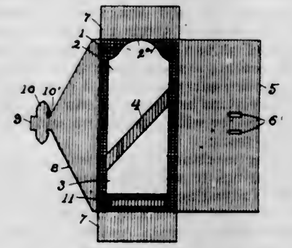
1,062,642. HANGING AND ADJUSTING DEVICE FOR MIRRORS. CLYDE L. EMERY, Jamestown, N. Y. Filed Mar. 1, 1913. Serial No. 751,487. (Cl. 16—142.)



1. In a device of the class described, a bolt, a nut for said bolt and means for attaching said nut to the mirror frame, a sleeve slidably mounted on said bolt and means for attaching said sleeve to the standard for said mirror frame, equal sized heads on said nut and sleeve adjacent one another, and a sleeve to fit over said heads to support the weight and cover the joint therebetween.

2. In a device of the class described, a bolt, a threaded nut for said bolt having an externally threaded shank for screwing into the mirror frame, a sleeve loosely mounted on said bolt having a threaded shank for screwing into a supporting standard for said mirror frame, adjacent heads on said nuts of the same diameter, a sleeve to fit closely over the peripheries of both of said heads to support the weight and cover the joint, intermeshing teeth on the adjacent faces of said heads, said faces cupped slightly to intermesh said teeth near the outer edges of said faces, substantially as and for the purpose specified.

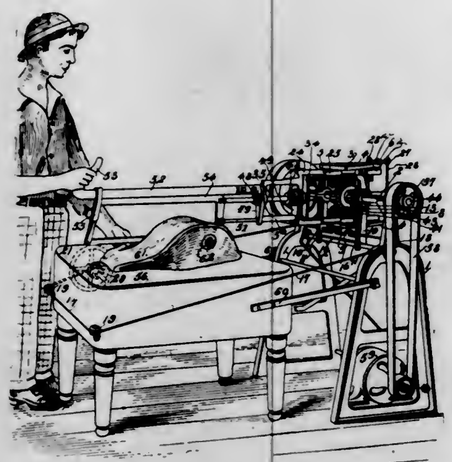
1,062,643. WRAPPER FOR LAUNDRIED SHIRTS. CALE B. FOX, St. Joseph, Mo. Filed Feb. 24, 1911. Serial No. 610,544. (Cl. 229—87.)



A wrapper adapted to hold a laundried shirt therein, said shirt being provided with a neck band therefor, said wrapper comprising a front of rectangular shape having an upper opening formed therethrough, said upper opening having its upper end portion of suitable form to fit the back portion of said neck band and to expose the same, the lower portion of said opening being adapted to expose the upper portion of the bosom of said shirt, said wrapper front also having a lower opening formed therethrough for exposing the lower portion of said bosom, said openings being of such form and location that a tie strip of said front remains and extends diagonally across said bosom and between said openings; an end flap extending

from each of the two transverse edges of said front and adapted to be folded backward on said shirt; a back extending from one of the longitudinal edges of said front and adapted to be folded backward on said end flaps and said shirt, said back being practically of the same shape and proportions as said front and having two fastening slots formed therethrough; a fastening flap extending from the other longitudinal edge of said front and adapted to have its free edge portion secured to said back.

1,062,644. MEAT-SAWING MACHINE. GEORGE THOMAS FRANCISCO, Highland, Cal., assignor of one-half to Claudius M. Hill, Highland, Cal. Filed Aug. 4, 1911. Serial No. 642,372. (Cl. 143—68.)



1. In a sawing machine, a bed frame, a driving shaft journaled in bearings in said frame, a sliding frame mounted on said shaft and longitudinally slidable thereon, means for moving said sliding frame along said shaft, a main operating frame pivoted on said shaft for vertical swinging movement, a saw carrying frame pivoted in said main frame for lateral swinging movement, a reciprocating saw actuating frame mounted in said saw carrying frame, transmission gears all mounted within the bounds of said main frame, crank and pitman connections between said gears and said reciprocating saw actuating frame, a saw carrier mounted on said saw carrying frame, a saw carried by said carrier and connections between said saw and said reciprocating frame, together with a pinion on said driving shaft for driving said gears.

2. In a sawing machine, a bed frame, a driving shaft journaled in bearings in said bed frame, a laterally movable non-rotative adjusting frame mounted on said shaft, a guide carried by said bed frame for engaging said laterally movable frame, a main operating frame pivotally mounted on said shaft and embraced by said adjusting frame, means carried by said adjusting frame for engaging said main operating frame to limit its pivotal movement in one direction, said main operating frame including bearing portions projecting toward the rear of said bed frame, a saw carrying frame having trunnions at one end to enter said main operating frame bearings and projecting toward the front of said bed frame, a saw carrier pivotally mounted on said saw carrying frame to turn on a longitudinal axis, a saw mounted on said saw carrier, a reciprocating saw actuating frame carried by said saw carrying frame and connected with said saw, and power transmitting connections between said driving shaft and said reciprocating frame for reciprocating the same said power transmitting connections being located wholly within the bounds of said main frame, said main frame projecting within said adjusting frame.

3. In a sawing machine, a bed frame, a driving shaft journaled in bearings in said bed frame, a laterally movable non-rotative adjusting frame mounted on said shaft, a guide carried by said bed frame for engaging said laterally movable frame, a main operating frame pivotally mounted on said shaft and embraced by said adjusting frame, means carried by said adjusting frame for engaging said main operating frame to limit its pivotal movement in one direction, said main operating frame including bearing portions projecting toward the rear of said bed frame, a saw carrying frame having trunnions at one end to enter said main operating frame bearings and projecting toward the front of said bed frame, a saw carrier pivotally mounted on said saw carrying frame to turn on a longitudinal axis, a saw mounted on said saw carrier, a reciprocating saw actuating frame carried by said saw carrying frame and connected with said saw, and power transmitting connections between said driving shaft and said reciprocating frame for reciprocating the same, said power transmitting connections including a pinion mounted on said driving shaft, gears mounted on said main operating frame and meshing with said pinion, and crank and pitman connections between said gears and said reciprocating frame.

4. In a sawing machine, a bed frame having bearings, a driving shaft mounted in said bearings, a laterally movable adjusting frame mounted on said shaft, means preventing turning of said adjusting frame on said shaft while permitting lateral adjustments of said frame, means for laterally adjusting said adjusting frame, a main operating frame consisting of an upper and a lower triangular portion and vertical members uniting said portions, said vertical members having bearings for said driving shaft so that said main operating frame may be swung on said shaft as a pivot, said triangular portions having rearwardly projecting bearings, a saw carrying frame including arms projecting into said main operating frame, trunnions carried by said arms to enter said rearwardy projecting bearings of said main operating frame, slideways carried by said saw carrying frame, a reciprocating frame mounted in said slideways, a saw carrier pivotally mounted on a longitudinal axis on said saw carrying frame, a saw carried by said saw carrier, connections between said saw and said reciprocating frame, an oscillating bar carried by said reciprocating frame, pitmen connection to said bar, power transmitting gears carried by said main operating frame and having crank portions to which said pitmen are connected, a pinion on said driving shaft meshing with said gears, means for operatively connecting and disconnecting said pinion to said driving shaft, substantially as shown and described.

5. In a sawing machine of the character stated a bed frame, a driving shaft journaled in bearings in said frame, a sliding frame mounted on said shaft and laterally slidable thereon, means for moving said sliding frame along said shaft, a main operating frame comprising upper and lower triangular members united by vertical slide bars, said vertical slide bars having bearings between said upper and lower triangular members to receive said driving shaft and thereby pivot said main operating frame on said driving shaft, said main operating frame having trunnions at its rear end, a saw carrying frame pivoted on said trunnions and projecting between said upper and lower triangular portions, said saw carrying frame including upper and lower guides having slideways, a rectangular sliding frame mounted in said slideways to reciprocate therein, a saw carrier mounted on said saw carrying frame, and coöperative connections between said reciprocating frame and the saw for reciprocating the same, together with power transmitting connections mounted within the bounds of said main operating frame for connecting said driving shaft with said reciprocating frame.

[Claim 6 not printed in the Gazette.]

1,062,645. BANKING-PIN. JOSEPH A. FREUND, Waltham, Mass., assignor to The Keystone Watch Case Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 12, 1911. Serial No. 602,314. (Cl. 58—122.)



1. In a timepiece employing a lever escapement, bankings for said lever composed of practically non-oxidizable material located upon both sides of said lever.

2. In a timepiece employing a lever escapement, bankings for said lever composed of practically non-oxidizable material located upon both sides of said lever, and means for adjusting one of said bankings.

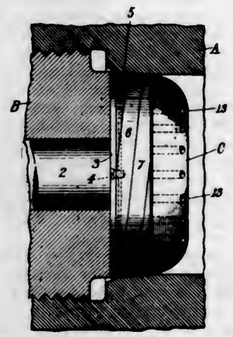
3. In a timepiece employing a lever escapement, bankings for said lever composed of practically non-oxidizable material mounted on the plate upon both sides of said lever.

4. In a timepiece employing a lever escapement, bankings for said lever composed of jewels located upon both sides of said lever.

5. In a timepiece employing a lever escapement, bankings for said lever composed of jewels mounted on the plate upon both sides of said lever.

[Claims 6 to 11 not printed in the Gazette.]

1,062,646. OBTURATOR. GREGORY GERDOM, Watervliet, N. Y., assignor to Ordnance Improvement Company, a Corporation of New York. Filed Mar. 27, 1908. Serial No. 423,524. (Cl. 89—26.)



1. In an obturator, a gas checking element comprising a resilient spiral fitted to the gun chamber, and an expanding element fitted within said spiral and subject to the direct pressure of the gases of explosion.

2. In an obturator, a resilient spiral element fitted to the gun chamber, an expanding element comprising a conical cup fitted to the interior of said spiral and open to the direct action of the gases of explosion.

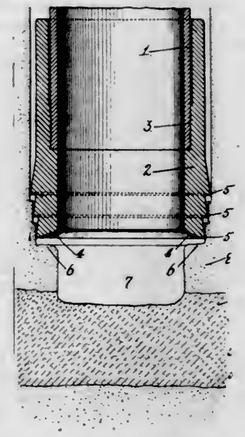
3. In combination with the breech-block of a breech loading gun, a sheet metal cup seated upon said block and spiral obturating rings surrounding said cup, and adapted to bear against the walls of the gun chamber, the edge of said cup being outturned to cover said rings and make contact with the walls of the gun chamber.

4. In a breech loading gun, in combination with the breech block and mushroom head, an interposed spiral spring ring adapted to bear against the walls of the gun, and a cup mounted upon the end of the block and fitted closely to the interior of said ring with its edge overlapping said ring.

5. An obturator for breech loading guns comprising resilient spiral rings fitted to the gun chamber, and a cup seated upon the breech block fitted to said rings and subject to the pressure of the gases of explosion, whereby it is expanded to force said resilient rings against the gun chamber walls.

[Claims 6 to 11 not printed in the Gazette.]

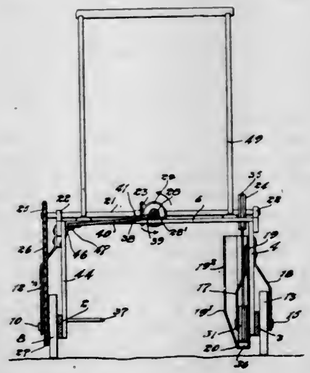
1,062,647. WELL-CASING SHOE. SAMUEL ALLEN GUIBERSON, Jr., and HARRY MEAD, Coalinga, Cal.; said Mead assignor to said Guiberson, Jr. Filed July 15, 1912. Serial No. 709,333. (Cl. 166—9.)



1. In combination with a casing-pipe, a shoe fitted to the foot thereof, said shoe being provided on the outer surface of its lower portion with a plurality of circumferential cutting-toes in rising series increasing in diameter upward.

2. In combination with a casing-pipe a shoe provided at its upper portion with means for attaching it exteriorily to the foot of the casing-pipe, and provided on the outer surface of its lower portion with a plurality of circumferential cutting-toes in rising series increasing in diameter upward.

1,062,648. INSECT-COLLECTING MACHINE. SYVER HANSEN, Dugald, Manitoba, Canada. Filed Nov. 18, 1912. Serial No. 732,019. (Cl. 43—1.)

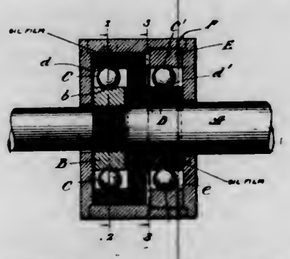


1. An insect collecting machine, comprising an open frame formed from side beams carrying uprights connected by cross bars, carriage wheels supporting the frame a rearwardly located drive shaft rotatably carried in bearings carried by brackets secured to the rear pair of uprights, a pulley, a beveled pinion, a chain wheel fixed on the shaft, a longitudinally directed counter shaft

mounted in bearings carried by the cross bars and located at one side of the frame, a beveled pinion fixed on the counter shaft and meshing with the aforesaid pinion, a beater carried by the counter shaft, a guard plate secured to the side of the frame opposite the counter shaft, and having the lower end, and one end thereof turned to form a trough, pulleys located forwardly and rearwardly within the trough, a pulley secured to the forward cross bar of the frame, an endless conveyer passing around the said pulleys and operating within the trough, said conveyer being supplied with suitably disposed cross slats, a chain wheel rotatable with one of the carriage wheels, a chain connecting said chain wheel with the aforesaid chain wheel, a handle secured to the frame rearwardly, and a wire extending longitudinally of the frame directly opposite the trough, as and for the purpose specified.

2. The combination with a portable frame, a rotatably mounted drive shaft carried by the frame, and a counter shaft driven by the drive shaft, of a bar extending lengthwise of the counter shaft and secured thereto, an apron pivotally secured to the bar by hinges, springs adjoining the hinges normally retaining the apron in the plane of the bar, a catch piece carried by the frame and designed to engage with and arrest the free edge of the apron each revolution of the shaft and a trip bar carried by the free edge of the apron and engageable with the catch piece, as and for the purpose specified.

1,062,649. JOURNAL-BEARING. HENRY HESS, Wawa, Pa., assignor to The Hess-Bright Manufacturing Company, Philadelphia, Pa., a Corporation of Delaware. Filed Sept. 17, 1907. Serial No. 393,322. (Cl. 64—36.)

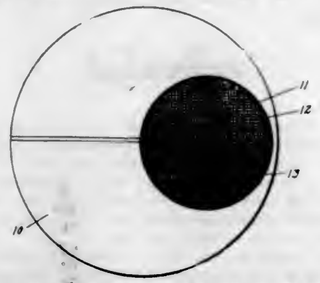


1. The combination of two relatively movable parts provided with tracks or ways, an intermediate supporting element provided on its opposite faces with tracks or ways registering with those on said parts and conjointly constituting raceways, and balls located in said raceways, the said supporting element being formed with extended surfaces located in proximity to the relatively movable parts and so closely fitted thereto as to provide for the formation of oil films therebetween, which films prevent actual contact thereof.

2. The combination of two relatively movable parts provided with tracks or ways located in different transverse planes, an intermediate supporting element provided on its opposite faces with tracks or ways registering with those on said parts and conjointly constituting raceways, and balls located in said raceways, the said supporting element being formed with extended surfaces located in proximity to the relatively movable parts and so closely fitted thereto as to provide for the formation of oil films therebetween, which films prevent actual contact thereof.

3. The combination of two relatively movable parts with an anti-friction bearing, which latter comprises a plurality of series of balls, external casing members, and a freely mounted supporting element between the respective series, the supporting element being of angular form so as to locate the several series of balls in different transverse planes, and said element being formed with extended surfaces, located in proximity to the relatively movable parts, and so closely fitted thereto as to provide for the formation of oil films therebetween, which films prevent the actual contact thereof.

1,062,650. MILK-PAIL COVER. CHARLES W. HUDSON, Riverside, Wash. Filed Jan. 25, 1913. Serial No. 744,109. (Cl. 31—14.)

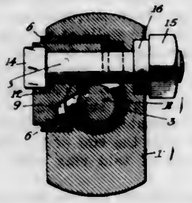


1. A milk pail cover having a shallow conical body wall, the apex of which is eccentrically located, the short inclined side of said body wall being provided with an opening supporting a band and forming a well, said band being slightly raised above the cover member and supporting flush with its upper edges a metallic strainer device, an annular body band supporting a straining element and a somewhat larger band for retaining the straining element tightly across the body band, a ring with an inwardly extending horizontal flange somewhat larger than the side walls of the well and provided to retain the inner straining device within the casing to support a final straining device across the bottom of the well.

2. A milk pail cover having a shallow conical body wall, the apex of which is eccentrically located, the short inclined side of said body wall being provided with an opening, a strainer arranged within said opening, said strainer consisting of a metallic body band secured to the cover wall and having one of its ends disposed flush with the outer surface of said wall, a reticulated metallic straining fabric secured to said end of the band over said opening, a straining cloth located intermediate of the ends of the band within the same, a clamping band arranged in the body band to hold said cloth in position, a second straining cloth, and an annulus frictionally engaging upon the inner end of said body band, to hold the latter straining cloth in position, said annulus being of angular form in cross section and having an inwardly extending flange constituting a stop to prevent inward movement of said clamping band.

3. A milk pail cover having a shallow conical body wall, the apex of which is eccentrically located, the short inclined side of said body wall being provided with an opening or well, said well extending upwardly and terminating at a slight distance above the cover and supporting on its upper edges a metallic straining device disposed flush with the edges and disposed slanting to the horizontal, a well supporting a plurality of cloth straining devices horizontal and in spaced relation to each other.

1,062,651. CHUCK FOR ROCK-DRILLS. CHARLES A. HULTQUIST, Los Angeles, Cal. Filed May 22, 1912. Serial No. 699,064. (Cl. 125—3.)



1. A chuck for rock drills comprising a chuck body, a drill bushing therein, said bushing having a segmental

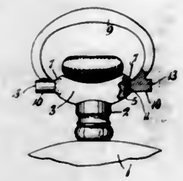
cutaway portion, a wedge bushing in said body extending transversely of the drill bushing and being formed with a segmental concave recess which receives the drill bushing, a cylindrical wedge sliding in the wedge bushing and a bolt extending through the wedge and body.

2. A chuck for rock drills comprising a chuck body, a drill bushing therein, said bushing having a segmental cutaway portion, a wedge bushing in said body extending transversely of the drill bushing and being formed with a segmental concave recess which receives the drill bushing, a cylindrical wedge sliding in the wedge bushing, a bolt extending through the wedge and body, the wedge bushing having portions which overhang the drill bushing and prevent accidental removal of the wedge bushing.

3. A chuck for rock drills comprising a body, a drill bushing in the body, the bushing having a segmental cutaway portion, a cylindrical wedge with an inclined face slidable laterally in the body and extending into the cutaway portion of the drill bushing, and a bolt extending through the wedge and body.

4. A chuck for rock drills comprising a body, a drill bushing therein having a cut-away portion, a cylindrical wedge with an eccentric hole slidable in the body transversely of the drill bushing, and a bolt through said eccentric hole and through the body.

1,062,652. SELF-RIVETING NON-DETACHABLE BOW. HAROLD L. JEFFERY, Fort Thomas, Ky., assignor to The Wadsworth Watch Case Company, Dayton, Ky., a Corporation of Kentucky. Filed Mar. 11, 1912. Serial No. 683,135. (Cl. 58—96.)



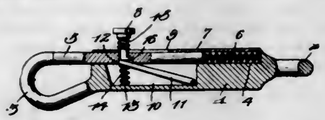
1. A watch pendant having a tapering lug, a bow having a hollow end spread open to receive said tapering lug, said pendant further having an outside bearing embracing said hollow expanded bow end.

2. A watch case pendant having an internal projecting part constituting a pivot, a bow having a hollow end embracing said pivot to rotate thereon, and said pendant further having an outside bearing embracing said hollow bow to constitute relatively inside and outside pivot bearings interlocking the pendant and bow together.

3. The combination with a pendant member, of a bow member pivotally secured thereto, the pivoting means including relatively inside and outside bearings for said bow whereby a non-detachable pivotal working fit between the pendant and bow is obtained the inside bearing consisting of a conical base portion on one member engaging a complemental recess in the other member and the outside bearing consisting of a tapered rim forming with a base a pocket having a contracted opening, and a complemental flaring portion on said other member confined within said pocket.

4. The combination with a pendant member, of a bow member pivotally secured thereto, the pivoting means including relatively inside and outside bearings for said bow whereby a non-detachable pivotal working fit between the pendant and bow is obtained, the inside bearing consisting of a conical base portion on one member engaging a complemental recess in the other member, and the outside bearing consisting of a tapered rim forming with the base a pocket having a contracted opening, and a complemental flaring portion expanded by said conical base portion into said pocket.

1,062,653. SNAP-HOOK. CLARENCE E. KOONS, Westerville, Ohio. Filed Sept. 25, 1912. Serial No. 722,351. (Cl. 24—241.)



A snap hook comprising a body portion having an eye formed at one end and a hook formed at the opposite end, said body portion having a recess formed therein, a locking bolt slidable through the body portion to coöperate with the hook, said locking bolt having an opening extending therethrough, operating means within said opening and a pawl pivoted within the recess for engagement with the opening in the locking bolt, and the opposite end of the pawl contacting with the bottom and one end wall of the recess for preventing any undesired movement thereof, whereby injury will be caused to its pivot pin.

1,062,654. EAR-PLATE. ADONIS GEORGE EDWARD LOWMAN, Winnipeg, Manitoba, Canada. Filed May 31, 1911. Serial No. 630,443. (Cl. 128—10.)



1. As a new article of manufacture an ear ornament comprising a plate shaped to receive the lobe of the ear and supplied with means for applying pressure on the back of the lobe when applied thereon, as and for the purpose specified.

2. As a new article of manufacture an ear ornament comprising a plate shaped to receive the lobe of the ear when applied and supplied with an extending neck receiving a portion of the ear helix and being provided further with a means for applying pressure against the back of the lobe and the helix when applied, as and for the purpose specified.

3. An ear plate having a body portion shaped to fit the lobe of the ear and supplied with a means for suspending it from the anti-tragus of the ear and further with an extending neck fitted to receive a portion of the helix of the ear, as and for the purpose specified.

4. As a new article of manufacture an ornamental plate adapted to fit over the lobe of the ear and to be suspended from the anti-tragus of the ear, and means for fastening the plate to the ear, as and for the purpose specified.

5. As a new article of manufacture a plate shaped to receive the lobe of the ear and provided with an extending neck receiving a portion of the ear helix, means for suspending the plate from the anti-tragus, and means for fastening the plate releasably to the ear, as and for the purpose specified.

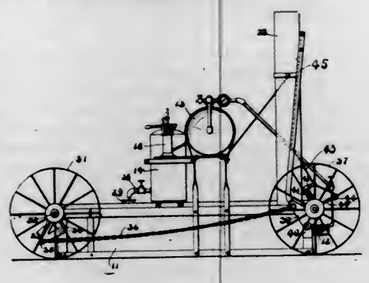
[Claims 6 to 11 not printed in the Gazette.]

1,062,655. SURFACE-HEATER. WALTER MACLEOD, Cincinnati, Ohio. Filed Apr. 26, 1911. Serial No 623,512. (Cl. 94—6.)

1. A surface heater comprising, an open bottom hood, a partition dividing the hood into upper and lower chambers, means for heating the upper chamber, and a vent passage communicating with the lower chamber and extending upwardly through the hood.

2. A surface heater comprising, an open bottom hood, a partition extending partially across the hood, and vent passages communicating with the hood below the partition and extending upwardly through the hood.

3. A surface heater comprising a hood, means for delivering hot gases and products of combustion to the hood, and means for causing the gases and products of combustion to travel across the upper portion of the hood in one direction and then diverting the gases downwardly and causing them to travel back across the lower portion of the hood in the other direction.

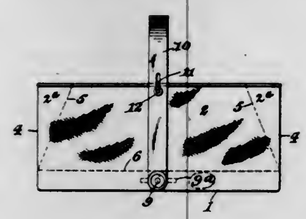


4. A surface heater comprising an open bottom hood, a partition extending partially across the interior of the hood, burners located above the partition, and a stack mounted on the hood and communicating with the interior of the hood below the partition.

5. A surface heater comprising an open bottom hood, a partition for dividing the interior of the hood into an upper, or combustion and a lower, or vent chamber, and a stack communicating with the vent chamber.

[Claims 6 to 14 not printed in the Gazette.]

1,062,656. COLLAPSIBLE RECEPTACLE. ARTHUR J. MITTLER, Wellston, Mo., assignor of one-half to Julius G. Mittler, St. Louis, Mo. Filed Oct. 11, 1911. Serial No. 654,136. (Cl. 150—48.)

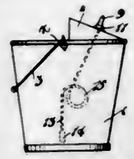


1. An article of the character described comprising a foldable receptacle, a handle having its opposite ends pivotally secured to the sides thereof, and a scoring disposed substantially from end to end of said sides above the point of engagement therewith of said handle, whereby said receptacle may be folded without interference from said handle.

2. An article of the character described comprising a foldable receptacle, a handle having its opposite ends pivotally secured to the sides thereof, members slidably engaged with said handle adapted to engage said sides, and a scoring disposed substantially from end to end of said sides above the point of engagement therewith of said handle, whereby said receptacle may be folded without interference from said handle.

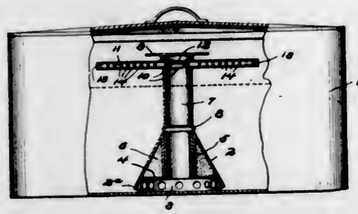
3. An article of the character described comprising a foldable receptacle, a handle having its opposite ends pivotally secured to the sides thereof, slots arranged in said sides, members slidably engaged with said handle adapted to engage said slots, and a scoring disposed substantially from end to end of said sides above the point of engagement therewith of said handle, whereby said receptacle may be folded without interference from said handle.

1,062,657. CALF-FEEDER. JOHN MOORE, Winnipeg, Manitoba, Canada. Filed Oct. 14, 1910. Serial No. 587,112. (Cl. 119—71.)



The combination with a suitable supporting member provided with a threaded ring, of a coupling provided on its lower side with a downwardly extending interiorly and exteriorly threaded flange, the interior thread receiving the ring and provided on its upper side with an extending neck, the neck being of smaller cross sectional area than the body of the coupling thereby forming an external shoulder, there being further a central continuous passageway through the coupling and neck, a nipple receiving the neck provided with an out-turned flange bearing on the shoulder, an interiorly threaded flange member threaded on the exteriorly threaded face of the coupling piece the flange of the member jamming the flange of the nipple against the shoulder, a metallic tube threaded to the coupling piece and communicating with the passage-way and a metallic strainer removably secured to the free end of the tube, as and for the purpose specified.

1,062,658. CLOTHES-WASHER. MAURICE J. MURPHY, Philadelphia, Pa. Filed July 13, 1912. Serial No. 709,124. (Cl. 68—30.)



A device of the character described, comprising a base having perforated side walls, a vertical tube telescoping in the base and adjustable therein, discharge pipes projecting through the upper ends of the tube at right angles to each other, said pipes within the tubes having their bottom portions cut away, a cap on said tube, one of said pipes appreciably longer than the other, said longer pipe having closed ends, and perforations in its side walls, both of said pipes being elliptical in cross section, and removably positioned within the tube, substantially as described.

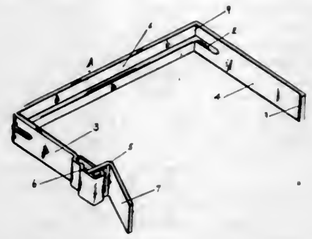
1,062,659. PAGE-CLAMP. MARVIN J. NEVIUS, Burlington, Iowa, and JAMES H. WILKINS, Washington, D. C. Filed July 8, 1912. Serial No. 708,178. (Cl. 101—52.)

1. A page clamp comprising three sides, a movable clamping cam on one side and a type-holding means on one of the other sides, two of the sides being substantially parallel and one of the same being longer than the other to guide the clamp into clamping position.

2. In a device of the clasa described, means comprising a body member having a clamping cam movably attached thereto for clamping a form of type and a projecting lip forming part of said body member for holding a single type in association with and as a part of said form of type, as and for the purpose specified.

3. An article of manufacture, comprising a U-shaped member having a projecting lip at one extremity of one leg of the said member and a clamping device at one extremity of the other leg, substantially as described.

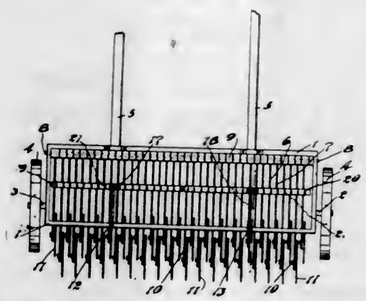
4. In a type-clamping device, a reinforced U-shaped member comprising a side member and two other members, one of said other members terminating in a type alining and holding means and a clamping device attached to the other of said other members, as and for the purpose specified.



5. A page clamp comprising an elastic member having at one extremity an inwardly projecting rigid lip and near the other extremity a pivoted clamping cam to cooperate with said lip, whereby a type form and a loose type may be clamped together.

[Claims 6 to 10 not printed in the Gazette.]

1,062,660. SOD-PULVERIZING MACHINE. FRANCIS ALBERT NUGENT, Sanford, Manitoba, Canada. Filed Oct. 14, 1912. Serial No. 725,581. (Cl. 55—73.)

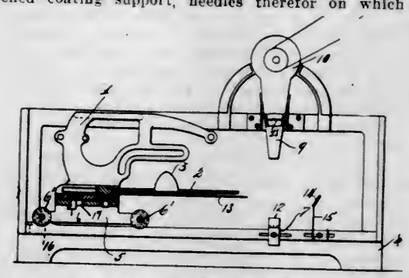


The combination with a main frame mounted on suitable carriage wheels, of sets of long and short drag bars having their forward ends pivotally secured to the front of the frame, said long and short bars being alternately arranged, flat vertically disposed disks pivotally secured to the rear ends of the drag bars, adjustable levers pivotally mounted on the frame rearwardly, arms extending forwardly from the levers, cross bars pivotally carried by the arms, vertically disposed rods pivotally secured to the drag bars and passing slidably through the cross bars, collars located on the rods and springs located on the rods between the collar and the under faces of the respective bars, as and for the purpose specified.

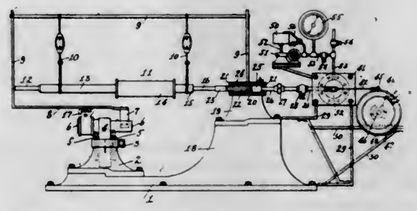
1,062,661. DEVICE FOR USE IN CANDY-MAKING. PANAYIOTIS PANOULIAS, Hoboken, N. J. Filed June 18, 1910. Serial No. 567,619. (Cl. 91—2.)

1. In an apparatus for treating and delivering coated candies, a frame and a blower mounted therein, a coating support, a carriage on said frame adapted to be reciprocated toward and backwardly away from the blower, and means for removably supporting the coating support on said carriage, in combination with scraping means in the path of reciprocation of the support adapted to be contacted thereby.

2. In an apparatus for treating and delivering coated candies, a frame, rails thereon, a blower mounted above the rails, a wheeled carriage on the rails, a removably attached coating support, needles therefor on which the candies rest, a scraping blade arranged in the path of travel of the needles.



1,062,662. ROCK-DRILL TESTER. WILLIAM D. PAYNTER, Grass Valley, Cal. Filed Aug. 7, 1912. Serial No. 713,794. (Cl. 73—51.)



1. A rock-drill tester comprising a conduit confining a body of non-compressible fluid; a piston adapted to receive the blows of the drill-bar and operating against one end of the fluid body; a diaphragm exposed to said fluid body at its other end; a slide rod operated by said diaphragm; a pencil-carrying multiplying-lever operated by the slide rod, and a chart-carrying time-drum upon which the pencil of the multiplying lever operates.

2. A rock-drill tester comprising a conduit confining a body of non-compressible fluid; a piston adapted to receive the blows of the drill-bar and operating against one end of the fluid body; a diaphragm exposed to said fluid body at its other end; means for varying the functional area of said diaphragm; a slide rod operated by said diaphragm; a pencil-carrying multiplying-lever operated by the slide rod, and a chart-carrying time-drum upon which the pencil of the multiplying lever operates.

3. A rock-drill tester comprising a conduit confining a body of non-compressible fluid; a piston adapted to receive the blows of the drill-bar and operating against one end of the fluid body; a diaphragm exposed to said fluid body at its other end; a slide rod operated by said diaphragm; a pencil-carrying multiplying-lever operated by the slide rod; a chart-carrying time-drum upon which the pencil of the multiplying lever operates, and means for reading the chart in terms of pounds pressure consisting of a cut-off valve in the fluid conduit, an independent conduit for a body of non-compressible fluid, to which the diaphragm may be exposed at will, a pump for said independent fluid body, and a pressure gage in said independent conduit.

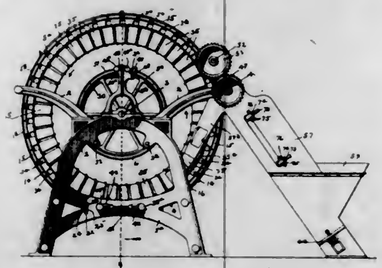
4. A rock-drill tester comprising a conduit confining a body of non-compressible fluid; a piston adapted to receive the blows of the drill-bar and operating against the end of the fluid body; a diaphragm exposed to said fluid body at its other end; a slide-rod positively connected with said diaphragm to act in harmony therewith; a pencil-carrying multiplying-lever operated by the slide rod, and a chart-carrying time-drum upon which the pencil of the multiplying lever operates.

5. A rock-drill tester comprising a conduit confining a body of non-compressible fluid; a piston adapted to re-

ceive the blows of the drill-bar and operating against the end of the fluid body; a diaphragm exposed to said fluid body at its other end; a slide-rod positively connected with said diaphragm to act in harmony therewith; a spring to assist the movement of the slide-rod and diaphragm; a pencil-carrying multiplying-lever operated by the slide rod, and a chart-carrying time-drum upon which the pencil of the multiplying lever operates.

[Claims 6 to 8 not printed in the Gazette.]

1,062,663. BEAN-SNIPPING MACHINE. WILLIAM B. PHINNEY, Chillicothe, Ohio, assignor to The Phinney Engineering Company, Chillicothe, Ohio, a Corporation of Ohio. Filed Apr. 26, 1909, Serial No. 492,373. Renewed Mar. 7, 1913. Serial No. 752,785. (Cl. 146—11.)



1. In a bean snipper, the combination with a rotatable drum comprising internal radial pockets having end openings, and means for automatically opening and closing said pocket openings, of a circular row of radially arranged open-mouthed cups on said drum, said cups communicating respectively with said pockets and cutting devices arranged adjacent to both ends of said pockets.

2. In a bean snipper, the combination with a rotatable drum comprising internal radial pockets, of spring actuated cutter blades arranged adjacent to both ends of the pockets, and means for feeding string-beans into said pockets.

3. In a bean snipper, the combination with a rotatable drum comprising internal radially arranged pockets, said pockets having comparatively narrow end openings, and inclined guide blocks in their outer ends, of cutter blades arranged in shearing engagement with the ends of the pockets, each of said pockets having an outside opening for the reception of beans, the inclined surfaces of said outer end blocks leading to said outer side openings.

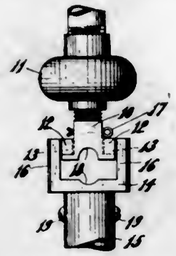
4. In a bean snipper, the combination with a rotatable drum comprising internal radially arranged pockets having openings in their ends, of pivoted closure plates, and means for automatically opening and closing said plates at predetermined periods, and means for feeding string-beans into said pockets while said drum is in motion.

5. In a bean snipper, the combination with a rotatable drum comprising internal radial pockets having openings at each end, said pockets being formed of reduced width toward their inner ends, of cutting members supported in shearing relations to the end openings of said pockets, and means for feeding string-beans laterally into said pockets.

[Claims 6 to 12 not printed in the Gazette.]

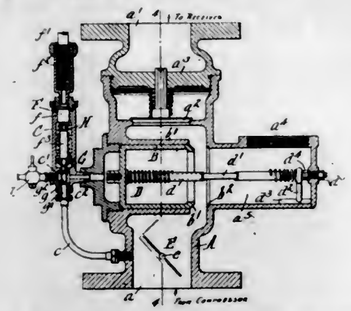
1,062,664. FIXTURE-COUPLING. ARTHUR POLACHECK, Milwaukee, Wis., assignor to Chas. Polacheck & Bro. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 5, 1911. Serial No. 647,475. (Cl. 248—30.)

A coupling for lighting fixtures, comprising an upper coupling member adapted for overhead support by a ceiling connection and provided with a T-shaped rectangular head, a lower coupling member having parallel upstanding side pieces spaced apart approximately the width of the head, inwardly extending rectangular lugs on the side-pieces forming beneath them a socket of approximately the size and shape of the head to receive the head in a horizontal movement of the lower coupling member, the laterally projecting parts of the T-shaped head having pockets at their central portions in which said lugs fit



with a downward movement of the lower coupling member, the rectangular shape of the head and its socket and the rectangular shape of the lugs and their pockets preventing a turning or a tilting action of the lower coupling member.

1,062,665. LOAD-CONTROLLING DEVICE. GEORGE M. RICHARDS, Erie, Pa. Filed Oct. 18, 1911. Serial No. 655,272. (Cl. 230—24.)



1. In a load controlling device for fluid compressors, the combination of a casing having inlet and outlet portions which connect respectively with the compressor and with a receiver for the compressed fluid, and an escape opening, a check valve located between the escape opening and the receiver for retaining the pressure in the receiver, a valve cylinder located in said casing between said inlet and outlet openings, a load controlling valve located in said cylinder and adapted to open and close said escape opening, a by-pass adapted to transmit fluid pressure from the inlet portion of said casing to said cylinder, whereby the difference between the fluid pressures in the inlet portion and the escape opening of the casing is transmitted to said cylinder to move said controlling valve to close said escape opening, and means for returning the controlling valve when the pressure in said cylinder is reduced, substantially as set forth.

2. In a load controlling device for fluid compressors, the combination of a casing having inlet and outlet portions which connect respectively with the compressor and with a receiver for the compressed fluid, and an escape opening located between said inlet and outlet portions, a valve cylinder located in said casing between said inlet and outlet openings, a load controlling valve located in said cylinder and adapted to open and close said escape opening, said valve being yieldingly held in its open position, and a by-pass leading from the inlet portion of the casing to said cylinder, whereby fluid pressure from said inlet portion is transmitted to said cylinder to move said controlling valve to close said escape opening, substantially as set forth.

3. In a load controlling device for fluid compressors, the combination of a casing having inlet and outlet portions which connect respectively with the compressor and with a receiver for the compressed fluid, and an escape opening, a check valve located between the escape opening and the receiver for retaining the pressure in the receiver, a valve cylinder located in said casing between said inlet and outlet openings, a load controlling valve located in said cylinder and adapted to open and close said escape opening, a by-pass adapted to transmit fluid pressure from the inlet portion of said casing to said cylinder, whereby the difference between the fluid pressures in the inlet portion and the escape opening of the casing is transmitted to said cylinder to move said controlling valve to close said escape opening, a device located in said casing and adapted to be adjusted to regulate the pressure in the inlet portion, substantially as set forth.

4. In a load controlling device for fluid compressors, the combination of a casing having inlet and outlet portions which connect respectively with the compressor and with a receiver for the compressed fluid, and an escape opening located between said inlet and outlet portions, a check valve located between the escape opening and the receiver for retaining the pressure in the receiver, a valve cylinder located in said casing between said inlet and outlet openings, a load controlling valve located in said cylinder and adapted to open and close said escape opening, a by-pass leading from the inlet portion of said casing to said cylinder, whereby fluid pressure from said inlet portion is transmitted to said cylinder to move said controlling valve to close said escape opening, a spring in said casing for returning the controlling valve when the pressure in the cylinder portion is reduced, and means adjustable exteriorly of said casing for regulating the pressure of said spring, substantially as set forth.

5. In a load controlling device for fluid compressors, the combination of a casing having inlet and outlet portions which respectively connect with the compressor and with a receiver, and an escape opening located between said inlet and outlet portions, a valve movable in a cylinder to open or close said escape opening, a connection between said cylinder and said inlet portion of the casing, whereby the difference between the fluid pressures in the inlet portion and the escape opening of the casing is transmitted to said cylinder to move said valve to close said escape opening, and means actuated by the pressure of the pumped fluid for discharging the fluid from said cylinder to cause said valve to open said escape opening, substantially as set forth.

[Claims 6 to 12 not printed in the Gazette.]

1,062,666. SLACK-ADJUSTER FOR AUTOMATIC BRAKE SYSTEMS. WILLIAM H. SAUVAGE, New York, N. Y. Filed July 2, 1912. Serial No. 707,200. (Cl. 188—49.)



1. In a brake system, the combination of a brake hanger, a brake head, means to move the same and a friction block or shoe operatively connected with the brake hanger, provisions being made for lost motion between the brake hanger and the friction block.

2. In a brake system, the combination of a brake hanger, a brake head, means to move the same, a friction block operatively connected to the brake hanger, provisions being made for lost motion between the brake hanger and the block, and a bar upon which the block is mounted frictionally.

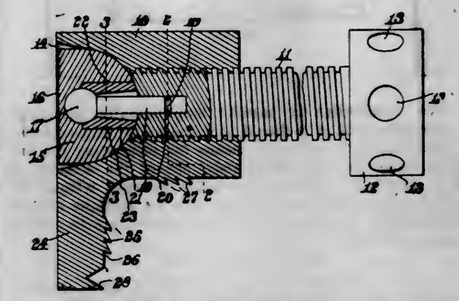
3. In a brake system, the combination of a truck frame, a bar supported thereby, a longitudinally slotted friction block mounted frictionally on said bar, a brake head, and means for operatively engaging the brake head with the longitudinally slotted block.

4. In a brake system, the combination of a truck frame, a hanger supported thereon, a brake head supported by the hanger, a friction block mounted frictionally on the truck frame, the hanger and the friction block being disposed in operative relation to each other provision being made for lost motion between the two.

5. In a brake system, the combination of a truck frame, a hanger suspended thereon, a brake head supported by the hanger, and a longitudinally slotted friction block engaged by the hanger.

[Claims 6 to 8 not printed in the Gazette.]

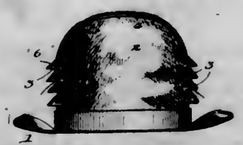
1,062,667. DEVICE FOR RELEASING PERSONS CAUGHT BY ELEVATORS. MICHAEL F. SILVA and EDWARD J. SHALLOW, Boston, Mass. Filed Dec. 26, 1912. Serial No. 738,763. (Cl. 57—44.)



1. In a device of the class described, the combination of a nut provided with a depending flange; a screw threaded thereto; and a face plate secured to the end of said screw and in which said screw is free to turn, said face plate being normally positioned within a depression in said nut.

2. In a device of the class described, the combination of a nut provided with a depending flange; a screw threaded thereto having a ball end; and a face plate fitted to said ball and within which said ball is free to turn, said face plate being normally positioned in a depression in said nut having a wall concentric with said ball member.

1,062,668. HAT. ANDREW C. SWANSON, Seattle, Wash. Filed June 12, 1911. Serial No. 632,614. (Cl. 2—108.)



1. A hat provided with a slit, in combination with means located adjacent the slit to provide a ventilating opening, said means comprising a strip of material having an inclined portion to engage the hat adjacent said slit.

2. A hat provided with a plurality of slits, in combination with means located adjacent said slits to provide a plurality of ventilating openings, said means comprising a strip of material having a plurality of inclined portions to engage the hat adjacent said slits.

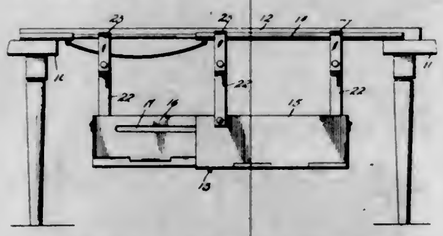
3. A hat having a crown provided with slits on opposite sides thereof, in combination with means located adjacent said slits to provide ventilating openings, said means comprising a strip of material having an inclined portion to engage the hat adjacent said slits.

4. A hat provided with a slit, in combination with means located adjacent said slit to provide a ventilating opening, said means comprising a strip having a pro-

jection provided with an inclined portion to engage the hat adjacent said slit.

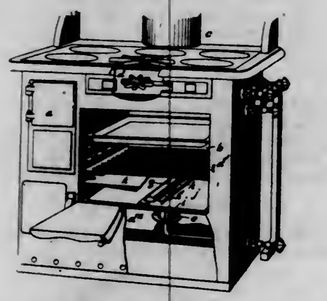
3. A hat having a crown provided with slits on opposite sides thereof, in combination with means located adjacent said slits to provide ventilating openings, said means comprising a strip of material provided on opposite sides with projections to engage the hat adjacent said slits.

1,062,669. ADJUSTABLE RECEPTACLE. NANNIE M. TATE, Mocksville, N. C. Filed Jan. 5, 1912. Serial No. 669,680. (Cl. 68—10.)



The combination of parallel longitudinally adjustable suspending rods, a sectional longitudinally adjustable receptacle beneath said rods, means for suspending the sections from the suspending rods, one of the sections of said receptacle being telescopically engaged within the other section, and means for locking the sections against independent movement to retain the receptacle in adjusted condition.

1,062,670. REMOVABLE GAS-BURNER FOR OVENS. GEORGE A. TINNERMAN, Cleveland, Ohio. Filed June 17, 1910. Serial No. 567,357. (Cl. 158—8.)



1. A removable member for convertible ranges, comprising an oven-bottom protecting-plate or shield, a burner-member superimposed on the shield, and a gas-supply connection for the burner-member, substantially as set forth.

2. A removable oven-burner, comprising a gas connection, a tubular member fitting the same, an associated non-conducting shield, and a superposed burner-member adapted to rest with said shield upon the bottom of the oven, substantially as set forth.

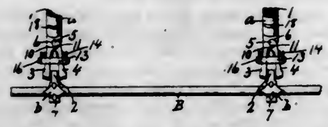
3. In a removable burner-device for convertible-ovens, the combination with a combined air-spreader and elongated burner adapted to be removably positioned upon the oven bottom, of a gas connection, and an air duct extending to said oven, and respectively connecting with the burner and air-spreader; said duct being of materially less area, as compared with the area defined by the burner and air spreader, substantially as set forth.

4. A removable gas burner unit, comprising a non-conducting shield, a superposed air-spreader extending transversely thereof, a superposed burner extending substantially the length of the air-spreader, in combination with a stationary collar adapted to connect the air-spreader with the external air, and a gas connection inclosed therein above which connection the burner removably fits, substantially as set forth.

5. The combination with an elongated gas-burner, of an intermediate gas-connection therefor, a collar or duct of restricted area, and an air distributer extending substantially the length of the burner and connecting intermediately with said duct; said burner and air-distributer comprising a unitary removable structure, substantially as set forth.

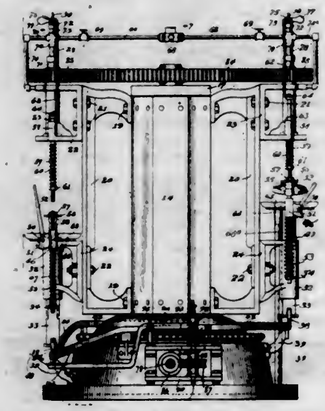
[Claims 6 to 8 not printed in the Gazette.]

1,062,671. THILL-COUPLING. CHARLES E. TOWNLEY, Dryden, N. Y. Filed Jan. 11, 1910. Serial No. 537,439. (Cl. 21—57.)



A thill coupling comprising a pair of jaws, one of said jaws adapted to be fixedly secured at one end to the thill and having its inner side provided with a vertically disposed substantially cylindrical socket having an open side, the other jaw being movable and provided with a cylindrical journal, slidable vertically into said socket and of greater diameter than the width of the open side of the socket, means for securing the other end of said jaws to a coupling member comprising a clamp slidable on said jaws and spring pressed to hold the same in an engagement with the coupling member, and at the same time prevent the removal of the cylindrical journal from its socket.

1,062,672. MACHINE FOR CUTTING BUTTON-BLANKS. ARCHIE P. WALLACE, Keithsburg, Ill. Filed Apr. 13, 1906. Serial No. 311,546. (Cl. 79—16.)



1. In a machine of the character described, the combination with a pedestal and a pillar rising centrally therefrom, of a hollow column surrounding said pillar and provided with a broad base flange of substantially the diameter of said pedestal rotatably supported near its outer margin on the latter, a series of brackets projecting radially from said column, a series of tools supported by said brackets, a series of work-holders also supported by said brackets and disposed in axial alinement with said tools, a stationary cam-track on which said work-holders are stepped, means for imparting rotation to said central column, and means for imparting rotation to said tools, substantially as described.

2. In a machine of the character described, the combination with a pedestal and a pillar rising centrally therefrom, of a hollow column surrounding said pillar and provided with a broad base flange of substantially the diameter of said pedestal rotatably supported near its outer margin on the latter, a series of brackets projecting radially from said column, a series of tools supported by said brackets, a series of work-holders also supported by said brackets and disposed in axial alinement with said tools, a stationary cam-track on which said work-holders are stepped, a driving shaft, driving connections therefrom to said hollow column, a vertical shaft mounted in and coaxially with said pillar, driving connections between said driving shaft and said vertical shaft, and driving connections between the upper end of said vertical shaft and said tools, substantially as described.

3. In a machine of the character described, the combination with a supporting frame, of a rotary annular saw mounted thereon, a shell-holder also mounted on said supporting frame in axial alinement with said saw, means for effecting a relative movement of said saw and shell-holder toward and from each other, a water supply tube within said annular saw having a valve-seat, a valve-stem within said water supply tube having a valve cooperating with said valve-seat, a spring normally forcing said valve to its seat, and means connected to said valve-stem adapted to contact said shell-holder on the approach of the latter to the saw whereby to unseat said valve, substantially as described.

4. In a machine of the character described, the combination with a supporting frame, of a rotary annular saw mounted thereon, a shell-holder also mounted on said supporting frame in axial alinement with said saw, means for effecting a relative movement of said saw and shell-holder toward and from each other, an ejector-rod within said hollow saw, a spring normally forcing one end of said ejector-rod out of the cutting end of the same, and means connected to the other end of said ejector-rod adapted to be contacted by the shell-holder on its approach to the saw whereby to retract the blank ejecting end of said ejector-rod within the saw during the cutting operation, substantially as described.

5. In a machine for cutting button blanks, the combination with a supporting frame, of a rotary annular saw mounted thereon, a shell-holder also mounted on said supporting frame in axial alinement with said saw, means for effecting a relative movement of said saw and shell-holder toward and from each other, a water-supply tube within said annular saw having a valve-seat, a valve-stem within said water-supply tube having a valve cooperating with said valve-seat, said valve-stem extending beyond said valve to form an ejector for the blanks to be cut, a spring normally forcing said valve to its seat, and means detachably connected to said valve-stem adapted to contact said shell-holder on the approach of the latter to the saw whereby to unseat said valve and retract said ejector within the saw during the cutting operation, substantially as described.

[Claim 6 not printed in the Gazette.]

1,062,673. FILING-CASE. EDWARD CHARLES WARD, Sioux Falls, S. D. Filed July 5, 1912. Serial No. 707,771. (Cl. 129—34.)

1. In a file case, a plurality of leaves each having a hinge forming bead at one edge, pintles in said beads extending exteriorly thereof, a binding chain for each end of said pintles, comprising alternate pintle links and connecting links, means in said pintle links engaging said pintle ends, whereby individual longitudinal movement of each of said pintles, independently of the other, is provided for in their respective pintle links.

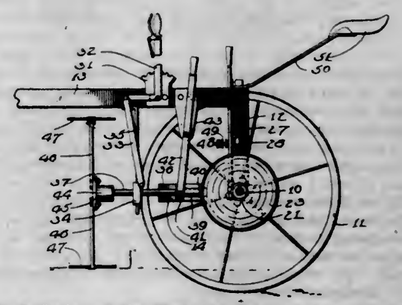
2. In a file case, a plurality of leaves, each having a hinge forming bead at one edge thereof, pintles in said beads, said pintles projecting beyond said beads, grooves in said pintles near the ends thereof, a binding chain for each end of said pintles, comprising alternate pintle links and connecting links, and longitudinal slots in said pintle links embracing said grooves in said pintles, whereby individual longitudinal movement of each of said pintles, independently of each other, is provided for in their respective pintle links.



3. In a file case, a plurality of leaves each having a hinge forming bead at one edge, pintles in said beads extending exteriorly thereof, grooves in said pintles near their outer ends, a binding chain for each end of said pintles, said chains comprising alternate pintle links and connecting links, said pintle links being formed with enlarged openings to pass over the pintle ends, and adapted to be swaged together to form longitudinal slots embracing the grooves in said pintles.

4. In a file case, a plurality of leaves each having a hinge forming bead at one edge, pintles in said beads extending exteriorly thereof, a binding chain for each end of said pintles comprising alternate pintle links and connecting links, longitudinal slots in said pintle links engaging said pintle ends, and notches at each end of said slots, into which said connecting links are adapted to fit, whereby the entire length of said slots is available for longitudinal movement of said pintles.

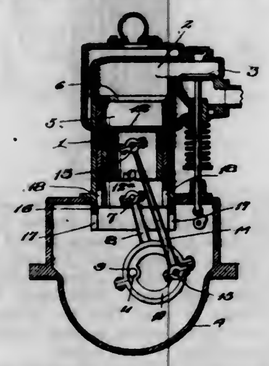
1,062,674. COTTON-CHOPPER. TRUZY WHEELER, Alvarado, Tex. Filed June 27, 1912. Serial No. 706,287. (Cl. 97—46.)



In a device of the kind described, an axle, a pair of wheels supporting said axle, one of said wheels being fixed thereon, spaced collars on said axle, a yoke having its ends pivotally mounted on said axle and bearing against said collars, an arch bar having its end mounted on said axle and bearing against the equal faces of the yoke ends, a tongue extending forward from said arch bar, a collar on said axle bearing against one of the ends of the arch bar, a ratchet member splined to said axle, a spring bearing at one end against the last mentioned collar and at the other end against said ratchet member, a hub provided with ratchet teeth coacting with

the teeth on the ratchet member, a gear carried by said hub and provided with concentric series of beveled teeth, a grooved collar slidably mounted on said axle and bearing against said hub, a cross bar connecting the arms of the arch bar, a shipper lever pivoted thereto and engaging the grooved collar, a bar depending from said tongue and having its lower end slotted, a cuff slidably mounted on said bar, a shaft journaled in said cuff, a yoke mounted on said axle, a gear fixed on said shaft, means to move said shaft longitudinally, means to raise and lower said cuff, and chopper blades carried by said shaft.

1,062,675. INTERNAL-COMBUSTION ENGINE. WILLIAM I. WHEELER, Scottville, Ill. Filed Jan. 30, 1912. Serial No. 674,334. (Cl. 123—75.)

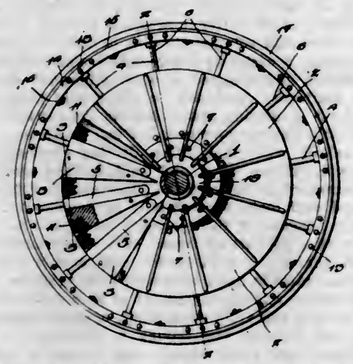


1. An engine of the reciprocating piston type, including a working cylinder, an open ended sleeve mounted to reciprocate in said cylinder, a crank case connected to the cylinder, the cylinder being formed with an extension projecting into the crank case, a piston mounted to reciprocate in said sleeve, a drive shaft mounted in the crank case, an eccentric connection between said drive shaft and the sleeve, the drive shaft being provided with a crank, and a pitman connected to said crank and to the piston, the extension of the cylinder being formed with recesses in the path of movement of said pitman and the adjoining end of the sleeve being formed with corresponding recesses.

2. An engine of the reciprocating piston type, including a working cylinder, a crank case connected thereto, the cylinder being formed with an extension projecting into the crank case, a sleeve mounted to reciprocate in said cylinder, a piston mounted to reciprocate in the sleeve, a crank shaft journaled in the crank case and formed with laterally spaced eccentrics and a crank pin connecting the eccentrics, the sleeve being provided at its crank case end with inwardly projecting studs, connecting rods journaled on said studs and provided with straps mounted on said eccentrics, and a pitman operatively connected to the crank pin and to the piston, the extension of the cylinder and the crank case end of the sleeve being formed with corresponding openings in the path of movement of said pitman and the piston being formed with dismetrically opposite edge recesses adapted to accommodate said studs.

3. An engine of the reciprocating piston type, including a working cylinder, an open ended sleeve mounted to reciprocate in said cylinder, a crank case connected to the cylinder, a piston mounted to reciprocate in said sleeve, a drive shaft mounted in the crank case, an eccentric connection between said drive shaft and the sleeve, the drive shaft being provided with a crank, and a pitman connected to said crank and to the piston, the cylinder being formed at its crank case end with recesses to provide clearances for the pitman, and the sleeve being arranged on the downward stroke of the piston to cover said recesses, for the purpose specified.

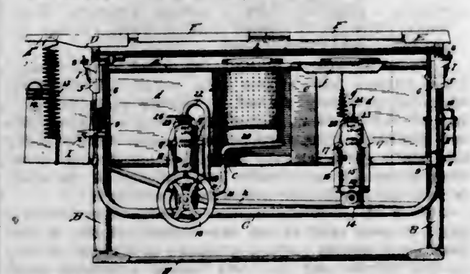
1,062,676. SPRING-WHEEL. FLOYD H. WHITE, Duke, Okla. Filed May 18, 1912. Serial No. 698,273. (Cl. 152—47.)



1. A spring wheel comprising a hub, a pair of spaced disks mounted thereon, a felly, a plurality of spokes pivotally mounted at their inner ends to said hub and securely engaged at their outer ends with said felly, said spokes being formed of telescoping sections, spring members disposed within the inner sections of said spokes and acting on the outer sections thereof, spacing blocks rigidly secured between the aforesaid disks and disposed between said spokes, the one side edge of each of said blocks being provided with a socket, and a plurality of additional coil spring members carried in the sockets of said spacing blocks and engaged with the inner sections of the adjacent spokes to normally force the latter against the adjacent spacing blocks.

2. A spring wheel comprising a hub, a pair of spaced disks mounted thereon, a felly, a plurality of spokes pivotally mounted at their inner ends to said hub and engaged at their outer ends with said felly, said spokes being formed of telescoping members, spring members disposed within the inner sections of said spokes and acting on the outer sections thereof, a plurality of spacing blocks rigidly secured between said spaced disks and arranged alternate of said spokes, the outer ends of said spacing blocks registering with the outer peripheries of said disks, and each of said blocks being provided with a socket in one side edge adjacent the outer end thereof, a plurality of coil spring members carried in the sockets of said spacing blocks and engaged with the inner sections of the adjacent spokes to normally force the latter against the adjacent spacing blocks, and bracing means between said disks and the hub of the wheel.

1,062,677. OIL-STOVE. WILLIAM H. WILDER, Gardner, Mass., assignor to Central Oil and Gas Stove Company, a Corporation of Maine. Filed Apr. 26, 1901. Serial No. 57,559. (Cl. 158—42.)



1. In an oil stove, a burner bowl, a maintained oil level reservoir, a free oil passage between constantly open, a siphon conduit carrying the burner bowl, and vertically

movable independent of the reservoir to raise and lower the burner bowl in relation to the oil line, whereby the raising of the bowl will drain it, and the lowering will fill it partially or wholly with oil, substantially as described.

2. In an oil stove, a burner bowl, a maintained oil level reservoir, a vertically movable siphon conduit carrying the burner bowl extending above and below said bowl, and movable independently of the reservoir, a movable fuel supply connection between the reservoir and the siphon conduit, substantially as described.

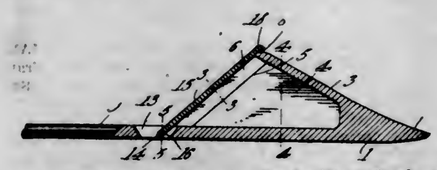
3. In an oil stove, a burner bowl, a maintained oil level reservoir, a vertically movable siphon conduit carrying the burner bowl extending above and below said bowl, and movable independently of the reservoir, an automatically adjustable fuel supply connection between the reservoir and siphon conduit, substantially as described.

4. In an oil stove, a reservoir, a burner and a conduit therebetween having an opening, said burner having a movable siphon connection with the opening of the conduit, the oil level in the reservoir being below the top of the burner and the opening, substantially as described.

5. An oil stove comprising a reservoir having a maintained oil level, a burner bowl having its top above said oil level, an intermediate chamber, a pipe line between said chamber and reservoir including a siphon, and an outlet from the chamber whereby leakage and overflow are prevented, substantially as described.

[Claims 6 to 46 not printed in the Gazette.]

1,062,678. HAY-TESTER. WILLIAM E. WITT, Wichita, Kans., assignor of one-half to Harry L. Cox, Cedar Vale, Kans. Filed Sept. 16, 1912. Serial No. 720,706. (Cl. 83—15.)



1. A sampler consisting of a head with a shank, said head having therein a recess opening rearwardly and having cutting edges at its mouth, and a pivoted cover for said recess having an outer end projecting beyond the wall thereof.

2. A sampler consisting of a head provided with a tapering front end and having at its rear end a recess opening rearwardly and forming a sample receptacle; a shank connected to said head; cutters carried by said head at the mouth of said receptacle; and a pivoted cover for said receptacle with its outer end projecting beyond the wall thereof.

1,062,679. TRANSPLANTING-TOOL. WILLIAM H. WOLFF, Nestor, Cal., assignor of one-half to Clyde R. Olmsted, Nestor, Cal. Filed Sept. 12, 1912. Serial No. 720,047. (Cl. 55—119.)

1. A transplanting tool including a pair of complemental concave jaws having a loose connection with each other, a handle, and a spring strip doubled upon itself, the middle portion of the spring strip being secured to the handle while the end portions thereof are secured to the respective jaws.

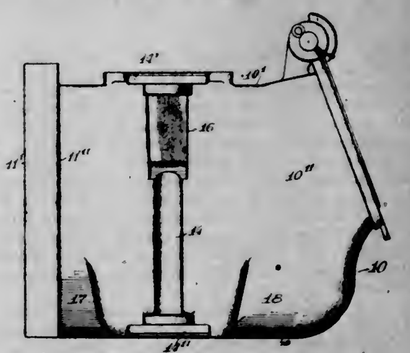
2. A transplanting tool including a pair of complemental concave jaws, offset ears at the upper end of one of the jaws, said offset ears having perforations therein, lugs projecting from the opposite jaw and loosely received within the perforations of the offset ears, a handle, and spring arms projecting from the handle and secured to the jaws.

3. A transplanting tool including a pair of complemental concave jaws, offset ears projecting from the upper end of one of the jaws and having perforations therein, lugs projecting from the opposite jaw and loosely received within the said perforations, a handle, and a spring strip doubled upon itself, the intermediate portion of the



spring strip being secured to the handle while the end portions thereof are secured to the upper ends of the complemental jaws at points remote from the offset ears and lugs.

1,062,680. JOURNAL-BOX. GEORGE ALVERADO WOODMAN, Chicago, Ill., assignor to Kirby Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed June 25, 1908. Serial No. 440,205. (Cl. 64—10.)



1. As a new article of manufacture, a cast steel journal box having an integral arch-bar seat and outside and inside dust guard walls, said box being substantially rectangular in section through the arch-bar seat and having its bottom rounded transversely both interiorly and exteriorly between the arch bar seat and the inside dust guard wall.

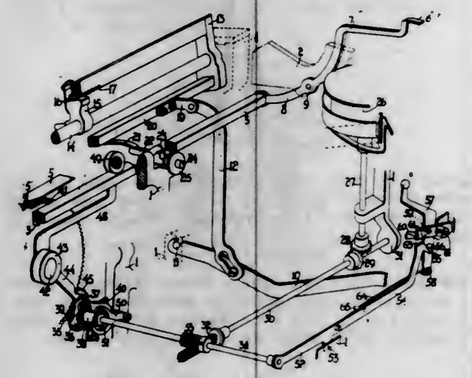
2. As a new article of manufacture, a cast steel journal box substantially rectangular in section through the arch-bar seat and having its bottom rounded transversely both interiorly and exteriorly adjacent to said rectangular section and on both sides thereof.

1,062,681. TYPE-WRITING MACHINE. FRANK A. YOUNG, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 24, 1910. Serial No. 583,560. (Cl. 197—169.)

1. In a typewriting machine, a carriage, a spring for driving the same, an escapement mechanism for controlling the feed of the carriage, means for releasing the carriage from the escapement mechanism, a gear driven by the carriage spring, a ribbon feeding mechanism adapted to be driven from said gear, a shiftable pinion for connecting and disconnecting the gear and the ribbon feed

mechanism, and manipulable means shiftable independently of said pinion for silencing said ribbon-feed mechanism.

2. In a typewriting machine, a carriage, a spring for driving the same, an escapement mechanism for controlling the feed of the carriage, means for releasing the carriage from the escapement mechanism, a gear driven by the carriage spring, a ribbon feeding mechanism, a pinion for driving the ribbon feed mechanism, means operated from the carriage for connecting and disconnecting said pinion and carriage spring gear, and manipulable means shifting said ribbon-feeding mechanism.



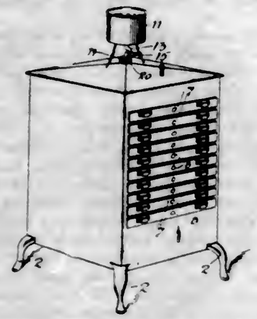
3. In a typewriting machine, a carriage, a spring for driving the same, a rack on the carriage, and an escapement mechanism coöperating with the carriage rack to control the feed of the carriage, means for disengaging the rack from the escapement mechanism to permit of forward throw of the carriage, a ribbon feed mechanism, a gear attached to and driven by the carriage spring, a pinion attached to the ribbon feed mechanism, for driving the same, means driven by the carriage rack as the latter moves to and from the escapement mechanism, for connecting and disconnecting said carriage spring gear and said pinion, and manipulable means shiftable independently of said pinion for silencing said ribbon-feeding mechanism.

4. In a typewriting machine, a carriage, a spring for driving the same, a rack on the carriage, and an escapement mechanism coöperating with the carriage rack to control the feed of the carriage, means for disengaging the rack from the escapement mechanism to permit of forward throw of the carriage, a ribbon feed mechanism, a gear attached to and driven by the carriage spring, a pinion attached to the ribbon feed mechanism, for driving the same, a lever operated by the carriage rack as the latter moves to and from the escapement mechanism, a pinion carried by said lever into and out of a position in which it connects said carriage spring gear to said ribbon feed pinion, and manipulable means shiftable independently of said pinion for silencing said ribbon-feeding mechanism.

5. In a typewriting machine, a carriage, a spring for driving the same, a rack on the carriage, and an escapement mechanism coöperating with the carriage rack to control the feed of the carriage, means for disengaging the rack from the escapement mechanism to permit of forward throw of the carriage, a ribbon feed mechanism, a gear attached to and driven by the carriage spring, a pinion attached to the ribbon feed mechanism, for driving the same, a lever having resilient bearing against the carriage rack to be operated by the carriage rack as the latter moves to and from the escapement mechanism, and a pinion carried by said lever into and out of a position in which it connects said carriage spring gear to said ribbon feed pinion.

[Claims 6 to 20 not printed in the Gazette.]

1,062,682. PROCESS OF TESTING SEEDS. BURTON H. ADAMS and WALTER C. ADAMS, Decorah, Iowa. Filed May 9, 1910. Serial No. 560,187. (Cl. 47—30.)



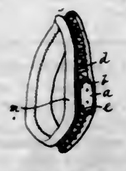
The process of germinating seed in bulk, which consists in exposing the seeds out of contact with one another to the germinating influence of pure moist warmed air free from products of combustion and circulated continuously over and about said seeds, and simultaneously supplying moisture to their upper surface by allowing water to drip on them, and supplying water below at their areas of contact with a supporting surface by allowing the water to soak slowly through a porous absorbent support, said moisture in quantity and initially supplied at a temperature substantially the same as that of the circulating warm air, periodically withdrawing a part of said bulk of seed for inspection, and maintaining these germinating influences substantially constant until the good seeds germinate.

1,062,683. PRESERVATIVE AND METHOD OF MAKING THE SAME. BOJE R. ALBERTSEN, San Francisco, Cal., assignor of one-half to Achille Levy, San Francisco, Cal. Filed Aug. 30, 1910. Serial No. 579,773. (Cl. 99—8.)

1. The process of manufacturing a preserving liquid for eggs, which consists in adding, to a slaked lime soultion, kaolin mixed with water to the consistency of cream, thoroughly stirring the same, allowing it to settle, drawing off the clear preserving liquid.

2. A preservative liquid consisting of a slaked lime solution, and kaolin suspended therein and floated thereon.

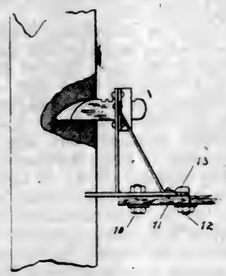
1,062,684. HORSE-COLLAR. FREDERICK ANDREWS, Mercer, New Zealand. Filed May 31, 1912. Serial No. 700,776. (Cl. 54—19.)



1. In combination with a horse or like collar, a metal shield conforming to the outside shape of the collar, and adapted to be fixed to the packing of the body of the collar but independent of the hames and of the covering of the after wale, said shield being located in the neighborhood of the draft hook, and extending over the front and side of the collar inside the after wale, substantially as and for the purpose set forth.

2. A concave shield with its top and bottom ends cut to an angle, having two projections at the back for passing into the packing of the collar, and a number of holes for tying or lacing the shield on to the padding of the collar forming the collar body, substantially as hereinbefore described and illustrated.

1,062,685. FOOTBOARD FOR WOOD-CHOPPERS. JAMES R. ANDRUS, Woodland, Wash. Filed Oct. 1, 1912. Serial No. 723,335. (Cl. 20—84.)



1. In a device of the character described, a bar having a plurality of notches in its upper edge and adapted to be driven horizontally into the body of a tree, an L-shaped frame with braces between the limbs having a vertical slot in one limb through which the said bar passes, the portion of the limb above said slot engaging either of said notches to sustain said limb against the body of the tree and barbs projecting forwardly from the base of the frame to engage in the tree.

2. In a device of the character described, a bar having a plurality of notches in its upper edge and adapted to be driven horizontally into the body of a tree, an L-shaped frame with braces between the limbs having a vertical slot in one limb through which the said bar passes, the portion of the limb above said slot engaging either of said notches to sustain said limb against the body of the tree and means on the frame to engage the side of the bar to prevent lateral movement, a barb projecting forwardly from each corner of the base, a foot board mounted upon said base and adapted to swing in a horizontal plane and means for securing the foot board at any angle desired.

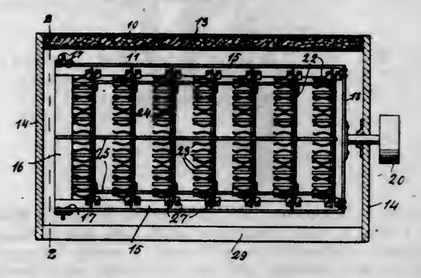
1,062,686. METHOD OF MANUFACTURING A COMPOSITION FOR PAVING AND LIKE PURPOSES. JOSEPH HAY AMIES, Philadelphia, Pa., assignor to Amies Asphalt Company, a Corporation of South Dakota. Filed Nov. 15, 1909. Serial No. 528,086. (Cl. 106—44.)



1. The herein described method of manufacturing a paving composition which consists in placing together in a mixing machine broken stone and fibrous material in bulk, operating the mixer to secure tearing of the fibrous material into relatively small pieces said tearing of the fibrous material resulting from the grinding action of the stones in the operation of the mixer, continuing the operation of the mixer to well distribute the fibrous material among the broken stones and while the mixer is still being operated adding to the said broken stones and fibrous material a bituminous cement and continuing the operation of the mixer until said cement becomes well mixed with the agitating stones and fibrous material whereupon the finished composition is immediately dumped from the mixer.

2. The herein described method of manufacturing a paving composition which consists in placing together in a mixing machine broken stone and paper in bulk, operating the mixer to secure tearing of the paper into relatively small pieces said tearing of the paper resulting from the grinding action of the stones in the operation of the mixer, continuing the operation of the mixer until the paper fibers become somewhat balled or agglomerated said operation serving to well distribute the paper fibers thus balled or agglomerated among the broken stones and while the mixer is still being operated adding to the said broken stones and torn paper a bituminous cement and continuing the operation of the mixer until said cement becomes well mixed with the agitating stones and paper, whereupon the finished composition is immediately dumped from the mixer.

1,062,687. INCUBATOR. HARRIS W. AXFORD, Chicago, Ill. Filed Aug. 26, 1912. Serial No. 717,079. (Cl. 119—44.)



1. An egg holder for incubators comprising an open frame, vertical supports mounted in said frame, said supports being spaced from each other laterally and made of foraminous material, and egg-holding clasps extending horizontally from the side of the supports.

2. An egg holder comprising diametrically opposite bars, means for holding said bars in spaced and parallel relation, laterally spaced vertical supports mounted between the bars, said supports being made of foraminous material, and egg-holding clasps extending horizontally from the side of the supports.

3. An egg holder comprising diametrically opposite T-bars the webs of which point inward and are provided with notches, means for connecting said bars in spaced and parallel relation, vertical supports mounted between the bars on the webs thereof and seating in the notches in said webs, whereby said supports are held spaced from each other, and egg-holding clasps extending horizontally from the side of the supports.

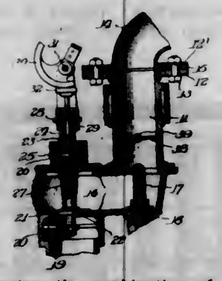
4. An egg holder comprising diametrically opposite T-bars having their webs pointing inward, means for connecting said bars in spaced and parallel relation, vertical supports mounted between the bars, spaced transverse members secured to one side of the supports and projecting from the edge thereof, the projecting portions of said members straddling the webs of the T-bars, and egg-holding clasps extending horizontally from the side of the supports.

5. An egg holder comprising diametrically opposite bars, means for connecting said bars in spaced and parallel relation, vertical supports mounted between the bars, arms extending from one side of the supports and engageable with adjacent supports for holding the supports in laterally spaced relation, and egg clasps extending horizontally from the side of the supports.

1,062,688. CARBURETER. CHARLES L. BASTIAN, Chicago, Ill. Filed Sept. 6, 1910. Serial No. 580,478. (Cl. 48—155.2.)

1. In a carbureter, the combination of a throttle disk disposed across the mixture outlet of the carbureting chamber, an air-intake valve disk, a stem upon which said disk is loosely mounted, a shoulder on said stem, a spring surrounding said stem between said shoulder and said valve disk, and connections between said valve stem and the throttle disk whereby the tension of said spring will be increased proportionately to the opening of said throttle disk.

2. In a carbureter, the combination of a throttle disk disposed across the mixture outlet of the carbureting chamber, an air-intake valve disk, a stem upon which said valve disk is loosely mounted, a shoulder on said stem, a spring interposed between said shoulder and said valve disk, a pivotally mounted cam disposed outside the valve chamber, and a connection between said cam and said throttle disk whereby said cam will be actuated to depress the valve stem and increase the tension of the air-intake valve disk controlling spring proportionately to the opening of the throttle valve disk.



3. In a carbureter, the combination of an air-intake valve disk, a valve stem upon which said disk is loosely mounted, a shoulder on said stem, a spring interposed between said shoulder and said valve disk, an adjusting screw for adjusting the normal tension of said spring, a cam pivotally mounted in position to engage the outer end of said valve stem, a throttle disk, and operating means connected to said throttle disk and to said cam for simulatneously opening the throttle disk and increasing the tension of said spring.

4. In a carbureter, the combination of a carbureting chamber, an air-intake valve, a mixture outlet, a throttle valve disposed in said mixture outlet, and means for increasing the resistance to the opening of the air-intake valve proportionately to the amount of opening of the throttle valve.

5. In a carbureter, the combination of an air-intake valve, a mixture outlet, a spring pressing the said air-intake valve on its seat, a throttle valve disposed in said mixture outlet, and means for increasing the pressure of the said spring on the said air-intake valve proportionately to the amount of opening of the throttle valve.

[Claims 6 and 7 not printed in the Gazette.]

1,062,689. UNDERFRAME FOR DUMPING-CARS. WILLIAM P. BETTENDORF, deceased, Bettendorf, Iowa, by Joseph W. Bettendorf, administrator, Bettendorf, Iowa. Original application filed Mar. 5, 1910, Serial No. 547,569. Divided and this application filed May 29, 1911. Serial No. 630,188. (Cl. 105—76.)



1. In a dump-car an underframe comprising end-sills, having integral rear extensions that are provided with depressed seats in which the center-sills are secured, center-sills, integral body-bolsters having transverse depressions in the upper part of their central portions in alinement with the seats in the rear extensions of said end-sills in which said center sills are secured and supported, and side-sills secured to the ends of said body-bolsters and provided with flanges that project beyond the longitudinal planes of the ends of said bolsters, the upper surfaces or edges of said bolsters and the upper flanges of all of said sills being disposed in the same horizontal plane and each adapted to contact with and support the floor of the car.

2. In a dump-car an underframe comprising side-sills, body-bolsters carried by said side-sills and having transverse depressions in the upper part of their central portions, center-sills extending past said bolsters and secured in the depressions therein, end-sills, and an integral rear extension for each end-sill having a depressed seat in longitudinal alinement with each other and with the bolster depression in which the ends of said center-sill are secured, said bolsters and all of said sills including said end-sill rearward extension having their upper surfaces disposed in the same horizontal plane and each adapted to contact with and support the floor of the car.

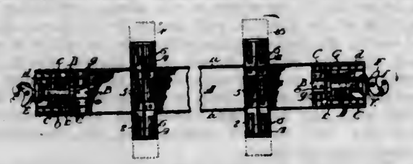
3. In a dump-car an underframe comprising side-sills, body-bolsters carried by said side-sills and having transverse depressions in the upper part of their central portions, center-sills extending past said bolsters and secured in the depressions therein, imperforate end-sills, and an integral rear extension for each end-sill having a depressed seat in longitudinal alinement with each other and with the bolster depression in which the ends of said center-sill are secured, said bolsters and all of said sills including said end-sill rearward extensions having their upper surfaces disposed in the same horizontal plane and each adapted to contact with and support the floor of the car.

4. In a dump-car an underframe comprising side-sills, center-sills extending continuously and terminating mediate the bolster and the ends of the car, end-sills, central integral rearward extensions for said end-sills to which the ends of said center-sills are secured, and integral body-bolsters carried by said side-sills and having their central portions recessed in longitudinal alinement with the rear extensions of said end-sills in which recess said center-sills are supported, all of said sills and said bolsters having their upper surfaces disposed in the same horizontal plane and each adapted to contact with and directly support the floor of the car.

5. In a dump-car an underframe comprising side-sills, end-sills, having rearward extensions provided with depressed seats in which the center-sills are secured, center-sills, said side-sills and center-sills made of integral rolled metal beams, and a body-bolster supporting said center-sills and consisting of two superimposed members the upper member of which is movable and made of integral cast-metal and the lower relatively stationary member to which said upper member is connected is provided with center-bearings, said upper member provided with a depression through which said center-sill passes and is seated.

[Claims 6 and 7 not printed in the Gazette.]

1,062,690. METAL UNDERFRAME CONSTRUCTION FOR CARS. WILLIAM P. BETTENDORF, deceased, Bettendorf, Iowa, by Joseph W. Bettendorf, administrator, Bettendorf, Iowa. Original application filed May 23, 1910, Serial No. 562,922. Divided and this application filed Apr. 25, 1912. Serial No. 693,085. (Cl. 213—42.)



1. An underframe for cars comprising a single I-beam, the web of which is horizontally disposed, and a draft-rigging receptacle and follower-stops mounted on and secured directly to each end of the web thereof.

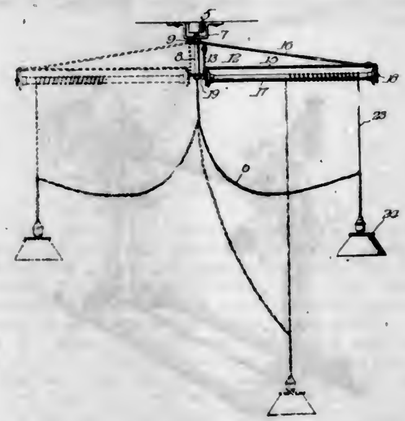
2. An underframe for cars comprising a single I-beam, the web of which is horizontally disposed extending from end to end of the car, and a draft-rigging receptacle and follower-stops secured direct to the ends thereof between its upper flanges.

3. An underframe for cars comprising a single I-beam, the web of which is horizontally disposed extending from end to end of the car past the bolsters with its flanges and web intact from end to end, and a draft-rigging receptacle and follower-stops secured direct to the end portions of said center-sill between its flanges.

4. An underframe for cars comprising a single I-beam the web of which is horizontally disposed, a cast-metal draft-rigging receptacle and follower-stops secured to the web of the end portions thereof and provided with a chamber therein for the draft-rigging and with a passage connecting said chamber to the front end of the receptacle, and with a recess in the transverse wall of said chamber opposite said passage, a basal flange extending from the rear transverse wall of said chamber, and braces connecting said rear wall and flange.

5. An underframe for cars comprising a body-bolster near each end thereof, a rolled metal beam center-sill so disposed that its web is horizontal and which connects said body-bolsters, and an integral draft-rigging receptacle and follower-stops secured directly to the ends of the web of said center-sill.

1,062,691. ADJUSTABLE LIGHT-HOLDER. THOMAS N. BURKE, Chicago, Ill. Filed Aug. 24, 1912. Serial No. 716,795. (Cl. 240—71.)



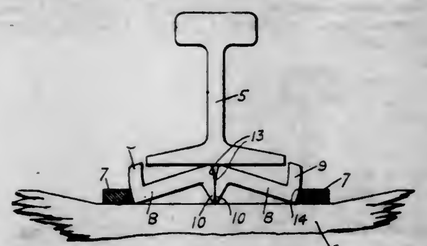
1. An adjustable light holder comprising a hollow pivot stud adapted to receive an electric light cord, a bracket pivotally supported by and adapted to swing about said stud, a roller mounted at each end in said bracket, and a flexible supporting cord attached at one end to said roller and connected with an electric lamp whereby the height of said lamp may be adjusted by winding the cord on or unwinding the cord from said roller.

2. An adjustable light holder comprising a hollow pivot stud provided with an insulating lining and adapted to receive an electric light cord, a bracket pivotally supported by said stud and adapted to swing in an arc about the stud, a spring roller supported at each end in said bracket, and a flexible supporting cord attached at one end to said roller and adapted to be connected with an electric lamp whereby the height of said lamp may be adjusted by winding the cord on or unwinding the cord from said roller.

3. An adjustable light holder comprising a hollow insulated pivot stud adapted to receive an electric light cord, a pivotally mounted bracket projecting laterally from said stud and adapted to swing in an arc about the stud, a spring roller carried by said bracket, a supporting cord attached to said roller and adapted to be connected with an electric lamp, said cord being adapted to be wound on and unwound from the roller to vary the height of the lamp and also to vary the horizontal distance of the lamp from the stud, and said roller and bracket being adapted to swing about the stud to vary the angular position of the lamp relatively to the stud.

4. An adjustable light holder comprising a hollow pivot stud adapted to receive the wire cord of the light to be supported, a bracket pivotally mounted on said stud and provided adjacent each end with downwardly projecting portions, a spring roller having its ends supported in said downwardly projecting portions of the bracket and a supporting cord attached at one end to said roller substantially midway its ends and adapted to be connected at its other end with the lamp to support the same from the roller whereby the lamp may be swung in an arc about the light wire extending through said pivotal stud.

1,062,692. INTERLOCKING TIE-PLATE FOR RAILS. ALBERT L. COLE, Auburndale, Mass., assignor to Francis J. V. Dakin, trustee, Boston, Mass. Filed Dec. 2, 1912. Serial No. 734,483. (Cl. 238—2.)



1. A tie plate for railroad rails comprising a frame and two clamps within said frame but not secured thereto, each of said clamps having, at its outer end, means for gripping a rail.

2. A tie plate for railroad rails comprising two gripping clamps, each of said clamps being provided with means on one end for gripping the foot of a rail and with means on the other end for penetrating a sleeper, and a frame for holding said clamps in operative position.

3. A tie plate for railroad rails comprising a frame and two gripping clamps being provided at one end with means for gripping the foot of a rail, and with means on the other end for penetrating a sleeper.

4. A tie plate for railroad rails comprising a frame and two clamps fitting within said frame but not secured thereto, each of said clamps having a flange for gripping the foot of a rail.

5. A tie plate for railroad rails comprising two gripping clamps each of said clamps having a flange at one end for gripping the foot of a rail and with means at the other end for penetrating a sleeper, and a frame for holding said clamps against displacement.

[Claims 6 to 14 not printed in the Gazette.]

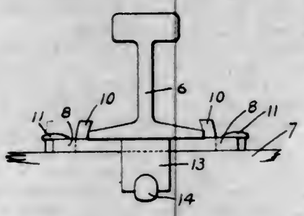
1,062,693. INTERLOCKING TIE-PLATE FOR RAILS. ALBERT L. COLE, Auburndale, Mass., assignor to Francis J. V. Dakin, trustee, Boston, Mass. Filed Feb. 6, 1913. Serial No. 746,434. (Cl. 238—2.)

1. A tie plate for railroad rails comprising a frame having a downwardly turned lip to engage one side of the sleeper, and vertically movable means within said frame for gripping the foot of a rail.

2. A tie plate for railroad rails comprising a frame having a downwardly turned lip to engage one side of a sleeper and means within said frame for gripping the foot of a rail, said means being so formed that an increase of weight on the rail serves to increase their grip upon the rail.

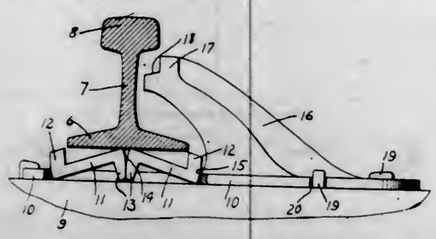
3. A tie plate for railroad rails comprising a frame having a downwardly turned lip to engage one side of a sleeper, and gripping members within said frame, but not secured thereto, for gripping the foot of a rail.

4. A tie plate for railroad rails comprising a frame having a downwardly turned lip to engage one side of a



sleeper, and two gripping members within said frame; said members being movable in a vertical direction and each having a flange for gripping the foot of a rail.

1,062,694. COMBINATION TIE-PLATE AND BRACE FOR RAILROAD-RAILS. ALBERT L. COLE, Auburndale, Mass., assignor to Francis J. V. Dakin, trustee, Boston, Mass. Filed Feb. 12, 1913. Serial No. 747,837. (Cl. 238—2.)



1. A combination tie-plate and brace comprising a frame adapted to fit under a rail, a brace integral with said frame for engaging the upper portion of a rail to support the same against lateral thrust and independent means within said frame for gripping the foot of a rail.

2. A combination tie-plate and brace comprising a frame adapted to be mounted between a rail and sleeper and having at one end an integral brace and means within said frame for gripping the foot of a rail; said means being so formed that any weight on the rail serves to increase their grip on the rail.

3. A combination tie-plate and brace comprising a frame adapted to be mounted between a rail and a sleeper and having at one end an upwardly and inwardly curved brace for engaging the upper portion of a rail and independent means within said frame for gripping the foot of a rail; said means being so formed that their grip on the rail is increased by an increase of weight on the rail.

4. A combination tie-plate and brace comprising a frame and a brace at one end of said frame and integral with it and vertically movable means within said frame for gripping and holding the foot of a rail.

5. A combination tie-plate and brace comprising a frame provided with an integral brace to engage and support the upper part of a rail and vertically movable means within said frame for receiving and gripping the foot of a rail.

[Claims 6 to 9 not printed in the Gazette.]

1,062,695. SANITARY DRINKING-CUP. LOUIS A. CORNELIUS, Grand Rapids, Mich. Filed Apr. 8, 1912. Serial No. 689,278. (Cl. 137—109.)

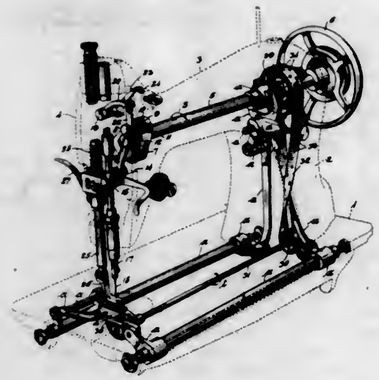
1. A sanitary drinking cup comprising a coupling adapted for attachment to a faucet and having a pair of ears projecting therefrom, a tubular arm provided with a lateral projection intermediate its ends pivoted in said ears of the coupling and thereby suspended by the coupling from the faucet out of alinement with the faucet when out of use, said arm having a receiving end adapted to swing into coöperative relation with said coupling when in use, a drinking cup on the other end of said arm, and a handle



carried by the arm for manipulating the same on its pivot.

2. A sanitary drinking cup comprising a coupling adapted for attachment to a faucet and having a projection thereon, a tubular arm provided with a projection intermediate its ends pivoted to said projection of the coupling and thereby supported below the discharge end of the faucet and out of alinement with the faucet when out of use, said arm having one end adapted to swing into cooperative relation with said coupling when in use, and a drinking cup on the other end of said arm.

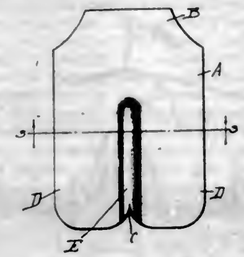
1,062,696. SEWING-MACHINE. HENRY J. COX, Elizabeth, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed May 9, 1911. Serial No. 625,960. (Cl. 112—15.)



In a sewing machine, the combination of a stitch-forming mechanism comprising a main-shaft having rotary movements in a direction toward the operator, a loop-taker having rotary movements in a direction away from the operator, a bobbin-case provided with a notched flange journaled in the loop-taker and held against rotation, a needle-thread take-up lever pivotally connected to a stationary part of the sewing machine and operatively connected with the main-shaft with its thread end in the direction of the operator and having movements in a vertical plane transverse to the axis of said main-shaft, and connections for connecting the main-shaft with the loop-taker to effect a multiple of rotations of the latter to one rotation of said main-shaft.

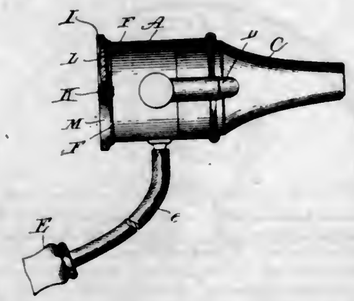
1,062,697. BLANK FOR APRONS. LOUIS DAUM, Chicago, Ill., assignor to Richard Pick Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 28, 1911. Serial No. 646,496. (Cl. 2—54.)

As a new article of manufacture, an apron blank comprising a single piece of flexible material having a central longitudinally disposed concavo convex rib extending from a point adjacent the middle to the lower end of said blank, said rib adapted to be severed longitudinally of its ridge and the respective portions thereof on either side of



the line of severance overlapped upon each other to form a bifurcated apron.

1,062,698. AURISCOPE. HENRY L. DE ZENG, Philadelphia, Pa. Filed Mar. 5, 1910. Serial No. 547,450. (Cl. 128—24.)



1. In a device of the character described, a casing having a cover with two or more openings therein adapted to register with a speculum extending therefrom, means for producing air pressure within said casing, a lens registering with one of said openings in said cover, and means for closing the other opening or openings when desired.

2. In a device of the character described, a casing having an opening adapted to register with a speculum extending therefrom, and means for introducing air under pressure into the interior of the said casing, there being two or more openings through the wall of the casing opposite said speculum, a lens, and means arranged to bring said lens across one of said openings and close the other opening.

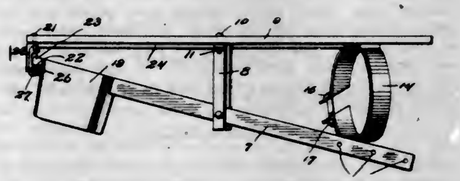
3. In a device of the character described, a casing having a plurality of openings in one wall, a member movably mounted upon said casing and having an opening therein in a position to register with the openings in said casing, a lens in the aforesaid opening in said member, there being a second opening in said member in a position to register simultaneously with one of the openings in said casing when the lens registers with another of said openings, and a speculum extending from said casing opposite the openings.

4. In a device of the character described, a casing having two or more openings in one wall, a member movably mounted upon said casing and having an opening therein in a position to register with the openings in said casing, a lens in the aforesaid opening in said member, there being a second opening in said member in a position to register with one of the openings in said casing when the lens registers with another of said openings, a speculum extending from said casing on the side opposite that having the openings, and means for producing pressure within said casing.

5. In a device of the character described, a casing having two or more openings in one end, a member movably mounted on said casing and having two or more openings therein so located as to register with the openings in the casing, a lens in one of said openings, and a speculum projecting from the opposite end of the casing.

[Claims 6 to 10 not printed in the Gazette.]

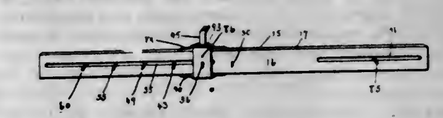
1,062,699. TIME-CONTROLLED DRAFT AND DAMPER REGULATOR. BASSETT FERGUSON, Philadelphia, Pa. Filed Jan. 6, 1912. Serial No. 669,726. (Cl. 161—8.)



1. A device of the character described, comprising a plate, a vertically swinging lever fulcrumed between its end and enlarged at one end forming a weight, flexible devices connecting the unweighted end of the lever with the draft and damper of a furnace, whereby the movement of the lever controls the said draft and damper, a tripping arm bent at an angle and pivoted to the plate, a catch pivotally secured to the plate, a lug on the weighted end of the lever and resting on the catch, whereby the weighted end of the lever is held elevated, the short end of the tripping arm engaging the catch, a clock holding clamp secured to the plate, a clock secured in the clamp, and a flexible device connecting the long end of the tripping arm with the alarm winding key of the clock, whereby the turning of the key causes the tripping arm to move the catch and release the weighted end of the lever, substantially as described.

2. A device of the character described, comprising a plate, a vertically swinging lever fulcrumed between its ends and enlarged at one end forming a weight, flexible devices connecting the unweighted end of the lever with the draft and damper of a furnace, whereby the movement of the lever controls the said draft and damper, a tripping arm bent at an angle and pivoted to the plate, a catch pivotally secured to the plate, and having a hole therein, a shoulder on the catch, a lug on the weighted end of the arm and resting on the shoulder, whereby the weighted end of the lever is held elevated, a hook on the short end of the tripping arm and positioned in the opening in the catch, a clock holding clamp secured to the plate, a clock secured in the clamp and a flexible device connecting the long end of the tripping arm with the alarm winding key of the clock, whereby the turning of the key causes the flexible device to wind on the key and causes the tripping arm to move the catch and release the weighted end of the lever, substantially as described.

1,062,700. PROPORTIONAL-SPACER DEVICE. JOSEPH A. FIRSCHING, Utica, N. Y. Filed Feb. 16, 1911. Serial No. 608,965. (Cl. 73—113.)

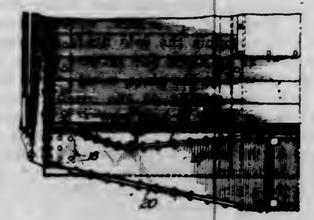


1. In a proportional spacer a fixed measuring point, a fixed rack adjacent to said fixed point, a sliding rack plate beyond said fixed rack and having a single rack and a loose pinion engaging said fixed rack, additional successive sliding rack plates therebeyond, each having two racks and a pinion therebetween, the pinion of the first double-racked plate being half the size of the pinion of the said single racked plate and the pinions on the successive

plates thereafter being alternately the size of said first mentioned and said second mentioned pinions, each of said pinions engaging on either side the rack of the next adjacent rack plate, slideways for said sliding rack plates, and means for operating said sliding rack plates and indicating the position thereof.

2. In a proportional spacer a fixed revoluble pinion, a fixed rack on either side thereof and on either side a series of successive sliding rack plates, each having two racks and a loose pinion intermediate of the said racks, the first and every alternate one of said last mentioned pinions being twice the size of said fixed pinion and the other pinions being the size of the said fixed pinion, each of said pinions engaging on either side the rack of the next adjacent rack plate, slideways for said rack plates and means for operating said sliding rack plates and indicating the position thereof.

1,062,701. CAR-FLOOR CONSTRUCTION. WILLIAM E. FOWLER, Sr., Chicago, Ill., assignor to The Fowler Car Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 16, 1912. Serial No. 720,550. (Cl. 105—76.)



1. In a railway-car, the combination of center-sills, side-sills, transverse-members having depressed portions, slotted metallic angular bars seated in said depressed portions and extending from end to end of the car, and floor-members bolted to said angular bars through said slots, substantially as described.

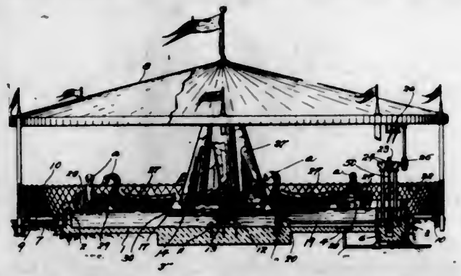
2. In a railway-car, the combination of center-sills, side-sills, and transverse-members having depressed-portions, slotted Z-bars seated in said depressed-portions and extending from end to end of the car, and floor-members bolted to said Z-bars through said slots, substantially as described.

3. In a railway-car, the combination of center-sills, side-sills, and transverse-members having depressed-portions, a pair of Z-bars resting in said depressed-portions and extending from end to end of the car, floor-boards resting on said center-sills, side-sills, and Z-bars, and being positively connected to said Z-bars only, substantially as described.

4. In a railway-car, the combination of center-sills and side-sills, transverse-members, angular members seated on said transverse-members and extending from end to end of the car, floor-boards resting on said side-sills and angular members, means for securing said boards to said angular members and a side-wall, said side-wall having a rabbeted connection to said floor-boards and adapted by interlocking engagement to hold said floor-boards in position, substantially as described.

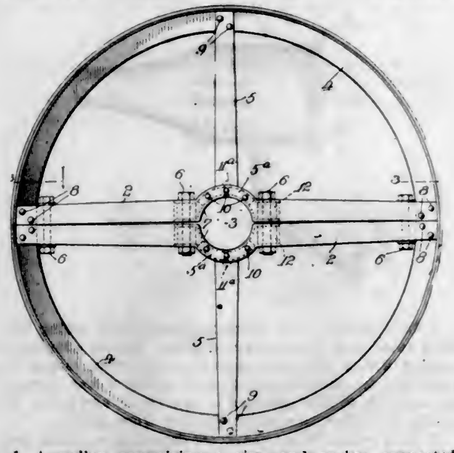
1,062,702. AMUSEMENT APPARATUS. HENRY D. GARDY, Philadelphia, Pa. Filed May 4, 1910. Serial No. 559,327. (Cl. 46—27.)

Aquatic apparatus comprising a multiplicity of boats, a rotatable driving element of relatively large diameter, relatively short arms in pairs connecting each boat with said driving element, adjacent arms being arranged relatively close together throughout their length, an angle iron arranged between and rigidly connecting together each pair of arms substantially midway between said boats and said driving element the assembled angle irons being of octagonal configuration, an eye-bolt for securing



each end of said angle iron to place and a short chain section between and secured to adjacent eye-bolts.

1,062,703. PULLEY. HENRY J. GILBERT, Saginaw, Mich. Filed Apr. 7, 1904. Serial No. 202,051. (Cl. 64—18.)



1. A pulley comprising a rim, and spokes connected therewith, each spoke being an integral structure comprising a central hub portion which has outwardly directed flanges projecting from its opposite side edges and radially extended from the outer portions of such hub to form spoke arms connected at their outer ends to the rim, and which has the two flat radial portions 2^b on each side of the hub portion, said spoke arms being separate and unconnected along their length and extending from the outer corners of said flat portions to the rim to form substantially diametrical spokes; substantially as described.

2. A pulley comprising a rim, and spokes connected therewith, each spoke being an integral structure comprising a central hub portion which has outwardly directed flanges projecting from its opposite side edges and radially extended from the outer portions of such hub to form spoke arms connected at their outer ends to the rim, and which also has the two flat radial portions 2^b on each side of the hub portion, said spoke arms being separate and unconnected along their length and extending from the outer corners of said flat portions to the rim, in combination with clamping bolts through the said portions 2^b for securing adjoining spokes together said spokes extending diametrically of the pulley structure; substantially as described.

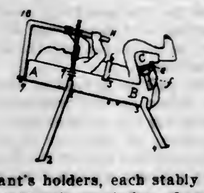
3. A pulley comprising a rim, spokes connected therewith, each spoke consisting of a central hub portion with outwardly directed flanges and radial spoke arms constituting a continuation of the flanges, supplemental spokes connected at their outer ends with the rim and having bifurcated inner ends fitting upon the hub portion of the spokes, hub supports inserted between said flanges of each of the first named spokes, and clamping bolts passed through the hub supports and said hub portions of the first named spoke arms; substantially as described.

4. A pulley comprising a rim, spokes connected therewith, each spoke consisting of a central hub portion with outwardly directed flanges and radial spoke arms constituting a continuation of the flanges, hub supports inserted between said flanges, supplemental spokes connected at their outer ends with the rim and having bifurcated inner ends fitting upon the hub portion of the spokes and secured to said flanges, and clamping bolts passed through the hub supports and the hub portions of the first named spokes; substantially as described.

5. A pulley comprising a rim, spokes connected therewith, each spoke consisting of a central hub portion and radial spoke arms, hub supports arranged concentric with the hub portions of the spokes, and supplemental spokes connected at their outer ends with the rim and having their inner ends secured between the hub supports and the said hub portions of the first named spokes; substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,062,704. INFANT'S STOOL AND BATH HOLDER. WILLISTON WIRT GREENWOOD, Los Angeles, Cal. Filed Aug. 2, 1906. Serial No. 328,947. (Cl. 4—2.)



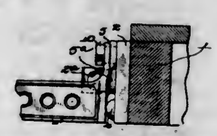
1. A pair of infant's holders, each stably mounted upon standards; one of said pair consisting of an inclined shallow concave trough conformable to the head and back of an infant, with elevated spreading supports at the lower extremity of said trough for the legs of said infant; the other of said pair consisting of an inclined shallow concave trough conformable to the face and front surfaces of the body of said infant, and having stirrups below the plane of said trough for supporting the legs of said infant in a flexed position: substantially as described and for the purposes set forth.

2. A pair of infant's holders, each stably mounted upon standards: one of said pair consisting of an inclined shallow concave trough conformable to the head and back of an infant, with elevated spreading supports at the lower extremity of said trough for the legs of said infant; the other of said pair consisting of an inclined shallow concave trough conformable to the face and front surfaces of the body of an infant, said trough having an aperture for the face, and additional supports below the plane of said trough for the flexed legs of said infant: substantially as described and for the purposes set forth.

3. A pair of infant's holders, each stably mounted upon standards: one of said pair consisting of an inclined shallow concave trough conformable to the head and back of an infant, with adjustable elevated spreading supports at the lower end of said trough for the legs of said infant, and having the accessories of pad, retaining strap and hand-hold; the other of said pair consisting of an inclined shallow concave trough conformable to the face and front surfaces of the body of an infant, said trough having an aperture for the face, and having also a pad, hand-hold, retaining strap, and additional supports below the plane of said trough for the flexed legs of said infant: substantially as described and for the purposes set forth.

4. A pair of infant's holders, each stably mounted upon four standards, the first of said pair consisting of the supporting trough A—B, adjustable supports C for the legs, retaining strap 5—6, hand-rods 9—10—11 and 7—8, and pad *a*—*b*; the other of said pair consisting of the supporting trough D—E, with aperture for face and arms, supports F—G for the legs, the strap 30, the hand-holds and braces 31 and 32, together with the pad *z*; substantially as shown and described.

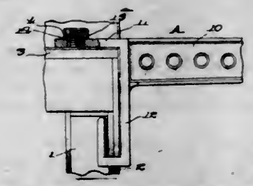
1,062,705. AUTOMOBILE-FENDER. JOSEPH HADKA, Chicago, Ill. Filed July 12, 1912. Serial No. 709,001. (Cl. 213—39.)



1. In an automobile fender, a securing bolt, a supporting member having an arm containing an aperture for the reception of the threaded end of such bolt, and a shouldered nut adapted to engage the thread of such bolt in said aperture.

2. In an automobile fender, a bracket arm containing an aperture for the reception of a bolt and a screw-threaded nut having a shoulder adapted to bear against the surface of said arm and a depressed extended collar adapted to engage the thread of a bolt within said aperture.

1,062,706. AUTOMOBILE-FENDER. JOSEPH HADKA, Chicago, Ill. Filed July 12, 1912. Serial No. 709,002. (Cl. 213—39.)



1. In an automobile fender, in combination, a channel bar of an automobile; a bolt projecting through said channel bar; and a supporting bracket comprising a horizontally extending arm having an aperture adapted to receive the threaded end of said bolt, a downwardly extending hooked arm adapted to embrace the flange of said channel bar, and a shouldered nut adapted to engage the thread of the bolt within the aperture and to secure the said horizontal arm to the said bolt.

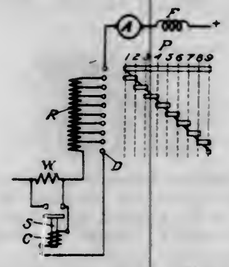
2. In an automobile fender, in combination, a transverse channel bar of an automobile; a projection from the frame of the radiator of the automobile; a bolt extending upwardly through said projection; a horizontal bracket arm having an aperture for the reception of said bolt; means for securing said arm to said bolt, and a vertical arm rigidly connected with said horizontal arm and having a hook adapted to engage the flange of said channel bar.

3. In an automobile fender, in combination, a transverse channel bar of an automobile; a projection from the frame of the radiator of the automobile; a bolt extending upward through said projection; a horizontal bracket arm having an aperture for the reception of said bolt; a nut having a recessed collar adapted to engage the thread of said bolt within said aperture and a shoulder adapted to engage the upper surface of said bracket arm; and a vertical bracket arm rigidly connected with said horizontal arm and having a hook adapted to engage the flange of the said channel bar.

1,062,707. SYSTEM OF CONTROL FOR ELECTRIC CONTROLLERS. JAY H. HALL, Cleveland, Ohio, assignor to The Electric Controller and Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 27, 1911. Serial No. 662,590. (Cl. 172—179.)

1. In an electric motor-control system, a motor, a circuit therefor, two resistances in series in said circuit,

a manually-operated controller for regulating one resistance, a switch for controlling the other resistance, an operating winding therefor, and a contact in the manually-operated controller for connecting the winding in the motor circuit after the manually-controlled resistance is cut out of the circuit.



2. In an electric motor-control system, a motor, a circuit therefor, a resistance in said circuit, a manually-operated controller for cutting out the resistance, a second resistance in the circuit, a switch for cutting out the latter resistance, a winding adapted to control the switch and be connected in the motor circuit, and a contact on the controller for energizing the winding after the first resistance is cut out.

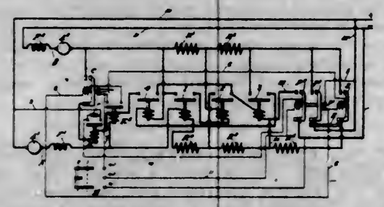
3. In a motor-control system, an electric motor having an armature, a circuit therefor, a resistance in said circuit, a manually-operated controller for cutting out the resistance, a second resistance in the circuit, a switch for cutting out the latter resistance, a winding adapted to control the switch and be connected in the armature circuit, and a contact on the controller for energizing the winding after the first resistance is cut out.

4. In a motor-control system, an electric motor having a field winding, a circuit therefor, a resistance in said circuit, a manually-operated controller for cutting out the resistance, a second resistance in the circuit, a switch for cutting out the latter resistance, a winding adapted to control the switch and be connected in the field circuit, and a contact on the controller for energizing the winding after the first resistance is cut out.

5. In a motor-control system, an electric motor having an armature and a series field winding, a circuit therefor, a resistance in said circuit, a manually-operated controller for cutting out the resistance, a second resistance in the circuit, a switch for cutting out the latter resistance, a winding adapted to control the switch and be connected in the circuit of the said armature and field winding, and a contact on the controller for energizing the winding after the first resistance is cut out.

[Claims 6 to 14 not printed in the Gazette.]

1,062,708. CONTROL SYSTEM FOR ELECTRIC MOTORS. JAY H. HALL, Cleveland, Ohio, assignor to The Electric Controller and Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Dec. 16, 1912. Serial No. 736,904. (Cl. 172—179.)



1. In a series-parallel system of motor control, a pair of motors, resistance therefor, a switch for cutting out said resistance, a winding for controlling the closure of said switch, a switch for connecting the motors in series in a circuit including the said winding, a second switch for connecting the motors in series in a circuit shunting said winding, and a switch for connecting the motors in parallel including the said winding in the circuit of one of the motors.

2. In a series-parallel system of motor control, a pair of motors, a motor circuit, resistances for the circuit, sets of contacts for the resistances, a winding for controlling the closure of each set of contacts, means for connecting in the motor circuit the motors in series with each other and the said windings, and means for deënergizing the said windings and connecting the motors in series.

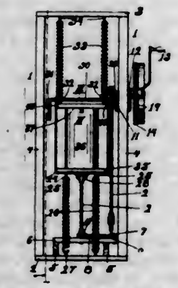
3. In a series-parallel system of motor control, a pair of motors, a motor circuit, resistances for the circuit, sets of contacts for the resistances, a winding for controlling the closure of each set of contacts, means for connecting in the motor circuit the motors in series with each other and the said windings, means for deënergizing the said windings and connecting the motors in series, and means for connecting the motors in parallel and reinserting the said windings in the circuit of at least one of the motors.

4. In a series-parallel system of motor control, a pair of motors, a motor circuit, resistances for the circuit, sets of contacts for the resistances, a winding for controlling the closure of each set of contacts, means for connecting in the motor circuit the motors in series with each other and the said windings, means for deënergizing the said windings and connecting the motors in series, and a winding in the motor circuit controlling the operation of the said means.

5. In a series-parallel system of motor control, a pair of motors, a motor circuit, resistances for the circuit, sets of contacts for the resistances, a winding for controlling the closure of each set of contacts, means for connecting in the motor circuit the motors in series with each other and the said windings, means for deënergizing the said windings and connecting the motors in series, and means connecting the motors in parallel and re-inserting the said windings in the motor circuit, and a winding in the motor circuit controlling the operation of the last mentioned means.

[Claims 6 to 9 not printed in the Gazette.]

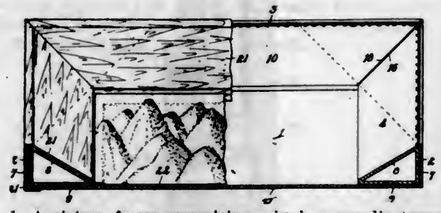
1,062,709. CHURN. CHARLES HOEFER, Jr., Lexington, Mo., MARCUS L. BELT, Jr., Muskogee, Okla., and WILLIAM R. BELT, Acme, Tex. Filed Nov. 11, 1910. Serial No. 591,910. (Cl. 31—18.)



1. In a churn, a suitable frame, a jar carrier, a stirrup receiving the jar carrier, a cover fitting between the arms of the stirrup and adapted as a closure for the jar upon the carrier, a rock shaft extending over the cover and journaled in the arms of the stirrup, a pair of clamps secured on said shaft and flattened at their lower ends, and retractile springs connecting the upper ends of the clamps with the frame above the jar cover, and tending to hold the clamps with their lower or flattened ends in engagement with the cover and the latter pressed down upon the jar.

2. In a churn, a suitable frame, a jar carrier, a stirrup receiving the jar carrier, a cover fitted between the arms of the stirrup and adapted as a closure for the jar upon the carrier, a rock shaft extending over the cover and journaled in the arms of the stirrup, a pair of clamps secured on said shaft and flattened at their lower ends, retractile springs connecting the upper ends of the clamps with the frame above the jar cover, and tending to hold the clamps with their lower or flattened ends in engagement with the cover and the latter pressed down upon the jar, springs pulling on the stirrup in opposition to the first-named springs, and means for imparting up and down movements to the carrier.

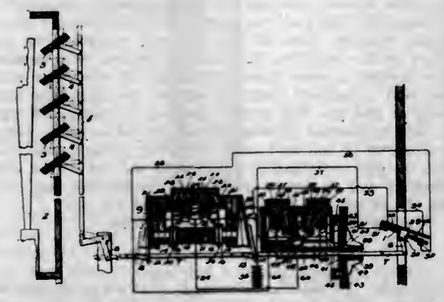
1,062,710. PICTURE-FRAME. ALBERT K. HOODWIN and EDWARD J. KIPP, Michigan City, Ind. Filed May 17, 1909. Serial No. 496,347. (Cl. 40—152.)



1. A picture frame comprising a back, upwardly turned sides and ends integral with said back, a pair of oppositely disposed side members abutting against the inner faces of said sides, a pair of oppositely disposed end members abutting against the inner faces of said ends, said side members and said end members being beveled in cross section and beveled at their ends, and a paper veneer covering the beveled faces of said side members and said end members, said veneer covering also the exterior face of said sides and said ends, and being bent under to engage the bottom of said back.

2. A picture frame comprising a back, upwardly turned sides and ends integral with said back, and inner members within said frame comprising vertical strips abutting against the inner faces of said sides and ends, inclined strips attached to the upper edge of said vertical strips running to a point in proximity to said back, and horizontal strips attached to said inclined strips abutting against the inner face of said back and running from the inner edge of said inclined strips to a point in proximity to said vertical strips but being disconnected therefrom.

1,062,711. ORGAN-SWELL. ROBERT HOPE-JONES, North Tonawanda, N. Y., assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y., a Corporation of New York. Filed Mar. 23, 1912. Serial No. 685,763. (Cl. 84—95.)



1. The combination of the swell shutters, a pedal, means connecting the pedal and shutters whereby motion is transmitted from one to the other, a motor for operating the shutters, and means mounted on the pedal for controlling said motor.

2. The combination of the swell-shutters, a pedal, means connecting the pedal and shutters whereby motion is transmitted from one to the other, a motor for operating the shutters, a brake for arresting the movement of the shutters, and means mounted on said pedal for controlling said motor and said brake.

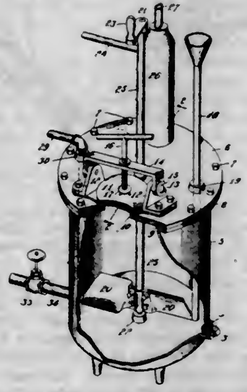
3. The combination of the swell-shutters, a pedal, means connecting the pedal and shutters whereby motion is transmitted from one to the other, an electro-pneumatic motor for operating the shutters, and an electric switch mounted on said pedal and controlling said motor.

4. The combination of the swell shutters, a pedal, means connecting the pedal and shutters whereby motion is transmitted from one to the other, an electro-pneumatic motor for operating the shutters, an electro-pneumatic brake for arresting the movement of the shutters, and an electric switch mounted on said pedal and controlling said motor and said brake.

5. The combination of the swell shutters, a pedal, means connecting the pedal and shutters whereby motion is transmitted from one to the other, a motor for operating the shutters, and a foot plate carried by the pedal and movable relatively thereto for controlling said motor.

[Claims 6 to 11 not printed in the Gazette.]

1,062,712. GAS-GENERATOR. HENRY W. JACOBS and HOWARD H. LANNING, Topeka, Kans. Filed June 24, 1912. Serial No. 705,646. (Cl. 23—10.)



1. A gas generator, comprising a liquid retaining receptacle, a removable cover secured to the open end of the receptacle, the cover being provided with a charge-receiving orifice, a gas-receiving chamber located above the cover, and means whereby the contents of the receptacle may be agitated.

2. A gas generator, comprising a liquid retaining receptacle, a charge-receiving orifice provided in the upper part thereof, means whereby the orifice may be closed and a gas tight joint maintained, a gas-receiving chamber located above said receptacle and communicating therewith, a conduit communicating with the upper part of said gas-receiving chamber and adapted to be connected with a source of water supply, and means whereby the contents of the receptacle may be agitated.

3. A gas generator, comprising a generator provided with a removable top, said top being provided with a charge-receiving orifice, means whereby said orifice is closed and a gas tight joint maintained, a gas chamber arranged on said removable top and communicating with the generator interior, a conduit for conveying water to said generator, and means whereby the contents of the generator may be agitated.

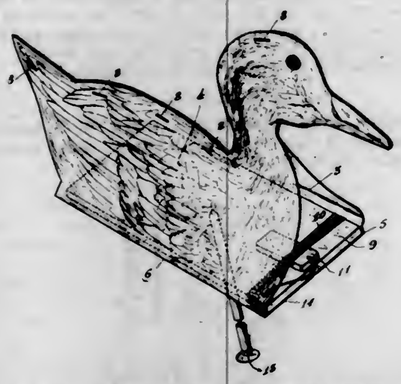
4. A gas generator, comprising a generator provided with a removable cover, said cover being provided with a charge-receiving orifice, means whereby said orifice is closed and a gas tight joint maintained, a gas receiving chamber communicating with the upper portion of the gen-

erator, a conduit for conveying water into the generator, means whereby the contents of the generator may be heated, and means for agitating the contents of the generator.

5. A generator device of the class described, comprising a generator provided with a charge receiving orifice, means whereby said orifice is closed and a gas tight joint maintained, a gas-receiving chamber communicating with the upper part of the generator, a water conveying conduit communicating with the upper part of the gas-receiving chamber, an agitator revolubly mounted within the generator, and a conduit for conveying a heat imparting medium into said generator.

[Claims 6 and 7 not printed in the Gazette.]

1,062,713. DECOY. WILLIAM R. JOHNSON, Seattle, Wash. Filed Dec. 6, 1911. Serial No. 664,266. (Cl. 43—2.)



1. A decoy, comprising a foldable image having corresponding side walls secured together at their upper margins, open ends, and a foldable bottom connecting the lower edges of the side walls.

2. A decoy, comprising a foldable image having corresponding side walls, means securing the upper margins of the side walls directly together, and an inwardly foldable bottom connecting the lower edges of the side walls and permitting the same to lie flat alongside each other and against the infolded bottom, portions of the front and rear edges of the side walls being disconnected and separate to maintain an open passageway through the image.

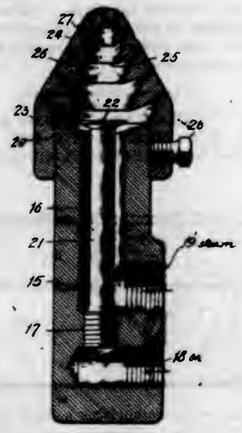
3. A decoy, comprising a foldable image having side walls secured together at their upper margins, open ends, an infolding bottom connecting the lower edges of the side walls, and a float element detachably located within the body and resting upon the infolding bottom, preventing the same from folding.

4. A decoy, comprising a collapsible body, a float and sustaining member detachably located therein, and a pendant weight passing through the body and attached to the float, said weight thereby constituting means for holding the float in position.

5. A decoy, comprising a collapsible body having an open end, a float detachably located in the body and removable through the open end, an anchor having a connection with the float at the open end, and a pendent weight passing through the body and engaged with the float, thereby maintaining the same in position.

1,062,714. LIQUID-FUEL BURNER. ROBERT N. JOHNSTON, Denver, Colo., assignor of one-half to Lou D. Sweet, Denver, Colo. Filed May 7, 1912. Serial No. 695,638. (Cl. 158—75.)

1. In a liquid fuel burner, a vertical pipe for the liquid fuel, an annular conduit for an impelling fluid surrounding said pipe, and a conical cap over the upper ends of said pipe and conduit, said cap having a series of depending concentric flanges within it and having perforations therethrough between said flanges.



2. In a liquid fuel burner, two conduits one for the liquid fuel and the other for an impelling fluid, said conduits having their discharge orifices adjacent to one another, and a cap over said discharge orifices of said conduits, said cap having a series of flanges on its inside directed toward said discharge orifices and having perforations therethrough between said flanges.

3. In a liquid fuel burner, two conduits one for the liquid fuel and the other for an impelling fluid, said conduits having their discharge orifices adjacent to one another, and a cap over said discharge orifices of said conduits, said cap having the general shape of a hollow cone with concentric circular flanges depending from its inside surface and having circular series of perforations therethrough between said flanges.

4. In a liquid fuel burner, two conduits one for the liquid fuel and the other for an impelling fluid, said conduits having their discharge orifices adjacent to one another, and a cap over said discharge orifices of said conduits, said cap having a series of flanges on its inside directed toward said discharge orifices and having perforations therethrough between said flanges and said cap also being adjustable toward or from said orifices.

5. In a liquid fuel burner, a member having two screw threaded lateral openings for the attachment respectively of impelling fluid and fuel supply pipes and having a cylindrical chamber open at one end and connected at the other to the impelling fluid supply opening, said member also having a screw threaded passage in alinement with the said cylindrical chamber between the impelling fluid opening and the fuel supply opening, a central oil pipe in said cylindrical chamber having its end screw threaded and fitting in the said screw threaded passage, said central oil pipe terminating adjacent to the end of the said member, and a conical perforated distributing cap over the end of the said member and the said oil pipe.

[Claims 6 to 8 not printed in the Gazette.]

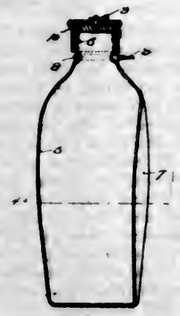
1,062,715. BUCKLE. PEDER J. KJELDEN, Hendricks, Minn. Filed June 3, 1912. Serial No. 701,220. (Cl. 24—176.)

A buckle comprising an annular body member, a flat bearing plate located in a plane below said body member and having upturned side flanges anchored, at their ends, to said body member, said bearing plate terminating short of the ends of its side flanges to afford strap passages, and a lock pin and a stop extension on said bearing plate,



said stop extension projecting into the plate of said body member, substantially as described.

1,062,716. FLASK FOR LIQUIDS. JOSEPH KOENIG, Two Rivers, Wis. Filed Apr. 18, 1911. Serial No. 621,809. (Cl. 221—93.)



An improved article of manufacture consisting of a one-piece, seamless-body, sheet-metal, flask-like canteen having a flat bottom and a side thereof concave from said bottom to a predetermined height above the same.

1,062,717. WELL-SCREEN. MAHLON E. LAYNE, Houston, Tex. Filed Aug. 29, 1911. Serial No. 646,955. (Cl. 166—5.)



A well screen comprising a perforated metal tube enlarged at its lower portion and adapted to support a loose screening material around the reduced portion of the tube above such lower portion, and a tubular envelope of loose screening material extending upward from the said enlarged portion and supported thereon and bearing at its inner surface against the tube and at its outer surface against the material in which the screen is located; the thickness of the walls of the tubular screening envelop being such that it may be inserted as the tube moves down during the positioning operation.

1,062,718. METHOD OF FORMING CONCRETE FOUNDATIONS AND THE LIKE. MAHLON E. LAYNE, Houston, Tex. Filed May 22, 1912. Serial No. 698,937. (Cl. 72—77.)



1. The method of forming piers, foundations, and the like which consists in sinking into the ground a metal shell having side walls with such walls spaced away from the ground, supplying the space between the walls and ground with a material capable of receiving cement to form concrete, supplying the interior of the shell with a material also capable of receiving cement to form concrete, and then forcing into the said shell and through perforations provided in the side walls of the shell and the said material surrounding the shell a cement which subsequently hardens forming with the said material a concrete mass inside and outside the said shell.

2. The method of forming piers, foundations, and the like which consists in sinking into the ground a metal shell having side walls and having an enlarged base whereby a space is provided between the walls of the shell and the dirt side walls of the excavation, supplying the said space with a material capable of receiving cement to form concrete, supplying the interior of the shell with a material also capable of receiving cement to form concrete, and then forcing into the said shell and through perforations provided in the side walls of the shell and the said material surrounding the shell a cement which subsequently hardens forming with the said material a concrete mass inside and outside the said shell.

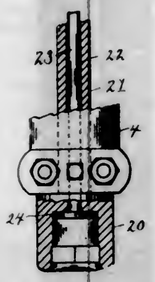
3. The method of forming piers, foundations, and the like which consists in sinking into the ground a metal shell having side walls and an enlarged lower end whereby a space is provided around the shell above the said lower end as the shell is sunk, providing the said space as the shell moves down with a material capable of receiving cement to form concrete, and then forcing cement through perforations provided in the side walls of the shell and into the said material.

4. The method of positioning a tube in the ground and providing a surrounding envelop of gravel or the like, which consists in sinking a tube having its lower portion larger than the portions thereabove whereby a space is provided around the tube above the said lower portion between the exterior surface of the tube and the ground as the tube is sunk, and supplying the said space between the tube and the ground with the said gravel or the like as the tube moves down, the body of gravel or the like bearing at its outer surface against the ground and at its inner surface against the tube.

5. The method of positioning a perforated tube in the ground, and providing a surrounding envelop of gravel or the like, which consists in sinking a tube having its lower end larger than the portions thereabove, whereby a space is provided around the tube above the lower end as the tube is sunk, guiding the said lower end of the tube

during its downward movement, and supplying the said space with the said gravel or the like as the tube moves down, the body of gravel or the like bearing at its outer surface against the ground and at its inner surface against the tube.

1,062,719. METHOD OF SHAPING HOLLOW METAL ARTICLES. JOHN F. LEWIS, Philadelphia, Pa. Filed July 13, 1912. Serial No. 709,120. (Cl. 113—51.)



1. The method of forming hollow articles, consisting of filling a hollow article with liquid, seating it upon a surface with its open end upward and shortening said article by pressure upon the open end to cause its side walls to distend.

2. The method of forming hollow articles consisting of seating a hollow article upon a surface, filling it with liquid, and shortening said article by pressure upon the open end, thereby distending its side walls.

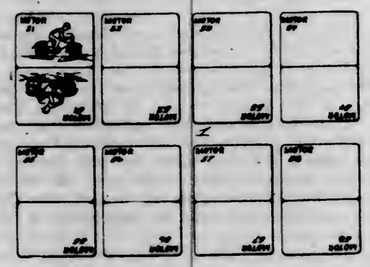
3. The method of forming hollow articles consisting of seating the closed end of a hollow article in a vessel filled with liquid, so that said hollow article is filled with said liquid and shortening said article causing an increase in the diameter of its side walls.

4. The method of forming hollow articles consisting of submerging a hollow article in a liquid, seating the closed end, closing the open end, and shortening the same by pressure upon the open end.

5. The method of forming hollow articles, consisting of submerging the same, seating the closed end of said article upon a punch, so that the liquid will be retained in said article, closing the open end, and shortening the article by pressure on the open end.

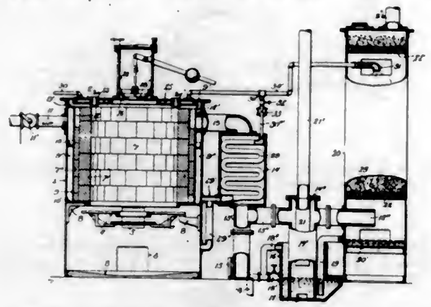
[Claims 6 to 11 not printed in the Gazette.]

1,062,720. PLAYING-CARDS. ORA D. LEWIS, Rushville, Ill. Filed Apr. 8, 1912. Serial No. 689,185. (Cl. 46—25.)



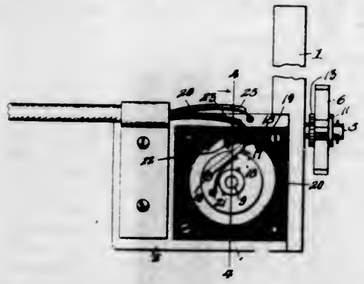
Playing cards comprising several suits, each of an equal number of cards, the cards of each suit being characterized according to their relative value, one suit being designated as a trump suit and a card of one of the suits other than the trump suit being designated as a dominant card of the deck.

1,062,721. GAS-PRODUCER. WILLIAM F. LUICK and ALVIN J. BASSETT, Milwaukee, Wis., assignors to Luick Bassett Producer Company, a Corporation of Wisconsin. Filed Oct. 2, 1911. Serial No. 652,396. (Cl. 48—64.)



In a gas producer having a jacket, a head closure therefor, an offset shell secured to the jacket adjacent to its head to form a gas pocket, the shell being extended parallel with the jacket and having an open lower end forming in conjunction with said jacket an air chamber, an air supply pipe in communication with the upper end of the air chamber, and a gas discharge pipe in communication with the gas pocket; the combination of a perforated baffle-ring interposed between the jacket and shell below the air supply pipe, a second perforated baffle-ring interposed between the jacket and shell at the lower end of said shell, layers of refractory material fitted within the shell to form a fire-pot, and a steam supply pipe having a branch in communication with the air chamber above the lower baffle-ring and a second branch pipe in communication with the fire-pot below said baffle-ring.

1,062,722. PERIODIC CIRCUIT-CLOSER. JOHN G. MACPHERSON, Philadelphia, Pa., assignor to The MacPherson Company, Incorporated, a Corporation of Delaware. Filed Nov. 2, 1911. Serial No. 658,251. (Cl. 177—10.)

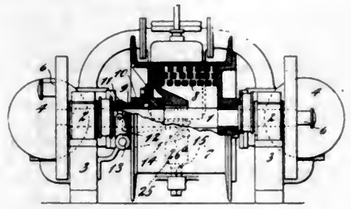


A circuit maker and breaker control, having a body of insulation having a recess with a curved and a shouldered wall, a contact terminal projecting within the recess adjacent the shouldered portion of the wall and a rotary contact arm spring cushionedly mounted and guided by the wall of the recess to engage said contact terminal and be snapped thereawayfrom due to its spring and the shouldered portion of the wall of the recess.

1,062,723. ROPE-DRUM. THOMAS SPENCER MILLER, South Orange, N. J. Original application filed Jan. 22, 1910, Serial No. 539,513. Divided and this application filed July 30, 1910. Serial No. 574,703. (Cl. 214—14.)

1. In combination, a driving shaft, controlling means therefor, a drum on the shaft, an element movable longitudinally of the shaft, an element rotatable on the shaft,

said elements being in threaded engagement with each other, and one being rotatable by the drum to cause said elements to move relative to each other, and means acting in accordance with such relative movement for operating the controlling means for the shaft.



2. In combination, a driving shaft, controlling means therefor, a drum on the shaft, means connecting the drum and shaft permitting relative movement between the same due to changes of load on the drum, an element movable longitudinally of the shaft, an element rotatable on the shaft, said elements being in threaded engagement with each other, and one being rotatable by the drum to cause said elements to move relative to each other, and means acting in accordance with such relative movement for operating the controlling means for the shaft.

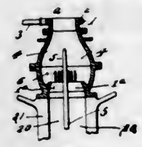
3. In combination, a driving shaft, controlling means therefor, a drum on the shaft, spring connecting the drum and shaft permitting a relative movement between said elements due to changes of load on the drum, an element movable longitudinally of the shaft, an element rotatable on the shaft, said elements being in threaded engagement with each other, and one being rotatable by the drum to cause said elements to move relative to each other, and means acting in accordance with such relative movement for operating the controlling means for the shaft.

4. In combination, a driving shaft, controlling means therefor, a drum on the shaft, an element movable longitudinally of the shaft and threaded to the drum, and means acting in accordance with the movement of said element for operating the controlling means for the shaft.

5. In combination, a driving shaft, controlling means therefor, a drum on the shaft, a spring connecting the drum and shaft, permitting relative movement between the same, due to changes of load on the drum, an element movable longitudinally of the shaft and having a cam incline engagement with the drum whereby it is moved by the drum, and means acting in accordance with the movement of said element for operating the controlling means for the shaft.

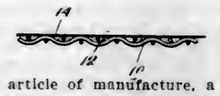
[Claims 6 to 9 not printed in the Gazette.]

1,062,724. EXHAUST-NOZZLE. LAWRENCE C. MOONEY, Montgomery, Ala. Original application filed May 25, 1910, Serial No. 563,441. Divided and this application filed Aug. 29, 1910. Serial No. 579,474. (Cl. 110—155.)



An exhaust nozzle having a contracted inlet at its lower end, and a discharge tip at its upper end, the area of which is greater than the area of the inlet, the intermediate portion of said nozzle between the inlet and the discharge tip being bulged outwardly to increase the internal area of said part from inlet to outlet and prevent the frictional contact of passing steam with its walls, said body portion having oppositely disposed inlet openings near its base in line with the contracted inlet.

1,062,725. COATED FABRIC. HARRY S. MORK, Boston, Mass., assignor to Chemical Products Company, Boston, Mass., a Corporation of Maine. Filed Mar. 17, 1910. Serial No. 549,934. (Cl. 154—50.)



1. As a new article of manufacture, a fabric impregnated with cellulose acetate and an independent sheet or film of cellulose acetate united with the acetate with which the fabric is impregnated, and thereby affixed to the fabric, substantially as described.

2. As a new article of manufacture, a fabric padded with a solution of cellulose acetate, and a sheet or film homogeneously united with the padding material.

1,062,726. LIVE-BAIT TIE. JOHN H. NELSON, Portland, Oreg. Filed May 31, 1912. Serial No. 700,647. (Cl. 43—7.)



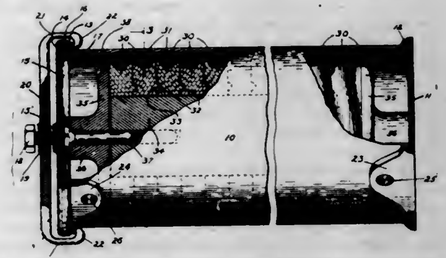
1. In a live bait tie, the combination with a fish hook, of a sheet metal blank bent around and secured to the shank of the hook and having a plurality of alining arms the free ends of which are yielding, and a flexible tie member adapted to be looped around the bait and passed between the hook-shank and said arms to clamp the tie member against movement.

2. In a live bait tie, the combination with a fish hook, of a sheet metal blank bent around and secured to the hook-shank and having a plurality of yielding free ends which are disposed in opposite directions, and a flexible tie member adapted to be looped around the bait at different portions of its length and each loop passed between one of said arms and the hook-shank to bind the same against movement.

3. In a live bait tie, the combination with a fish hook, of means secured to the hook-shank comprising a plurality of endwise spaced arms the free ends of which are yielding, and a flexible tie member adapted to be looped around the bait at different portions of its length and each loop as made passed between a separate arm and the hook-shank to bind the tie member against movement.

4. A live bait tie for fish hooks, comprising a plate of thin sheet metal having clamping arms formed along one longitudinal edge thereof and yielding at their free ends, the end arms extending beyond the ends of the plate, and an intermediate arm formed by a cut out portion in the plate.

1,062,727. BEER-COOLER. FRANK A. PHILLIPPI, Pottstown, Pa., assignor of one-third to William H. Reifsnyder and one-third to Rudolph Keller, Pottstown, Pa. Filed Oct. 16, 1912. Serial No. 726,177. (Cl. 62—2.)

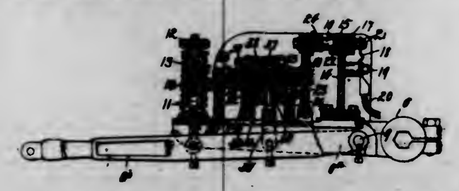


1. A beer cooler comprising a cylinder having one rigidly secured head, means for removably securing the other head to said cylinder, a ring secured to the cylinder opposite to the fixed head, means combined with said ring for

the outlet support, means combined with said fixed head for the inlet support, a plurality of glass disks having grooves in their peripheries so formed as to present a continuous helical passage around the interior of said cylinder when said disks are placed side by side therewithin, a mounting for said disks and a clamping means thereof.

2. In a beer cooler, a cylindrical casing having one fixed head and one removable head, a plurality of disks fitted therein, means whereby said disks are engaged one with another, means for clamping said disks together said disks having on their peripheries grooves adjoining each other and forming a helical passage extending from end to end, and means whereby all of said disks may be withdrawn from said cylinder as a unit.

1,062,728. CONTROL MEANS FOR ELECTRIC SWITCHES. ROBERT CLARK PIERCE, Cincinnati, Ohio, assignor to The Toledo Electric Welder Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 26, 1912. Serial No. 733,590. (Cl. 219—4.)



1. In combination, a plurality of members mounted for relative and unitary movements, means yieldingly resisting a relative movement of said members from normal position, a switch carried by one of said members and having a movable part, means acting on said part to normally maintain it in open position, mechanism movably carried by one and connected to the other of said members and to said switch part and operable by a relative movement of the members from normal position to move said part to switch closing position.

2. In combination, a movable member having relatively movable parts, means for resisting a relative outward movement of said parts and adjustable to vary such resistance, an electric switch carried by one of said parts and having a movable element, means influencing an opening movement of said element, and mechanism pivotally carried by the switch carrying part and having connection with both of said element and the other of said parts, said mechanism being operable upon a relative outward movement of the parts to move said element to switch closing position.

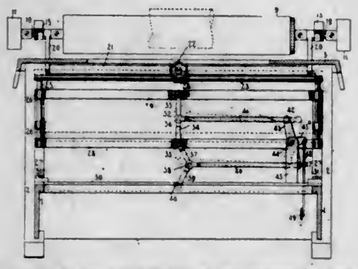
3. In combination, a movable member having pivotally connected relatively movable parts, means yieldingly resisting a relative outward movement of said parts and adjustable to vary such resistance, an electric switch carried by one of said parts and having a pivotally movable element, means influencing an opening movement of said element, and mechanism carried by the switch carrying part for rocking movements in unison with said element and having connection with the other of said parts and operable by relative outward movements of the parts to move said element to switch closing position.

4. In combination, a lever having a relatively movable part, an electric switch having a movable element, and means operable by a movement of said part relative to the lever for moving said element to close the switch and to permit an automatic opening movement of said element at a predetermined point in the relative movements of said part and lever.

5. In combination, a lever having a relatively movable part, means for resisting relative movements in one direction of said lever and part, a normally open electric switch, and mechanism operable by a relative movement of said lever and part to effect a closing of the switch and to permit an automatic opening of the switch upon a continuation of such relative movements of the lever and part.

[Claims 6 to 33 not printed in the Gazette.]

1,062,729. TYPE-WRITING MACHINE. MORRIS W. POOL, New York, N. Y., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed May 6, 1911. Serial No. 625,482. (Cl. 197—74.)



1. In a typewriting machine, the combination of an element shiftable to change case, and means for shifting said element comprising opposing toggles, one or the other of said toggles constantly supporting said shiftable element.

2. Case shift mechanism for typewriting machines comprising the combination of a plurality of toggles, and means for operating said toggles in alternation to effect the case shifting operation.

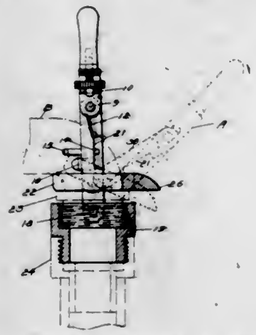
3. Case shift mechanism for typewriting machines comprising the combination of a plurality of toggles, and means controlled by a single key for breaking one toggle and concurrently straightening another toggle.

4. In a typewriting machine, the combination with a platen, and a set of type bars, the platen and type bars being relatively movable to change case, of means for effecting such relative movement, said means comprising two toggles oppositely acting, and hand controlled means for at will straightening and breaking said toggles.

5. In a typewriting machine, the combination of a platen supporting element, a type bar supporting element, one of said elements being shiftable to change case, a toggle for shifting said shiftable element in one direction, and a second toggle for shifting said shiftable element in the opposite direction.

[Claims 6 to 17 not printed in the Gazette.]

1,062,730. COUPLING FOR UNITING HOSE-PIPES WITH FAUCETS. JESSE G. POPPERT, Portland, Oreg. Filed Jan. 12, 1912. Serial No. 670,961. (Cl. 137—28.)



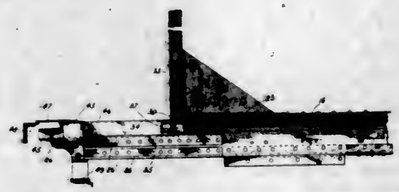
1. A hose coupling comprising a union, trunnions formed thereon, a yoke-lever mounted to swing on said trunnions, a yoke adapted to engage a pipe section, pivotally mounted within the fork of said lever and an extension formed on said yoke adapted to bear against said union as the lever is operated, whereby the yoke is preserved in engaging position.

2. A hose coupling comprising a union, trunnions formed thereon, a yoke-lever mounted to swing on said trunnions, arms pivotally mounted within the fork of said lever the free ends being yieldingly held normally in advance thereof, a yoke adapted to engage a pipe section, pivotally mounted in the free ends of said arms, and an extension formed on the yoke adapted to bear against said union as the lever is operated, whereby the yoke is preserved in engaging position.

3. A coupling for uniting hose pipes with faucets and the like, comprising a union, trunnions formed thereon, a forked lever mounted on said trunnions, a clamp pivotally mounted between the forks of said lever, means for longitudinal adjustment of the clamp, means holding the clamp normally to the rear of the lever for engagement with the faucet when the lever is moved into engaging position, and means for locking the clamp in the lever, when in closed position.

4. Coupling for uniting hose pipes with faucets, and the like, comprising a union, trunnions formed thereon, a forked lever mounted on said trunnions, a clamp comprising a pair of arms pivoted between the forks of the lever, an open engaging member pivotally mounted at the forward end of said arms, means for preserving said member in working position, means holding the clamp normally to the rear of the lever for engagement with the faucet when the lever is moved into engaging position, and means for locking the clamp in the lever, when in closed position.

1,062,731. CAR-FRAMEWORK. EDWARD POSSON, Chicago, Ill. Filed Mar. 1, 1909. Serial No. 480,678. (Cl. 105—76.)



1. In a car framework, a center sill, an end sill attached thereto, said center sill being prolonged beneath the end sill, reinforcing members attached to the prolonged part of the center sill, and a buffer attached to the extremity of the prolonged part of the center sill.

2. In a car framework, a center sill, an end sill attached to the center sill, said center sill being prolonged and reinforced beneath the end sill, and a hollow buffer of cast metal resting upon and attached to the extremity of the prolonged center sill.

3. A vestibule car framework comprising a center sill with the upper portion cut away at the end, an end sill resting against the place where the center sill is cut away, a buffer resting on the extremity of the center sill, and longitudinal sill members interposed between the end sill and the buffer.

4. A vestibule car framework comprising a center sill with the upper portion cut away at the end, an end sill resting against the place where the center sill is cut away, a buffer resting on the extremity of the center sill, longitudinal sill members interposed between the end sill and the buffer, and reinforcing members riveted to the center sill beneath said longitudinal sill members.

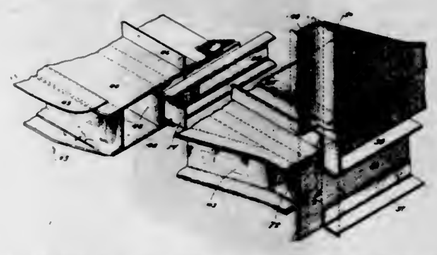
5. A vestibulue car framework comprising a center sill with its upper portion cut away at the end, an end sill lying across the center sill adjacent to the place where it is cut away, a reinforcing angle iron along the upper edge of the center sill beyond the end sill, and a rolled member resting upon the said angle iron with its end abutting the end sill on the outer face thereof.

[Claims 6 and 7 not printed in the Gazette.]

1,062,732. CAR-FRAMEWORK. EDWARD POSSON, Chicago, Ill. Filed Mar. 1, 1909. Serial No. 480,680. (Cl. 105—76.)

1. An end sill comprising two channel beams, and overlying and underlying plates adjacent to the flanges of said channel beams.

2. An end sill comprising two channel beams with their webs in vertical planes, one of said channel beams having its ends bent so as to make the webs adjacent at the ends but leaving them spaced apart and parallel in a horizontal direction between the bent portions.



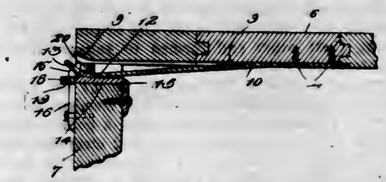
3. An end sill comprising two channel beams with their webs in vertical planes, one of said channel beams having its ends bent so as to make webs adjacent at the ends but leaving them spaced apart between the ends, and plates overlying and underlying the channel beams adjacent to the flanges thereof.

4. An end sill comprising two channel beams with top and bottom plates adjacent to the flanges thereof, the top plate being extended rearwardly beyond the channel beams.

5. In a car framework, a side sill, an end sill comprising two channel beams overlaid by a plate, and a triangular gusset plate with one edge attached to the side sill and another edge attached to said overlying plate of the end sill.

[Claims 6 to 9 not printed in the Gazette.]

1,062,733. BOX-COVER FASTENER. ANTON RAHOTINA, Lorain, Ohio. Filed Aug. 17, 1912. Serial No. 715,665. (Cl. 70—82.)



1. The combination with a box and a sliding top therefor, of a leaf spring fixed at its inner end to the under side of the top and extending longitudinally thereof beyond one end of the same, the free end of the spring being curved upwardly and provided with an opening, and a keeper member disposed upon the upper edge of one of the end walls of the box, said edge being recessed to receive the keeper member, the keeper member being provided with an upstanding cylindrical stud to engage the spring carried by the box and adapted to be received in the opening in the end of said spring, said keeper having attaching flanges extending upon the inner and outer faces of the box wall, the outer of said flanges being projected upwardly above the top edge of the box whereby a stop for the sliding top is provided.

2. The combination with a box and a removable sliding top therefor, of a leaf spring fixed at one of its ends to the under side of the top and extending longitudinally thereof, the free end of the spring projecting beyond one end of the box top and provided with an opening, the upper edge of the end wall of the box having a recess therein, and a keeper member disposed in said recess and having an upstanding cylindrical stud to engage the spring carried by the box top and to be received in the opening in the end of said spring, said keeper member having attaching flanges extending upon the inner and outer faces of the box wall and provided with an aperture, said aperture and the opening in the end of the spring being adapted to receive a suitable sealing wire.

1,062,734. FLY-TRAP. ALBERT FRANKLIN RAMSEY, Plymouth, Ohio. Filed May 29, 1912. Serial No. 700,373. (Cl. 43—22.)



1. An insect trap comprising in combination with a body having an inlet, and means for closing the said inlet, a receiver, said receiver having all of its sides, except one, closed, a closure member for the open side slidably held on the receiver, and means for removably supporting the holder against the body having the inlet and over the inlet.

2. In an insect trap, the combination with a screen frame having an insect opening, and means for closing the opening at times; of a holder having all of its sides, except one, closed, a slide plate mounted on the holder for closing the open side when the holder is removed, and means for securing the holder against the screen body over the insect inlet.

3. In an insect trap, the combination with a screen frame having an insect opening, and means for closing the opening at times; of a holder having all of its sides, except one, closed, a slide plate mounted on the holder for closing the open side when the holder is removed, and means for securing the holder against the screen body over the insect inlet, the said means consisting of a series of eyes at the opposite ends of the holder and spring tension hook devices, each connected at one end to the screen body and having their other end formed to engage with the desired ones of the eyes on the holder.

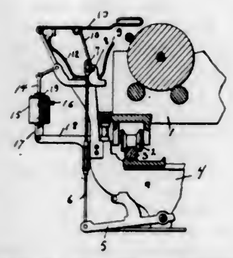
4. As a new article, a fly catching means for window and door screens comprising, a cut off member for controlling a fly passage in the screen body, a holder consisting of upper and lower members and end members, and a back portion and a hood portion for guiding the insects to the bottom of the holder as they pass in through the fly passage, a slide plate mountable on the holder and adapted for being adjusted to form a solid closure for the open side of the holder when the insects are caught therein, and means for removably mounting the holder on the screen, said means including loop members at the opposite ends of the holder, hooks pivotally connectible to the screen body, and having members for engaging the loops on the ends of the holder, at least one of the said hooks including a body portion formed of a coiled spring.

5. In combination with a screen frame including a cross piece, said frame having a fly passage at a point below the cross piece, and means mounted on the screen for closing the said passage at times; of a holder comprising a rectangular frame comprised of closed top, bottom and end portions and a screen back portion, a plate slidably mounted on the holder for sliding up over and closing the open side of the holder, and means for engaging the holder and the screen body, said means including devices for securing the holder under tension against the screen body and the cross member of its frame.

[Claim 6 not printed in the Gazette.]

1,062,735. TYPE-WRITER. GEORGE W. RAMSEY, Peoria, Ill., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of New Jersey. Filed June 24, 1909. Serial No. 504,028. (Cl. 197—154.)

1. In a typewriting machine in combination, a ribbon vibrator, means for moving said vibrator to the printing point and returning it from the printing point, and a checking device for causing the movement of the vibrator to be gradual from the printing point toward normal position; said checking device comprising mechanism whereby the movement from the printing point to normal position is accelerated.



2. In a typewriting machine in combination, a ribbon vibrator, means for moving said vibrator to the printing point, means for retracting said vibrator from the printing point, and means for retarding said retracting movement, said retarding means comprising a cylinder, a piston therein, and valve mechanism constructed to permit air to be driven from said cylinder by said piston, a vent with an adjustable opening being provided for admitting air to said cylinder.

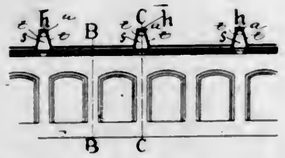
3. In a typewriting machine, in combination, a ribbon vibrator, means for moving said ribbon vibrator to the printing point during the printing operation and for returning it from the printing point, and a movement retarder effective upon a rapid continuous operation of the typewriting machine to limit the return stroke of said vibrator to less than its normal extent, and a screw in said retarder to vary the retarding effect.

4. In a typewriting machine, the combination with a ribbon vibrator, of a pneumatic device connected thereto and having means substantially ineffective to obstruct the movement of the vibrator to the printing point, but effective to obstruct the movement of the vibrator away from the printing point, and means for regulating the pneumatic device; the pneumatic device constructed to free the vibrator during the latter part of the return stroke of the latter.

5. In a typewriting machine in combination, a ribbon vibrator, means for moving said vibrator to the printing point, means for retracting said ribbon from the printing point, means for retarding said retracting movement of said vibrator, said retarding means comprising a cylinder having two distinct sized bores therein, a valve to permit air to be expelled from said cylinder, a piston, operating in said cylinder, and connections from said piston to said ribbon vibrator, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,062,736. INTEGRAL REINFORCED-CONCRETE ROOF STRUCTURE. STANISLAW RECHNIEWSKI, St. Petersburg, Russia. Filed May 14, 1910. Serial No. 561,342. (Cl. 108—1.)



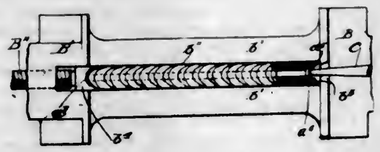
1. A reinforced concrete roof construction comprising an integral span of reinforced concrete adapted to rest on side walls and consisting of slightly arched reinforced concrete portions extending from wall to wall, arched reinforced concrete ribs extending from wall to wall and projecting above said portions and having side or lateral walls spaced apart from each other and united near their lower margins with said slightly arched portions, and reinforced concrete separating members transversely disposed between the walls of said arches and formed integral therewith.

2. A reinforced concrete roof construction comprising an integral span of reinforced concrete adapted to rest on the side walls and consisting of slightly arched reinforced concrete portions extending from wall to wall, arched reinforced concrete ribs extending from wall to wall and projecting above said portions and having lateral or side walls spaced apart from each other and united near their lower margins with said slightly arched portions, and vertically disposed flat reinforced concrete separating members transversely arranged between the walls of said arches and formed integral therewith.

3. A reinforced concrete roof construction comprising an integral span of reinforced concrete adapted to rest on side walls and consisting of slightly arched reinforced concrete portions extending from wall to wall, arched reinforced concrete ribs extending from wall to wall and projecting above said portions and having lateral or side walls spaced apart from each other and united near their lower margins with said slightly arched portions, and reinforced concrete separating members disposed between the walls of said arches and spaced apart from each other, said separating members being of greater height near the crown of the arch than near the base thereof.

4. A reinforced concrete roof construction comprising an integral span of reinforced concrete adapted to rest on side walls and consisting of portions slightly arched transversely with respect to the length of the span, arched reinforced concrete ribs extending substantially from wall to wall and projecting above said slightly arched portions, said ribs having side walls converging toward each other upwardly from said slightly arched portions, reinforced concrete arched roofs connecting the tops of said converging side walls, reinforced concrete separating members connecting said side walls, substantially as described.

1,062,737. STEAM-TURBINE BLADES. HARRY J. RICHTER, Wilmette, Ill., assignor to Horace A. Leslie, trustee, Chicago, Ill. Filed Aug. 3, 1908. Serial No. 446,551. (Cl. 121—57.)

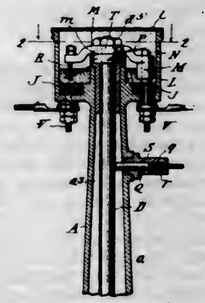


A new article of manufacture comprising a plurality of turbine blades and spacers and a rivet passing through said blades and spacers and headed at both ends, the head of the rivet being exposed at one end of the section thus formed, the other end of said section being provided with a recess and the common base formed by said spacers and the ends of the blades being of less width than the free ends of said blades, substantially as described.

1,062,738. CONTROLLER MECHANISM FOR EXPLOSION-ENGINES. CHARLES SCHMIDT, Cleveland, Ohio, assignor, by mesne assignments, to The Peerless Motor Car Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 6, 1906. Serial No. 337,695. (Cl. 123—167.)

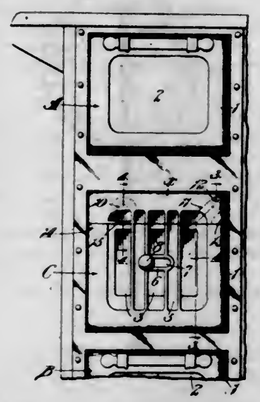
1. In circuit controlling mechanism, the combination of a casing having a cup-shaped upper end, and an annular row of insulated terminal plates secured to the bottom of said cup, with a controller shaft mounted in the casing and projecting into the cup, an arm secured to the shaft within the cup, a brush movably mounted in one end of said arm, an adjusting screw-pin mounted in the other end of the arm, and a spring carried by said arm in engagement with the brush and with said pin.

2. In a circuit controlling mechanism, the combination of a casing standard having a cup-shaped receptacle at its upper end which is adapted to hold a body of oil, an annular row of insulated terminal plates secured to the bottom of the receptacle, with a vertically disposed controller shaft, a contact arm secured on the shaft and adapted to make contact with the submerged surfaces of said terminal plates and a boss on the axis of the receptacle forming a bearing for the shaft and extending up into the receptacle above the normal surface level of the body of oil contained therein.



3. In circuit controlling mechanism, the combination of a casing having a cup-shaped upper end, and an annular row of insulated terminal plates secured in the bottom of said cup, with a controller shaft mounted in the casing and projecting into the cup, a disk secured to the end of the shaft within said cup and having an annular row of holes, a brush-carrying arm loosely embracing the shaft above said disk and having a pin fitting into the holes in said disk, and a nut screwing onto the end of said shaft against said arm.

1,062,739. COMBINED DRAFT-DOOR AND GRATE-BAR COVER. LOYD SCRUGGS, St. Louis, Mo., assignor to Copper Clad Malleable Range Company, St. Louis, Mo., a Corporation of Nebraska. Filed Dec. 30, 1911. Serial No. 668,622. (Cl. 126—193.)



1. A combined draft door and grate-bar cover for coal ranges comprising a lower hinged portion in which draft openings are formed, an upper portion that forms a continuation of said lower portion and corresponds in width with same, and an upwardly projecting arm on said lower portion that lies behind said upper portion and to which the upper portion is pivotally connected at a point above the upper edge of said lower portion.

2. A stove door comprising two coöperating portions which are so designed that when combined they give the appearance of a single door, the front faces of said portions being flush and both portions being of the same

width, and an arm on one of said portions that lies behind the other portion and to which said other portion is pivotally connected.

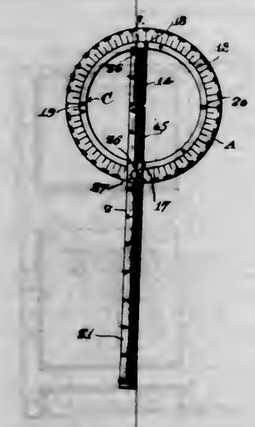
3. A stove door comprising two horizontally divided portions which are so designed that when combined they give the appearance of a single door, both of said portions extending the entire width of the door, an arm on one of said portions that lies behind the other portion and to which said other portion is pivotally connected, and means independent of said arm for preventing one portion from moving out of the plane in which the other portion lies when the door is arranged in a horizontal position.

4. A stove door provided with a smooth-faced frame and with vertically disposed portions which merge at their upper and lower ends into said smooth-faced frame, oblong-shaped draft openings between said portions, the door being divided horizontally so as to form two independent sections, one of which can be moved relatively to the other, and means for connecting said sections together so that they will move as one when the door is operated.

5. A stove door provided with a smooth-faced frame and with vertically disposed portions which merge at their upper and lower ends into said smooth-faced frame, draft openings between said vertical portions, the door being divided horizontally so as to form two independent sections, one of which can be moved relatively to the other, a sliding damper that closes said draft openings, a handle on said damper, a horizontally disposed cross-piece at approximately the center of the door provided with an elongated slot which receives the handle on said damper, and an upwardly projecting arm on the lower section of the door to which the upper section is pivotally connected.

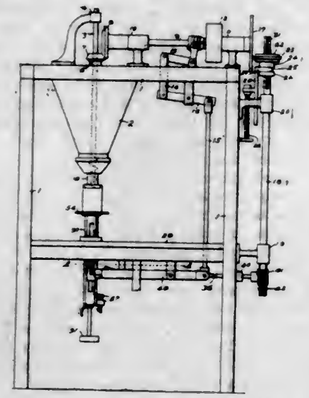
[Claims 6 to 8 not printed in the Gazette.]

1,062,740. POCKET-PROTRACTOR. JOSEPH SHARPE, U. S. Army. Filed July 19, 1912. Serial No. 710,528. (Cl. 33—12.)



A pocket protractor comprising a pair of outer rings one of which has its inner face provided with annular recesses at each edge, and its outer face graduated, an intermediate ring having its outer edge provided with a flange seated in the innermost recess of said outer ring whereby said intermediate ring is rotatably mounted between the outer rings, a graduated diametrical cross bar connecting the inner edge of the intermediate ring and having one side edge coincident with a diameter of said ring, a graduated arm having one end reduced and overlying said cross bar, means connecting said reduced end of said arm to the cross bar, and a tongue on said arm slidable in the outermost recess of the outer ring.

1,062,741. PACKER. LAWRENCE G. SIEBER, Cincinnati, Ohio, assignor to The J. H. Day Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 28, 1912. Serial No. 706,342. (Cl. 100—56.)



1. In a machine of the class described a containing hopper, a feeding mechanism to draw material from said hopper, a sliding support for receptacles operating in alinement with said feeding mechanism and means connected with the driving mechanism of the machine for withdrawing said sliding support from said feeding mechanism as said receptacles are being filled.

2. In a machine of the class described a storage hopper having a feeding mechanism arranged to discharge the contents thereof into receptacles, a sliding support for said receptacles, a counterbalance for said sliding support and means for raising said counterbalance while said feeding mechanism is operating.

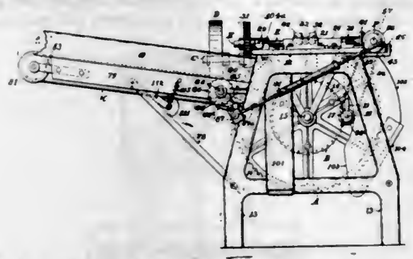
3. In a machine of the class described a storage hopper, having a feeding mechanism arranged to discharge the contents thereof into receptacles, a sliding support for said receptacles, a weight for counterbalancing said sliding support, a flexible connection between said weight and said sliding support, and means for operating said flexible connection to raise said weight and thereby cause said sliding support to withdraw from said feeding mechanism while operating.

4. In a machine of the class described a storage hopper having a feeding mechanism arranged to discharge the contents thereof into receptacles, a sliding support for said receptacles, a weight for counterbalancing said sliding support and means for elevating the said weight to cause said sliding support to drop by gravity.

5. In a machine of the class described a storage hopper having a feeding mechanism arranged to discharge the contents thereof into receptacles, a sliding support for said receptacles, a weighted counterbalance for said sliding support and mechanism for elevating said counterbalance and means for varying the velocity of said mechanism to change the density of the contents of said receptacles.

1,062,742. MACHINE FOR CRACKING NUTS. GEORGE C. SIEBERT and ANTON GERSTMAYR, Chicago, Ill.; said Gerstmayr assignor to said Siebert. Filed Dec. 26, 1911. Serial No. 667,898. (Cl. 146—3.)

1. In a machine for cracking nuts, the combination, of a rotatable feed wheel constructed to receive the nuts to be cracked, mechanism for intermittently rotating said feed wheel located at the side of the said feed wheel, cracking rams located at the side of said feed wheel and constructed to advance by a step-by-step movement, abutment plungers located at the side of the feed wheel opposite the cracking rams and in alinement with the latter, screw-mechanism for advancing and retracting said abutment plungers, and mechanisms for advancing and retracting said cracking rams, said screw-mechanism including a crank and racks and gearing connected thereto to move said screw mechanism in one direction, and spiral springs constructed to move said racks and gearing in the opposite direction.



2. In a machine for cracking nuts, the combination, of a rotatable feed wheel having pockets in its periphery constructed to receive nuts to be cracked, mechanism constructed to rotate said feed wheel by a step-by-step movement, abutment plungers located at one side of said feed wheel, screw-shafts constructed to advance and retract said abutment plungers, cracking rams at the opposite side of said feed wheel and constructed to coact with said plungers, means for rotating said screw-shafts in two opposing directions, and means for advancing the cracking rams by a step-by-step movement, said screw mechanism including a rotatable shaft, a crank on said shaft, racks, operated by said crank in one direction, gearing connecting said racks to said screw shafts, and springs constructed to move said racks in the opposite direction.

3. In a machine for cracking nuts, the combination, of a rotatable feed wheel, pockets in the periphery of said feed wheel constructed to receive the nuts to be cracked, abutment plungers at one side of said feed wheel against which said nuts are held, cracking rams at the other side of said feed wheel in alinement with said abutment plungers and coöperating therewith, means for advancing said abutment plungers, means for positively locking the said abutment plungers in advanced position, means for retracting said abutment plungers, means for imparting a step-by-step rotative movement to said feed wheel, and means for imparting a step-by-step advancing movement to said cracking rams, said positively locking means for the rams in this advanced position including rotatable screw shafts located in, and in screw-threaded engagement with, said plungers, and means for rotating said screw shafts in two opposing directions.

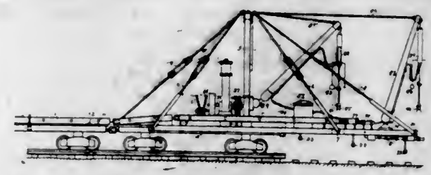
4. A machine for cracking nuts, including, in combination, one or more abutment plungers, a block wherein said abutment plungers are longitudinally movable, said plungers being hollow bodies, a screw-shaft in each hollow body for advancing and retracting said plungers, a rack and gearing for each plunger, means for moving each rack in one direction independently of the other rack, and means for conjointly retracting said racks to normal position.

5. In a machine for cracking nuts, one or more abutment plungers, a block wherein said abutment plungers are longitudinally movable, said plungers being tubular bodies, a shaft in each plunger in screw-threaded engagement therewith, a pinion on each shaft, a spur gear for each pinion, a further pinion connected to each spur gear, a rack constructed to engage the latter pinion, a spring for, and connected to, each rack to pull the same in one direction by contraction, and means for retracting said racks and retensioning said springs.

[Claims 6 to 10 not printed in the Gazette.]

1,062,743. TRACK-LAYING MACHINE. CHARLES M. SIMPSON, Houston, Tex., assignor of five-sixths to Howard F. Smith, Houston, Tex. Filed Oct. 25, 1912. Serial No. 727,084. (Cl. 104—16.)

1. The combination with a train of cars, of sectional tramways carried thereby, one tramway being supported upon the cars and the other being secured to the sides thereof, the tramways extending along both sides of the cars, the sections of said tramways having rollers mounted therein and their inner sides flexibly or pivotally connected together and their outer sides slidably connected together and means for operating said rollers.



2. The combination with a train of cars, of sectional tramways on each side, one of said tramways being mounted on the cars and the other being suspended from the sides thereof the sections of said tramways having their ends on one side flexibly or pivotally connected together and on the other side connected by a sliding joint, transversal rollers mounted in the tramways whose inner ends carry askew gears and means within the tramways operatively connected with said gears for operating said rollers.

3. The combination with a train of cars, of sectional tramways on each side, one of said tramways being mounted on the cars and the other being secured to the sides thereof, transverse rollers mounted in said tramways and having askew gears on their inner ends, sectional drive shafts within the tramways and underneath the rollers, the sections thereof being connected by universal sliding joints, askew gears carried by said drive shafts and operatively connected with the roller gears and adapted to rotate said rollers through said gears.

4. The combination with the train of cars, of sectional tramways removably supported on the sides thereof, one of said tramways being mounted upon the cars and the other being secured to the sides thereof and having its upper surface beneath the upper surface of the beds of the cars, transverse rollers in said tramways, askew gears on the inner ends of the rollers, sectional drive shafts within the tramways and underneath the rollers and having their sections united by means of a universal sliding union, askew gears on said drive shafts which have operative connection with the roller gears, and tumbling rods transmitting motion to the drive shafts.

5. A sectional tramway having its sections flexibly connected at one side of the ends of said sections, and slidably connected at the other side of said ends, transverse rollers mounted on shafts in bearings in said tramway, gears carried by the inner ends of said rollers, a drive shaft underneath the rollers and within the sides of the tramway, gears carried by the drive shaft and operatively connected with the gears of the rollers and adapted to rotate the rollers, a motive means and a tumbling-rod operatively connecting the motive means and the drive shaft.

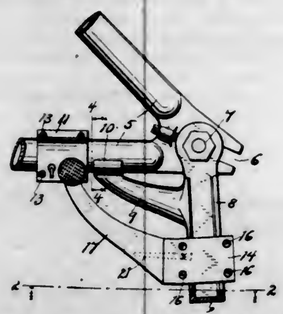
[Claims 6 to 16 not printed in the Gazette.]

1,062,744. MOTOR-CYCLE LOCK. CHARLES H. SMITH and CHARLES F. ADAMS, Chicago, Ill. Filed June 12, 1912. Serial No. 703,176. (Cl. 208—79.)

1. A device of the kind described comprising a clamp; a lock in said clamp; a second clamp; an arm connected with said second clamp by means of an elbow joint; a catch on said arm adapted to engage said lock; and a spring on said second clamp maintaining said catch normally out of engagement with said lock, substantially as described.

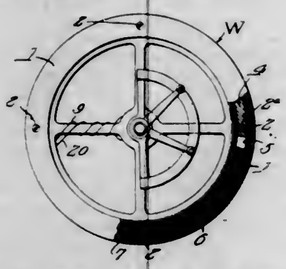
2. The combination with a cycle frame and support pivotally connected to said frame; of a clamp secured to said frame; a lock in said clamp; a second clamp on said support; an arm connected with said second clamp by means of an elbow joint; a catch on said arm adapted to engage said lock; and a spring on said second clamp

normally maintaining said catch out of engagement with said lock, substantially as described.



3. The combination with a cycle frame and a support pivotally connected with said frame; of a clamp secured on said frame; a lock in said clamp; a second clamp on said support; an arm connected with said second clamp by means of an elbow joint and the engaging surfaces of the shoulders of said elbow joint being disposed, one surface at an acute angle and the other at an obtuse angle with the outside of said clamp; a catch on said arm adapted to engage said lock; and a spring on said second clamp normally maintaining said catch out of engagement with said lock, substantially as described.

1,062,745. ELECTRIC-HEATED STEERING-RIM. REUBEN S. SMITH, Marshall, Tex. Filed Aug. 14, 1912. Serial No. 715,098. (Cl. 219—19.)



1. An electric heater of the class described, comprising a pair of annular, trough-like members; a heat-conducting core therein; a resistance element surrounding the core; and securing elements connecting the trough-like members and extended through the core and through the resistance element.

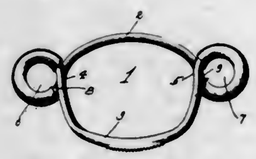
2. An electric heater of the class described, comprising a pair of annular, trough-like members; a metallic core therein; an insulating jacket surrounding the core; a resistance element surrounding the jacket; an insulating jacket surrounding the resistance element; a securing element connecting the trough-like members and extended through both jackets, through the resistance element and through the core; and an insulating member surrounding the securing element to space the same electrically from the trough-like members, and from the core.

1,062,746. COLLAR-SUPPORT. MARY B. SWEIGART, Lewistown, Pa., assignor of one-half to H. W. Sweigart, Lewistown, Pa. Filed Dec. 26, 1911. Serial No. 667,660. (Cl. 2—91.)

In a collar support, a body; a gripping element cooperating at one end with the body in engaging the collar, the gripping element including a shank, formed at one end with a lateral enlargement, from which enlargement a tongue is struck, the enlargement serving to reinforce the gripping element, to provide for the striking of the tongue; there being another tongue projecting from the periphery of the enlargement, both tongues being extended through, and clenched upon the body; and a member having terminal hooks slidably engaged with the edges of the body, said member including a central portion slidably engaged with the shank, the central portion being laterally enlarged, to increase the friction between said member and the shank, there being tapered arms projecting from the central portion, at the ends of which, said hooks are formed, the arms being narrowest adjacent the central portion, to afford resiliency, and being widest adjacent the hooks, to stiffen the hooks.



1,062,747. BRIDLE-BIT. WILLIAM S. TEVIS, Jr., San Francisco, Cal. Filed Dec. 13, 1912. Serial No. 736,538. (Cl. 54—7.)

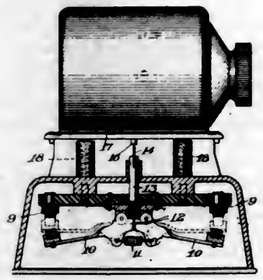


1. A one piece bridle bit comprising a curved bit bar, an oppositely curved member adapted to extend around the under side of the lower jaw, the two members forming a substantially circular ring and crossing at opposite sides thereof and forming bit rings, said bit rings being of a smaller diameter than the first mentioned ring and arranged without the area of the larger ring, and adapted to receive the reins forming the headstall and provide a fulcrum for said bit.

2. A one piece bridle bit comprising an outwardly curved bit bar, an oppositely curved bar adapted to extend around the under side of the lower jaw, the curvature of said bar being greater than that of the bit bar, the two forming a substantially circular ring and crossing at opposite sides thereof and forming bit rings one at each end of said curved bars, and arranged without the area of said circular ring, said bit rings adapted to receive the reins and provide a fulcrum point for said bit bar and jaw encircling member.

1,062,748. ELECTRICALLY-CONTROLLED CHECK-PROTECTOR. LIBANUS M. TODD and CHARLES G. TIEFEL, Rochester, N. Y., assignors to G. W. Todd & Company, a Firm composed of George W. Todd and Libanus M. Todd, Rochester, N. Y. Filed Aug. 12, 1911. Serial No. 643,791. (Cl. 101—57.)

1. In a check protector, the combination with a die, of a platen movable to bring a check into engagement with the die, a pivoted actuating member movable independently of the platen having one end arranged directly under the platen so as to contact therewith and its opposite ends at a point removed from the platen, an electric circuit, an electromagnet in the circuit having connection with the actuating member at the end removed from the platen, a switch for closing the circuit and means adapted to be actuated simultaneously with the insertion of a check for operating said switch.



2. In a check protector, the combination with a die, of a platen movable to bring a check into engagement with the die, a pivoted actuating member movable independently of the platen having one end arranged directly under the platen so as to contact therewith and its opposite end at a point removed from the platen, an electric circuit, an electromagnet in the circuit having connection with the actuating member at the end removed from the platen, a switch for closing the circuit and means arranged in the path of the check for operating said switch.

3. In a check protector, the combination with a die, of a platen movable to bring a check into engagement with the die, a pivoted member movable independently of the platen having one end arranged directly under the platen so as to contact therewith and its opposite end at a point removed from the platen, an electric circuit, an electromagnet in the circuit having connection with the actuating member at the end removed from the platen, a switch for closing the circuit and means for simultaneously supporting the check and operating said switch.

4. In a check protector, the combination with a die, of a platen movable to bring a check into engagement with the die, a pivoted actuating member movable independently of the platen having one end arranged directly under the platen so as to contact therewith and its opposite end at a point removed from the platen, an electric circuit, an electromagnet in the circuit having connection with the actuating member at the end removed from the platen, a switch for closing the circuit, and a finger plate adapted to operate said switch.

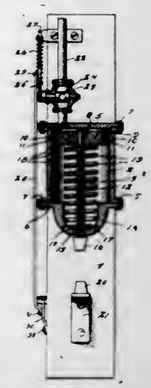
5. In a check protector, the combination with a die, of a platen movable to bring a check into engagement with the die, a pivoted actuating member movable independently of the platen having one end arranged directly under the platen so as to contact therewith and its opposite end at a point removed from the platen, an electric circuit, an electromagnet in the circuit having connection with the actuating member at the end removed from the platen, a switch for closing the circuit and a finger plate arranged in the path of movement of the check and adapted to operate said switch.

[Claims 6 to 10 not printed in the Gazette.]

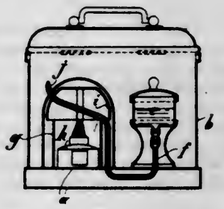
1,062,749. PNEUMATIC TOOL. ISAAC W. TOWNSEND, Teague, Tex. Filed July 11, 1912. Serial No. 708,765. (Cl. 121—19.)

1. In a device of the character described, a cylinder, a pressure inlet pipe leading into the cylinder, said cylinder being provided between its ends with a plurality of spaced exhaust ports which are arranged to form a longitudinal row of the same with relation to the cylinder, a piston mounted to operate within the cylinder, a rod connected with the piston, a suitably stiff coil spring surrounding the rod to oppose the movement of the piston in one direction, and an element connected with the free end of the rod.

2. In a device of the character described, a cylinder provided between its ends with a plurality of spaced relatively small exhaust ports which are arranged in a row extending longitudinally of the cylinder, a pressure supply pipe leading into one end of the cylinder, a piston mounted to reciprocate within the cylinder, a piston rod connected with the piston, a head connected with the opposite end of the cylinder and provided with an opening for the passage of the piston rod and having a relatively large pocket formed therein, a relatively large stiff coil spring surrounding the piston rod and engaging the piston and having its turns of such large diameter that the same are spaced away from the piston rod and are the proper size to fit snugly within the relatively large pocket whereby the spring is held against displacement, and an element connected with the free end of the piston rod.

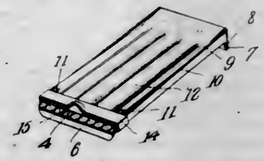


1,062,750. INHALING APPARATUS. OTTO WALKER, Zurich, Switzerland. Filed Mar. 30, 1912. Serial No. 687,336. (Cl. 28—13.)



An inhaling apparatus which comprises in combination with the usual liquid-vessel and heater, a U-shaped tube, an incline at the forward end of said tube above the heater, and an upturned nozzle at the extremity of the tube, as and for the purpose described.

1,062,751. PULL-PROTECTOR FOR BOOTS AND SHOES. LESLIE COLBY WENTWORTH, Oxford, Miss. Filed Jan. 29, 1912. Serial No. 674,119. (Cl. 36—72.)



1. A boot and shoe strap presser and protector, having a receptacle for the strap, and integral means disposed at the respective ends thereof to direct liquid away from the strap and lining of the boot or shoe.

2. A boot and shoe strap presser and protector, having a receptacle for the strap, and an off-set lip disposed at the respective ends thereof.

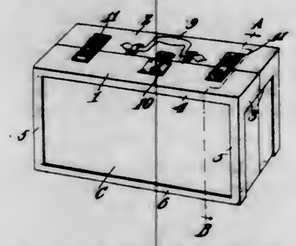
3. A boot and shoe strap presser and protector, having a receptacle portion for the strap, a spring tensioned clamping cover for the receptacle formed integral with the receptacle, means encircling the receptacle and cover for retaining the cover in strap clamping position, and means formed integral with and at the respective ends of the receptacle portion to retain the encircling means in operable position and to direct liquid away from the strap and lining of the boot or shoe.

4. A metallic strap protecting casing to receive and close upon all sides the loop of a strap, provided with means for detachably connecting the casing with the strap, and integral means for directing ink or blacking away from the strap and the lining of the boot or shoe.

5. A metallic strap protecting casing to receive and close upon all sides the loop of a strap, provided with means for detachably connecting the casing with the strap, and two lips formed integral with the casing upon the same side and at the respective ends thereof to prevent the entrance of ink or blacking into the boot or shoe and to direct the ink or blacking away from the strap.

[Claim 6 not printed in the Gazette.]

1,062,752. ATTACHMENT FOR SUITCASES AND THE LIKE. WILLIAM G. WILLIAMS, Vinita, Okla. Filed Dec. 7, 1911. Serial No. 664,483. (Cl. 190—26.)



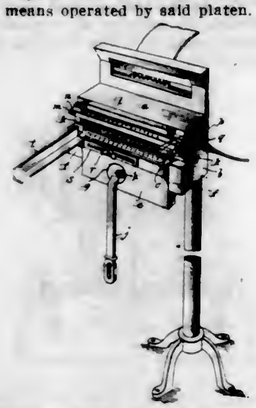
A suit case receiving and reinforcing structure including opposed rigid frame sections, each formed in a single piece and consisting of a top plate flanged at its ends and along one side, an angular bottom strip, angular side strips connecting the ends of the top and bottom strips, and tongues extending inwardly from the bottom strip, hinge connections between the tongues of the opposed sections, means upon the top plates for securing them together, and a handle upon one of the plates.

1,062,753. IMPLEMENT FOR PUNCHING AND CUTTING BELTS. WHITFORD W. WOODLEY, Elizabeth City, N. C. Filed Apr. 28, 1909. Serial No. 492,685. (Cl. 164—91.)

1. In an implement of the class described, the combination of an upright supporting table provided with a belt opening, means for guiding the belt through said opening, and means for simultaneously punching and cutting the belt, said means including a vertically movable platen and a stationary knife and a series of stationary punches, said punches being supported by a horizontal bar, and stripping means consisting of a bar supported above the punch bar and attached to the vertically movable platen and provided with a series of depending stripping pins.

2. In an implement of the class described, the combination of an upright plate provided with a belt opening and means for guiding the belt therethrough, a vertically movable platen supporting said guiding means, means for forcing this platen up and down, and cutting, punching and stripping means.

3. In an implement of the class described, the combination of an upright plate provided with a belt opening and means for guiding the belt therethrough, a vertically movable platen supporting said guiding means, means for forcing this platen up and down, cutting and punching means and stripping means operated by said platen.

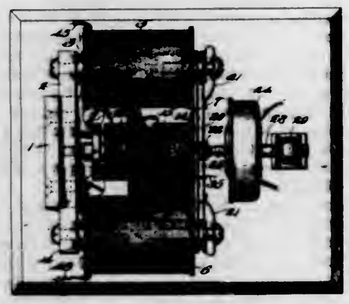


4. In an implement of the class described, the combination of an upright support, cutting and punching devices thereon, a platen and means for moving it up and down on the support, stripping means carried by this platen, and belt guiding means also carried by the platen.

5. In an implement of the class described, the combination with an upright support, cutting and punching means supported thereon, a platen and means for moving it up and down with respect to the cutting and punching means, and stripping means carried by the platen.

[Claims 6 and 7 not printed in the Gazette.]

1,062,754. TELEPHONIC APPARATUS. CHARLES ADAMS-RANDALL, Boston, Mass. Filed Nov. 1, 1912. Serial No. 729,179. (Cl. 179—171.)



1. In a telephonic apparatus the combination of a magnet; a magnetic connection between the poles of said magnet; a non-magnetic connection also carried by said magnet; an electro-magnet having its core joined to said magnetic connection; and a second electro-magnet mounted on said non-magnetic connection and associated with said first electro-magnet, said electro-magnets adapted to be connected with a telephonic circuit, substantially as described.

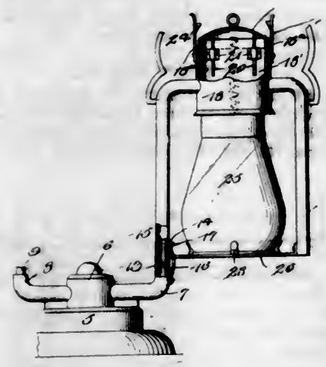
2. In a telephonic apparatus the combination of a magnet; a magnetic connection between the poles of said magnet; an electro-magnet having its core joined to said magnetic connection; a second electro-magnet associated with said first electro-magnet, said electro-magnets adapted to be connected with a telephonic circuit; a transmitter; and means for connecting said transmitter with said first electro-magnet, substantially as described.

3. In a telephonic apparatus the combination of a magnet; a magnetic connection comprising a vibrating member between the poles of said magnet; an electro-magnet having its core joined to said magnetic connection; a second electro-magnet associated with said first electro-magnet, said electro-magnets adapted to be connected with a telephonic circuit; and means for adjustably moving the core of said second electro-magnet toward and from said first electro-magnet, substantially as described.

4. In a telephonic apparatus the combination of a magnet; a vibrating member closing the magnetic circuit of said magnet; an electro-magnet adjustably joined to said magnet; another electro-magnet joined to said vibrating member, the cores of said electro-magnets forming an adjustable gap between them; a telephonic transmitter; and means connected with said vibrator for varying the resistance of said transmitter, substantially as described.

5. In a telephonic apparatus the combination of a magnet; a vibrating member closing the magnetic circuit of said magnet; an electro-magnet adjustably joined to said magnet; another electro-magnet joined to said vibrating member, the cores of said electro-magnets forming an adjustable gap between them; a non-magnetic support for the coil of said last mentioned electro-magnet; a telephonic transmitter; means connected with said vibrator for varying the resistance of said transmitter; and means to support said transmitter in operative relation to said vibrator, substantially as described.

1,062,755. LANTERN. ANTHON H. ANDERSEN, Spring Valley, Wis. Filed June 12, 1912. Serial No. 703,292. (Cl. 240—27.)

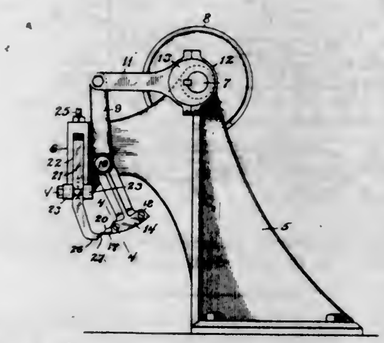


1. In combination, a resirvoir, and burner, supporting arms on the reservoir, a globe frame mounted upon said supporting arms for vertical movement, said frame being also adapted for rotative movement upon one of the arms whereby the same and the globe may be swung to one side of the reservoir, and means for locking said frame against rotative movement upon the supporting arm when the globe is disposed above the burner or at one side thereof.

2. In combination, a lantern reservoir and burner, supporting arms extending laterally from the reservoir and having vertically disposed end portions, tubular frame members mounted upon the ends of the supporting arms and vertically movable thereon, a globe mounted between said frame arms and supported thereby for swinging movement with relation to the reservoir, one of the frame arms being rotatably mounted upon the supporting arms, said last referred to frame arm having spaced openings therein, said supporting arm being also provided with an opening, and a spring pressed lug adapted to be disposed through one of the openings in the frame arm and through the opening in the supporting arm to hold said frame and the globe against swinging movement, when the globe is disposed above the burner or at one side thereof.

3. In a lantern, a globe supporting frame comprising spaced arms, a stack arranged between the upper ends of said arms and secured thereto, said stack consisting of inner and outer cylindrical walls, said inner wall projecting above the outer wall and having lugs upon opposite sides thereof to rest upon the edge of the outer wall and support said inner wall in position, the inner wall being adapted for engagement at its lower end with a globe mounted in the frame, a spring held cap arranged upon the upper end of the inner wall, and means for supporting said cap in spaced relation to the upper edge of said inner wall, and against the action of said springs.

1,062,756. INSEAM-TRIMMING MACHINE. HARRIE A. BALLARD, Boston, Mass., assignor to The Boylston Manufacturing Company, South Boston, Mass., a Corporation of New Jersey. Filed May 23, 1908, Serial No. 434,472. Renewed Sept. 13, 1912. Serial No. 720,273. (Cl 12—82.)



1. In an inseam trimming machine a stationary cutter to engage the inner face of the seam, a reciprocatory cutter outside the seam, said cutters having their edges at an acute angle, and the reciprocatory cutter overlapping the stationary cutter, whereby said reciprocatory cutter passes over the severed edge of the work without depressing it, said stationary cutter having a flange to extend over the insole lip and engage the edge of the upper, substantially as set forth.

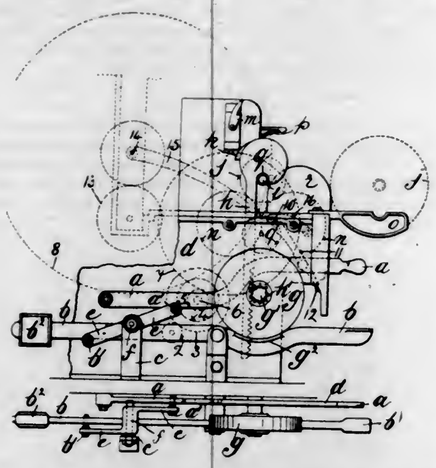
2. In an inseam trimming machine the combination with a movable cutter and means for supporting and actuating it, of a coöperating element constituting both a work gage and support and a stationary cutter, said element having a cutting edge extending under the movable cutter, a face to engage the innersole of the work and a flange to engage the edge of the upper, the edges of the movable cutter and the stationary cutter forming an acute angle.

3. In an inseam trimming machine, a movable cutter outside the seam and a stationary cutter to engage the inner face of the seam, said stationary cutter having a face to engage the innersole of the work, and a flange to extend over the innersole and engage the side edge of the upper, substantially as set forth.

1,062,757. LAPPING MECHANISM OF OPENERS, SCUTCHERS, AND LIKE MACHINES. FRANK BARLOW, Hyde, England. Filed May 12, 1910. Serial No. 561,008. (Cl. 19—8.)

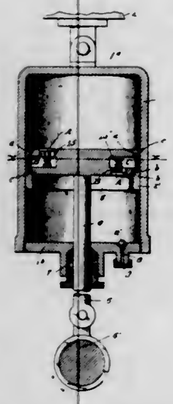
The combination, with a revoluble lap roll, a pair of revoluble calender rolls, toothed racks which normally hold the lap roll in engagement with the calender rolls, a revoluble shaft, toothed pinions secured on the said shaft and gearing into the said racks, a brake wheel secured on the said shaft, a brake normally bearing on the said brake wheel and retarding the upward movement of the racks, disengageable driving mechanism, and a drop lever controlling the said driving mechanism and operatively connected with the said brake; of automatic catch mechanism for sustaining the racks when they are raised to a prearranged extent, pinions secured concentric with the

said lap roll, and discharging segments arranged in the upward path of the last said pinions and operating to



roll the lap roll clear of the calender rolls when the racks are sustained by the said catch mechanism.

1,062,758. SHOCK-ABSORBER. GUY L. BAYLEY, Berkeley, Cal. Filed Oct. 26, 1911. Serial No. 656,839. (Cl. 21—105.)



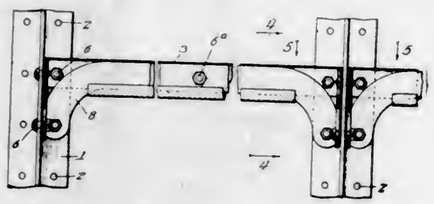
1. In a pneumatic shock-absorber, the combination with the cylinder thereof, of a piston movable within the cylinder, valves mounted within said piston, devices interposed between the cylinder and the piston and coacting with said valves and thrown into action by the movement of the piston for controlling the flow of air within the cylinder to first equalize the pressures on both sides of the piston and then to increase the pressure on one side of the piston and decrease the pressure on the opposite side thereof for the production of retarding forces which vary in pressure in accordance with the length of the piston's movement.

2. In a pneumatic shock-absorber, the combination with the cylinder thereof, of a piston working therein, valves mounted within said piston, a slide cut-off coacting with said valves and interposed between the cylinder and the piston and actuated by the movement of the latter for first equalizing the pressures and then permitting a compression of air on one side of the piston and creating a partial vacuum on the other side of said piston, thereby producing retarding forces opposing the movement of the piston and increasing in accordance with the stroke thereof.

3. A pneumatic shock-absorber comprising a cylinder provided with a piston working therein, a valve controlled chamber in said piston, the movement of the piston within the cylinder being opposed by the compression of air on one side thereof, and the formation of a partial vacuum on the other side of said piston, and a slide cut-off within the cylinder actuated by the movement of the piston therein, said slide cut-off coacting with the valves of said chamber for controlling the flow of air from one side of the piston to the other side, so that on a reversal of the piston's movement the air pressures on each side thereof are first equalized and then caused to generate retarding forces within the cylinder in opposition to further movement in the reverse direction.

4. A pneumatic shock-absorber comprising a cylinder, a piston working within the cylinder, oppositely disposed valve controlled openings within said piston, and a slide cut-off having a limited movement with the movement of the piston, said cut-off first releasing a portion of the air on one side of the piston and permitting the same to flow through certain of said valves to the opposite side thereof during the movement of the piston to equalize the pressures on each side thereof, and then cutting off the flow of air so that the air in advance of the piston may be compressed to increase the pressure thereof while the pressure on the opposite side is decreased and a partial vacuum formed, these retarding forces increasing in accordance with the stroke of the piston.

1,062,759. SHELVING. HERBERT P. BEECHER, Aurora, Ill., assignor to Lyon Metallic Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed Dec. 20, 1912. Serial No. 737,793. (Cl. 211—27.)



1. In shelving, the combination of an upright, a shelf, and a brace, the shelf being attached to the upright, the brace being attached to the upright at a point remote from the point of attachment of the shelf, and the brace being also attached to the shelf and being formed to contact the underside of the shelf for the major portion of the length of the brace.

2. In shelving, the combination of an upright having a vertical row of apertures, a shelf, and a brace, the shelf being attached to the upright at one of the apertures thereof, the brace being attached to the upright at a lower aperture thereof, and the brace being also attached to the shelf and being formed to lie tangent to the underside of the shelf for the major portion of the length of the brace.

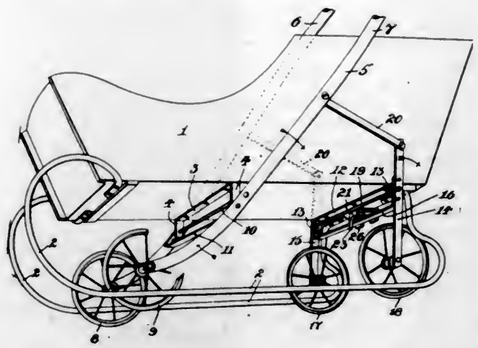
3. Shelving comprising two uprights apertured at regular intervals, a shelf extending from one upright to the other and fastened to the uprights at one of the apertures therein, a brace fastened to the uprights at apertures below the point of attachment of the shelf to the uprights, and a depending flange on said shelf, said brace contacting said flange throughout the major portion of the length of the brace.

4. Shelving comprising two uprights apertured at regular intervals, a shelf extending from one upright to the other and fastened to the uprights at one of the apertures therein, a brace fastened to the uprights at apertures below the point of attachment of the shelf to the uprights, and a depending flange on said shelf, said brace having the form of a long flat arch and contacting both the flange and the under surface of the shelf for the major portion of the length of the brace.

5. Sectional shelving comprising uprights having apertures spaced equidistantly, a shelf fastened to the uprights at one of the apertures therein, a depending flange on said shelf, and a brace having the form of a flat arch contacting the said flange and lying tangent to the shelf throughout the major portion of the length of the brace, the brace being curved downward at the ends and being fastened at the ends to the uprights at apertures therein below the point of attachment of the shelf to the upright.

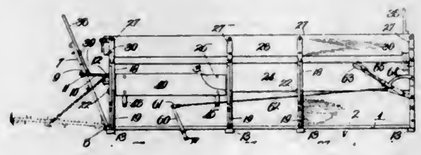
[Claim 6 not printed in the Gazette.]

1,062,760. CONVERTIBLE SLEIGH. WILHELM BEILSTEIN, Berlin, Ontario, Canada, assignor of one-half to Carl Kranz, Berlin, Canada. Filed June 3, 1912. Serial No. 701,235. (Cl. 21—96.)



In a convertible sleigh the combination with the sleigh body supported on fixed runners, of a propelling handle extending above and below the sleigh body and carrying wheels at the lower end means for pivoting said handle to the sleigh toward its front end, a swingable frame carrying wheels at its lower end, means for pivoting said frame to the sleigh toward its rear end means for coupling said handle and said frame for obtaining simultaneous movement, a stop secured to the sleigh body and limiting the movement of said frame in one direction, a bracket secured beneath the sleigh body, and a rotatable member journaled in said bracket and having a cranked inner end and means at its outer end for rotating said cranked end into and out of engagement with the frame.

1,062,761. CONVERTIBLE WAGON-BOX. LOUIS F. BONALY, Kickapoo township, Leavenworth county, Kans. Filed Dec. 11, 1911. Serial No. 665,558. (Cl. 21—74.)



1. The combination with a wagon box of a lateral extension or hopper therefor, comprising longitudinally alined and communicating front and rear portions, the former being the deeper and closed at its rear end below the front end of the rear or shallow portion, closures for the front and rear ends respectively of said front and rear portions, and means for holding the extension or hopper in fixed relation to the wagon box.

2. The combination with a wagon box of lateral extensions or hoppers therefor, consisting of upwardly and outwardly sloping bottoms, vertical sides at the outer edges of the bottoms and ends or closures interposed between the said sides and the wagon box near the front and rear ends of the latter; the said hoppers or extensions each consisting of a front portion and a communicating rear portion of less depth than the front portion, and a closure for the rear end of the front portion below the plane of the rear portion.

3. A convertible wagon box, comprising a bottom, ends and permanent sides, boards recessed in their lower or inner edges from their rear ends forwardly a suitable distance, and hingedly supported and adapted to stand edgewise above the said sides to increase the depth of the same or to occupy an upwardly and outwardly sloping position outward of the permanent sides, upward extensions 3 for the permanent sides, occupying said recesses of the hingedly supported boards when the latter stand edgewise above the permanent sides, and hinged boards pendent outward of the permanent sides when the recessed boards are standing above the sides, and overlying the recesses of said recessed boards when the same are in said sloping position.

1,062,762. METHOD FOR PRODUCING PROPELLER-BLADE PATTERNS. WILLIAM R. BOUTWELL, Norfolk, Va. Filed May 27, 1912. Serial No. 700,088. (Cl. 144—309.)



1. That method of forming propeller blade patterns which consists in forming a circular groove in a disk of material, the groove being formed concentric to the disk leaving the central portion of the disk thicker than the grooved portion, cutting the disk to provide a number of independent parts, and working down the parts to produce a pattern of the desired width, the thickened central part being worked down to provide a stem for the propeller blade pattern.

2. The method of forming a propeller blade pattern which consists in concentrically grooving the side of a disk blank and leaving the central portion thereof thicker than the grooved portion of the blank, then cutting said blank to provide a part having a width substantially equal to the width of the desired pattern, and finally turning down the section to produce the propeller blade, the central thickened portion of the blank being turned down to provide a stem integral with the pattern.

3. The method of forming patterns for propeller blades which consists in first: forming a concentric groove in a cylindrical blank leaving the central portion of the blank thicker than the grooved portion, second: cutting the blank through the groove to form a number of segments having transverse grooves therein, and third: working down the segments to provide patterns for the propeller blades from the grooved portions and stems for the blades from the thickened central portions.

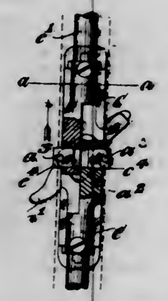
4. That method of forming propeller blade patterns which consists in cutting a concentric groove, or grooves, arcuate in cross-section in the face of a blank leaving a central thickened portion cutting the blank through the arcuate groove or grooves and the thickened portion to provide a number of parts each having a thickened inner end, and working down each part to produce the blade patterns desired, the thickened inner ends being worked down to produce stems for the parts.

5. The method of forming patterns for water and air craft propeller blades which consists in forming complementary grooves in the opposite sides of a disk blank and leaving a central thickened portion, cutting the disk blank through the grooves into a number of parts, and working

down the desired patterns of the blade from the said parts and working the stems for the blade patterns from the central thickened portion.

[Claim 6 not printed in the Gazette.]

1,062,763. FASTENER SUITABLE FOR SHOW-CASES AND OTHER PURPOSES. JOHN SAMUEL BRUCE, Birmingham, England. Filed Feb. 10, 1913. Serial No. 747,492. (Cl. 16—63.)



1. A fastener suitable for show cases and the like comprising in combination, one or more locking members adapted for reciprocatory movement, a rotatable member for operating said locking members, and means for operating said locking members from said rotatable member comprising one or more blocks separate from said member mounted for sliding movement transverse to the movement of said locking members.

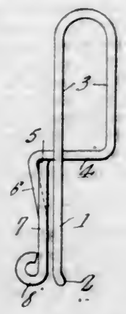
2. A fastener suitable for show cases and the like comprising in combination, one or more locking members adapted for reciprocatory movement and each having a transverse groove therein, a rotatable member for operating said locking members, and means for operating said locking members from said rotatable member comprising one or more blocks separate from said members and mounted for sliding movement in said grooves.

3. A fastener suitable for show cases and the like comprising in combination, one or more locking members adapted for reciprocatory movement and each having a transverse groove therein, a rotatable member for operating said locking members, and means for operating said locking members from said rotatable member comprising one or more blocks mounted in said grooves and having sockets therein and pins operatively connecting said blocks with said rotatable member.

4. A fastener suitable for show cases and the like comprising in combination, one or more locking members mounted for reciprocatory movement and each having a transverse dovetail groove therein, said grooves being substantially perpendicular to the line of movement of said locking members, blocks having a dovetail cross section in one direction and mounted for sliding movement in said grooves, said blocks being provided with apertures extending substantially at right angles to the direction of said groove, and a rotatable member having its axis of rotation substantially parallel to said apertures and having pins projecting therein whereby said blocks are operated from said rotatable member to change the position of said locking member.

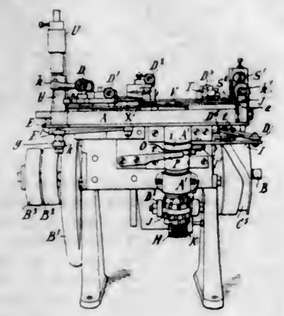
1,062,764. CLOTHES-PIN. JOHN LEE BUCKLEY, Weatherford, Tex. Filed June 15, 1911. Serial No. 633,376. (Cl. 24—261.)

A clothes pin fashioned from a length of wire and comprising a U-shaped loop, separated portions bent back from the ends of the loop, separated portions passing through the loop from the aforesaid portions, and the ends of the wire extending downwardly from the latter portions over the bend of the loop to form line receiving jaws therewith, the loop sections of the wire converging from the bend of the loop to the ends, and the ends being crossed, the outer end being deflected inwardly below the



crossing point so that the ends below the crossing point lie in a plane parallel to the plane of the loop.

1,062,765. AUTOMATIC MACHINE FOR PLACING AND FIXING ROLLERS IN METAL TUBES OR EYELETS. VICTOR JOSEPH BUNET, Paris, France. Filed Apr. 5, 1911. Serial No. 619,163. (Cl. 78—49.)

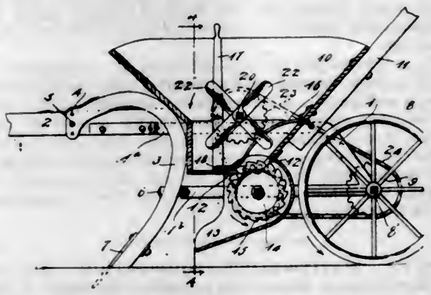


1. A machine of the character described comprising in combination a matrix holder secured at the front of the machine, a matrix upon the upper end of said holder adapted to execute a quarter turn, a plate above said matrix provided with a hole in its center through which said matrix passes, adapted to form a support for an eyelet, two punches for simultaneously punching the eyelet or ring at diametrically opposite points, and mechanism for riveting a roller in said ring after said matrix has executed its quarter turn, substantially as described.

2. A machine of the character described comprising in combination, means for supporting an eyelet or ring adapted to execute a quarter turn, mechanism for punching holes in the ring or eyelet at diametrically opposite points, means for bringing a roller with a bore therein in alinement with said holes, mechanism for projecting a suitable length of wire through said holes and roller, and means for riveting the ends of said wire after said supporting means have executed their quarter turn, substantially as described.

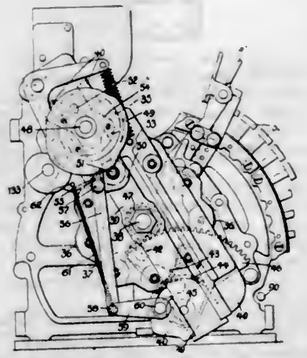
3. A machine of the character described comprising in combination, a support for a matrix having a slot, a roller within said slot, a plate above said matrix provided with a hole in its center through which said matrix passes, and supporting an eyelet, two punches for simultaneously punching an eyelet or ring at diametrically opposite points, means for actuating said punches, a spindle or rivet for riveting a roller in said ring after said matrix has executed its quarter turn, and means for actuating said riveting means, substantially as described.

1,062,766. SEED-PLANTER. THOMAS L. CARTER, Atlanta, Ga. Filed Jan. 18, 1912. Serial No. 671,840. (Cl. 111—7.)



In a planting machine of the character described, a supporting frame, operating means mounted thereon, a hopper having a feed passage located in the bottom thereof, a seed discharging wheel revolubly mounted in the frame and forming a closure for the passage in said hopper, whereby the seeds are conveyed from the hopper during the movement of the machine, a spring guard secured to the rear wall of the hopper and extending over the passage in the lower end of the hopper and the seed discharging wheel mounted below the hopper, a lever pivoted to one side of the hopper, a curved lifting lug forming the lower end of the lever and adapted for engagement with the disconnected free end of the spring guard, whereby the latter is regulated, blades mounted within the hopper and arranged above the guard and in close relation to the opening located in the bottom of said hopper, and to one side of said guard, said blades being adapted to be rotated during the movement of the machine.

1,062,767. CASH-REGISTER. WILLIAM G. CHAMBERS, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio, a Corporation of Ohio. (Incorporated in 1906.) Filed Aug. 16, 1912. Serial No. 715,324. (Cl. 235—6.)



1. In a cash register, the combination with a plurality of totalizers, of actuating mechanism common to all of the totalizers, means for preliminarily establishing a coöperative relation between the actuating mechanism and any desired one of the totalizers, and means effective upon an operation of the machine for lifting the positioned totalizer into operative engagement with the actuating mechanism, said latter means comprising a sliding frame carrying the totalizers, a sliding plate adjacent the frame, a slot and pin connection intermediate the plate and frame whereby the movements of the former are transmitted to the latter, and a cam for operating said plate.

2. In a cash register, the combination with actuating mechanism differentially operable according to the amount to be registered, of a plurality of totalizers, a carrier for said totalizers adjustable to establish a coöperative relation between any desired one of the totalizers and the actuating mechanism, a support for said carrier movable to move the positioned totalizer into and out of operative engagement with the actuating mechanism, connections normally acting to move said support at each operation of the machine said connections comprising a rotary disk carrying a cam plate having two operating faces one concentric and the other eccentric to the axis of rotation of said disk, said faces merging into each other, a sliding plate adjacent the frame and adapted to be slid by the cam plate, and a slot and pin connection intermediate said plate and frame.

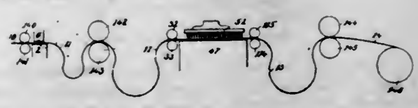
3. In a cash register, the combination with actuating mechanism differentially operable according to the amount to be registered, of a plurality of totalizers, a carrier for said totalizers adjustable to establish a coöperative relation between any desired one of the totalizers and the actuating mechanism, a support for said carrier movable to move the positioned totalizer into and out of operative engagement with the actuating mechanism, connections normally acting to move said support at each operation of the machine said connections comprising a rotary disk carrying a cam plate having two operating faces one concentric and the other eccentric to the axis of rotation of said disk, said faces merging into each other, a sliding plate adjacent the frame and adapted to be slid by the cam plate, a slot and pin connection intermediate said plate and frame, and manipulative devices for effecting a movement of said plate out of coöperative relation with the eccentric face of said cam plate whereby no movement of the totalizer frame will be effected upon an operation of the rotary disk.

4. In a cash register, the combination with a main operating mechanism, of a series of depressible keys, a detent mechanism for said keys, a latch for the main operating mechanism controlled by the detent mechanism, a cash receptacle adapted to be exposed at each operation of the machine, and means controlled by the receptacle for preventing movement of the detent and latch while the receptacle is in exposed position.

5. In a cash register, the combination with a main operating mechanism, of a series of depressible keys, a detent mechanism for said keys, a latch for the main operating mechanism controlled by the detent mechanism, a cash receptacle adapted to be exposed at each operation of the machine, means controlled by the receptacle for preventing movement of the detent and latch while the receptacle is in exposed position, and adjustable means capable of a plurality of adjustments, one adjustment in which said receptacle controlled means is ineffective, a second adjustment in which said means is effective, and a third adjustment in which said detent mechanism is completely disabled.

[Claims 6 to 8 not printed in the Gazette.]

1,062,768. EXPANDED-METAL MANUFACTURE. NORRIS ELMORE CLARK, Plainville, Conn., assignor to The National Metal Fabric Company, New York, N. Y., a Corporation of New York. Original application filed Feb. 23, 1906, Serial No. 302,406. Divided and this application filed May 31, 1907. Serial No. 376,573. (Cl. 164—6.5.)



1. The method of forming expanded metal, which includes first slitting a sheet, then flattening it, and then expanding it laterally.

2. The method of forming expanded metal, which includes first slitting a sheet, then flattening it, then expanding it laterally, and then flattening it.

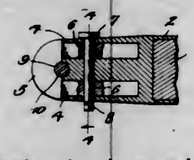
3. The method of forming expanded metal, which includes slitting a strip, rolling it longitudinally, then expanding it laterally, and then flattening it.

4. The method of forming expanded metal, which includes slitting a strip, rolling it flat, and then expanding it laterally in the direction of its original plane.

5. The method of forming expanded sheet metal, which includes slitting a strip, flattening it, expanding it laterally, and setting the bonds and strands in the same plane.

[Claims 6 to 103 not printed in the Gazette.]

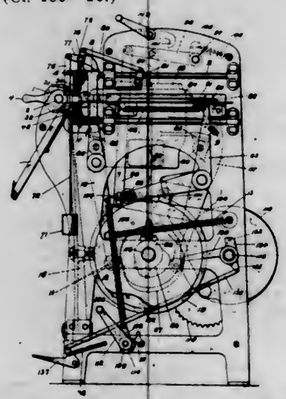
1,062,769. DETACHABLE REACH END. JOHN L. CORNS, Chelsea, Okla., assignor of one-third to Walter A. Howard and one-third to Harry J. Swarts, Chelsea, Okla. Filed June 29, 1912. Serial No. 706,811. (Cl. 21—39.)



1. A reach end adapted to be secured to the end of a reach pole and project longitudinally therefrom, said reach end having a solid body portion formed with a pair of longitudinally extending end opening recesses, a fastening clip having parallel arms adapted to be positioned within said recesses, the clip coöperating with the reach end to form an opening for the reception of a king bolt, said reach end and fastening clip being formed with a plurality of transverse alined openings, and a pin fitted within said openings whereby the fastening clip is secured in position.

2. A reach end comprising an elongated socket rectangular in cross section and adapted to receive one end of a reach pole, means for removably securing the socket in position, the outer end of said socket being solid and formed with a pair of longitudinal end opening recesses, and a fastening clip removably secured within said recesses and coöperating with the socket to form an opening for the reception of a king bolt.

1,062,770. TYPOGRAPHIC MACHINE. FRITZ C. LUCKE D'AIX, New York, N. Y. Filed Nov. 14, 1908. Serial No. 462,670. (Cl. 199—10.)



1. A typographic machine including in combination a mold and a rotatable matrix carrier permanently located in the frame of the machine at the casting point and having means for holding a plurality of lines of matrices, and manually operated means for causing said carrier to present at will any selected one of the several lines of matrices, which it carries, to the mold.

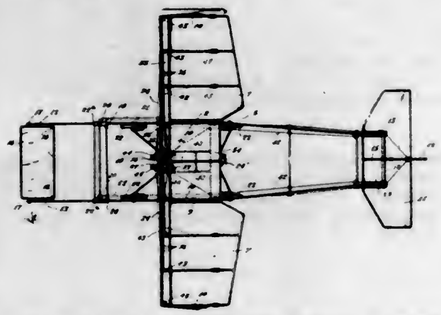
2. A typographic machine including in combination a mold and a rotatable matrix carrier permanently located in the frame of the machine at the casting point and having means for holding a plurality of lines of matrices, manually operated means for causing said carrier to present at will any selected one of the several lines of matrices which it carries to the mold and means acting to automatically aline the selected line of matrices with the mold slot.

3. A typographic machine including in combination a mold movable between casting position and ejecting position, a melting pot, an automatically operated ejector, and a rotatable matrix carrier permanently located in the frame of the machine at the casting point and having means for holding a plurality of lines of matrices, said matrix carrier being rotatable at the will of the operator to present any selected one of the several lines of matrices which it carries, to the mold.

1,062,771. PAVING-BLOCK COMPOSITION. AUGUST DEIDESHEIMER, Neustadt-on-the-Hardt, Germany. Filed Mar. 17, 1911. Serial No. 615,103. (Cl. 106—11.)

A composition for clinkered paving-blocks consisting essentially of a mixture of 70 per cent. and upward of a plurality of sorts of differently-sized granular refractory stony materials, in conjunction with a void-filling and binding mixture of a fluxing dust derived from such stony materials, and fire-clay.

1,062,772. AEROPLANE. HALVOR OLSEN EIANE, San Diego, Cal. Filed Sept. 26, 1911. Serial No. 651,473. (Cl. 244—29.)



1. In an aeroplane construction, a frame, a substantially horizontal adjustable plane mounted on said frame, a mechanism for adjusting said plane comprising spaced vertical planes mounted on said frame for bodily movement in a lateral direction by the air, and an operative connection between said vertical planes and said horizontal plane.

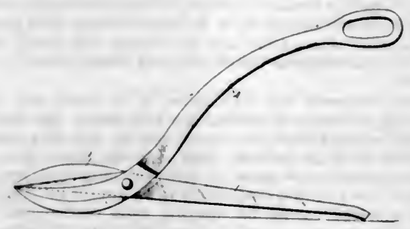
2. In an aeroplane construction, a frame, a substantially horizontal adjustable plane on said frame, means for adjusting said plane comprising a pair of vertical planes spaced laterally of said frame and mounted thereon for bodily movement in parallel relation laterally thereof, and an operative connection between said vertical planes and said horizontal plane.

3. An aeroplane comprising a frame, a horizontal plane pivotally supported on said frame, means for effecting rotary adjustment of said plane, means for warping said plane comprising a vertical plane supported on said frame for movement in a lateral direction by the air, and an operative connection between said vertical plane and said horizontal plane.

4. An aeroplane comprising a frame, supporting planes pivotally mounted on said frame laterally of one another, means for effecting rotary adjustment of said planes, means for warping said planes comprising a vertical plane supported on said frame for movement laterally thereof by the air, and operative connections between said vertical plane and said horizontal planes.

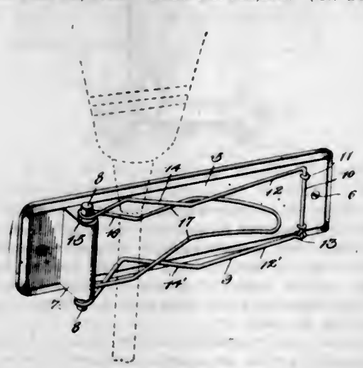
5. An aeroplane comprising a frame, supporting planes pivotally mounted on said frame laterally of one another, means for effecting rotary adjustment of said planes, means for warping said planes comprising vertical planes supported on said frame for simultaneous movement laterally thereof by the air, and an operative connection between said vertical planes and said horizontal planes.

1,062,773. METAL CLIPPER OR SHEARS. ELI HENDERSON ELLER, Granville, Tenn. Filed Feb. 11, 1910. Serial No. 543,411. (Cl. 30—13.)



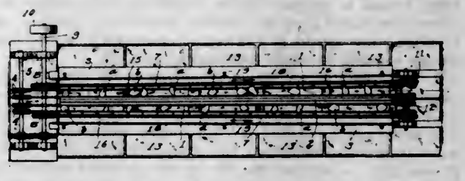
The metal clipper or shears comprising the cutting blades pivotally connected together, the upper cutting blade having a rearwardly extending heel, and the lower cutting blade having an operating lever extending upwardly and rearwardly at divergence from the underlying heel extension and to a point to be gripped by the operator, said heel extension forming a rest for the foot and inclining downwardly from the pivot of the two blades to the rear extremity of the heel in the closed position of the blades for increasing the leverage on the blades in the operation of cutting, substantially as described.

1,062,774. BROOM-HOLDER. GEORGE ELSE, Yuma, Colo. Filed June 22, 1912. Serial No. 705,295. (Cl. 24—257.)



In a broom holder, the combination with a base having a block on one end provided with oppositely projecting studs, of a wire having one end angularly bent and fixed to the base opposite the block, said wire being obliquely extended outwardly from the face of the base, the other end of said wire being disposed in spaced parallel relation to the oblique portion and secured to the fixed end, said ends extending inwardly from the ends of the oblique portions to a point adjacent the surface of the base, thence outwardly and coiled upon themselves, said coils surrounding the studs at each end of the block, the intermediate portion of said wire being inclined outwardly from the coils and the spaced intermediate portions of said wire being convergently extended and curved inwardly, and the central portion of said wire extending beyond the vertical plane of the obliquely inclined portions thereof, as and for the purpose set forth.

1,062,775. LEMON-GRADER. RUSSELL B. FARRAR, Glendale, and BYRON C. LEIGHTON, Los Angeles, Cal. Filed June 24, 1911. Serial No. 635,179. (Cl. 130—32.)



1. A grader for oblong fruit, comprising a grading element, a series of pins, and means for producing relative movement betwen the pins and fruit for turning the fruit, to bring their short axes into coöperative relation with the grading element.

2. An oblong fruit grader comprising a grading way, upon which the fruit is supported and travel and pins along said way in a direction opposite to the movement of the lemons for engaging the ends of said fruit and turning the fruit to bring their short axes into cooperative relation with the grading way.

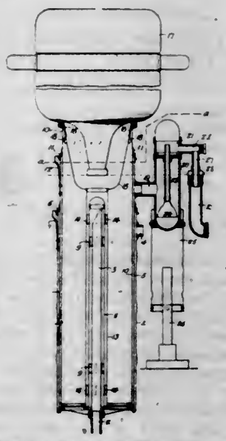
3. An oblong fruit grader comprising a grading way, upon which the fruit is supported and travel, a chain movable with respect to the fruit along said way, a series of pins carried by said chain, said pins being of a length to contact with the ends of fruit which have turned with their long diameter transverse to the grading way and thereby turn such fruit to bring their short diameter transverse to the grading way.

4. An oblong fruit grader comprising a grading way, along which the fruit travel, a chain extending along the grading way, a series of U-shaped pins, one leg of each pin being revolubly mounted in said chain and a spring for yieldingly holding each pin in a position transverse to the chain.

5. An oblong fruit grader comprising a grading way, along which the fruit travels, and a series of pins yieldingly supported, traveling along said grading way for turning fruit whose long axes are transverse to the grading way, into a position with their short axes transverse to the grading way.

[Claim 6 not printed in the Gazette.]

1,062,776. STERILIZER. JOHN S. FORBES, Philadelphia, Pa., assignor to Forbes Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 11, 1912. Serial No. 682,845. (Cl. 210—20.)



1. The combination in a sterilizer of three containers closely and removably nested, one within the other to form a heat exchange; means for sterilizing liquid operatively independent of and outside said containers, said means

being directly connected to the upper parts of the middle and outer containers respectively so as to receive raw liquid from the space between the inner and middle containers and to deliver sterile liquid into the space between the outer and the middle containers; means for supplying raw liquid to the nested containers; and a discharge conduit for said containers.

2. The combination in a sterilizer of a plurality of closely nested containers, of which one has a cup for the reception of raw liquid and a central conduit opening into said cup; a conduit for the second container extending within the condiut of the first container and closed at one end; a conduit for the third container extending within said latter conduit and having a discharge pipe; with liquid sterilizing means connected to receive raw liquid from the space between two of the containers and to deliver sterile liquid to the space between one of the said two containers and a third container.

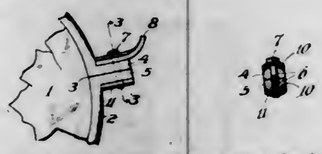
3. The combination in a sterilizer of a plurality of closely nested containers separably mounted one within the other; means for delivering raw liquid to the space between two of the containers; means for sterilizing liquid connected to receive raw liquid from between two of the containers and to deliver sterile liquid to the space between one of said containers and a third container, with an overflow pipe within the containers and extending out through the bottom of the same, said pipe being arranged to provide a level maintaining trap so as to prevent draining out of all the sterile liquid.

4. The combination in a sterilizer of a plurality of closely nested containers of different lengths, the longest of said containers having an annular flange covering the open end of the second container, and said second container having an annular flange covering the open end of the third container; means for delivering raw liquid to the space between two of the containers; with means for sterilizing liquid connected to receive raw liquid from said space and formed to deliver sterile liquid to the space between one of said containers and the third container.

5. The combination in a sterilizer of an inner, an intermediate, and an outer container closely nested but respectively separable one from the other; means for sterilizing liquid operatively independent and outside of said container, connected to receive raw liquid from the space between two of the containers and arranged to deliver sterile liquid to the space between one of said containers and a third container; means for delivering raw liquid to the space between said first two containers; and means for normally preventing separation of the containers.

[Claims 6 to 13 not printed in the Gazette.]

1,062,777. FRAME FOR EYEGLASSES AND SPECTACLES. IVAN FOX, Media, Pa. Filed Aug. 16, 1911. Serial No. 644,377. (Cl. 88—42.)



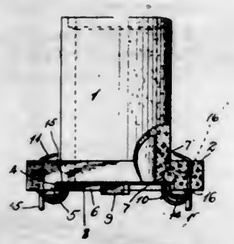
1. A pair of eye glasses including rims for holding the lenses, the integrality of the said rims being interrupted at certain points and the said rims being provided with projections at such points the surface of the upper side of the uppermost projection and the surface of the lower side of the lowermost projection being convexed, means having concaved surfaces for engaging the said convexed surfaces, means for securing the said first-named means to the said projections and for securing the said projections together, and parts of the frame structure of the eye glasses connected to the said securing means.

2. In eyeglasses, rims of non-metallic material, the integrality of which is interrupted at certain points and the said rims being provided with projections at such points and the opposite sides of said projections being curved, a bridge having transversely curved ends, which fit the said curved sides upon the said projections, and means for securing the ends of said bridge and the said projections together.

3. In eyeglasses, the combination of rims of non-metallic material, the continuity of the said rims being interrupted and the said rims having projections secured thereto upon opposite sides of the point where the continuity is broken, the outer edges of the said projections being curvilinear, with a bridge for connecting the rims and lenses together, the opposite end portions of the said bridge being curvilinear in transverse section whereby concaved seats are formed which fit upon the convex surfaces of the upper sides of the said projections, and means for securing and clamping the ends of said bridge to said projections.

4. In eyeglasses, the combination of the lenses and the rims surrounding and holding the said lenses, the continuity of which rims is interrupted and the said rims being provided with projections upon opposite sides of the abutting ends at the point of interruption and the outer edges or sides of said projections being convex in outline, with a bridge having its opposite ends concavo-convex in transverse section and the concaved sides of the said ends resting upon the upper convexed sides or edges of the said projections, nuts concavo-convex in transverse section having their concaved sides or surfaces seated against the convex surface of the lower edges or sides of the said projections, and means for clamping and connecting the opposite ends of the said bridge, the said projections, and the said nuts together.

1,062,778. FLUME-GATE. PERRY L. HEDRICK, El Centro, Cal. Filed June 10, 1912. Serial No. 702,720. (Cl. 61—46.)



1. A flume gate construction, comprising a centrally apertured body portion formed of a cementitious material and provided with a rectangularly formed recessed seat on its outer face, a metallic gate slidably mounted in said seat, and resilient means secured to the face of said body portion and contacting with said gate to hold the same in contact with the seat.

2. A flume gate, comprising a body formed of cementitious material having an aperture formed therein, said body being also provided with a recessed seat on its outer face, the straight sides of said recess forming a guide way, a metallic gate slidably mounted in said seat, and springs secured to said body portion and extending into said recessed seat to bear against the said gate.

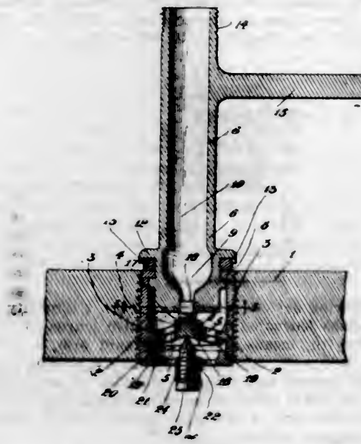
3. A flume gate, comprising a cementitious pipe, a gate holder formed of cementitious material on one end of said pipe, said gate holder being provided with a centrally disposed aperture, said aperture registering with the bore of the pipe, the outer face of said holder being recessed to form a gate seat, a metallic gate slidably mounted in said seat and adapted to close the aperture in the gate holder, and resilient means extending from the face into said recess to press said gate against said seat.

4. In a flume gate construction, a centrally apertured gate holder formed of cementitious material and being provided with a recess in the outer face thereof, said recess forming a gate seat, a sliding gate mounted in said seat, and springs of approximately U shape mounted in the face of said holder and bearing against said gate.

5. As a new article of manufacture, a flume gate construction, comprising a cylindrical pipe section formed of cementitious material, a gate holder, said gate holder comprising a rectangular structure provided with a circular aperture coinciding with the openings in the pipe structure and provided on its outer face with a recess, said recess being open in its upper end, and a pair of oppositely disposed metallic wire springs formed of resilient material attached to the face of the holder adjacent the recess, said springs adapted to bear against a slide gate, and a gate mounted in said recess and movable therein.

[Claims 6 and 7 not printed in the Gazette.]

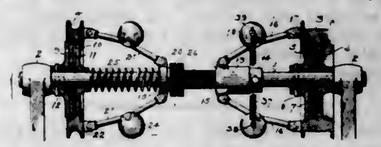
1,062,779. BARREL-TAP. HENRY HILDENBRAND, New York, N. Y., assignor of one-half to Lewis H. Phelps, Westfield, N. J. Filed Sept. 23, 1911, Serial No. 650,891. Renewed Mar. 18, 1913. Serial No. 755,262. (Cl. 225—2.)



1. A device of the character described comprising a valve casing having cast integrally therewith a diametrically extending web provided with a central hub and fluid passage apertures the under portion of said web being adapted to form a valve seat, a valve mounted in said valve seat and said central hub, provided with fluid passage apertures, a shank provided with a head for actuating said valve, a spigot mounted within said valve casing and engaging the actuating head on said valve, a cap detachably mounted in said valve casing having formed therein a bearing, and a set screw mounted in said bearing for holding said valve against its seat.

2. A device of the character described comprising a valve casing having cast integrally therewith a diametrically extending web provided with a central hub and fluid passage apertures, the under portion of said web forming a valve seat, a valve mounted in said web conforming to said valve seat and provided with fluid passage apertures adapted to register with the apertures in said web and having a shank formed with an actuating head, a spigot adapted to be mounted in said valve casing provided at its lower end with a neck adapted to engage said actuating head on said valve shank, a cap mounted in said valve casing provided with a bearing and fluid passage apertures, a set screw mounted in said bearing provided with a conical end adapted to engage the valve, and a locknut mounted on said set screw engaging said bearing in said cap and adapted to hold said set screw and valve in place in said valve casing.

1,062,780. SPEED-GOVERNOR DEVICE. CHARLES O. KENNEDY, Servia, Ind. Filed Nov. 25, 1912. Serial No. 733,373. (Cl. 74—45.)



1. In a speed governor, a shaft, a driving pulley adapted to be connected with the driving motor and a driven pulley adapted to be connected with the driven machine revolubly journaled thereon, a set of friction clutch devices normally connecting the driven pulley with the shaft, a second set of friction clutch devices adapted to connect the driving pulley with the shaft, said driving pulley being normally disconnected from the shaft, governor weights controlled by centrifugal tendency and adapted by their initial operation to cause the driving pulley to be engaged with the shaft, and upon rotation at an excessive speed adapted to cause the driven pulley to be disconnected from the shaft, substantially as specified.

2. In a speed governor, a shaft, a driving pulley and a driven pulley mounted upon the shaft, clutch means for operatively connecting said pulleys with the shaft, a spring for normally maintaining the driven pulley clutch mechanism in operative position whereby the driven pulley will be operatively engaged with the shaft, said driving pulley being normally disconnected from the shaft, centrifugally operated governor weights adapted to operate the clutch mechanism of the driving pulley to connect said driving pulley with the shaft when said pulley has attained sufficient speed to affect said governor weights and to operate said clutch mechanism of the driven pulley against the tension of the spring to disconnect the driven pulley when the speed exceeds certain predetermined limits, substantially as specified.

3. In a speed governor, a shaft, a drive and a driven pulley, said pulleys being both revolubly and longitudinally movable on said shaft, disks fixed upon said shafts with which the pulleys are frictionally connected and disks connected by their longitudinal movement upon the shaft, governor weights operated by centrifugal tendency and adapted by their operation to shift the pulleys longitudinally upon the shaft into and out of frictional engagement with the disks, said drive pulley being normally disconnected and adapted to be connected by the operation of the governor weights, the driven pulley being normally connected and adapted to be disconnected by the operation of the weights, substantially as specified.

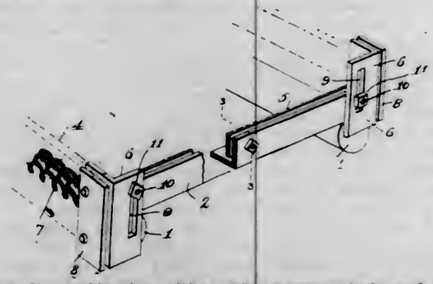
4. In a speed governor, a shaft, a driving and a driven pulley both revolubly and longitudinally movable upon said shaft, clutch mechanism for operatively engaging the pulleys with the shaft with which the pulleys are engaged and disengaged by their longitudinal movement upon the shaft, the driving pulley being normally disengaged from its clutch mechanism, a sleeve revolubly mounted upon the shaft adjacent to the driving pulley, toggle links connecting the sleeve to the driving pulley, governor weights carried by the toggle links adapted to shift under centrifugal tendency and thereby adapted to draw the driving pulley longitudinally into engagement with its clutch, and a second sleeve mounted upon the shaft adjacent to the driven pulley, toggle links connecting the second sleeve with the driven pulley, governor weights carried by the toggle links adapted to shift under centrifugal tendency and thereby adapted to draw the driven pulley longitudinally out of engagement with its corresponding clutch mechanism when the pulley has attained a predetermined limit of speed, substantially as specified.

5. In a speed governor, a shaft, driving and driven pulleys revolubly mounted on the shaft clutches for each of the pulleys adapted to operatively engage the pulleys with the shaft, said driving pulley and its clutch being nor-

mally disengaged, said driven pulley and its clutch being normally engaged, governor weights operated by centrifugal tendency adapted by their movement to cause the engagement of the driving pulley and its clutch at a given rate of speed and to cause the disengagement of the driven pulley and its clutch at a higher rate of speed, substantially as specified.

[Claims 6 to 8 not printed in the Gazette.]

1,062,781. SIDE GUARD FOR SPRING-MATTRESSES. JAMES T. KEYES, New York, N. Y. Filed Apr. 2, 1913. Serial No. 758,457. (Cl. 5—39.)

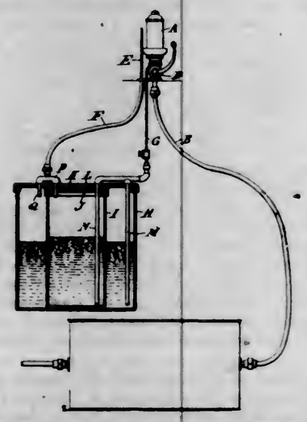


1. In combination with a wire mattress body and its frame, separate side guards therefor, end pieces for said side guards having direct connecting means with said frame affording vertical adjustment, and means for retaining said end pieces and side guards in any adjusted position.

2. In combination with a wire mattress body and its frame, separate side guards therefor, angle end pieces for said side guards slotted vertically to receive bolts connected to said mattress frame, and nuts on said bolts for clamping said end pieces in any adjusted position vertically with respect to said mattress and its frame.

3. In combination with a wire mattress body and its frame, separate woven wire side guards therefor, angle end pieces slotted vertically in one face to receive bolts connected to said mattress frame, nuts on said bolts for clamping said end pieces in any adjusted position vertically with respect to said mattress and its frame, and plates disposed against the outer faces of said end pieces between which and said end pieces the ends of the side guards are clamped.

1,062,782. METHOD OF SIGNALING. STEPHEN J. KÜBEL, Washington, D. C. Filed Apr. 1, 1913. Serial No. 758,216. (Cl. 116—18.)



1. The method of producing visual signals which consists in forming a cloud-like body by chemical reaction, and controlling the discharge of said cloud-like body in accordance with the desired signals.

2. The method of producing visual signals which consists in forming a cloud-like body by chemical reaction, and discharging said cloud-like body at desired intervals by fluid pressure.

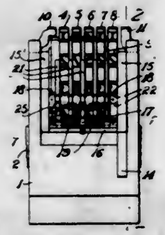
3. The method of producing visual signals which consists in admixing chemicals which when united form a cloud-like body, and discharging said cloud-like body at desired intervals by fluid pressure.

4. The method of producing visual signals which consists in vaporizing suitable chemicals, admixing the same to form a dense cloud-like body, and discharging the same into the atmosphere in accordance with the desired signal.

5. The method of producing visual signals which consists in submitting suitable chemicals to a current of pneumatic pressure, uniting the evolved vapors to form a dense cloud-like body and ejecting the same into the atmosphere at desired intervals.

[Claims 6 and 7 not printed in the Gazette.]

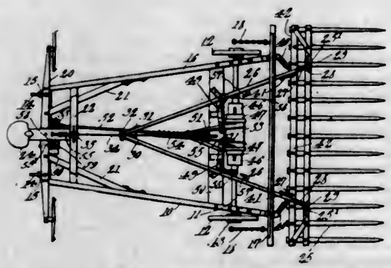
1,062,783. NUMBERING DEVICE. CALVIN MARTIN, Peabody, Mass., assignor to Carter Ticket Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 29, 1912. Serial No. 674,170. (Cl. 101—183.)



1. A numbering device comprising a base, a plurality of numbering disks journaled therein, an arm journaled concentric therewith, means for rocking said arm, a pawl support on said arm, means for yieldingly holding said pawl support toward said disks, a plurality of oppositely acting sets of pawls mounted on said support and means for holding either one or the other of said sets in operative disk engaging position.

2. A numbering device comprising a base, a plurality of numbering disks journaled therein, a rocker arm journaled concentric therewith, means for rocking said arm, a pawl support pivoted to said rocker arm, a plurality of oppositely acting sets of pawls pivoted on said support, and means for holding either one or the other of said pawl sets in operative position.

1,062,784. HAY-RAKE. ALVIN B. MCCOMBS, Sedalia, Mo. Filed June 7, 1912. Serial No. 702,308. (Cl. 56—66.)



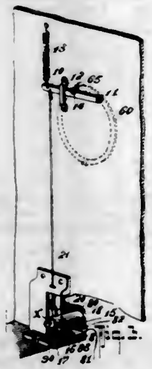
1. A rake comprising a wheel supported frame having a revoluble axle, a winding element loose upon the axle, a clutch for coupling said element to the axle, a structure mounted to tilt and slide upon the frame, a rake carried by said structure, a guide upon the rear portion of the frame, a flexible connection between said structure and the winding element, said connection extending rearwardly from said structure to the guide, means under the control of the operator for shifting the clutch into engagement with the winding element, and means operated by said structure during its actuation by the flexible connection and the winding element for disengaging the clutch from said element.

2. The combination with a revoluble axle, a winding element loose thereon, and a clutch, of a structure mounted to slide and swing, a rake carried thereby, a connection between the structure and winding element, a guide, said connection extending rearwardly from the structure to the guide and thence forwardly to the winding element, means under the control of the operator for shifting the clutch into engagement with said element, and means carried by the structure for disengaging the clutch from said element during the movement of the structure by the flexible connection.

3. The combination with a winding element and a clutch, of a structure carrying a rake, a guide, a flexible connection between said structure and the winding element, said connection extending rearwardly to the guide and forwardly to the winding element, means under the control of the operator for shifting the clutch into engagement with the winding element to drive said element and draw the structure downwardly and rearwardly to elevate the rake, and means upon the structure for engaging the clutch during such movement to disengage the clutch from said winding element.

4. The combination with a winding element and a clutch, of a structure carrying a rake, a guide, a flexible connection between said structure and the winding element, said connection extending rearwardly to the guide and forwardly to the winding element, means under the control of the operator for shifting the clutch into engagement with the winding element to drive said element and draw the structure downwardly and rearwardly to elevate the rake, and means for engagement by said structure for holding the structure and rake against return movement.

1,062,785. MAIL-BOX. TEMISTOCLE E. MELA, Sacramento, Cal. Filed Sept. 26, 1912. Serial No. 722,491. (Cl. 232—35.)



1. In a mail box, a locked closure member for the discharge outlet of the box, an indicator for the said box, a locked cover for the said indicator, key controlled means operable from the outside of the box for simultaneously releasing the closure member for the mail outlet and the cover for the indicator, said means including a slidable spring snap bolt for engaging the closure member, a latch for holding the indicator cover to its closed position, and a key engaged device that coöperates with the snap bolt and the latch and adapted to release the closure member and the latch.

2. In a mail box, a locked closure member for the outlet of the mail box, an indicator for the said box, a locked cover for the said indicator, means operable from the outside of the box for simultaneously releasing the closure member for the mail outlet and the cover for the indicator, the said means including a slidable snap bolt, a spring that normally holds the bolt to its locking position, the said bolt having a camway and a rocker device, said rocker device being key actuated from the outside of the box and including a member for engaging the camway in the bolt whereby when the said device is rocked under key action the bolt is slid back to a releasing position and against the tension of its engaging spring.

3. In a mail box, a locked closure member for the outlet of the said box, an indicator on the outside of the box, a normally locked cover for the said indicator, said cover being hinged to swing down by gravity when released, means operable from the outside of the box for simultaneously releasing the closure member for the mail outlet and the cover for the indicator, said means including a slidable snap bolt, a latch for holding the indicator cover to its closed position and an actuated device that coöperates with the snap bolt and the latch and adapted under key action to release the closure member and the latch.

4. In an open bottom mail box, a hinged closure member for the said bottom, a spring snap bolt for locking the closure member, an indicator on the face of the box, a gravity dropped hinged cover for the said indicator, a latch device for holding said cover to its closed position, said device including a latch lever pivotally mounted on the inside of the box, the aforesaid snap bolt having a diagonally disposed groove, a member rockably mounted over the bolt and having a keyway for receiving the actuating key, the said rocker member having a projection for engaging the said diagonal groove whereby to shift the said snap bolt and having a crank extension and a connecting member that joins the latch with the said crank extension on the rocker member.

1,062,786. SANITARY DRINKING DEVICE. ALVIN S. MILLER, Monroe, La., assignor of one-half to Fred Alder, Shreveport, La. Filed May 1, 1912. Serial No. 694,503. (Cl. 137—11.)

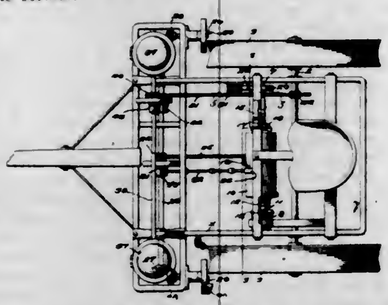


As a new article, a double nipple consisting of two sections of bulb-like form each having a small perforation in the outer end to form a passage into the nipple, said nipple including a ring-like formation between the sections, either end of said nipple adapted to be inserted in the mouth of the user, and a flexible hose having its respective ends removably held over said nipple sections, either of said ends being adapted to be disconnected from the nipple for attachment to a source of supply, and the thereby exposed nipple section adapted for insertion in the mouth of the user substantially as shown and for the purposes described.

1,062,787. WIRELESS CORN-PLANTER. ROBERT C. MOORE, Spickard, Mo., assignor of one-half to Edward A. Hastings, Bloomfield, Iowa. Filed Aug. 3, 1912. Serial No. 713,186. (Cl. 111—6.)

1. In a device of the class described, the combination with a frame having an axle rotatably mounted thereon, wheels carried on said axle, and seed hoppers mounted on the frame; of an operating shaft for said hoppers, mounted on said frame, and a marker shaft also mounted on the frame, means to cause the former shaft to be operated upon the rotation of the axle, said latter means being capable of various adjustments, and additional means operated upon the rotation of the last mentioned shaft to cause the other shaft to be rotated.

2. In a device of the class described, the combination with a frame, an axle rotatably mounted thereon, wheels carried on said axle, and seed hoppers mounted on the frame; of an operating shaft for said hoppers mounted on the frame, a marker shaft rotatably mounted on said frame, independent loose connecting means between said axle and shafts, a timing mechanism coöperating with said marker shaft and axle, the operation of which will permit the marker shaft to be rotated with the axle, and means in connection with said marker and operating shafts to cause the latter to be rotated upon the rotation of the former.



3. In a device of the class described, the combination with a frame, an axle rotatably mounted thereon, wheels carried on said axle, and seed hoppers mounted on the frame; of a pair of operating shafts rotatably mounted on said frame, independent loose connecting means between said axle and shafts, means to cause one of said shafts to be rotated upon the rotation of the axle, and additional means in connection with the last referred to means to cause the other of said shafts to be rotated upon the rotation of the axle.

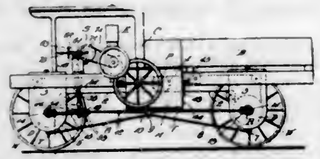
4. In a device of the class described, the combination with a frame, an axle rotatably mounted thereon, wheels carried on said axle, and grain hoppers mounted on the frame; of a pair of operating shafts rotatably mounted on said frame, independent loose connecting means between said axle and shafts, clutch mechanisms on each of said shafts in connection with the aforesaid means thereon, means in connection with the clutch of one of said shafts and indirectly connected with said axle to cause said last mentioned shaft to be rotated with the latter, and means in connection with the last mentioned shaft and the clutch on said other shaft to rotate the latter upon the rotation of the former.

5. In a device of the class described, the combination with a frame, a rotatable axle thereon, wheels carried on said axle and seed hoppers on said frame; of an operating shaft for said seed hoppers mounted on the frame, a marker shaft also rotatably mounted on said frame, independent loose connecting means between said axle and said shafts, clutch mechanisms on each of the shafts in connection with the last referred to means thereon, a rotatable cylinder carried on the frame provided with a plurality of spaced lugs thereon, means to rotate said cylinder, a longitudinal bar having coöperation with the lugs on said cylinder and the clutch on said marker shaft to cause the latter to be rotated at predetermined times, and means coöperating with the marker shaft and the clutch on said operating shaft to cause said latter shaft to be rotated upon the rotation of the former.

[Claim 6 not printed in the Gazette.]

1,062,788. STEERING MECHANISM FOR TRACTION-ENGINES. WALTER S. MORTON, Portsmouth, Ohio, assignor to Samuel F. Dunkle, trustee, Harrisburg, Pa. Filed Oct. 10, 1911. Serial No. 653,914. (Cl. 21—114.)

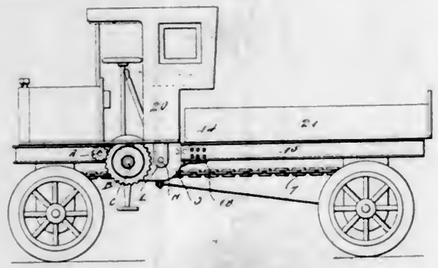
1. In a motor vehicle, the combination with a main frame, and a motor therein; of a steering mechanism comprising an upright shaft having a worm gear thereon, a horizontal shaft having a worm in mesh with said gear, a friction disk fast on this shaft, a longitudinally shiftable shaft at right angles to said worm shaft, a belt wheel and a driving disk fast on the longitudinal shaft and spaced apart a greater distance than the width of said friction disk, means for shifting this shaft, and connections between said belt wheel and motor.



2. In a motor vehicle, the combination of a main frame, a power shaft thereon, a steering gear including an upright shaft, a supporting stand on the frame for said upright shaft, a worm gear on top of said shaft, a horizontal shaft having on its intermediate portion a worm to mesh with said worm gear, a hand wheel on one end of said horizontal shaft, a disk upon the other end of said shaft, a longitudinally shiftable shaft arranged at right angles to said horizontal shaft, a belt wheel on said shiftable shaft to engage one edge of said disk, a disk upon said shiftable shaft to engage the other side of said disk, means for shifting said shiftable shaft, and means connecting said belt wheel to the power shaft.

3. In a motor vehicle, the combination with a main frame, and a motor therein; of a steering mechanism including an upright shaft connected with the steering axle and carrying a worm gear, a horizontal shaft having a worm in mesh with said gear, a driven wheel fast on this shaft, a longitudinally shiftable shaft standing at right angles to said worm shaft and having fast thereon two driving wheels spaced a greater distance apart than the width of said driven wheel, one of said driving wheels being a belt pulley, a belt connecting it with said motor, a grooved wheel fast on this shaft, and a pivoted lever having a fork engaging the groove thereof for shifting this shaft to throw either driving wheel into contact with the driven wheel, for the purpose set forth.

1,062,789. MOTOR-VEHICLE FRAME. WALTER S. MORTON, Harrisburg, Pa. Filed Mar. 5, 1912. Serial No. 681,862. (Cl. 21—90.)



1. In a motor vehicle, the combination of a body supporting frame made in sections, a transmission mechanism supporting frame interposed between two of said sections, and of substantially the same width as the latter so as to form an element therein and preserve the continuity thereof, and a flexible connection between one of said body supporting frame sections and said transmission mechanism supporting frame.

2. In a motor vehicle, the combination of a body supporting frame made in sections, a transmission mechanism supporting frame interposed between two of said sections and rigidly connected to one of said sections to form a part thereof, and a horizontal longitudinally extending torsion pivot uniting the transmission mechanism supporting frame to the other body supporting frame section.

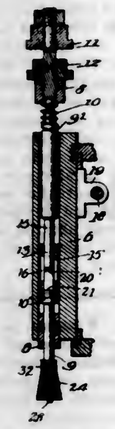
3. A motor vehicle frame made up of sections including side bars, and a cross bar connecting the extremities of the side bars of one section; combined with a transmission mechanism, a rectangular case therefor which is of substantially the same width as said frame so as to form an element therein and preserve the continuity thereof, a flexible connection between one end of the case and the center of said cross bar, and lugs at the other end of the case rigidly connected with the side bars of the other frame-section.

4. A motor vehicle frame-section including side bars and a cross bar connecting their extremities; combined with a transmission mechanism, a rectangular case inclosing the same and of substantially the same width as said frame so as to form an element therein and preserve the continuity thereof, its bottom being dished, its sides provided with notches and its rear plate resting against said cross bar, a horizontal torsion pivot connecting said plate and cross bar, and bearings for the shafts of said mechanism removably mounted in said notches.

5. In a motor vehicle, the combination with the frame made in two sections, a rectangular case interposed between the adjacent ends of and of substantially the same width as said sections and rigidly connected with the forward section, and a torsion bolt pivotally connecting the case with the rearward section at the transverse center of the frame; of transmission mechanism mounted within said base and including a sprocket wheel and a driving shaft of which one extremity projects to the side of the case, means for connecting the projecting extremity with a source of power, and connections between said sprocket wheel and the running gear of the vehicle.

[Claims 6 to 10 not printed in the Gazette.]

1,062,790. STONE-CHANNELING MECHANISM. THOMAS D. MOWLDS, Bala, Pa. Filed Apr. 11, 1910. Serial No. 554,687. (Cl. 125—2.)



1. In an impact stone channeling machine, a cutting member of relatively small weight, a laterally movable frame supporting said cutting member down in the channel and adapted to move lengthwise therein, a plunger, projecting outside of the channel and adapted to extend within the channel and means outside of the channel for causing the plunger to deliver impact blows to the cutting member.

2. In an impact stone channeling machine, a frame adapted to enter the channel and guided to move into and out of the channel and laterally therein, a drill carrying rod mounted in the lower part of said frame, a plunger having one end projecting outside of the channel but adapted to extend within the channel and strike upon the drill carrying rod and means for guiding the plunger in line with the drill carrying rod.

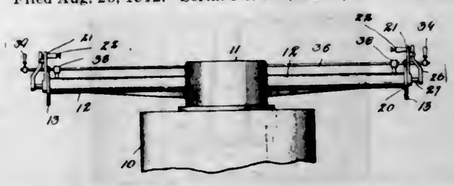
3. In an impact stone channeling machine, a guiding frame movable laterally within the channel, a drill-carrying rod mounted in the lower part of said frame, a guide surrounding the rod, and a vertically movable plunger guided to deliver a blow upon said rod and adapted to enter the channel but having one end always projecting outside of said channel.

4. In an impact stone channeling machine, a laterally movable guide capable of entering the channel and a two part impact device movable horizontally therein, separated to provide relative movement between the parts and having one of the parts at all times extending outside of the channel.

5. In an impact stone channeling machine, a drill-carrying rod, a longitudinal guide therefor below the top of the rod, a lateral guide for the longitudinal guide, a sleeve surrounding the top of the rod and a plunger movable within the said sleeve.

[Claims 6 to 23 not printed in the Gazette.]

1,062,791. STREET-CAR CONTROLLER. CHARLES MUNSON and JOHN G. MUNSON, Cedar Rapids, Iowa. Filed Aug. 26, 1912. Serial No. 717,062. (Cl. 172—179.)



1. A device of the class described, comprising in combination with a controller arm, a casing positioned thereover, a revoluble shaft, gearing between said shaft and arm, an actuating crank at each end of said shaft, a ratchet plate, a latch upon said arm adapted for engagement with said plate, and means including a pin carried by said crank for actuating said latch.

2. A device of the class described, comprising in combination with a controller box, a ratchet plate positioned thereon, a controller arm adjacent said plate, a latch pivoted to said arm, a controller post upon which said arm is secured and having a central opening therein, a vertically movable spring pressed pin mounted in said opening and engaging said latch, a tubular shaft extending each side of said arm, gearing between said post and shaft, a crank lever upon each end of said shaft, and means adjacent each crank lever for controlling said pin.

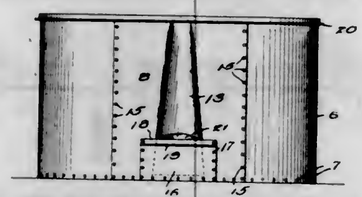
3. A device of the class described, comprising in combination with a controller box, a ratchet plate positioned thereon, a controller arm adjacent said plate, a latch pivoted to said arm, a controller post upon which said arm is secured and having a central opening therein, a vertically movable spring pressed pin mounted in said opening and engaging said latch, a tubular shaft extending each side of said arm, a crank lever at each end of said shaft, a pinion upon said shaft, a gear upon said post meshing with said pinion, and means adjacent each crank lever for actuating said pin.

4. A device of the class described, comprising in combination with a controller box, a ratchet plate positioned thereon, a controller arm adjacent said plate, a latch pivoted to said arm, a controller post upon which said arm is secured and having a central opening therein, a vertically movable spring pressed pin mounted in said opening and engaging said latch, a tubular shaft extending each side of said arm, a crank lever at each end of said shaft, a pinion upon said shaft, a gear upon said post meshing with said pinion, a stationary indicator disk adjacent each crank lever, a longitudinally movable rod within said shaft, a circumferentially grooved sleeve secured to said rod and engaging the upper end of said pin, and means incinding a pin upon said crank lever for shifting said rod.

5. A device of the class described, comprising in combination with a controller box, a ratchet plate positioned

thereon, a controller arm adjacent said plate, a latch pivoted to said arm, a controller post upon which said arm is secured and having a central opening therein, a vertically movable spring pressed pin mounted in said opening and engaging said latch, a tubular shaft extending each side of said arm, a crank lever at each end of said shaft, a pinion upon said shaft, a gear upon said post meshing with said pinion, a stationary indicator disk adjacent each crank lever, a longitudinally movable rod within said shaft, a circumferentially grooved sleeve secured to said rod and engaging the upper end of said pin, means including a pin upon said crank lever for shifting said rod, a housing surrounding said gear, pinion, plate and arm, tubular extensions carried by said housing with said shaft journaled therein, a reversing lever, a rod journaled in said housing, links connecting said rod and reversing lever, and a hand lever upon each end of said rod adjacent each of said crank levers.

1,062,792. WATERING-TANK. JOHN W. NELSON, Hutchinson, Kans. Filed Dec. 12, 1912. Serial No. 736,291. (Cl. 119—78.)



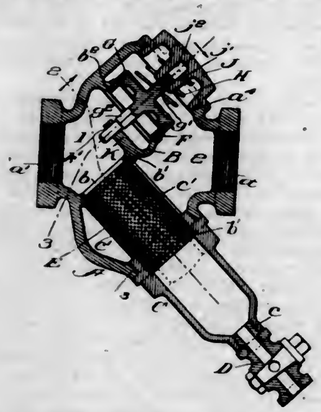
1. A tank of the character described, comprising a bottom, a main side section connected therewith and having its ends spaced for forming an opening therebetween, a separate section to fill the opening between the ends of the main side section, said separate section being originally flat and increasing in width downwardly and having the lower portion of its material provided with a number of slits to form separate ears, the separate section having its central portion bent inwardly for forming a drinking chamber which extends from the bottom of the tank to the upper end thereof, means connecting the separate section with the first named section, and a third separate section disposed upon the outer surface of the second named section to close the lower outer portion of the drinking chamber.

2. A tank of the character described, comprising a bottom, a main side section connected therewith, a second separate side section connected with the main side section and having a drinking chamber formed therein by bending the material of the same inwardly, and a third section mounted upon the outer surface of the second section to close the outer lower portion of the drinking chamber.

1,062,793. SELF-CLEANING FILTER. FRANK E. PENDLETON, Montclair, N. J. Filed Apr. 2, 1908. Serial No. 424,687. (Cl. 210—16.)

1. In a device of the class described, a casing having an inlet opening and an outlet opening and an opening to receive a trap, a wall in the casing dividing said casing into an inlet and an outlet compartment, said wall having two openings therein one of which communicates with the trap, said trap extending into the outlet compartment and having openings therein which permit free communication from the inlet to the outlet compartment through the opening in said wall, a screen covering the opening in the trap, and a relief valve normally closing the other opening in said wall.

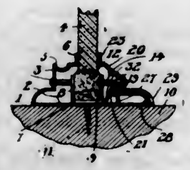
2. In a device of the class described, a casing having an inlet opening and an outlet opening, a wall inside of the casing dividing the same into two compartments, two openings in said wall, a trap communicating with one of said openings, said trap consisting of a tube projecting into one of the compartments and having an opening in the wall thereof which will permit free communication from one compartment to the other through said opening in the wall, a screen covering the opening in the trap, a diaphragm projecting from said wall, and a relief valve normally covering the other opening in the wall.



3. In a device of the class described, a casing having an inlet opening and an outlet opening, a wall inside of the casing dividing the same into two compartments, two openings in said wall, a trap communicating with one of said openings, said trap consisting of a tube projecting into one of the compartments and having an opening in the wall thereof which will permit free communication from one compartment to the other through said opening in the wall, a screen covering the opening in the trap, a diaphragm projecting from the wall and having its greatest area adjacent to said wall, and a relief valve normally covering the other opening in the wall.

4. In a device of the class described, the combination with a casing having an inlet and an outlet that are oppositely disposed and in substantial alinement, of an inclined partition wall interposed between the inlet and outlet and having an opening therethrough and another opening in the lower wall of the casing in line with the partition wall opening, a trap pocket detachably secured in the casing opening and depending from the casing, said pocket having an upper open mouth and a shoulder therein, an open ended tubular screen having its upper end abutted against the partition wall and surrounding the opening therethrough and its lower end fitted into the mouth of the pocket and abutted against the shoulder therein, and a draw-off cock carried by the lower depending end of the pocket.

1,062,794. WINDOW. WILLIAM R. PHILLIPS, Crafton, Pa., assignor, by direct and mesne assignments, of one-third to Alfred D. Phillips, Cincinnati, Ohio, and one-third to James L. Adams, Coraopolis, Pa. Filed Oct. 20, 1911. Serial No. 655,762. (Cl. 189—78.)



1. In a glass window, a sheet metal base having a lateral member in engagement with one side of the glass and a second lateral member located at the opposite side of the glass and bent upwardly and toward the first lateral member and then downwardly, a cover member having one portion in engagement with the remaining face of the glass and another portion resting upon the said second lateral member, and means for clamping the glass between the said first member and the cover member.

2. In a glass window, a sheet metal member having a flange in engagement with one face of the glass, a second sheet-metal member at the opposite side of the glass having a portion parallel with the glass and spaced therefrom, a third sheet-metal member having one edge in engagement with the opposite side of the glass, a central portion covering the space between the glass and the said parallel portion of the second member, and another edge extending beyond the said parallel portion, means for clamping the glass between the first and third members, and means for supporting the glass and preventing the second edge of the third member moving toward the first member under the action of the clamping means.

3. In a glass window, a sheet metal member having a flange in engagement with one face of the glass, a second sheet-metal member at the opposite side of the glass having a portion parallel with the glass and spaced therefrom, a third sheet-metal member having one edge in engagement with the opposite side of the glass, a central portion covering the space between the glass and the said parallel portion of the second member, and another edge extending beyond the said parallel portion, means for clamping the glass between the first and third members, and means for preventing the second edge of the third member moving toward the first member under the action of the clamping means.

4. In a glass window, a hollow sheet-metal sash having lateral portions with edges at opposite sides of the glass, a sheet-metal channel beneath the glass, a support for the glass within the channel, a nut carried by the channel, and a screw extending through each of the said lateral portions of the sash and into the opposite ends of the said nuts.

5. In a glass window, a hollow sheet-metal sash having lateral portions with edges at opposite sides of the glass, a support for the glass, a nut non-rotarily held by the support, and screws extending through the said lateral portions of the sash and into the nut.

[Claims 6 and 7 not printed in the Gazette.]

1,062,795. BREAD-MAKING PLANT. CHARLES E. POINTON and JOHN E. POINTON, Peterborough, England. Filed Aug. 6, 1910. Serial No. 575,925. (Cl. 107—57.)

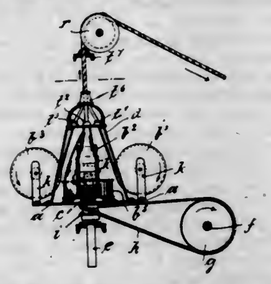


In a break making plant, the combination consisting of proving and baking chambers, a conveyer passing circuitously through the interior of the baking chamber, a conveyer passing circuitously through the proving chamber and around the baking chamber and working synchronously with the conveyer within said baking chamber, means for automatically transferring the bread portions from said second-mentioned conveyer to said first-mentioned conveyer, and means for automatically transferring the bread portions from said first-mentioned conveyer to said second-mentioned conveyer.

1,062,796. MACHINE FOR PRODUCING ROPES OR THREADS. ALBERT RABE, Berlin, Germany. Filed Oct. 31, 1912. Serial No. 728,758. (Cl. 28—21.)

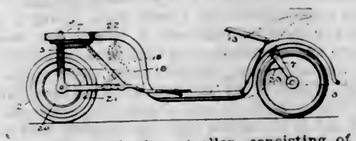
1. A machine for producing ropes and threads comprising a rotatable member, a plurality of outer band supply rolls each rotatably mounted thereon with its axis of rotation horizontal, a central band supply roll having its axis vertical, a frame secured upon said rotatable member, a central hollow guide and outer hollow guides supported by said frame, and a uniting guide mounted centrally above said central hollow guide.

2. A machine for producing ropes and threads, comprising a rotatable horizontal table, a plurality of spools rotatably mounted thereon and upon each of which a band is wound, said spools having their axis of rotation horizontal, a frame secured upon said table, a plurality of hollow guides supported by said frame, a central rotatable spool having a band wound thereon and having its axis of rotation vertical, and a uniting guide mounted centrally over said hollow guides.



3. A machine for producing ropes and threads comprising a rotatable spindle, a horizontal table secured thereon, a plurality of rotatably mounted spools thereon and upon each of which a band is wound, said spools having their axis of rotation horizontal, a frame secured upon said table, a plurality of hollow guides supported by said frame, a central rotatable spool having a band wound thereon and mounted on said spindle with its axis of rotation vertical, and a uniting guide centrally over said hollow guides.

1,062,797. GYROMOTOR-WHEEL CONTROLLER. RICHARD S. RICHESON, St. Louis, Mo. Filed Nov. 13, 1911. Serial No. 660,019. (Cl. 21—90.)

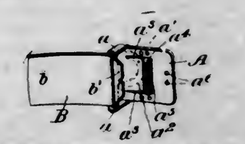


1. A gyromotor wheel controller, consisting of a main rib formed with longitudinal bores, forks journaled in the rib, cables working in the bores of the rib, and means connecting the cables and forks to enable the wheels to be operated in unison.

2. In a gyromotor wheel controller, the combination with the wheels of the machine, of forks carrying said wheels, rotating journals for said forks, cables connecting the wheels to cause them to operate in conjunction and means for normally keeping the wheels straight.

3. A gyromotor wheel controller, consisting of a main rib, forks journaled in the same, the rear fork having a forwardly projecting yoke embracing the rib, a rack on said yoke, a pinion journaled on the main rib and meshing with said rack, and cables connecting the front fork with the pinion to operate the wheels in unison.

1,062,798. COMBINATION BUCKLE AND HOOK. ISAAC ROD, Philadelphia, Pa. Filed Jan. 16, 1913. Serial No. 742,389. (Cl. 24—73.)



1. The combination with a base plate having a pair of outwardly projecting pivot lugs, and a tongue cut from said base plate and extending away from said lugs with

its attached end terminating between them, of a clamping member comprising an operating portion and a clamp arranged at an angle to one another, said clamping member being pivoted to said pivot lugs near the bend between said clamp and operating portion, and said clamp when open, extending toward the free end of the tongue.

2. The combination with a base plate having a pair of outwardly projecting pivot lugs, and a tongue cut from said base plate and extending away from said lugs with its attached end terminating between them, of a clamping member comprising an operating portion and a clamp arranged at an angle to one another, said clamping member being pivoted to said pivot lugs near the bend between said clamp and operating portion, and said clamp when open, extending toward the free end of the tongue, and a transverse rib on the base plate near the free end of the tongue and inclined toward the pivot lugs.

3. The combination with a base plate having a pair of outwardly projecting pivot lugs, and a tongue cut from said base plate and extending away from said lugs with its attached end terminating between them, said tongue being bent slightly inward out of the plane of the base plate, of a clamping member comprising an operating portion and a clamp arranged at an angle to one another, said clamping member being pivoted to said pivot lugs near the bend between said clamp and operating portion, and said clamp when open, extending toward the free end of the tongue.

4. The combination with a base plate having a pair of outwardly projecting pivot lugs, and a tongue cut from said base plate and extending away from said lugs with its attached end terminating between them, said tongue being bent slightly inward out of the plane of the base plate, of a clamping member comprising an operating portion and a clamp arranged at an angle to one another, said clamping member being pivoted to said pivot lugs near the bend between said clamp and operating portion, and said clamp when open, extending toward the free end of the tongue, and a transverse rib on the base plate near the free end of the tongue and inclined toward the pivot lugs.

5. The combination with a base plate having a pair of outwardly projecting lugs and a tongue cut from said base plate, and extending away from said lugs with its attached end terminating between them, said tongue being bent slightly inward out of the plane of the base plate, of a hook extending from the end of said base plate nearer the attached end of the tongue and bent inwardly into substantial parallelism with said tongue, and a clamping member comprising an operating portion and a clamp arranged at an angle to one another, said clamping member being pivoted to said pivot lugs near the bend between said clamp and operating portion and said clamp, when open, extending toward the free end of the tongue.

1,062,799. ELECTROMECHANICAL DEVICE. GEORGE H. ROWE, Chicago, Ill., assignor to Electro-Magnetic Tool Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 8, 1909. Serial No. 521,732. (Cl. 172—126.)



1. In an electro-mechanical apparatus, the combination with a driving device, of a reciprocating driven device, means for producing a cushioning magnetic connection between said devices, and auxiliary means for increasing the force of the working stroke in relation to that of the return stroke.

2. In an electro-mechanical apparatus, the combination with a driving device, of a reciprocating driven device, means for producing a cushioning magnetic connection between said devices, and electro-magnetic means for increasing the force of the working stroke in relation to that of the return stroke.

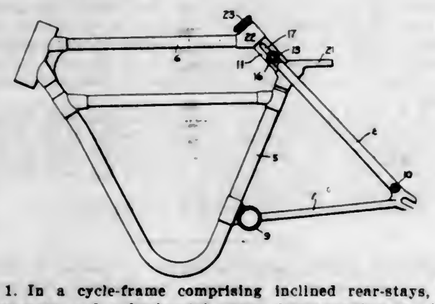
3. In an electro-mechanical apparatus, the combination with a driving device, of a driven device, means for producing a cushioning magnetic connection between said devices, a magnetizable body arranged in the path of the driven device for increasing the force of the working stroke of the driven device in relation to that of its return stroke which is alternately magnetized and demagnetized.

4. In an electro-mechanical apparatus, the combination with a driving device, of a reciprocating driven device, means for producing a cushioning magnetic connection between the devices, said driving and driven devices providing a substantially closed magnetic circuit; and a magnetizable body which is cut into said magnetic circuit so as to increase the force of the working stroke of said apparatus.

5. In an electro-mechanical apparatus, the combination with a driving device, of a reciprocating driven device, means for producing a cushioning magnetic connection between the devices, said driving and driven devices providing a substantially closed magnetic circuit; and a magnetizable body which is cut into said magnetic circuit, and which stands in the path of said driven device so as to exert a direct attraction upon the same at the end of the working stroke thereof.

[Claims 6 to 13 not printed in the Gazette.]

1,062,800. CUSHION-FRAME FOR CYCLES. JAMES H. SAGER, Rochester, N. Y. Filed Dec. 30, 1912. Serial No. 739,338. (Cl. 208—94.)

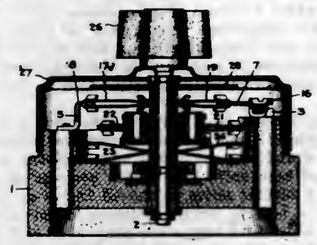


1. In a cycle-frame comprising inclined rear-stays, a seat-mast and a horizontal upper frame-member, an inclined tubular member connecting the seat-mast and the horizontal upper frame-member, and provided with lateral slots, said inclined member extending in a line substantially parallel with the rear-stays, spring-mechanism inclosed within said inclined member and connected with the upper ends of the rear-stays through said slots, and a removable closure for one end of said inclined member.

2. In a cycle-frame comprising inclined rear-stays, a seat-mast and a horizontal upper frame-member, an inclined frame-member connecting the seat-mast and the horizontal upper frame-member, and provided with a spring-receiving chamber extending above the horizontal upper frame-member, a removable closure for the forward end of the spring-receiving chamber, a spring in said chamber, and connections between the spring and the upper ends of the rear-stays, the inclined frame-member being slotted for the passage of said connections.

3. In a cycle-frame comprising inclined rear-stays, a seat-mast and a horizontal upper frame-member, an inclined tubular member connecting the seat-mast and the horizontal upper member and laterally slotted, a fitting receiving and closing the upper end of the seat-mast and the rear end of said inclined member, and provided with an integral, rearwardly-extending saddle-supporting member, a fitting receiving the forward end of the inclined frame-member and the rear end of the upper horizontal frame-member, a screw-threaded cap closing the forward end of the inclined frame-member, springs and a spring-controlled slide movable within said inclined member, and connections between the slide and the upper ends of the rear-stays, said connections passing through the slots in the inclined member.

1,062,801. SERIES MULTIPLE SWITCH. HOWARD R. SARGENT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 16, 1911. Serial No. 644,409. (Cl. 175—290.)



1. A series-multiple switch comprising a central spindle, four stationary posts provided with contact segments, located in different planes, three in one plane, two in another and one in a third plane, certain contact segments in the first two planes being at greater distance from the spindle than others in said planes, and three insulated blades on said spindle located respectively in said planes and coöperating with said segments, the upper and middle blades each having arms of different lengths.

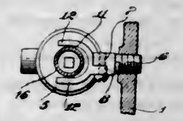
2. A series-multiple switch comprising a central spindle, three superposed blades thereon, the upper one having four arms at right angles, two arms being longer than the others, the middle blade having two opposite arms of different lengths, the lowest blade having three equal arms at right angles; four stationary posts carrying contact segments in the planes of said blades, certain of said segments being positioned nearer the central spindle than others, and a single segment connected with one side of the line and with which the lowest blade coöperates to open and close one side of the line circuit.

3. A series-multiple switch comprising a central spindle, three superposed blades thereon, the upper one having four arms at right angles, two arms being longer than the others, the middle blade having two opposite arms of different lengths, the lowest blade having three equal arms, at right angles, four stationary posts positioned 90° apart, contact segments on three of said posts in the plane of the upper arm, the segment on the first of said posts extending radially inward more than the others, a segment on the second post in the plane of the middle blade, a longer segment on the opposite or fourth post to cooperate with said middle blade, a lower segment on said fourth post coöperating with the lowest blade, and a segment below said lower segment, coöperating with said lowest blade, but normally disconnected from said fourth post and carrying one of the line terminals.

4. A series-multiple switch comprising four posts, provided with contact segments on three different planes, certain of said segments being disposed nearer the spindle than others and a spindle carrying three insulated blades, a middle one having diametrically opposite long and short arms, an upper one having a long arm registering with the short arm of the middle blade, a short arm registering with the long arm thereof, and a long arm and a short arm at right angles thereto, and the third or lowest blade having two equal arms opposite to each other and registering with the long and short arms of the middle blade and an intermediate arm of the same length as the others, and at right angles thereto, and registering with the other short arm of the upper blade.

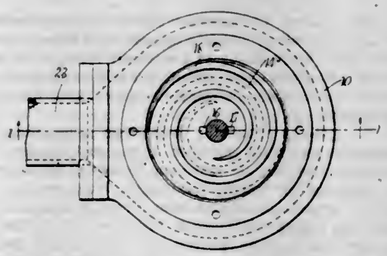
5. In a rotary switch having three operative and one off positions, the combination with a rotary shaft of wire connectors for both poles of a supply circuit, a common pole and two single poles of two branch circuits, and three sets of stationary contacts and switch blades arranged in different planes, the first set of contacts being connected to a supply circuit connector and to one of the single pole branch circuit connectors and the blade of the set arranged to connect said contacts in each of three switch positions, the second set of contacts being connected to both of the single branch circuit connectors and unequally spaced from the shaft and the blade of the set having two arms of unequal length to connect said contacts in one switch position, and the third set of contacts being connected to the common pole connector, to a single branch circuit connector and to the other supply circuit connector, the latter contact being spaced a different distance from the shaft relatively to the other two and the blade of the set having two long arms and two short arms to connect at least two contacts in each of three positions of the switch.

1,062,802. AIR-VALVE. FREDERICK H. SAUER, New York, N. Y. Filed Nov. 28, 1910. Serial No. 594,618. (Cl. 237—19.)



A device of the character described comprising a supporting member having a threaded portion to screw into a radiator, and a solid, wrench receiving portion with a recess at one side; together with a U-shaped reception member adapted to straddle the neck of an air valve, said reception member having a rearwardly extending lug to fit within the recess in the solid portion of said supporting member, said solid portion and lug having alined threaded apertures and a screw engaging therein to unite said members.

1,062,803. ROTARY PUMP. WALTER AIKEN SIMOND, Franklin, N. H., assignor of one-half to Omar A. Towne, Franklin, N. H. Filed Apr. 12, 1912. Serial No. 690,295. (Cl. 103—43.)



In a centrifugal pump, a rotor consisting of a simple disk having on each side thereof a single spiral channel, the channel on one side of the disk being approximately 180° in advance of the channel on the other side, and the said channels being non-alined throughout their length, a shaft on which the disk is mounted and by which it is adapted to be rotated, and a casing inclosing the said disk and provided with bearings in which the shaft is rotatable, and having opposite central openings for the admission of fluid, and a peripheral opening for the discharge of fluid.

1,062,804. JEWELRY. ALFRED SPANEY, Piermont, and JOSHUA W. MAYER, New York, N. Y. Filed June 30, 1911. Serial No. 636,192. (Cl. 63—2.)

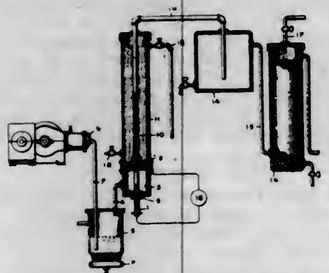
An article of jewelry having a cover section provided with a recessed central opening, retaining projections arranged upon the inner side of said cover section and extending inwardly into said central opening, and a dished removable section fitted into the recessed portion of said central opening having its central raised portion in a plane with the outer surface of said cover section, and having recesses arranged in its opposite edges, each pro-

vided with a beveled portion and adapted to engage frictionally with the under side of said projections to hold said removable section in dished form, and the edge there-



of in frictional engagement with the recessed edge of the central opening in said cover section, substantially as specified.

1,062,805. PRODUCTION OF AMMONIUM COMPOUNDS. CHARLES P. STEINMETZ, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 11, 1910. Serial No. 543,254. (Cl. 204—31.)



1. The process of making ammonium compounds of a nitrogen acid which consists in passing a gaseous mixture containing watery vapor and nitrogen through an electric arc and withdrawing the resulting reaction products immediately into a space maintained below their dissociating temperature.

2. The process of making ammonium compounds, which consists in passing a mixture of air and aqueous vapor through an electric arc and immediately cooling the reaction products below their dissociating temperature.

3. The process of making ammonium compounds, which consists in urging a mixture of nitrogen, oxygen and aqueous vapor through an electric arc, and cooling the products of the resulting reaction below their dissociating temperature.

4. The process of making ammonium compounds which consists in passing a gaseous mixture containing oxygen, nitrogen and watery vapor through an electric arc and withdrawing the products of the resulting reaction into a space maintained below the dissociating temperature of the reaction products.

1,062,806. APPARATUS FOR THE REMOVAL OF PROJECTING HAIRS AND THE LIKE FROM WOOL-YARN THREADS. OTTO STÖHR, Leipzig-Gohlis, Germany. Filed Nov. 2, 1911. Serial No. 658,158. (Cl. 28—20.)



1. An apparatus of the kind described, a cutting device comprising a pair of concentric tubular knives through which a strand of yarn passes under tension, and means for simultaneously oscillating said knives in opposite directions to trim the surface of the yarn.

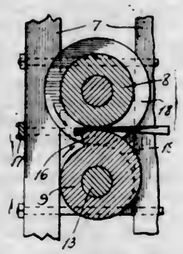
2. In an apparatus of the kind described, a cutting device comprising a pair of concentric tubular knives, through which a strand of yarn passes under tension, a bearing for supporting said knives in which they are adapted to rock independently, an arm on each knife, and means connected to said arm for simultaneously oscillating the knives in opposite directions to trim the surface of the yarn.

3. In an apparatus of the kind described, a cutting device comprising a pair of concentric tubular knives through which a strand of yarn passes under tension, a head on one end of each knife from which projects an operating arm, and a tubular series of tapered fingers on their opposite ends, a bearing for supporting said knives and their heads in which said knives are adapted to rock independently, and means connected to said arms for simultaneously oscillating the knives in opposite directions to trim the surface of the yarn.

4. In an apparatus of the kind described, the combination of a feding mechanism for yarn, means for tensioning said yarn, a cutting device comprising a pair of concentric tubular knives through which the yarn passes from the tensioning means, each knife being formed of a circular series of tapering fingers projecting from the ends of the knives, means for simultaneously oscillating said knives in opposite directions to trim the surface of the yarn, and a polishing surface over which the yarn passes from the cutters.

5. In an apparatus of the kind described, the combination of a feed for yarn, a brake device for tensioning said yarn, a plurality of independent cutting devices arranged in a straight line through which the yarn passes under tension, each of said cutting devices comprising a pair of concentric tubular knives formed of a circular series of tapering fingers, means for simultaneously operating said knives in opposite directions to trim the surface of the yarn, and polishing means over which said yarn passes from the cutters.

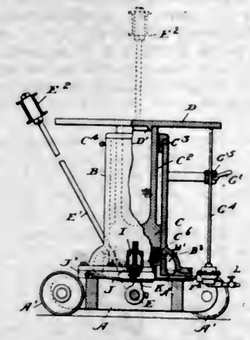
1,062,807. METAL-ROLLING MACHINE. SAMUEL D. STURGIS, Los Angeles, Cal. Filed Oct. 4, 1911. Serial No. 652,805. (Cl. 80—26.)



A mechanism for rolling metal, comprising a cylindrical roll, and a roll having a spiral cross sectional shape the shortest radius of which is equal the radius of the cylindrical roll.

1,062,808. APPARATUS FOR JARRING AND PRESSING GRANULAR MATERIALS. HENRY TSCHEARNING, Freeport, Ill., assignor to Arcade Manufacturing Company, Freeport, Ill., a Corporation of Illinois. Filed May 16, 1912. Serial No. 697,819. (Cl. 22—45.)

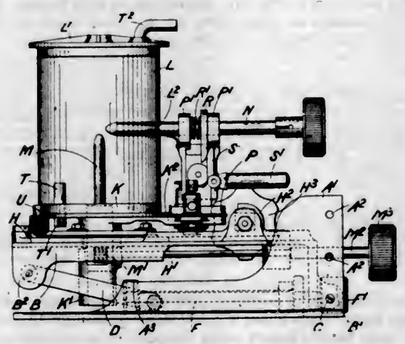
1. In apparatus of the class described, the combination with a cylinder having inlet and discharge passages below, of a piston working in the cylinder, a spring-closed valve and a second valve each controlling the discharge opening when the companion valve is closed, means for admitting compressed fluid below the piston constantly or intermittently as desired, a manually operated member arranged to be swung into or out of a normal position, and means whereby the spring-closed valve is held open only while said member is out of said position.



2. In apparatus of the class described, the combination with a vertical cylinder and its piston, of a spring-closed valve in the discharge passage leading from the cylinder, a manually operated member arranged to swing into and out of a normal position, a cam operated by the movement of said member and adapted to hold said valve open only while the member is out of said position, a second, manually operated valve controlling said passage when the first valve is closed, and means for admitting compressed fluid to the space below the piston intermittently or constantly as desired.

3. In apparatus of the class described, the combination with a vertical cylinder provided below with inlet and discharge passages, of a piston working in the cylinder above said passages, manually controlled means for admitting compressed fluid to the inlet passage, means for holding the discharge passage closed, and means for automatically interrupting at short intervals the flow of fluid admitted by said manually controlled means, and means for at will holding said interrupting means out of action.

1,062,809. ELECTRIC-ARC LAMP. ARTHUR GEORGE WAY, London, England. Filed Apr. 1, 1911. Serial No. 618,333. (Cl. 176—103.)

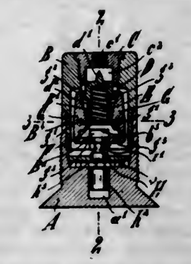


1. In an electric arc lamp, the combination of a relatively stationary upright carbon, a casing surrounding said carbon, a second carbon extending through an aperture in the side wall of the casing, means for supporting the second carbon arranged outside of the casing and comprising two uprights through which the carbon is freely movable, a clutch plate supported on and surrounding the second carbon between said upright, a lever fulcrumed below the second carbon and having an arm adapted to actuate the clutch plate to feed the carbon into the casing, and a coiled spring surrounding the second carbon and engaging the clutch plate and one of the uprights of the support for said carbon to move the clutch plate longitudinally of the carbon.

2. The combination in an apparatus of the character described, of a base, a table pivotally connected with the base, a yoke slidable upon the base, links connecting the yoke and table, means for moving the yoke relatively to the base to vary the inclination of the table, a carrier plate pivotally mounted on the table, means for moving the plate, and an inclosed arc lamp mounted on the plate.

3. The combination in an apparatus of the character described, of a base, a table pivotally connected with the base, means for varying the inclination of the table relative to the base, a carrier plate mounted on the table to swing about a vertical axis, means for thus moving said plate, an inclosed arc lamp mounted on the plate, and means mounted on the plate at one side of said lamp and connected to one of the carbons of the lamp for the purpose described.

1,062,810. PERCUSSION-FUSE. KARL WIESER, Bredeney, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed May 11, 1912. Serial No. 696,730. (Cl. 102—39.)



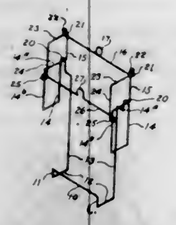
1. In a percussion fuse, the combination with ignition means comprising a fulminate and a firing pin; a percussion hammer carrying one of said ignition means, a firing spring tending to drive the hammer in the direction to fire said ignition means; arresting means for said percussion hammer, normally holding said percussion hammer retracted against said firing spring, a releasing bolt engaging said arresting means and movable on impact in various directions only by the action of inertia, said bolt being adapted to release said arresting means when moving in any direction, and a casing completely inclosing the percussion hammer, the firing spring, the arresting means and said releasing bolt.

2. In a percussion fuse having a main body inclosing all the moving parts of the fuse, a fulminate seated in said main body; a percussion hammer; a firing pin on said percussion hammer; a spring acting between the main body and the percussion hammer to drive the latter against the fulminate; arresting means normally holding said percussion hammer in a retracted position, said arresting means comprising a flange on said percussion hammer, pawls mounted in said main body to oscillate in radial planes through the longitudinal axis of the fuse, each of said pawls having a long and a short arm, the long arms of the pawls normally engaging said flange; a sliding bolt, mounted to slide axially in both directions in the main body, a collar on said sliding bolt normally in engagement with said short arms of the pawls; releasing means for said bolt actuated by the centrifugal force.

3. In a percussion fuse having a main body inclosing all the moving parts of the fuse, a fulminate seated in said main body; a percussion hammer; a firing pin on said percussion hammer; a spring acting between the main body and the percussion hammer to drive the latter against the fulminate; arresting means normally holding said percussion hammer in a retracted position, said arresting means comprising a flange on said percussion hammer, pawls mounted in said main body to oscillate in radial planes through the longitudinal axis of the fuse, each of said pawls having a long and a short arm, the long arms of the pawls normally engaging said flange; a sliding bolt, mounted to slide axially in both directions

in the main body, a collar on said sliding bolt normally in engagement with said short arms of the pawls; releasing means for said arresting means, comprising a plurality of dogs fulcrumed to swing in a plane at right angles to the longitudinal axis of the fuse, a groove in said sliding bolt normally engaging said dogs; the dogs swinging out of said groove actuated by the centrifugal force leaving the sliding bolt free for displacement in any axial direction on impact, whereby said pawls will be free to release said hammer, the spring actuated hammer thus striking the fulminate.

1,062,811. BAG-HOLDER. SAMUEL W. ANDERSON, Spokane, Wash. Filed Mar. 3, 1913. Serial No. 751,697. (Cl. 211—2.)



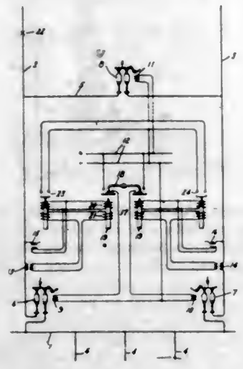
1. In a bag holder, a single wire bent to form a bottom front support, a horizontally arranged base support, vertically arranged parallel rear supports, vertically arranged parallel side supports near the top of the holder, vertically arranged parallel top rear supports and a top horizontally arranged rear transverse support connecting the top side supports, the said sets of rear supports and the side supports being brought into interlocking engagement with each other to form a rigid, reinforced strong mechanism substantially as described.

2. In a bag holder, a single wire bent to form a bottom front support, a horizontally arranged base support, vertically arranged parallel rear supports, vertically arranged parallel side supports near the top of the holder, vertically arranged parallel top rear supports and a top horizontally arranged rear transverse support, together with a separate wire tiltably connected to the upper rear corners of said holder and bent to extend downwardly at each side of said holder, to form outwardly extending loops adapted to being brought into locking engagement with the side supports then bent inwardly and extending horizontally across the holder with a U shaped bend at the center thereof, substantially as described.

3. In a bag holder, a single wire bent to form a bottom front support, a horizontally arranged base support, vertically arranged parallel rear supports, vertically arranged parallel side supports near the top of the holder, vertically arranged parallel top rear supports and a top horizontally arranged rear transverse support, together with a separate wire tiltably connected to the upper rear corners of said holder and bent to extend downwardly at each side of said holder, to form outwardly extending loops adapted to being brought into locking engagement with the side supports then bent inwardly and extending horizontally across the holder with a U shaped bend at the center thereof, substantially as described, and a rack adapted for supporting a series of said holders in horizontal arrangement, pivoted thereto, such rack being adapted for suspension above a counter or the like, substantially as described.

1,062,812. PROTECTIVE DEVICE. DAVID BASCH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 9, 1912. Serial No. 724,730. (Cl. 175—294.)

1. The combination with a receiving station, two feeders connected thereto, a tie line connecting together the feeders, a switch for disconnecting each feeder from the station and a switch for opening the tie line, of means for operating said switches including a trip coil for each switch, a source of energy for said trip coils, a reverse energy relay connected to each feeder the two relays being incapable of operating simultaneously, each relay controlling the supply of energy to the trip coil of the switch of the feeder to which it is connected, and another reverse energy relay connected to one of the feeders and controlling the supply of energy to the trip coil of the switch of the tie line.



2. The combination with a receiving station, two feeders connected thereto, a tie line connecting together the feeders, a switch for disconnecting each feeder from the station and a switch for opening the tie line, of means for operating said switches including a trip coil for each switch, a source of energy for said trip coils, a reverse energy relay connected to each feeder the two relays being incapable of operating simultaneously, each relay controlling the supply of energy to the trip coil of the switch of the feeder to which it is connected, and another reverse current relay connected to each of said feeders, each of said last mentioned relays controlling the supply of energy to the trip coil of the switch of the tie line.

1,062,813. SYSTEM OF MUSICAL NOTATION. GUSTAV L. BECKER, New York, N. Y. Filed July 18, 1912. Serial No. 710,330. (Cl. 84—18.)

SCALE DEGREE	1	2	3	4	5	6	7	8
SCALE DEGREE NAMES	D	R B	M H	F S	S D	L H	T Liadz	EXTONIC SOH-FAH (Thurmonic)
ENLARGED BY 1/2 STEP	oan	Airin	ane	un	awn	on	een	oon
INTERVAL NAMES FROM FIRST DEGREES OF MAJOR SCALE	oo Primes	oh Seconds	ay Thirds	ai Fourths	o Fifths	awe Sixths	ee Sevenths	oo Octaves
LESSENED BY 1/2 STEP		ahl	ale	ael	ele	all	eel	eol
LESSENED BY WHOLE STEP		ahlz	alz	aelz	ehlz	awlz	relz	eelz

1. A system of musical notation, comprising a set of scale degree names and a set of interval names, any one of the scale degree names being adapted to be combined with any one of the interval names to make an easily vocalizable combination and to denote both the tone to be sung and the interval to be taken.

2. A system of musical notation, comprising a set of suitable consonants to denote scale degrees, and a set of suitable vowels to denote intervals, any one of the scale degree consonants being adapted to be combined with any one of the interval vowels to make an easily vocalizable syllable and to denote both the tone to be sung and the interval to be taken.

3. A system of musical notation, comprising a set of suitable consonants to denote scale degrees, and a set of suitable vowels to denote intervals, any one of the scale degree consonants being adapted to be prefixed to

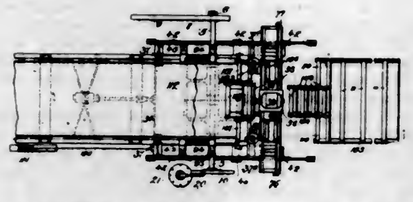
any one of the interval vowels to make an easily vocalizable syllable and to denote both the tone to be sung and the interval to be taken.

4. A system of musical notation, comprising a set of scale degree names, a set of interval names, and a set of interval describing names, any one of the scale degree names being adapted to be combined with any one of the interval names, and any of such combinations being adapted to be combined with any one of the interval describing names to make an easily vocalizable combination and to denote the tone to be sung, the interval to be taken, and the character of the interval to be taken.

5. A system of musical notation, comprising a set of suitable consonants to denote scale degrees, a set of suitable vowels to denote intervals, and a set of suitable consonants to describe the intervals, any one of the scale degree consonants being adapted to be combined with any one of the interval vowels and any of such combinations being adapted to be combined with any one of the interval describing consonants to make an easily vocalizable syllable and to denote the tone to be sung, the interval to be taken and the character of the interval to be taken.

[Claims 6 to 8 not printed in the Gazette.]

1,062,814. PLASTER-BOARD-CUTTING MACHINE. DAVID F. BERNHARDT, New Brighton, N. Y., assignor to J. B. King & Co., New York, N. Y., a Corporation of New York. Filed Aug. 3, 1910. Serial No. 575,274. (Cl. 143—47.)



1. In a machine of the class described, a shaft, a disk with electrical contacts mounted on said disk, plaster-board supporting belt, a shaft, which also carries said disk, and a roller on said shaft, a crane mounted for movement in the direction of the belt and in the opposite direction, means for mounting said crane, brushes and means for supporting the same so they will engage said contacts on said disk, a saw, an electric motor and means for driving the same, means for supporting said motor so that the same may run transversely of said crane said motor being shifted and controlled by said brushes and contacts to cause the saw to sever plaster-board during the movement of the crane in the same direction as the movement of the plaster-board.

2. In a machine of the class described, an endless belt, a roller supporting the same, segmental gears on said roller, a shaft supporting said roller, means for supporting said shaft, a disk with electrical contacts fixed on said shaft, brushes adapted to engage said contacts, means for supporting said brushes, a crane and means for supporting the same so that the crane may move either in the direction of the movement of the belt while carrying the plaster-board or in the opposite direction, racks carried by said crane adapted to engage said segmental gears, said contacts and brushes being so related that while the gears are intermeshing some of the brushes and contacts are in engagement, a saw, a motor and means connecting the same with the supporting mechanism of the saw and electrical switches and contacts and conductors so arranged and disposed that said saw will move transversely of the crane while the gears are in contact and not otherwise, so that the said saw cuts without interfering with the forward movement of the plaster-board.

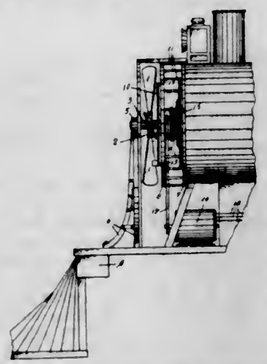
3. In a machine of the class described, a fixed frame carrying a contact, a shaft, a disk thereon carrying contacts, means for supporting brushes which are adapted to engage said disk contacts, a crane and means for supporting the same, segmental gears and means for supporting the same, racks on said crane adapted to engage said gears whereby the said crane is moved for a short distance in one direction, means for moving said crane in the other direction, a saw carried by said crane and adapted to move transversely thereof, a motor, a windlass having a worm gear and a worm connected to said motor, cables connecting said saw supporting means whereby the saw is moved transversely of the crane and on the crane with the aid of said motor, means connected with said saw for opening the armature circuit of said motor whereby the movement of the saw transversely of the crane is terminated and a contact on said crane adapted to engage the contact on said fixed part so that said armature circuit may again be closed when the crane returns to its initial position, and while the opening means operated by the saw is open, whereby the armature circuit may be closed so that the saw may be shifted in the opposite direction.

4. The combination with means for severing plaster-board, and means for causing such severing means to travel both transversely of and longitudinally with the plaster board, of a support through which the severing means travels transversely, comprising independent, interlapping means for supporting different portions transversely of the plaster board, one of which supporting means moves longitudinally with the severing means.

5. In a machine of the class described, a saw, a carriage carrying said saw, means for supporting said carriage so that it may move both transversely and longitudinally, means for moving said carriage longitudinally in one direction, means for moving said carriage longitudinally in the other direction, rollers adjacent said saw and carried by the carriage supporting means and having an interrupted space and not extending across said carriage supporting means, and a fixed table having rollers projecting into said interrupted portion, so that the plaster board will be supported at all times without a large gap while being severed by the saw.

[Claim 6 not printed in the Gazette.]

1,062,815. POWER-GENERATING APPARATUS. ALFRED BEST, Salt Lake City, Utah. Filed May 13, 1912. Serial No. 697,090. (Cl. 170—37.)



1. A power generating apparatus consisting of a wind wheel mounted on a locomotive and adapted to rotate when forced through the air by the running of said locomotive; a shaft in said wheel; a journal bearing for said shaft secured to the front of said locomotive; a supporting frame in which the other end of said shaft is mounted; a circular track on said frame; roller bearings on said wind wheel adapted to run on said track; and means to impart the motion of said shaft to other machinery.

2. In combination with a locomotive, of angled vanes secured in a hub; a shaft keyed therein and mounted on said locomotive; a supporting frame forming one of the bearings for said shaft and which is secured on the front

of said locomotive; a circular track on said frame; roller bearings on said vanes adapted to run on said circular track; a pulley on said shaft; a dynamo fastened on said locomotive adjacent said pulley; and means to transmit the motion of said pulley to said dynamo, as and for the purposes described.

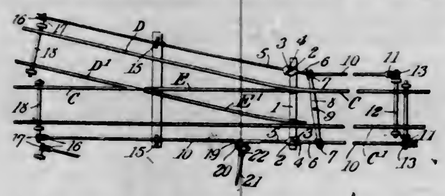
1,062,816. BILLIARD-CUE. ROBERT F. BURWELL, New Haven, Conn. Filed Aug. 5, 1912. Serial No. 713,458. (Cl. 46—9.)



1. In a billiard cue, the combination with a tubular body, of a cue end longitudinally movable in said body, a follower, means for forcing the follower forward, and a loose hammer located between the cue end and follower and adapted to be forced forward by the forward movement of the follower.

2. The herein described billiard cue comprising a cue body, a cue end longitudinally movable in said body, a spring to draw the cue end rearward, a slide coupled with said cue end, a plunger, means for forcing the plunger forward, and a loose hammer located between the plunger and slide and not connected with either and adapted when forced forward by the plunger to project the cue end.

1,062,817. SWITCH-OPERATING MECHANISM. EDWARD CARRAU, Cathlamet, Wash., assignor, by direct and mesne assignments, of one-third to Joseph Girard and one-third to Pacific Cadeau, Cathlamet, Wash. Filed Feb. 9, 1912. Serial No. 676,576. (Cl. 104—23.)



1. The combination with a movable switch member, and a cross bar movable therewith, of projecting elements upon the end portions of the bar, shifting plates having diagonally disposed slots in which said elements are mounted, and means for simultaneously shifting the plates in opposite directions to move the bar longitudinally in either direction, the walls of the slots and the projections coöperating to hold the bar and switch tongue against movement independently of the plates.

2. The combination with a movable switch tongue, of a bar shiftable therewith, upstanding projections upon the end portions of the bar, members having diagonally disposed bearing faces engaging the projections, means for actuating one of the members, means for transmitting motion from said member to the other member, the two members operating simultaneously to shift the bar and switch tongue in either of two directions, said members coöperating to hold the tongue and bar against movement independently of the members.

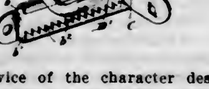
3. The combination with a shiftable switch tongue, of a bar movable therewith, upstanding projections upon the bar, members having diagonally disposed portions engaging the projections, means for causing the members to move in opposite directions simultaneously to engage the projections and to shift the bar and tongue in either of two directions, and separately movable revoluble elements for actuating either of said members.

4. The combination with a shiftable switch tongue, of a bar movable therewith, upstanding projections upon the bar, members having diagonally disposed portions engaging the projections, means for causing the members to move in opposite directions simultaneously to engage the projections and to shift the bar and tongue in either of two directions, separately movable revoluble elements for actuating either of said members, and car supported means for actuating either of said elements.

5. The combination with a switch tongue, of projecting elements movable therewith, members having obliquely disposed portions engaging said elements, means for causing the members to move simultaneously in opposite directions respectively to shift the tongue in either of two directions, separately revoluble devices connected to the respective members, yielding means for holding said devices normally in predetermined positions irrespective of the movement of said members, and means for rotating either of said devices to shift the members.

[Claims 6 to 8 not printed in the Gazette.]

1,062,818. GLAZIER'S JOINT. NILS H. CEDERQUIST, West Alhambra, Cal., assignor of one-half to Robert A. Puifer, Los Angeles, Cal. Filed Jan. 4, 1911 Serial No. 600,846. (Cl. 211—25.)



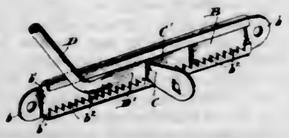
1. The combination of a glass plate having an opaque marking strip cemented thereto, and a supporting member having a cementing strip secured to one edge thereof, said cementing strip being cemented to said marking strip at intervals, and comprising a strip of felt and a wooden strip cemented to said felt strip, said wooden strip having a continuous coating of cementing material attached at intervals to said marking strip.

2. The combination of a glass plate having an opaque marking strip cemented thereto, another glass plate having an irregular edge, a cementing strip composed of a wooden layer and a felt layer cemented to the irregular edge of said second glass plate and having its outer edge formed as a true plane surface and cemented to said marking strip.

3. The combination of a glass plate having a strip cemented to one face thereof, and a second glass plate having a cementing strip secured to one edge thereof, said cementing strip comprising an outer layer of wood and an inner layer of felt, said layers being cemented together, said felt being cemented to said edge of the said glass plate, and the said outer layer of wood being cemented to the aforesaid strip on the first named glass plate.

4. The combination with a glass plate, of a strip provided with a grooved wooden portion embracing the edge of said plate in its groove, a felt portion attached to said wooden portion, another wooden portion attached to the other side of said felt portion, and another glass plate attached to said second wooden portion.

1,062,819. SHADE AND CURTAIN BRACKET. GEORGE E. COOK, Herrin, Ill. Filed Mar. 23, 1911. Serial No. 616,529. (Cl. 156—24.)

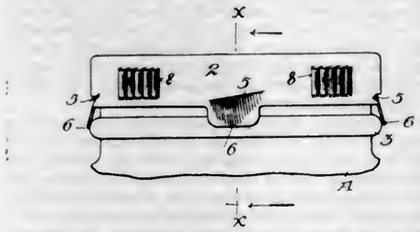


1. In a device of the character described, a bracket supporting member provided with parallel guide channels along the upper and lower portions thereof, the upper edge of the front wall of the lower guide channel being provided with a plurality of notches therein, a foot piece mounted for sliding longitudinal movement in the guide channels of the supporting member, said foot piece being

in the form of an elongated flat plate constructed and arranged to have a limited pivotal movement on one corner thereof in the guide channels, a bracket projecting outwardly from the opposite end of said plate, and having a portion adapted to directly engage the notches in the upper edge of the front wall of the lower guide channel of the bracket supporting member to normally hold the bracket against longitudinal movement in the guide channels.

2. In a device of the character described, a bracket supporting member provided with parallel guide channels along the upper and lower portions thereof, the upper edge of the front wall of the lower guide channel being provided with a plurality of notches therein, a foot piece mounted for longitudinal sliding movement in the parallel guide channels of the bracket supporting member, said foot piece being in the form of an elongated flat plate of a width at one end to substantially fill the space between the bottom walls of the guide channels of the bracket supporting member and at its other end of a width less than the distance between the bottom walls of the guide channels, the lower edge of said plate being inclined upwardly from the widest end of the plate, whereby a limited canting movement of the foot piece on one corner thereof in the guide channels is permitted, and a bracket projecting outwardly from the narrow end of the foot piece, the lower edge of said bracket being provided with a portion adapted to directly engage the notches in the upper edge of the front wall of the lower guide channel of the bracket supporting member to normally hold the bracket against longitudinal movement in the guide channels, the lower inclined edge of the foot piece engaging the bottom wall of the lower guide channel when the bracket portion is in locking engagement with one of the said notches, substantially as described.

1,062,820. BOTTLE-CAP. HARRY R. COREY, New York, N. Y., assignor to American Stopper Company, Brooklyn, N. Y., a Corporation of New Jersey. Filed Aug. 14, 1911. Serial No. 643,855. (Cl. 215—85.)

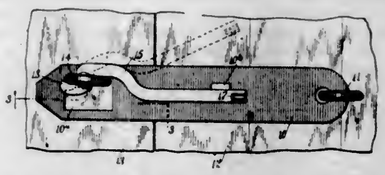


1. The combination with a bottle or jar having a threaded neck and an annular encircling bead tread below the said threads, a sheet metal cap having a top portion and pendent band, tabs extending from said band adapted to engage the bead on the bottle neck, and lugs integral with said band engaging said threaded neck, and located in line with said band tabs.

2. The combination with a bottle or jar having a threaded neck and an annular encircling bead, a sheet metal cap having a top portion and a peripheral band, tabs integral with said band and depending from the lower edge thereof, inwardly extending lugs integral with said band and adjacent the tabs and coöperating therewith for engagement with said threaded neck, the tabs below said lugs serving to resiliently engage said bead, and the tabs being bendable outwardly to permit this engagement of their respective lugs from said threaded neck.

3. The combination with a bottle or jar having a neck with inclined threads and an annular encircling bead, projecting below said threads, a sheet metal cap having a top portion and pendent band, tabs extending from said band adapted to engage the bead on the bottle neck, and inclined lugs adapted to engage said inclined threads and having operative or engaging portions in line with said tabs.

1,062,821. SAFETY DOOR-HASP. JUDD B. CRANE, Ellensburg, Wash. Filed July 26, 1912. Serial No. 711,655. (Cl. 70—83.)

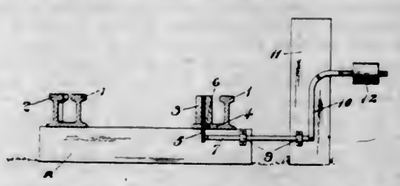


1. In a safety door hasp, the combination of a plate having a slot adapted to admit a staple, a lever of the first class constituting a locking member pivoted on said plate adjacent the upper edge of said slot, said lever terminating at one free end in a hook adapted to embrace one leg of the staple in the locking operation of the hasp, and means coöperating with the opposite end of the lever to secure it in locking position.

2. In a safety door hasp, the combination of a substantially flat plate having a wide slot, a locking member pivoted on the plate adjacent one side of the slot, one end of the lever constituting a hook adapted to embrace a staple projecting through the slot, another portion of the lever constituting a cam to coöperate with the staple in opening the hasp, and means formed on the plate to secure the locking lever in locking position.

3. In a safety door hasp, the combination of a substantially flat plate having a wide slot at one end, a portion of said plate constituting a lug extending into said slot from the upper side thereof, a staple adapted to pass through said slot and to admit said lug, a locking member pivoted on said lug, one end of the locking member constituting a hook adapted to pass downwardly through the staple and to embrace one leg of the same, and means coöperating with the opposite end of the lever to secure it in locking position.

1,062,822. RAILWAY-SWITCH-OPERATING MECHANISM. DANIEL DOCKSTADER, Palatine Bridge, N. Y. Filed May 7, 1912. Serial No. 695,696. (Cl. 104—25.)

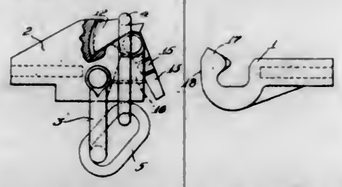


1. In a railway switch the combination of the switch point, a pin pendent from the under side of the switch point and extending below the plane of the under side of the main rail, and a weight actuated part arranged beneath the main rail and adapted to engage the said pin and serving normally to hold the free end of the switch point away from the rail of the main track.

2. In a railway switch, the combination of a bed plate having a transverse slot, a main rail and a switch point supported upon the bed plate, a pin pendent from the switch point and extending through the transverse slot of the bed plate, and a weight arranged horizontally below the bed plate and having an extension to engage the pin of the switch point to normally hold the free end of said switch point away from the main rail.

3. In a railway switch, the combination of a bed plate having a transverse slot, a main rail and a switch point supported upon the bed plate, a pin pendent from the switch point and extending through the transverse slot of the bed plate, a weight arranged horizontally below the bed plate and having an extension to engage the pin of the switch point to normally hold the free end of said switch point away from the main rail, and a box forming a housing for said weight and completely inclosing the same.

1,062,823. COUPLING FOR MINING-CARS. JAMES DUBOIS, SECONDO NOVARIO, and JOHN E. JONES, Westville, Ill. Filed Oct. 25, 1912. Serial No. 727,750. (Cl. 213—45.)



1. A car coupler comprising a coupler head and a coupler hook, a dog pivoted on the coupler head and comprising an upper head member and a lower stem member adapted to project in advance of the coupler head in position to be engaged by said hook, and a flexible member connected to the coupler head, and a link large enough to surround the front end of the coupler head and rest upon the head member of the dog secured to said flexible member.

2. A car coupler comprising a coupler head and a hook, a dog pivoted on the front end of the coupler head and comprising an upper head member and a lower stem member adapted to project in advance of the coupler head so as to be engaged and swung back by the hook when the coupler head and hook are brought together, a link large enough loosely to surround the front end of the coupler head and rest upon the head member of the dog, and a flexible member connected at one end to the coupler head and at the other end to said link.

3. A car coupler comprising a coupler head and a cooperating hook, a flexible member connected at one end to the head and having at its opposite end a substantially circular link, and a dog mounted on said head, and having a link-supporting position and a tripping position, said dog having a part adapted to be engaged by the hook when the dog is in its link-supporting position and to be moved thereby in a position to drop the link over the hook.

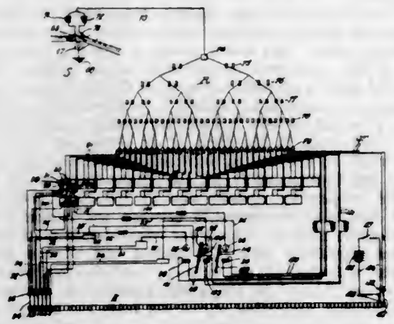
4. A car coupler comprising a hook and a coupler head having a substantially cylindrical front end, a dog pivoted within the front end of said head and having an upper link-supporting part and a lower stem adapted to project in advance of the coupler head so as to be engaged by said hook when the head and hook are brought together, and a flexible member connected to the coupler head and having at its end a substantially circular link large enough loosely to surround the front end of the head and overlie said link-supporting part of the dog, the parts being proportioned and arranged to cause the link to be dropped down over the hook by said dog when the hook engages the stem of the dog and forces it back.

5. A car coupler comprising a hook and a coupler head, said coupler head having a recess cut in the top thereof and extending inwardly from the front edge and having also a central vertical slot cut in the front face and communicating with said recess, a dog having a head member lying in said recess and a stem member projecting downwardly in the slot, means for pivotally supporting the dog on the coupler head, the parts being so proportioned and arranged that the head member of the dog normally overbalances the stem member and causes the dog to swing outwardly with the stem projecting beyond the front end of the coupler head, the head member of the dog having in the top thereof a link-receiving seat arranged at some distance behind the pivotal axis of the dog when the dog occupies its normal position, and a flexible member connected to the coupler head and having a link large enough loosely to surround the front end of the coupler head and rest in said seat on the dog.

[Claims 6 to 9 not printed in the Gazette.]

1,062,824. TELEGRAPH SYSTEM. CLAUDE M. EDWARDS, Galveston, Tex. Filed Apr. 3, 1912. Serial No. 689,460. (Cl. 178—54.)

1. In combination, a series of electrically operated actuating devices, means whereby an electric current may be directed to a particular actuating device to energize the same, a group of actuating mechanisms under the control of each actuating device, and means operable to control the individual actuating mechanisms under the control of the energized actuating device, said last-named means including an element normally operating to render one of the actuating mechanisms of the group under the control of the energized actuating device operative.



2. In combination, a series of electrically operated actuating devices, means whereby an electric current may be directed to a particular actuating device to energize the same, a group of actuating mechanisms under the control of each actuating device, and means operable automatically to control the individual actuating mechanisms under the control of the energized actuating device, said last-named means including an element normally operating to render one of the actuating mechanisms of the group under the control of the energized actuating device operative.

3. In combination, a series of electrically operated actuating devices, means whereby an electric current may be directed to a particular actuating device to energize the same, a group of actuating mechanisms under the control of each actuating device, and a selector operable automatically to control the individual actuating mechanisms under the control of the energized actuating device, said selector including an element normally operating to render one of the actuating mechanisms of the group under the control of the energized actuating device operative.

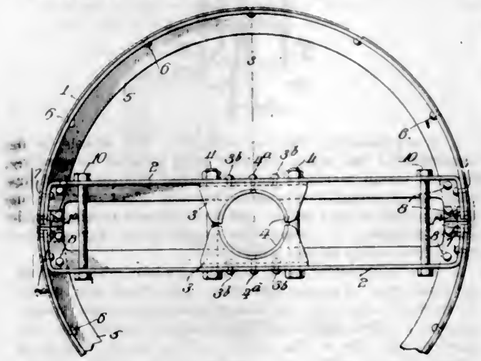
4. In combination, a series of electrically operated actuating devices, means whereby an electric current may be directed to a particular actuating device to energize the latter, groups of actuating mechanisms each under the control of certain actuating devices, and a selector operable from certain of the remaining devices whereby any one of the group of actuating mechanisms controlled by the energized actuating device may be operated, said selector including an element normally operating to render one of the actuating mechanisms of the group controlled by the energized actuating device operative.

5. The combination with a key board embracing a number of banks of keys, of a series of actuating devices, successive series of selecting devices whereby a current may be directed to a particular actuating device to energize the latter, a group of actuating mechanisms under the control of each actuating device and each adapted to operate a key in one of said banks, and a selector operable automatically and controlling the individual actuating mechanisms of the group under the influence of the energized actuating device whereby the key in any bank may be operated.

[Claims 6 to 17 not printed in the Gazette.]

1,062,825. PULLEY. HENRY J. GILBERT, Saginaw, Mich. Filed May 23, 1904. Serial No. 209,334. (Cl. 64—18.)

1. A pulley comprising rim segments, spoke arms consisting of angle irons composed solely of two flanges connected at their ends with the rim segments, one flange of each of such angle irons being inwardly directed and the other one parallel to the plane of division between the pulley halves and extending in a straight line across the pulley, and a hub at the middle portion of the spoke arms consisting of similar but separate sections of angle irons reversely arranged with respect to the spoke arms, each hub angle iron having a flange secured to the said parallel flange of its spoke arm and of the same width as such latter flange and another flange directed radially; substantially as described.



2. A pulley comprising rim segments, spoke arms extending in a straight line across the pulley and consisting of angle irons composed solely of two flanges connected at their ends with the rim segments, and a hub thimble connected with the spoke arms, one of the flanges of the angle irons being recessed to fit upon the hub thimble; substantially as described.

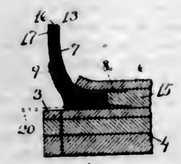
3. A pulley comprising rim segments, angle irons secured to the inner face thereof, spoke arms consisting of angle irons having radially inwardly directed flanges secured to the corresponding flanges of the other angle irons and having hub sections at an angle to the other set of their flanges and parallel to said inwardly directed flanges, and a hub thimble, one flange of each spoke arm being recessed to fit upon the hub thimble; substantially as described.

4. A pulley comprising rim segments, angle irons secured to the inner face thereof, spoke arms consisting of angle irons having radially inwardly directed flanges secured to the corresponding flanges of the other angle irons and having hub sections at an angle to the other set of their flanges and parallel to said inwardly directed flanges, and a hub thimble, said hub sections and also one inwardly directed flange of each spoke arm being recessed to fit upon the hub thimble; substantially as described.

5. A pulley comprising rim segments, angle irons secured to the inner face thereof, and spoke arms consisting of angle irons, said angle irons and spoke arms being together interlocked with the rim segments; substantially as described.

[Claims 6 to 19 not printed in the Gazette.]

1,062,826. BOOT AND SHOE. SAMUEL J. HARRIS, Randolph, Mass. Filed May 29, 1912. Serial No. 700,479. (Cl. 36—4.)

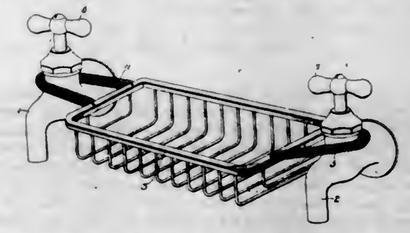


1. An exterior flexible strengthening strip adapted for use in rubber boots and shoes, having a continuous outwardly facing shoulder extending longitudinally thereof, a surface beveled from the top of said shoulder to the inner edge of the strip, and a continuous flange extending outwardly from the bottom of said shoulder and adapted to be turned upward to engage said shoulder, said flange having a width greater than the height of said shoulder, whereby when said flange is turned upward against said shoulder it will extend above the same.

2. In rubber boots and shoes, a middle sole, an insole secured to the top of said middle sole, a welt sole secured to the bottom of the middle sole, a composite upper joining the middle sole between said insole and said welt sole, an interior circumferential strengthening strip secured partly in the upper and partly between the insole and middle sole, and an exterior circumferential strengthening strip secured partly between the upper and welt sole and partly between the welt sole and the middle sole.

3. In rubber boots and shoes, a middle sole, an insole secured to the top of said middle sole, a welt sole secured to the bottom of the middle sole, a composite upper extending between the insole and the welt sole, an interior circumferential strengthening strip engaging the insole, the top of the middle sole and the inner portion of the composite upper and an exterior circumferential strengthening strip secured to the bottom of said middle sole and to the lower edge portions of the composite upper.

1,062,827. SOAP-DISH. WILLIAM H. HINZ, Chicago, Ill. Filed Feb. 11, 1911. Serial No. 608,118. (Cl. 45—28.)



1. A soap dish adapted to be detachably suspended between two faucets or other supporting members provided on each of two oppositely disposed sides with a single handle for engaging the supporting member; one of the handles, at least, being in the form of a stiff helical spring bent into the form of a loop and having its ends fastened to said dish; the length of the dish and the handles in the unstretched condition being less than the distance between the parts of the supporting members with which the handles engage; and the resilient handle having sufficient strength to remain substantially horizontal when supporting the dish.

2. A soap dish adapted to be detachably suspended between and automatically adjust itself to two handled faucets arranged at variable distances from each other provided with two oppositely disposed loop-like handles or bails in the form of stiff helical springs, said springs having sufficient flexibility and resiliency to permit them to be stretched over the handles of the faucets and to remain taut when slipped down upon the faucets and having sufficient strength to remain substantially horizontal under the weight of the dish.

1,062,828. CAOUTCHOUC-LIKE SUBSTANCE AND PROCESS OF MAKING SAME. FRITZ HOFMANN, CARL COUTELLE, KONRAD DELBRÜCK, and KURT MEISENBURG, Elberfeld, Germany, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Mar. 20, 1911. Serial No. 615,667. (Cl. 23—24.)

1. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of more than two erythrene hydrocarbons.

2. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including erythrene and a plurality of other erythrene hydrocarbons.

3. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including isoprene and a plurality of other erythrene hydrocarbons.

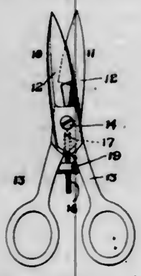
4. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene

hydrocarbons including diisopropenyl and a plurality of other erythrene hydrocarbons.

5. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene, isoprene and diisopropenyl.

[Claims 6 to 12 not printed in the Gazette.]

1,062,829. BUTTONHOLE-SCISSORS. FRANK KARSITZ, Bridgeport, Conn., assignor to The Acme Shear Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 10, 1913. Serial No. 741,242. (Cl. 164—5.)

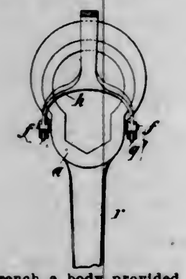


1. An implement of the character described consisting of members, a pivot, a swinging rod and a nut having threaded engagement with the rod, each member comprising a blade and a shank, one of the blades having a recess in its inner face extending from the inner end but leaving solid metal between said recess and the pivot, and the rod being loosely secured in the recess leaving the nut in position to be engaged by the shanks to limit the cutting action of the blades.

2. An implement of the character described consisting of members, a pivot, a swinging rod and a nut having threaded engagement with the rod, each member comprising a blade and a shank, one of the blades having a recess in its inner face extending from the inner end and a transverse hole intersecting the recess but leaving solid metal between said recess and hole and the pivot, and the rod having its end bent at a right angle to engage the hole, leaving the nut in position to be engaged by the shanks to limit the cutting action of the blades.

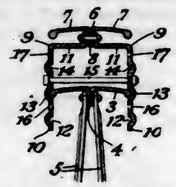
3. An implement of the character described consisting of members and a pivot, each member comprising a blade and a shank, one of the blades having a recess in its inner face at the inner end but not extending to the pivot, a rod swinging freely in said recess and a nut having threaded engagement with said rod and adapted to be engaged by the shanks to determine the amount of cutting action of the blades.

1,062,830. SCREW-WRENCH. OSKAR KNOOP, Ekkenberg, near Gratz, Austria-Hungary. Filed Dec. 4, 1912. Serial No. 734,954. (Cl. 81—121.)



In a vehicle wrench a body provided with a handle, a stirrup pivoted by its ends on the outer sides of said body, a handle on said stirrup, arms fixed on the ends of the prongs of said handle and rollers pivoted on said arms.

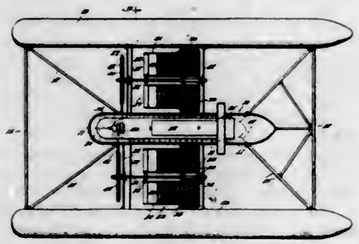
1,062,831. SUPPLEMENTAL RIM FOR PULLEYS OR BELT-WHEELS. FRANK P. KOBERT, Fairhaven, Conn. Filed June 1, 1912. Serial No. 700,913. (Cl. 64—17.)



1. A supplemental rim for pulleys or belt wheels, said supplemental rim being provided with parallel, inwardly-directed clamp members having spaced grooves, in their inner faces, adapted to receive the side edges of the rim of the pulley or belt wheel, and bolts passed through said clamp members to secure the supplemental rim to the rim of the pulley or belt wheel.

2. The combination with a pulley or belt wheel having the usual rim, of a supplemental rim provided with parallel inwardly-directed side clamp members having spaced grooves in their inner faces adapted to receive the side edges of the rim of the pulley or belt wheel, and bolts passed through said clamp members to secure the supplemental rim to the rim of the pulley or belt wheel.

1,062,832. WAVE-ACTUATED MOTIVE APPARATUS. THEODOR KURRELL and HEINRICH SCHNEIDER, Los Angeles, and LEONARD BUKOWSKI, Pasadena, Cal. Filed Sept. 3, 1912. Serial No. 718,415. (Cl. 115—4.)



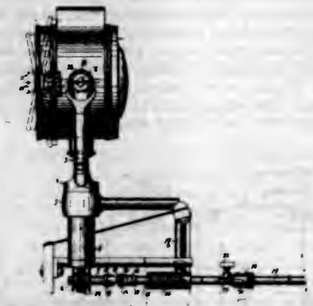
1. The combination of a boat, buoyant members at each side of and connected with the boat, frames between said buoyant members and the boat, means including wave-actuated motive apparatus mounted on said frames to propel the boat, and a buoyant member arranged below and connected with the hull of the boat.

2. The combination of a boat, a propeller, buoyant members, frames connected between the buoyant members and the boat, shafts mounted on the frames, frames on the shafts, rods mounted on the last mentioned frames, a plurality of plates having one end thereof pivotally mounted on the rods and having the other end portion thereof adapted to overlap adjacent rods, and operative connections between the shafts and the propeller.

3. The combination of a boat, a propeller, buoyant members, frames connected between the buoyant members and the boat, shafts mounted on said frames, frames mounted on the shafts, pivotally mounted frames on the frames which are mounted on the shafts, rods on said pivotally mounted frames, plates having one end portion thereof pivotally mounted on the rods and having the other end portion thereof adapted to overlap adjacent of the plates, and operative connections between the shafts and the propeller.

4. The combination of a boat, buoyant members at each side of and connected with the boat, a propeller, frames between the buoyant members and the boat, a buoyant member arranged below and connected with the hull of the boat, means to operate the propeller including shafts on the frames, frames operatively connected with the shafts, rods on the last frames, and plates having one end portion thereof pivotally mounted on the rods and having the other end portion thereof adapted to overlap adjacent of the plates, and means to operatively connect the first mentioned means with the propeller.

1,062,833. DIRIGIBLE HEADLIGHT. LOUIS MARCEL GABRIEL LOURDIN, Paris, France. Filed Feb. 23, 1912. Serial No. 679,436. (Cl. 240—61.)

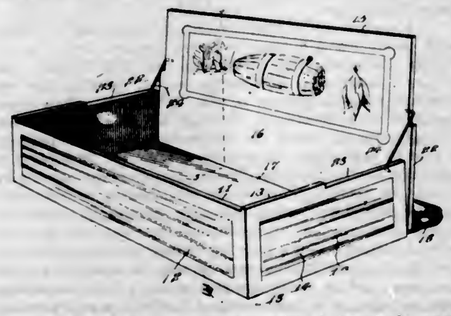


1. A dirigible headlight comprising in combination a lamp having trunnions, a revoluble fork having bearings for said trunnions, a revoluble shaft near the end of said fork, a pinion on one of said trunnions, a pinion on said revoluble shaft, connections between said pinions, a second shaft mounted so as to be capable of both swinging and revolving on its axis, and a Cardan joint connecting said shafts, substantially as described.

2. A dirigible headlight comprising in combination a lamp having trunnions, a revoluble fork having bearings for said trunnions, a revoluble shaft near the end of said fork, a pinion on one of said trunnions, a pinion on said revoluble shaft, a sprocket chain on each pinion, cables surrounded by flexible sheathing connecting said chains, a second shaft mounted so as to be capable of both swinging and revolving on its axis, and a Cardan joint connecting said shafts, substantially as described.

3. A dirigible headlight comprising in combination a lamp having trunnions, a revoluble supporting fork therefor, an operating rod, an oscillatory supporting socket therefor, an intermediate rod connected with said operating rod, a shaft connected at one end with said fork and at the opposite end with said intermediate rod by a Cardan joint, a pinion on said shaft, a pinion on one of said trunnions, and connections between said pinions, all arranged substantially as described so that said lamp may be turned in different planes by the respective swinging or rotation of said operating rod, substantially as described.

1,062,834. BOX. WILLIAM S. LYON, Auburn, N. Y. Filed May 10, 1912. Serial No. 696,443. (Cl. 217—58.)

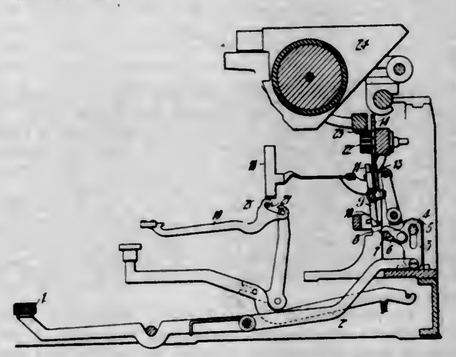


1. In a box, the combination with a box body open along one side thereof, of a flexible member on the box body, a cover having connection with the said flexible member, the said flexible member forming a side of the box to close the open side thereof when the cover is in closed position on the box and movable into folded position when the cover is moved into open position, hook members on the said box body and adapted for connection with the cover for supporting the same in open position, the said cover when in open position being adapted to form a side of the said box body.

2. In a box, the combination with a box body open along one side thereof, of a flexible member on the said box body, a cover having connection with the flexible member, the said flexible member forming a side of the box body when the cover is in closed position and the said cover forming a side of the box body when the cover is in open position, and means on the said box body and engaging the said cover to retain the same in open position to form a side of the box body.

3. In a box, the combination with a box body open along one side thereof, of a flexible member on the said box body, a cover having connection with the flexible member, the said flexible member forming a side of the box body when the cover is in closed position and the said cover forming a side of the box body when the cover is in open position, and hook members on the said box body and engaging the said cover to retain the same in open position to form a side of the box body.

1,062,835. TYPE-WRITING MACHINE. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed May 7, 1912. Serial No. 695,754. (Cl. 197—82.)



1. In a typewriting machine having key-operated types, a carriage, and an escapement mechanism therefor constructed to complete its cycle of operation during the return stroke of the type keys, the combination with a space-key, of independent devices operated by said space-key for both actuating and releasing the escapement mechanism during the down-stroke of the space-key.

2. In a typewriting machine, a carriage, escapement mechanism including a toothed wheel, a rocker, a feed dog and detent dog mounted on said rocker, said detent dog having a beveled face, a space-key, means connected to said space-key for swinging said rocker so as to release the toothed wheel from the feed dog and to cause it to engage the beveled face of the detent dog, said means releasing the rocker during the down-stroke of the space key.

3. In a typewriting machine, a carriage, escapement mechanism including a rocker, a feed dog and detent dog mounted on this rocker, the rocker having a projection formed thereon, a space-key, mechanism connected to said space-key and including a stop adapted to engage said projection and release it during the downward movement of the space-key.

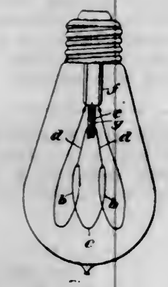
4. In a typewriting machine, a carriage, escapement mechanism including a rocker, a feed dog and detent dog

mounted on this rocker, the rocker having a projection formed thereon, a space-key, mechanism connected to said space-key and including a relatively movable stop adapted to engage said projection and release it during the downward movement of the space-key.

5. In a typewriting machine, a carriage, escapement mechanism including a rocker, a feed dog and detent dog mounted on this rocker, the rocker having a projection formed thereon, a space-key, mechanism connected to said space-key and including a relatively movable stop, means for limiting the movement of the stop in one direction, said stop being adapted to engage said projection and release it during the downward movement of the space-key.

[Claims 6 to 13 not printed in the Gazette.]

1,062,836. INCANDESCENT LAMP. MATTHEW M. MERRITT, Middleton, Mass., assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed Nov. 27, 1905. Serial No. 289,187. (Cl. 176—39.)



1. An incandescent lamp provided with a filament, a stem through which the filament connections enter, a single metallic anchor wire sealed into said stem, a glass sleeve upon said wire, and electrically separated branch wires sealed into said sleeve and connected respectively to different points in the length of said filament.

2. An incandescent lamp provided with a filament, a stem, a single metallic anchor wire sealed into said stem, a sleeve upon said wire, and a plurality of electrically separated anchor wires fastened to said sleeve and connected respectively to different points in the length of said filament.

3. An incandescent lamp having a filament, a stem, a metallic anchor support sealed into said stem, a perforated body of insulating material secured to said support, and a plurality of electrically separated anchor wires secured to said insulating material and at their opposite ends connected respectively to different points in the length of the filament.

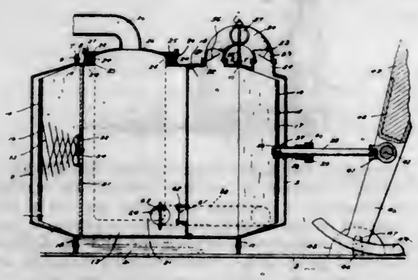
4. The combination with a plurality of filament loops of a metallic anchor support and a plurality of electrically separated supports by which the various filament loops are supported and which are connected to said anchor support by a perforated carrier movably mounted thereon.

5. An anchor carrier for an incandescent lamp comprising a hollow elongated sleeve adapted to be placed upon a filament support, and a plurality of electrically separated connections secured to said sleeve and adapted to be attached to separated points in the length of the lamp filament.

[Claim 6 not printed in the Gazette.]

1,062,837. VACUUM CLEANING DEVICE. HERMAN B. MERTZ, Beach View, Pa. Filed July 18, 1910. Serial No. 572,560. (Cl. 230—5.)

1. A device of the kind described comprising a cylinder, a partition intermediate the ends of said cylinder, extending transversely thereof and forming two compartments, valve-controlled means for establishing intercommunication between said compartments, a diaphragm secured intermediate the ends of one of said compartments and extending to a point spaced from the end of the cylinder, a valve-controlled pipe emptying at a point alining with said diaphragm and at another point adjacent said partition, into said last-named compartment, said pipe having an air-port intermediate its open ends, a diaphragm secured in said other compartment and terminating short of the opposite end of said cylinder, an upright member in said last-named compartment, a spring secured to said member and holding said last-named diaphragm distended, means for establishing communication between said compartments, a removable cap at the top of said last-named compartment arranged to clamp a bag depending in the latter, an air tube communicating with said last-named compartment, and emptying into said bag, and means for reciprocating said first-named diaphragm.

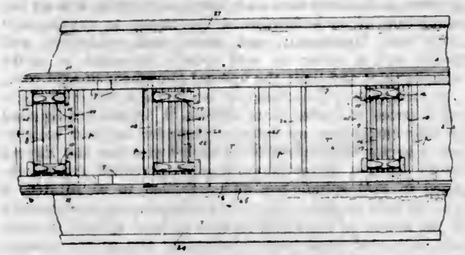


2. A device of the kind described comprising a casing having two intercommunicatable compartments, diaphragms in said compartments disposed at the ends of said casing but spaced therefrom, flat air compressing members formed upon said diaphragm, one of said members arranged to compress air in its compartment in both a forward and rearward stroke, means for causing said other member to move toward said first-named member when the latter has moved forwardly, or rearwardly, an air-inlet tube expanding air in said other compartment and arranged to restore said last-named member, a removable cap upon said casing clamping a bag depending into said last-named compartment and carrying said tube, and means for discharging the air exhausted by said first-named member.

3. In combination a casing divided into two compartments, valve-controlled means for establishing communication between said compartments, diaphragms disposed at the ends of said casings in said compartments, means for causing one of said diaphragms to exhaust the air in its compartment by a forward and rearward stroke, an air-inlet tube in said other compartment, means for suspending a porous receptacle in said last-named compartment in registration with said tube, said other diaphragm becoming active when said first-named diaphragm has moved, and means for carrying off the air exhausted by said first-named diaphragm.

4. A device of the kind described comprising a casing, said casing being divided into two compartments, an inverted U-shaped pipe opening at the top at each end of one compartment and having a port opening into the atmosphere, a diaphragm in said last-named compartment arranged to force air out of either end of said pipe when it reciprocates, means for reciprocating said diaphragm, a post in said other compartment, a second diaphragm in said last-named compartment, variable-tension springs attached to said post put under compression by said last-named diaphragm when said first diaphragm moves in either direction, an air-delivering tube opening into the second compartment, a pipe connecting said compartments, having an air-delivering port opening into said first compartment and an air-intake port opening into said second compartment, a valve controlling said last-named port and opening only to admit air, and a tube establishing intercommunication between said two compartments.

1,062,838. PLEASURE-WATERWAY. JOHN A. MILLER, Homewood, Ill. Filed Sept. 26, 1912. Serial No. 722,882. (Cl. 104—111.)



1. In a pleasure water way, the combination of a trough disposed on a grade, rails disposed in said trough, and means controlled by the flow of water through said trough for holding said rails up to receive a vehicle.

2. In a pleasure water way, the combination of a trough disposed on a grade and having water flowing therethrough, alternate ridges and pockets at the trough bottom, supporting frames hinged to the edges of said pockets, and rails secured to the upper ends of said supporting frames, said frames being controlled by water flow to hold said rails in position to receive a vehicle.

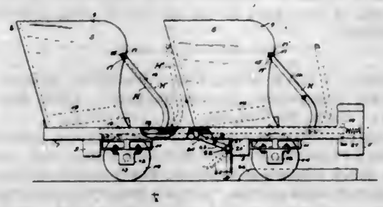
3. In a pleasure water way, the combination of a trough disposed on a grade and having water flowing therethrough, rails adjacent the upper edges of said trough and having overlapping ends, and supporting frames secured to the trough walls and to the ends of the overlapping rails and controlled by water flow through said trough to hold the overlapping ends of said rails securely together.

4. In a pleasure water way, the combination of a trough disposed on a grade and having water flowing therethrough, the bottom of said trough being provided alternately with transverse ridges and pockets, rails adjacent the upper edges of said trough, the lower end of each rail overlapping the end of the next rail, frames secured to the overlapping end of each rail and to the entrance edge of a pocket whereby water flow over said frame and into said pocket will tend to force said frame and connected rail downwardly, a second frame secured to the underlying end of each rail and to the outlet edge of a pocket, water flowing out of said pocket tending to raise the said frame whereby the rail ends are held vertically together.

5. In a pleasure water way, the combination of a trough for running water, rails within said trough, mechanical means controlled by water flow through said trough for holding said rails close to the surface of the water and in engagement with a vehicle traveling with the water.

[Claims 6 and 7 not printed in the Gazette.]

1,062,839. HANDLE-BAR MECHANISM FOR PLEASURE-RAILWAYS. JOHN A. MILLER, Chicago, Ill. Filed Sept. 27, 1912. Serial No. 722,631. (Cl. 104—111.)



1. In a pleasure railway vehicle, the combination of a vehicle body and a seat structure thereon, a handle bar structure supported at its lower end on the vehicle body in front of the seat structure, a notch at the front of said seat structure near the top thereof, and means for shifting the lower end of said handle bar structure toward or away from said seat structure to cause vertical movement of the upper end of said handle bar structure and engagement thereof in said notch to become locked to the seat structure.

2. In a pleasure railway vehicle, the combination of a vehicle body and a seat structure thereon, a handle bar structure comprising a cross rod and side bars extending downwardly therefrom, means pivotally supporting the lower ends of said side bars, said supporting means being horizontally shiftable toward and away from the seat structure thereby to effect movement of the handle bar structure to raise and lower the cross rod thereof, and a locking notch on said seat structure for receiving said cross rod upon such vertical movement thereof to lock said cross rod to the seat structure.

3. In a pleasure railway vehicle, the combination of a vehicle body and a seat structure thereon, a handle bar frame comprising an upper cross rod and side bars, bars shiftable longitudinally on said vehicle body, said handle frame side bars being pivoted at their lower ends to said shiftable bars, said side bars being inclined toward said seat structure so that movement of the shiftable bars toward and away from said seat structure will cause respectively upward and downward movement of the cross rod, and notches provided on said seat structure for receiving said cross rod upon vertical movement thereof to lock said rod rigidly to the seat structure.

4. In a pleasure railway vehicle, the combination of a vehicle body and a seat structure thereon, a handle bar structure in front of the seat structure, bars longitudinally shiftable on said vehicle body to which bars said handle bar structure is pivoted at its lower end, said handle bar structure being adapted to be swung in inclined position in front of the seat structure, and locking means on said seat structure coöperating with said handle bar structure upon shifting of said bars to rigidly lock the handle bar structure to the seat structure.

5. In a pleasure railway vehicle, the combination of a vehicle body and a seat structure thereon, a handle bar structure comprising a top cross rod and side rods extending downwardly therefrom, said side bars being supported at the lower ends on the vehicle body and being adapted to be swung to inclined position with the cross rod resting against the front of the seat structure, notches cut in said seat structure, and means for shifting the lower ends of said side bars toward said seat structure to thereby effect raising of said cross rod and engagement of said cross rod in said notches to be securely locked thereby to the seat structure.

[Claims 6 to 13 not printed in the Gazette.]

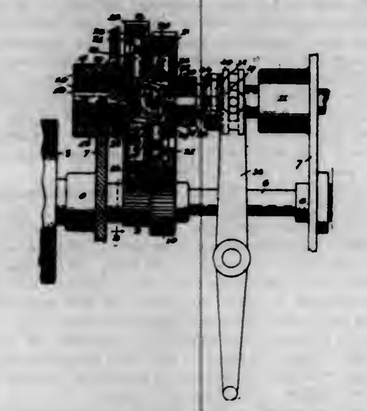
1,062,840. CLUTCH MECHANISM. WILLIAM L. MILLER, Madison, Wis., assignor to Gisholt Machine Company, Madison, Wis., a Corporation of Wisconsin. Filed Mar. 23, 1912. Serial No. 685,783. (Cl. 192—13.)

1. In combination, an axially bored and slotted shaft, a hollow faced gear loose on said shaft, an expansion ring clutch mechanism fast on said shaft within said gear, a cam for actuating said clutch mechanism located within the slot of said shaft, and a rod slidably mounted in the bore of said shaft and connected to said cam for actuating the latter.

2. In combination, an axially bored and transversely slotted shaft, a hollow faced gear loose on said shaft, an expansion ring clutch mechanism fast on said shaft within said gear, a cam for actuating said clutch mechanism located within the slot of said shaft and bodily shiftable lengthwise of the latter, and a rod slidably mounted in the bore of said shaft and carrying said cam.

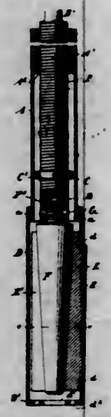
3. In combination, an axially bored and transversely slotted shaft, a pair of hollow faced gears loose on said shaft, expansion ring clutch mechanisms fast on said shaft within said gears, a double-ended cam for actuating said clutch mechanisms located within the slot of said shaft and bodily shiftable lengthwise of the latter, and a rod slidably mounted in the bore of said shaft and carrying said cam.

4. In combination, an axially bored shaft formed with a pair of transverse slots therein, a hollow faced gear loose on said shaft, an expansion ring clutch mechanism fast on said shaft within said gear, a cam for actuating said clutch mechanism located within one of the slots of said shaft and bodily shiftable lengthwise of the latter,



a rod slidably mounted in the bore of said shaft and carrying said cam, said rod extending across both slots of said shaft, a circumferentially grooved collar encircling said shaft opposite the other of said slots, a pin connecting said collar to said rod through said other slot of said shaft, and a clutch-actuating lever engaging said grooved collar.

1,062,841. REAMER. CHARLES C. MITCHEL, Lyndhurst, N. J. Filed Sept. 6, 1912. Serial No. 718,856. (Cl. 166—6.)

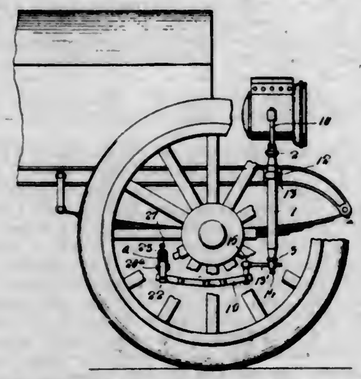


1. In a tool of the character set forth, a cutter-box having a series of radial slots therein, a spindle-box carried by said cutter-box, a series of cutter-bars in said cutter-box and having blades engaged in said slots, a screw-threaded spindle engaged in said spindle-box and arranged to be rotated, and a cone on said spindle constructed when moved downwardly by the action of the screw-threads on said spindle to force said cutter bars and blades outwardly and at the completion of such downward movement to engage said cutter-bars frictionally and rotate said cutter-box and blades.

2. In a tool of the character set forth, a cutter-box having a series of radial slots therein, a spindle-box carried by said cutter-box, an internal shoulder on said spindle-box, a series of cutter-bars in said cutter-box and having blades engaged in said slots, a screw-threaded spindle engaged in said spindle-box and arranged to be rotated, and a cone on said spindle constructed when moved downwardly by the action of the screw-threads on said spindle to force said cutter-bars and blades outwardly and at the completion of such downward movement to engage said cutter-bars frictionally and rotate said cutter-box and blades, and a collar on said spindle arranged to strike said shoulder and limit the upward movement of said cone.

3. In a tool of the character set forth, a cutter-box having a series of radial slots therein, a spindle-box carried by said cutter-box, an internal shoulder on said spindle-box, a series of cutter-bars in said cutter-box and having blades engaged in said slots, a screw-threaded spindle engaged in said spindle-box and arranged to be rotated, a cone on said spindle constructed when moved downwardly by the action of the screw-threads on said spindle to force said cutter-bars and blades outwardly and at the completion of such downward movement to engage said cutter-bars frictionally and rotate said cutter-box and blades, a collar on said spindle arranged to strike said shoulder and limit the upward movement of said cone, and means for adjusting said collar on said spindle relatively to said shoulder.

1,062,842. HEADLIGHT FOR AUTOMOBILES. WILLIAM J. MITCHELL and MILTON W. ATKINS, Ridgeway, Va. Filed June 26, 1912. Serial No. 706,036. (Cl. 240—62.)

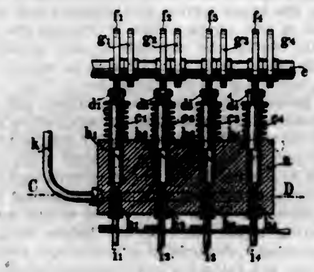


An automobile attachment of the class described comprising a standard, means to secure the same in place on one side of the chassis of an automobile, a spindle having its bearings in the standard and provided at its upper end with a headlight supporting means and provided at its lower end with a transverse opening, a radius arm adjustable in the said transverse opening, means to secure said radius arm at any required adjustment, a chain comprising flexible links pivotally connected together for flexing in a vertical direction and against flexing in a horizontal direction, a flexible connection between the front end of the chain and the radius arm, and means to detachably and adjustably secure the rear end of the chain to the tie rod or drag link of the automobile.

1,062,843. VALVE-GEAR FOR ENGINES. RUDOLF MURAUER, Klagenfurt, Austria-Hungary. Filed May 27, 1911. Serial No. 629,882. (Cl. 121—97.)

1. Valve controlling mechanism for engines, embodying therein a supporting member provided with a bore containing a liquid column, a piston arranged to act against one end of said liquid column, valvular means in operative relation to the opposite end of said liquid column, means for actuating the piston, and means whereby the pressure of said liquid column may be varied to permit reverse movement of said mechanism.

2. Valve controlling mechanism for engines, embodying therein a supporting member provided with a bore containing a liquid column, a piston arranged to act against one end of said liquid column, valvular means in operative relation to the opposite end of said liquid column, means for actuating the piston, and means whereby said liquid column may be placed in communication with atmosphere to modify the pressure of said liquid column.



3. Valve controlling mechanism for engines, embodying therein a supporting member provided with bores each containing a liquid column, a piston arranged to act against one end of each of said liquid columns, valvular means in operative relation to the opposite end of each of said liquid columns, means for actuating the pistons, and a pipe common to and connected with said several liquid columns, said pipe communicating with atmosphere whereby said several liquid columns may be placed in communication with atmosphere to modify the pressure thereof.

4. Valve controlling mechanism for engines, embodying therein a supporting member provided with bores each containing a liquid column, a piston arranged to act against one end of each of said liquid columns, valvular means in operative relation to the opposite end of each of said liquid columns, means for actuating the pistons, a pipe common to and connected with said several liquid columns, said pipe communicating with atmosphere whereby said several liquid columns may be placed in communication with atmosphere to modify the pressure thereof, and means whereby each of said liquid columns may be caused to communicate independently of the other liquid columns with said pipe leading to atmosphere.

5. Valve controlling mechanism for engines, embodying therein a supporting member provided with bores each containing a liquid column, a piston arranged to act against one end of each of said liquid columns, valvular means in operative relation to the opposite end of each of said liquid columns, means for actuating the pistons, means whereby the pressure of said liquid columns may be varied to permit reverse movement of said mechanism, and means whereby the liquid in each of said columns is maintained substantially constant in quantity.

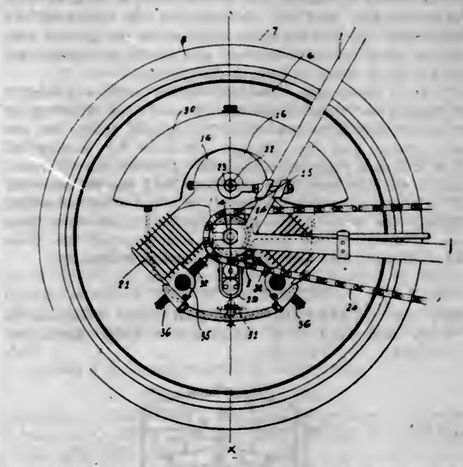
[Claims 6 and 7 not printed in the Gazette.]

1,062,844. MOTOR-CYCLE. COURTENAY G. MURIDGE, Elk Grove, Cal. Filed June 10, 1911. Serial No. 632,522. (Cl. 21—90.)

1. A device of the character described comprising a bearing, a wheel secured to said bearing, a split cone mounted on said bearing and provided with a gear, a clutch sleeve mounted on said split cone, a motor suspended on said clutch sleeve, and means connecting said motor with the gear on said cone, as described.

2. A device of the character described comprising a bearing, a wheel mounted on said bearing, a split cone mounted on said bearing and provided with a gear, means for securing said split cone to said bearing in frictional contact, a motor suspended on said wheel, and means connecting said motor with the gear on said cone, as described.

3. A device of the character described comprising a bearing, a wheel mounted on said bearing, a split cone mounted on said bearing, a gear on said cone, a clutch sleeve mounted on said split cone, a motor suspended on said clutch sleeve, fly wheels driven by said motor, a gear



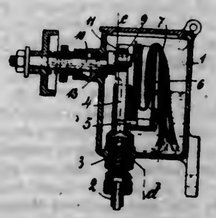
on said fly wheels, said gear engaging the gear on said cone, as described.

1,062,845. PORTABLE FOLDABLE WARDROBE. JOE NEILSEN, Leesburg, Va. Filed June 7, 1912. Serial No. 702,211. (Cl. 45—118.)



A wardrobe comprising two longitudinal beams, transverse beams povitally connected at their ends with the longitudinal beams, each transverse beam being composed of two sections hingedly connected together, arms pivotally connected with one of the longitudinal beams, one of the said arms having at its inner end portion a longitudinally disposed slot and the other having at its inner end portion a projection which enters the said slot, the last mentioned arm having an end portion which extends beyond the said projection and which is provided with a perforation adapted to be brought into alinement with the slot in the other arm and wires connected with the projection upon one of the said arms and also connected with the ends of that longitudinal beam other than the beam to which the arms are pivotally connected.

1,062,846. LUBRICATOR. OLOF OHLSSON, Södertelje, Sweden. Filed Oct. 15, 1912. Serial No. 725,856. (Cl. 184—27.)

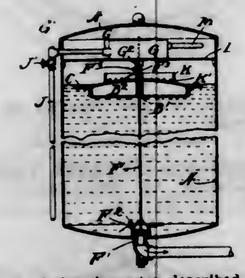


1. In a lubricator, the combination with a plurality of pistons and their cylinders and means for directing oil to the places to be lubricated, of upright tubes one for each

piston and its cylinder and located to one side of the piston cylinder, conduits for leading oil from the said tubes to the piston cylinders, an oil reservoir, a wick in each tube extending into the oil reservoir for supplying the tubes with oil, a cross beam common to the pistons connecting them one with another and means for reciprocating the cross beam and hence the pistons.

2. In a lubricator, the combination with a plurality of pistons and their cylinders and means for directing oil to the places to be lubricated, of upright tubes, one for each piston and its cylinder, conduits for leading oil from the said tubes to the piston cylinders, an oil reservoir, a wick in each tube extending into the oil reservoir for supplying the tubes with oil, a cross beam extending through the stems of the several pistons connecting them one to another and means for reciprocating the cross beam laterally and hence the pistons longitudinally.

1,062,847. PASTEURIZING APPARATUS. WILLIAM H. PARK, New York, N. Y. Filed July 6, 1910. Serial No. 570,688. (Cl. 210—20.)



1. In a device of the character described, the combination of a holder for liquid, a conduit adapted to discharge liquid into the upper part of the holder, an outlet channel adapted to permit the discharge of liquid from the lower part of the holder only, said outlet permitting the escape of liquid from the holder only when the level of liquid therein is above the lower part of said holder, and means for preventing liquid entering the holder from having vertical movement.

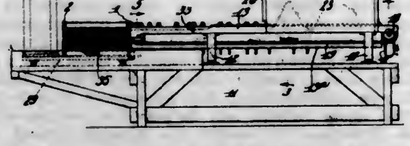
2. In a device of the character described, the combination of a holder for liquid, a conduit adapted to discharge liquid into the upper part of the holder, an outlet channel adapted to permit the discharge of liquid from the lower part of the holder only, said outlet permitting the escape of liquid from the holder only when the level of liquid therein is above the lower part of said holder, and means for preventing liquid entering the holder from having vertical movement, comprising a horizontal spreader arranged to rise and fall with and constantly occupy a position at the upper surface of the liquid and to receive the impact of the liquid before it reaches the body of liquid in the holder.

3. In a device of the character described, the combination of a holder for liquid, a conduit adapted to discharge liquid into the upper part of the holder, an outlet channel adapted to permit the discharge of liquid from the lower part of the holder only, said outlet permitting the escape of liquid from the holder only when the level of liquid therein is above the lower part of said holder, and means for preventing liquid entering the holder from having vertical movement, comprising a horizontal spreader arranged to rise and fall with and constantly occupy a position at the upper surface of the liquid and to receive the impact of the liquid before it reaches the body of liquid in the holder, and a receptacle between the discharge end of the supply conduit and the spreader adapted to receive liquid from said discharge end and discharge it upon the spreader, said receptacle being open at the top.

4. In a device of the character described, the combination of a holder for liquid, a conduit adapted to discharge liquid into the upper part of the holder, an outlet channel adapted to permit the discharge of liquid from the lower part of the holder only, said outlet permitting the escape of liquid from the holder only when the level of liquid therein is above the lower part of said holder, and means for preventing liquid entering the holder from having vertical movement, comprising a horizontal spreader arranged to rise and fall with and constantly occupy a position at the upper surface of the liquid and to receive the impact of the liquid before it reaches the body of liquid in the holder and a flange extending from the body of said spreader toward the walls of the holder.

[Claims 6 to 13 not printed in the Gazette.]

1,062,848. MAGAZINE-LOADER. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed June 3, 1911. Serial No. 631,041. (Cl. 118—13.)



1. In a bobbin-magazine loader, the combination of a plurality of parallel belts arranged to support between them bobbins extending transversely of the belts, means for supporting a magazine so as to inclose a portion of the belts, and means for moving the belts to feed bobbins into the magazine.

2. In a bobbin-magazine loader, the combination of a plurality of parallel belts arranged to support between them bobbins extending transversely of the belts, means for normally supporting a magazine so as to inclose a portion of the belts, and means for moving the belts to feed bobbins into the magazine, the magazine-supporting means permitting the magazine to yield to the pressure of the bobbins as the latter are fed into the magazine.

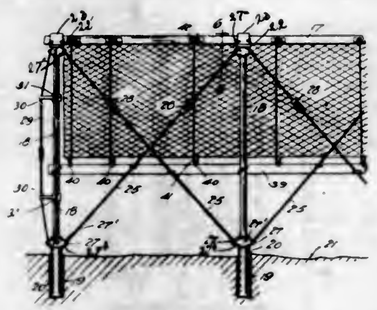
3. In a bobbin sorter, the combination of a set of spaced parallel rails, a hopper-like structure supported over a portion of said set of rails, endless bobbin-engaging belts supported so that certain runs of said belts extend along opposite sides of the spaces between the rails, said rails being longitudinally grooved to support the belts, members extending along the rails and partially overlying the portions of the belts within the grooves, and means for moving said belts.

4. In a bobbin-magazine loader, the combination of a set of spaced parallel rails, wheels mounted at one end of said set of rails, bobbin-engaging belts extending over said wheels and along opposite sides of the spaces between the rails, members supported adjacent to said wheels and having their upper edges alined with the portions of the belts extending along the rails, means for supporting a magazine so as to inclose the end of the said rails at which the wheels are located, and means for moving said belts to feed bobbins into the magazine.

5. In a bobbin-magazine loader, the combination of a hopper-like structure, bobbin-sorting and feeding means extending from said structure, and means for supporting a magazine so as to inclose a portion of said sorting and feeding means.

[Claims 6 to 8 not printed in the Gazette.]

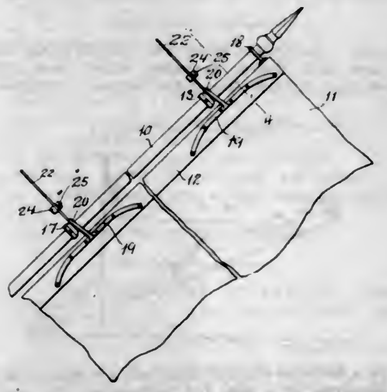
1,062,849. FISH-TRAP. JAMES E. PHARO and WILLIAM S. BENJAMIN, Seattle, Wash. Filed Jan. 12, 1912. Serial No. 670,830. (Cl. 43—20.)



1. In a fish-trap of the class described, of pot and heart frames comprised of pluralities of posts, brackets carried by the upper ends of said posts, headers received in said brackets and connecting the upper ends of the posts, socket members fixedly secured in locations to receive the lower ends of the respective posts, ears carried by the brackets and ears carried by the upper ends of the sockets, and rods connected to the ears of the brackets and sockets for connecting each of the posts with the socket provided for the adjacent post and serving to hold the posts in upright positions and also retain the same against accidental withdrawal from the socket members.

2. In a fish-trap of the class described, of pot and heart frames constituted of spaced posts, a bracket on the top of each post having U-arms, horizontal headers received in said arms and connecting the posts, caps secured to said headers and arms, braces extending diagonally between the adjacent posts, reinforcing trusses for certain of said posts connecting the socket of a post to its bracket and means whereby the lower ends of the posts are removably secured to maintain the aforesaid frames in operative positions upon a submerged rock bed.

1,062,850. FLAG AND STAFF. PHILIP W. PRATT, Boston, Mass. Filed Nov. 21, 1912. Serial No. 732,679. (Cl. 116—12.)



1. The combination with a staff having a supporting collar, of a flag having an eye or ring to contact with said collar, means being provided for holding said eye with only its rear portion in engagement with the collar.

2. The combination with a staff having a yielding supporting collar, of a flag having an eye or ring to contact with said collar, means being provided for holding said eye with only its rear portion in engagement with the collar.

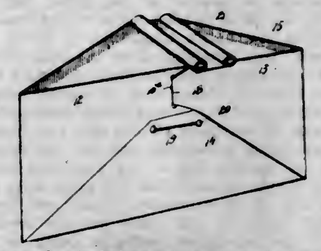
3. The combination with a staff having a cone-faced supporting collar, of a flag having an eye or ring to contact with said collar, means being provided for holding said eye with only its rear portion in engagement with the collar.

4. The combination with a flag staff having a collar secured thereto, a slidable collar spaced therefrom, and a spring interposed between the two collars, of a flag having a ring bearing against one face of the said slidable collar of the staff.

5. The combination with a flag staff having a collar secured thereto, a slidable collar spaced therefrom, and a spring interposed between the two collars, said slidable collar having a cone-shaped face, of a flag having a ring bearing against one face of the said slidable collar of the staff.

[Claims 6 to 11 not printed in the Gazette.]

1,062,851. ENVELOP. WILLIAM RADCLIFF, Burgettstown, Pa. Filed Jan. 26, 1912. Serial No. 673,566. (Cl. 229—82.)



In an envelop including a body formed of a single piece of material, a bottom flap formed by bending a lower portion of the said body upon itself, the said bottom flap having a plurality of slots therein and formed at relatively right angles on the said bottom flap, side flaps formed by bending side portions of the said body upon itself and over the said bottom flap, one of the said side flaps having a slot adapted to register with one of the slots of the bottom flap, a locking flange formed on the other side flap and adapted to extend through the said registering slots in the bottom flap and the first mentioned side flap, a sealing flap formed by bending an upper portion of the said body upon itself and over the said side flaps and said bottom flap, the edges of the said sealing flap being provided with an adhesive, and a locking flange formed with the said sealing flap and adapted to extend through one of the slots in the said bottom flap to secure the said sealing flange in sealed position over and upon the said side flaps and said bottom flap, the locking flanges of the second mentioned side flap and said sealing flap being adapted to be rolled up to permit of inserting the said locking flanges through the respective slots provided therefor, the said locking flanges being adapted to unroll after being passed through their respective slots to secure the said side flaps in locked relation with the said bottom flap and the said sealing flap in locked relation with the said bottom flap.

1,062,852. CLUTCH. CHARLES F. RICHARDSON, Woonsocket, R. I., and GERRY A. MORGAN, Goffstown, N. H., assignors to Boston Automatic Machine Company, Boston, Mass., a Corporation of Massachusetts. Filed May 25, 1912. Serial No. 699,667. (Cl. 192—21.)

1. The combination with a rotatable driven member, of a rotary driver independently movable with respect to the driven member and having a cylindrical surface concentric with the common axis of rotation, a clutch member pivotally connected with said driven member eccen-

trically of such axis and having a portion complemental to, and in the zone of such cylindrical surface, yielding means tending constantly to swing said clutch member in the direction of rotation of the driver, a stop in the path of the clutch member, and means for displacing said stop.



2. The combination with a rotatable driven member, of a rotary driver independently movable with respect to the driven member and having a cylindrical surface concentric with the common axis of rotation, a clutch member having an active portion complemental to such cylindrical surface, pivotally connected to the driven member at such a point that movement about its pivot in either direction from a neutral position will bring its active portion into contact with the cylindrical surface, yielding means tending constantly to swing the clutch member about its pivot in the direction of rotation of the driver, and means for rendering the clutch member operative and inoperative.

3. A driving mechanism comprising a driver and a driven member, both rotatable about the same axis independently of one another and the driver having a rib concentric with such axis formed with an interior cylindrical clutching surface, a clutch arm pivotally connected to the driven member eccentrically of the axis and having an active element lying within and near the said cylindrical surface on the opposite side of the axis from its pivot, the distance of such element from the pivot being greater than the radius of the cylindrical surface and less than the combined length of this radius and the eccentricity of the pivot, yielding means tending to swing the clutch arm about its pivot in the same direction as that in which the driver rotates, and a stop member movable into and out of contact with a part of the clutch arm.

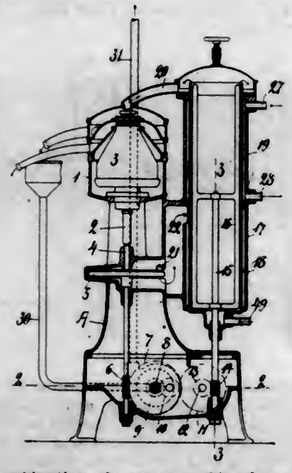
4. The combination of a driver normally in continuous rotation having a cylindrical clutching surface concentric with its axis, a driven member adapted to rotate about the same axis, a clutch member pivotally connected to the driven member eccentric to such axis and having a complemental face adapted to coact with the cylindrical surface, the pivot and face of said member being located at correspondingly the same side of the axis and the portion of the cylindrical surface nearest to such face, respectively, means tending yieldingly and constantly to swing the clutch arm about its pivot in the direction of rotation of the driver, and a stop normally in the path of the clutch arm and displaceable from such path.

5. A driving mechanism comprising a driven member, a pulley normally in continuous rotation and loose with respect to said driven member, said pulley having a rib with a clutch face concentric with the driven member, a clutch member pivotally connected with the driven member eccentrically thereof, means normally tending to bring the clutch member into frictional engagement with the said concentric surface, a stop in the path of said clutch member for arresting the same and holding it out of engagement with said surface, and means for displacing said stop from said path.

[Claims 6 and 7 not printed in the Gazette.]

1,062,853. COMBINED STEAM-TURBINE CENTRIFUGAL LIQUID-SEPARATOR AND LIQUID-HEATER. JOHANNES VALDEMAR MÅRTEN RISBERG, Fridhem, Södertelje, Sweden, assignor to Aktiebolaget Baltic, Södertelje, Sweden, a Corporation of Sweden. Filed Apr. 20, 1912. Serial No. 692,142. (Cl. 127—20.)

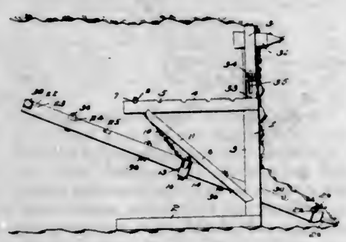
1. The combination of a steam turbine for a centrifugal liquid separator, a liquid heater, a steam chamber for said heater and communicating with the exhaust of the turbine, the said steam chamber being shut off from the exterior air, and a pump device communicating with the said steam chamber and removing water of condensation, air, and it may be, steam from the same for the creating of a vacuum in the chamber and in the casing of the turbine, substantially as described.



2. The combination of a steam turbine for a centrifugal liquid separator, a liquid heater, a steam chamber for said heater and communicating with the exhaust of the turbine, the said steam chamber being shut off from the exterior air, a pump device communicating with the said steam chamber and removing water of condensation, air, and, it may be, steam from the same for the creating of a vacuum in the said chamber and in the casing of the turbine, a supplemental steam chamber in the liquid heater, and means for supplying fresh steam to the chamber last mentioned, substantially as described and for the purpose set forth.

3. The combination of a steam turbine for a centrifugal liquid separator, a liquid heater, a steam chamber for said heater and communicating with the exhaust of the turbine, the said steam chamber being shut off from the exterior air, a pump device communicating with the said steam chamber and removing water of condensation, air and, it may be, steam from the same for the creating of a vacuum in the chamber and in the casing of the turbine, and a motion transmitting device connected with the shaft of the turbine and actuating the said pump device, substantially as described and for the purpose set forth.

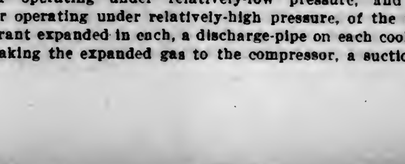
1,062,854. HAND-MACHINE TO UNDERMINE COAL. ALBERT ROE, Beaver township, Noble county, Ohio. Filed June 18, 1912. Serial No. 704,286. (Cl. 125—14.)



1. In a device of the kind described, a rammer said rammer consisting of a base and longitudinal side portions, a centerpiece received by the recess formed by the base and side portions, spikes received by that portion of the recess near the forward end of the rammer, said spikes having a head, a plurality of notches cut in the longitudinal walls of the rammer, and said center piece provided with a cross head, the spikes held against rearward movement by abutting against the center piece and held against forward movement by means of a cross piece engaging notches in the longitudinal side pieces of the rammer and the heads of the spikes, said center piece held against movement by engaging corresponding notches in the side walls of the rammer, substantially as shown and described.

2. In a device of the kind described comprising a frame, said frame comprising vertical uprights, sliding caps fitting over the upper ends of the uprights and sliding in recesses therein, slots in each upright, nut and bolt connections, entering through the lower ends of the caps and said slots, tapering spikes or wedges extending through the space between the upper ends of the uprights and said caps, substantially as shown and described.

1,062,855. AIR-GUN. ERNEST S. ROE, Plymouth, Mich., assignor to Markham Rifle Company, Plymouth, Mich., a Corporation of Michigan. Filed Oct. 28, 1912. Serial No. 728,024. (Cl. 124—10.)



1. In a gun, the combination of a spring, a plunger comprising a head and a shank, the latter formed by a pair of flexible arms having shoulders at their free ends to engage the spring for assembling and disassembling it and the shank, and a plate on the arms against the shoulders.

2. In a gun, the combination of a spring, a plunger comprising a head and a shank inwardly-extending therefrom and composed of a pair of flexible arms adapted to be compressed at their free ends, and opposite inclined shoulders on the free ends of the arms for engagement with the spring, and a plate on the arms against the shoulders.

3. In a gun, the combination of a plunger comprising a head and a shank inwardly-extending therefrom and composed of a pair of opposite flexible arms, shoulders on the free ends of the arms, a rearwardly inclined plate on the arms at the shoulders, and spring on the shank between the plate and head.

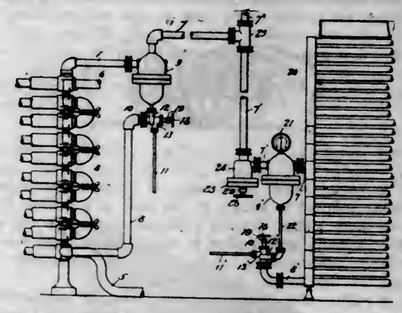
4. In a gun, the combination of a plunger comprising a head and a shank inwardly-extending therefrom and composed of a pair of opposite arms adapted to receive a pin in their free ends, shoulders on the free ends of the arms, an inclined plate having slots to receive the ends of the arms and held between the pin and shoulders, and a spring on the shank between the plate and head.

5. In a gun, the combination of a barrel, a plunger having a shank formed by a pair of opposite arms, a spring on the shank, a shouldered abutment between the arms of the shank, a sight-piece passing through the barrel and engaging the shouldered end of the abutment, a pin engaging the other end of the abutment, and means to retract the plunger to put the spring under compression against the abutment.

[Claims 6 to 9 not printed in the Gazette.]

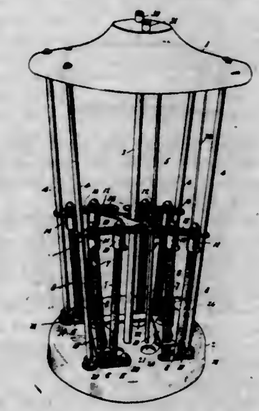
1,062,856. REFRIGERATING APPARATUS. JOSEPH SCHNEIBLE, Chicago, Ill. Filed Jan. 19, 1912. Serial No. 672,104. (Cl. 62—6.)

In a refrigerating apparatus, the combination of a cooler operating under relatively-low pressure, and a cooler operating under relatively-high pressure, of the refrigerant expanded in each, a discharge-pipe on each cooler for taking the expanded gas to the compressor, a suction-pipe into which said pipes discharge, and automatic means for maintaining a predetermined difference of pressure in



the suction-pipe and said high-pressure cooler, for the purpose set forth.

1,062,857. ARC-LAMP. RALPH SCOTT, Newark, N. J., assignor, by mesne assignments, to Scott Electrical Company, New York, N. Y., a Corporation of Maine. Filed June 15, 1907. Serial No. 379,205. (Cl. 176—52.)



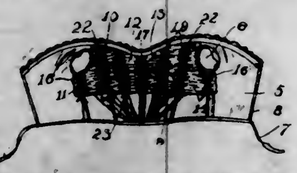
1. In an arc lamp, a plurality of downwardly converging electrodes, means for connecting said electrodes in series whereby a plurality of arcs are produced, said electrodes and the arcs thereof alone producing a single magnetic field acting equally on all of said arcs and constituting their exclusive regulating means.

2. In an arc lamp, a plurality of downwardly converging electrodes having means for establishing a plurality of circuits therebetween, said electrodes being arranged to produce a single magnetic field acting equally on all of said arcs and constituting their exclusive regulating means, and means for initially separating the electrodes whereby the arcs are struck.

3. In an arc lamp, a plurality of downwardly converging electrodes, means for connecting said electrodes whereby a plurality of arcs are produced, said electrodes and the arcs thereof all coöperating to assist in the production of a single magnetic field for furnishing the exclusive regulation of said arcs.

4. In an arc lamp, a plurality of downwardly converging electrodes having means for establishing a plurality of circuits therebetween, said electrodes being arranged to produce a single magnetic field to regulate said arcs, and means including a striking magnet at a remote point from the arcs for initially separating the electrodes whereby the arcs are struck.

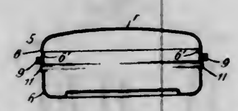
1,062,858. COMBINED CORSET-COVER AND BUST-RUFFLES. GOODWIN B. SMITH, Philadelphia, Pa. Filed May 11, 1912. Serial No. 696,685. (Cl. 2—87.)



1. A ruffle waist comprising a garment of suitable material adapted to snugly fit the bust of a female figure, one or more ruffles secured adjacent the inside top edge of the garment, said ruffles having draw strings running vertically therethrough and means for attaching said strings to the inside of the garment.

2. A ruffle waist comprising a garment of comparatively light material, shaped to fit snugly the bust of the wearer, vertically disposed ruffles secured to the upper portion of the garment and spaced from each other, a length of tape secured to the garment below the ruffles, and draw strings passing loosely through the ruffles, and attached at their upper ends to the garment and at their lower ends to the tape.

1,062,859. METAL BOX. FRANK E. SPRAGUE, Nashua, N. H. Filed Feb. 8, 1912. Serial No. 676,349. (Cl. 220—6.)



1. A box having a metal slip cover with a depending resilient flange tightly fitting the body of said box and a rigid, unyielding projection on the periphery of said flange extending partly therearound.

2. A box having a metal slip cover with a depending resilient flange tightly fitting the body of said box and a rigid, unyielding projection of greater thickness than said flange fast to the periphery of said flange and extending partly therearound.

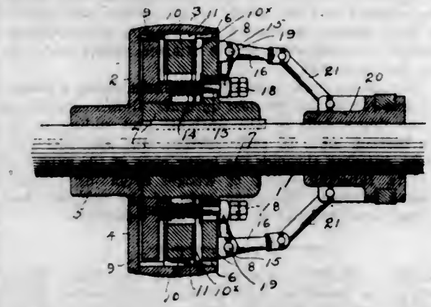
3. A box having a metal slip cover with a depending resilient flange tightly fitting the body of said box and two rigid, unyielding projections on the periphery of said flange diametrically opposed to each other and each extending partly around said flange.

4. A box having a resilient metal body portion and a metal slip cover with a depending resilient flange tightly fitting said body portion and a rigid, unyielding projection on the periphery of one of said parts.

1,062,860. FRICTION-CLUTCH. GEORGE STAHL, Dayton, Ohio, assignor to The Edgemont Machine Company, Dayton, Ohio, a Corporation of Ohio. Filed June 26, 1911. Serial No. 635,312. (Cl. 192—7.)

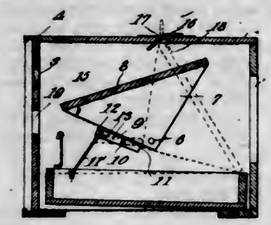
1. In a friction clutch of the type having a disk connected to one member and interposed between a disk and a clamping ring on the other member, the improvement comprising studs carried by the clamping ring and projecting through openings in the disk, heads on said studs of less diameter than the diameter of the openings in the disk whereby the heads may be passed through the openings in assembling or disassembling the device, bell crank levers mounted on the exterior of the disk, having one arm bifurcated to engage the studs of the clamping ring, and means to actuate the bell crank levers.

2. In a friction clutch embodying a pulley carrying a friction member and a clamping member comprising two relatively movable clamping bodies normally independent of the pulley and friction member but adapted upon movement to engage opposite sides of the friction member the combination of studs carried by one of the clamping bodies and projecting through perforations in the opposite clamping body, said perforations being of such dimensions as to permit the free movement of the studs therethrough, and operating levers detachably engaging the studs at points beyond the perforated clamping body and means for oscillating the levers substantially as and for the purposes specified.



3. In a friction clutch embodying a pulley carrying a friction member and a clamping member comprising two relatively movable clamping bodies normally independent of the pulley and friction member but adapted upon movement to engage opposite sides of the friction member the combination of studs carried by one of the clamping bodies and projecting through perforations in the opposite clamping body, heads on said studs, said heads being of less dimensions than the said perforations whereby said studs and heads may be freely inserted in and removed from the perforations, and bifurcated operating levers engaging the stud heads when projected through the perforations and means for oscillating the levers, substantially as specified.

1,062,861. NEST. GLENN A. STONE, Marietta, Minn. Filed Sept. 7, 1912. Serial No. 719,104. (Cl. 119—49.)



1. A housing, a nest tiltably supported therein, a closure pivoted below its center of gravity within the housing, a trip pivotally mounted below the closure and separate therefrom, and a connection between the trip and nest for transmitting motion from the nest when depressed to the trip to force the trip in engagement with the closure.

2. A housing, a nest tiltably supported therein, a closure pivoted below its center of gravity within the housing, a trip pivotally mounted below the closure and separate therefrom, an adjustable detachable connection between the nest and the trip for transmitting motion to the trip from the nest when the nest is depressed, said trip when actuated constituting means for shifting the closure toward closed position.

3. A housing, a nest tiltably supported therein, a closure pivoted below its center of gravity within the housing, a trip pivotally mounted below the closure and separate therefrom, an adjustable detachable connection between the nest and the trip for transmitting motion to the trip from the nest when the nest is depressed, said trip when actuated constituting means for shifting the closure toward closed position, and means for engaging the closure to hold it against actuation by the trip.

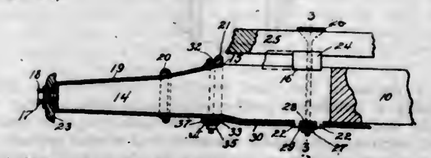
4. A housing, a nest tiltably supported therein, a closure pivoted below its center of gravity within the housing, a trip pivotally mounted below the closure and separate therefrom, an adjustable detachable connection between the nest and the trip for transmitting motion to the trip from the nest when the nest is depressed, said trip when actuated constituting means for shifting the closure toward closed position, a signal tiltably mounted on the housing, and a tongue depending therefrom and into the path of the closure, said closure when moved to closed position, being shiftable against the tongue to tilt the signal upwardly to active position.

1,062,862. BALL-BEARING DOOR-HANGER. KARL STROHMANN, Bremen, Germany. Filed Mar. 6, 1912. Serial No. 682,003. (Cl. 16—91.)



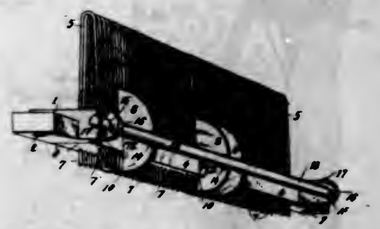
A mounting for sliding doors with balls running loosely between an upper and a lower rail, comprising in combination with the lower guide rail fixed to the lintel of the door, an upper guide rail composed of an upper guide bar having two lateral vertical flanges and of a lower guide flange, supporting brackets to which said bars of the upper guide rail are fixed, a supporting bar fixed to the horizontal part of said supporting brackets and having indentations at either side, brackets of longitudinal cross section fixed upon the upper edge of the door and slotted at the top part so that inwardly projecting arms are formed adapted to engage with said indentations of said horizontal bar and to be placed upon the larger parts of said bar, a downwardly projecting vertical arm on said bar, pins projecting from the inner surface of said vertical arm, an angular band iron fixed upon the upper edge of the door so that its vertical arm bears against the inner surface of the vertical arm of said bar, said vertical arm of the angular band iron having holes corresponding with the pins of the vertical arm and a screw for connecting the bar with the angular iron, substantially as described and shown and for the purpose set forth.

1,062,863. WAGON-AXLE. HANS SUNDBY, Stoughton, Wis. Filed Jan. 21, 1911. Serial No. 603,855. (Cl. 21—5.)



A device of the class described comprising an axle having a spindle provided with a vertical slot extending centrally the length of the spindle with the slot extending into the body of the axle, a skein mounted upon said spindle, a strengthening plate fitted in and of the same length as said slot, the upper and lower edges of said plate being flush with the periphery of the spindle and axle for the entire length of the said slotted portion, a shoulder upon the upper edge of the plate against which the inner end of the skein abuts, means for securing the skein against said shoulder and against the outer end of said plate, said plate notched in its upper edge to form a seat for a hound, lugs carried by the lower edge of the plate adjacent its inner end and depending below the body of the axle, a truss-bar underlying the axle and having openings receiving the lugs of said plate, means for securing the outer end of the truss-bar to the skein securing means whereby the truss-bar also acts to secure the skein on the spindle, a cross-bar extending between the lugs and engaging the truss-bar, and means for securing the cross-bar to the axle.

1,062,864. DOBBY. CHARLES SYLVESTER, Fall River, Mass. Filed Sept. 19, 1912. Serial No. 721,130. (Cl. 139—79.)



1. In a dobby machine, a rack, and finger guides fixed thereto in transverse parallel planes and adapted to hold a finger support, when removably mounted on the rack, in the plane of its pivoted finger.

2. In a dobby machine, a metal bar; finger guides mounted in transverse parallel planes, on said bar; and soft metal, molding said bar and finger guides into fixed relation to each other.

3. In a dobby machine, a metal bar; a row of vertically parallel hair pin shaped pins arranged in transverse planes to form finger guides; and soft metal molded about said metal bar to hold and fix said pins in proper relation to each other and the bar.

4. In a dobby machine, a metal bar; hair-pin shaped finger guides fixed to the bar in transverse parallelism to hold a finger support in the plane of its pivoted finger.

5. In a dobby machine, a finger support; a bar; finger guides fixed thereto in transverse planes and adapted to hold the finger support in the plane of its pivoted finger.

[Claims 6 to 8 not printed in the Gazette.]

1,062,865. MUSHROOMING BULLET. EDWARD L. UHL, New Haven, Conn., assignor to Winchester Repeating Arms Co., New Haven, Conn., a Corporation. Filed Feb. 8, 1913. Serial No. 747,068. (Cl. 102—28.)



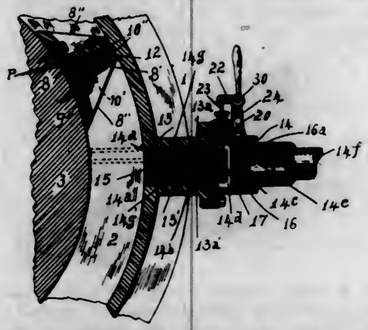
1. In a jacketed bullet, the combination with a soft-metal slug, of a jacket applied thereto and extending beyond the outer end thereof to provide a tapering displacement-chamber and formed with a circumferential groove or cannelure separated from the outer end of the slug by a portion of the said displacement-chamber.

2. In a jacketed bullet, the combination with a soft metal slug, of a jacket applied thereto and extending beyond the outer end thereof to provide a tapering displacement-chamber and formed with a circumferential groove or cannelure located midway the length of the said chamber with a portion of the same on either side of it, whereby the breaking down of the tapering hollow portion of the jacket and the mushrooming of the bullet is facilitated.

3. In a jacketed bullet, the combination with a soft-metal slug having a concentric cavity in its outer end, of a jacket applied to the slug to provide a tapering displace-

ment-chamber and formed with a circumferential groove or cannelure separated from the outer end of the slug by a portion of the said displacement-chamber, whereby the breaking down of the tapering portion of the jacket and the mushrooming of the bullet is facilitated.

1,062,866. ROTARY ENGINE. GEORGE F. WEISS, Springfield, Ill., assignor of one-half to L. E. Wheeler, Springfield, Ill. Filed Mar. 27, 1911. Serial No. 617,151. (Cl. 121—71.)



1. The combination of a cylinder having two valve-controlled exhaust ports, also having a bore adapted to accommodate a rotating piston; a piston mounted to rotate in the bore of the cylinder and having a fixed radial wing; two box-shaped sliding abutments adapted to slide transversely of the cylinder and between the exhaust ports and having ports communicating with the interior of the cylinder when the sliding abutments are projected into the cylinder; and a valve adapted to supply steam within either abutment to cause the sliding abutment to which steam is supplied to slide transversely of the cylinder.

2. The combination of a cylinder having a first exhaust port and a second exhaust port; a steam actuated first sliding abutment having in its upper wall a port admitting steam to the cylinder above said first sliding abutment; a steam actuated second sliding abutment having in its lower wall a port admitting steam to the cylinder below said second sliding abutment; a movable controller-valve controlling the admission of steam to both sliding abutments; a lever connected to operate the controller-valve; exhaust port valves respectively controlling the exhaust ports of the cylinder; and connecting devices connecting said exhaust-port valves with said lever to close the first exhaust port and open the second exhaust port when the controller-valve is moved in one direction and reversely to close the second exhaust port and open the first exhaust port when the controller-valve is moved in the opposite direction.

3. The combination of a cylinder having a first exhaust port and a second exhaust port; a steam actuated first sliding abutment having in its upper wall a port admitting steam to the cylinder above said first sliding abutment; a second sliding abutment having in its lower wall a port admitting steam to the cylinder below said second sliding abutment; a movable controller-valve controlling the admission of steam to both sliding abutments; a lever connected to operate the controller-valve; valves respectively controlling the exhaust ports of the cylinders; connecting devices connecting the exhaust port valves with said lever; and a cut-off valve controlling the admission of steam to said controller-valve.

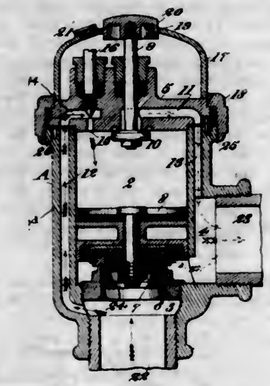
4. The combination of a cylinder; a valve body having extensions adapted to support the movable abutments respectively and having ways through said extensions; hollow abutments mounted to slide on said extensions and provided with ports positioned to communicate with the interior of the cylinder; and a valve controlling the supply of steam through said extensions to the interiors of said hollow abutments to slide said hollow abutments transversely of the cylinder.

1,062,867. CHILD'S SULKY. JOEL N. WHEELER, Geneva, Ill. Filed Feb. 28, 1911. Serial No. 611,498. (Cl. 21—12.)



In a child's sulky, the combination with the seat, axle and means for supporting the seat on the axle, of a tongue extending from seat to axle, a brace member beneath the tongue, one end of the brace terminating adjacent to the tongue opposite the edge of the seat and another portion of the brace extending adjacent to the axle, a single fastening device for holding the tongue, seat and end of the brace in assembled adjustment and a single fastening device for holding the tongue, axle and brace in assembled adjustment.

1,062,868. REVERSIBLE FLUSH-VALVE. JOHN B. WILLIAMS, San Francisco, Cal., assignor of one-half to Edward Blomquist, San Francisco, Cal. Filed June 3, 1912. Serial No. 701,303. (Cl. 137—93.)



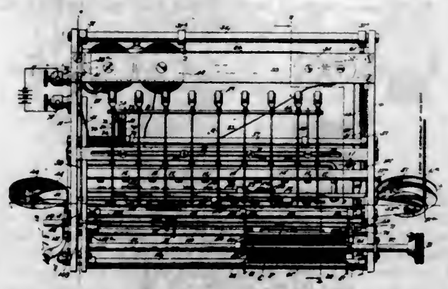
A device of the class described comprising an outer casing, a cylindrical portion within said outer casing, intake and discharge connections attached to said casing and communicating with the lower end of said cylinder, a valve seat provided in the lower portion of said cylinder, a piston valve arranged to close on said valve seat to shut off communication between the intake and the discharge connections, partitions connecting said outer casing and cylindrical portion in such manner as to provide two ducts, one being connected with the intake opening and the other being connected with the outlet opening, a cylinder head closing the upper end of the cylinder and provided with diametrically oppositely disposed passage ways opening into said cylinder and each communicating with one of said ducts, a needle valve carried by said cylinder head and adapted to control one of said passage ways, and a control valve carried by said cylinder head and provided with a push button, said cylinder head being formed with the passage ways constructed to permit the cylinder head to be reversed whereby the relationship of said passage ways to the ducts is interchanged, substantially as described.

1,062,869. METHOD OF MANUFACTURING AN AMMONIUM SUPERPHOSPHATE FERTILIZER. THOMAS LEOPOLD WILLSON and MAXIMILIAN MATTHEUS HAFF, Ottawa, Ontario, Canada; said Haff assignor to said Willson. Filed Oct. 1, 1912. Serial No. 723,308. (Cl. 71—7.)

1. The herein described process which comprises introducing ammonia gas into a superphosphate and mixing the resultant mixture with an acid containing body.

2. The herein described method which comprises introducing ammonia gas into a superphosphate and then mixing a quantity of the resultant mixture with fresh superphosphate.

1,062,870. ADDING ATTACHMENT FOR TYPE-WRITERS. JACOB C. WOLFE, New York, and EDWIN W. MORTON, White Plains, N. Y., assignors, by direct and mesne assignments, to Automata Company, New York, N. Y., a Corporation of New York. Filed Oct. 24, 1899. Serial No. 734,618. (Cl. 235—59.)



1. The combination with manually operated keys for printing the letters of an adding device and means for actuating it to effect an addition, a set of numeral keys for printing numeral characters and for controlling said adding device, electrically controlled mechanism brought into operation by the movement of said numeral keys for effecting the operation of the means for actuating the adding device, and electrically operated means brought into operation by the operation of said numeral keys for alining the numeral wheels of the adding device after they are set.

2. In an adding attachment for typewriting machines, the combination of an adding head, a single driving wheel therefor, mechanism for moving the driving wheel transversely of the head, electrically controlled devices for turning the wheel when in engagement with the head, impression levers controlling said electrical devices, means for regulating the rotation of the driving wheel and means for alining the parts of the adding head when they are once set.

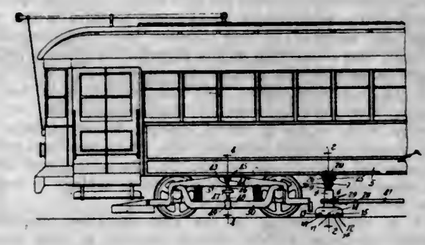
3. In an adding attachment for type-writing or similar machines, an adding head, a universal rock shaft, an operating bar therefor, key levers attached to act upon the operating bar and adding head, an alining bar for the head, a driving wheel for the head having a sliding support, and a check device for the head carried by the said support, an actuating connection between the alining bar, the check device and the rock shaft, means for limiting the rotation of the driving wheel under the control of the key levers, an electrically controlled mechanism arranged to impart rotating motion to the driving wheel, and a second and independent electrically controlled mechanism adapted to operate an auxiliary alining bar for the head, as described.

4. An adding attachment for type-writing or similar machines, comprising a head constructed in divisions and mounted to rotate, a drive wheel having sliding and rotary motion, a tension device controlling the sliding movement of the wheel, an electrically controlled mechanism arranged to impart rotating motion to the wheel, checks controlling the throw of the drive wheel, and levers arranged to control the said mechanism and connect with the said checks.

5. In an adding attachment for type-writers or similar machines, an adding device, impression levers, an electrically controlled mechanism operated by the impression levers, means for actuating the adding device, and means for alining the numeral-carrying surfaces of the adding device, which means are under the control of the said electrically operated mechanism, as described.

[Claims 6 to 40 not printed in the Gazette.]

1,062,871. LIFTING-JACK FOR CARS. SOLOMON E. AARON, Charlestown, Mass. Filed May 13, 1912. Serial No. 696,817. (Cl. 104—161.)



1. In combination, a railroad car embodying in its construction a body and a truck, means to lock the frame of said truck to said car body, a jack adapted to raise said car and its truck from the rail upon which it may rest and consisting of an upper member and a lower member having screw-threaded connection with each other and a roll journaled to rotate on said lower member about an axis extending transversely of said lower member, said roll being adapted to contact with said rail.

2. In combination, a railroad car embodying in its construction a body and a truck, means to lock the frame of said truck to said car body, a jack adapted to raise said car and its truck from the rail upon which it may rest, said jack embodying an upper member and a lower member having screw-threaded connection with each other, a roll journaled to rotate on said lower member about an axis extending transversely of said lower member, said roll being adapted to contact with said rail and a bracket adapted to be fastened to the framework of said car upon which bracket said upper member is journaled to rotate about its longitudinal median axial line.

3. A jack for lifting the car from the rail having, in combination, an upper member and a lower member having screw-threaded connection with each other and a roll journaled to rotate on said lower member about an axis extending transversely of said lower member, said roll being adapted to contact with said rail and a strut pivotally connected at one end to said jack and adapted to engage a stationary object with its other end.

4. A jack for lifting the car from the rail having, in combination, an upper member and a lower member having screw-threaded connection with each other, a roll journaled to rotate on said lower member about an axis extending transversely of said lower member, said roll being adapted to contact with said rail, a strut pivotally connected at one end to said jack and adapted to engage a stationary object with its other end and means to lengthen said strut.

5. A jack for lifting the car from the rail having, in combination, an upper member and a lower member having screw-threaded connection with each other, a roll journaled to rotate on said lower member about an axis extending transversely of said lower member, said roll being adapted to contact with said rail, a plurality of ears on

said lower member arranged at different points around its periphery and a tie-rod adapted to be fastened to said ears.

[Claims 6 to 9 not printed in the Gazette.]

1,062,872. VEHICLE-SPRING. LEONIDAS L. ABBOT, Little Rock, Ark. Filed Sept. 24, 1912. Serial No. 722,043. (Cl. 21—103.)

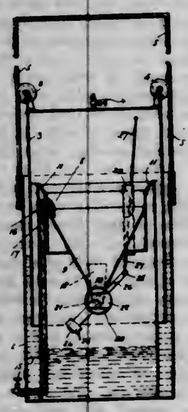


1. A vehicle spring of the elliptical type, including a casing secured to each member of the spring, a helical spring interposed between the said spring members, springs seated in the said casings, disks slidably seated in the casings and adapted to bear against the last mentioned springs, and connecting means between the disks substantially as and for the purpose described.

2. In a vehicle spring, the combination of a helical spring interposed between the members of the vehicle spring, with a pair of spiral springs, hollow casings for the reception of said spiral springs, disks bearing against said spiral springs and means for connecting said disks to cause the compression of said spiral springs to lessen the rebound of the said vehicle spring.

3. A vehicle spring of the kind described, including spring members, hollow casings secured to said spring members, coiled springs seated in said hollow casings, disks slidably mounted in said casings and bearing against said coiled springs, a chain connecting said disks, and a helical spring interposed between the members of the vehicle spring, all as and for the purpose described.

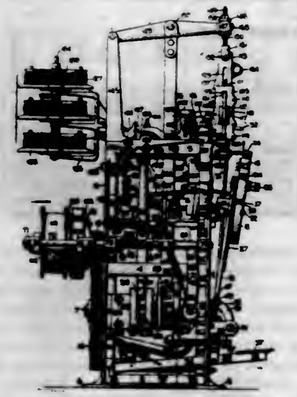
1,062,873. ACETYLENE-GAS GENERATOR. WALTER R. ARNDT, Moline, Kans., assignor of one-half to Tilton and Tilton, Moline, Kans., a Firm consisting of George W. Tilton and Carl W. Tilton. Filed Jan. 2, 1913. Serial No. 739,609. (Cl. 48—40.)



1. In an acetylene gas generator, the combination, with a water chamber, and a water seal tank encircling it; of a carbid holder supported over the water chamber and provided with an outlet opening, bearings secured to the carbid holder and depending below the said outlet opening, a hollow cylindrical valve provided with trunnions which are journaled in the said bearings, said valve being arranged in the space below the carbid holder and provided with a cross-pipe extending between the opposite sides of its periphery and adapted to register with the said inlet opening, a tappet rod operatively connected with the said valve, a weight normaly holding the said valve closed, and a gas bell working in the water seal tank and depressing the tappet rod when lowered.

2. In an acetylene gas generator, the combination with a water chamber, and a water seal tank encircling it, of a carbid holder supported over the water chamber and provided with an outlet opening, bearings secured to the carbid holder and depending below the said outlet opening, a hollow cylindrical valve provided with trunnions which are journaled in the said bearings, said valve being arranged in the space below the carbid holder and provided with a cross-pipe extending between the opposite sides of its periphery and adapted to register with the said outlet opening, a yoke secured to the trunnions and provided with a weight at its middle part, an arm secured to the yoke and projecting on the opposite side of the axis of the valve from the said weight, a conduit pipe extending vertically through the carbid holder, a tappet rod arranged in the conduit pipe and pivoted to the said arm, and a gas bell working in the water seal tank and depressing the tappet rod when lowered.

1,062,874. MACHINE FOR MAKING BARREL-HOOPS. EDWIN F. BEUGLER, Buffalo, N. Y., assignor to Edward B. Holmes, Buffalo, N. Y. Filed Dec. 21, 1911. Serial No. 667,153. (Cl. 144—258.)



1. In a machine of the class described, a machine frame and a hoop form consisting of an upper member of semi-circular segmental form, a lower member of similar semi-circular segmental form hinged at one side to the upper member, a cross bar extending between the lower ends of the upper member, a depending vertical frame member pivoted at its lower end to the machine frame and rigidly secured at its upper end to the cross bar of the upper member, a foot treadle and a connecting rod pivoted at its lower end to the foot treadle and at its upper end to the depending vertical frame member at a distance above its lower pivoting point.

2. In a machine of the class described, a machine frame and a hoop form consisting of two semi-circular segmental members hinged together at one side; the upper member being provided with a cross bar extending between its lower ends, a depending vertical frame member pivoted at its lower end to the machine frame, and rigidly secured at its upper end to the cross bar of the upper member, and means connected to the depending vertical frame member for swinging the hoop form into hoop stapling position, and also expanding said hoop form.

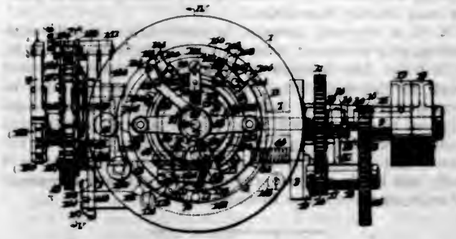
3. In a machine of the class described, a main frame having an outwardly projecting portion, a vertical swing frame pivoted at its lower end to the outwardly projecting portion of the main frame, an expansible hoop form rigidly fastened to the upper end of the vertical swing frame, stapling mechanism supported in the main frame and a single manually operated means for simultaneously swinging the swing frame into stapling position and also expanding the hoop form.

4. In a machine of the class described, a machine frame, stapling mechanism in said frame, an expansible hoop form consisting of two hinged together members one of which is pivotaly supported from the machine frame, and manually swinging and expanding means having a rod connected to the other member.

5. In a machine of the class described, a machine frame, stapling mechanism in said frame, an expansible hoop form consisting of two hinged together members one of which is pivotally supported from the machine frame, a foot treadle, and a rod connecting the foot treadle to the other member of the hoop form.

[Claims 6 to 16 not printed in the Gazette.]

1,062,875. CIRCULAR-KNITTING MACHINE. JOSIAH BLACK, Philadelphia, Pa., assignor to Eliza Vaughan, Philadelphia, Pa. Filed Dec. 3, 1908. Serial No. 465,776. (Cl. 66—23.)



1. In a circular knitting machine provided with cylinder needles and dial needles, a device for transferring loops from one set of needles to the other, which comprises a series of movable blades; means whereby a blade is temporarily moved into contact with one side of a needle from which a loop is to be transferred; and means whereby the needle to which the loop is to be transferred is advanced against the opposite side of said needle to that which is in contact with the blade in order to engage the loop on such needle.

2. In a circular knitting machine, provided with cylinder needles and rocking dial needles, a device for transferring loops from dial needles to cylinder needles, which comprises a series of movable blades; and means whereby a blade is temporarily moved into contact with a loop-carrying dial needle so as to tip up its end, and means whereby a cylinder needle is advanced along side of the dial needles while thus tipped and caused to engage its loop.

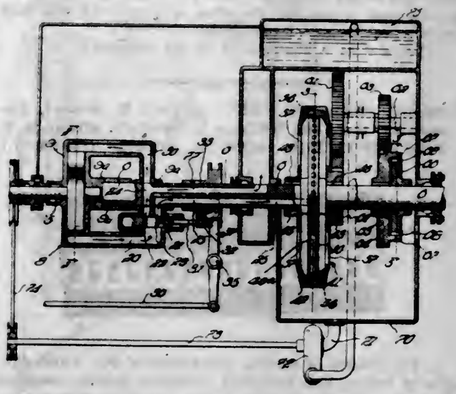
3. In a circular rib knitting machine, the combination of dial needles and cylinder needles, said dial needles being provided with loop distending shoulders on their upper surfaces and also with beveled notches on one side; means whereby the two series of needles are so adjusted in relation to each other that while a dial needle is advanced with its loop distended by contact with the shoulder on its upper surface, the corresponding cylinder needle is advanced through said distended loop, its entry therein being facilitated by contact with the above recited beveled surface, all coöperating to accomplish the transfer of dial loops to their adjacent cylinder needles.

4. In a circular rib knitting machine the combination of dial needles with capacity for a rocking motion and with loop-distending shoulders; sheaths surrounding the cylinder needles, with blades on each sheath; means for successively advancing first the dial needles to distend their loops, second the sheaths until their blades tip up the ends of the dial needles; and third the cylinder needles until each has passed through the adjacent distended loop held by a tipped up dial needle.

5. In a circular rib knitting machine, the combination of dial needles with loop-distending shoulders; sheaths with lateral blades for each cylinder needle; means for successively advancing the dial needles to distend their loops, the sheath blades to brace one side of the dial needle, and the cylinder needle to pass up through the distended loop of the dial needle on the side of that needle opposite to that one braced by its protruded sheath.

[Claims 6 to 12 not printed in the Gazette.]

1,062,876. AUTOMOBILE TRANSMISSION. LAFAYETTE W. BEYMER, Los Angeles, Cal. Filed Oct. 31, 1911. Serial No. 657,734. (Cl. 138—3.)



1. In combination with a driving and a driven shaft, a pressure producing mechanism having intake and outlet and adapted to be operated by the relative rotation of the shafts, a motor mechanism comprising two relatively movable parts, one of said motor parts being carried by the driven shaft and the other connected to the driven shaft, and means to connect the inlet and outlet of the pressure producing mechanism together and to divert a portion of the produced pressure to the motor mechanism.

2. In combination with a driving and a driven shaft, a fluid pressure producing mechanism mounted on the shafts and adapted to be operated by their relative rotation, said mechanism having a fluid inlet and outlet, a fluid pressure motor comprising two relatively movable parts one of which is carried by the driven shaft and the other connected to the driven shaft to rotate it in the direction of rotation of the driving shaft, means to connect the inlet and outlet of the pressure producing mechanism together, and means for diverting a portion of the fluid pressure to the motor mechanism.

3. In combination with a driving and a driven shaft, the driven shaft having a pair of longitudinal passageways therethrough, a fluid pump having its relatively moving pumping portions mounted on the driving and driven shafts to be operated by the relative rotation thereof, an inlet and an outlet passage for the pump, the inlet passage connecting directly with one of the longitudinal passageways in the driven shaft, a valve mechanism for connecting the outlet passage of the pump to either the inlet passage thereof or to the other passage in the driven shaft, a turbine rotary member rigidly mounted on the driven shaft and having liquid passages connecting with the last mentioned shaft passage, a coöperating turbine member rotatively mounted on the driven shaft and rotatively connected thereto through the medium of gears and ratchets, and a liquid reservoir surrounding the driven shaft and connecting with the first mentioned shaft passage.

4. In combination with a driving and a driven shaft, an energy transforming mechanism connected between and adapted to be operated by the relative rotation of the two shafts, a motor mechanism comprising two relatively movable parts, one of which is carried by the driven

shaft and the other connected to the driven shaft, and means to short-circuit the energy produced within the energy transforming mechanism and to divert said energy to the motor mechanism.

5. In combination with a driving and a driven shaft, a fluid pressure producing mechanism mounted on the shafts and adapted to be operated by their relative rotation, said mechanism having a fluid inlet and outlet, a fluid pressure motor comprising two relatively movable parts one of which is carried by the driven shaft, a ratchet mechanism through which the other motor member is connected to the driven shaft to rotate it in the direction of rotation of the driving shaft, means to connect the inlet and outlet of the pressure producing mechanism together, and means for diverting a portion of the fluid pressure to the motor mechanism.

[Claims 6 to 9 not printed in the Gazette.]

1,062,877. ENDLESS FELT. ARTHUR H. BOGANI, Jersey City, N. J., and WILLIAM E. SHEEHAN, Albany, N. Y. Filed July 12, 1910. Serial No. 571,553. (Cl. 38—7.)



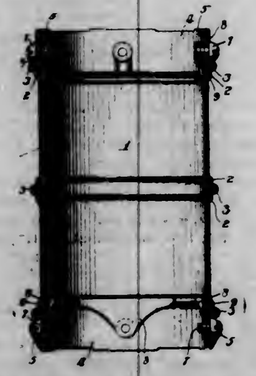
1. The process of making paper-makers' felt which consists in fulling and shrinking a tubular fabric, teaseling the surface thereof to raise a nap, attaching thereto continuous thin strata of fiber, and felting the same to said fabric.

2. The process of making paper-makers' felt which consists in fulling and shrinking a tubular woven woolen fabric, teazeling the surface thereof to raise a nap, attaching thereto continuous thin strata of wool, and felting the ame to said fabric.

3. A paper-maker's felt comprising a fulled and shrunk tubular fabric having a raised nap, and a plurality of continuous thin strata of fiber attached to and felted thereon.

4. A paper-maker's felt comprising a fulled and shrunk tubular woven woolen fabric having a raised nap, and a plurality of continuous thin strata of wool attached to and felted thereon.

1,062,878. KNOCKDOWN SHIPPING-PACKAGE. GEORGE S. BOWMAN, Lebanon, Pa. Filed Sept. 24, 1912. Serial No. 722,024. (Cl. 220—60.)



1. In a knockdown shipping package, in combination, a body formed of sheet metal rolled to form a cylinder and furnished with circumferential ridges near its ends, hoops or bands surrounding said body and held in position, at one side, by said ridges, removable heads closing the ends of said body, and fastenings for securing said heads and body, said fastenings holding said rings or hoops upon the side opposite to that held by said ridges.

2. In a knockdown shipping package, in combination, a body with overlapping sides and circumferential ridges near its ends, cylindrical shaped heads with ridges adapted to interlock with the inside grooved part of said first ridges, rings or hoops adapted to encircle said body and to be held from movement in one direction by said ridges on said body, and beaded fastenings for securing together said body and heads and for holding said rings or hoops against movement away from said ridges.

3. In a knockdown shipping package, in combination, a body with overlapping sides and circumferential ridges near its ends, cylindrical shaped heads adapted to enter the ends of said body, rings or hoops adapted to encircle said body and to be held from movement in one direction by said ridges on said body, beaded fastenings for securing together said body and heads and for holding said rings or hoops in contact with the ridges on the body, and a reinforcing keeper for the chimes of said package held in place by said beaded fastenings.

4. In a shipping package, in combination, a body with overlapping sides and circumferential ridges near its ends, cylindrical shaped heads adapted to enter the ends of said body, furnished at their outer ends with ears that can be bent down along the outside of the body, rings or hoops adapted to encircle said body, means forming part of said body for preventing said rings from moving inward on the same, and beaded fastenings for securing together said body and heads and for preventing an outward movement of said rings or hoops thereon.

1,062,879. TIN-SHACKLE SEAL. WINFRED MUDGE BROOKS, East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y., a Corporation of New York. Filed Mar. 15, 1913. Serial No. 754,570. (Cl. 70—98.)



1. An improved press-fastenable tin-shackle seal having, in combination, an open-faced seal part of lead having a central stud and an embrasured horse-shoe-shaped wall surrounding said stud, and a flexible flat shackle one end of which is preliminarily fastened in the seal part and the other end terminates in an eye adapted to embrace said stud within said wall; the shackle being further provided with inspection facilitating apertures in its respective ends, formed and arranged to coincide with each other when said eye is engaged with said stud and wall, and in the fastened seal.

2. An improved press-fastenable tin-shackle seal having, in combination with an open-faced shackle-end inclosing seal part of lead, a flexible flat shackle both ends of which terminate in eyes connected with the body of the shackle by narrow shanks, and are provided with apertures formed and arranged to coincide with each other in the fastened seal, and Y-shaped stiffening ribs the stems of which reinforce said shanks and their forks partly embrace said apertures, respectively, substantially as hereinbefore specified.

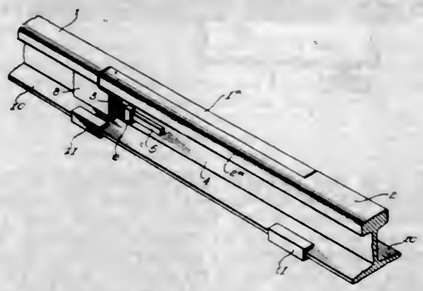
1,062,880. CORDING-SEAL. WINFRED MUDGE BROOKS, East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y., a Corporation of New York. Filed Mar. 15, 1913. Serial No. 754,571. (Cl. 70—98.)



1. An improved press-fastenable cording seal having, in combination, a compressible domed back member provided with threading holes and with an inwardly projecting central teat; an inclosed compressible middle piece having a central hole formed and arranged to interact with said teat, a middle portion in which said hole is located, and locking portions adjoining said middle portion; and a face plate inseparably seamed to said back member.

2. An improved press-fastenable cording seal having, in combination, a compressible domed back member provided with threading holes, inwardly projecting guards at the several holes and an inwardly projecting central teat; an inclosed compressible middle piece having a central hole formed and arranged to interact with said teat, a substantially U-shaped middle portion in which said hole is located, locking portions adjoining said middle portion and provided with sharp cord-penetrating spurs masked in the unpressed seal by said guards, and cord-embracing portions adjoining said locking portions and adapted to hug the cord against said spurs in the press-fastened seal; and a face plate inseparably seamed to said back member; substantially as hereinbefore specified.

1,062,881. RAIL-JOINT. DELPHIS BROUSSEAU, Montreal, Quebec, Canada, assignor of one-eighth to Emery Dufour and one-eighth to Philias Beausejour, Montreal, Canada. Filed Feb. 7, 1913. Serial No. 746,744. (Cl. 239—8.)

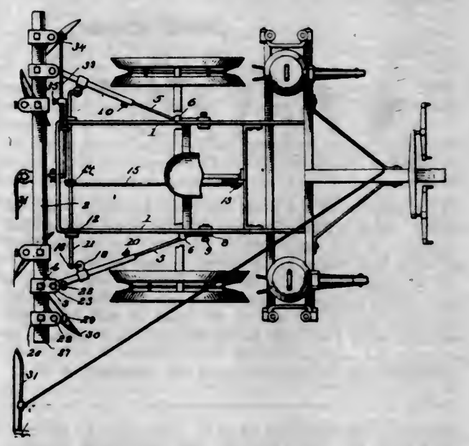


1. In a rail joint, reversely disposed members transversely equal to half of a rail, interlocking keys and openings carried by the web portions of the members, blocks integral with the web portion of the rail and so disposed at the base of each of the reversely disposed members as to form a slot for the reception of the web portion of the outer end of its abutting member, and rigid clamp members disposed over the base portion of each end of the joint for strengthening purposes, in combination.

2. In a rail joint, reversely disposed members each transversely equal to half of a rail and slidably operative one on the other, oppositely headed T shaped openings and keys carried by the web portions of the members and adapted to be interlocked, blocks integral with the web portion of the rail and projecting over the inner end of each member so as to form a slot for the reception of the web portion of the outer end of its abutting member, and a rigid clasp member slidably mounted on the base flanges of the joints and adapted to brace each end of the joint, in combination.

3. In a rail joint, reversely disposed members each transversely equal to half of a rail and slidably operative on each other, T shaped keys carried at the inner end on the inner face of the web portion of each member, T shaped openings through the web portion of each member near the outer end thereof and adapted to interlock with the T shaped keys, blocks integral with the web portion of the rail at the base of each member and adapted to brace the web portion of the outer end of the abutting member, and slidably mounted bracing base clasps, in combination.

1,062,882. CULTIVATOR ATTACHMENT FOR PLANTERS. RUDOLF W. BRUENE, Cushing, Iowa. Filed June 14, 1912. Serial No. 703,744. (Cl. 97—5.)



1. A planter attachment comprising a bar, clips adjustably mounted thereon, rods adjustably mounted in the clips, longitudinally extensible arms adjustably connected with the rods, means for connecting the arms with the frame of a planter, other clips adjustably mounted upon the bar, rods adjustably mounted in the last-mentioned clips and carrying soil engaging members, a lever mechanism adapted to be mounted upon a planter frame, and means resiliently connecting said lever mechanism with said arms.

2. A planter attachment comprising a bar, means for connecting the bar with a planter frame, means for attachment with the planter frame for raising and lowering the bar, soil engaging members carried by the bar, a marker carried by and extending beyond the bar, and a brace member adapted to be connected with the planter frame and with the bar at the end portion thereof opposite that end beyond which the work engaging member of the marker is disposed.

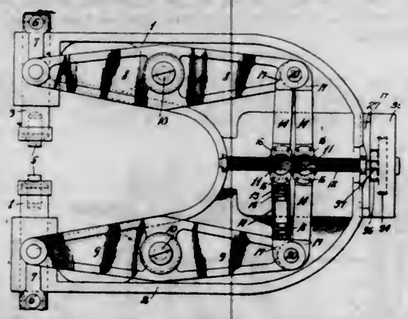
3. A planter attachment comprising a bar, means adapted to connect the bar with a planter frame, means adapted to be mounted upon the planter frame for raising and lowering the bar, soil engaging members carried by and extending beyond the bar, a marker carried by the bar, and a longitudinally extensible brace adapted to be connected with the planter frame and connected with that end portion of the bar opposite the end thereof beyond which the soil engaging member of the marker is disposed.

1,062,883. ELECTRIC RIVETING-MACHINE. JAMES BURKE, Erie, Pa., assignor to Chicago Pneumatic Tool Company, a Corporation of New Jersey. Filed June 13, 1907. Serial No. 378,711. (Cl. 78—46.)

1. In a machine of the class described, a ram, a main frame for supporting the ram and driving parts, and an electric driving motor, the said frame serving as the field frame of the motor.

2. In a machine of the class described, a ram, a main frame for supporting the ram and driving parts, an electric driving motor, the said frame serving to inclose the motor and form the field frame thereof.

3. In a machine of the class described having a yoke frame, a ram, and an electric motor within the head of the yoke for driving the ram, the head of the yoke forming the field frame for said motor.



4. A machine of the class described having a yoke, an electric motor within the head of said yoke, and means comprising a ram supported by said yoke for acting upon the work, said means being driven by said motor.

5. In a machine of the class described, a yoke frame, a ram, an arm pivoted on said frame for operating the ram, an electric motor inclosed by the head of said frame for operating said arm, and means between said motor and said arm for multiplying the force exerted.

[Claims 6 to 12 not printed in the Gazette.]

1,062,884. EXTENSION-TABLE. CHARLES S. BURTON, Oak Park, Ill. Filed Nov. 15, 1909. Serial No. 528,089. (Cl. 45—112.)



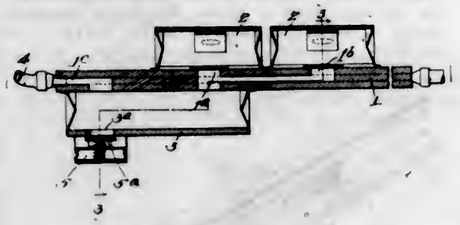
1. In an extension table, in combination with the top members which are movable for extension to admit fillers, a filler comprising two members hinged together at a longitudinal edge of their lower surfaces respectively, a contractile link consisting of two rods each having an eye which engages the other for sliding, and a spring coiled about one of the rods between said eyes, such rods being bent at their ends to form eyes offset in the same direction, the filler members having their undersurfaces respectively recessed to admit said eyes and channeled from the eye-receiving recesses transversely to their meeting edges to accommodate the link, and means for pivotally attaching the offset eyes to the members respectively in the recesses.

2. In an extension table, a two part folding filler comprising two members which are hinged together at a longitudinal edge of the inner surface of each, both said members being recessed from the under surface upward at points remote from their meeting edges, and channeled transversely from said members to said meeting edges; a contractile link having its opposite ends provided with eyes for entering the recesses, the link being accommodated in the channels, the means for pivoting such link to said members respectively being bolts having at their inner ends heads adapted for pivotal engagement with the link ends, the heads being lodged in the recesses respectively, and the bolts extending thence outward to the edges of the filler members remote from their meeting plane, said edges having nut-receiving recesses and nuts on the bolts in said recesses.

3. In an extension table, a folding filler comprising two members which are hinged together at the longitudinal edges of their inner surfaces respectively, a contractile link which connects the two members pivoted to the members respectively at points back from their meeting edges and above their under surfaces, said members having recesses extending from their under surfaces to admit the ends of the links for such pivoting; pivots for the ends of the link in the members respectively, consisting of bolts having their inner ends adapted to engage the link ends, the filler members being transversely grooved on their under surfaces from the outer edges inward to the pivot sockets to permit such bolts to be introduced laterally from the under surfaces of the filler members.

4. In an extension table, in combination with a supporting member and top members which are movable thereon for extension to admit fillers, slides which connect them with each other and with said supporting member for extension; adjacent slides having notches which are positioned for registering at half filler width intervals of extension; keys adapted to be lodged in such notches for stopping the slides against extension, a two-part folding filler having its members hinged together at longitudinal edges of the inner surfaces respectively and having an aggregate width when extended equal to twice the interval between the consecutive notches of the slides one of the keys in each set of slides being yieldably compressible in the plane of sliding engagement of the slides which it connects.

1,062,885. BELLOWS-ACTION FOR AUTOPNEUMATIC MUSICAL INSTRUMENTS. CHARLES S. BURTON, Oak Park, Ill., assignor, by mesne assignments, to Melville Clark Piano Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 5, 1910. Serial No. 536,460. (Cl. 84—168.)

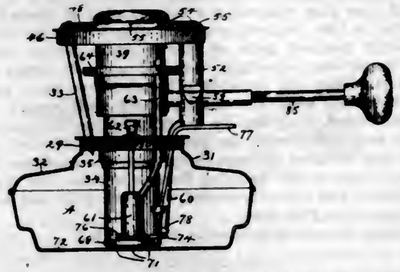


1. In an auto pneumatic musical instrument in combination with two air chambers, pumpers and receiving bellows exhausted by the pumpers, conduits from the receiving bellows to the air chambers respectively, one of said conduits comprising a governor pneumatic mounted upon the moving wall of the receiver; springs which yieldingly resist the collapse of the receiver and said governor pneumatic respectively, both said springs having one end held independently of said moving wall of the receiver whereby the movement of the latter modifies the tension of the governor or spring.

2. In an auto pneumatic musical instrument in combination with pumpers and receiver bellows exhausted by the pumpers, two conduits leading from the receiver, air chambers to which they respectively lead, a governor pneumatic in one conduit, springs connected at one end to the moving members of the receiver and governor pneumatic respectively, a lever device to which the other ends of the springs are connected, means for adjusting and securing the lever, the points of attachment of said springs to said lever being distant respectively from the fulcrum of the lever proportionately to the length of the springs, whereby they are proportionately modified in tension by movement of the lever.

3. In an autopneumatic musical instrument, in combination with pumpers and a receiver exhausted thereby, two conduits leading from the receiver; air chambers to which they respectively lead; a governor pneumatic in one conduit; springs which resist the collapse of the receiver and governor pneumatic respectively, said springs being connected at one end to the moving walls of the receiver and governor pneumatic respectively; a lever to which they are connected at their other ends, and means for adjusting the lever to vary the tension of the springs.

1,062,886. ALCOHOL-LAMP. FREDERICK E. CARLSON, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation. Filed June 29, 1912. Serial No. 706,584. (Cl. 158—72.)



1. The combination of a wick tube, a generator mounted on the said wick tube and inclosing its upper end and side adjacent to the said upper end, a wick within the said tube having its side exposed to the interior of the generator, a valve communicating with the interior of the wick tube and generator near the lower end of the latter, a mixing tube connected with the said valve, and a burner ring mounted on the said generator just below its upper end and connected with the said mixing tube.

2. The combination of a wick tube, a wick therein, a generator surrounding the said wick tube and wick and covering the upper ends thereof, and outwardly and downwardly inclined aprons on the wick tube and resting against the periphery of the wick at a point above the lower end of the generator to direct the down flowing fuel from the wick into the generator.

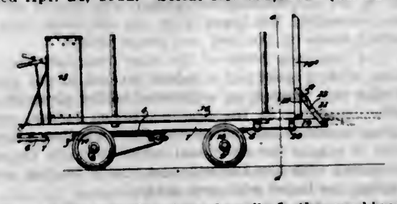
3. The combination of a wick tube, a wick therein, a generator surrounding the said wick tube and wick and covering the upper ends thereof, and a heat insulator within the said generator and surrounding the said wick.

4. The combination of a wick tube, a wick therein, a generator inclosing the upper end and side of the said wick, an outwardly and downwardly inclined collar on the said wick tube and connecting it with the lower end of the generator whereby there is formed an insulating air space beneath the said collar and a narrow annular space at the bottom of the generator.

5. In a vapor lamp, the combination of a generator, a priming pan mounted on the said generator, and a burner ring mounted on the said generator above the said priming pan and having in addition to the flame openings at its top a series of flame openings at the junction of its inner and bottom walls above the said pan for directing the flames obliquely downward into the said pan.

[Claims 6 to 16 not printed in the Gazette.]

1,062,887. TRUCK. WILLIAM C. CARR, Buffalo, N. Y. Filed Apr. 24, 1912. Serial No. 692,817. (Cl. 21—7.)



1. In a device of the class described, the combination with a truck platform, of an extension member attached to said platform and adapted to be turned to a vertical position to form an end gate for said platform, to a horizontal position to lengthen the platform, or to a diagonally inclined position to constitute a loading and unloading skid, means for locking the extension member in its vertical position, and means for supporting the extension member in its horizontal position; said supporting means being movable horizontally to permit the extension member to be turned down to a diagonally inclined position.

2. In a device of the class described, the combination with a truck platform having a frame including channel iron side beams, of a supporting member slidably mounted in the channels of the side beams, and an extension member pivoted to the end of the frame of the truck platform and adapted to be turned to either a vertical position, a horizontal position, or a diagonally inclined position; said supporting member when in one position being adapted to support the extension member in horizontal position and in another position to permit the extension member to drop to an inclined position with its outer end resting on the floor.

3. In a device of the class described, the combination with a truck platform, of an extension member attached to said platform, and adapted to be turned to a vertical position to form an end gate for said platform, to a horizontal position to lengthen the platform, or to a diagonally inclined position to constitute a loading and unloading skid, means for supporting the extension member in its horizontal position, and means for locking the extension member in its vertical position consisting of a supporting arm in pivotally jointed sections having one section pivoted to the supporting means, and another section pivoted to the extension member.

4. In a device of the class described, the combination with a truck platform, of an extension member pivoted to one end of said truck platform and adapted to be turned to either a vertical position, a horizontal position or a diagonally inclined position and a member for supporting the extension member in horizontal position slidably mounted in the truck platform and adapted to be moved inwardly to permit the extension member to drop to a diagonally inclined position and means for locking the extension member in vertical position connected to the extension member and the slidable member.

5. In a device of the class described, the combination with a truck platform, of an extension member pivoted to one end of said truck platform and adapted to be turned to either a vertical position, a horizontal position or a diagonally inclined position and a member for supporting the extension member in horizontal position slidably mounted in the truck platform and adapted to be moved inwardly to permit the extension member to drop to a diagonally inclined position and means for locking the extension member in vertical position pivotally connected to the extension member and the slidable member.

[Claim 6 not printed in the Gazette.]

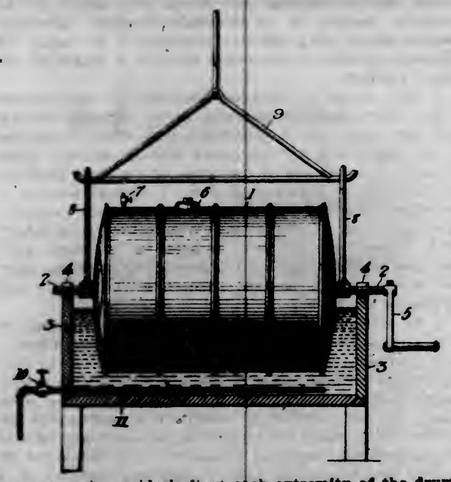
1,062,888. APPARATUS FOR TREATING FRUIT-JUICES AND THE LIKE. BYRON O. CLARK, Honolulu, Hawaii. Filed Jan. 22, 1912. Serial No. 672,589. (Cl. 99—2.)

1. Apparatus for treating fruit juices and the like, comprising an open tank adapted to contain water, means to heat the water, open U-shaped bearings associated with the walls of said tank, and an imperforate drum for holding the material to be treated journaled in said bearings and freely removable therefrom, and means to rotate the drum.

2. Apparatus for treating fruit juices and the like, comprising an open tank adapted to contain water, means to heat the water, open U-shaped bearings associated with the walls of said tank, an imperforate drum for holding the material to be treated journaled in said bearings and freely movable therefrom, means to rotate the drum, and means to remove said drum from the bearings.

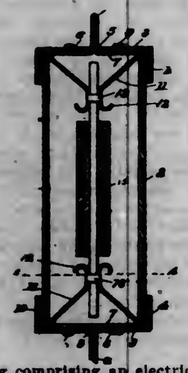
3. Apparatus for treating fruit juices and the like, comprising a tank containing water, means to heat the same, open U-shaped bearings in the walls of said tank, an imperforate drum for holding the material to be treat-

ed having a shaft journaled in said bearings and freely removable therefrom, means to rotate the drum, and



means engaging said shaft at each extremity of the drum adapted to lift the drum from the bearings.

1,062,889. REFILLABLE FUSE-PLUG. JOHN G. CLEMENS, Buffalo, N. Y., assignor of one-half to Frank H. Kaiser, Buffalo, N. Y. Filed Sept. 26, 1911. Serial No. 651,413. (Cl. 175—273.)



1. A fuse plug comprising an electrical shell of insulating material, metallic caps disposed at the ends of the shell and having marginal flanges extending around the ends of the shell, and resilient fuse engaging clamping members disposed within the opposite ends of the shell, said clamping members being held in resilient clamping engagement with a fuse by said caps.

2. A fuse plug comprising a tubular shell of insulating material, oppositely disposed metallic caps closing the ends of the shell, and oppositely disposed pairs of fuse clamping members located at opposite ends of the shell, each pair comprising oppositely disposed resilient angular clamping strips extending radially over the edge wall of the shell at opposite points in its diameter, said clamping members being forced into resilient engagement with each other by the shell.

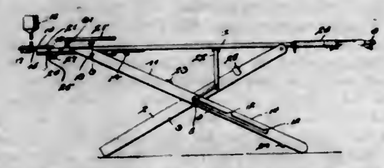
3. A fuse plug comprising a tubular shell of insulating material, metallic caps at each end of the shell, and oppositely disposed pairs of fuse clamping members located at opposite ends of the shell, each pair comprising oppositely disposed, resilient, angular clamping strips extending radially over the edge wall of the shell at opposite points in its diameter, the clamping members of each pair having their inner ends divergently curved.

4. A fuse plug comprising a tubular shell of insulating material, metallic caps at each end of the shell, and oppositely disposed pairs of fuse clamping members located at opposite ends of the shell, each pair comprising oppositely disposed resilient angular clamping strips extending radially over the edge wall of the shell at opposite points in its diameter, the clamping members of each pair having their inner ends divergently curved and formed with complementary guiding ears extending at right angles to the respective clamping members.

5. A fuse plug comprising a tubular shell of insulating material, a fuse longitudinally extending within the shell, oppositely disposed pairs of fuse gripping devices, each pair comprising oppositely disposed angular strips of metal extending over the ends of the shell, one leg of each strip extending along the exterior of the shell toward the middle thereof, the other leg extending along the interior of the shell and toward the axial center thereof, and metallic caps covering the ends of the shell and engaging the outward legs of the clamping devices to force the inner legs toward and into engagement with each other and with the ends of the fuse wire.

[Claims 6 to 8 not printed in the Gazette.]

1,062,890. COMBINATION STEP-LADDER AND IRONING-TABLE. OAKLAND F. COULTER, Rochester, Pa. Filed June 12, 1912. Serial No. 703,335. (Cl. 228—32.)



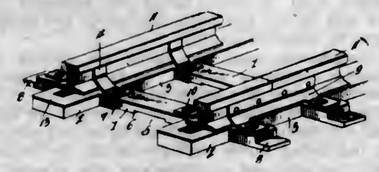
1. In a combined ironing table and step ladder, the combination with a board; of a ladder pivoted to the under face thereof, adjacent one end of the same, laterally extending studs carried on the side rails of said ladder, an additional crossed supporting ladder through which the first mentioned ladder extends, the side rails of said last mentioned ladder being provided with slots through which said studs extend, the one wall of said slots being provided with notches to receive said studs therein, hook members secured to the under face of said board to receive a rung of the last mentioned ladder, and hinged bracing arms connecting said board with the aforesaid laterally extending studs.

2. In a combined ladder and ironing table, the combination with a board, of a ladder pivotally connected to the under face thereof adjacent one end of the same, laterally extending studs carried on the side rails of said ladder intermediate of its ends, an additional crossed ladder through which said first mentioned ladder extends, said last mentioned ladder being provided with slots having notches in one wall thereof, to receive the studs therein, hook members carried on the under face of said board and adapted to receive a rung of the last mentioned ladder in engagement therewith, means to clamp the two ladders in alinement with one another, when the device is set up for use as a ladder proper, and hinged bracing means connecting the board with the aforesaid laterally extending studs on the first mentioned ladder.

3. In a combined device of the class described, the combination with a board; of a ladder pivoted at one end to the under face thereof, an additional ladder pivotally and slidably connected to the first mentioned ladder, spring clamping members carried on the first mentioned ladder adapted to engage the additional ladder to retain the same in alinement with one another, and hinged bracing means connecting the board with said ladder.

4. In a combined device of the class described, the combination with a board; of a ladder pivotally connected at one end to the under face of said board, an additional ladder pivotally and slidably connected to the first mentioned ladder, means carried on the first mentioned ladder adapted for engagement with the additional ladder to retain the same in alinement with one another, adjustable extension means carried on the under face of said board whereby the length of the latter may be increased according to the adjustment of the ladders, and bracing means between said board and said ladders.

1,062,891. METALLIC RAILWAY-TIE. JOHN H. COX, Hot Springs, Ark. Filed July 10, 1912. Serial No. 708,681. (Cl. 238—5.)

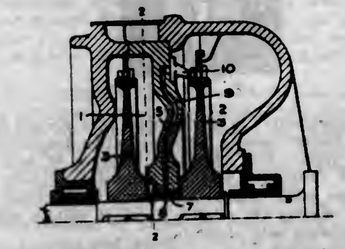


1. In a railway tie device, a plurality of tie members, projections on said device in line with said tie members, rail-bearing means intermediate the tie members, in combination with rails having their junction intermediate said tie members, and a clamp member securing said rails together, and means to secure said clamp member to each of said projections.

2. In a railway tie device, a plurality of tie members, said ties connected adjacent one end by a rail-bearing cross piece consisting of a single piece of metal, in combination with railway rails having their junction intermediate the ties, and a clamp member at said junction, said device having projections beyond said cross piece and in line with the tie members, and said clamp member connected to each projection.

3. A rail tie device comprising a plurality of distanced tie members, rail-bearing means intermediate the tie members, rail-bearing means in continuation of said rail-bearing means on opposite sides of said tie members to abut rail-bearing means of adjacent tie members to provide a continuous rail-bearing surface, projecting means on said device beyond the rail-bearing means, in combination with means to fasten a rail bearing on said rail-bearing means to said projecting means.

1,062,892. UTILIZING LEAKAGE STEAM IN STEAM-TURBINES. LUDWIG CURELIC, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 15, 1912. Serial No. 725,825. (Cl. 121—58.)



1. In a turbine, the combination of a rotor, a casing therefor, a shaft for the rotor, a packing for the shaft, and means receiving leakage fluid from the packing and discharging it against the rotor in a direction to assist its rotation.

2. In a turbine, the combination of a rotor having buckets, a casing therefor, a shaft for the rotor, a packing for the shaft, a device for discharging fluid against the buckets, and means for supplying fluid to the device from the packing.

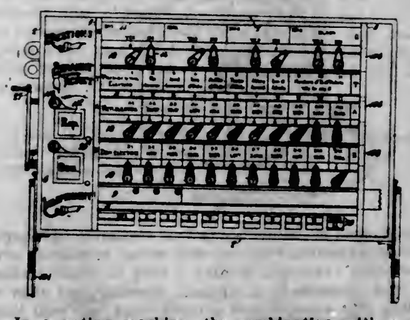
3. The combination with a multi-stage turbine having diaphragms between stages, of a packing device for a diaphragm provided with means for collecting leakage steam, and a conduit for conveying said steam to a point where it can act upon the bucket wheel of a lower stage.

4. The combination with a multi-stage turbine having diaphragms between stages, of a special nozzle on one of said diaphragms, a packing device for a diaphragm provided with an annular groove for collecting leakage steam, and a conduit conveying said steam to said special nozzle.

5. The combination with a multi-stage turbine having diaphragms between stages, of a packing device for a diaphragm having an annular groove for collecting leakage steam, and a conduit formed in said diaphragm for connecting said groove with a nozzle.

[Claim 6 not printed in the Gazette.]

1,062,893. VOTING-MACHINE. WILLIAM H. DANA, Dayton, Ohio, assignor to Leopold Rauh, Dayton, Ohio. Filed Oct. 13, 1909. Serial No. 522,393. (Cl. 235—54.)



1. In a voting machine, the combination with a plurality of key levers, a straight ticket lever, and a bar common to all of a series of keys and actuated by the straight ticket lever, of a series of resilient arms mounted on the bar, one for each key of the series and intermediate the bar and the keys, said arms being normally inactive and adapted to contact with and to shift all unlocked keys but to yield to any locked keys in said series.

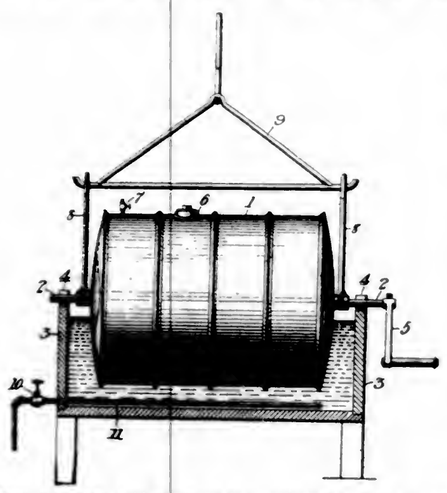
2. In a voting machine, the combination with a plurality of key levers, a straight ticket lever, and a slidable bar common to all of a series of keys and actuated by the straight ticket lever, of a series of resilient arms mounted on the bar, one for each key of the series and intermediate the bar and the keys, said arms being normally inactive and adapted to contact with and to shift all unlocked keys but to yield to any locked key in said series.

3. In a voting machine, the combination with a plurality of key levers, a straight ticket lever, and a bar common to all of the series of keys and actuated by the straight ticket lever, of a series of resilient arms mounted on the bar, one for each key of the series and intermediate the bar and the keys, said arms being normally inactive and adapted to contact with and to shift all unlocked keys but to yield to any locked key in said series, with adjustable pins on the key levers adapted to be shifted to disconnect any desired key from operation by the straight ticket lever.

4. In a voting machine, the combination with a plurality of key levers, a straight ticket lever, and a bar common to all of a series of keys and actuated by the straight ticket lever, of a series of resilient arms mounted on the bar, one for each key of the series and intermediate the bar and the keys, said arms being normally inactive and adapted to contact with and to shift all unlocked keys but to yield to any locked key in said series, with adjustable screws on the key levers to disconnect any desired key from operation by the straight ticket lever.

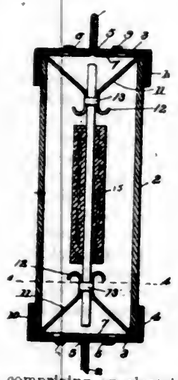
5. An interlocking mechanism for voting machines, comprising a series of non-abutting plates slidably mounted in the frame, each plate with an arm pivoted thereto, to abut against the next adjoining plate in all positions of the arm with connection for said arms each with its

ed having a shaft journaled in said bearings and freely removable therefrom, means to rotate the drum, and



means engaging said shaft at each extremity of the drum adapted to lift the drum from the bearings.

1,062,889. REFILLABLE FUSE-PLUG. JOHN G. CLEMENS, Buffalo, N. Y., assignor of one-half to Frank H. Kaiser, Buffalo, N. Y. Filed Sept. 26, 1911. Serial No. 651,413. (Cl. 175—273.)



1. A fuse plug comprising an electrical shell of insulating material, metallic caps disposed at the ends of the shell and having marginal flanges extending around the ends of the shell, and resilient fuse engaging clamping members disposed within the opposite ends of the shell, said clamping members being held in resilient clamping engagement with a fuse by said caps.

2. A fuse plug comprising a tubular shell of insulating material, oppositely disposed metallic caps closing the ends of the shell, and oppositely disposed pairs of fuse clamping members located at opposite ends of the shell, each pair comprising oppositely disposed resilient angular clamping strips extending radially over the edge wall of the shell at opposite points in its diameter, said clamping members being forced into resilient engagement with each other by the shell.

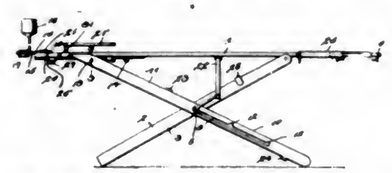
3. A fuse plug comprising a tubular shell of insulating material, metallic caps at each end of the shell, and oppositely disposed pairs of fuse clamping members located at opposite ends of the shell, each pair comprising oppositely disposed, resilient, angular clamping strips extending radially over the edge wall of the shell at opposite points in its diameter, the clamping members of each pair having their inner ends divergently curved.

4. A fuse plug comprising a tubular shell of insulating material, metallic caps at each end of the shell, oppositely disposed pairs of fuse clamping members located at opposite ends of the shell, each pair comprising oppositely disposed resilient angular clamping strips extending radially over the edge wall of the shell at opposite points in its diameter, the clamping members of each pair having their inner ends divergently curved and formed with complementary guiding ears extending at right angles to the respective clamping members.

5. A fuse plug comprising a tubular shell of insulating material, a fuse longitudinally extending within the shell, oppositely disposed pairs of fuse gripping devices, each pair comprising oppositely disposed angular strips of metal extending over the ends of the shell, one leg of each strip extending along the exterior of the shell toward the middle thereof, the other leg extending along the interior of the shell and toward the axial center thereof, and metallic caps covering the ends of the shell and engaging the outward legs of the clamping devices to force the inner legs toward and into engagement with each other and with the ends of the fuse wire.

[Claims 6 to 8 not printed in the Gazette.]

1,062,890. COMBINATION STEP-LADDER AND IRONING-TABLE. OAKLAND F. COULTER, Rochester, Pa. Filed June 12, 1912. Serial No. 703,335. (Cl. 228—32.)



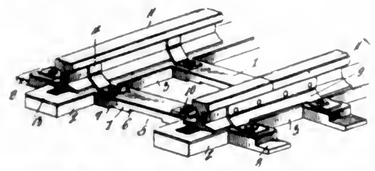
1. In a combined ironing table and step ladder, the combination with a board; of a ladder pivoted to the under face thereof, adjacent one end of the same, laterally extending studs carried on the side rails of said ladder, an additional crossed supporting ladder through which the first mentioned ladder extends, the side rails of said last mentioned ladder being provided with slots through which said studs extend, the one wall of said slots being provided with notches to receive said studs therein, hook members secured to the under face of said board to receive a rung of the last mentioned ladder, and hinged bracing arms connecting said board with the aforesaid laterally extending studs.

2. In a combined ladder and ironing table, the combination with a board, of a ladder pivotally connected to the under face thereof adjacent one end of the same, laterally extending studs carried on the side rails of said ladder intermediate of its ends, an additional crossed ladder through which said first mentioned ladder extends, said last mentioned ladder being provided with slots having notches in one wall thereof, to receive the studs therein, hook members carried on the under face of said board and adapted to receive a rung of the last mentioned ladder in engagement therewith, means to clamp the two ladders in alinement with one another, when the device is set up for use as a ladder proper, and hinged bracing means connecting the board with the aforesaid laterally extending studs on the first mentioned ladder.

3. In a combined device of the class described, the combination with a board; of a ladder pivoted at one end to the under face thereof, an additional ladder pivotally and slidably connected to the first mentioned ladder, spring clamping members carried on the first mentioned ladder adapted to engage the additional ladder to retain the same in alinement with one another, and hinged bracing means connecting the board with said ladder.

4. In a combined device of the class described, the combination with a board; of a ladder pivotally connected at one end to the under face of said board, an additional ladder pivotally and slidably connected to the first mentioned ladder, means carried on the first mentioned ladder adapted for engagement with the additional ladder to retain the same in alinement with one another, adjustable extension means carried on the under face of said board whereby the length of the latter may be increased according to the adjustment of the ladders, and bracing means between said board and said ladders.

1,062,891. METALLIC RAILWAY-TIE. JOHN H. COX, Hot Springs, Ark. Filed July 10, 1912. Serial No. 708,681. (Cl. 238—5.)

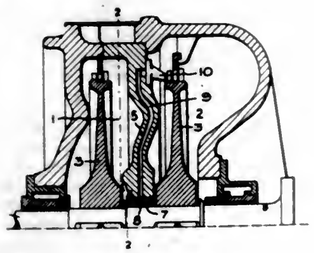


1. In a railway tie device, a plurality of tie members, projections on said device in line with said tie members, rail-bearing means intermediate the tie members, in combination with rails having their junction intermediate said tie members, and a clamp member securing said rails together, and means to secure said clamp member to each of said projections.

2. In a railway tie device, a plurality of tie members, said ties connected adjacent one end by a rail-bearing cross piece consisting of a single piece of metal, in combination with railway rails having their junction intermediate the ties, and a clamp member at said junction, said device having projections beyond said cross piece and in line with the tie members, and said clamp member connected to each projection.

3. A rail tie device comprising a plurality of distanced tie members, rail-bearing means intermediate the tie members, rail-bearing means in continuation of said rail-bearing means on opposite sides of said tie members to abut rail-bearing means of adjacent tie members to provide a continuous rail-bearing surface, projecting means on said device beyond the rail-bearing means, in combination with means to fasten a rail bearing on said rail-bearing means to said projecting means.

1,062,892. UTILIZING LEAKAGE STEAM IN STEAM-TURBINES. LUDWIG CUBELIC, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 15, 1912. Serial No. 725,825. (Cl. 121—58.)



1. In a turbine, the combination of a rotor, a casing therefor, a shaft for the rotor, a packing for the shaft, and means receiving leakage fluid from the packing and discharging it against the rotor in a direction to assist its rotation.

2. In a turbine, the combination of a rotor having buckets, a casing therefor, a shaft for the rotor, a packing for the shaft, a device for discharging fluid against the buckets, and means for supplying fluid to the device from the packing.

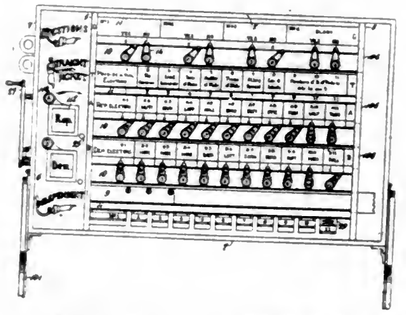
3. The combination with a multi-stage turbine having diaphragms between stages, of a packing device for a diaphragm provided with means for collecting leakage steam, and a conduit for conveying said steam to a point where it can act upon the bucket wheel of a lower stage.

4. The combination with a multi-stage turbine having diaphragms between stages, of a special nozzle on one of said diaphragms, a packing device for a diaphragm provided with an annular groove for collecting leakage steam, and a conduit conveying said steam to said special nozzle.

5. The combination with a multi-stage turbine having diaphragms between stages, of a packing device for a diaphragm having an annular groove for collecting leakage steam, and a conduit formed in said diaphragm for connecting said groove with a nozzle.

[Claim 6 not printed in the Gazette.]

1,062,893. VOTING-MACHINE. WILLIAM H. DANA, Dayton, Ohio, assignor to Leopold Rauh, Dayton, Ohio. Filed Oct. 13, 1909. Serial No. 522,393. (Cl. 235—54.)



1. In a voting machine, the combination with a plurality of key levers, a straight ticket lever, and a bar common to all of a series of keys and actuated by the straight ticket lever, of a series of resilient arms mounted on the bar, one for each key of the series and intermediate the bar and the keys, said arms being normally inactive and adapted to contact with and to shift all unlocked keys but to yield to any locked keys in said series.

2. In a voting machine, the combination with a plurality of key levers, a straight ticket lever, and a slidable bar common to all of a series of keys and actuated by the straight ticket lever, of a series of resilient arms mounted on the bar, one for each key of the series and intermediate the bar and the keys, said arms being normally inactive and adapted to contact with and to shift all unlocked keys but to yield to any locked key in said series.

3. In a voting machine, the combination with a plurality of key levers, a straight ticket lever, and a bar common to all of the series of keys and actuated by the straight ticket lever, of a series of resilient arms mounted on the bar, one for each key of the series and intermediate the bar and the keys, said arms being normally inactive and adapted to contact with and to shift all unlocked keys but to yield to any locked key in said series, with adjustable pins on the key levers adapted to be shifted to disconnect any desired key from operation by the straight ticket lever.

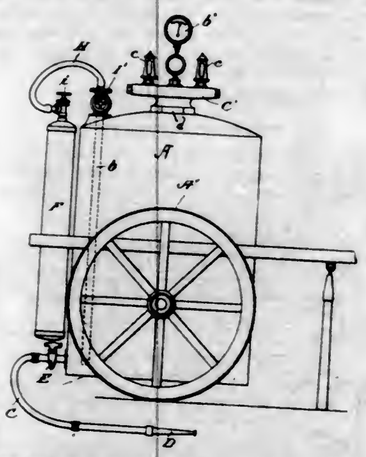
4. In a voting machine, the combination with a plurality of key levers, a straight ticket lever, and a bar common to all of a series of keys and actuated by the straight ticket lever, of a series of resilient arms mounted on the bar, one for each key of the series and intermediate the bar and the keys, said arms being normally inactive and adapted to contact with and to shift all unlocked keys but to yield to any locked key in said series, with adjustable screws on the key levers to disconnect any desired key from operation by the straight ticket lever.

5. An interlocking mechanism for voting machines, comprising a series of non-abutting plates slidably mounted in the frame, each plate with an arm pivoted thereto, to abut against the next adjoining plate in all positions of the arm with connection for said arms each with its

respective key, whereby the actuation of the key will spread the plates a predetermined distance.

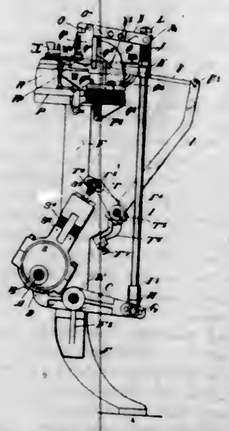
[Claims 6 to 12 not printed in the Gazette.]

1,062,894. PROCESS OF EXTINGUISHING FIRES. GUILLAUME LOUIS DANEY, Paris, France. Filed Sept. 26, 1910. Serial No. 583,934. (Cl. 23—5.)



The method of extinguishing fires consisting in charging a fire extinguishing reservoir with water, aluminum nitrid and calcium cyanamid, holding a body of liquid carbonic acid and nitrogen in a separate reservoir and then expanding said nitrogen and carbonic acid into said liquid to impregnate the same and to expel the liquid with its products of reaction and directing the same onto the burning material.

1,062,895. IMPRINTING ATTACHMENT FOR ENVELOP-MACHINES. PRIME JOSEPH DANSEREAU, Pittsfield, Mass., assignor to Eaton, Crane & Pike Co., Pittsfield, Mass., a Corporation of Maine. Filed Aug 27, 1912. Serial No. 717,304. (Cl. 93—73.)



1. In an envelop making machine, means for imprinting the blank before folding comprising an imprinting plunger, a rock lever for actuating same, an actuating link and connections between the lever and link comprising a block swiveled to said lever and adapted to slide on said link, adjusting nuts on said link for limiting the play of said swivel block, and a cushioning spring between one of said nuts and said block and means for operating said parts.

2. In an envelop making machine, a folding mechanism, an imprinting head, imprinting devices therein, said imprinting head adapted to operate upon a sheet of paper while the paper is in position to be folded by said folding mechanism, and adjustable means for actuating said imprinting devices and means for adjusting the height of said imprint head.

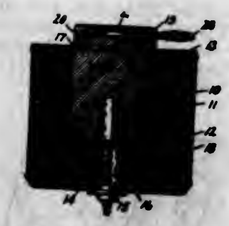
3. In an envelop making machine, an imprinting head, imprinting devices therein, and adjustable spring cushioned means for actuating said imprinting devices and means for adjusting said imprint head, a frame carrying said imprint head, threaded means for adjusting the height of said frame, and adjustable studs for holding said frame in adjusted position.

4. In combination with a machine for making envelops having a forming plunger, an imprinting device positioned to operate on a blank when in position to be operated on by said forming plunger, a carriage for moving blanks into position to be operated on by said plunger and said imprinting device, yieldable means for reciprocating said carriage, and an adjustable stop adapted to limit the movement by said operating means of said carriage in its movement to bring said blanks into position to be operated on by said plunger and imprinting device, said means for reciprocating said carriage being adapted to yield when said stop acts to limit the movement of the carriage.

5. In combination with a machine for making envelops having a forming plunger, an imprinting device positioned to operate on a blank when in position to be operated on by said forming plunger, a carriage for moving blanks into position to be operated on by said plunger and imprinting device, means for operating said carriage comprising a rock shaft, an adjustable stop arm mounted on said rock shaft and adapted to abut against a fixed part of the machine to adjustably limit the travel of said carriage in its movement to bring said blanks into position to be operated on by said plunger and imprinting device.

[Claims 6 to 14 not printed in the Gazette.]

1,062,896. ELECTRICAL HEAT-STORAGE DEVICE. JOHN T. H. DEMPSTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 7, 1912. Serial No. 724,243. (Cl. 219—19.)



1. The combination in an electrical heat storage device of a heat storage mass, a heat conducting body mounted adjacent thereto, the contiguous surfaces of said elements each comprising portions adapted to contact with those of the other element and insulating portions, and means for varying the relative areas of contact and insulation between said elements.

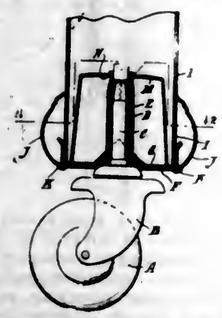
2. The combination in an electrical heat storage device of a heat storage mass a part of which is surrounded by heat insulation and a heat conducting body mounted upon another part thereof, the contiguous surfaces of said elements each comprising portions adapted to contact with those of the other element and insulating portions, and one of said elements being movable to vary the relative areas of contact and insulation between the same.

3. The combination in an electrical heat storage device of a heat storage mass, a heat conducting body mounted adjacent thereto, the contiguous surfaces of said elements each having depressions therein and intervening portions adapted to contact with corresponding portions of the other element, one of said elements being movable to vary the relative areas of contact and separation of said elements.

4. In a heat storage device, a heat storage mass and a body for conducting heat therefrom, said elements having surfaces adapted to register and each provided with a series of similarly spaced depressions, the said elements being so disposed that one of said surfaces is movable upon the other.

5. The combination in an electrical heat storage device of a heat storage mass and a thermal switch rotatably mounted thereon the contiguous surfaces of said mass and said switch being similarly grooved so as to form contact and separation areas between the same.

1,062,897. CASTER. ALBERT B. DISS, Newark, N. J., assignor to Universal Caster & Foundry Company, New York, N. Y., a Corporation of New Jersey. Filed June 21, 1911. Serial No. 634,480. (Cl. 16—4.)



1. The combination of a caster wheel, jaws and pintle, and a leg mount structure comprising two superimposed leg supporting disks and a separate leg mount ring or member secured between the said disks, and frictional means adapted to act within a tubular leg for securing said disks thereto.

2. The combination of a caster wheel, jaws and pintle, and a leg mount structure comprising two superimposed leg supporting disks and a separate leg mount ring or member secured between the said disks, means for securing the said disks together and thereby securing the said leg mount, and means for securing said pintle and disks to a tubular leg, said means acting on the interior surface of the said leg.

3. The combination of a caster wheel, jaws and pintle and a leg mount structure comprising two superimposed leg supporting disks and a separate leg mount ring or member secured between the said disks, and means for securing the leg supporting disks together, said means being part of a pintle socket which is rigid with the said disks.

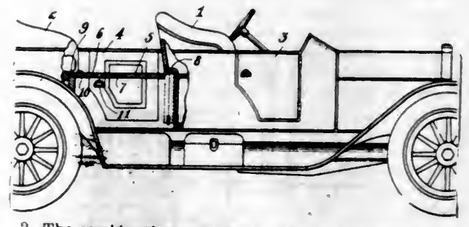
4. The combination of a caster wheel, jaws and pintle, and a leg mount structure comprising two superimposed leg supporting disks and a separate leg mount ring or member secured between the said disks, one of the said disks having upturned portions adapted to receive and to tend to center the foot of the tubular leg.

5. The combination of a caster wheel, jaws and pintle, two superimposed leg supporting plates which are secured rigidly together and which center the pintle, and the upper of which has upturned portions adapted to act against the exterior surface of a tubular leg to center the plates and pintle relatively thereto, and a leg mount secured by and between said two plates and extending around the leg above the said upturned portions.

[Claims 6 to 11 not printed in the Gazette.]

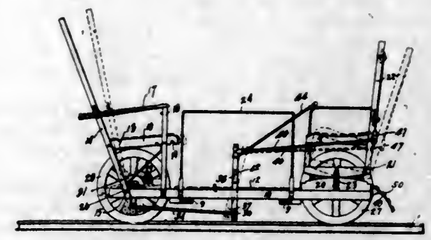
1,062,898. AUTOMOBILE. FRED DREW, Boston, Mass. Filed Dec. 9, 1912. Serial No. 735,674. (Cl. 21—7.)

1. The combination with the body of an automobile having a passenger space provided with side doors, of a collapsible cover arranged when extended to inclose a portion of the passenger space to form a storage receptacle, means whereby the collapsible cover may be locked in operative position, and securing means for the doors inaccessible when the cover is extended.



2. The combination with the body of an automobile having front and rear seats and side doors, of a collapsible cover secured to the back of the front seat and arranged when extended to inclose the space between the front and rear seats to form a storage space, means whereby the collapsible cover may be locked in operative position, and securing means for the doors inaccessible when the cover is extended.

1,062,899. AMUSEMENT DEVICE. NOAH EBY, Hubbell, Nebr. Filed May 24, 1911. Serial No. 629,182. (Cl. 105—246.)



1. In a device of the character described, a car, operative connections to drive said car, foot operated means and horizontally rocking means operated by movements of the body to operate said connections to drive said car.

2. In a device of the character described, a car, operative connections to drive said car, a plurality of means to operate said connections to drive said car, comprising foot operated means, hand operated means, and horizontally rocking means operated by movements of the body.

3. In a device of the character described, a car, operative connections to drive said car, a plurality of means to operate said connections to drive said car, comprising foot operated means, hand operated means, and horizontally rocking means operated by movements of the body, and means to disconnect any of said means.

4. In a device of the character described, a car, a lever adapted to drive said car, foot operated means, hand operated means, and horizontally rocking means operated by movements of the body, all of said means having operative connections with said lever.

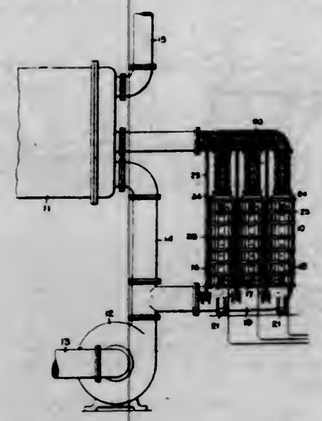
5. In a device of the character described, a car, wheels for supporting said car, a lever having operative connection with one of said wheels, foot rests on said lever and a hand link connected thereto whereby said car may be driven by foot or hand power.

[Claims 6 to 13 not printed in the Gazette.]

1,062,900. WATER-COOLED RESISTANCE. WILLIAM L. R. EMMET, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 7, 1910. Serial No. 591,001. (Cl. 219—48.)

1. A rheostat comprising a duct of insulating material, a resistance conductor occupying a part of the length of said duct and a body of liquid connected to said

duct so as to circulate therethrough, the cross sections of the occupied and unoccupied portions of the duct being each such that the resistance to the flow of current therein is materially greater than the resistance of the conductor.



2. A rheostat comprising a resistance element of small cross section relative to its length, a duct of insulating material closely surrounding said resistance element, and an extension duct of insulating material connected with the main duct the cross section and length of the extension duct being such that the resistance to the flow of current therethrough is materially greater than the resistance of the said element.

3. A rheostat comprising a duct of insulating material, a resistance occupying a part of the length of said duct, and connections for circulating a continuous supply of water through said duct to cool the resistance.

4. A rheostat comprising a duct of insulating material, a resistance of non-corrosive material occupying a part of the length of said duct, and connections for circulating a continuous supply of water through said duct to cool the resistance.

5. A rheostat comprising an insulating duct, a resistance conductor located therein, and an extension duct of insulating material connected with the main duct.

[Claims 6 to 15 not printed in the Gazette.]

1,062,901. SHELF-SUPPORT. SAMUEL C. ENTWISTLE, Jamestown, N. Y. Filed Aug. 7. 1911. Serial No. 642,646. (Cl. 248—19.)

1. The combination of a strip having a vertically extending pocket therein on one side thereof, and a bracket adapted to support a shelf and comprising a horizontally extending portion and a vertically extending portion, the vertically extending portion being provided with an opening, the width of which is substantially equal to the width of the said strip, the said vertically extending portion lying adjacent opposite edge portions of the strip, the horizontally extending portion being provided with a tongue for engagement in the said pocket, the lower part of the said vertically extending portion forming a cross piece suitably offset from the rest of the said vertically extending portion, whereby the engagement between the side walls of the said opening and the opposite edge portions of the strip will prevent the bracket from tilting.

2. The combination of a strip provided with a pocket, a bracket made up of a horizontally extending portion and a vertically extending portion, the said portions lying adjacent opposite edge portions of the strip, the intermediate part of the vertically extending portion being removed for a suitable distance, the width of the removed portion being substantially equal to the width of the strip, the intermediate part of the horizontally extending portion being also removed for a suitable distance, the width of such removed portion being also substantially equal to the width of the strip, a tongue carried by the horizontally extending portion and positioned intermediate the side walls of the said removed portion, and adapted for engagement in the said pocket, the side walls of the removed part of the vertically extending portion engaging opposite edge portions of the strip.



3. The combination of a strip having a vertically extending pocket therein in advance of one side thereof, with a bracket comprising a horizontally extending portion and a vertically extending portion, an opening formed in the vertically extending portion, the opening also extending into the horizontally extending portion, the strip lying within the said opening, a tongue carried by the horizontally extending portion engaging in the said pocket,, the lower end of the vertically extending portion being offset a distance sufficient to bring it into the same vertical plane as the said tongue, whereby the engagement of the side walls of the said opening with the opposite edge portions of the strip will bring the said lower end of the vertically extending portion adjacent the front of the strip and will prevent the bracket from tilting.

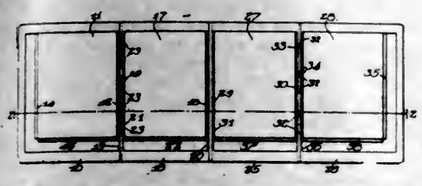
4. The combination of a strip having a pocket therein, and a bracket made up of two parts extending at right angles to each other, the intermediate portions of the said parts being removed for suitable distances, the width of the removed portions being substantially equal to the width of the strip, a vertically extending tongue carried by one of the parts, and a cross piece carried by the other part, the cross piece and the tongue lying in substantially the same vertical plane so that when the tongue is engaged in the pocket, the said cross piece will lie adjacent the said strip, the side walls of the said removed portions engaging opposite edge portions of the strip, whereby the bracket is prevented from tilting.

5. As a new article of manufacture, a bracket made of a single piece of material and provided with an opening, a tongue extending at right angles from one edge portion of the opening, that portion of the said piece of material opposite the tongue being offset, the said piece of material being bent on a line intermediate the edge portion provided with the tongue and the said offset portion, whereby two right-angularly extending parts of the said piece are formed, the line of bending being such that the said tongue lies in the same plane as the said offset portion.

[Claims 6 to 8 not printed in the Gazette.]

1,062,902. CHASE. WILLIAM EVENSEN, Chicago, Ill., assignor to The Goss Printing Press Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 16, 1911. Serial No. 666,190. (Cl. 101—25.)

1. The combination of two chases arranged alongside of each other the adjacent sides of which comprise two superposed strips, one of said strips forming a part of the side of one chase and the other strip forming a part of the side of the other chase.



2. The combination of a plurality of chases arranged alongside of each other, each two adjacent sides of the several chases being in the form of angle irons the flanges of which are superposed.

3. The combination of a plurality of type chases arranged side by side, the inner side of each end chase being in the form of an angle-iron, and both sides of the intermediate chases being in the form of angle-irons, said angle-iron sides overlapping one another.

4. The combination of a plurality of chases arranged alongside of each other, a part of one of two adjacent sides of said chases extending over a part of the other of said two adjacent sides.

5. The combination of a plurality of chases arranged alongside of each other, two adjacent sides of said chases having flanges which overlap.

[Claims 6 and 7 not printed in the Gazette.]

1,062,903. DEVICE FOR ATTACHING HANDLES TO UMBRELLA OR OTHER RODS. JOSEPH FORSHEIM, Great Neck, and JOSEPH KONIGSBERG, New York, N. Y. Filed Oct. 4, 1911. Serial No. 652,713. (Cl. 135—46.)

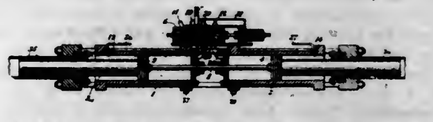
1. A handle provided with a socket piece, a rod insertible therein and a sleeve secured to and having a limited rotary movement on the socket piece for locking and releasing the rod, said sleeve having an interior annular groove and a recess communicating therewith, said socket piece having an ear and said rod having a lug adapted to enter and leave the groove through said recess for assembling and disassembling the parts.

2. A handle provided with a socket piece, a rod insertible therein, and a sleeve secured to and having a limited rotary movement on the socket piece for locking and releasing the rod, said sleeve having an interior annular groove and a recess communicating therewith and said socket piece having an ear located in said groove and an abutment in said groove for limiting the movement of the sleeve by engagement with said ear.

3. A handle provided with a socket piece, a rod insertible therein and a sleeve secured to and having a limited rotary movement on the socket piece for locking and releasing the rod, said sleeve having an interior annular groove and a recess communicating therewith, said socket piece having an ear struck outwardly from its inner end, and forming a recess, said ear being located within said annular groove, and said rod having a lug adapted to enter and leave the groove through the recess in the sleeve, said lug being located in the slot in the socket piece when in said groove.

4. A handle provided with a socket piece, a rod insertible therein and a sleeve secured to and having a limited rotary movement on the socket piece for locking and releasing the rod, said sleeve having an interior annular groove and a recess communicating therewith, said socket piece having an ear struck outwardly from its inner end and forming a recess, said ear being located within said annular groove, and said rod having a lug adapted to enter and leave the groove through the recess in the sleeve, said lug being located in the slot in the socket piece when in said groove, and an abutment on the sleeve arranged to be engaged by said ear for bringing the recesses in the sleeve and socket piece in alinement to permit the insertion and removal of the rod.

1,062,904. FLUID-PRESSURE MOTOR. JOHN FOURNIA, Albany, N. Y., assignor of one-half to Frederick Randall Greene, Albany, N. Y. Filed May 17, 1911. Serial No. 627,779. (Cl. 121—6.)



1. A fluid pressure motor comprising two oppositely facing fluid pressure cylinders, a piston in each cylinder arranged to move in conjunction with and oppositely to its complementary piston, a valve-chest communicating with both cylinders and having a valve-chamber provided with inlet and exhaust ports, a slide-valve in the valve-chamber to alternately connect the cylinders with the inlet and exhaust ports, respectively; each cylinder having a port near its open outer end arranged to be opened to the piston-closed portion of the cylinder for a short period at the outer portion of the stroke of the piston, and the valve chest having ports opening into the valve chamber at each end thereof and each in communication with the outer end port of its corresponding cylinder, whereby fluid pressure from each cylinder will actuate the slide valve at the outer portion of the stroke of each cylinder.

2. A fluid pressure motor comprising two oppositely facing fluid pressure cylinders in tandem, the cylinders being closed at their inner ends and open at their outer ends, a piston in each cylinder arranged to move in conjunction with and oppositely to its complementary piston, a valve-chest communicating with both cylinders and having a valve-chamber provided with inlet and exhaust ports, a slide-valve in the valve-chamber to alternately connect the cylinders with the inlet and exhaust ports, respectively, and means controlled by each piston for admitting pressure fluid from its cylinder to the valve-chest to reverse the slide-valve when the piston is near the outer end of its stroke and to permit the said pressure fluid to vent itself after such actuation of the slide valve.

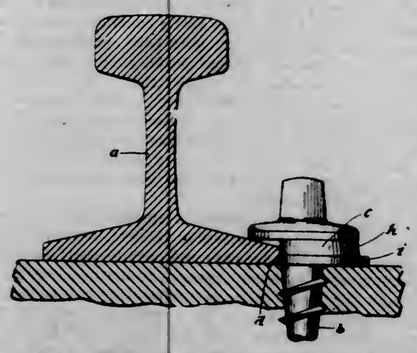
3. A fluid pressure motor comprising two oppositely facing fluid pressure cylinders in tandem, the cylinders being closed at their inner ends and open at their outer ends, a piston in each cylinder arranged to move in conjunction with and oppositely to its complementary piston, a valve-chest communicating with both cylinders and having a valve-chamber provided with inlet and exhaust ports, a slide-valve in the valve-chamber to alternately connect the cylinders with the inlet and exhaust ports, respectively; each cylinder having a port near its open outer end arranged to be opened to the piston-closed portion of the cylinder for a short period at the outer portion of the stroke of the piston, and to be open to the atmosphere when the piston is in proximity to the inner end of its stroke, and the valve-chest having ports opening into the valve-chamber at each end thereof and each in communication with the outer end port of its corresponding cylinder, whereby fluid pressure from each cylinder will actuate the slide valve at the outer portion of the stroke of each piston, and the fluid pressure is vented after such actuation of the slide valve.

4. In a fluid pressure motor, in combination with two fluid pressure cylinders having one end closed and the

other end open to the atmosphere and a piston in each cylinder arranged to move oppositely to its complementary piston, a valve-chest arranged in control of both cylinders and having a valve-chamber and a pressure fluid inlet port, two exhaust ports and two cylinder-communicating ports opening into the valve-chamber, each cylinder having a port at its inner end communicating with one of the cylinder-communicating ports in the valve-chest; a slide-valve in the valve-chamber arranged in one position to connect one cylinder port with one exhaust port and the other cylinder port with the pressure fluid inlet, and in another position to connect the first cylinder port with the pressure fluid inlet and the second cylinder port with the other exhaust port; and a reversing port in each cylinder communicating with the corresponding end of the valve-chamber beyond the slide-valve, the reversing ports being so located that the pistons pass their respective reversing ports during their stroke, whereby in one position of the pistons relative to the reversing ports, one end of the valve-chamber is connected to the pressure fluid in the cylinder and the other end of the valve-chamber is vented to the atmosphere, and in the other position of the pistons the ends of the valve-chamber are reversely connected.

5. In a fluid pressure motor, in combination with two oppositely facing fluid pressure cylinders arranged in tandem, the cylinders being closed at their inner ends and open at their outer ends, and a piston in each cylinder, the pistons being mounted on a common rod, a valve-chest arranged in control of both cylinders and having a valve-chamber and a pressure fluid inlet port, two exhaust ports and two cylinder-communicating ports opening into the valve-chamber, each cylinder having a port at its inner end communicating with one of the cylinder-communicating ports in the valve-chest; a slide-valve in the valve-chamber arranged in one position to connect one cylinder port with one exhaust port and the other cylinder port with the pressure fluid inlet, and in another position to connect the first cylinder port with the other exhaust port; and means controlled by the piston for reversing the slide-valve.

1,062,905. HEAD-SUPPORT FOR SCREW-SPIKES. CHARLES J. GADD, Lebanon, Pa. Filed July 11, 1911. Serial No. 637,995. (Cl. 85—44.)



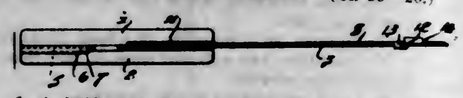
1. A head support for screw spikes consisting of a washer having a flat side adapted to be placed contiguous to the base of a rail and the top of which is shaped to conform to the under part of the spike head, which has a hole for the passage of a spike and a slot extending from said flat side to said hole, said slot being of less width than the diameter of the spike but wider than that part of the spike included between the threads of the screw.

2. A head support for screw spikes consisting of a washer having a flat side which is adapted to lie adjacent to the flange of a rail, which is perforated for the passage of a spike, the top part of which slopes upward and outward in all directions from the center of said perforation, and which is furnished with a slot extending from said flat side to said perforation, said slot being of less width than the diameter of the spike but wider than that part included between the threads of the screw.

3. A head support for screw spikes consisting of a washer having a coned depression to conform to the cone on the under side of the screw spike head, said washer being segmental in form with a flat side and having a hole in its center and a slot communicating with said hole said slot having a width less than the diameter of the shank of a spike but wide enough to pass between the roots of the thread thereon.

4. A head support washer for screw spikes consisting of a disk of metal segmental in form having a base and one or more segmental flanges of different heights to conform to the angle of the cone on the under side of the spike head, a flat side, a hole in its center and a slot communicating with said hole, said slot being of a width less than the diameter of the shank of the spike but wide enough to pass between the roots of the thread upon said spike.

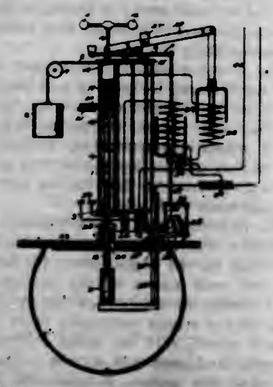
1,062,906. SAFETY SKINNING-KNIFE. FRIEDRICH W. GROSCHOPP, New York, N. Y., assignor to Kampfe Bros., New York, N. Y., a Corporation of New York. Filed May 25, 1912. Serial No. 699,635. (Cl. 30—20.)



1. A knife comprising a handle, a cutting blade secured thereto, and a guard, said guard being rigid and of a width slightly less than the width of said blade throughout a portion of its length, said guard being yieldable throughout a portion of the remainder of its length and pivoted to said handle adjacent the rearmost end of said yieldable portion, said handle being provided with a recess adapted to receive the yieldable portion of said blade.

2. A knife comprising a handle, a cutting blade secured thereto, a guard, said guard being rigid and of a width slightly less than the width of said blade throughout a portion of its length, said guard being yieldable throughout a portion of the remainder of its length and pivoted to said handle adjacent the rearward end of said yieldable portion, said handle being provided with a recess adapted to receive the yieldable portion of said blade, and stops carried by said guard adapted to contact with said blade when said guard is in position for use.

1,062,907. MAGAZINE ARC-LAMP. EMILE J. GUAY, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 21, 1909. Serial No. 508,769. (Cl. 176—63.)



1. A magazine arc lamp having a plurality of tubes grouped in a segment of a circle, a gravity feed electrode in each tube which is free to drop therefrom, a single lower electrode, means for moving said magazine step by step and for simultaneously moving the lower electrode laterally out of alinement with the upper electrode at each step by step movement, a clutch for separating the upper electrode from the lower, and means for rendering said clutch inoperative after the lower electrode is swung to one side in order to permit the spent electrode to drop from its tube.

2. An arc lamp having a rotatable magazine comprising a plurality of tubes grouped in a segment of a circle, a gravity-feed electrode in each tube, means for rotating said magazine, a pawl and ratchet escapement therefor, and means comprising a shunt solenoid for controlling said escapement.

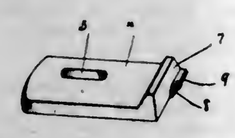
3. An arc lamp having a rotatable magazine comprising a plurality of tubes grouped in a segment of a circle, a gravity feed electrode in each tube, a single lower cooperating electrode, means for rotating said magazine, a pawl and ratchet escapement therefor, a series magnet and mechanism responsive to the energization of said magnet for separating the upper electrode from the lower, a shunt magnet and means operatively connected to said solenoid for controlling said escapement, and for opening the circuit of said series magnet.

4. An arc lamp having a rotatable magazine comprising a plurality of tubes grouped in a segment of a circle, a weight and cord for rotating said magazine, ratchet-teeth on said magazine, a lever having a detent pawl engaging with said teeth, and a shunt solenoid for actuating said lever.

5. An arc lamp having a rotatable magazine comprising a plurality of tubes grouped in a segment of a circle, each tube having a longitudinal slot, a weight in each tube having an arm extending through said slot, and means comprising a solenoid controlling the rotation of said magazine, and means controlled by said arm for controlling said solenoid.

[Claims 6 to 9 not printed in the Gazette.]

1,062,908. SEWING-MACHINE GAGE. SAMUEL J. HALLIDAY, Watervliet, N. Y., assignor, by mesne assignments, to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed Nov. 13, 1911. Serial No. 660,043. (Cl. 112—9.)

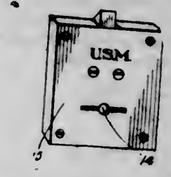


1. A gage for sewing-machines having a projecting horizontal end-flange, a work-engaging abutment below the level of said flange and at a distance from its edge, and a work-engaging abutment above the level of said flange and at a greater distance from its edge than the abutment below the level of the flange.

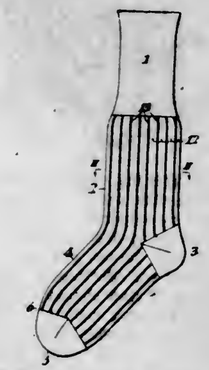
2. In a sewing-machine having stitch-forming mechanism including a needle, the combination with the needle and the work-plate; of gage-mechanism having a horizontal flange, a work-engaging abutment below the level of said flange and more remote from the needle than the edge of said flange, and a work-engaging abutment above the level of said flange and more remote from the needle than said abutment below the level of said flange.

1,062,909. SPRING-LOCK. ALFRED HARLAN, Indianapolis, Ind. Filed Apr. 5, 1911. Serial No. 619,053. (Cl. 70—78.)

A lock consisting of a casing, a slidable bolt having an enlarged head and a bowed spring pressing against said head, said head having a three cornered opening therein, a pin projecting into said opening and adapted to be accommodated by one of said corners, a key having a wing adapted to project into either of said other corners and an arcuate surface connecting said last two corners along which said wing is adapted to slide to operate said bolt.



1,062,910. VERTICALLY-STRIPED SEAMLESS HOSIERY. EMIL A. HIBNER, Allentown, Pa., assignor to Novelty Hosiery Company, a Corporation of Pennsylvania. Filed Mar. 22, 1907. Serial No. 363,872. (Cl. 66—4.)



1. A vertically striped seamless stocking composed of stripes of plated knitting, alternating with stripes of plain knitting where the plating thread is floated at the back, the aggregate width of the stripes of the plated knitting being so great, in proportion to the aggregate width of the stripes of plain knitting, as to maintain the lateral elasticity of the stocking substantially unimpaired.

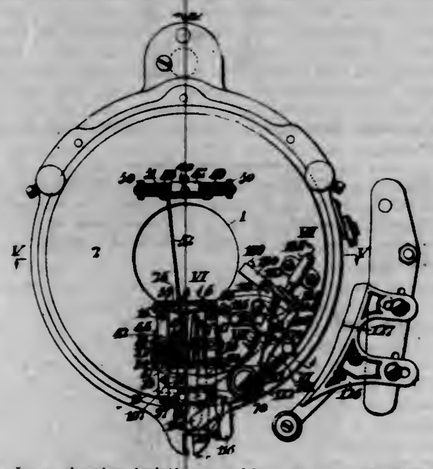
2. A seamless circular-knit stocking ornamented by figurings of contrasting colors, wherein the groundwork fabric is of plated knitting consisting of a body yarn knit with a contrasting plating yarn on the face, and wherein the figures consist of plain knitting of the body yarn only with the plating yarn floated behind said figures, and wherein the whole number of wales of ground-work in any one course so much exceeds the whole number of wales in the figures as to maintain the lateral elasticity of the stocking substantially unimpaired.

1,062,911. THREAD-CHANGING MECHANISM FOR KNITTING-MACHINES. EMIL A. HIBNER, Allentown, Pa., assignor to Novelty Hosiery Company, a Corporation of Pennsylvania. Filed May 22, 1908. Serial No. 434,297. (Cl. 66—12.)

1. In a circular knitting machine, a plurality of separate thread carriers constantly maintained in such relation to each other as to feed their threads to the needles in specific relation to each other; a plurality of thread changing levers controlling independent threads in cooperation with one of said thread carriers; means for effecting the alternate coöperation of said levers to feed one or other of said independent threads to said thread carrier.

2. In a circular stocking knitting machine, the combination of a plurality of thread changing levers carrying respectively body thread, heel thread and plating threads; a plurality of operating levers coöperating one with each thread changing lever; spring-pressed trigger plates co-

operating with the operating levers; and means for so operating said trigged plates and their coöperating members that the levers which control the plating threads are compelled to work in alternation, while the movement of the operating lever to throw in the heel thread withdraws all the other threads.



3. In a circular knitting machine, the combination of a plurality of operating levers; a plurality of thread changers arranged to coöperate with said levers; means for moving said levers to depress and elevate the thread carrying ends of said thread changers; and means on certain of said levers for effecting the simultaneous operation of two of said thread changers.

4. In a circular knitting machine, the combination of a plurality of thread changing levers any one of which when depressed feeds thread to the needles; a plurality of operating levers each connected with and operating one of said thread changing levers; a pair of spring-pressed trigger plates each capable of holding one or more of said operating levers in position to depress their thread changing mechanism; and means on one of said operating levers which is in the path of one of said trigger plates for cooperating with one of the operating levers in the path of the other trigger plate whereby when said lever is freed from its trigger plate, the lever which is being held by said other trigger plate is simultaneously freed; while either of said two levers may be locked or freed from its trigger plate without affecting said lever held by its trigger plate.

5. In a circular knitting machine, the combination of a plurality of movable thread changers; a plurality of movable levers for controlling said thread changers; a pair of vertically disposed trigger plates for holding said levers in the position for depression of their thread changers; one of said trigger plates being movable independently of the other, but also adapted to move therewith; means whereby the motion of one of the levers which coöperate with the first mentioned trigger plate in depressing its thread changer causes the release of the thread changer controlled by the other of said levers and vice versa, without affecting the other trigger plate, permitting only one of the said levers to remain in the thread-changer-depressing position at a time.

1,062,912. CAOUTCHOUC-LIKE SUBSTANCE AND PROCESS OF MAKING SAME. FRITZ HOFMANN, CARL COUTELLE, KONRAD DELBRÜCK, and KURT MEISENBURG, Elberfeld, Germany, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Mar. 20, 1911. Serial No. 615,662. (Cl. 23—24.)

1. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons.

2. The process of producing a caoutchouc-like substance which comprises heating a mixture of erythrene hydrocarbons until a caoutchouc-like product results insoluble in acetone.

3. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons in the presence of an agent promoting the polymerization.

4. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons in the presence of an agent of acid reaction.

5. The process of producing a caoutchouc-like substance which comprises heating a mixture of erythrene hydrocarbons in the presence of an agent promoting the polymerization until a caoutchouc-like product results insoluble in acetone.

[Claims 6 to 11 not printed in the Gazette.]

1,062,913. CAOUTCHOUC SUBSTANCE AND PROCESS OF MAKING SAME. FRITZ HOFMANN, CARL COUTELLE, KONRAD DELBRÜCK, and KURT MEISENBURG, Elberfeld, Germany, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Mar. 20, 1911. Serial No. 615,663. (Cl. 23—24.)

1. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of substituted erythrene hydrocarbons.

2. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of methyl-substituted erythrene hydrocarbons.

3. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of mono- and poly-methyl erythrene hydrocarbons.

4. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of mono- and dimethyl erythrene hydrocarbons.

5. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including isoprene and a polymethyl erythrene.

[Claims 6 to 37 not printed in the Gazette.]

1,062,914. CAOUTCHOUC SUBSTANCE AND PROCESS OF MAKING SAME. FRITZ HOFMANN, CARL COUTELLE, KONRAD DELBRÜCK, and KURT MEISENBURG, Elberfeld, Germany, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Mar. 20, 1911. Serial No. 615,664. (Cl. 23—24.)

1. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including erythrene.

2. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including erythrene and a poly-methyl substituted erythrene.

3. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including erythrene and a dimethyl-erythrene.

4. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including erythrene and diisopropenyl.

5. The process of producing a caoutchouc-like substance which comprises heating a mixture of erythrene hydrocarbons including erythrene under caoutchouc-forming conditions until a caoutchouc-like product results insoluble in acetone.

[Claims 6 to 16 not printed in the Gazette.]

1,062,915. CAOUTCHOUC SUBSTANCE AND PROCESS OF MAKING SAME. FRITZ HOFMANN, CARL COUTELLE, Elberfeld, Germany, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Mar. 20, 1911. Serial No. 615,670. (Cl. 23—24.)

1. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including isoprene.

2. The process of producing a caoutchouc-like substance which comprises heating a mixture of erythrene hydrocarbons including isoprene under caoutchouc-forming conditions until a product results insoluble in acetone.

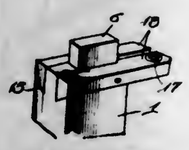
3. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including erythrene and a methylerythrene.

4. The process of producing a caoutchouc-like substance which comprises heating a mixture of erythrene hydrocarbons including erythrene and a methyl-erythrene under caoutchouc-forming conditions until a product results insoluble in acetone.

5. The process of producing a caoutchouc-like substance which comprises polymerizing a mixture of erythrene hydrocarbons including erythrene and isoprene.

[Claims 6 to 10 not printed in the Gazette.]

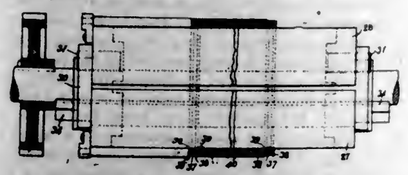
1,062,916. WINDOW-SASH. OSCAR L. HUTTO, Pelion, S. C., assignor of one-half to Jophes Perry Hutto, Pelion, S. C. Filed May 4, 1912. Serial No. 695,268. (Cl. 20—56.2.)



1. A window sash including a bottom rail and stiles secured thereto, said rail and stiles being provided on their adjoining edges with pane-receiving grooves, a pane seated in said grooves, the stiles being provided at their upper ends with upwardly projecting tenons, a top rail formed with recesses designed to receive said tenons and of a depth in proportion to the tenons sufficient to hold the top rail spaced from the main portions of the stiles, the said stiles being formed on opposite sides of each tenon with inwardly beveled recesses and removable sash-retaining strips seated in said recesses on opposite sides of said tenons and having beveled lower faces at their ends corresponding to the bevel of the recesses, said strips being interposed between the top rail and main portions of the stiles.

2. A sash of the character described, including a bottom rail and stiles secured thereto, said rail and stiles being formed on their adjoining edges with pane-receiving grooves, panes seated in said grooves, each of said stiles being provided at its upper end with an upwardly projecting tenon and with recesses on opposite sides of said tenons, a top rail formed in its lower face and at its ends with recesses adapted to receive said tenons, removable sash-retaining strips seated in the recesses of the stiles on opposite sides of the tenons and interposed between the main portions of the stiles and the top rail and engaged by the latter, fastening devices securing the sash-retaining strips to the stiles and other fastening devices securing the top rail to the respective sash-retaining strips.

1,062,917. PRINTING-PRESS. HANS LOUIS JENSEN, Dayton, Ohio, assignor to The Egry Register Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 2, 1912. Serial No. 668,868. (Cl. 101—90.)

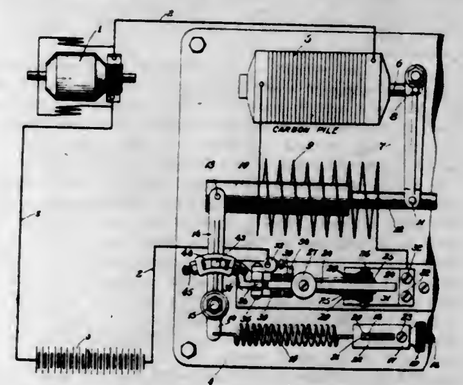


1. A printnig roll comprising a plurality of longitudinal sections movably connected one to the other, means for moving one of said sections relatively to the other, and clamping rings extending about the exterior of said sections and adapted to engage the printing plates, whereby said plates may be clamped to said roll.

2. A printing roll comprising two longitudinal sections pivotally connected one to the other, a link pivotally connected to one of said sections, a pin eccentrically mounted in the other of said sections and extending through said link, whereby the rotation of said pin will move one of said members toward or away from the other, clamping rings extending about the exterior of said sections and adapted to extend over the edges of the printing plates, whereby the expansion of said sections will cause said plates to be clamped between the sections and the rings.

3. A printing roll comprising two longitudinal sections pivotally connected one to the other, a link pivotally connected to one of said sections, a pin eccentrically mounted in the other of said sections and extending through said link, whereby the rotation of said pin will move one of said members toward or away from the other, and means for locking said sections in adjusted positions, clamping rings extending about the exterior of said sections and adapted to extend over the edges of the printing plates, whereby the expansion of said sections will cause said plates to be clamped between the sections and the rings.

1,062,918. ELECTRICAL SYSTEM AND APPARATUS THEREFOR. JOHN W. JEPSON, Depew, and ALEXANDER MCGARY, New York, N. Y., assignors, by mesne assignments, to Gould Coupler Co., a Corporation of New York. Filed Aug. 20, 1909. Serial No. 513,760. (Cl. 171—314.)



1. The combination of a storage battery, a source of electrical energy for charging the same, a carbon pile resistance in series with the battery, a coil for controlling said resistance responsive to variations in the battery current, and means controlled by said coil for opening the battery circuit.

2. The combination of a storage battery, a source of electrical energy for charging the same, a variable resistance for regulating the battery current and a coil for controlling said resistance responsive to variations in the battery current, and means regulated by said coil for automatically stopping the battery current when the current in said coil exceeds a predetermined value, and for automatically stopping the battery current when the current in said coil decreases below a predetermined value.

3. The combination of a storage battery, a source of electrical energy for charging the same, a variable resistance for regulating the battery current and a coil and means for controlling the increase and decrease of said resistance responsive to variations in the battery current and for opening the battery circuit when the battery current decreases below a predetermined value and for opening the battery circuit when the battery current rises above a predetermined value.

4. The combination of a storage apparatus, a source of energy for charging the same, a variable resistance

for regulating the charging current and means for controlling the increase and decrease of said resistance responsive to variations in the charging current and for stopping the charging current when it decreases below a predetermined value responsive to a definite change in said resistance.

5. The combination of a storage apparatus, a source of energy for charging the same, a variable resistance for regulating the charging current and means for controlling the increase and decrease of said resistance responsive to variations in the charging current and for stopping the charging current when it increases above a predetermined value responsive to a definite change in said resistance.

[Claims 6 to 26 not printed in the Gazette.]

1,062,919. MUSHROOMING BULLET. THOMAS C. JOHNSON, New Haven, Conn., assignor to Winchester Repeating Arms Co., New Haven, Conn., a Corporation. Filed Jan. 14, 1913. Serial No. 741,918. (Cl. 102—28.)



1. As a new article of manufacture, a mushrooming bullet consisting of a soft-metal slug and a jacket inclosing the same, the forward end walls of the jacket being reduced in thickness and projecting sufficiently beyond the forward end of the slug to form a hollow chamber in front of the same.

2. As a new article of manufacture, a mushrooming bullet consisting of a soft-metal slug having a cavity in its outer end, and a drawn sheet-metal jacket having its forward end reduced in thickness and made enough longer than the slug to form a hollow chamber in front of the cavity in the slug and in line therewith.

3. As a new article of manufacture, a mushrooming bullet consisting of a soft-metal slug formed in its outer end with a cavity, and a sheet-metal jacket having its side walls reduced in thickness from end to end and made longer than the slug to project beyond the forward end thereof to produce when contracted a hollow thin-walled chamber in front of the cavity in the slug.

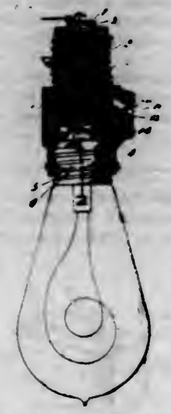
4. As a new article of manufacture, a mushrooming bullet consisting of a soft-metal slug formed in its outer end with a concentric cavity the inner end of which is larger than its outer end for facilitating the mushrooming of the slug, and a sheet-metal jacket projecting beyond the forward end of the slug and forming a hollow chamber in front of the said cavity therein.

1,062,920. SAFETY LAMP PLUG AND SOCKET. HOWARD C. JONES and CHARLES M. WEEKS, Somerville, Mass. Filed Jan. 17, 1913. Serial No. 742,562. (Cl. 173—356.)

1. In a device of the character described, an insulating body having a plug portion, an exteriorly-threaded conducting member secured thereto and a pointed screw passing diagonally through said plug portion and so arranged that its point will penetrate a socket receiving said plug.

2. In a device of the character described, an insulating body having a plug portion at one end, a socket portion at the other end and a central enlargement between said portions, said central enlargement being provided with a key-hole, plug-locking means accessible from said key-hole and lamp-locking means also accessible from said key-hole, the end of said lamp-locking means being provided with an aperture of definite shape arranged to receive a correspondingly-shaped key and said end when in locking position projecting beyond the end of said plug-locking means.

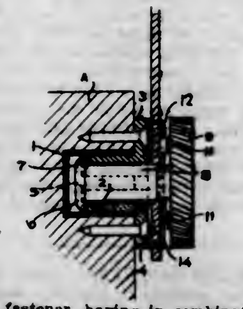
3. In a device of the character described, an insulating body having a plug portion at one end, a socket portion at the other end and a central enlargement between said portions, said central enlargement being provided with a key-hole, plug-locking means accessible from said key-hole and lamp-locking means also accessible from said key-hole, the ends of said plug-locking means and lamp-locking means each being provided with an aperture of definite shape arranged to receive a correspondingly-shaped key.



4. In a device of the character described, an insulating body having a plug portion, an exteriorly-threaded conducting member secured thereto and a key-controlled pointed screw passing diagonally through said plug portion and so arranged that its point will penetrate a socket receiving said plug.

5. In a device of the character described, an insulating body having a plug portion at one end, a socket portion at the other end and a central enlargement between said portions, said central enlargement being provided with a key-hole, key-controlled plug-locking means accessible from said key-hole and key-controlled lamp-locking means also accessible from said key-hole.

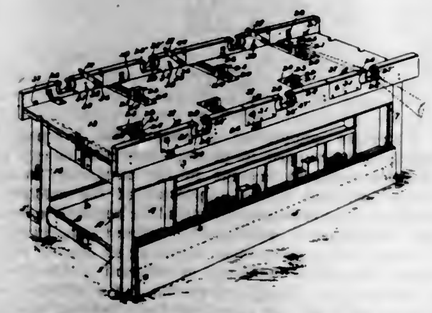
1,062,921. CURTAIN-FASTENER FOR AUTOMOBILES. WALTER H. KINSEL, Detroit, Mich. Filed Sept. 23, 1912. Serial No. 721,886. (Cl. 24—221.)



1. A curtain fastener, having in combination, a socket member provided with a slot, an eyelet adapted to clasp the curtain and provided with a portion struck up from the substance of the eyelet to act as a spring member, and a key member provided with a key portion insertible through the eyelet and through the slot of the socket member and adapted to be turned to fasten the curtain to the socket member, the said spring member of the eyelet acting to force the key member away from the socket member and to thereby hold the key portion in a given position when it has been turned, substantially as described.

2. A curtain fastener, having in combination, a socket member provided with a slot and a recess in one end, an eyelet adapted to clasp the curtain and provided with a struck-up portion that acts as a spring lug and a key member provided with a key portion insertible through the eyelet and the slot of the socket member and adapted to be turned to rest in said recess in the end of the socket member, the same being held therein by the action of the spring lug in tending to force the key member away from the socket member, substantially as described.

1,062,922. RIFLE-CLEANING TABLE. DANIEL L. LARSEN, Duluth, Minn. Filed Dec. 27, 1911. Serial No. 668,193. (Cl. 42—91.)



1. A cleaning table comprising legs, side rails connecting the legs together, rail sections arranged in pairs and hingedly connected with the legs at the ends of the table, the members of each pair being hingedly connected together to swing inwardly, means for holding the members of the pairs in alinement with each other, a top hinged to one of the said side rails, holding devices mounted upon the top, and means for securing the top in folded position against the legs at one side of the table.

2. A cleaning table comprising legs, side rails connecting the legs together, rail sections arranged in pairs and hingedly connected together and hinged to the legs at the ends of the table, a top hinged to one of the side rails, retaining devices mounted on the top, means for holding the top in folded position against two of the end legs, and a casing arranged between the connecting side rails of the other two end legs.

3. A cleaning table comprising legs, side rails connecting the legs together, rail sections arranged in pairs and hingedly connected together and hingedly connected with the legs and arranged to swing inwardly at their inner ends, means for holding the said rail sections in alinement with each other, a top hingedly mounted upon one of the side rails, means for securing the top in folded position against two of the legs, cleats carried at the under side of the top, keepers carried by the said cleats, keepers located at the edges of the top, rails having tongues adapted to enter the keepers upon the top and adapted to enter the keepers upon the cleats, blocks adjustably mounted upon the top, and clamping devices carried by the last mentioned rails.

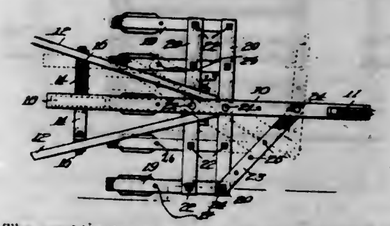
4. In a cleaning table, a top, oppositely disposed parallel rails detachably mounted at the edges of the top, gun clamping members carried by said rails and disposed in staggered relation to each other, perforated muzzle holding blocks slidably mounted upon the top, and means for holding said blocks in adjusted positions.

5. In a cleaning table, a top, rails detachably mounted at the edges thereof, clamping members carried by the rails, perforated muzzle holding blocks adjustably mounted upon the top and having openings, and slides carried by the blocks and adapted to be projected across the openings.

[Claims 6 to 9 not printed in the Gazette.]

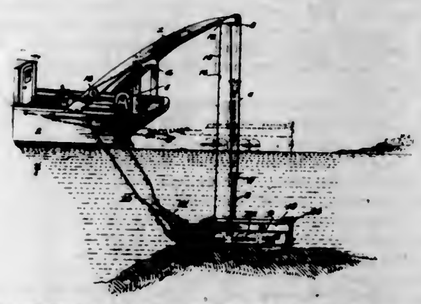
1,062,923. CULTIVATOR. JOSEPH H. MCGOWEN, Watha, N. C. Filed Dec. 6, 1911. Serial No. 664,308. (Cl. 97—10.)

1. The combination of a beam, a pair of parallel crossbars pivoted intermediate their ends to the beam to swing in a horizontal plane, and extending from opposite sides of the beam, cultivator teeth, and pivot bolts passing through the bars and the shanks of the cultivator teeth, said shanks having a plurality of bolt holes to permit adjustment of the teeth horizontally relative to one another forward or rearward of the bars to vary the grouping of the teeth.



2. The combination of a beam, a pair of parallel crossbars pivoted intermediate their ends to the beam to swing in a horizontal plane, and extending from opposite sides of the beam, cultivator teeth, pivot bolts passing through the bars and the shanks of the cultivator teeth, said shanks having a plurality of bolt holes to permit adjustment of the teeth horizontally relative to one another forward or rearward of the bars to vary the grouping of the teeth, and a tooth mounted beneath the beam and adjustable horizontally in the direction of the length thereof relative to the other teeth.

1,062,924. CHANNEL-PLOW. JOHN B. MERCER, Wilmington, N. C. Filed Mar. 22, 1912. Serial No. 685,601. (Cl. 37—13.)



1. An apparatus for loosening submerged soil comprising a hood, soil engaging members located thereunder, means for connecting the hood with a vessel, a cable connected with the hood, and a sounding line connected with the hood.

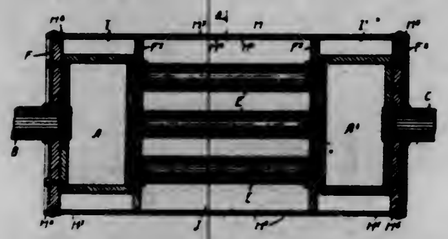
2. An apparatus for loosening submerged soil comprising a hood, said hood including runners, agitating means supported within the hood, said hood being formed with curved suction creating means disposed to create suction at the rear end of the hood as the apparatus is drawn through the water.

3. An apparatus for loosening and distributing submerged soil comprising a hood open at both ends, the opening in the front of the hood being restricted by an obliquely disposed member, agitating means supported within the hood, and suction creating means disposed at the rear of the hood.

4. An apparatus for loosening and distributing submerged soil comprising a hood, said hood including forwardly disposed sloping members, rearwardly disposed suction creating means, and soil agitating means disposed within the hood.

5. An apparatus for loosening and distributing submerged soil comprising a hood open at both ends, the opening in the front of said hood being smaller than the opening at the rear, an agitating mechanism supported within the hood, and a flared plate disposed at the rear of said hood.

1,062,925. FOOT-WARMER. JOHN PHILIPCIK, Jr., New Canaan, Conn. Filed Aug. 29, 1912. Serial No. 717,720. (Cl. 126—204.)



1. A foot warmer, comprising end chambers spaced apart, an inlet pipe connected with the outer end of one of the said chambers, an outlet pipe connected with the outer end of the other chamber, spacing plates attached to the outer and inner ends of each chamber, the spacing plates extending beyond the front, rear, top and bottom of the said chambers, pipes connecting the said chambers with each other at their inner sides, and a shell inclosing the said spacing plates and forming with the said chambers end heating compartments, and forming with the said pipes a middle heating compartment.

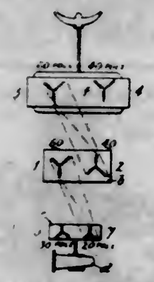
2. A foot warmer, comprising end chambers spaced apart, an inlet pipe connected with the outer end of one of the said chambers, an outlet pipe connected with the outer end of the other chamber, spacing plates attached to the outer and inner ends of each chamber, the spacing plates extending beyond the front, rear, top and bottom of the said chambers, pipes connecting the said chambers with each other at their inner sides, and a shell inclosing the said spacing plates and forming with the said chambers end heating compartments and forming with the said pipes a middle heating compartment, the tops of the said spacing plates and the top of the shell being inclined.

3. A foot warmer, comprising end chambers spaced apart, an inlet pipe connected with the outer end of one of the said chambers, an outlet pipe connected with the outer end of the other chamber, spacing plates attached to the outer and inner ends of each chamber, the spacing plates extending beyond the rear, front, top and bottom of the said chambers, pipes connecting the said chambers with each other at their inner sides, and a shell inclosing the said spacing plates and forming with the said chambers end heating compartments, and forming with the said pipes a middle heating compartment, the said shell being provided at the front and top with apertures at each heating compartment.

4. A foot warmer, comprising end chambers spaced apart, an inlet pipe connected with the outer end of one of the said chambers, an outlet pipe connected with the outer end of the other chamber, spacing plates attached to the outer and inner ends of each chamber, the spacing plates extending beyond the front, rear, top and bottom of the said chambers, pipes connecting the said chambers with each other at their inner sides, and a shell inclosing the said spacing plates and forming with the said chambers end heating compartments, and forming with the said pipes a middle heating compartment, the shell being formed of three superimposed layers, of which the inner is made of sheet metal, the middle one of asbestos and the outer one of a fabric material.

1,062,926. DREDGER. JOHN REID and HENRY ALEXANDER MAVOR, Glasgow, Scotland. Filed Jan. 14, 1913. Serial No. 741,979. (Cl. 37—9.)

1. A suction dredger comprising in combination a power plant having a plurality of energy sources, each adapted to supply energy at a predetermined rate, a propulsion motor having a plurality of energy translating devices, each adapted to receive energy from any one of said sources, a suction pump motor having a plurality of energy translating devices, each adapted to receive energy from any one of said sources, and means for delivering energy from any one of said sources to any one of said translating devices.



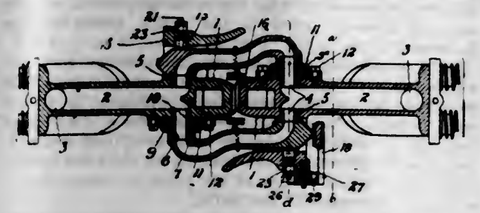
2. A dredger, comprising in combination a source of electric power arranged to produce electrical energy approximately equal in amount to the maximum amount of energy required in the propulsion of the dredger, a propulsion motor arrangement including an electric motor having a plurality of windings of different pole numbers, a dredging motor arrangement including an electric motor having a plurality of windings of different pole numbers, and means for electrically connecting any winding of any motor to the source of power so that varying amounts of electrical energy can be delivered to said motors whereby the distribution of energy produced by said source can be proportioned between said motors as desired.

3. A dredger, comprising in combination an electric generating plant arranged to deliver electrical energy of a plurality of different periodicities, the total amount of energy produced by said plant being approximately equal to the maximum amount of energy required in the propulsion of the dredger, a propulsion motor having a plurality of windings of different pole numbers, a dredging pump, an electric motor operatively connected to said pump and having a plurality of windings of different pole numbers, and means for delivering electrical energy of any periodicity generated by said plant to any winding of the propulsion motor and to any winding of the pump motor whereby the distribution of energy generated by said plant can be proportioned between said motors as desired.

4. A dredger, comprising in combination an electric generating plant arranged to deliver electrical energy of a plurality of different periodicities, the total amount of energy generated by said plant being approximately equal to the maximum amount of energy required in the propulsion of the dredger, a propulsion motor having a plurality of windings of different pole numbers, a dredging pump, an electric motor operatively connected to said pump and having a plurality of windings of different pole numbers, means for delivering electrical energy of any periodicity generated by said plant to any winding of the propulsion motor and to any winding of the pump motor whereby the distribution of energy generated by said plant can be proportioned between said motors as desired, and switching mechanism coöperating with said last mentioned means whereby said propulsion motor can be connected at will to said generating plant to produce a plurality of different speeds of said dredger in a forward or reverse direction and said pump motor can be connected at will to said generating plant to produce a plurality of pumping speeds.

1,062,927. AUTOMATIC PIPE CONNECTION. JOHN W. ROBERTS, Sarnia, Ontario, Canada. Filed May 8, 1912. Serial No. 695,915. (Cl. 188—13.)

1. In pipe connections the combination of a head; a fluid passage therein terminating in two laterally and oppositely directed orifices; a coupling pipe connected with the head and extending forwardly from one of said orifices and shaped at its forward end to co-act with the free orifice of an opposed head; and a flaring guard at the opposite side of the head from the coupling pipe adapted to guide into place the free end of the coupling pipe of an opposed head and hold it in co-acting relationship with the fluid passage orifice at that side of the head.



2. In pipe connections the combination of a head; a fluid passage therein terminating in two laterally and oppositely directed orifices; a coupling pipe connected with the head and extending forwardly from one of said orifices and shaped at its forward end to co-act with the free orifice of an opposed head; a flaring guard at the opposite side of the head from the coupling pipe adapted to guide into place the free end of the coupling pipe of an opposed head; and movable means tending to press the pipe toward the orifice at that side of the head.

3. In pipe connections the combination of a head; a fluid passage therein terminating in two laterally and oppositely directed orifices; a coupling pipe connected with the head to swing vertically and extending forwardly from one of said orifices and shaped at its forward end to co-act with the free orifice of an opposed head; and a flaring guard at the opposite side of the head from the coupling pipe adapted to guide into place the free end of the coupling pipe of an opposed head and hold it in co-acting relationship with the fluid passage orifice at that side of the head.

4. In pipe connections the combination of a head; a fluid passage therein terminating in two laterally and oppositely directed orifices; a coupling pipe connected with the head and extending forwardly from one of said orifices and shaped at its forward end to co-act with the free orifice of an opposed head; a flaring guard at the opposite side of the head from the coupling pipe adapted to guide into place the free end of the coupling pipe of an opposed head; movable means operable to press the latter pipe toward the orifice at that side of the head; and means operable by the free end of said pipe to cause the operation of said movable means.

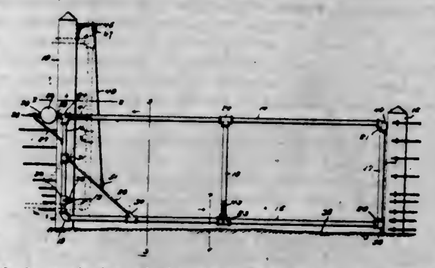
5. In pipe connections the combination of a head; a fluid passage therein terminating in two laterally and oppositely directed orifices; a coupling pipe connected with the head and extending forwardly from one of said orifices and shaped at its forward end to co-act with the free orifice of an opposed head; a flaring guard at the opposite side of the head from the coupling pipe adapted to guide into place the free end of the coupling pipe of an opposed head; movable means operable to press the latter pipe toward the orifice at that side of the head; means operable by the free end of said pipe to cause the operation of said movable means; and spring means tending to maintain the movable means in normal position.

[Claims 6 and 7 not printed in the Gazette.]

1,062,928. TILTING GATE. HUGH H. ROOF, Biloxi, Miss. Filed Mar. 15, 1912. Serial No. 684,054. (Cl. 39—13.)

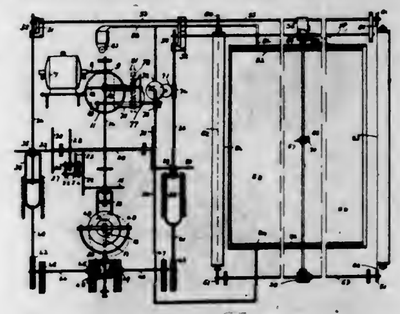
1. In a device of the class described, co-acting posts spaced apart, a pivot member extending through the posts, a gate including a vertical end member, and a coupling member betwen the pivot member and the vertical gate member and comprising a sleeve engaging the gate member and sleeves spaced apart and mounted for rotation on the pivot member and bearing against the confronting faces of the posts, said sleeves being united.

2. In a device of the class described, co-acting posts spaced apart, a gate including frame members and movable between said posts, a pivot member extending through said posts, means for coupling said gate to said pivot member, and stop members connected to said gate and each including an inclined portion and a lateral projection to guide the gate between the posts and to limit the movement in one direction and to hold the gate from lateral displacement when in open position.



3. In a device of the class described, co-acting posts spaced apart, a gate including frame members and movable between said posts, a pivot member extending through said posts, means for coupling said gate to said pivot member, stop members connected to said gate and each including an inclined portion and a lateral projection to guide the gate between the posts and to limit the movement in one direction and to hold the gate from lateral displacement when in open position, a counter-weight support extending from said gate, and a counter-weight carried by said support.

1,062,929. APPARATUS FOR INDICATING AND RECORDING THE COURSE OF NAVIGABLE VESSELS. VICTOR ROŽIĆ, Bakar, Austria-Hungary. Filed Feb. 6, 1911. Serial No. 606,923. (Cl. 234—26.5.)



1. A nautical apparatus comprising in combination, a chart, a marker for indicating on the chart the direction or course of the vessel with respect to the points of the compass, coacting devices for advancing the marker on the chart in any direction corresponding to the course of the vessel and each device having an adjustable friction wheel, fundamental means adapted to be driven at a speed corresponding to the speed of the vessel and having friction wheels engaging and driving the adjustable wheels of said devices, and gyroscopic mechanism for adjusting the wheels of said devices with respect to the wheels of said fundamental means for varying the action of the marker, substantially as described.

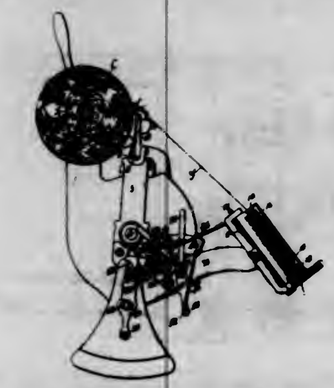
2. A nautical apparatus comprising in combination, a chart, a marker for indicating on the chart the direction or course of the vessel with respect to the points of the compass, coacting devices for moving the marker on the chart in any direction corresponding to any direction of movement of the vessel, a fundamental wheel adapted to be driven at a rate of speed corresponding to the speed of the vessel, a friction wheel driven by the fundamental wheel, a Mercator curve mechanism driven by one of said marker actuating devices for adjusting said friction wheel with respect to said fundamental wheel to alternate speed of the former, driving connection means between said fric-

tion and said coacting devices, and gyroscopic mechanism for altering the speed of said devices with respect to each other, substantially as described.

3. A nautical apparatus comprising in combination, a chart, a marker for indicating on the chart the direction or course of the vessel with respect to the points of the compass, coacting devices for moving the marker on the chart in a direction corresponding to any direction of movement of the vessel, fundamental mechanism having a chain speed device connected to drive said coacting devices and itself adapted to be driven at a rate of speed corresponding to the speed of the vessel, Mercator curve mechanism driven by one of said coacting devices for operating said chain speed device, a gyroscopic mechanism for altering the speed of said coacting devices with respect to each other, substantially as described.

4. A nautical apparatus comprising in combination, a chart, a marker for indicating on the chart the direction or course of the vessel with respect to the points of the compass, coacting devices for moving the marker on the chart in any direction corresponding to any direction of movement of the vessel, fundamental mechanism connected to drive said coacting devices and having a chain speed device whereby the rate of speed of drive imparted to said coacting devices may be varied, and gyroscopic mechanism for altering the individual speed of said coacting devices with respect to each other, substantially as described.

1,062,930. WINDING-MACHINE. CLAES RYDEN and FRANK D. BABCOCK, Providence, R. I., assignors to Universal Winding Company, Portland, Me., a Corporation of Maine. Filed Feb. 10, 1911. Serial No. 607,787. (Cl. 242—45.)



1. In a winding-machine, the combination with the winding-spindle and thread-guide arranged to separate from each other as the cop increases in diameter, of a lever acting to resist such separation, a weight on said lever, and means to automatically move the weight along the lever to vary the operative force thereof concurrently with the growth of the cop.

2. In a winding-machine, the combination with the winding-spindle and thread-guide arranged to separate as the cop is built up on the spindle, of a lever acting to maintain the thread-guide in contact with the surface of the cop, a weight on said lever, and means to automatically move the weight along the lever during the winding to relieve the pressure on the guide as the cop increases in diameter.

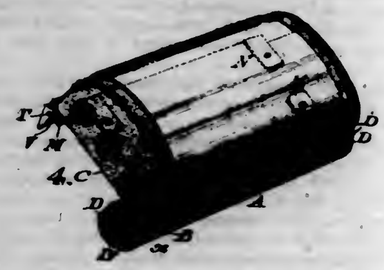
3. In a winding-machine, the combination with a winding-spindle, of a thread-guide adapted to bear on the surface of the cop throughout the winding, a lever to apply pressure to said thread-guide, a weight on said lever, and means to automatically adjust the weight along the lever to vary the pressure on the guide as the cop increases in diameter.

4. In a winding-machine, the combination with the winding-spindle, of a thread-guide arranged to recede therefrom as the cop increases in diameter, a lever acting to resist the movement of the guide away from the spindle, a weight on said lever, and means to move said weight on the lever concurrently with the movement of the guide to vary the operative force of the weight acting through the lever.

5. In a winding-machine, the combination with the winding-spindle, of a thread-guide arranged to recede therefrom as the cop increases in diameter, a pivoted lever acting to resist the movement of the guide away from the spindle, a weight on said lever, and means to move the weight toward the fulcrum of the lever concurrently with the movement of the guide to reduce the resistance to movement of the latter.

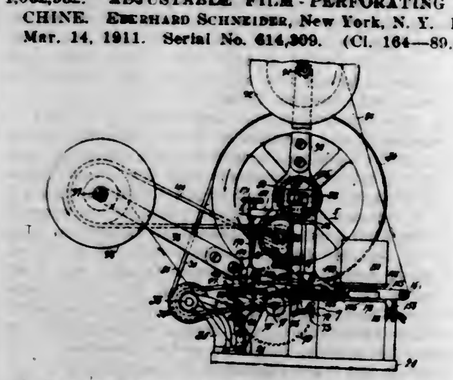
[Claims 6 to 23 not printed in the Gazette.]

1,062,931. ATTACHMENT FOR HEAD-RESTS OF BARBERS' OR OTHER CHAIRS. LEWIS G. SALMON, Philadelphia, Pa. Filed Aug. 31, 1908. Serial No. 450,937. (Cl. 155—10.)



In an attachment for a head rest of a chair, a paper receiving body having an ear thereon, and a reversible bracket adapted to be fitted into either end of said ear and secured thereto.

1,062,932. ADJUSTABLE FILM-PERFORATING MACHINE. EBERHARD SCHNEIDER, New York, N. Y. Filed Mar. 14, 1911. Serial No. 614,309. (Cl. 164—89.)



1. In a perforating machine the combination of a driving sprocket drum for a film, means to perforate said film and manually operated means to effectively engage said film at various circumferential positions on said drum.

2. In a perforating machine the combination of a drum for a film, means to maintain said film in tensional engagement with said drum, perforating means adjacent to the drum, a manually adjustable guide roller to bear on the film to maintain said film in various operative positions with the circumferential surface of the drum.

3. In a perforating machine the combination of a drum for a film, perforating means adjacent to the drum, and a manually adjustable guide roller to bear on the film to maintain it in engagement with the drum at various circumferential portions thereof.

4. In a perforating machine the combination of a sprocket drum for a film having index marks, means adjacent to the drum to perforate the same, means to locate the film in effective engagement therewith and at various circumferential portions thereof and an indicator in the machine to indicate the place of engagement of the film with said drum.

5. In a perforating machine the combination of a sprocket drum for a film having index marks, pins extending from the drum, means in the machine to perforate the film, means to effectively engage one of said pins with the film, and a pointer in the machine to indicate the location of the pin when it engages said film.

[Claims 6 to 9 not printed in the Gazette.]

1,062,933. KNOB SHANK AND HOLDER. HENRY R. STADTMILLER, Stamford, Conn., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed Dec. 17, 1912. Serial No. 737,357. (Cl. 70—10.)



1. A knob shank and holder consisting of an outer shell, an inner core and a frame independent of the shell and core and having a central detachable engagement with the core, the peripheral edge of the frame being clamped to the shell.

2. A knob shank and holder consisting of an outer shell or casing having a cylindrical section and a flaring end, an inner member approximately fitting the cylindrical portion of the shell, and a frame independent of the shell and inner member and having a central detachable engagement with the latter for locking the same against rotation and supporting it against endwise displacement, the outer edge of said frame being locked in place by bending the metal of the outer flaring end of the shell around the outer edge of the frame.

3. A knob shank and holder consisting of an outer shell of wrought metal struck up into shape, and an inner core of harder metal, one end of said core being angular in cross section, and a frame having an opening to receive the angular end of the core, the said frame being held in place by the overlapping of the surrounding shell.

4. A knob shank and holder comprising a shell or casing having a cylindrical portion and a flaring end, a metal core approximately filling said cylindrical portion, and a dish shaped spring metal frame or spider engaging one end of said core and provided with a series of radially projecting fingers adapted to engage the inner face of the flaring end of the shell and be locked to the latter by bending the outer edge of the flaring end down over said fingers.

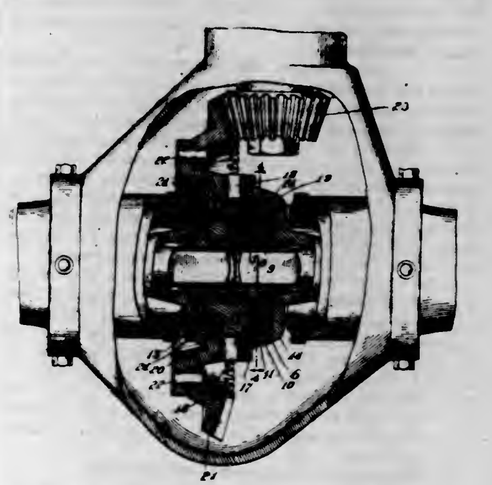
5. A knob shank and holder consisting of an outer shell and inner core, a spring metal spider engaging the inner end of the core and held in place by the overlapping of the surrounding metal of the shell, the periphery of said spider being forced forwardly and so held by the shell whereby it bears with a yielding pressure against the end of the core.

1,062,934. POWER-TRANSMISSION MECHANISM. CLARENCE W. TAYLOR, Chicago, Ill., assignor to Agnes Poage Taylor, Chicago, Ill. Filed Nov. 4, 1912. Serial No. 729,208. (Cl. 74—7.)

1. In a power transmission mechanism, a coupling-unit comprising a drag-plate and a clutch-member both operable by a driving member.

2. In a power transmission mechanism, a coupling-unit comprising an elastic drag-plate and a clutch-member having a plurality of faces for engagement with a driven-member, the drag-plate and the clutch member being formed and mounted for relative movement.

3. A power transmission mechanism comprising, in combination with a driving member and a driven member, a fulcrumed drag-plate positioned to exert force against the driven member and a clutch-member having a plurality of engaging studs on one side and reversed-plane-surfaces on the other side and operable by the driving member.

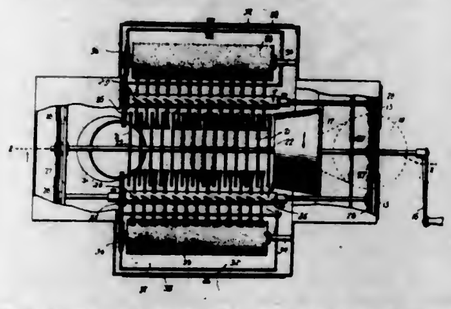


4. A power transmission mechanism comprising, in combination with independent shafts and a clutch-drum fixed to one end of each shaft and a driving member, a drag-plate-lever adjacent each clutch-drum and a clutch-member adapted to be actuated by the driving member.

5. A power transmission mechanism comprising, in combination with a driving member and a driven member, lever means for drag effort between said members.

[Claims 6 to 9 not printed in the Gazette.]

1,062,935. VEGETABLE-PEELER. HENRY TAUST, New York, N. Y. Filed Jan. 9, 1913. Serial No. 740,977. (Cl. 146—14.)



1. In a vegetable peeler, the combination of a rotary feeding device, stripping mechanism coöperating with said feeding device, said stripping mechanism including a series of flexible arms adapted to coöperate with the vegetables and each carrying one or more laterally projecting cutting claws adapted to catch the peelings and jerk the same from the vegetables, and means to operate the feeding device, and stripping mechanism simultaneously, substantially as set forth.

2. In a device of the character set forth, the combination of an inclined main shaft, feeding devices connected to said shaft comprising a series of spaced rings, stripping mechanism comprising a series of arms adapted to extend between adjacent pairs of said rings, said arms carrying flexible fingers, and means to rotate said shaft and stripping mechanism simultaneously.

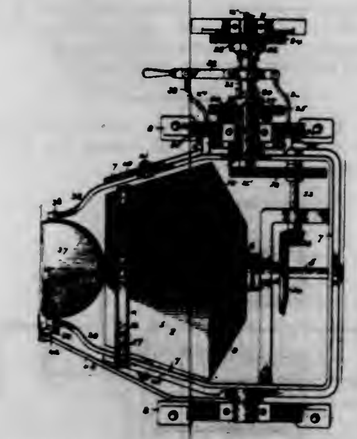
3. In a potato peeler, the combination of a feeding mechanism including a series of spaced rings and a tumbler adjacent one end of said series, means to deliver potatoes into and through the tumbler, stripping mechanism located at one side and parallel to the feeding mechanism and comprising a series of arms adapted to project between adjacent rings for contact with the potatoes as they progress through the feeder, and means to simultaneously rotate the feeder and said stripping mechanism at different speeds.

4. In a potato peeler, the combination of a feeding mechanism including a tumbler and a series of rings beyond the tumbler, each ring being held in place and operated by means of spokes, said spokes forming the feeder into a plurality of runways into which the potatoes are delivered by the tumbler, stripping mechanism associated with and parallel to the feeder and including a plurality of arms carrying flexible fingers which are adapted to be extended into contact with the potatoes as they progress along said runways, and means to operate the feeding mechanism and stripping mechanism simultaneously.

5. In a potato peeler, the combination of a main shaft, a tumbler connected to the shaft, a series of spaced rings connected to the shaft in the rear of said tumbler, a countershaft parallel to the main shaft, means connected to said shafts for simultaneous rotation in opposite directions, and a plurality of stripper arms arranged in sets, each set adapted to project between a pair of said rings and each arm including a series of flexible fingers having claws for coöperation with the potatoes passing along said rings.

[Claims 6 and 7 not printed in the Gazette.]

1,062,936. CONCRETE-MIXER. GUSTAVUS A. TUERK, Berlin, Ontario, Canada. Filed July 17, 1912. Serial No. 709,940. (Cl. 83—73.)



1. A mixing pot of the class described, consisting of a main forward truncated cone portion of an acute type and pentagonal in cross section, a reversely arranged rear cone portion of an obtuse type and pentagonal in cross-section, and an inner and smaller cone portion of a pentagonal form in cross section and disposed in a reverse direction to the aforesaid rear portion and connected thereto, substantially as set forth.

2. A mixing pot of the class described consisting of a main forward truncated cone portion of an acute type and polygonal in cross-section, a reversely arranged rear cone portion of an obtuse type and polygonal in cross-section, and an inner and smaller cone portion of a polygonal form in cross-section and disposed in a reverse direction to the aforesaid rear portion and connected thereto, substantially as set forth.

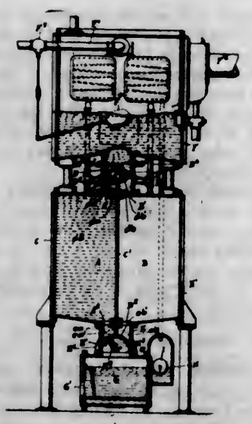
3. In a concrete mixer, an open ended mixing pot, an oscillatory supporting frame for said pot, a main frame having journals for said supporting frame, a carrying shaft extending rearwardly from the mixing pot and journaled in said supporting frame, a driving shaft extending axially through a journal trunnion of said frame, operative connections between the driving and carrying shafts aforesaid, carrying arms extending from the forward end of the supporting frame, a filling bucket pivotally mounted at the forward ends of said arms, and means for automatically tilting said bucket as the forward end of the supporting frame is tilted upwardly, substantially as set forth.

4. In a concrete mixer, an open ended mixing pot, an oscillatory supporting frame for said pot, a main frame having journals for said supporting frame, a carrying shaft extending rearwardly from the mixing pot and journaled in said supporting frame, a driving shaft extending axially through a journal trunnion of said frame, operative connections between the driving and carrying shafts aforesaid, carrying arms pivoted to the forward end of the supporting frame, means for limiting the independent pivotal movement of said arms, a filling bucket pivotally mounted on the forward ends of said arms, and means for automatically tilting said bucket as the forward end of the supporting frame is tilted upwardly, substantially as set forth.

5. In a concrete mixer, an open ended mixing pot, an oscillatory supporting frame for said pot, a main frame having journals for said supporting frame, a carrying shaft extending rearwardly from the mixing pot and journaled in said supporting frame, a driving shaft extending axially through a journal trunnion of said frame, operative connections between the driving and carrying shafts aforesaid, carrying arms pivoted in flaring recesses in the supporting frame, a filling bucket pivotally mounted on the forward ends of said arms, and means for automatically tilting said bucket as the forward end of the supporting frame is tilted upwardly, substantially as set forth.

[Claim 6 not printed in the Gazette.]

1,062,937. LIQUID-MEASURING APPARATUS. AXEL B. WALLEM, Cynwyd, Pa., assignor to Joseph S. Lovering Wharton, William S. Hallowell, and John C. Jones, doing business as The Firm of Harrison Safety Boiler Works, Philadelphia, Pa. Filed May 29, 1912. Serial No. 700,359. (Cl. 73—167.)



1. In a liquid measuring apparatus, the combination of two measuring chambers, valve mechanism controlling the admission to and discharge from said chambers of the liquid measured, said mechanism being shiftable back and forth from one position in which one chamber fills and the other empties to a second position in which the one chamber empties and the other chamber fills, a receptacle into which both chambers empty, and means responsive to the height of water level in said receptacle for shifting said valve mechanism on a predetermined fall of said level.

2. In a liquid measuring apparatus, the combination of two measuring chambers, valve mechanism controlling the admission to and discharge from said chambers of the liquid measured and shiftable back and forth from one position in which one chamber fills and the other empties to a second position in which the one chamber empties and the other chamber fills, a receptacle into which both chambers empty, a motor for shifting said valve mechanism, and a controlling device for said motor responsive to the rise and fall of the liquid level in said receptacle.

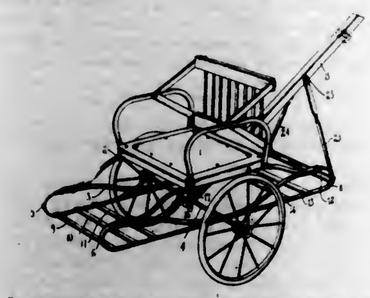
3. In a liquid measuring apparatus, the combination of two measuring chambers, valve mechanism controlling the admission to and discharge from said chambers of the liquid measured, said valve mechanism being shiftable back and forth from one position in which one chamber fills and the other empties to a second position in which the one chamber empties and the other chamber fills, a receptacle into which both chambers empty, and mechanism for shifting said valve mechanism including controlling means jointly responsive to the accumulation of liquid in said receptacle and to the distribution of liquid in said chambers.

4. In a liquid measuring apparatus, the combination of two measuring chambers, valve mechanism controlling the admission to and discharge from said chambers of the liquid measured, and shiftable back and forth from one position in which one chamber fills and the other empties to a second position in which the one chamber empties and the other chamber fills, a receptacle into which both chambers empty, means for shifting said valve mechanism including a controlling device responsive to the rise and fall of the liquid level in said receptacle, and means responsive to the distribution of liquid in said chambers for preventing a second shifting of said valve mechanism until after a change in said distribution of liquid following the preceding shift of said valve mechanism.

5. In a liquid measuring apparatus, the combination of two measuring chambers, valve mechanism controlling the admission to and discharge from said chambers of the liquid measured, said mechanism being shiftable back and forth from one position in which one chamber fills and the other empties to a second position in which the one chamber empties and the other chamber fills, a receptacle into which both chambers empty, a reciprocating fluid pressure motor for shifting said valve mechanism, a valve controlling the supply of a pressure fluid to said motor, means responsive to the height of liquid level in said receptacle for operating said valve and adapted to open the latter on a predetermined fall of said level, and means including a reversing valve mechanism and a device responsive to the distribution of liquid in said chambers for governing the movements of said motor occurring when said valve is open.

[Claims 6 to 10 not printed in the Gazette.]

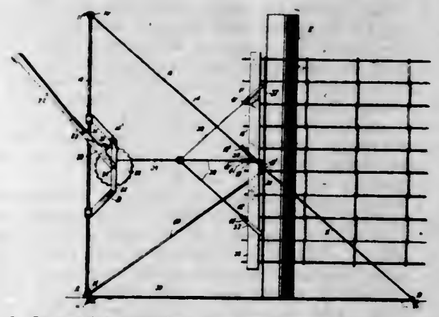
1,062,938. CHILD'S SULKY. JOEL N. WHEELER, Geneva, Ill. Filed May 11, 1911. Serial No. 626,553. (Cl. 21—12.)



1. In a child's sulky, in combination, a seat frame, an axle, a tongue, a pair of elliptic springs connecting the seat frame and axle and provided with extensions directly connected therewith to limit tilt, cross connections between the said extensions, diverging swinging braces indirectly connecting the tongue and seat frame and means for connecting the tongue with the axle.

2. In a child's sulky, in combination, a seat frame, an axle, a tongue, elliptic springs connecting the seat frame and axle and provided with extensions directly connected therewith to limit the tilt, diverging swinging links connecting the tongue and seat frame, diverging links connecting the tongue and certain of the extensions, and means for connecting the tongue with the axle.

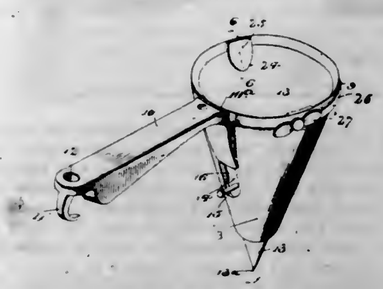
1,062,939. WIRE-STRETCHER. JESSE A. WHITE, Wilsey, Kans. Filed Apr. 20, 1912. Serial No. 691,992. (Cl. 39—51.)



1. In a wire stretcher, the combination of an upright, a cross arm fixed to the upper end of said upright, a transversely disposed anchor foot fixed to the lower end of said upright, downwardly inclined braces secured to each end of said cross arm, each of said braces being formed of inner and outer sections hinged together, ground engaging claws on the free ends of said outer sections, connections between the free ends of each outer section and the corresponding end of the anchor foot, an upwardly inclined brace having its lower end secured to the upright at its connection with the anchor foot, and a wire stretching device adjustably mounted on said upright.

2. In a wire stretcher, the combination of an upright, a cross arm fixed to the upper end of said upright, a transversely disposed anchor foot fixed to the lower end of said upright, downwardly inclined braces secured to each end of said cross arm, each of said braces being formed of inner and outer sections hinged together, ground engaging claws on the free ends of said outer sections, connections between the free ends of each outer section and the corresponding end of the anchor foot, a frame including spaced tubular portions slidably adjustable on said upright, and wire stretching means mounted in said frame.

1,062,940. DEVICE FOR FILLING ICE-CREAM CONES. BEN T. WILSON and WILTON F. RATCLIFF, Nacogdoches, Tex. Filed June 15, 1909. Serial No. 502,260. (Cl. 107—48.)



1. A filling support for frangible cones, including a cone holder adapted to entirely inclose and sheathe said cone

and formed with a cutting edge projecting beyond the pastry receptacle when the latter is in place, an ejector located within the holder and adapted to receive and engage the receptacle, means attached to the ejector and projecting through the holder for moving the ejector relatively to the holder to raise the pastry receptacle above the holder, and an adjustable stop for limiting the movement of the ejector relative to said holder.

2. A filling support for pastry receptacles, including a holder adapted to inclose and sheathe said receptacle, and an ejector located within the holder and relatively movable thereto, said ejector being adapted to receive the pastry receptacle, the upper end of the ejector being cut away at opposite points of its diameter to provide finger holds whereby the pastry receptacle may be withdrawn from engagement with the ejector.

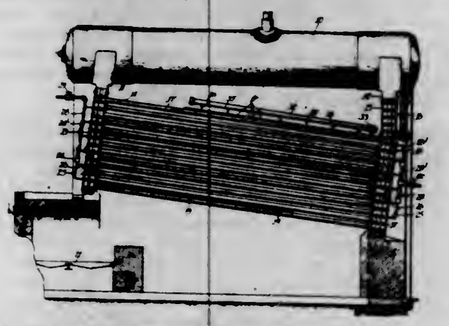
3. A filling support for pastry receptacles, including a holder adapted to inclose and insheath said receptacle, said holder, when the receptacle is in place, extending to or beyond the edge of the same, thereby protecting said edge, and an ejector located within the holder and relatively movable thereto, said ejector being adapted to receive the pastry receptacle, the upper end of the ejector being cut away at opposite points of its diameter to provide finger holds whereby the pastry receptacle may be withdrawn from engagement with the ejector.

4. A filling support for pastry receptacles, including a holder adapted to inclose and insheath said receptacle, said holder being longer than the receptacle to provide a projecting end, when the receptacle is in place, thereby protecting the edge of the receptacle, and an ejector located within the holder and formed with cut-out portions on its upper edge to permit the receptacle to be withdrawn from the ejector, the said holder on its upper edge being formed with bevel-faced lugs filling the cut-out portion of the ejector when the latter is inserted to its full extent in the holder.

5. A filling support for pastry receptacles, including a conical holder, and a conical ejector located within said holder, the larger end of the holder having its walls parallel to the longitudinal axis of the holder and provided at opposite points with inwardly projecting lugs whose faces are parallel to the longitudinal axis of the holder, said ejector having cut-out portions upon its larger end, into which said lugs project when the ejector is in place.

[Claims 6 to 10 not printed in the Gazette.]

1,062,941. **BOILER-TUBE CLEANER.** FRANCES P. WILSON, Chicago, Ill. Filed Feb. 19, 1912. Serial No. 678,618. (Cl. 122—891.)



1. In a device of the character described, the combination of a water tube boiler having opposite double wall headers each provided with rows of hollow stay bolts communicating with the boiler spaces between the water tubes of the boiler, and a manifold associated with each said header, each manifold comprising a pipe connected to a source of fluid under pressure and a series of nozzle tubes extending from said pipe and disposed in rows for permanent arrangement in alternate rows of hollow stay bolts at the respective ends of the boiler, the rows of nozzle tubes at one end entering said boiler spaces left vacant by the alternate rows of nozzle tubes at the other end, whereby simultaneous operation of all said rows of nozzle tubes, so staggeringly arranged, results in the formation of whirls within said spaces as and for the purposes described.

2. The combination with a boiler having opposite double-wall headers provided with rows of hollow stay bolts communicating with the boiler spaces between the water tubes in the boiler, and baffle plates providing non-alining openings at opposite ends of said boiler, manifold nozzle tubes permanently arranged in staggering relation in alternate rows of hollow stay bolts whereby each said boiler space has a row of manifold tubes associated therewith at one end and the adjacent spaces at the opposite end thereof, each said nozzle tube terminating at substantially the inner edge of the surrounding hollow stay bolts, and a nozzle having a series of tubes for insertion in a row of hollow stay bolts, said last mentioned tubes being of a length to extend from the manifold through the hollow stay bolts and into the associated boiler spaces to a point beyond the space left at that end by the baffle plates, and each extending in a straight line from its manifold, whereby said row of tubes may be removed from any row of hollow stay bolts and inserted in any other row of hollow stay bolts in either header of the boiler not occupied by said permanently-inserted alternately-arranged tubes, and a flexible tube connection for said removable manifold permitting such removal of the tubes and insertion thereof in any other unoccupied row of hollow stay bolts.

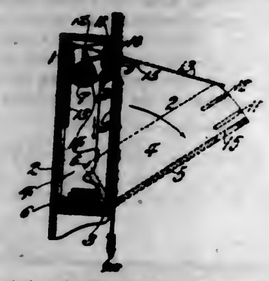
1,062,942. **AIR-STRAINER.** NELSON T. WOODS, Portland, Oreg., assignor to Robert W. Murray McNair, Vancouver, British Columbia, Canada. Filed Apr. 5, 1912. Serial No. 688,671. (Cl. 23—90.)



An oil separator of the class described, comprising a casing provided with an inlet opening in the front thereof, an outlet opening in the rear and disposed at a higher elevation than said inlet opening, said casing being provided interiorly with a plurality of stepped shoulders of progressively larger sizes from the front end of the casing toward the rear, screens adapted to fit against the respective shoulders, means for removably securing said screens in place, said casing having a drain opening in the bottom thereof located below the shoulders of largest diameter, and a draw-off cock for the drain opening.

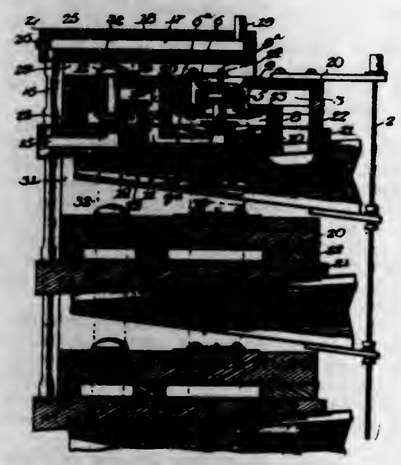
1,062,943. **SANITARY TOWEL-HOLDER.** JOHN QUINCY ADAMS, Westmont, N. J. Filed Aug. 28, 1912. Serial No. 717,414. (Cl. 45—32.)

In a sanitary towel holder, a cabinet, a frame therein pivotally connected therewith, said frame being composed of a closed front, sides, and a bottom, and a series of vertically-extending slots in said sides, a plurality of friction rollers one below the other mounted on said sides freely in certain of said slots, a towel roller mounted on said sides freely in other slots, said slots being open at top, and a passage in the front of said frame common for the withdrawal and returning-portions of the towel, said towel roller being rearward of said friction rollers, and



said passage being in front of said friction rollers above said bottom of the frame.

1,062,944. **MECHANICAL MUSICAL INSTRUMENT.** HARRY J. ANDERSON, Chicago, Ill., assignor to Newman Bros. Co., Chicago, Ill. Filed May 13, 1911. Serial No. 626,985. (Cl. 84—178.)

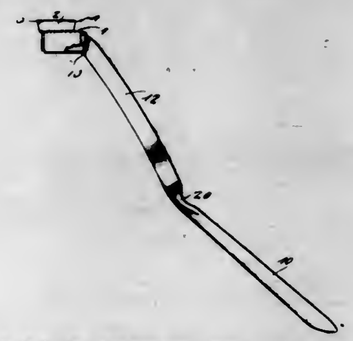


1. In a device of the class described, a plurality of tiers of pneumatics, valves for said pneumatics, mechanism for operating said valves, a bleed chest mounted above the top tier of pneumatics, having a plurality of passages therein, having an outlet from each of said passages adapted to be connected to a tracker board and an outlet leading to said valve operating mechanism, a member provided with a groove carried by said bleed chest and disks having restricted openings which communicate with said passages and said groove.

2. In a device of the class described in combination, an action chest comprising top and bottom boards, a row of pneumatics attached to the bottom board of said chest, valves for said pneumatics mounted on the top board of said chest, mechanism for operating said valves and a bleed chest mounted immediately above said top board but spaced therefrom, said bleed chest having transverse passages each of which is provided with an outlet for connection with a tracker board, and also with an outlet for connection to the mechanism for operating said vaives, said mechanism being mounted on said bottom board of the action chest.

3. In a device of the class described in combination, a structure having a wedge shaped piece with its inclined face upward, a second wedge shaped piece with its inclined face resting against the inclined face of the first mentioned piece, said second wedge being extended laterally of the structure, and having a plurality of pneumatics attached to its inclined surface, and a substantially rectangular block above said second mentioned piece having primary and secondary valves mounted thereon, said rectangular block being spaced from said second mentioned piece by spacing strips whereby windways are formed for said valves and said pneumatics.

1,062,945. **TILING-TOOL.** OVE M. ANDERSON, Chicago, Ill. Filed June 3, 1912. Serial No. 701,342. (Cl. 72—138.)



1. In a tool, the combination with a cutter including a flat body, wings at right angles thereto, and inturned flanges at the outer edges of the wings, the body being formed with a cutting knife; of a handle whose outer end is bifurcated and the arms of whose bifurcation have substantially parallel fingers at their outer extremities springing normally apart and of a shape to engage beneath said body, inside said wings, and above said flanges.

2. In a tool, the combination with a cutter comprising a body carrying a cutting knife, parallel wings projecting from the edges of said body, and inturned flanges at the outer edges of said wings; of a handle including a hand hold, substantially parallel fingers carried thereby and springing normally apart, and outwardly projecting hooks at the outer ends of said fingers, for the purpose set forth.

3. In a tool for the purpose set forth, the combination with a cutter comprising a substantially flat body carrying a cutting knife and having channeled edges; of a handle having a hand hold at one extremity and bifurcated at its other end, the arms of the bifurcation being deflected out of the general line of the handle and continued into substantially parallel fingers springing normally apart and of a cross section to fit in the channeled edges of said cutter, for the purpose set forth.

4. In a tiling tool, the combination with a cutter comprising a substantially flat metallic plate of rectangular contour having an upstanding U-shaped rib at its transverse center with knives at the ends of said rib, and flanges along the edges of said body; of a handle member, and means for detachably connecting one extremity of said handle member with the flanged edges of said cutter, for the purpose set forth.

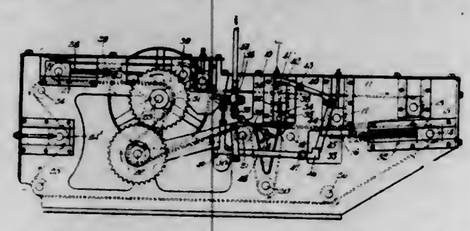
1,062,946. **REVOLVING TUBULAR KILN.** LUDWIG BAHLER, Wolgast, Germany. Filed Sept. 21, 1911, Serial No. 650,596. Renewed Mar. 27, 1913. Serial No. 757,256. (Cl. 34—5.)



An improved revolving tubular kiln comprising in combination with the wall of the kiln, a central shaft,

partitions movably mounted on said shaft so that they oscillate during the revolution of the shaft, and stops projecting from the inner surface of the wall of the kiln limiting the oscillating motion of said partitions, substantially as described and shown and for the purpose set forth.

1,062,947. PROCESS OF MAKING LEATHER FLEXIBLE. GEORGE BASLER, Lynn, Mass., assignor to Basler Machinery Company, Lynn, Mass., a Corporation of Maine. Original application filed Mar. 15, 1912, Serial No. 684,069. Divided and this application filed Mar. 28, 1912. Serial No. 686,873. (Cl. 91—68.)



1. The herein described process, which consists in treating one side only of leather stock with a penetrating, opening surface cleansing fluid, and immediately thereafter mechanically flexing and working the same side of the stock to loosen and open the fibers and pores thereof.

2. The herein described process, which consists in treating leather stock on its grain side only with a penetrating fiber-opening fluid, and stretching and working the stock by flexing the same to loosen and open the fibers thereof on the grain side, said steps being carried out as substantially component parts of a single operation.

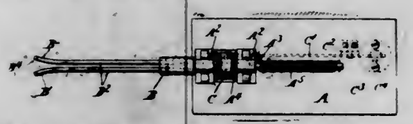
3. The herein described process, which consists in applying to one side only of the leather stock a copious bath of penetrating fluid in a body of such amount as to impregnate the leather on said side to an appreciable extent inwardly beneath the surface, continuing said application progressively lengthwise of the piece of leather, and then immediately placing the impregnated side under flexing tension to facilitate the thorough inward and lateral distribution of the liquid.

4. The herein described process, which consists in applying to one side of the leather stock a copious bath of penetrating and cleansing fluid in a body of such amount as to impregnate the leather on said side to an appreciable extent inwardly beneath the surface, continuing said application progressively lengthwise of the piece of leather, and then immediately placing the impregnated side under flexing tension to facilitate the thorough inward and lateral distribution of the liquid.

5. The herein described process, which consists in applying to one side of the leather stock a copious bath of penetrating, cleansing and bleaching fluid in a body of such amount as to impregnate the leather on said side to an appreciable extent inwardly beneath the surface, continuing said application progressively lengthwise of the piece of leather, and then immediately placing the impregnated side under flexing tension to facilitate the thorough inward and lateral distribution of the liquid.

[Claims 6 to 10 not printed in the Gazette.]

1,062,948. BAG-FASTENING DEVICE. ADELMER M. BATES, Chicago, Ill. Filed Sept. 6, 1910. Serial No. 580,715. (Cl. 83—26.)



A bag tying device comprising a rotatable mandrel, means responsive to the will of the operator for rotating said mandrel in one direction and automatic means for subsequently returning it to its original position, and a pair of parallel spring arms projecting outwardly from the end of said mandrel substantially in line with the axis thereof, said arms terminating in outwardly bent hook members, said arms being rigidly attached at their other ends to said mandrel, the space between said arms being free at all points between the hooks and the mandrel.

1,062,949. METHOD OF TREATING CONCRETE MIXTURES. ALBERT J. BATES, Chicago, Ill. Filed Dec. 1, 1911. Serial No. 663,296. (Cl. 25—155.)



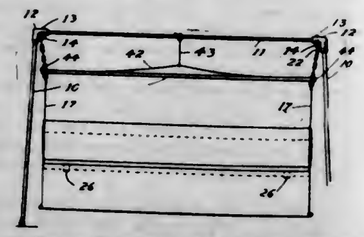
1. The method of treating concrete mixtures, which consists in placing the same in a mold and imparting an arcuate movement simultaneously to the ends of the mold about a common axis of oscillation which is substantially parallel to the longitudinal axis of the mold when the same is in normal position, whereby the mixture is subjected to a slushing action from end to end and from side to side of the mold.

2. The method of treating concrete mixtures, which consists in placing the same in a mold and alternately elevating the ends of the mold in an arcuate path about a common axis of oscillation which is substantially parallel to the longitudinal axis of the mold when the same is in normal position, and alternately dropping the said ends from elevated position, whereby the mixture is subjected simultaneously to a slushing action from end to end and from side to side of a mold and to a succession of violent bodily jars.

3. The method of treating concrete mixtures which consists in placing the same in a mold and simultaneously imparting an arcuate movement to the ends of the mold alternately in opposite directions about a common axis of oscillation, whereby the mixture is subjected to a slush action from end to end and from side to side of the mold.

4. The method of treating concrete mixtures which consists in placing the same in a mold and simultaneously imparting an arcuate movement to the ends of the mold alternately in opposite directions and subjecting the said mold to a series of violent bodily jars, whereby the mixture is kept continuously agitated and is subjected to a slushing action from end to end and from side to side of the mold.

1,062,950. COLLAPSIBLE COT-HAMMOCK. WILLIAM BOSS, St. Paul, Minn. Filed Feb. 24, 1912. Serial No. 679,716. (Cl. 5—61.)



1. A cot hammock comprising a bed or bottom formed of two strips of fabric united along both sets of edges of said bed strips, one of said strips extending beyond each end of the other to provide suspending ends, valance strips secured between the bed strips, the binding seam being turned in, a stretching frame between said bed strips comprising side bars formed with longitudinal grooves for receiving the seams and end bars having means for engaging and forcing apart said side bars, and means secured to said suspending ends for supporting the hammock.

2. A collapsible cot hammock comprising a fabric portion and a removable frame, said fabric portion consisting of two strips of fabric united along the side edges, one of said strips extending beyond each end of the other to provide suspending ends, said removable frame consisting of a pair of side bars and a pair of cross bars having no permanent connection one with another, means for assembling the cross bars upon the ends of the side bars so as to force said side bars outwardly against the inside of the tube formed by the said two strips of fabric, said cross bars forming free and unobstructed sustaining parts from the outer limits of the side bars across the ends of the frames upon which the suspending ends bear in sustaining the hammock, the frame portion of the hammock being held in position by the fabric portion.

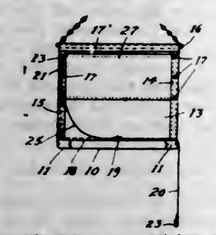
3. A cot hammock comprising a bed or bottom formed of two strips of fabric united at the edges, one of said strips extending beyond each end of the other to provide suspending ends, means holding the bed strips stretched, bars secured to the edges of the suspending strips, chains secured to the ends of the bars, and supporting means for the chains including a longitudinal member for holding the chains and said suspending ends from spreading.

4. A cot hammock comprising a bed or bottom formed of two strips of fabric united at the edges, one of said strips extending beyond each end of the other to provide suspending ends, means holding the bed strips stretched, bars secured to the edges of the suspending strips, chains secured to the ends of the bars, supporting means for the chains including a longitudinal member for holding the chains and said suspending ends from spreading, and a canopy top of substantially the same size as the hammock bottom removably secured to said chains and longitudinal member, and having the ends thereof in closing engagement with the edges of said suspending strips.

5. A cot hammock comprising a bed or bottom formed of two strips of fabric united at the edges, one of said strips extending beyond each end of the other to provide suspending ends, means holding the bed strips stretched, bars secured to the edges of the suspending strips, chains secured to the ends of the bars, supporting means for the chains including a longitudinal member for holding the chains and said suspending ends from spreading, a canopy top of substantially the same size as the hammock bottom, bars secured in the ends of said canopy top which extend beyond the side edges thereof, said bars being positioned back of the said chains to hold the canopy in engagement with the edges of said suspending ends, and a member securing the center of said canopy to said longitudinal member.

[Claim 6 not printed in the Gazette.]

1,062,951. HAMMOCK. WILLIAM BOSS, St. Paul, Minn. Filed Oct. 7, 1912. Serial No. 724,379. (Cl. 5—61.)



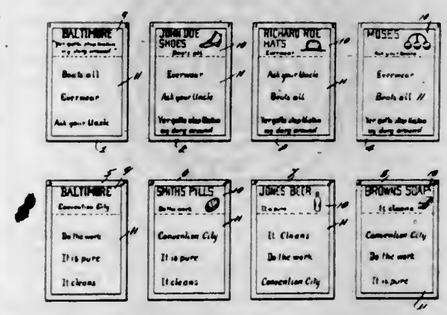
1. A cot hammock settee comprising a fabric bottom and means for suspending the same, and valance strips secured at their inner edges along lines parallel with and adjacent the center of said bottom.

2. A cot hammock settee comprising a fabric bottom and means for suspending the same, valance strips secured at their inner edges along lines parallel with and adjacent the center of said fabric bottom, and means for securing the ends of said valance strips between the said suspending means.

3. A cot hammock settee comprising a fabric bottom and ends of said fabric extending beyond the bottom for suspending the same, valance strips secured at their inner edges along lines parallel with and adjacent the center of said fabric bottom, bars carried by the free edges of said valance strips, and means for securing said bars at their ends to the said suspending ends.

4. A cot hammock settee comprising a fabric bottom and ends of said fabric extending beyond the bottom for suspending the same, valance strips secured at their inner edges along lines parallel with and adjacent the center of said fabric bottom, bars carried by the free edges of said valance strips, and means for securing said bars at their ends to the said suspending ends in a plurality of positions of elevation of the bars relative to the fabric bottom.

1,062,952. DECK OF PLAYING-CARDS. JOSEPH P. BRYAN, Baltimore, Md., assignor to Ask-Your-Dealer Vantage Company, Incorporated, a Corporation of New York. Filed Apr. 29, 1912. Serial No. 693,981. (Cl. 46—25.)



1. A deck of playing cards having designations thereon for being separated into a plurality of groups, the cards of each group containing main titles and sub-titles associated therewith, one card of each group throughout the deck having a main title in common, the cards of each group each having less prominently displayed thereon a list of sub-titles which form part of the main features of other cards in the same group.

2. A deck of playing cards having designations thereon for being separated into a plurality of groups, the cards of each group containing main titles and sub-titles associated therewith all prominently displayed thereon to form the main feature of said cards, one card of each group throughout the deck having a main title in common adapting said cards for use as of special value, the remaining cards of the deck having different titles, the cards of each group each having less prominently displayed thereon a list of the sub-titles which form part of the main features of other cards in the same group.

3. A deck of playing cards having designations thereon for being separated into a plurality of groups, one card of each group throughout the deck having a special feature thereon in common, the remaining cards of the deck containing distinctive main features prominently displayed thereon, each comprising different representations of some commodity, the cards of each group having less prominently displayed thereon a list of representations which form part of the main feature of the other cards in the same group.

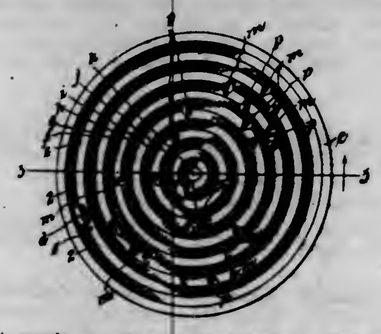
4. A deck of playing cards having designations thereon for being separated into a plurality of groups, one card of each group throughout the deck having a special feature thereon in common, the remaining cards of the deck containing distinctive main features prominently displayed thereon, each comprising the representation of a

commodity and a phrase associated with said commodity, said cards also having less prominently displayed thereon a list of the associated phrases on the other cards of the same group.

5. A deck of playing cards having designations thereon for being separated into a plurality of groups, one card of each group throughout the deck having a special feature thereon comprising the name of a city common to all said special cards and a phrase associated with said city, the remaining cards of the deck having distinctive main features prominently displayed thereon each comprising the representation of a commodity and a phrase associated with said commodity, the cards of each group having less prominently displayed thereon a list of the phrases forming a part of the special and main features of the other cards in the same group.

[Claim 6 not printed in the Gazette.]

1,062,953. PUZZLE. LOUIS S. BURBANK, Hopedale, Mass. Filed Sept. 18, 1912. Serial No. 720,995. (Cl. 46—41.)



1. A puzzle comprising a base having a labyrinthine passage, a transparent top, a pellet of mercury, means whereby the pellet may be subdivided, and a goal connected with the passage.

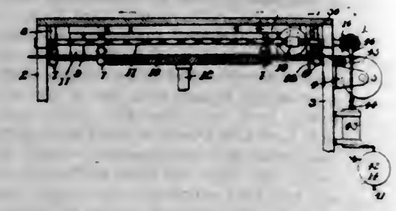
2. A puzzle comprising a base having a labyrinthine passage, a transparent top forming the outer wall of the passage, a pellet of mercury, means in the outer portion of the passage whereby the pellet may be subdivided, and a goal communicating with the inner end of the passage, said passage having culs-de-sac adapted to pocket a pellet or pellets moving therein.

3. A puzzle comprising a base having a lybyrinthine passage composed of elongated portions and shorter transverse connecting portions, said passage having barriers forming the ends of culs-de-sac, a pellet of mercury, means in the outer portion of the passage whereby the pellet may be subdivided, and a goal communicating with the inner end of the passage.

4. A puzzle comprising a base having a labyrinthine passage composed of two divisions, a transparent top forming the outer wall of said passage, a pellet of mercury, the outer ends of the passages being adjacent to each other, means whereby the pellet may be subdivided in the outer portion of the passage into two smaller pellets, one located in each division, a goal communicating with the inner ends of the divisions, and connections between portions of the divisions through which a pellet may pass from either division into the other.

1,062,954. MACHINE FOR MANUFACTURING ENVELOPS. ROBERT MOORE DECKER, West Newton, Pa. Filed Aug. 16, 1912. Serial No. 715,410. (Cl. 101—46.)

1. A machine of the type described comprising a platform, means for automatically feeding paper beneath said platform, a movable platform supporting the paper beneath the first mentioned platform, paste applying devices movable through the first mentioned platform for applying paste to said paper, cutter wheels movable beneath said first mentioned platform for cutting said paper, and wrapping rollers adapted to move onto said movable platform and wrap and seal the cut and moistened piece of paper.



2. A machine of the type described comprising a platform, means for automatically feeding paper beneath said platform, a movable platform supporting the paper beneath the first mentioned platform, paste applying devices movable through the first mentioned platform for applying paste to said paper, cutter wheels movable beneath said first mentioned platform for cutting said paper, and wrapping rollers adapted to move onto said movable platform and wrap and seal the cut and moistened piece of paper, and an ejector located beneath one of said wrapping rollers and adapted to eject the wrapped paper from said movable platform.

3. A machine of the type described comprising a main platform, means for feeding paper beneath said platform, paste applying devices movable through said platform and adapted for applying paste to the paper beneath said platform, a movable platform supporting said paper during the paste applying operation, cutter wheels movable beneath said main platform and adapted to cut the edges of said paper, means located beneath said main platform for folding and sealing the edges of the pice of paper carried by said movable platform, and mean supported from said main platform for moving said paper.

4. A machine of the type described comprising a main platform, means for feeding paper beneath said platform, paste applying devices movable through said platform and adapted for applying paste to the paper beneath said platform, a movable platform supporting said paper during the paste applying operation, cutter wheels movable beneath said main platform and adapted to cut the edges of said paper, means located beneath said main platform for folding and sealing the edges of the piece of paper carried by said movable platform, and means supported from said main platform for moving said paper, means supported beneath said main platform for operating said cutter wheels, and an ejector beneath said platform and adapted to eject the folded and sealed piece of paper from said movable platform.

5. A machine of the type described comprising a main platform, a movable platform located beneath said main platform, means carried by the underside of said main platform and adapted to feed a piece of paper therebeneath, a paste applying device movable through said main platform and adapted to apply paste to a piece of paper upon said movable platform, revoluble cutter wheels movable beneath said main platform and guided thereby and adapted to cut the edges of the piece of paper, a knife movable beneath said main platform and adapted to sever the piece of paper from the supply roll thereof, wrapping rollers movable relatively to said movable platform and adapted to fold and seal the edges of the cut piece of paper, and an ejector in proximity to said movable platform for ejecting the wrapped and sealed piece of paper therefrom.

1,062,955. PEDAL MECHANISM FOR PIANOFORTES. FRANK DENNINGER, New York, N. Y. Filed Aug. 23, 1911. Serial No. 645,495. (Cl. 84—24.)

1. A piano comprising a case provided with a slot, a pedal having a vertically positioned portion to cover the slot, and an adjustable flat spring attached to the base of the case extending through the slot and secured to the vertical portion of the pedal.

2. A piano case provided with a slot, a pedal mechanism comprising a foot-operating piece or pedal proper, an outstanding portion on the pedal for covering said slot, a flat spring adjustably attached to the base of the case and extending through the slot and secured to the outstanding portion of the pedal, and means connected to said spring for operating the mechanism controlled by the pedal.

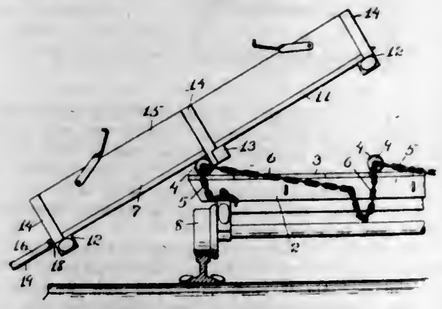


3. A pedal mechanism for musical instruments comprising a spring plate fixed at one end to the base of the instrument and bearing on its free end, a foot operating piece or pedal proper for depressing the spritng plate, a rigid bar connected to said spring plate and extending laterally therefrom, said bar partaking of the movement of the plate, and actuating means connected to and operated by the bar.

4. A piano case provided with a slot, a pedal formed with a vertically positioned portion on its inner end to cover the slot, and a flat spring secured within and to the base of the case extending outwardly through said slot and fastened on the rear face of the vertical portion of the pedal.

5. A piano case provided with a slot, a pedal formed with a vertically positioned portion on its inner end to cover the slot, a flat spring secured within and to the base of the case and extending outwardly through said slot and fastened to the rear face of the vertical portion of the pedal, a lever connected to the spring, and a resilient rod secured at one end within the case and supporting by its other end said lever, said resilient rod adapted to oscillate with the lever as the pedal is depressed.

1,062,956. POLE DUMPING-CAR. LILBURN DYE, St. Paul, Va., assignor of one-half to James D. Cleek, St. Paul, Va. Filed Nov. 14, 1912. Serial No. 731,361. (Cl. 105—190.)



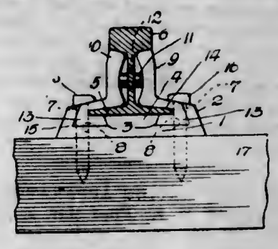
1. In a dumping car, a platform truck, a dumping bed having a middle sill and extended side sills, a bearing roller parallel to and between said middle sill and each side sill, and holding chains and limiting chains connected to said truck and said rollers.

2. A dumping bed for a platform truck, said bed consisting of a bottom having a middle sill and extended side sills, a bearing roller parallel to and between each side sill and the middle sill, limiting chains, and holding chains detachably connected to said bearing rollers.

3. A dumping bed for a platform truck, said bed comprising a bed bottom, a middle sill and side sills, a bearing roller parallel to and between each side sill and the middle sill, end boards, a detachable hinged side board and detachable limiting chains.

4. In a dumping car, a platform truck, a dumping bed having a middle sill and side sills, bearing rollers between the truck platform and dumping bed, and detachable chains connecting the rollers to the platform truck.

1,062,957. RAIL-FASTENER. WILLIAM LINLEY EBY, Wellsville, Ohio. Filed July 19, 1912. Serial No. 710,508. (Cl. 239—6.)



In a rail fastener, a rail chair adapted to be mounted upon a tie and having its upper face formed with spaced longitudinally extending parallel dove-tailed grooves each having its outer wall of greater height than its inner wall, said chair further having its upper face provided with a centrally disposed seat for the bases of a pair of rails and arranged in a plane below the top of the outer walls of said grooves, a pair of splice bars bracing the sides of said rails and one formed with integral pins extending into the openings of the rails, each of said splice bars having lateral flanges seated upon the upper faces of the bases of the rails, depending longitudinally extending dove-tailed angle-shaped tongues carried by the lateral flanges of said splice bars and fitting in said grooves, the upper face of the horizontal member of said tongues forming a continuation of said seat, said flanges and tongues flush with the top of said chair, spikes extending through the top of said chair and through the vertical member of said tongues and adapted to engage in the tie for securing the chair in position, said spikes adapted to abut against the longitudinal edges of the bases of the rail, and the heads of said spikes engaging with the upper face of the flanges and chair.

1,062,958. FILLER FOR CAOUTCHOUC AND PROCESS OF MANUFACTURING SAME. LAMBERTUS ELFRINK, Modjokerto, Java. Filed Jan. 29, 1913. Serial No. 745,049. (Cl. 106—23.)

1. In a caoutchouc composition a filler comprising the finely divided insoluble components of aquatic animals.

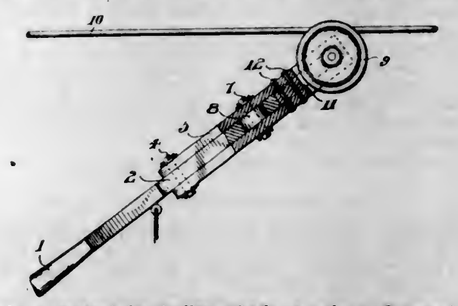
2. In a caoutchouc composition a filler comprising the dry insoluble powder of the flesh of aquatic animals.

3. In a caoutchouc composition a filler comprising the dry insoluble powder of the flesh of fishes.

4. A composition of matter comprising caoutchouc mixed with the powdered insoluble parts of aquatic animals.

5. A composition of matter comprising caoutchouc mixed with the powdered insoluble flesh of fishes.

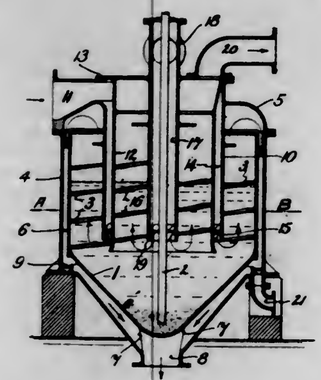
1,062,959. TROLLEY. JAMES FAWCETT, Rochester, Pa. Filed Jan. 25, 1913. Serial No. 744,122. (Cl. 64—70.)



In a support for trolley wheels, a pole, a flat semicircular head carried by the upper end thereof and provided near its upper edge with a wide segment-shaped

slot, a harp having a bifurcated lower portion mounted upon said head, means for pivotally connecting the lower end of said harp and the lower portion of said plate centrally thereof, a roller revolubly mounted in the furcation of said harp and traveling against the curved edges of said slot, said harp having its upper end bifurcated, the furcation at the upper end of a harp extending in a plane at right angles to the furcation in the lower portion of the harp, said furcation in the upper end of the harp providing means for the mounting of a trolley wheel therein.

1,062,960. SATURATION APPARATUS. WILLIAM FEICKS, Bloomfield, N. J. Filed Mar. 2, 1912. Serial No. 681,258. (Cl. 23—21.)



1. A saturation apparatus comprising a vessel adapted to contain a liquid, a plurality of annular chambers located within said apparatus and terminating below the normal level of the liquid, independent means for supplying gas to each of said annular chambers and independent means for withdrawing such gases from such chambers after they have passed in contact with the liquid.

2. A saturation apparatus comprising a vessel adapted to contain a liquid, an annular chamber outside said vessel communicating at a point above the normal liquid level with said vessel to conduct gases therefrom, means for introducing gases into said vessel and through the liquid and an exit for such gases leading from said annular chamber.

3. A saturation apparatus comprising a vessel adapted to contain a liquid; a housing enveloping said vessel forming a chamber for passage of gases, communicating at one end with said vessel and forming at its other end means for withdrawing gases; and means for supplying gases to said vessel through the liquid.

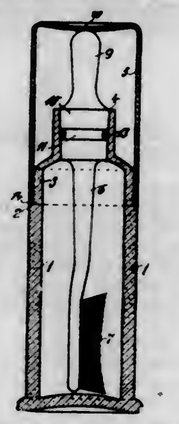
4. A saturation apparatus comprising a vessel adapted to contain a liquid, means for passing gas through and imparting a rotary motion to said liquid, a circulatory annular projection inside said vessel and means for introducing gas into and withdrawing it from said vessel.

5. A saturation apparatus comprising a vessel adapted to contain a liquid, means for the introduction to and removal of gases from said vessel and helical projections in said vessel arranged to coöperate with the gas to cause stirring of the liquid.

[Claims 6 to 15 not printed in the Gazette.]

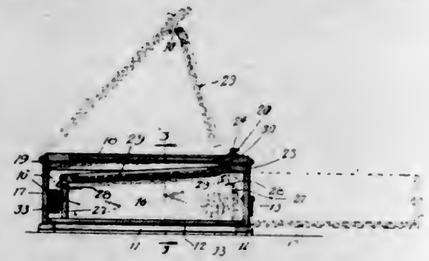
1,062,961. COMBINED TOOTH-BRUSH AND PROPHYLACTIC CONTAINER. DANIEL CARL FUNCKE, Wiesbaden, Germany. Filed Dec. 13, 1912. Serial No. 736,586. (Cl. 132—11.)

In a combined tooth brush and prophylactic container, the combination of a container having a conical mouth, a shoulder on the upper end of the container, a tooth brush adapted to be inserted in the container, a conical enlargement on the tooth brush adapted to seal the conical mouth of the container, and a cup adapted to abut against the upper end of the tooth brush when the latter is inserted in the said container and to engage the said



shoulder on the upper end of the container covering the said upper end and the tooth brush, substantially as described.

1,062,962. TOILET-CABINET. ALEXANDER GAAL, Chicago, Ill. Filed Mar. 3, 1913. Serial No. 751,726. (Cl. 132—11.)



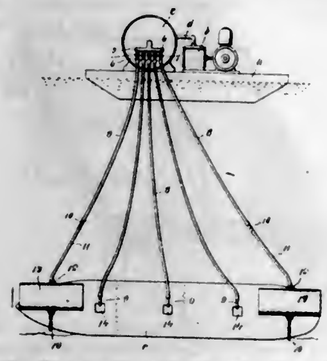
1. In a toilet cabinet, a rectangular box having an open top, and an open end, a drawer slidably mounted in said box, and movable through said open end, a cover hinged to said box, and a mirror hinged to said drawer and cover, and acting to automatically open and close the cover whenever the drawer is withdrawn from and pushed back into the box.

2. In a toilet cabinet, a rectangular box having an open top, and an open end, a drawer slidably mounted in said box, and movable through said open end, a cover for said box, hinged thereto at the end opposite to said open end, and a mirror hinged to the back wall of said drawer, and hinged to the under side of said cover, near its free end.

1,062,963. APPARATUS FOR RAISING SUNKEN VESSELS. THOMAS HECTOR GAWLEY, New Orleans, La., assignor of one-sixth to William H. Byrnes, Jr., and one-sixth to Edward C. Byrnes, New Orleans, La. Filed Apr. 12, 1912. Serial No. 690,319. (Cl. 114—52.)

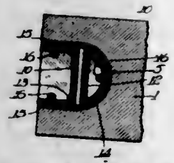
An apparatus for raising sunken vessels comprising a header adapted for connection to the container of an air compressor and having a plurality of valve controlled nipples, a plurality of compressed air tanks, means for connecting said tanks in pairs and admitting of their disposition on opposite portions of the vessel to be raised a plurality of flexible tubes carried by the nipples, a plurality of tubes carried by the tanks, Y-couplings connecting certain of the first with the second named tubes

sealing plates secured in the hatches of the vessel, nozzles extending through said plates and connected to the



other of the first mentioned conduits, and discharge conduits also secured in said plates.

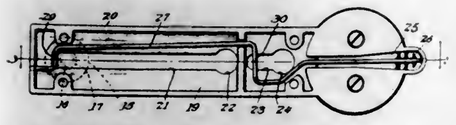
1,062,964. SPIRIT-LEVEL. CHARLES H. GESBECK and JOHN SEMMERLING, Chicago, Ill. Filed Mar. 2, 1912. Serial No. 681,245. (Cl. 73—70.)



1. A spirit level comprising a bar having a lateral opening therethrough, the peripheral wall of said opening having a peripheral groove therein in which is placed a plastic material capable of setting to become hard, and a spirit level tube embedded at its ends in said plastic material and held rigidly in place thereby, and means partly embedded in said plastic material adapted, when withdrawn therefrom after it has set, to fracture the same and permit ready removal thereof for releasing said tube.

2. A spirit level comprising a bar having a lateral opening therethrough adapted to receive at least one spirit level tube, a spirit level tube disposed to span said opening and engaged at its ends between peripheral flanges bordering the deepest portion of said opening between the ends thereof, a plastic material disposed between said flanges embedding the end portions of said tube and adapted, when set, to hold said tube rigidly in place in said opening, and devices partly embedded in said plastic material and projecting therefrom, adapted when said material has become set, to be withdrawn therefrom to fracture said material and release said tube.

1,062,965. DOOR-SECURING DEVICE. SAMUEL E. GREENBERG, Chicago, Ill. Filed June 15, 1912. Serial No. 703,780. (Cl. 116—44.)



1. A door securing device comprising a chain, a socket having a slot therein for receiving said chain to secure the door, a member mounted so as to be movable with respect to said socket, and having a portion extending across said slot, whereby said member is engaged and moved by said chain when a strain is imparted to the latter, and a spring-actuated bell having a releasing button, such button being disposed in the path of said member so as to be actuated when the latter is moved.

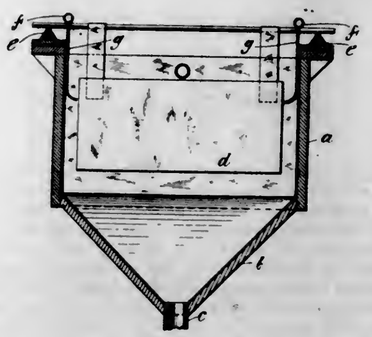
2. A door securing device comprising a chain, a socket, having a front wall and a side flange extending from said front wall, the front wall having a slot therein for receiving said chain to secure the door, a rod slidably mounted in the flange of said socket, and having a portion extending across said slot, whereby said rod is engaged and moved by said chain, when a strain is imparted to the latter, and an alarm adapted to be actuated by said rod when the latter is moved.

3. A door securing device comprising a chain, a socket, having a front wall and a side flange extending from said front wall, the front wall having a slot therein for receiving said chain to secure the door, a rod slidably mounted in the flange of said socket, and having a bent portion, said bent portion being disposed so as to extend across said slot, whereby said rod is engaged and moved by said chain when a strain is imparted to the latter, and an alarm adapted to be actuated by said rod when the latter is moved.

4. A door securing device comprising a chain, a socket having a slot therein for receiving said chain to secure the door, a member mounted so as to be movable with respect to said socket and having a portion extending across said slot, whereby said member is engaged and moved by said chain, when a strain is imparted thereto, an alarm, and a spring-returned button for actuating said alarm, said button being disposed in the path of said member so as to be actuated when the latter is moved, and so as to return said member when the latter is released.

5. A door securing device comprising a chain, a socket, having two slots therein, each adapted to receive said chain to secure the door, one of said slots being disposed so as to permit a slight opening of said door, and the other slot being disposed so as not to permit such opening, a member mounted so as to be movable with respect to said socket, and having portions extending across said slots whereby said member is engaged and moved by said chain when a strain is imparted to the latter, and an alarm adapted to be engaged and operated by said member when the latter is moved.

1,062,966. PROCESS OF ELECTROLYSIS AND APPARATUS THEREFOR. KENNETH S. GUITERMAN, New York, N. Y. Filed Nov. 11, 1912. Serial No. 730,598. (Cl. 204—57.)



1. The process of electrolysis which consists in arranging the electrodes in pairs, washing the slime from the electrodes as formed into a body of bath below the electrodes, keeping the slimes in suspension out of contact with the electrodes and causing the same to accumulate at a predetermined point, and then continuously removing said slimes with a portion of the bath.

2. The process of electrolysis which consists in subjecting each pair of electrodes to a continuous current

of electrolyte, providing a body of electrolyte below the electrodes, producing currents having a definite directional flow through said bath to accelerate the normal fall of the slimes and prevent same from coming into contact with the electrodes, collecting the slimes at a point remote from the electrodes, removing the slimes with a portion of the electrolyte, separating the slimes from said removed portion of the electrolyte, and then returning said electrolyte to the bath.

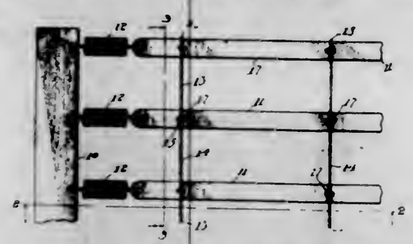
3. A process of electrolysis which consists in washing the slime from the electrodes, causing a current of electrolyte having a definite directional velocity between each pair of electrodes to wash the slime from the surface of the electrodes, and hold the slime out of contact therewith, maintaining said current in a direction away from the electrodes to collect the suspended slime, removing the slimes and a portion of the electrolyte, separating the slimes from said removed portion of the electrolyte and then returning the electrolyte to the bath.

4. A process of electrolysis which consists in causing a current of electrolyte between each pair of electrodes, directing each of said currents in a downward direction at substantially uniform velocity to carry the slimes out of contact with the electrodes, then gradually directing said currents toward an outlet relatively remote from the electrodes, removing the slimes and a portion of the electrolyte through said outlet, filtering said portion of the electrolyte to separate the suspended slimes and then returning said portion of the electrolyte to the bath.

5. A process of electrolysis which consists in causing a current of electrolyte between each pair of electrodes having sufficient velocity to wash the slimes from the surface of the electrodes and prevent eddy currents, keeping the slimes in suspension out of contact with the electrodes, causing the slimes to accumulate at a predetermined point relatively remote from the electrodes, and then removing said slimes and a portion of the electrolyte, separating the slimes from the electrolyte and then returning said electrolyte to the bath.

[Claims 6 to 9 not printed in the Gazette.]

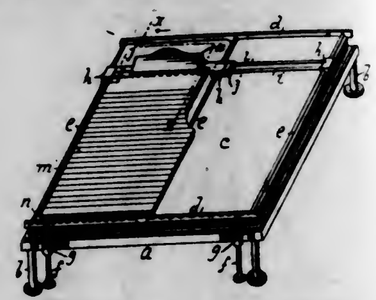
1,062,967. METALLIC FABRIC. JOHN D. HAGGARD, Chicago, Ill., assignor to Haggard & Marcusson Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1913. Serial No. 759,089. (Cl. 5—39.)



1. In a device of the character described, the combination of a plurality of parallel slats uniformly spaced apart and perforated at regular intervals; transverse stay members comprising wires having loops at uniform intervals to provide eyes in the axial plane of the respective stay wires for engagement in the perforations in the slat members; and key-rods threaded through said eyes and located on the opposite sides of said slat members.

2. In a device of the character described, the combination of a relatively rigid frame having opposite end members perforated at regular intervals; a plurality of slats perforated at regular intervals, said slats independently supported in said frame by springs engaging each end thereof; transverse stay members comprising wires having loops at uniform intervals to provide eyes in the axial plane of the respective stay wires for engagement in the perforations in the slat members; and key-rods threaded through said eyes and located on the opposite sides of said slat members.

1,062,968. MANIFOLDING DEVICE. PHILIP HANO, New York, N. Y. Filed July 8, 1912. Serial No. 708,149. (Cl. 11—23.)



1. A manifolding device comprising a table for the reception of a book or leaf, a rectangular frame comprising transverse end bars and spaced apart longitudinal rails, the transverse bars having downwardly projecting posts, friction devices on the table engaging the posts to yieldingly support the frame above the table, said frame being adapted to be drawn up and pushed down to the desired position above the table, blocks mounted to slide on said rails, a pair of transverse rails connecting said blocks, a pair of spaced apart blocks mounted to slide transversely of the frame on said pair of rails and a paper clip secured to said pair of blocks and adapted to hold a carbon and a superposed sheet.

2. In manifolding device comprising a table for the reception of a book or leaf, a frame extending over the table, yielding supporting means between the frame and the table admitting the manual lifting of the frame to the desired height above the table and admitting of the manual pushing of the frame down toward the table, said supporting means yieldingly holding the frame in the desired vertically adjusted position, and a paper clip on the frame engaging a carbon and a superposed sheet whereby to hold the same over the book or leaf.

1,062,969. DRIED FRUIT AND PROCESS OF DRYING THE SAME. HENRY H. HARRISON, Boston, Mass. Filed Oct. 25, 1912. Serial No. 727,731. (Cl. 99—5.)



1. As a new article of food, a dried, entire cranberry having a vented skin.

2. As a new article of food, a dried, entire cranberry having a multiplicity of vents distributed in its skin.

3. As a new article of food, a dried, entire fruit having its interior vented through to the outside and disturbed to facilitate the escape of fluid therefrom.

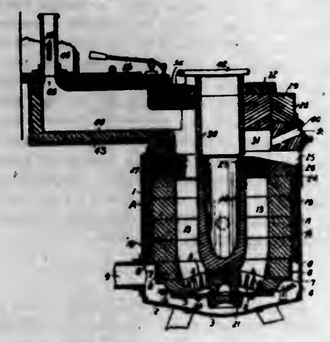
4. The process for drying fruit which comprises venting the interior of the fruit through the outside thereof while retaining the integrity of the fruit and thereafter subjecting the vented fruit to the action of a drying agent.

5. The process for drying fruit which comprises puncturing the enveloping skin or shell thereof from the exterior to produce one or more vents for the interior of the fruit and thereafter subjecting the vented fruit to the action of a drying agent.

[Claim 6 not printed in the Gazette.]

1,062,970. PORTABLE CRUCIBLE-FURNACE. MATTHEW HARVEY, Walsall, England. Filed Jan. 24, 1911. Serial No. 604,382. (Cl. 75—186.)

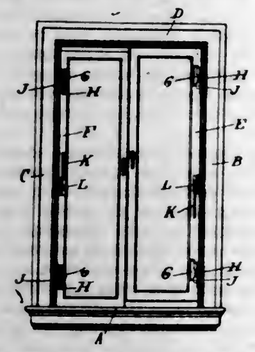
1. In a crucible furnace, an outer shell having an annular blast chamber, a plurality of twyers passing tangentially through said shell, and having communication with said blast passage, and cocks located in the outer ends of said twyers regulating the blast therethrough, said cocks being provided with means for rotating them, substantially as described.



2. In a crucible furnace, an outer shell having an annular blast chamber, a plurality of twyers passing tangentially through said shell and having communication with said blast chamber, and hollow cocks located in the outer ends of said twyers for regulating the blast therethrough, said cocks being provided with means for rotating them, the outer ends of said hollow cocks being provided with a transparent closure, whereby the cocks will serve as sight holes.

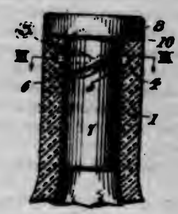
3. In combination a portable crucible furnace, a feed heater resting upon and disconnected from the upper end of said furnace, a chimney at one side of said furnace having an open lower end, said feed heater having a horizontal portion extending beneath the lower end of the chimney and normally bearing against the under side thereof, horizontal trunnions for said horizontally extending portion, and means for swinging said feed heater upon said trunnions, substantially as described.

1,062,971. LIFTING APPLIANCE. BERNARD HAUSMANN, San Francisco, Cal., assignor to The Facile Window Company, Inc., a Corporation of New York. Filed Dec. 11, 1911. Serial No. 664,935. (Cl. 20—53.)



A lifting appliance for a vertically movable and swinging sash having supporting hinges, comprising a lifting plate held to the sash by a vertical pintle coaxial with the hinge pintles, the plane of said lifting plate being parallel throughout to the axis of the hinge pintles, said lifting plate having a horizontal slot in its body portion, and a lifting lever pivoted to the window frame and having a pin offset from the pivot of the lever and engaging said slot in the lifting plate, sufficient lost motion being provided in the pin and slot connection to permit the lifting lever to be moved inwardly through a slight angle in order to obtain leverage before the lifting movement is commenced.

1,062,972. BOTTLE-STOPPER. ALBERT D. HITES and HARRY B. VAN GORDER, Ellwood City, Pa. Filed Dec. 18, 1912. Serial No. 737,438. (Cl. 215—55.)



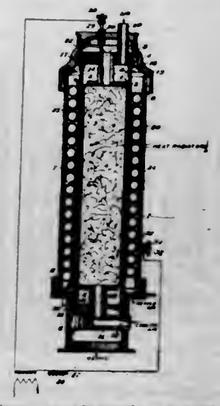
In a bottle stopper, the combination with a bottle neck having the inner wall thereof in proximity to its top edge formed with an annular groove divided into two divisions by a pair of diametrically opposed shoulders, an elongated cylindrical stopper movably mounted within said neck and having a peripheral spiral groove at a point between its center and its upper end, a flat spring having its ends extending into one of the divisions of the groove in said bottle neck and having a central offset portion extending into the groove of the stopper to limit the movement of the latter in the bottle neck, said stopper having a longitudinal groove extending through its inner ends to a point above the spiral groove, and a head carried by the outer end of the stopper.

1,062,973. PRODUCING RUBBER-LIKE COMPOUNDS. HENRY STALAY ARTHUR HOLT, Ludwigshafen-on-the-Rhine, Germany, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Dec. 9, 1911. Serial No. 664,874. (Cl. 23—24.)

1. The process of producing compounds resembling rubber by heating a hydrocarbon of the homologous series of which erythrene is the lowest member, in the presence of a very small quantity of sulfur.

2. The process of producing compounds resembling rubber by heating isoprene in the presence of about one-fifth of one per cent. of sulfur.

1,062,974. OZONIZER. NEVIL MONROE HOPKINS, Washington, D. C., assignor to The Terpezone Company, New York, N. Y., a Corporation of New York. Filed Feb. 26, 1913. Serial No. 750,915. (Cl. 204—32.)



1. In an ozonizer, an electrode consisting of a metal sheet, heat-radiators in contact with said electrode, and means for directing a cooling fluid over said radiators.

2. In an ozonizer, opposed electrodes each consisting of a metal sheet, heat-radiators in contact with said electrodes, and means for directing a cooling fluid over said radiators.

3. In an ozonizer, opposed electrodes each consisting of a metal sheet, heat-radiators in contact with said electrodes, and means for directing a cooling fluid successively over the radiators of the two electrodes.

4. In an ozonizer, concentric tubular electrodes, a casing inclosing the outer electrode, means for passing air to be ozonized between said electrodes, and conduits for passing a separate current of cooling fluid successively through the inner electrode and said casing.

5. In an ozonizer, a dielectric layer, and an electrode consisting of a thick sheet of metal electrodeposited on said dielectric layer.

[Claim 6 not printed in the Gazette.]

1,062,975. COLORING-MATTERS OF THE ANTHRAQUINONE SERIES. MAX HENRY ISLER, Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Apr. 20, 1912. Serial No. 692,043. (Cl. 8—1.)

1. The process of producing coloring matters of the anthraquinone series by condensing an omega-dihalogen-2-methyl-anthraquinone body with an ortho-diamino-anthraquinone.

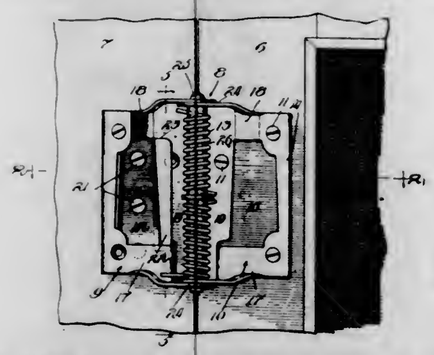
2. The process of producing coloring matter of the anthraquinone series by condensing 1.2-diamino-anthraquinone with omega-dichlor-2-methyl-anthraquinone.

3. The process of producing coloring matter of the anthraquinone series by condensing 1.2-diamino-anthraquinone with omega-dichlor-2-methyl-anthraquinone in the presence of boiling nitrobenzene.

4. The new vat coloring matters of the anthraquinone series which are condensation products of an omega-dihalogen-2-methyl-anthraquinone body with an ortho-diamino-anthraquinone, which new coloring matters are insoluble in water and in dilute acids and alkalis and yield from yellow to red solutions in sulfuric acid, from yellow-red to brown-red vats with alkaline hydrosulfite, and dye cotton from such vats yellow to orange to violet shades.

5. The new vat coloring matter of the anthraquinone series which is a condensation product of 1.2-diamino-anthraquinone with omega-dichlor-2-methyl-anthraquinone, which new coloring matter is insoluble in water and in dilute acids and alkalis, is infusible below 330° C., gives a yellow-orange solution in concentrated sulfuric acid, a yellow-red vat with alkaline hydrosulfite solution, and dyes cotton clear yellow shades.

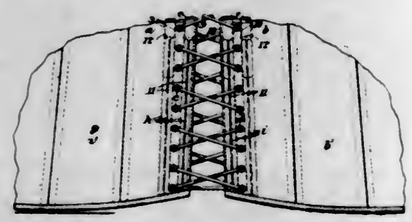
1,062,976. HINGE. ERSKINE H. JACKSON, Chicago, Ill. Filed Aug. 20, 1912. Serial No. 716,041. (Cl. 16—25.)



1. A hinge composed of two pivotally connected members, each formed of a single piece of metal bent around and back near its outside edge to provide a groove on the underside thereof, and formed in its central portion with an opening bounded on the outside by the walls of the aforesaid groove and on the inside by an underset edge of the hinge member disposed substantially in the same plane with the under wall of the aforesaid groove, in combination with a socket member provided with offset tongues adapted to overlie the under wall of the aforesaid groove and the under-set edge of the hinge member to lock therewith, substantially as described.

2. A hinge composed of two pivotally connected members, each formed of a single piece of metal bent around and back near its outside edge to provide a groove on the underside thereof, and formed in its central portion with an opening bounded on the outside by the walls of the aforesaid groove, on the inside by an under-set edge of the hinge member disposed substantially in the same plane with the under wall of the aforesaid groove, and at one of its ends by a web extending transversely and obliquely between the aforesaid outside and under-set inside edges, in combination with a socket member provided with offset tongues adapted to overlie the under wall of the aforesaid groove and the under-set edge of the hinge member to lock therewith, substantially as described.

1,062,977. APPAREL-CORSET. DANIEL KOPS, New York, N. Y. Filed Oct. 26, 1912. Serial No. 727,838. (Cl. 2—73.)



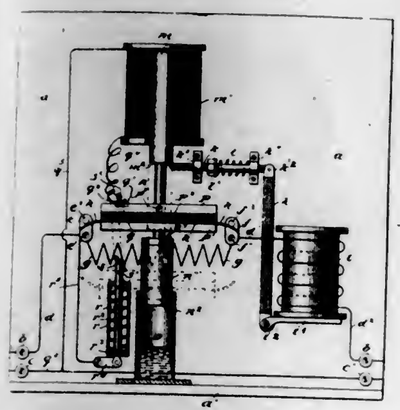
1. An apparel corset comprising corset body halves, skirts depending therefrom, main back-bones adjacent to the lacing edges of the corset body halves, and skirt bones extending upwardly from the bottom of the said skirts at the rear thereof and overlapping the said main back-bones for stiffening the skirts along the lacing edges thereof and under flexure permitting the lower rear portions of the skirts to conform to the contour of the body of the wearer.

2. An apparel corset comprising the corset body halves, skirts depending therefrom, elastic fabric inserts in the said skirts at the rear portions thereof, main back-bones adjacent to the lacing edges of the corset body halves, and skirt bones extending upwardly from the bottom of the said elastic fabric inserts and overlapping the said main back-bones for stiffening the skirts along the lacing edges thereof and under flexure permitting the lower rear portions of the skirts to conform to the contour of the body of the wearer.

3. An apparel corset comprising the corset body halves, skirts depending therefrom, fabric inserts in the said skirts at the rear portions thereof, main back-bones adjacent to the lacing edges of the corset body halves, and skirt bones employed in pairs extending upwardly from the bottom edges of the said fabric inserts along the lacing edges thereof, each pair of the said skirt bones overlapping one of the said main back-bones for stiffening the fabric inserts at the lacing edges thereof and under flexure compelling the fabric inserts to conform to the contour of the body of the wearer.

4. An apparel corset comprising the corset body halves, skirts depending therefrom, elastic fabric inserts at the rear of the said skirts, main back-bones at the rear of the corset body halves with series of lacing eyelets intervening between the said main back-bones, which extend below the said corset body halves and into the said fabric inserts, and skirt bones employed in pairs, each pair extending from the lower edge of the said fabric inserts and overlapping one of the said main back-bones, the series of lacing eyelets being continued from the corset body halves between the pairs of the said skirt bones which stiffen the skirts at the lacing edges thereof and compel the same to conform to the contour of the body of the wearer.

1,062,978. ELECTRIC WORK-CIRCUIT-REGULATING MONITOR. FRANK KRAEMER, Chicago, Ill., assignor, by mesne assignments, to MAX HARRIS, Pittsburgh, Pa. Filed Dec. 14, 1906. Serial No. 347,800½. (Cl. 175—268.)



1. An electric work circuit regulating monitor comprising a resistance circuit permanently connected, and a low resistance switch circuit normally closed, between terminals in the branch circuit furnishing current for the work, electrically controlled mechanism set in action by a decrease in circuit resistance, to open the switch and shift the entire current through the resistance, a shunt circuit closed an interval after said opening, a solenoid in said shunt circuit, a gravity core in said solenoid, means for supporting said core in the solenoid while the resistance in the circuit is at normal, and a connection between said core and the switch to hold the switch closed so long as the core is supported.

2. An electric work circuit regulating monitor comprising a resistance circuit permanently connected, and a low resistance switch circuit normally closed, between terminals in the branch circuit furnishing current for the work, a solenoid, a gravity core in said solenoid, means for supporting the core in the solenoid while the resistance in the circuit is at normal, means set in action electrically by a decrease of such resistance to withdraw the support from the core and permit the latter to fall, a connection between the switch and the core whereby the latter opens the switch in its fall, to shift the entire current through the resistance, and a shunt circuit embracing said solenoid and closed an interval after the opening of the switch, to energize the solenoid.

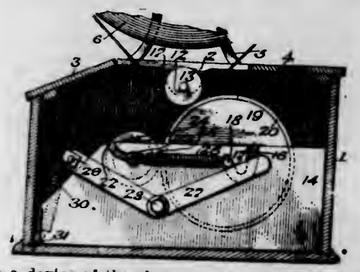
3. An electric work circuit regulating monitor comprising a resistance circuit permanently connected, and a low resistance switch circuit normally closed, between terminals in the branch circuit furnishing current for the work, a solenoid, a gravity core in said solenoid, means for supporting the core in the solenoid while the resistance in the circuit is at normal, means set in action electrically by a decrease of said resistance, to withdraw the support from the core and let it fall, a connection between the switch and the core whereby the switch is opened by the latter in its fall, to shift the entire current through the resistance, and closed by said core in its rise, after an interval, as the core is sucked in by the solenoid, and a shunt circuit embracing said solenoid and closed an interval after the opening of the switch, to energize the solenoid.

4. An electric work circuit regulating monitor comprising a resistance circuit permanently connected, and a low resistance switch circuit normally closed, between terminals in the branch circuit furnishing current for the work, a solenoid, a gravity core in said solenoid, means for supporting the core in the solenoid while the resistance in the circuit is at normal, means set in action electrically by a decrease in such resistance, to withdraw the support from the core and permit it to fall, a connection between the switch and the core whereby the switch is opened by the latter in its fall, to shift the entire current through the resistance, a shunt circuit embracing the solenoid and normally open, and a circuit closer struck by the switch as it is thrown open and closing the shunt circuit to energize the solenoid to lift the core.

5. An electric work circuit regulating monitor, comprising a high-resistance circuit permanently connected, and a low-resistance switch circuit normally closed, between terminals in a branch circuit furnishing current for the work, electrically-controlled mechanism set in action by an increase of current and operating to open the switch and shift the entire current through the high resistance, a shunt circuit closed at an interval after the opening of the switch, a solenoid in said shunt circuit, a permanent electrical connection between one main and one end of the solenoid winding, a conductor permanently connected to the other end of the solenoid winding and to a contact carried by the switch, another contact electrically connected to the other main which the contact carried by the switch strikes to close the shunt circuit, a core for said solenoid, and a connection between said core and the switch whereby the core acts to restore the switch as the shunt circuit is closed.

[Claims 6 to 14 not printed in the Gazette.]

1,062,979. PRINTING ATTACHMENT FOR ROLLS. MOSES W. LEE, Philadelphia, Pa., assignor, by direct and mesne assignments, to National Roll Printer Company, Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 1, 1912. Serial No. 687,689. (Cl. 211—30.)



1. In a device of the character stated, a casing, a paper roll carried thereby, a roll mounted in said casing and beneath which a sheet of paper passes, a support carried by said casing and having slots extending downwardly, laterally and upwardly, an impression roll having journals engaging said slots, said support having rearwardly extending slots therein, an ink roll journaled in said rearwardly extending slots, yielding means for maintaining said ink roll and impression roll in operative and assembled position with respect to said support, arms journaled in said support and having one end engaging the journals of said impression roll, and a tension device for said arms whereby said impression roll is maintained in operative relation with respect to the paper withdrawn from the paper roll.

2. In a device of the character stated, a casing, a paper roll carried thereby, a support carried by said casing and comprising side plates and cross bars connected therewith, said side plates having slots extending downwardly, laterally and upwardly and slots extending downwardly, laterally and rearwardly, an impression roll contained in the downwardly, laterally and upwardly extending slots, an ink roll carried in said other slots, a spring coöperating with said rolls to maintain them in assembled condition with respect to said plates, a roll journaled in said casing and between which and the impression roll the paper passes, and yielding means for maintaining said impression roll against the paper.

3. In a device of the character stated, a casing having a removable cover, a roll of sheet material rotatably mounted above said casing, a support carried by said casing and having outwardly, laterally and upwardly extending slots, and downwardly and rearwardly extending

slots, an impression roll arranged in said first slots, an ink roll mounted in said second slots, yielding means for maintaining said rolls in operative relation with respect to each other, and in assembled condition with respect to said support, arms journaled in said support and bearing against the journals of the impression roll, a spring secured to said arms and to said support to maintain said impression roll in operative position, and a roll carried by said casing and between which and the impression roll a sheet passes from the sheet carrying roll.

4. In a device of the character stated, a casing having a removable portion, a support carried by said casing and comprising side members having a downwardly, laterally and upwardly extending slot, an impression roll journaled in said slots, said support having slots therein, an ink roll journaled in the last named slots, yielding means for maintaining the ink roll and the impression roll in working relation and in assembled condition with respect to the side members, arms journaled in said side members and engaging the impression roll journals, yielding means co-acting with said arms to place a yielding tension on the impression roll journals, brackets carried by said casing, each having an aperture in its under face and a roll journaled in said aperture and between which and the impression roll the sheet of material passes.

5. In a device of the character stated, a casing having a removable portion, a support carried by said casing and comprising side members each having a downwardly, laterally and upwardly extending slot, an impression roll journaled in said slots, said support having slots therein, an ink roll journaled in the last named slots, yielding means for maintaining the ink roll and the impression roll in working relation and in assembled condition with respect to the said members, arms journaled in said side members and engaging the impression roll journals, yielding means co-acting with said arms to place a tension against the impression roll journals, brackets carried by said casing, each having an open slot in its under face, and a roll journaled in said open slots and between which and the impression roll the sheet of material passes.

[Claim 6 not printed in the Gazette.]

1,062,980. TROLLING-SPOON. WILLIAM W. LEWIS, Oneida, N. Y., assignor of one-half to Charles E. B. Williams and William J. Capron, Oneida, N. Y. Filed Aug. 23, 1912. Serial No. 716,714. (Cl. 43—30.)



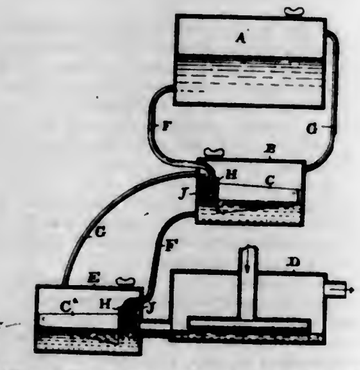
1. In a trolling spoon, the combination with a wire, of a flexible frame loosely mounted upon a wire, a spoon having a notch formed therein adapted to fit about the flexible frame for fastening the spoon to the frame and means for fastening the spoon to the frame.

2. In a trolling spoon, the combination with a wire, of a flexible frame loosely mounted upon the wire, a spoon having a notch formed therein adapted to fit about the flexible frame for fastening the spoon to the frame, said spoon having an elongated slot therein and a button movably mounted upon the flexible frame adapted to be passed through the slot in the spoon and then turned for fastening the spoon to the frame.

3. In a trolling spoon, the combination with a wire, of an L-shaped spring frame having openings therein at the ends through which the wire extends, a spoon having a notch formed in one end thereof adapted to engage the spring frame, said spoon having a slot formed therein, and a button on the frame adapted to pass through the slot for fastening the spoon to the frame.

4. In a trolling spoon, the combination with a wire, of a frame mounted upon the wire, and a spoon having a notch therein for fastening the spoon to the frame, said notch adapted to fit about the wire and the spoon drawn along the wire so that the notch passes onto and engages with the frame for connecting the spoon to the frame and means for fastening the spoon to the frame.

1,062,981. CARBURETING APPARATUS. FREDERICK C. LYNDE, Withington, Manchester, England, assignor of one-half to Clement Vincent Haworth, Poulton-le-Fylde, England. Filed Mar. 28, 1908. Serial No. 423,823. (Cl. 137—68.)



In a device of the character described, a float hinged at one end thereof, a cup carried by said float at the free end thereof whereby said cup may be given an extended range of movement relative to that of the center of gravity of the float, and a mercury seal in said cup for controlling the inlet of liquid thereinto and means for adjusting the height of said cup with respect to said float.

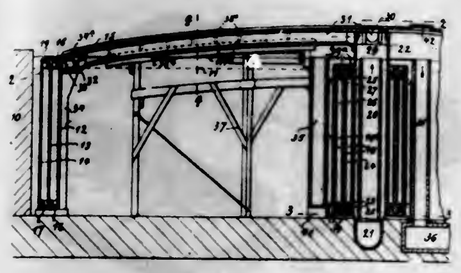
1,062,982. PROCESS OF PRODUCING ELEMENTARY SILICON AND BY-PRODUCTS. FLORENTINE J. MARCHALSKE, Philadelphia, Pa., assignor of one-half to Christopher Offenhauser, Philadelphia, Pa. Filed May 13, 1912. Serial No. 697,060. (Cl. 204—63.)

1. The process of producing simultaneously elementary silicon and by-products from silicious compounds consisting in splitting up the silicious compound by electro-thermic fusion and subjecting the fused mass directly to centrifugal action.

2. The process of producing directly in a separate condition elementary silicon and by-products from silicious compounds consisting in splitting up the compounds by electro-thermic fusion and subjecting the fused mass directly to centrifugal action while allowing the current to pass at a voltage somewhat less than that used during the electro-thermic fusion of the said compounds.

3. The process of producing simultaneously elementary silicon and metallic oxids consisting in splitting up silicious compounds by electro-thermic fusion, and subjecting the fused mass directly to centrifugal action while allowing the current to pass at a voltage somewhat less than that used during the electro-thermic fusion of the said compounds, separating thus the silicon from the metallic oxids by specific gravity.

1,062,988. GASOMETER. FREDERICK J. MAYER, New York, N. Y., assignor to Stettiner Chamotte-Fabrik Actien-Gesellschaft, vorm. Didier, Stettin, Germany, a Corporation of Germany. Filed Mar. 4, 1912. Serial No. 681,407. (Cl. 48—177.)



1. A gasometer provided with a bell having a central distributing chamber at the top and a pipe leading to said chamber, ducts extending outwardly from said chamber, a peripheral duct connected with the outer ends of said ducts and communicating with the interior of the bell, a central inlet pipe arranged to deliver gas to the pipe of the bell, and an annular outlet pipe surrounding said inlet pipe at a sufficient distance to leave a space for the pipe of the bell.

2. A gasometer comprising a tank having an inlet pipe and an annular outlet pipe surrounding said inlet pipe, a bell having a depending pipe arranged to receive gas from the inlet pipe, and ducts for leading the gas from said depending pipe to the peripheral portion of the bell, and constructed to discharge gas into the bell only at the peripheral portion thereof

3. A gasometer comprising a tank having an inlet pipe and an annular outlet pipe surrounding said inlet pipe, and a bell provided with means for receiving gas at its central portion and discharging said gas into the bell only at its peripheral portion, said means being imperforate between the central and the peripheral portions of the bell.

4. A gasometer comprising a tank having an inlet pipe and an outlet pipe both located at the central portion of the tank, and a bell provided with means for receiving gas at its central portion and discharging said gas into the bell only at its peripheral portion, said means being imperforate between the central and the peripheral portions of the bell.

5. A gasometer comprising a tank having an inlet pipe and an outlet pipe both located at the central portion of the tank, and a bell provided with means for receiving gas at its central portion from said inlet pipe, means for discharging the gas into the interior of the bell at its periphery in a number of jets, and imperforate ducts for leading the gas from the central receiving means to the peripheral discharging means.

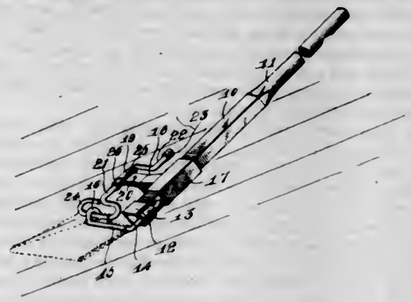
[Claims 6 and 7 not printed in the Gazette.]

1,062,984. COMBINED MOP HEAD AND WRINGER. MILTON B. MCCOY, Pueblo, Colo. Filed Aug. 17, 1912. Serial No. 715,636. (Cl. 15—43.)

1. A mop holder comprising a handle, a bearing slidably mounted upon said handle, a crank shaft rotatably mounted upon said bearing and having one end portion formed into an eye for holding one end of a mop, and means at the end of said handle for holding the other end of a mop and adapted to be releasably connected with said eye to hold said bearing at the lower end of said handle.

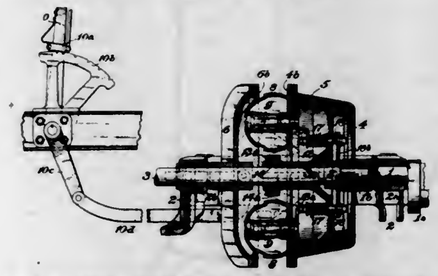
2. A mop holder comprising a handle, mop engaging means at the lower end of said handle, a hook carried by said mop engaging means, a sleeve slidably mounted upon said handle, and a crank shaft rotatably supported from said sleeve and having one end portion formed into an eye adapted to engage one end of a mop and adapted to be engaged by said hook to hold said sleeve at the lower end of said handle.

8. A mop holder comprising a handle, a sleeve slidably mounted upon said handle, means carried by said sleeve for holding and wringing a mop, and means at the end of said handle for holding a mop and for engaging said first mentioned means to prevent longitudinal movement of said sleeve.



4. A mop holder comprising a handle, a mop holding bar carried by the handle and extending to one side thereof, said bar terminating in a hook, a sleeve slidably mounted upon said handle, and a crank shaft carried by said sleeve and terminating in an eye for engaging one end of a mop and adapted to be engaged by the hook of said bar to prevent longitudinal movement of said sleeve.

1,062,985. POWER-TRANSMISSION MECHANISM. CARL J. MELLIN, Schenectady, N. Y. Filed May 15, 1912. Serial No. 697,378. (Cl. 74—26.)



1. In a power transmission mechanism, the combination of a driving shaft, a driven shaft, friction wheels on said shafts, an interposed rotatable ball member through which rotation is imparted from the driving shaft to the driven shaft by frictional contact, and means for varying the direction of rotation of the driven shaft by variations of the axial angular relation of the ball member thereto.

2. In a power transmission mechanism, the combination of a driving shaft, a driven shaft, friction wheels on said shafts provided with internal friction surfaces on their rims, an interposed rotatable ball member adapted to contact with said friction surfaces, an axle on which said ball member is journaled, a carrier shaft extending at right angles to the axle of the ball member and secured thereto, an arm fixed to said carrier shaft, and operative connections for turning said arm and shaft to move the ball member into and out of different desired relative planes of contact with the surfaces of the friction wheels.

3. In a power transmission mechanism, the combination of a driving shaft, a driven shaft, friction wheels on said shafts, an interposed rotatable ball member in the form of a segment of a sphere having a peripheral groove in a plane at right angles to its axis of rotation, an axle on which said ball member is journaled, and means for moving the ball member at right angles to its axis of rotation and thereby to bring it into contact with the friction wheels in different desired radial planes at right angles to said

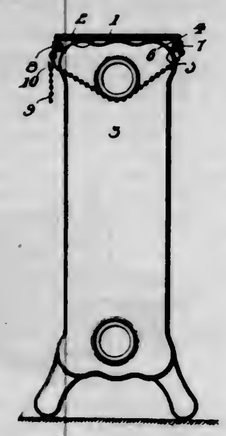
axis, or to move it into position in which its peripheral groove registers with one of the friction wheels and its surface is removed from contact with the other.

4. In a power transmission mechanism, the combination of a driving shaft, a driven shaft, friction wheels on said shafts, two rotatable ball members journaled on axles on opposite sides of the axes of the friction wheels, and means for coincidently moving said ball members at right angles to their axes of rotation and thereby bringing their surfaces into and out of frictional contact, in different desired relative transverse planes of the ball members, with the rims of the friction wheels.

5. In a power transmission mechanism, the combination of a driving shaft, a driven shaft, friction wheels on said shafts, two rotatable ball members journaled on axles on opposite sides of the axes of the friction wheels, in position to contact with said wheels, two carrier shafts journaled in bearings at right angles to the axles of the ball members, and each secured to one of said axles, a shifting bar fitted to slide longitudinally at right angles to the carrier shafts, links coupling said shifting bar to said shafts, and operative connections for actuating the shifting bar.

[Claims 6 to 14 not printed in the Gazette.]

1,062,986. RADIATOR-COVER. WILLIAM R. MOORE, Windber, Pa. Filed Dec. 18, 1912. Serial No. 737,478. (Cl. 237—19.)

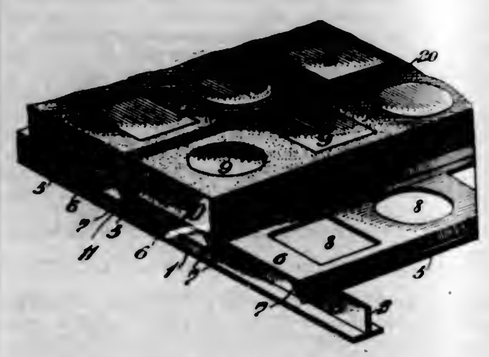


In an extensible cover for radiators, inverted channel-shaped telescopic sections, one of said sections having the walls thereof flanged inwardly to serve as guides for the walls of the other section, ears carried by the walls of one of said sections adjacent to one end thereof, and a flexible connection between said ears and adapted to extend between the sections of a radiator and retain said cover thereof.

1,062,987. SIDEWALK, FLOOR, VAULT, AND ROOF LIGHT CONSTRUCTION. LOGAN WILLARD MULFORD, Narberth, Pa., assignor to American Bar Lock Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 12, 1911, Serial No. 632,549. Renewed Jan. 4, 1913. Serial No. 740,239. (Cl. 94—7.)

1. In a sidewalk, floor, vault and roof-light construction, supporting elements including a longitudinally grooved bar, lenses carried by the supporting elements, binding material surrounding the lenses, and means coacting with said binding material to permit the expansion and contraction thereof and coacting with the groove of said bar to prevent leakage through the construction.

2. In a sidewalk, floor, vault and roof-light construction, supporting elements including an element having a groove in its upper face, lenses carried by said supporting elements, binding material surrounding the lenses and having a groove in alinement with the groove in said bar, and elastic waterproofing material filling the groove in the binding material.



3. In a sidewalk, floor, vault and roof-light construction, supporting elements including an element having a groove in its upper face, lenses carried by said supporting elements, binding material surrounding the lenses and having a V-shaped groove in alinement with the groove in said bar and extending thereinto, and elastic waterproofing material filling the groove in the binding material.

4. In a sidewalk, floor, vault and roof-light construction, primary bars adapted to rest upon suitable supports, secondary bars carried by the primary bars and having grooves in their upper faces, apertured plates longitudinally adjustable relatively to the secondary bars, lenses covering the apertures in said plates, and binding material surrounding the lenses, covering the plates and filling the grooves whereby the plates and secondary bars are interlocked with the binding material.

5. In a sidewalk, floor, vault and roof-light construction, primary bars adapted to rest upon suitable supports and having recesses therein, secondary bars engaging the walls of the recesses of the primary bars, plates having lens receiving apertures therein and carried by adjacent secondary bars, lenses covering the apertures in said plates and binding material surrounding the lenses and filling said bars whereby an increased thickness of binding material is formed intermediate said lenses.

[Claims 6 to 10 not printed in the Gazette.]

1,062,988. ANTHRAQUINONE DYES. CARL MÜLLER, Ludwigshafen-on-the-Rhine, and MAX HENRY ISLER, Mannheim, Germany, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Apr. 20, 1912. Serial No. 692,133. (Cl. 8—1.)

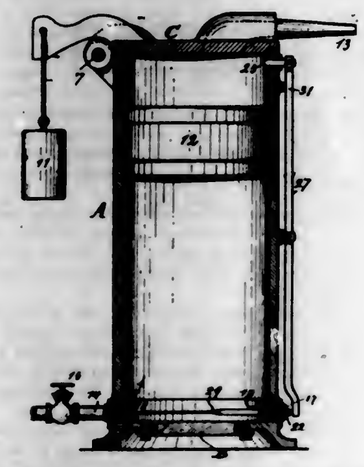
1. As new articles of manufacture amidins containing at least two 2-amino-anthraquinone residues and yielding yellow to red solutions in concentrated sulfuric acid, from yellow to red vats with alkaline hydrosulfite and dyeing cotton, from such a vat, yellow to orange-yellow shades.

2. As a new article of manufacture the amidin containing two 2-amino-anthraquinone residues which can be obtained by condensing 2-amino-anthraquinone with benzotrichlorid in the presence of nitrobenzene, which probably possesses a constitution corresponding to the formula

$$C_6H_5.C\begin{matrix}=N.C_{14}H_7O_2\\ -NH.C_{14}H_7O_2\end{matrix}$$

and which melts at about from 334° to 337° C., yields an orange-yellow solution in concentrated sulfuric acid, an orange-red vat in alkaline hydrosulfite and dyes cotton, from a vat, yellow shades.

1,062,989. SAFETY APPLIANCE FOR SAUSAGE-STUFFERS. CHARLES NAEGELEN, Cincinnati, Ohio, assignor to The Cincinnati Butchers' Supply Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 24, 1912. Serial No. 692,956. (Cl. 138—10.)



1. In a device of the character described, the combination of an inclosure provided with a lockable cover and an outlet, a press-head to expel the contents of the inclosure movably fitted into the same and adapted to move under pressure toward said outlet, an inlet for the pressure medium and an independent relief port in the inclosure, a valve whereby this port is controlled, a spring which holds the valve normally closed and means whereby the press-head and this valve are operatively connected in a manner that the valve is caused to open automatically when the press-head has moved through its intended travel and is permitted to close again automatically as soon as the press-head returns.

2. In a device of the character described, the combination of an inclosure provided with a lockable cover and an outlet, a press-head to expel the contents of the inclosure movably fitted into the same and adapted to move under pressure toward said outlet, an inlet for the pressure medium and an independent relief port in the inclosure, a valve whereby this port is controlled, a spring which holds the valve normally closed and a trip normally located in the path of the press-head and in a position whereby, when this latter has moved through its intended path, it acts automatically upon said trip to cause opening of the valve permitting the same to close again automatically as soon as action upon the trip ceases.

3. In a device of the character described, the combination of an inclosure provided with a lockable cover and an outlet, a press-head to expel the contents of the inclosure movably fitted into the same and adapted to move under pressure toward said outlet, an inlet for the pressure medium and an independent relief port in the inclosure, a valve whereby this port is controlled, a spring which holds the valve normally closed, a trip located to project normally through the side of the inclosure into the path of the press-head and means whereby it is operatively connected to the valve mentioned and which means are adapted to move this valve automatically into open position in consequence of actuation of the trip by the press-head after this latter has moved through its intended path, the valve being left free to close again automatically as soon as the press-head returns.

4. In a device of the character described, the combination of an inclosure provided with a lockable cover and an outlet, a press-head to expel the contents of the inclosure movably fitted into the same and adapted to move under pressure toward said outlet an inlet for the pressure medium and an independent relief port in the inclosure, a valve whereby this port is controlled, a spring which holds the valve normally closed, a trip seated in the side of the inclosure and projecting normally into the path of the press-head and a lever in operative connection therewith and with the valve mentioned and whereby this latter is caused to open automatically when the trip is actuated by the press-head after this latter has moved through its intended path, the valve being free to close again automatically as soon as the press-head returns.

5. In a device of the character described, the combination of an inclosure provided with a lockable cover and an outlet, a press-head to expel the contents of the inclosure movably fitted into the same and adapted to move toward said outlet, an inlet to this inclosure to admit a pressure medium to move the press head, a valve which controls this inlet, an independent relief port in the inclosure, a valve which controls it, means whereby the two valves are connected to move together and in a manner that when one valve is caused to open, the other closes, a trip located to project normally into the path of the press-head so as to be actuated thereby when this latter has moved through its intended path, means operatively connecting the trip with both valves to effect automatically their simultaneous movement in one direction, and a spring to return them again automatically to their original position.

1,062,990. ANTHRAQUINONE DYES AND PROCESS OF MAKING THEM. PAUL NAWIASKY, Ludwigshafen-on-the-Rhine, Germany, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Mar. 30, 1912. Serial No. 687,462. (Cl. 8—1.)

1. The process of producing coloring matter of the anthraquinone series by treating an anthraquinone-aryl-thio-ether with a sulfonating agent.

2. The process of producing coloring matter of the anthraquinone series by treating 2-amino-anthraquinone-1.3-di-paracresyl-thio-ether with a sulfonating agent.

3. As new articles of manufacture the coloring matters which are probably sulfonic acid derivatives of anthraquinone-aryl-thio-ethers which are soluble in water and in concentrated sulfuric acid and which dye wool from an acid bath various shades, which new coloring matters yield alkaline solutions which are colored and which assume a different color on being treated with sodium hydrosulfite, which new coloring matters in the form of their neutral potassium salts possess more atomic proportions of sulfur than of potassium, while the color of their aqueous solutions is destroyed by alkaline hypochlorite.

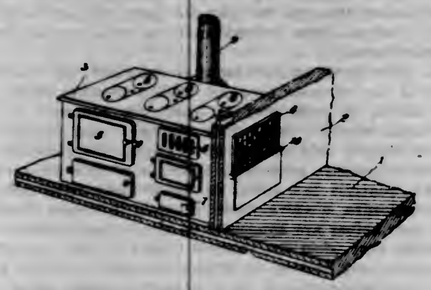
4. As a new article of manufacture the coloring matter being probably a sulfonated derivative of 2-amino-anthraquinone-1.3-diparacresyl-thio-ether, which coloring matter consists of an orange powder which yields an orange solution in water, a yellow-red solution in concentrated sulfuric acid, dyes wool orange from an acid bath, yields a colored alkaline solution which solution assumes a different color on being treated with sodium hydrosulfite, which new coloring matter in the form of its neutral potassium salt possesses more atomic proportions of sulfur than of potassium, while the color of its aqueous solution is destroyed by alkaline hypochlorite.

1,062,991. RANGE. FRANCES P. NEAL, North Plainfield, N. J. Filed May 17, 1912. Serial No. 697,873. (Cl. 126—1.)

1. In a device of the kind described, a range containing a fire box having an opening in its side, a grate in said opening composed of a plurality of bars of fire-resisting material, transparent non-inflammable material removably held between said bars and a hinged cover composed of alternate layers of metal and non-conducting material adapted to cover the outside of said grate.

2. In a device of the kind described, a range having a fire box provided with an extension having an opening,

a grate composed of a plurality of bars of fire brick located in said opening, sheets of mica removably held between said bars and adapted to fill the space between them and a hinged cover composed of alternate layers of metal and asbestos adapted to cover the outside of said grate and to completely close said opening.



3. In combination with the partition wall of a house, a range having a fire box provided with a lateral extension projecting through said wall, said lateral extension being closed at its outer end by a grate of fire-resisting material, transparent, non-inflammable material located betwen the bars of said grate and a cover adapted to cover the end, and completely close the opening of, the lateral extension.

4. In combination with a partition wall of a house, a range having a top surface and containing a fire-box at its side, a grate in said opening, transparent non-inflammable material located outside of the grate and adapted to cover the same, and a cover attached to the partition wall and adapted to cover the grate.

1,062,992. ONE-PART EXPANSION-SHIELD. HENRY B. NEWHALL, Jr., Plainfield, and HENRY W. PLEISTER, Westfield, N. J., assignors to Henry B. Newhall, Plainfield, N. J. Filed Mar. 12, 1912. Serial No. 683,256. (Cl. 85—2.4.)



1. An expansion shield formed of a single piece of sheet metal with a connecting web and comprising two parts bent into juxtaposed relation, each of said parts comprising inner and outer sections having connecting webs and bent one upon the other.

2. An expansion shield formed of a single piece of sheet metal with a connecting web and comprising two parts bent into juxtaposed relation, each of said parts comprising inner and outer sections bent one upon the other and having means whereby to maintain their proper relation.

3. An expansion shield formed of a single piece of sheet metal with a connecting web and comprising two parts bent into juxtaposed relation, each of said parts comprising inner and outer sections bent one upon the other, the former having extended side edges bent about the side edges of the latter.

4. An expansion shield formed of a single piece of sheet metal with a connecting web and comprising two parts, said parts being bent into juxtaposed relation and each comprising transversely curved inner and outer sections, bent one upon the other, the former having extended side edges inversely curved about the side edges of the latter.

5. An expansion shield formed of a single piece of sheet metal with a connecting web and comprising two parts, said parts being bent into juxtaposed relation and each comprising inner and outer sections also bent into juxtaposed relation, the inner sections having transverse corrugations coöperating to form a bolt-advancing screw.

[Claim 6 not printed in the Gazette.]

1,062,993. TWO-PART EXPANSION-SHIELD. HENRY B. NEWHALL, Jr., Plainfield, and HENRY W. PLEISTER, Westfield, N. J., assignors to Henry B. Newhall, Plainfield, N. J. Filed Mar. 12, 1912. Serial No. 683,257. (Cl. 85—2.4.)



1. An expansion shield formed of sheet metal and comprising a pair of transversely curved parts, each part including an outer section and an inner section, said sections having means whereby to maintain their proper relation in each part.

2. An expansion shield comprising two parts, each part including an outer transversely curved section, and an inner transversely curved section, the latter having extending side edges inversely curved about the side edges of the outer section.

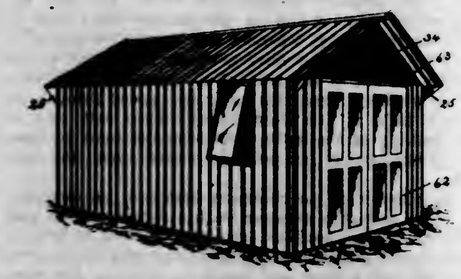
3. An expansion shield comprising two parts, each of which parts includes an outer transversely curved section and an inner transversely curved section inclined with respect to said outer section, said sections of each part being formed of a single piece of material and provided with means whereby to maintain their proper relation.

4. An expansion shield formed of sheet metal and comprising two transversely curved parts, each of said parts including an outer section and an inner section, bent one upon the other, and having relatively engaging means whereby to maintain their proper relation, the inner sections having transverse corrugations coöperating to form a bolt advancing screw.

5. An expansion shield comprising two parts, each part including an outer transversely curved section and an inner transversely curved section, the former having extended portions projecting in a greater degree adjacent one end than the other, and adapted to contact with the inner section and maintain the same in an inclined position with respect to the outer section.

[Claims 6 to 11 not printed in the Gazette.]

1,062,994. SHEET-METAL HOUSE. CLARENCE D. PRUDEN, Baltimore, Md. Filed Mar. 2, 1911. Serial No. 611,767. (Cl. 189—2.)



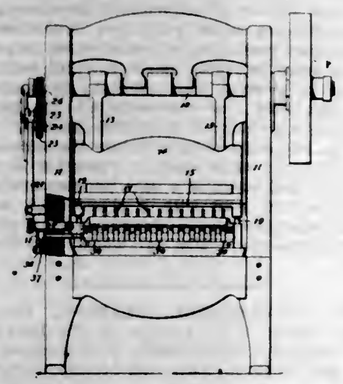
1. In a sheet metal house the combination with a plurality of connected walls of channel plates carried on the upper ends of opposite walls each channel plate having an up-turned flange; a roof and a strip secured to the under side of the roof and projecting downwardly into locking engagement with the channel plate flanges.

2. In a sheet metal house the combination with a plurality of wall sections joined at their longitudinal edges, of a pilaster for connecting wall-sections that extend at an angle with respect to each other; a corner bracket sustained from the upper end of the pilaster and projecting beyond the outer side of the walls; a roof and means for connecting the roof with the corner brackets.

3. In a sheet metal house the combination with a plurality of wall sections joined at their longitudinal edges, of a pilaster for connecting wall-sections that extend at an angle with respect to each other; a corner bracket sustained from the upper end of the pilaster and projecting beyond the outer side of the walls,—said corner brackets having up-turned flanges; a roof and means on the roof for engaging the flanges of the corner brackets.

4. In a sheet metal house the combination with a plurality of wall sections joined at their longitudinal edges, of a pilaster connecting walls that extend at an angle with respect to each other,—said pilaster having a vertical groove at its upper end; a corner bracket having a flange that enters the pilaster-groove and also having an upper plate portion that projects over the end of the pilaster; means for securing said plate portion to the pilaster; a roof and means for securing the roof to the corner bracket.

1,062,995. GANG PUNCHING-PRESS. OBERLIN SMITH, Bridgeton, N. J. Filed Sept. 25, 1908. Serial No. 454,834. (Cl. 164—90.)



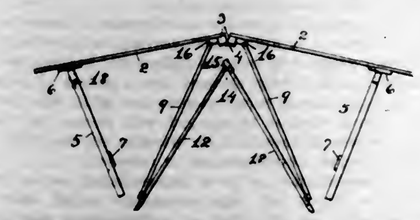
1. In a press the combination of a ram, means for reciprocating the ram, a gang of independent punches, a rock shaft, supporting devices for the punches connected with said rock shaft, and means to move said rock shaft to simultaneously move said supporting devices into and out of operative relation to the punches.

2. In a press, the combination of a punching means and means to shift the latter with reference to the work in a direction crosswise of the line of movement of the punching means.

3. In a press, the combination of coöperating punches and dies, a reciprocating ram for operating the same, and means to shift the punches and dies crosswise of the direction of travel of the ram.

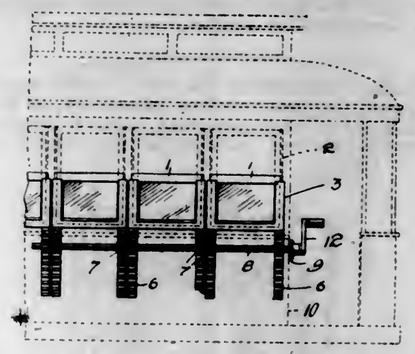
4. In a press, the combination of a ram and bolster, punches and dies, plates carrying the punches and dies slidably connected to the ram and bolster, and means to reciprocate said plates.

1,062,996. FOLDING TABLE. GEORGE F. SORNBERGER, Sidney, N. Y. Filed May 17, 1912. Serial No. 698,056. (Cl. 45—116.)



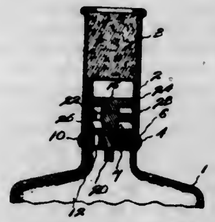
A folding table, comprising a top having two leaves, inner battens having lower hinged connection with each other, outer battens, inward foldable legs having hinged connection with said outer battens and cross braces, a single central longitudinal brace composed of two members having at their inner ends a hinged connection, and at their outer ends a separable connection with said cross braces, and inclined braces having at their upper ends a hinged connection with the inner ends of said leaves and at their lower ends a hinged connection with the outer ends of said members.

1,062,997. WINDOW-OPERATING DEVICE. ANTONI S. STANISH, Madrid, Iowa. Filed Oct. 28, 1912. Serial No. 728,066. (Cl. 89—97.)



The combination with a car having window sashes, of U-shaped frames having channeled sides and a channeled end loosely mounted upon the lower sashes, springs carried by the upper ends of said frames and frictionally holding said sashes within said frames, depending racks carried by said frames, a longitudinal revoluble shaft supported by said car, pinions mounted upon said shaft and engaging said racks, and means at an end of said shaft to facilitate rotating said shaft to simultaneously elevate and lower said frames carrying said sashes therewith.

1,062,998. NON-REFILLABLE BOTTLE. FRANK SULLIVAN, Port Royal, S. C., assignor of one-half to Charles J. Batchelor, Baltimore, Md. Filed Jan. 31, 1913. Serial No. 745,450. (Cl. 215—65.)

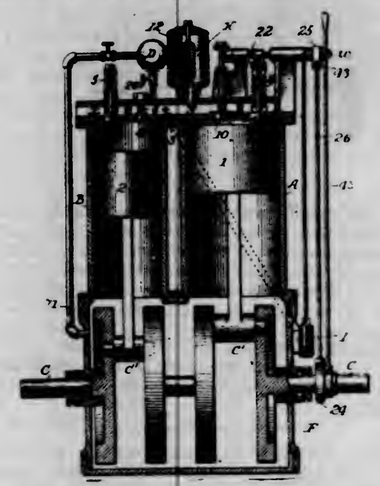


1. A non-refillable bottle comprising a neck having an annular groove on the inner side thereof; an apertured disk member located in said neck and providing a valve seat; means engaging with said disk member and the bottle neck and holding the valve sent in position; a valve guard comprising a pair of spaced disks and a stem, said stem passing through and secured to said apertured disk member; an apertured disk valve fitting on the guard stem between the valve seat and the adjacent guard disk, and adapted to close the openings of the valve seat when the bottle is in upright position; and a plurality of spacing members projecting from the valve seat and providing a flow passage when the bottle is in inverted position, substantially as described.

2. A non-refillable bottle comprising a neck having an annular groove on the inner side thereof; an apertured disk member located in said neck and providing a valve seat; means engaging with the disk member and the bottle neck and holding the valve seat in position; a valve

guard comprising a pair of spaced disks and a stem formed integrally therewith, one of said disks having apertures providing fluid passages and the other disk guarding the perforated disk; said stem having a reduced end portion passing through the valve seat disk; a member passing through said reduced end portion of the stem, and securing the guard to said valve seat disk; an apertured disk valve fitting loosely on the guard stem between the valve seat and the perforated disk of the guard, and adapted to close the openings of the valve seat when the bottle is in upright position; and a plurality of spacing members projecting from the valve seat and providing a flow passage when the bottle is in inverted position. substantially as described.

1,062,999. GAS-ENGINE. SAMUEL J. WEBB, deceased, Minden, La.; Robert D. Webb, Minden, La., by inheritance and by mesne assignments, owner of entire title. Filed Oct. 30, 1912. Serial No. 129,428. (Cl. 123—49.)



1. In a gas engine, in combination, a working or power cylinder, a compressor cylinder, an explosion chamber connecting the cylinders, pistons for said cylinders, a crank shaft connected to said pistons having cranks set at an angle, the power crank being in advance of the compressor crank, a check valve between the compressor cylinder and explosion chamber, and a valve between the power cylinder and the explosion chamber.

2. The combination with the compression cylinder and piston and working cylinder and piston, of a casing containing an explosion chamber, ports between the said chamber and said cylinders, one having a spring seated valve 4 and the other a valve 10, means for positively opening the valve 10, an exhaust port and valve 7 for said working cylinder, and means for positively opening the latter, an inlet port for the compression cylinder, an air vessel D communicating with the explosion chamber through a channel provided with a valve and also communicating with the inner or crank shaft ends of the cylinders and devices whereby to shift said opening means for opening valves 7 and 10 so that said valves are not opened.

3. In a gas engine, in combination, a working or power cylinder, a compressor cylinder, an explosion chamber connecting the cylinders, pistons for said cylinders, a crank shaft connected to said pistons having cranks set at an angle, the power crank being in advance of the compressor crank, valves between the cylinders and explosion chamber, and an inclosed air-tight crank case opening into the crank ends of the cylinders.

4. In a gas engine, in combination, a working or power cylinder, a compressor cylinder, an explosion chamber connecting the cylinders, pistons for said cylinders, a crank shaft connected to said pistons having cranks set at an angle, the power crank being in advance of the compressor crank, a check valve between the compressor cylinder and explosion chamber, and a positively operated valve between the power cylinder and the explosion chamber.

1,063,000. ANTHRACENE DYES AND MAKING THE SAME. HUGO WOLFF, Ludwigshafen-on-the-Rhine, Germany, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed May 20, 1911. Serial No. 628,511. (Cl. 8—1.)

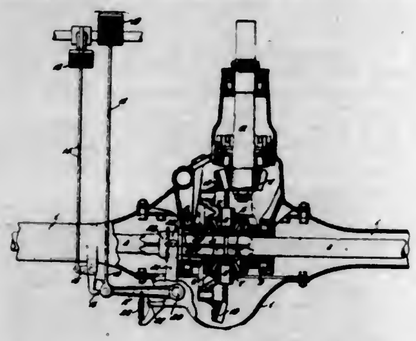
1. The process of producing new coloring matters of the anthracene series by treating an iso-dibenzanthrone body with a nitrating agent.

2. The process of producing new coloring matters of the anthracene series by treating an iso-dibenzanthrone body with a nitrating agent and then reducing the product so obtained.

3. As new articles of manufacture the coloring matters of the anthracene series which are derivatives of iso-dibenzanthrone containing nitrogen which coloring matters yield green solutions in concentrated sulfuric acid, violet-blue to greenish blue solutions in boiling nitrobenzene and yield blue vats with alkaline hydrosulfite from which vats cotton is dyed blue shades.

4. As a new article of manufacture the coloring matter of the anthracene series which is a nitrated iso-dibenzanthrone body, and which is a dark powder soluble in concentrated sulfuric acid with a green color, soluble in boiling nitrobenzene with a violet-blue color, yields with alkaline hydrosulfite a blue vat which dyes cotton blue shades.

1,063,001. DIFFERENTIAL GEARING. HERBERT W. ALDEN, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Sept. 7, 1912. Serial No. 719,241. (Cl. 74—34.)



1. The combination with a releasable transmission clutch member, of a differential gearing, a movable locking element adapted to lock the differential gearing, and means for shifting said locking element into and out of locking position, said means being inoperative while the transmission clutch member is engaged.

2. The combination with a releasable transmission clutch member, of a differential gearing, a movable locking element adapted to lock the differential gearing, means for shifting said locking element into and out of locking position, said means being inoperative while the transmission clutch member is engaged, and means for effecting the release of said locking element automatically as the transmission clutch member is released.

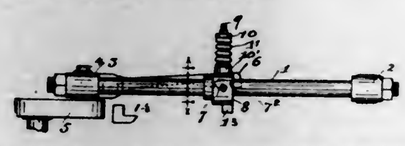
3. The combination with a transmission clutch lever adapted to throw off the releasable clutch member when moved in one direction, of a differential gearing, a movable locking element adapted to lock the differential gearing, a lever mechanism for shifting said locking element into and out of locking position, and a locking element for said lever mechanism, said second mentioned locking element being connected with said transmission clutch lever so as to release the lever mechanism as said transmission clutch lever is moved to throw off the clutch and whereby also said lever mechanism is rendered inoperative while the transmission clutch is on.

4. The combination with a releasable transmission clutch member and two divided driving shaft sections, of a differential gearing connecting the inner ends of said driving shaft sections, a locking element mounted on one of said shaft sections so as to be movable longitudinally thereon, but being fixed to rotate therewith, said locking element being adapted for engagement with one of the elements of the differential gearing so as to lock said gearing, a lever mechanism for shifting said locking element into and out of locking position, and a lock for said lever mechanism, said second mentioned lock being connected to said transmission clutch member so that said lever mechanism is inoperative while the transmission clutch is on.

5. The combination with a releasable transmission clutch member and two divided driving shaft sections, of a differential gearing connecting the inner ends of said driving shaft sections, a locking element mounted on one of said shaft sections so as to be movable longitudinally thereon, but being fixed to rotate therewith, said locking element being adapted for engagement with one of the elements of the differential gearing so as to lock said gearing, a lever mechanism for shifting said locking element into and out of locking position, a lock for said lever mechanism, said second mentioned lock being connected to said transmission clutch member so that said lever mechanism is inoperative while the transmission clutch is on, and means for throwing off the differential gearing lock automatically as the transmission clutch is thrown off.

[Claim 6 not printed in the Gazette.]

1,063,002. PRESSURE-RELEASING DEVICE. DANIEL J. C. ARNOLD, New London, Ohio. Filed Sept. 21, 1911. Serial No. 650,489. (Cl. 74—48.)



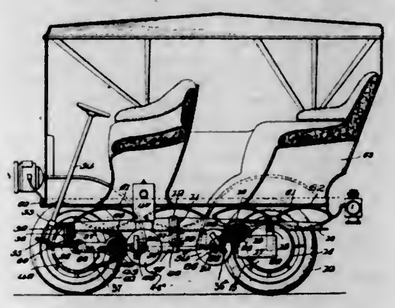
1. In a connecting rod, in combination with a crank and crank pin, a cross bar through which the pin extends, a pair of rods connected together at the outer ends and slidable in said first mentioned cross bar, a cross bar connecting the said rods together intermediate of their lengths, said bar provided with inner and outer shoulders, a latch bar pivoted in said crank pin bar and provided with a recess provided with shoulders engaging the shoulders on said intermediate cross bar and a device for resiliently retaining the said latch bar in engagement with said intermediate cross bar.

2. In combination with a crank and crank pin, a cross bar pivoted on said crank pin, parallel rods slidable in said pivoted cross bar and connected together at their outer ends, a latch bar pivoted in said pivoted cross bar and provided with a shouldered recess in its outer end, a transverse bar connecting said parallel rods, and engaged by the shoulders on said latch bar, one of the shoulders in said latch bar being inclined and the corresponding shoulder in the transverse bar having a corresponding inclination, a spring on each side of said latch bar and retaining means therefor secured in said transverse bar.

3. The combination with a crank and crank pin, of a cross bar pivoted on said crank pin, a pair of spaced rods movable in said pivoted cross bar and secured together at their outer ends, a latch bar pivoted in said pivoted cross bar, a transverse bar intermediate of the length of said rods, and provided with engaging shoulders and said latch bar provided with corresponding shoulders, springs on said transverse bar tending to retain said shoulders on said latch and cross bar in engagement and means for returning the latch bar to its normal position.

4. The combination with the frame, crank, and crank pin, of a cross bar pivoted on said crank pin, a pair of rods slidable in said cross bar and connected together at the outer end, a latch bar pivoted in said pivoted cross bar and provided with a front and a rear shoulder, a transverse bar rigidly connecting said rods, and provided with corresponding shoulders, a third shoulder on said transverse bar and a corresponding shoulder on the frame.

1,063,003. AUTOMOBILE. DANIEL N. BAXTER, Wichita, Kans., assignor to Daniel N. Baxter, trustee, Wichita, Kans. Filed July 7, 1909. Serial No. 506,382. (Cl. 21—90.)



1. In a motor vehicle, a main skeleton frame, a secondary frame pivoted at its rear end to the main frame for movement in a horizontal plane, traction wheels mounted on the forward ends of the secondary frame, driving mechanism mounted on said secondary frame and movable therewith, a hollow body supported upon the main frame, and motors carried on the secondary frame extending up through the main frame and into said body, said motors being operatively connected to the driving mechanism and movable with the secondary frame.

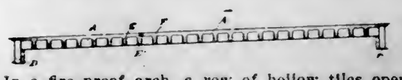
2. In a motor vehicle, a main frame, a secondary frame pivoted at its rear end to the main frame for movement in a horizontal plane, traction wheels mounted on the forward ends of the secondary frame, driving mechanism mounted on said secondary frame and movable therewith, a body supported upon the main frame and having a hollow seat carried thereon, and motors carried on the secondary frame extending up through the main frame and through the body and into the hollow seat, said motors being operatively connected to the driving mechanism.

1,063,004. CRYSTALLINE MONOZINC FORMALDEHYDE SULFOXYLATE. MAX BAZLEN, EMIL RIEGER, and THEODOR WOHLFAHRT, Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Feb. 20, 1912. Serial No. 678,865. (Cl. 23—24.)

Crystalline mono-zinc formaldehyde sulfoxylate which in the pure state and free from water of crystallization possesses a composition corresponding to the formula

$$Zn(HSO_2.CH_2O)_2.$$

1,063,005. FIREPROOF ARCH. PHILIP H. BEVIER, New York, N. Y. Filed July 16, 1910. Serial No. 572,322. (Cl. 72—66.)



1. In a fire proof arch, a row of hollow tiles open at their ends, substantially U-shaped foot tiles each positioned intermediate two adjacent hollow tiles of the row and operating to space them relatively to each other, and adidtional tiles positioned in coöperative relation to the foot tiles, said additional tiles closing the open ends of said hollow tiles.

2. In a fire proof arch, a row of hollow tiles open at their respective ends, substantially U-shaped foot tiles each positioned intermediate two adjacent hollow tiles of said row and operating to space them relatively to each other, additional tiles positioned in contact with the foot tiles, said additional tiles coöperating with the foot tiles in closing the open spaces of said hollow tiles, and in coöperative relation to end faces of said adjacent tiles, and a filling of concrete in the spaces between said tiles.

3. In a fire proof arch, a plurality of spaced rows of hollow tiles, each tile being open at the respective ends thereof, each row of tiles including foot tiles each positioned between two adjacent hollow tiles of said row and operating to space said adjacent hollow tiles relatively to each other, additional tiles coöperating with the foot-tiles in closing the open ends of the hollow tiles, and fillings of concrete, certain of said fillings occupying spaces between the rows of tiles, and other fillings occupying the spaces produced by the interposition of said foot tiles and the additional tiles between the aforesaid hollow individual tiles of the rows.

4. In a fire proof arch, a row of hollow tiles, each tile being open at the ends thereof, substantially U-shaped foot tiles positioned intermediate the individual tiles of the row, said U-shaped tiles partially closing the hollow tiles, and other tiles coöperating with the U-shaped tiles and closing those portions of the hollow tiles left uncovered by said foot tiles, whereby a concrete filling is precluded from entering the hollow tiles.

5. In a fire proof arch, a row of hollow open ended tiles, flanged foot tiles positioned between the ends of the hollow tiles, closure tiles resting upon the flanges of the foot tiles, the flanges of said foot tiles and the closure tiles coöperating with the ends of the hollow tiles in closing the spaces in said hollow tiles, and a filling of concrete in the spaces of the foot tiles and between the closure tiles.

[Claims 6 to 12 not printed in the Gazette.]

1,063,006. FILTER FOR WELLS AND OTHER PURPOSES. JULES BLONDIAU, Braine-le-Comte, Belgium. Filed Oct. 22, 1909. Serial No. 524,011. (Cl. 210—11.)



A device for filtering, comprising a rectangular block having opposite inlet and discharge faces and provided with slightly spaced flat horizontally lying channels of vertically elongated cross-section extending perpendicularly and nearly connecting said faces, every alternate conduit being a filtering conduit and opening through said inlet face and being closed at the opposite end, the remaining conduits being discharge conduits and opening through the discharge face and closed at the end nearest the inlet face, all of the faces except the inlet and outlet faces being imperforate, means directly fitting in the open ends of the discharge conduits for temporarily closing the same, and means at the closed ends of the filtering conduits for permitting the filtering conduits to be cleaned from the discharge end of the device.

1,063,007. PRODUCTION OF AMMONIUM SULFATE. CARL BOSCH, ALWIN MITTASCH, and LEOPOLD HECHT, Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Jan. 21, 1913. Serial No. 743,279. (Cl. 23—21.)

1. The process of producing ammonium sulfate by heating ammonium bisulfite with a catalytic agent.

2. The process of producing ammonium sulfate by heating ammonium bisulfite with a catalytic agent in the presence of water.

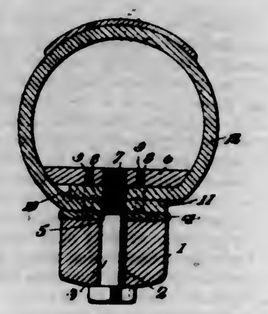
3. The process of producing ammonium sulfate by heating ammonium bisulfite and ammonium sulfite with a catalytic agent.

4. The process of producing ammonium sulfate by heating ammonium bisulfite and ammonium sulfite with a catalytic agent in the presence of water.

5. The process of producing ammonium sulfate by heating amonium bisulfite with sulfur.

[Claims 6 and 7 not printed in the Gazette.]

1,063,008. VEHICLE-TIRE. WILLIAM E. BUDD, Elizabeth, N. J. Filed Mar. 15, 1913. Serial No. 754,619. (Cl. 152—20.)



1. A tire structure including a felly-band; an encircling clamping-band provided with a plurality of series of threaded holes, one series arranged along a medial line of the band and other series between said line and the edges of the band; a series of headed elements threaded into certain of said holes; a tire-member formed with portions adapted to overlap each other and be secured to said clamping-band by two of the series of said headed elements; and a series of headed elements distinct from said first-mentioned headed elements and extending through the felly-band and through the overlapping portions and threaded into said clamping-band to hold the tire-member thereto.

2. A tire-structure including an incasing-shoe having two portions adapted to overlap each other; a clamping-band disposed within said incasing-shoe; a plurality of series of bolts extending through said overlapped portions and threaded into said clamping-band and serving to secure said portions to said band, and a series of bolts also threaded into said clamping-band intermediate of said first-mentioned series of bolts and adapted to secure the incasing-shoe to a wheel-felly.

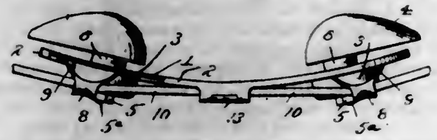
3. A tire-structure including an incasing-shoe having two overlapping portions; a clamping-band superposed upon the inner shoe-portion; two sets of spaced bolts threaded into said clamping-band, each set extending through both of the overlapping portions; and a series of centrally-disposed bolts threaded into said clamping-band intermediate of the first-mentioned series of bolts and penetrating both of the overlapping shoe-portions and adapted to secure the incasing-shoe to a felly.

4. A tire-structure including an incasing-shoe provided with two engaging portions adapted to occupy one or another of a plurality of positions relatively to each other; a clamping-band housed within said shoe and superposed upon the inner shoe-portion; two sets of spaced shoe-securing bolts threaded into said clamping-band, and each set extending through both of the overlapping portions of the shoe and each set being arranged in parallelism with the other set, and both sets adapted to secure the shoe-portions in overlapped relation to said clamping-band; an annular member adapted to engage the outer shoe-portion and against which said bolts abut at one end; and a series of medially-arranged bolts extending through said annular member and threaded through said overlapped portions and into said clamping-band, whereby said incasing-shoe is secured to said annular member.

5. A tire-structure including an incasing-shoe having two portions adapted to overlap each other and to be adjusted relatively in a transverse direction; a clamping-band housed within the shoe and superposed upon the inner shoe-portion; two sets of shoe-securing bolts threaded into said clamping-band and adapted to secure thereto the overlapped portions of the shoe in one or another of their adjusted positions; an annular member encircling said incasing-shoe; and a series of bolts extending through said annular member and threaded into said clamping-band and occupying a spaced position relatively to said shoe-securing bolts.

[Claim 6 not printed in the Gazette.]

1,063,009. TRUSS-PAD SUPPORTER. CHARLES CLUTHE, Sr., Glen Ridge, N. J. Filed Dec. 18, 1912. Serial No. 737,436. (Cl. 128—26.)



1. A truss pad supporter comprising a plate curved to the form of the wearer and enlarged at both ends and having recesses in said end portions facing the wearer and adapted to receive and hold the pads, cords for attaching the plate to the wearer, means for guiding each cord past the central portion of said plate, and guide ferrules attached to each end portion above and below said recess for spreading and guiding each cord away from the plate in two lengths apart from each other.

2. A truss pad supporter comprising a plate curved to the form of the wearer and enlarged at both ends and having recesses in said end portions facing the wearer and adapted to receive and hold the pads, cords for attaching the plate to the wearer, means for guiding each cord past the central portion of said plate, and guide ferrules attached to each end portion above and below said recess and raised above the outer face of the plate for spreading and guiding each cord away from the plate in two lengths apart from each other.

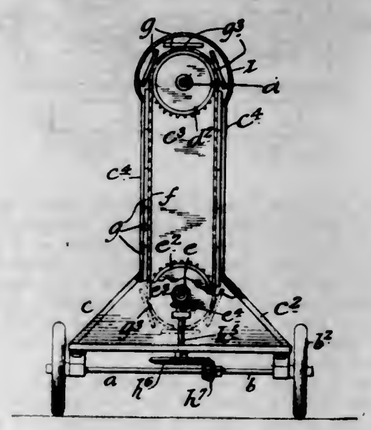
3. A truss pad supporter comprising a plate curved to the form of the wearer and enlarged at both ends and having recesses in said end portions facing the wearer and adapted to received and hold the pads, cords for attaching the plate to the wearer, means for guiding each cord past the central portion of said plate, said guiding means being elastically connected with said cords, and guide ferrules attached to each end portion above and below said recess, for spreading and guiding each cord away from the plate in two lengths apart from each other.

4. A truss pad supporter comprising a plate curved to the form of the wearer and enlarged at both ends and having recesses in said end portions facing the wearer and adapted to receive and hold the pads, cords for attaching the plate to the wearer, means for guiding each cord past the central portion of said plate, said guiding means being elastically connected with said cords, and guide ferrules attached to each end portion above and below said recess and raised above the outer face of the plate for spreading and guiding each cord away from the plate in two lengths apart from each other.

5. A truss pad supporter comprising a plate curved to the form of the wearer and enlarged at both ends and having recesses in said end portions facing the wearer and adapted to receive and hold the pads, cords for attaching the plate to the wearer, a double hook attached to the central portion of said plate having an elastic ring for each cord attached to it, and a guide attached to each ring for guiding each cord past the central portion of said plate and guide ferrules attached to each end portion above and below said recess and raised above the outer face of the plate for spreading and guiding each cord away from the plate in two lengths apart from each other.

[Claims 6 to 8 not printed in the Gazette.]

1,063,010. ADVERTISING APPARATUS. FRANK CONCANNON, New York, N. Y. Filed Aug. 21, 1912. Serial No. 716,138. (Cl. 40—43.)

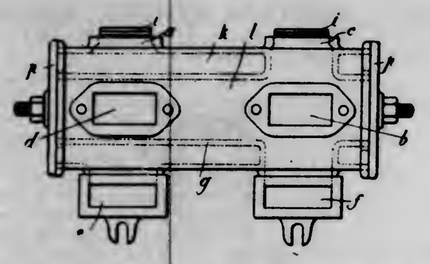


1. An advertising apparatus involving an upright body or frame, parallel rotatable shafts mounted in the top and bottom portions thereof, the sides of the body or frame being provided with vertical panels, a plurality of endless belt devices mounted on said shafts and corresponding in number with said panels, horizontally arranged advertising members movably connected with said endless belt devices and movable vertically through said panels and around said shafts and consisting of housings having openings in the front thereof and movable plates placed in said housings and one side face of which is provided with two rows of advertisements reversely arranged, said plates being movable laterally in said housings through a space the width of which is approximately the same as the transverse width of one of said advertisements and of the openings in the front of the housings.

2. An advertising apparatus involving an upright body or frame having parallel shafts and an endless belt device movable around said shafts and provided with horizontally arranged advertising members movably connected therewith and consisting of housings having openings in the front thereof, and movable plates placed in said housings and one side face of which is provided with two rows of advertisements reversely arranged, said plates being movable laterally in said housings through a space the width of which is approximately the same as the transverse width of one of said advertisements and of the openings in the front of said housings.

3. An advertising apparatus involving an upright body or frame having parallel shafts and an endless belt device movable around said shafts and provided with horizontally arranged advertising members movably connected therewith and consisting of housings having openings in the front thereof, and movable plates placed in said housings and one side face of which is provided with two rows of advertisements reversely arranged, said plates being movable laterally in said housings through a space the width of which is approximately the same as the transverse width of one of said advertisements and of the openings in the front of said housings, the top of the frame being also provided with a stationary part beneath which the endless belt device is movable, and on the opposite sides of which are printed headings indicating the different classes of articles the names of which are placed on said advertising members.

1,063,011. ADMISSION-PIPE FOR TWO-STROKE INTERNAL-COMBUSTION ENGINES. ELYSÉE CÔTE, Pantin, France, assignor to Société des Etablissements Côte, Pantin, France. Filed Jan. 11, 1910. Serial No. 537,428. (Cl. 123—52.)

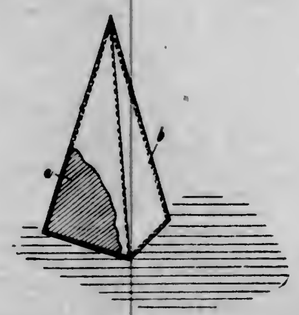


1. In a double cylinder combustion engine, the combination with the pump and explosive chambers, together with their pistons operating consecutively, of a gas distributing chamber containing concentric channels, each of said channels communicating with a gas supply, and the pump chamber of one of the cylinders, whereby a charge of gas is draw in and compressed by each of the pump pistons alternately and delivered to the explosive chamber of the other cylinder.

2. In a double cylinder combustion engine, the combination with the pump and explosive chambers, together with their pistons operating consecutively, of a gas distributing chamber containing concentric valve controlled channels, each of said channels communicating with a gas supply, and the pump chamber of one of the cylinders, whereby a charge of gas is drawn in and compressed by each of the pump pistons alternately and delivered to the explosive chamber of the other cylinder.

3. In a double cylinder combustion engine, the combination with a pair of explosion and pump chambers together with explosion and pump pistons operating consecutively, of a distributing chamber having a plurality of channels, one of said channels communicating with the pump chamber of one cylinder and the explosion chamber of the other cylinder, valve controlled ports establishing separate communication between each of said channels and a gas supply; whereby charges of gas will be gathered and compressed by the pump piston of one cylinder and delivered to the explosion chamber of the other cylinder.

1,063,012. PROCESS OF TREATMENT OF FUSIBLE CERAMIC BODIES FOR INDICATING TEMPERATURE IN FURNACES. EDUARD CRAMER, Berlin, Germany. Filed Feb. 27, 1911. Serial No. 611,273. (Cl. 73—32.)



In combination, a ceramic body adapted to fuse at a given temperature, and a protective metallic coating thereon adapted to fuse at a temperature lower than that at which the body will fuse.

1,063,013. METALLIC TIE. DANIEL CRAWFORD, Jr., Philadelphia, Pa. Filed Mar. 9, 1912. Serial No. 682,628. (Cl. 238—5.)



1. In a metallic tie, the combination of a plurality of rail chairs formed of I-beam sections having upper horizontal and lower arched flanges with integral connecting webs in the same longitudinal plane, spacing and connecting members for said rail chairs, and means in line with the webs of said rail chairs for securing said spacing and connecting members thereto.

2. In a metallic tie, the combination of a pair of rail chairs formed of I-beam sections having upper horizontal and lower arched flanges with integral connecting webs, longitudinal members in line with their webs connecting and spacing said rail chairs, and anchorage wings disposed substantially at right angles to the longitudinal axis of said tie carried by said connecting and spacing means.

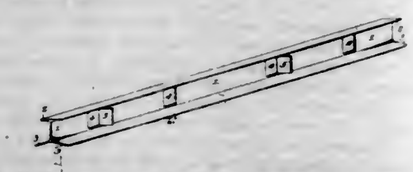
3. In a metallic tie, the combination of a pair of rail-chairs, a base plate or anchorage member therefor serving as a spacing element and permanently secured thereto, supplemental connecting means for said rail-chairs disposed above the plane of said base plate, and wings carried by said supplemental connections and disposed substantially at right angles thereto.

4. In a metallic tie, the combination of a pair of rail-chairs, a base plate or anchorage member therefor serving as a spacing element and permanently secured thereto, said base plate or anchorage member being substantially arch-shaped in cross section, and supplemental connecting means for said rail-chairs disposed above the plane of said base plate.

5. In a metallic tie, the combination of a pair of rail-chairs formed of I-beam sections, a base plate or anchorage member therefor serving as a spacing element and permanently secured thereto, said base plate or anchorage member being substantially arch-shaped in cross section, and supplemental connecting means for said rail-chairs disposed above the plane of said plate.

[Claims 6 to 19 not printed in the Gazette.]

1,063,014. METALLIC TIE. DANIEL CRAWFORD, Jr., Philadelphia, Pa. Filed Mar. 9, 1912. Serial No. 682,629. (Cl. 238—5.)



1. A tie comprising a rolled metal member of uniform cross section throughout, having upper and lower flanges, and a web connecting the same in combination with integral anchorage elements carried by said web and flanges and projecting at an angle with respect thereto.

2. A metallic tie comprising a section substantially I-shape in cross section, having portions of its web and portions of one of its flanges struck up to form anchorage elements.

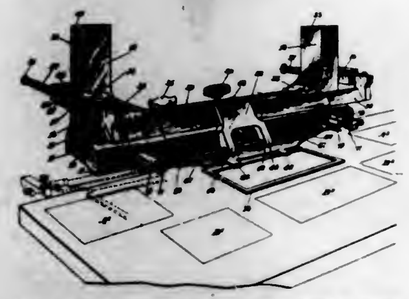
3. A metallic tie comprising a section having flanges and a web substantially I-shape in cross section, having portions of its web and portions of its flanges struck up to form anchorage elements disposed substantially at right angles to said web to prevent longitudinal movement of said tie in the roadbed.

4. A metallic tie comprising a section having flanges and a web substantially I-shape in cross section, having portions of its web struck-up substantially at right angles thereto to form anchorage elements, and portions of its flanges struck-up in line with the longitudinal axis of said tie and other portions struck up at right angles thereto to form adjacent anchorage elements.

5. A metallic tie comprising a section having upper and lower flanges and a web substantially I-shape in cross section, said tie having portions of its web and flanges struck-up to form anchorage elements.

[Claims 6 to 8 not printed in the Gazette.]

1,063,015. FILM-FRAME APPARATUS. BENJAMIN DAY, Summit, N. J., assignor to Ben. Day, Inc., a Corporation of New Jersey. Filed Apr. 3, 1911. Serial No. 618,571. (Cl. 101—162.)



1. In a film frame apparatus for utilizing printing films, the combination of a shiftable holdfast having an elongated, weighted base, vertically translatable carriages arranged on opposite ends of said base, mechanism for raising and lowering the carriages and film frame supporting and adjusting mechanism supported from said carriages in front of the base.

2. In a film-frame apparatus for utilizing printing-films, the combination of a weighted base or holdfast, vertically translatable carriages thereon, film-frame supporting and adjusting mechanism supported from said carriages in front of the base, and operating means for simultaneously and equally adjusting said carriages vertically in unison.

3. In a film-frame apparatus for utilizing printing-films, the combination of a support, vertically movable secondary supports thereon, operating means and gearing connecting said secondary supports for producing simultaneous adjustment thereof, and film-frame holding and micrometric-adjusting mechanism supported from said secondary supports.

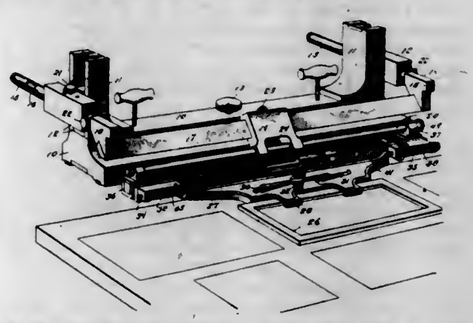
4. In a film-frame apparatus for utilizing printing-films, the combination of a support vertically movable secondary supports thereon, a common intermediate manual operating device and means connecting the same with said carriages for producing simultaneous vertical adjustment thereof, and film-frame holding and micrometric-adjusting mechanism supported from said secondary supports.

5. In a film-frame apparatus for utilizing printing-films, the combination of a shiftable holdfast having an elongated tunneled weighted base, vertically movable secondary supports thereon, operating mechanism therefor concealed and protected in said tunneled base, and film-frame holding and micrometric-adjusting mechanism supported from said secondary supports.

[Claims 6 to 65 not printed in the Gazette.]

1,063,016. FILM-FRAME APPARATUS. BENJAMIN DAY, Summit, N. J. Filed May 25, 1911. Serial No. 629,281. (Cl. 101—162.)

1. In a machine for utilizing printing-films, the combination with a film-frame holder, and means for supporting and permitting tilting of said holder, of mechanism for effecting simultaneous and equal parallel micrometric forward or backward adjustment of both sides of said holder, comprising members having inclined interengaging portions and micrometric screw means for moving one of said members transversely of the machine.



2. In a machine for utilizing printing-films, the combination of a base, a support, means between said base and support for adjusting the support toward and from the work, a tiltable film-frame holder sustained from said support, and mechanism for effecting simultaneous and equal parallel micrometric forward or backward adjustment of both sides of said holder relative to the support, the same including members one of which has inclined ways engaged by the other, and a micrometer screw for moving one of said members transversely of the machine.

3. In a machine for utilizing printing-films, a base, a support carried by the base and movable relatively to the work, a film-frame holder, a pair of pintles on which said holder is pivoted, and mechanism for effecting simultaneous micrometric forward or backward adjustment of said pintles, comprising a member guided for straight forward or backward movement on said support, a transversely movable slide having an inclined way whereby it produces forward or backward movement of said member, and a micrometer screw for moving the slide.

4. In a machine for supporting and adjusting a film-frame over the work, a support, and mechanism for effecting simultaneous and equal micrometric forward or backward adjustment of both sides of the film-frame, comprising members mounted slidably on said support and guides on said support confining the members to movement at right angles to each other, said members having interengaging inclined portions, and a micrometric screw connected to one of said members.

5. In a machine for supporting and adjusting a film-frame over the work, a support, means for adjusting the same relatively to the work, a pivoted holder for the film frame and mechanism for effecting simultaneous and equal micrometric forward or backward adjustment of both sides of the holder, comprising a member guided on said support for straight forward or backward movement, a member slidable transversely on said support, one of said members having an inclined slotted way and the other member having a portion received therein, and a micrometer screw connected with the second member.

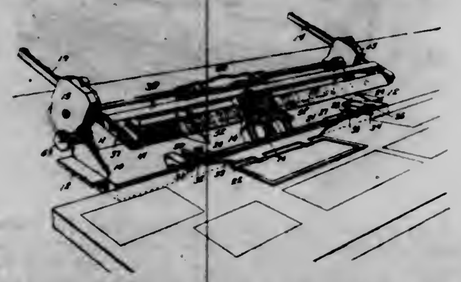
[Claims 6 to 22 not printed in the Gazette.]

1,063,017. WIDE-RANGE HOLDFAST. BENJAMIN DAY, Summit, N. J. Filed June 27, 1912. Serial No. 706,190. (Cl. 101—162.)

1. In a film-frame apparatus of the holdfast type, the combination of a movable holdfast having a weighted base and standard rising therefrom, fore and aft arms and means supporting them to swing up and down on said standards, means for effecting wide-range adjustment across the front of the machine, comprising a laterally adjustable carriage carried by said arms and a second laterally adjustable carriage mounted on the first, and mechanism carried by said second carriage for tiltably supporting and micrometrically adjusting a film-frame.

2. In a film-frame apparatus of the holdfast type, the combination of a movable holdfast having a weighted

base and standards rising therefrom, holders angularly adjustable on said standards, fore and aft projectable arms carried by said holders to swing up and down therewith, a transverse way-bar carried by the forward parts of said arms, a carriage mounted to have extended movement along said way-bar, a rod having extended movement in the same directions as said carriage, and means for supporting a film-frame from the ends of said rod.



3. In a film-frame apparatus of the holdfast type, the combination of a movable holdfast having a weighted base and standards rising therefrom, holders angularly adjustable on said standards, fore and aft arms having extended longitudinal movement in said holders and up and down swinging movement therewith, a transverse way-bar carried by the forward parts of said arms, a carriage, mounted between the ends of said way bar and movable from end to end thereof, a transverse rod supported by said carriage, and a hinged film-frame holder supported by said rod for extended transverse movement relative to said carriage.

4. In a film-frame apparatus of the holdfast type, the combination of a movable holdfast having a weighted base and standards rising therefrom, fore and aft arms and means for supporting the same from said standards for up and down swinging movement, a transverse member carried by the forward parts of said arms, means for angularly adjusting said member about a transverse axis relatively to said arms, and mechanism supported from said member for holding and micrometrically adjusting a film-frame.

5. In a film-frame apparatus of the holdfast type, the combination of a holdfast having standards, fore and aft arms and means supporting the same from said standards for up and down swinging movement, a downward and forward extending support carried by said arms, means for angularly adjusting said support about a transverse axis relatively to said arms, and micrometric hinged devices supported from the lower part of said support.

[Claims 6 to 28 not printed in the Gazette.]

1,063,018. STONE-CUTTING CHISEL. HEINRICH DEHL, Cologne-Lindenthal, Germany, assignor to Bergisch Märkische Steinindustrie, Aktiengesellschaft, Cologne-on-the-Rhine, Germany. Filed Nov. 1, 1910. Serial No. 590,181. (Cl. 125—10.)

1. A wedge shaped chisel for cutting tapered holes in rocks, provided on all sides with a plurality of sharply pointed pyramidal projections.

2. A wedge shaped chisel for cutting tapered holes in rocks, provided on all sides with a plurality of sharply pointed pyramidal projections; said projections alternating in the longitudinal direction of the tool.

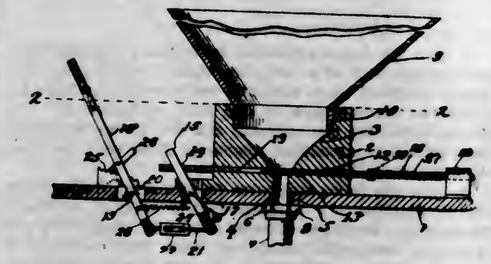
3. A wedge shaped chisel for cutting tapered holes in rocks, said chisel having a plurality of pyramid shaped projections terminating in cutting points and arranged in staggered relation throughout the cutting area of the tool; said projections arranged in parallel rows in two directions forming diagonal grooves between them, said grooves constituting channels for the removal of the material chipped by the cutting edges.

4. A wedge shaped chisel for cutting tapered holes in rocks, said chisel having a plurality of pyramid shaped projections arranged along its working surfaces; said projections forming a series of cutting edges along the sides of the chisel, each following projection extending farther



out from the longitudinal axis of the wedge than its preceding neighbor, whereby each projection forms an individual cutting tool.

1,063,019. SAND-BOX FOR STREET-CARS. THOMAS J. DELANEY, Paterson, N. J. Filed June 25, 1912. Serial No. 705,737. (Cl. 105—178.)



1. A valve-operating mechanism for said boxes comprising in combination with a casting formed with a horizontal slot, a valve slidably mounted in said slot and having a longitudinal slot in its outer extremity, a lever suitably fulcrumed and engaging said slot, an operating lever suitably fulcrumed, an adjustable link connecting the corresponding terminals of said levers, a spring normally tending to oscillate said levers to hold the valve in a closed position, and a detent mechanism to hold said valve in adjusted positions.

2. In a mechanism of the character described, the combination with a car, of a casing secured thereto, said casing being formed with a vertical passage and a horizontal slot, a valve slidable within said slot to close the passage and formed with an aperture adjacent one end, a lever pivoted intermediate its ends within a slot in the car floor, said lever extending through the aperture, a second lever similarly pivoted, an adjustable means for connecting said levers, a detent mechanism for locking the second mentioned lever, a longitudinally extending rod positioned upon said valve, a guide bracket for said rod, and a coil spring surrounding the rod and tending to hold the valve normally in its closed position.

1,063,020. SANITARY SHAVING-BRUSH. NATHAN ELLIS, Syracuse, N. Y. Filed June 1, 1912. Serial No. 701,018. (Cl. 15—30.)

1. A brush comprising a handle, a reservoir mounted in said handle and having an opening at one end thereof, a shaft rotatably mounted in said reservoir and having a bearing in each end thereof, means movable upon said shaft for normally closing the opening in said reservoir,

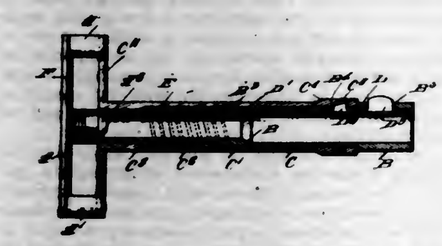
and means connected to said shaft for rotating the same whereby the last named means will be moved from engagement with said opening.



2. A brush comprising a handle, a reservoir mounted in said handle and having an opening at one end thereof, a shaft rotatably mounted in said reservoir and having a bearing at each end adjacent the side wall thereof, means movable upon said shaft for normally closing the opening in said reservoir, and means connected to said shaft for rotating the same whereby the last named means will be moved in engagement with said opening.

3. A brush comprising a handle, a reservoir mounted in said handle and having an outlet opening at one end, a shaft rotatably mounted in said reservoir, and having a bearing in each end thereof, a plate having radial slots therein movable upon said shaft, and means carried by said plate for normally closing said outlet opening.

1,063,021. SAFETY-RAZOR. LOUIS JARVIS FAY, Nogales, Ariz. Filed Nov. 12, 1908. Serial No. 462,232. (Cl. 30—12.)



1. A safety razor substantially as herein described comprising a blade holder having end stubs and a central or intermediate bolt, a blade having a central opening receiving said bolt, a blade compressor consisting of a tube screwing at one end upon the bolt and bearing at said end against the blade whereby to press the latter firmly against the holder, a latch consisting of a plate within the bore of said compressor and having an outwardly extending latch projection to engage with a safety shield, a safety shield having a body plate provided at its edges with guards and a tubular portion fitted over the tubular blade compressor and having an annular internal groove to receive the latch projection carried by the blade compressor, the said blade compressor and safety shield being provided with oppositely facing shoulders and a spring bearing between said shoulders and fitting within the tube of the safety shield and encircling the blade compressor, substantially as and for the purposes set forth.

2. A combination safety and ordinary or open razor comprising a blade holder having a threaded bolt, a blade having an opening fitting over said bolt, a blade compressor having a tube screwed at one end on said bolt and bearing at such end against the blade surrounding the said bolt whereby to press the blade firmly against the blade holder and a removable safety shield movable to a position against the blade in the adjustment of the implement for use as a safety razor, and removable from the implement when it is desired to use the latter as an ordinary or open razor.

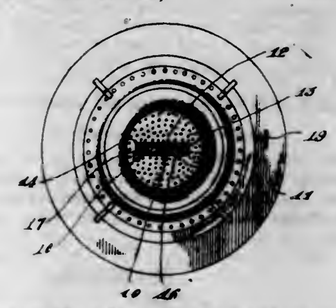
3. The combination with a blade holder having a threaded bolt and a tubular blade compressor screwing at one end on the bolt, and a safety shield having a body plate to coöperate with the blade holder and a tubular portion encircling and movable longitudinally along the tubular blade compressor, substantially as set forth.

4. The combination with a blade holder having a threaded bolt and a tubular blade compressor screwing at one end on the bolt, of a safety shield having a body plate to coöperate with the blade holder and a tubular portion encircling and movable along the tubular blade compressor, and a spring for pressing said safety shield toward the blade holder.

5. The combination with a blade holder having a threaded bolt and a tubular blade compressor screwing at one end on the bolt, a safety shield having a body plate to cooperate with the blade holder and a tubular portion encircling and movable along the tubular blade compressor, a spring for pressing the safety shield toward the blade holder, and a latch for holding the safety shield against the stress of said spring.

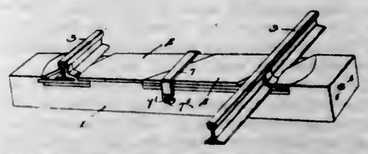
[Claims 6 to 12 not printed in the Gazette.]

1,063,022. LAMP-BURNER ATTACHMENT. CHARLES H. FREDRICK, Cabool, Mo. Filed June 29, 1912. Serial No. 706,746. (Cl. 67—78.)



In a lamp burner, a flat wick tube having one side provided with an outstanding bead, and one edge with an orifice in alinement with the bead, and its other edge with an open ended slot terminating with the bead, a closure fitting within the tube, a pivot pin secured to the closure and disposed within the bead and having one end portion projected through the orifice and its other end portion arranged within the slot to permit removal of the closure, the latter end portion being bent at right angles to the length of the pivot-pin to provide an arm that is deflected downward relative to the closure when in closed position, and a counter-weight carried by the free end of the arm.

1,063,023. RAILWAY-TIE. ETHEL C. GALLUP, New York, N. Y. Filed Aug. 2, 1912. Serial No. 712,976. (Cl. 238—4.)



1. A tie having a pair of seats formed in its upper face, and a pair of rail-supporting sections movable horizontaly beneath the rails into and out of said seats, each of said sections having a pair of retaining devices arranged to engage the adjacent rail at diagonally opposite points, the

upper faces of said sections being flush with the upper face of said tie when said sections are in place in said seats.

2. A tie having a pair of seats formed in its upper face, and a pair of rail-supporting sections movable horizontally beneath the rails into and out of said seats, each section having a transverse rail-receiving channel adapted to be brought into alinement with the adjacent rail when said section is in position in its seat, to permit said rail to automatically seat itself therein, and having a pair of retaining devices arranged to engage said rail at diagonally opposite points when said section is in such position, the upper faces of said sections being flush with the upper face of said tie when said sections are in place in said seats.

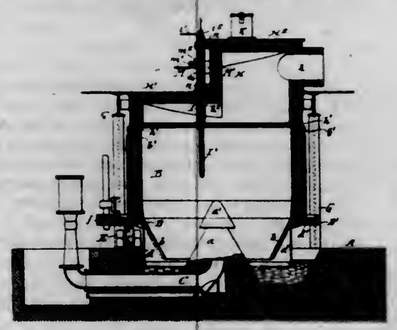
3 A tie provided with a pair of swinging rail-supporting sections having each a transverse rail-receiving channel formed in its upper face and flared at the ends thereof and a pair of diagonally-arranged rail-engaging members, said sections being movable horizontally beneath the rails into position to bring said channels into alinement with the rails, to permit the latter to automatically seat themselves therein, and to engage said members with the opposite sides of said rails.

4. A tie having a pair of seats formed in its upper face, which seats have recesses formed in certain of the walls thereof, and a pair of rail-supporting sections movable beneath the rails into and out of said seats, each section having a pair of rail-engaging members adapted to engage the adjacent rail at diagonally-opposite points, and a stop movable into the adjacent recess to limit the inward movement of the section.

5. A concrete tie provided upon its upper face with a pair of swinging rail-supporting sections each comprising a metal plate faced upon opposite sides with layers of concrete, each plate having a pair of diagonally-arranged tongues adapted to engage the adjacent rail at opposite sides.

[Claims 6 to 11 not printed in the Gazette.]

1,063,024. GAS-PRODUCER. CLAUDE M. GARLAND, Collingswood, N. J., assignor to Camden Iron Works, Camden, N. J., a Corporation of New Jersey. Filed Feb. 27, 1912. Serial No. 680,336. (Cl. 48—85.1.)

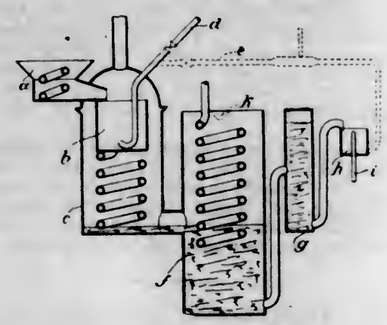


1. The combination in a gas producer, of a body section and a top section; means for rotating one in respect to the other; said top section being stepped to form upper and lower portions; a vertical wall between the two; said lower portion having an opening therein near the vertical wall; a slicer bar extending through the opening into the body of the producer; and bearings for the slicer bar secured to the vertical wall.

2. The combination in a gas producer, of a body; means for rotating the same; a top section inclosing the body and stepped to form upper and lower portions; a vertical wall connecting the two; the upper portion having a gas outlet therein and a fuel hopper thereon; the lower portion having a series of openings therein extending in front of the vertical wall; slicer bars projecting through the opening into the body of the producer; bearings secured to the vertical wall of the said top section for the slicer bars; means for vertically adjusting each bar in its bearing; means for locking each bar in the adjusted position; and means for circulating water through the several bars; said bars being supported by the bearings independently of the lower portion of the top section.

3. The combination in a gas producer, of a body portion; means for rotating said body portion; a fixed top section stepped to form upper and lower portions; a vertical wall; said lower portion having an enlarged opening therein near the wall; upper and lower bearings secured to the vertical wall; a slicer bar reciprocally mounted in the bearings and extending through the opening in the lower portion of the top section; said opening being greater in diameter than the bar so that the bar has no lateral bearing against the walls of the opening.

1,063,025. APPARATUS FOR THE RECOVERY OF ACID USED IN REFINING OILS. ADALBERT GELLEN, Glinik Maryampolski, Galicia, Austria-Hungary. Filed Jan. 5, 1912. Serial No. 669,629. (Cl. 23—1.)



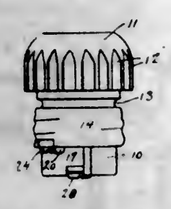
1. Apparatus for the continuous elimination of acid from acid-containing waste products resulting from the refining of mineral oils, comprising a decomposing receptacle, means to supply a decomposing medium to the receptacle, a receptacle containing the decomposing receptacle, means for heating the latter receptacle, a separating receptacle in communication with the second receptacle, having continuous discharges for acid and for organic products.

2. Apparatus for recovery of acid used in refining oils, comprising means for continuously supplying the substance to be treated, a decomposing vessel continuously receiving the substance from said means, means to supply a decomposing medium to the decomposing vessel, a receptacle containing said vessel, means for heating the receptacle, a settling chamber having outlets at different levels for acid and for hydrocarbon products, and means for heating said chamber.

3. Apparatus for recovery of acid used in refining oils, comprising means for continuously supplying the substance to be treated, a decomposing vessel, means to continuously supply a decomposing medium to said vessel, a receptacle containing the decomposing vessel and into which the latter discharges, means to heat the receptacle, a settling chamber into which the receptacle discharges having concentric chambers communicating at their bottoms and outlets at different levels for acid and for tarry products.

4. Apparatus for recovery of acid used in refining oils, comprising means to continuously supply the substance to be treated, a decomposing vessel, a receptacle containing said vessel and into which the latter discharges, means for heating the vessel, a settling chamber communicating with the bottom of the receptacle and having an acid discharge near its bottom and a hydrocarbon discharge near its top, an acid clarifier connected to said acid discharge, means to receive clarified acid, and means to supply clarified acid to the decomposing vessel for setting free further quantities of acid.

1,063,026. ATTACHMENT-PLUG. GILBERT W. GOODRIDGE, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Jan. 25, 1913. Serial No. 744,143. (Cl. 173—359.)



1. An attachment plug of the screw plug type comprising a one-piece body of insulating material having a lateral bay at its entering end, a screw shell side contact having a flange projecting inwardly into said bay, a center contact plate on the entering end of said plug, binding screws on said plate and flange respectively, said insulating body being provided with independent wire passages extending longitudinally through the plug body and opening adjacent said binding screws.

2. An attachment plug of the screw plug type comprising a one-piece body of insulating material having a head portion, a body portion and a portion of reduced size extending beyond the entering end of said body portion, a side contact mounted on said body portion and a center contact mounted on said portion of reduced size, said insulating body being provided with independent wire passages extending longitudinally through said insulating body, in combination with binding screws on the entering end of the plug for electrically connecting the wires to said center and side contacts.

3. An attachment plug of the screw plug type comprising a one-piece body of insulating material having a head portion, a body portion and a portion of reduced size extending beyond the entering end of said body portion, a side contact mounted on said body portion and a center contact mounted on said portion of reduced size, said insulating body being centrally recessed in its head portion to form a wire receiving chamber and longitudinally recessed to form wire passages opening from said wire receiving chamber to the wire terminal, in combination with binding screws on the entering end of the plug for electrically connecting the wires to said center and side contacts.

4. In an attachment plug of the screw plug type comprising a one-piece body of insulating material having a lateral bay at its entering end, a screw shell side contact mounted on said body and having a flange projecting inwardly into said bay, a binding screw passing through said flange and a wire passage through said insulating body and side contact flange opening adjacent said binding screw.

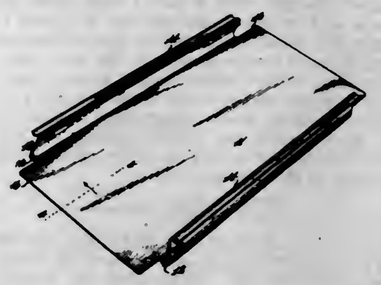
5. In an attachment plug of the screw plug type comprising a one-piece body of insulating material having a lateral bay at its entering end, a screw shell side contact mounted on said body and having a flange projecting inwardly into said bay, a binding screw passing through said flange and a hollow rivet securing said flange to the body and forming a wire passage opening adjacent said binding screw, substantially as described.

[Claims 6 to 10 not printed in the Gazette.]

1,063,027. MEANS FOR MAKING UP AND PILING PAGES OF TYPE. HARRY H. HANCOCK, Swampscott, Mass. Filed Oct. 29, 1912. Serial No. 728,436. (Cl. 101—53.)

1. A printer's device of the class described, comprising a plate provided on one side with side flanges for forming a pocket to receive a page of type, and on the other side with an attached soft or yielding facing, and shoulders or lips extending from the outer edge portions of said flanges.

2. A printer's device of the class described, comprising a plate provided on one side with side flanges for forming a pocket to receive a page of type, and on the other side with an attached soft facing, and suitable means at the upper and lower edges of said flanges adapted to connect with or interlock with other such printer's devices.



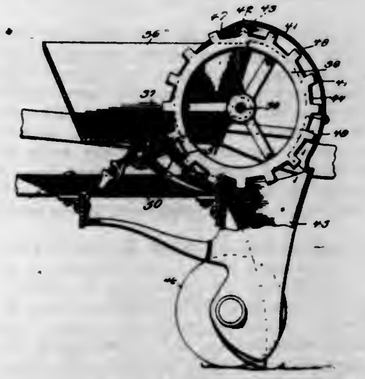
3. A printer's device of the class described, comprising a plate provided with a pocket to receive a page of type, and also having means for protecting the type faces or engravings, said plate being provided with projecting means at opposite edge portions of both surfaces, extending away from each other, and engaging connections on one of said projecting means.

4. The combination of two or more interlocking or nested devices for piling and separating pages of type, each comprising a plate provided with an open-side pocket to receive a page of type, the upper plate or plates having means for protecting the type faces or engravings of the pages of type beneath.

5. The combination of two or more freely detachable devices for piling and separating pages of type, each comprising a plate having side flanges to form an open-side pocket for receiving a page of type, and the flanges being constructed to interlock or be connected with other plates.

[Claims 6 to 10 not printed in the Gazette.]

1,063,028. PEANUT-PLANTER. WILLIAM L. HARRIS, Petersburg, Va. Original application filed Sept. 1, 1911, Serial No. 647,270. Divided and this application filed Dec. 27, 1911. Serial No. 668,166. (Cl. 111—9.)

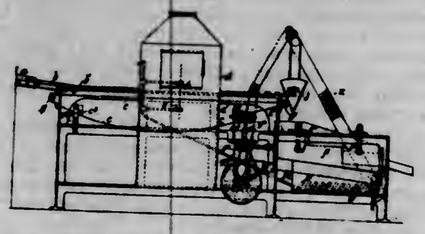


1. A seed selecting and dropping mechanism including a hopper having a slot formed in its bottom and side, a rotatably mounted seed wheel projecting into the hopper through the slot, a boot positioned beneath the wheel, a hood section supported by the hopper and extending about a portion of the wheel to maintain the seed in place, and a second hood section hinged by one end to the first and bearing about the upper portion of the seed wheel, said second hood section being provided at its free end with downwardly extending shields having angularly disposed edges adapted to seat against the bottom and

side of the hopper when the shield is in lowered position to prevent the seed in the hopper from coming in contact with the wheel spokes.

2. A seed selecting and dropping mechanism including a hopper provided with a slot, a seed wheel rotatably mounted and extending through the slot, and a guard for said seed wheel carried by the hopper, said guard including a lower section secured to the outer face of the hopper and a second section hinged to the upper end of the lower section and provided at its free end with downwardly extending shields which bear against opposite sides of the wheel and which seat against the inner walls of the hopper to take the strain off from the securing means of the first section.

1,063,029. APPARATUS FOR COATING CONFECTIONERY. JOHN WILFRID HAYTHORNTHWAITE, Nelson, England. Filed Apr. 10, 1911. Serial No. 620,130. (Cl. 107—43.)



1. The combination in a coating machine of a steam chest; a conveyer passing through said chest; a movable shelf forming a container for coating material and placed to receive articles from said conveyer; means for oscillating said container; means for separating the coated articles from the surplus coating material after they have passed from the container; and a device for partially dissolving the coating on the coated article and thereby fixing it to the latter.

2. The combination in a coating machine of a steam-chest; a conveyer passing therethrough; means for delivering articles to be coated to said conveyer; means for delivering coating material to such articles after they have been passed through the steam-chest; a second steam-chest; and means for conveying the coated articles through the same.

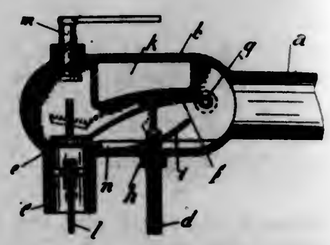
3. The combination in a coating machine of two steam-chests; two conveyers respectively passing through said steam-chests; means for feeding articles to be coated to one of said conveyers; an oscillatory structure placed to receive articles to be coated from said latter conveyer and deliver articles to the second conveyer; means for delivering coating material to the articles while they are on said oscillatory structure; and means for removing surplus material from the articles after they have been coated and before they are delivered to the second conveyer.

4. The combination in a coating machine of a conveyer; means for moistening articles while they are on said conveyer; an oscillatory structure placed to receive articles from the conveyer and constituting a container for coating material; means for supplying coating material to the articles while they are on said oscillatory structure; and a movable structure for separating the surplus coating material from the articles after they have been coated.

5. The combination in a coating machine of a conveyer; means for supplying articles to be coated to said conveyer; means for moistening articles on the conveyer; an oscillatory container placed to receive articles from the conveyer and formed to hold coating material; means for supplying coating material to the articles in said container; a movable sieve placed to receive articles from the container for separating surplus coating material therefrom; with means for moistening the articles after they have been coated.

[Claim 6 not printed in the Gazette.]

1,063,030. CARBURETER. WILHELM HEIDELMANN, Brunswick, Germany. Filed May 18, 1912. Serial No. 698,238. (Cl. 48—154.1.)



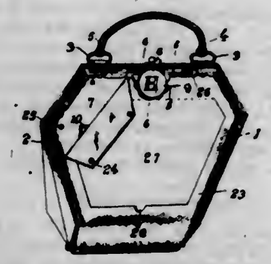
1. In a carbureter, a casing having air and fuel inlets, a chamber within the casing and adapted to receive waste gases, a fuel vaporising surface in the form of a plate lever pivoted within the casing and so disposed as to come intermittently into heat absorbing contact with a wall of the chamber, a valve for the air inlet attached to the lever, and a valve for the fuel inlet controlled by the lever.

2. In a carbureter, a casing, a chamber within the casing and adapted to receive waste gases, a fuel vaporising surface in the form of a plate lever pivoted within the casing and so disposed as to come intermittenly into heat absorbing contact with a wall of the chamber, an air inlet, a valve controlling the air inlet and carried by the free end of the plate lever, a fuel inlet situated opposite the heated part of the plate lever, and a valve for the fuel inlet controlled by the lever.

3. In a carbureter, a casing having air and fuel inlets, a chamber heated by waste gases and arranged within the casing at the upper part thereof, a fuel vaporising surface conforming with the lower wall of the chamber and forming part of a plate lever pivoted at one end within the casing, a valve for the air inlet carried by the other end of the lever, and a valve for the fuel inlet carried by the part of the lever contacting with the chamber.

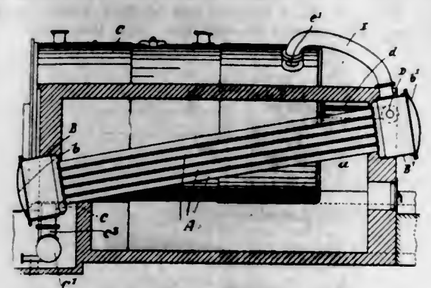
4. In a carbureter, a casing having air and fuel inlets, a chamber heated by waste gases and arranged within the casing, fuel vaporising surface in the form of a plate lever pivoted within the casing and so disposed as to come intermittently into heat absorbing contact with a wall of the chamber, a valve for the air inlet carried by the free end of the lever, and a valve for the fuel inlet carried by the stem oblique to the lever and fixed to the middle part thereof.

1,063,031. HAND-BAG. BEULAH L. HENRY, Charlotte, N. C. Filed Dec. 27, 1911. Serial No. 668,050. (Cl. 150—34.)



The combination with a hand bag having its opposite side walls adapted to serve as article holding means, fasteners secured to the edge portion of the side walls, a flexible cover conforming to the shape of the side walls and disposed against the under side of the bag and said side walls, fasteners carried by the cover and adapted to be connected to the bag fasteners and removably holding the cover thereagainst, the opposite sides of said cover being provided with integral flaps hinged against the upper edge thereof, and fastening means secured to the free end of said flap for the purpose set forth.

1,063,032. STEAM-BOILER. THOMAS HUDSON, Airdrie, Scotland. Filed Sept. 12, 1912. Serial No. 720,011. (Cl. 122—195.)



1. In steam boilers, the improved arrangement and construction of the inclined water tubes A with the circular boxes B and B^1 placed in the side flues; the front mud drums C^1 and connections c, c^2 and c^3; the connections D and d on the rear tube boxes together with the steam pipes E and E^1 in combination with the cylindrical boiler as set forth.

2. In steam boilers, the combination with the usual cylindrical boiler, of two sets of inclined water-tubes arranged in the usual side flues, headers on the front and rear ends of such sets of tubes, a horizontal mud drum located at the front of the boiler, pipe connections between the front headers and the mud drum, a pipe connecting the mud drum with the boiler, connecting means between the rear headers, a pipe connection from such means to the water space of the boiler, and steam pipes connecting the rear headers with the steam space in the boiler.

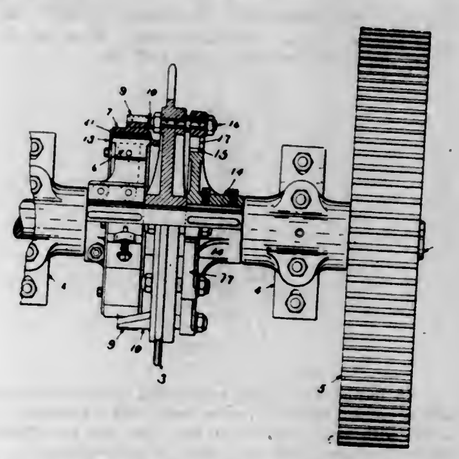
3. In steam boilers, the combination with the usual cylindrical boiler, of two sets of inclined water tubes arranged in the usual side flues, circular headers on the front and rear ends of such sets of tubes, a horizontal mud drum located beneath the front of the boiler, vertical pipes between the front headers and the mud drum, a vertical pipe connecting the mud drum with the boiler, a pipe connecting the rear headers, a pipe connecting the last mentioned pipe with the water space in the boiler, and a pair of steam pipes connecting the rear headers with the steam space in the boiler near the rear end thereof.

1,063,033. DRIVING MECHANISM FOR HAULAGE SYSTEMS. GUSTAVE E. HUTTELMAIER, Scottdale, Pa. Filed Dec. 28, 1911. Serial No. 667,509. (Cl. 74—29.)

1. A driving mechanism for chains and the like comprising a head shaft having means whereby said shaft is positively rotated, a chain driving wheel rotatably mounted on said shaft, means connecting the shaft and wheel permitting rotation of said shaft and wheel in one direction at varying angular velocities, and means connecting the shaft and wheel preventing rotation of said wheel in the opposite direction at a greater angular velocity than said head shaft.

2. A driving mechanism for chains and the like comprising a head shaft having means whereby said shaft is positively rotated, a chain driving wheel rotatably mounted on said shaft, means connecting the shaft and wheel permitting relative angular rotation of said shaft and wheel in one direction, and means connecting the shaft and wheel preventing rotation of the wheel on said head shaft in the opposite direction.

3. A driving mechanism for chains and the like comprising a head shaft having means whereby said shaft is positively rotated, a chain driving wheel rotatably mounted on said shaft, wheel driving means connecting the shaft and wheel permitting relative angular movement of the shaft with respect to the wheel in one direction, and means connecting the shaft and wheel preventing relative angular movement of the wheel on the shaft in the opposite direction.

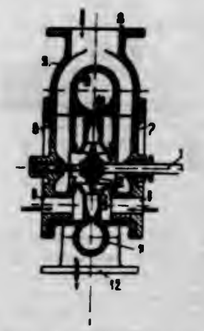


4. In a car haulage system a chain sprocket wheel, a head shaft on which said wheel is rotatably mounted, means whereby said shaft is positively driven, means frictionally connecting said wheel and shaft for driving said wheel, and independent means connecting the wheel and shaft and preventing rotation in one direction of the wheel on said shaft.

5. In a car haulage system, a sprocket wheel, a head-shaft on which said wheel is rotatably mounted, means whereby said shaft is positively driven, a friction wheel keyed on and rotated by said shaft, a friction band engaging with said friction wheel to drive the sprocket wheel, a ratchet wheel keyed and rotating with the shaft, and a ratchet pawl on the sprocket wheel engaging with the teeth of said ratchet wheel, said pawl and ratchet wheel operating to prevent rotation in one direction of the sprocket wheel on the head shaft.

[Claims 6 to 8 not printed in the Gazette.]

1,063,034. PROCESS OF AND APPARATUS FOR RAREFYING AND COMPRESSING AIR AND GASES BY MEANS OF LIQUID ACCELERATED BY A ROTOR-WHEEL. CARL HERMANN JAEGER, Leipzig, Germany. Filed Sept. 24, 1910. Serial No. 583,670. (Cl. 230—14.)



In an apparatus for compressing elastic fluids, the combination with a rotary impeller for liquid constructed with transversely extended spaced openings in its periphery, whereby thin strips of liquid may be ejected therefrom, of a compressing chamber surrounding the periphery of said impeller and into which said impeller discharges constructed with an inlet passage for elastic fluid, an annu-

lar peripheral discharge passage and side walls which converge gradually from the outlet of the impeller to said discharge passage.

1,063,035. INCANDESCENT ELECTRIC LAMP. RUDOLF JAHODA, Vienna, Austria-Hungary. Filed Dec. 23, 1911. Serial No. 667,454. (Cl. 176—39.)



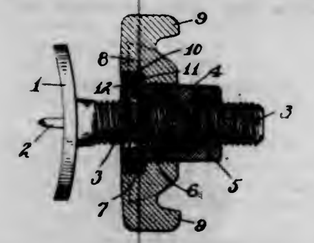
1. An incandescent lamp comprising two filament supporting crossed members spaced apart, and a filament connected with said members at the same and at different relative positions from the centers of said members.

2. An incandescent lamp comprising an axial support, bars mounted thereon and crossing each other, and a filament extending from the outer end of one bar to the outer end of the other bar, and from the last named position to a point on the other bar intermediate its ends and center.

3. An incandescent lamp comprising an axial support, bars mounted thereon and crossing each other, and a filament extending from the outer end of one bar to the outer end of the other bar, and from the last named position to a point on the other bar intermediate its ends and center and from said intermediate point to a corresponding point on the first named bar.

4. An incandescent lamp comprising a support, two filament supporting members spaced apart along the support and crossing each other and a filament extending from one bar to the other in a plurality of windings inclined both to the bars and to the support.

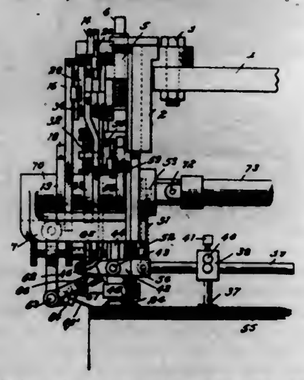
1,063,036. SCAFFOLD-TIE. DANIEL PALMER JONES, Westminster, London, England, assignor to Patent Rapid Scaffold Tie Company Limited, London, England. Filed Dec. 23, 1912. Serial No. 738,302. (Cl. 20—88.)



1. A device for connecting scaffold poles comprising a foot plate having a screw bolt extending therefrom, a nut fitted to the bolt having an annular flange at its rear end, a tension plate loosely mounted on the nut and having a skirt of sufficient depth to extend rearwardly beyond the said flange, and a ring within and held by the skirt in rear of the flange of the nut to hold the nut in place, substantially as described.

2. A device for connecting scaffold poles comprising a foot plate having a screw bolt extending therefrom, a nut fitted to the bolt having an annular flange at its rear end, a tension plate loosely mounted on the nut and having a skirt of sufficient depth to extend rearwardly beyond the said flange, and a ring within the skirt in rear of the flange of the nut, the edge of said skirt being upset to hold the ring in place, substantially as described.

1,063,037. SHEET-SEPARATING MECHANISM FOR PAPER-FEEDING MACHINES. RICHARD E. JONES, Pearl River, N. Y., assignor to Dexter Folder Company, Pearl River, N. Y., a Corporation of New York. Filed Mar. 29, 1912. Serial No. 687,071. (Cl. 101—41.)



1. In a device of the character described, an apron, a cylinder reciprocably mounted adjacent one edge of said apron, a piston in said cylinder, a lever for reciprocating said cylinder, another lever for reciprocating said piston, and pivots for said levers projecting laterally, from said apron.

2. In a device of the character described, an apron, a cylinder reciprocably mounted on said apron, a lever pivotally mounted on a part rigid with said apron, and operatably connected to said cylinder, a piston in said cylinder, a lever pivoted on a part rigid with said apron for reciprocating said piston within said cylinder, and means for adjusting the position of said apron.

3. A sheet separator for feeding machines, comprising a vacuum cylinder provided with a sheet gripping sucker, a piston in said cylinder, means for lifting said cylinder, means for moving said piston to exhaust the air in said cylinder, said piston moving means being operative before the cylinder lifting means and continuing during and after the lifting movement of said cylinder and a snapper comprising a presser foot impinging the stack prior to the movement of said piston and releasing its hold at approximately the initiation of the cylinder lifting movement.

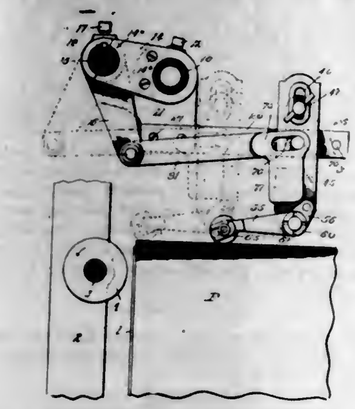
4. In a sheet separator and feeding machine, a vertically adjustable apron, a cylinder reciprocably mounted on said apron, a cylinder reciprocating lever pivoted on said apron, a piston in said cylinder, a piston reciprocating lever pivoted on said apron, a presser foot for a pile of sheets, an operating lever therefor pivoted on said apron, and a cam shaft journaled in said apron and having cams mounted thereon for respectively operating said levers.

5. In a sheet separator for feeding machines, a sheet lifting device, a presser foot normally pressed against a stack of sheets, a clamping foot, and an actuating lever positively connected to said clamping foot, said lever being provided with a lost motion connection with said presser foot, whereby said presser foot is raised approximately at the limit of the downward movement of said clamping foot.

[Claims 6 to 8 not printed in the Gazette.]

1,063,038. PAPER-FEEDING MACHINE. RICHARD E. JONES, Pearl River, N. Y., assignor to Dexter Folder Company, a Corporation of New York. Filed Apr. 13, 1912. Serial No. 690,548. (Cl. 101—39.)

1. In a paper feeding machine, the combination of a reciprocating carriage, a feed finger pivotally mounted upon said carriage and movable up and down thereon, an operating rock arm, a link operatively connecting said rock arm and said carriage, said link being provided with a lost motion connection with said carriage and a cam mounted on said link for raising and lowering said feed finger.



2. In a feeding machine, a reciprocable carriage provided with a pair of laterally projecting pins, a feed finger journaled on one of said pins, a cam provided with a slot embracing the other of said pins and adapted to operate said finger by a movement relative to said carriage, and means for reciprocating said cam, said cam being adapted by its lost motion connection with the carriage to reciprocate the latter periodically.

3. In a feeding machine, the combination with a reciprocable carriage provided with a laterally projecting pin, of a feed finger pivotally mounted on said carriage, and a cam provided with a slot reciprocably engaging said pin, and means for reciprocating said cam, said cam being adapted to periodically operate said finger and reciprocate said carriage.

4. In a paper feeding machine, the combination of a guide bar, a carriage mounted to reciprocate upon said bar, a device upon said carriage engaging a part upon said bar for retarding the movement of the carriage, a cam having a pin and slot connection with said carriage, and a feed finger movably mounted upon said carriage and controlled by said cam.

5. In a paper feeding machine, the combination of a guide bar, a carriage mounted to reciprocate upon said bar, a leaf spring mounted upon said carriage with oppositely projecting ends, and projections mounted on said guide bar and adapted to respectively and periodically engage said projecting ends.

[Claims 6 to 11 not printed in the Gazette.]

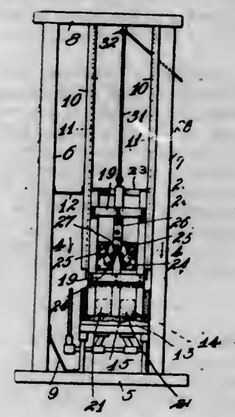
1,063,039. TAMPER. WILLIAM KAMMER, Leshara, Nebr. Filed Mar. 4, 1912. Serial No. 681,617. (Cl. 25—41.)

1. A tamper comprising relatively movable tamping members, means locking said members against relative movement and constructed to be moved by impact to free the members for relative movement and again lock them in their changed relative position against relative movement.

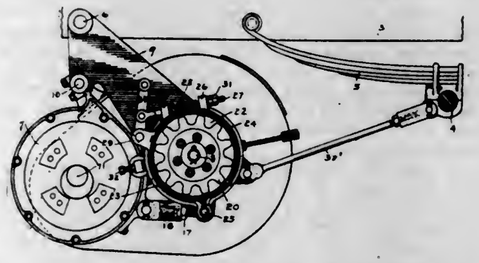
2. A tamper comprising permanently fixed tamping members and relatively movable tamping members, in combination with a pin and slot connection between the fixed and movable members permitting relative movement between the fixed and movable members and means locking the movable members in their adjusted position.

3. A tamper comprising spaced parallel tamping members permanently secured together against relative movement, tamping members slidably mounted between said parallel members, a pin secured to each movable member and slotted links pivotally mounted on one of the parallel members coöperating with said pins to permit and limit relative movement between the fixed and movable member.

4. A tamper comprising spaced parallel tamping members secured together against relative movement, tamping members slidably mounted between said parallel members, pins on the movable members, and links pivotally mounted on one of the parallel members and provided with elongated slots having a locking recess at each end of each thereof, said pins being constructed to operate in said slots, whereby the slidable members may be moved relatively to the parallel members and locked against movement in their adjusted position.



1,063,040. MOTOR SUSPENSION AND DRIVE. HAROLD H. KENNEDY, Indianapolis, Ind., assignor to The Waverley Company, Indianapolis, Ind., a Corporation of Indiana. Filed June 28, 1911. Serial No. 635,893. (Cl. 21—90.)



1. A motor-car frame, and a structure suspended as a unit from said frame, said structure comprising hangers, a countershaft mounted in said hangers, an axle, means for adjusting the distance of the free ends of the hangers from the axle, a motor pivotally suspended from the hangers, the suspensions for said hangers and motor being in the same vertical plane, power transmission means between the motor and countershaft, and means for swingingly adjusting the suspension of the motor to vary the distance between the countershaft and armature shaft.

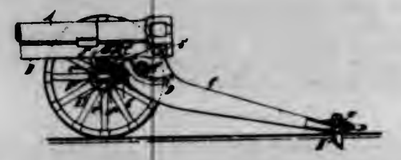
2. A motor-car frame, a countershaft supported by the frame, and a structure suspended as a unit from said countershaft comprising hangers, an axle, means for adjusting the ditsance of the free ends of the hangers from the axle, a second countershaft mounted in said hangers, a motor pivotally suspended from said hangers from a pivot in the same vertical plane with said first countershaft, a sprocket and chain belt transmission from the motor to the second countershaft, and a distance-rod adjustable in its length extending from the motor to the hangers to keep said chain belt taut.

3. A motor-car frame, a transverse shaft supported by the frame, a rear axle, a pair of hangers suspended from the shaft, distance rods connecting the ends of the

hangers with the rear axle, a motor suspended from the hangers, the axis of the motor and of its suspension being in substantially the same vertical plane which passes through the axis of the shaft from which the hangers are suspended, and a countershaft journaled to the hangers and driven from the motor and means for swingingly adjusting the suspension of the motor to vary the distance between the axis of the motor and axis of the countershaft.

4. A motor-car frame, a transverse shaft supported by the frame, a rear axle, a pair of hangers suspended from the shaft, distance rods connecting the ends of the hangers with the rear axle, a motor suspended from the hangers, the axis of the motor and of its suspension being in substantially the same vertical plane which passes through the axis of the shaft from which the hangers are suspended, a countershaft journaled to the hangers, chain-belt transmission from the motor-shaft to said countershaft, and a distance rod extending from the motor to the hangers whereby the tension of said chain-belt may be regulated.

1,063,041. TRAVELING ORDNANCE. NORBERT KOCH, Essen-Rellinghausen, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed June 21, 1912. Serial No. 705,052. (Cl. 89—40.)



1. Traveling ordnance having a gun, a trail, an axle tree and wheels, the gun being mounted in the trail and means for elevating the gun relative to the trail; in combination with a spade, a king-pin on the spade, a socket in the trail end for said king-pin allowing horizontal turning between trail and spade; said trail having a forward projecting, arcuate jaw curved concentrically to the axis of said king-pin, a guide rib on the axle-tree in engagement with said arcuate jaw, and a training gear between said trail and said axle-tree, whereby said trail with the gun can be traversed relative to the axle-tree with said king-pin as a center.

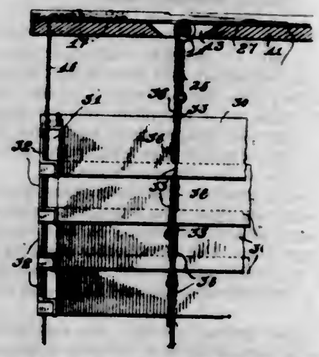
2. Traveling ordnance having a gun, a trail, an axle tree and wheels, the gun being mounted in the trail and means for elevating the gun relative to the trail; said axle tree having a raised middle portion and a rocking member connected with said trail and pivoted to said middle portion of the axle tree, adjusting means controlling the relative angular position between said axle-tree and said rocking member; whereby said gun and trail may be held in an upright position on a transversely inclined ground.

3. Traveling ordnance having a gun, a trail, an axle tree and wheels, the gun being mounted in the trail and means for elevating the gun relative to the trail; said axle tree having a raised middle portion, a rocker connected with said trail, a pivot pin in said middle portion of the axle-tree for said rocker, adjusting means controlling the relative angular position between said axle-tree and said rocker; whereby said gun and trail may be held in an upright position on a transversely inclined ground.

4. Traveling or ordnance having a gun, a trail, an axle tree and wheels, the gun being mounted in the trail and means for elevating the gun relative to the trail; said axle-tree having a raised middle portion, a rocker connected with said trail, a pivot pin in said middle portion of the axle tree for said rocker, adjusting means controlling the relative angular position between said axle-tree and said rocker; whereby said gun and trail may be held in an upright position on a transversely inclined ground; said adjusting means comprising a screw having hinge- and turning connection with the axle tree, a nut for said screw mounted to oscillate in said rocker.

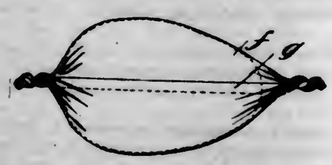
5. Traveling ordnance having a gun, a trail, an axle-tree and wheels, the gun being mounted in the trail and means for elevating the gun relative to the trail; in combination with a spade, a king-pin on the spade, a socket in the trail end for said king-pin allowing horizontal turning between trail and spade; said trail having a forward projecting arcuate jaw curved concentrically to the axis of said king-pin, a guide rib on the axle-tree in engagement with said arcuate jaw, and a training gear between said trail and said axle-tree, whereby said trail with the gun can be traversed relative to the axle tree with said king-pin as a center; said axle-tree having a raised middle portion, a rocker connected with said trail, a pivot pin in said middle portion of the axle-tree for said rocker, adjusting means controlling the relative angular position between said axle-tree and said rocker; whereby said gun and trail may be held in an upright position on a transversely inclined ground; said adjusting means comprising a screw having hinge- and turning connection with the axle-tree, and a nut for said screw mounted to oscillate in said rocker.

1,063,042. WINDOW-BLIND. HENRY KRUEGER, Spokane, Wash. Filed June 22, 1912. Serial No. 705,281. (Cl. 156—17.)



A blind of the character described comprising a supporting bar, a lower bar, flexible means supporting said lower bar, slats positioned between said supporting bar and said lower bar, links passing above and below each of said slats and having their end portions formed into eyes positioned in alinement, links connecting the eyes of said first mentioned links with said flexible supporting means, means for drawing said lower bar upwardly to raise the blind, and means for vertically adjusting certain of said flexible supporting means for adjusting the angle of said slats.

1,063,043. METHOD OF PRESERVING AND PACKING EGGS. WALTHER KULENKAMPFF, Magdeburg, Germany. Filed Nov. 4, 1911. Serial No. 658,588. (Cl. 99—8.)



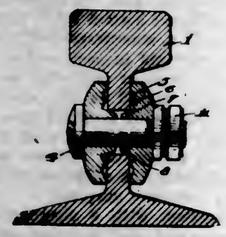
1. The process for preserving eggs, which consists in first disinfecting the clean eggs internally and externally by evacuating and then filling them with a gaseous disinfectant, then replacing the latter with an innocuous gas and finally packing them in a bacteria proof wrapper, substantially as described.

2. The process for preserving eggs, which consists in first disinfecting the clean eggs internally and externally by evacuating and subsequently filling them with a gaseous disinfectant, then replacing the latter with an innocuous gas, then dipping them in a liquid disinfectant, and finally packing them in a bacteria-proof wrapper, substantially as described.

3. The process for preserving eggs, which consists in first treating the eggs with a disinfecting process and then packing them in bacteria-proof wrappers lined on the inside with a sterilized absorbent material impregnated with disinfectant substance, substantially as described.

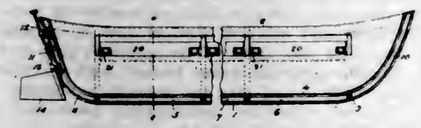
4. The process for preserving eggs, which consists in subjecting the clean eggs to a disinfecting process and then packing them in bacteria-proof wrappers prepared from sterilized loose fibrous material, substantially as described.

1,063,044. SPLICE-BAR. CHARLES S. LANDERS, New London, Conn. Filed May 25, 1912. Serial No. 699,717. (Cl. 239—9.)



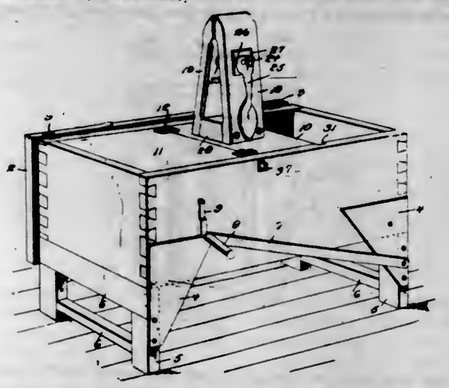
In a rail joint of the class described, the combination with a plurality of rails, of fish-plates secured to the sides thereof, said fish-plates being formed of a bowed-structure in cross section, laterally extending lugs secured to the inner face of said fish-plates and being of a conical form, said rails provided with apertures formed in their web-portions, the inner ends of said conical shaped lugs fitting in said apertures in said web-portions of said rails, the bowed-portions of said fish-plates constituting a spring body for allowing said conical lugs to pass into said apertures when said apertures become worn, and said conical lugs always engaging the corners formed adjacent said apertures, and in this manner always holding said fish-plates firmly upon the web-portion of said rail as the conical lugs will pass into said apertures when the side walls become worn, said conical portions adapted to constitute an alining means for said rails, and means passing through said fish-plates and lugs for firmly clamping said fish-plates in engagement with said rails.

1,063,045. LIFE-BOAT. GEORGE E. LANE, Ellendale, N. D. Filed Sept. 16, 1912. Serial No. 720,618. (Cl. 9—3.)



A life boat having an unobstructed receiving space to adapt it to nest with other boats; said boat comprising inner and outer hulls and longitudinal frame-ribs, each secured to both the inner and outer hulls and sub-dividing the inter-hull space into air chambers and pockets; said ribs being located, respectively, at the keel, at the gunwales and along the sides intermediate of the gunwales and keel; said intermediate ribs being constructed of angle iron with an upwardly presented flange next to the inner hull; said inner hull being provided with openings to give access to the pockets above said intermediate ribs; said pockets extending down to said upwardly presented flanges; said boat being provided with removably mounted seats adapted to enter the pockets above the intermediate ribs and having suspending hooks adapted to engage over the rib flanges at the bottoms of the pocket openings.

1,063,046. WORK-BENCH. FRANK S. LATHROP, Park Rapids, Minn., assignor of one-half to William Wiediger, Park Rapids, Minn. Filed Apr. 24, 1912. Serial No. 692,862. (Cl. 69—19.)



1. A work bench comprising a housing, a leaf pivotally secured within the housing, a second leaf hinged to the first-mentioned leaf, braces on the leaves extending past the meeting edges thereof when in the operative position, and a movable support within the housing adapted to permit collapse of the said leaves or to maintain the same in an operative position.

2. A work bench comprising a housing, a leaf pivotally secured therein, a second leaf hinged to the first-mentioned leaf, a movable support within the housing, and automatic means tending to hold the said support against the last-mentioned leaf to maintain the same in its operative position.

3. A work bench comprising a housing, a foldable leaf pivotally secured within the housing, a support hinged within the housing, and means for yieldably holding said support in engagement with the foldable leaf.

4. A work bench comprising a housing, a leaf pivotally mounted therein, a second leaf hinged to the first-mentioned leaf, a swinging support hinged upon the bottom of the housing and having its upper edge in contact with the leaf, and a spring having its opposite ends secured to the said support and to the bottom of the housing respectively.

5. A work bench comprising a housing having vertical grooves in the inner faces of its side walls, a foldable leaf pivoted to the said walls adjacent the said grooves, a movable support for the said leaf, a spring secured to the said support and the bottom of the housing, and a tool receptacle having a partition slidably engaging the said grooves and a bottom extending over the said spring.

[Claims 6 to 9 not printed in the Gazette.]

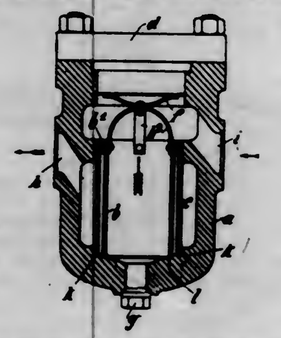
1,063,047. WATER-PURIFIER. JOSEF LOHRMANN, Dusseldorf, Germany. Filed May 9, 1911. Serial No. 625,976. (Cl. 210—16.)

1. A water purifier comprising: the combination of a vessel having lateral openings adapted to be joined to the conduit pipe of a water conduit, and two strainers, the one within the other, in said vessel; supporting means for the strainers at one end; means at the other end secured to one of said strainers and bearing upon the other to close the space between the said strainers; and resilient means adapted to act on said closing means.

2. A water purifier comprising: the combination of a vessel having lateral openings adapted to be joined to the conduit pipe of a water conduit, and a plurality of cylindrical strainers, the one within the other, in said vessel; suitable strainer supporting means; a ring secured to the top of one of said strainers bearing upon the other and closing the space between the same; and a spring above said ring adapted to act thereon.

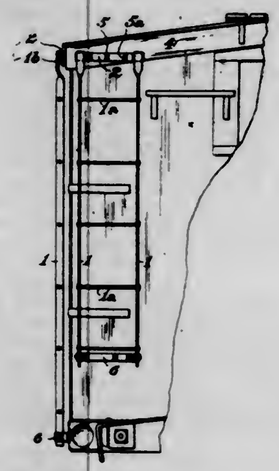
3. A water purifier of the class referred to comprising the combination of a vessel having side-openings adapted

to be joined to the conduit pipe of a water conduit, the said openings being at one level, and of bottomless cylindrical strainers within the said vessel, the said vessel having shoulders inside of its bottom adapted to support the said strainers, a ring on top of the said strainers covering



the intermediate space between the latter and a spring above the said ring, the said ring and strainers being within the action of the said spring and the said vessel having further an opening in its bottom and a removable seal in the said opening.

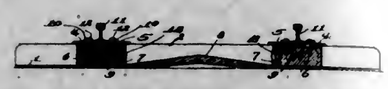
1,063,048. FREIGHT-CAR LADDER. DONALD R. MACBAIN, Cleveland, Ohio. Filed Aug. 22, 1911. Serial No. 645,329. (Cl. 228—1.)



1. The combination with a railroad car, of an upper supporting bracket secured to the outside of the car body and forming eyes adjacent to its ends, a lower supporting bracket secured to the outside of the car body adjacent its bottom, the ends of which are rebent to form loops spaced from and opening toward the car body, and a ladder comprising stiles the upper ends of which are constructed to engage the eyes of the upper supporting bracket and having lower ends constructed to fit in the loops of the lower supporting bracket, and a plurality of rungs connected at their ends to said stiles.

2. The combination with a railroad car, of an upper supporting bracket secured to the outside of the car body and having eyes adjacent to its ends, a lower supporting bracket secured to the outside of the car body adjacent to its bottom, the ends of which are rebent in the same direction to form loops opening toward the car body, and a ladder comprising stiles having hooks on their upper ends engaging the eyes of the upper supporting brackets and fitting in the loops of a lower supporting bracket, and a plurality of rungs connected at their ends to said stiles.

1,063,049. RAILWAY-TIE. ROBERT MALONEY, De Lancey, Pa. Filed July 9, 1912. Serial No. 708,488. (Cl. 238—5.)



1. The combination, with a channeled tie embodying side and bottom walls and provided with stops adjacent each end, of a cushion disposed in the tie channel in contact with each stop, a chair plate disposed in said channel and spiked to the upper face of each cushion, and a pair of spaced straps connecting the side walls of said tie adjacent each end of the latter and coöperative with the adjacent plate for holding the same against movement.

2. The combination, with an open-topped channeled tie embodying side and bottom walls and provided adjacent each end with a transverse partition, of a cushion block removably disposed in each end of the tie channel and contacting at its inner end with the adjacent partition, a chair plate spiked to the upper face of each block, and retaining means provided upon said tie and cooperative with the adjacent plate, each of said partitions being formed with an opening through which a tool may be inserted to dislodge the adjacent block after the corresponding plate has been unspiked.

3. The combination, with a channeled tie embodying side and bottom walls, and provided adjacent each end with a stop, of a cushion disposed in the tie channel in contact with each stop, a chair plate secured to each cushion and provided with a pair of spaced transversely-disposed rail-engaging ribs, and a pair of spaced transversely-disposed straps connecting the side walls of said tie at each end of the latter and arranged against and in engagement with the outer side faces of the adjacent pairs of ribs.

4. The combination, with a channeled tie embodying side and bottom walls, of a cushion disposed in the tie channel adjacent each end thereof, a chair plate secured to each cushion and provided with a pair of spaced transversely-disposed rail-engaging ribs, and a pair of spaced transversely-disposed straps connecting the side walls of said tie at each end of the latter and arranged against and in engagement with the outer side faces of the adjacent pair of ribs.

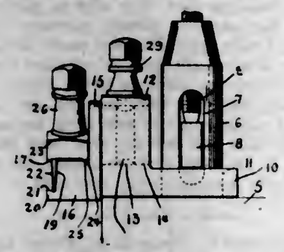
5. The combination, with a channeled tie embodying side and bottom walls and provided adjacent each end with a transverse partition, of a cushion block removably disposed in each end of the tie channel and contacting at its inner end with the adjacent partition, a chair plate fastened to each cushion and provided upon its upper face with a pair of spaced transversely-disposed rail-engaging ribs and a pair of spaced transversely-disposed straps connecting the side walls of said tie at each end of the latter and arranged against and in engagement with the outer side faces of the adjacent pair of ribs, each of said partitions being formed with an opening through which a tool may be inserted to dislodge the adjacent block after the corresponding plate has been unfastened therefrom.

[Claim 6 not printed in the Gazette.]

1,063,050. TOOL-HOLDER. HARRY E. MATTHEUS, Birmingham, Ala. Filed June 26, 1912. Serial No. 706,010. (Cl. 82—36.)

1. A tool holder comprising a base adapted to be clamped to a tool rest of a lathe or other machine, a bearing rising from said base, a swinging tool supporting member connected with said bearing and having a tool seat in its outer side, a clamping plate carried by said member and engageable with a tool when disposed within the seat in said member for holding the same, and means on the clamping plate and engageable with the member for causing inward lateral movement of the said clamping plate for firmly forcing a tool in the seat in said member.

2. A tool holder comprising a base adapted to be clamped to a tool rest of a lathe or other machine, a bearing rising from said base, a swinging tool supporting member connected with said bearing and having a tool seat in its outer side, a clamping plate carried by said member and engageable with a tool when disposed within the seat in said member for holding the same, means on the clamping plate and engageable with the member for causing inward lateral movement of the said clamping plate for firmly forcing a tool in the seat in said member, and means for binding the swinging supporting member in the bearing.



3. A tool holder comprising a base adapted to be clamped to a tool rest of a lathe or other machine, a bearing rising from said base, a swinging tool supporting member connected with said bearing and having a tool seat in its outer side, a clamping plate carried by said member and engageable with a tool when disposed within the seat in said member for holding the same, means on the clamping plate and engageable with the member for causing inward lateral movement of the said clamping plate for firmly forcing a tool in the seat in said member, means for binding the swinging supporting member in the bearing, and means for adjusting the clamping plate on the said supporting member.

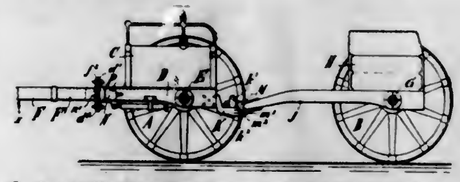
4. A tool holder comprising a base adapted to be clamped to a tool rest of a lathe or other machine, a bearing rising from said base, a swinging tool supporting member connected with said bearing and having a tool seat in its outer side, a clamping plate carried by said member and engageable with a tool when disposed within the seat in said member for holding the same, means on the clamping plate and engageable with the member for causing inward lateral movement of the said clamping plate for firmly forcing a tool in the seat in said member, means for binding the swinging supporting member in the bearing, and means for adjusting the clamping plate on the said supporting member, the said supporting member being extended forwardly beyond the clamping plate.

5. A tool holder comprising a base adapted to be clamped to a tool rest of a lathe or other machine, a bearing rising from said base, a swinging tool supporting member connected with said bearing and having a tool seat in its outer side, a clamping member carried by said member and engageable with a tool when disposed within the seat in said member for holding the same, means on the clamping plate and engageable with the member for causing inward lateral movement of the said clamping plate for firmly forcing a tool in the seat in said member, means for binding the swinging supporting member in the bearing, means for adjusting the clamping plate on the said supporting member, the said supporting member being extended forwardly beyond the clamping plate, and an inwardly beveled abutment lip formed on the supporting member at the lowermost portion of the seat therein for coöperation with the tool when engaged in the seat.

[Claim 6 not printed in the Gazette.]

1,063,051. ARTILLERY-CARRIAGE. WILHELM MAYER, Essen-on-the-Ruhr, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Oct. 10, 1910. Serial No. 586,291. (Cl. 89—40.)

1. An artillery vehicle, comprising a two-wheeled front carriage and a two-wheeled detachable rear carriage; a coupling stiff in the vertical plane and yielding in the horizontal plane between said front carriage and said rear carriage; a pole for said front carriage, and connections between said front carriage and said pole, said connections being situated in the front carriage and constructed to yield when said pole is subjected to undue strain in any direction, and said pole and said connections returning to their normal position at the termination of said strain.



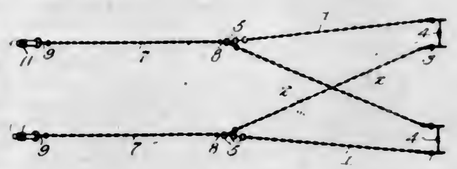
2. An artillery vehicle comprising a two-wheeled front carriage and a two wheeled rear carriage, a shaft on the rear carriage, a horizontally yielding coupling between the front carriage and the shaft having striking surfaces to prevent tilting of the front carriage around the wheel axle, and a yieldingly mounted pole on the front carriage.

3. An artillery vehicle comprising a two-wheeled front carriage and a two wheeled rear carriage, a shaft on the rear carriage, a horizontally yielding coupling between the front carriage and the shaft having striking surfaces to prevent tilting of the front carriage around the wheel axle, and a yieldingly mounted pole on the front carriage, said yielding mounting comprising a universal joint and a resilient sustaining means.

4. An artillery vehicle comprising a limber and a rear carriage, a horizontally yielding coupling between said limber and said rear carriage, and a pole yieldingly mounted on said limber, said yielding pole mounting comprising a bolt having a semi-spherical head, a socket piece having a surface formed complementary to the bolt head, and a resilient sustaining means mounted on the bolt.

5. An artillery vehicle comprising a limber and a rear carriage, a horizontally yielding coupling between said limber and said rear carriage, and a pole yieldingly mounted on said limber, said yielding pole mounting comprising a pair of disk-plates carried by the limber and the pole respectively and adapted to lie in intimate contact, interengaging elements holding said plates in proper relative position, a bolt having a semi-spherical head mounted on the limber, a socket piece carried by the tongue and having a surface formed complementary to and in engagement with the bolt head, and a plurality of spring elements mounted on said bolt and effecting the resilient connection between the limber and the tongue.

1,063,052. DRIVING-LINES. THOMAS M. MCCONNELL, Elberton, Ga. Filed Feb. 27, 1912. Serial No. 680,343. (Cl. 54—36.)



1. A driving rein comprising independent main and cross lines each connected to bits, each of said main lines being provided with a plurality of rings adjacent one end, said cross lines having their free ends adjustably connected with said rings, and a driving rein adapted to be connected with any of said rings for the purpose set forth.

2. A driving rein comprising main lines connected with bits and provided with a plurality of rings at one end, independent cross lines having one end connected with

said bits and the opposite end adjustably connected with said rings, a driving rein, and a removable section adapted to connect the rein with said lines and to be connected with any of the said rings for the purpose set forth.

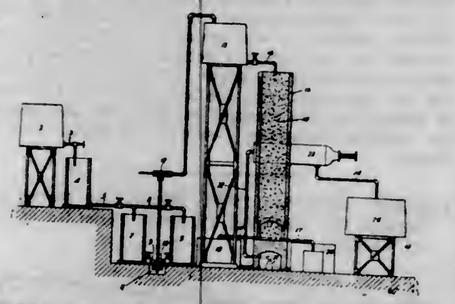
1,063,053. LANTERN-GLOBE. JOHN W. MCCRONE, San Antonio, Tex. Filed Oct. 10, 1911. Serial No. 653,814. (Cl. 240—93.)



1. An article of manufacture comprising a lantern globe cast with an integral lens and an oppositely disposed externally projecting circular flange, a reflecting substance fixed to the external face of said globe within said flange and forming a reflector for said lens, said flange being formed with integral studs, and a cap having a flange formed with bayonet slots and mounted upon the globe flange interlocking with the studs thereof.

2. An article of manufacture comprising a lantern globe cast with an integral lens, a protector carried by the globe, and a reflecting substance carried by one of the parts exteriorly of the globe and arranged at a diametrically opposite point to the lens, said reflecting substance being shielded by the protector.

1,063,054. METHOD OF STRIPPING SHEETS. JOSEPH MCFERRAGE, Vandergrift, Pa., assignor to American Sheet & Tin Plate Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Oct. 28, 1912. Serial No. 728,169. (Cl. 75—18.)



1. The method of stripping galvanized material which consists in placing the material in a bath of a zinc salt and acid to partly strip the material, removing the partly stripped material therefrom to a second bath to remove the zinc-iron alloy and complete the stripping operation, removing portions of partly neutralized solution from the first bath to form the second bath, and making additions of acid to the first bath to restore its strength.

2. The method of stripping galvanized material and conserving the zinc values which consists in stripping the material in a bath of a zinc salt and acid until the coating is partly removed, removing the partly stripped materials to a second bath of zinc chlorid and acid and completing the stripping operation therein, using the second bath until neutralized and withdrawing portions of partly neutralized solution from the first bath to replace neutralized solution in the second bath.

3. The method of stripping metallic coated material which consists in placing the material in an acid bath of from two to three per cent. free acid to partly strip the coating from the material, thereby partially neutralizing the acid in said bath, removing the partly stripped material therefrom to a second bath to complete the stripping operation, and removing portions of the partly neutralized solution forming the first bath to form the second bath when the acid content of the first bath becomes reduced to between one-half and one per cent.

4. The method of stripping metallic coated material which consists in placing the material in an acid bath of from two to three per cent. free acid to partly strip the coating from the material, thereby partially neutralizing the acid in said bath, removing the partly stripped material therefrom to a second bath to complete the stripping operation, and removing portions of the partly neutralized solution forming the first bath to form the second bath when the acid content of the first bath becomes reduced to between one-half and one per cent. and making additions of acid to the first bath to restore its strength to between two and three per cent. free acid.

1,063,055. LANTERN. THOMAS L. MOORE, San Antonio, Tex. Filed July 8, 1912. Serial No. 708,297. (Cl. 240—51.)



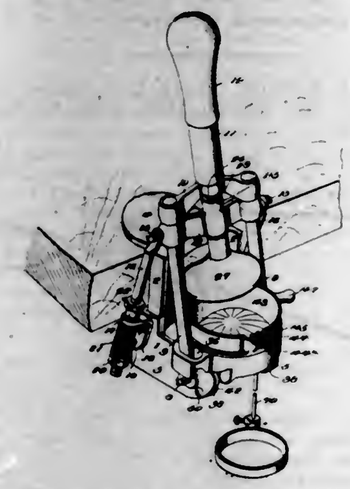
1. A lantern embodying a font having a raised portion, a burner in rotatable engagement with the top of the front and including an actuating stem, a globe cage ring seating on the font around the raised portion and having a straight slot receiving the stem, means for locking the said ring to the font when rotated, and a guard projecting upwardly from the font adjoining the raised portion to close the said slot and on which the stem is seatable when the ring is rotated to locked position.

2. A lantern embodying a font, a burner in engagement therewith and including an actuating stem, a globe cage ring seating on the font and having a slot receiving the stem, means for engaging the said ring to the font, and a rib projecting upwardly from the font exteriorly of the ring to brace the corners of the ring formed by the said slot.

3. A lantern embodying a font having a raised portion, a burner engaged with the font and having a laterally projecting stem, a supporting ring seated on the font around the raised portion, and having a slot receiving the stem, a lug projecting from the raised portion of the font, the ring having a bayonet slot receiving the lug, and a wire secured to the lower edge of the ring and extending unbrokenly past and looped outwardly adjoining the bayonet slot.

4. A lantern embodying a font having a raised portion, a burner in screw-threaded engagement with the font and including a laterally projecting stem, a supporting ring seating on the font around the raised portion and having a slot receiving the stem, a guard projecting upwardly from the font within the ring back of the said slot and on which the stem is seatable, a rib projecting upwardly from the font exteriorly of the ring to brace the corners of the ring formed by the said slot, diametrically opposite lugs projecting from the raised portion of the font, the ring having bayonet slots receiving the lugs, a wire secured to the lower edges of the ring and looped outwardly adjoining the bayonet slots, and a leaf spring secured to the said ring and designed to engage one of the said lugs.

1,063,056. LEMON-SQUEEZER. RASMUS NIELSEN, Troy, N. Y., assignor to Catherine Nielsen and Henry S. Giles, Troy, N. Y. Filed July 8, 1912. Serial No. 708,251. (Cl. 100—41.)



1. A lemon squeezer comprising a tilting frame, a compressor, a cup, and means for rotating and advancing the compressor toward the cup when the frame is tilted.

2. A device of the character described comprising a compressor, a cup, and means operated when the compressor and cup are tilted for rotating and advancing the compressor toward the cup.

3. A device of the character described comprising a normally vertically disposed tilting frame, a reciprocating rod mounted in the frame, a compressor on the rod, a normally substantially horizontally disposed cup mounted on the tilting frame and tiltable to a vertical position when said frame is tilted and means to cause the rod and compressor to reciprocate when the frame is tilted to a horizontal position.

4. A device of the character described comprising a stationary frame, a tilting frame pivoted to the stationary frame, a reciprocating rod mounted in the tilting frame, a compressor on the rod, a bearing for the rod, slidable on the tilting frame, a pivotal connection between the sliding bearing and the stationary frame, means for rotating the reciprocating rod when the tilting frame is moved and a cup which coöperates with the compressor to hold and squeeze a lemon.

5. A device of the character described, comprising a stationary frame, a tilting frame pivoted to the stationary frame and including a sliding member, a rod mounted in the sliding member, a compressor on the rod, means for rotating the rod when the frame is tilted, and a cup with which the compressor coöperates.

[Claims 6 to 27 not printed in the Gazette.]

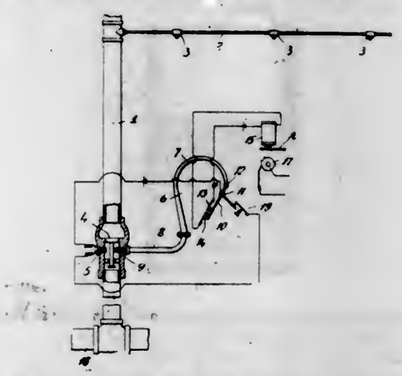
1,063,057. HEADED WIRE PIN. KARL OERTEL, Berlin, Germany, assignor to Gesellschaft für Patent-Verwertung M. B. H., Berlin, Germany. Filed July 19, 1909. Serial No. 508,516. (Cl. 85—16.)

A pin of integral construction comprising a stem, and a flattened approximately solid coil disposed at right angles thereto and constituting the head of the pin, the free terminal of said coil extending across and beneath that portion of the pin which connects the stem and coil and



projecting into and completely filling the space between said stem and coil.

1,063,058. SPRINKLER SUPERVISORY SYSTEM. CHARLES F. PATTERSON, Orange, N. J. Filed June 17, 1912. Serial No. 704,146. (Cl. 178—103.)



1. The combination with a conduit normally containing liquid and in which no flow of that liquid normally occurs, of means for indicating flow through such conduit, comprising means for varying the temperature of a portion of the liquid in such conduit with reference to the temperature of the liquid supplied to that conduit, and heat responsive means located in operative proximity to the region within which the temperature of the liquid is so changed, and arranged to operate upon material change of temperature of the liquid in its vicinity.

2. The combination with a conduit adapted for the flow of liquid therethrough, and adapted to contain liquid normally without flow, of means for indicating flow through such conduit comprising heating means arranged to raise locally the temperature of a portion of the liquid within the conduit, and heat responsive means arranged to be operated by fall of temperature of the liquid within the zone of such localized heat.

3. The combination with a conduit adapted for the flow of liquid therethrough, and adapted to contain liquid normally without flow, of means for indicating flow through such conduit comprising heating means arranged to raise locally the temperature of a portion of the liquid within the conduit, and heat responsive means arranged to be operated by fall of temperature of the liquid within the zone of such localized heat, said heat responsive means comprising contact mechanism adapted to control a signaling circuit.

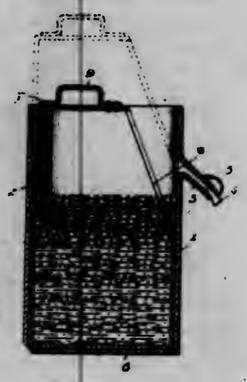
4. The combination with a conduit adapted for the flow of liquid therethrough, and adapted to contain liquid normally without flow, of heating means arranged to raise locally the temperature of a portion of the liquid within the conduit, and heat responsive means arranged to be operated by fall of temperature of the liquid within the zone of such localized heat, said heat responsive means comprising contact means, and an alarm transmitter controlled by such contact means.

5. The combination with a conduit adapted for the flow of liquid therethrough, and adapted to contain liquid normally without flow, of means for indicating flow through such conduit comprising heating means arranged to raise locally the temperature of a portion of the liquid within the conduit, and heat responsive means arranged to be operated by fall of temperature of the liquid within

the zone of such localized heat, said heat responsive means further provided with means for controlling the action of said heating means.

[Claims 6 to 10 not printed in the Gazette.]

1,063,059. CREAM-SEPARATOR. FRANK PETERSON, Leadville, Colo. Filed Sept. 17, 1912. Serial No. 720,832. (Cl. 31—85.)



1. A cream separator comprising an outer vessel having a discharge spout near its upper end and an inner vessel movable vertically in the outer vessel, and having an opening in one side to permit cream to flow therethrough, and through the spout when the inner vessel is raised.

2. The herein described cream separator comprising an outer vessel having a spout near its upper end and an inner vessel movable vertically in the outer vessel and having a V-shaped opening near its upper end and at one side and arranged opposite the inner end of the spout to permit the cream from the inner vessel to flow out through the spout when the inner vessel is raised.

1,063,060. ANTI-RAIL-CREEPING DEVICE. MERITT L. PHELPS, Colorado City, Colo. Filed Feb. 10, 1913. Serial No. 747,484. (Cl. 238—2.)



1. A railroad rail having the floor of its base formed with wave-like corrugations pressed therein, in combination with a tie plate having wave-like corrugations pressed in its top face and meshing with said corrugations of the rail.

2. A railroad rail having its base formed with series of transversely-disposed depressions and intervening ridges, in combination with a tie plate having ridges entering said depressions to hold the rail against creeping, said ridges and depressions of the rail and plate being so relatively formed as to provide lateral spaces to allow for expansion and contraction of the rail independently of the tie plate.

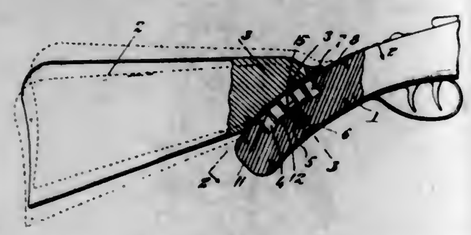
3. A railroad rail having the bottom face of its base formed with uniformly spaced parallel transversely arranged valleys and intervening ridges pressed therein, in combination with a tie plate formed for being fixedly secured to a tie and having parallel transverse valleys to receive the ridges of said rail and intervening ridges to enter the valleys of the rail, said ridges being less in width than said valleys for the purpose described.

4. A railroad rail having the bottom face of its base corrugated in combination with a support therefor having its top face corrugated to mesh with the corrugations of the rail, lateral spaces intervening between the intermeshing bearing surfaces of the rail and support to allow for expansion and contraction of the rail independently of and on the support.

5. A railroad rail having the under face of its base formed with transversely curving corrugations pressed therein in combination with a tie plate having corrugations pressed in its top face and adapted to mesh with the corrugations of the rail to hold the rail against creeping.

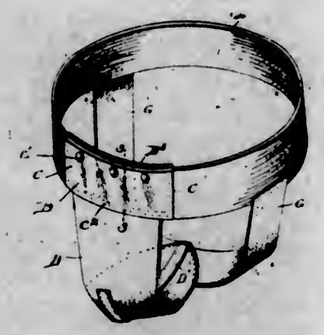
[Claim 6 not printed in the Gazette.]

1,063,061. GUN-STOCK. SAMUEL H. PICKERING, Norristown, Pa. Filed Aug. 23, 1912. Serial No. 716,715. (Cl. 42—73.)



In a gun, a pistol grip having a chamber in the upper surface thereof, and a slide way at right angles to the chamber and communicating therewith, a stock, an adjustable connection between the stock and grip and disposed within said chamber, said connection comprising a U-shaped yoke having the free ends of the limbs thereof connected to the gripping head of the stock and the interconnecting bar thereof formed with a serrated surface, a retainer within the slide way and slidable therein and comprising a block having a bifurcated end embracing said interconnecting bar of the yoke, pins carried by said end and adapted to bind against the serrated surface of said bar, and means for producing the binding action.

1,063,062. JOCK-STRAP. ARTHUR QUENZER, New York, N. Y. Filed Oct. 18, 1910. Serial No. 587,658. (Cl. 128—38.)

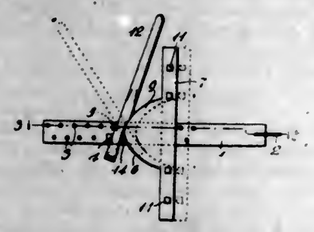


1. A jock-strap comprising a suspensory having a body portion formed of a single piece provided with strands of elastic ribbing extending longitudinally thereof and distributed therethrough, the corresponding strands upon opposite sides converging at the lower end and meeting along a median line, thereby forming a pouch longitudinally yieldable and transversely non-yieldable, longitudinally elastic thigh-bands secured to opposite sides of the converging lower portion of said body portion, and a waist-band secured to the upper part of the body portion.

2. A jock-strap comprising a suspensory having a body portion formed of a single piece provided with strands of elastic ribbing extending longitudinally therethrough, the corresponding strands upon opposite sides converging at the lower end and meeting along a median line, thereby forming a pouch longitudinally yieldable and transversely non-yieldable, a non-elastic reinforcing strip secured to and covering the ends of said convergent strands, elastic thigh-bands secured to opposite sides of the converging lower portion of said body portion, a waist-support comprising a non-elastic member secured to the upper edge of the suspensory and an elastic waist-band secured to opposite sides of said non-elastic member.

3. A jock-strap, comprising a suspensory composed of fabric having strands of elastic ribbing symmetrically distributed and extending longitudinally therethrough, said elastic strands converging at the lower end to form the fabric into a central protruding pouch or pocket, an elastic waist-band having a front central portion comprising a multiple-ply non-elastic member and secured to the upper edge of said suspensory to form a firm non-sagging support therefor, the edge of the suspensory entering between the plies of said non-elastic member, and elastic thigh-bands fastened to opposite sides of the lower end of the suspensory and to the rear of said elastic waist-band and adapted to exert a pull transverse to the strands of said fabric.

1,063,063. WIRE-STRETCHER. CHARLES H. RAINS, Eichorn, Ill. Filed Oct. 17, 1912. Serial No. 726,328. (Cl. 39—58.)

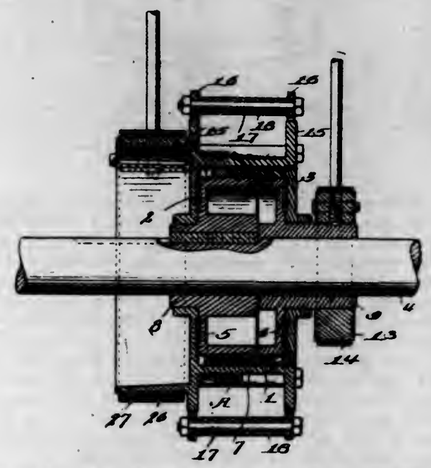


In a wire stretcher, the combination with a fulcrum bar having two rows of holes disposed through it in staggered relation to each other, and means for connecting it with a fixed object; of a clamping mechanism including a bar at right angles to said fulcrum bar and provided at its mid-length with a laterally projecting cam, the bar and the cam being pierced with a slot for sliding engagement with the fulcrum bar, a pair of pins for insertion in said holes, and a lever having a slot adapted to loosely embrace said fulcrum bar so that the lever may rock thereon, one of its edges being recessed for engagement with the nose of said cam.

1,063,064. FRICTION-CLUTCH. WILLIAM ARTHUR RAMSAY, Honolulu, Hawaii. Filed Apr. 4, 1912. Serial No. 688,407. (Cl. 192—14.)

1. In a clutch, a rotatable drum shaped member, a pair of rotatable drums inclosed within the drum shaped member and having flush peripheral surfaces, a coil spring normally contractile upon the drums and interposed between the peripheral surfaces thereof and the inner circumferential surface of said member, the member and the drums being correlated to the spring as companion parts, and the drums being provided with driving lugs for engagement with the ends of said spring, one of the companion parts constituting a driving element, another a driven element, and the third, together with the spring, a means of connection between the driving element and the driven element, and means for moving the third part against the tension of the spring to cause the latter to put the driving and driven elements into operative relation.

2. In a clutch, a rotatable drum shaped member having heads at each end thereof, one of the heads being removable, a pair of rotatable drums inclosed within the drum shaped member and having flush peripheral surfaces, a coil spring arranged upon the drums and interposed between the peripheral surfaces thereof and the inner circumferential surface of said member, the member and the drums being correlated to the spring as companion parts and the drums being provided with driving lugs for engagement with the ends of said spring, one of the companion parts constituting a driving element, another a driven element, and the third, together with the spring, a means of connection between the driving element and the driven element, and means for moving the third part against the tension of the spring to cause the latter to put the driving and driven elements into operative relation.



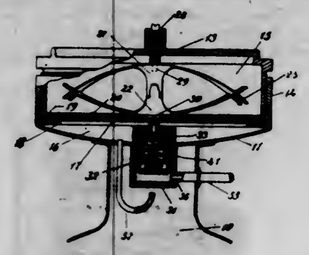
3. In a clutch, a rotatable drum shaped member, a pair of rotatable drums inclosed within the drum shaped member and having flush peripheral surfaces, a coil spring normally contractile upon the drums and interposed between the peripheral surfaces thereof and the inner circumferential surface of said member, the drums having driving lugs engaging the extremities of the spring and the latter transmitting the rotation of one drum to the other drum, and means for moving one of the drums with relation to the other drum whereby to expand the spring into engaging contact with the inner circumferential surface of the drum shaped member.

4. In a clutch, a rotatable drum shaped member, a pair of rotatable drums inclosed within the drum-shaped member and having flush peripheral surfaces, a coil spring normally contractile upon the drums and interposed between the peripheral surfaces thereof and the inner circumferential surface of said member, the drums having driving lugs engaging the extremities of the spring and the latter transmitting the rotation of one drum to the other drum, the drum-shaped member having hubs at the ends thereof, one of the drums having a hub which projects through and beyond the adjacent hub, and means associated with said hub to retard the rotation of the drum by which the hub is carried with relation to the other drum and to thereby expand the spring into engagement with the inner surface of said drum-shaped member.

1,063,065. PRESSURE-REGULATOR. GIUSEPPE REGONDI, New York, N. Y. Filed Nov. 25, 1911. Serial No. 662,252. Renewed Apr. 18, 1913. Serial No. 762,094. (Cl. 50—23.)

1. In a device of the character described, and in combination with a high pressure and a low pressure chamber, a regulating valve comprising a hollow casing connected to the high pressure chamber, a hollow closing member secured to the same provided with an inwardly-projecting

lug having an opening connecting the inside of said casing with the low pressure chamber, a hollow plunger movable within said hollow member, a wire screen filtering the fluid fed to said valve previous to its entering said hollow closing member, a spring within said plunger controlling the same, a washer of plastic material retained by said plunger against said lug closing said opening, a longitudinally movable plug inserted through said opening and resting against said plunger having a section area a trifle smaller than the area of said opening, and a diaphragm controlling said plug retaining the same in position; substantially as described, and for the purposes as set forth.



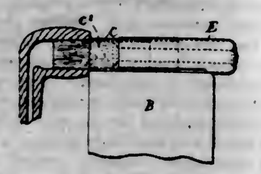
2. The combination of a body, having an inwardly projecting flange, a diaphragm on said flange, a flexible backing member for the same, a hollow cover secured to said body clamping said diaphragm and backing member against said flange, a compression spring between said cover and said backing member, a hollow valve casing secured to the bottom of said body having an opening connecting the same internally to said body, a plunger closing said opening, means for holding said plunger against said opening, and a longitudinally movable plug inserted through said opening and held against said plunger by the action of said diaphragm, having a section area a trifle smaller than the area of said opening; substantially as described, and for the purposes as set forth.

3. The combination of a body, having an inwardly projecting flange, a diaphragm on said flange, a flexible backing member for the same, a hollow cover secured to said body clamping said diaphragm and backing member against said flange, a spring composed of two convex metal plates having radial arms interlocking with each other between said cover and said backing member, a screw through said cover adjusting the pressure of said spring, a hollow valve casing secured to the bottom of said body connected to the high pressure fluid supply, a hollow closing member secured to the same provided with an inwardly projecting lug having an opening connecting the inside of said casing with the inside of said body, a hollow plunger movable within said hollow member, a wire screen filtering the fluid fed to said valve previous to its entering said hollow closing member, a spring within said plunger controlling the same, a washer of plastic material retained by said plunger against said lug closing said opening, a longitudinally movable plug inserted through said opening and held against said plunger by said diaphragm having a section area a trifle smaller than the area of said opening, and a pipe attached to the bottom of said body conveying the fluid fed thereto against the bottom of said valve casing; substantially as described, and for the purposes as set forth.

1,063,066. COMBINED TOBACCO-RECEIPTACLE AND PIPE-FILLER. GLEESON EDWARD ROBINSON, Esher, England, assignor to The Strand Accessories Company, Limited, London, England. Filed Dec. 6, 1910. Serial No. 595,945. (Cl. 131—59.)

1. A pocket tobacco case comprising a pipe filler adapted to receive a tobacco cartridge and provided with means for holding the cartridge case during the expulsion of the tobacco therefrom, and a cartridge magazine fixed thereto and constituting a handle therefor.

2. A pocket tobacco case comprising a cartridge magazine, and a pipe filler fixed thereto at one end thereof, adapted to receive a tobacco cartridge and provided with means for holding the cartridge case during the expulsion of the tobacco therefrom, said magazine constituting a handle for said filler.



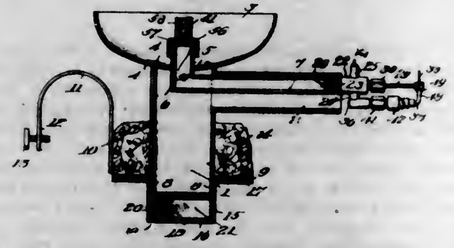
3. A pocket tobacco case comprising a filler barrel adapted to receive a tobacco cartridge and provided with means for holding the cartridge case during the expulsion of the tobacco therefrom, a plunger movable in said barrel for expelling the tobacco therefrom, and a cartridge magazine fixed to said barrel and constituting a handle for the filler.

4. A pocket tobacco case comprising a filler barrel composed of separable sections and adapted to receive a tobacco cartridge and provided with means for holding the cartridge case within said barrel during the expulsion of tobacco therefrom, a plunger movable in said barrel for expelling the tobacco therefrom, and a cartridge magazine comprising a body and cover fixed respectively to different sections of said filler barrel and constituting a handle for the filler.

5. In combination a receptacle for containing tobacco cartridges, a pipe filler comprising a cylinder for the cartridge said pipe filler having a roughened surface to prevent the cartridge case following the tobacco as the pipe is being filled, and a part of the filler adapted to be moved in to exert pressure upon the side of the cartridge to hold it against the roughened surface.

[Claims 6 to 20 not printed in the Gazette.]

1,063,067. GASOLENE-LIGHTING APPARATUS. AUGUSTINE T. ROCHTE, McClure, Ohio. Filed Oct. 27, 1911. Serial No. 657,023. (Cl. 67—50.)



1. A device of the character specified, comprising a vertical casing having a lateral tubular extension near its upper end, a cup or receptacle seated on the upper end of the casing and provided with openings outside of the casing, a washer threaded onto the lower end of the casing, said washer having brackets for supporting a globe, a layer of absorbent non-combustible material on the washer, a cap having an opening in its end threaded onto the casing below the washer, a perforated disk in the cap, a gauze screen above the disk, an elbow having one arm passing through the extension, the cup having an opening for receiving the other, arm, means for supplying gasolene to the vertical arm of the elbow, a valve casing threaded into the other arm and having an inlet port opening into the arm, said casing having an outlet port directed into the extension of the first-named casing, a valve controlling each port, and a common operating means for the valves.

2. A device of the character specified, comprising a vertical casing having a lateral tubular extension ear its upper end, a cup or receptacle seated on the upper end of the casing and provided with openings outside of the casing, a washer threaded onto the lower end of the casing, said washer having brackets for supporting a globe, a layer of absorbent non-combustible material on the washer, a cap having an opening in its end threaded onto the casing below the washer, a perforated disk in the cap, a gauze screen above the disk, an elbow having one arm passing through the extension, the cup having an opening for receiving the other arm, means for supplying gasolene to the vertical arm of the elbow, and means for conducting the gasolene from the outer end of the elbow into the lateral extension of the first-named casing.

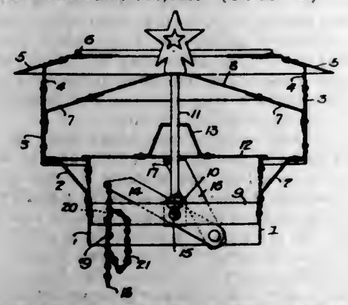
3. A device of the character specified, comprising a vertical casing having a lateral tubular extension near its upper end, a cup or receptacle seated on the upper end of the casing and provided with openings outside of the casing, a washer threaded onto the lower end of the casing, said washer having brackets for supporting a globe, a layer of absorbent non-combustible material on the washer, a straining device for the gas at the lower end of the casing, an elbow having a vertical arm extending above the cup and a horizontal arm within the lateral extension, means for supplying gasolene to the vertical arm of the elbow, and means for conducting the gasolene from the outer end of the elbow into the lateral extension of the casing.

4. In a device of the character specified, a casing provided with a laterally extending mixing tube near its top, a cup seated on the top of the casing and having a central opening, said cup having openings outside of the casing, means below the mixing tube for supporting a non-combustible absorbing material, an elbow having a vertical arm in the casing and passing through the opening of the cup, and a horizontal arm in the mixing tube at the top thereof, means for supplying fuel to the vertical arm of the elbow, and means on the outer end of the horizontal arm for delivering the gas to the mixing tube, said means comprising a casing having an inlet port in the horizontal arm and an outlet port directed toward the outer end of the mixing tube, a valve for controlling each port, and means for operating the valves together.

5. In a device of the character specified, a casing provided with a laterally extending mixing tube near its top, a cup seated on the top of the casing and having a central opening, said cup having openings outside of the casing, means below the mixing tube for supporting a non-combustible absorbing material, an elbow having a vertical arm in the casing and passing through the opening of the cup, and a horizontal arm in the mixing tube at the top thereof, means for supplying fuel to the vertical arm of the elbow, and means on the outer end of the horizontal arm for delivering the gas to the mixing tube, said means comprising a casing having one end connected to the outer end of the horizontal arm and having an outlet port directed toward the open end of the mixing tube.

[Claims 6 and 7 not printed in the Gazette.]

1,063,068. VENTILATOR. JAMES M. ROSE, Philadelphia, Pa., assignor to Merchant & Evans Company, Philadelphia, Pa., a Corporation of New Jersey. Filed Aug. 15, 1912. Serial No. 715,259. (Cl. 98—4.)



1. The combination with a ventilator having a body conduit; of a movable valve formed to seat on said conduit; and operating means for the valve consisting of a lever; a link connected to said lever and loosely engaging the valve and means for turning the lever on its fulcrum.

2. The combination with a ventilator having a body conduit, of a movable valve formed to seat on said conduit; a member extending across said conduit; a lever pivoted on said member; a link connected to the lever and loosely engaging said valve; and means for actuating the lever.

3. The combination with a ventilator having a body conduit and a vertical guide bar; of a valve slidable on said guide bar; a link having on one end slidable on the guide bar and engaging the valve; a lever pivoted to said link; and means for actuating the lever.

4. The combination with a ventilator having a substantially cylindrical body conduit of a valve formed of a substantially flat sheet of metal mounted to seat on one end of said conduit; a rod supported by said body conduit and passing through the valve so as to guide the same; with a device for raising and lowering said valve consisting of a link having one end guided on the rod and loosely engaging the valve; a cross bar carried by the body conduit; a lever fulcrumed to said bar and having one end pivoted to said link; and operating means connected to the other end of the lever.

1,063,069. DEVICE FOR FASTENING COASTER-BRAKES. ERNST SACHS, Schweinfurt, Germany. Filed July 10, 1912. Serial No. 708,643. (Cl. 208—57.)



1. In a device for non-rotatably fastening a stationary part of a coaster-brake for cycles, the combination with a slotted eye provided on the rear fork of the cycle, of an axle adjustable in the slot of said eye, a brake part fixed upon the axle, and a fastening device composed of two special members, one of which is located inside the eye and non-rotatably engaged with the brake part and the other outside the eye, and two axial extensions one engaged in the slot and one embracing the lower edge of the eye, one of the extensions also uniting the two members non-rotatably.

2. The combination with a slotted eye provided on the cycle frame and adapted to receive the axle of a wheel-hub, of a coaster brake element to be non-rotatably attached to said eye and a fastening device adapted to interconnect the eye and the brake, and composed of two flat members embracing the eye on its two sides and being in positive engagement with the said brake part and with the eye by radial and axial projections formed on said members, one of the axial projections connecting the two members non-rotatably.

3. The combination with a slotted eye of a cycle frame, of a coaster-brake capable of being attached to said eye, and a device for non-rotatably fastening the coaster-brake to the eye, said fastening device being composed of two members facing the two sides of the eye and having radial projections engaged with the coaster-brake, and axial extensions one projecting into the slot of the eye and another embracing the outer edge of the eye, one of them positively connecting the two members against rotation.

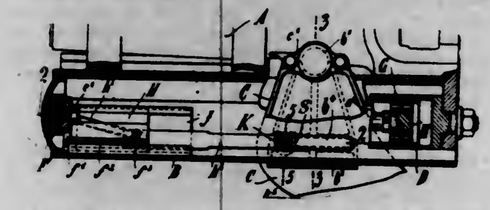
4. A device for non-rotatably fastening a coaster-brake to the slotted eye of the cycle frame, composed of opposed members facing the sides of said eye, one of said members having radial projections engaged in radial gaps of a brake-part, and axial extensions engaged with the slot, the other of said members having an axial extension en-

gaging the outer edge of said eye, together with means for connecting said members so as to hold them against rotation.

5. A device for non-rotatably fastening a coaster-brake to the slotted eye provided on the rear fork of a cycle frame, composed of two members facing the sides of said eye and having radial projections engaged in radial gaps of a brake part and a plurality of axial extensions engaged with the slot and with the outer edge of the said eye and also interconnecting the two members so as to prevent them against relative rotation.

[Claims 6 to 9 not printed in the Gazette.]

1,063,070. HYDRAULIC RECOIL-BRAKE. FRIEDRICH SACHTLEBEN, Essen-on-the-Ruhr, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Oct. 12, 1911. Serial No. 654,353. (Cl. 89—43.)



A recoil mount for guns with fluid recoil brake comprising a cradle, a cylinder within the cradle, fluid throttling means within the cylinder, a guide-way mounted within the cradle and disposed lengthwise of the same, a slide operable within the guide-way and provided with a cam-slot having connection with the fluid throttling means and means connecting said slide to a part of the gun mount not partaking of the elevation movement of the barrel, said means comprising a guide groove inclined to the direction of the slide's movement and open at its upper end, and an arm on said slide engaging normally said guide groove in order to effect the automatic regulation of the fluid throttling means on the elevation of the gun barrel and being detached therefrom by lifting said cradle from the part of the gun mount not partaking of the elevation movement of the barrel.

1,063,071. APPARATUS FOR MANUFACTURING HOLLOW BRICKS WITH CLOSED ENDS. WILHELM SCHLEUNING, Friedenau, Germany. Filed June 9, 1910. Serial No. 566,059. (Cl. 25—11.)



1. In an apparatus for manufacturing hollow bricks with closed ends, the combination with the mouth piece, of a core open at both ends supported within said mouth piece and means for intermittently closing said hollow core.

2. In an apparatus for the manufacture of hollow bricks with closed ends, the combination with the mouth piece, of a hollow core open at both ends supported within the mouth piece, a space for the clay being provided on all sides of said core, a movable plate for closing one end of said hollow core, and operative means for bringing said plate into engagement with and removing it from said core.

3. In an apparatus for the manufacture of hollow bricks with closed ends, the combination with the mouth piece, of a hollow core open at both ends, supported within the mouth piece so as to provide a space surrounding the core, within the mouth piece, a movable part for intermittently closing said core, and devices for displacing portions of the clay adjacent to the meeting faces of the hollow column, passing outside of the hollow core, and the closing plugs passing through said hollow core, to cause said plugs to unite firmly with the walls of the hollow column.

4. In an apparatus for the manufacture of hollow bricks with closed ends, the combination with the mouth piece, of a hollow core open at both ends supported within the mouth piece, so as to provide a space surrounding the core within the mouth piece and a movable part for intermittently closing said core, said core being provided with a device for cutting the portion of the clay passing through the same longitudinally thereof to form venting apertures in said blocks.

5. In an apparatus for the manufacture of hollow bricks with closed ends, the combination with the mouth piece, of a hollow core open at both ends, supported within the mouth piece, so as to provide a space surrounding the core within the mouth piece and a movable part for intermittently closing said core, said core being provided with a longitudinally disposed tongue arranged in the path of the portion of the clay passing through said core, to form venting apertures in said blocks.

[Claims 6 to 13 not printed in the Gazette.]

1,063,072. AIR-RIFLE. ELBERT HAMILTON SEARLE, Springfield, Mass. Filed Aug. 25, 1909. Serial No. 514,641. (Cl. 124—10.)



1. In a gun, the combination of an action case, a barrel, and an air cylinder; the action case being constructed from a blank of sheet metal bent into a substantially tubular form with a reduced forward end, providing a shoulder; the barrel embracing said reduced end; and the air cylinder being fitted within the action case and in abutment with and sustained by the shoulder provided by the reduced portion.

2. In a gun, the combination of an action case constructed of a blank of sheet metal bent into substantially tubular form and with downwardly projecting flanges, a member interposed between and spacing said flanges apart, a spring located in the action case, and a spring abutment extending through the interposed spacing member and through the action case.

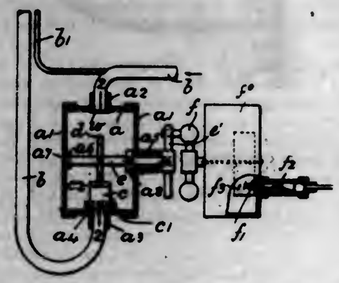
3. In a gun, the combination of an action case, constructed of a blank of sheet metal bent into substantially tubular form and with downwardly projecting parallel flanges spaced apart, a spring located in the action case, and a part extending between parallel flanges and across the interior of the action case to provide a spring abutment; said part extending through the casing and providing a sight member and extending rearwardly from said flanges to provide a trigger guard and connected at its rear end with the frame of the gun.

4. In a spring actuated breakdown gun, the combination of a forward portion and a rear portion separating by a breakdown action, and a single member constituting an abutment for the spring, a sight, and a trigger guard, said member having a fixed connection with one of the gun parts and having hinged action with the other of said parts in order to permit the breakdown action.

5. In a gun comprising a sheet metal frame having forwardly extending side walls and a frame extension having side walls and connected with the frame through means which permits breakdown action between them; a locking means for yieldingly resisting the breakdown action comprising a forwardly extending tongue located at an intermediate point between the side walls of the frame and a transverse connection between the side walls of the frame extension providing a shoulder for the engagement of said tongue.

[Claims 6 to 20 not printed in the Gazette.]

1,063,073. GAS-ILLUMINATED ADVERTISING APPARATUS. FRANK OSCAR SEYD, London, England. Filed Feb. 13, 1912. Serial No. 677,304. (Cl. 67—110.)

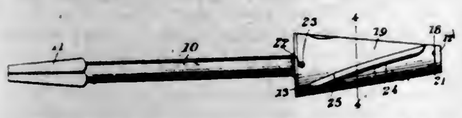


1. In gas illuminated advertising apparatus, in combination, a casing having an inlet port and outlet ports, a valve at each outlet port, a rotary shaft within the casing, and on said shaft a plurality of sets of strikers in the form of segments adapted to open the valves in sequence and to close them in any desired order, substantially as described.

2. In gas illuminated advertising apparatus, in combination, a casing having an inlet port and outlet ports, a valve at each outlet port, a rotary shaft within the casing, and on said shaft a plurality of sets of strikers in the form of segments adapted to open the valves in sequence and to close them in any desired order, the segments of one set being of different length to those of another, substantially as described.

3. In gas illuminated advertising apparatus, in combination, a casing, a rotary shaft passing through one end of the casing, and a fixed cross-bar adjacent to the other end of the casing through which the rotary shaft also passes, this end of the casing being adjustable and having a recess in which the end of the shaft engages, substantially as described.

1,063,074. REAMER. JOHN B. SHIRER, Charlotte, N. C. Filed Aug. 23, 1912. Serial No. 716,676. (Cl. 77—72.)



1. In a reamer, the combination with a stem, of a head formed at one end thereof, a flange formed on the stem between the ends thereof, a plurality of blades for removable connection with the said head and said flange, pins on the said head and extending into notches formed in the forward ends of the said blades, and means for engagement with the rear ends of the said blades and the said flange for securing the said blades in rigid position thereon.

2. In a reamer, the combination with a stem, of a head formed at one end thereof and provided with a dovetail groove, a flange formed on the said head, a seat on the said flange, blades for engagement with the said head and the said flange, the forward ends of the said blades being tapered for reception in the said dovetail groove, and means for securing the rear ends of the said blades to the said flange.

3. In a reamer, the combination with a stem, of a head formed at one end thereof and provided with a dovetail groove, a flange formed on the said head, a seat on the said flange, blades for engagement with the said head and the said flange, the forward ends of the said blades being tapered for reception in the said dovetail groove, means for securing the rear ends of the said blades to the said flange, and pins projecting from the said head and received in notches formed in the forward ends of the said blades.

4. In a reamer, the combination with a stem, of a head formed therewith, a flange formed with the stem and provided with an opening, and blades for removable engagement with the said head and said flange, the said blades having portions thereof cut away to form openings between the blades with the forward and rear ends of one blade engaging the forward and rear ends of the next blade.

1,063,075. FLASH-LIGHT APPARATUS. DAVID C. SHOBERG, Sioux City, Iowa. Filed June 7, 1912. Serial No. 702,247. (Cl. 67—28.)



1. In photographic flash light apparatus, a hood adapted to hold smoke incident to firing of a flash therein, said hood comprising pivoted sides, a spreading member normally holding the hood extended and operable to collapse said hood, whereby the smoke aforesaid may be expelled from the hood.

2. In photographic flash light apparatus, a hood adapted to hold smoke incident to firing of a flash therein, said hood comprising pivoted sides, a spreading member pivotally connected to one side of said hood and slidably connected with its opposite side, whereby movement of said spreading member will collapse the hood and forcibly expel the smoke therefrom.

3. In photographic flash light apparatus, a collapsible inclosing hood adapted to hold smoke incident to firing of a flash therein, a spreading member connected with the opposite sides of said hood and operable to collapse the same to permit the said sides to flap and rub against each other when shaken, whereby the residuum of powder from the flash may be expelled from the hood.

4. In photographic flash light apparatus, a collapsible hood adapted to hold smoke incident to firing of a flash therein, said hood comprising inclosing sides one of which is composed of foraminous material, a spreading member pivotally connected with the opposite sides and normally holding the hood extended, said member being operable to collapse the hood and permit the sides thereof to flap and rub against each other when shaken, whereby the residuum of powder from the flash may be shifted through the said foraminous material to thereby cleanse the latter.

5. Flash light apparatus comprising a pan, feeding means for supplying powder to the pan, and the resilient member for checking the flow of powder into the pan and operable by the feeding means to release a supply of powder, said member being adapted to return the feeding means to initial operative position.

[Claims 6 to 10 not printed in the Gazette.]

1,063,076. FILE. OLIVER G. SIMMONS, Narberth, Pa., assignor of one-half to William F. Fischer, Philadelphia, Pa. Filed Jan. 7, 1913. Serial No. 740,598. (Cl. 29—78.)

1. A file having spiral undercut teeth.

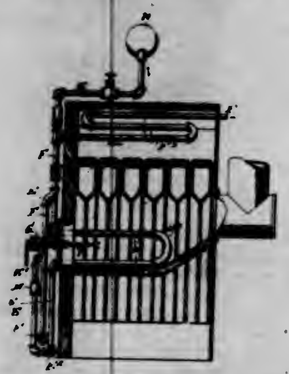
2. A file having teeth, each of which has an outer face bounded by two curves converging transversely of the file, one of such curves being spiral.

3. A file having undercut teeth each of which has an outer face tapered transversely of the file.



4. A substantially flat face cutting tool having a series of curved teeth, each tooth having a smooth milled sharp cutting edge lying in the plane of said face, the center of curvature being outside of said plane, and the cutting face of each tooth being undercut forming an acute angle with the axis of curvature of the cutting edge thereof.

1,063,077. HYDROCARBON-BURNING FURNACE. JAMES SNEDDEN, Wichita, Kans., assignor of one-third to Albert Ralph Murray, Wichita, Kans. Filed Apr. 2, 1912. Serial No. 688,108. (Cl. 158—36.)

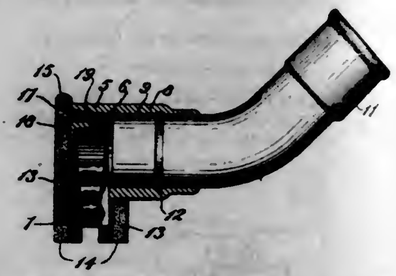


1. In a hydrocarbon burning furnace, having a combustion chamber, in combination a source of compressed air supply, a source of liquid fuel supply, a burner in said chamber, and individual conduits to said burner from said sources of air and fuel supply; said compressed air conduit comprising a coiled pipe in the path of the flame within the combustion chamber; said liquid fuel conduit comprising a coiled pipe in the combustion chamber and removed from the flame, whereby the fuel is heated to a desired temperature.

2. In a hydrocarbon burning furnace, having a combustion chamber, in combination a source of compressed air supply, a source of liquid fuel supply, a burner in said chamber, and individual conduits to said burner from said sources of air and fuel supply; said compressed air conduit comprising a coiled pipe in the path of the flame within the combustion chamber; said liquid fuel conduit comprising a coiled pipe in the combustion chamber and removed from the flame, whereby the fuel is heated to a desired temperature; an inlet valve on said burner controlling the admission of both air and fuel to said burner, and individual valves in said conduits, whereby the relative quantity of air and fuel will be adjusted in the combustion mixture admitted to the burner through said inlet valve.

1,063,078. CLEANING-TOOL. IRA H. SPENCER, West Hartford, Conn., assignor to The Spencer Turbine Cleaner Company, Hartford, Conn., a Corporation of Connecticut. Filed Feb. 2, 1909. Serial No. 475,554. (Cl. 15—60.)

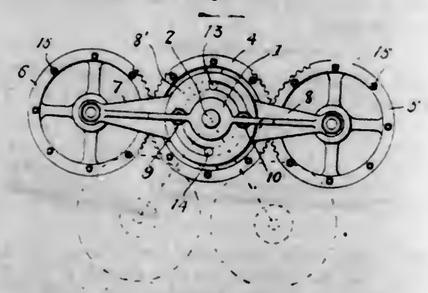
1. A cleaning tool including a body formed of rigid material with a chamber having an inlet thereto and an outlet therefrom with substantially flat front and rear faces, a facing of flexible material formed to the shape of but slightly larger than said front face to project on all sides thereof, and a like facing formed to the shape of but slightly larger than said back face to project beyond its edge on all sides, said facings being removably secured in place.



2. A cleaning tool including a body part of rigid material having a chamber with an inlet thereto and an outlet therefrom and with a hub formed upon the top thereof, the front face of the tool including the end of said hub, a handle extending into said hub, a facing of comparatively soft flexible material formed to the shape of but slightly larger than the front face of the tool including said hub, and projecting beyond said face on all sides, and a facing of like material separately formed to the shape of the back face of the tool, and projecting beyond its end and bottom edges.

3. A cleaning tool including a body part formed of rigid material having a hub on the top thereof extending to and forming a part of the front face of the tool, a handle projecting into said hub at the rear of the tool, a facing of comparatively soft, flexible material formed in the shape of but slightly larger than said front face including said hub, and projecting beyond the edges thereof on all sides, and a facing of like material formed in the shape of but slightly larger than said rear face and fitting underneath the projecting part of said hub, and projecting beyond the rear face entirely around its exposed edge, said facing being removably secured in place.

1,063,079. SOIL-CULTIVATOR. SYLVESTER GEORGE STEVENS, Duluth, Minn. Filed Apr. 20, 1912. Serial No. 692,162. (Cl. 55—13.)



1. A soil cultivator, comprising a horizontally revoluble wheel, two similarly horizontally revoluble wheels operated by the first mentioned wheel and supported radially adjustable therefrom, and soil cultivating elements depending from said wheels.

2. A soil cultivator comprising a central and two side horizontally arranged intermeshing wheels adapted to carry depending soil cultivating teeth, swinging supporting members for the side wheels, the supporting members swinging on an axis concentric with the axis of the center wheel for the purpose described.

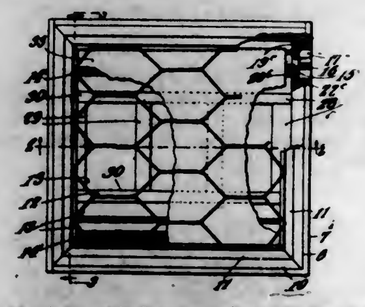
3. A soil cultivator comprising a central horizontally arranged revoluble wheel, adapted to carry depending soil cultivating teeth, the wheel connected with means through which rotary motion may be imparted to the wheel, a swinging wheel support swinging on an axis concentric with the axis of a center wheel, the support projecting beyond the periphery of the center wheel, a horizontally revoluble wheel supported on a vertical axis at the outer end of the support and meshing with the center wheel, and means for clamping the swinging support at any desired angle to the line of draft of the cultivator.

4. A soil cultivator comprising a central revoluble wheel adapted to carry depending soil cultivating teeth, a support for the said wheel, an extending swinging side wheel support carried by the center wheel support and swinging on an axis concentric with the axis of the center wheel, means for holding the swinging support in its adjusted position, said wheels carrying means through which rotary motion may be imparted to them for the purpose described.

5. A soil cultivator, comprising a cultivator wheel support, a center horizontally arranged revoluble wheel journaled in said support and adapted to carry depending cultivating teeth, two swinging arms extending from said support and projecting beyond the periphery of the center wheel, horizontally revoluble wheels journaled at the outer ends of the swinging arms, means for holding the swinging arms at their adjusted position, said wheels provided with means by which rotary motion may be imparted thereto for the purpose described.

[Claim 6 not printed in the Gazette.]

1,063,080. EGG-TRAY. HJALMAR A. SWANSON, Clay Center, Nebr. Filed Apr. 30, 1912. Serial No. 694,168. (Cl. 119—44.)



1. An egg tray embodying a frame having inner recesses in opposite sides and ways extending upwardly from one of each pair of recesses, bearings mounted in the said recesses, one bearing of each pair having an open slot adapted to register with the way and the other bearing having an opening, rollers arranged in the frame and having trunnions journaled in the slots and openings of the bearings, a belt trained over the rollers, means for adjusting a pair of the bearings, and an egg-holder seatable in the frame over the belt.

2. An egg-tray embodying a frame, two pairs of bearings mounted in the opposite sides of the frame, one pair of bearings being slidable and having threaded extensions, one bearing of each pair having an open slot and the other bearing having an opening, the frame having ways with which the said slots are adapted to register, rollers arranged within the frame and having trunnions journaled in the slots and openings of the respective pairs of bearings, a belt trained over the rollers, adjusting nuts journaled in the frame and engaging the said extensions to tighten the belt and bring the slot of the corresponding bearing out of registration with the way, and an egg holder in the frame over the belt.

1,063,081. APPARATUS FOR THE PRODUCTION OF AIR-GAS. WALTER THIEM, Halle-on-the-Saale, Germany, assignor to Svend Olsen, Halle-on-the-Saale, Germany. Filed Apr. 28, 1911. Serial No. 623,957. (Cl. 48—150.)

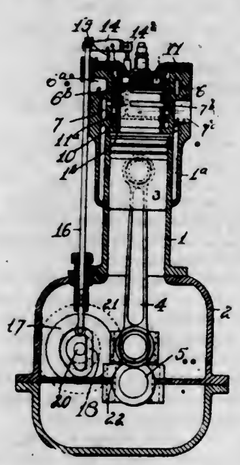
1. In apparatus for manufacturing air-gas, an oscillatory scooping-device having a tubular limb carrying a bucket, and a compensation-pipe extending from the latter at an angle to the limb and adapted to receive such quantities of hydrocarbon as equalize the quantity lifted by the tubular limb at different liquid levels, substantially as described.



2. In apparatus for manufacturing air-gas, an oscillatory scooping-device having a tubular limb carrying a bucket, and a covered compensation-pipe, having a lateral orifice, extending from the bucket and adapted to receive such quantities of hydrocarbon as equalise the quantity lifted by the tubular limb at different levels, substantially as described.

3. In apparatus for manufacturing air-gas, an oscillatory scooping-device having a tubular limb carrying a bucket, a slit in the wall of the tubular limb, constituting an outlet for the surplus hydrocarbon when the device is being elevated, substantially as and for the purpose described.

1,063,082. VALVE MECHANISM FOR INTERNAL-COMBUSTION ENGINES. WILLIAM R. THOMAS, Sr., and WILLIAM R. THOMAS, Jr., Catasauqua, Pa.; said Thomas, Sr., assignor to said Thomas, Jr. Filed June 24, 1912. Serial No. 705,606. (Cl. 123—188.)

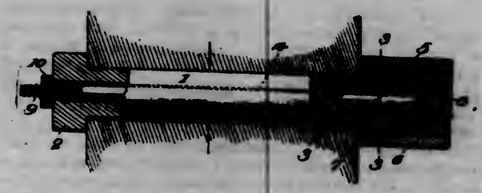


1. In an internal combustion engine, a cylinder having laterally opening superimposed inlet and exhaust ports and an internal annular flange, a piston working in said cylinder below said flange, a removable head having a cylindrical portion projecting within the engine cylinder and abutting against said flange, and forming with said cylinder an annular chamber closed at its lower end, said cylindrical portion having also superimposed inlet and exhaust ports, a cylindrical valve located within said chamber and having also superimposed inlet and exhaust ports, oppositely disposed operating rods connected to said valve and projecting through the head of the cylinder, and means driven from a moving part of the engine for operating said rods, substantially as described.

2. In an internal combustion engine, a cylinder having in the wall thereof near the upper end superimposed annular inlet and exhaust passages communicating by annularly disposed inlet and exhaust ports with the interior of the cylinder, said cylinder having also an annular longitudinally extending chamber in the wall thereof closed to the cylinder at its lower end, a removable head for the cylinder exposing, when removed, said annular chamber, a cylindrical valve member located in said

annular chamber and capable of being lifted out upon removal of the head, said cylindrical valve having superimposed annularly arranged inlet and exhaust ports coacting with the inlet and exhaust ports of the cylinder, and means acting through the head of the cylinder for operating said valve.

1,063,083. SAFETY-BOLT. GEORGE C. THOMPSON, East Liverpool, Ohio. Filed Dec. 23, 1912. Serial No. 738,260. (Cl. 151—2.)



1. A safety bolt, comprising a bolt having a bore throughout its entire length, said bolt having a head at one end and externally threaded at the opposite end, a nut having a hollow internally threaded portion and a rod carried by the nut and extending loosely through the bore of the bolt, and a nut on said rod on the outside of the head for locking the rod against rotation in a backward direction.

2. A safety bolt comprising a bolt having a bore throughout its entire length, said bolt having a head at one end and externally threaded at the opposite end, a nut having a hollow internally threaded portion, a rod carried by the nut and extending loosely through the bore of the bolt and having its outer free end externally threaded in opposite direction to the thread of the bolt, and a nut screwed on the rod and engaging the head of the bolt.

3. A safety bolt, comprising a bolt having a bore throughout its entire length and externally threaded at one end, a nut screwed upon the bolt and a rod rigidly carried by the nut and extending loosely through the bore of the bolt, and a nut screwed on the outer end of the rod on the outside of the head in an opposite direction to that of the first mentioned nut.

4. A safety bolt, comprising a bolt having a bore throughout its entire length, said bolt having a head at one end and externally threaded at the opposite end, a nut having a closed outer end, and a rod carried by the said closed outer end and extending loosely through the bore of the bolt, and a nut screwed on said rod in the opposite direction to that of the first-mentioned nut and adapted to engage the head of the bolt.

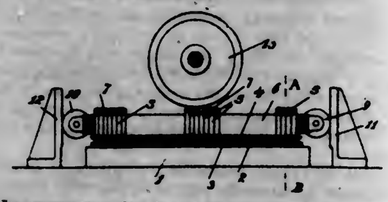
5. A safety bolt, comprising a bolt having a bore throughout its entire length, said bolt having a head at one end and externally threaded at the opposite end, a nut screwed upon the bolt and having a closed outer end, said closed outer end having formed integral therewith a rod extending loosely through the bore of the bolt and beyond the head thereof, and a nut screwed upon the rod on the outside of the head of the bolt in an opposite direction to that of the nut carried by the bolt.

1,063,084. APPARATUS FOR IMPRESSING PATTERNS ON LEATHER AND LIKE SOFT MATERIALS. JULIUS THOMSON, Offenbach-on-the-Main, Germany. Filed Jan. 3, 1912. Serial No. 669,285. (Cl. 149—23.)

1. In apparatus for impressing patterns on leather, a stationary impression plate, a series of pressure-transmitting blocks, means for guiding these blocks and means for successively depressing the aforesaid blocks.

2. In apparatus for impressing patterns on leather, a stationary impression plate, a series of pressure-transmitting blocks, means for guiding these blocks, a protecting sheet placed between the said series of blocks and the leather to be impressed, and means for successively depressing the aforesaid blocks.

3. In apparatus for impressing patterns on leather, a stationary impression plate, a series of pressure-transmitting blocks, means for guiding these blocks, a protecting sheet placed between the said series of blocks and the leather to be impressed, and a roller for successively depressing the aforesaid blocks.



4. In apparatus for impressing patterns on leather, a stationary impression plate, a series of pressure-transmitting blocks, means for guiding these blocks perpendicularly to the surface of the leather to be impressed, a protecting sheet placed between the said series of blocks and the said leather, and a roller adapted to travel over and successively depress the aforesaid blocks.

5. In apparatus for impressing patterns on leather, a stationary impression plate, a series of pressure transmitting blocks, a stationary frame adapted for guiding these blocks perpendicularly to the surface of the leather to be impressed, a protecting sheet placed between the said series of blocks and the said leather, and a roller adapted to travel over and succesively depress the aforesaid blocks.

[Claim 6 not printed in the Gazette.]

1,063,085. MEANS FOR RECORDING AND REPRODUCING LENGTHY SPEECHES, COMPOSITIONS, AND THE LIKE. FRANZ EWALD THORMEYER, Hamburg, Germany. Filed Oct. 22, 1906. Serial No. 340,067. (Cl. 181—4.)

1. The combination of a plurality of successively operative recording or reproducing machines and means automatically controlled by the operation of one of said machines for starting the operation of another of such machines.

2. The combination of a plurality of successively operative recording or reproducing machines and electromagnetic means automatically controlled by the operation of one of said machines for starting the operation of another of such machines.

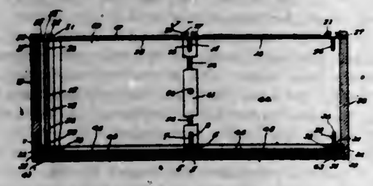
3. The combination with a plurality of successively operative sound recording or reproducing machines each including a record and a stylus, of a regulating means operated by the machine first operated for causing the operation of the after operated machine.

4. The combination with a plurality of successively operative sound recording or reproducing machines each including a record-carrier, of a regulating device actuated by the movement of one record carrier to control the operation of the other record carrier.

5. The combination of a plurality of successively operative sound recording or reproducing machines, means automatically controlled by the operation of one of said machines for starting the operation of another machine and means to stop the movement of the machine first operated.

[Claims 6 to 14 not printed in the Gazette.]

1,063,086. SECTIONAL SHELVING. WILLIAM TIETZ, Richmond, Va.; R. Grayson Dashiell curator of the estate of said William Tietz, deceased. Filed Jan. 19, 1912. Serial No. 672,071. (Cl. 211—27.)



1. A sectional shelving construction including vertical supporting bars adapted to support shelves and formed to provide outwardly converging locking flanges, and grooved facing members interlocking with said flanges.

2. A sectional shelving construction including vertical supporting bars formed of folded sheet metal and adapted to support shelves and formed with outwardly converging locking flanges and facing members having slots interlocking with said flanges.

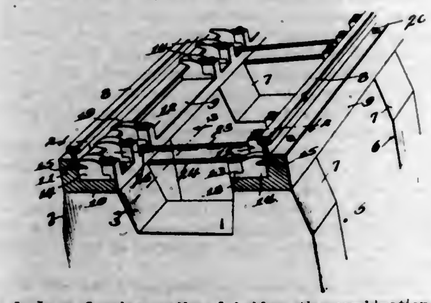
3. A sectional shelving construction including vertical supporting bars formed of folded sheet metal to provide outwardly converging locking flanges and grooved facing strips slidably interlocked with said flanges.

4. A shelving construction comprising vertical supporting bars adapted to support shelves and formed of folded sheet metal to provide locking flanges and tongues, facing strips interlocked with said flanges and end panels interlocked with said tongues.

5. A sectional shelving construction including vertical bars adapted to support shelves and formed of sheet metal folded to provide inturned flanges, one of said flanges being formed to provide a tongue and panels having hook flanges interlocking with a part of said inturned flanges.

[Claims 6 to 29 not printed in the Gazette.]

1,063,087. RAIL TIE AND FASTENER. ALBERT VALKELBERG, Hiteman, Iowa. Filed Jan. 22, 1913. Serial No. 743,680. (Cl. 238—5.)



1. In a floorless railroad bridge, the combination of a pair of spaced concrete piers; a pair of spaced ties mounted directly upon said piers at right-angles thereto and parallel with each other; reinforcing rods embedded in said piers and connected to said ties for anchoring the latter to the former; and rail-fastening means mounted on said ties for securing the rails in place thereon, certain of said rods being connected to said fastening means for anchoring the same in place.

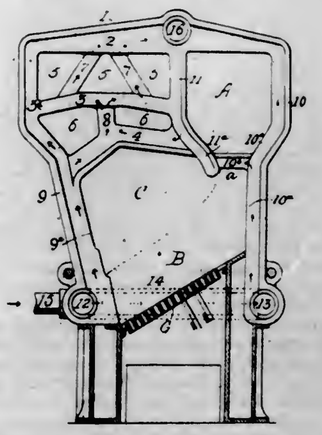
2. In a floorless railroad bridge, the combination of a pair of spaced concrete piers having vertical reinforcing rods embedded therein and projecting at their upper ends above the piers; a pair of perforated ties mounted directly upon said piers at right-angles thereto and in spaced parallel relation to each other; and coöperating rail-engaging fasteners and keepers therefor provided upon said ties and having perforated interlocked portions, the projecting ends of said rods extending through the perforations in said ties and in the said interlocked portions of said fasteners and keepers, for anchoring the ties to said piers and the fasteners in place thereon.

3. In a floorless railroad bridge, the combination of a pair of spaced concrete piers; a pair of spaced ties mounted directly upon said piers at right-angles thereto and parallel with each other; rail-fastening means mounted on said ties for securing the rails in place thereon; pairs of upper and lower cross-rods connecting said ties together and having their corresponding ends mutually connected; and reinforcing devices embedded in said piers and connected to said ties for anchoring the latter to the former.

4. In a floorless railroad bridge, the combination of a pair of spaced concrete piers; a pair of spaced ties mounted directly upon said piers at right-angles thereto and parallel with each other; rail-fastening means mounted on said ties for securing the rails in place thereon; pairs of upper and lower cross-rods connecting said ties together, the lower rod of each pair having up-bent terminals, and the upper rod having terminal eyes engaged with the adjacent up-bent terminals; and reinforcing devices embedded in said piers and connected to said ties for anchoring the latter to the former.

5. In a floorless railroad bridge, the combination of a pair of spaced concrete piers; a pair of spaced ties mounted directly upon said piers at right-angles thereto and parallel with each other; rail-fastening means mounted on said ties for securing the rails in place thereon; cross-rods connecting said ties; and reinforcing devices embedded in said piers and connected to said ties for anchoring the latter to the former, certain of said reinforcing devices being connected to said fastening means for anchoring the same in place.

1,063,088. WATER-JACKET FURNACE. JOSEPH A. WADDELL, Jr., Scranton, Pa., assignor to Spencer Heater Company, Scranton, Pa., a Corporation of Pennsylvania. Filed Aug. 5, 1912. Serial No. 713,412. (Cl. 122—225.)

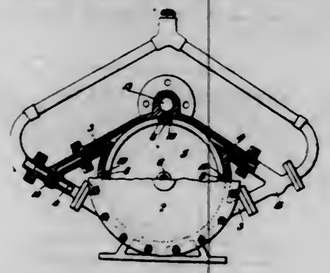


1. A boiler furnace comprising a single incline grate, a fuel magazine above the high portion of the grate and a combustion chamber extending upwardly and outwardly from the main body of the grate; said magazine and combustion chamber being constructed of hollow boiler sections, each comprising three upwardly extending walls, to wit, an outer wall extending vertically from the high

point of the grate and forming one of the outer walls of the furnace, an intermediate wall terminating at a point adjacent to said vertical outer wall but above the surface of the grate and forming with said vertical outer wall a magazine with a restricted opening discharging upon the high portion of the grate; and a second outer wall extending upwardly and outwardly from the lower portion of the grate and forming with said intermediate wall a combustion chamber approximately perpendicular to the inclined surface of the grate; there being arch walls extending between the intermediate wall and the outwardly inclined outer wall; all of said walls being hollow to provide passages for a heat conveying medium.

2. A sectional boiler furnace comprising a single incline grate, a combustion chamber substantially perpendicularly above the inclined surface of the grate, and a magazine having a restricted discharge opening vertically above the high portion of the grate; the boiler of said furnace being constructed of sections, each formed with an outer magazine wall extending vertically upward from the high point of the grate, an outer combustion chamber wall extending upwardly and outwardly from the lower point of the grate, and an intermediate wall dividing the upper part of the combustion chamber from the magazine and extending upwardly from a point above the grate and adjacent to the outer magazine wall; the upper portion of each of said walls being deflected to provide a vertical portion extending to the top of the furnace and there being hollow arch walls connecting the intermediate wall with the outer combustion chamber wall and up-take passages extending from high points of the arch walls to the walls above the same.

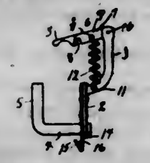
1,063,089. TURBINE. WILLIAM GEORGE WALKER, Westminster, London, England. Filed Dec. 22, 1911. Serial No. 667,365. (Cl. 121—56.)



1. In a fluid pressure turbine, a casing, a rotor inclosed therein, the casing having an internal exhaust chamber adjacent the rotor, the rotor having passages arranged circumferentially thereof and each terminating in transverse blades, and nozzles arranged in the walls of the casing at a distance from one another greater than the length of said passages to direct the motive fluid into the passages and against the blades, the rotor having openings adjacent the blades by means of which the passages are put in communication with the exhaust space and through which the motive fluid passes into the exhaust space after impact with said blades.

2. In a fluid pressure turbine, a casing, a rotor, a passage arranged circumferentially of said rotor, curved blades spaced at equal distances apart and arranged radially of said rotor within said circumferential passage, said blades being curved on both surfaces, a supply of motive fluid, a pair of oppositely disposed nozzles arranged to inject said motive fluid into said circumferential passage, one of said nozzles directing said motive fluid against one surface of each blade in succession and the second of said nozzles directing said motive fluid against the other surface of each blade in succession, apertures in a wall of said passage, said apertures being adjacent to said curved surfaces, and means for controlling the flow of motive fluid through said oppositely disposed nozzles.

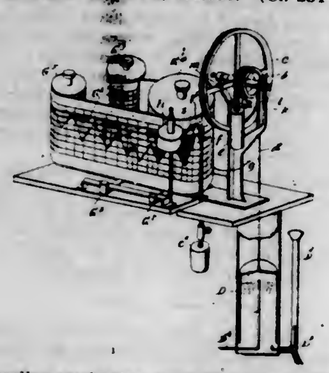
1,063,090. LICENSE-TAG HOLDER. WILLIAM L. WEIDLER, Camden, N. J. Filed Dec. 12, 1912. Serial No. 736,279. (Cl. 40—131.)



1. A license tag holder comprising a base plate, a pair of upwardly projecting arms formed integral with the base plate, a grooved retaining bar hinged to the free ends of said arms, means for normally drawing said retaining bar toward the base plate, and a grooved supporting plate, supported by the base plate, said supporting plate and retaining bar adapted to hold a license tag between them.

2. A license tag holder comprising a base plate, a pair of upwardly projecting arms formed integral with the base plate, a grooved retaining bar hinged to the free ends of said arms, means for normally drawing said retaining bar toward the base plate, and a lamp bracket formed integral with the base plate projecting from one side edge thereof and to the front of the base plate.

1,063,091. MEASURING INSTRUMENT. NILS HARALD WERNER, Stockholm, Sweden, assignor to Aktiebolaget Ingeniorsfirma Fritz Egnell, Stockholm, Sweden. Filed Jan. 22, 1912. Serial No. 672,750. (Cl. 234—10.)



1. Recording mechanism consisting of a movable measuring body, a movable recording organ actuated by the measuring body through the intermediary of a transmission giving the said organ a greater motion than the corresponding movement of the measuring body, said transmission transferring the motion of the measuring body to the recording organ after said body has moved a predetermined distance uniform for every operation.

2. Recording mechanism consisting of a movable measuring body, an arm connected therewith, a projecting member coöperating with said arm after said measuring body has moved a predetermined distance and a recording organ connected with said projecting member in such a way as to be given a greater motion than that of the projecting member.

3. Recording instrument consisting of a movable measuring body suspended from a pulley, an arm connected to said pulley, a second pulley mounted coaxially with said first pulley, a projection on the second pulley, said arm cooperating on the rotation of the first pulley with said projection, said second pulley bearing the recording organ and being of a greater diameter than the first pulley.

4. Recording instrument consisting of a movable measuring body suspended from a pulley, an arm connected to said pulley, a second pulley mounted coaxially with said first pulley, a projection on the second pulley, said arm cooperating on the rotation of the first named pulley with said projection, said second pulley bearing the recording organ and being of a greater diameter than the first pulley, a set screw for adjusting the relative positions of said arm and said projection.

5. Recording instrument for measuring volumes comprising a movable measuring body, a balancing weight, a pulley from which said measuring body and said weight are suspended to balance each other, a second pulley balanced in a certain position, a common axis for both pulleys, a recording pen suspended from said second pulley and a diagram table adjacent to said pen, a set screw in the first named pulley, a projection on said second pulley located in the circular path of said set screw and at a distance from the starting point of the set screw; the length of the radius at which the pen is suspended from the second pulley being a multiple of the length of the radius at which the said measuring body is suspended from the first pulley whereby the recorded length of travel of said measuring body will be multiplied on the diagram table.

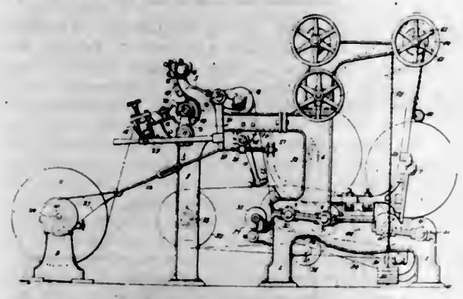
[Claim 6 not printed in the Gazette.]

1,063,092. COLLAR-BUTTONING DEVICE. ADOLPH WERNER and WILLIAM H. FETTER, Turtle Creek, Pa. Filed Nov. 24, 1911, Serial No. 662,139. Renewed Mar. 29, 1913. Serial No. 757,692. (Cl. 24—40.)



A collar buttoning device comprising a tapering body circular in cross section at any point throughout its length and slitted to provide a pair of oppositely disposed arms, the slit in the body extending from the enlarged end to a point in proximity to the smaller end thereof, each of said arms having its free end curving inwardly to engage a major portion of the head of a collar button, said tapering body gradually increasing in diameter from its smaller end to the inturned portions of said arms, each of said arms having its free end provided with a teat such teats being oppositely disposed for limiting the movement of the enlarged end of the body upon the head of the button, the smaller end closed and rounded to prevent injury to the collar and constituting the entering end.

1,063,093. PAPER SLITTING AND WINDING MACHINE. JOSEPH ATWOOD WHITE, Philadelphia, Pa., assignor to The Moore and White Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 6, 1911. Serial No. 606,808. (Cl. 164—65.)



1. The combination in a winding machine, of two rolls spaced apart, one roll acting as the main supporting roll, the other acting as the guiding roll for the roll of paper as it is wound, means for guiding the roll, and separate driving means for driving the supporting roll, so that the supporting roll will slip when extra pressure is applied.

2. The combination in a winding machine, of two rolls spaced apart, one roll acting as the main supporting roll, the other acting as the guiding roll for the roll of paper as it is wound, means for positively driving the guiding roll, and an endless belt for driving the supporting roll from the guiding roll, with means for allowing the belt to slip when increased weight is carried by the supporting roll, to prevent the paper tearing as it is wound.

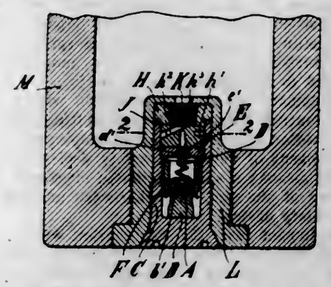
3. The combination in a machine for winding paper, of two rolls, a spindle, a guide for the spindle on which the paper is to be rolled, one of said rolls being nearer a vertical line drawn through the spindle than the other roll and acting as the main supporting roll, means for driving the other roll, a belt wheel on the spindle of each of said rolls, a belt passing around said belt wheel, an idler wheel in the loop of the belt, an adjustable weight for placing tension on the belt so that when the draft of paper as it is wound upon the roll becomes too great for its tensile strength, the belt will slip, causing a momentary stoppage of the rotation of the supporting roll.

4. The combination of two sets of rolls, a spindle mounted above each pair of rolls, guides for the spindles, one of said rolls of each pair being nearer the vertical center line of its spindle than the other roll so that it carries a greater proportion of the weight of the paper as it is rolled upon the spindles, the other rolls acting as guide rolls for the paper, a belt pulley on the spindle of each guide roll, a driving shaft, a belt pulley on the driving shaft, a belt passing around the two belt pulleys of the guide rolls, and a belt passing over the first mentioned belt and around the driving pulley, a second pulley on the spindle of each guide roll and a pulley on the spindle of each supporting roll, belts passing around the two sets of pulleys, a weighted idler mounted on the loop of each belt so as to allow the said belts to slip when extra weight is applied to the said supporting rolls.

5. The combination in a combined slitting and winding machine for paper, of a support for the roll to be unwound, guides for the paper, slitters, and means for rolling the slit paper, with a yielding guide roll and friction mechanism for the roll of paper to be unwound controlled by the said yielding guide roll.

[Claims 6 to 9 not printed in the Gazette.]

1,063,094. PROJECTILE. KARL WIESER, Bredeney, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Oct. 28, 1909. Serial No. 525,067. (Cl. 102—39.)



1. In a projectile containing a bursting charge and means for causing an igniting flame, the combination with a retarding substance interposed in the path of the igniting flame, of means for weakening the igniting flame, said means being placed between the retarding substance and the place where the igniting flame is produced.

2. In a projectile containing a bursting charge and means for causing an igniting flame, the combination with a retarding substance interposed in the path of the igniting flame, of means for weakening the igniting flame, said means being placed between the retarding substance and the place where the igniting flame is produced and comprising a circuitous channel through which the flame must pass to reach the retarding substance.

3. In a projectile containing a bursting charge and means for causing an igniting flame, the combination with a retarding substance interposed in the path of the igniting flame, of means for weakening the igniting flame, said means being placed between the retarding substance and the place where the igniting flame is produced, and comprising a circuitous channel through which the flame must pass to reach the retarding substance, said circuitous passage being of zigzag form which compels the igniting flame to repeatedly change its direction.

4. In a projectile containing a bursting charge and means for causing an igniting flame, the combination with a retarding substance interposed in the path of the igniting flame, of means for weakening the igniting flame, said means being placed between the retarding substance and the place where the igniting flame is produced, and comprising a circuitous channel through which the flame must pass to reach the retarding substance and said circuitous passage being provided at suitable points with reinforcing powder substance.

1,063,095. IMPACT-FUSE. KARL WIESER, Bredeney, Germany, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Filed Oct. 10, 1910. Serial No. 586,273. (Cl. 102—19.)



1. In an impact fuse, the combination with a pellet, of a movable part causing the ignition of the pellet on impact, a safety device for said movable part, and a spring-actuated clockwork for controlling the disengagement of the safety device, said clockwork being automatically started by the firing of the gun.

2. In an impact fuse, the combination with a pellet; of a movable part, causing the ignition of the pellet on impact; means for holding said movable part in inoperative position until the moment of impact; a safety device controlling said holding means, a spring actuated clockwork started by the firing of the gun, said clockwork adapted to release said safety device.

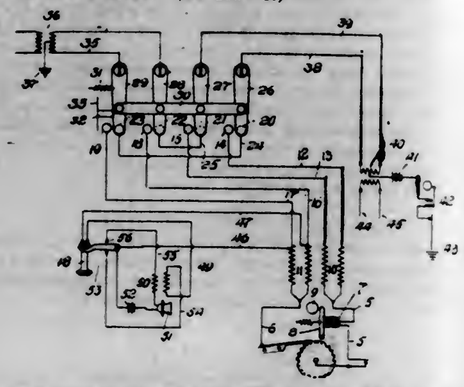
3. In an impact fuse, the combination with a pellet; of a spring-controlled firing point for igniting said pellet; means for holding said firing point in inoperative position until the moment of impact; a safety device controlling said holding means; a spring actuated clockwork started by the firing of the gun, said clockwork adapted to release said safety device.

4. In an impact fuse, the combination with a pellet; of a spring-controlled firing point for igniting said pellet; a swinging lever keeping the spring cocked and holding the firing point in inoperative position until the moment of impact, when said lever releases the firing spring as the lever swings, influenced by the inertia; a safety device controlling said swinging lever; a spring actuated clockwork started by the firing of the gun coöperating with said safety device.

5. In an impact fuse, the combination with a pellet; of a spring-controlled firing point for igniting said pellet; a swinging lever keeping the spring cocked and holding the firing point in inoperative position until the moment of impact, when said lever releases the firing spring as the lever swings influenced by the inertia; a safety device comprising a bolt, adapted to prevent the swinging of said lever, a baffle plate restraining said bolt, and a latch plate normally interlocking with said baffle plate; a spring actuated clockwork started on the firing of the gun, said latch plate being rigidly mounted on a rotary part of the clockwork and adapted to release said baffle plate after starting of the clockwork.

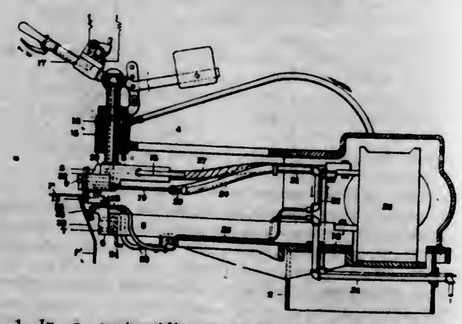
[Claims 6 and 7 not printed in the Gazette.]

1,063,096. SIGNAL SYSTEM. GEORGE S. WILLIAMSON, McKeesport, Pa., assignor of one-third to Albert T. Johnston, McKeesport, Pa. Filed Aug. 23, 1912. Serial No. 716,758. (Cl. 179—5.)



In a non-interfering alarm system, two pairs of contacts, a pair of leading-out wires, a magnet interposed in one of said leading-out wires, a repeater coil of forty-five ohms connected to each of said wires, an alarm mechanism for establishing a circuit through said wires, a pair of circuit wires leading from each pair of contacts to a coil, a row of contacts arranged with the outer contacts of the row connected together and the inner contacts of the row connected together, a normally locked spring controlled switch including four contact arms connected together for moving in unison and normally engaging the contacts of said row for normally closing a main line circuit for the sending of an alarm, a pair of main line circuit wires leading to two of said arms and having interposed therein a repeater coil with one-half grounded, a pair of main line circuit wires leading from the other two arms having a repeater coil interposed therein with one-half grounded, a telephone circuit leading to one of the first mentioned repeater coils, and said switch when released having the arms thereof engaging said pairs of contacts for maintaining the main line circuit closed for closing the telephone circuit through said main line circuit.

1,063,097. ELECTRIC SPOT-WELDING MACHINE. WILLIAM C. WINFIELD and ALBERTIS C. TAYLOR, Warren, Ohio, assignors to The Winfield Electric Welding Machine Co., Warren, Ohio, a Corporation. Filed Sept. 18, 1911. Serial No. 650,048. (Cl. 219—4.)



1. In a spot-welding machine, a vertically-movable point-holder and a fixed point-holder, each having water circulating devices in combination with a set of auxiliary point-holders removably mounted on said movable and fixed point-holders and having water-circulating devices of their own, and water supply connections for said machine having detachable attachment with the water-circulating devices of either set of point-holders.

2. In a spot-welding machine, a set of main point-holders having water-circulating passages and a set of auxiliary point-holders having water-circulating channels, in combination with water supply pipes having connections adapted to detachably unite with either of said point-holders.

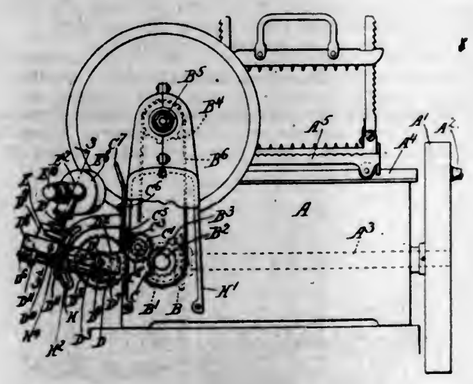
3. In a spot-welding machine, a set of oppositely-mounted main point-holders having water supply tubes detachably connected therewith, in combination with a set of auxiliary point-holders having separate water-circulating means adapted to connect with said supply tubes, and means to detachably secure said auxiliary point-holders upon said main point-holders.

4. In a spot-welding machine, a point-holder having water inlet and outlet pipes extending therefrom, in combination with an auxiliary point-holder having water inlet and outlet pipes extending therefrom and a set of water-supply tubes having detachable connection with said pipes.

5. In a spot-welding machine, a set of auxiliary point-holders, each having projecting water inlet and outlet pipes, in combination with detachable water-supply connections for said pipes.

[Claims 6 to 8 not printed in the Gazette.]

1,063,098. SHARPENING DEVICE FOR SLICING-MACHINES. WALLACE B. WOLFF, Chicago, Ill., assignor to American Slicing Machine Company, Chicago, Ill., a Corporation of New York. Filed Mar. 3, 1910. Serial No. 547,070. (Cl. 51—7.)



1. A device for sharpening rotary knives comprising a cup-shaped grinding wheel, rotatable about an axis perpendicular to the beveled surface of the knife and automatic means for laterally displacing said axis.

2. A device for sharpening rotary knives comprising grinding means adapted to engage the knife and means for simultaneously oscillating such grinding means in two perpendicular planes.

3. A device for sharpening rotary knives comprising grinding means adapted to engage the knife and automatic means for simultaneously oscillating such grinding means in two perpendicular planes.

4. A device for sharpening rotary knives, said device comprising a grinding wheel and automatic means for rocking said wheel in a plane perpendicular to the axis of the knife.

5. A device for sharpening rotary knives, said device comprising a grinding wheel, and means for rocking said wheel in a plane perpendicular to the axis of the knife, said means responsive to the motion of the knife.

[Claims 6 to 10 not printed in the Gazette.]

1,063,099. ACIDYLSALICYLIC ACID ESTER AND PROCESS OF MAKING SAME. RICHARD WOLFFENSTEIN, Berlin, Germany. Filed Nov. 25, 1911. Serial No. 662,456. (Cl. 23—24.)

1. The herein described process of producing acidylsalicylic acid esters, which consists in causing an alcohol to act on acidylsalicylic acid halogenids and immediately rendering the hydrogen halogenic acid which is formed ineffective.

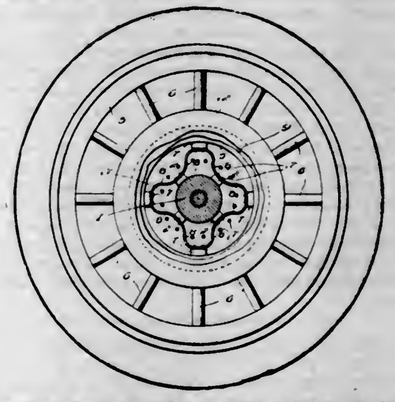
2. The herein described process of producing acidyl salicylic acid esters, which consists in causing the alcohol to act on an acidylsalicylic acid chlorid in the presence of a medium which is adapted to bind hydrochloric acid.

3. The herein described process of producing acetyl salicylic acid trichlorisobutyl ester, which consists in heating acetylsalicylic acid chlorid with trichlorisobutyl alcohol and a medium which is adapted to bind hydrochloric acid.

4. The herein described process of producing acetylsalicylic acid trichlorisobutyl ester, which consists in dissolving acetylsalicylic acid chlorid and trichlorisobutyl alcohol in the presence of calcium carborate in benzene, heating the solution, allowing the same to cool, dissolving the product in benzene, successively shaking with diluted hydrochloric acid, soda solution, and water, and recrystallizing the product.

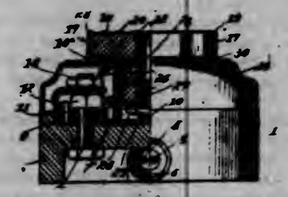
5. As a new product, the herein described acetyl salicylic acid trichlorisobutyl ester, which crystallizes in needles, melts at a temperature of 75 degrees centigrade, boils under partial decomposition *in vacuo* at a temperature of about 185 degrees centigrade, is readily soluble in the usual organic solvents, insoluble in water, has a neutral reaction, splits off salicylic acid when heated with alkali, and gives off hydrochloric acid when heated with concentrated sulfuric acid.

1,063,100. SPRING-WHEEL. ELMER G. WOODLEE, Altamont, Tenn. Filed Dec. 3, 1912. Serial No. 734,733. (Cl. 152—44.)



A spring wheel comprising a hub, radially projecting bosses thereon, a felly, an inner rim concentric with the felly, spokes rigidly connecting the felly and rim, bosses on the inner face of said rim arranged in staggered relation to the bosses on the hub and normally located beyond the outer extremities of the bosses on the hub, springs secured to the bosses of the rim and hub, spring housing plates having hub flanges encircling the hub and fastened thereto, and other housing plates secured to the inner rim and bearing a telescopic relation to the housing plates on the hub, each spring being of ogee shape and having one end fastened to one of the rim bosses and the other end fastened to one of the hub bosses, the outer extremities of the springs being butted together and the inner extremities thereof being also butted together, and all of the springs being normally located as an entirety between the inner extremities of the outer bosses and the outer extremities of the inner bosses.

1,063,101. THERMAL CIRCUIT-CONTROLLING DEVICE. GEORGES ADAM, Paris, France. Filed July 17, 1911. Serial No. 638,970. (Cl. 177—303.)



1. In a thermal circuit controlling device, the combination of an insulated base, an internally threaded conducting member carried by said base and adapted for connection with one pole of the electric circuit, a contact carried by said base, spaced apart from said conducting member, and adapted for connection with the other pole of the electric circuit, a plug member of insulative material, an externally threaded conducting member carried by said plug member for engagement with said internally threaded conducting member, a metallic plunger carried by said plug member and conductively connected with said contact, a bridging conductive member readily discriminable from said plug member and disposed at one face thereof in contact with said plunger, and means conductively connecting said bridging member with said externally threaded conducting member, but fusible at approximately a certain temperature, whereupon said bridging conducting member becomes detached from said plug member breaking the circuit and permitting of visual detection of the actuated device.

2. In a thermal circuit controlling device, the combination of an insulated base, an internally threaded conducting member carried by said base and adapted for connection with one of the poles of an electric circuit, a contact carried by said base, spaced apart from said conducting member and adapted for connection with the other pole of the electric circuit, a plug member of insulative material, an externally threaded conducting member carried by said plug member for engagement with said internally threaded conducting member, a metallic plunger carried by said plug member, a bridging conducting member readily discriminable from said plug member and disposed at one face thereof in contact with said plunger, a metallic spring normally forcing said plunger in contact with said bridging member, and conductively connecting the same with said contact, and means conductively connecting said bridging member with said externally threaded conducting member, but fusible at approximately a certain temperature, whereupon said bridging conducting member becomes detached from said plug member, breaking the circuit and permitting of visual detection of the actuated device.

1,063,102. MATERIAL FOR USE IN MAKING UP, REPAIRING, AND REPLACING LININGS, &c., OF METALLURGICAL FURNACES. JOHN E. BAKER, York, Pa. Filed Dec. 6, 1911. Serial No. 664,302. (Cl. 106—11.)

1. As a new article of manufacture, double burned dolomite in the form of a granulated mass, the particles of which are of such of a substantially uniform physical character as to render the same slow to absorb moisture.

2. As a new article of manufacture, burned dolomite in the form of a granulated mass, the particles of which are uniformly substantially free from volatiles and of such a uniform physical character as to render the same slow to absorb moisture.

3. As a new article of manufacture, burned dolomite in the form of a granulated mass, the particles of which are uniformly substantially free from volatiles and are uniformly condensed rendering the same slow to absorb moisture.

4. As a new article of manufacture, burned dolomite in the form of a granulated mass, substantially all of the particles of which are uniformly condensed rendering the same slow to absorb moisture.

5. As a new article of manufacture, a material for repairing furnace linings and the like consisting of a mass of burned broken dolomite rock, the constituent members of which have a substantially uniformly condensed surface part, the mass being substantially free from cinder.

[Claims 6 and 7 not printed in the Gazette.]

1,063,103. PROCESS OF PREPARING MATERIAL FOR USE IN MAKING UP, REPAIRING, AND REPLACING LININGS, &c., OF METALLURGICAL FURNACES. JOHN E. BAKER, York, Pa. Filed Dec. 6, 1911. Serial No. 664,303. (Cl. 106—42.)

1. The method of producing a dolomite material for repairing furnace linings and the like, consisting in burning raw dolomite rock, breaking the burned rock, and subsequently reburning the broken rock to produce a uniform product.

2. The method of producing a dolomite material for repairing furnace linings and the like consisting in first burning the raw rock in a cupola furnace, breaking the burned rock, and finally reburning the broken rock.

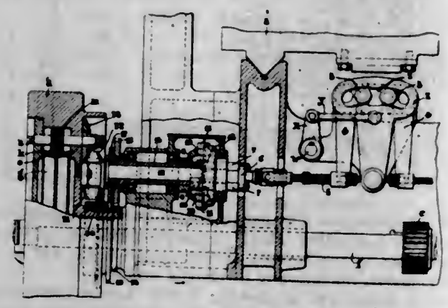
3. The method of producing dolomite material for repairing furnace linings and the like consisting in first burning the raw rock in a cupola furnace, breaking the burned rock, and finally reburning the broken rock in a rotary kiln.

4. The method of producing a dolomite material for repairing furnace linings and the like consisting in burning raw dolomite rock, breaking, and subsequently reburning the burned rock by subjecting the same to a high degree of heat uniformly burning the various particles of the mass.

5. The method of producing a dolomite material for repairing furnace linings and the like consisting in burning raw dolomite rock, granulating the same and subsequently reburning the burnt rock in granular form.

[Claims 6 to 10 not printed in the Gazette.]

1,063,104. DRIVING AND REVERSING GEAR. RICHARD WILKINSON BATEMAN and LOFTUS HANSON BATEMAN, Leeds, England. Filed Nov. 10, 1911. Serial No. 659,582. (Cl. 90—48.)



1. In combination, a wheel continuously rotated in one direction, a reversible part, a pulley in operative connection with said reversible part, a band surrounding the peripheral edge of said pulley for providing an operative connection between said wheel and pulley, and means positively operated by said reversible part for actuating said band, as set forth.

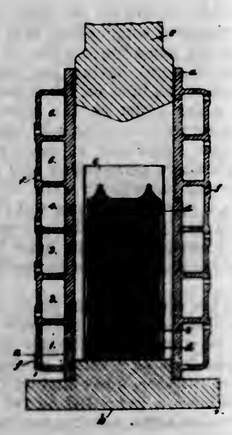
2. In combination, a fly wheel continuously rotated in one direction, a reversible part, a shaft in operative connection with said part, a pulley on said shaft and concentric with said fly wheel, a band carried by said fly wheel and surrounding said pulley, means positively operated by said reversible part for actuating said band, and a spring for transmitting the motion of said means to the band, as set forth.

3. In combination, a reversible part, a shaft in operative connection with said reversible part, a fly wheel loose upon said shaft and continuously rotated in one direction, a pulley fast upon said shaft and concentric with said fly wheel, a band carried by said fly wheel and surrounding said pulley, a rack upon said band, a pinion engaging said rack, means positively operated by said reversible part for actuating said band, and a spring for transmitting the motion of said means to the pinion for operating said band, as set forth.

4. In combination, a reversible part, a shaft in operative connection with said reversible part, a fly wheel loose upon said shaft and continuously rotated in one direction, a pulley fast upon said shaft and concentric with said fly wheel, a band carried by said fly wheel and surrounding said pulley, a rack upon said band, a pinion engaging said rack, a wheel loosely mounted upon said fly wheel and in operative connection with said pinion, a wheel keyed upon said fly wheel and means operated by the reversible part for varying the rate of rotation of said loose wheel relatively to the fast wheel for operating said pinion, as set forth.

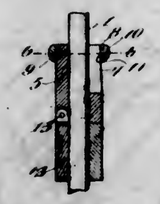
5. In combination, a reversible part, a shaft in operative connection with said reversible part, a fly wheel loose upon said shaft and continuously rotated in one direction, a cover plate secured to the said fly wheel, said fly wheel and cover plate forming a chamber and each having a hub journaled on said shaft, a driving pulley arranged in the said chamber and secured on the driving shaft between the two hubs, a flexible band carried by the fly wheel and surrounding the pulley, a rack upon said band, a pinion engaging said rack, a wheel loosely mounted upon said fly wheel and in operative connection with said pinion, a wheel keyed upon said fly wheel, and means operated by the reversible part for varying the rate of rotation of said loose wheel relatively to the fast wheel for operating said pinion, as set forth.

1,063,105. ELECTRICAL CONDENSER. ERNEST A. BAYLISS, Helsby, England, assignor to British Insulated and Helsby Cables Limited, Prescot, England. Filed Mar. 1, 1913. Serial No. 751,532. (Cl. 250—41.)



In the manufacture of electrical condensers of the kind herein referred to, the method which consists in submerging the condenser in a bath of liquid wax or insulation subjecting such liquid to pressure, thereby impregnating the spaces in the condenser with dielectrics and effecting the cooling and solidification of the wax, while under pressure in a gradual manner, by passing artificial cooling fluid, around the bath in a sequence of stages, in the manner substantially as herein described.

1,063,106. CONVERTIBLE TRIPOD AND WALKING-STICK. ISAAC A. BELL, Chicago, Ill. Filed Feb. 17, 1912. Serial No. 678,247. (Cl. 88—62.)



The herein described convertible tripod and walking stick, comprising a post, a sleeve through which the post extends and in which the post is slidable, the said sleeve being provided at its upper end with a pair of spaced slits whereby an integral clamping tongue is formed between the slits, the said tongue forming a part of one side of the sleeve and being flattened on its outer side and the sleeve being provided with an annular groove which extends around the same from one side of the tongue to the other, a clamping ring arranged on the upper end of the sleeve and provided on its inner side with a cam web which may be caused by partly turning the clamping ring to engage the groove or to engage the flattened outer side of the tongue, and tripod legs pivotally connected to the sleeve.

1,063,107. PROCESS FOR PRODUCING EDIBLE LARD FROM HOG-MIDDLES. ERNEST F. BLOSS, Cleveland, Ohio. Filed Jan. 31, 1913. Serial No. 745,369. (Cl. 87—13.)

1. The process of producing lard from hog middles consisting of soaking them in brine and then scalding them to remove the loosened slime.

2. The process of producing lard from hog middles consisting of ripping them, soaking them in brine and then scalding them before putting them in the rendering tank.

3. A process of producing lard from hog middles consisting of ripping them, soaking them in brine until the slime is loosened, soaking them in hot water to remove the slime, then heating and melting off the cleansed fat which is strained off and cooled in the form of lard.

4. The process of producing lard from hog middles consisting of soaking them in brine for several hours until the slime is loosened and then scalding them with hot water for several minutes.

5. The process of producing lard from hog middles consisting of ripping them, soaking them in brine of about seventy per-cent. strength from three to twelve hours, and then immersing them in boiling water from five to twenty minutes.

[Claim 6 not printed in the Gazette.]

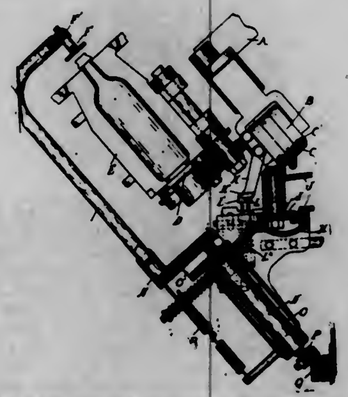
1,063,108. GLASS-BLOWING MACHINE. WILLIAM EMIL BOCK, Toledo, Ohio, assignor, by mesne assignments, to The Toledo Glass Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 25, 1909. Serial No. 480,016. (Cl. 49—14.)

1. In a glass blowing machine, the combination with a mold carrier, having laterally-separable body mold sections, of means for holding the blown article from movement during the opening of said body mold sections and for ejecting the article.

2. In a glass blowing machine, the combination with a mold carrier, of a mold thereon, comprising a bottom section and laterally-separable body mold sections, of means independent of the mold for engaging the upper end of the blown article to clamp the same upon said bottom section during the opening of said body mold sections adapted to eject the article.

3. In a glass blowing machine, the combination with a mold carrier and a mold thereon having separable mold

sections, of timed mechanism other than the mold for positively separating and ejecting the blown article from said mold.



4. In a glass blowing machine, the combination with a mold carrier and a mold thereon formed in separable sections, of a carriage, a clamping mechanism for the blown article mounted on said carriage, means for coupling said carriage to said mold carrier during a portion of the travel of the latter, and for simultaneously operating said clamping means, for the purpose described.

5. In a glass blowing machine, the combination with a traveling mold carrier, and a mold thereon formed in separable sections, of a carriage, means for coupling said carriage to said mold carrier, to travel with the latter during the separation of the mold sections, mechanism on said carriage for clamping the blown article during the separation of the mold sections, and means for uncoupling and returning said carriage after the opening of said mold sections.

[Claims 6 to 10 not printed in the Gazette.]

1,063,109. DENTAL INSTRUMENT. WILLIAM W. BOLLS, Washington, D. C. Filed Oct. 22, 1912. Serial No. 727,206. (Cl. 32—10.)



1. In combination with a holder and means to rotate a broach independently of the holder, means carried by the holder and formed to directly engage the broach intermediate the ends of the latter to enable the free end of the broach to be rotated in a plane at an angle to the plane of the holder.

2. In combination with a holder and means to rotate a broach independently of the holder, a bendable arm carried by the holder and formed to directly engage the broach intermediate the ends of the latter to enable the free end of the broach to be rotated in a plane at an angle to the plane of the holder.

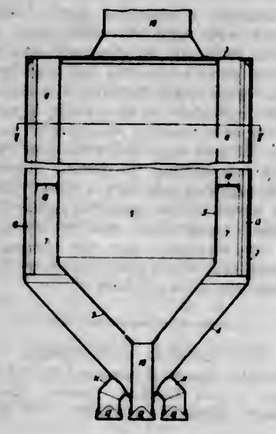
3. In combination with a holder and means to rotate a broach independently of the holder, an adjustable arm carried by the holder and formed to directly engage the broach intermediate the ends of the latter to enable the free end of the broach to be rotated in a plane at an angle to the plane of the holder.

4. In combination with a holder and means to rotate a broach independently of the holder, a bendable arm adjustably carried by the holder and having an eye to receive and directly engage the broach intermediate the ends of the latter to enable the free end of the broach to be rotated in a plane at an angle to the plane of the holder.

5. In combination with a holder and means to rotate a broach independently of the holder, a removable attachment engaged with the holder and having means to directly engage the broach intermediate the ends of the latter to enable the free end of the broach to be rotated in a plane at an angle to the plane of the holder.

[Claims 6 to 9 not printed in the Gazette.]

1,063,110. DUST-CATCHER. ARTHUR J. BOYNTON, Lorain, Ohio. Filed May 2, 1912. Serial No. 694,723. (Cl. 75—30.)



1. A dust catcher comprising an inner chamber, a plurality of outer chambers surrounding said inner chamber, said chambers having imperforate walls, at least one outer chamber forming a spiral having one end opening into the inner chamber, a gas inlet on the opposite end of said spiral chamber, a gas outlet on the inner chamber, and means forming openings connecting said outer chambers.

2. A dust catcher comprising an inner chamber, a plurality of outer chambers surrounding said inner chamber, said chambers having imperforate walls, at least one outer chamber forming a spiral having one end opening into the inner chamber, a gas inlet on the opposite end of said spiral chamber, a gas outlet on the inner chamber, and a series of baffles forming channels connecting said outlet chambers.

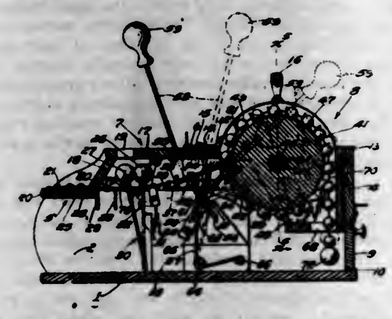
3. A dust catcher comprising an inner chamber, a plurality of outer chambers, said chambers having imperforate walls, at least one outer chamber surrounding said inner chamber and forming a spiral having one end opening into the inner chamber, a gas inlet on the opposite end of said spiral chamber, a gas outlet on the inner chamber, and a series of curved baffles forming vertical channels connecting said outer chambers.

4. A dust catcher comprising an inner chamber having a gas outlet opening, a spiral outer chamber surrounding said inner chamber having a gas outlet opening into said inner chamber and a gas inlet connected with a source of gas supply, a dust chamber surrounding the inner chamber below said outer chamber, said chambers having imperforate walls, and means forming a plurality of channels connecting said outer chamber and the dust chamber.

5. A dust catcher comprising an inner chamber having a gas outlet opening, a spiral outer chamber surrounding said inner chamber having a gas outlet opening into said inner chamber and a gas inlet connected with a source of gas supply, a dust chamber surrounding the inner chamber below said outer chamber, said chambers having imperforate walls, and a series of baffles forming channels connecting the outer chamber and the dust chamber on the periphery of said chambers.

[Claims 6 to 8 not printed in the Gazette.]

1,063,111. BALLOTING-BOX FOR FRATERNAL ORDERS. HENRY BRAASCH, Los Angeles, Cal. Filed July 25, 1910. Serial No. 573,779. (Cl. 232—3.)



1. A ballot box provided with two strings; balloting members strung on said strings and flexibly connected thereby, the balloting members of one string being differentiated from those on the other string, and means whereby the balloting members may be moved into position to indicate a vote cast.

2. A ballot box comprising two spools, strings on the spools respectively, balloting members strung on one of said strings, balloting members strung on the other of said strings, and means to rotate the spools alternatively to indicate the vote.

3. A ballot box comprising two spools, strings on the spools respectively, balloting members strung on one of said strings, balloting members strung on the other of said strings, means to rotate the spools alternatively to indicate the vote, said means being operable only by the manipulation of two elements, one of which is concealed and the other exposed to view.

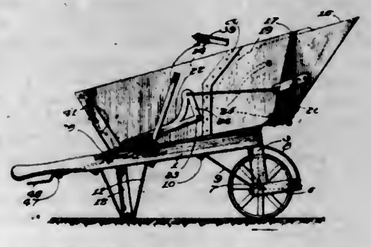
4. A ballot box comprising two spools, strings on the spools respectively, balloting members strung on one of said strings, balloting members strung on the other of said strings, means to rotate the spools alternatively to indicate the vote, said means being operable only by the manipulation of two elements, one of which is concealed and the other exposed to view; one of said elements being a concealed finger piece and the other element being an exposed handle.

5. A baHot box comprising a case provided with an opening through which the fingers of the voter may be inserted, strings inside the case, balloting members strung on one of said strings, balloting members strung on the other of said strings, a handle, finger pieces, one for each of said strings and means between the finger pieces and the strings whereby the manipulation of the finger pieces in conjunction with the operation of the handle will move one of the strings to effect the casting of the vote.

[Claims 6 to 15 not printed in the Gazette.]

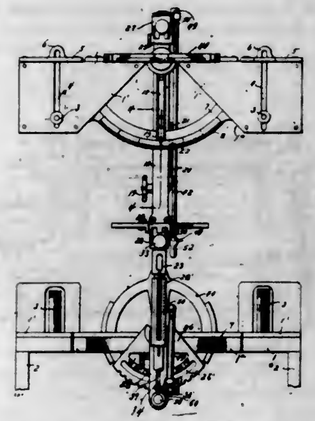
1,063,112. WHEELBARROW. DAVID H. BRAND, Trenton, N. J. Filed Feb. 12, 1912. Serial No. 677,187. (Cl. 21—68.)

1. A wheel barrow of the class described comprising a body provided with an open outer end, a chute hinged to said body near said open outer end, said chute provided with an arc slot having ratchet teeth formed upon its upper edge, said body provided with an elongated slot in the path of movment of said arc slot, a locking lever pivotally secured to said body, and extending longitudinally thereof for facilitating the operation of said lever from the rear of said body, said lever provided with a substantially angularly extending outer end terminating in a rearwardly extending foot fitting through said slot formed in said body, said angularly extending end adapted to engage the ratchet teeth formed upon the upper edge of said slot in said chute for holding said chute in an adjusted position, said rearwardly extending foot formed upon said angularly extending end adapted to hold said angularly extending end against lateral displacement from said ratchet teeth formed upon the upper edge of said slot formed in said chute.



2. A wheelbarrow of the class described comprising a body, a chute secured to the forward end of said body, said chute provided with an arc slot having ratchet teeth formed upon its upper edge, an operating lever pivotally secured to said body, means carried by said lever and engaging said ratchet means for preventing the lateral displacement of said lever from said ratchet means.

1,063,113. MITER-BOX. WILLIAM A. BREMER, Holland, Mich. Filed May 15, 1911. Serial No. 627,239. (Cl. 143—88.)



1. In a miter box, the combination, with a bed, of a saw support extending across and beneath the bed, a pivot pin extending upwardly through the saw support and engaging the bed to sustain the support pivotally and leaving the same free to swing horizontally beneath the bed, bearings connected to and spaced above the saw support, saw guides journaled in the bearings in position for swinging vertically, means connecting the guides, a guide disposed between the first mentioned guides and mounted to rock upon the bed, the axis of rocking movement being in the line of the axis of movement of the saw guides, and means connecting the second mentioned guide to the connecting means of the first mentioned guides for effecting simultaneous action of all of the guides.

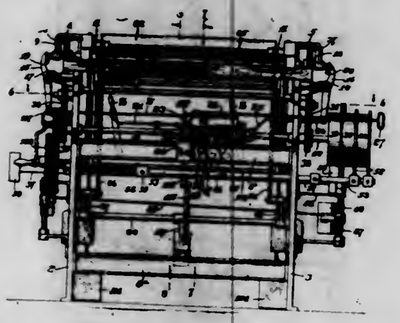
2. In a miter box, the combination, with a bed, of a saw support mounted thereon, vertical saw guides arranged at opposite portions of the support and pivotally connected therewith for swinging vertically, a bar connecting the lower ends of the saw guides beneath the bed, a guide

plate disposed intermediate said saw guides and comprising a circular frame disposed to inclose portions of the bed, said frame having a radial arm extending toward its center and slotted to receive a saw, the arm being mounted to rock on the bed, and to thus pivotally support the guide plate, and means of connection between the lower portions of the guide plate and the connecting bar for the saw guides.

3. In a miter box, the combination, with a bed, of a saw support extending across and beneath the bed, means pivotally connecting the support to the bed and allowing the support to swing freely horizontally, saw guides pivotally connected to the end portions of the saw support in position for swinging vertically, means connecting said saw guides, a guide plate intermediate said saw guides comprising a circular frame having a pendent slotted arm, the lower end of the arm being of arcuate form, and the bed being formed with an arcuate recess receiving said lower end of the arm for permitting rocking of the guide plate in said arcuate recess, the axis of movement of the guide plate being in line with the axis of movement of the saw guides, and means connecting the guide plate to the saw guides for effecting coöperative movements thereof.

4. In a miter box, the combination of a bed, a saw support mounted thereon, standards at the opposite ends of the support, guide members mounted for vertical movement in said standards, a bar rigidly connecting the lower ends of the standards, means on the saw support for pivotally supporting the standards intermediate their ends, a shaft carried by said standards, locking arms mounted on said shaft and coöperating with the guide members to hold the latter at a desired adjustment, and means for operating said shaft to actuate the locking arms.

1,063,114. PATTERN-SETTING MACHINE. JOHN J. BRENNAN, Philadelphia, Pa., assignor to John H. Bromley and Edward Bromley, Copartners trading as John Bromley & Sons, Philadelphia, Pa. Filed July 21, 1911. Serial No. 639,767. (Cl. 28—14.)



1. In a pattern-setting machine, the combination of a supporting frame, means to support a detachable spool, means to rotate said spool-supporting means in either direction, including means governing the direction of rotation thereof; means to automatically stop the rotation of the spool after it has rotated a predetermined number of revolutions, including a cam device and a clutch mechanism; means operative to move the last named means into and out of operative position, and manually operated means to stop and start the rotation of the spool without affecting the automatic stopping means when it is in operative position.

2. In a pattern-setting machine, the combination of a supporting frame, a rotatable spool support, comprising a pair of oppositely disposed and longitudinally adjustable short shafts, a loom spool adapted to be removably supported between said shafts, means for rotating said supporting shafts in unison of time and in either direction, means to automatically stop the rotation of said spool supporting shafts after they have rotated the spool a predetermined number of revolutions, and means to shift said automatic stopping mechanism into and out of operative position.

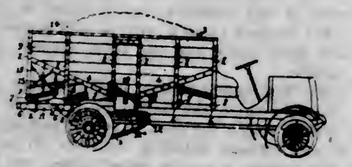
3. In a pattern-setting machine, the combination of a supporting frame, including a pair of oppositely disposed brackets, a pair of alining short shafts slidably mounted longitudinally in said brackets, and carrying each a spool clamping head, a spool having means on its opposite ends adapted to be engaged by said clamping heads, means to simultaneously shift both of said spool-supporting shafts, toward each other to clamp the spool, and in the opposite direction to release the spool, means to rotate said shafts, including a clutch device movable into operative position to start the rotation of said spool-supporting shafts, means for automatically moving said clutch device into inoperative position after a predetermined number of revolutions of said spool-supporting shafts, and independent means to start and stop the rotation thereof at any time without affecting said clutch device when it is in operative position.

4. In a pattern-setting machine, the combination of a supporting frame, a main shaft, means to start and stop the rotation of said shaft, a supplemental shaft, gearing between said shafts, including a gear wheel mounted to turn freely on said supplemental shaft, a clutch device movable to an operative position clutching said gear wheel to said supplemental shaft, and movable to an inoperative position unclutching said gear wheel from said supplemental shaft, means for automatically moving said clutch device into its inoperative position after said supplemental shaft has rotated a predetermined number of revolutions, a rotatable spool support, and gearing between said supplemental shaft and said spool support.

5. In a pattern-setting machine, the combination of a supporting frame, means to support and rotate a loom spool, means to guide a plurality of threads to a spool removably supported by said rotating means, means including a cam and cam shaft and actuating mechanism governed thereby, operating to automatically stop the rotation of the spool after it has rotated a predetermined number of revolutions, and other means to stop and start the rotatable spool support at any time without affecting the automatic stopping mechanism.

[Claims 6 to 14 not printed in the Gazette.]

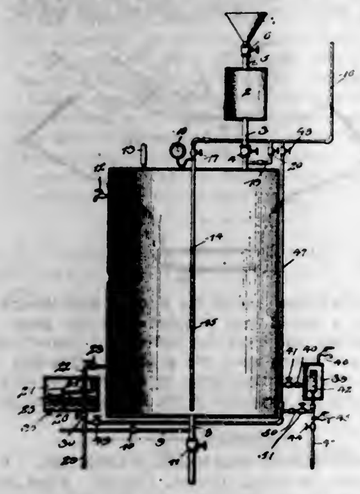
1,063,115. AUTOTRUCK-BODY. JAMES N. BREWSTER, New York, N. Y. Filed Sept. 10, 1912. Serial No. 719,513. (Cl. 21—7.)



1. An auto-truck body composed of an open framework of angle iron, a series of cross sills of timber to which the lower ends of the upright angle irons are bolted, inclined floor angle irons extending from the middle portion upward to the front and rear ends, and sides and flooring of wooden planks bolted to the inside of said angle iron framework extending from the said inclined floor angle irons upward, but leaving the lower portion of the angle iron framework exposed in skeleton form.

2. An auto-truck body, composed of an open framework of angle iron, a series of cross sills of timber to which the lower ends of the upright angle irons are bolted, inclined floor angle irons extending from the middle portion upward to the front and rear ends, and sides and flooring of wooden planks bolted to the inside of said angle iron framework, channel bars laid on said cross sills, and clips adapted to clamp them to the chassis of the truck.

1,063,116. HEATING AND FEEDING APPARATUS FOR FEED-WATER-PURIFYING COMPOUNDS. STEPHEN EDWARD BUCK, Moline, Ill. Filed Nov. 11, 1912. Serial No. 730,682. (Cl. 210—19.)



1. A heating and feeding apparatus for feed water purifying compounds comprising a mixing and cooking tank adapted to receive the compound, means whereby steam is introduced into said tank for the purpose of heating and cooking the compound, a closed tank, a valved discharging pipe connecting the last-named tank with the lower portion of said heating tank, a float operated valve in said closed tank to control the discharge of the compound from the heating tank, a valved suction pipe connected with said closed tank whereby the liquid may be pumped from the latter, said pipe having a reduced inner end, a feed controlling and cleaning rod loosely engaged with the reduced inner end of said suction pipe, and means to loosely support said rod whereby the suction through the pipe will keep the rod agitated and the opening in the end of the pipe free from obstruction.

2. A heating and feeding apparatus for feed water purifying compounds comprising a mixing and cooking tank adapted to receive the compound, means whereby steam is introduced into said tank for the purpose of heating and cooking the compound, a closed tank, a valved discharging pipe to connect it with the lower portion of said heating tank, a valved operating lever, a valve on said lever adapted to be brought into engagement with the end of said discharge pipe whereby the latter is closed, a float on said lever, a suction pipe having its end projecting into said closed tank and reduced, a cleaning and regulating rod loosely engaged with the reduced end of said pipe, a block on the outer end of said rod, a spring whereby said rod is yieldingly supported, a cut off valve arranged in said suction pipe, and a steam conducting pipe connected with the latter whereby steam may be introduced thereinto for the purpose of cleaning and blowing out the same.

3. A heating and feeding apparatus for feed water purifying compounds comprising a closed tank, a combined washout and water inlet pipe connected with the bottom of the tank, a valve to close said pipe, a steam discharge pipe arranged in said tank and having a perforated inner end, a steam supply pipe connected with said discharge pipe, a valve arranged in said discharge pipe, a branch steam pipe to connect said steam supply pipe with the upper portion of the tank, a valve in said branch pipe, a feeding mechanism connected to the lower portion of said tank whereby the compound may be fed to the feed water, and a valved branch steam pipe connecting said steam supply pipe with said feeding mechanism.

4. In a device of the class described, the combination with a closed tank, an outlet pipe rising through the bottom thereof, and an inlet pipe; of a block yieldably supported above the end of said outlet pipe, means for creating suction in the latter, and a rod carried by the block and depending loosely into said pipe.

5. In a device of the class described, the combination with a closed tank, an outlet pipe rising through the bottom thereof, and an inlet pipe; of a spring supported within said tank, a block yieldingly carried by one end of said spring and standing over the inner end of the outlet pipe, means for creating suction through the latter, and a rod whose lower end stands within said pipe, whose body passes through said block, and whose upper end has an eye.

[Claim 6 not printed in the Gazette.]

1,063,117. TIRE OF WHEELS OF VEHICLES OR THE LIKE. JOHN CAIANS, Walsall, England. Filed Apr. 14, 1911. Serial No. 621,101. (Cl. 152—9.)



1. The combination of a resilient tire section having an air chamber therein and an opening through the base thereof, and having inclosing walls of sufficient strength to sustain a useful load independently of the air, sealing means for completely sealing said air chamber, a portion of said sealing means being within the interior of said section and said sealing means accomplishing its sealing function independently of the rim, and a device directly secured to said sealing means and adapted to fasten the tire to the wheel.

2. The combination of a resilient tire section having an air chamber therein and an opening through the base thereof, and having inclosing walls of sufficient strength to sustain a useful load independently of the air, sealing means for completely sealing said air chamber, a portion of said sealing means being within the interior of said section and being larger than said opening, and said sealing means accomplishing its sealing function independently of the rim, and a device directly secured to said sealing means and adapted to fasten the tire to the wheel.

3. The combination of a resilient tire section having an air chamber therein and an opening through the base thereof, and having inclosing walls of sufficient strength to sustain a useful load independently of the air, means entering said opening and larger than the same for sealing said chamber, means exterior to said opening and larger than the same, and a device clamping said two first mentioned means on the tire and adapted to secure them to the wheel to secure the tire to the wheel.

4. The combination of a resilient tire section having an air chamber therein and having inclosing walls of sufficient strength to sustain a useful load independently of air pressure, the bottom of said chamber having an opening therein, parts independent of the wheel and adapted respectively to clamp upper and lower surfaces of said bottom to close and seal the air chamber, and means for clamping said parts together, said means being adapted for fastening them to said wheel.

5. In a device of the character described, the combination of a hollow stud having inclosing walls with sufficient strength to sustain a load irrespective of the air in the stud, the bottom of the stud having an opening and a combined cover and fastening means trapping the air in the stud and clamping the base of the same upon the upper and lower surfaces around the hole in the base of the tire.

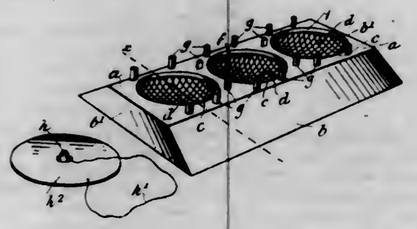
[Claims 6 to 9 not printed in the Gazette.]

1,063,118. PRODUCT FOR USE IN TEXTILE AND OTHER MANUFACTURES. PETER C. D. CASTLE, St. Margaret's-on-Thames, England. Filed Sept. 27, 1912. Serial No. 722,688. (Cl. 87—17.)

1. A method of preparing gum or mucilage from locust bean kernels which consists in treating the kernels with caustic alkali having a strength of 75 to 90 per cent. for a period of time not exceeding approximately thirty minutes, washing the dehusked kernels in a solution of borax having a strength of approximately one per cent., grinding them to powder and then treating with a saccharine solution.

2. A method of extracting gum or mucilage from locust bean kernels, consisting in dehusking the kernels, washing the dehusked kernels in borax solution having a strength of approximately one per cent. or less, grinding them to powder, and treating the flour with a saccharine solution.

1,063,119. APPLIANCE FOR USE IN PLAYING A GAME OF GOLF. STANLEY CLIFFORD, Laleham-on-Thames, England. Filed May 4, 1912. Serial No. 695,165. (Cl. 46—4.)



1. An appliance for use in playing a game of golf, comprising a rectangular, raised stand having inclined sides and straight ends and formed with a longitudinally-arranged series of ball-receiving holes disposed in its upper surface, and pockets of soft or pliable material arranged beneath said holes.

2. An appliance for use in playing a game of golf, comprising a rectangular raised stand having inclined sides and straight ends and formed with a longitudinally-arranged series of ball-receiving holes in its upper surface, soft or pliable pockets arranged beneath said holes, and a plurality of obstacles disposed so as to obstruct the entry of said balls into said holes and pockets.

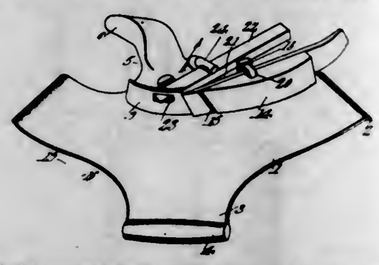
3. An appliance for use in playing a game of golf, comprising a rectangular, raised stand having inclined sides and straight ends and formed with a longitudinally-arranged series of ball-receiving holes in its upper surface, soft or pliable pockets arranged beneath said holes, said pockets being of larger diameter than the holes so as to leave a circumferential lip around each hole to prevent a ball played thereinto from bouncing out, and a plurality of obstacles so disposed as to obstruct the entry of the balls into said holes.

4. An appliance for use in playing a game of golf, comprising a rectangular, raised stand having straight ends and inclined sides and formed with a longitudinally-arranged series of ball-receiving holes in its upper surface, pockets of soft material arranged beneath said holes, a plurality of obstacles disposed so as to obstruct the entry of said balls into said holes, and a cover for each hole adapted to be placed thereon when the same has been played.

1,063,120. CHAMFERING-HOWEL. CHARLES F. CLOSE, Barnard, N. Y. Filed Nov. 21, 1911. Serial No. 661,531. (Cl. 147—24.)

1. In a chamfering howel, a body, a guide block, a gage spaced from the block and adjustable on the body, a crozing tool adjustably mounted on the gage and movable therewith, and a chamfering tool secured to the block and extending between the block and gage.

2. A tool for chamfering and crozing barrels and the like, consisting of a body, a guide block integral therewith and outstanding therefrom, said block having a curved work engaging face, a gage adjustably mounted on the body and spaced from the block, said gage having a curved work engaging face movable into and out of the



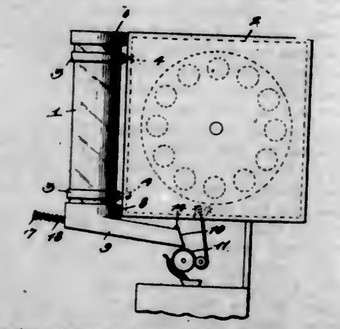
arc of the working face of the block, a grip integral with the body, a second grip integral with the gage, means upon the body and block for fastening a chamfering tool thereto, and means upon the gage for adjustably clamping a crozing tool thereupon, there being an opening in the gage for the reception of the cutting end of the crozing tool.

1,063,121. HORSE-BLANKET FASTENER. EUGENE DANFORTH, Montreal, Quebec, Canada. Filed Feb. 19, 1912. Serial No. 678,723. (Cl. 24—265.)



A horse blanket fastener, comprising a backing plate having a pair of perforations therein, a holding plate similar in outline to the backing plate and having perforations therein registering with the perforations of the backing plate, a tongue extending from the holding plate adapted to hold a locking member, the tongue being bent back upon itself and having its end locked between the perforations of the holding plate, a U-shaped fastening pin passing through the perforations and binding one end of the backing plate when in locked position against the bent tongue, and means carried by the holding plate for holding the pins in locked position.

1,063,122. FIRE-EXTINGUISHER. HENRY EWOLDT, Holstein, Iowa, assignor of one-fourth to Peter J. A. Schnoor, Holstein, Iowa. Filed Jan. 31, 1912. Serial No. 674,499. Renewed Oct. 12, 1912. Serial No. 725,536. (Cl. 169—13.)

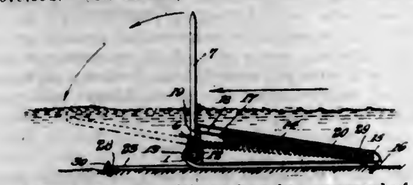


1. A device of the character described, including a container for a fire extinguishing substance, a casing having a screw threaded connection with the lower end of said container and formed with outlet orifices, a valve plate adapted to cut off said orifices from the remaining portion of the casing, and means whereby the valve plate may be pushed past said orifices for the purpose specified.

2. A device of the character described, including a container, a casing detachably connected to said container at one end and projecting in angular relation thereto, the casing being formed at one end with outlet orifices, a hinged plate carried by the casing and adapted to cut off said orifices from the remaining portion of the casing, an actuating rod extending longitudinally in said casing and operatively connected to said valve plate, and a spring tending to hold said rod in its rearward position.

3. A device of the character described, including a container, a casing connected thereto and formed at one end with outlet orifices, a normally bowed spring valve plate mounted in said casing and adapted to cut off the orifices from the remaining portion of the casing, and means for springing said plate forwardly past said orifices into engagement with the end of the casing.

1,063,123. FLOOD-GATE. ANDREW STEPHEN GALBRAITH, Baxter county, Ark. Filed Feb. 17, 1912. Serial No. 678,191. (Cl. 30—4.)



1. A flood gate comprising a base bar composed of a plurality of alined sections, unions threaded onto the adjacent ends of the sections, a plurality of holding stakes for the base bar, each stake having its lower end pointed, and its upper provided with a ring engaging the bar, a plurality of gate sections hinged to the bar, each section comprising a bar having a lateral arm at each end, the arms extending in the same direction, a plurality of arms detachably connected to the bar between the first-named arms, all of said arms being in the same plane and spaced apart from each other, a loop at each end of each gate section encircling the bar of the gate and the base bar, a set screw traversing the loop and engaging the base bar, a housing at each end of each gate section on the upstream side of the gate, each housing being substantially U-shaped in cross section and decreasing gradually in height from the gate, a spring connected to each end of each gate section in the housing and a holding stake at the end of the housing remote from the gate for engagement by the other end of the spring.

2. A flood gate comprising a sectional base bar, means for holding the bar to the ground, a plurality of independent gate sections for the bar, a housing at each end of each section on the up stream side of the base bar, and a spring in each housing pulling the gate section toward the housing, said housing forming a stop for holding the gate sections in vertical position.

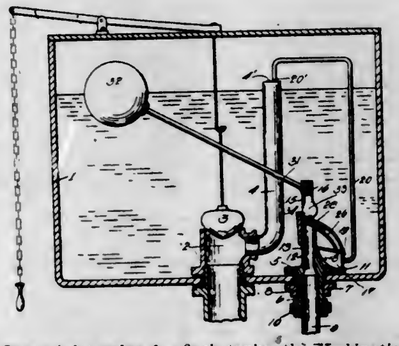
3. A flood gate comprising in combination with the gate, a housing at each end thereof, and a spring in each housing pulling the gate toward the housing, said housings forming a stop for holding the gate in vertical position.

1,063,124. HAND PAPER-FOLDER AND ENVELOP-FILLER. ALBERT J. GORE, Washington, D. C. Filed Nov. 5, 1912. Serial No. 729,556. (Cl. 120—8.)



A paper folder and envelop filler comprising a body of sheet material provided with a straight edge, a plurality of finger stalls on one face of said body opening rearwardly of said edge and a friction edge on the under surface of said body along the straight edge thereof.

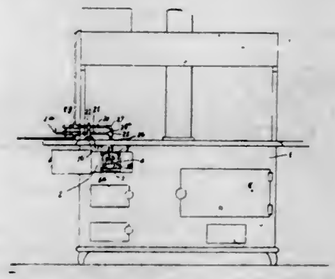
1,063,125. INLET-VALVE FOR FLUSH-TANKS. PAUL E. GOWEY, Seattle, Wash. Filed Dec. 2, 1911, Serial No. 663,636. Renewed Mar. 19, 1913. Serial No. 755,521. (Cl. 4—5.)



1. In an inlet valve for flush tanks, the combination of a body provided with a bore having communication with a source of water supply, a nozzle having connection with said bore, a pair of combined guides and standards on opposite sides of said nozzle, a valve member slidably-mounted on said standards to close the opening of said nozzle and having a chamber adapted to receive packing, said valve member having a downwardly curved wall lying to one side of the nozzle and over a recess provided in the body at the base of the nozzle, an afterfill pipe communicating with said recess, a rod pivotally-mounted in the upper end of said standards and having a float on its free end, and an arm depending from the pivoted end of said rod to engage said valve member to force the latter upon the nozzle opening as the water level in the tank is raised.

2. In an inlet valve for flush tanks, the combination of a body provided with a bore having communication with a source of water supply, a nozzle having communication with said bore, a pair of combined guides and standards on opposite sides of said nozzle, said body having a recess at one side thereof having a downwardly and outwardly-curved base wall, an afterfill pipe leading from said recess, a valve member slidably-mounted on said standards and having a downwardly curved top wall overlying said recess, a rod pivoted in the upper end of said standards and having a float on one end, and a depending arm carried by the pivoted end of said rod to engage the valve member and force the latter upon the nozzle opening as the water level in the tank is raised.

1,063,126. PETROLEUM-BURNER. FRED HENDRICKS, Lodi, Cal. Filed Sept. 18, 1912. Serial No. 721,016. (Cl. 158—8.)

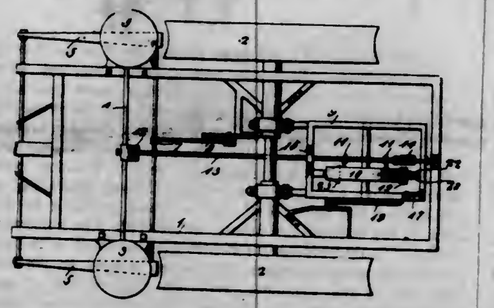


1. A device of the character described comprising the combination with a stove having a hole, of a burner dis

posed below said hole, a split standard secured to said stove and provided with two orifices, a fuel supply pipe projecting through one orifice, a water supply pipe projecting through the other orifice, means for clamping said standard against said pipes, a T-joint on the end of the fuel pipe, such T-joint being disposed over the hole in said stove, an elbow on the water pipe, such elbow being positioned to discharge the water through said T-joint, as described.

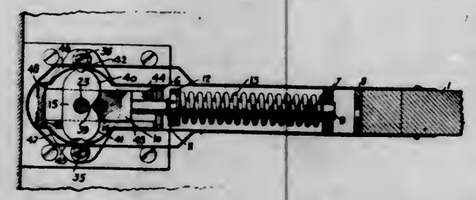
2. A device of the character described comprising a burner having a base provided with a central orifice, a pin projecting into said orifice, a cup-like receptacle mounted on said base and having an orifice, said pin projecting through said orifice and having a shoulder to hold such cup-like receptacle in position on said base, an inverted cup-like receptacle provided with an orifice to receive the top of said pin, such pin having an upper shoulder against which said inverted member rests, said inverted member being provided with a plurality of orifices, as described.

1,063,127. SEED-PLANTER. ROBERT A. JOYCE, Independence, Kans. Filed June 10, 1912. Serial No. 702,838. (Cl. 111—6.)



In a planter the combination with an operating mechanism of a frame adapted to be movably secured in rear of the main drive wheels of the planter, said mechanism comprising a wheel centrally mounted upon said frame, a guide projecting upwardly from one end of the frame, a coiled spring attached to the opposite end of the frame, a lever having one of its ends attached to said spring and provided with an offset or projection which is adapted for yielding contact with the shaft of the mechanism and tappets projecting from one side of the wheel and adapted for engagement with the lever on either side of the offset thereof whereby the lever is held in proper position and the offset thereof yieldingly engaged with the tappets projecting from the wheel to cause the grain to be properly deposited at intervals.

1,063,128. FLOOR SPRING-HINGE. OSCAR KATZENBERGER, Chicago, Ill. Filed Oct. 29, 1912. Serial No. 728,356. (Cl. 16—25.)



1. In a hinge of the class described, a frame adapted to be secured to a door, a stationary cam arranged in said frame, said frame being adapted to pivot around said stationary cam, said frame being formed with alined slots, a roller adapted to press against said cam, the ends of said roller being adapted to fit into said slots, antifriction means surrounding the ends of said rollers fitting into said slots, a reciprocating member pressing against said roller and designed to cause the same to press against said cam, and a spring pressing against one end of said frame and against said reciprocating member.

2. In a hinge of the class described, a framework adapted to be secured to a door, a stationary cam arranged in said framework and extending substantially at right angles thereto beyond the sides thereof, movable means connected with said framework for causing the same to normally remain in a certain position acting on said cam, and a lubricant-retaining housing formed of a pair of side plates having bulged portions for inclosing said cam and associated parts.

3. In a hinge of the class described, a frame adapted to be secured to a door, a cam arranged in said frame formed so as to project on each side thereof, means for securing said cam in place and holding the same stationary in respect to said frame, a roller bearing adapted to press against said cam, a reciprocating member adapted to press against said roller bearing, a spring adapted to act against said frame for pressing the reciprocating member against said roller bearing, and a pair of oil retaining covering members, said covering members being formed with flanges of resilient material adapted to press against said frame for resiliently clamping the covering members in place.

1,063,129. ATTACHMENT FOR SHOE-BRUSHES. JOHN E. KENKEL, Great Falls, Mont. Filed June 1, 1912. Serial No. 700,932. (Cl. 15—16.)



1. The combination, with the base having means adjacent to one end for receiving a polish box, of a resilient arm pivoted at one end to the said base, at a point between the ends of the latter, and a depending box cover carried on the said arm at its free end, the said arm being adapted to swing on its pivot to locate the box cover over the box-receiving means, and to swing to a position with the cover adjacent to the opposite end of the base from the said receiver, the resiliency of the arm tending to press the cover in the direction of the receiver so as to engage any box that may be therein, or against the surface of the base at the opposite end from the box, to retain the arm and cover in either position.

2. The combination in a shoe brush, of a spring arm carried by the brush and pivotally attached to the back of the brush at a point between the ends thereof to swing laterally, means for holding a polish box in the said back of the brush, and a cover carried by the said arm, and movable with said arm to a position over the box-holding means, or to an opposite position at the other side of the pivot.

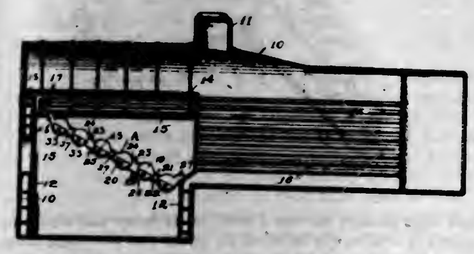
3. The combination with a brush, of means for holding a polish box at the back of a brush, a spring arm pivoted at the back of the brush at a point between the ends, and a cover hung on the under side of said spring arm to freely rock thereon in any direction.

4. The combination with a brush, of means for holding a polish box at the back of a brush, a spring arm pivoted at the back of the brush at a point between the ends to swing laterally, and a cover mounted on said spring arm to rock thereon in any direction, said cover being concavo-convex.

5. The combination with a supporting base, of a spring arm pivoted to said base at a point intermediate the ends, to swing laterally, said base having a depressed pocket to receive a polish box, and a cover hung at its center to

the under side of said arm and provided with an absorbent facing at its under side, the said cover having an annular flange extending below the facing.

1,063,130. SMOKE-CONSUMER. EDMON LESLIE, Marshalltown, Iowa. Filed May 13, 1912. Serial No. 697,070. (Cl. 110—76.)



1. In a device of the class described, a fire box, a cylinder having openings in its upper and lower halves, and having the lower half of each end open, a half cylinder having openings in its upper part and having its lower part made of perforated material, received in the lower half of said cylinder, said half cylinder being provided with openings in each end, cylinders detachably received in the walls of the fire box and having their ends inserted in the openings in said half cylinder and being designed to supply air to said first described cylinder from outside the fire box.

2. In a device of the class described, a fire box, a cylinder having openings in its upper and lower halves, and having the lower half of each end open, a half cylinder having openings in its upper part and having its lower part made of perforated material, received in the lower half of said cylinder, said half cylinder being provided with openings in each end, cylinders detachably received in the walls of the fire box and having their ends inserted in the openings in said half cylinder and being designed to supply fresh air to said first mentioned cylinder, said half cylinders being provided with downwardly extending plates near the inner ends of said last described cylinders.

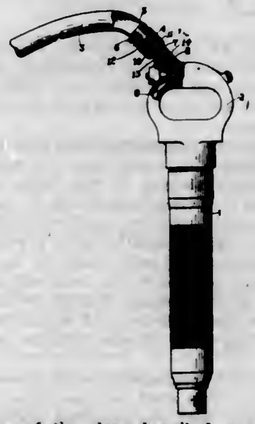
3. In a device of the class described, a fire box, a cylinder having openings in its upper and lower halves, and having the lower half of each end open, a half cylinder having openings in its upper part and having its lower part made of perforated material, received in the lower half of said cylinder, said half cylinder being provided with openings in each end, cylinders detachably received in the walls of the fire box and having their ends inserted in the openings in said half cylinder for supporting and for supplying fresh air to said first mentioned cylinder, said half cylinders being provided with downwardly extending plates near the inner ends of said last described cylinders, and means for yieldingly locking said last mentioned cylinders in position.

4. In a device of the class described, a smoke consumer section, comprising two cylinders spaced apart from each other, parallel upper and lower walls connecting said cylinders, a wall extending from the outer side of one of said cylinders from a point near the upper portion thereof, a wall extending from the outer portion of the other of said portions from a point near the lower portion thereof, said last described walls being designed to coact with cylinders of other smoke consumer sections, said cylinders being provided with large perforations in their lower portions and with smaller perforations in their upper portions, and being open in the lower half of each end, half cylinders detachably received in said cylinders, said half cylinders having perforated tops, and body portions made of perforated material and being constructed with openings in their ends, said walls being perforated, and screens resting upon the lower walls.

5. In a device of the class described, a fire box, a plurality of smoke consumer sections, each comprising two cylinders spaced apart from each other, parallel upper and lower walls connecting said cylinders, a wall extending from the outer side of one of said cylinders from a point near the upper portion thereof, a wall extending from the outer portion of the other of said portions from a point near the lower portion thereof, said last described walls being designed to coact with cylinders of other smoke consumer sections, said cylinders being provided with large perforations in their lower portions and with smaller perforations in their upper portions, and being open in the lower half of each end, half cylinders detachably received in said cylinders, said half cylinders having perforated tops, and body portions made of perforated material and being constructed with openings in their ends, said walls being perforated, screens resting upon the lower walls, cylinders detachably received in the side walls of said fire box and extending into the openings in the ends of said half cylinders, for the purpose of supporting said smoke consumer sections and of admitting air thereto.

[Claim 6 not printed in the Gazette.]

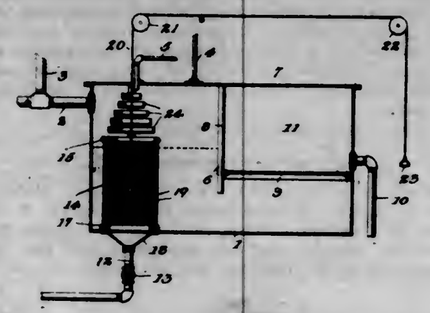
1,063,131. CHECK-VALVE. MAX MAXIMILIAN, Buffalo, N. Y., assignor to John Butler Porter, Buffalo, N. Y. Original application filed July 14, 1909, Serial No. 507,462. Divided and this application filed Dec. 15, 1911. Serial No. 666,040. (Cl. 137—30.)



In a device of the class described, a pneumatic tool having an internally screw-threaded nipple, an air supply tube having an externally screw threaded nipple, and a check valve consisting of two parts only and being constructed without a spring; one of said parts being tubular and constituting a valve casing and having a reduced externally screw threaded portion at its inner end on which the internally screw-threaded nipple of the pneumatic tool is adapted to screw and an enlarged outer portion which is internally screw threaded and in which the externally screw-threaded nipple of the air supply tube is adapted to screw, the opening through said valve casing having its outer portion considerably larger in diameter than the remainder and having an intermediate annular shoulder forming a valve seat located at the merging point of the large outer and small inner portions of said opening and a valve member slidably mounted within the valve casing and having an enlarged outer portion or head arranged within the enlarged outer portion of the casing and an inner stem of reduced diameter located within the reduced inner portion of the said opening, said valve being adapted to be automatically opened when the casing is screwed in to the nipple of the pneumatic tool by contact of an intersecting portion of the tool with the inner end of the valve stem, to be closed automatically by air pressure when the casing is unscrewed from the nipple of the pneumatic tool and to be completely disassembled by dropping the valve from the casing when the casing is unscrewed from the air supply tube, the annu-

lar inner end surface of the enlarged outer portion or head constituting a valve part adapted to co-act with the valve seat of the casing and the outer end of the said enlarged outer portion or head being adapted to strike against the inner end of the externally screw-threaded nipple of the air supply tube when said nipple is screwed in place in the valve casing to limit the outer range of movement of the valve member within the casing.

1,063,132. FEED-WATER HEATER AND PURIFIER. DONALD MCDONALD, Louisville, Ky. Filed June 17, 1912. Serial No. 704,153. (Cl. 210—16.)



1. In a filter, the combination with a receptacle, of a perforated collapsible chamber suspended from the top of the receptacle and having a loose connection at its bottom with the bottom of the chamber, and means to collapse the chamber.

2. In a filter, the combination with a receptacle, of a filter cloth chamber suspended from the top of said receptacle, a weight secured to the lower end of said chamber to hold it in close contact with the bottom of the receptacle.

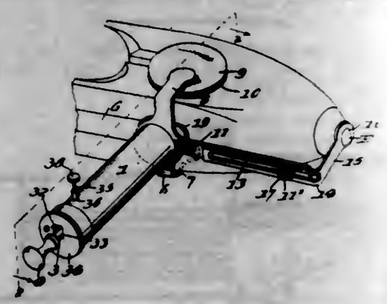
3. In a filter, the combination with a receptacle, of a filter cloth chamber suspended from the top of said receptacle, a weight secured to the lower end of said chamber to hold it in close contact with the bottom of the receptacle, and means to elevate said weight, thereby disengaging the bottom of the chamber with the bottom of the receptacle.

4. In a filter, the combination with a receptacle, of a chamber made of filter cloth and suspended from the top of said receptacle with its lower end positioned around a drain pipe opening in the bottom of the receptacle and having close contact with the bottom of said receptacle, a heavy ring secured to the bottom of the wire cloth chamber to hold it in close contact with the bottom of the receptacle, and a cable connected to said ring whereby it may be raised and thus collapse the walls of the filter cloth chamber.

5. In a filter, the combination with a receptacle, a supplemental filter chamber within the receptacle having a solid partition and a filter cloth bottom below which the lower end of the solid partition extends, a discharge opening above the filter cloth bottom of a primary filtering chamber comprising a cylinder made of filter cloth having a tight joint with the bottom of the receptacle, and means to collapse said primary filtering chamber.

1,063,133. DEVICE FOR THREADING SHUTTLES. CORNELIUS MILLER, Providence, R. I., assignor to Michael Lenahan, Providence, R. I. Filed Oct. 17, 1912. Serial No. 726,283. (Cl. 139—43.)

In a device of the type set forth, in combination with a cylinder and means for attaching the same to a shuttle, a piston rod having a head on the interior of the cylinder, a coil spring between the piston and the inner end of the cylinder, a spring arm having one end attached to the rod and having its free end portion inclined outwardly with relation to the rod and having a shouldered catch on the free end of said arm, a head for the cylinder formed with a slot which receives the arm and catch, a perforated boss on the cylinder, and a slidable plunger in the



boss, said plunger having a foot on its inner end which engages the arm and a head on its outer end for engagement with the fingers of the operator.

1,063,134. PENCIL-CASE AND KINDRED INSTRUMENT. EDWARD NORRIS, London, England, assignor to S. Mordan and Company, Limited, London, England. Filed Feb. 2, 1912. Serial No. 674,884. (Cl. 120—20.)



1. An instrument of the character specified, comprising, in combination, a tubular case provided at one end with a depressible element and at the other end with a mouth; an obturator normally seated in said mouth and embodying companion parts and spring carriers therefor, said carriers normally forcing said parts away from each other; and means controlled by said depressible element for seating and unseating said parts.

2. An instrument of the character specified, comprising a tubular case embodying a fixed member and a movable member having a conoidal portion formed with a mouth; an obturator embodying a pair of companion parts normally seated in said mouth, and spring arms rigidly secured to said fixed member and carrying said parts, said arms normally forcing the said parts away from each other; and means carried by said case and connected with said movable member for operating the latter, to seat and unseat said parts.

3. An instrument of the character specified, comprising a tubular case embodying a fixed member and a movable member having a conoidal portion formed with a mouth; an obturator embodying a pair of companion parts normally seated in said mouth, and spring arms rigidly secured to said fixed member and carrying said parts, said arms normally forcing the said parts away from each other; and a depressible element carried by said case and connected with said movable member for operating the latter, to seat and unseat said parts.

4. An instrument of the character specified, comprising a tubular case embodying a fixed member and a movable member having a conoidal portion formed with a mouth; an obturator embodying a pair of companion parts normally seated in said mouth, and spring arms rigidly secured to said fixed member and carrying said parts, said arms normally forcing the said parts away from each other; a movable tube disposed within said case and connected to said movable member; and a depressible element mounted in said case and connected to said tube, for moving the latter and said movable member, to seat and unseat said parts.

5. An instrument of the character specified, comprising, in combination, a tubular case embodying fixed and movable members, the latter of which is provided with a mouth; a depressible element carried by the fixed member; an obturator disposed within the movable member and embodying companion parts normally seated in said mouth, and supports rigidly secured to said fixed member and to which said parts are connected; and means controlled by said depressible element and connected with said movable member for operating the latter, to seat and unseat said parts.

1,063,135. INSPECTION DEVICE FOR GRAIN-CARS. BENJAMIN F. OWENS, Rockwell City, Iowa. Filed July 8, 1912. Serial No. 708,889. (Cl. 105—15.)



1. A device of the class described, comprising a hollow body portion open at both ends and having its sides inclined away from each other toward the inner end, an integral flange on the outer surface of the body portion spaced apart from the inner end thereof, and a cap hinged on top of the body portion and designed when open to stand in position slightly past a vertical line through the hinge, and when closed, to cover the opening in the outer end of the device, for the purpose stated.

2. A device of the class described, comprising a body portion formed with two parts designed to be attached to a car side or the like, having an opening therein, the outer part being formed hollow, open at both ends and having its sides inclined away from each other toward the inner end and its top and bottom both inclined downwardly and inwardly from the inner end, a flange formed on the outer surface of said outer part and spaced from the inner end thereof, a hinged cap for the outer end of the outer part designed, when open, to stand in a position slightly past a vertical line through the hinge center and to rest against the car side to which the part is attached, said inner part being formed hollow with its sides, top and bottom shaped to form a continuation of the corresponding portions of the outer part and a flange on the outer surface of said inner part, said flange being provided with perforations to receive bolts for fastening the two parts together on opposite sides of the car side for the purpose stated.

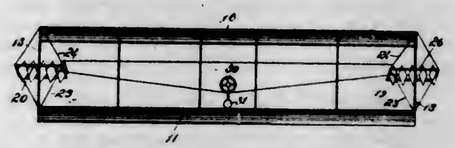
1,063,136. HINGE. FREDERICK J. PALMER, Providence, R. I. Filed June 24, 1912. Serial No. 705,549. (Cl. 16—11.)

1. In combination with a pair of sections, one of said sections having a concave groove at its rear side, an exposed tube of the same length as that of the sections secured to the rear side of the other section and being received in said groove, and means to hingedly connect the tube to the first named section the exterior exposed portion of said tube being continuous and unbroken.



2. In combination with a pair of sections one of which has a concave groove throughout its length and a pair of perforated knuckles which project over the groove in spaced relation thereto, an exposed tube the exterior of which is continuous and unbroken secured to the other section and extending throughout the length of the latter and projecting in said groove and having cut-away portions to receive the knuckles, and means to secure the knuckles to the tube passed through the perforations of the knuckles.

1,063,137. STABILIZER FOR AIRSHIPS. ALBERT O. PAULSON, Los Angeles, Cal. Filed May 20, 1912. Serial No. 698,620. (Cl. 244—29.)



1. In a flying machine, a horizontally-disposed frame at each lateral end of the supporting surfaces, hinged transversely to give a greater or less angle of incidence than the supporting planes, and a plurality of blades in said frame pivotally mounted therein on fore and after pivots.

2. In a flying machine, a horizontally-disposed frame at each lateral end of the supporting surfaces, hinged on a transverse pivot, to give a greater or less angle of incidence than the supporting planes, a plurality of blades in each frame pivotally mounted therein on a line approximately ten degrees off from the direction of flight.

3. In a flying machine, a horizontally-disposed frame at each lateral end of the supporting surfaces, hinged on a transverse pivot, a plurality of blades pivotally mounted on a line approximately ten degrees off from the direction of flight, the forward ends of said blades being farther from the central line of the machine than their rear ends.

4. In a flying machine, a horizontally-disposed frame at each lateral end of the supporting surfaces, means for swinging them to any suitable angle of incidence, blades in said frame pivotally-mounted therein on a line approximately ten degrees from the direction of flight, both sets of blades being normally at such an angle as to produce a lift equal to its drift or resistance in flight.

5. In a flying machine, a horizontally-disposed frame at each lateral end of the supporting surfaces, means for adjusting them to any suitable angle of incidence, blades in said frame pivotally mounted on a line approximately ten degrees off from the direction of flight, means whereby the closing of one set of blades will produce a lift on the depressed side, and means whereby the set of blades on the other side will depress the machine.

[Claims 6 to 9 not printed in the Gazette.]

1,062,138. DEVICE FOR RAISING OR LOWERING CURTAIN-POLES AND THE LIKE. WILHELM BARTHOLET DIDRICK PONNINGHAUS, South Yarra, Prahran, Victoria, Australia, assignor of one-half to John Alston Wallace, Grazier, Australia. Filed Aug. 22, 1912. Serial No. 716,483. (Cl. 57—110.)

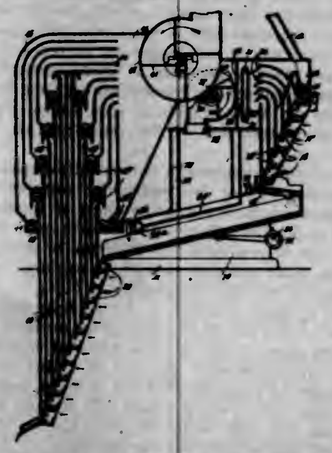


1. An improved device for raising or lowering curtain poles or the like, consisting of a handle, levers pivoted to the upper end of the handle, a supporting device pivotally connected to the outer end of each lever, a link pivoted at its upper end to each lever, and a sliding guide extending between the lower ends of the links and pivotally connected thereto.

2. An improved device for raising or lowering curtain poles or the like, consisting of a handle having a vertical slot-way in its upper end, a sliding guide moving in said slotway, levers pivoted to the handle at the top of said slotway, and a link pivotally connected to each lever and the guide.

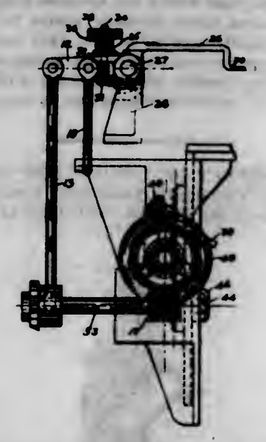
3. An improved device for raising or lowering curtain poles or the like, consisting of a handle having a slotway in its upper end, a pivot pin extending across said slotway at the top thereof, a sliding guide moving in said slotway and consisting of a sleeve embracing said handle, a cross piece attached to said sleeve and having outstanding portions, a link pivoted to each outstanding portion, opposite levers each pivoted at its inner end to the pivot pin across the slotway and pivoted to the said links, and a hook pivotally connected to each lever at its outer end.

1,063,139. WHEAT-CLEANER. JOHN JACKSON RAMSAUR, Lincolnton, N. C. Filed Oct. 21, 1912. Serial No. 726,965. (Cl. 130—17.)



In a machine of the class specified, the combination of air current mechanism, means to deliver grain so as to be operated upon by said mechanism to withdraw the dust and other lighter particles therefrom, means in communication with said mechanism to receive and retain the dust, a series of narrow air current chutes, a high-tensioned suction fan operative through said chutes, means including an oscillatory shoe to deliver the dust-cleaned grain along the lower ends of said chutes in succession whereby the screenings are removed therefrom and conveyed upwardly, the lower part of the dust retaining means being connected to said shoe, and means to deliver said screenings from the upper ends of said chutes.

1,063,140. FEEDING MECHANISM FOR ENVELOP-MACHINES. FERDINAND L. SCHMIDT, New York, N. Y. Filed Jan. 18, 1912. Serial No. 671,796. (Cl. 101—36.)



1. In an envelop machine, the combination of a vertically movable table for holding the envelop blanks, means for automatically elevating the table, a feeler having a projecting lug thereon, a second lug suitably positioned in said envelop machine so that it will engage the lug on said feeler when said feeler descends below a predetermined position, means for swinging said feeler, means for adjusting the arc through which said feeler can swing, and means operatively connecting said feeler and said movable table elevating means.

2. In an envelop machine, the combination of a vertically movable table for holding the envelop blanks, means for automatically elevating the table, a feeler having a projecting lug thereon, a second lug suitably positioned in said envelop machine so that it will engage the lug on said feeler when said feeler descends below a predetermined position, means for swinging said feeler, self-locking means for adjusting at one operation the arc through which said feeler can swing, and means operatively connecting said feeler and said movable table elevating means.

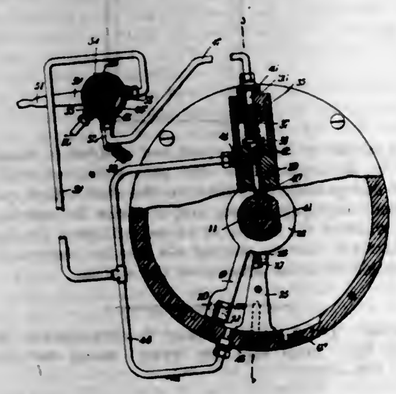
3. An envelop blank feeding device comprising a vertically movable blank supporting table, a stationary frame having a lug thereon, a shaft supported in said frame, a rocking lever to one end of which said shaft is attached, means for operatively rocking said lever to rotate said shaft, a feeler attached to said shaft to swing vertically, means for adjustably changing the arc of the swing of said feeler, a projecting lug on said feeler which will engage the lug on said stationary supporting frame when said feeler swings below its lowest normal position, and means for operatively connecting the said rocking lever and the vertically movable blank supporting table.

4. In an envelop machine, the combination of a vertically movable table for holding the envelop blanks, means for automatically elevating the table, a feeler having a projecting lug thereon, a second lug suitably positioned in said envelop machine so that it will engage the lug on said feeler when said feeler descends below a predetermined position, means for swinging said feeler, means operatively connecting said feeler and said movable table elevating means, and means for automatically dropping the table to its lowest position when said table reaches a predetermined position.

5. In an envelop machine, the combination of a vertically movable table for holding the envelop blanks, means for automatically elevating the table, a feeler having a projecting lug thereon, a second lug suitably positioned in said envelop machine so that it will engage the lug on said feeler when said feeler descends below a predetermined position, means for swinging said feeler, means for operatively connecting said feeler and said movable table elevating means, and means for dropping said table from any position to its lowest position manually at one operation.

[Claim 6 not printed in the Gazette.]

1,063,141. ENGINE-STARTER. GREGORY JOHN SPOHRER, Franklin, Pa., assignor to Wilson Motor Starter Company, Franklin, Pa. Filed May 17, 1911. Serial No. 627,653. (Cl. 123—179.)



1. In an engine starter, an engine shaft, a cylinder having a revoluble shaft mounted therein, said last-mentioned shaft being in alinement with said engine shaft and adapted to engage the same, an arm rigidly attached to said revoluble shaft within said cylinder, a compressed fluid reservoir, fluid-conducting means extending from said reservoir to said cylinder, and a controlling valve disposed in said fluid-conducting means and actuated by said revoluble shaft, to admit compressed fluid to said cylinder, to rotate said arm and engine shaft.

2. In an engine starter, a cylinder, a shaft extending through said cylinder, an arm revolubly mounted on said shaft in said cylinder, said arm having a limited movement, a compressed fluid-conducting means leading to said cylinder, and a valve controlling the admission of said compressed fluid to said cylinder, the valve stem riding on said shaft, said shaft having a recess therein to receive said stem, and thereby to automatically shut off the admission of said fluid to said cylinder when said arm approaches the limit of its movement.

3. In an engine starter, an engine shaft, a revolving shaft in line with said engine shaft and normally disconnected therefrom, a one-way clutch adapted to connect said shafts, resilient means carried by said revolving shaft tending to bring the parts of said clutch into engagement, means to rotate said revolving shaft to permit said resilient means to act, resilient means put under tension by rotation of the revolving shaft when driven by said rotating means but stronger than the first-mentioned resilient means, and serving to return said shaft to its normal position, and means acting under the influence of said shaft returning means to disconnect said clutch against the tension of the first-mentioned resilient means.

4. In combination, a cylinder, a shaft passing through the heads of said cylinder, one head being enlarged to form a valve casing, a valve controlling the admission of fluid to said cylinder mounted in said casing, said valve having a stem riding on said shaft, to normally maintain said valve in open position, said shaft having a flattened portion in alinement with said valve stem, and means forcing said stem into said flattened portion, to bring said valve to the closed position.

5. In an engine starter, in combination, a fluid-actuating mechanism adapted to turn the engine shaft, a valve carried by said mechanism, a three-way valve disposed adjacent the operator, a fluid connection between one outlet of said three-way valve and the valve on the mechanism, a connection from a compressed fluid reservoir leading to an inlet in said three-way valve, and a fluid connection with the third opening of said valve, said last-mentioned fluid connection bifurcated, forming a fluid connection with the mechanism and forming a connection with the valve on the mechanism.

1,063,142. FENCE-POST. FRANK F. TOBIAS, Chicago, Ill., assignor of one-half to Robert P. Inglis, Chicago, Ill. Filed Feb. 24, 1913. Serial No. 750,088. (Cl. 39—12.)



1. A fence post, comprising a sheet of metal bent to form a substantially cylindrical body portion, and a flange portion formed by the edges of the metal projecting from the body portion, said projecting edges being held together by lips struck up from the metal thereof and said flange being provided with wire-receiving apertures formed by striking up said lips and having means for retaining wires in said apertures.

2. A fence post, comprising a sheet of metal shaped to provide a body portion, and a flange consisting of a plurality of thicknesses of metal, projecting from said body portion, secured together by lips struck up from said thicknesses of metal, said flange having wire-receiving apertures formed by the displacement of the metal to provide said lips and also having provisions for retaining wires in said apertures.

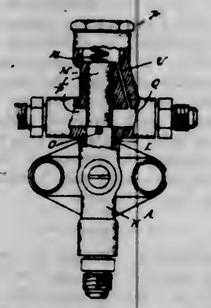
1,063,143. LUBRICATOR. JESSE G. VINCENT, Detroit, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed July 2, 1912. Serial No. 707,191. (Cl. 103—79.)

1. The combination with a pump provided with inlet and outlet connections of a plurality of branch connections to the outlet, and a valve for simultaneously controlling said connections, variably positioned, by the pressure developed by said pump.

2. The combination with a pump having inlet and outlet connection and a plurality of branch connections for said outlet, of a self-closing valve controlling communication between said outlet and the several branch connections, said valve being subjected to the pressure developed in the main outlet to open the same.

3. The combination with a pump having inlet and outlet connections and a plurality of branch connections for said outlet, of a piston valve for simultaneously control-

ling communication between said outlet and the several branch connections, one end of said piston being subjected to the pressure developed in the main outlet and being operated thereby to its open position, and a spring for closing said valve.

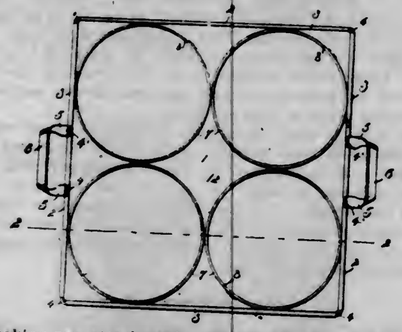


4. The combination with a pump having inlet and outlet connections of a cylinder connected with said outlet, a plurality of branch connections respectively communicating with ports in said cylinder, a piston movable in said cylinder to simultaneously and proportionately open and close said ports, one end of said piston being subjected to the pressure developed by said pump, and a spring for moving said piston to a position in which said ports are closed.

5. The combination with a casing forming a pump barrel of a plunger pump in said barrel, valve controlled inlet and outlet connections to said barrel, a cylinder with which said outlet communicates, a piston valve in said cylinder, a plurality of branch conduits communicating with ports in said cylinder controlled by said valve, and a spring for closing said valve against the pressure developed by said pump.

[Claims 6 to 8 not printed in the Gazette.]

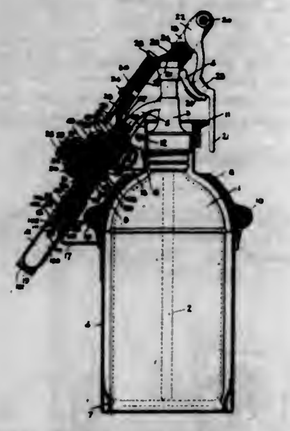
1,063,144. BAKING-PAN ATTACHMENT. JAMES E. WALLACE, Paducah, Ky. Filed Aug. 12, 1911. Serial No. 643,741. (Cl. 53—6.)



A baking pan attachment comprising a ring constructed of a single piece of metal and provided along its upper and lower edges with reinforcing flanges, one terminal of the metal being extended beyond the adjacent ends of the flanges thereof to provide a tongue, the flanges at the opposite terminal of the metal being slit vertically whereby to receive the tongue, the said flanges of said other terminal having portions bent into engagement with the tongue, and the said tongue being bent into engagement with the exterior surfaces of said portions.

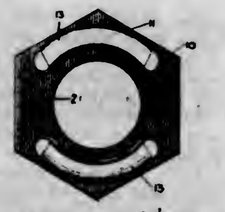
1,063,145. SIPHON-CHARGING MECHANISM. HARVEY S. WINSOR, New York, N. Y. Filed May 15, 1912. Serial No. 697,361. (Cl. 225—18.)

An apparatus of the class described, comprising the combination of a receptacle for containing a siphon, a charging mechanism adapted to carry a cartridge containing a compressed gas, the said charging mechanism comprising parts movable relatively one to the other, the said parts being spaced and adapted to form a pocket for receiving the cartridge, one of the parts being provided with a hollow valve rod for engaging the valve in the cartridge,



means carried by the same part and adapted to engage the spout of the siphon, the said part being provided with valves and passageways between the said hollow rod and the spout engaging means, and a device for moving said parts, whereby the hollow valve rod will move the valve of the cartridge, thereby placing the interior thereof in communication with the interior of the siphon.

1,063,146. LOCK-NUT. ISAAC D. ZITZERMAN, Kansas City, Mo. Filed Sept. 26, 1912. Serial No. 722,437. (Cl. 151—15.)



1. A lock nut concaved bodily and having a threaded eye, the thread extending without mutilation from a single starting point at the concaved face of the lock nut, the said concave face having a ribbed formation presenting bearing edges at diametrically opposite sides of the eye, the said bearing edges presenting curved lines concentric with the eye of the nut.

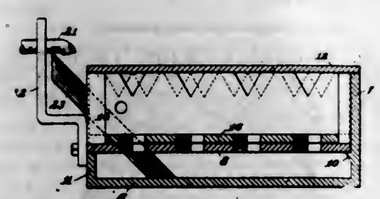
2. A lock nut, having a ribbed formation at the inner face, said ribbed formation terminating in an edge defined by an outer perpendicular wall, and a face at an acute angle to said perpendicular wall, there being an inner wall at an angle to the said face.

1,063,147. LIQUID-FUEL BURNER. HENRY H. AMES, Great Bend, Kans. Filed Apr. 1, 1911, Serial No. 618,427. Renewed Apr. 11, 1913. Serial No. 760,557. (Cl. 158—91.)

1. A liquid fuel burner comprising a box into which the fuel is fed, said box having an opening in the top thereof, and air chambers located in the upper part of the box and spaced apart to form a combustion space therebetween under said opening, said chambers having valved ports opening into said space.

2. A liquid fuel burner comprising a box into which the fuel is fed, said box having an opening in the top thereof.

and air chambers located in the upper part of the box, said chambers being spaced apart under said opening and also spaced from the bottom of the box, and having valved ports in the bottom, and also in the sides toward said opening.



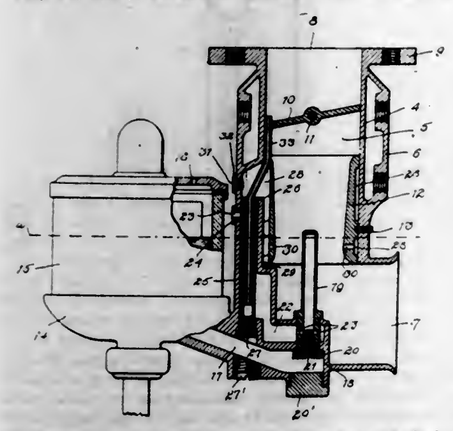
3. A liquid fuel burner comprising a box into which the fuel is fed, said box having an opening in the top thereof, angular partitions in opposite sides of the box, said partitions being spaced apart to form a combustion chamber therebetween leading to said opening, said partitions being also spaced from the bottom of the box, thereby forming air chambers in upper opposite corners of the box, said partitions having ports in the bottoms and sides thereof, and valves controlling said ports.

4. A liquid fuel burner comprising a box into which the fuel is fed, said box having an opening in the top thereof and also having air inlet openings in one end thereof, partitions in the box forming air chambers in the upper opposite corners thereof, with which chambers said air inlet openings communicate, the partitions being spaced apart to form a combustion chamber therebetween under said opening in the top of the box, and said partitions having valved openings into the interior of the box.

5. A liquid fuel burner comprising a box having a fuel space in the bottom thereof and an opening in the top wall thereof, air chambers located in the upper part of the box, at opposite sides thereof, above said fuel space, the air chambers being spaced apart to form a combustion chamber therebetween under said opening in the top of the box, and valve ports in said chambers, opening into the fuel space and also into the combustion chamber.

[Claims 6 and 7 not printed in the Gazette.]

1,063,148. CARBURETER. RAYMOND M. ANDERSON, Chicago, Ill., assignor to Stromberg Motor Devices Company, Chicago, Ill., a Corporation of Illinois. Filed July 26, 1912. Serial No. 711,619. (Cl. 48—155.1.)



1. In a carbureter, a carbureting chamber, a fuel jet therein, a constant level supply chamber feeding said fuel jet and exposed to atmospheric pressure, an auxiliary reservoir fed from said constant level supply chamber, an auxiliary fuel jet discharging into said carbureting chamber and fed from said auxiliary reservoir, an atmospheric inlet for said auxiliary reservoir, and means for maintaining a sub-atmospheric pressure in said auxiliary reservoir during operation of said carbureter.

2. In a carbureter, a carbureting chamber, a fuel jet therein, a constant level supply chamber feeding said fuel jet and exposed to atmospheric pressure, an auxiliary reservoir fed from said constant level supply chamber, an auxiliary fuel jet discharging into said carbureting chamber and fed from said auxiliary reservoir, an atmosphere inlet for said auxiliary reservoir, and means for maintaining a sub-atmospheric pressure in said auxiliary reservoir during operation of the carbureter comprising a duct for the passage of air only, communicating with said carbureting chamber and with the auxiliary reservoir above the level of the liquid therein.

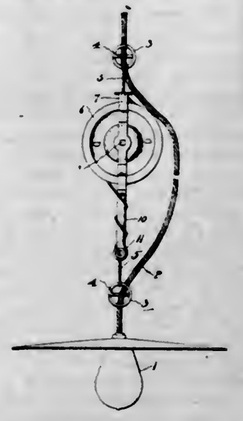
3. In a carbureter, a carbureting chamber, a fuel jet therein, a constant level supply chamber feeding said fuel jet and exposed to atmospheric pressure, an auxiliary reservoir fed from said constant level supply chamber, an auxiliary fuel jet discharging into said carbureting chamber and fed from said auxiliary reservoir, an atmospheric inlet for said auxiliary reservoir, and means for maintaining a variable sub-atmospheric pressure in said auxiliary reservoir depending upon the suction of the engine to give a variable supply per unit of time to said auxiliary fuel jet according to the suction of the engine.

4. In a carbureter, a carbureting chamber, a fuel jet therein, a constant level supply chamber feeding said fuel jet and exposed to atmospheric pressure, an auxiliary reservoir fed from said constant level supply chamber, an auxiliary fuel jet discharging into said carbureting chamber and fed from said auxiliary reservoir, a restricted atmosphere inlet for said auxiliary reservoir, and means for maintaining a sub-atmospheric pressure in said auxiliary reservoir during operation of the carbureter.

5. In a carbureter, a carbureting chamber, a fuel jet therein, a constant level supply chamber feeding said fuel jet and exposed to atmospheric pressure, an auxiliary reservoir fed from said constant level supply chamber by way of a restricted passageway, an auxiliary fuel jet discharging into said carbureting chamber and fed from said auxiliary reservoir, a restricted atmosphere inlet for said auxiliary reservoir, and means for maintaining a variable sub-atmospheric pressure in said auxiliary reservoir upon the liquid therein, depending upon the suction of the engine, to give a variable feed to said auxiliary reservoir through the restricted passageway leading from said constant level supply chamber according to the suction of the engine.

[Claims 6 to 9 not printed in the Gazette.]

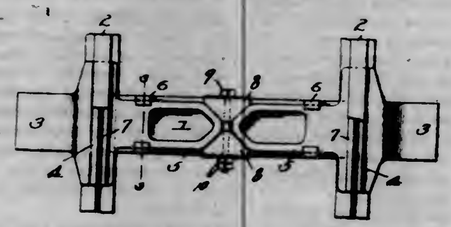
1,063,149. ADJUSTABLE HANGER. PERRY ERNEST DOOLITTLE, Toronto, Ontario, Canada. Filed Apr. 20, 1909. Serial No. 491,106. (Cl. 248—10.)



In adjustable hangers, in combination with a load suspending member, a flexible friction exerting member, a rigid load resisting frictional member around which

the flexible friction member freely passes, said flexible member having one end connected to said load suspending member above the rigid friction member and having its other end connected to the load suspending member below the rigid friction member and a rotatable spring winding member around which said flexible member passes and operable merely to exert a tension on said flexible member to keep the same taut, substantially as described.

1,063,150. RAILROAD CROSS-TIE AND JOINT-CLAMP. DANIEL J. MCPHERSON, Cheraw, S. C. Filed Dec. 27, 1911. Serial No. 668,029. (Cl. 238—5.)



1. A railroad tie having an integral rail engaging bridge and plates adapted to engage outer faces of parallel rails, inwardly extending lugs carried by opposite sides of the tie, plates slidably held beneath said lugs and adapted to engage the inner faces of the said rails, and oppositely movable wedge shaped blocks arranged between the end portions of the last mentioned plates and adapted to force them in opposite directions upon movement of said blocks toward each other.

2. A combined tie and rail chair comprising a base adapted to receive the rail and having a chair portion integral therewith, said portion engaging the outer faces of parallel rails, movable chair members slidably held upon said base, each of said movable chair members having its inner end oppositely beveled, triangular blocks adapted to move transversely upon the base and arranged between said movable plates a bolt extending through said blocks and transverse to the tie, and nuts working upon said bolt, as and for the purpose set forth.

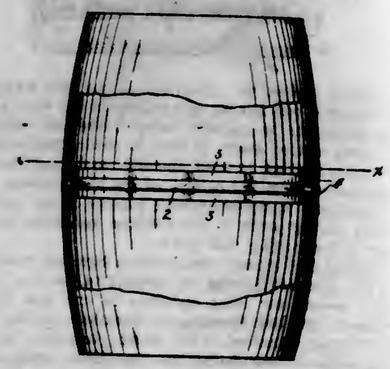
1,063,151. GATE-CLOSER. WILLIAM J. WILTSE, Lisbon, N. D. Filed Mar. 29, 1912. Serial No. 687,205. (Cl. 39—101.)



1. In a device of the class described, a fence including posts spaced apart at opposite sides of a gate way opening, a gate within said opening and including vertical end posts, pins projecting from said end posts near their ends, links connected to one of said fence posts and engaging around the adjacent end post of the gate above and below the pins thereof, another link engaging around the other fence post and the adjacent end post of the gate and above the lower pin of the same, a bracket connected to said last mentioned fence post, a locking lever pivoted to said bracket, and a link pivoted to the lever and adapted to engage over the adjacent gate post and beneath the pin of the same.

2. In a device of the class described, a fence including posts spaced apart at opposite sides of a gate way opening, a gate within said opening and including vertical end posts, pins projecting from one of said gate posts, means for swingingly uniting the other of said gate posts to one of said fence posts, a link engaging around the other fence post and the adjacent end post of the gate and above the lower pin of the same, a bracket connected to said last mentioned fence post, a locking lever pivoted to said bracket, and a link pivoted to the lever and adapted to engage over the adjacent gate post and beneath the pin of the same.

1,063,152. METALLIC PACKAGE. LEONHARD BAUROTH, Toledo, Ohio, assignor to The Metallic Barrel Company Chicago, Ill., a Corporation of Maine. Filed Sept. 18 1911. Serial No. 650,001. (Cl. 220—1.)



In a sheet metal package of the class described, a body portion, and a sheet metal annular reinforcing member in the body portion bearing outward against the inner wall thereof, said member being of channel form in cross-section with its leg terminals turned outward to form bearing surfaces and having their body coacting sides transversely recessed to coöperate with the body to provide passages from either side of the member to the interior of the channel thereof, substantially as described.

1,063,153. PIPE-WRENCH. LAURANCE D. BENEDICT, Chicago, Ill., assignor to Benedict Wrench Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 19, 1912. Serial No. 726,610. (Cl. 81—67.)



1. In a pipe wrench, a hollow handle, a flexible gripping member short enough to be housed in the handle, a spring within the handle connected at its ends respectively to the handle and to one end of said flexible member and adapted normally to withdraw said flexible member into the handle, and parts arranged respectively on the handle and on the free end of said flexible member for detachably connecting the free end of the flexible member to the handle.

2. In a pipe wrench, a hollow handle having at one end separated ears in the form of hooks, a flexible gripping member short enough to be housed in the handle, a spring within the handle connected at its ends respectively to the handle and to one end of said flexible member and adapted normally to withdraw said flexible member into the handle, and a transverse pin on the free end of said flexible member adapted to be engaged with the hooked ears.

3. In a pipe wrench, a hollow handle having on one end a face inclined to the longitudinal axis of the handle, a flexible gripping member extending at one end into the handle, a spring housed within the handle and connected at its ends respectively to the handle and to the inner end of said flexible member, and means near the end of the handle on the longer side thereof for detachably engaging the free end of said flexible member.

4. In a pipe wrench, a hollow handle having a portion of one side removed therefrom near one end thereof to form two separated ears, said ears having portions cut away to shape them into hooks, a flexible gripping member having one end projecting into the handle, a spring within the handle connected at its ends respectively to the handle and to one end of said flexible member, said ears being far enough apart to receive between them the free end of said flexible member, and lateral projections on the free end of said member adapted to be engaged with said hooks.

5. In a pipe wrench, a hollow handle open at one end, a flexible gripping member in said handle and adapted to project out of said open end, a spring lying within the handle and connected at its ends respectively to the handle and to one end of said flexible member, means on one side of the handle adjacent to the said end thereof for detachably engaging the free end of said member, and there being an inwardly facing shoulder on the opposite side at the aforesaid end of the handle for engaging with the side of said member.

[Claims 6 to 9 not printed in the Gazette.]

1,063,154. PACKAGING BOTTLES. FRANK BERGEN, East St. Louis, Ill., assignor to Joseph Nester, East St. Louis, Ill. Filed Apr. 4, 1912. Serial No. 688,498. (Cl. 229—89.)



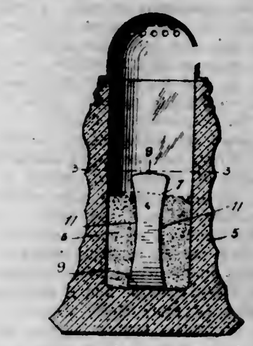
1. A package comprising a bottle, a protective jacket therefor and a sheet of paper or like material extending over the mouth thereof and frictionally held by the jacket against the surface of the bottle.

2. A package comprising a bottle, a cork lightly inserted therein, a jacket and a sheet of paper or like material extending over said bottle and frictionally held by said jacket against the body of said bottle.

3. A package comprising a bottle, a jacket of protective material therefor and a sheet of paper or like material, the middle portion of which rests against the mouth end of the bottle and the marginal portions of which are frictionally held by the jacket against the surface of the bottle.

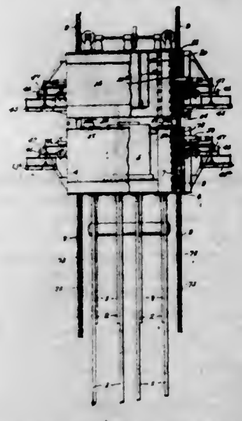
4. A package comprising a bottle with a band of corrugated paper constituting a continuous jacket open at its ends, and a sheet of paper or like material whose middle portion rests against the mouth end of the bottle and whose marginal portions are frictionally held by said band against the surface of the bottle.

1,063,155. DISINTEGRATOR. GEORGE L. BORDEN, Groveville, N. J., assignor to Electrolytic Art Metal Company, Trenton, N. J., a Corporation of New Jersey. Filed Dec. 7, 1912. Serial No. 735,559. (Cl. 65—57.)



A disintegrator having convex sides and concave edges, the ends being of arc-shape and adapted to serve as cutting edges.

1,063,156. MECHANISM FOR LIFTING HEAVY WEIGHTS. FREDERICK W. COHEN and MEIER GEO. HILPERT, Harrisburg, Pa., assignors to The Pennsylvania Steel Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 3, 1910. Serial No. 590,570. (Cl. 14—1.)



1. In a mechanism for lifting heavy weights, the combination with a main sustaining member, of a lifting member, a hydraulic jack centrally supporting the latter, auxiliary sustaining members carried by the lifting member, and means on the lifting member to maintain the auxiliary sustaining members in contact with the main sustaining member.

2. In a mechanism for lifting heavy weights, the combination with a sustaining member having vertical passages between a pair of walls at its sides, said walls having alined holes therein; of a lifting member having vertical passages in alinement with those in the sustaining member and formed between similar walls also having alined holes, suspenders free to pass through said passages and having holes adapted to be brought into register with those in said walls, pins to be inserted in the holes when in register, whereby said walls will sustain the load on the suspenders, pin inserting and withdrawing mechanism carried by said members, and means to raise the lifting member.

3. In a mechanism for lifting heavy weights, the combination with a sustaining member constructed as a webbed girder having a vertical passage between a pair

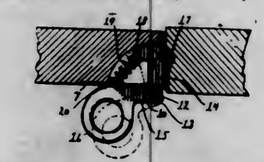
of walls at each side of the member, said walls having alined holes therein; of a lifting member also constructed as a webbed girder having a pair of walls at each side between which passages are formed in alinement with those in the sustaining member, a hydraulic jack mounted centrally of and between the members, suspenders having holes at intervals adapted to register with the alined holes in both members, pins adapted to enter the holes in said walls and suspenders, whereby said lifting and suspending member walls directly support the load of the suspenders on the pins.

4. In a mechanism for lifting heavy weights, the combination with a lifting member and a sustaining member both having holes in their sides, means to raise the lifting member, suspenders having holes at intervals, and pins adapted to take through said holes to connect the suspenders to the members, of a pin inserting and withdrawing mechanism carried by said members.

5. In a mechanism for lifting heavy weights, the combination with a lifting member and a sustaining member both having holes in their sides, means to raise the lifting member, suspenders having holes at intervals and pins adapted to take through said holes to connect the suspenders to the members, of pin supports carried by said members, and power mechanism to which the pins are yieldingly connected to longitudinally move the pins.

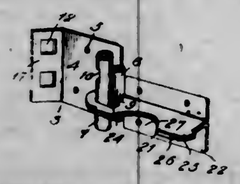
[Claims 6 to 17 not printed in the Gazette.]

1,063,157. LOCK. THOMAS W. COTTLE, Oakland, Kans. Original application filed Apr. 27, 1911, Serial No. 623,649. Divided and this application filed Apr. 25, 1912, Serial No. 693,089. Renewed Apr. 15, 1913. Serial No. 761,403. (Cl. 70—49.)



In combination, an L-shaped plate adapted to fit the face and edge of a sash, door, window and the like and having a slot extending through the edge part and continuing partially through the face portion, and said face portion having a backwardly extending lug and two outwardly projecting lugs on opposite sides of said slot at the junction of said two portions of said L-shaped plate; an L-shaped latch pivoted at its elbow between said two last-named lugs, one leg extending along said face portion and terminating in a ring, and the other leg extending inwardly in said slot and having a beveled locking lug projecting from the edge portion of the L-shaped plate and a rearwardly projecting lug adapted to engage against the first-named lug when the locking lug is withdrawn from locking position; and a coil compression spring secured at its respective ends about said first-named lug and said lug adapted to engage against it, and tending to force the latch to locking position; the outer leg of the latch bearing against the face portion of the L-shaped plate when the latch is in locking position.

1,063,158. HINGE. CHESLEY T. J. GILES, Greenville, S. C. Filed July 26, 1912. Serial No. 711,672. (Cl. 16—110.)

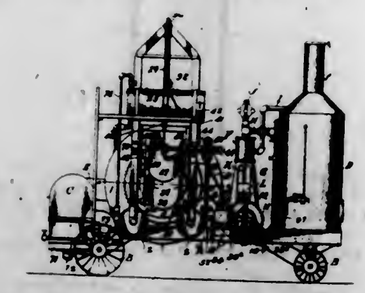


1. A hinge comprising a reversible stationary member, a removable member comprising an attaching plate having on one edge a reduced neck provided on its outer end with an extension projecting above and below the neck, said extension being bent to form a tubular cylindrical head or double ended pintle, and a neck engaging portion formed on said extension of the neck and adapted to be engaged with the inner side of the latter when said pintle is formed and bearing lugs formed on said neck engaging plate of the extension and adapted to fit over the upper and lower edges of the neck and to rest on said stationary member of the hinge when the end of the pintle of the movable member of the hinge is engaged with said stationary member.

2. In a hinge, a stationary member and a movable member, said stationary member comprising a plate bent or folded upon itself to form a supporting plate having its inner ends bent in opposite directions at right angles to the plate and having in one end a substantially D-shaped aperture and a double ended pintle formed on said movable member of the hinge the latter having a reduced neck, and bearing lugs formed on the same and adapted to fit over the upper and lower edges of said neck, said ends of the pintle being adapted to be engaged with said aperture in the supporting plate of the stationary member whereby said members are pivotally connected together and whereby the same may be reversed to be used in both right and left hand positions.

3. In a hinge, a stationary member and a movable member, said stationary member comprising a plate folded upon itself midway between its ends to provide a supporting plate having its inner edges bent at right angles to form attaching flanges and having one end extended beyond said flanges and rounded, said extended end having therein a substantially D-shaped passage, a catch lug formed on the outer end of said supporting plate, tubular pintles formed on said movable member of the hinge and having in one side thereof, notches whereby the pintle when engaged with the aperture in the supporting plate of the stationary member of the hinge is permitted to be shifted to a slight extent, a locking extension on the opposite end of the movable member of the hinge, said extension having therein locking apertures adapted to be engaged with the catch lug on the outer end of said supporting plate whereby the movable member of the hinge is locked in open position.

1,063,159. LOADING AND UNLOADING MECHANISM FOR MIXING-DRUMS OR OTHER RECEPTACLES. WILLIAM BERTON HAHN, Paris, Tex. Filed Apr. 13, 1912. Serial No. 690,535. (Cl. 214—12.)



1. In discharging mechanism, a discharge spout therefor, pendant arms by which said spout is suspended, a rock-shaft from which said arms depend, gearing for rotating the said rock-shaft and reversing clutch devices for said gearing, whereby the direction of rotation of said shaft may be regulated at will, thereby mechanically swinging said spout alternately into and out of discharging position substantially as set forth.

2. In combination with a pivoted charging bucket and a pivoted discharging spout, an intermediate receptacle supplied by the former and discharging through the latter, a driving shaft and connections, distinct from said receptacle, between said shaft and bucket and said shaft and spout, said connections being arranged and adapted to alternately move the bucket into operative position while moving the spout into inoperative position and vice versa.

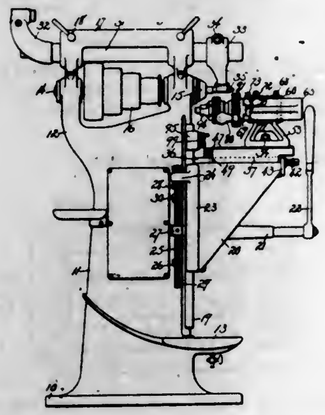
3. In combination with a pivoted charging bucket and a discharging spout, an intermediate receptacle supplied by the said bucket and discharging through said spout, pivoted suspending means to which said spout is pivoted outside of said receptacle in order that said spout may be swung toward or from the receptacle in reversing its own position of inclination, a driving shaft, intermediate connections distinct from said receptacle and including flexible connections respectively between said shaft and bucket and between said bucket and spout, and devices for permitting the reverse movement of the last mentioned parts, in order that the bucket and spout may alternately take their operative positions as set forth.

4. In discharging mechanism, a discharge spout, in combination with a weighted rock-shaft provided with depending arms on which said spout is pivoted to swing as described, a rotating shaft, mechanism for driving the same, and gearing between said shafts comprising a gear wheel composed of disks held together in frictional contact by a spring which will yield under a predetermined strain substantially as set forth.

5. In combination with a suspended door and a swinging spout arranged to pass below it when said door is raised, a rock-shaft, devices for suspending said door from said shaft and causing it to rise and fall with the rocking of the latter and additional devices for suspending said spout from said rock-shaft and causing said spout to swing alternately inward and outward with reversal of its position of inclination, simultaneously with the rising and falling of said door.

[Claims 6 to 9 not printed in the Gazette.]

1,063,160. FORMING-MACHINE. BENGT M. W. HANSON, Hartford, Conn., assignor to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed Mar. 12, 1908. Serial No. 420,594. (Cl. 90—13.)



1. A machine including a column, a knee movable upon the column and a spindle for holding a cutting tool, means for moving the knee, a sliding base movable upon the knee, said base having a socket piece, a spring located within said socket piece, a spring operated plunger extending within the socket piece to exert pressure upon the sliding base, means for governing the tension of the spring, a fixture support mounted upon the sliding base, means carried by the fixture support for holding a blank, and a former supported by said column and arranged to vary and control the direction of movement of the sliding base to determine the resultant shape of said blank.

2. A machine including a column, a knee movable upon the column and a spindle for holding a cutting tool, means for moving the knee, a sliding base movable upon the knee, said base having a socket piece, a spring located within the socket piece and seated against the spring, a screw located in said knee, said screw thrusting against the end of said plunger, a fixture support mounted upon the sliding base, means carried by the fixture support for holding a blank, and a former supported by said column and arranged to vary and control the direction of movement of the sliding base to determine the resultant shape of said blank.

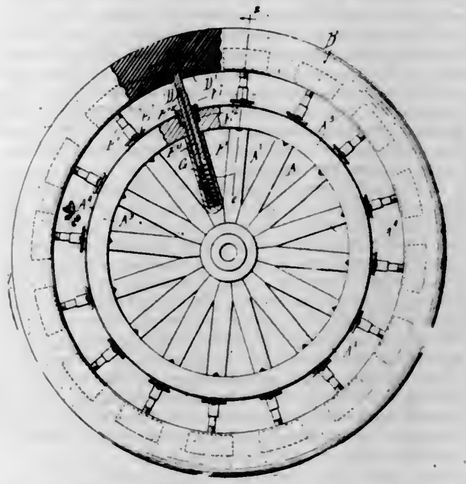
3. A machine including a column, a knee movable upon the column and a spindle for holding a cutting tool, means for moving the knee, a sliding base supported on said knee, means for exerting spring pressure upon said sliding base to move it toward said column, means for varying the tension of the spring, a fixture support mounted upon the sliding base, means carried by the fixture support for holding a blank, and a former secured to said column and arranged to vary and control the direction of movement of the sliding base to determine the resultant shape of the blank.

4. A machine including a knee and a spindle for holding a cutting tool, means for moving the knee, a sliding base supported upon the knee, a fixture support carried by the sliding base, means carried by the fixture support for holding a blank, a bracket secured to the fixture support, an indexing mechanism attached to the fixture support, and means for positioning said bracket with respect to the blank carried by the fixture support.

5. A machine including a knee and a blank support, means for operating the knee, a sliding base mounted on the knee, a fixture support mounted on the sliding base, a bracket adjustably mounted on the fixture support, an indexing plate adjustably mounted on the bracket to support indexing mechanism, and a former arranged to vary and control the direction of movement of the sliding base on the knee to determine the resultant shape of a blank.

[Claims 6 and 7 not printed in the Gazette.]

1,063,161. SPRING-WHEEL. OZRO H. HINDS, Le Mars, Iowa. Filed Sept. 6, 1912. Serial No. 718,893. (Cl. 152—29.)

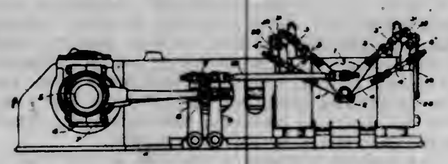


1. The improvement in wheels herein described comprising the combination of an outer elastic tire and an inner rigid body portion having hollow spokes and a rigid rim portion and metal cylindrical casings fixed in such spokes and having cup-like outer portions seated in the rim and felly portion of the body, stuffing-boxes applied to the outer ends of said hollow spokes, piston spokes secured at their outer ends to the elastic tire and extend-

ing thence into the respective spokes of the body portion, said piston spokes having longitudinal bores forming an oil passage and having lateral ports communicating with the outer ends of said passages, means for closing said ports, and springs within the hollow body spokes and operating upon the inner ends of the slidable piston spokes, substantially as set forth.

2. The improvement in spring wheels herein described, comprising an inner rigid body portion having hollow spokes, metal casings lining said spokes and having cup-like portions at their outer ends, packing in said cups, a gland compressing the same, and a metal ring arranged beneath the packing, and piston spokes operating within the casings, said piston spokes having lubricating passages, means whereby oil may be supplied thereto, and springs arranged within the hollow bodies of the spokes, as described.

1,063,162. VALVE-GEAR FOR GAS-ENGINES. JOSEPH M. JENCKES, Oil City, Pa. Filed Aug. 18, 1909. Serial No. 513,434. (Cl. 123—91.)



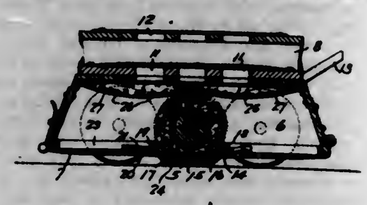
1. A valve gear for four-stroke cycle gas engines consisting of a wrist-plate, means for oscillating said wrist-plate isochronally with the reciprocations of the engine piston, a bell-crank, means connected to said wrist-plate adapted to actuate said bell-crank, valve-actuating mechanism attached to said bell crank adapted to positively actuate a valve of such engine throughout its opening and closing movement, and means for causing said valve-actuating means to actuate said valve in harmony with the four-stroke cycle of the engine.

2. In a valve gear for four-stroke cycle gas engines, the combination with the main shaft and the valves of such engine, of a wrist-plate, means connected to said main shaft adapted to cause the oscillation of said wrist-plate, a bell-crank adapted to be operated by means connected to said wrist-plate, a valve-actuating device carried by said bell-crank positively operating one of said valves throughout its opening and closing movement, a reducing gear adapted to be operated by said main shaft, an operating medium for said valve-actuating device connecting said device and said reducing gear and adapted to harmonize the operation of said valve actuating device with the four-stroke cycle of the engine.

3. In a valve gear for four-stroke cycle gas engines, the combination with the main shaft and the valves of such engine, of a wrist-plate, means connected to said main shaft and adapted to oscillate said wrist-plate isochronally with the reciprocations of the piston of said engine, a bell-crank, valve-actuating means carried by said bell-crank adapted to positively operate one of said valves throughout its opening and closing movement, means connected to said wrist-plate and adapted to operate said bell-crank, a reducing gear adapted to be operated by the crank-pin of said engine, means connecting said reducing gear and said valve actuating means to cause it to engage the stem of said valve at each alternate vibration of said engaging means, for the purpose of actuating said valve in harmony with the four-stroke cycle of said engine.

1,063,163. CARPET-CLEANER. GOTTLOB KLUMPP, Bayonne, N. J. Filed Jan. 4, 1913. Serial No. 740,171. (Cl. 15—60.)

1. In a carpet cleaner, a body having a bottom with an opening therein, a shoe mounted in said opening having a longitudinal slot therethrough and provided with curved sides adjacent thereto, and a flexible strip of material secured to said shoe and the bottom of said cleaner in an air-tight manner and adapted to centralize and flexibly hold said shoe in said opening in a manner to permit the bottom edges of said curved sides to rest on the floor.

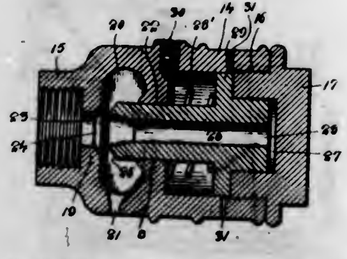


2. In a carpet cleaner, a body having a bottom with an opening therein, a shoe mounted in said opening having a longitudinal slot therethrough and provided with curved sides adjacent to said slot, and a flexible strip of material secured to said shoe and the bottom of said cleaner in an air-tight manner and adapted to centralize and flexibly hold said shoe in said opening in a manner to permit the bottom edges of said curved sides to rest on the floor, said bottom edges having longitudinally-spaced transverse grooves, as and for the purpose set forth.

3. In a carpet cleaner having air-forcing apparatus, a body portion having a bottom opening, a shoe adapted to ride upon the floor and having a central, longitudinal slot therein whereby a nozzle is formed, a flexible strip adapted to position said shoe in said opening and prevent the entrance of air around the same, and a rotatable brush in contact with the floor through said slot, as and for the purpose set forth.

4. In a carpet cleaner having air-forcing apparatus, a body portion having a bottom opening, a shoe adapted to ride upon the floor and having a central, longitudinal opening whereby a nozzle is formed, the portions of said shoe adapted to engage the floor being segmental in form and the curved portions ending in ribs rising above the plane of the shoe, a flexible strip adapted to position said shoe in said opening and prevent the flow of air around the same, and a rotatable brush in contact with the floor through said slot, as and for the purpose set forth.

1,063,164. CYLINDER-COCK AND STEAM-CHEST RELIEF-VALVE. JAMES R. MCCUMBER and THOMAS G. FULCHER, Princeton, W. Va. Filed Aug. 21, 1912. Serial No. 716,273. (Cl. 121—117.)



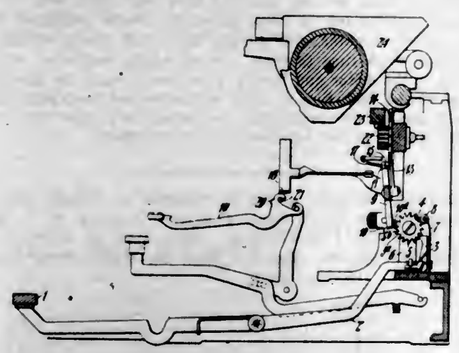
1. In an automatic relief valve, the combination with a casing adapted to be connected to a steam cylinder and having independent fluid pressure and outlet chambers, a floating piston arranged within the casing, a cap detachably engaged in and closing one end of the casing and having a pocket receiving one end of the piston, a seat formed on the casing and receiving the other end of the piston, and resilient means normally holding the piston unseated.

2. In an automatic relief valve, the combination with a casing adapted to be connected to a steam cylinder and having independent fluid pressure and outlet chambers, a floating piston arranged within the casing, a cap detachably engaged in and closing one end of the casing and having a pocket receiving one end of the piston, a seat formed on the casing and receiving the other end of the piston, resilient means normally holding the piston unseated, and means for admitting fluid to the pressure chamber.

3. In an automatic relief valve, the combination with a casing adapted to be connected to a steam cylinder and having independent fluid pressure and outlet chambers, a floating piston arranged within the casing, a cap detachably engaged in and closing one end of the casing and having a pocket receiving one end of the piston, a seat formed on the casing and receiving the other end of the piston, resilient means normally holding the piston unseated, means for admitting fluid to the pressure chamber, the said piston being provided with a fluid passage opening through opposite ends thereof for permitting fluid to pass from the said steam cylinder into the pocket for the seating of the said piston and automatically shutting off communication between the said steam cylinder and the outlet chamber.

4. In an automatic relief valve, the combination with a casing adapted to be connected to a steam cylinder and having independent fluid pressure and outlet chambers, a floating piston arranged within the casing, a cap detachably engaged in and closing one end of the casing and having a pocket receiving one end of the piston, a seat formed on the casing and receiving the other end of the piston, resilient means normally holding the piston unseated, means for admitting fluid to the pressure chamber, the said piston being provided with a fluid passage opening through opposite ends thereof for permitting fluid to pass from the said steam cylinder into the pocket for the seating of the said piston and automatically shutting off communication between the said steam cylinder and the outlet chamber, and a fluid head formed on the piston and working within the pressure chamber.

1,063,165. TYPE-WRITING MACHINE. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed May 8, 1912. Serial No. 695,886. (Cl. 197—82.)



1. In a typewriting machine, a carriage, escapement mechanism therefor including a rocker having a projection thereon, a space-key, and a toothed wheel actuated by said space-key and adapted to engage the projection on the rocker.

2. In a typewriting machine, a carriage, escapement mechanism therefor including a rocker having a projection, a toothed wheel mounted adjacent the rocker and engaging said projection, a space-key, and means for advancing said wheel through said space-key one tooth at a time.

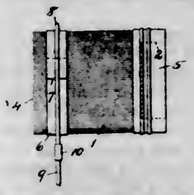
3. In a typewriting machine, a carriage, escapement mechanism therefor including a rocker having a projection, a toothed wheel mounted adjacent the rocker and engaging said projection, a space-key, and a pawl operatively connected to said space-key and engaging the teeth of said wheel.

4. In a typewriting machine, a carriage, escapement mechanism therefor including a rocker, a toothed wheel mounted adjacent to said rocker and engaging therewith, a space-key having an arm extending therefrom, a pawl mounted on said arm and adapted to actuate said wheel, and a detent engaging said wheel.

5. In a typewriting machine, a carriage, escapement mechanism therefor including an escapement wheel, a rocker, a feed dog and detent dog mounted on said rocker, said detent dog having a beveled face adapted to engage a tooth of the escapement wheel, a space-key, and rotary means operated by said space-key and engaging said rocker, said means imparting to said rocker its complete cycle of movement during the down stroke of the space-key.

[Claims 6 to 12 not printed in the Gazette.]

1,063,166. MANUFACTURE OF BRUSHES. HUGH P. MCMILLAN, Baltimore, Md., assignor to Wm. A. Tottle & Co., a Firm composed of William A. Tottle and Morton P. Tottle, Baltimore, Md. Filed Feb. 1, 1912. Serial No. 674,680. (Cl. 15—36.)



1. The improvement in the manufacture of brushes comprising the forming of a bunch of bristles with the flag-ends of the bristles arranged at one end of the bunch and the butt-ends of the bristles arranged at the opposite end of the bunch, temporarily binding the butt-ends of the bristles while the flag-ends are loose; mechanically clamping the flag-ends of the bristles while the butt-ends are temporarily bound; releasing the temporarily-bound butt-ends to allow said butt-ends to spread to receive a cement; applying a cement to the spread butt-ends while the flag-ends remain mechanically clamped; applying a ferrule to the cemented butt-ends and hardening the cement.

2. The improvement in the manufacture of brushes comprising the forming of a bunch of bristles with the flag-ends of the bristles arranged at one end of the bunch and the butt or root-ends of the bristles arranged at the opposite end of the bunch temporarily binding the butt-ends of the bristles, encircling the flag-ends of the bunch of bristles with a flexible band to confine the latter end while the butt-ends are temporarily bound, clamping the flexible band about the flag-ends while the butt-ends remain temporarily clamped to compress and rigidly secure the flag-ends temporarily, releasing the temporarily-bound butt-ends of the bristles to allow said butt-ends to spread, applying a cement to the released and spread butt-ends of the bristles while the flag-ends are rigidly secured, applying a ferrule to the cemented butt-ends of the bristles and hardening the cement at the ferrule-bound butt-ends.

3. The improvement in the manufacture of brushes comprising the forming of a bunch of bristles with the flag-ends of the bristles arranged at one end of the bunch and the butt or root-ends of the bristles arranged at the opposite end of the bunch, inserting a permanent block in the butt-ends of the bristles, placing a permanent ferrule around the butt-ends of the bristles to confine the bristles around the block in the center thereof, encircling the flag-ends of the bristles with a flexible band while the butt-ends are confined by the permanent ferrule to confine the flag-ends, moving the permanent ferrule from the butt-ends toward the flexible band to free the block at the center thereof, forcing the block in the bunch of bristles toward the flexible band at the flag-ends to spread the bristles apart at the butt-ends, applying a cement to the spread butt-ends of the bristles while the flag-ends are confined, returning the block to the cemented butt-ends, returning the permanent ferrule to the cemented butt-ends to again confine the bristles around the block at the center and hardening the cement on the butt-ends of the bristles.

1,063,167. OZONE-PRODUCING MACHINE. DANIEL C. SMITH and FRED. M. HUMMEL, Des Moines, Iowa; said Smith assignor to Anna Hope Smith and Sylvia Elizabeth Smith, Des Moines, Iowa. Filed Aug. 14, 1912. Serial No. 714,985. (Cl. 204—32.)



1. In an ozone producing machine, a frame, a series of radially extending plates carried by said frame, each of said plates having teeth extending toward the center of the frame, a hollow dielectric tube carried by the frame, said tube being centered in said frame between said electrode teeth, a conductor disposed within the tube, and means carried by said tube for centering the latter in the frame.

2. In an ozone producing machine, a frame comprising annular end pieces, longitudinal strips connecting said annular end pieces together, a hollow dielectric, end caps for said dielectric arranged to fit within said annular end pieces, a conductor on the inside of said dielectric, and a series of radially extending plates carried by said annular end pieces, each of said plates having teeth arranged to extend toward the outside of said dielectric.

3. In an ozone producing machine, a frame comprising a pair of annular radially slotted end pieces, a series of radially extending plates carried in the slots in said annular end pieces, each of said plates being provided with inwardly extending teeth, a glass tube, conducting material within said glass tube, insulating caps secured to said glass tube, said insulating caps being arranged to enter the annular openings in said slotted end members and to be held in said openings after centering the tube.

4. In an ozone producing machine, a frame comprising end members slotted radially, a series of radially extending plates carried in the slots in said end members, each of said plates having teeth arranged to extend toward the center of the frame, a hollow dielectric tube carried by the frame, and a metal conductor disposed within said tube.

5. In an ozone producing machine, a frame comprising end members slotted radially, a series of radially extending plates carried in the slots in said end members, each of said plates having teeth arranged to extend toward the center of the frame, a hollow dielectric tube carried by the frame, a metal conductor disposed within said tube, and rings for holding said radially extending plates in position.

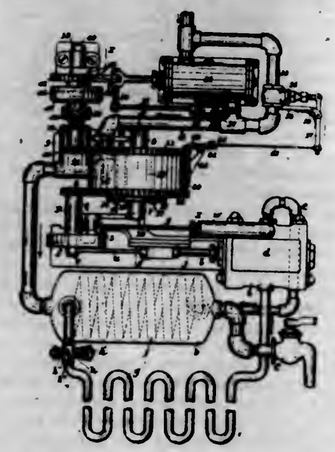
[Claim 6 not printed in the Gazette.]

1,063,168. MOTOR MECHANISM. WILLIAM C. WHITNEY, Newburgh, N. Y., assignor, by direct and mesne assignments, to Whitney Refrigeration Company, a Corporation of New York. Filed Mar. 27, 1912. Serial No. 686,647. (Cl. 253—1.)

1. In a refrigerating apparatus, the combination of a driven element, a conductor for the service-fluid and mechanism for causing the energy developed by the moving service-fluid to drive said element including means for storing the energy developed by the moving service-fluid and means for transmitting the stored energy to said element, substantially as described.

2. In a refrigerating apparatus, the combination of an energy-storing member movable back and forth and normally constrained to move forward, a conductor for the service-fluid, and means, operated by the moving service-fluid, for setting back said energy-storing member from time to time, said means including a service-fluid-pressure-controlled power-transmitting clutch, substantially as described.

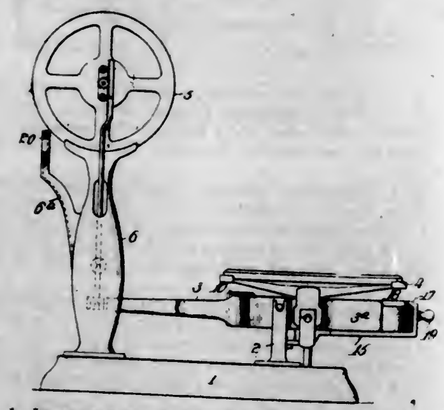
3. In a refrigerating apparatus, the combination of an energy-storing member movable back and forth and normally constrained to move forward, a conductor for the service-fluid having means for alternately allowing and checking the flow of the fluid therethrough, and means, operated by the moving service-fluid, for setting back said energy-storing member from time to time, said means including a normally closed service-fluid-pressure-opened power-transmitting clutch, substantially as described.



4. In a refrigerating apparatus, the combination of an energy storing member movable back and forth and normally constrained to move forward, means, including a service-fluid motor, for setting back said energy-storing member from time to time, and means, having a service-fluid-controlling valve controlled by said member, for conducting the service-fluid to the motor, substantially as described.

5. In a refrigerating apparatus, the combination of an energy-storing member movable back and forth and normally constrained to move forward, means, including a service-fluid motor, for setting back said energy-storing member from time to time, a service-fluid conductor containing the motor and having a by-pass around the latter, and means, including a valve in the by-pass controlled by said member, for controlling the influence of the service-fluid on the motor, substantially as described.

1,063,169. SCALE. ALLEN DE VILBISS, Jr., Toledo, Ohio, assignor to Toledo Scale Company, Newark, N. J., a Corporation of New Jersey. Filed May 23, 1904, Serial No. 209,396. Renewed Sept. 23, 1912. Serial No. 721,925. (Cl. 73—104.)



1. In apparatus of the character described, the combination with a scale beam, indicating means, and load-counterbalancing means, all operatively connected together, of a tare-weight carried by the scale beam and movable longitudinally thereof; a handle lever movable crosswise the scale beam; and operating connections between said lever and the tare weight for converting the cross-wise movement of the former into longitudinal movement of said weight.

2. In apparatus of the character described, the combination with a scale beam, indicating means, and load-counterbalancing means, all operatively connected together and the scale beam having graduations extending across one end thereof; of a tare-weight carried by the scale beam and movable longitudinally thereof; a handle lever movable crosswise the scale beam, in association with the aforesaid graduations thereof; and operating connections between said lever and the tare weight for converting the cross-wise movement of the former into longitudinal movement of said weight.

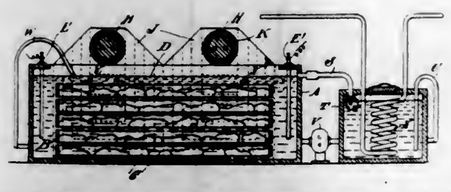
3. In apparatus of the character described, the combination with a scale beam, indicating means, and load-counterbalancing means, all operatively connected together and the scale beam having graduations extending across one end thereof; of a tare-weight carried by the scale beam and movable longitudinally thereof; a handle lever movable crosswise the scale beam and projecting beyond the end of the scale beam and having a pointer extending over the graduations on the latter, and operating connections between the said lever and the tare weight for converting the cross-wise movement of the former into longitudinal movement of said weight.

4. A scale comprising indicating mechanism, a scale lever coöperating therewith and formed at its forward end into a frame 3^a, a guide frame with said frame 3^a, and a tare weight movable within said guide frame and longitudinally of the scale lever, substantially as described.

5. A scale comprising indicating mechanism, a scale lever coöperating therewith, a tare weight movable longitudinally and centrally in said scale lever and having a projecting rack, a pinion mounted in such scale lever and coöperating with the rack, an indicator or pointer, and a rack carried by such pointer and operatively connected with the pinion; substantially as described.

[Claims 6 to 14 not printed in the Gazette.]

1,063,170. ELECTROMAGNETIC APPARATUS. JOHN C. LINCOLN, East Cleveland, Ohio, assignor to The Electric Meat Curing Company, Cleveland, Ohio, a Corporation of Maine. Original application filed Sept. 27, 1909, Serial No. 519,675. Divided and this application filed Oct. 10, 1910. Serial No. 586,271. (Cl. 175—311.)



1. An apparatus comprising a vessel adapted to contain liquid, means for circulating liquid through the vessel, electrodes therein, and a magnet having pole faces outside of the vessel and adapted to cause lines of force transversely of the vessel contents, and means for passing alternating current between the electrodes.

2. An apparatus comprising the combination of a vessel, electrodes therein at the opposite ends of the vessel, and a magnet having pole faces on opposite sides of the vessel, and means for supplying electric current to the electrodes, one electric current to the electrodes and another electric current to the magnet, one of such currents being varied.

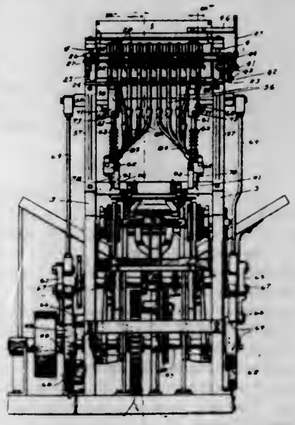
3. An apparatus consisting of a vessel adapted to contain a liquid, and having an open top for the insertion of articles, means for passing an electric current through the liquid, an electromagnet having pole faces on opposite sides of the vessel, and means for supplying current to the magnet, one of such currents being varied with reference to the other.

4. In an apparatus of the character described, the combination of a tank, an electromagnet having pole faces on opposite sides of the tank, said pole faces being of diminishing thickness as they recede from the core, and means for passing current through the tank transversely of the lines of force of the magnet, and means for passing current through the magnet, one of such currents being alternating and the other direct.

5. An apparatus for preserving, consisting of a vessel adapted to contain the articles to be preserved surrounded by a preserving medium, means for passing an electric current through the same, and an electromagnet having pole faces on opposite sides of the vessel, and means for supplying current to the magnet, one of such currents being varied with reference to the other.

[Claims 6 to 17 not printed in the Gazette.]

1,063,171. BOX-NAILING MACHINE. ELMER C. NORTHRUP, San Francisco, Cal., assignor to Automatic Machine Company, San Francisco, Cal., a Corporation of California. Original application filed Feb. 23, 1909, Serial No. 479,640. Divided and this application filed Feb. 2, 1911. Serial No. 606,212. (Cl. 1—16.)



1. In a box making machine, a series of inclined slotted ways, a slidable rod at the lower ends of said ways, a series of brackets slidably mounted on said rod, an abutment on the rod for each bracket, a spring pressing each bracket against its abutment, each bracket having two arms, one of which normally closes a slot in the adjacent way when in normal position, a curved pin carried by the other arm of each bracket and adapted to remove a nail from the slotted way when the bracket is shifted, means for operating said rod to shift said brackets, and means for restraining the shifting movement of any of said brackets without preventing the shifting movement of said rod.

2. In a box making machine, inclined slotted ways for guiding the nails, a slidable rod at the lower ends of said ways, a series of brackets slidably mounted on said rod, each bracket having an arm normally closing the slot in the adjacent way, the other arm of each bracket being provided with a finger for stripping a nail from the adjacent way when the bracket is shifted to uncover the slot, means for yieldingly holding each bracket in a certain relative position on said rod, a second rod adjacent to the first rod, means for detachably engaging any of said brackets with the second rod, means for imparting simultaneous movement to both rods to shift all of the brackets, and means for shifting the first named rod only, whereby those brackets which are engaged with the second named rod are restrained from movement while the other brackets shift with the first rod.

3. In a box making machine, inclined slotted ways for guiding the nails, a slidable rod at the lower ends of said ways, a series of brackets slidably mounted on said rod, each bracket having an arm normally closing the slot in the adjacent way, the other arm of each bracket being provided with a finger for stripping a nail from the adjacent way when the bracket is shifted to uncover the slot, means for yieldingly holding each bracket in a certain relative position on said rod, a second rod adjacent to the first rod, means for detachably engaging any of said brackets with the second rod, a cam at the end of said rods, said cam having a set of projections with a path of movement against the end of one only of said rods, certain of said projections having a path of movement against the ends of both of said rods.

4. In a box making machine, inclined slotted ways for guiding the nails, a slidable rod at the lower ends of said ways, a series of brackets slidably mounted on said rod, each bracket having an arm normally closing the slot in the adjacent way, the other arm of each bracket being provided with a finger for stripping a nail from the adjacent way when the bracket is shifted to uncover the slot, means for yieldingly holding each bracket in a certain relative position on said rod, a second rod adjacent to the first rod, means for detachably engaging any of said brackets with the second rod, a cam at the end of said rods, said cam having a set of projections with a path of movement against the end of one only of said rods, certain of said projections having a path of movement against the ends of both of said rods, a pivoted hopper for delivering nails to said ways, a rock lever pivoted adjacent said cam, an arm and a link connecting said rock lever to said cam, a series of pins on said cam, and a pawl on said rock lever for operating against said pins to actuate the cam.

1,063,172. PRODUCING AMINO-ANTHRAQUINONES AND DERIVATIVES THEREOF. CHRISTIAN RAMPINI, deceased, by William E. Warland, administrator, Brooklyn, N. Y., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Filed Mar 15, 1912. Serial No. 684,081. (Cl. 23—24.)

1. The process of producing alpha-amino-anthraquinones substituted in the amino group, by heating alpha-anthraquinone-sulfonic acids with organic amins in the presence of water and of an oxidising agent.

2. The process of producing alpha-methyl-amino-anthraquinone by heating anthraquinone-alpha-sulfonic acid with monomethylamin in the presence of water and in the presence of an oxidizing agent.

3. The process of producing alpha-methylamino-anthraquinone by heating anthraquinone-alpha-sulfonic acid with monomethylamin in the presence of water and in the presence of potassium bromate.

1,063,173. PRODUCING AMINO-ANTHRAQUINONES AND DERIVATIVES THEREOF. CHRISTIAN RAMPINI, deceased, by William E. Warland, administrator, Brooklyn, N. Y., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Filed Mar. 15, 1912. Serial No. 684,082. (Cl. 23—24.)

1. The process of producing amino-anthraquinones by heating anthraquinone-sulfonic acids with aqueous ammonia in the presence of an oxidizing agent.

2. The process of producing 2-amino-anthraquinone by heating anthraquinone-2-sulfonic acid with aqueous ammonia in the presence of an oxidizing agent.

3. The process of producing 2-amino-anthraquinone by heating anthraquinone-2-sulfonic acid with aqueous ammonia in the presence of copper sulfate.

1,063,174. BOBBIN. GEORGE HILLARD BENJAMIN, New York, N. Y. Original application filed Dec. 22, 1911, Serial No. 667,294. Divided and this application filed June 25, 1912. Serial No. 705,728. (Cl. 242—120.)

1. In combination with a spindle, a bobbin, and means interposed between the top of the spindle whirl and the bottom of the bobbin for maintaining a space between such parts.



2. In combination with a spindle, a bobbin, and means forming a part of the bobbin for maintaining a space between the top of the spindle whirl and the bottom of the bobbin.

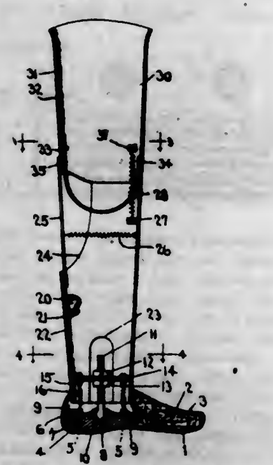
3. In combination with a spindle, a bobbin, and a device interposed between the top of the spindle whirl and the bottom of the bobbin adapted to maintain a space between the two.

4. In combination with a spindle, a bobbin, and means for maintaining a distance between the top of the spindle whirl and the bottom of the bobbin, whereby thread carried by the bobbin may move freely through such space.

5. In combination with a spindle, a bobbin, means for centering the bobbin on the spindle, and means interposed between the bottom of the spindle and the spindle for elevating the bottom of the bobbin above the top of the spindle whirl.

[Claim 6 not printed in the Gazette.]

1,063,175. ARTIFICIAL LEG. SAMUEL R. ANDERSON, Quincy, Ill. Filed Dec. 2, 1912. Serial No. 734,612. (Cl. 3—3.)



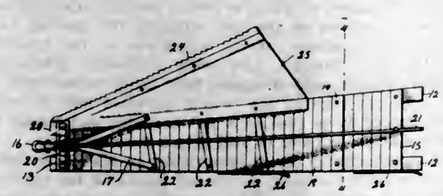
1. In an artificial limb, the combination with an outer shell-like member having openings in each side at its outer end, and a plate secured across the interior of said member opposite said openings and pierced with holes; of another member forming the extremity of the limb and having an internal socket, a ball in said socket, a threaded shank projecting from the ball through the central hole in said plate, nuts on said shank at opposite sides of the plate and accessible through said openings, and yielding connections between the extreme member and the remaining holes in the plate of said outer member.

2. In an artificial leg, the combination with upper and lower leg-sections of shell-like configuration, the lower section having a deep notch in its rear side at its upper end, hinge members attached respectively to said sections and pivotally connected with each other, and a guard for the lower end of the thigh-section consisting of a metal strip having its rear end attached to the interior of this section, its body bent downward beneath the end thereof and standing within said deep notch, and its front end secured inside the front of said thigh-section; of a strap secured within the rear of the thigh-section with its body spanning said deep notch of the lower section and secured inside the same at the bottom of such notch, a spring connecting the front of the lower section with said strap between the ends of the latter, and yielding means for normally straightening the leg.

3. In an artificial leg, the combination with upper and lower leg-sections of shell-like configuration, hinge members attached respectively thereto and pivotally connected with each other, cross bars within said sections, and springs connecting said bars; of a strap secured at its lower end within the upper end of the lower leg-section and at its upper end within the lower end of the thigh-section, and a contractile spring connecting the strap between said points of attachment with the front portion of the lower leg-section.

4. In an artificial leg, the combination with upper and lower leg-sections of shell-like configuration, hinge members attached respectively thereto and pivotally connected with each other, cross bars within said sections, and springs connecting said bars; of means for limiting the bending of the lower leg-section in one direction, and a guard for the lower end of the thigh-section consisting of a sheet of metal cut initially into Y-shape with its single arm secured inside the rear of said thigh-section, its body bent downward beneath the end thereof, and its forked end secured inside the front of said section, substantially as described.

1,063,176. BRUSH-CUTTER. INGEBRIGH H. OLSON, THOMAS A. ROREM, and JOHN H. HILL, Tofield, Alberta, Canada, assignors of one-fourth to John Cormack and Henry Arthur Mackie, Edmonton, Canada. Filed July 30, 1912. Serial No. 712,359. (Cl. 55—60.)



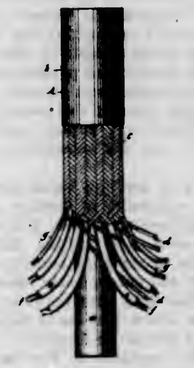
1. A brush cutting drag comprising a body framework provided with means whereby traction power may be applied thereto, a series of braces extending outward from one side of said framework, a brush cutter mounted at the outer ends of said braces and disposed at an acute angle to the body of the drag, a plate attached to said body and to said braces and cutter, said plate overlying said braces and filling the space between the said cutter and the body of said drag, and means for resisting the side thrust of said cutter to prevent lateral movement of the drag under the influence of such thrust.

2. A brush cutting drag comprising a body provided with means whereby traction power may be applied thereto, a brush cutter connected with one side of said body, but extended outward therefrom at an acute angle thereto, and guiding blades projecting below said body on the side thereof opposite said cutter, and serving to oppose the thrust of the latter so as to prevent sidewise movement of the drag as it is drawn forward, the rear ends of said guiding blades being turned outwardly to increase their thrust-resisting action.

3. A brush cutting drag comprising a body provided with means whereby traction power may be applied thereto, a brush cutter connected with one side of said body, but extended outward therefrom at an acute angle thereto, an inclined guard centrally disposed above the body of the drag and having its forward end highest so that it slants downward rearwardly, and means for resisting the thrust of the said cutter to prevent lateral movement of the drag under the influence of such thrust.

REISSUES.

13,568. BRAIDED FABRIC AND PROCESS OF MAKING IT. HENRY Z. COBB, Winchester, Mass., assignor, by mesne assignments, to Revere Rubber Company, a Corporation of Rhode Island. Filed Nov. 16, 1911. Serial No. 660,727. Original application filed Aug. 6, 1906, Serial No. 329,401. Divided and application filed May 28, 1907, Serial No. 376,198. Original No. 937,021, dated Oct. 12, 1909. (Cl. 28—25.)



1. The process which consists in simultaneously braiding a plurality of distinct and parallel webs and a distinct supplemental web of strands crossing between and interlacing with those of the parallel webs, and uniting them, and introducing rubber between the strands of the respective webs, and subsequently vulcanizing the fabric.

2. The process which consists in simultaneously braiding a plurality of distinct and parallel concentric tubular webs and a distinct supplemental web of strands crossing between and interlacing with those of the parallel webs, and uniting them, and introducing rubber between the strands of the respective webs, and subsequently vulcanizing the fabric.

3. The process of braiding which consists in simultaneously braiding a plurality of distinct and parallel webs and a distinct supplemental web of strands interlacing with those of the parallel webs, and uniting them, and simultaneously introducing between the parallel webs longitudinal strands of rubber, and subsequently vulcanizing the fabric to unite the braided webs with the intervening rubber.

4. The process which consists in simultaneously braiding a plurality of distinct and parallel concentric tubular webs and a distinct supplemental web of strands interlacing with those of said tubular webs, and uniting them, and simultaneously introducing between the parallel tubular webs longitudinal strands of rubber, and subsequently vulcanizing the fabric to unite the braided webs with the intervening rubber.

5. The improved fabric consisting of distinct parallel braided webs each complete in itself and a distinct supplemental web of interlaced braided strands uniting the parallel webs.

6. The improved hose consisting of distinct outer and inner parallel tubular braided webs, and a distinct supplemental web of braided strands uniting the parallel webs.

7. The improved braided fabric consisting of distinct parallel braided webs, intervening longitudinal strands between said webs, and a distinct supplemental web of interlaced braided strands uniting the parallel webs.

8. The improved hose consisting of distinct outer and inner parallel tubular braided webs, intervening longitudinal strands between said webs, and a distinct supplemental web of braided strands uniting the parallel webs.

9. The improved braided fabric consisting of two distinct parallel braided webs and a distinct supplemental web of braided strands uniting them, and having intervening longitudinal strands of rubber united by vulcanization to the braided webs.

10. The improved hose consisting of distinct outer and inner parallel tubular braided webs and a distinct supplemental web of interlaced braided strands uniting them, and having intervening longitudinal strands of rubber, and a lining tube of rubber, all united by vulcanization.

11. The process which consists in simultaneously braiding a plurality of distinct and parallel webs and distinct supplemental strands crossing between and interlacing with those of the parallel webs, and uniting them, and introducing rubber between the strands of the respective webs, and subsequently vulcanizing the fabric.

12. The process which consists in simultaneously braiding a plurality of distinct and parallel concentric tubular webs and distinct supplemental strands crossing between and interlacing with those of the parallel webs, and uniting them, and introducing rubber between the strands of the respective webs, and subsequently vulcanizing the fabric.

13. The process of braiding which consists in simultaneously braiding a plurality of distinct and parallel webs and distinct supplemental strands interlacing with those of the parallel webs, and uniting them, and simultaneously introducing between the parallel webs longitudinal strands of rubber, and subsequently vulcanizing the fabric to unite the braided webs with the intervening rubber.

14. The process which consists in simultaneously braiding a plurality of distinct and parallel concentric tubular webs and distinct supplemental strands interlacing with those of said tubular webs, and uniting them, and simultaneously introducing between the parallel tubular webs longitudinal strands of rubber, and subsequently vulcanizing the fabric to unite the braided webs with the intervening rubber.

15. The improved braided fabric consisting of distinct parallel braided webs each complete in itself and distinct supplemental strands interbraided with and uniting the parallel webs.

16. The improved hose consisting of distinct outer and inner parallel tubular braided webs, and distinct supplemental strands uniting the parallel webs.

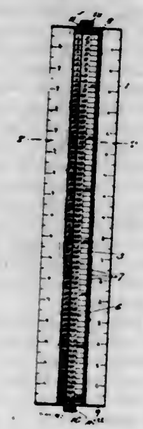
17. The improved braided fabric consisting of distinct parallel braided webs, intervening longitudinal strands between said webs, and distinct supplemental strands uniting the parallel webs.

18. The improved hose consisting of distinct outer and inner parallel tubular braided webs, intervening longitudinal strands between said webs, and distinct supplemental strands uniting the parallel webs.

19. The improved braided fabric consisting of two distinct parallel braided webs and distinct supplemental strands uniting them, and having intervening longitudinal strands of rubber united by vulcanization to the braided webs.

20. The improved hose consisting of distinct outer and inner parallel tubular braided webs and distinct supplemental interlaced strands uniting them, and having intervening longitudinal strands of rubber, and a lining tube of rubber, all united by vulcanization.

13,569. CALCULATING DEVICE. SIDNEY R. LAMB, Woodcliff Lake, N. J. Filed Dec. 21, 1909. Serial No. 534,375. Original No. 909,621, dated Jan. 12, 1909, Serial No. 423,054. (Cl. 235—87.)



1. A calculating device comprising an elongated body, an opening in the body, a cylinder journaled for rotation therein, a portion of which is visible through said opening, a row of numbers on the body adjacent the opening, and a plurality of strips running lengthwise of the cylinder and carrying numbers, and being removably positioned on the cylinder, said elongated body being formed with a thin straight edge at the bottom provided with a scale and adapted to be used as a straight edge.

2. A calculating device comprising an elongated body, an opening in the body, a cylinder journaled for rotation therein, a portion of which is visible through said opening, a row of numbers on the body adjacent the opening, and a plurality of strips running lengthwise of the cylinder, and carrying numbers, and being removably positioned on the cylinder, said elongated body being formed with a thin straight edge at the bottom provided with a scale and adapted to be used as a straight edge and means at the ends of the device to rotate the cylinder.

3. A calculating device comprising an elongated body, an opening in the body, a cylinder journaled for rotation therein, a portion of which is visible through said opening, a row of numbers on the body adjacent the opening, and a plurality of strips running lengthwise of the cylinder and carrying numbers, and being removably positioned on the cylinder, said elongated body being formed with a thin straight edge at the bottom provided with a scale and adapted to be used as a straight edge and means at the end of the cylinder to hold it in a fixed position.

4. A calculating device comprising an elongated body, an opening in the body, a cylinder journaled for rotation therein, a portion of which is visible through said opening, a row of numbers on the body adjacent the opening, and a plurality of strips running lengthwise of the cylinder and carrying numbers, and being removably positioned on the cylinder, said elongated body being formed with a thin straight edge at the bottom provided with a scale and adapted to be used as a straight edge, means at the ends of the device to rotate the cylinder and means at the end of the cylinder to hold it in a fixed position.

5. A calculating device, comprising an elongated horizontal body having a longitudinal cylindrical opening bored therethrough and a slot in its top extending the full length thereof, leading into the said opening, the body being provided with a row of numbers adjacent to the slot, plates secured to ends of the body, a cylinder in the opening of the body and provided with removable strips extending lengthwise thereof and carrying numbers, pins journaled in the end plates and forming bearings for the cylinder and provided with handles at their ends, and yielding means for holding the cylinder from turning and permitting intermittent movement thereof.

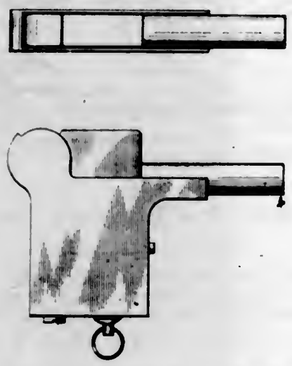
6. A calculating device comprising an elongated chambered body having a longitudinal slot or sight opening, a cylinder mounted to rotate within the body, a series of numbers arranged on the body adjacent the sight opening, a plurality of longitudinally arranged number-bearing strips removably positioned on the cylinder, manually operated means for rotating the cylinders to bring different number-bearing strips thereon into position opposite the sight opening, and means at one end of the body formed to release the strips on the cylinder to permit the insertion and removal of the strips without removing the cylinder from the body.

7. A calculating device comprising an elongated horizontal chambered body having a longitudinal slot or sight opening in its top side, a cylinder mounted to rotate within the body, a series of numbers arranged on the body adjacent the sight opening, a plurality of longitudinally arranged number-bearing strips removably positioned on the cylinder, manually operated means for rotating the cylinder to bring different number-bearing strips thereon into position opposite the sight opening, and means at one end of the body formed to release the strips on the cylinder to permit the insertion and removal of the strips without removing the cylinder from the body, said body being formed with a laterally projecting longitudinally extending bottom straight edge.

8. A calculating device comprising an elongated horizontal chambered body having a longitudinal slot or sight opening in its top side, a cylinder mounted to rotate within the body, a series of numbers arranged on the body adjacent the sight opening, a series of longitudinally arranged number-bearing strips on the cylinder, and manually operated means for turning the cylinder to bring different number-bearing strips thereon into position beneath the sight opening, said body being formed with a laterally projecting tapered bottom flange or part forming a longitudinally extending knife edge.

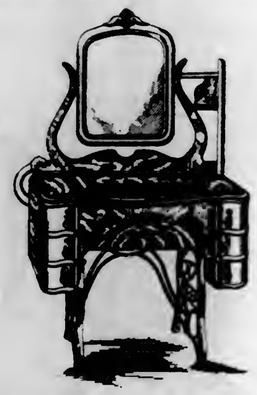
DESIGNS.

44,080. CASING FOR CIGAR-LIGHTERS. PARNAG A. ADAMIAN and ANTON DAHAN, Boston, Mass. Filed Nov. 25, 1912. Serial No. 733,539. Term of patent 14 years.



The ornamental design for a casing for cigar lighters, as shown.

44,081. SEWING-MACHINE TABLE AND STAND. HENRY E. BRYANT, Jacksonville, Fla. Filed Sept. 23, 1911. Serial No. 651,002. Term of patent 14 years.



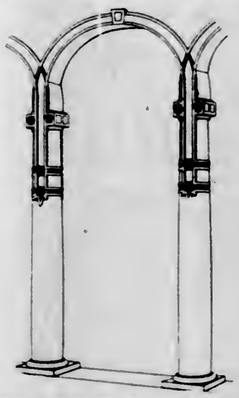
The ornamental design for a sewing machine table and stand, as shown and described.

44,082. CAP FOR TIRE-VALVES. WILBUR B. BURKE, Cleveland, Ohio. Filed Mar. 19, 1913. Serial No. 755,546. Term of patent 14 years.



The ornamental design for a cap for tire valves, as shown.

44,083. CAPITAL AND ARCH. ALEXANDER AIMWELL CANTIN, New York, N. Y. Filed Jan. 25, 1913. Serial No. 744,247. Term of patent 14 years.



The ornamental design for capital and arch, as shown.

5. The improved fabric consisting of distinct parallel braided webs each complete in itself and a distinct supplemental web of interlaced braided strands uniting the parallel webs.

6. The improved hose consisting of distinct outer and inner parallel tubular braided webs, and a distinct supplemental web of braided strands uniting the parallel webs.

7. The improved braided fabric consisting of distinct parallel braided webs, intervening longitudinal strands between said webs, and a distinct supplemental web of interlaced braided strands uniting the parallel webs.

8. The improved hose consisting of distinct outer and inner parallel tubular braided webs, intervening longitudinal strands between said webs, and a distinct supplemental web of braided strands uniting the parallel webs.

9. The improved braided fabric consisting of two distinct parallel braided webs and a distinct supplemental web of braided strands uniting them, and having intervening longitudinal strands of rubber united by vulcanization to the braided webs.

10. The improved hose consisting of distinct outer and inner parallel tubular braided webs and a distinct supplemental web of interlaced braided strands uniting them, and having intervening longitudinal strands of rubber, and a lining tube of rubber, all united by vulcanization.

11. The process which consists in simultaneously braiding a plurality of distinct and parallel webs and distinct supplemental strands crossing between and interlacing with those of the parallel webs, and uniting them, and introducing rubber between the strands of the respective webs, and subsequently vulcanizing the fabric.

12. The process which consists in simultaneously braiding a plurality of distinct and parallel concentric tubular webs and distinct supplemental strands crossing between and interlacing with those of the parallel webs, and uniting them, and introducing rubber between the strands of the respective webs, and subsequently vulcanizing the fabric.

13. The process of braiding which consists in simultaneously braiding a plurality of distinct and parallel webs and distinct supplemental strands interlacing with those of the parallel webs, and uniting them, and simultaneously introducing between the parallel webs longitudinal strands of rubber, and subsequently vulcanizing the fabric to unite the braided webs with the intervening rubber.

14. The process which consists in simultaneously braiding a plurality of distinct and parallel concentric tubular webs and distinct supplemental strands interlacing with those of said tubular webs, and uniting them, and simultaneously introducing between the parallel tubular webs longitudinal strands of rubber, and subsequently vulcanizing the fabric to unite the braided webs with the intervening rubber.

15. The improved braided fabric consisting of distinct parallel braided webs each complete in itself and distinct supplemental strands interbraided with and uniting the parallel webs.

16. The improved hose consisting of distinct outer and inner parallel tubular braided webs, and distinct supplemental strands uniting the parallel webs.

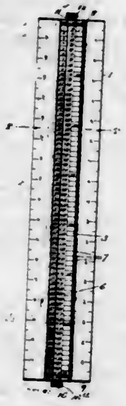
17. The improved braided fabric consisting of distinct parallel braided webs, intervening longitudinal strands between said webs, and distinct supplemental strands uniting the parallel webs.

18. The improved hose consisting of distinct outer and inner parallel tubular braided webs, intervening longitudinal strands between said webs, and distinct supplemental strands uniting the parallel webs.

19. The improved braided fabric consisting of two distinct parallel braided webs and distinct supplemental strands uniting them, and having intervening longitudinal strands of rubber united by vulcanization to the braided webs.

20. The improved hose consisting of distinct outer and inner parallel tubular braided webs and distinct supplemental interlaced strands uniting them, and having intervening longitudinal strands of rubber, and a lining tube of rubber, all united by vulcanization.

13,569. CALCULATING DEVICE. SIDNEY R. LAMB, Woodcliff Lake, N. J. Filed Dec. 21, 1909. Serial No. 534,375. Original No. 909,621, dated Jan. 12, 1909, Serial No. 423,054. (Cl. 235—87.)



1. A calculating device comprising an elongated body, an opening in the body, a cylinder journaled for rotation therein, a portion of which is visible through said opening, a row of numbers on the body adjacent the opening, and a plurality of strips running lengthwise of the cylinder and carrying numbers, and being removably positioned on the cylinder, said elongated body being formed with a thin straight edge at the bottom provided with a scale and adapted to be used as a straight edge.

2. A calculating device comprising an elongated body, an opening in the body, a cylinder journaled for rotation therein, a portion of which is visible through said opening, a row of numbers on the body adjacent the opening, and a plurality of strips running lengthwise of the cylinder, and carrying numbers, and being removably positioned on the cylinder, said elongated body being formed with a thin straight edge at the bottom provided with a scale and adapted to be used as a straight edge and means at the ends of the device to rotate the cylinder.

3. A calculating device comprising an elongated body, an opening in the body, a cylinder journaled for rotation therein, a portion of which is visible through said opening, a row of numbers on the body adjacent the opening, and a plurality of strips running lengthwise of the cylinder and carrying numbers, and being removably positioned on the cylinder, said elongated body being formed with a thin straight edge at the bottom provided with a scale and adapted to be used as a straight edge and means at the end of the cylinder to hold it in a fixed position.

4. A calculating device comprising an elongated body, an opening in the body, a cylinder journaled for rotation therein, a portion of which is visible through said opening, a row of numbers on the body adjacent the opening, and a plurality of strips running lengthwise of the cylinder and carrying numbers, and being removably positioned on the cylinder, said elongated body being formed with a thin straight edge at the bottom provided with a scale and adapted to be used as a straight edge, means at the ends of the device to rotate the cylinder and means at the end of the cylinder to hold it in a fixed position.

5. A calculating device, comprising an elongated horizontal body having a longitudinal cylindrical opening bored therethrough and a slot in its top extending the full length thereof, leading into the said opening, the body being provided with a row of numbers adjacent to the slot, plates secured to ends of the body, a cylinder in the opening of the body and provided with removable strips extending lengthwise thereof and carrying numbers, pins journaled in the end plates and forming bearings for the cylinder and provided with handles at their ends, and yielding means for holding the cylinder from turning and permitting intermittent movement thereof.

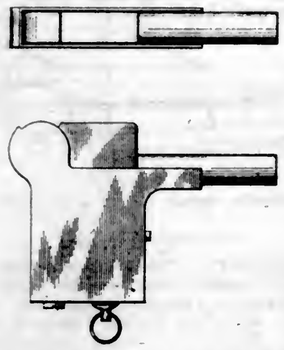
6. A calculating device comprising an elongated chambered body having a longitudinal slot or sight opening, a cylinder mounted to rotate within the body, a series of numbers arranged on the body adjacent the sight opening, a plurality of longitudinally arranged number-bearing strips removably positioned on the cylinder, manually operated means for rotating the cylinders to bring different number-bearing strips thereon into position opposite the sight opening, and means at one end of the body formed to release the strips on the cylinder to permit the insertion and removal of the strips without removing the cylinder from the body.

7. A calculating device comprising an elongated horizontal chambered body having a longitudinal slot or sight opening in its top side, a cylinder mounted to rotate within the body, a series of numbers arranged on the body adjacent the sight opening, a plurality of longitudinally arranged number-bearing strips removably positioned on the cylinder, manually operated means for rotating the cylinder to bring different number-bearing strips thereon into position opposite the sight opening, and means at one end of the body formed to release the strips on the cylinder to permit the insertion and removal of the strips without removing the cylinder from the body, said body being formed with a laterally projecting longitudinally extending bottom straight edge.

8. A calculating device comprising an elongated horizontal chambered body having a longitudinal slot or sight opening in its top side, a cylinder mounted to rotate within the body, a series of numbers arranged on the body adjacent the sight opening, a series of longitudinally arranged number-bearing strips on the cylinder, and manually operated means for turning the cylinder to bring different number-bearing strips thereon into position beneath the sight opening, said body being formed with a laterally projecting tapered bottom flange or part forming a longitudinally extending knife edge.

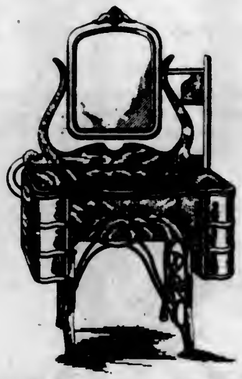
DESIGNS.

44,080. CASING FOR CIGAR-LIGHTERS. PARNAG A. ADAMIAN and ANTON DAHAN, Boston, Mass. Filed Nov. 25, 1912. Serial No. 733,539. Term of patent 14 years.



The ornamental design for a casing for cigar lighters, as shown.

44,081. SEWING-MACHINE TABLE AND STAND. HENRY E. BRYANT, Jacksonville, Fla. Filed Sept. 23, 1911. Serial No. 651,002. Term of patent 14 years.



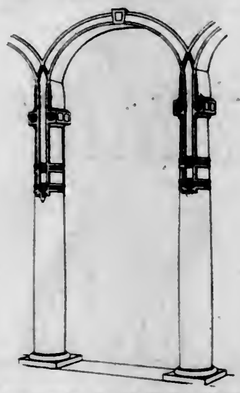
The ornamental design for a sewing machine table and stand, as shown and described.

44,082. CAP FOR TIRE-VALVES. WILBUR B. BURKE, Cleveland, Ohio. Filed Mar. 19, 1913. Serial No. 755,546. Term of patent 14 years.



The ornamental design for a cap for tire valves, as shown.

44,083. CAPITAL AND ARCH. ALEXANDER AIMWELL CANTIN, New York, N. Y. Filed Jan. 25, 1913. Serial No. 744,247. Term of patent 14 years.



The ornamental design for capital and arch, as shown.

44,084. CAPITAL AND ARCHITRAVE. ALEXANDER AIMWELL CANTIN, New York, N. Y. Filed Jan. 25, 1913. Serial No. 744,248. Term of patent 14 years.



The ornamental design for capital and architrave, as shown.

44,085. MALE DIE FOR SEALS. HERBERT WHEATON CONGDON, New York, N. Y., assignor to The Delta Upsilon Fraternity, New York, N. Y., a Corporation of New York. Filed Apr. 11, 1912. Serial No. 690,177. Term of patent 14 years.



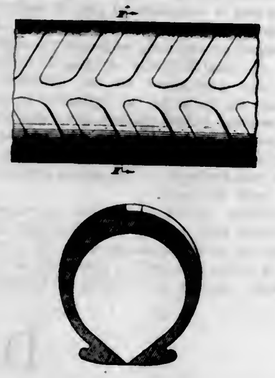
The ornamental design for a male die for a seal, as shown.

44,086. REFLECTOR. JAMES R. CRAVATH, Chicago, Ill., assignor to National X-Ray Reflector Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 14, 1913. Serial No. 761,068. Term of patent 7 years.



The ornamental design for a reflector, as shown.

44,087. AUTOMOBILE-TIRE. CHARLES A. DANIEL, Philadelphia, Pa. Filed Feb. 3, 1912. Serial No. 675,353. Term of patent 14 years.



The ornamental design for an automobile tire as shown.

44,088. AUTOTRUCK-BODY. JAMES C. DOYLE, Portland, Oreg. Filed Jan. 19, 1912. Serial No. 672,211. Term of patent 7 years.



The ornamental design for an auto truck body, as shown.

44,089. EMBLEMATIC COLLAR ORNAMENT. EDWARD F. DURAND, Columbus, Ohio, assignor to The Supreme Lodge, Knights of Pythias, a Corporation. Filed Oct. 19, 1912. Serial No. 726,814. Term of patent 14 years.



The ornamental design for an emblematic collar ornament, as shown.

44,090. HELMET-SHIELD. EDWARD F. DURAND, Columbus, Ohio, assignor to The Supreme Lodge, Knights of Pythias, a Corporation. Filed Oct. 19, 1912. Serial No. 726,815. Term of patent 14 years.



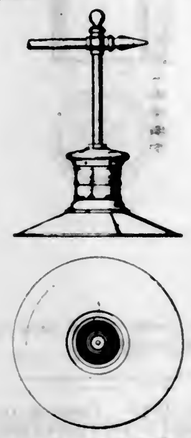
The ornamental design for a helmet shield, as shown.

44,091. CAP-FRONT ORNAMENT. EDWARD F. DURAND, Columbus, Ohio, assignor to The Supreme Lodge, Knights of Pythias, a Corporation. Filed Oct. 19, 1912. Serial No. 726,816. Term of patent 14 years.



The ornamental design for a cap-front ornament, as shown.

44,092. REFLECTOR. ALFRED C. EINSTEIN, St. Louis, Mo. Filed Feb. 10, 1913. Serial No. 747,567. Term of patent 14 years.



The ornamental design for a reflector, as shown.

44,093. METALLIC STORAGE-CABINET. CLAUD A. ELLIS, St. Charles, Ill., assignor to The Faultless Iron Works, St. Charles, Ill. Filed Jan. 24, 1913. Serial No. 744,029. Term of patent 14 years.



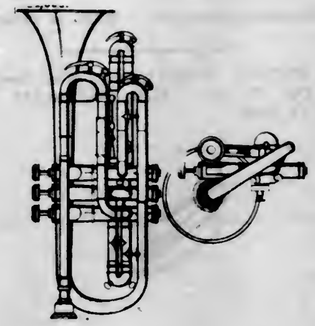
The ornamental design for a metallic storage cabinet, as shown.

44,094. WATCH-HOLDER. CHARLES H. FRASARD, Detroit, Mich. Filed Mar. 31, 1913. Serial No. 758,039. Term of patent 14 years.



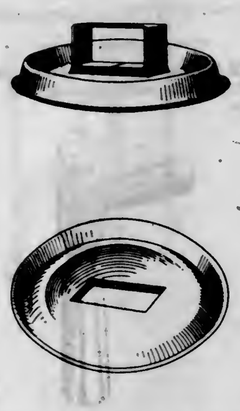
The ornamental design for a watch holder, as shown.

44,095. CORNET. WALTER A. FRENCH, Kansas City, Mo. Filed Mar. 17, 1913. Serial No. 755,037. Term of patent 14 years.



The ornamental design for a cornet, as shown.

44,096. MATCH-BOX HOLDER. JOHN L. GAFFNEY, Chicago, Ill. Filed Nov. 15, 1912. Serial No. 731,609. Term of patent 7 years.



The ornamental design for a match box holder, as shown.

44,097. DRESS. JACOB J. GOLDMAN, Mount Vernon, N. Y. Filed Feb. 27, 1913. Serial No. 751,167. Term of patent 3½ years.



The ornamental design for a dress, as shown.

44,098. BUTTON. ROBERT GORTON, West Newton, Mass. Filed Feb. 15, 1913. Serial No. 748,742. Term of patent 14 years.





The ornamental design for a button as shown.

44,099. DOOR-KNOB. ANTONI GRIBKO, Hatfield, Mass. Filed Feb. 17, 1913. Serial No. 749,050. Term of patent 3½ years.



The ornamental design for a door knob, as shown.

44,100. DOME-TOP TOILET-POWDER CAN. AMBROSE J. GUIDRY, New Orleans, La., assignor to Finlay Dicks & Co. Ltd., New Orleans, La. Filed July 1, 1912. Serial No. 707,109. Term of patent 14 years.



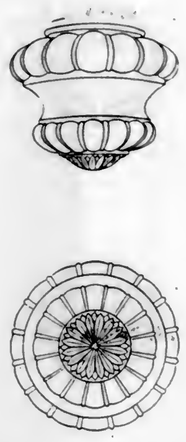
The ornamental design for a dome-top toilet-powder can, as shown and described.

44,101. FONT OF TYPE. FRANK S. GUILD, Merchantville, N. J., assignor to The Curtis Publishing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 30, 1912. Serial No. 687,531. Term of patent 14 years.

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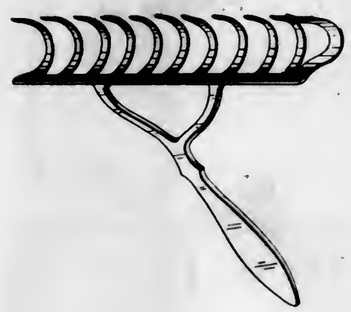
The design for a font of type shown in the accompanying drawing.

44,102. LAMP-SHADE. WILLIAM FRANK M. HAWE, Pittsburgh, Pa., assignor to Macbeth-Evans Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 20, 1913. Serial No. 755,801. Term of patent 14 years.



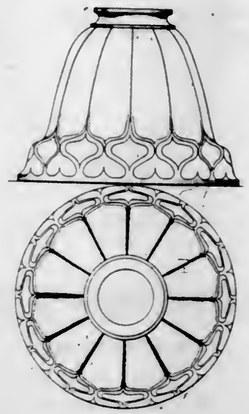
The ornamental design for a lamp shade as shown.

44,103. ASPARAGUS-HOLDER. ADOLF HEPNER, Munich, Germany. Filed Nov. 30, 1912. Serial No. 734,399. Term of patent 14 years.



The ornamental design for an asparagus-holder, as shown.

44,104. LAMP-SHADE. ERNEST W. HUTTIG, Pittsburgh, Pa., assignor to Jefferson Glass Company, Follansbee, W. Va., a Corporation. Filed Mar. 29, 1913. Serial No. 757,702. Term of patent 7 years.



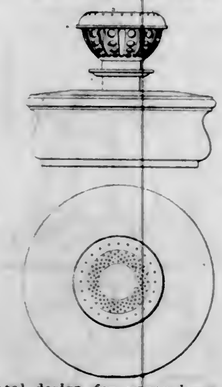
The ornamental design for a lamp shade as shown.

44,105. CABINET FOR TALKING-MACHINES. ELDRIDGE R. JOHNSON, Merion, Pa., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Dec. 27, 1912. Serial No. 738,958. Term of patent 14 years.



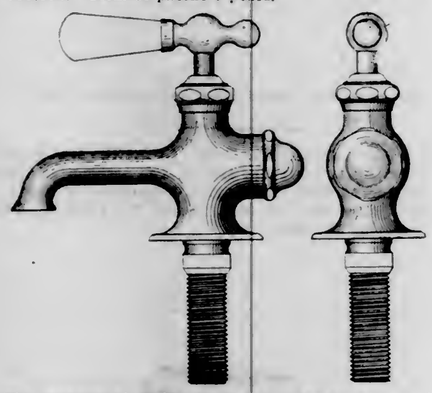
The ornamental design for a cabinet for a talking machine, as shown.

44,106. VAPOR-LAMP. CHARLES NELSON, New York, N. Y., assignor to S. Sternau & Company, New York, N. Y., a Copartnership composed of Sigmund Sternau and Lionel Strassburger. Filed Jan. 17, 1913. Serial No. 742,731. Term of patent 7 years.



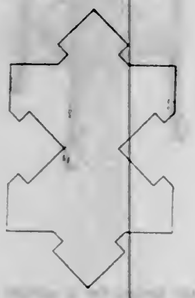
The ornamental design for vapor lamp, as shown and described.

44,107. FAUCET. WILLIAM G. NEWTON, New Haven, Conn., assignor to The Peck Bros. & Co., New Haven, Conn., a Corporation. Filed Mar. 19, 1913. Serial No. 755,554. Term of patent 7 years.



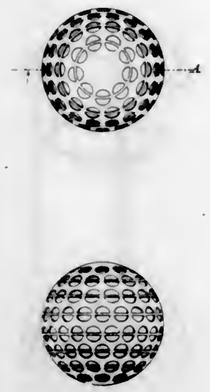
The ornamental design for a faucet, as shown.

44,108. TILE. EDWIN PARKINSON, Ridgefield Park, N. J., assignor to David E. Kennedy, Incorporated, a Corporation of New York. Filed Jan. 25, 1912. Serial No. 673,454. Term of patent 14 years.



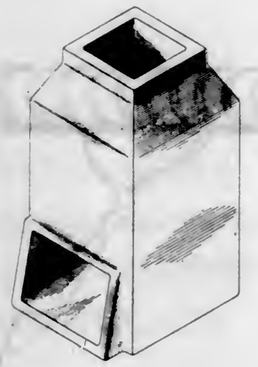
The ornamental design for a tile, as shown.

44,109. GOLF-BALL. HAROLD D. PENNEY, Pelham, N. Y., assignor to The St. Mungo Manufacturing Company of America, Newark, N. J. Filed Dec. 21, 1911. Serial No. 667,247. Term of patent 7 years.



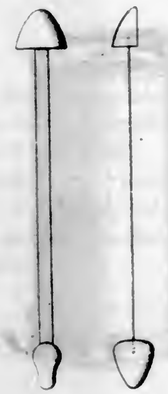
The ornamental design for a golf ball as shown.

44,110. GARBAGE-RECEPTACLE. PAUL PERSSON, Chicago, Ill. Filed Jan. 28, 1913. Serial No. 744,773. Term of patent 14 years.



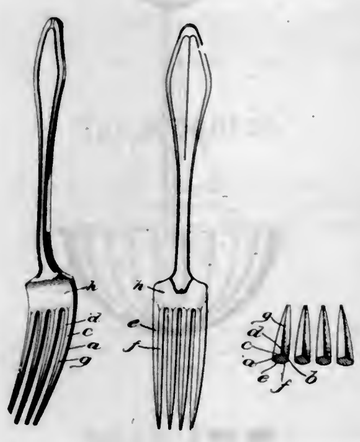
The ornamental design for a garbage receptacle, as shown.

44,111. SHOE-CONFORMER. CHARLES O. QUIMBY, Wakefield, Mass. Filed Mar. 13, 1913. Serial No. 754,160. Term of patent 7 years.



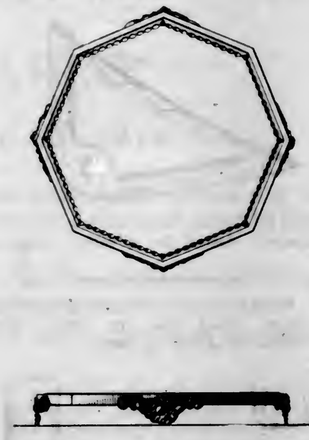
The ornamental design for a shoe conformer, as shown.

44,112. FORK OR ANALOGOUS ARTICLE. HENRY CHARLES QUINCY, Newburyport, Mass., assignor to Towle Manufacturing Company, Newburyport, Mass., a Corporation of Massachusetts. Filed Dec. 4, 1912. Serial No. 734,996. Term of patent 14 years.



The ornamental design for a fork, or analogous article, as shown and described.

44,113. MIRROR-PLATEAU. JOHN E. ROHRBECK, West Hoboken, N. J. Filed Mar. 8, 1913. Serial No. 751,933. Term of patent 3½ years.



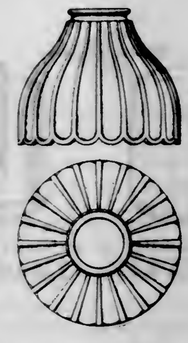
The ornamental design for a mirror plateau, as shown.

44,114. CUT-GLASS VESSEL OR SIMILAR ARTICLE. THOMAS A. SHANLEY, Meriden, Conn., assignor to International Silver Company, Meriden, Conn., a Corporation of New Jersey. Filed Mar. 7, 1913. Serial No. 752,771. Term of patent 7 years.



The ornamental design for a cut glass vessel or similar article, as shown.

44,115. LAMP-SHADE. MATTHEW H. SLOAN, Cumberland, Md., assignor to The Wellington Glass Company, Cumberland, Md., a Corporation of Maryland. Filed Apr. 10, 1913. Serial No. 760,819. Term of patent 14 years.



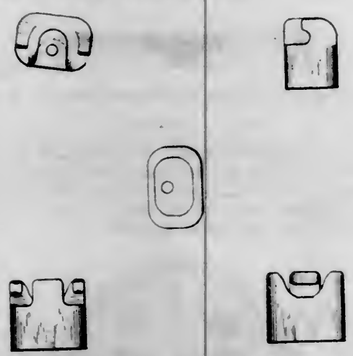
The ornamental design for a lamp shade, as shown.

44,116. COLLAR ATTACHMENT. JOSEPH I. VAN TOCHINE, Fort Wayne, Ind. Filed Mar. 27, 1913. Serial No. 757,263. Term of patent 3½ years.



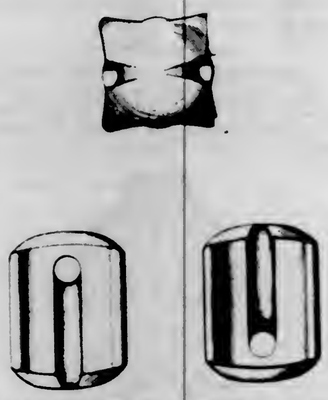
The ornamental design for a collar attachment, as shown.

44,117. WIRING-CLEAT. CHARLES H. WATERMAN, Athens, Mich. Filed Mar. 18, 1912. Serial No. 684,628. Term of patent 3½ years.



The ornamental design for a wiring cleat as shown and described.

44,118. INSULATOR. THOMAS C. WHITE, St. Louis, Mo. Filed Mar. 17, 1913. Serial No. 755,040. Term of patent 7 years.



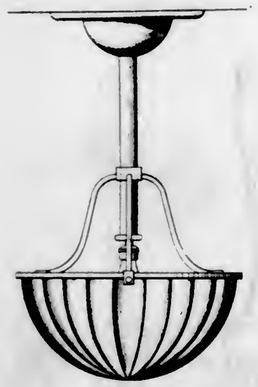
The ornamental design for an insulator, as shown.

44,119. VACUUM-CLEANER CASING. THEODORE WIEDEMANN and JOSEPH H. TEMPLIN, Philadelphia, Pa. Filed Aug. 11, 1909. Serial No. 512,470. Term of patent 3½ years.



The ornamental design for a vacuum cleaner casing, as shown.

44,120. LIGHTING-FIXTURE. LORIN W. YOUNG, New York, N. Y. Filed Mar. 25, 1913. Serial No. 756,797. Term of patent 7 years.



The ornamental design for a lighting fixture, as shown.

TRADE-MARKS

PUBLISHED MAY 27, 1913.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 39,857. (CLASS 32. FURNITURE AND UPHOLSTERY.) TRAVERSE CITY CHAIR COMPANY, Traverse City, Mich. Filed Jan. 13, 1909.

Chair Craft

Particular description of goods.—Foot-Stools, Small Tables or Taborets, Library-Tables, and Davenports.
Claims use since on or about Nov. 15, 1908.

Ser. No. 44,061. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) Dr. R. & Dr. O. WEIL, Frankfurt a. M., Germany. Filed Aug. 10, 1909.

Tanargentan

Particular description of goods.—Remedies for Diarrhea, Summer Diarrhea of Children, Gastroenteritis, Dysentery, Typhus Abdominalis, Intestinal Tuberculosis, Hemorrhoids, and Fluarine Albus Gonorrhö.
Claims use since Mar. 25, 1909.

Ser. No. 54,103. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. C. LARKIN, Toronto, Canada, and New York, N. Y. Filed Jan. 26, 1911.

"SALADA"

Particular description of goods.—Cocoa.
Claims use since Dec. 3, 1910.

Ser. No. 55,573. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE JACOB J. VOLLRATH MFG. CO., Sheboygan, Wis. Filed Apr. 7, 1911. Under ten-year proviso.

IMPERIAL

Particular description of goods.—Cast-Iron Pots, Kettles, Spiders, and Tea-Kettles.
Claims use since 1889.

Ser. No. 55,574. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE JACOB J. VOLLRATH MFG. CO., Sheboygan, Wis. Filed Apr. 7, 1911. Under ten-year proviso.

NEW IDEA

Particular description of goods.—Metal Kettles.
Claims use since 1889.

Ser. No. 56,602. Renewal. (CLASS 15. OILS AND GREASES.) STANDARD OIL CO. OF NEW YORK, New York, N. Y. Filed May 26, 1911.

Royal

Particular description of goods.—Illuminating-Oils.
Claims use since the year 1879.

Ser. No. 57,745. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PRATT-LOW PRESERVING CO., Santa Clara, Cal. Filed July 20, 1911.

PIED PIPER

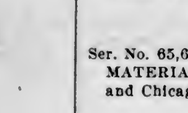
Particular description of goods.—Canned Blackberries, Apricots, Pears, Peaches, Apples, Grapes, Cherries, Plums, and Tomatoes.
Claims use since Jan. 3, 1911.

Ser. No. 61,097. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Filed Jan. 27, 1912.

PICNIC

Particular description of goods.—Biscuit.
Claims use since 1872.

Ser. No. 61,417. (CLASS 6, CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CORNEL PARTOS, New York, N. Y. Filed Feb. 12, 1912.



The facsimile signature shown being that of applicant.
Particular description of goods.—A Laxative Remedy, a Remedy for Headache and Neuralgia, a Remedy for Diseases of the Skin, Tonic Preparations for Malaria, Anemia, and Impoverished Conditions of the Blood, a Cough Remedy, a Facial Cream, Preparations for the Hair and Scalp, Remedies for Rheumatism and Kidney Diseases, Remedies for Venereal Diseases and Female Complaints, a Remedy for Diseases of the Vocal Organs, a Remedy for Diseases of the Digestive Organs, a Tooth-Paste, an Eye-Lotion, a Healing-Salve, a Disinfectant, and a Digestive.
Claims use since January, 1911.

Ser. No. 62,730. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS. BIRDSEY-SOMERS COMPANY, New York, N. Y. Filed Apr. 8, 1912.

Onist

Particular description of goods.—Dress-Shields.
Claims use since Mar. 15, 1912.

Ser. No. 64,675. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) DEIMEL LINEN MESH SYSTEM COMPANY, San Francisco, Cal. Filed July 11, 1912.

"DEIMELIN"

Particular description of goods.—Dress-Shields.
Claims use since Dec. 30, 1911.

Ser. No. 65,223. (CLASS 39. CLOTHING.) THE RICHMOND UNDERWEAR CO., Richmond, Ind. Filed Aug. 12, 1912.

"NATURE'S FIT"
RICHMOND
CLOSED CROTCH
SPRING NEEDLE.

No claim being made to the words "Closed Crotch" and "Spring Needle" and "Richmond" or the words "Nature's Fit."
Particular description of goods.—Knitted Underwear.
Claims use since about Jan. 1, 1912.

Ser. No. 65,650. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill. Filed Sept. 9, 1912.

SEMDAC

Particular description of goods.—A Polish or Gloss for Cleaning, Brightening, and Polishing all Kinds of Furniture and Finished Woodwork.
Claims use since Aug. 24, 1912.

Ser. No. 65,670. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE ACME SHEAR COMPANY, Bridgeport, Conn. Filed Sept. 10, 1912.

KING

Particular description of goods.—Shears and Scissors.
Claims use since Aug. 28, 1912.

Ser. No. 65,723. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) FRIED. KRUPP AKTIENGESELLSCHAFT, Essen, Germany. Filed Sept. 13, 1912. Under ten-year proviso.

KRUPP

Particular description of goods.—Naval, Coast-Defense, Siege, and Fortress Guns; Armored Turrets and Shields, Disappearing Gun-Carriages; Gun-Limbers and Gun-Carriages, Projectiles, Fuse-Setters, and Rifle-Barrels.
Claims use since the year 1812.

Ser. No. 65,724. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) FRIED. KRUPP AKTIENGESELLSCHAFT, Essen, Germany. Filed Sept. 13, 1912. Under ten-year proviso.

KRUPP

Particular description of goods.—Steel and Iron Plates, Bars; Sheet-Steel; Armor and Terne Plates; Boiler-Plates; Frame-Plates, Castings and Forgings for Bridges.
Claims use since the year 1812.

Ser. No. 66,108. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) FENOFORM CORPORATION, Hastings-on-Hudson, N. Y. Filed Oct. 2, 1912.

Fenoform.

Particular description of goods.—Chemicals Consisting of Fluids, Plastics, and Solids Composed in Whole or in Part of Phenol or One of Its Homologues, with Formaldehyde as a Reaction, Addition, or Condensation Product, and Adapted for Use in the Arts—when in a Fluid State as a Varnish for Wood or other Materials or for the Impregnation of Wood or other Materials, when in the Form of a Plastic as a Body from Which Articles May be Molded by Cold or Hot Pressing or Otherwise, when in the Form of a Solid to Form the Body of or Parts of Devices of Various Characters, Especially Those Employed with Electricity or Under Conditions Where Electric Discharges or High Temperatures Would Tend to Injure or Destroy the Body or Part.
Claims use since Aug. 1, 1912.

Ser. No. 66,109. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) FENOFORM CORPORATION, Hastings-on-Hudson, N. Y. Filed Oct. 2, 1912.

Pliadin.

Particular description of goods.—Chemicals Consisting of Fluids, Plastics, and Solids Formed in Whole or in Part of a Condensation, Reaction, or Addition Product of Phenol or One of Its Homologues and Formaldehyde and a Carrying-Body—Such as Corosco, Wood-Pulp, Asbestos, Coloring-Matters, Abrasive Materials, and the Like—and Adapted for Use in the Arts—when in a Fluid State as a Varnish for Wood or other Materials or for the Impregnation of Wood or other Materials, when in the form of a Plastic as a Body from Which Articles May be Molded by Cold or Hot Pressing or Otherwise, when in the Form of a Solid to Form the Body of or Parts of Devices of Various Characters, Especially Those Employed with Electricity or Under Conditions Where Electric Discharges or High Temperatures Would Tend to Injure or Destroy the Body or Part.
Claims use since Aug. 1, 1912.

Ser. No. 66,416. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FISHER FLOURING MILLS COMPANY, Seattle, Wash. Filed Oct. 21, 1912.



Particular description of goods.—Wheat-Flour.
Claims use since May 16, 1911.

Ser. No. 66,711. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE OHIO BUTTERINE CO., Cincinnati, Ohio. Filed Nov. 5, 1912.

"O-K"

Particular description of goods.—Oleomargarin.
Claims use since 1900.

Ser. No. 66,756. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THEODORE WILLIAM CARTER, St. Louis, Mo. Filed Nov. 8, 1912.



Particular description of goods.—A Fluid Filler and Finisher to be Applied Upon a Freshly-Varnished Surface to Maintain a Clear, Glassy, and Hard Finish and Appearance and Hardening the Surface by Making It Proof Against Oils and Grease-Spots.
Claims use since Sept. 1, 1910.

Ser. No. 66,841. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FISHER FLOURING MILLS COMPANY, Seattle, Wash. Filed Nov. 12, 1912.



LONG SWAN

Particular description of goods.—Wheat-Flour.
Claims use since May 9, 1911.

Ser. No. 66,905. (CLASS 37. PAPER AND STATIONERY.) JAMES DAVIS WARD, Limehurst, Grange over Sands, England. Filed Nov. 15, 1912.

RADIX

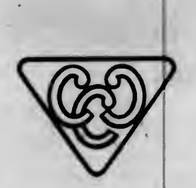
Particular description of goods.—Account-Books.
Claims use since Jan. 7, 1912.

Ser. No. 66,969. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE WALDORF-ASTORIA IMPORTATION COMPANY, New York, N. Y. Filed Nov. 18, 1912.

Waldorf Astoria

Particular description of goods.—Olive-Oil.
Claims use since 1897.

Ser. No. 67,102. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA CRACKER CO., Oakland, Cal. Filed Nov. 25, 1912.



Particular description of goods.—Crackers, Biscuits, and Cakes.
Claims use since July 1, 1912.

Ser. No. 67,527. (CLASS 39. CLOTHING.) RICE-STIX DRY GOODS COMPANY, St. Louis, Mo. Filed Dec. 20, 1912.

MONARCH

Particular description of goods.—Men's and Boys' Athletic Underwear—viz., Sleeveless and Quarter-Length-Sleeve Undershirts, Knee and Three-Quarter-Length Underdrawers, and One-Piece Undergarments Made of Woven Fabrics—Elastic-Seam Drawers, Sweater-Coats, Sweaters, Knitted and Woven Mufflers, Caps, Hoods, Bootees, and Leggings.
Claims use since Jan. 1, 1885.

Ser. No. 67,638. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NEW PRAGUE FLOURING MILL COMPANY, New Prague, Minn. Filed Dec. 30, 1912.



Particular description of goods.—Wheat-Flour.
Claims use since July 2, 1912.

Ser. No. 67,700. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TORRENS PETRI BAKING CO., New York, N. Y. Filed Jan. 3, 1913.

T-P

Particular description of goods.—Bread.
Claims use since Dec. 14, 1912.

Ser. No. 67,773. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) KOENIGL. MINERALBRUNNEN SIEMENS ERBEN, Berlin, Germany. Filed Jan. 7, 1913. Under ten-year proviso.

KÖNIGL. FACHINGEN

Particular description of goods.—Mineral Waters.
Claims use since 1894.

Ser. No. 67,777. (CLASS 39. CLOTHING.) SAWYER BOOT & SHOE CO., Bangor, Me. Filed Jan. 7, 1913.



Particular description of goods.—Boots and Shoes.
Claims use since about Dec. 15, 1912.

Ser. No. 67,799. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROY A. LUSK, New York, N. Y. Filed Jan. 9, 1913.

PICNIC

Particular description of goods.—Prepared Mustard.
Claims use since Oct. 1, 1912.

Ser. No. 67,826. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SPOKANE VALLEY ORCHARD & LAND COMPANY, Spokane Bridge, Wash. Filed Jan. 10, 1913. The portrait being that of Martha Washington, deceased.



Particular description of goods.—Evaporated Apples, Evaporated Prunes, Evaporated Apricots, Evaporated Peaches, Dried Lemon-Peel, Dried Orange-Peel, Dried Currants, Fresh Cherries, Apricots, Peaches, Pears, Plums, Grapes, Prunes, Berries, Cantaloups, Muskmelons, Lemons, Nuts, Olives, Persimmons, Apple-Butter, Malt Vinegar, Cider Vinegar, Apple Jelly, Crab-Apple Jelly, Currant Jelly, Grape Jelly, Quince Jelly, Apple and Quince Jelly, Crushed Apples and Grape, Apple and Quince Preserve, Strawberry Preserve, Peach Preserve, Ginger Pear Preserve, Spiced Cantaloup, Spiced Cherries, Marmalades, Orange Marmalade, Grape-Fruit Marmalade, Lime-Fruit Marmalade, Fruit Conserves, Canned Pineapple, Canned Pears, Canned Plums, Canned Cherries, Canned Peaches, Canned Blueberries, Canned Vegetables, Canned Tomatoes, Canned String-Beans, Canned Corn, Canned Asparagus-Tips, Canned Pork and Beans, Blackberry Jam, Strawberry Jam, Raspberry Jam, Plum Jam, Canned Soups, Canned Tomato Soup, Canned Beef Broth, Extract of Beef, Mince-Meat, Raisins, Corn-Starch, Plum-Pudding, Condensed Milk, Kumiss, Malted Milk, Tomato Catsup, Mixed Pickles, Pickled Olives, Pickled Cucumbers, Ripe Fresh Olives, Salad-Dressing, Worcestershire Sauce, Chilli Sauce, Chow-Chow, Chutney, Preserved Citron, Peanut-Butter, Strained Honey, Comb Honey, Olive-Oil, Gelatin as a Food, Prepared Mustard, Chewing-Gum, Store-Cheese, Cream-Cheese, Sausages, Combined Apple and Quince Preserves, and Peanuts.
Claims use since Dec. 17, 1912.

Ser. No. 67,873. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FISHER FLOURING MILLS COMPANY, Seattle, Wash. Filed Jan. 13, 1913.



Particular description of goods—Wheat-Flour.
Claims use since May 20, 1911.

Ser. No. 67,899. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE MANHATTAN RUBBER MFG. CO., Passaic, N. J. Filed Jan. 13, 1913.

PARANITE

Particular description of goods.—Rubber Pipe-Coupler Rings, Rubber Piston-Packing, Rubber Sheet-Packing, Rubber Pump-Valves, Rubber Steam-Hose, and Rubber Oil-Hose.
Claims use since Jan. 1, 1901.

Ser. No. 67,942. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOB CUSIMANO, New Orleans, La. Filed Jan. 16, 1913.



Particular description of goods.—Tomato Paste.
Claims use since January, 1911.

Ser. No. 67,953. (CLASS 15. OILS AND GREASES.) STANDARD OIL COMPANY, Whiting, Ind., and Chicago, Ill. Filed Jan. 16, 1913.

GYLVALETTE

Particular description of goods.—Cylinder-Oil, Engine-Oil, and Gas-Engine Oil.
Claims use since Sept. 10, 1912.

Ser. No. 67,955. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE UNCLE SAM'S MACARONI CO., Tecumseh, Mich. Filed Jan. 16, 1913.

HOTEL HOOKS

Particular description of goods.—Macaroni, Spaghetti, and Vermicelli.
Claims use since Oct. 2, 1912.

Ser. No. 68,354. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LEXINGTON FLOURING MILLS, Lexington, Mo. Filed Feb. 6, 1913.

Smart Set



Particular description of goods.—Wheat-Flour.
Claims use since Dec. 12, 1912.

Ser. No. 68,378. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) YOUNG-MANOOD COMPANY, Pittsburgh, Pa. Filed Feb. 6, 1913.



Particular description of goods.—Rice and Blended Coffee.
Claims use since Dec. 17, 1912, on rice and since Oct. 24, 1912, on blended coffee.

Ser. No. 68,381. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) FRANK K. ATKINS, Philadelphia, Pa. Filed Feb. 7, 1913.



"Cortella."
Particular description of goods.—A Game-Board.
Claims use since Dec. 10, 1912.

Ser. No. 68,387. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRANKLIN N. CALDERWOOD, Portland, Me. Filed Feb. 7, 1913.



Applicant does not claim the right to the exclusive use of the word "Cake."
Particular description of goods.—Cakes.
Claims use since Jan. 20, 1913.

Ser. No. 68,392. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE MOTOMETER COMPANY, INC., New York, N. Y. Filed Feb. 7, 1913.

MOTOMETER

Particular description of goods.—Temperature-Indicating Devices for Fluid Systems.
Claims use since Dec. 21, 1912.

Ser. No. 68,406. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS. NOT INCLUDING ELECTRICAL APPARATUS.) MICHIGAN STOVE COMPANY, Detroit, Mich. Filed Feb. 8, 1913. Under ten-year proviso.

GARLAND STOVES AND RANGES

Particular description of goods.—Heating Stoves and Ranges.
Claims use since Dec. 10, 1882.

Ser. No. 68,530. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) FRITZ BARTH, Barmen, Germany. Filed Feb. 13, 1913.

Ajax

Particular description of goods.—Rubber Cord, Suspenders, Garters, Buttons, Buckles, and Slides Used as Parts of Braces, and Braces.
Claims use since July 1, 1912.

Ser. No. 68,535. (CLASS 5. ADHESIVES.) THE PRAGMA TYRE FILLING CO. LIMITED, Derby, England. Filed Feb. 13, 1913.

"PRAGMA"

Particular description of goods.—A Resilient Filling for Tires.
Claims use since Mar. 8, 1912.

Ser. No. 68,582. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) CHARLES B. SPIES, New York, N. Y. Filed Feb. 17, 1913.

REGAL

Particular description of goods.—Liquids for Cleaning and Polishing Metallic Articles.
Claims use since Aug. 1, 1906.

Ser. No. 68,611. (CLASS 7. CORDAGE.) BRODERICK & BASCOM ROPE COMPANY, St. Louis, Mo. Filed Feb. 19, 1913.

BROBAS

Particular description of goods.—Cables and Ropes.
Claims use since on or about Dec. 1, 1912.

Ser. No. 68,627. (CLASS 38. PRINTS AND PUBLICATIONS.) THE W. S. TYLER COMPANY, Cleveland, Ohio. Filed Feb. 19, 1913.

Through the Meshes

Particular description of goods.—Periodicals.
Claims use since about July, 1908.

Ser. No. 68,628. (CLASS 38. PRINTS AND PUBLICATIONS.) THE W. S. TYLER COMPANY, Cleveland, Ohio. Filed Feb. 19, 1913.

The Latch String

Particular description of goods.—Periodicals.
Claims use since about June, 1909.

Ser. No. 68,639. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THOMAS A. HANLAN, Nogales, Ariz. Filed Feb. 20, 1913.



Exclusive right to the word "Lax" being disclaimed.
Particular description of goods.—Laxative Tonic.
Claims use since Sept. 25, 1912.

Ser. No. 68,663. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RECKITTS (U. S. A.), LTD., New York, N. Y., and New Brunswick, N. J. Filed Feb. 21, 1913.

Rex

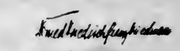
Particular description of goods.—Bluing.
Claims use since January, 1913.

Ser. No. 68,684. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) ELIAS T. GOLDBERG, Bridgeport, Conn. Filed Feb. 24, 1913.

IDEAL

Particular description of goods.—Soldering-Gold.
Claims use since Feb. 18, 1913.

Ser. No. 68,720. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FRIEDRICH FRANZ FRIEDMANN, Berlin, Germany, assignor to Moritz Elsner, New York, N. Y. Filed Feb. 25, 1913.



Consisting of a facsimile of my signature.
Particular description of goods.—Chemical or Bacteriological Products Comprising Healing Preparations, Medicines, Sera, Salves, and Disinfectants for Use in the Treatment of Tuberculosis in Men and Animals.
Claims use since Nov. 5, 1912.

Ser. No. 68,750. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) HUGH MACKAY, Los Angeles, Cal. Filed Feb. 26, 1913.



Particular description of goods.—A Certain Compound Consisting of Oils, Gum, Borax, and Portland Cement for Preserving Leathers.
Claims use since Feb. 13, 1913.

Ser. No. 68,790. (CLASS 39. CLOTHING.) THE REALITY RUBBER COMPANY, Massillon, Ohio. Filed Feb. 28, 1913.

REALITY

Particular description of goods.—Rubber Gloves.
Claims use since 1906.

Ser. No. 68,965. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) TREMONT & SUFFOLK MILLS, Lowell, Mass. Filed Mar. 11, 1913. Under ten-year proviso.

LAWRENCE MILLS SHEETINGS

L.L.L.

Particular description of goods.—Cotton Piece Goods.
Claims use since about Feb. 15, 1867.

Ser. No. 68,967. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ALBANY MILLING COMPANY, Albany, Mo. Filed Mar. 12, 1913.

Life o' wheat

No claim being made to the word "Wheat."
Particular description of goods.—Breakfast Foods.
Claims use since Feb. 17, 1913.

Ser. No. 69,002. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOY SALES CO., Green Bay, Wis. Filed Mar. 13, 1913.

Foot-Joy

Particular description of goods.—Foot-Tablets.
Claims use since Jan. 15, 1913.

Ser. No. 69,036. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE NATIONAL ONION SALT COMPANY, Chicago, Ill. Filed Mar. 14, 1913.

NOSCO

Particular description of goods.—Seasonings in Powdered Form.
Claims use since Dec. 24, 1912.

Ser. No. 69,054. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) KASTNER & CO., LTD., London, England. Filed Mar. 15, 1913.

KASTONOME

Particular description of goods.—Pianos, Piano-Players, and Parts of Pianos and Piano-Players, Also Music-Rolls.
Claims use since August, 1909.

Ser. No. 69,082. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE GEORGE BLOME & SON CO., Baltimore, Md. Filed Mar. 17, 1913.



The picture of the people shown being fanciful.
Particular description of goods.—Candy Cough-Drops.
Claims use since Oct. 3, 1894.

Ser. No. 69,084. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE BACORN COMPANY, Elmira, N. Y. Filed Mar. 17, 1913.

Forkola

Particular description of goods.—A Remedy for Colds, Catarrh, Tonsilitis, Pneumonia, Headache, Neuralgia, Cough, Sore Throat, Eczema, Croup, Scalds, Burns, Hay-Fever, Piles, Cuts, Bruises, Sprains, Salt-Rheum, Toothache, Quinsy, Earache, Poison-Ivy Poisoning, Sunburn, Rheumatism, Chilblains, Asthma, and Bronchitis.
Claims use since Feb. 15, 1911.

Ser. No. 69,088. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DEEP SEA SALMON COMPANY, INC., Seattle, Wash. Filed Mar. 17, 1913.

Market



No claim being made to the exclusive use of the symbol of the fish.
Particular description of goods.—Canned Salmon.
Claims use since Sept. 13, 1912.

Ser. No. 69,098. (CLASS 39. CLOTHING.) HAMMOND KNITTING CO., Hammond, Ind. Filed Mar. 17, 1913.

"MILL-RIGHT"

Particular description of goods.—Knitted Gloves, Mittens, Sweater-Coats, Caps, and Mufflers.
Claims use since Sept. 1, 1910.

Ser. No. 69,107. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE LIVE STOCK REMEDY COMPANY, St. Louis, Mo. Filed Mar. 17, 1913.



Particular description of goods.—A Remedy for the Expurgation of Worms from Hogs, Sheep, Horses, and Cattle and for Roup, Gapes, and Cholera of Poultry.
Claims use since 1898.

Ser. No. 69,110. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MANEY MILLING COMPANY, Omaha, Nebr. Filed Mar. 17, 1913.

SUNKIST

Particular description of goods.—Wheat-Flour.
Claims use since September, 1909.

Ser. No. 69,131. (CLASS 15. OILS AND GREASES.) UTAH OIL REFINING COMPANY, Salt Lake City, Utah. Filed Mar. 17, 1913.

UTILITY

Particular description of goods.—Lubricating-Oils.
Claims use since Nov. 1, 1912.

Ser. No. 69,146. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE AMERICAN PHOTOGRAPHIC TEXT BOOK COMPANY, Scranton, Pa. Filed Mar. 18, 1913.

PHOTEX

Particular description of goods.—Cameras, Lenses, Camera-Stands, Print-Rollers, Print-Frames, Negative-Racks, Focusing-Cloths, Photographic-Printing Paper, Photographic Dry-Plates, Photographic Shutters, and Metal Tripods.
Claims use since Feb. 25, 1913.

Ser. No. 69,156. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) ENDURA MANUFACTURING CO., Philadelphia, Pa. Filed Mar. 18, 1913.

SHEET IDUR

No claim, however, being made to the words "Sheet Packing."
Particular description of goods.—Packing Made from Chemically-Prepared Paper.
Claims use since Jan. 22, 1913.

Ser. No. 69,165. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FRED. W. MILLINGTON LIMITED, Manchester, England. Filed Mar. 18, 1913.



No claim is made to the exclusive use of the word "Washrite."
Particular description of goods.—Torchon Laces.
Claims use since December, 1911.

Ser. No. 69,168. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) CARLOS B. RANDALL, Los Angeles, Cal. Filed Mar. 18, 1913.

C. B. Randall.

Consisting of a facsimile of my signature.
Particular description of goods.—Corset-Chart.
Claims use since October, 1912.

Ser. No. 69,202. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE FISK RUBBER COMPANY, Chicopee Falls, Mass. Filed Mar. 20, 1913.

COLD BOND

Particular description of goods.—Rubber Tires.
Claims use since Dec. 9, 1912.

Ser. No. 69,209. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE W. J. MCCAHAN SUGAR REFINING CO., Philadelphia, Pa. Filed Mar. 20, 1913.



No claim, however, being made to the words "Pure Cane Sugars."

Particular description of goods.—Sugar.

Claims use since Dec. 16, 1912.

Ser. No. 69,230. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE HOFFMAN-LA ROCHE CHEMICAL WORKS, New York, N. Y. Filed Mar. 21, 1913.

KRESAPOL

Particular description of goods.—Soap Solution of Cresole Used for Antiseptic and Disinfecting Purposes.

Claims use since January, 1909.

Ser. No. 69,287. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HARTMANN & CO., Rochester, N. Y. Filed Mar. 24, 1913.

PURITAN

Particular description of goods.—Evaporated Apples.

Claims use since Aug. 15, 1906.

Ser. No. 69,289. (CLASS 12. CONSTRUCTION MATERIALS.) HUTCHISON SCOTT COMPANY, New York, N. Y. Filed Mar. 24, 1913.

TEMPO

Particular description of goods.—A Liquid Compound for Covering Wood, Cork, Metal, Stone, and Cement Which is Non-Conductive of and Insulates Against Heat and Cold.

Claims use since Mar. 1, 1909

Ser. No. 69,337. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed Mar. 25, 1913.



No claim being made to the words "Boudoir Paper."

Particular description of goods.—Toilet-Paper.

Claims use since [illegible]. 1, 1906.

Ser. No. 69,363. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WALTER R. MEIER, Durand, Ill. Filed Mar. 26, 19[illegible].



Applicant specifically disclaims the word "Brand" as shown in the specimens.

Particular description of goods.—Butter.

Claims use since Sept. 22, 1912.

Ser. No. 69,365. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HOWARD B. WARD, New York, N. Y. Filed Mar. 26, 1913.

HUMPTY DUMPTY

Particular description of goods.—Bread.

Claims use since Mar. 22, 1913.

Ser. No. 69,366. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HOWARD B. WARD, New York, N. Y. Filed Mar. 26, 1913.

HANDY SPANDY

Particular description of goods.—Bread.

Claims use since Mar. 22, 1913.

Ser. No. 69,369. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HOWARD B. WARD, New York, N. Y. Filed Mar. 26, 1913.

PETER PIPER

Particular description of goods.—Bread.

Claims use since Mar. 22, 1913.

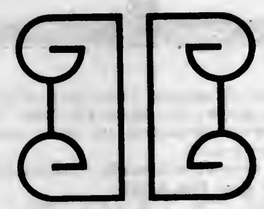
Ser. No. 69,372. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE CLEVELAND GALVANIZING WORKS CO., Cleveland, Ohio. Filed Mar. 27, 1913. Under ten-year proviso.

"Cleveland"

Particular description of goods.—Wire Chain and Coil, Porch-Swing Chains, Hammock-Chains, and Pump-Chains.

Claims use since 1893.

Ser. No. 69,373. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) CLINCHER AUTOMOBILE TIRE MANUFACTURERS' ASSOCIATION, Cleveland, Ohio. Filed Mar. 27, 1913.



Particular description of goods.—Vehicle Wheel-Rims.

Claims use since Oct. 15, 1912.

Ser. No. 69,378. (CLASS 27. HOROLOGICAL INSTRUMENTS.) HIPP, DIDISHEIM & BRO., New York, N. Y. Filed Mar. 27, 1913.

BRONZOR

Particular description of goods.—Watches and Watch-cases.

Claims use since September, 1912.

Ser. No. 69,391. (CLASS 39. CLOTHING.) HENRY HEATH, LIMITED, London, England. Filed Mar. 28, 1913. Under ten-year proviso.



Particular description of goods.—Hats of All Kinds.

Claims use since the year 1865.

Ser. No. 69,407. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) BERRY BROTHERS, Detroit, Mich. Filed Mar. 29, 1913.

LUXEBERRY

Particular description of goods.—Varnishes.

Claims use since July 21, 1903.

Ser. No. 69,413. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) CAUGHEY & CARRAN CO., Detroit, Mich. Filed Mar. 29, 1913.

APEX

Particular description of goods.—Clover, Timothy, Alfalfa, and Alsike Seeds.

Claims use since Oct. 1, 1908.

Ser. No. 69,430. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JOHN LEWIS, St. Louis, Mo. Filed Mar. 29, 1913.



The words "Trade Mark" being disclaimed.

Particular description of goods.—Polish for Silverware and the Like.

Claims use since Mar. 12, 1913.

Ser. No. 69,436½. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DR. J. H. SPENCER, Vicksburg, Miss. Filed Mar. 29, 1913.

SEARCH POWER

Particular description of goods.—A Remedy for Rheumatism and Neuralgia.

Claims use since Jan. 1, 1913.

Ser. No. 69,444. (CLASS 37. PAPER AND STATIONERY.) WILLIAM H. BEAVER, Philadelphia, Pa. Filed Mar. 31, 1913.

HOMESPUN LINEN

Applicant disclaims the right to the exclusive use of the word "Linen."

Particular description of goods.—Writing and Printing Paper.

Claims use since Aug. 1, 1902.

Ser. No. 69,537. (CLASS 12. CONSTRUCTION MATERIALS.) FRANKLYN R. MULLER, Chicago, Ill. Filed Apr. 2, 1913.

ASBESTONE

Particular description of goods.—A Sanitary Composition Flooring Material Composed of Calcined Grecian Magnesite, Asbestos, Oxid of Iron, Chlorid of Magnesium, and Wood Fiber.

Claims use since about December, 1907.

Ser. No. 69,583. (CLASS 10. FERTILIZERS.) DIXIE FERTILIZER CO., Prattville, Ala. Filed Apr. 3, 1913.

BROGAN



Particular description of goods.—A Fertilizing Compound Containing Available Phosphate Acid, Nitrogen, and Potash.
Claims use since Mar. 15, 1913.

Ser. No. 69,654. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) DRUGGISTS' CO-OPERATIVE ASSOCIATION (INC.), Jersey City, N. J., and Detroit, Mich. Filed Apr. 8, 1913.

VALDONA

Particular description of goods.—Grape-Juice.
Claims use since Jan. 15, 1913.

Ser. No. 69,709. (CLASS 12. CONSTRUCTION MATERIALS.) PACIFIC MUTUAL DOOR COMPANY, Tacoma, Wash. Filed Apr. 10, 1913.

PAMUDO

Particular description of goods.—Doors, Sash, and Moldings.
Claims use since Jan. 1, 1913.

Ser. No. 69,718. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) GEO. BORGFELDT & Co., New York, N. Y. Filed Apr. 11, 1913.

Trianon

Particular description of goods.—Toilet-Combs Made of Pyroxylin Compound.
Claims use since Apr. 7, 1913.

Ser. No. 69,735. (CLASS 38. PRINTS AND PUBLICATIONS.) JOHN R. BURTON, New York, N. Y. Filed Apr. 12, 1913.

NEW YORK CURB

Consists of the words "New York Curb" surrounded by a design in silhouette representing a group of persons engaged in buying and selling securities.
Particular description of goods.—A Publication, (a Weekly Newspaper.)
Claims use since Apr. 8, 1911.

Ser. No. 69,747. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THOMAS M. SAYMAN, St. Louis, Mo. Filed Apr. 12, 1913.



The portrait illustrated being that of the applicant herein. The words "Dr. Sayman's Toilet Talcum Powder" are hereby disclaimed, the same constituting no part of the trade-mark.
Particular description of goods.—Talcum Powder.
Claims use since Dec. 1, 1911.

Ser. No. 69,770. (CLASS 38. PRINTS AND PUBLICATIONS.) THE FARM PRESS PUBLISHING CO., Chicago, Ill. Filed Apr. 14, 1913.

Better Farming

Particular description of goods.—An Industrial Magazine or Publication.
Claims use since Apr. 5, 1913.

Ser. No. 69,782. (CLASS 12. CONSTRUCTION MATERIALS.) ROSE CITY LUMBER AND SHINGLE COMPANY, Portland, Oreg. Filed Apr. 14, 1913.

UNIVERSITY

Particular description of goods.—Shingles.
Claims use since 1909.

Ser. No. 69,787. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE XXTH CENTURY HEATING & VENTILATING COMPANY, Akron, Ohio. Filed Apr. 14, 1913.

XXTH CENTURY

Particular description of goods.—Furnaces.
Claims use since the spring of 1894.

Ser. No. 69,791. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE ACME SHEAR COMPANY, Bridgeport, Conn. Filed Apr. 15, 1913.

1876

WHEEL BRAND
WARRANTED

Exclusive use of the words "Brand" and "Warranted" being disclaimed.
Particular description of goods.—Shears.
Claims use since Jan. 15, 1913.

Ser. No. 69,802. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) THE REPUBLIC METALWARE CO., Buffalo, N. Y. Filed Apr. 15, 1913.

PROTEX

Particular description of goods.—Sink-Strainers.
Claims use since April, 1912.

Ser. No. 69,862. (CLASS 39. CLOTHING.) OSHKOSH OVERALL COMPANY, Oshkosh, Wis. Filed Apr. 17, 1913.

OSHKOSH

Particular description of goods.—Overalls.
Claims use since April, 1911.

Ser. No. 69,873. (CLASS 10. FERTILIZERS.) J. E. TYGERT COMPANY, Philadelphia, Pa. Filed Apr. 17, 1913.

FEARLESS

Particular description of goods.—Fertilizers.
Claims use since April, 1911.

Ser. No. 69,897. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) MAJESTIC DRESS FORM COMPANY, Chicago, Ill. Filed Apr. 18, 1913.

SIMPLEX

Particular description of goods.—Dress-Forms.
Claims use since Oct. 10, 1911.

Ser. No. 69,909. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) EDWARD G. WHALL, Washington, D. C. Filed Apr. 18, 1913.

GLAZEA

Particular description of goods.—Canned Paint.
Claims use since Jan. 1, 1911.

Ser. No. 69,910. (CLASS 47. WINES.) JULIUS WILE SONS & Co., New York, N. Y. Filed Apr. 18, 1913.

MATADOR

Particular description of goods.—Sherry-Wine.
Claims use since July 24, 1903.

Ser. No. 69,928. (CLASS 15. OILS AND GREASES.) STANDARD OIL CO. OF KENTUCKY, Louisville, Ky. Filed Apr. 19, 1913. Under ten-year proviso.

FIRE PROOF

Particular description of goods.—Illuminating-Oil.
Claims use since 1885.

Ser. No. 69,942. (CLASS 39. CLOTHING.) CARSON GLOVE CO., San Francisco, Cal. Filed Apr. 21, 1913.

Broadette

Particular description of goods.—Leather Gloves.
Claims use since Sept. 13, 1911.

Ser. No. 69,947. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) EMPIRE STATE RING COMPANY, Buffalo, N. Y. Filed Apr. 21, 1913.

ES

Particular description of goods.—Rings.
Claims use since Jan. 15, 1913.

Ser. No. 70,000. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) THE AMERICAN BRASS COMPANY, Waterbury, Conn. Filed Apr. 23, 1913.

ANCAPCO

The trade-mark consisting of the word "Ancapco."
Particular description of goods.—Copper Wire.
Claims use since July 26, 1912.

Ser. No. 70,026. (CLASS 12. CONSTRUCTION MATERIALS.) THE ENAMEL VITRIFIED BRICK COMPANY, Toledo, Ohio. Filed Apr. 24, 1913.



Particular description of goods.—Brick.
Claims use since Apr. 2, 1913.

Ser. No. 70,038. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) JOHN F. LANGDON, Kansas City, Kans. Filed Apr. 24, 1913.

IDEAL

Particular description of goods.—Band-Cutters and Self-Feeders for Threshing-Machines.
Claims use since about Apr. 20, 1906.

Ser. No. 70,039. (CLASS 39. CLOTHING.) MAYER BRO'S., Chicago, Ill. Filed Apr. 24, 1913.

GRADUATE

Particular description of goods.—Men's and Boys' Coats, Vests, Trousers, and Overcoats.
Claims use since before Jan. 1, 1909.

Ser. No. 70,040. (CLASS 39. CLOTHING.) MAYER BRO'S., Chicago, Ill. Filed Apr. 24, 1913.

VIKING

Particular description of goods.—Men's and Boys' Coats, Vests, Trousers, and Overcoats.
Claims use since before May 1, 1893.

Ser. No. 70,044. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) NEW PROCESS CORK COMPANY, New York, N. Y. Filed Apr. 24, 1913.

Nepro

Particular description of goods.—Cork Disks and Washers.
Claims use since Oct. 24, 1912.

Ser. No. 70,089. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) CONKLIN TIN PLATE & METAL COMPANY, Atlanta, Ga. Filed Apr. 28, 1913. Under ten-year proviso.

PIEDMONT

Particular description of goods.—Tin and Terne Plates.
Claims use since about the year 1893.

Ser. No. 70,097. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) ITALIAN-SWISS COLONY, San Francisco, Cal. Filed Apr. 28, 1913.

GRAPINAC

Particular description of goods.—Brandy.
Claims use since January, 1913.

Ser. No. 70,207. (CLASS 48. MALT EXTRACTS AND LIQUORS.) H. KOEHLER & CO., New York, N. Y. Filed May 3, 1913.



Particular description of goods.—Beer.
Claims use since about Apr. 15, 1913.

Ser. No. 70,253. (CLASS 39. CLOTHING.) SCHWARZ & WILD, St. Louis, Mo. Filed May 5, 1913.

COMMODORE PERRY

Particular description of goods.—Women's, Girls', and Children's Blouses and Skirts.
Claims use since Nov. 1, 1912.

TRADE-MARKS

REGISTERED MAY 27, 1913.

91,735. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,779. PUBLISHED MARCH 25, 1913.

91,736. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,780. PUBLISHED MARCH 25, 1913.

91,737. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,782. PUBLISHED MARCH 25, 1913.

91,738. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,783. PUBLISHED MARCH 25, 1913.

91,739. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,784. PUBLISHED MARCH 25, 1913.

91,740. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,786. PUBLISHED MARCH 25, 1913.

91,741. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,787. PUBLISHED MARCH 25, 1913.

91,742. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,794. PUBLISHED MARCH 25, 1913.

91,743. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed June 29, 1912. Serial No. 64,465. PUBLISHED MARCH 25, 1913.

91,744. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed August 13, 1912. Serial No. 65,231. PUBLISHED MARCH 25, 1913.

91,745. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed August 13, 1912. Serial No. 65,232. PUBLISHED MARCH 25, 1913.

91,746. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed August 13, 1912. Serial No. 65,234. PUBLISHED MARCH 25, 1913.

91,747. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed August 13, 1912. Serial No. 65,235. PUBLISHED MARCH 25, 1913.

91,748. OVERALLS. ALEXANDER BROS. CO., Savannah, Ga.
Filed May 20, 1912. Serial No. 63,638. PUBLISHED MARCH 25, 1913.

91,749. BUNTING. ANNIN & Co., New York, N. Y.
Filed March 3, 1913. Serial No. 68,809. PUBLISHED MARCH 25, 1913.

91,750. PLAYING-CARDS. THE G. W. ARMSTRONG DINING ROOM & NEWS COMPANY, Boston, Mass.
Filed February 20, 1913. Serial No. 68,630. PUBLISHED MARCH 25, 1913.

91,751. RAILWAY MATES, CROSSINGS, FROGS, AND TURNOUTS. BARBOUR-STOCKWELL COMPANY, Cambridge, Mass.
Filed September 1, 1911. Serial No. 58,494. PUBLISHED MARCH 25, 1913.

91,752. AUTOMOBILE AND CARRIAGE PAINTS. BLANCHITE PAINT COMPANY, New York, N. Y., assignor, by mesne assignments, to Blanchite Paint Company, a Corporation of New Jersey.
Filed February 19, 1909. Serial No. 40,681. PUBLISHED NOVEMBER 26, 1912.

91,753. PORT AND SHERRY WINE. BODEGA, Paris, France.
Filed June 18, 1912. Serial No. 64,250. PUBLISHED MARCH 25, 1913.

91,754. UNDERWEAR, VIZ: MEN'S UNION SUITS, SHIRTS, AND DRAWERS. BLUM BROTHERS, Chicago, Ill.
Filed September 9, 1912. Serial No. 65,636. PUBLISHED MARCH 25, 1913.

91,755. ALUMINUM WARE, TINWARE, AND METAL TRAYS. GEO. BORGFELDT & CO., New York, N. Y.
Filed January 18, 1913. Serial No. 67,977. PUBLISHED MARCH 25, 1913.

91,756. CERTAIN NAMED GARMENTS OF TEXTILE AND KNITTED MATERIALS. CHANDLER & Co. INC., Boston, Mass.
Filed July 5, 1912. Serial No. 64,591. PUBLISHED MARCH 25, 1913.

91,757. CHEMICAL AND LAUNDRY STARCHES. CHEMICAL SPECIALTIES CO., Jersey City, N. J.
Filed November 19, 1912. Serial No. 67,004. PUBLISHED MARCH 25, 1913.

91,758. INSECTICIDES. CORONA CHEMICAL COMPANY, Milwaukee, Wis.
Filed February 1, 1913. Serial No. 68,255. PUBLISHED MARCH 25, 1913.

91,759. CERTAIN NAMED ARTICLES OF CLOTHING. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed November 28, 1911. Serial No. 59,983½. PUBLISHED MARCH 25, 1913.

91,760. CERTAIN NAMED ARTICLES OF TEXTILE AND WOVEN FABRIC. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed January 7, 1913. Serial No. 67,766. PUBLISHED MARCH 25, 1913.

91,761. THROWN SILKS, SILK THREADS, AND YARNS. JNO. DUNLOP'S SONS, New York, N. Y.
Filed July 19, 1912. Serial No. 64,826. PUBLISHED MARCH 18, 1913.

91,762. SPICES, FLAVORING EXTRACTS FOR FOODS, AND OLIVE-OIL. THE DURBAR CO., Jersey City, N. J., and New York, N. Y.
Filed March 23, 1912. Serial No. 62,368. PUBLISHED MARCH 25, 1913.

91,763. INSECTICIDES, SOAP SPRAY, WORM AND ANT DESTROYER, AND WEED-KILLERS. EASTERN CHEMICAL COMPANY, Boston, Mass.
Filed January 4, 1913. Serial No. 67,710. PUBLISHED MARCH 25, 1913.

91,764. CHEMICAL OR BIOLOGICAL REAGENT FOR CERTAIN NAMED PURPOSES. FARBWERKE VORM. MEISTER LUCIUS & BRÜNING, Höchst-on-the-Main, Germany.
Filed December 11, 1912. Serial No. 67,332. PUBLISHED MARCH 25, 1913.

91,765. PUZZLES. FORSHEIM & KONIGSBERG, New York, N. Y.
Filed March 1, 1913. Serial No. 68,798. PUBLISHED MARCH 25, 1913.

91,766. BAKING-POWDER. GOLDBERG, BOWEN & CO., San Francisco, Cal.
Filed November 10, 1910. Serial No. 52,694. PUBLISHED JUNE 18, 1912.

91,767. CORRUGATED-IRON ROOFING AND SIDING FOR BUILDINGS. THE ANDREW GREIS COMPANY, INC., New York, N. Y.
Filed December 13, 1912. Serial No. 67,379. PUBLISHED MARCH 25, 1913.

91,768. OVERCOATS, COATS, VESTS, AND TROUSERS. J. S. HALL'S SONS, Knoxville, Tenn.
Filed August 16, 1912. Serial No. 65,296. PUBLISHED MARCH 25, 1913.

91,769. BROMIN COMPOUND FOR USE AS A SEDATIVE. THE HOFFMANN-LA ROCHE CHEMICAL WORKS, New York, N. Y.
Filed January 7, 1913. Serial No. 67,772. PUBLISHED MARCH 25, 1913.

91,770. SELF-RISING WHEAT-FLOUR. HOME MILL & GRAIN CO., Mount Vernon, Ind.
Filed April 6, 1912. Serial No. 62,715. PUBLISHED JULY 2, 1912.

91,771. COTTON PIECE GOODS. A. G. HYDE & SONS, New York, N. Y.
Filed January 24, 1913. Serial No. 68,092. PUBLISHED MARCH 25, 1913.

91,772. WATCHES AND CLOCKS. ROBT. H. INGERSOLL & BRO., New York, N. Y.
Filed July 1, 1912. Serial No. 64,505. PUBLISHED MARCH 25, 1913.

91,773. CHEMICAL COMPOUND FOR USE IN COOKING. WILLIAM HAWKINGS JOHNSON, Ripley, Tenn.
Filed October 18, 1912. Serial No. 66,346. PUBLISHED MARCH 25, 1913.

91,774. VARNISH. KEYSTONE VARNISH CO., Brooklyn, N. Y.
Filed December 28, 1912. Serial No. 67,624. PUBLISHED MARCH 25, 1913.

91,775. FOUNTAIN-PENS. HARRY A. LEE, Atlantic City, N. J.
Filed December 11, 1912. Serial No. 67,355. PUBLISHED MARCH 25, 1913.

91,776. WRITING-PAPER. LEE PAPER COMPANY, Vicksburg, Mich.
Filed February 6, 1913. Serial No. 68,352. PUBLISHED MARCH 25, 1913.

91,777. HOG-CHOLERA MEDICINE. GEORGE LIPE, Salina, Kans.
Filed May 2, 1912. Serial No. 63,263. PUBLISHED MARCH 25, 1913.

91,778. WRITING TABLETS AND PAPER. THE LONGWELL-CUMMINGS CO., Logansport, Ind.
Filed February 6, 1913. Serial No. 68,353. PUBLISHED MARCH 25, 1913.

91,779. FRESH APPLES. LUSCIOUS FRUIT COMPANY, Hood River, Oreg.
Filed December 23, 1912. Serial No. 67,552. PUBLISHED MARCH 25, 1913.

91,780. CERTAIN NAMED FOODS. LUTEY BROS., Butte, Mont.
Filed March 14, 1912. Serial No. 62,170. PUBLISHED MARCH 25, 1913.

91,781. CERTAIN NAMED FOODS. LUTEY BROS., Butte, Mont.
Filed March 14, 1912. Serial No. 62,171. PUBLISHED MARCH 25, 1913.

91,782. CERTAIN NAMED FOODS. LUTEY BROS., Butte, Mont.
Filed March 14, 1912. Serial No. 62,172. PUBLISHED MARCH 25, 1913.

91,783. FLAVORING EXTRACTS FOR FOODS. THE DWIGHT B. MCCURDY COMPANY, Chicago, Ill.
Filed March 18, 1912. Serial No. 62,221. PUBLISHED MARCH 25, 1913.

91,784. WHEAT-FLOUR. MCDONALD MILLING COMPANY, McDonald, Pa.
Filed December 16, 1912. Serial No. 67,412. PUBLISHED MARCH 25, 1913.

91,785. SAUSAGE. WILLIAM E. MILLER, Alexandria Bay, N. Y.
Filed January 3, 1913. Serial No. 67,693. PUBLISHED MARCH 25, 1913.

91,786. GAMES. MILTON BRADLEY CO., Springfield, Mass.
Filed February 19, 1913. Serial No. 68,612. PUBLISHED MARCH 25, 1913.

91,787. TOOTH-BRUSHES, HAIR-BRUSHES, CLOTH-BRUSHES, AND SHAVING-BRUSHES. MONTAG BROTHERS, Atlanta, Ga.
Filed July 6, 1911. Serial No. 57,510. PUBLISHED NOVEMBER 7, 1911.

91,788. MEDICATED SALT, HOG REMEDY, HORSE AND CATTLE POWDER, AND STOCK-DIP. MOORMAN MFG. CO., Quincy, Ill.
Filed January 2, 1913. Serial No. 67,675. PUBLISHED MARCH 25, 1913.

91,789. SCARFS, TABLE-COVERS, PENNANTS, PILLOW-COVERS, COUCH-COVERS, DOILIES, CURTAINS, RIBBONS, AND BLANKETS. SAMUEL MORTENSON & CO., Chicago, Ill.
Filed February 17, 1913. Serial No. 68,577. PUBLISHED MARCH 25, 1913.

91,790. STERILIZED AND CONDENSED MILK. NESTLE AND ANGLO-SWISS CONDENSED MILK COMPANY, Cham and Vevey, Switzerland.
Filed June 18, 1912. Serial No. 64,252. PUBLISHED MARCH 25, 1913.

91,791. RAZOR-STROPS. NEV-A-HONE RAZOR STROP COMPANY, New York, N. Y.
Filed February 8, 1913. Serial No. 68,408; PUBLISHED MARCH 25, 1913.

91,792. CERTAIN NAMED PIECE GOODS. NORTH TEXAS DRY GOODS COMPANY, Paris, Tex.
Filed January 27, 1913. Serial No. 68,149. PUBLISHED MARCH 25, 1913.

91,793. WRITING-PAPERS. OLD BERKSHIRE MILLS COMPANY, Dalton, Mass.
Filed January 13, 1913. Serial No. 67,903. PUBLISHED MARCH 25, 1913.

91,794. CITHERNS OR ZITHERS. THE PHONOHARP COMPANY, Boston and East Boston, Mass.
Filed January 24, 1913. Serial No. 68,099. PUBLISHED MARCH 25, 1913.

91,795. OINTMENTS OR SALVES FOR THE TREATMENT OF VENEREAL DISEASES. THE PROPHYLO LABORATORY, Cleveland, Ohio.
Filed November 21, 1912. Serial No. 67,051. PUBLISHED MARCH 25, 1913.

91,796. HOSIERY. RICHARDSON DRY GOODS CO., St. Joseph, Mo.
Filed November 19, 1912. Serial No. 67,010. PUBLISHED MARCH 25, 1913.

91,797. WOOLEN PIECE GOODS. RICKETTS & SHAW, Monson, Mass.
Filed January 13, 1913. Serial No. 67,905. PUBLISHED MARCH 25, 1913.

91,798. KNITTED UNDERWEAR, RITESIZE UNDERWEAR CO., Utica, N. Y.
Filed May 28, 1912. Serial No. 63,852. PUBLISHED MARCH 25, 1913.

91,799. CATHARTIC IN PILL FORM. THE SYDNEY ROSS CO., New York, N. Y.
Filed December 4, 1912. Serial No. 67,227. PUBLISHED MARCH 25, 1913.

91,800. CERTAIN MUSICAL INSTRUMENTS, PARTS THEREOF, AND BOWS AND STRINGS THEREFOR. ROTH & LEDERER, Markneukirchen, Germany.
Filed December 4, 1912. Serial No. 67,217. PUBLISHED MARCH 25, 1913.

91,801. CERTAIN MUSICAL INSTRUMENTS, PARTS THEREOF, AND BOWS AND STRINGS THEREFOR. ROTH & LEDERER, Markneukirchen, Germany.
Filed December 4, 1912. Serial No. 67,218. PUBLISHED MARCH 25, 1913.

91,802. REMEDY FOR CONSTIPATION. THE GEORGE H. RUNDLE COMPANY, Piqua, Ohio.
Filed January 17, 1913. Serial No. 67,971. PUBLISHED MARCH 25, 1913.

91,803. VELVETS AND PLUSHES IN THE PIECE. THE SALT'S TEXTILE MANUFACTURING COMPANY, Bridgeport, Conn., and New York, N. Y.
Filed November 4, 1912. Serial No. 66,689. PUBLISHED MARCH 11, 1913.

91,804. OINTMENTS FOR THE TREATMENT OF PILES. THE SAMUEL CHEMICAL CO., Cincinnati, Ohio.
Filed January 4, 1913. Serial No. 67,730. PUBLISHED MARCH 25, 1913.

91,805. ENVELOP-SEALING MACHINES. DANIEL G. SAUNDERS, Jr., Kansas City, Mo.
Filed January 6, 1913. Serial No. 67,751. PUBLISHED MARCH 25, 1913.

91,806. MARGARIN. H. SCHLINCK & CIE. A. G., Hamburg, Germany.
Filed July 22, 1912. Serial No. 64,864. PUBLISHED MARCH 25, 1913.

91,807. SARDINES. SEACOAST CANNING CO., Eastport, Me.
Filed May 4, 1912. Serial No. 63,324. PUBLISHED JUNE 25, 1912.

91,808. BONELESS-COD JOHNNIES, SMOKED BLOATERS, AND KIPPERED HERRING. B. M. SHIPMAN CO., New York, N. Y.
Filed October 8, 1912. Serial No. 66,188. PUBLISHED MARCH 25, 1913.

91,809. FOUNTAIN-PENS AND STYLOGRAPHIC PENS. W. H. SMITH & SON, London, England.
Filed May 13, 1912. Serial No. 63,540. PUBLISHED MARCH 25, 1913.

91,810. REMEDY FOR THE SMOKING HABIT. SMOKE-NO-MORE CO., Winnfield, La.
Filed September 27, 1912. Serial No. 66,013. PUBLISHED MARCH 25, 1913.

91,811. SHERRY-WINE, PORT-WINE. MARY A. SNOW, Boston, Mass.
Filed February 17, 1913. Serial No. 68,584. PUBLISHED MARCH 25, 1913.

91,812. WHITE COATING AND CLEANER FOR WHITE CLOTH AND LEATHER SHOES. NATHAN F. SOLOMON, St. Louis, Mo.
Filed February 12, 1912. Serial No. 61,443. PUBLISHED MARCH 25, 1913.

91,813. SPOKES AND NIPPLES OF VEHICLES. THE STANDARD COMPANY, Torrington, Conn.
Filed January 16, 1913. Serial No. 67,951. PUBLISHED MARCH 25, 1913.

91,814. WEEKLY MAGAZINE. STOVES & HARDWARE PUBLISHING COMPANY, St. Louis, Mo.
Filed August 12, 1912. Serial No. 65,202. PUBLISHED MARCH 25, 1913.

91,815. BLOUSES FOR WOMEN AND CHILDREN. THE STROUSE-BAER CO., Baltimore, Md.
Filed January 9, 1913. Serial No. 67,806. PUBLISHED MARCH 25, 1913.

91,816. SPECIAL BOUQUET WINES. SWEET VALLEY WINE CO., Sandusky, Ohio.
Filed February 26, 1913. Serial No. 68,753. PUBLISHED MARCH 25, 1913.

91,817. LEATHER AND CANVAS BOOTS AND SHOES. A. W. TEDCASTLE & CO., Boston, Mass.
Filed June 17, 1912. Serial No. 64,246. PUBLISHED MARCH 25, 1913.

91,818. DEPILATORY. THE TO-KALON MANUFACTURING COMPANY, Syracuse, N. Y., assignor to The International Druggists' and Chemists' Laboratories, Inc., of New York.
Filed October 9, 1912. Serial No. 66,210. PUBLISHED MARCH 25, 1913.

91,819. TREATMENT OF THE DISORDERS OF THE SCALP. THE TO-KALON MANUFACTURING COMPANY, Syracuse, N. Y., assignor to The International Druggists' and Chemists' Laboratories, Inc., of New York.
Filed November 4, 1912. Serial No. 66,683. PUBLISHED MARCH 25, 1913.

91,820. ANTISEPTIC PREPARATIONS FOR EXTERNAL USE IN POWDER FORM. THE UPJOHN COMPANY, Kalamazoo, Mich.
Filed January 26, 1912. Serial No. 61,039. PUBLISHED MARCH 25, 1913.

91,821. SILK GOODS IN THE PIECE. THE VALENTINE & BENTLEY SILK CO., Newton township, N. J., and New York, N. Y.
Filed February 20, 1913. Serial No. 68,645. PUBLISHED MARCH 25, 1913.

91,822. WHEAT-FLOUR. VALIER & SPIES MILLING CO., St. Louis, Mo.
Filed October 21, 1912. Serial No. 66,413. PUBLISHED MARCH 25, 1913.

91,823. SNAP-BUTTONS USED AS GARMENT-FASTENERS. WALDES & CO., Prague-Wrschowitz, Austria-Hungary.
Filed April 1, 1912. Serial No. 62,577. PUBLISHED MARCH 25, 1913.

91,824. GARMENT-FASTENERS KNOWN AS SNAP-BUTTONS. WALDES & CO., Prague-Wrschowitz, Austria-Hungary.
Filed November 26, 1912. Serial No. 67,122. PUBLISHED MARCH 25, 1913.

91,825. GARMENT-FASTENERS KNOWN AS SNAP-BUTTONS. WALDES & CO., Prague-Wrschowitz, Austria-Hungary.
Filed December 11, 1912. Serial No. 67,352. PUBLISHED MARCH 25, 1913.

91,826. GARMENT-FASTENERS KNOWN AS SNAP-BUTTONS. WALDES & CO., Prague-Wrschowitz, Austria-Hungary.
Filed December 11, 1912. Serial No. 67,353. PUBLISHED MARCH 25, 1913.

91,827. AUTOMOBILE RUNABOUTS AND TOURING-CARS. ARTEMAS WARD, Detroit, Mich.
Filed December 19, 1912. Serial No. 67,509. PUBLISHED MARCH 25, 1913.

91,828. WASHING AND BLEACHING FLUID AND DISINFECTANT. EDWARD P. WENNER, Williamsport, Pa.
Filed February 14, 1913. Serial No. 68,551. PUBLISHED MARCH 25, 1913.

LABELS

REGISTERED MAY 27, 1913.

17,038.—*Title:* "GOLDEN STATE BRAND TOKAY." (For Grapes.) J. M. DAVIES, Florin, Cal. Filed April 30, 1913.

17,039.—*Title:* "BUCKEYE FEEDING MOLASSES." (For Molasses.) W. H. EDGAR & SON, Detroit, Mich. Filed April 25, 1913.

17,040.—*Title:* "PROGRESSIVE CO-OPERATIVE COUPON." (For Bread.) PROGRESSIVE CO-OPERATIVE ASSN., Boston, Mass. Filed May 10, 1913.

17,041.—*Title:* "INVINCIBLE." (For Violin-Strings.) SOUTHERN CALIFORNIA MUSIC COMPANY, Los Angeles, Cal. Filed April 15, 1913.

17,042.—*Title:* "SILVER THREADS." (For Violin-Strings.) SOUTHERN CALIFORNIA MUSIC COMPANY, Los Angeles, Cal. Filed April 15, 1913.

17,043.—*Title:* "LIGNOLI." (For Violin-Strings.) SOUTHERN CALIFORNIA MUSIC COMPANY, Los Angeles, Cal. Filed April 15, 1913.

17,044.—*Title:* "DR. A. E. BLOCK PRESCRIPTION SHOE." (For Shoes.) STIX, BAER & FULLER DRY GOODS COMPANY, St. Louis, Mo. Filed March 24, 1913.

17,045.—*Title:* "VEE GEE BRAND." (For Canned Vegetables.) HENRY VON GLAHN & SON, Brooklyn, N. Y. Filed July 6, 1912.

17,046.—*Title:* "DANDY MIRROR." (For Mirrors.) CRIS. W. WIEGAND, Los Angeles, Cal. Filed April 21, 1913.

PRINTS

REGISTERED MAY 27, 1913.

3,272—*Title:* "$1[22] BOSCH PLUGS." (For Spark-Plugs.) BOSCH MAGNETO COMPANY, New York, N. Y. Filed April 29, 1913.

3,273.—*Title:* "MARASCHINO WHITE PINE FROM IDAHO." (For White-Pine Lumber.) OWEN M. BRUNER COMPANY, Philadelphia, Pa. Filed April 12, 1913.

3,274.—*Title:* "WASHANEW GLACÉ KID GLOVES." (For Gloves.) J. M. CHANUT & CIE., INC., New York, N. Y. Filed May 9, 1913.

3,275.—*Title:* "COLGATE'S MONAD VIOLET TALC." (For Violet Talc.) COLGATE & CO., Jersey City, N. J., and New York, N. Y. Filed April 18, 1913.

3,276.—*Title:* "COLGATE'S DACTYLIS TALC." (For Dactylis Talc.) COLGATE & CO., Jersey City, N. J., and New York, N. Y. Filed April 18, 1913.

3,277.—*Title:* "COLGATE'S ÉCLAT TALC." (For Éclat Talc.) COLGATE & CO., Jersey City, N. J., and New York, N. Y. Filed April 18, 1913.

3,278.—*Title:* "THE BARR BAKING & CATERING CO., ICE CREAM AND PASTRY, CATERING AT ANY DISTANCE." (For Ice-Cream and Pastry.) THEODORE LANGE, Springfield, Mass. Filed April 3, 1913.

3,279.—*Title:* "BETTER THAN A PROMISE." (For Brass Beds.) PITTSBURGH-HICKSON COMPANY, East Butler, Pa. Filed May 14, 1913.

3,280.—*Title:* "ROSILLA PASTE." (For Candy.) POWELL'S, New York, N. Y. Filed April 25, 1913.

3,281.—*Title:* "SPRING-STEP RUBBER HEELS." (For Rubber Heels.) REVERE RUBBER CO., Providence, R. I., and Chelsea, Mass. Filed June 1, 1912.

3,282.—*Title:* "CREMOLA WAFERS." (For Cremola Wafers.) YECKER CHOCOLATE COMPANY INC., New York, N. Y. Filed April 28, 1913.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE ONEIDA COMMUNITY, LIMITED.

Decided April 17, 1913.

1. TRADE-MARKS—DESIGN ON THE BACK OF A SPOON—NOT REGISTRABLE IN VIEW OF PRIOR PATENTED CONSTRUCTION.

A trade-mark for spoons described as "the raised substantially circular or O shaped film having distinct edges, appearing on the back of the spoon bowl" *Held* properly refused registration where a spoon having a piece of pure silver placed thereon is shown in patents granted prior to applicant's alleged date of use.

2. SAME—PATENTED CONSTRUCTION—CANNOT BE MONOPOLIZED BY A REGISTRATION.

When a patent showing a certain construction expires, the public has a right to manufacture articles in accordance therewith, and that right cannot be taken away under the guise of a registration of a trade-mark.

ON APPEAL.

TRADE-MARK FOR SPOONS.

Messrs. Duncan & Duncan for the applicant.

MOORE, *Commissioner:*

This is an appeal from the decision of the Examiner of Trade-Marks refusing to register as a trade-mark for spoons a mark which is described as—

the raised substantially circular or O shaped film having distinct edges, appearing on the back of the spoon bowl.

The refusal is based on the ground that the mark is not a distinct mark of origin and ownership.

Three patents have been cited—namely, Blackman, No. 70,156, October 26, 1867; Warner, No. 309,013, December 9, 1884; Warner, No. 337,099, March 2, 1886—as showing it to be common to place a film of metal on the back of the bowl of a spoon in the manner shown in applicant's drawing.

It is contended on behalf of applicant that these patents do not show any mark on the back of the spoon for the reason that the piece of pure silver is placed on the spoon prior to the time that the spoon is plated and that after said plating the back of the spoon presents a uniform appearance.

The patent to Warner, however, shows a piece of silver fastened to the outside of the spoon, and it is believed that it would clearly show on the back thereof. The rejection is not, as contended by applicant, a holding of non-patentability, but is based on the ground that when the Blackman patent expired the public had a right to manufacture spoons in accordance therewith and that that right cannot be taken away from it under the guise of the registration of a trade-mark.

In the decision of the Court of Appeals of the District of Columbia in *Herz* v. *Locwenstein* (decided April 7, 1913) the court in holding that a trade-mark for toothpicks consisting of two short parallel lines of currugations connected by a relatively long line of corrugations embossed on paper tubes in which the toothpicks are inclosed did not constitute a valid trade-mark where it appeared that these marks were formed on the tubes in the act of sealing these tubes by pressure, without the use of paste, said:

If this method of making wrappers is not anticipated and serves a useful purpose, it could be patented as an invention and others prevented for a limited time from using it. A trade-mark registration, however, would give appellant a perpetual monopoly. The Trade-Mark Act cannot be used as an avenue to escape the limitation of the patent law.

This ruling is believed to be clearly applicable to the present case.

The Examiner in his statement said:

It may be true that this applicant has presented a more artistic spoon and a more pleasing character of film, but this is merely due to the development of the art.

At the hearing it was contended that applicant had not presented a more artistic spoon, since, as a matter of fact, the silver trade regarded this oval disk as detracting from the appearance of the spoon. It is to be noted, however, that an application for a design for this identical article was filed by the same person who signed the present application as vice-president of the applicant company.

The decision of the Examiner of Trade-Marks is affirmed.

MESNARD *v.* HODGKINSON.

Decided May 13, 1913.

INTERFERENCE—CONCESSION OF PRIORITY—GROUND FOR DISSOLUTION.

A concession of priority is a ground for an award of priority and not for dissolving the interference.

ON ORDER.

ENGINE-STARTER.

Messrs. Brown & Hopkins for Mesnard.

Messrs. Osgood, Davis & Dorsey for Hodgkinson.

MOORE, *Commissioner:*

On September 20, 1912, the Examiner of Interferences awarded priority to Hodgkinson. Mesnard appealed to the Examiners-in-Chief from this decision.

On February 19, 1913, a concession of priority to Hodgkinson was filed, which on February 26 the Examiners-in-Chief held informal, since not signed by the inventor. On April 1, 1913, they rendered a decision affirming the decision of the Examiner of

Interferences awarding priority to Hodgkinson. The limit of appeal was set to expire April 21, 1913.

No appeal was taken from that decision; but on May 5, 1913, a concession of priority to Hodgkinson was filed, signed by Mesnard and his assignee. This concession was accompanied by a request that the interference be dissolved.

A concession of priority is a ground for awarding priority and not for dissolving the interference, and if this concession had been filed before the Examiner of Interferences rendered his decision he would have rendered a decision in accordance therewith, awarding priority to Hodgkinson. Had it been filed within the limit of appeal either from the decision of the Examiner of Interferences or from the decision of the Examiners-in-Chief it would have been construed merely as a waiver of the right of appeal.

No appeal having been taken from the decision of the Examiners-in-Chief, that decision has become final.

No action, therefore, can be taken on the concession.

SOMERVILLE *v.* LARMUTH.

Decided May 5, 1913.

INTERFERENCE—PRELIMINARY STATEMENT—MOTION TO AMEND.

A motion to amend a preliminary statement *Held* properly denied where it appears from the affidavits accompanying the motion that the appellant had known of certain letters upon which the motion to dissolve is based, but owing to press of business had not examined his records at the time the original preliminary statement was prepared.

APPEAL on motion.

ROPE-MAKING MACHINE.

Messrs. Jones. Addington, Ames & Seibold for Somerville.

Messrs. Howson & Howson for Larmuth.

BILLINGS, *First Assistant Commissioner:*

This is an appeal by Larmuth from a decision of the Examiner of Interferences denying his motion to amend his preliminary statement.

In his original preliminary statement Larmuth alleged introduction into this country on the 14th of October, 1910, at which time, it is stated, his attorneys received a letter from his English attorneys—

fully showing and describing said invention, and instructing the filing of an application for Letters Patent in the United States therefor.

In the proposed amended preliminary statement Larmuth alleges an earlier disclosure in this country by reason of certain letters written to one Thomas Gore, the first of which, it is stated, was written on the 24th of September by Thomas Laidler, the receipt thereof having been acknowledged on the 8th of October, 1907, and the second of which was written by appellant's firm, Thomas Larmuth & Co., Ltd., to Gore on November 23, 1907, and the receipt thereof acknowledged by Gore on December 10th.

The motion was denied by the Examiner of Interferences on the ground that the only excuse offered by Larmuth was, in effect, that due to extreme business pressure he did not take time to examine his papers for the purpose of preparing an accurate statement and that such excuse constituted no proper basis for permitting amendment.

In the brief filed on behalf of Larmuth it is alleged that this statement of the Examiner of Interferences is not correct. It is stated that the amended preliminary statement shows that Larmuth disclosed his invention in confidence to one Thomas Laidler, who had been for a number of years the agent in London for Larmuth's firm, that Laidler may have unintentionally violated the confidence which had been imposed in him, and the—

question then is, was there anything in this unusual act to put Larmuth on his guard to the extent that he was required to examine the records of the firm to see if there had been any communication of the invention to a party in the United States.

It appears, however, very clearly from Larmuth's affidavit accompanying the motion to amend that he had known, prior to the time when he executed the original preliminary statement, of the communications sent by Laidler and the firm of Thomas Larmuth & Co., Ltd., to Gore. In this affidavit he states that being compelled to be absent from home for long periods owing to extreme pressure of business he was unable to see his patent agents in Manchester for more than a few minutes, and that—

in the extreme press of business the fact that particulars of my invention had been sent—

by Laidler and by the firm to Gore—

quite escaped my memory and particulars thereof were therefore inadvertently omitted from my preliminary statement;

and he further states that—

as soon as the fact that particulars of my invention had been introduced into the United States occurred to me,

a search was at once caused to be made through the correspondence with Gore.

In view of these statements of Larmuth himself the Examiner of Interferences was right in holding that the only excuse offered for the failure to make the allegations now proposed in the original preliminary statement is that through press of business appellant did not take time to make a careful search of the evidence upon which said statement could be based. This excuse is clearly insufficient to justify the proposed amendment for the reasons fully pointed out in the decisions cited by the Examiner of Interferences.

The decision of the Examiner of Interferences is affirmed.

GASAU AND MARKLEIN *v.* ODELL.

Decided May 6, 1913.

INTERFERENCE—JOINT APPLICATION—MOTION TO PRESENT SAME AS SOLE APPLICATION—TRANSMISSION REFUSED.

A motion to transmit an interference to the Primary Examiner for the purpose of considering whether the joint application in the interference may be amended to present the same as the sole application of one of the joint applicants *Held* properly refused, since sole inventors and joint inventors constitute distinct entities, and a joint application does not constitute proof that one of the applicants was a sole inventor.

APPEAL on motion.

COUCH.

Messrs. Munn & Co. for Gasau and Marklein.

Mr. Samuel E. Darby for Odell.

TENNANT, *Assistant Commissioner:*

This is an appeal by Gasau and Marklein from the decision of the Examiner of Interferences denying their motion to transmit the above-entitled interference for the purpose of considering a motion that their application be so amended as to present the same as an application of Marklein alone instead of a joint application.

It is pointed out in support of this motion that the testimony taken in the interference shows that in so far as this issue is concerned the parties Gasau and Marklein are not, in fact, joint inventors, but that the invention is that of Marklein alone. It is, however, asserted that as to certain subject-matter involved in the joint application involved herein they are, in fact, joint inventors. In view of these facts it is proposed to cancel from the application certain claims covering the joint invention with a view to confining this application to the sole invention of Marklein.

The Examiner of Interferences refused to transmit this motion in view of the practice set forth in the decisions in *ex parte Erne and Bridges* (81 O. G., 2247) and *ex parte Weil and Grant*, (173 O. G., 1081.)

It is stated in the brief that unless Marklein shall obtain the benefit of the filing date of the joint application involved in this interference he will be barred from obtaining a patent upon his sole application, for the reason that the device covered by the issue has now been in public use for more than two years. It is urged in view of these facts that justice demands that he should be given the benefit of the earlier application by the substitution of the proofs above referred to.

This contention is believed to be without substantial foundation. As pointed out in the decisions above referred to, sole inventors and joint inventors constitute distinct entities, and the joint application does not constitute proof that one of the parties is the sole inventor, for, as stated in *Haskell v. Miner v. Ball*, (109 O. G., 2170)—

it is scarcely necessary to say that a joint application filed in this Office is not record evidence that one of the joint applicants is a sole inventor. On the contrary, the oath attached to that application indicates that he is not a sole inventor, and therefore it seems very clear that the joint application cannot be considered complete proof that he is the first and sole inventor.

In *ex parte Weil and Grant, supra*, it is stated that—

* * * even if Weil was the sole inventor of the application disclosed herein he is not entitled to the benefit of the filing date of this joint application as a constructive reduction to practice of that invention. (*Haskell v. Miner v. Ball*, C. D., 1904, 131; 109 O. G., 2170.)

The recent decision of the Court of Appeals of the District of Columbia in the case of *Hewlett v. Steinberger* (190 O. G., 270) clearly supports this principle. Furthermore, the same court said in its decision in *Lemp v. Randall and Bates* (145 O. G., 255; 33 App. D. C., 430) that the question whether joint applicants are, in fact, joint inventors is a pertinent question for consideration in connection with priority of invention.

In view of these facts it must be held that the decision of the Examiner of Interferences refusing to transmit Gasau and Marklein's motion to amend was right, and it is accordingly affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE MYGATT.

Decided February 3, 1913.

DESIGN—REQUIREMENT FOR FURTHER ILLUSTRATION—RULING NOT APPEALABLE TO THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

Where the Commissioner affirmed the action of the Examiner requiring further illustration in an application for a design patent and the Examiner held that an amendment filed thereafter was not a sufficient compliance with that ruling and the Commissioner denied a petition that the Examiner be directed to either allow or reject the application, *Held* that no appeal lies from this decision of the Commissioner, and if the Examiner refuses to allow the application without further amendment appeal will lie from such action to the Examiners-in-Chief.

Mr. F. B. Brock for the appellant.

Mr. W. S. Ruckman for the Commissioner of Patents.

SHEPARD, *C. J.:*

Mygatt is an applicant for a design patent for prism-glass shades. The original application was filed June 5th, 1908, and there followed frequent objections and amendments. On April 11th, 1910, the Examiner notified the applicant that his application presented patentable matter, but required him to furnish an additional view in side elevation, or in perspective in order that the application be clearly illustrated. Applicant appealed to the Examiners-in-Chief, who dismissed the appeal on July 10th, 1911, on the ground that there had been no rejection of the application, wherefore they were without jurisdiction. They suggested, that the applicant's remedy was an appeal by petition to the Commissioner in person. This course the applicant followed and the Commissioner, after calling for an additional statement by the Examiner of his reasons for requiring the amendment, sustained the decision of the Examiner. On October 5th, 1911, the applicant filed a verbal amendment which the Examiner held was not a sufficient compliance with the former requirement; stating in conclusion:

Applicant having failed to completely disclose the design, the claim is again rejected.

This was the first rejection after the amendment had been made. On February 29th, 1912, the applicant, not treating this as a final rejection of his application, called the attention of the Examiner to a ruling of the Commissioner in another pending application of applicant, which he urged as controlling. The Examiner being of the opinion that the ruling cited was not in point, repeated his requirement of amendment. March 28th, 1912, he asked the Examiner to allow or reject his application in order that he might appeal to the Examiners-in-Chief. April 11th, 1912, the Examiner, neither allowing nor rejecting the application, renewed his demand for the amendment, and declared his action final. On April 15th, 1912, applicant by petition to the Commissioner in person, appealed—

from the requirement of the Examiner, twice repeated, that the applicant furnish additional illustration in this case, instead of rejecting his application.

Interferences awarding priority to Hodgkinson. The limit of appeal was set to expire April 21, 1913.

No appeal was taken from that decision; but on May 5, 1913, a concession of priority to Hodgkinson was filed, signed by Mesnard and his assignee. This concession was accompanied by a request that the interference be dissolved.

A concession of priority is a ground for awarding priority and not for dissolving the interference, and if this concession had been filed before the Examiner of Interferences rendered his decision he would have rendered a decision in accordance therewith, awarding priority to Hodgkinson. Had it been filed within the limit of appeal either from the decision of the Examiner of Interferences or from the decision of the Examiners-in-Chief it would have been construed merely as a waiver of the right of appeal.

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APPEAL on motion.

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Messrs. Howson & Howson for Larmuth.

BILLINGS, *First Assistant Commissioner:*

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fully showing and describing said invention, and instructing the filing of an application for Letters Patent in the United States therefor.

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The motion was denied by the Examiner of Interferences on the ground that the only excuse offered by Larmuth was, in effect, that due to extreme business pressure he did not take time to examine his papers for the purpose of preparing an accurate statement and that such excuse constituted no proper basis for permitting amendment.

In the brief filed on behalf of Larmuth it is alleged that this statement of the Examiner of Interferences is not correct. It is stated that the amended preliminary statement shows that Larmuth disclosed his invention in confidence to one Thomas Laidler, who had been for a number of years the agent in London for Larmuth's firm, that Laidler may have unintentionally violated the confidence which had been imposed in him, and the—

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a search was at once caused to be made through the correspondence with Gore.

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The decision of the Examiner of Interferences is affirmed.

GASAU AND MARKLEIN *v.* ODELL.

Decided May 6, 1913.

INTERFERENCE—JOINT APPLICATION—MOTION TO PRESENT SAME AS SOLE APPLICATION—TRANSMISSION REFUSED.

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COUCH.

Messrs. Munn & Co. for Gasau and Marklein.

Mr. Samuel E. Darby for Odell.

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It is pointed out in support of this motion that the testimony taken in the interference shows that in so far as this issue is concerned the parties Gasau and Marklein are not, in fact, joint inventors, but that the invention is that of Marklein alone. It is, however, asserted that as to certain subject-matter involved in the joint application involved herein they are, in fact, joint inventors. In view of these facts it is proposed to cancel from the application certain claims covering the joint invention with a view to confining this application to the sole invention of Marklein.

The Examiner of Interferences refused to transmit this motion in view of the practice set forth in the decisions in *ex parte Erne and Bridges* (81 O. G., 2247) and *ex parte Weil and Grant*, (173 O. G., 1081.)

It is stated in the brief that unless Marklein shall obtain the benefit of the filing date of the joint application involved in this interference he will be barred from obtaining a patent upon his sole application, for the reason that the device covered by the issue has now been in public use for more than two years. It is urged in view of these facts that justice demands that he should be given the benefit of the earlier application by the substitution of the proofs above referred to.

This contention is believed to be without substantial foundation. As pointed out in the decisions above referred to, sole inventors and joint inventors constitute distinct entities, and the joint application does not constitute proof that one of the parties is the sole inventor, for, as stated in *Haskell v. Miner v. Ball*, (109 O. G., 2170)—

it is scarcely necessary to say that a joint application filed in this Office is not record evidence that one of the joint applicants is a sole inventor. On the contrary, the oath attached to that application indicates that he is not a sole inventor, and therefore it seems very clear that the joint application cannot be considered complete proof that he is the first and sole inventor.

In *ex parte Weil and Grant, supra*, it is stated that—

• • • even if Weil was the sole inventor of the application disclosed herein he is not entitled to the benefit of the filing date of this joint application as a constructive reduction to practice of that invention. (*Haskell v. Miner v. Ball*, C. D., 1904, 131; 109 O. G., 2170.)

The recent decision of the Court of Appeals of the District of Columbia in the case of *Hewlett v. Steinberger* (190 O. G., 270) clearly supports this principle. Furthermore, the same court said in its decision in *Lemp v. Randall and Bates* (145 O. G., 255; 33 App. D. C., 430) that the question whether joint applicants are, in fact, joint inventors is a pertinent question for consideration in connection with priority of invention.

In view of these facts it must be held that the decision of the Examiner of Interferences refusing to transmit Gasau and Marklein's motion to amend was right, and it is accordingly affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE MYGATT.

Decided February 3, 1913.

DESIGN—REQUIREMENT FOR FURTHER ILLUSTRATION—RULING NOT APPEALABLE TO THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

Where the Commissioner affirmed the action of the Examiner requiring further illustration in an application for a design patent and the Examiner held that an amendment filed thereafter was not a sufficient compliance with that ruling and the Commissioner denied a petition that the Examiner be directed to either allow or reject the application, *Held* that no appeal lies from this decision of the Commissioner, and if the Examiner refuses to allow the application without further amendment appeal will lie from such action to the Examiners-in-Chief.

Mr. F. B. Brock for the appellant.

Mr. W. S. Ruckman for the Commissioner of Patents.

SHEPARD, *C. J.:*

Mygatt is an applicant for a design patent for prism-glass shades. The original application was filed June 5th, 1908, and there followed frequent objections and amendments. On April 11th, 1910, the Examiner notified the applicant that his application presented patentable matter, but required him to furnish an additional view in side elevation, or in perspective in order that the application be clearly illustrated. Applicant appealed to the Examiners-in-Chief, who dismissed the appeal on July 10th, 1911, on the ground that there had been no rejection of the application, wherefore they were without jurisdiction. They suggested, that the applicant's remedy was an appeal by petition to the Commissioner in person. This course the applicant followed and the Commissioner, after calling for an additional statement by the Examiner of his reasons for requiring the amendment, sustained the decision of the Examiner. On October 5th, 1911, the applicant filed a verbal amendment which the Examiner held was not a sufficient compliance with the former requirement; stating in conclusion:

Applicant having failed to completely disclose the design, the claim is again rejected.

This was the first rejection after the amendment had been made. On February 29th, 1912, the applicant, not treating this as a final rejection of his application, called the attention of the Examiner to a ruling of the Commissioner in another pending application of applicant, which he urged as controlling. The Examiner being of the opinion that the ruling cited was not in point, repeated his requirement of amendment. March 28th, 1912, he asked the Examiner to allow or reject his application in order that he might appeal to the Examiners-in-Chief. April 11th, 1912, the Examiner, neither allowing nor rejecting the application, renewed his demand for the amendment, and declared his action final. On April 15th, 1912, applicant by petition to the Commissioner in person, appealed—

from the requirement of the Examiner, twice repeated, that the applicant furnish additional illustration in this case, instead of rejecting his application.

After citing certain rulings of the Commissioner, the petition concluded as follows:

It is therefore requested that the Examiner be directed to either allow or reject the application.

As the Commissioner agreed with the Examiner that the amendment had been properly required it would have expedited matters had he directed the Examiner to reject the claim upon failure of amendment within a reasonable time. The Commissioner, however, denied the petition thereby leaving the applicant to deal with the Examiner. His decision was not upon the merits of the application, for they were not involved, but interlocutory merely. From it this appeal had been prosecuted. As has been repeatedly held, appeals do not lie from interlocutory orders of the Commissioner, or to regulate matters of practice. *In ex parte* cases the appellate jurisdiction is limited to those—

where the claims of an applicant for patent, or the reissue of a patent, after having been twice rejected, have been finally rejected on an appeal to the Commissioner in due course of procedure. (*In re Fullagar*, 32 App. D. C., 222–228, and cases there cited.)

The due course of procedure, prescribed by statute and rules, is first, an appeal to the Examiners-in-Chief, and from them to the Commissioner. It is true that, under the circumstances, the applicant might have treated the action of the Examiner as, in fact, a rejection of his application, he having failed to amend as required, and might have appealed to the Examiners-in-Chief therefrom as from an express rejection, and from them to the Commissioner, and then to this court. Looking to the substance and effect of a similar action in a former case of the same party, and not to the mere form of the decision, this court entertained an appeal that had been prosecuted in the due course of procedure referred to. (*Ex parte Mygatt*, 26 App. D. C., 366–369.) As pointed out in that case by Mr. Justice Duell the applicant had two courses open to him: either to petition the Commissioner to compel definite final action by the Examiner; or to treat the action as, substantially and in effect, a final second rejection of his application, and appeal therefrom to the Examiners-in-Chief in due course. In the case cited he pursued the latter course and his appeal was entertained. In the present case he adopted the former. Having elected this remedy and failed, he can do nothing more than go back to the Examiner, and refusing to amend demand either allowance or rejection of his application as it stands. If the Examiner should adhere to his insistence upon the amendment and refuse to entertain a rejection, which is hardly probable, he could take his appeal in due course as was done in the case cited.

It follows that the appeal must be dismissed.

Dismissed.

Court of Appeals of the District of Columbia.

MIEHLE *v.* SCOTT AND SCOTT, EXECUTORS OF THE ESTATE OF WALTER SCOTT, DECEASED.

Decided February 3, 1913.

1. INTERFERENCE—PRIORITY—REDUCTION TO PRACTICE.

Where the claim in issue is for a combination of coördinating elements in a printing-press including a tripping mechanism, *Held* that the building and testing of a full-sized tripping mechanism does not constitute reduction to practice of the invention in issue.

2. SAME—SAME—SAME.

Where the invention in issue does not involve a device so simple in character as to demonstrate its own usefulness without test, but is one that required careful experimentation and test before its capacity for useful operation could be determined, *Held* that the mere building of a full-sized device did not constitute reduction to practice. "In the circumstances of this case, until this test occurred the reduction to practice was potential and not actual. It could not be known that the invention was complete until the ability of the combination of elements to produce the desired result had been demonstrated."

3. SAME—SAME—SAME.

"In the present case, as previously suggested, it was not demonstrated prior to the filing date of appellees that appellant's device was complete and capable of useful operation. The subsequent demonstration could not deprive appellees of priority of reduction to practice, since that question must be determined upon the facts existent at the time of such filing."

Mr. C. C. Linthicum, *Mr. F. T. Brown*, and *Mr. F. A. Hopkins* for the appellant.

Mr. Axel V. Beeken for the appellee.

ROBB, *J.*:

This appeal involves a decision of the Commissioner of Patents in an interference proceeding awarding priority of invention to appellees, the senior parties, who filed as executors of Walter Scott.

The invention is expressed in the following count:

In a multi-couple, multi-revolution printing machine, the members of which are adapted to print on the same side of the sheet, the combination with the members of two adjacent printing couples, of automatic means for periodically tripping and untripping the members of each couple, interrupting means for the automatic means of each couple normally inactive but adapted to act sequentially during successive cycles of the machine, when properly positioned, and means for positioning both of said interrupting means during the same cycle of the machine.

We quote the following from the opinion of the Acting Examiner of Interferences:

In mechanism of this character two sheets receive impressions at the same time. The latest fed receives its first impression while the one previously fed receives its second impression. Should the second sheet be fed crooked or should the feeder fail to feed it at the proper time, the type forms in the first printing couple would print on the pad of its cylinder and this ink would soil the back of the next few sheets fed in. It is therefore desirable, under such circumstances, to cause the first cylinder to remain out of impression position, but to allow the second couple to give its impression to the sheet previously fed before it, in turn, is thrown out of action. The invention here involved therefore consists in an arrangement of mechanism which will cause the first couple to be thrown out of action at one time and the second couple to be thrown out automatically at a later time. To produce this result the parties hereto have evolved their respective devices. These are specifically quite different, due to the fact that they are applied to presses widely differing in general design.

While the devices of the two parties specifically differ, it is not disputed that each responds to the issue. Each of the three tribunals of the Patent Office has ruled that Scott was the first to conceive the invention, and each has ruled that Miehle's proofs fall short of establishing reduction to practice by him prior to Scott's filing date. The evidence introduced on behalf of Scott on the question of priority of conception is so clear and convincing, and the review of that evidence by the Patent Office so satisfactory, that we shall accept the finding thereon, without further comment. In the absence of a showing of diligence by appellees, the real question

in the case is whether Miehle has sustained the burden resting upon him of proving, by a preponderance of evidence, that he reduced the invention to practice prior to the filing date of Scott, December 19, 1905.

It appears that some time in October, 1905, Miehle completed a full-sized tripping mechanism of the particular type devised by him, mounted it in a frame, and manipulated it by hand. He now contends that, as the new element in the patentable combination set forth in the claim of the issue was present in this early tripping mechanism, the test then made was sufficient to demonstrate operativeness, hence, he insists, it amounted to reduction to practice. We agree with the Patent Office that this position is untenable. Appellant is not seeking a patent on this tripping mechanism; he is seeking a patent on a combination of coördinating elements and, unless that coördination exists, patentability of the combination is lacking. There must be harmony of action between the members of the printing-couples and the tripping device, since the very object of the invention is control of the impression-cylinders, that is, the function of the tripping device in the machine is to cause the impression-cylinders to act in a predetermined manner. At that time the rods connecting the tripping mechanism with the cylinders were not on the machine. As the absence of those rods prevents the tripping of the cylinders, it is clear, as found by the Patent Office, that it could not be definitely determined whether the cylinders would trip in proper sequence. That the invention was complete was not, therefore, then demonstrated.

Appellant further contends that, regardless of whether the October experiments with his tripping device constituted reduction to practice of the combination of the issue, he is entitled to a date at least as early as December 6, 1905, because on that date the tripping mechanism was connected to the cylinders and the transfer-cylinder was mounted in place. In other words, while the evidence will not justify a finding that appellant's machine was operated prior to appellee's filing date, he nevertheless insists that his machine had been perfected prior to that time and that, in its then condition, it was capable of useful operation, and hence that he is entitled to be considered the first to reduce the invention to practice. Obviously, this invention does not involve a device so simple in character as to demonstrate its own usefulness without test. (*Sydeman v. Thoma*, 32 App. D. C., 362, 373.) On the contrary, as found by the tribunals of the Patent Office and as demonstrated by the evidence in the case, it is one that required careful experimentation and test before its capacity for useful operation could be determined, that is, before it could be known that it was capable of producing the desired results. In the circumstances of this case, until this test occurred the reduction to practice was potential and not actual. It could not be known that the invention was complete until the ability of the combination of elements to produce the desired result had been demonstrated. In *Hall v. Macneale* (107 U. S., 97) the invention related to "improvement in connecting doors and casings of safes," consisting of conical or tapering arbors in combination with two or more pieces of metal in the doors and casings of safes and other secure receptacles. It was there contended that the invention was anticipated by a prior similar device. This contention was attempted to be met with the suggestion that the use of this prior device was experimental merely. The Court declined to adopt this suggestion and ruled that the invention was complete in this prior device. The Court said:

The safes (containing the prior device) were sold, and, apparently, no experiment and no experimental use were thought to be necessary.

In other words, the device there involved was of such a character that it demonstrated its own efficacy. "It was capable," said the Court, "of producing the results sought to be accomplished." But that case materially differs from the present. Here it would have been impossible, even for those skilled in the art, to have determined with certainty whether the machine which appellant assembled prior to appellees' filing date would produce the expected result without actual trial. Until such a trial took place, it could not be known whether the invention was complete.

If the question relate to a machine—

said the court in *Coffin v. Ogden*, (18 Wall., 120, 124)—

conception must have been clothed in substantial forms which demonstrate at once its practical efficacy and utility. • • • Until his work *is done*, the inventor has given nothing to the public.

Agawam Co. v. Jordan (7 Wall., 602) contains nothing inconsistent with what we have said. There it was sought to overthrow a patent for an invention that had gone into universal use, on the ground that the patentee was not the real inventor. No doubt whatever existed that he was the first to give physical embodiment to the invention, nor was it claimed that he was not the first to reduce to practice. With these facts in mind, the court said:

The settled rule of law is, that whoever first perfects a machine is entitled to the patent, and is the real inventor, although others may have previously had the idea and made some experiments toward putting it in practice. He is the inventor and is entitled to the patent who first brought the machine to perfection and made it capable of useful operation.

In the present case, as previously suggested, it was not demonstrated prior to the filing date of appellees that appellant's device was complete and capable of useful operation. The subsequent demonstration could not deprive appellees of priority of reduction to practice, since that question must be determined upon the facts existent at the time of such filing. It may well be that, had the two devices been specifically the same, the constructive reduction to practice of one would have been overcome by the prior physical embodiment of the other; but such is not the case before us. Moreover, inasmuch as he who first conceives an invention and is thereafter diligent is entitled to priority over him who is the second to conceive but the first to reduce to practice, it is obvious that the court, in the Agawam case, was speaking with reference to the particular circumstances of that case.

The decision is affirmed.

Affirmed.

Court of Appeals of the District of Columbia.

THE HUMP HAIRPIN COMPANY *v.* THE DE LONG HOOK AND EYE COMPANY.

Decided January 6, 1913.

1. TRADE-MARKS—GOODS OF THE SAME DESCRIPTIVE PROPERTIES—TESTIMONY—CONCLUSIONS OF WITNESSES ENTITLED TO LITTLE WEIGHT.

"While witnesses familiar with the articles of merchandise may give evidence of facts within their knowledge of the construction and uses of said articles, from which conclusions may be deduced, it is not perceived that their opinions or conclusions are entitled to any particular weight. For this reason, as well as because of the direct conflict between them we attach no weight to the evidence."

2. SAME—SAME—INCLUSION IN SAME CLASS NOT DETERMINATIVE.

The fact that two articles are included in one of the classes established by the Commissioner of Patents under the act of May 4, 1906, does not of itself make these articles of the same descriptive properties.

3. SAME—SAME—HAIR-PINS AND HOOKS AND EYES ARE NOT.

Hair-pins and hooks and eyes *Held* not to be goods of the same descriptive properties. "There could be no confusion in the minds of purchasers of hair pins and hooks and eyes, respectively, because one could not possibly be used for the purpose to which the other is applied."

4. SAME—PROPERTY RIGHT—ACQUIRED ONLY BY USE.

Property in a trade-mark is acquired not by the invention or discovery of a word or symbol or by advertising, but only by attaching or affixing it to the articles or merchandise for which it is intended to be used as a trade-mark.

5. SAME—OPPOSITION—STATUTORY USE BY APPLICANT—CANNOT BE RAISED BY AN OPPOSER SHOWING NO SPECIAL INTEREST.

Where an opposer fails to show any interest in the registration of a trade-mark which is not common to the general public, *Held* that he cannot raise the question whether the applicant has established a statutory use of the mark.

Mr. John M. Coit for the appellant.

Mr. C. N. Anderson and *Mr. C. E. Rushmore* for the appellee.

SHEPARD, *C. J.*:

Appeal from the decision of the Commissioner of Patents sustaining an opposition to the registration of a trade-mark.

The Hump Hairpin Company applied for the registration of a trade-mark for hair-pins consisting of the words "The Hump" over the representation of a camel with a conspicuous hump showing between the prongs of a hair-pin carried on the camel's back, as he traverses a desert, with the rays of a rising, or setting, sun in the background.

The application was allowed and ordered for publication; following which the De Long Hook and Eye Company filed an opposition. We adopt the statement of the grounds of opposition made by the Examiner of Interferences, as follows:

The grounds are, in effect, that opposer and its predecessors in business have used the word "Hump" as a trade-mark for hooks and eyes continuously since the year 1891; that since December, 1907, opposer has used the words "DeLong Co." interchangeably with the word "Hump" as a trade-mark for hooks and eyes; that opposer has manufactured and sold large quantities of hair-pins of a form styled "Cupid" since 1894; that by reason of the long-continued association of the trade-mark "Hump" in the market with the products of opposer and its predecessors and by reason of extensive advertisement, the same has become very widely known and valuable to the opposer, and the goods bearing this mark have become familiar to the purchasing public as the products of opposer; that hooks and eyes and hair-pins belong to the same class of goods; and that opposer would be greatly damaged by the registration of the mark for hair-pins for which application has been made.

De Long Hook and Eye Company and its predecessors owned the patent—since expired—for the hook and eye with a spring-bend resembling a hump, and used the word "Hump" as a trade-mark for said hooks and eyes long prior to any date claimed for said word, as a trade-mark by the Hump Hairpin Company, and its predecessors. The De Long Hook and Eye Company also began the manufacture of hair-pins calling the same "Cupid" and affixing that name to the packages. These pins did not have a hump in the same way as the hook and eye, but had a crimp or twist in each prong. It is true also that the De Long Co. widely advertised the hump hook and eye, and all of their productions, with such words as "See that Hump," and the like. They also advertised their hair-pins as made by the manufacturers of the Hump hook and eye. It also manufactured and sold other forms of hooks and eyes under different names, "Atlas," "Columbia," etc.

In the view that we have taken of the case it is not necessary to consider the effect of the expiration of the hook and eye patent upon the use of "Hump," or "See that Hump," as trade-marks for hooks and eyes; which mark, it appears, had been registered for hooks and eyes by the De Long Co. under former laws, and reregistered under the present law, in 1905 and 1906.

The question on which the case turns, in our opinion, is whether hooks and eyes and hair-pins are of the same "descriptive properties." (See sec. 7, Trade-Mark Act.)

Expert testimony, so called, was taken by each party on this issue. From this it appears that hooks and eyes and hair-pins are generally exposed for sale in notion departments along with many other articles of notions unlike in material and uses. Stress is laid by the De Long Co.'s witnesses upon the fact that both articles are made of wire, are sold as notions, and are used as fastenings. Opposing witnesses note the many essentially different articles classed as notions, some of which are made of wire, as are hair-pins and hooks and eyes, and say that hooks and eyes as well as studs, buttons, buckles, etc., used for cloth-fastenings are dressmakers' findings; while hair-pins, used for fastening the hair, are hair-dressers' findings.

While witnesses familiar with the articles of merchandise may give evidence of facts within their knowledge of the construction and uses of said articles, from which conclusions may be deduced, it is not perceived that their opinions or conclusions are entitled to any particular weight. For this reason, as well as because of the direct conflict between them, we attach no weight to the evidence.

The question has been before this court in several cases. In *Phoenix Paint & Varnish Co.* v. *Lewis & Bros. Co.* (32 App. D. C., 285–287) it was said that the goods need not be identical, but it is sufficient

if there be a sameness in their general and essential characteristics. That case involved the use of the same trade-mark upon packages of mixed paints by one party, and upon packages of paste paints by the other. These were held to be of the same descriptive properties. To the same effect: *Walter Baker Co.* v. *Harrison*, (32 App. D. C., 272;) *American Stove Co.* v. *Detroit Stove Works*, (31 App. D. C., 304–306.) In a later case one party used the figure of a Dutchman as a trade-mark upon packages of calcimine; the other a figure of a Dutch boy upon packages of white lead. Without deciding whether the marks so nearly resembled each other as to be likely to produce confusion in trade, if applied to the same articles, the court said:

The real question is whether the use of the figure of a Dutch boy on one package, and that of a Dutchman on the other is calculated to mislead an ordinary person seeking to buy white lead, into buying a package of calcimine. Bearing in mind the essential differences between the two articles, we think it impossible that such should be the case. The purchaser has some definite use in view, and must know whether he wants white lead to compound into paint, or for other purposes, or whether he wants calcimine. He does not call for the Dutch boy or the Dutchman package, but may probably call for the Dutch boy brand of white lead, or the Dutchman brand of calcimine. He may even call for the Dutch white lead, or Dutch calcimine, but he knows whether he wants white lead or calcimine, and, unless mentally defective, an unprincipled salesman could not induce him to take one for the other. (*Muralo Co.* v. *National Lead Co.*, 36 App. D. C., 541–543. See also *Johnson Educator Food Co.* v. *Sylvanus Smith & Co.*, 37 App. D. C., 107.)

The language quoted above is, if anything, more directly applicable to the conditions of the instant case. There could be no confusion in the minds of purchasers of hair-pins and hooks and eyes, respectively, because one could not possibly be used for the purposes to which the other is applied. Tested by the rule enounced in the cases cited, the two articles have not the same descriptive properties because their general and essential characteristics are not the same.

It is further contended that the articles must be taken to be of the same descriptive properties because they are included in the same class in the Patent Office. By authority of the amendment to the trade-mark laws, approved May 4, 1906, the Commissioner made certain classifications of merchandise for the purpose of registering trade-marks. Hooks and eyes and hair-pins were first included in Class 13—"Metal manufactures, not otherwise classified." By amendment, in force at the time of the pending application, they are embraced in Class 40—"Fancy goods, furnishings, and notions"—of Group 6—"Dry goods and clothing."

Including an article in a comprehensive class does not, of itself, make it of the same descriptive properties of another included in the same class. Section 2 of the act referred to does not contemplate any such minute classification. Contemplating that there would be some common ground suggesting the classification of articles under comprehensive heads, it permits the registration of a trade-mark for any and all goods within the class, upon which the trade-mark has actually been used, provided the particular descriptions of goods be stated. The De Long Hook and Eye Company had registered the mark originally for hooks and eyes, and in renewing the registration, under the existing law, it was still so limited. Moreover, it could not have extended its registration to hair-pins for it had not, in fact, used it as a trade-mark therefor. As we have seen, the actual mark affixed to its twisted or crimped pin was "Cupid." Property in a trade-mark—without which there can be no legal registration—is acquired, not by the invention or discovery of a word or symbol, or by advertisement, but only by attaching or affixing it to the articles of merchandise for which it is intended to be used as a trade-mark. Nothing short of the latter constitutes a trade-mark use. (*Battle Creek Sanitarium Co.* v. *Fuller*, 30 App. D. C., 411–416; *Ill. Match Co.* v. *Broomall*, 34 App. D. C., 427–429.) As the De Long Hook and Eye Company has shown no property right in the word "Hump" as a trade-mark for hair-pins, either by actual use of the goods, or by its use of the same on hooks and eyes only, it has no foundation for the opposition to its registration by the Hump Hairpin Company, for it can sustain no legal injury or damage thereby. (*McIlhenny's Son* v. *New Iberia Ex. of T. P. Co.*, 30 App. D. C., 337–339; *Battle Creek Sanitarium Co.* v. *Fuller*, 30 App. D. C., 411–415.) As said in the case last cited:

It is not sufficient for the opponent to say that he believes he would be damaged. He must allege some fact showing an interest in the subject-matter, from which damage might be inferred. If he has not used the mark as a trade-mark upon goods of a like description, he can suffer no damage from its registration by another.

The opponent also challenges the sufficiency of the evidence of the Hump Hairpin Company to show its actual use of the mark as a trade-mark for hair-pins in commerce among the States, or with foreign nations. This is a question which the opponent cannot raise, having shown no interest that is not common to the general public. The Commissioner of Patents represents the public interest in trade-mark applications as he does in applications for patents. If satisfied with the showing made by an applicant, he passes it for publication, and no opposition can be entertained thereto save by one who can show an interest in the subject-matter entitling him to claim that he would be damaged by the registration of the trade-mark by another person. (*Battle Creek Sanitarium Co.* v. *Fuller*, 30 App. D. C., 411–415.)

It may be remarked, however, that the testimony of the witness Goldberg—the representative of the Hump Hairpin Company—is subject to criticism; and that it is, to say the least, doubtful whether there had been the actual trade-mark use by the said company that is the condition of registration. But we refrain from expressing any opinion on that point because, as pointed out above, it is not before us on this appeal. The question is one solely for the consideration and determination of the Commissioner.

For the reasons given the decision sustaining the opposition to registration will be reversed; and this decision ordered to be certified to the Commissioner of Patents.

Reversed.

ADJUDICATED PATENTS.

(U. S. C. C. A.) The Aiken patent, No. 718,044, for a roof structure, *Held* valid and infringed. *Riter-Conley Mfg. Co. v. Aiken*, 203 Fed. Rep., 699.

(U. S. C. C. A.) The Jenne patent, No. 722,512, for an egg-carrier, *Held* valid and infringed. *Elbs v. Rochester Egg-Carrier Co.*, 203 Fed. Rep., 705.

Disclaimers.

610,705.—*Joseph Wells Dickey*, New York, N. Y. BRUSH FOR ELECTRICAL MACHINES. Patent dated September 13, 1898. Disclaimer filed May 13, 1913, by the assignee, *Charles E. Chapin*.

He hereby disclaims—

"Each and every brush which is claimed in any of claims 1, 2, 5, 8, or 9, except brushes in which the gauze is firmly compacted together into practically a solid mass and given a permanent set in the form desired."

934,732.—*Omar H. Jewell*, Chicago, Ill. APPARATUS FOR MAKING ARTIFICIAL ICE. Patent dated September 21, 1909. Disclaimer filed May 15, 1913, by the assignee, *Polar Ice Machine Company*.

It hereby makes this disclaimer—

"To that part of the specification which is identified as follows, to wit:

"The construction illustrated in Figs. 6, 7, and 8 of the drawings and described in the specification in the following words:

"Fig. 6 is a partial longitudinal sectional view, showing an apparatus designed to be employed for freezing ice according to what is known as the 'plate system,' using my improved method: Fig. 7 is a partial horizontal section on line 7—7 of Fig. 6; and Fig. 8 is a partial cross-section on line 8—8 of Fig. 6.

"In Figs. 6, 7, and 8 I have shown an apparatus designed to carry out my process in connection with the manufacture of ice according to the plate system. As therein shown, 22 indicates a tank of suitable dimensions and shape adapted to contain the water to be frozen. 23 indicates a series of coils adapted to contain ammonia, or other freezing agent, and supplied therewith from any suitable source. In Fig. 8 I have shown said coils as being provided with pipes 24—25 through which the circulation of ammonia, or other freezing agent, is maintained. As best shown in Figs. 6 and 8, the coils 23 are placed transversely in the tank 22 and are elevated a short distance above the floor thereof, being preferably supported by transverse beams 26. Thus a zone of water is provided in the tank which lies below the freezing influence of the refrigerating agent in the coils, thus forming the non-freezing zones hereinbefore referred to. The several coils 23 are placed at such distances apart that the ice may form upon them and grow laterally toward the mass of ice forming on the next adjacent coils at either side, in the manner shown in Fig. 6. For the purpose of maintaining the water in the tank in a state of circulation, air pipes 27 are provided in the non-freezing zone at the bottom of the tank, said pipes being provided with transversely-extending perforated pipes 28, as shown in Fig. 7, through which the air may escape into the water in the tank. The transverse pipes 28 are placed substantially centrally between adjacent coils 23, as shown in Fig. 6, so that the bubbles of air rise in planes about midway between the successive coils, thus maintaining a substantially uniform circulation throughout the tank.

"Heretofore in making ice by the plate system it has been the practice to apply the freezing temperature to the full depth of the entire body of water, the freezing plates or coils extending to the floor of the tank containing them, so that when frozen the mass of ice extended to the bottom of the tank, thus freezing in all the impurities and making it necessary to remove a large part of the ice at the bottom of each block in order to get rid of such impurities. By the use of my improved apparatus, however, I avoid this objection, thereby securing a considerable per cent. more of merchantable ice than it has been possible to secure by the use of any prior apparatus of which I am aware."

934,972.—*Omar H. Jewell*, Chicago, Ill. METHOD OF MAKING ARTIFICIAL ICE. Patent dated September 21, 1909. Disclaimer filed May 15, 1913, by the assignee, *Polar Ice Machine Company*.

It hereby makes this disclaimer—

"To that part of the specification which is identified by the word 'either,' line 101, page 2, and the words 'by other means,' line 102, page 2, it being the intent and purpose of this disclaimer to exclude means other than air for effecting the circulation or agitation of the water to be frozen."

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 22, 1913.

Nevada Milling Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of The Ansted & Burk Co., of Springfield, Ohio, for registration of a trade-mark and trade-mark registered February 11, 1908, No. 67,569, to the Nevada Milling Co., of Nevada, Mo., and a notice of such declaration sent by registered mail to said Nevada Milling Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Nevada Milling Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner*.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 14, 1913.

Hansen-Schmitt Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frings Bros. Co., 3134 Market street, Philadelphia, Pa., for registration of a trade-mark and trade-mark registration No. 54,445, dated June 26, 1906, issued to Hansen-Schmitt Co., 334–336 East Water street, Milwaukee, Wis., and a notice of such declaration sent by registered mail to said Hansen-Schmitt Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Hansen-Schmitt Co., its assigns or legal representatives, shall within thirty days from the first publication of this order enter an appearance therein the interference will proceed as though by default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner*.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 7, 1913.

James H. Carrington, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Rudolph Weil, of 123 Williams street, New York, N. Y., for registration of a trade-mark and trade-mark registered April 22, 1884, No. 11,119, to James H. Carrington, of New York, N. Y., and a notice of such declaration sent by registered mail to said James H. Carrington at the said address having been returned by the post-office undeliverable, notice is hereby given that unless James H. Carrington, his assigns or legal representatives, shall within thirty days from the first publication of this order enter an appearance therein the interference will be proceeded with as though by default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner*.

Changes in Classification.

(ORDER NO. 2,051.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 16, 1913.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In Division III, class 204, Electrochemistry, establish subclass—

Electrodes—

65. Carbon,

most of the patents therein being taken from subclass 50, Batteries, Cathodes, in the same class.

In Division XX, class 16, Builders' Hardware, change the title of subclass 153, Handles, Coffin, Braces, to read—

Handles—

153. Braces.

EDWARD B. MOORE,
Commissioner.

Changes in Classification.

(ORDER NO. 2,052.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 17, 1913.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In Division IV, class 189, Metallic Building Structures, change the title of subclass 23, Electric-wire supports, Telegraph-poles, to read:

23. **Poles and posts.**

In the title of subclass 30 thereunder change the word "Augers" to read "Auger," and abolish the definitions now existing for subclass 23 and the subclasses thereunder and establish in lieu thereof the following definitions:

23. POLES AND POSTS. Metallic poles and posts and metallic parts for use with poles and posts generally.

Search Classes—

68—LAUNDRY, subclass 12, Clothes-line fasteners.
119—ANIMAL HUSBANDRY, subclass 122, Restraining devices, Hitching, Posts, and subclasses thereunder.
135—TENTS, CANOPIES, UMBRELLAS, AND CANES, subclass 15, Tents, Pegs, poles, and cover fastenings.
256—FENCES, subclass 49, Wire, Connections, Cross, Facing strip, for metallic posts and poles having a wooden strip upon their face for receiving staples or nails.

24. POLES AND POSTS, COMPOUND. Poles and posts having a main stem and one or more members bracing said stem throughout its length.

25. POLES AND POSTS, MULTIPLE SUPPORTS. Poles and posts comprising two or more uprights similarly placed and equally bearing the load.

26. POLES AND POSTS, SECTIONAL. Poles and posts composed of sections placed on top of one another, with some means of joining together the ends of two adjacent sections.

27. POLES AND POSTS, INSULATED PARTS. Poles and posts disclosing some form of insulation in some portion of the structure, usually to prevent the lower portion of the pole from being charged in case of accident to the conducting wire or its insulating support.

Note.—This subclass is limited to insulators in telegraph pole structure. Insulators for conductors generally are classified in class 173, ELECTRICITY, CONDUCTORS, subclass 28, Insulators, and the subclasses thereunder.

Search Classes—

173—ELECTRICITY, CONDUCTORS, subclass 268, Conductors, Joints, Insulated.
240—ILLUMINATION, subclass 85, Light supports, Bracket and chandelier hangers.

28. POLES AND POSTS, BASES. Metallic poles and posts wherein the novelty resides in the base thereof and metallic bases for bottoms of poles and posts generally not classifiable in any of the subclasses hereunder.

Search Classes—

189—METALLIC BUILDING STRUCTURES, subclasses 21, Skeleton towers, Details, Caps and bases; 26, Poles and posts, Sectional; 32, Poles and posts, Protectors, and 42, Columns, Caps and bases.
47—TREES, PLANTS, AND FLOWERS, subclass 12, Trellises.
68—LAUNDRY, subclass 12, Clothes-line fasteners.
116—SIGNALS, subclass 12, Flagstaffs.
248—SUPPORTS, subclasses 37, Staff-holders, and 38, Staff-holders, Vertical.

29. POLES AND POSTS, BASES, ANCHORED. Bases as above defined which include some projection or equivalent which would tend to increase the resistance offered by the base to withdrawal from the ground.

30. POLES AND POSTS, BASES, ANCHORED, AUGER. Anchored bases as above defined where the resisting projection or equivalent takes the form of an auger or an augerlike structure for insertion into the ground.

Search Class—

119—ANIMAL HUSBANDRY, subclass 121, Restraining devices, Hitching, Picket-stakes.

31. POLES AND POSTS, BASES, ANCHORED, EXPANDING. Anchored bases as hereinbefore defined where the resisting projection or equivalent takes the form of an expanding device by which a larger resisting area is offered to the withdrawal than was opposed to the insertion thereof.

32. POLES AND POSTS, PROTECTORS. Caps and other devices for protecting the tops or other parts of metallic telegraph-poles from the effects of moisture.

Note.—Waterproofing walls and cellars is in class 72, MASONRY AND CONCRETE STRUCTURES, subclasses 126, Waterproofing, Cellars, and 127, Waterproofing, Walls.

Search Classes—

189—METALLIC BUILDING STRUCTURES, subclasses 21, Skeleton towers, Details, Caps and bases; 26, Poles and posts, Sectional; 27, Poles and posts, Insulated parts; 28, Poles and posts, Bases, and 42, Columns, Caps and bases.
61—HYDRAULIC ENGINEERING, subclass 43, Piles, Protected.

33. POLES AND POSTS, CROSS-ARMS. Cross-arms for metallic telegraph-poles and supports for the same.

Note.—Pins for support of insulators, brackets for the same, and devices for attachment of same to cross-arms or other bodies are classified in class 173, ELECTRICITY, CONDUCTORS, subclass 321, Insulators, Supports.

Search Class—

173—ELECTRICITY, CONDUCTORS, subclass 251, Supports and hangers.

In same division, same class, establish the following subclasses and definitions:

Poles and posts—	Poles and posts—
Bases—	Braced—
Anchored—	31.4. Strut,
30.5. Key-locked,	31.5. Tie,
31.1. Braced—	31.3. Truss.
32.2. Compound,	

30.5. POLES AND POSTS, BASES, ANCHORED, KEY-LOCKED. Anchored bases comprising a key which after the base is set is driven through or from the same into the ground at an angle to the post, so as to anchor the post in the ground.

Search Classes—

189—METALLIC BUILDING STRUCTURES, subclass 90, Land anchors, and subclasses thereunder.
85—DRIVEN, HEADED, AND SCREW-THREADED FASTENINGS, subclass 27, Nails, spikes, and tacks, Locking devices, Transverse key.

31.1. POLES AND POSTS, BRACED. Metallic poles and posts wherein the novelty resides in the brace thereof and metallic braces for poles and posts generally not classified in any of the subclasses hereunder.

31.2. POLES AND POSTS, BRACED, COMPOUND. Braces as above defined where two or more different types of braces are used to brace a single pole or post or where two or more of the same type are used, if they do not consist merely of a duplication of bracing elements.

31.3. POLES AND POSTS, BRACED, TRUSS. Braces (or a plurality thereof) as hereinbefore defined consisting of two members so joined to the pole or post and to each other that they form with the pole or post a rigid structure having some form of a simple triangle.

31.4. POLES AND POSTS, BRACED, STRUT. Braces (or a plurality thereof) as hereinbefore defined consisting of a single rigid member joined to the pole or post and resting upon or anchored in the ground, so as to prop the pole or post.

31.5. POLES AND POSTS, BRACED, TIE. Braces (or a plurality thereof) as hereinbefore defined consisting of one or more rods or strands attached to the pole or post and anchored in the ground, bracing the pole or post only when under tension.

With the changes above directed, this group of subclasses will then read as follows:

23. Poles and posts—	Poles and posts—
28. Bases—	Braced—
29. Anchored—	31.3. Truss,
30. Auger,	24. Compound,
31. Expanding,	33. Cross arms,
30.5. Key-locked,	27. Insulated parts,
31.1. Braced—	25. Multiple supports,
31.2. Compound,	32. Protectors,
31.4. Strut,	26. Sectional.
31.5. Tie,	

In same division, same class, establish also the following subclasses and definitions:

Structural units—
Joints and connections—
36.2. Crossed rod or wire joints—
36.3. Removable clip,
36.4. Tie.

36.2. STRUCTURAL UNITS, JOINTS AND CONNECTIONS, CROSSED ROD OR WIRE JOINTS. Joints for crossed wires or metal rods formed solely by the use of a separate element in the nature of a clip, fastener, or tie. Contains only joints between single wires.

Search Class—

256—FENCES, subclass 45, Wire, Fabrics.

36.3. STRUCTURAL UNITS, JOINTS AND CONNECTIONS, CROSSED ROD OR WIRE JOINTS, REMOVABLE CLIP. Crossed rod or wire joints in which the separate joining element is removably attached to the crossed members.

36.4. STRUCTURAL UNITS, JOINTS AND CONNECTIONS, CROSSED ROD OR WIRE JOINTS, TIE. Crossed rod or wire joints in which the separate joining element is in the form of a tie wire.

Search Classes—

140—WIRE WORKING, subclasses 11, Fabric making, All wire, Stay-applying, Clip-joining, and 116, Joining wire, Tying-dies.
256—FENCES, subclass 7, Barbed, Strands, Single.

In Division XXIX, class 20, Wooden Buildings, abolish the following subclass, with its definition, the patents formerly contained therein having been placed in subclass 96, Wooden columns, Caps and bases, hereinafter established in this class:

96. Post-bases.

In same division, same class, establish the following subclasses and definitions:

Wooden columns—
96. Caps and bases.
90. Poles and posts.

98. WOODEN COLUMNS, CAPS AND BASES. Details of caps and bases of wooden columns, the bases generally consisting of porch irons intended to prevent the rotting of the column end.

Search Class—
189—METALLIC BUILDING STRUCTURES, subclasses 21, Skeleton towers, Details, Caps and bases; 28, Poles and posts, Bases, and 42, Columns, Caps and bases.

99. POLES AND POSTS. Poles and posts made of wood or of wood in combination with other materials, except such as are particularly adapted for use in a fence. This subclass is intended to receive post constructions and post parts not provided for in the subclasses of "Poles and posts," under classes 72, MASONRY AND CONCRETE STRUCTURES, and 189, METALLIC BUILDING STRUCTURES. Poles and posts particularly adapted for use in a fence will be found under the particular type of fence with which they are used or under the appropriate subclass of "Connections," in class 256, FENCES, wherein the novelty resides.

Search Classes—
119—ANIMAL HUSBANDRY, subclass 125, Restraining devices, Hitching, Posts, Disappearing, for disappearing posts.
68—LAUNDRY, subclass 12, Clothes-line fasteners, and 135, TENTS, CANOPIES, UMBRELLAS, AND CANES, subclass 15, Tents, Pegs, poles, and cover fastenings, for telescoping poles.

In Division XXXIII, class 72, Masonry and Concrete Structures, abolish the following subclass and definition:

Walls—
34. Fences.

In same division, same class, change the titles of subclasses—

82. **Posts—**
83. Inseparable bases,
84. Separable bases.
85. **Telegraph-poles,**

to read:

82. **Poles and posts—**
83. With bases—
84. Detachable,
85. Reinforced,

abolish the existing definitions, and establish in lieu thereof the following definitions:

82. POLES AND POSTS. Poles and posts made of stone or plastic, with or without metal elements, and parts made of like materials for use with poles or posts generally.

Search Class—
72—MASONRY AND CONCRETE STRUCTURES, subclasses 72, Columns, and appropriate subclasses thereunder, and 81, Foundations, Concrete piles.

83. POLES AND POSTS, WITH BASES. Combinations of poles and posts with bases and bases *per se* formed of plastic material or stone.

84. POLES AND POSTS, WITH BASES, DETACHABLE. Poles and posts with bases and bases *per se* formed of plastic material or stone where the base is so attached to the pole or post as to be more or less readily separated therefrom.

85. POLES AND POSTS, REINFORCED. Poles and posts formed of concrete or other plastic with internal reinforcing elements of metal or other material.

Search Classes—
72—MASONRY AND CONCRETE STRUCTURES, subclasses 76, Columns, Metal reinforced, and 81, Foundations, Concrete piles.
256—FENCES, subclass 51, Wire, Connections, Cross, Plastic, Reinforced.

In the definitions of class 72, Masonry and Concrete Structures, in subclass 101, Bonding and tying, add to the definition the following search note:

Search Class—
256—FENCES, subclass 50, Wire, Connections, Cross, Plastic,

and in subclass 105, Bonding and tying, Fixing-blocks, add to the definition after the existing search note the following:

256—FENCES, subclass 51, Wire, Connections, Cross, Plastic, Reinforced.

In Division XXXV, class 24, Buckles, Buttons, Clasps, Etc., establish the following subclasses and definitions:

Strap-tighteners—
71.1. Midline—
71.2. Winders—
71.3. One piece.

71.1. STRAP-TIGHTENERS, MIDLINE. Devices adapted to be attached to a wire or other line at a point in its length and to take up slack, remaining a permanent part of the line. Combinations of said device with tools for use particularly therewith.

71.2. STRAP-TIGHTENERS, MIDLINE, WINDERS. Midline strap tighteners which wind in tightening the line.

71.3. STRAP-TIGHTENERS, MIDLINE, WINDERS, ONE PIECE. Winders made in one piece.

In the definitions of class 24, Buckles, Buttons, Clasps, Etc., in subclass 115, Cord and rope holders, in line 2, after the word "rope" add the word "wire" and cancel the third search note to class 39, Fences, and in subclass 123, Cord and rope holders, Couplings and sockets, in line 3, before the word "rope" cancel the word "and" and after the word "rope" add the words "and wire."

In Division I, class 39, fences, change the title to read:

CLASS 39.—FENCES, GATES,

and abolish the following subclasses:

Fences—
1. Barbed—
70. Linked,
102. Ribbon,
71. Visible,
64. Cat-guards,
4. Flood,
6. Iron—
104. Panel,
9. Wire—
72. Fabric,
12. Fasteners—
76. Clamps,
105. Hooks,
106. Loops,
107. Sleeves,
108. Joints,
109. Panel,
73. Picket,
74. Stays—
78. Linked,
79. Lock-plates,
110. Lock-rod,
111. Tied,
112. Wire,
75. Strands,

Fences—
66. Wood—
80. Panel—
83. Suspended,
84. Worm,
81. Picket—
85. Panel,
82. Tied.

Posts—
Bases—
86. Metal,
88. Wood,
Braces—
89. Lateral,
90. Longitudinal—
131. Strut,
132. Tie,
133. Truss,
67. Metal—
134. Anchors,
135. Compound,
136. Doubled,
137. Flanged,
138. Flat,
139. Folded,
69. Wood.

In same division, same class, establish subclass—

Gates—
4. Flood.

In same division establish class 256, Fences, with the following subclasses and definitions:

CLASS 256.—FENCES.

Subclasses.

2. **Barbed—**
5. Fabrics,
3. Guarded—
4. Visible,
6. Strands—
9. Sectional,
7. Single—
8. Integral barb.
19. **Earth, stone, plastic, and wooden.**
10. **Electric.**
13. **Flood.**
20. **Hedge.**
21. **Metallic—**
22. Picket.
1. **Miscellaneous.**
24. **Panel—**
27. Angle—
28. Tied,
31. Braced,
25. Inclosure,
26. Hinged,
29. Tied—
30. Braced.
73. **Panels.**
59. **Rail—**
60. Angle—
61. Tied,
64. Braced,
65. Connections—
67. Adjustable,
68. Clamp—
69. Screw,
70. Wedge,
72. No clip,
66. Plastic,
71. Tie,
62. Tied—
63. Braced.
23. **Suspended.**
11. **Top guarded—**
12. Unstable.
14. **Track guard—**
17. Bar—
18. Pronged,
15. Rocking,
16. Rotary.
32. **Wire—**
33. All wire,
35. Braced—
36. Trussed,
47. Connections—
48. Cross—
54. Clamp—
55. Screw,
56. Wedge,
49. Facing strip,
52. Multiple,
58. No clip,
53. Non-alined slots,
50. Plastic—
51. Reinforced,
57. Tie,
45. Fabrics,
34. Picket,
46. Strands,
37. Stretcher—
38. Gravity,
39. Spring,
40. Winder—
42. Bracket,
43. Internal,
44. Lateral,
41. Multiple.

EDWARD B MOORE
Commissioner.

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TO THE

DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

MAY, 1913.

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DIGEST

OF THE

DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

MAY, 1913.

[Decisions of the Court of Appeals of the District of Columbia are indicated by a star (*).]

ABANDONMENT OF APPLICATIONS.

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ACQUIESCENCE.

See Registration of Trade-Marks.

ACTION BY THE EXAMINER.

See Amendment; Designs; Prosecution of Applications.

AFFIDAVIT.

See Joint and Sole Applications, 1; Motion to Amend Preliminary Statement.

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See Cancelation of Trade-Mark Registration, 2; Fees; Registration of Trade-Marks, 1, 4.

AMENDMENT.

See Designs, 2; Joint and Sole Applications, 2.

AFTER ADVERSE DECISION IN INTERFERENCE OR OPPOSITION—PRACTICE.

Where after an adverse decision in an interference or opposition applicant files an amendment in an endeavor to eliminate the subject-matter involved in such proceeding, *Held* that the Examiner should enter the amendment, and if he is of the opinion that it is not sufficient and does not eliminate the matter in controversy he should refuse registration. When such action is made final, appeal will lie to the Commissioner.

[*Ex parte* Oakford and Fahnestock, 793.

APPEAL TO THE COMMISSIONER OF PATENTS.

See Amendment; Designs; Opposition to Registration of Trade-Marks.

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APPLICATIONS.

See Designs; Fees; Joint and Sole Applications; Prosecution of Applications.

AUTHORITY OF NOTARY PUBLIC.

See Notary Public in Foreign Country,

BAR TO PATENT.

See Interference.

CANCELATION OF TRADE-MARK REGISTRATION.

1. USE NOT EXCLUSIVE DURING THE TEN-YEAR PERIOD.

An application for the cancelation of a registration, effected under the ten-year clause of the act, of a mark for brooms consisting merely of a red band at the top of the broom *Held* properly sustained where the evidence shows that another used this identical mark during the ten-year period.

[*The Joseph Lay Company *v.* Indianapolis Brush and Broom Manufacturing Company, 269.

2. SHOWING OF INTEREST.

Where in a petition for the cancelation of a registration it is stated that goods bearing the registered trade-mark had been held up at a custom-house at the instance of the registrant, *Held* that the petitioner had alleged such interest as to bring himself within the statutory class of persons who may file applications for cancelation.

[Loewenstein *v.* Herz, 794.

CERTIFICATE OF REGISTRATION OF TRADE-MARKS.

DECLARATION—SUBSCRIBING CLAUSE MUST BE IN ENGLISH.

In printing certificates of trade-marks the declaration and subscribing clause are included, and it is obvious that both should be, as required by the rules, in the English language.

[*Ex parte* Löw, 549.

CLAIMS.

See Construction of Claims; Motion to Dissolve Interference; Prosecution of Applications: Reduction to Practice, 1.

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CONCESSION OF PRIORITY.

INTERFERENCE—GROUND FOR DISSOLUTION.

A concession of priority is a ground for an award of priority and not for dissolving the interference.

[Mesnard v. Hodgkinson, 1027.

CONSTRUCTION OF CLAIMS.

1. PATENTABILITY—BOILER-HEADERS.

Claims for a wrought-metal seamless water-tube-boiler header *Held* not patentable in view of the prior art. [*In re* Higgins, 551.

2. SAME—SAME—SUPERIORITY IN POINT OF UTILITY NOT CONTROLLING.

Where seamless cast headers were old and welded wrought-metal headers were also old, *Held* that "the superiority of wrought metal over cast being apparent, the problem which confronted him [appellant] was to perfect a process and devise machinery that would enable him to duplicate the cast metal header in wrought metal. The function of the header produced by him is identical with the cast and wrought headers of the prior art. It does not follow that, because it is superior in point of utility to those preceding it, appellant is entitled to a patent." [*Id.

CONSTRUCTION OF TRADE-MARK STATUTES.

See Cancelation of Trade-Mark Registration; Goods of Same Descriptive Properties; 3, Similarity of Marks.

CONSULAR OFFICER OF THE UNITED STATES.

See Notary Public in Foreign Country.

DATE OF FILING APPLICATION.

See Reduction to Practice, 3.

DECISIONS OF THE COMMISSIONER OF PATENTS.

See Designs, 2.

DECISIONS OF THE EXAMINER OF INTERFERENCES.

See Motion to Amend Preliminary Statement; Opposition to Registration of Trade-Marks.

DECLARATION IN TRADE-MARKS.

See Certificate of Registration of Trade-Marks; Registration of Trade-Marks, 1.

DELAY IN PROSECUTION OF APPLICATIONS.

See Motion to Dissolve Interference.

DEMURRER.

See Opposition to Registration of Trade-Marks, 1.

DESIGNS.

See Registration of Trade-Marks, 4.

1. NEW MATTER—REJECTION—REVIEWABLE ON APPEAL.

Where the Examiner rejected a claim for a design as unpatentable in view of the prior art and thereafter applicant filed a new drawing which the Examiner refused to enter on the ground that it disclosed matter not contained in the case as originally filed and involved a departure from the invention disclosed, *Held* that his action is reviewable on appeal and not on petition to the Commissioner. [*Ex parte* Miller, 793.

2. REQUIREMENT FOR FURTHER ILLUSTRATION—RULING NOT APPEALABLE TO THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

Where the Commissioner affirmed the action of the Examiner requiring further illustration in an application for a design patent and the Examiner held that an amendment filed thereafter was not a sufficient compliance with that ruling and the Commissioner denied a petition that the Examiner be directed to either allow or reject the application, *Held* that no appeal lies from this decision of the Commissioner, and if the Examiner refuses to allow the application without further amendment appeal will lie from such action to the Examiners-in-Chief. [*In re* Mygatt, 1029.

DISCLOSURE OF INVENTION.

See Designs, 1; Joint and Sole Applications, 1.

DISSOLUTION OF INTERFERENCE.

See Concession of Priority.

DIVISION OF APPLICATIONS.

See Prosecution of Applications.

DRAWINGS.

See Designs.

ELEMENTS.

See Reduction to Practice, 1, 2.

ESTOPPEL.

See Motion to Dissolve Interference; Registration of Trade-Marks.

EVIDENCE.

See Cancelation of Trade-Mark Registration; Goods of Same Descriptive Properties; Priority of Invention, 4; Public Use, 13.

EXCLUSIVE USE.

See Cancelation of Trade-Mark Registration; Registration of Trade-Marks, 1.

EXPIRED PATENTS.

See Registration of Trade-Marks, 5.

FEES.

APPLICATION ALLEGED TO HAVE BEEN FILED IN NAME OF WRONG PARTY—FEE NOT RETURNED.

An allegation that an application was filed in the name of one party under a misapprehension and that, as a matter of fact, another party was the real and true inventor *Held* not sufficient ground to warrant the return of the fee for the purpose of applying it to another application filed by such other party.

[*Ex parte* Giles, 547.

FINAL HEARING.

See Motion to Amend Preliminary Statement; Motion to Dissolve Interference.

FIRST AND ORIGINAL INVENTOR.

See Priority of Invention, 4.

FOREIGN LANGUAGE.

See Certificate of Registration of Trade-Marks.

FOREIGN NOTARY.

See Notary Public in Foreign Country.

FORMER DECISION CITED.

See Priority of Invention, 4.

FUNCTION.

See Construction of Claims, 2; Priority of Invention, 2.

GOODS OF SAME DESCRIPTIVE PROPERTIES.

See Similarity of Marks.

1. RUBBER TIRES AND AUTOMOBILES ARE NOT.

Rubber tires and automobiles *Held* not to constitute goods of the same descriptive properties within the meaning of the trade-mark law.

[*G & J Tire Company *v* G. J G. Motor Car Company, 550.

2. TESTIMONY—CONCLUSIONS OF WITNESSES ENTITLED TO LITTLE WEIGHT.

"While witnesses familiar with the articles of merchandise may give evidence of facts within their knowledge of the construction and uses of said articles, from which conclusions may be deduced, it is not perceived that their opinions or conclusions are entitled to any particular weight. For this reason, as well as because of the direct conflict between them we attach no weight to the evidence."

[The Hump Hairpin Company *v.* The De Long Hook and Eye Company, 1032.

3. INCLUSION IN SAME CLASS NOT DETERMINATIVE.

The fact that two articles are included in one of the classes established by the Commissioner of Patents under the act of May 4, 1906, does not of itself make these articles of the same descriptive properties. [*Id.

4. HAIR-PINS AND HOOKS AND EYES ARE NOT.

Hair-pins and hooks and eyes *Held* not to be goods of the same descriptive properties. "There could be no confusion in the minds of purchasers of hair-pins and hooks and eyes, respectively, because one could not possibly be used for the purpose to which the other is applied." [*Id.

INTERFERENCE.

See Amendment; Concession of Priority; Joint and Sole Applications, 2; Motion to Amend Preliminary Statement; Motion to Dissolve Interference; Priority of Invention; Reduction to Practice.

TESTIMONY—PUBLIC USE—INTERFERENCE NOT SUSPENDED TO CONSIDER QUESTION OF.

After testimony on the question of priority has been filed an interference will not be suspended to determine the question whether such testimony establishes a statutory bar of public use.

[Luellen *v.* Claussen and Claus, 265.

INVENTORS.

See Fees; Priority of Invention, 4.

JOINT AND SOLE APPLICATIONS.

1. TESTIMONY—PRESUMPTIONS—FAILURES TO CALL WITNESS—CONFLICTING AFFIDAVITS IN SOLE AND JOINT APPLICATIONS.

Where H. and B. filed an application for the invention in issue and subsequently, without abandoning the joint application, H. filed a sole application for this invention and S. has established a disclosure of the invention to B., *Held* that in the absence of testimony by H. the presumption is that the invention was disclosed to H. by B. and that this presumption is not overcome by H.'s oath in the sole application. [*Hewlett *v.* Steinberger, 270.

2. INTERFERENCE—MOTION TO PRESENT SAME AS SOLE APPLICATION—TRANSMISSION REFUSED.

A motion to transmit an interference to the Primary Examiner for the purpose of considering whether the joint application in the interference may be amended to present the same as the sole application of one of the joint applicants *Held* properly refused, since sole inventors and joint inventors constitute distinct entities, and a joint application does not constitute proof that one of the applicants was a sole inventor.

[Gasau and Marklein *v.* Odell, 1028.

JUDGMENT ON THE RECORD.

See Opposition to Registration of Trade-Marks, 1.

MERITS OF THE CASE.

See Prosecution of Applications.

MISTAKE.

See Fees.

MONOPOLY.

See Registration of Trade-Marks, 5.

MOTION TO AMEND PRELIMINARY STATEMENT.

1. POSTPONED TO FINAL HEARING—DECISION OF THE EXAMINER OF INTERFERENCES REVIEWABLE BY THE EXAMINERS-IN-CHIEF.

Where a motion to amend a preliminary statement was filed after testimony had been taken and the Examiner of Interferences postponed consideration of such motion until final hearing and rendered a decision thereon in connection with his decision on priority, *Held* that the question of amending the preliminary statement should be reviewed by the Examiners-in-Chief in connection with the appeal on the question of priority.

[Gammeter *v.* Thropp, 266.

2. INTERFERENCE.

A motion to amend a preliminary statement *Held* properly denied where it appears from the affidavits accompanying the motion that the appellant had known of certain letters upon which the motion is based, but owing to press of business had not examined his records at the time the original preliminary statement was prepared. [Somerville *v.* Larmuth, 1028.

MOTION TO DISSOLVE INTERFERENCE.

ALLEGED DELAY IN PRESENTING THE CLAIMS—MOTION NOT TRANSMITTED.

A motion to dissolve on the ground that the opposing party is estopped to make the claims in issue by reason of long delay in making the same *Held* properly refused transmission, since this question can more properly be raised on final hearing than on a motion to dissolve. [Long *v.* Flagg and Livermore, 265.

NAME OF APPLICANT.

See Fees.

NEW MATTER.

See Designs, 1.

NOTARY PUBLIC IN FOREIGN COUNTRY.

OATH—AUTHORITY MUST BE DIRECTLY CERTIFIED TO.

Where an oath is taken before a notary public in a foreign country, *Held* that such notary's authority must be directly proved by a certificate of a diplomatic or consular officer.

[*Ex parte* Löw, 549.

OATH.

See Joint and Sole Applications, 1; Notary Public in Foreign Country.

OPPOSITION TO REGISTRATION OF TRADE-MARKS.

See Amendment; Goods of Same Descriptive Properties, 4.

1. JUDGMENT ON THE RECORD—APPEAL.

Where the Examiner of Interferences overruled a demurrer to a notice of opposition and the applicant having not filed any further pleading rendered a judgment sustaining the opposition, *Held* that from this judgment appeal lay to the Commissioner of Patents.

[*G & J Tire Company *v.* G. J. G. Motor Car Company, 550.

2. STATUTORY USE BY APPLICANT—CANNOT BE RAISED BY AN OPPOSER SHOWING NO SPECIAL INTEREST.

Where an opposer fails to show any interest in the registration of a trade-mark which is not common to the general public, *Held* that he cannot raise the question whether the applicant has established a statutory use of the mark.

[*The Hump Hairpin Company *v.* The De Long Hook and Eye Company, 1032.

PATENTABILITY.

See Construction of Claims, 1; Designs, 1; Public Use, 1.

PETITION TO THE COMMISSIONER OF PATENTS.

See Designs.

PRELIMINARY STATEMENTS.

See Motion to Amend Preliminary Statement.

PRESUMPTION.

See Joint and Sole Applications, 1.

PRIOR PATENTS.

See Registration of Trade-Marks, 5.

PRIORITY OF INVENTION.

See Concession of Priority; Interference; Motion to Amend Preliminary Statement; Reduction to Practice.

1. RIGHT TO MAKE CLAIMS.
In an interference involving an apparatus for removing skins from fruit *Held* that B. is entitled to make claims which include "means for directing peeling water jets upon said fruit."
[*Dunkley *v.* Beekhuis, 267.

2. SAME—APPLICANT NOT AWARE OF ALL THE FUNCTIONS OF THE DEVICE IMMATERIAL.
"Dunkley was the first to invent and put into practice a rapid and effective machine for peeling peaches. This comprised in the combination the jets of water which he evidently realized aided in the removal of the skins when disintegrated by the alkali solution. That he did not realize the full extent of their agency cannot deprive him of the benefits accruing from their use."
[*Id.

3. SAME—AWARD.
D. *Held* entitled to make the claims in issue and to have been the first to conceive and reduce to practice the invention covered thereby, and therefore entitled to an award of priority. [*Id.

4. AWARD.
Evidence reviewed and *Held* to establish that H. was not an original inventor, but derived his knowledge of the invention in issue from S. through a third party and that priority was properly awarded to S. (*For decision of the Commissioner see 183 O. G., 1308.*) [*Hewlett *v.* Steinberger, 270.

PROCESS AND APPARATUS.

See Public Use, 2, 3.

PROPERTY RIGHTS.

ACQUIRED ONLY BY USE.
Property in a trade-mark is acquired not by the invention or discovery of a word or symbol or by advertising, but only by attaching or affixing it to the articles or merchandise for which it is intended to be used as a trade-mark.
[*The Hump Hairpin Company *v.* The De Long Hook and Eye Company, 1032.

PROSECUTION OF APPLICATIONS.

REQUIREMENT FOR DIVISION—ELECTION—EXAMINATION.
Where after requirement for division applicant states on the record that he elects to prosecute one set of the claims, but does not cancel the other claims, *Held* that the Examiner should act on the merits of the claims to the invention elected by the applicant and that if such claims are finally rejected a single appeal may be made to the Examiners-in-Chief both as to such claims and as to requirement for division. [*Ex parte* King, 548.

PUBLIC USE

See Interference.

1. PATENTABILITY—CIRCUMSTANCES OF EACH CASE TO BE CONSIDERED.
"As no two cases are exactly alike, it is apparent that the character of the invention involved, the prior art, and the particular circumstances surrounding each case must be considered in weighing evidence of prior use." [*Boynton *v.* Taggart, 795.

2. SAME—PROCESS—SUPERIORITY OF MACHINE IMMATERIAL.
In considering whether a process for making dental inlays and the like had been in public use for more than two years prior to the filing of the application upon which patent was granted *Held* that it was of no possible consequence that by the use of the patentee's machine gold inlays and the like may be produced more cheaply and rapidly than they were produced by the dentists who testified in the case. [*Id.

3. SAME—PROCESS FOR MAKING DENTAL INLAYS.
Evidence reviewed and *Held* to establish beyond reasonable doubt that a process for making dental inlays had been in public use for many years prior to the filing of the application upon which a patent for such process was granted. [*Id.

REDUCTION TO PRACTICE.

See Priority of Invention.

1. INTERFERENCE—PRIORITY.
Where the claim in issue is for a combination of coördinating elements in a printing-press, including a tripping mechanism, *Held* that the building and testing of a full-sized tripping mechanism does not constitute reduction to practice of the invention in issue.
[*Miehle *v.* Scott and Scott, executors 1030.

2. SAME—SAME.
Where the invention in issue does not involve a device so simple in character as to demonstrate its own usefulness without test, but is one that required careful experimentation and test before its capacity for useful operation could be determined, *Held* that the mere building of a full-sized device did not constitute reduction to practice. "In the circumstances of this case, until this test occurred the reduction to practice was potential and not actual. It could not be known that the invention was complete until the ability of the combination of elements to produce the desired result had been demonstrated." [*Id.

3. SAME—SAME.
"In the present case, as previously suggested, it was not demonstrated prior to the filing date of appellees that appellant's device was complete and capable of useful operation. The subsequent demonstration could not deprive appellees of priority of reduction to practice, since that question must be determined upon the facts existent at the time of such filing." [*Id.

REGISTRATION OF TRADE-MARKS.

See Amendment; Opposition to Registration of Trade-Marks, 2.

1. ACQUIESCENCE IN RULING BY THE OFFICE—APPLICANT BOUND THEREBY.
Where an application for registration of a trade-mark was refused on the ground that the mark was not a technical trade-mark and applicant acquiesced in this decision and filed a new declaration alleging exclusive use of the mark for ten years next preceding the passage of the Trade-Mark Act, *Held* that applicant is estopped to urge thereafter that the registration was other than under the ten-year clause.
[*The Joseph Lay Company *v.* Indianapolis Brush and Broom Manufacturing Company, 269.

2. COLORED FIBER CORE FOR WIRE ROPE—NOT REGISTRABLE.
A trade-mark for wire rope described as "a fiber core in the wire rope, which core is colored purple," *Held* not registrable where it appears that it was old to use cores for such ropes made of asbestos, of fiber soaked in tar, and of tarred hemp or Manila rope.
[*Ex parte* De Witt Wire Cloth Company, 547.

3. FEATURE OF PACKAGE INCIDENT TO METHOD OF MANUFACTURE—NOT A TRADE-MARK.
Two short lines of transverse corrugations connected by a relatively long line of such corrugations appearing on paper tubes inclosing toothpicks *Held* to be merely a feature of the package incident to an old and well-known method of sealing the same and not capable of adoption as a trade-mark for toothpicks.
[Loewenstein *v.* Herz, 794.

4. DESIGN ON THE BACK OF A SPOON—NOT REGISTRABLE IN VIEW OF PRIOR PATENTED CONSTRUCTION.
A trade-mark for spoons described as "the raised substantially circular or O shaped film having distinct edges, appearing on the back of the spoon bowl" *Held* properly refused registration where a spoon having a piece of pure silver placed thereon is shown in patents granted prior to applicant's alleged date of use.
[*Ex parte* Oneida Community, Limited, 1027.

5. PATENTED CONSTRUCTION—CANNOT BE MONOPOLIZED BY A REGISTRATION.
When a patent showing a certain construction expires, the public has a right to manufacture articles in accordance therewith, and that right cannot be taken away under the guise of a registration of a trade-mark. [Id.

RETURN OF FEES.

See Fees.

RIGHT TO MAKE CLAIMS.

See Priority of Invention, 1, 3.

SIMILARITY OF MARKS.

NO CONFUSION IN TRADE UNLESS GOODS ARE OF SAME DESCRIPTIVE PROPERTIES.
"Before it can be held that the similarity of the marks will cause confusion in trade, it must appear that the marks are to be applied to goods of the same general class and of the same descriptive properties. Unless this be true, the mere similarity of the marks becomes immaterial. The law places no inhibition upon the use of the same mark by different persons, so long as the goods to which it is applied are so distinctive in class and quality as to forbid the probability of confusion in trade."
[*G & J Tire Company *v.* G. J. G. Motor Car Company, 550.

SOLE APPLICATIONS.

See Joint and Sole Applications.

STATE OF THE ART.

See Construction of Claims, 1; Designs, 1; Public Use, 1; Registration of Trade-Marks.

STATUTORY USE OF TRADE-MARKS.

See Opposition to Registration of Trade-Marks, 2.

SUSPENSION OF INTERFERENCE.

See Interference.

TECHNICAL TRADE-MARKS.

See Registration of Trade-Marks, 1.

TEN-YEARS CLAUSE.

See Cancelation of Trade-Mark Registration; Registration of Trade-Marks, 1.

TESTIMONY.

See Goods of the Same Descriptive Properties, 2; Interference; Joint and Sole Applications, 1; Motion to Amend Preliminary Statement, 1.

TESTS.

See Reduction to Practice.

TRADE-MARKS.

See Amendment; Cancelation of Trade-Mark Registration; Certificate of Registration of Trade-Marks; Goods of Same Descriptive Properties; Opposition to Registration of Trade-Marks; Property Rights; Registration of Trade-Marks; Similarity of Marks.

TRANSMISSION OF MOTIONS.

See Joint and Sole Applications, 2; Motion to Dissolve Interference.

UTILITY.

See Construction of Claims, 2; Priority of Invention, 2; Public Use, 2; Reduction to Practice.

WITNESSES.

See Goods of Same Descriptive Properties, 2.

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ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED DURING THE MONTH OF MAY, 1913.

[Abbreviations: "Gaz."—Official Gazette.]

A. B. Stove Company. (See Alexander and Berry, assignors.)

A. F. Meisselbach & Brother. (See Catucci, Pliny, assignor.)

Aaron, Solomon E., Charlestown, Mass. Lifting-jack for cars. No. 1,062,871; May 27; Gaz. vol. 190; p. 897.

Abbot, Leonidas L., Little Rock, Ark. Vehicle-spring. No. 1,062,872; May 27; Gaz. vol. 190; p. 898.

Abbott, William J., Algiers, Ind. Ditching-machine. No. 1,062,528; May 20; Gaz. vol. 190; p. 742.

Abramson, Harry, Philadelphia, Pa. Gas-heated iron. No. 1,060,572; May 6; Gaz. vol. 190; p. 3.

Acme Shear Company, The. (See Karsitz, Frank, assignor.)

Acme Supply Company, The. (See Schroyer, Harry H., assignor.)

Acorn Brass Manufacturing Company. (See Prouty, Theodore C., assignor.)

Adam, Georges, Paris, France. Thermal circuit-controlling device. No. 1,063,101; May 27; Gaz. vol. 190; p. 974.

Adams, Burton H. and W. C., Decorah, Iowa. Testing seeds. No. 1,062,682; May 27; Gaz. vol. 190; p. 836.

Adams, Charles F. (See Smith and Adams.)

Adams, Henry T., Chicago, assignor to Henry T. Adams Company, South Chicago, Ill. Bicycle-stand. No. 1,061,513; May 13; Gaz. vol. 190; p. 361.

Adams, James L., *et al.* (See Phillips, William R., assignor.)

Adams, John Q., Westmont, N. J. Sanitary towel-holder. No. 1,062,943; May 27; Gaz. vol. 190; p. 922.

Adams, Marcellin C., Pittsburgh, Pa. Broom-bridle. No. 1,060,877; May 6; Gaz. vol. 190; p. 108.

Adams-Randall, Charles, New York, N. Y. Elastic wheel. No. 1,061,580; May 13; Gaz. vol. 190; p. 387.

Adams-Randall, Charles, Boston, Mass. Telephonic apparatus. No. 1,062,754; May 27; Gaz. vol. 190; p. 858.

Adams, Walter C. (See Adams, Burton H. and W. C.)

Agrell, Frans G., Stockholm, Sweden. Telephone system. No. 1,061,650; May 13; Gaz. vol. 190; p. 410.

Agrell, Frans G., Stockholm, Sweden. Telephone system. No. 1,061,651; May 13; Gaz. vol. 190; p. 411.

Aiken, Edward L. (See Aylsworth and Aiken.)

Ainsworth, Arthur B., Leavenworth, Kans. Gravitation labeling-machine. No. 1,062,267; May 20; Gaz. vol. 190; p. 657.

Akerlund, Gustaf, assignor to Standard Gas Power Company, Atlanta, Ga. Gas-producer system. No. 1,060,807; May 6; Gaz. vol. 190; p. 83.

Aktiebolaget Baltic. (See Risberg, Johannes V. M., assignor.)

Aktiebolaget Ingeniorsfirma Fritz Egnell. (See Wener, Nils H., assignor.)

Aktiebolaget L. M. Ericsson & Co. (See Larsson, Gustaf O., assignor.)

Aktien-Gesellschaft Warschauer Schrauben und Drahtfabriken. (See Pius, Schlama, assignor.)

Albertsen, Boje R., assignor of one-half to A. Levy, San Francisco, Cal. Preservative and making the same. No. 1,062,683; May 27; Gaz. vol. 190; p. 836.

Alcott, Edward, Manassas, Va. Protector for railway-rails. No. 1,061,967; May 20; Gaz. vol. 190; p. 555.

Alden, Herbert W., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Differential gearing. No. 1,063,001; May 27; Gaz. vol. 190; p. 940.

Alder, Fred. (See Miller, Alvin S., assignor.)

Alexander, John A., and F. K. Berry, assignors to A. B. Stove Company, Battle Creek, Mich. Gas-range. No. 1,060,573; May 6; Gaz. vol. 190; p. 3.

Alexander, John A., and F. K. Berry, assignors to A. B. Stove Company, Battle Creek, Mich. Stove-door. No. 1,060,806; May 6; Gaz. vol. 190; p. 83.

Alexander, Walter, assignor to National Gum & Mica Company, New York, N. Y. Package for materials liable to be injured by exposure. No. 1,061,439; May 13; Gaz. vol. 190; p. 335.

Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Alternating-current motor. No. 1,060,731; May 6; Gaz. vol. 190; p. 58.

Allen, Linus H., Battle Creek, Mich. Ink-well. No. 1,061,155; May 6; Gaz. vol. 190; p. 203.

Allen, Thomas B., and F. J. Tone, assignors to The Carborundum Company, Niagara Falls, N. Y. Treating electrometallurgical products. No. 1,061,255; May 13; Gaz. vol. 190; p. 273.

Allen, Thomas B., and F. J. Tone, assignors to The Carborundum Company, Niagara Falls, N. Y. Manufacture of silicon. No. 1,061,256; May 13; Gaz. vol. 190; p. 273.

Allen, William G. (See Hundrup and Allen.)

Allen, Wilson A., Rochester, Minn. Invalid lifter and carrier. No. 1,061,715; May 13; Gaz. vol. 190; p. 433.

Allinio, Peter, Rust, Cal. Automatic lateral and longitudinal balance for aeroplanes. No. 1,062,074; May 20; Gaz. vol. 190; p. 591.

Allis-Chalmers Company. (See Patitz, Johann F. M., assignor.)

Allwine, Eugene E. (See Roberts, Robert R., assignor.)

Alma Manufacturing Company of Baltimore City. (See Hillegeist, Henry L., assignor.)

Almen, John O., assignor to Continental Computing Cash Register Company, Spokane, Wash. Calculating-machine. No. 1,060,878; May 6; Gaz. vol. 190; p. 109.

Alphin, Christopher, assignor to E. P. Webb, Kinston, N. C. Shade and curtain hanger. No. 1,061,968; May 20; Gaz. vol. 190; p. 555.

Alter, Christian, New York, N. Y. Razor-blade sharpener. No. 1,060,657; May 6; Gaz. vol. 190; p. 31.

Althouse, Charles S., Reading, Pa. Apparatus for treating threads. No. 1,061,652; May 13; Gaz. vol. 190; p. 411.

Altman, Harry P., Collinsville, Ill. Jig. No. 1,061,581; May 13; Gaz. vol. 190; p. 387.

Alyea, Courtland P., assignor of one-half to G. W. Spaulding and one-half to C. N. Griffin, Jacksonville, Fla. Explosive-engine. No. 1,061,653; May 13; Gaz. vol. 190; p. 412.

Ambler, Joseph B., Cadillac, Mich. Carriage-top. No. 1,061,031; May 6; Gaz. vol. 190; p. 164.

Ambruster, Joseph, Freeport, Ill. Tank and heater. No. 1,060,658; May 6; Gaz. vol. 190; p. 32.

Amen, Charles L., Carthage, S. D. Grain-cleaner. No. 1,061,971; May 20; Gaz. vol. 190; p. 556.

American Asphaltum and Rubber Co. (See Rawstron, Donald, assignor.)

American Automotoneer Company. (See Eversole, Cyrus P., assignor.)

American Bar Lock Company. (See Mulford, Logan W., assignor.)

American Car and Foundry Company. (See Rohling, John M., assignor.)

American Cotton Oil Company. (See Boyce, James, assignor.)

American Couch Company. (See Plunkett, Charles L., assignor.)

American Electrical Heater Company. (See Kuhn, Frank, assignor.)

American Lady Corset Company. (See Kinder, Garrett A., assignor.)

American Radiator Company. (See Sutton, William S., assignor.)

American Sanitary Works. (See Tilden, Bert O., assignor.)

American Sheet & Tin Plate Company. (See McFetridge, Joseph, assignor.)

American Slicing Machine Company. (See Luschka, August R., assignor.)

American Slicing Machine Company. (See Wolff, Wallace B., assignor.)

American Stopper Company. (See Corey, Harry R., assignor.)

American Stove Company. (See Fritz, Herman C., assignor.)

American Telephone and Telegraph Company. (See Blanvelt and Molina, assignors.)

Ames, Henry H., Great Bend, Kans. Liquid-fuel burner. No. 1,063,147; May 27; Gaz. vol. 190; p. 988.

Amidon, William S. (See Merrell and Amidon.)

Amies Asphalt Company. (See Amies, Joseph H., assignor.)

Amies, Joseph H., Philadelphia, Pa., assignor to Amies Asphalt Company. Manufacturing a composition for paving and like purposes. No. 1,062,686; May 27; Gaz. vol. 190; p. 837.

Ammann, John A., Geneva, Iowa. Mail-box. No. 1,060,659; May 6; Gaz. vol. 190; p. 32.

Andersen, Anthon H., Spring Valley, Wis. Lantern. No. 1,062,755; May 27; Gaz. vol. 190; p. 859.

Anderson, Anders E., assignor of one-half to A. G. Johnson, Lake Forest, Ill. Attachment for drill-presses. No. 1,060,574; May 6; Gaz. vol. 190; p. 4.

Anderson-Barngrover Mfg. Co. (See Anderson and Thompson, assignors.)

Anderson, Benjamin, Gebo, Wyo. Spring-wheel. No. 1,061,799; May 13; Gaz. vol. 190; p. 458.

Anderson, David W., La Fayette, Ind. Starter for internal-combustion engines. No. 1,061,716; May 13; Gaz. vol. 190; p. 433.

Anderson, Emil W., Chicago, Ill., assignor to Triple "A" Machine Company, Manistee, Mich. Motor for floor-scrapers and the like. No. 1,060,575; May 6; Gaz. vol. 190; p. 4.

Anderson, Ferdinand, Waterbury, Conn. Non-refillable bottle. No. 1,060,732; May 6; Gaz. vol. 190; p. 58.

Anderson, George S., assignor to Elliott-Fisher Company, Harrisburg, Pa. Platen for type-writing machines. No. 1,062,428; May 20; Gaz. vol. 190; p. 710.

Anderson, Harold B. (See Winton and Anderson.)

Anderson, Harry J., assignor to Newman Bros. Co., Chicago, Ill. Mechanical musical instrument. No. 1,062,944; May 27; Gaz. vol. 190; p. 923.

Anderson, James W., Fort Smith, Ark. Window-shade bracket and curtain-pole support. No. 1,061,800; May 13; Gaz. vol. 190; p. 458.

Anderson, John C. A., Chicago, Ill. Elevator-alarm. No. 1,061,514; May 13; Gaz. vol. 190; p. 362.

Anderson, Julia, Superior, Wis. Hat-pin guard. No. 1,061,212; May 6; Gaz. vol. 190; p. 223.

Anderson, Morris, Jamestown, N. Y. Sheet-metal construction. No. 1,062,210; May 20; Gaz. vol. 190; p. 638.

Anderson, Ove M., Chicago, Ill. Tiling-tool. No. 1,062,945; May 27; Gaz. vol. 190; p. 923.

Anderson, Raymond M., assignor to Stromberg Motor Devices Company, Chicago, Ill. Carbureter. No. 1,063,148; May 27; Gaz. vol. 190; p. 989.

Anderson, Samuel R., Quincy, Ill. Artificial leg. No. 1,063,175; May 27; Gaz. vol. 190; p. 998.

Anderson, Samuel W., Spokane, Wash. Bag-holder. No. 1,062,811; May 27; Gaz. vol. 190; p. 878.

Anderson, William C., San Jose, Cal. Impaling-roll for fruit-seeding machines. No. 1,062,315; May 20; Gaz. vol. 190; p. 674.

Anderson, William C., and A. B. Thompson, assignors to Anderson-Barngrover Mfg. Co., San Jose, Cal. Slicing-machine. No. 1,062,378; May 20; Gaz. vol. 190; p. 694.

Anderson, William C., and A. B. Thompson, assignors to Anderson-Barngrover Mfg. Co., San Jose, Cal. Cooker. No. 1,062,379; May 20; Gaz. vol. 190; p. 694.

Andresen, Julius C. (See Marten, Grahn, and Andresen.)

Andrew, James T., Montgomery, Ala. Chair or support for railway-rails. No. 1,061,801; May 13; Gaz. vol. 190; p. 458.

Andrew, William E., Atlantic Highlands, N. J. Spring structure. No. 1,060,879; May 6; Gaz. vol. 190; p. 109.

Andrews, Frederick, Mercer, New Zealand. Horse-collar. No. 1,062,684; May 27; Gaz. vol. 190; p. 836.

Andrick, Wallace P., E. Lowe, and H. W. Haff, assignors to K. M. Turner, Jamaica, N. Y. Key construction and support for telephonic apparatus. No. 1,060,576; May 6; Gaz. vol. 190; p. 4.

Andrus, James R., Woodland, Wash. Footboard for wood-choppers. No. 1,062,685; May 27; Gaz. vol. 190; p. 837.

Anson, Joseph, Madoc, assignor of one-third to W. Sleeman and one-third to T. Sleeman, Bessemer, Ontario, Canada. Acetylene-lamp. No. 1,060,660; May 6; Gaz. vol. 190; p. 32.

Anthony, Wendell P., Ridley Park, assignor to The Eddystone Manufacturing Company, Eddystone, Pa. Machine for putting labels on dry goods. No. 1,060,661; May 6; Gaz. vol. 190; p. 33.

Antoni, Friedrich A., Cologne-Ehrenfeld, Germany. Corrugated pasteboard wrapper. No. 1,061,654; May 13; Gaz. vol. 190; p. 412.

Apple Electric Company, The. (See Apple, Vincent G., assignor.)

Apple, Vincent G., assignor to The Apple Electric Company, Dayton, Ohio. Regulator for dynamo-electric machines. No. 1,062,380; May 20; Gaz. vol. 190; p. 695.

Appleby, John F., Beaver county, Okla., assignor to Dixie Cotton Picker Company, Chicago, Ill. Cotton-extracting machine. No. 1,060,880; May 6; Gaz. vol. 190; p. 110.

Arbuckle, Christina, *et al.*, administrators. (See Arbuckle, John.)

Arbuckle, John, deceased, New York, N. Y.; C. Arbuckle and C. A. Jamison, administrators. Means for raising sunken vessels. No. 1,061,213; May 6; Gaz. vol. 190; p. 223.

Arcade Manufacturing Company. (See Tscherning, Henry, assignor.)

Arco, Georg von, assignor to Gesellschaft für Drahtlose Telegraphie, m. b. H., Berlin, Germany. Arrangement for producing electrical oscillations. No. 1,061,717; May 13; Gaz. vol. 190; p. 434.

Arcturus Electric and Manufacturing Company, The. (See McBride, Lewis M., assignor.)

Arend, Francis J., *et al.* (See Berrigan, John J., assignor.)

Arendt, Oskar, Berlin, and C. Schlesinger, Strassburg, Germany. Apparatus for repairing electric metallic-filament lamps. No. 1,061,583; May 13; Gaz. vol. 190; p. 388.

Arens, Lloyd H., assignor to Frank Adam Electric Company, St. Louis, Mo. Fastening device. No. 1,062,075; May 20; Gaz. vol. 190; p. 591.

Arenz, Joseph, Milwaukee, Wis. Saw-swage. No. 1,062,211; May 20; Gaz. vol. 190; p. 638.

Armfield, Charles N., Guthrie Center, Iowa. Spindle-oiler. No. 1,060,881; May 6; Gaz. vol. 190; p. 110.

Armistead, William E., Sandersville, Ga. Apparatus for manufacturing ice. No. 1,062,530; May 20; Gaz. vol. 190; p. 743.

Armstrong, Harry Y., Elgin, Ill., assignor to Armstrong Wrapping Machine Company, Louisville, Ky. Sheet-feeding device. No. 1,061,584; May 13; Gaz. vol. 190; p. 388.

Armstrong, Harry Y., Elgin, Ill., assignor to Armstrong Wrapping Machine Company, Louisville, Ky. Sheet-feeding device. No. 1,061,585; May 13; Gaz. vol. 190; p. 388.

Armstrong, James R., assignor of one-third to W. H. Irvin, Pittsburgh, Pa. Gas-meter. No. 1,062,268; May 20; Gaz. vol. 190; p. 657.

Armstrong Wrapping Machine Company. (See Armstrong, Harry Y., assignor.)

Arndt, Walter R., assignor of one-half to Tilton and Tilton, Moline, Kans. Acetylene-gas generator. No. 1,062,873; May 27; Gaz. vol. 190; p. 898.

Arnold, Daniel J. C., New London, Ohio. Pressure-releasing device. No. 1,063,002; May 27; Gaz. vol. 190; p. 941.

Arnold, Mervin V., Syracuse, N. Y. Fireplace. No. 1,061,718; May 13; Gaz. vol. 190; p. 434.

Arnold, William W. (See Jacobson, Ole, assignor.)

Ask-Your-Dealer Vantage Company. (See Bryan, Joseph P., assignor.)

Atkins, Milton W. (See Mitchell and Atkins.)

Atkinson, William R., Homestead, assignor of one-third to J. C. Knode, Munhall, Pa. Toy pistol. No. 1,061,257; May 13; Gaz. vol. 190; p. 273.

Atwater, Harry R., assignor to The Osborn Manufacturing Company, Cleveland, Ohio. Mold-making machine. No. 1,061,440; May 13; Gaz. vol. 190; p. 335.

Atwood, James T., Rockford, Ill. Vacuum-cleaner. No. 1,060,964; May 6; Gaz. vol. 190; p. 140.

Augur, Robert C., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa. Compound steam-pump. No. 1,061,969; May 20; Gaz. vol. 190; p. 555.

Augur, Robert C., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa. Steam-pump. No. 1,061,970; May 20; Gaz. vol. 190; p. 556.

Aurora Automatic Machinery Company. (See Levedahl, Axel, assignor.)

Auto Compressed-Air Wheel Company. (See Gruss, Lucien R., assignor.)

Auto Strop Company. (See Gaisman, Henry J., assignor.)

Automata Company. (See Wolfe and Morton, assignors.)

Automatic Electric Company. (See Erickson, John, assignor.)

Automatic Machine Company. (See Northrup, Elmer C., assignor.)

Autopointe Company of America, The. (See Wood, Henry A. W., assignor.)

Axford, Harris W., Chicago, Ill. Incubator. No. 1,062,687; May 27; Gaz. vol. 190; p. 837.

Axford, Robert M., Corvallis, Oreg. Drinking-cup. No. 1,062,578; May 27; Gaz. vol. 190; p. 801.

Aylsworth, Jonas W., East Orange, assignor, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J. Making duplicate phonograph-records. No. 1,060,577; May 6; Gaz. vol. 190; p. 4.

Aylsworth, Jonas W., East Orange, assignor, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J. Talking-machine. No. 1,062,579; May 27; Gaz. vol. 190; p. 801.

Aylsworth, Jonas W., East Orange, and E. L. Aiken, Orange, assignors, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J. Making sound-record molds. No. 1,061,258; May 13; Gaz. vol. 190; p. 273.

B. F. Cummins Company, The. (See Rehak, James, assignor.)

B. F. Sturtevant Company. (See Balcome, Herbert A., assignor.)

B. F. Sturtevant Company. (See Middleton, Harry N., assignor.)

Babcock, Frank D. (See Ryden and Babcock.)

Babcock, Frederic W. (See Beach and Babcock.)

Bachman, Frank E., Port Henry, N. Y. Mixer for gaseous fuel. No. 1,061,855; May 13; Gaz. vol. 190; p. 412.

Backus, Peter J., Delphos, Ohio. Life-detecting apparatus. No. 1,061,802; May 13; Gaz. vol. 190; p. 458.

Bacon, William M., assignor to O. H. Hyde, St. Louis, Mo. Printing-machine. No. 1,060,578; May 6; Gaz. vol. 190; p. 5.

Badische Anilin & Soda Fabrik. (See Bazlen, Rieger, and Wohlfahrt, assignors.)

Badische Anilin and Soda Fabrik. (See Bosch and Mittasch, assignors.)

Badische Anilin & Soda Fabrik. (See Bosch, Mittasch, and Hecht, assignors.)

Badische Anilin & Soda Fabrik. (See Holt, Henry S. A., assignor.)

Badische Anilin & Soda Fabrik. (See Isler, Max H., assignor.)

Badische Anilin & Soda Fabrik. (See Müller and Isler, assignors.)

Badische Anilin & Soda Fabrik. (See Nawiasky, Paul, assignor.)

Badische Anilin & Soda Fabrik. (See Rampini, Christiani, assignor.)

Badische Anilin & Soda Fabrik. (See Wolff, Hugo, assignor.)

Bahler, Ludwig, Wolgast, Germany. Revolving tubular kiln. No. 1,062,946; May 27; Gaz. vol. 190; p. 923.

Bailey, Arthur. (See Hogan, George L., assignor.)

Bailey, Charles A., Cromwell, Conn. Primer. No. 1,060,965; May 6; Gaz. vol. 190; p. 140.

Bailey, Curtis L., assignor to The "New-Way" Motor Co., Lansing, Mich. Heat-radiating device. No. 1,060,733; May 6; Gaz. vol. 190; p. 59.

Bakala, August M. (See Wajda, Floryan, assignor.)

Baker, Harvey C., assignor to National Clinch Hinge Company, Chicago, Ill. Hasp-fastener. No. 1,061,032; May 6; Gaz. vol. 190; p. 165.

Baker, Harvey C., assignor to National Clinch Hinge Company, Chicago, Ill. Hinge. No. 1,061,033; May 6; Gaz. vol. 190; p. 165.

Baker, John E., York, Pa. Material for use in making up, repairing, and replacing linings, &c., of metallurgical furnaces. No. 1,063,102; May 27; Gaz. vol. 190; p. 974.

Baker, John E., York, Pa. Preparing material for use in making up, repairing, and replacing linings, &c., of metallurgical furnaces. No. 1,063,103; May 27; Gaz. vol. 190; p. 974.

Baker, Ross L., Joplin, Mo. Protective apparatus for electric circuits. No. 1,061,894; May 13; Gaz. vol. 190; p. 487.

Balcome, Herbert A., assignor to B. F. Sturtevant Company, Boston, Mass. Electric motor and brake. No. 1,060,966; May 6; Gaz. vol. 190; p. 140.

Balkus, Joseph F., Glastonbury, Conn. Soldering-iron. No. 1,061,803; May 13; Gaz. vol. 190; p. 459.

Ball, Albert, assignor to Sullivan Machinery Company, Claremont, N. H. Engine-reversing mechanism. No. 1,061,586; May 13; Gaz. vol. 190; p. 389.

Ball, David H., South Williamsport, Pa. Saw-swage. No. 1,061,156; May 6; Gaz. vol. 190; p. 204.

Ballard, Harrie A., Boston, assignor to The Boylston Manufacturing Company, South Boston, Mass. Inseam-trimming machine. No. 1,062,756; May 27; Gaz. vol. 190; p. 859.

Ballard, Robert B., Fort Dodge, Iowa. Governor for explosive-engines. No. 1,060,882; May 6; Gaz. vol. 190; p. 111.

Balod, Edward, Vancouver, British Columbia, Canada. Butter-cutter. No. 1,062,429; May 20; Gaz. vol. 190; p. 710.

Bals, Charles A., Chicago, Ill., assignor to Corwin Telephone Manufacturing Company. Telephony. No. 1,061,515; May 13; Gaz. vol. 190; p. 362.

Bals, Charles A., Chicago, Ill., assignor to Corwin Telephone Manufacturing Company. Telephone-exchange system. No. 1,061,516; May 13; Gaz. vol. 190; p. 363.

Bane, Charles W., *et al.* (See Lee, Isaac E., assignor.)

Bangs, Edwin D., Milwaukee, Wis. Engine-starter. No. 1,061,719; May 13; Gaz. vol. 190; p. 434.

Banks, John S., Portsmouth, Va. Reinforced block wall. No. 1,061,441; May 13; Gaz. vol. 190; p. 335.

Bannan, Francis B., Pottsville, Pa. Producing pictures, designs, or ornaments. No. 1,061,804; May 13; Gaz. vol. 190; p. 459.

Barber-Colman Company. (See Colman, Howard D., assignor.)

Barber-Colman Company. (See Colman and Peterson, assignors.)

Barber-Colman Company. (See Peterson, Burt A., assignor.)

Barbour-Stockwell Company. (See Ellis, Frank H., assignor.)

Barditzky, Herman, Memphis, Tenn. Electric fire-alarm. No. 1,062,137; May 20; Gaz. vol. 190; p. 613.

Barger, Lorin W., assignor to Davenport Locomotive Works, Davenport, Iowa. Articulated engine. No. 1,060,883; May 6; Gaz. vol. 190; p. 111.

Barker, Theodore E. (See Grossarth and Barker.)

Barker, Walter G. (See Nelson and Barker.)

Barlow, Frank, Hyde, England. Lapping mechanism of openers, scutchers, and like machines. No. 1,062,757; May 27; Gaz. vol. 190; p. 859.

Barnard, Walter E., Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,062,076; May 20; Gaz. vol. 190; p. 592.

Barnhart Bros. & Spindler. (See Murray, Brink, and Malmstrom, assignors.)

Bart, Heinrich, Bad Dürkheim, Germany. Production of organic derivatives of arsenic acid. No. 1,061,587; May 13; Gaz. vol. 190; p. 389.

Barth, Arthur von, New York, N. Y. Counting-machine. No. 1,060,884; May 6; Gaz. vol. 190; p. 111.

Basch, David, Schenectady, N. Y., assignor to General Electric Company. Protective device. No. 1,062,812; May 27; Gaz. vol. 190; p. 878.

Baskett, James N., and J. H. Rodes, St. Louis, Mo. Liquid-dispenser. No. 1,062,576; May 20; Gaz. vol. 190; p. 750.

Basler, George, assignor to Basler Machinery Company, Lynn, Mass. Making leather flexible. No. 1,062,047; May 27; Gaz. vol. 190; p. 924.

Basler Machinery Company. (See Basler, George, assignor.)

Bassett, Albin J. (See Luick and Bassett.)

Bassick, Edgar W., Bridgeport, Conn. Lock. No. 1,061,442; May 13; Gaz. vol. 190; p. 336.

Bastian, Charles L., Chicago, Ill. Carbureter. No. 1,062,688; May 27; Gaz. vol. 190; p. 837.

Batcheldes, Asa F., Schenectady, N. Y., assignor to General Electric Company. Locomotive-truck. No. 1,060,734; May 6; Gaz. vol. 190; p. 59.

Batcheller, Birney C., New York, N. Y. Pneumatic-despatch-tube receiving-terminal. No. 1,061,034; May 6; Gaz. vol. 190; p. 165.

Batcheller, Birney C., New York, N. Y. Transit-tubing for carrier systems. No. 1,061,035; May 6; Gaz. vol. 190; p. 165.

Batcheller, Birney C., New York, N. Y. Carrier system. No. 1,061,036; May 6; Gaz. vol. 190; p. 166.

Batcheller, Birney C., New York, N. Y. Carrier system. No. 1,061,214; May 6; Gaz. vol. 190; p. 223.

Batchelor, Charles J. (See Sullivan, Frank, assignor.)

Batdorf, John W. (See Falk, Colonel N., assignor.)

Bateman, Loftus H. (See Bateman, Richard W. and L. H.)

Bateman, Richard W. and L. H., Leeds, England. Driving and reversing gear. No. 1,063,104; May 27; Gaz. vol. 190; p. 974.

Bates, Adelmer M., Chicago, Ill. Bag-fastening device. No. 1,062,948; May 27; Gaz. vol. 190; p. 924.

Bates, Albert J., Chicago, Ill. Side frame for railway-cars. No. 1,062,316; May 20; Gaz. vol. 190; p. 674.

Bates, Albert J., Chicago, Ill. Treating concrete mixtures. No. 1,062,949; May 27; Gaz. vol. 190; p. 924.

Bates, Arthur, Leicester, England, assignor to United Shoe Machinery Company, Paterson, N. J. Lasting-machine. No. 1,060,967; May 6; Gaz. vol. 190; p. 141.

Bates, Arthur, and E. A. Cridland, Leicester England, assignors to United Shoe Machinery Company, Paterson, N. J. Work-support. No. 1,060,735; May 6; Gaz. vol. 190; p. 59.

Bates, Bernard, Vancouver, British Columbia, Canada. Door for packing-houses. No. 1,061,588; May 13; Gaz. vol. 190; p. 389.

Batz, Rose L., Pittsfield, Ill. Poultry-fountain. No. 1,062,531; May 20; Gaz. vol. 190; p. 743.

Bauer, Louis P., Pekin, Ill., assignor to Corn Products Refining Company. Apparatus for drying starch. No. 1,061,720; May 13; Gaz. vol. 190; p. 435.

Baumann, Robert. (See Wurmb and Baumann.)

Bauroth, Leonhard, Toledo, Ohio, assignor to C. H. Wacker, Chicago, Ill. Power-press. No. 1,060,662; May 6; Gaz. vol. 190; p. 33.

Bauroth, Leonhard, Toledo, Ohio, assignor to C. H. Wacker, Chicago, Ill. Sheet-metal-working machine. No. 1,060,663; May 6; Gaz. vol. 190; p. 33.

Bauroth, Leonhard, Toledo, Ohio, assignor to The Metallic Barrel Company, Chicago, Ill. Metallic package. No. 1,063,152; May 27; Gaz. vol. 190; p. 990.

Baxter, Daniel N., trustee. (See Baxter, Daniel N., assignor.)

Baxter, Daniel N., assignor to D. N. Baxter, trustee, Wichita, Kans. Automobile. No. 1,063,003; May 27; Gaz. vol. 190; p. 941.

Bayer, Jacob J., Columbus, Ohio. Snap-hook. No. 1,060,736; May 6; Gaz. vol. 190; p. 60.

Bayer, Paul, assignor to The Thomas B. Jeffery Company, Kenosha, Wis. Bearing-roller retainer. No. 1,060,579; May 6; Gaz. vol. 190; p. 5.

Bayles, Ernest A., Helsby, assignor to British Insulated and Helsby Cables Limited, Prescot, England. Electrical condenser. No. 1,063,105; May 27; Gaz. vol. 190; p. 975.

Bayley, Guy L., Berkeley, Cal. Shock-absorber. No. 1,062,758; May 27; Gaz. vol. 190; p. 860.

Baylis, Robert N., East Orange, N. J. Fluid-pressure regulator. No. 1,062,138; May 20; Gaz. vol. 190; p. 613.

Bazlen, Max. E. Rieger, and T. Wohlfahrt, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Crystalline monozinc formaldehyde sulfoxylate. No. 1,063,004; May 27; Gaz. vol. 190; p. 941.

Beach, Clarence E., Binghamton, assignor to G. O. Knapp, New York, N. Y. Signaling system. No. 1,062,381; May 20; Gaz. vol. 190; p. 695.

Beach, Henry L., and F. W. Babcock, Cleveland, Ohio. Separable fastener. No. 1,061,805; May 13; Gaz. vol. 190; p. 459.

Beall, Albert E., assignor to Vertical Drainage Company, Clinton, Iowa. Drainage system. No. 1,060,737; May 6; Gaz. vol. 190; p. 60.

Beans, John F. (See Beaumont, Beans, and Lehman.)

Bear Milling and Mining Company. (See Nielsen, Borglin, and Soeborg, assignors.)

Bear, Wilson G., and K. C. Hurlbut, Monroe, Wis. Dust-shield for hubs. No. 1,061,806; May 13; Gaz. vol. 190; p. 400.

Beasecker, Clarence H., assignor of one-half to J. B. Symes, Sparta, Mich. Compound rail. No. 1,061,037; May 6; Gaz. vol. 190; p. 166.

Beatham, Stanley. (See McKenney and Beatham.)

Beaudry, Frederick, Springfield, Mass. Chair-seat frame. No. 1,060,664; May 6; Gaz. vol. 190; p. 34.

Beaumont, George H., J. F. Beans, and J. E. Lehman, Canton, Ohio; said Lehman assignor to said Beaumont and Beans. Spring forming and tempering machine. No. 1,061,721; May 13; Gaz. vol. 190; p. 435.

Beauregard, Victor, Boston, Mass. Vegetable-slicer. No. 1,060,809; May 6; Gaz. vol. 190; p. 83.

Beausejour, Phillas, *et al.* (See Brousseau, Delphis, assignor.)

Bechtel, Milton W., assignor to The Borden Company, Warren, Ohio. Die or chaser for pipe-threading tools. No. 1,062,212; May 20; Gaz. vol. 190; p. 638.

Beck, Charles W., Rockville Center, N. Y., assignor, by mesne assignments, to Michigan Motor Specialties Company, Detroit, Mich. Oil-can holder. No. 1,060,885; May 6; Gaz. vol. 190; p. 112.

Beck, Charles W., Rockville Center, N. Y., assignor, by mesne assignments, to Michigan Motor Specialties Company, Detroit, Mich. Terminal connector for spark-plugs for explosive-engines for automobiles and other uses. No. 1,062,629; May 27; Gaz. vol. 190; p. 819.

Becker, Gustav L., New York, N. Y. System of musical notation. No. 1,062,813; May 27; Gaz. vol. 190; p. 878.

Becker, John, Hyde Park, Mass. Tool-holding device. No. 1,062,630; May 27; Gaz. vol. 190; p. 819.

Becker, Paul E., assignor to The Handy Manufacturing Company, Bridgeport, Conn. Die-stock. No. 1,062,317; May 20; Gaz. vol. 190; p. 674.

Becket, Frederick M., Niagara Falls, assignor to Electro Metallurgical Company, New York, N. Y. Alloy. No. 1,062,430; May 20; Gaz. vol. 190; p. 711.

Beckham, Walter C., Paxton, Fla. Stump-burner. No. 1,061,350; May 13; Gaz. vol. 190; p. 305.

Beebe, Edwin J., *et al.* (See Johnston, Charles F., assignor.)

Beecher, Herbert P., assignor to Lyon Metallic Manufacturing Company, Aurora, Ill. Shelving. No. 1,062,759; May 27; Gaz. vol. 190; p. 860.

Beeler, Adam M., Seattle, Wash. Busy-signal attachment for telephones. No. 1,061,589; May 13; Gaz. vol. 190; p. 390.

Beeman, Edwin R., Minneapolis, and T. Brennan, Jr., St. Louis Park, Minn., assignors to Monitor Drill Company. Grain-drill. No. 1,061,517; May 13; Gaz. vol. 190; p. 364.

Behning Piano Company. (See Prisciantelli, Mike, assignor.)

Behnke, Adolph C. and A. J., Valders, Wis. Vaporizer and vapor-burner. No. 1,061,518; May 13; Gaz. vol. 190; p. 364.

Behnke, Albert J. (See Behnke, Adolph C. and A. J.)

Beilstein, Wilhelm, assignor of one-half to C. Kranz, Berlin, Ontario, Canada. Convertible sleigh. No. 1,062,760; May 27; Gaz. vol. 190; p. 861.

Bell, Charles W., Strong, assignor of one-half to J. S. Harlow, Dixfield, Me. Catheter. No. 1,060,665; May 6; Gaz. vol. 190; p. 34.

Bell, George W., Stockport, England. Device for shaping the outer casings of pneumatic tires. No. 1,061,722; May 13; Gaz. vol. 190; p. 436.

Bell, I. E. (See Dyer, George B., assignor.)

Bell, Isaac A., Chicago, Ill. Convertible tripod and walking-stick. No. 1,063,106; May 27; Gaz. vol. 190; p. 975.

Bellan, Peter, Chicago, Ill. Folding-machine. No. 1,061,972; May 20; Gaz. vol. 190; p. 556.

Bellemare, George, Winnipeg, Manitoba, Canada. Tire-protector. No. 1,062,631; May 27; Gaz. vol. 190; p. 819.

Bellman, Belle, Hays, Kans. Churn-dasher. No. 1,061,723; May 13; Gaz. vol. 190; p. 436.

Bellows, Benjamin F., Cleveland, Ohio, assignor to Electric Compositor Company, New York, N. Y. Spacer selecting and releasing mechanism. No. 1,060,580; May 6; Gaz. vol. 190; p. 6.

Belt, Marcus L., Jr. (See Hoefer and Belt.)

Belt, William R. (See Hoefer and Belt.)

Bemis, Herbert G., Riceville, Iowa. Washing-machine for milk-separator disks. No. 1,061,157; May 6; Gaz. vol. 190; p. 204.

Ben Day, Inc. (See Day, Benjamin, assignor.)

Benedict, Laurance D., assignor to Benedict Wrench Company, Chicago, Ill. Pipe-wrench. No. 1,063,153; May 27; Gaz. vol. 190; p. 990.

Benedict Wrench Company. (See Benedict, Laurance D., assignor.)

Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.)

Benjamin, George H., New York, N. Y. Bobbin. No. 1,063,174; May 27; Gaz. vol. 190; p. 998.

Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Electric-lamp socket. No. 1,062,139; May 20; Gaz. vol. 190; p. 613.

Benjamin, William S. (See Pharo and Benjamin.)

Bennet, Robert H., New York, N. Y. Spool and needle holder. No. 1,061,590; May 13; Gaz. vol. 190; p. 390.

Bergen, Frank, assignor to J. Nester, East St. Louis, Ill. Packaging bottles. No. 1,063,154; May 27; Gaz. vol. 190; p. 991.

Bergens, William J., assignor of one-fourth to C. L. Terry, one-fourth to J. A. Bommhardt, Cleveland, Ohio, and one-half to The Single Faucet Company, Chicago, Ill. Mixing-valve. No. 1,061,724; May 13; Gaz. vol. 190; p. 436.

Berger Machine Company. (See Kempf, Henry J., assignor.)

Bergisch Märkische Steinindustrie, Aktiengesellschaft. (See Dehl, Heinrich, assignor.)

Bergius, Friedrich. (See Meyer and Bergius.)

Bergman, Oscar A., Seattle, Wash. Sandpaper-holder. No. 1,052,214; May 20; Gaz. vol. 190; p. 639.

Bergmann, Nora E. P., New York, N. Y. Garter-holder. No. 1,061,215; May 6; Gaz. vol. 190; p. 224.

Berlin, George C., Caldwell, Idaho. Driving-gear. No. 1,062,318; May 20; Gaz. vol. 190; p. 674.

Berliner, Selma, New York, N. Y. Hat-pin. No. 1,061,038; May 6; Gaz. vol. 190; p. 167.

Bernhardt, David F., New Brighton, assignor to J. B. King & Co., New York, N. Y. Plaster-board-cutting machine. No. 1,062,814; May 27; Gaz. vol. 190; p. 879.

Bernoulli, Walter. (See Preiswerk and Bernoulli.)

Bernstrom, John, *et al.* (See Berrigan, John J., assignor.)

Berrigan, John J., East Orange, N. J., assignor to F. J. Arend, New York, N. Y., and J. Bernstrom, Stockholm, Sweden. Centrifugal separator. No. 1,062,215; May 20; Gaz. vol. 190; p. 639.

Berrigan, John J., Orange, N. J., assignor to F. J. Arend, New York, N. Y., and J. Bernstrom, Stockholm, Sweden. Apparatus for separating solids and liquids and washing or otherwise treating the separated solids. No. 1,062,216; May 20; Gaz. vol. 190; p. 639.

Berry, Frank K. (See Alexander and Berry.)

Berry, William C., Marshall, Tex. Peanut-picker and pea-huller. No. 1,061,591; May 13; Gaz. vol. 190; p. 390.

Best, Alfred, Salt Lake City, Utah. Power-generating apparatus. No. 1,062,815; May 27; Gaz. vol. 190; p. 879.

Best, William N., New York, N. Y. Cupola-furnace. No. 1,061,158; May 6; Gaz. vol. 190; p. 204.

Bettendorf, J. W., administrator. (See Bettendorf, William P.)

Bettendorf, William P., deceased, Davenport, Iowa; J. W. Bettendorf, administrator. Underframe for cars. No. 1,061,351; May 13; Gaz. vol. 190; p. 305.

Bettendorf, William P., deceased; J. W. Bettendorf, administrator, Bettendorf, Iowa. Underframe for dumping-cars. No. 1,062,689; May 27; Gaz. vol. 190; p. 838.

Bettendorf, William P., deceased; J. W. Bettendorf, administrator, Bettendorf, Iowa. Metal underframe construction for cars. No. 1,062,690; May 27; Gaz. vol. 190; p. 838.

Betz, Frank S. (See Douglass, Ernest D., assignor.)

Beugler, Edwin F., assignor to E. B. Holmes, Buffalo, N. Y. Machine for making barrel-hoops. No. 1,062,874; May 27; Gaz. vol. 190; p. 898.

Bevier, Philip H., New York, N. Y. Fireproof arch. No. 1,063,005; May 27; Gaz. vol. 190; p. 941.

Bicknell, John E., assignor to The Findlay Electric Porcelain Company, Findlay, Ohio. Insulator. No. 1,060,886. May 6; Gaz. vol. 190; p. 112.

Bierce, Frederick N., assignor to The Specialty Device Company, Cincinnati, Ohio. Cable-roller. No. 1,061,895; May 13; Gaz. vol. 190; p. 487.

Billiter, Jean, Vienna, Austria-Hungary. Purifying carbon for carbon filaments. No. 1,062,431; May 20; Gaz. vol. 190; p. 711.

Bilton, Clarence E., assignor to The Standard Manufacturing Company, Bridgeport, Conn. Milling-machine. No. 1,061,973; May 20; Gaz. vol. 190; p. 557.

Binion, William A., Newark, N. Y. Tire. No. 1,061,807; May 13; Gaz. vol. 190; p. 460.

Binney, Robert W., Granite City, Ill. Compression-retractor. No. 1,060,738; May 6; Gaz. vol. 190; p. 60.

Binns, James R., assignor of one-half to E. D. Myers, Canton, Ohio. Automatic turning-lathe. No. 1,062,319; May 20; Gaz. vol. 190; p. 675.

Birdsall, James E., assignor to W. E. Dotts, Philadelphia, Pa. Toy gun. No. 1,060,887; May 6; Gaz. vol. 190; p. 112.

Bisch, Floyd, Philadelphia, Pa. Ratchet-wrench. No. 1,062,140; May 20; Gaz. vol. 190; p. 614.

Bisko, Andrew, Minneapolis, Minn. Combination-tool. No. 1,061,352; May 13; Gaz. vol. 190; p. 305.

Bissex, George E., assignor to Stephen Greene Co., Philadelphia, Pa. Strip-applying machine. No. 1,061,966; May 13; Gaz. vol. 190; p. 512.

Bituminized Road Company. (See Popkess, Michael A., assignor.)

Black, Charles. (See Blee, Black, and Palmer.)

Black, Charles. (See Gillett, George S., assignor.)

Black, Joseph L., Palatine, Ill. Separator for mechanical mixtures of gases. No. 1,061,656; May 13; Gaz. vol. 190; p. 412.

Black, Josiah, assignor to E. Vaughan, Philadelphia, Pa. Circular-knitting machine. No. 1,062,875; May 27; Gaz. vol. 190; p. 899.

Blackwell, Adelaide M., Seattle, Wash. Protective uniform. No. 1,061,808; May 13; Gaz. vol. 190; p. 460.

Blair, David W., assignor, by mesne assignments, to Metallurgical Research Company, New York, N. Y. Furnace. No. 1,061,964; May 13; Gaz. vol. 190; p. 511.

Blair, John A., Steuben township, Crawford county, Pa. Attachment for milk-pails. No. 1,062,532; May 20; Gaz. vol. 190; p. 743.

Blakely, Horace. (See Forsyth, John F., assignor.)

Blauvelt, William G., New York, N. Y., and E. C. Molina, East Orange, N. J., assignors to American Telephone and Telegraph Company. Controlling apparatus. No. 1,061,519; May 13; Gaz. vol. 190; p. 364.

Blee, Charles O., Fort Wayne, Ind., C. Black, Westminster, Md., and C. Palmer, Fort Wayne, Ind. Plasterer's implement. No. 1,060,810; May 6; Gaz. vol. 190; p. 84.

Bloch, Joseph, New York, N. Y. Combined buckle and box. No. 1,061,954; May 13; Gaz. vol. 190; p. 509.

Block, Alexander E., St. Louis, Mo. Arch-support. No. 1,061,353; May 13; Gaz. vol. 190; p. 306.

Block, Herman W. (See Desbecker, Harold C., assignor.)

Blofield, Arthur E., and J. J. Link, New York, N. Y. Bed-covering. No. 1,061,259; May 13; Gaz. vol. 190; p. 274.

Blom, John H. (See Guy and Blom.)

Blomquist, Edward. (See Williams, John B., assignor.)

Blondlau, Jules, Braine-le-Comte, Belgium. Filter for wells and other purposes. No. 1,063,006; May 27; Gaz. vol. 190; p. 942.

Bloss, Ernest F., Cleveland, Ohio. Producing edible lard from hog-middles. No. 1,063,107; May 27; Gaz. vol. 190; p. 975.

Blosser, Joseph W., Atlanta, Ga. Destroying insects and their eggs. No. 1,061,443; May 13; Gaz. vol. 190; p. 336.

Bluh, Charles G., New York, N. Y. Safety-razor. No. 1,061,159; May 6; Gaz. vol. 190; p. 204.

Blumberg, David, *et al.* (See Saltman, Philip, assignor.)

Blymyer, Lafayette W., Los Angeles, Cal. Automobile transmission. No. 1,062,876; May 27; Gaz. vol. 190; p. 899.

Boal, Thomas H., Philadelphia, Pa. Type-writer support. No. 1,061,896; May 13; Gaz. vol. 190; p. 488.

Bock, William E., assignor, by mesne assignments, to The Toledo Glass Company, Toledo, Ohio. Glass-blowing machine. No. 1,063,108; May 27; Gaz. vol. 190; p. 975.

Böcker, Jacob, Caster, near Bedburg, assignor of one-half to T. Wassenberg, Elsen, near Grevenbroich, Germany. Beet-harvester. No. 1,060,968; May 6; Gaz. vol. 190; p. 141.

Bocorselski, Frank E., and C. K. Lassiter, Richmond, Va. Binding-post. No. 1,061,809; May 13; Gaz. vol. 190; p. 460.

Bodenhofer, Ferdinand, New York, N. Y. Loose-leaf binder. No. 1,061,897; May 13; Gaz. vol. 190; p. 488.

Boerner, Hermann, assignor to F. R. Cornwall, St. Louis, Mo. Street-car advertising apparatus. No. 1,061,260; May 13; Gaz. vol. 190; p. 274.

Bogani, Arthur H., Jersey City, N. J., and W. E. Sheehan, Albany, N. Y. Endless felt. No. 1,062,877; May 27; Gaz. vol. 190; p. 900.

Bohn, Gebhard C., St. Paul, Minn. Refrigerator-car. No. 1,061,974; May 20; Gaz. vol. 190; p. 557.

Boland, Joseph, Pittsburgh, Pa. Shock-absorber. No. 1,062,320; May 20; Gaz. vol. 190; p. 675.

Boland, Ransome G. (See Rutledge and Boland.)

Boldizzoni, Teobaldo, New York, assignor of one-half to L. Bujese, Brooklyn, N. Y. Fire-escape apparatus. No. 1,060,969; May 6; Gaz. vol. 190; p. 141.

Bollée, Amédée, fils, Le Mans, France. Valve-gear. No. 1,062,580; May 27; Gaz. vol. 190; p. 801.

Bolls, William W., Washington, D. C. Dental instrument. No. 1,063,109; May 27; Gaz. vol. 190; p. 976.

Bommer, Emil, Brooklyn, N. Y. Door-holder. No. 1,061,592; May 13; Gaz. vol. 190; p. 391.

Bommer, Emil, New York, N. Y. Spring-hinge. No. 1,062,217; May 20; Gaz. vol. 190; p. 640.

Bommhardt, John A., *et al.* (See Bergens, William J., assignor.)

Bonaly, Louis F., Kickapoo township, Leavenworth county, Kans. Convertible wagon-box. No. 1,062,761; May 27; Gaz. vol. 190; p. 861.

Bondy, Siegfried, assignor to K. Krupitschka, Vienna, Austria-Hungary. Elastic-fluid packing. No. 1,061,657; May 13; Gaz. vol. 190; p. 413.

Bonney, John C. G., Brooklyn, N. Y. Hat-ventilator. No. 1,061,593; May 13; Gaz. vol. 190; p. 391.

Borchert, William, assignor of one-half to W. A. McPherson, Rockford, Ill. Device for sealing wrapped packages. No. 1,061,030; May 6; Gaz. vol. 190; p. 167.

Borden, Bradford, Toronto, Ontario, Canada, assignor to The Borden Company, Warren, Ohio. Pipe-threading tool. No. 1,062,218; May 20; Gaz. vol. 190; p. 640.

Borden Company, The. (See Bechtel, Milton W., assignor.)

Borden Company, The. (See Borden, Bradford, assignor.)

Borden, George L., Groveville, assignor to Electrolytic Art Metal Company, Trenton, N. J. Disintegrator. No. 1,063,155; May 27; Gaz. vol. 190; p. 991.

Border, William P., Bozeman, Mont. Combination headgate and water-measuring device. No. 1,062,432; May 20; Gaz. vol. 190; p. 711.

Borglin, Charles J. (See Nielsen, Borglin, and Soeborg.)

Bornstein, Newton A. (See Gollobin and Bornstein.)

Bosch, Carl, and A. Mittasch, assignors to Badische Anilin and Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Producing molybdenum nitrid. No. 1,061,725; May 13; Gaz. vol. 190; p. 437.

Bosch, Carl, A. Mittasch, and L. Hecht, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Production of ammonium sulfate. No. 1,063,007; May 27; Gaz. vol. 190; p. 942.

Bosch, Firm of Robert. (See Woerner, Eugen, assignor.)

Boss, William, St. Paul, Minn. Collapsible cot-hammock. No. 1,062,950; May 27; Gaz. vol. 190; p. 924.

Boss, William, St. Paul, Minn. Hammock. No. 1,062,951; May 27; Gaz. vol. 190; p. 925.

Bosse, Charles O., Tacoma, Wash. Elevator-controller. No. 1,062,433; May 20; Gaz. vol. 190; p. 711.

Boston Automatic Machine Company. (See Richardson and Morgan, assignors.)

Boutell, John R., assignor of one-half to Siebers & Raisch Pattern Works, Milwaukee, Wis. Antiscald-faucet. No. 1,061,975; May 20; Gaz. vol. 190; p. 557.

Boutwell, William R., Norfolk, Va. Producing propeller-blade patterns. No. 1,062,762; May 27; Gaz. vol. 190; p. 861.

Bowden, Thomas, Manchester, England. Advertising and like apparatus. No. 1,061,520; May 13; Gaz. vol. 190; p. 365.

Bowen, William F., *et al.* (See Lee, Isaac E., assignor.)

Bower, Samuel M., Tutwiler, Miss. Traction-wheel. No. 1,062,382; May 20; Gaz. vol. 190; p. 695.

Bowers, Jacob R., Waelder, Tex. Cotton knife and hook. No. 1,060,811; May 6; Gaz. vol. 190; p. 84.

Bowles, Charles A., Richmond, Va. Ticket-holder. No. 1,061,810; May 13; Gaz. vol. 190; p. 460.

Bowling, James H., Russellville, Ky. Oil-burner. No. 1,062,383; May 20; Gaz. vol. 190; p. 696.

Bowman, George S., Lebanon, Pa. Knockdown shipping-package. No. 1,062,878; May 27; Gaz. vol. 190; p. 900.

Bowman, Martin, *et al.* (See Nordstrom, Axel R., assignor.)

Bowman, Newton K., North Lawrence, Ohio. Mail-handling apparatus. No. 1,060,888; May 6; Gaz. vol. 190; p. 113.

Boyce, James, Chicago, Ill., assignor to American Cotton Oil Company, New York, N. Y. Producing an edible compound. No. 1,061,254; May 6; Gaz. vol. 190; p. 236.

Boyd, Thomas A., Glasgow, Scotland. Winding-machine for yarn and thread. No. 1,062,562; May 20; Gaz. vol. 190; p. 753.

Boyle, William O., St. Joseph, Mo. Spectacles-adjuster. No. 1,061,216; May 6; Gaz. vol. 190; p. 224.

Boylston, John, Chicago, Ill. Steam-trap. No. 1,062,632; May 27; Gaz. vol. 190; p. 820.

Boylston Manufacturing Company, The. (See Ballard, Harrie A., assignor.)

Boynton, Arthur J., Lorain, Ohio. Gas-burner. No. 1,061,811; May 13; Gaz. vol. 190; p. 460.

Boynton, Arthur J., Lorain, Ohio. Dust-catcher. No. 1,063,110; May 27; Gaz. vol. 190; p. 976.

Braasch, Henry, Los Angeles, Cal. Balloting-box for fraternal orders. No. 1,063,111; May 27; Gaz. vol. 190; p. 977.

Brach, Leon S., New York, N. Y. Nut-lock. No. 1,062,581; May 27; Gaz. vol. 190; p. 802.

Bradshaw, Charles E., assignor of one-half to W. Dunbar, Cleveland, Ohio. Adjustable support for concrete-building forms. No. 1,061,658; May 13; Gaz. vol. 190; p. 413.

Brady, Joseph H., Kansas City, Mo. Humidity-controlling apparatus. No. 1,062,269; May 20; Gaz. vol. 190; p. 658.

Brand, David H., Trenton, N. J. Wheelbarrow. No. 1,063,112; May 27; Gaz. vol. 190; p. 977.

Brandt, Charles M., Holmes, assignor of twenty-five and one-half one-hundredths to A. B. Willoughby, Philadelphia, Pa. Mantle-retainer. No. 1,061,659; May 13; Gaz. vol. 190; p. 413.

Brandt, Charles M., Holmes, assignor of twenty-five and one-half one-hundredths to A. B. Willoughby, Philadelphia, Pa. Mantle-retainer. No. 1,061,812; May 13; Gaz. vol. 190; p. 461.

Brashear, Peter C., *et al.* (See Hilfrank, Edward, assignor.)

Brauer, Karl, Lyndhurst, N. J. Life-preserver. No. 1,060,889; May 6; Gaz. vol. 190; p. 113.

Breeden, Prince B., Norfolk, Va. Combined rake and pitchfork. No. 1,061,217; May 6; Gaz. vol. 190; p. 224.

Breeden, William S., Millville, N. J. Tooth-brush holder. No. 1,061,976; May 20; Gaz. vol. 190; p. 558.

Bremer, William A., Holland, Mich. Miter-box. No. 1,063,113; May 27; Gaz. vol. 190; p. 977.

Brennan, John J., assignor to J. Bromley & Sons, Philadelphia, Pa. Pattern-setting machine. No. 1,063,114; May 27; Gaz. vol. 190; p. 978.

Brennan, Thomas, Jr. (See Beeman and Brennan.)

Brennan, Thomas, Jr., St. Louis Park, Minn., assignor to Monitor Drill Company. Grain-drill. No. 1,061,521; May 13; Gaz. vol. 190; p. 365.

Brett, Franklin A., Oak Park, Ill. Scrubbing-machine. No. 1,062,533; May 20; Gaz. vol. 190; p. 744.

Brewer, Governor L., assignor of one-half to J. Musil, Beach, N. D. Toy. No. 1,062,219; May 20; Gaz. vol. 190; p. 640.

Brewster, James N., New York, N. Y. Autotruck-body. No. 1,063,115; May 27; Gaz. vol. 190; p. 978.

Briand, Charles C., Revere, Mass., assignor to Peter Gray & Sons. Lantern or lamp. No. 1,062,220; May 20; Gaz. vol. 190; p. 641.

Brigden, Arthur, Albertville, Ala. Spring-tooth cultivator. No. 1,061,354; May 13; Gaz. vol. 190; p. 306.

Brink, George B., Plymouth, Mich. Spring structure. No. 1,061,218; May 6; Gaz. vol. 190; p. 225.

Brink, George B., Plymouth, Mich. Spring structure. No. 1,061,219; May 6; Gaz. vol. 190; p. 225.
Brink, Lewis R. (See Murray, Brink, and Malmstrom.)
Bristol, Edgar H., and W. E. Goodyear, Naugatuck, assignors to The Industrial Instrument Company, Waterbury, Conn. Measuring or controlling instrument. No. 1,060,812; May 6; Gaz. vol. 190; p. 84.
British Insulated and Helsby Cables Limited. (See Bayles, Ernest A., assignor.)
Britts, Peter W., Arleta, Oreg. Boiler and economizer. No. 1,061,444; May 13; Gaz. vol. 190; p. 336.
Broderick, John J., Manchester, N. H. Advertising-sign. No. 1,061,594; May 13; Gaz. vol. 190; p. 391.
Brogden, Joah, and J. W. Watkins, assignors to David Lupton's Sons Company, Philadelphia, Pa. Fire-retarding closure. No. 1,062,563; May 20; Gaz. vol. 190; p. 754.
Brokaw, John V. (See Griffis, Samuel A., assignor.)
Bromley & Sons, John. (See Brennan, John J., assignor.)
Bronn, Jegor. (See Schemmann and Bronn.)
Bronnert, Emile, Niedermorschweiler, assignor to Vereinigte Glanzstoff Fabriken Aktiengesellschaft, Elberfeld, Germany. Production of formylcelluloses. No. 1,061,977; May 20; Gaz. vol. 190; p. 558.
Brooks, Oliver E., Robblin, Manitoba, Canada. Bed attachment. No. 1,062,434; May 20; Gaz. vol. 190; p. 711.
Brooks, Winfred M., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Tin-shackle seal. No. 1,062,879; May 27; Gaz. vol. 190; p. 900.
Brooks, Winfred M., East Orange, N. J., assignor to E. J. Brooks & Co., New York, N. Y. Cording-seal. No. 1,062,880; May 27; Gaz. vol. 190; p. 901.
Brostrom, Carl A., Moline, Ill. Plow. No. 1,062,141; May 20; Gaz. vol. 190; p. 614.
Brousseau, Delphis, assignor of one-eighth to E. Dufour and one-eighth to P. Beausejour, Montreal, Quebec, Canada. Rail-joint. No. 1,062,881; May 27; Gaz. vol. 190; p. 901.
Brower, William W., Olds, Alberta, Canada, assignor, by mesne assignments, to The Sattley Stacker Company, Indianapolis, Ind. Threshing-machine. No. 1,060,890; May 6; Gaz. vol. 190; p. 113.
Brown, Charles, Albert Lea, assignor of one-half to A. P. Sawyer, Glenville, Minn. Monument. No. 1,060,970; May 6; Gaz. vol. 190; p. 142.
Brown, Coleman H., Pulaski, Tenn. Automatic cranking device. No. 1,061,595; May 13; Gaz. vol. 190; p. 391.
Brown, Elisha S. (See Drake and Brown.)
Brown, Henry C., Brooklyn, N. Y., assignor to H. Stockman, Englewood, N. J. Automatic stamping-machine. No. 1,061,040; May 6; Gaz. vol. 190; p. 167.
Brown, James H. and R. C., Cuddy, Pa. Wrench. No. 1,061,978; May 20; Gaz. vol. 190; p. 558.
Brown, James R., Pampa, Tex. Adjustable window-shade bracket. No. 1,062,142; May 20; Gaz. vol. 190; p. 615.
Brown, John W., Jr., assignor to The Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Sand-tempering apparatus. No. 1,061,160; May 6; Gaz. vol. 190; p. 205.
Brown, Robert C. (See Brown, James H. and R. C.)
Brown, Sidney G., London, England. Apparatus for use in administering anesthetics. No. 1,061,161; May 6; Gaz. vol. 190; p. 205.
Brown, Sidney G., London, England. Telephony. No. 1,061,813; May 13; Gaz. vol. 190; p. 461.
Brown, William J., assignor to Indianapolis Stove Company, Indianapolis, Ind. Hot-blast stove. No. 1,062,221; May 20; Gaz. vol. 190; p. 641.
Browne, Carl D., Hot Springs township, Napa county, Cal. Airship. No. 1,061,445; May 13; Gaz. vol. 190; p. 337.
Brownell, Frank A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-printing device. No. 1,060,813; May 6; Gaz. vol. 190; p. 85.
Bruce, John S., Birmingham, England. Fastener suitable for show-cases and other purposes. No. 1,062,763; May 27; Gaz. vol. 190; p. 862.
Bruder, Albert A. and A. J., Detroit, Mich. Water-closet. No. 1,061,522; May 13; Gaz. vol. 190; p. 365.
Bruder, August J. (See Bruder, Albert A. and A. J.)
Bruene, Rudolf W., Cushing, Iowa. Cultivator attachment for planters. No. 1,062,882; May 27; Gaz. vol. 190; p. 901.
Brumbaugh, Denford A., Broken Arrow, Okla. Sign-holder. No. 1,061,261; May 13; Gaz. vol. 190; p. 275.
Brunton Brothers. (See Brunton, John L. and W. P., assignors.)
Brunton, David W., Denver, Colo. Transit. No. 1,062,582; May 27; Gaz. vol. 190; p. 802.
Brunton, John L. and W. P., Westcombe Park, assignors to Brunton Brothers, Limited, London, England. Apparatus for flooding the compartments of ships. No. 1,061,262; May 13; Gaz. vol. 190; p. 275.
Brunton, William P. (See Brunton, John L. and W. P.)
Bryan, Joseph P., Baltimore, Md., assignor to Ask-Your-Dealer Vantage Company, Incorporated. Deck of playing-cards. No. 1,062,952; May 27; Gaz. vol. 190; p. 925.
Bryant Electric Company, The. (See Goodridge, Gilbert W., assignor.)
Bryant, Emmons, *et al.* (See Hilfrank, Edward, assignor.)
Bryant, William, Massillon, Ohio. Metallurgical apparatus. No. 1,061,446; May 13; Gaz. vol. 190; p. 337.
Bryce, James W. (See Goss and Bryce.)
Buchanan, James W., Asheville, N. C. Life-preserver suit. No. 1,062,435; May 20; Gaz. vol. 190; p. 711.
Buchanan-Lawrence Company. (See Dillberg, Erik, assignor.)
Buchheim & Helster. (See Färber, Richard, assignor.)
Buck, Daniel L., North Fort Worth, Tex. Fly-trap. No. 1,062,633; May 27; Gaz. vol. 190; p. 820.
Buck, Stephen E., Moline, Ill. Heating and feeding apparatus for feed-water-purifying compounds. No. 1,063,116; May 27; Gaz. vol. 190; p. 979.
Buckeye Manufacturing Company, The. (See Lambert, John W., assignor.)
Buckhart, James W., Santa Clara, Cal. Cutter-head. No. 1,062,634; May 27; Gaz. vol. 190; p. 820.
Buckley Automatic Flag-Pole Company. (See Buckley, John J., assignor.)
Buckley, Harry, Louisville, Ky. Disintegrator. No. 1,060,739; May 6; Gaz. vol. 190; p. 60.
Buckley, John J., Lynn, Mass., assignor to Buckley Automatic Flag-Pole Company. Rotatable truck for flagstaffs. No. 1,061,041; May 6; Gaz. vol. 190; p. 168.
Buckley, John J., Lynn, Mass., assignor to Buckley Automatic Flag-Pole Company. Flag-halyards cleat and carrier. No. 1,061,042; May 6; Gaz. vol. 190; p. 169.
Buckley, John L., Weatherford, Tex. Clothes-pin. No. 1,062,764; May 27; Gaz. vol. 190; p. 862.
Budd, William E., Elizabeth, N. J. Vehicle-tire. No. 1,063,008; May 27; Gaz. vol. 190; p. 942.
Buegeleisen, Samuel, New York, N. Y. Instrument-stand. No. 1,060,581; May 6; Gaz. vol. 190; p. 6.
Bujese, Louis. (See Boldizzoni, Teobaldo, assignor.)
Bukolt, John J., Stevens Point, Wis. Tire-armor. No. 1,061,523; May 13; Gaz. vol. 190; p. 365.
Bukolt, John J., Stevens Point, Wis. Tire-armor. No. 1,061,524; May 13; Gaz. vol. 190; p. 366.
Bukouski, Charles J., Pasadena, Cal. Pocket-guard. No. 1,061,162; May 6; Gaz. vol. 190; p. 205.
Bukowski, Leonard. (See Kurrell, Schneider, and Bukowski.)
Bunet, Victor J., Paris, France. Automatic machine for placing and fixing rollers in metal tubes or eyelets. No. 1,062,765; May 27; Gaz. vol. 190; p. 862.
Burbank, Louis S., Hopedale, Mass. Puzzle. No. 1,062,953; May 27; Gaz. vol. 190; p. 926.
Burberry, Thomas, London and county of Hants, England. Legging. No. 1,061,163; May 6; Gaz vol. 190; p. 205.
Burger, Christian, Nuremberg, Germany. Brush. No. 1,061,814; May 13; Gaz. vol. 190; p. 461.
Burgess, Henry E., Brooklyn, N. Y. Concrete railway-tie. No. 1,062,436; May 20; Gaz. vol. 190; p. 712.
Burggaller, Adolph, West Hoboken, N. J. Refuse-receptacle. No. 1,062,270; May 20; Gaz. vol. 190; p. 658.
Burgum, William C., assignor of two-eighths to D. R. McCreedle, one-eighth to K. W. Runser, and two-eighths to E. S. Fownes, Pittsburgh, Pa. Gearing. No. 1,060,814; May 6; Gaz. vol. 190; p. 85.
Burk, Maud M., Ricea Landing, Pa. Curtain-pole. No. 1,061,043; May 6; Gaz. vol. 190; p. 169.
Burk, William H., St. Louis, Mo. Hollow tile. No. 1,062,077; May 20; Gaz. vol. 190; p. 592.
Burke Electric Company. (See Burke, James, assignor.)
Burke, James, Erie, Pa., assignor to Burke Electric Company. Commutator. No. 1,061,251; May 6; Gaz. vol. 190; p. 236.
Burke, James, Erie, Pa., assignor to Chicago Pneumatic Tool Company. Electric riveting-machine. No. 1,062,883; May 27; Gaz. vol. 190; p. 901.
Burke, Thomas N., Chicago, Ill. Adjustable light-holder. No. 1,062,691; May 27; Gaz. vol. 190; p. 839.
Burkey, Harvey M., Newark, N. J., assignor to Metallurgical Company of America, New York, N. Y. Obtaining zinc oxid and sinter from alloys containing zinc. No. 1,061,447; May 13; Gaz. vol. 190; p. 337.
Burnes, Joseph W. (See Smith, James H., assignor.)
Burnett, Richard W., Montreal, Quebec, Canada. Passenger-car truck. No. 1,061,263; May 13; Gaz. vol. 190; p. 275.
Burns, Alonzo H., Jefferson, Ga. Planter attachment. No. 1,061,596; May 13; Gaz. vol. 190; p. 392.
Burns, John F., Bronson, Tex. Churn. No. 1,061,220; May 6; Gaz. vol. 190; p. 225.
Burridge, Lee S., New York, N. Y. Type-writing machine. No. 1,060,582; May 6; Gaz. vol. 190; p. 6.
Burton, Charles A., Chicago, Ill. Perforating-machine. No. 1,061,979; May 20; Gaz. vol. 190; p. 559.
Burton, Charles S., Oak Park, Ill. Extension-table. No. 1,062,884; May 27; Gaz. vol. 190; p. 902.
Burton, Charles S., Oak Park, assignor, by mesne assignments, to Melville Clark Piano Company, Chicago, Ill. Bellows-action for autopneumatic musical instruments. No. 1,062,885; May 27; Gaz. vol. 190; p. 902.
Burwell, Robert F., New Haven, Conn. Billiard-cue. No. 1,062,816; May 27; Gaz. vol. 190; p. 880.
Butler, Cooley, New York, N. Y. Detachable anchor-bolt. No. 1,062,534; May 20; Gaz. vol. 190; p. 744.
Buttler, William, Indianapolis, Ind. Forming glass shapes. No. 1,060,583; May 6; Gaz. vol. 190; p. 7.
Butts, Newton L., Norwich, assignor to J. H. Fitch, Rochester, N. Y. Mortising-machine. No. 1,062,583; May 27; Gaz. vol. 190; p. 902.
Buttsov, George P., assignor of one-third to C. Matsen and one-third to H. P. Erb, Chicago, Ill. Boat. No. 1,061,355; May 13; Gaz. vol. 190; p. 306.

Buzzell, Jesse W., Oakland, Cal. Sliding rule. No. 1,062,321; May 20; Gaz. vol. 190; p. 675.
Byrnes, Edward C., *et al.* (See Gawley, Thomas H., assignor.)
Byrnes, William H., Jr., *et al.* (See Gawley, Thomas H., assignor.)
Bys, Peter, Great Falls, Mont. Life-saving device. No. 1,061,264; May 13; Gaz. vol. 190; p. 275.
Bystron, Joseph, Teschen, Austria-Hungary, assignor to himself, and K. von Vietinghoff, Berlin, Germany. Treating iron-tanned leather. No. 1,061,597; May 13; Gaz. vol. 190; p. 392.
C. F. Boehringer & Soehne. (See Straub, Walther, assignor.)
C. G. Conn Co. (See Todt, Frederick W., assignor.)
Cadeau, Pacific, *et al.* (See Carrau, Edward, assignor.)
Cahn, Bernard, San Diego, Cal. Combined shovel and automobile traction. No. 1,061,980; May 20; Gaz. vol. 190; p. 559.
Cairns, John, Walsall, England. Tire of wheels of vehicles or the like. No. 1,063,117; May 27; Gaz. vol. 190; p. 979.
Caldecott, William A., Johannesburg, Transvaal. Separation of liquids from crushed ore products. No. 1,061,660; May 13; Gaz. vol. 190; p. 414.
Calhoun, Archie L., Rockwell, Fla. Car-replacer. No. 1,060,584; May 6; Gaz. vol. 190; p. 7.
Calhoun, John W., Huntington, W. Va. Valve. No. 1,061,044; May 6; Gaz. vol. 190; p. 169.
California Valve and Air Brake Company. (See Pierce, Guy C., assignor.)
Camden Iron Works. (See Garland, Claude M., assignor.)
Cameron and Company Incorporated. (See Gans, Bertram J., assignor.)
Campau, Julian G., Monroe, assignor of one-half to L. M. Connell, Jackson, Mich. Compound rail. No. 1,061,726; May 13; Gaz. vol. 190; p. 437.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Hopper-bottom car. No. 1,062,384; May 20; Gaz. vol. 190; p. 696.
Campbell, Argyle, assignor to Enterprise Railway Equipment Company, Chicago, Ill. Hopper-car-door-operating mechanism. No. 1,062,385; May 20; Gaz. vol. 190; p. 696.
Campbell, Robert, Elizabeth, N. J. Rule attachment. No. 1,061,045; May 6; Gaz. vol. 190; p. 169.
Campbell, Wilson L., assignor, by mesne assignments, to First Trust and Savings Bank, trustee, Chicago, Ill. Telephone lock-out. No. 1,061,898; May 13; Gaz. vol. 190; p. 488.
Canfield, Erwin S. (See Newton and Canfield.)
Capewell, George J., Jr., Hartford, Conn. Wind-shield for vehicles. No. 1,060,971; May 6; Gaz. vol. 190; p. 142.
Capron, William J., *et al.* (See Lewis, William W., assignor.
Carborundum Company, The. (See Allen and Tone, assignors.)
Cardot, Evan, Pottsville, Pa., assignor to The Phoenix Silk Manufacturing Company, Paterson, N. J. Tubular fabric. No. 1,062,143; May 20; Gaz. vol. 190; p. 615.
Carkhuff, Norman W., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-printing mask. No. 1,061,727; May 13; Gaz. vol. 190; p. 437.
Carll, Addison B., Boothwyn, Pa. Wrench. No. 1,060,891; May 6; Gaz. vol. 190; p. 114.
Carlson, Edward E., Geneva, Ill. Window-shade. No. 1,061,728; May 13; Gaz. vol. 190; p. 437.
Carlson, Frederick E., assignor to Landers, Frary & Clark, New Britain, Conn. Alcohol-lamp. No. 1,062,886; May 27; Gaz. vol. 190; p. 903.
Carlson, William, Jamestown, N. Y. Hinge. No. 1,062,437; May 20; Gaz. vol. 190; p. 712.
Carmean, John M., Noblesville, Ind. Adjustable shade and curtain hanger. No. 1,061,815; May 13; Gaz. vol. 190; p. 462.
Carney, Fred J. (See Wainwright and Carney.)
Carp, Arthur. St. Louis, Mo. Quick-adjusting wrench. No. 1,061,046; May 6; Gaz. vol. 190; p. 170.
Carr, Howard G., Hoopeston, Ill. Motor-vehicle running-gear. No. 1,061,981; May 20; Gaz. vol. 190; p. 559.
Carr, William C., Buffalo, N. Y. Truck. No. 1,062,887; May 27; Gaz. vol. 190; p. 903.
Carrau, Edward, assignor of one-third to J. Girard and one-third to P. Cadeau, Cathlamet, Wash. Switch-operating mechanism. No. 1,062,817; May 27; Gaz. vol. 190; p. 880.
Carroll, James, Pittsfield, Ill. Gate. No. 1,061,448; May 13; Gaz. vol. 190; p. 337.
Carter, George W., Norway, Me. Sole-rounding machine. No. 1,061,356; May 13; Gaz. vol. 190; p. 306.
Carter, Ralph B., Haworth, N. J. Pump. No. 1,060,815; May 6; Gaz. vol. 190; p. 86.
Carter, Ralph B., Haworth, N. J. Pump. No. 1,060,816; May 6; Gaz. vol. 190; p. 86.
Carter, Thomas L., Atlanta, Ga. Seed-planter. No. 1,062,766; May 27; Gaz. vol. 190; p. 863.
Carter Ticket Company. (See Martin, Calvin, assignor.)
Case, Charles H. (See Welch and Case.)
Cash, Arthur W., Newark, N. J., assignor, by mesne assignments, to Orange Hat Box Company. Hat-packing-ring machine. No. 1,060,740; May 6; Gaz. vol. 190. p. 61.
Casilli, Ottavio, Newark, N. J. Escaping-gas alarm. No. 1,061,598; May 13; Gaz. vol. 190; p. 392.
Caspers, Joseph, Lancaster Wis. Calk-tongs. No. 1,061,047; May 6; Gaz. vol. 190; p. 170.
Cassard, Hamilton. (See Miller, Andrew E., assignor.)
Casteel, Ira E. (See Rose and Casteel.)
Castle, Peter C. D., St. Margaret's-on-Thames, England. Product for use in textile and other manufactures. No. 1,063,118; May 27; Gaz. vol. 190; p. 980.
Catucci, Pliny, Newark, N. J., assignor to A. F. Meisselbach & Brother. Sound-box. No. 1,061,729; May 13; Gaz. vol. 190; p. 438.
Causey, Thomas S., assignor of one-twelfth to W. Dugan, Arlington, Tex. Composition of matter to be introduced into the inner tubes of pneumatic tires for rendering the tires puncture-proof. No. 1,062,535; May 20; Gaz. vol. 190; p. 744.
Cederquist, Nils H., West Alhambra, assignor of one-half to R. A. Pulfer, Los Angeles, Cal. Glazier's joint. No. 1,062,818; May 27; Gaz. vol. 190; p. 880.
Central Oil and Gas Stove Company. (See Wilder, William H., assignor.)
Chadwick, Francis C., Hartford, Conn., assignor to Savage Arms Company, Utica, N. Y. Cartridge-adapter for firearms. No. 1,061,265; May 13; Gaz. vol. 190; p. 276.
Chamberland, Frank A., Lynn, Mass. Combination curtain-bracket. No. 1,060,741; May 6; Gaz. vol. 190; p. 61.
Chambers, John H. (See Mowbray, James W., assignor.)
Chambers, William G., assignor to The National Cash Register Company, Dayton, Ohio. Cash-register. No. 1,062,767; May 27; Gaz. vol. 190; p. 863.
Champ, Joseph H., assignor to The Standard Welding Company, Cleveland, Ohio. Demountable rim. No. 1,061,816; May 13; Gaz. vol. 190; p. 462.
Champion, Charles S. (See Kemble and Underhill, assignors.)
Champion Ignition Company. (See Schmidt, Albert, assignor.)
Chandler, Edwin M., Salt Lake City, Utah. Pencil, book, and card-holder. No. 1,060,666; May 6; Gaz. vol. 190; p. 34.
Chapman, Charles H., assignor to Chapman Gravity Spindle Company, Winchester, Mass. Spinning-spindle. No. 1,061,266; May 13; Gaz. vol. 190; p. 276.
Chapman, Charles H., assignor to Chapman Gravity Spindle Company, Winchester, Mass. Spinning-spindle. No. 1,061,267; May 13; Gaz. vol. 190; p. 277.
Chapman Gravity Spindle Company. (See Chapman, Charles H., assignor.)
Chas. Polacheck & Bro. Co. (See Polacheck, Arthur, assignor.)
Chase Rolling Mill Co. (See Summey, David L., assignor.)
Chase, Theodore W., Barnet, Vt. Beating-engine. No. 1,060,585; May 6; Gaz. vol. 190; p. 7.
Chase, Wilfred O., Detroit, Mich. Device for preventing liquid from freezing in tanks. No. 1,061,525; May 13; Gaz. vol. 190; p. 366.
Chaumat, Achille, Fresnoy-le-Grand, assignor to Compagnie Francaise Des Applications De La Cellulose, Paris, France. Preparation of concentrated solutions of cellulose. No. 1,062,222; May 20; Gaz. vol. 190; p. 642.
Chemical Products Company. (See Mork, Harry S., assignor.)
Chenoweth, John H., Chicago, Ill. Hat-chuck. No. 1,060,667; May 6; Gaz. vol. 190; p. 35.
Chesapeake Addressing Company, The. (See Hanrahan, John E., assignor.)
Chicago Electric Meter Company. (See Kinney, Frank F., assignor.)
Chicago Pneumatic Tool Company. (See Burke, James, assignor.)
Chinnick, Walter I., Trenton, N. J. Bearing. No. 1,061,899; May 13; Gaz. vol. 190; p. 489.
Christianson, Andrew, Butler, assignor to Standard Steel Car Company, Pittsburgh, Pa. Swinging buffer and draft rigging. No. 1,061,817; May 13; Gaz. vol. 190; p. 462.
Christianson, Andrew, Butler, assignor to Standard Steel Car Company, Pittsburgh, Pa. Dumping-car. No. 1,061,818; May 13; Gaz. vol. 190; p. 463.
Christlein, Paul. (See Josse and Christlein.)
Christy, Henry A., Chicago, Ill. Car-roof. No. 1,061,268; May 13; Gaz. vol. 190; p. 277.
Church, Albert E., New Britain, Conn. Drill-chuck. No. 1,061,934; May 13; Gaz. vol. 190; p. 502.
Cincinnati Butchers' Supply Company. (See Naegelen, Charles, assignor.)
Clark, Byron O., Honolulu, Hawaii. Apparatus for treating fruit-juices, &c. No. 1,062,888; May 27; Gaz. vol. 190; p. 903.
Clark, James, assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Wrought-metal ring for collar-clamps, &c. No. 1,062,438; May 20; Gaz. vol. 190; p. 712.
Clark, James J., Nashville, Tenn. Metallic packing-ring. No. 1,060,586; May 6; Gaz. vol. 190; p. 8.
Clark, Norris E., Plainville, Conn., assignor to The National Metal Fabric Company, New York, N. Y. Expanded-metal manufacture. No. 1,062,768; May 27; Gaz. vol. 190; p. 863.
Clark, William G., London, England. Coating metal articles with other minerals. No. 1,061,164; May 6; Gaz. vol. 190; p. 206.

Clarke, Samuel H., Richmond, Va. Door-lock. No. 1,061,449; May 13; Gaz. vol. 190; p. 338.
Clavans, Morris Z., assignor of one-half to W. Goldstein, Philadelphia, Pa. Cloth or fabric cutter. No. 1,061,982; May 20; Gaz. vol. 190; p. 560.
Clayton, Robert F., Wimberly, Tex. Drill-cable clamp. No. 1,061,221; May 6; Gaz. vol. 190; p. 225.
Cleary, Maud L., Boise, Idaho. Calculator. No. 1,061,819; May 13; Gaz. vol. 190; p. 463.
Cleek, James D. (See Dye, Lilburn, assignor.)
Clelland, William J., assignor of one-half to Wittertown Specialty Company, Watertown, N. Y. Combined hand and air brake. No. 1,061,900; May 13; Gaz. vol. 190; p. 489.
Clémencet, Louis E., Paris, France. Clutch. No. 1,061,048; May 6; Gaz. vol. 190; p. 170.
Clemens, John G., assignor of one-half to F. H. Kaiser, Buffalo, N. Y. Refillable fuse-plug. No. 1,062,889; May 27; Gaz. vol. 190; p. 904.
Clement, George A., Beloit, Wis. Carbureter. No. 1,061,582; May 13; Gaz. vol. 190; p. 387.
Clements, Charles J., Brooklyn, assignor to The Clements Co., New York, N. Y. Attachment for sheet-metal constructions. No. 1,062,635; May 27; Gaz. vol. 190; p. 821.
Clements Co., The. (See Clements, Charles J., assignor.)
Clements, George, Chicago, Ill., assignor to Clements Mfg. Co. Bellows attachment for vacuum-cleaners. No. 1,060,742; May 6; Gaz. vol. 190; p. 62.
Clements Mfg. Co. (See Clements, George, assignor.)
Clements, Roy. (See Evans and Clements.)
Clemetsen Company, The. (See Vaaler, Jens, assignor.)
Clifford, Stanley, Laleham-on-Thames, England. Appliance for use in playing a game of golf. No. 1,063,119; May 27; Gaz. vol. 190; p. 980.
Clift, Arthur S., London, England. Plant or apparatus for the sampling of ores. No. 1,062,636; May 27; Gaz. vol. 190; p. 821.
Cloes, Benjamin J., Los Angeles, Cal. Grape-picking implement. No. 1,061,661; May 13; Gaz. vol. 190; p. 414.
Close, Charles F., Barnard, N. Y. Chamfering-howel. No. 1,063,120; May 27; Gaz. vol. 190; p. 980.
Clothier, Willis, New Castle, Del. Automatic weighing-machine. No. 1,061,983; May 20; Gaz. vol. 190; p. 560.
Clover Manufacturing Company. (See Gallaher, Edward B., assignor.)
Clnett, Peabody & Co. (See Halliday, Samuel J., assignor.)
Cluthe, Charles, Sr., Glen Ridge, N. J. Truss-pad supporter. No. 1,063,009; May 27; Gaz. vol. 190; p. 943.
Clyne, Robert G., Alton, assignor to Western Cartridge Company, East Alton, Ill. Cartridge. No. 1,060,817; May 6; Gaz. vol. 190; p. 87.
Clyne, Robert G., Alton, assignor to Western Cartridge Company, East Alton, Ill. Cartridge. No. 1,060,818; May 6; Gaz. vol. 190; p. 87.
Coates, William A., Sidell, Ill. Combination cord-holder and fastener-clencher. No. 1,061,165; May 6; Gaz. vol. 190; p. 206.
Cobb, Henry Z., Winchester, Mass., assignor, by mesne assignments, to Revere Rubber Company. Braided fabric and making it. (Reissue.) No. 13,568; May 27; Gaz. vol. 190; p. 999.
Cobb, Lyman H., Fitchburg, Mass., assignor, by mesne assignments, to Young Safety Razor Company, Philadelphia, Pa. Safety-razor. (Reissue.) No. 13,563; May 20; Gaz. vol. 190; p. 760.
Cock, Benjamin, assignor to Holman Brothers, Limited, Camborne, England. Chuck. No. 1,062,223; May 20; Gaz. vol. 190; p. 642.
Coe, Charles E., assignor to W. F. Morrison, St. Louis, Mo. Belt-fastener. No. 1,062,078; May 20; Gaz. vol. 190; p. 593.
Coffin, Antoinette A., Cleveland, Ohio. Door-stop. No. 1,061,269; May 13; Gaz. vol. 190; p. 277.
Coffin, Howard E., Detroit, Mich. Explosion-engine. No. 1,060,819; May 6; Gaz. vol. 190; p. 87.
Coffin, Howard E., Detroit, Mich. Starting device for explosion-engines. No. 1,060,820; May 6; Gaz. vol. 190; p. 88.
Coggin, Frank F., assignor to The Economy Car Heating Company, New York, N. Y. Exhaust-steam-controlling apparatus. No. 1,062,079; May 20; Gaz. vol. 190; p. 593.
Coggin, Frank F., Matawan, N. J., assignor to The Economy Car Heating Company, New York, N. Y. Mechanism for controlling the flow of exhaust-steam. No. 1,062,080; May 20; Gaz. vol. 190; p. 593.
Cohen, Frederick W., and M. G. Hilpert, Harrisburg, assignors to The Pennsylvania Steel Company, Philadelphia, Pa. Mechanism for lifting heavy weights. No. 1,063,156; May 27; Gaz. vol. 190; p. 991.
Colbert, Charles W., Westhoff, Tex. Combined book and pencil holder. No. 1,061,820; May 13; Gaz. vol. 190; p. 464.
Cole, Albert L., Auburndale, assignor to F. J. V. Dakin, trustee, Boston, Mass. Interlocking tie-plate for rails. No. 1,062,692; May 27; Gaz. vol. 190; p. 839.
Cole, Albert L., Auburndale, assignor to F. J. V. Dakin, trustee, Boston, Mass. Interlocking tie-plate for rails. No. 1,062,693; May 27; Gaz. vol. 190; p. 839.
Cole, Albert L., Auburndale, assignor to F. J. V. Dakin, trustee, Boston, Mass. Combination tie-plate and brace for railway-rails. No. 1,062,694; May 27; Gaz. vol. 190; p. 840.
Cole, John A., Chicago, Ill. Tag for water-pipe valves. No. 1,061,730; May 13; Gaz. vol. 190; p. 438.
Coleman, Arthur, Higgins, Tex. Differential mechanism. No. 1,061,450; May 13; Gaz. vol. 190; p. 338.
Coleman, George, Lynn, assignor of one-half to Reece Shoe Machinery Company, Boston, and one-fourth to L. Murr, Swampscott, Mass. Insole. No. 1,062,586; May 20; Gaz. vol. 190; p. 744.
Coleman, James M., Westmount, Quebec, Canada. Car body and truck locking device. No. 1,061,984; May 20; Gaz. vol. 190; p. 560.
Collier, David R., assignor to Collier-Keyworth Company, Gardner, Mass. Sanitary nursery-chair. No. 1,061,935; May 13; Gaz. vol. 190; p. 502.
Collier-Keyworth Company. (See Collier, David R., assignor.)
Collins Brothers Machine Co. (See Collins, Charles E., assignor.)
Collins, Charles E., Pawtucket, assignor to Collins Brothers Machine Co., Inc., Providence, R. I. Combination separator and stray-yarn severer for spinning and twisting machines. No. 1,062,272; May 20; Gaz. vol. 190; p. 659.
Collins, William R., Chicago, Ill. Drill-supporting mechanism. No. 1,061,451; May 13; Gaz. vol. 190; p. 339.
Colman, Howard D., assignor, by mesne assignments, to Barber-Colman Company, Rockford, Ill. Warp-drawing machine. No. 1,062,271; May 20; Gaz. vol. 190; p. 659.
Colman, Howard D., and B. A. Peterson, assignors to Barber-Colman Company, Rockford, Ill. Doffer. No. 1,062,439; May 20; Gaz. vol. 190; p. 718.
Colonial Trust Company, The, trustee. (See Herr, Herbert T., assignor.)
Colonial Trust Company, The, trustee. (See Hodgkinson, Francis, assignor.)
Colonial Trust Company, The, trustee. (See Knape, Charles N. F., assignor.)
Colonial Trust Company, The, trustee. (See London, William J. A., assignor.)
Colonial Trust Company, The, trustee. (See Snyder, John E., assignor.)
Colonial Trust Company, The, trustee. (See Westinghouse, George, assignor.)
Columbia Machine Works & Malleable Iron Co., The. (See Grady, James, assignor.)
Columbus Railway Supply Company, The. (See Winsworth, William H., assignor.)
Combs, Charles E., Kansas City, Mo. Can. No. 1,062,440; May 20; Gaz. vol. 190; p. 713.
Commonwealth Steel Company. (See Howard and Pflager, assignors.)
Compagnie Francaise Des Applications De La Cellulose. (See Chaumat, Achille, assignor.)
Compton, Melvin D., New York, N. Y. Rapid-service lifeboat system. No. 1,062,637; May 27; Gaz. vol. 190; p. 821.
Conant, Clarence F., Portland, Oreg. Window-cleaner. No. 1,062,322; May 20; Gaz. vol. 190; p. 676.
Concannon, Frank, New York, N. Y. Advertising apparatus. No. 1,063,010; May 27; Gaz. vol. 190; p. 943.
Concealed Door Check Company. (See Nordquist, Per E., assignor.)
Condit, Arthur M., East Orange, N. J. Rotary engine. No. 1,061,452; May 13; Gaz. vol. 190; p. 340.
Conen, Alexander J., Louisville, Ky. Adding-machine. No. 1,061,901; May 13; Gaz. vol. 190; p. 490.
Conklin, Edward E., Aurora, Ill. Carbureter. No. 1,062,273; May 20; Gaz. vol. 190; p. 659.
Conlan, William, Quincy, Wash. Cresting-holder. No. 1,060,587; May 6; Gaz. vol. 190; p. 8.
Connell, Leo M. (See Campau, Julian G., assignor.)
Connors, Mathaen M., *et al.* (See Hines, William J., assignor.)
Conrad, Miller E., Atlantic, Iowa. Shoe. No. 1,061,222; May 6; Gaz. vol. 190; p. 226.
Continental Computing Cash-Register Company. (See Almen, John O., assignor.)
Continental Railway Equipment Company. (See Murray, George C., assignor.)
Continuous Rail Company. (See Rhodes, Edgar, assignor.)
Converse, Charles H., and W. H. C. Rider, Chicago, Ill. Picture-projecting apparatus. No. 1,062,081; May 20; Gaz. vol. 190; p. 594.
Cook, Charles L., Louisville, Ky. Explosion-engine. No. 1,062,323; May 20; Gaz. vol. 190; p. 676.
Cook, Enoch J. (See Ussery and Cook.)
Cook, Fred A., Portland, Oreg. Counterbalanced unloading device for trucks. No. 1,061,223; May 6; Gaz. vol. 190; p. 226.
Cook, George E., Herrin, Ill. Shade and curtain bracket. No. 1,062,819; May 27; Gaz. vol. 190; p. 880.
Cook, John B., Troy, N. Y. Bench-chair. No. 1,061,270; May 13; Gaz. vol. 190; p. 278.
Cook, John H. (See Schafer and Cook.)
Cook Railway Signal Company, The. (See Fallek, Nathan, assignor.)
Cook, Walter H., New Orleans, La. Shock-absorber. No. 1,062,441; May 20; Gaz. vol. 190; p. 714.

Cook, William H., Webster City, Iowa. Tone-modifying device. No. 1,062,224; May 20; Gaz. vol. 190; p. 642.
Cooke, James. (See Davies and Cooke.)
Cookson, Charles L., Kansas City, Mo. Rotary valve for internal-combustion engines. No. 1,061,599; May 13; Gaz. vol. 190; p. 393.
Cooper, Alfred J., Totland Bay, Isle of Wight, England. Apparatus for indicating and recording the speed of ships. No. 1,061,985; May 20; Gaz. vol. 190; p. 561.
Coopersmith, Rudolph, St. Louis, Mo. Sofa-bedstead. No. 1,061,986; May 20; Gaz. vol. 190; p. 561.
Copper Clad Malleable Range Company. (See Scruggs, Loyd, assignor.)
Corcoran, Cornelius B., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,061,600; May 13; Gaz. vol. 190; p. 393.
Corcoran, Cornelius B., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,062,386; May 20; Gaz. vol. 190; p. 697.
Corey, Harry R., New York, assignor to American Stopper Company, Brooklyn, N. Y. Bottle-cap. No. 1,062,820; May 27; Gaz. vol. 190; p. 881.
Cormack, John, *et al.* (See Olson, Rorem, and Hill, assignors.)
Corn Products Refining Company. (See Bauer, Louis P., assignor.)
Cornelius, Louis A., Grand Rapids, Mich. Sanitary drinking-cup. No. 1,062,695; May 27; Gaz. vol. 190; p. 840.
Cornell, James, *et. al.* (See De Hymel, Franklin O., assignor.)
Corns, John L., assignor of one-third to W. A. Howard and one-third to H. J. Swarts, Chelsea, Okla. Detachable reach end. No. 1,062,769; May 27; Gaz. vol. 190; p. 864.
Cornwall, Frederick R. (See Boerner, Hermann, assignor.)
Cortissoz, Samuel W., Philadelphia, Pa. Feed and delivery attachment for printing-presses. No. 1,061,526; May 13; Gaz. vol. 190; p. 367.
Corwin Telephone Manufacturing Company. (See Bals, Charles A., assignor.)
Cosgrove, Christopher H., Atlanta, Ga. Railway-ticket. No. 1,061,821; May 13; Gaz. vol. 190; p. 464.
Côte, Elysée, assignor to Société des Etablissements Côte, Pantin, France. Admission-pipe for two-stroke internal-combustion engines. No. 1,063,011; May 27; Gaz. vol. 190; p. 944.
Cottle, Thomas W., Oakland, Kans. Lock. No. 1,063,157; May 27; Gaz. vol. 190; p. 992.
Coulombe, Ignace, Fall River, Mass. Brake-belt link. No. 1,062,442; May 20; Gaz. vol. 190; p. 714.
Coulombe, Ignace, Fall River, Mass. Let-off motion for looms. No. 1,062,443; May 20; Gaz. vol. 190; p. 714.
Coulston, Harry. (See Schwartz and Coulston.)
Coulter, Oakland F., Rochester, Pa. Combination step-ladder and ironing-table. No. 1,062,890; May 27; Gaz. vol. 190; p. 904.
Coupiin, Levi S., South Greenfield, Mo. Fly-screen. No. 1,060,743; May 6; Gaz. vol. 190; p. 62.
Coutelle, Carl. (See Hofmann and Coutelle.)
Coutelle, Carl. (See Hofmann, Coutelle, Delbrück, and Meisenburg.)
Covert, Fred W., assignor to Covert Manufacturing Company, Watervliet, N. Y. Coupling member for chains. No. 1,060,744; May 6; Gaz. vol. 190; p. 62.
Covert Manufacturing Company. (See Covert, Fred W., assignor.)
Cowart, Stephen A., Midlothian, Tex. Wagon-standard. No. 1,061,224; May 6; Gaz. vol. 190; p. 226.
Cowell, William H., Columbus, Ohio. Draw-bar equipment. No. 1,061,049; May 6; Gaz. vol. 190; p. 171.
Cox, Harry L. (See Witt, William E., assignor.)
Cox, Henry J., Elizabeth, N. J., assignor to The Singer Manufacturing Company. Sewing-machine. No. 1,062,696; May 27; Gaz. vol. 190; p. 840.
Cox, John H., Hot Springs, Ark. Metallic railway-tie. No. 1,062,891; May 27; Gaz. vol. 190; p. 905.
Cox, Oscar M., Plainview, Tex. Traction-engine. No. 1,061,453; May 13; Gaz. vol. 190; p. 340.
Craft, Edward B., Hackensack, N. J., and J. N. Reynolds, Greenwich, Conn., assignors to Western Electric Company, New York, N. Y. Telephone-receiver. No. 1,062,082; May 20; Gaz. vol. 190; p. 594.
Craig, Arthur D., Lamar, Mo. Lantern. No. 1,061,454; May 13; Gaz. vol. 190; p. 341.
Craig, James A., Toronto, Ontario, Canada, assignor of one-half to J. M. Wogan, New Orleans, La. Feed-mixer. No. 1,061,987; May 20; Gaz. vol. 190; p. 561.
Craig, Robert B., Kansas City, Mo. Multiple machine-tool holder. No. 1,061,822; May 13; Gaz. vol. 190; p. 464.
Cramer, Eduard, Berlin, Germany. Treatment of fusible ceramic bodies for indicating temperature in furnaces. No. 1,063,012; May 27; Gaz. vol. 190; p. 944.
Crandall, Max E., Fairfax, Okla. Wrench. No. 1,061,662; May 13; Gaz. vol. 190; p. 414.
Crane, Edward F., Newark, N. J. Concrete tile. No. 1,061,455; May 13; Gaz. vol. 190; p. 341.
Crane, Judd B., Ellensburg, Wash. Safety door-hasp. No. 1,062,821; May 27; Gaz. vol. 190; p. 881.
Crapo, Henry T., New York, N. Y., assignor to G. R. Webb, Baltimore, Md. Motion-picture and voice-reproducing machine. No. 1,062,324; May 20; Gaz. vol. 190; p. 676.
Crawford, Daniel, Jr., Philadelphia, Pa. Metallic tie. No. 1,063,013; May 27; Gaz. vol. 190; p. 944.
Crawford, Daniel, Jr., Philadelphia, Pa. Metallic tie. No. 1,063,014; May 27; Gaz. vol. 190; p. 944.
Crawford, John, Rochester, N. Y. Vessel for dispensing liquids. No. 1,061,663; May 13; Gaz. vol. 190; p. 415.
Crawshaw, Gervase W., Leeds, England. Helmet for use in the driving of reinforced-concrete piles. No. 1,060,668; May 6; Gaz. vol. 190; p. 35.
Cream Cone Machine Company. (See Pierce, Simeon F., assignor.)
Creamery Packing Manufacturing Company. (See Penn, William E., assignor.)
Creighton, Elmer E. F., Schenectady, N. Y., assignor to General Electric Company. Storm and surge alarm for transmission-lines. No. 1,062,083; May 20; Gaz. vol. 190; p. 594.
Cressy, Walter. (See Pillsbury, Franklin C., assignor.)
Cridland, Ernest A. (See Bates and Cridland.)
Crisman, Alonzo M., Davenport, Iowa. Planter-frame. No. 1,061,456; May 13; Gaz. vol. 190; p. 341.
Croce, Ferdinando D., New York, N. Y. Paper-bag holder. No. 1,061,357; May 13; Gaz. vol. 190; p. 307.
Crockford, Frank K., Bristol, R. I. Drinking-fountain. No. 1,060,972; May 6; Gaz. vol. 190; p. 142.
Crompton & Knowles Loom Works. (See Gordon, Albert A., Jr., assignor.)
Crompton & Knowles Loom Works. (See Ryon, Eppa H., assignor.)
Cromwell, William A., White Plains, N. Y. Mop-wringer. No. 1,060,821; May 6; Gaz. vol. 190; p. 88.
Cronin Electrical Appliances Company, The. (See Cronin, Jeremiah, assignor.)
Cronin, Jeremiah, assignor to The Cronin Electrical Appliances Company, Wapakoneta, Ohio. Tie-wire for high-voltage circuits. No. 1,061,823; May 13; Gaz. vol. 190; p. 465.
Crosher, Archibald T., Te Aroha, New Zealand. Connecting electric wires to lamp-holders, plugs, and the like. No. 1,060,822; May 6; Gaz. vol. 190; p. 88.
Crossley, James W., Banks, Ark. Combination-tool. No. 1,062,584; May 27; Gaz. vol. 190; p. 803.
Crotsly, Asahel W., Arlington Heights, assignor to Wheeling Corrugating Company, Chicago, Ill. Metallic building construction. No. 1,060,745; May 6; Gaz. vol. 190; p. 62.
Crowley, Cornelius J., Burlington, Iowa. Tool-holder. No. 1,062,225; May 20; Gaz. vol. 190; p. 643.
Cruise, Michael H., Hebron, Nebr. Spring-wheel. No. 1,060,823; May 6; Gaz. vol. 190; p. 89.
Cubelic, Ludwig, Charlottenburg, Germany, assignor to General Electric Company. Utilizing leakage steam in steam-turbines. No. 1,062,892; May 27; Gaz. vol. 190; p. 905.
Culbertson, William C., Rushville, Ind. Liquid-supply regulator. No. 1,062,537; May 20; Gaz. vol. 190; p. 744.
Culli, George, Millstadt, Ill. Whiffletree. No. 1,061,166; May 6; Gaz. vol. 190; p. 206.
Culver, Forest E., Chicago, Ill. Pliers. No. 1,061,358; May 13; Gaz. vol. 190; p. 307.
Cunningham, Michael J. H., Lynn, Mass. Bag, satchel, and similar receptacle. No. 1,060,824; May 6; Gaz. vol. 190; p. 89.
Cunningham, Samuel A., New York, N. Y. Therapeutic device for utilizing radiant energy. No. 1,061,225; May 6; Gaz. vol. 190; p. 227.
Cupstid, Thomas J., Blaney, S. C. Hub and axle connection. No. 1,062,226; May 20; Gaz. vol. 190; p. 643.
Curnutt, John Z., and E. E. Lloyd, Maryville, Mo. Lightning-rod. No. 1,061,824; May 13; Gaz. vol. 190; p. 465.
Currie, Alexander A., Monessen, Pa. Curtain-fixture. No. 1,061,988; May 20; Gaz. vol. 190; p. 562.
Cutler-Hammer Mfg. Co., The. (See Henderson, Clark T., assignor.)
Cutler, Harry, Pittsburgh, Pa. Trolley-wheel construction. No. 1,061,989; May 20; Gaz. vol. 190; p. 562.
Cuvelier, Louis, assignor of one-half to R. E. Verge, Halifax, Nova Scotia, Canada. Reversible heel. No. 1,062,538; May 20; Gaz. vol. 190; p. 745.
D'Aix, Fritz C. L., New York, N. Y. Typographic machine. No. 1,062,770; May 27; Gaz. vol. 190; p. 864.
Dahlmann, Wilhelm. (See Gohlke and Dahlmann.)
Dakin, Francis J. V., trustee. (See Cole, Albert L., assignor.)
Daley, Dennis W. and F. R., Parkersburg, W. Va. Hot-water system. No. 1,061,359; May 13; Gaz. vol. 190; p. 307.
Daley, Frank R. (See Daley, Dennis W. and F. R.)
Daly, Charles M., and G. A. Weidhaas, New York, N. Y. Moving-eye figure. No. 1,061,965; May 13; Gaz. vol. 190; p. 512.
Damascus Brake Beam Company, The. (See Handiges, Philip T., assignor.)
Dana, William H., assignor to L. Rauh, Dayton, Ohio. Voting-machine. No. 1,062,893; May 27; Gaz. vol. 190; p. 905.
Daney, Guillaume L., Paris, France. Extinguishing fires. No. 1,062,894; May 27; Gaz. vol. 190; p. 906.
Danforth, Eugene, Montreal, Quebec, Canada. Horse-blanket fastener. No. 1,063,121; May 27; Gaz. vol. 190; p. 980.
Daniel, George, and E. G. Lewis, Mabscott, W. Va. Registering car-lock. No. 1,062,539; May 20; Gaz. vol. 190; p. 745.
Daniels, Margarette M., Dalton, Nebr. Jump-seat for go-carts. No. 1,062,227; May 20; Gaz. vol. 190; p. 644.

Dansereau, Prime J., assignor to Eaton, Crane & Pike Co., Pittsfield, Mass. Imprinting attachment for envelop-machines. No. 1,062,895; May 27; Gaz. vol. 190; p. 906.
Darnall, Carl R., Washington, D. C. Apparatus for purifying water. No. 1,060,669; May 6; Gaz. vol. 190; p. 35.
Dashiell, B. Grayson, curator. (See Tietz, William.)
Daum, Albert F., Pittsburgh, Pa. Safety-fuse. No. 1,061,226; May 6; Gaz. vol. 190; p. 227.
Daum, Albert F., Pittsburgh, Pa. Cartridge-fuse. No. 1,061,227; May 6; Gaz. vol. 190; p. 228.
Daum, Albert F., Pittsburgh, Pa. Cartridge-fuse. No. 1,061,228; May 6; Gaz. vol. 190; p. 228.
Daum, Louis, assignor to Richard Pick Manufacturing Company, Chicago, Ill. Blank for aprons. No. 1,062,697; May 27; Gaz. vol. 190; p. 840.
Davenport Locomotive Works. (See Barger, Lorin W., assignor.)
David Lupton's Sons Company. (See Brogden and Watkins, assignors.)
Davies, Hugh, and J. Cooke, West New York, N. J. Incandescent-lamp lock and seal. No. 1,062,228; May 20; Gaz. vol. 190; p. 644.
Davies, William H., Quinton, assignor of one-half to L. E. Hires, Salem, N. J. Device for cleaning fruit and vegetables. No. 1,060,825; May 6; Gaz. vol. 190; p. 89.
Davis, Charles F., Downers Grove, Ill. Folding chair. No. 1,061,050; May 6; Gaz. vol. 190; p. 177.
Davis, Charles W., Edgeworth, assignor to Standard Underground Cable Company, Pittsburgh, Pa. Junction-box for electrical cables. No. 1,061,527; May 13; Gaz. vol. 190; p. 367.
Davis, George H., Portland, Me. Acetylene-gas generator. No. 1,060,670; May 6; Gaz. vol. 190; p. 36.
Davis, George H., Portland, Me. Acetylene-gas generator. No. 1,060,671; May 6; Gaz. vol. 190; p. 36.
Davis, George H., Portland, Me. Acetylene-gas generator. No. 1,061,052; May 6; Gaz. vol. 190; p. 172.
Davis, George H., West Orange, assignor to Standard Music Roll Company, Orange, N. J. Perforating-machine. No. 1,061,051; May 6; Gaz. vol. 190; p. 171.
Davis, Willard G., Nicholasville, Ky. Head and tail light control. No. 1,061,053; May 6; Gaz. vol. 190; p. 172.
Davison, Morgan, Almeda, Tex. Smoothing-drag. No. 1,061,990; May 20; Gaz. vol. 190; p. 562.
Day, Benjamin, Summit, N. J. Film-frame apparatus. No. 1,063,016; May 27; Gaz. vol. 190; p. 945.
Day, Benjamin, Summit, N. J. Wide-range holdfast. No. 1,063,017; May 27; Gaz. vol. 190; p. 945.
Day, Benjamin, Summit, N. J., assignor to Ben. Day, Inc. Film apparatus. No. 1,060,892; May 6; Gaz. vol. 190; p. 114.
Day, Benjamin, Summit, N. J., assignor to Ben. Day, Inc. Film-frame apparatus. No. 1,063,015; May 27; Gaz. vol. 190; p. 945.
De Hymel, Catherine D., *et al.* (See De Hymel, Franklin O., assignor.)
De Hymel, Franklin O., San Antonio, assignor of one-fourth to B. C. De Witt, Sutton county, one-half to C. D. De Hymel, San Antonio, one-eighth to J. Cornell, Sutton county, and one-eighth to O. F. Seargeant, Kinney county, Tex. Combined pneumatic lift and force pump. No. 1,060,826; May 6; Gaz. vol. 190; p. 90.
De Long, John S., Osborn, Ohio. Transplanter. No. 1,062,585; May 27; Gaz. vol. 190; p. 803.
De Lukacsevics, Charles, New York, N. Y. Siphon-head. No. 1,061,857; May 13; Gaz. vol. 190; p. 475.
De Vilbiss, Allen, Jr., Toledo, Ohio, assignor to Toledo Scale Company, Newark, N. J. Scale. No. 1,063,109; May 27; Gaz. vol. 190; p. 996.
De Witt, Bart C., *et al.* (See De Hymel, Franklin O., assignor.)
De Witt, Clarence E., Mount Jewett, Pa. Engine-muffler. No. 1,061,272; May 13; Gaz. vol. 190; p. 278.
De Zeng, Henry L., Philadelphia, Pa. Auriscope. No. 1,062,698; May 27; Gaz. vol. 190; p. 841.
Deaner, William F. (See Word, John R., assignor.)
Decker, Robert M., West Newton, Pa. Machine for manufacturing envelops. No. 1,062,954; May 27; Gaz. vol. 190; p. 926.
Dehl, Heinrich, Cologne-Lindenthal, assignor to Bergisch Märkische Steinindustrie, Aktiengesellschaft, Cologne-on-the-Rhine, Germany. Stone-cutting chisel. No. 1,063,018; May 27; Gaz. vol. 190; p. 946.
Deidesheimer, August, Neustadt-on-the-Hardt, Germany. Paving-block composition. No. 1,062,771; May 27; Gaz. vol. 190; p. 864.
Del Prato, Cesare. (See Del Prato, Vincenzina, G., V., C., and M.)
Del Prato, Giovanni. (See Del Prato, Vincenzina, G., V., C., and M.)
Del Prato, Maria. (See Del Prato, Vincenzina, G., V., C., and M.)
Del Prato, Vincenzo. (See Del Prato, Vincenzina, G., V., C., and M.)
Del Prato, nata Viscardi, Vincenzina, G., V., C., and M., Naples, Italy. Separating vegetable or animal fiber. No. 1,061,902; May 13; Gaz. vol. 190; p. 490.
Delaney, Thomas J., Paterson, N. J. Sand-box for street-cars. No. 1,063,019; May 27; Gaz. vol. 190; p. 946.
Delaunay-Belleville, Robert, assignor to Société Anonyme Des Etablissements Delaunay-Belleville, St. Denis, Seine, France. Valve. No. 1,062,213; May 20; Gaz. vol. 190; p. 638.
Delbrück, Konrad. (See Hofmann, Coutelle, Delbrück, and Meisenburg.)
Delvaux, Arthur L., Champaign, Ill. Valve. No. 1,062,144; May 20; Gaz. vol. 190; p. 615.
Dempster, John T. H., Schenectady, N. Y., assignor to General Electric Company. Electrical heat-storage device. No. 1,062,896; May 27; Gaz. vol. 190; p. 906.
Denninger, Frank, New York, N. Y. Pedal mechanism for pianofortes. No. 1,062,955; May 27; Gaz. vol. 190; p. 926.
Dennis, Oliver C. (See Hoglund, Gustave E., assignor.)
Dennison, Wilburn N., Merchantville, N. J., assignor to Victor Talking Machine Company. Sound-box for talking-machines. No. 1,060,672; May 6; Gaz. vol. 190; p. 37.
Dennison, Wilburn N., Merchantville, N. J., assignor to Victor Talking Machine Company, Governor for motors. No. 1,060,527; May 6; Gaz. vol. 190; p. 90.
Dental Denture Improvement Company, The. (See Gollobin and Bornstein, assignors.)
Deprez, Oscar, Brussels, and A. Richir, Anderlecht-Brussels, Belgium. Valveless two-cycle motor. No. 1,061,528; May 13; Gaz. vol. 190; p. 368.
Desbecker, Harold C., Schenectady, assignor to H. W. Block, New York, N. Y. Electrically-operated sash-holder. No. 1,062,084; May 20; Gaz. vol. 190; p. 595.
Desbecker, Harold C., Schenectady, assignor to H. W. Block, New York, N. Y. Window-operating apparatus. No. 1,062,085; May 20; Gaz. vol. 190; p. 595.
Detroit Can Company. (See Harbeck, Jervis R., assignor.)
Dewey, William F., Iola, Kans. Heater. No. 1,061,825; May 13; Gaz. vol. 190; p. 466.
Dewson, Edward H., New York, N. Y., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa. Unloading device for pumps. No. 1,060,588; May 6; Gaz. vol. 190; p. 8.
Dexter Folder Company. (See Jones, Richard E., assignor.)
Dezendorf, Richard L., Richmond Hill, N. Y. Meter-testing apparatus. No. 1,061,271; May 13; Gaz. vol. 190; p. 278.
Diamond, James K., assignor to J. B. Stone Co., Grand Rapids, Mich. Tool for clenching belt-fasteners. No. 1,060,746; May 6; Gaz. vol. 190; p. 63.
Diamond Power Specialty Company. (See Magee, John, assignor.)
Diamond Power Specialty Company. (See Waller, Thomas S., assignor.)
Dick, William. (See Rojohn and Dick.)
Dickhute, Albert C., Shelby, Nebr. Pitman connection for harvesting-machines. No. 1,062,444; May 20; Gaz. vol. 190; p. 715.
Didlake, William H., Crystal Springs, Miss. Ship construction. No. 1,061,826; May 13; Gaz. vol. 190; p. 466.
Dierdorff, Joseph, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company. Belt conveyer. No. 1,062,325; May 20; Gaz. vol. 190; p. 677.
Dillberg, Erik, assignor to Buchanan-Lawrence Company, Joliet, Ill. Wool sole for slippers. No. 1,060,589; May 6; Gaz. vol. 190; p. 9.
Dillon, Charles A., assignor to The United Electric Company, Canton, Ohio. Vertical bearing. No. 1,062,638; May 27; Gaz. vol. 190; p. 822.
Dines, William L., Jr., assignor to William L. Dines, Jr., Co., Worcester, Mass. Feed-regulator. No. 1,061,731; May 13; Gaz. vol. 190; p. 438.
Dinger, Gustave, assignor to Dinger's Ondulateur Parfait Limited, London, England. Curling-iron and the like. No. 1,061,273; May 13; Gaz. vol. 190; p. 279.
Dinger's Ondulateur Parfait Limited. (See Dinger, Gustave, assignor.)
Dismuke, W. H., *et al.* (See Morton, Frank M., assignor.)
Diss, Albert B., Newark, N. J., assignor to Universal Caster & Foundry Company, New York, N. Y. Caster. No. 1,062,897; May 27; Gaz. vol. 190; p. 907.
Dittman, Samuel E., New York, N. Y. Producing printing-surfaces. No. 1,060,893; May 6; Gaz. vol. 190; p. 114.
Dixie Cotton Picker Company. (See Appleby, John F., assignor.)
Dixon, Amos F., assignor to Western Electric Company, Chicago, Ill. Fastening device. No. 1,062,145; May 20; Gaz. vol. 190; p. 616.
Dixon, Elbert S., and H. E. Werner, Houston, Tex. Feed-mixer. No. 1,062,086; May 20; Gaz. vol. 190; p. 596.
Dixon, Robert M., East Orange, N. J., assignor, by mesne assignments, to Standard Heat and Ventilation Company, Inc., New York, N. Y. Heating system. No. 1,062,639; May 27; Gaz. vol. 190; p. 822.
Dmen, Octave, Rochester, N. Y. Switch-throwing device. No. 1,061,457; May 13; Gaz. vol. 190; p. 342.
Dobson, James, Birmingham, England. Weighing-machine. No. 1,061,229; May 6; Gaz. vol. 190; p. 228.
Dockstader, Daniel, Palatine Bridge, N. Y. Railway-switch-operating mechanism. No. 1,062,822; May 27; Gaz. vol. 190; p. 881.
Dodd, John W. (See Shirey and Dodd.)
Dodds, Ethan I., Central Valley, N. Y., assignor to Kerner Manufacturing Company, Pittsburgh, Pa. Stay-bolt for locomotive and other boilers. No. 1,061,274; May 13; Gaz. vol. 190; p. 279.

Dolnikoff, Wladimir, Baden, Switzerland. Alternating-current dynamo-electric machine. No. 1,061,529; May 13; Gaz. vol. 190; p. 368.
Dolivo-Dobrowolsky, Michael, Wilmersdorf, Germany, assignor to General Electric Company. Dynamometer-wattmeter. No. 1,060,894; May 6; Gaz. vol. 190; p. 115.
Dollinger, Charles A., *et al.* (See Schulte, Henry P., assignor.)
Donegan, William R., Hartford, Conn., assignor, by mesne assignments, to Pope Manufacturing Company. Manufacture of cushions. No. 1,062,564; May 20; Gaz. vol. 190; p. 754.
Donnenwerth, William J., Charlton, Iowa. Seesaw. No. 1,060,590; May 6; Gaz. vol. 190; p. 9.
Doolittle, Perry E., Toronto, Ontario, Canada. Adjustable hanger. No. 1,063,149; May 27; Gaz. vol. 190; p. 989.
Dorchester, Watson E. (See McCulloch and Dorchester.)
Dorn, Victor. (See Plathner and Dorn.)
Dorney, Clark L., assignor of one-half to J. E. Sells, Dayton, Ohio. Hood and drip-pan fastener. No. 1,062,229; May 20; Gaz. vol. 190; p. 645.
Dotts, Worthington E. (See Birdsall, James E., assignor.)
Double Body Bolster Company. (See Frede, Charles F., assignor.)
Douglass, Ernest D., Chicago, Ill., assignor to F. S. Betz, Hammond, Ind. Emasculator. No. 1,062,087; May 20; Gaz. vol. 190; p. 596.
Douglass, Ernest D., Chicago, Ill., assignor to F. S. Betz, Hammond, Ind. Emasculator. No. 1,062,146; May 20; Gaz. vol. 190; p. 616.
Dowda, Earl G. (See Stanton and Dowda.)
Downham, William, Jr., Philadelphia, Pa. Vehicle-wheel. No. 1,061,458; May 13; Gaz. vol. 190; p. 342.
Doyle, Francis J., Chicago, Ill. Gas-burner. No. 1,061,360; May 13; Gaz. vol. 190; p. 308.
Doyle, Francis J., Chicago, Ill. Furnace. No. 1,062,147; May 20; Gaz. vol. 190; p. 617.
Doyle, Patrick J. (See Schardin and Doyle.)
Dr. C. Otto & Comp. Ges. mit beschränkter Haftung. (See Rottmann, August, assignor.)
Drake, Emmett C., and E. S. Brown, Blockton, Iowa. Harness-buckle. No. 1,061,955; May 13; Gaz. vol. 190; p. 509.
Draper Company. (See Riley, Andrew J., assignor.)
Drenahtein, Ephraim, New York, N. Y. Combined corset and abdominal supporter. No. 1,061,664; May 13; Gaz. vol. 190; p. 415.
Drew, Fred, Boston, Mass. Automobile. No. 1,062,898; May 27; Gaz. vol. 190; p. 907.
Drountlege, Henry, Ponsonby, Auckland, New Zealand. Milking-machine. No. 1,060,828; May 6; Gaz. vol. 190; p. 91.
Drullard, Martha B., Los Angeles, Cal. Bonnet. No. 1,061,991; May 20; Gaz. vol. 190; p. 562.
Drumm, Nannie G., *et al.* (See Watkins, William J., assignor.)
Dryfoos, Nathan I., Cleveland, Ohio. Soldering-tool. No. 1,062,088; May 20; Gaz. vol. 190; p. 596.
Drysdale, John, New York, N. Y. Window-sash lock. No. 1,060,747; May 6; Gaz. vol. 190; p. 63.
Duane H. Nash Inc. (See Taff, Frederick N., assignor.)
Dubois, James, S. Novario, and J. E. Jones, Westville, Ill. Coupling for mining-cars. No. 1,062,823; May 27; Gaz. vol. 190; p. 882.
Duff, Ralph A. (See Moore, Harry W., assignor.)
Dufour, Emery, *et al.* (See Brousseau, Delphis, assignor.)
Dugan, Wm. (See Causey, Thomas S., assignor.)
Dukro, William J., Lima, Ohio. Trolley-wire splice. No. 1,061,992; May 20; Gaz. vol. 190; p. 563.
Dunbar, William. (See Bradshaw, Charles E., assignor.)
Duncan, Henry J., Alpena, Mich. Lathe. No. 1,061,459; May 13; Gaz. vol. 190; p. 342.
Dunkle, Samuel F., trustee. (See Morton, Walter S., assignor.)
Dunning, Ellsworth A., Minneapolis, Minn. Antislipping device. No. 1,062,326; May 20; Gaz. vol. 190; p. 677.
Duplex Metals Company. (See Monnot, John F., assignor.)
Dupont, Herman, Fair Haven, Mich. Currycomb. No. 1,061,827; May 13; Gaz. vol. 190; p. 466.
Duryee, Gustavus A. (See Evans and Duryee.)
Dye, Lilburn, assignor of one-half to J. D. Cleek, St. Paul, Va. Pole-dumping-car. No. 1,062,956; May 27; Gaz. vol. 190; p. 927.
Dyer, George P., assignor to I. E. Bell, Washington, D. C. Clothes-stop. No. 1,061,054; May 6; Gaz. vol. 190; p. 172.
E. Ingraham Co., The. (See Stockton, Elmer E., assignor.)
E. C. Stearns & Co. *et al.* (See Schneeloch and Smith, assignors.)
E. I. du Pont de Nemours Powder Company. (See Hall, Hiram P., assignor.)
E. J. Brooks & Co. (See Brooks, Winfred M., assignor.)
E. M. Hulse Company, The. (See Pease, William A., assignor.)
Eagar, George T., Balliston Spa, and C. H. Williams, Schenectady, N. Y., assignors to General Electric Company. Motor starting and protective device. No. 1,060,895; May 6; Gaz. vol. 190; p. 115.
Easterday, Philip S., Portland, Oreg. Coupling for reinforced-concrete conduit-sections. No. 1,061,665; May 13; Gaz. vol. 190; p. 415.
Eastman Kodak Co. (See Folmer, William F., assignor.)
Eastman Kodak Co. (See Linder, John, assignor.)
Eastman Kodak Co. (See Niles, Henry E., assignor.)
Eastman Kodak Company. (See Brownell, Frank A., assignor.)
Eastman Kodak Company. (See Carkhuff, Norman W., assignor.)
Eastman Kodak Company. (See Robertson, John A., assignor.)
Eastman Kodak Company. (See Ruttan and Hutchings, assignors.)
Eaton, Charles T. (See Taylor and Eaton.)
Eaton, Crane & Pike Co. (See Dansereau, Prime J., assignor.)
Ebersole, Cyrus P., assignor to American Automotoneer Company, Philadelphia, Pa. Controller-regulator. No. 1,061,055; May 6; Gaz. vol. 190; p. 172.
Eby, Noah, Hubbell, Nebr. Amusement device. No. 1,062,899; May 27; Gaz. vol. 190; p. 907.
Eby, William L., Wellsville, Ohio. Rail-fastener. No. 1,062,957; May 27; Gaz. vol. 190; p. 927.
Economy Car Heating Company, The. (See Coggin, Frank F., assignor.)
Eddystone Manufacturing Company, The. (See Anthony, Wendell P., assignor.)
Edelin, James N., assignor to The Safety Hasp Manufacturing Co. Inc., Los Angeles, Cal. Hasp. No. 1,062,230; May 20; Gaz. vol. 190; p. 645.
Edge, James, Gorton, England. Stripping-roller of carding-engines. No. 1,061,167; May 6; Gaz. vol. 190; p. 206.
Edgemont Machine Company, The. (See Stahl, George, assignor.)
Edison, Thomas A. (See Aylsworth, Jonas W., assignor.)
Edison, Thomas A. (See Aylsworth and Aiken, assignors.)
Edison, Thomas A. (See Hudson and Elmes, assignors.)
Edman, John, assignor of one-half to C. M. Larson and one-half to C. H. Olson, Minneapolis, Minn. Curtain-stretcher. No. 1,060,829; May 6; Gaz. vol. 190; p. 91.
Edman, John, assignor of one-sixth to C. Standiford and one-sixth to C. W. Tarbox, Minneapolis, Minn. Butter-dish. No. 1,060,973; May 6; Gaz. vol. 190; p. 143.
Edmonds, Samuel P., Catonsville, Md. Life-preserver and pillow. No. 1,061,275; May 13; Gaz. vol. 190; p. 279.
Edmonds, Walter D. (See Ladoff, Isador, assignor.)
Edwards, Claude M., Galveston, Tex. Telegraph system. No. 1,062,824; May 27; Gaz. vol. 190; p. 882.
Egry Register Company, The. (See Jensen, Hans L., assignor.)
Elane, Halvor O., San Diego, Cal. Aeroplane. No. 1,062,772; May 27; Gaz. vol. 190; p. 864.
Elmer, August, New York, N. Y. High-temperature gas-burner. No. 1,062,640; May 27; Gaz. vol. 190; p. 822.
Einfeldt, Emil, assignor, by mesne assingments, to French & Hecht, Davenport, Iowa. Making butt-welds. No. 1,062,641; May 27; Gaz. vol. 190; p. 823.
Elder, John D., Wattsboro, and P. Laffoon, Oral Oaks, Va. Combined churn and washer. No. 1,060,896; May 6; Gaz. vol. 190; p. 115.
Elder, William S., assignor to J. Hirsh, Philadelphia, Pa. Union suit. No. 1,061,732; May 13; Gaz. vol. 190; p. 438.
Eldridge, Charles C., *et al.* (See Johnston, Charles F., assignor.)
Electric Compositor Company. (See Bellows, Benjamin F., assignor.)
Electric Compositor Company. (See Le Boeuf, Arthur W., assignor.)
Electric Controller and Manufacturing Company, The. (See Hall, Jay H., assignor.)
Electric Meat Curing Company, The. (See Lincoln, John C., assignor.)
Electro-Magnetic Tool Company. (See Rowe, George H., assignor.)
Electro Metallurgical Company. (See Becket, Frederick M., assignor.)
Electrolytic Art Metal Company. (See Borden, George L., assignor.)
Elfrink, Lambertus, Modjokerto, Java. Filler for caoutchouc and manufacturing same. No. 1,062,958; May 27; Gaz. vol. 190; p. 927.
Elkhart Musical Instrument Company. (See Middleton, Robert, assignor.)
Eller, Eli H., Granville, Tenn. Metal clipper or shears. No. 1,062,773; May 27; Gaz. vol. 190; p. 865.
Elliott-Fisher Company. (See Anderson, George S., assignor.)
Elliott, Roy D., Oxnard, Cal. Process of preserving food and apparatus therefor. No. 1,061,460; May 13; Gaz. vol. 190; p. 343.
Ellis, Carleton, Montclair, N. J. Catalyzer for hydrogenating oils and the like. No. 1,060,673; May 6; Gaz. vol. 190; p. 37.
Ellis, Frank H., Somerville, Mass., assignor to Barbour-Stockwell Company. Spring-switch. No. 1,061,530; May 13; Gaz. vol. 190; p. 368.
Ellis, Jacob D., Castle Rock, Colo. Weed-extractor. No. 1,061,361; May 13; Gaz. vol. 190; p. 308.
Ellis, Nathan, Syracuse, N. Y. Sanitary shaving-brush. No. 1,063,020; May 27; Gaz. vol. 190; p. 946.
Ellis, Theresa M., London, England. Brush. No. 1,061,276; May 13; Gaz. vol. 190; p. 280.
Elmendorf, Bernhard, and J. Gabler, Isselhorst, Germany. Automatic weft-replenishing mechanism for looms. No. 1,060,830; May 6; Gaz. vol. 190; p. 91.

Elmendorf, Bernhard, and J. Gabler, Isselhorst, Germany. Automatic weft-replenishing mechanism for looms. No. 1,060,831; May 6; Gaz. vol. 190; p. 92.

Elmer, James P., St. Paul, Minn., assignor to Moore Patent Car Company. Refrigerator-car. No. 1,061,680; May 13; Gaz. vol. 190; p. 421.

Elmes, Devereux. (See Hudson and Elmes.)

Else, George, Yuma, Colo. Broom-holder. No. 1,062,774; May 27; Gaz. vol. 190; p. 865.

Emery, Clyde L., Jamestown, N. Y. Hanging and adjusting device for mirrors. No. 1,062,642; May 27; Gaz. vol. 190; p. 823.

Emery, Elias J., Portsmouth, N. H. Arch-support. No. 1,061,056; May 6; Gaz. vol. 190; p. 173.

Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Water-cooled resistance. No. 1,062,900; May 27; Gaz. vol. 190; p. 907.

Emmons, Frederick, assignor to Hinde & Dauch Paper Company, Sandusky, Ohio. Package. No. 1,061,531; May 13; Gaz. vol. 190; p. 369.

Emrich, John O., Pittsburgh, Pa. Metallic door. No. 1,061,993; May 20; Gaz. vol. 190; p. 563.

Endter, Waldemar A. (See Jones, Frank, assignor.)

Engdahl, Carl, Gunnison, and T. Matson, Denver, Colo.; said Engdahl assignor to said Matson. Weather-strip-forming machine. No. 1,060,897; May 6; Gaz. vol. 190; p. 116.

Engel, Hermann W., Hamburg, Germany. Scale for drawing utensils. No. 1,061,994; May 20; Gaz. vol. 190; p. 563.

Engelhardt, Philip M., Swaledale, Iowa. Folding step. No. 1,061,828; May 13; Gaz. vol. 190; p. 468.

Englander, Benjamin B., New York, assignor to Englander Spring Bed Company, Brooklyn, N. Y. Convertible bed and divan. No. 1,061,362; May 13; Gaz. vol. 190; p. 309.

Englander, Benjamin B., New York, assignor to Englander Spring Bed Company, Brooklyn, N. Y. Couch or divan. No. 1,061,532; May 13; Gaz. vol. 190; p. 369.

Englander, Benjamin B., New York, assignor to Englander Spring Bed Company, Brooklyn, N. Y. Adjustable-back divanette. No. 1,061,533; May 13; Gaz. vol. 190; p. 370.

Englander, Benjamin B., New York, assignor to Englander Spring Bed Company, Brooklyn, N. Y. Divanette. No. 1,061,534; May 13; Gaz. vol. 190; p. 370.

Englander, Benjamin B., New York, assignor to Englander Spring Bed Company, Brooklyn, N. Y. Convertible bed and divan. No. 1,061,956; May 13; Gaz. vol. 190; p. 509.

Englander Spring Bed Company. (See Englander, Benjamin B., assignor.)

Englander Spring Bed Company. (See Kreuzkamp, August J., assignor.)

Englander Spring Bed Company. (See Potts, Samuel W., assignor.)

Enterprise Manufacturing Company of Pennsylvania, The. (See Brown, John W., Jr., assignor.)

Enterprise Railway Equipment Company. (See Campbell, Argyle, assignor.)

Entwistle, Samuel C., Jamestown, N. Y. Shelf-support. No. 1,062,901; May 27; Gaz. vol. 190; p. 908.

Epstein, Harris, Brooklyn, N. Y. Signaling apparatus. No. 1,060,898; May 6; Gaz. vol. 190; p. 116.

Erb, Herman P., *et al.* (See Buttsov, George P., assignor.)

Erbe, Christopher, Tamaqua, Pa. Stirrup. No. 1,062,327; May 20; Gaz. vol. 190; p. 678.

Erickson, Charles F., Brooklyn, N. Y. Carbureter. No. 1,061,995; May 20; Gaz. vol. 190; p. 563.

Erickson, Charles J., assignor, by mesne assignments, to First Trust and Savings Bank, trustee, Chicago, Ill. Harmonic electric bell or ringer. No. 1,061,783; May 13; Gaz. vol. 190; p. 439.

Erickson, Charles J., assignor, by mesne assignments, to First Trust and Savings Bank, trustee, Chicago, Ill. Spring-mounting for magnet-armatures. No. 1,062,586; May 27; Gaz. vol. 190; p. 804.

Erickson, John, assignor to Automatic Electric Company, Chicago, Ill. Measured-service telephone system. No. 1,062,387; May 20; Gaz. vol. 190; p. 697.

Ernst, Alfred, Pittsburgh, Pa. Gas-cleaner. No. 1,062,445; May 20; Gaz. vol. 190; p. 715.

Ernst, Alfred, Pittsburgh, Pa. Gas-cleaner. No. 1,062,446; May 20; Gaz. vol. 190; p. 715.

Ernst, Charles K., Buffalo, N. Y. Trap-door. No. 1,060,974; May 6; Gaz. vol. 190; p. 143.

Erskine, James, Jersey City, N. J., assignor to William M. Crane Company. Heating apparatus. No. 1,060,975; May 6; Gaz. vol. 190; p. 143.

Etheridge, John B., Hallsville, Tex. Hoe. No. 1,061,067; May 6; Gaz. vol. 190; p. 173.

Eureka Tempered Copper Works. (See Risbridger, John, assignor.)

Evans, Fred, New York, N. Y., and G. A. Duryee, Summit, N. J., assignors to Universal Cork Extractor Company. Stopper. No. 1,061,822; May 13; Gaz. vol. 190; p. 467.

Evans, J. Harry. (See Gerhard, Elmer R., assignor.)

Evans, Joseph. (See Kennedy and Evans.)

Evans, Lewis J., Kirkwood, N. Y. Airship. No. 1,061,963; May 13; Gaz. vol. 190; p. 509.

Evans, William C., and R. Clements, Sedalia, Mo. Pulverizing-harrow. No. 1,061,220; May 6; Gaz. vol. 190; p. 228.

Evensen, William, assignor to The Goss Printing Press Company, Chicago, Ill. Chase. No. 1,062,902; May 27; Gaz. vol. 190; p. 908.

Ewart, Arthur F., assignor to Honolulu Iron Works Company, Honolulu, Hawaii. Sugar-cane mill. No. 1,061,535; May 13; Gaz. vol. 190; p. 370.

Ewing, Robert E., Avalon, assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa. Light-shade. No. 1,061,277; May 13; Gaz. vol. 190; p. 280.

Ewing, Robert M., Philadelphia, Pa. Locket. No. 1,061,364; May 13; Gaz. vol. 190; p. 309.

Ewoldt, Henry, assignor of one-fourth to P. J. A. Schnoor, Holstein, Iowa. Fire-extinguisher. No. 1,063,122; May 27; Gaz. vol. 190; p. 980.

Facile Window Company, The. (See Hausmann, Bernard, assignor.)

Falk, Colonel N., assignor of one-half to J. W. Batdorf, San Jose, Cal. Advertising device. No. 1,061,601; May 13; Gaz. vol. 190; p. 394.

Fallek, Nathan, assignor to The Cook Railway Signal Company, Denver, Colo. Storage-battery compound. No. 1,060,832; May 6; Gaz. vol. 190; p. 92.

Fanning, Charles E., assignor, by mesne assignments, to F. Wernentin, Jr., Davenport, Iowa. Vending-machine. No. 1,062,231; May 20; Gaz. vol. 190; p. 645.

Farbenfabriken vorm. Friedr. Bayer & Co. (See Hofmann and Coutelle, assignors.)

Farbenfabriken vorm. Friedr. Bayer & Co. (See Hofmann, Coutelle, Delbrück, and Meisenburg, assignors.)

Färber, Richard, assignor to Buchheim & Heister, Frankfort-on-the-Main, Germany. Apparatus for testing concrete and the like. No. 1,061,996; May 20; Gaz. vol. 190; p. 564.

Farbwerke vorm. Meister Lucius & Brüning. (See Schmidt and Thiess, assignors.)

Farkas, Karl, assignor of one-half to G. V. Williams, New York, N. Y. Producing fine tungstous oxids. No. 1,061,058; May 6; Gaz. vol. 190; p. 173.

Farnum, Dwight, Denver, Colo., assignor of one-half to C. M. Tyler, Boston, Mass. Puzzle. No. 1,061,903; May 13; Gaz. vol. 190; p. 490.

Farrar, Russell B., Glendale, and B. C. Leighton, Los Angeles, Cal. Lemon-grader. No. 1,062,775; May 27; Gaz. vol. 190; p. 865.

Fawcett, James, Rochester, Pa. Trolley. No. 1,062,959; May 27; Gaz. vol. 190; p. 927.

Fay, Louis J., Nogales, Ariz. Safety-razor. No. 1,063,021; May 27; Gaz. vol. 190; p. 947.

Federal Electric Company. (See Silbert, Gustaf I., assignor.)

Feely, William C., New York, N. Y. Invalid-bed. No. 1,061,168; May 6; Gaz. vol. 190; p. 206.

Felcks, William, Bloomfield, N. J. Saturation apparatus. No. 1,062,960; May 27; Gaz. vol. 190; p. 928.

Feliner, Karl, Nuremberg, Germany. Valve-gear for two-stage combustion-engines. No. 1,061,681; May 13; Gaz. vol. 190; p. 422.

Feinen, Mary B., Jersey City, N. J. Washboard. No. 1,062,447; May 20; Gaz. vol. 190; p. 716.

Felbel, Jacob, New York, assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. No. 1,061,957; May 13; Gaz. vol. 190; p. 510.

Fenoform Corporation. (See Wiechmann, Ferdinand G., assignor.)

Ferguson, Bassett, Philadelphia, Pa. Time-controlled draft and damper regulator. No. 1,062,699; May 27; Gaz. vol. 190; p. 841.

Ferguson, Floyd E., Walla Walla, Wash. Sign. No. 1,061,997; May 20; Gaz. vol. 190; p. 564.

Ferron, Heinrich C., Amsterdam, Netherlands. Metallic roofing and the like. No. 1,061,231; May 6; Gaz. vol. 190; p. 220.

Fetter, William H. (See Werner and Fetter.)

Fiat-San Giorgio, Società Anonima. (See Laurenti, Cesare, assignor.)

Fidler, Charles A. (See Krieger and Fidler.)

Field, Frederick T. (See Field, Jones, and Field.)

Field, William T., C. E. Jones, and F. T. Field, Sanford, Fla. Lens-support. No. 1,062,540; May 20; Gaz. vol. 190; p. 745.

Fienhold, Charles J., Brooklyn, N. Y. Locking device for dump-wagons of the end-dump type. No. 1,060,976; May 6; Gaz. vol. 190; p. 144.

Fillingim, Elijah J., Pace, Fla. Sap-gatherer. No. 1,061,278; May 13; Gaz. vol. 190; p. 280.

Finch, Nathan W., Piano, Ill. Draft-equaliser. No. 1,061,365; May 13; Gaz. vol. 190; p. 310.

Findlay Electric Porcelain Company, The. (See Bicknell, John E., assignor.)

Fink, Edward, Milwaukee, Wis., assignor to Fink Smelters Company, Chicago, Ill. Ore smelting and refining apparatus. No. 1,061,279; May 13; Gaz. vol. 190; p. 280.

Fink Smelters Company. (See Fink, Edward, assignor.)

Finkelstein, Heinrich, *et al.* (See Müller, Philipp, assignor.)

Finley, John T., Jr., and John T., Sr., Atlanta, Ga. Combined rail-joint and locking-plate. No. 1,061,232; May 6; Gaz. vol. 190; p. 229.

Finn, Oliver B., Colorado Springs, Colo. Elevator-bucket. No. 1,060,853; May 6; Gaz. vol. 190; p. 98.

Finsel, Andrew, Elizabeth, N. J. Cork-puller. No. 1,061,904; May 13; Gaz. vol. 190; p. 490.

Fire-Proof Furniture and Construction Company. (See Millice, Paul S., assignor.)

Firsching, Joseph A., Utica, N. Y. Proportional-spacer device. No. 1,062,700; May 27; Gaz. vol. 190; p. 841.

First Trust and Savings Bank, trustee. (See Campbell, Wilson L., assignor.)

First Trust and Savings Bank, trustee. (See Erickson, Charles J., assignor.)

Fischer, Howard L., St. Paul, Minn. Pencil. No. 1,062,274; May 20; Gaz. vol. 190; p. 660.

Fischer, William F. (See Simmons, Oliver G., assignor.)

Fish, Harold, Stratford, assignor to The Ready Tool Company, Bridgeport, Conn. Tool-holder. No. 1,062,448; May 20; Gaz. vol. 190; p. 716.

Fisher, George W., assignor of one-third to E. H. Tucker and one-third to C. W. Wackershauser, Tacoma, Wash. Ore-separator. No. 1,061,830; May 13; Gaz. vol. 190; p. 467.

Fisher, John L., Pekin, Ill. Vise. No. 1,061,461; May 13; Gaz. vol. 190; p. 343.

Fiske, Franklin S., Baltimore, Md. Orange and lemon juice and pulp extractor. No. 1,061,734; May 13; Gaz. vol. 190; p. 439.

Fitch, Joseph H. (See Butts, Newton L., assignor.)

Fithian, Charles B. (See Stanger and Fithian.)

Fiveshilling, Albert D., assignor of one-half to R. Reed, Buffalo, N. Y. Broom-bridle. No. 1,061,735; May 13; Gaz. vol. 190; p. 440.

Fleming, Luke G., Tarrytown, N. Y. Tire-fastener. No. 1,061,905; May 13; Gaz. vol. 190; p. 490.

Flint, Louis J., assignor to Grip Nut Company, Chicago, Ill. Magneto-generator. No. 1,062,089; May 20; Gaz. vol. 190; p. 597.

Flint, Louis J., assignor to Grip Nut Company, Chicago, Ill. Interrupter. No. 1,062,090; May 20; Gaz. vol. 190; p. 597.

Flock, Hermann, Leipzig, Germany. Producing placards with sunk characters or imprints. No. 1,061,059; May 6; Gaz. vol. 190; p. 173.

Folmer, William F., assignor to Eastman Kodak Co., Rochester, N. Y. Camera-back. No. 1,060,748; May 6; Gaz. vol. 190; p. 63.

Folmer, William F., assignor to Eastman Kodak Co., Rochester, N. Y. Focusing-hood for cameras. No. 1,060,834; May 6; Gaz. vol. 190; p. 93.

Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Multiplying camera-back. No. 1,061,736; May 13; Gaz. vol. 190; p. 440.

Folsom, Charles S., San Diego, Cal. Water-heater. No. 1,062,574; May 20; Gaz. vol. 190; p. 758.

Folz, Robert L., and P. A. Zace, Chicago, Ill. Automatic stop device for automatic machines. No. 1,061,160; May 6; Gaz. vol. 190; p. 207.

Forbes Company. (See Forbes, John S., assignor.)

Forbes, John S., Philadelphia, Pa., assignor to Forbes Company, Wilmington, Del. Sterilizer. No. 1,062,776; May 27; Gaz. vol. 190; p. 865.

Forbes Lithograph Manufacturing Company, The. (See MacOrquodale, Lorne H., assignor.)

Ford, Bertram L., Seattle, Wash. Turnbuckle. No. 1,061,060; May 6; Gaz. vol. 190; p. 174.

Ford, Bruce, Philadelphia, Pa. Changing the composition of iron and steel. No. 1,062,388; May 20; Gaz. vol. 190; p. 698.

Ford, Edward L., Youngstown, Ohio. Ladle-runner. No. 1,061,280; May 13; Gaz. vol. 190; p. 281.

Ford, Ralph L., Decatur, Ill., assignor to Pioneer Implement Company, Council Bluffs, Iowa. Dropping device for corn-planters. No. 1,062,440; May 20; Gaz. vol. 190; p. 717.

Forman, Thomas P., Waterbury, Conn. Necktie-case. No. 1,061,906; May 13; Gaz. vol. 190; p. 491.

Forman, William, *et al.* (See Saltman, Philip, assignor.)

Forner, Georg, Berlin, Germany, assignor to General Electric Company. Elastic-fluid turbine. No. 1,061,737; May 13; Gaz. vol. 190; p. 440.

Forsheim, Joseph, Great Neck, and J. Konigsberg, New York, N. Y. Device for attaching handles to umbrella or other rods. No. 1,062,903; May 27; Gaz. vol. 190; p. 909.

Forsyth, John F., assignor of one-third to H. Blakely, Bloomington, Ind. Rail-joint. No. 1,061,907; May 13; Gaz. vol. 190; p. 491.

Foster, Benjamin, Philadelphia, Pa. Waterproofing construction for building-walls. No. 1,062,091; May 20; Gaz. vol. 190; p. 598.

Foster, Bertram G., Washington, D. C. Swing-seat. No. 1,061,462; May 13; Gaz. vol. 190; p. 343.

Foster, Green B. C., Milltown, Ala. Cotton-chopper. No. 1,061,233; May 6; Gaz. vol. 190; p. 230.

Foster, Oliver F., Elmira Heights, N. Y. Bottle-opener. No. 1,060,674; May 6; Gaz. vol. 190; p. 37.

Fountain, Jerome, Oakland, Cal. Can opener and closure. No. 1,061,602; May 13; Gaz. vol. 190; p. 394.

Fournia, John, assignor of one-half to F. R. Greene, Albany, N. Y. Fluid-pressure motor. No. 1,062,904; May 27; Gaz. vol. 190; p. 909.

Foust, Charles E., Birmingham, Ala. Wheel. No. 1,061,603; May 13; Gaz. vol. 190; p. 394.

Fowler Car Company, The. (See Fowler, William E., Sr., assignor.)

Fowler Car Company, The. (See Fowler, William E., assignor.) (Reissue.)

Fowler, William E., Chicago, Ill., assignor to The Fowler Car Company. Box-car. (Reissue.) No. 13,561; May 13; Gaz. vol. 190; p. 512.

Fowler, William E., Sr., assignor to The Fowler Car Company, Chicago, Ill. Car-floor construction. No. 1,062,701; May 27; Gaz. vol. 190; p. 842.

Fownes, Edwin S., *et al.* (See Burgum, William C., assignor.)

Fownes, William C., Jr., Pittsburgh, and F. Hofwing, Midland, assignors to Pittsburg Iron & Steel Foundries Company, Pittsburgh, Pa. Wheel. No. 1,060,835; May 6; Gaz. vol. 190; p. 93.

Fox, Cale B., St. Joseph, Mo. Wrapper for laundried shirts. No. 1,062,643; May 27; Gaz. vol. 190; p. 823.

Fox, Ivan, Media, Pa. Frame for eyeglasses and spectacles. No. 1,062,777; May 27; Gaz. vol. 190; p. 866.

Frame, Alastair M. (See Mangelsdorff, Carl B., assignor.)

Frame, John, Searsport, Me. Wave-motor. No. 1,061,061; May 6; Gaz. vol. 190; p. 174.

Francisco, George T., assignor of one-half to C. M. Hill, Highland, Cal. Meat-sawing machine. No. 1,062,644; May 27; Gaz. vol. 190; p. 824.

Frank Adam Electric Company. (See Arens, Lloyd H., assignor.)

Frankel, Fridolf, Stockholm, Sweden. Sounding-board. No. 1,062,275; May 20; Gaz. vol. 190; p. 660.

Frantz Standard Buckle Co. (See McFarland, Frank H., assignor.)

Fraser, John A., Benton Harbor, Mich., assignor to Metal Sectional Furniture Company, Portland, Me. Follower-block for filing-cabinets. No. 1,061,463; May 13; Gaz. vol. 190; p. 344.

Fraser, William A., Georgetown, Ontario, Canada. Flushing system. No. 1,062,148; May 20; Gaz. vol. 190; p. 617.

Frazer, George, Eugene, Oreg. Take-down cook-range. No. 1,062,450; May 20; Gaz. vol. 190; p. 717.

Frazier, Orville Z., Elkhart, Ind. Muffler. No. 1,062,092; May 20; Gaz. vol. 190; p. 598.

Frazier, Thomas O., Paris, Ill. Hanger for harness. No. 1,061,366; May 13; Gaz. vol. 190; p. 310.

Frede, Charles F., assignor to Double Body Bolster Company, St. Louis, Mo. Electric-motor truck. No. 1,061,281; May 13; Gaz. vol. 190; p. 281.

Frederick, Tilghman G., Bernharts, Pa., assignor to Mitts & Merrill, Saginaw, Mich. Cutter for key-seating machines. No. 1,060,749; May 6; Gaz. vol. 190; p. 64.

Fredrick, Charles H., Cabool, Mo. Lamp-burner attachment. No. 1,063,022; May 27; Gaz. vol. 190; p. 947.

Free, William C., Chicago, Ill. Sewing-machine. No. 1,062,389; May 20; Gaz. vol. 190; p. 698.

Freeland, Lloyd D., Portage, Wis. Measuring-pump. No. 1,061,062; May 6; Gaz. vol. 190; p. 174.

Freeman, Charles C., and W. W. Tainter, Dixfield, Me. Machine for rounding toothpicks and other splints. No. 1,061,063; May 6; Gaz. vol. 190; p. 175.

Freese, Herman W., Chicago, Ill. Magnetic separator. No. 1,061,666; May 13; Gaz. vol. 190; p. 415.

Freese, John H., Concordia, Mo. Combination comb and tooth-brush holder. No. 1,061,831; May 13; Gaz. vol. 190; p. 467.

Freiberger, Moritz. (See Mathesius and Freiberger.)

French, Harry B., assignor to Smith, Kline & French Co., Philadelphia, Pa. Commercial package for explosive volatile liquids. No. 1,062,565; May 20; Gaz. vol. 190; p. 754.

French & Hecht. (See Einfeldt, Emil, assignor.)

Freund, Carl. (See Thron and Freund.)

Freund, Joseph A., Waltham, Mass., assignor to The Keystone Watch Case Company, Philadelphia, Pa. Banking-pin. No. 1,062,645; May 27; Gaz. vol. 190; p. 825.

Fried. Krupp Aktiengesellschaft. (See Koch, Norbert, assignor.)

Fried. Krupp Aktiengesellschaft. (See Mayer, Wilhelm, assignor.)

Fried. Krupp Aktiengesellschaft. (See Sachtleben, Friedrich, assignor.)

Fried. Krupp Aktiengesellschaft. (See Wieser, Karl, assignor.)

Fried. Krupp Aktiengesellschaft Grusonwerk. (See Ullrich, Georg, assignor.)

Friedman, Bernhard Z., Fort Worth, Tex. Clock. No. 1,060,591; May 6; Gaz. vol. 190; p. 9.

Friedman, Joseph. (See Hershkowitz and Friedman.)

Fritz, Herman C., Cleveland, Ohio, assignor to American Stove Company, St. Louis, Mo. Lighting device for gas-stoves. No. 1,061,738; May 13; Gaz. vol. 190; p. 440.

Frizzell, Bernard F., Washington, D. C. Type-writing machine. No. 1,061,464; May 13; Gaz. vol. 190; p. 344.

Froehlich, Henry, Central Aguirre, Porto Rico. Tobacco-pipe. No. 1,061,234; May 6; Gaz. vol. 190; p. 230.

Froesé, Minna, New York, N. Y. Hook-and-eye fastening. No. 1,060,899; May 6; Gaz. vol. 190; p. 117.

Fryar, Allen P., Ashton, Idaho. Letter-case. No. 1,062,232; May 20; Gaz. vol. 190; p. 645.

Fryer, Jesse D., Alhambra, Cal. Drawer-guide. No. 1,061,465; May 13; Gaz. vol. 190; p. 345.

Fudge, Benjamin D., Bainbridge, Ga. Sheet-metal pipe. No. 1,061,739; May 13; Gaz. vol. 190; p. 441.

Fuhr, Adam, assignor to Firm of H. Lanz, Mannheim, Germany. Rotary power-hoe. No. 1,061,235; May 6; Gaz. vol. 190; p. 230.

Fuhrer, Daniel, Bluffton, Ind. Gasolene-engine starter. No. 1,061,536; May 13; Gaz. vol. 190; p. 371.
Fulcher, Thomas G. (See McCumber and Fulcher.)
Fuller, Frans A., assignor to The J. E. Mergott Company, Newark, N. J. Handle-fastening for bag-frames. No. 1,062,390; May 20; Gaz. vol. 190; p. 698.
Fuller, Franz A., assignor to The J. E. Mergott Company, Newark, N. J. Bag-frame. No. 1,062,391; May 20; Gaz. vol. 190; p. 699.
Fuller, James A., assignor to Hamilton and Hamilton, Jr., Providence, R. I. Cigar-end cutter. No. 1,061,236; May 6; Gaz. vol. 190; p. 231.
Funcke, Daniel C., Wiesbaden, Germany. Combined tooth-brush and prophylactic container. No. 1,062,961; May 27; Gaz. vol. 190; p. 928.
Funk Machine Co. (See Funk, Nelson E., assignor.)
Funk, Nelson E., New York, N. Y., assignor to Funk Machine Co. Blower. No. 1,062,149; May 20; Gaz. vol. 190; p. 617.
Gaal, Alexander, Chicago, Ill. Toilet-cabinet. No. 1,062,962; May 27; Gaz. vol. 190; p. 928.
Gabler, Johannes. (See Elmendorf and Gabler.
Gadd, Charles J., Lebanon, Pa. Head-support for screw-spikes. No. 1,062,905; May 27; Gaz. vol. 190; p. 910.
Gadermayr, Hermann, Bischopswerda, Germany. Gas-generator. No. 1,061,466; May 13; Gaz. vol. 190; p. 345.
Gagné, Joseph O., Sherbrooke, Quebec, Canada. Steam-boiler. No. 1,062,451; May 20; Gaz. vol. 190; p. 717.
Gagnon, Joseph E., and A. Kaufmann, Philadelphia, Pa. Type-case. No. 1,062,392; May 20; Gaz. vol. 190; p. 699.
Gaisman, Henry J., assignor to Auto Strop Company, New York, N. Y. Razor-strop scraper and surfacer. No. 1,062,393; May 20; Gaz. vol. 190; p. 699.
Galbraith, Andrew S., Baxter county, Ark. Flood-gate. No. 1,063,123; May 27; Gaz. vol. 190; p. 981.
Gale, Ernest L., Sr., Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Brake control for elevators. No. 1,060,836; May 6; Gaz. vol. 190; p. 94.
Gale, Walter L., assignor to The Monarch Typewriter Company, Syracuse, N. Y. Type-writing machine. No. 1,060,592; May 6; Gaz. vol. 190; p. 10.
Gallagher, Demetrius A., York, Pa. Treating tobacco. No. 1,062,093; May 20; Gaz. vol. 190; p. 598.
Gallaher, Edward B., assignor to Clover Manufacturing Company, New York, N. Y. Motor-vehicle. No. 1,062,452; May 20; Gaz. vol. 190; p. 718.
Gallup, Ethel C., New York, N. Y. Railway-tie. No. 1,063,023; May 27; Gaz. vol. 190; p. 947.
Gamboni, Walter, Olema, Cal. Railway-car hose-coupling. No. 1,061,908; May 13; Gaz. vol. 190; p. 491.
Gans, Bertram J., assignor to Cameron and Company Incorporated, Napa, Cal. Button-sewing-machine attachment. No. 1,062,328; May 20; Gaz. vol. 190; p. 678.
Gardy, Henry D., Philadelphia, Pa. Amusement apparatus. No. 1,062,702; May 27; Gaz. vol. 190; p. 842.
Garland, Claude M., Collingswood, assignor to Camden Iron Works, Camden, N. J. Gas-producer. No. 1,063,024; May 27; Gaz. vol. 190; p. 948.
Gärtner, Hermann, Lintorf, near Dusseldorf, Germany. Cutter-box for making the points of wire nails and the like. No. 1,062,394; May 20; Gaz. vol. 190; p. 700.
Garvin, George W. (See Sprint, John W., assignor.)
Gathmann, Emil, Baltimore, Md. Ingot. No. 1,061,467; May 13; Gaz. vol. 190; p. 345.
Gau, Joseph F., St. Paul, Minn. Razor-stropping device. No. 1,061,468; May 13; Gaz. vol. 190; p. 346.
Gaul, Andrew, Jr. (See Hyde and Gaul.)
Gawley, Thomas H., assignor of one-sixth to W. H. Byrnes, Jr., and one-sixth to E. C. Byrnes, New Orleans, La. Apparatus for raising sunken vessels. No. 1,062,963; May 27; Gaz. vol. 190; p. 928.
Gay, Joseph H., Newark, N. J. Hide-splitting machine. No. 1,061,604; May 13; Gaz. vol. 190; p. 395.
Gedney, Lane, Orchards, Wash. Garden-weeder. No. 1,061,237; May 6; Gaz. vol. 190; p. 231.
Gehant, Henry W., West Brooklyn, Ill. Extension-cuff for tops of boots. No. 1,061,740; May 13; Gaz. vol. 190; p. 441.
Geils, Henry G., Chicago Heights, Ill. Reversible friction-roll automobile-wrench. No. 1,061,367; May 13; Gaz. vol. 190; p. 310.
Geisinger, John, Newport News, Va. Safety-valve for water-gages. No. 1,061,832; May 13; Gaz. vol. 190; p. 467.
Gellen, Adalbert, Glinik Maryampolski, Galicia, Austria-Hungary. Apparatus for the recovery of acid used in refining oils. No. 1,063,025; May 27; Gaz. vol. 190; p. 948.
General Electric Company. (See Alexanderscn, Ernst F. W., assignor.)
General Electric Company. (See Basch, David, assignor.)
General Electric Company. (See Batchelder, Asa F., assignor.)
General Electric Company. (See Creighton, Elmer E. F., assignor.)
General Electric Company. (See Cubelic, Ludwig, assignor.)
General Electric Company. (See Dempster, John T. H., assignor.)
General Electric Company. (See Dolivo-Dobrowolsky, Michael, assignor.)
General Electric Company. (See Eagar and Williams, assignors.)
General Electric Company. (See Emmet, William L. R., assignor.)
General Electric Company. (See Forner, Georg, assignor.)
General Electric Company. (See Guay, Emile J., assignor.)
General Electric Company. (See Hall, John L., assignor.)
General Electric Company. (See Haskins, Caryl D., assignor.)
General Electric Company. (See Howell, John W., assignor.)
General Electric Company. (See Junggren, Oscar, assignor.)
General Electric Company. (See Krueger, Carl R., assignor.)
General Electric Company. (See Lyle, Fred W., assignor.)
General Electric Company. (See Merritt, Matthew M., assignor.)
General Electric Company. (See Miller, John, assignor.)
General Electric Company. (See Petermöller, Franz J., assignor.)
General Electric Company. (See Pratt, William H., assignor.)
General Electric Company. (See Rice, Richard H., assignor.)
General Electric Company. (See Sargent, Howard R., assignor.)
General Electric Company. (See Siebert, Werner, assignor.)
General Electric Company. (See Stanley, William, assignor.)
General Electric Company. (See Steinbecker, Karl, assignor.)
General Electric Company. (See Steinmetz, Charles P., assignor.)
General Electric Company. (See Stumpf and Schroeder, assignors.)
General Electric Company. (See Wedmore and Hamlyn, assignors.)
General Fire Extinguisher Company. (See Swan, John P., assignor.)
General Fireproofing Company, The. (See White, Herbert E., assignor.)
General Manifold and Printing Company, The. (See Lewis, Edward Z., assignor.)
General Railway Equipment Company. (See Kleinschmidt, Edward E., assignor.)
Genesy, Baptiste J., Reno, Nev. Phonograph brake and stop. No. 1,061,282; May 13; Gaz. vol. 190; p. 281.
Geo. Borgfeldt & Co. (See Phillips, Thomas W. S., assignor.)
Gerber, Arthur U., Chicago, Ill. Telephone-signal. No. 1,061,238; May 6; Gaz. vol. 190; p. 232.
Gerdom, Gregory, Watervliet, N. Y., assignor to Ordnance Improvement Company. Obturator. No. 1,062,646; May 27; Gaz. vol. 190; p. 825.
Gerhard, Elmer S., assignor of one-half to J. H. Evans, Philadelphia, Pa. Photographic plate and paper developing machine. No. 1,061,667; May 13; Gaz. vol. 190; p. 416.
Gerstmayr, Anton. (See Siebert and Gerstmayr.)
Gesbeck, Charles H., and J. Semmerling, Chicago, Ill. Spirit-level. No. 1,062,964; May 27; Gaz. vol. 190; p. 929.
Gesellschaft für Drahtlose Telegraphie m. b. H. (See Arco, Georg von, assignor.)
Gesellschaft für Patentverwertung m. b. H. (See Oertel, Karl, assignor.)
Gibbs, James E., Covington, Ky. Combined door check and spring. No. 1,062,575; May 20; Gaz. vol. 190; p. 758.
Giblin, Charles, Cleveland, Ohio. Ironing-table. No. 1,061,833; May 13; Gaz. vol. 190; p. 467.
Giddens, Lewis D., Wilson, N. C. Clock. No. 1,061,741; May 13; Gaz. vol. 190; p. 441.
Giffen, Frank M., San Antonio, Tex. Electric soldering-iron. No. 1,061,170; May 6; Gaz. vol. 190; p. 207.
Gilbert, Henry J., Saginaw, Mich. Pulley. No. 1,062,703; May 27; Gaz. vol. 190; p. 842.
Gilbert, Henry J., Saginaw, Mich. Pulley. No. 1,062,825; May 27; Gaz. vol. 190; p. 882.
Gilchrist, John E., South Bend, Wash. Tag-line clevis. No. 1,060,675; May 6; Gaz. vol. 190; p. 38.
Gilchrist, John E., South Bend, Wash. Logging or butt chain lead-block. No. 1,060,676; May 6; Gaz. vol. 190; p. 38.
Giles, Chesley T. J., Greenville, S. C. Hinge. No. 1,063,158; May 27; Gaz. vol. 190; p. 992.
Giles, Henry S., *et al.* (See Nielsen, Rasmus, assignor.)
Gillett, George S., Halfway, assignor of one-half to C. Black, Wallowa, Oreg. Water-motor. No. 1,061,605; May 13; Gaz. vol. 190; p. 395.
Gilliam, Walter L., St. Louis, Mo. Filtering material. No. 1,061,368; May 13; Gaz. vol. 190; p. 311.
Ginaca, Henry G., assignor to Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii. Cutting-tube for fruit-treating machines. No. 1,060,750; May 6; Gaz. vol. 190; p. 64.
Ginn, Percy E. (See Scott, Charles D., assignor.)
Giolitti, Federico, Rome, assignor to Societa Anonima Italiana Gio. Ansaldo Armstrong & Co., Genoa, Italy. Manufacture of armor-plates for the protection of ships and other steel objects. No. 1,061,998; May 20; Gaz. vol. 190; p. 565.

Gipe, Isaac S., Rapid City, S. D. Combined ironing-board and step-ladder. No. 1,061,834; May 13; Gaz. vol. 190; p. 468.
Girard, Joseph, *et al.* (See Carrau, Edward, assignor.)
Giset, Olaf E., assignor to A. Wittnauer & Co., New York, N. Y. Indicating mechanism for timepieces. No. 1,061,171; May 6; Gaz. vol. 190; p. 208.
Gisholt Machine Company. (See Miller, William L., assignor.)
Glinski, Barney J. (See Wajda, Floryan, assignor.)
Gobbe, Emile, Jumet, Belgium. Treating pulverulent substances. No. 1,061,469; May 13; Gaz. vol. 190; p. 346.
Gobbi, Emilio, Asnières, France. Carbureter. No. 1,061,835; May 13; Gaz. vol. 190; p. 468.
Godwin, Benjamin, Marple, England. Friction-clutch. No. 1,061,172; May 6; Gaz. vol. 190; p. 208.
Goeiz, Charles, Mineral Point, Wis. Wrench. No. 1,060,752; May 6; Gaz. vol. 190; p. 65.
Goersch, Friedrich W. J., Cleveland, Ohio. Swimming device. No. 1,062,587; May 27; Gaz. vol. 190; p. 804.
Gohike, Max, Berlin, and W. Dahlmann, Tegel, near Berlin, Germany. Mechanism for measuring the play between relatively movable parts. No. 1,062,566; May 20; Gaz. vol. 190; p. 755.
Gohmann, Arthur, assignor to Stettiner Chamotte-Fabrik Actien-Gesellschaft vorm. Didier, Stettin, Germany. Gas-producing oven. No. 1,060,837; May 6; Gaz. vol. 190; p. 94.
Gold, Egbert H., Chicago, Ill. Drainage-fitting. No. 1,061,064; May 6; Gaz. vol. 190; p. 175.
Goldberg Calculating Machine Company. (See Goldberg, Hyman E., assignor.)
Goldberg, Hyman E., assignor to Goldberg Calculating Machine Company, Chicago, Ill. Calculating-machine. No. 1,061,606; May 13; Gaz. vol. 190; p. 395.
Golden, Maximilian K., Detroit, Mich. Electric vibrator. No. 1,061,065; May 6; Gaz. vol. 190; p. 175.
Goldstein, William. (See Clavans, Morris Z., assignor.)
Gollobin, Harry A., and N. A. Bornstein, assignors to The Dental Denture Improvement Company, Newark, N. J. Removable bridge for teeth. No. 1,062,233; May 20; Gaz. vol. 190; p. 646.
Goodman, Charles. (See Wicks and Goodman.)
Goodman, Nathan J., St. Louis, Mo. Adjustable protector for laundried shirts. No. 1,062,150; May 20; Gaz. vol. 190; p. 618.
Goodridge, Gilbert W., assignor to The Bryant Electric Company, Bridgeport, Conn. Attachment-plug. No. 1,063,026; May 27; Gaz. vol. 190; p. 949.
Goodson, George A., Minneapolis, Minn. Plated metallic body. No. 1,061,066; May 6; Gaz. vol. 190; p. 176.
Goodwine, Frank J. (See Hobart, Darwin, assignor.)
Goodyear, Watson E. (See Bristol and Goodyear.)
Gordon, Albert A., Jr., Worcester, Mass., assignor to Crompton & Knowles Loom Works. Shedding mechanism for looms. No. 1,060,977; May 6; Gaz. vol. 190; p. 144.
Gordon, Albert A., Jr., Worcester, Mass., assignor to Crompton & Knowles Loom Works. Shedding mechanism for looms. No. 1,062,151; May 20; Gaz. vol. 190; p. 618.
Gordon, Orin L., Robinson, Ill. Scale. No. 1,060,677; May 6; Gaz. vol. 190; p. 38.
Gore, Albert J., Washington, D. C. Hand paper-folder and envelop-filler. No. 1,063,124; May 27; Gaz. vol. 190; p. 981.
Gorham, Eugene I., Mount Union, Iowa. Cultivator attachment. No. 1,062,329; May 20; Gaz. vol. 190; p. 678.
Goss, Harry T., Rutherford, N. J., and J. W. Bryce, Brooklyn, N. Y. Time recorder and indicator. No. 1,061,607; May 13; Gaz. vol. 190; p. 395.
Goss Printing Press Company, The. (See Evensen, William, assignor.)
Gould Coupler Co. (See Jepson and McGary, assignors.)
Gowan, William, Johannesburg, Transvaal. Rotary grinding-machine. No. 1,062,094; May 20; Gaz. vol. 190; p. 598.
Gowey, Paul E., Seattle, Wash. Inlet-valve for flush-tanks. No. 1,063,125; May 27; Gaz. vol. 190; p. 981.
Grabein, Reinhold, Forst, Germany. Mechanism for supplying single hairs to a spinning-machine. No. 1,062,152; May 20; Gaz. vol. 190; p. 618.
Gradick, Wiley N., assignor to Woldert Grocery Company, Tyler, Tex. Nutcracker. No. 1,061,470; May 13; Gaz. vol. 190; p. 346.
Grady, James, New York, assignor to The Columbia Machine Works & Malleable Iron Co., Brooklyn, N. Y. Bending-machine. No. 1,061,067; May 6; Gaz. vol. 190; p. 176.
Graf, Emil, Elberfeld, Germany. Loom. No. 1,061,836; May 13; Gaz. vol. 190; p. 468.
Graham, James J., Jacksonville, Fla. Sanitary closet. No. 1,062,453; May 20; Gaz. vol. 190; p. 718.
Graham, Robert S., and R. P. Morse, assignors of one-third to W. E. Graham, New York, N. Y. Cushion-heel. No. 1,060,751; May 6; Gaz. vol. 190; p. 64.
Graham, William E. (See Graham and Morse, assignors.)
Grahl, Gustav de, Zehlendorf, near Berlin, Germany. Apparatus for controlling the artificial blast in locomotives. No. 1,061,668; May 13; Gaz. vol. 190; p. 417.
Grahn, Henry. (See Marten, Grahn, and Andresen.)
Gramling, Alajos, Borossebes, Austria-Hungary. Safety transport device for mountain-railways. No. 1,062,454; May 20; Gaz. vol. 190; p. 718.
Granger, Arthur O. (See Herzog, Joseph, assignor.)
Gray, David E., White Plains, N. Y. Shuttle and picker-stick check. No. 1,062,395; May 20; Gaz. vol. 190; p. 700.
Gray Telephone Pay Station Company, The. (See Long, George A., assignor.)
Graybill, John M., Gary, Ind. Sash-weight. No. 1,061,742; May 13; Gaz. vol. 190; p. 442.
Green, Ira J., Hoskins, Oreg. Device for holding vine-supports. No. 1,060,593; May 6; Gaz. vol. 190; p. 10.
Green, Isidor, *et al.* (See Saltman, Philip, assignor.)
Green, Michael B., Memphis, Tenn. Compression-box. No. 1,061,837; May 13; Gaz. vol. 190; p. 468.
Greenberg, Louis, *et al.* (See Saltman, Philip, assignor.)
Greenberg, Samuel E., Chicago, Ill. Door-securing device. No. 1,062,965; May 27; Gaz. vol. 190; p. 929.
Greene, Frederick R. (See Fournia, John, assignor.)
Greene, John, Salt Lake City, Utah. Game. No. 1,061,173; May 6; Gaz. vol. 190; p. 209.
Greenfield, William R., Verona, assignor to Van Orden Corset Company, Newark, N. J. Corset. No. 1,062,276; May 20; Gaz. vol. 190; p. 660.
Greenhalgh, Harry. (See Greenhalgh, John H. and H.)
Greenhalgh, John H., Woonsocket, R. I., and H. Greenhalgh, Blackstone, Mass. Let-off mechanism for looms. No. 1,062,455; May 20; Gaz. vol. 190; p. 719.
Greenidge, Vivian, Newton Highlands, Mass. Screw-hinge. No. 1,060,678; May 6; Gaz. vol. 190; p. 39.
Greenleaf, William H., Jr., and P. P. Moore, Gloucester, Mass. Jointing device. No. 1,062,456; May 20; Gaz. vol. 190; p. 719.
Greenwood, Williston W., Los Angeles, Cal. Infant's stool and bath holder. No. 1,062,704; May 27; Gaz. vol. 190; p. 843.
Gregg Company, The. (See Gregg, William C., assignor.)
Gregg, William C., assignor to The Gregg Company, Limited, Hackensack, N. J. Metal underframe for car construction. No. 1,062,153; May 20; Gaz. vol. 190; p. 619.
Gregg, William E. (See Hamilton, Frank L., assignor.)
Gregory, Arthur D., and F. G. Sanders, Albany, Oreg. Attachment for metal planers and shapers. No. 1,062,396; May 20; Gaz. vol. 190; p. 700.
Gregson, William, Fort Worth, Tex., assignor of one-half to J. A. Wisherd, Stanton, Nebr. Gas-generator. No. 1,061,936; May 13; Gaz. vol. 190; p. 503.
Griffin, Charles N., *et al.* (See Alyea, Courtland P., assignor.)
Griffin, James C., assignor to Griffin Manufacturing Company, Erie, Pa. Sash-fastener. No. 1,061,283; May 13; Gaz. vol. 190; p. 282.
Griffin Manufacturing Company. (See Griffin, James C., assignor.)
Griffis, Samuel A., Peoria, assignor, by mesne assignments, to J. V. Brokaw, Canton, Ill. Boiler. No. 1,061,174; May 6; Gaz. vol. 190; p. 209.
Griffiths, William U., Philadelphia, Pa. Pump. No. 1,060,594; May 6; Gaz. vol. 190; p. 10.
Grimme, Natalis & Co., Commanditgesellschaft auf Actien Brunswick. (See Stemmler and Schaller, assignors.)
Grimshaw, Frederick, Wanaque, N. J. Automatic window-lock. No. 1,062,234; May 20; Gaz. vol. 190; p. 646.
Grip Nut Company. (See Flint, Louis J., assignor.)
Grob, Fred C., Metamora, Ill. Combined corn-popper and peanut-roaster. No. 1,061,608; May 13; Gaz. vol. 190; p. 396.
Groenendyke, John. (See Groenendyke, William, assignor.)
Groenendyke, William, assignor of one-half to J. Groenendyke, Passaic, N. J. Seat or stool. No. 1,060,838; May 6; Gaz. vol. 190; p. 94.
Grondahl, Einar L., Seattle, Wash. Game apparatus. No. 1,061,999; May 20; Gaz. vol. 190; p. 565.
Groschopp, Friedrich W., assignor to Kampfe Bros., New York, N. Y. Safety skinning-knife. No. 1,062,906; May 27; Gaz. vol. 190; p. 910.
Grossarth, Albert A., and T. E. Barker, Chicago, Ill. Trolley-controlling device. No. 1,061,471; May 13; Gaz. vol. 190; p. 346.
Grover, Frank H., Seattle, Wash. Hydraulic motor. No. 1,061,937; May 13; Gaz. vol 190; p. 503.
Gruber, John A., assignor of one-half to W. H. Hambaugh, Cincinnati, Ohio. Safety device to keep wheels from sliding. No. 1,061,369; May 13; Gaz. vol. 190; p. 311.
Grundeen, Erick A., Escanaba, Mich. Stump-puller. No. 1,061,370; May 13; Gaz. vol. 190; p. 311.
Gruss, Lucien R., San Francisco, assignor to Auto Compressed-Air Wheel Company, Chico, Cal. Vehicle-wheel. No. 1,061,537; May 13; Gaz. vol. 190; p. 371.
Guay, Emile J., Lynn, Mass., assignor to General Electric Company. Magazine arc-lamp. No. 1,062,907; May 27; Gaz. vol. 190; p. 910.
Guernsey, Charles C., assignor of one-half to F. O. Libbey, Lawrence, Mass. Wrench. No. 1,061,600; May 13; Gaz. vol. 190; p. 396.
Guiberson, Samuel A., Jr., and H. Mead, Coalinga, Cal.; said Mead assignor to said Guiberson. Well-casing shoe. No. 1,062,647; May 27; Gaz. vol. 190; p. 825.
Guice, Duke, Greenville, Ala. Crate. No. 1,061,371; May 13; Gaz. vol. 190; p. 311.
Guiterman, Kenneth S., New York, N. Y. Electrolysis and apparatus therefor. No. 1,062,966; May 27; Gaz. vol. 190; p. 929.
Gummi (U. S. A.) Limited. (See Olsson, Zacharias, assignor.)

Guricke, Arthur B., Glashütte, Germany. Traveling-case for type-writing machines, calculating-machines, and the like. No. 1,062,277; May 20; Gaz. vol. 190; p. 660.

Guy, Albert E., Pittsburgh, Pa. Indicating torque-meter. No. 1,061,372; May 13; Gaz. vol. 190; p. 312.

Guy, John F., and J. H. Blom, Everett, Wash. Weed-pulling device. No. 1,061,175; May 6; Gaz. vol. 190; p. 210.

H. McFarlane & Company. (See Heile and Snyder, assignors.)

H. Mueller Mfg. Co. (See Mueller, Philip, assignor.)

H. D. Smith & Company, The. (See Thomson, William S., assignor.)

H. K. Mulford Company, The. (See Turner, Joseph L., assignor.)

Haarmann, August, Osnabrück, Germany. Means for fastening the rails to the sleepers. No. 1,061,538; May 13; Gaz. vol. 190; p. 372.

Hackley, George T., Los Angeles, Cal. Pressure-gage. No. 1,061,472; May 13; Gaz. vol. 190; p. 347.

Hadfield, Robert A., Sheffield, England. Making alloys. No. 1,061,373; May 13; Gaz. vol. 190; p. 312.

Hadka, Joseph, Chicago, Ill. Automobile-fender. No. 1,062,705; May 27; Gaz. vol. 190; p. 843.

Hadka, Joseph, Chicago, Ill. Automobile-fender. No. 1,062,706; May 27; Gaz. vol. 190; p. 843.

Hadley, Artemas N., Indianapolis, Ind. Stalk-harvester. No. 1,061,473; May 13; Gaz. vol. 190; p. 347.

Hadley, Walter E., Coatesville, Pa. Clothes-line holder. No. 1,062,457; May 20; Gaz. vol. 190; p. 719.

Haertel, Georg, Berlin, Germany. Apparatus for administering narcotics. No. 1,061,539; May 13; Gaz. vol. 190; p. 372.

Haff, Howell W. (See Andrick, Lowe, and Haff.)

Haff, Maximillian M. (See Willson and Haff.)

Hagerman, Alfred, Chanute, Kans. Hay-derrick. No. 1,061,838; May 13; Gaz. vol. 190; p. 469.

Haggard, John D., assignor to Haggard & Marcusson Company, Chicago, Ill. Metallic fabric. No. 1,062,967; May 27; Gaz. vol. 190; p. 930.

Haggard & Marcusson Company. (See Haggard, John D., assignor.)

Hahn, Elgy, Milwaukee, Wis. Nut construction. No. 1,062,000; May 20; Gaz. vol. 190; p. 565.

Hahn, Otto W., San Francisco, Cal. Gear-shifting-lever lock. No. 1,061,938; May 13; Gaz. vol. 190; p. 503.

Hahn, William B., Paris, Tex. Loading and unloading mechanism for mixing-drums or other receptacles. No. 1,063,159; May 27; Gaz. vol. 190; p. 992.

Hallwood, Ernest A., Morley, England. Apparatus for igniting miners' safety-lamps. No. 1,060,978; May 6; Gaz. vol. 190; p. 145.

Hainisch, Victor, Vienna, Austria-Hungary. Cork-extractor. No. 1,062,458; May 20; Gaz. vol. 190; p. 720.

Haiss, Hugo, Marietta, Pa. Forging-press. No. 1,061,889; May 13; Gaz. vol. 190; p. 469.

Halfpenny, James M., assignor to J. M. Halfpenny and L. D. Roberts, Juniata, Pa. Railway-tie and rail-seat. No. 1,062,459; May 20; Gaz. vol. 190; p. 720.

Hall, Charles E. (See Kesselhuth, Edward H., assignor.)

Hall, Harvey H., assignor to The Ideal Disappearing Wall Bed Company, Denver, Colo. Disappearing wall-bed. No. 1,060,753; May 6; Gaz. vol. 190; p. 65.

Hall, Hiram P., New York, N. Y., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Dipping-machine. No. 1,062,001; May 20; Gaz. vol. 190; p. 566.

Hall, Holmes. (See Weist, Martin S., assignor.)

Hall, Jay H., assignor to The Electric Controller and Manufacturing Company, Cleveland, Ohio. System of control for electric controllers. No. 1,062,707; May 27; Gaz. vol. 190; p. 843.

Hall, Jay H., assignor to The Electric Controller and Manufacturing Company, Cleveland, Ohio. Control system for electric motors. No. 1,062,708; May 27; Gaz. vol. 190; p. 844.

Hall, John L., Schenectady, N. Y., assignor to General Electric Company. Projector control. No. 1,060,754; May 6; Gaz. vol. 190; p. 65.

Halliday, Samuel J., Watervliet, assignor, by mesne assignments, to Cluett, Peabody & Co., Troy, N. Y. Sewing-machine gage. No. 1,062,908; May 27; Gaz. vol. 190; p. 911.

Hambaugh, W. H. (See Gruber, John A., assignor.)

Hambleton, George, Goffstown, N. H., assignor to U. S. Bobbin & Shuttle Co., Providence, R. I. Bobbin. No. 1,061,239; May 6; Gaz. vol. 190; p. 232.

Hamel, Norbert D., Gardner, Mass. Piston packing-ring. No. 1,062,095; May 20; Gaz. vol. 190; p. 599.

Hamilton, Abram S., Nanaimo, British Columbia, Canada. Detonator-magazine. No. 1,060,979; May 6; Gaz. vol. 190; p. 145.

Hamilton, Frank L., assignor of one-half to W. E. Gregg, Ford City, Pa. Knockdown box. No. 1,061,068; May 6; Gaz. vol. 190; p. 176.

Hamilton and Hamilton, Jr. (See Fuller, James A., assignor.)

Hamlyn, William P. (See Wedmore and Hamlyn.)

Hammann, John, Northampton, Mass. Machine-vise. No. 1,060,980; May 6; Gaz. vol. 190; p. 145.

Hammick, Walter, Pittsburg, Kans. Gas-producer. No. 1,060,755; May 6; Gaz. vol. 190; p. 65.

Hancock, Harry H., Swampscott, Mass. Means for making up and piling pages of type. No. 1,063,027; May 27; Gaz. vol. 190; p. 949.

Handiges, Philip T., East Cleveland, assignor to The Damascus Brake Beam Company, Cleveland, Ohio. Brake-beam fulcrum. No. 1,062,330; May 20; Gaz. vol. 190; p. 678.

Handy Manufacturing Company, The. (See Becker, Paul E., assignor.)

Haney, John. (See Thomas and Haney.)

Hang, Edward L. (See Jones, Hang, and McConnell.)

Hannan, Benjamin R., Lawtey, Fla. Electric-lamp holder. No. 1,062,460; May 20; Gaz. vol. 190; p. 720.

Hano, Philip, New York, N. Y. Manifolding device. No. 1,062,968; May 27; Gaz. vol. 190; p. 930.

Hanrahan, John E., assignor to The Chesapeake Addressing Company, Baltimore, Md. Single-type-casting attachment for linotype-machines. No. 1,060,679; May 6; Gaz. vol. 190; p. 39.

Hansen, Anton, Greensburg, Pa. Valve. No. 1,061,610; May 13; Gaz. vol. 190; p. 396.

Hansen, Frederick, Woodbine, Iowa. Mail-bag catcher. No. 1,062,461; May 20; Gaz. vol. 190; p. 720.

Hansen, John M., Pittsburgh, Pa. Manufacture of car-wheels. No. 1,061,284; May 13; Gaz. vol. 190; p. 282.

Hansen, Syver, Dugald, Manitoba, Canada. Insect-collecting machine. No. 1,062,648; May 27; Gaz. vol. 190; p. 825.

Hanson, Bengt M. W., assignor to Pratt & Whitney Company, Hartford, Conn. Forming-machine. No. 1,063,160; May 27; Gaz. vol. 190; p. 993.

Harbeck, Jervis R., assignor to Detroit Can Company, Detroit, Mich. Paper-walled can. No. 1,062,002; May 20; Gaz. vol. 190; p. 566.

Harber, John S., Youngstown, Ohio. Inner-tube valve. No. 1,061,069; May 6; Gaz. vol. 190; p. 176.

Harbison, Daniel L., Pittsburgh, Pa. Envelop-moistener. No. 1,062,397; May 20; Gaz. vol. 190; p. 700.

Hardsocg Wonder Drill Company, The. (See Smith, Clark J., assignor.)

Harlan, Alfred, Indianapolis, Ind. Spring-lock. No. 1,062,909; May 27; Gaz. vol. 190; p. 911.

Harley, Charles, assignor to Ludington Basket Company, Ludington, Mich. Basket-machine. No. 1,061,939; May 13; Gaz. vol. 190; p. 504.

Harley, William S., Milwaukee, Wis. Stand-latch for motor-cycles. No. 1,062,003; May 20; Gaz. vol. 190; p. 566.

Harlow, John S. (See Bell, Charles W., assignor.)

Harnishfeger, Alexander, assignor of one-half to M. A. Strouse, Evansville, Ind. Tire-support. No. 1,062,462; May 20; Gaz. vol. 190; p. 721.

Harnly, Albert K., Reading, Pa. Locking device for fuel-supply valves. No. 1,062,154; May 20; Gaz. vol. 190; p. 619.

Harrington, Laura, Davenport, Iowa. Egg-case. No. 1,061,374; May 13; Gaz. vol. 190; p. 312.

Harris, Joseph D., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa. Flexible-hose protector. No. 1,062,155; May 20; Gaz. vol. 190; p. 619.

Harris, Max. (See Kraemer, Frank, assignor.)

Harris, Samuel J., Randolph, Mass. Boot and shoe. No. 1,062,826; May 27; Gaz. vol. 190; p. 883.

Harris, William L., Petersburg, Va. Peanut-planter. No. 1,063,028; May 27; Gaz. vol. 190; p. 949.

Harrison, Henry H., Boston, Mass. Dried fruit and drying the same. No. 1,062,069; May 27; Gaz. vol. 190; p. 930.

Harrison, James, Anderson, S. C. Wire-stretcher. No. 1,062,331; May 20; Gaz. vol. 190; p. 678.

Harrison Safety Boiler Works. (See Wallem, Axel B., assignor.)

Harrisson, James A. G., Potchefstroom, Transvaal. Adjustment for regulating the discharge of liquids over crest-weirs and the like. No. 1,061,240; May 6; Gaz. vol. 190; p. 232.

Harsey, Haskell, assignor of one-half to J. H. Senterfitt, Andalusia, Ala. Puller. No. 1,061,840; May 13; Gaz. vol. 190; p. 470.

Hart, Edward, Easton, Pa. Making potash alum. No. 1,062,278; May 20; Gaz. vol. 190; p. 661.

Hart, Hubert C., Unionville, Conn. Set-screw. No. 1,061,176; May 6; Gaz. vol. 190; p. 210.

Hart Manufacturing Company, The. (See Palmer, Granville E., assignor.)

Hartel, William, Cleveland, Ohio. Power-drill. No. 1,061,474; May 13; Gaz. vol. 190; p. 348.

Hartbill, Alfred W., and I. E. Stamets, Elkhart, Ind. Trombone-slide. No. 1,062,279; May 20; Gaz. vol. 190; p. 661.

Hartley, William, Atlanta, Ind. Mold for concrete posts. No. 1,060,680; May 6; Gaz. vol. 190; p. 39.

Harvey, Matthew, Walsall, England. Portable crucible-furnace. No. 1,062,970; May 27; Gaz. vol. 190; p. 930.

Harvey, Wesley G., Wellsville, N. Y. Sad-iron cleaner and waxer. No. 1,062,332; May 20; Gaz. vol. 190; p. 679.

Harwood, Sumpter L., Dublin, Ga. Fire-extinguisher. No. 1,062,463; May 20; Gaz. vol. 190; p. 721.

Haseltine, Stacy B., assignor to W. H. Miner, Chicago, Ill. Heater-door fastener. No. 1,060,756; May 6; Gaz. vol. 190; p. 66.

Hashim, Hashim S., Raymond, Wash. Lock. No. 1,061,177; May 6; Gaz. vol. 190; p. 210.

Hawkins, Caryl D., Schenectady, N. Y., assignor to General Electric Company. Thermal cut-out. No. 1,060,757; May 6; Gaz. vol. 190; p. 66.

Hastings, Alonzo L., Chicago, Ill. Side frame for car-trucks. No. 1,061,611; May 13; Gaz. vol. 190; p. 397.

Hastings, Edward A. (See Moore, Robert C., assignor.)

Hastings, Ruben C. M., assignor to The International Telephone Co., Columbus, Ohio. Selective system of telephony. No. 1,061,285; May 13; Gaz. vol. 190; p. 283.

Hastings, Ruben C. M., assignor to The International Telephone Co., Columbus, Ohio. Selecting apparatus for telephone systems. No. 1,061,286; May 13; Gaz. vol. 190; p. 283.

Hastings, Ruben C. M., assignor to The International Telephone Co., Columbus, Ohio. Telephone system. No. 1,061,287; May 13; Gaz. vol. 190; p. 283.

Hastings, Ruben C. M., assignor to The International Telephone Co., Columbus, Ohio. Telephone system. No. 1,062,004; May 20; Gaz. vol. 190; p. 567.

Hathaway, M. C. (See Wiebe, Sigurd, assignor.)

Hattersley and Sons, George. (See Monk, William B., assignor.)

Haug, Charles F., St. Paul, Minn. Sandpapering-machine. No. 1,060,595; May 6; Gaz. vol. 190; p. 11.

Hausmann, Bernard, San Francisco, Cal., assignor to The Pacific Window Company, Inc. Lifting appliance. No. 1,062,971; May 27; Gaz. vol. 190; p. 931.

Hauss, David J., Aurora, Ind. Electric furnace. No. 1,060,839; May 6; Gaz. vol. 190; p. 95.

Hawaiian Pineapple Company. (See Ginaca, Henry G., assignor.)

Hawk, Clara M., executor. (See Hawk, Franklin A.)

Hawk, Franklin A., deceased, Central Point, Oreg.; C. M. Hawk, executor. Combined baby jumper and swing. No. 1,061,669; May 13; Gaz. vol. 190; p. 417.

Haworth, Clement V. (See Lynde, Frederick C., assignor.)

Hayes, Albert, Salt Lake City, Utah. Needle or stylus. No. 1,061,070; May 6; Gaz. vol. 190; p. 177.

Hayes, Albert, Salt Lake City, Utah. Sound-box. No. 1,061,071; May 6; Gaz. vol. 190; p. 177.

Hayes, Albert, Salt Lake City, Utah. Mounting a vibrating diaphragm. No. 1,061,072; May 6; Gaz. vol. 190; p. 177.

Haymes, Elmer R., Marshfield, Mo. Combination stock and box car. No. 1,060,981; May 6; Gaz. vol. 190; p. 146.

Haynes, Hobart F., Syracuse, N. Y. Tack-placer. No. 1,062,464; May 20; Gaz. vol. 190; p. 722.

Haythornthwaite, John W., Nelson, England. Apparatus for coating confectionery. No. 1,063,029; May 27; Gaz. vol. 190; p. 950.

Heacock, Benjamin L., assignor to The Schultz Underwear Company, Reading, Pa. Undergarment. No. 1,062,398; May 20; Gaz. vol. 190; p. 701.

Heany, John A., Washington, D. C. Electric welding. No. 1,061,375; May 13; Gaz. vol. 190; p. 312.

Heany, John A., Washington, D. C. Electrode for electric welding-machines. No. 1,061,376; May 13; Gaz. vol. 190; p. 313.

Heany, John A., Washington, D. C. Electric welding system. No. 1,061,377; May 13; Gaz. vol. 190; p. 313.

Heany, John A., Washington, D. C. Electric welding-machine. No. 1,061,378; May 13; Gaz. vol. 190; p. 313.

Hebden, John C., Providence, R. I. Jack-spool. No. 1,062,005; May 20; Gaz. vol. 190; p. 567.

Hecht, Leopold. (See Bosch, Mittasch, and Hecht.)

Hedrick, Perry L., El Centro, Cal. Flume-gate. No. 1,062,778; May 27; Gaz. vol. 190; p. 866.

Hedstrom, John P., Big Rapids, Mich. Carriage-return mechanism for gang-saw sharpeners. No. 1,060,758; May 6; Gaz. vol. 190; p. 66.

Heidelmann, Wilhelm, Brunswick, Germany. Carbureter. No. 1,063,030; May 27; Gaz. vol. 190; p. 950.

Heil, Anton H. (See Johnes, Alfred, assignor.)

Heile, Charles D., Oak Park, and E. G. Snyder, assignors to H. McFarlane & Company, Chicago, Ill. Dump-wagon. No. 1,061,743; May 13; Gaz. vol. 190; p. 442.

Heinrich, Jacob, Fürth, Bavaria, assignor to Metallpapier-Bronzefarben-Blattmetallwerke Aktiengesellschaft, Munich, Germany. Apparatus for composing and decomposing metal-foil molds or forms. No. 1,062,588; May 27; Gaz. vol. 190; p. 804.

Heinrich, Johannes C., Milwaukee, Wis., assignor to Heinrich Manufacturing Company. Boiler-furnace. No. 1,061,379; May 13; Gaz. vol. 190; p. 314.

Heinrich Manufacturing Company. (See Heinrich, Johannes C., assignor.)

Heizer, Alexander L., Chicago, Ill., assignor to Vesta Accumulator Company. Ignition-magneto. No. 1,062,156; May 20; Gaz. vol. 190; p. 620.

Helder, Ferdinand, New York, N. Y. Turn-table attachment for automobiles. No. 1,061,073; May 6; Gaz. vol. 190; p. 177.

Heldmann, Peter, assignor to Maschinenfabrik Moenus A. G., Frankfort-on-the-Main, Germany. Machine for grinding toe-caps and the like. No. 1,060,759; May 6; Gaz. vol. 190; p. 67.

Hellstrom, Frank O., Grove, N. D. Rail-support. No. 1,061,475; May 13; Gaz. vol. 190; p. 348.

Hellstrom, Gustaf F., Sr. and Jr., *et al.* (See Nordstrom, Axel R., assignor.)

Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller for electric motors. No. 1,062,096; May 20; Gaz. vol. 190; p. 599.

Henderson, Clark T., assignor to The Cutler-Hammer Mfg Co., Milwaukee, Wis. Motor-controller. No. 1,062,589; May 27; Gaz. vol. 190; p. 804.

Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor-controller. No. 1,062,590; May 27; Gaz. vol. 190; p. 805.

Hendricks, Fred, Lodi, Cal. Petroleum-burner. No. 1,063,126; May 27; Gaz. vol. 190; p. 981.

Henri, William B., Chicago, Ill. Mailing-folder. No. 1,060,596; May 6; Gaz. vol. 190; p. 11.

Henry, Albert, Paris, France. Fixing rails on permanent ways. No. 1,062,235; May 20; Gaz. vol. 190; p. 646.

Henry, Beulah L., Charlotte, N. C. Hand-bag. No. 1,063,031; May 27; Gaz. vol. 190; p. 950.

Henry T. Adams Company. (See Adams, Henry T., assignor.)

Hepke, Alexander. (See Wischhusen and Hepke.)

Herbert, Patrick J., Dover Plains, N. Y. Non-refillable bottle. No. 1,061,288; May 13; Gaz. vol. 190; p. 284.

Herm. Schroers Maschinenfabrik. (See Hunz, Josef, assignor.)

Herm. Schroers Maschinenfabrik. (See Hunz, Joseph, assignor.)

Héroult, Paul L. T., La Praz, Savoie, assignor to Societe Electro-Metallurgique Francaise, Froges, France. Regulating electric furnaces. No. 1,061,612; May 13; Gaz. vol. 190; p. 397.

Héroux, Edmond, assignor to C. A. Milette, Montreal, Quebec, Canada. Railway-rail. No. 1,061,476; May 13; Gaz. vol. 190; p. 349.

Herr, Herbert T., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa. Steam-turbine. No. 1,061,670; May 13; Gaz. vol. 190; p. 418.

Herron, John J. (See Kennedy and Herron.)

Hershkowitz, Max, and J. Friedman, New York, N. Y. Heater for hat-brims. No. 1,061,909; May 13; Gaz. vol. 190; p. 492.

Herzog, Felix B., deceased, New York, N. Y.; H. Herzog, executrix. Electric signaling apparatus and circuits. No. 1,060,760; May 6; Gaz. vol. 190; p. 67.

Herzog, Henrietta, executrix. (See Herzog, Felix B.)

Herzog, Joseph, New York, N. Y., assignor to A. O. Granger, Montreal, Canada. Incandescent lamp. No. 1,062,591; May 27; Gaz. vol. 190; p. 805.

Herzog, Joseph, New York, N. Y., assignor to A. O. Granger, Montreal, Canada. Incandescent wick-lamp. No. 1,062,592; May 27; Gaz. vol. 190; p. 806.

Hess, Abbie M., and A. L. Tibbals, Kansas City, Kans. Wrinkle-remover. No. 1,062,399; May 20; Gaz. vol. 190; p. 701.

Hess-Bright Manufacturing Company, The. (See Hess, Henry, assignor.)

Hess, Henry, Wawa, assignor to The Hess-Bright Manufacturing Company, Philadelphia, Pa. Journal-bearing. No. 1,062,649; May 27; Gaz. vol. 190; p. 826.

Hessling, Waldemar, assignor to Sturtevant Engineering Company, Limited, London, England. Centrifugal fan or pump. No. 1,062,006; May 20; Gaz. vol. 190; p. 568.

Hetle, Peder, Miner, N. D. Mail receiving and delivering apparatus. No. 1,061,744; May 13; Gaz. vol. 190; p. 442.

Hewett, John E., Wilmington, N. C. Means for locking type-forms in a chase. No. 1,061,745; May 13; Gaz. vol. 190; p. 443.

Hewitt, George H., Jr., Jersey City, N. J. Automobile number carrier and drop. No. 1,061,910; May 13; Gaz. vol. 190; p. 492.

Heyder, Charles C., Hansford, W. Va. Electric heater. No. 1,061,289; May 13; Gaz. vol. 190; p. 284.

Heym, Wilhelm, Berlin, Germany. Cigar-lighter. No. 1,061,074; May 6; Gaz. vol. 190; p. 177.

Hickenbottom, James F., Flora, Ill. Damper for heating-stoves. No. 1,061,911; May 13; Gaz. vol. 190; p. 493.

Hicks, Charles E., and J. N. Hoffman, Forest Grove, Oreg. Mitering device. No. 1,062,541; May 20; Gaz. vol. 190; p. 746.

Higgins, William H. C., Jr., Laporte, Ind. Carbureter. No. 1,062,333; May 20; Gaz. vol. 190; p. 679.

Hildenbrand, Henry, New York, N. Y., assignor of one-half to L. H. Phelps, Westfield, N. J. Barrel-tap. No. 1,062,779; May 27; Gaz. vol. 190; p. 867.

Hilditch, Francis F., Georgetown, Pa. Folding umbrella. No. 1,061,075; May 6; Gaz. vol. 190; p. 178.

Hilditch, Francis F., Georgetown, Pa. Hat-pin-point protector. No. 1,061,076; May 6; Gaz. vol. 190; p. 178.

Hildreth, Lawrence, Lexington, Ky. Animal-trap. No. 1,061,477; May 13; Gaz. vol. 190; p. 349.

Hilfrank, Edward, assignor of two-thirds to E. Bryant and P. C. Brashear, Castleton, N. Y. Safety device for presses or the like. No. 1,062,097; May 20; Gaz. vol. 190; p. 599.

Hilfrank, John W., White Plains, N. Y. Caster. No. 1,061,912; May 13; Gaz. vol. 190; p. 493.

Hill, Claudius M. (See Francisco, George T., assignor.)

Hill Cotton Compress Co. (See Hill, William, assignor.)

Hill, John H. (See Olson, Rorem, and Hill.)

Hill, Oren, North Conway, N. H. Flying-machine. No. 1,062,007; May 20; Gaz. vol. 190; p. 568.

Hill, William, assignor to Hill Cotton Compress Co., Ltd., Alexandria, La. Cotton-compress. No. 1,062,465; May 20; Gaz. vol. 190; p. 722.

Hillegeist, Henry L., assignor to Alma Manufacturing Company of Baltimore City, Baltimore, Md. Trousers-hook and belt-supporter. No. 1,062,334; May 20; Gaz. vol. 190; p. 679.
Hilliard, John D., Jr., and C. E. Parsons, Glens Falls, N. Y. Lightning-arrester. No. 1,061,671; May 13; Gaz. vol. 190; p. 418.
Hilpert, Meier G. (See Cohen and Hilpert.)
Hinde & Dauch Paper Company. (See Emmons, Frederick, assignor.)
Hinds, Ozro H., Le Mars, Iowa. Spring-wheel. No. 1,063,161; May 27; Gaz. vol. 190; p. 993.
Hines, William J., assignor of one-fourth to M. M. Connors and one-fourth to A. E. Rothlisberger, Grant Town, W. Va. Coal-boring machine. No. 1,060,840; May 6; Gaz. vol. 190; p. 95.
Hinz, Julius C., Detroit, Mich. Oil-burner. No. 1,062,280; May 20; Gaz. vol. 190; p. 661.
Hinz, William H., Chicago, Ill. Soap-dish. No. 1,062,827; May 27; Gaz. vol. 190; p. 883.
Hires, Lucius E. (See Davies, William H., assignor.)
Hirner, Emil A., Allentown, Pa., assignor to Novelty Hosiery Company. Vertically-striped seamless hosiery. No. 1,062,910; May 27; Gaz. vol. 190; p. 911.
Hirner, Emil A., Allentown, Pa., assignor to Novelty Hosiery Company. Thread-changing mechanism for knitting-machines. No. 1,062,911; May 27; Gaz. vol. 190; p. 911.
Hirsh, Julius. (See Elder, William S., assignor.)
Hirth, Carl A., Cannstatt, near Stuttgart, Germany. Device for accelerating the feed of ball-bearing balls to grinding-machines. No. 1,061,241; May 6; Gaz. vol. 190; p. 233.
Hitchcock, Forrest I., assignor of one-half to E. R. Templeton, Indianapolis, Ind. Gasolene-filter trap. No. 1,062,236; May 20; Gaz. vol. 190; p. 646.
Hitchcock, Minor L., Los Angeles, Cal. Baking cones. No. 1,062,157; May 20; Gaz. vol. 190; p. 620.
Hites, Albert D., and H. R. Van Gorder, Ellwood City, Pa. Bottle-stopper. No. 1,062,972; May 27; Gaz. vol. 190; p. 931.
Hobart, Darwin, assignor of one-half to F. J. Goodwine, West Lebanon, Ind. Weighing-scoop for scales. No. 1,061,841; May 13; Gaz. vol. 190; p. 470.
Hobbs, James J., Matbis, Tex. Card game. No. 1,060,900; May 6; Gaz. vol. 190; p. 117.
Hoch, Otto M., assignor to M. D. Knowlton Company, Rochester, N. Y. Scoring and other sheet-working machine. No. 1,060,681; May 6; Gaz. vol. 190; p. 40.
Hock, John A., assignor to The National Tube Company, Pittsburgh, Pa. Multiple-disk cutting-off machine. No. 1,061,940; May 13; Gaz. vol. 190; p. 504.
Hockensmith, Franklin C., Pittsburgh, assignor to Hockensmith Wheel & Mine Car Company, Penn Station, Pa. Mine-car wheel. No. 1,061,746; May 13; Gaz. vol. 190; p. 443.
Hockensmith Wheel & Mine Car Company. (See Hockensmith, Franklin C., assignor.)
Hodges, Horace F., Philadelphia, Pa. Thermal water purification. No. 1,060,901; May 6; Gaz. vol. 190; p. 117.
Hodgkinson, Edwin, assignor to Taylor Instrument Companies, Rochester, N. Y. Pen-arm-adjusting mechanism for recording instruments. No. 1,060,761; May 6; Gaz. vol. 190; p. 67.
Hodgkinson, Francis, Edgewood Park, assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa. Supporting means for turbines. No. 1,061,672; May 13; Gaz. vol. 190; p. 418.
Hodgkinson, Francis, Edgewood Park, assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa. Marine turbine. No. 1,061,673; May 13; Gaz. vol. 190; p. 419.
Hodgkinson, Francis, Edgewood Park, assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa. Fluid-pressure motor. No. 1,062,098; May 20; Gaz. vol. 190; p. 599.
Hoefer, Charles, Jr., Lexington, Mo., M. L. Belt, Jr., Muskogee, Okla., and W. R. Belt, Acme, Tex. Churn. No. 1,062,709; May 27; Gaz. vol. 190; p. 844.
Hoerr, Louis A., St. Louis, Mo. Angle-cock holder for railway-cars. No. 1,060,762; May 6; Gaz. vol. 190; p. 68.
Hofe, Christian von, Wilmersdorf, near Berlin, assignor to Optische Anstalt C. P. Goerz Aktiengesellschaft, Friedenau, near Berlin, Germany. Base-line telemeter. No. 1,060,902; May 6; Gaz. vol. 190; p. 118.
Hoffman, John N. (See Hicks and Hoffman.)
Hoffmann, Alexander, Baltimore, Md., assignor of one-half to P. D. Lowe, New York, N. Y. Drier. No. 1,061,941; May 13; Gaz. vol. 190; p. 505.
Hoffmann, Ferdinand, St. Louis, Mo. Safety-envelop. No. 1,061,077; May 6; Gaz. vol. 190; p. 178.
Hofmann, Fritz, and C. Coutelle, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany. Caoutchouc substance and making same. No. 1,062,915; May 27; Gaz. vol. 190; p. 912.
Hofmann, Fritz, C. Coutelle, K. Delbrück, and K. Meisenburg, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany. Caoutchouc-like substance and making same. No. 1,062,828; May 27; Gaz. vol. 190; p. 883.
Hofmann, Fritz, C. Coutelle, K. Delbrück, and K. Meisenburg, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany. Caoutchouc-like substance and making same. No. 1,062,912; May 27; Gaz. vol. 190; p. 912.
Hofmann, Fritz, C. Coutelle, K. Delbrück, and K. Meisenburg, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany. Caoutchouc substance and making same. No. 1,062,913; May 27; Gaz. vol. 190; p. 912.
Hofmann, Fritz, C. Coutelle, K. Delbrück, and K. Meisenburg, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany. Caoutchouc substance and making same. No. 1,062,914; May 27; Gaz. vol. 190; p. 912.
Hofwing, Fritz. (See Fownes and Hofwing.)
Hogan, George L., Montreal, Quebec, Canada, assignor of one-half to A. Bailey, Seattle, Wash. Oil-burner. No. 1,061,290; May 13; Gaz. vol. 190; p. 284.
Hogan, Zachariah, Amite, La. Saw-set. No. 1,062,466; May 20; Gaz. vol. 190; p. 722.
Hoglund, Gustave E., assignor of one-half to O. C. Dennis, Chicago, Ill. Explosive-engine. No. 1,062,099; May 20; Gaz. vol. 190; p. 600.
Holmes, Halvor E., Minneapolis, Minn. Music-leaf turner. No. 1,060,682; May 6; Gaz. vol. 190; p. 40.
Hollk, Frank, Prague, Okla. Railway-rail tie and rail-fastener. No. 1,060,903; May 6; Gaz. vol. 190; p. 118.
Hollingsworth & Whitney Company. (See Stobie, William H., assignor.)
Holman Brothers. (See Cock, Benjamin, assignor.)
Holmes, Edward B. (See Beugler, Edwin F., assignor.)
Holt, Henry S. A., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Producing rubber-like compounds. No. 1,062,973; May 27; Gaz. vol. 190; p. 931.
Holton, Samuel M., Battle Creek, Mich. Combined dish rinser and drier. No. 1,060,763; May 6; Gaz. vol. 190; p. 68.
Holzmark, Isaac. (See Holzmark, William P., assignor.)
Holzmark, William P., assignor of one-half to I. Holzmark, St. Louis, Mo. Non-gyroscopic aeronautic engine. No. 1,060,597; May 6; Gaz. vol. 190; p. 11.
Honold, Gottlob, Stuttgart, Germany. Contact-breaker for electrical ignition in internal-combustion engines. No. 1,061,613; May 13; Gaz. vol. 190; p. 397.
Honolulu Iron Works Company. (See Ewart, Arthur F., assignor.)
Hoodwin, Albert K., and E. J. Kipp, Michigan City, Ind. Picture-frame. No. 1,062,710; May 27; Gaz. vol. 190; p. 845.
Hookey, Thomas A., McDonald, Pa. Lock-nut. No. 1,061,842; May 13; Gaz. vol. 190; p. 470.
Hope-Jones, Robert, assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y. Tuning device for reed-organ pipes. No. 1,061,380; May 13; Gaz. vol. 190; p. 314.
Hope-Jones, Robert, assignor to The Rudolph Wurlitzer Manufacturing Company, North Tonawanda, N. Y. Organ-swell. No. 1,062,711; May 27; Gaz. vol. 190; p. 845.
Hopkins, Nevil M., Washington, D. C., assignor to The Terpezone Company, New York, N. Y. Ozonizer. No. 1,062,974; May 27; Gaz. vol. 190; p. 931.
Hopkins, William L., New York, N. Y. Portable power-saw. No. 1,061,381; May 13; Gaz. vol. 190; p. 315.
Houghton, Lewis T. (See Pierce and Provencher, assignors.)
Hovey, Joseph, Florida, Ohio. Feeder for threshing-machines. No. 1,061,478; May 13; Gaz. vol. 190; p. 349.
Howard, Clarence H., and H. M. Pflager, assignors to Commonwealth Steel Company, St. Louis, Mo. Car-truck. No. 1,061,078; May 6; Gaz. vol. 190; p. 178.
Howard, Walter A., *et al.* (See Corns, John L. assignor.)
Howarth, Robert H., Rothschild, Wis. Portable duplex grinder. No. 1,061,843; May 13; Gaz. vol. 190; p. 471.
Howell, John W., Newark, N. J., assignor to General Electric Company. Forming-machine for tungsten filaments. No. 1,062,281; May 20; Gaz. vol. 190; p. 662.
Howerton, Oliver N., Peoria, Ill. Door-knob fastener. No. 1,061,844; May 13; Gaz. vol. 190; p. 471.
Hoyt, Edward R., assignor to Hoyt Metal Company, St. Louis, Mo. Rolled metal. No. 1,061,674; May 13; Gaz. vol. 190; p. 419.
Hoyt, John S. (See Jansson, Karl E. O., assignor.)
Hoyt Metal Company. (See Hoyt, Edward R., assignor.)
Hron, Frank C., Tyndall, S. D. Cultivator-tongue support. No. 1,061,845; May 13; Gaz. vol. 190; p. 471.
Huber, Edward R., assignor of one-half to F. L. Pohlmann, St. Louis, Mo. Vapor generator and mixer. No. 1,061,382; May 13; Gaz. vol. 190; p. 315.
Hudrie, James, Haugen, Wis. Poultry-disinfecting device. No. 1,061,540; May 13; Gaz. vol. 190; p. 373.
Hudson, Charles W., Riverside, Wash. Milk-pail cover. No. 1,062,650; May 27; Gaz. vol. 190; p. 826.
Hudson, Elisha E., Newark, and D. Elmes, Orange, assignors, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J. Primary battery. No. 1,061,541; May 13; Gaz. vol. 190; p. 373.
Hudson Motor Car Company. (See Vincent, Jesse G., assignor.)
Hudson, Palmer T., Everton, Mo. Apparatus for grounding telephone-wires. No. 1,060,598; May 6; Gaz. vol. 190; p. 12.

Hudson, Thomas, Airbrie, Scotland. Steam-boiler. No. 1,063,032; May 27; Gaz. vol. 190; p. 951.
Huebner-Bleistein Patents Company. (See Huebner, William C., assignor.)
Huebner, William C., assignor to Huebner-Bleistein Patents Company, Buffalo, N. Y. Photographic screen. No. 1,060,982; May 6; Gaz. vol. 190; p. 146.
Huggins, James A., Red Springs, N. C. Automatic-adjusting plow. No. 1,061,291; May 13; Gaz. vol. 190; p. 285.
Hughes, Joseph D., assignor to Workman Manufacturing Company, Chicago, Ill. Temporary binder. No. 1,060,599; May 6; Gaz. vol. 190; p. 12.
Hughes, Margaret M., New York, N. Y. Means for producing a correct writing habit. No. 1,061,913; May 13; Gaz. vol. 190; p. 493.
Hultquist, Charles A., Los Angeles, Cal. Chuck for rock-drills. No. 1,062,651; May 27; Gaz. vol. 190; p. 826.
Hummel, Fred. M. (See Smith and Hummel.)
Humphrey, Ernest N., assignor to The Traut & Hine Manufacturing Company, New Britain, Conn. Safety-razor. No. 1,060,904; May 6; Gaz. vol. 190; p. 118.
Humphrey, George F., London, England. Baker's oven and the like. No. 1,060,841; May 6; Gaz. vol. 190; p. 96.
Hundrup, John P., Riverside, and W. G. Allen, San Francisco, Cal. Dust and fume arrester. No. 1,061,292; May 13; Gaz. vol. 190; p. 285.
Hunt, Charles A., Jr. (See Pickard, Alfred L., assignor.)
Hunt, Sylvester H., Long Branch, N. J. Grate. No. 1,060,683; May 6; Gaz. vol. 190; p. 41.
Hunter, John S., Egeland, N. D. Traction device. No. 1,060,684; May 6; Gaz. vol. 190; p. 41.
Huntoon, Charles F., assignor to E. A. Laughlin, Chicago, Ill. Third suspension for brake-beams. No. 1,060,842; May 6; Gaz. vol. 190; p. 96.
Huntzinger, Ida R., Scranton, Pa. Corset-cover. No. 1,062,467; May 20; Gaz. vol. 190; p. 722.
Hunyady, Frank, Chicago, Ill. Combined clothes-drier and curtain-stretcher. No. 1,062,100; May 20; Gaz. vol. 190; p. 600.
Hunz, Josef, assignor to Herm. Schroers Maschinenfabrik, Crefeld, Germany. Cop-winding machine. No. 1,061,542; May 13; Gaz. vol. 190; p. 373.
Hunz, Joseph, München-Gladbach, assignor to Herm. Schroers Maschinenfabrik, Crefeld, Germany. Cop-winding machine. No. 1,061,543; May 13; Gaz. vol. 190; p. 374.
Hurel, Amand M., New York, N. Y. Truss. No. 1,062,158; May 20; Gaz. vol. 190; p. 620.
Hurlbut, Kenneth C. (See Bear and Hurlbut.)
Huss, Joseph G., and W. A. Smith, Minneapolis, Minn. Soil-pipe fitting. No. 1,062,008; May 20; Gaz. vol. 190; p. 568.
Husted, Don B., Auburn, Ohio. Traction-wheel. No. 1,062,335; May 20; Gaz. vol. 190; p. 680.
Huston, Isaac G., Carey, Ohio. Clamp. No. 1,061,178; May 6; Gaz. vol. 190; p. 211.
Huston, Robert M., Fall River, Kans. Floor-jack. No. 1,060,843; May 6; Gaz. vol. 190; p. 96.
Hutches, Benjamin F., Jr., Allendale, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,062,009; May 20; Gaz. vol. 190; p. 569.
Hutchings, Charles E. (See Ruttan and Hutchings.)
Huttelmaier, Gustave E., Scottdale, Pa. Safety appliance for mine-cages. No. 1,061,747; May 13; Gaz. vol. 190; p. 443.
Huttelmaier, Gustave E., Scottdale, Pa. Driving mechanism for haulage systems. No. 1,063,033; May 27; Gaz. vol. 190; p. 951.
Hutto, Jophes P. (See Hutto, Oscar L., assignor.)
Hutto, Oscar L., assignor of one-half to J. P. Hutto, Pelion, S. C. Window-sash. No. 1,062,916; May 27; Gaz. vol. 190; p. 913.
Huye, Joseph G., assignor of one-half to W. J. Kernaghan, New Orleans, La. Automatic self-closing compound mixing-faucet. No. 1,061,293; May 13; Gaz. vol. 190; p. 285.
Hyde, Benjamin T. B., New York, N. Y., and A. Gaul, Jr., Ridgefield, N. J. Aeroplane. No. 1,061,242; May 6; Gaz. vol. 190; p. 233.
Hyde, Oscar H. (See Bacon, William M., assignor.)
Hye, Thomas, Spokane, Wash. Rotary pump. No. 1,061,544; May 13; Gaz. vol. 190; p. 374.
Iacovino, John J., Providence, R. I. Compasses. No. 1,061,846; May 13; Gaz. vol. 190; p. 471.
Ideal Disappearing Wall Bed Company, The. (See Hall, Harvey H., assignor.)
Imhoff, Wilson, Lititz, Pa. Metallic railway-tie. No. 1,061,294; May 13; Gaz. vol. 190; p. 286.
Indiana Machine and Wire Company, The. (See Whittington, George W., assignor.)
Indianapolis Stove Company. (See Brown, William J., assignor.)
Industrial Instrument Company, The. (See Bristol and Goodyear, assignors.)
Inglis, Robert P. (See Tobias, Frank F., assignor.)
International Machine Corporation. (See McConnell, William H., assignor.)
International Telephone Co., The. (See Hastings, Ruben C. M., assignor.)
Ionides, Alexander C., Jr., London, England. Means for preventing the backward propagation of flame. No. 1,061,847; May 13; Gaz. vol. 190; p. 472.
Irvin, William H. (See Armstrong, James R., assignor.)
Irving, Samuel C., Berkeley, Cal. Waterproof roofing-sheet. No. 1,062,400; May 20; Gaz. vol. 190; p. 701.
Irwin, Frank L., and J. E. Tesseyman, assignors to The Ralston Steel Car Company, Columbus, Ohio. Hopper-car. No. 1,062,237; May 20; Gaz. vol. 190; p. 647.
Isaacs, Moses, New York, N. Y. Cloth-laying machine. No. 1,061,914; May 13; Gaz. vol. 190; p. 494.
Isherwood, Harold. (See Pollen and Isherwood.)
Isidor, Joseph S., Newark, N. J. Bag-frame hinge. No. 1,062,593; May 27; Gaz. vol. 190; p. 806.
Isidor, Joseph S., Newark, N. J. Lock. No. 1,062,594; May 27; Gaz. vol. 190; p. 806.
Isler, Max H. (See Müller and Isler.)
Isler, Max H., Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Coloring-matters of the anthraquinone series. No. 1,062,975; May 27; Gaz. vol. 190; p. 932.
Ives Manufacturing Corporation, The. (See Viall, William G., assignor.)
J. B. King & Co. (See Bernhardt, David F., assignor.)
J. B. Stone Co. (See Diamond, James K., assignor.)
J. E. Mergott Company, The. (See Fuller, Franz A., assignor.)
J. H. Day Company, The. (See Sieber, Lawrence G., assignor.)
Jackson, Erskine H., Chicago, Ill. Hinge. No. 1,062,976; May 27; Gaz. vol. 190; p. 932.
Jacobs, Henry W., and H. H. Lanning, Topeka, Kans. Gas-generator. No. 1,062,712; May 27; Gaz. vol. 190; p. 845.
Jacobson, Andrew E., Kamrar, Iowa. Chair. No. 1,062,010; May 20; Gaz. vol. 190; p. 569.
Jacobson, Olaf G. (See Oliver and Jacobson.)
Jacobson, Ole, assignor of one-half to W. W. Arnold, Hamilton, Ohio. Egg boiler and timer. No. 1,061,942; May 13; Gaz. vol. 190; p. 505.
Jacobus, James W., Great Neck, N. Y. Filler for ink-wells, &c. No. 1,061,748; May 13; Gaz. vol. 190; p. 443.
Jacoby, Hermann, Eberstadt, near Darmstadt, Germany. Tire-deflation indicator. No. 1,062,567; May 20; Gaz. vol. 190; p. 755.
Jaeger, Carl H., Leipzig-Plagwitz, Germany. Tubular heat-exchange apparatus. No. 1,061,295; May 13; Gaz. vol. 190; p. 286.
Jaeger, Carl H., Leipzig, Germany. Process of and apparatus for rarefying and compressing air and gases by means of liquid accelerated by a rotor-wheel. No. 1,063,034; May 27; Gaz. vol. 190; p. 951.
Jäger, August. (See Martignoni and Jäger.)
Jahoda, Rudolf, Vienna, Austria-Hungary. Incandescent electric lamp. No. 1,063,035; May 27; Gaz. vol. 190; p. 952.
Jalnett, Fredrick S., Presidio, Cal. Railway-rail joint and brace. No. 1,061,958; May 13; Gaz. vol. 190; p. 510.
Jamieson, Bertrand G., and C. A. Keller, Chicago, Ill. Connector. No. 1,060,600; May 6; Gaz. vol. 190; p. 12.
Jamison, Charles A., *et al.*, administrators. (See Arbuckle, John.)
Janney, Reynold. (See Williams and Janney.)
Jansson, Karl E. O., assignor to J. S. Hoyt, New York, N. Y. Automatic stop-valve for hydraulic elevators. No. 1,060,601; May 6; Gaz. vol. 190; p. 13.
Jeavons, William R., Cleveland, Ohio. Heater. No. 1,061,079; May 6; Gaz. vol. 190; p. 179.
Jefferies, Roy C. (See Johnston, Jefferies, and Ryan.)
Jeffery, Harold L., Fort Thomas, assignor to The Wadsworth Watch Case Company, Dayton, Ky. Producing watchcase-bows. No. 1,061,080; May 6; Gaz. vol. 190; p. 179.
Jeffery, Harold L., Fort Thomas, assignor to The Wadsworth Watch Case Company, Dayton, Ky. Self-riveting non-detachable bow. No. 1,062,652; May 27; Gaz. vol. 190; p. 827.
Jeffrey Manufacturing Company, The. (See Dierdorff, Joseph, assignor.)
Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)
Jenckes, Joseph M., Oil City, Pa. Valve-gear for gas-engines. No. 1,063,162; May 27; Gaz. vol. 190; p. 994.
Jenkins, Charles F., Washington, D. C. Vehicle-tire. No. 1,062,011; May 20; Gaz. vol. 190; p. 570.
Jenning, Gustav A., East St. Louis, Ill. Leveling instrument. No. 1,060,602; May 6; Gaz. vol. 190; p. 13.
Jennings, Frank R., Chicago, Ill. Line-reel. No. 1,061,749; May 13; Gaz. vol. 190; p. 444.
Jennings, Victor H., assignor to Mills Woven Cartridge Belt Company, Worcester, Mass. Holster-web and weaving the same. No. 1,062,238; May 20; Gaz. vol. 190; p. 647.
Jennison, Harry G., Toledo, Ohio. Wood pavement. No. 1,061,296; May 13; Gaz. vol. 190; p. 286.
Jensen, Hans L., assignor to The Egry Register Company, Dayton, Ohio. Printing-press. No. 1,062,917; May 27; Gaz. vol. 190; p. 913.
Jepson, John W., Depew, and A. McGary, New York, N. Y., assignors, by mesne assignments, to Gould Coupler Co. Electrical system and apparatus therefor. No. 1,062,918; May 27; Gaz. vol. 190; p. 913.
Joch, Anton, assignor to The Ohio Blower Company, Cleveland, Ohio. Ventilator. No. 1,062,012; May 20; Gaz. vol. 190; p. 570.

John Church Company, The. (See Leisch, Joseph, assignor.)
John Wanamaker. (See Tily and Rehfuss, assignors.)
Johnes, Alfred, assignor of one-half to A. H. Heil, Bridgeport, Conn. Callipers. No. 1,061,614; May 13; Gaz. vol. 190; p. 398.
Johnsen, Aksel P., Chicago, Ill. Derrick. No. 1,060,603; May 6; Gaz. vol. 190; p. 14.
Johnson, Aben E. (See Wilson, Richard T., assignor.)
Johnson, Anders G. (See Anderson, Anders E., assignor.)
Johnson, Carl O., Tekoa, Wash. Collar-band for shirts. No. 1,062,468; May 20; Gaz. vol. 190; p. 723.
Johnson, Edward E., St. Paul, Minn. Stand-pipe or water-column. No. 1,060,844; May 6; Gaz. vol. 190; p. 97.
Johnson, Edward J., Graycreek, Colo. Powder-can. No. 1,062,101; May 20; Gaz. vol. 190; p. 601.
Johnson, George L., Lynn, Mass. Collapsible waste-basket. No. 1,061,297; May 13; Gaz. vol. 190; p. 286.
Johnson, Henry E. (See Simons, Edward L., assignor.)
Johnson, John T., and F. G. Mason, Caulfield, Victoria, Australia. Pneumatic-tire cover. No. 1,062,401; May 20; Gaz. vol. 190; p. 701.
Johnson, John W., Leavenworth, Kans. Bit-holder. No. 1,060,845; May 6; Gaz. vol. 190; p. 97.
Johnson, Lawrence J., Akron, assignor to The Summit Rubber Company, Barberton, Ohio. Corset-stiffener. No. 1,061,081; May 6; Gaz. vol. 190; p. 179.
Johnson, Pauline, Brockton, Mont. Whiffletree-hook. No. 1,061,545; May 13; Gaz. vol. 190; p. 374.
Johnson, Robert H., Washington, D. C. Reversible gearing. No. 1,062,469; May 20; Gaz. vol. 190; p. 723.
Johnson, Thomas C., assignor to Winchester Repeating Arms Co., New Haven, Conn. Mushrooming bullet. No. 1,062,919; May 27; Gaz. vol. 190; p. 914.
Johnson, Thomas J., Norman, Okla. Pump. No. 1,061,615; May 13; Gaz. vol. 190; p. 398.
Johnson, William R., Seattle, Wash. Decoy. No. 1,062,713; May 27; Gaz. vol. 190; p. 846.
Johnston, Albert T. (See Williamson, George S., assignor.)
Johnston, Charles F., assignor of one-half to C. C. Eldridge and one-half to E. J. Beebe, Marshalltown, Iowa. Spark-plug. No. 1,061,915; May 13; Gaz. vol. 190; p. 494.
Johnston, Clarence S., R. C. Jefferies, and W. J. Ryan, Glendive, Mont. Deep-tilling attachment for plows. No. 1,061,479; May 13; Gaz. vol. 190; p. 350.
Johnston, James O., Athol, Idaho. Stump-puller. No. 1,062,470; May 20; Gaz. vol. 190; p. 723.
Johnston, James T. M., London, England. Portable tar-boiling apparatus. No. 1,061,916; May 13; Gaz. vol. 190; p. 494.
Johnston, M. B. (See Osborne, Henry E., assignor.)
Johnston, Robert N., assignor of one-half to L. D. Sweet, Denver, Colo. Liquid-fuel burner. No. 1,062,714; May 27; Gaz. vol. 190; p. 846.
Johnstone, Harvey M., Lincoln, Nebr. Automobile transmission-lock. No. 1,061,943; May 13; Gaz. vol. 190; p. 505.
Jolliffe, William T., Rossett, England. Wind-screen for motor-cars and the like. No. 1,062,402; May 20; Gaz. vol. 190; p. 701.
Jones, Charles, Topeka, Kans. Mail-crane. No. 1,062,239; May 20; Gaz. vol. 190; p. 648.
Jones, Charles E. (See Field, Jones, and Field.)
Jones, Daniel P., Westminster, London, assignor to Patent Rapid Scaffold Tie Company Limited, London, England. Scaffold-tie. No. 1,063,036; May 27; Gaz. vol. 190; p. 952.
Jones, Edwin, Troy, Kans. Disk attachment for cultivators. No. 1,060,905; May 6; Gaz. vol. 190; p. 119.
Jones, Elihu K., Portland, Oreg. Pipe-wrench. No. 1,060,685; May 6; Gaz. vol. 190; p. 42.
Jones, Frank, assignor of one-half to W. A. Endter, Rock Island, Ill. Tinner's-seam-beating device. No. 1,061,848; May 13; Gaz. vol. 190; p. 472.
Jones, Harry R., E. L. Hang, and J. McConnell, assignors to The United Steel Company, Canton, Ohio. Making steel bars. No. 1,060,764; May 6; Gaz. vol. 190; p. 69.
Jones, Howard C., and C. M. Weeks, Somerville, Mass. Safety lamp plug and socket. No. 1,062,920; May 27; Gaz. vol. 190; p. 914.
Jones, John E. (See Dubois, Novario, and Jones.)
Jones, Moses, South Mills, N. C. Combined heating and cooking stove. No. 1,061,959; May 13; Gaz. vol. 190; p. 510.
Jones, Pearl N., Pittsburgh, Pa. Door-operating mechanism. No. 1,061,298; May 13; Gaz. vol. 190; p. 287.
Jones, Pearl N., Pittsburgh, Pa. Electric-motor control. No. 1,061,299; May 13; Gaz. vol. 190; p. 287.
Jones, Pearl N., Pittsburgh, Pa. Passenger-car. No. 1,061,750; May 13; Gaz. vol. 190; p. 444.
Jones, Ralph A. (See Mitchell and Jones.)
Jones, Richard E., Pearl River, N. Y., assignor to Dexter Folder Company. Paper-feeding machine. No. 1,062,336; May 20; Gaz. vol. 190; p. 680.
Jones, Richard E., assignor to Dexter Folder Company, Pearl River, N. Y. Sheet-separating mechanism for paper-feeding machines. No. 1,063,037; May 27; Gaz. vol. 190; p. 952.
Jones, Richard E., Pearl River, N. Y., assignor to Dexter Folder Company. Paper-feeding machine. No. 1,063,038; May 27; Gaz. vol. 190; p. 952.
Josse, Emil, Berlin, and P. Christlein, Charlottenburg, Germany. Multistage turbine. No. 1,062,471; May 20; Gaz. vol. 190; p. 724.
Joyce, Robert A., Independence, Kans. Seed-planter. No. 1,063,127; May 27; Gaz. vol. 190; p. 982.
Joyner, Miles D., Savannah, Ga. Cross-head. No. 1,061,179; May 6; Gaz. vol. 190; p. 211.
Jungers, Clement J., Streator, Ill. Making wire-glass. No. 1,062,013; May 20; Gaz. vol. 190; p. 570.
Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Diaphragm and nozzle construction for turbines. No. 1,061,675; May 13; Gaz. vol. 190; p. 419.
Kaehn, Henry B., Lookout, Okla. Rail-joint. No. 1,061,751; May 13; Gaz. vol. 190; p. 444.
Kahn, Theodore, Jennings, La. Garment-weight. No. 1,062,403; May 20; Gaz. vol. 190; p. 702.
Kahrs, Christen H., Christiania, Norway. Trawling-net. No. 1,061,082; May 6; Gaz. vol. 190; p. 179.
Kahrs, Friman, deceased, East Haddam, Conn.; M. Kahrs, executrix. Viscosimeter. No. 1,062,159; May 20; Gaz. vol. 190; p. 621.
Kahrs, Marie, executrix. (See Kahrs, Friman.)
Kaiser, Frank H. (See Clemens, John G., assignor.)
Kaiser, Frank H., Buffalo, N. Y. Refillable fuse-plug. No. 1,062,240; May 20; Gaz. vol. 190; p. 648.
Kammer, William, Leshara, Nebr. Tamper. No. 1,063,039; May 27; Gaz. vol. 190; p. 953.
Kampe, John F., Brooklyn, N. Y. Divanette. No. 1,062,337; May 20; Gaz. vol. 190; p. 680.
Kampfe Bros. (See Groschopp, Friedrich W., assignor.)
Kane, Patrick, North Brookfield, Mass. Detachable boot or shoe heel. No. 1,062,338; May 20; Gaz. vol. 190; p. 681.
Kapp, Gisbert, Birmingham, England. Means for testing the durability of material which is exposed to repeatedly-applied stresses. No. 1,062,595; May 27; Gaz. vol. 190; p. 807.
Karsch, Martin, Los Angeles, Cal. Automatic clock winding means. No. 1,062,282; May 20; Gaz. vol. 190; p. 662.
Karsitz, Frank, assignor to The Acme Shear Company, Bridgeport, Conn. Buttonhole-scissors. No. 1,062,829; May 27; Gaz. vol. 190; p. 884.
Kather, Konrad, San Francisco, Cal. Composition of matter. No. 1,061,546; May 13; Gaz. vol. 190; p. 374.
Katzenberger, Oscar, Chicago, Ill. Floor spring-hinge. No. 1,063,128; May 27; Gaz. vol. 190; p. 982.
Kaufmann, Anton. (See Gagnon and Kaufmann.)
Kaufmann, Ludwig, Berlin, Germany. Organic antimony compounds and making same. No. 1,060,765; May 6; Gaz. vol. 190; p. 69.
Kaye, Samuel, Columbus, Miss. Wheel. No. 1,062,472; May 20; Gaz. vol. 190; p. 724.
Kayser, Francis, Philadelphia, Pa. Transmitter. No. 1,061,849; May 13; Gaz. vol. 190; p. 472.
Kazmierczak, Ignatz F., Detroit, Mich. Curtain-bracket. No. 1,061,300; May 13; Gaz. vol. 190; p. 288.
Keables, Charles F., Indianola, Iowa. Road-making machine. No. 1,060,604; May 6; Gaz. vol. 190; p. 14.
Keller, Carl A. (See Jamieson and Keller.)
Keller, Rudolph, *et al.* (See Phillippi, Frank A., assignor.)
Kelley, John W. (See Pealer, James C., assignor.)
Kelly, George W., Elizabeth, N. J. Blacking set. No. 1,062,339; May 20; Gaz. vol. 190; p. 681.
Kelly, J. A., *et al.* (See Watkins, Orla H., assignor.)
Kelly, John R., Chapin, S. C. Combined rake and fork. No. 1,062,241; May 20; Gaz. vol. 190; p. 648.
Kelly, Mary H. (See Kelly, William S., assignor.)
Kelly, Robert E., Cocoanut Grove, Fla. Elastic pocket for garments. No. 1,062,160; May 20; Gaz. vol. 190; p. 621.
Kelly, William, Memphis, Tenn. Smoke-consumer. No. 1,062,473; May 20; Gaz. vol. 190; p. 724.
Kelly, William S., Cosmopolis, assignor to M. H. Kelly, Aberdeen, Wash. Shovel. No. 1,062,474; May 20; Gaz. vol. 190; p. 725.
Kemble, William F., Rockaway Beach, and C. R. Underhill, Yonkers, N. Y., assignors of one-half to C. S. Champion, Ridgewood, N. J. Accounting-exchange. No. 1,062,102; May 20; Gaz. vol. 190; p. 601.
Kemp, William R. A., Maida Road, Epping, near Sydney, New South Wales, Australia. Device for stringing and cutting beans for cooking. No. 1,060,605; May 6; Gaz. vol. 190; p. 14.
Kempf, Henry J., assignor to Berger Machine Company, Springfield, Mass. Gum-wrapping machine. No. 1,060,983; May 6; Gaz. vol. 190; p. 147.
Kendrick, Frank J., assignor of forty-nine one-hundredths to D. E. McCarthy, Schenectady, N. Y. Milk-bottle. No. 1,062,542; May 20; Gaz. vol. 190; p. 746.
Kenkel, John E., Great Falls, Mont. Attachment for shoe-brushes. No. 1,063,129; May 27; Gaz. vol. 190; p. 982.
Kennedy, Charles O., Servia, Ind. Speed-governor device. No. 1,062,780; May 27; Gaz. vol. 190; p. 867.
Kennedy, Charles W., and J. J. Herron, Schenectady, N. Y. Deodorizer. No. 1,060,766; May 6; Gaz. vol. 190; p. 69.
Kennedy, Harold H., Indianapolis, Ind., assignor to The Waverly Company. Steering-knuckle. No. 1,060,606; May 6; Gaz. vol. 190; p. 14.

Kennedy, Harold H., assignor to The Waverley Company, Indianapolis, Ind. Motor suspension and drive. No. 1,063,040; May 27; Gaz. vol. 190; p. 953.
Kennedy, Joseph, New York, N. Y. Stay-washer. No. 1,061,480; May 13; Gaz. vol. 190; p. 350.
Kennedy, Julian, Pittsburgh, Pa. Rolling-mill guide. No. 1,061,676; May 13; Gaz. vol. 190; p. 420.
Kennedy, William A., and J. Evans, Wichita, Kans. Covering for hay, grain, &c. No. 1,061,547; May 13; Gaz. vol. 190; p. 374.
Kernaghan, William J. (See Huye, Joseph G., assignor.)
Kerner Manufacturing Company. (See Dodds, Ethan I., assignor.)
Kerr, Henry N., assignor to M. E. Kerr, Philadelphia, Pa. Lamp. No. 1,062,340; May 20; Gaz. vol. 190; p. 681.
Kerr, Mary E. (See Kerr, Henry N., assignor.)
Kersey, Edward, Chicago, Ill. Flushing apparatus. No. 1,061,548; May 13; Gaz. vol. 190; p. 375.
Kesselhuth, Edward H., assignor of one-half to C. E. Hall, Long Pine, Nebr. Clamp for detachable vehicle-seats. No. 1,061,752; May 13; Gaz. vol. 190; p. 444.
Kestner Evaporator Company. (See Kestner, Paul, assignor.)
Kestner, Paul, Lille, France, assignor to Kestner Evaporator Company, Philadelphia, Pa. Evaporating apparatus. No. 1,060,607; May 6; Gaz. vol. 190; p. 15.
Keyes, James T., New York, N. Y. Side guard for spring-mattresses. No. 1,062,781; May 27; Gaz. vol. 190; p. 868.
Keystone Watch Case Company, The. (See Freund, Joseph A., assignor.)
Kidd, William C., and J. B. Strong, assignors to Standard Equipment Company, Hillburn, N. Y. Target for switch-stands. No. 1,062,014; May 20; Gaz. vol. 190; p. 571.
Kiefer, Adam S., Lakewood, Ohio. Ignition device. No. 1,060,906; May 6; Gaz. vol. 190; p. 119.
Kiefer, Raymond A., Ramsey, N. J. Sterilization. No. 1,062,404; May 20; Gaz. vol. 190; p. 702.
Kiesel, William F., Jr., Altoona, Pa. Superheater for steam-generators. No. 1,061,180; May 6; Gaz. vol. 190; p. 212.
Kiewicz, John, Hyde Park, assignor to The Reece Button Hole Machine Company, Boston, Mass. Buttonhole-sewing machine. No. 1,062,475; May 20; Gaz. vol. 190; p. 725.
Kinard, John W., Centerville, Ala. Fire-dog. No. 1,060,686; May 6; Gaz. vol. 190; p. 42.
Kinder, Garrett A., assignor to American Lady Corset Company, Detroit, Mich. Sewing-machine. No. 1,061,383; May 13; Gaz. vol. 190; p. 316.
King, Arthur, St. Louis, Mo. Transmission-speed-reducing gearing. No. 1,061,677; May 13; Gaz. vol. 190; p. 420.
King, Henry H., Gresham, Oreg. Grain-car door. No. 1,062,476; May 20; Gaz. vol. 190; p. 726.
King, John W., New York, N. Y., assignor to King Mechanism & Engineering Company. Dumping-vehicle. No. 1,062,477; May 20; Gaz. vol. 190; p. 726.
King Machine Company, The. (See Norton and Langenegger, assignors.)
King Mechanism & Engineering Company. (See King, John W., assignor.)
Kinney, Frank F., assignor, by mesne assignments, to Chicago Electric Meter Company, Chicago, Ill. Recording-wattmeter. No. 1,060,984; May 6; Gaz. vol. 190; p. 147.
Kinney, Frank F., assignor, by mesne assignments, to Chicago Electric Meter Company, Chicago, Ill. Recording-wattmeter. No. 1,061,182; May 6; Gaz. vol. 190; p. 212.
Kinney, Justus R., Dorchester, Mass. Air-compressor. No. 1,061,181; May 6; Gaz. vol. 190; p. 212.
Kinsel, Walter H., Detroit, Mich. Curtain-fastener for automobiles. No. 1,062,921; May 27; Gaz. vol. 190; p. 914.
Kipp, Charles M., Marysville, Cal. Track-liner No. 1,061,243; May 6; Gaz. vol. 190; p. 233.
Kipp, Edward J. (See Hoodwin and Kipp.)
Kirby Equipment Company. (See Woodman, George A., assignor.)
Kirchhoff, William G., assignor to T. W. Remmers, St. Louis, Mo. Feeding mechanism. No. 1,061,753; May 13; Gaz. vol. 190; p. 445.
Kirn, Theodore J., Louisville, Ky. Plunger-elevator. No. 1,060,907; May 6; Gaz. vol. 190; p. 120.
Kissinger, Robert H., Omaha, Nebr. Can. No. 1,060,767; May 6; Gaz. vol. 190; p. 69.
Kitsee, Isidor, Philadelphia, Pa. Telephony. No. 1,062,161; May 20; Gaz. vol. 190; p. 621.
Kjelden, Peder J., Hendricks, Minn. Buckle. No. 1,062,715; May 27; Gaz. vol. 190; p. 846.
Klapproth, Wilhelm, Ober-Ingelheim, Germany. Baking-powder. No. 1,061,183; May 6; Gaz. vol. 190; p. 213.
Kleinschmidt, Edward E., Brooklyn, N. Y., assignor to General Railway Equipment Company. Telephone system. No. 1,062,577; May 20; Gaz. vol. 190; p. 759.
Kluck, Ernest M., assignor of one-half to himself and one-half to N. C. Newerf, Buffalo, N. Y. Muffler. No. 1,060,768; May 6; Gaz. vol. 190; p. 70.
Klug, Louis W., Woonsocket, S. D. Seed-corn rack and stand. No. 1,062,242; May 20; Gaz. vol. 190; p. 648.
Kluge, Otto, Golconda, Ill. Baling mechanism. No. 1,062,243; May 20; Gaz. vol. 190; p. 649.
Klumpp, Gottlob, Bayonne, N. J. Carpet-cleaner. No. 1,063,163; May 27; Gaz. vol. 190; p. 994.
Knape, Charles N. F., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa. Turbine-blade. No. 1,061,754; May 13; Gaz. vol. 190; p. 445.
Knapp, George O. (See Beach, Clarence E., assignor.)
Knapp, George P., Bridgeport, Conn. Safety device. No. 1,060,608; May 6; Gaz. vol. 190; p. 15.
Knapp, Paul S., Akron, Ohio. Bowling-alley. No. 1,062,162; May 20; Gaz. vol. 190; p. 621.
Kneuper, George M., New York, N. Y. Filter. No. 1,061,755; May 13; Gaz. vol. 190; p. 445.
Knies, Henry E., White Haven, Pa. Alarm for tires. No. 1,061,184; May 6; Gaz. vol. 190; p. 213.
Knlesche, August F., Baltimore, Md. Head-steaming apparatus. No. 1,061,083; May 6; Gaz. vol. 190; p. 179.
Knight, Charles Y., Coventry, England. Piston. No. 1,061,756; May 13; Gaz. vol. 190; p. 445.
Knights, George L., assignor to Pettingell Machine Company, Amesbury, Mass. Rotary cutting-machine. No. 1,060,908; May 6; Gaz. vol. 190; p. 120.
Knode, John C. (See Atkinson, William R., assignor.)
Knoedler, Elmer L., assignor to Welsbach Light Company, Gloucester City, N. J. Manufacture of inverted mantles. No. 1,062,163; May 20; Gaz. vol. 190; p. 622.
Knoop, Oskar, Ekkenberg, near Gratz, Austria-Hungary. Screw-wrench. No. 1,062,830; May 27; Gaz. vol. 190; p. 884.
Knowlton, Annie D., *et al.*, administrators. (See Knowlton, Mark D.)
Knowlton, Edgar, Pidcock, Ga. Peanut-planter. No. 1,061,384; May 13; Gaz. vol. 190; p. 316.
Knowlton, Erni J., Birmingham, Ala. Switch-operating mechanism. No. 1,061,185; May 6; Gaz. vol. 190; p. 213.
Knowlton, Frederic K., *et al.*, administrators. (See Knowlton, Mark D.)
Knowlton, Mark D., deceased; A. D. and F. K. Knowlton, administrators, Rochester, N. Y. Machine for attaching box-corner stays. No. 1,061,084; May 6; Gaz. vol. 190; p. 180.
Knuckles, George H., Slusher, Ky. Detachable saw-handle. No. 1,060,909; May 6; Gaz. vol. 190; p. 120.
Knudson, Charles E., Everest, Kans. Brood-coop and run. No. 1,061,850; May 13; Gaz. vol. 190; p. 473.
Kobert, Edward J., Woodside, N. Y. Shoe-tree. No. 1,062,164; May 20; Gaz. vol. 190; p. 622.
Kobert, Edward J., Woodside, N. Y. Shoe-tree. No. 1,062,165; May 20; Gaz. vol. 190; p. 622.
Kobert, Frank P., Fairhaven, Conn. Supplemental rim for pulleys or belt-wheels. No. 1,062,831; May 27; Gaz. vol. 190; p. 884.
Koch, Norbert, Essen-Rellinghausen, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Traveling ordnance. No. 1,063,041; May 27; Gaz. vol. 190; p. 954.
Koenig, Joseph, Two Rivers, Wis. Flask for liquids. No. 1,062,716; May 27; Gaz. vol. 190; p. 847.
Koerner, Ewald, Dresden, Germany. Treating the tipping material of cigarette-tubes. No. 1,061,757; May 13; Gaz. vol. 190; p. 446.
Kohlberger, Charles F., New York, N. Y. Pin-tumbler mechanism. No. 1,060,769; May 6; Gaz. vol. 190; p. 70.
Kohnle, Frederick, Dayton, Ohio, assignor to H. H. Prugh and T. Meuche, trustees. Type-chase. No. 1,062,283; May 20; Gaz. vol. 190; p. 662.
Kolson, Frank J., McKeesport, Pa. Combined scraper and smoother. No. 1,061,085; May 6; Gaz. vol. 190; p. 180.
Koniakowsky, Louis F., Ellinger, Tex. Store furniture. No. 1,062,543; May 20; Gaz. vol. 190; p. 746.
König, Albert, assignor to Firm of C. Zeiss, Jena, Germany. Stereoscopic telemeter. No. 1,062,166; May 20; Gaz. vol. 190; p. 623.
Konigsberg, Joseph. (See Forsheim and Konigsberg.)
Koons, Clarence E., Westerville, Ohio. Snap-hook. No. 1,062,653; May 27; Gaz. vol. 190; p. 827.
Köppen, Lothar von, Hanover, Germany. Ship's hull. No. 1,060,985; May 6; Gaz. vol. 190; p. 148.
Kopple, Morris D., New York, N. Y. Nut-lock. No. 1,060,687; May 6; Gaz. vol. 190; p. 42.
Kops, Daniel, New York, N. Y. Apparel-corset. No. 1,062,977; May 27; Gaz. vol. 190; p. 932.
Kornbau, Kennard J., New York, N. Y. Shade-holder. No. 1,061,186; May 6; Gaz. vol. 190; p. 214.
Köster, Ernst W., Frankfort-on-the-Main, Germany. Compressor. No. 1,062,405; May 20; Gaz. vol. 190; p. 702.
Kott, Arthur O., Johnson City, Tex. Funnel. No. 1,062,167; May 20; Gaz. vol. 190; p. 623.
Kottusch, Emil W., assignor to The Miller, Du Brul & Peters Manufacturing Company, Cincinnati, Ohio. Cleaning or polishing machine. No. 1,061,481; May 13; Gaz. vol. 190; p. 350.
Kottusch, Emil W., assignor to The Miller, Du Brul & Peters Mfg. Co., Cincinnati, Ohio. Cleaning and polishing machine. No. 1,061,482; May 13; Gaz. vol. 190; p. 351.
Kraemer, Frank, Chicago, Ill., assignor, by meane assignments, to M. Harris, Pittsburgh, Pa. Electric work-circuit-regulating monitor. No. 1,062,978; May 27; Gaz. vol. 190; p. 933.
Kraft, Paul, Nekoosa, Wis. Cement tie, including a rail-fastener. No. 1,061,187; May 6; Gaz. vol. 190; p. 214.

Kranz, Carl. (See Beilstein, Wilhelm, assignor.)
Krebs, Stephen J., Philadelphia, Pa. Clothes-line support. No. 1,061,851; May 13; Gaz. vol. 190; p. 473.
Kreuzkamp, August J., assignor, by mesne assignments, to C. J. Witzel, Brooklyn, N. Y. Side-guard-holding means. No. 1,061,483; May 13; Gaz. vol. 190; p. 351.
Kreuzkamp, August J., New York, assignor, by mesne assignments, to C. J. Witzel, Brooklyn, N. Y. Side guard for spring-mattresses. No. 1,061,616; May 13; Gaz. vol. 190; p. 399.
Kreuzkamp, August J., assignor, by mesne assignments, to C. J. Witzel, Brooklyn, N. Y. Spring-mattress side guard. No. 1,061,617; May 13; Gaz. vol. 190; p. 399.
Kreuzkamp, August J., assignor to Englander Spring Bed Company, Brooklyn, N. Y. Side guard. No. 1,062,341; May 20; Gaz. vol. 190; p. 682.
Krieger, Silas N., and C. A. Fidler, Shamokin, Pa. Miner's lamp. No. 1,061,385; May 13; Gaz. vol. 190; p. 316.
Kroder, John, New York, N. Y. Extension curtain-pole. No. 1,062,478; May 20; Gaz. vol. 190; p. 726.
Kropp, William, Maple City, Mich. Wood-sawing machine. No. 1,062,544; May 20; Gaz. vol. 190; p. 747.
Krueger, Carl R., Schenectady, N. Y., assignor to General Electric Company, Electrode. No. 1,061,758; May 13; Gaz. vol. 190; p. 446.
Krueger, Henry, Spokane, Wash. Window-blind. No. 1,063,042; May 27; Gaz. vol. 190; p. 954.
Krumeich, Anthony J., Newark, N. J. Game apparatus. No. 1,060,846; May 6; Gaz. vol. 190; p. 98.
Krupitschka, Karl. (See Bondy, Siegfried, assignor.)
Kübel, Stephen J., Washington, D. C. Signaling. No. 1,062,782; May 27; Gaz. vol. 190; p. 868.
Kugler, Friedrich, assignor to Martini-Buchbinderei & Textilmaschinenfabrik A. G., Frauenfeld, Switzerland. Book-sewing machine. No. 1,062,596; May 27; Gaz. vol. 190; p. 807.
Kuhn, Frank, Detroit, Mich. Automatically-operating switch for electric circuits. No. 1,060,987; May 6; Gaz. vol. 190; p. 148.
Kuhn, Frank, assignor to American Electrical Heater Company, Detroit, Mich. Safety-switch for electric heaters and other electrical apparatus. No. 1,060,986; May 6; Gaz. vol. 190; p. 148.
Kulenkampff, Walther, Magdeburg, Germany. Preserving and packing eggs. No. 1,063,043; May 27; Gaz. vol. 190; p. 954.
Kunkel, George, and G. H. Williams, Cincinnati, Ohio. Knockdown or folding scenery. No. 1,062,479; May 20; Gaz. vol. 190; p. 727.
Kurowski, Alfred G. F., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,061,618; May 13; Gaz. vol. 190; p. 399.
Kurrell, Theodor, H. Schneider, Los Angeles, and L. Bukowski, Pasadena, Cal. Wave-actuated motive apparatus. No. 1,062,832; May 27; Gaz. vol. 190; p. 884.
La Rue, Joseph A., Salmon, Tex. Subsoil-irrigating implement. No. 1,062,169; May 20; Gaz. vol. 190; p. 623.
La Trobe, Harold B. (See Reeves and La Trobe.)
Ladoff, Isador, Cleveland, Ohio, assignor, by mesne assignments, of thirty one-hundredths to W. D. Edmonds, Boonville, N. Y. Arc-light electrode. No. 1,062,168; May 20; Gaz. vol. 190; p. 623.
Laffoon, Pompey. (See Elder and Laffoon.)
Lafleur, Hormidas, Leominster, Mass. Resilient wheel. No. 1,061,086; May 6; Gaz. vol. 190; p. 180.
Lahue, Moses M., Lowell, Mass. Picking mechanism for looms. No. 1,060,910; May 6; Gaz. vol. 190; p. 121.
Lake, Benjamin D., and N. G. Marks, Springfield, Ky. Automobile light-controlling device. No. 1,061,087; May 6; Gaz. vol. 190; p. 181.
Lamb, Joseph F., assignor to Landers, Frary & Clark, New Britain, Conn. Lunch-box. No. 1,061,386; May 13; Gaz. vol. 190; p. 316.
Lamb Railway Service Company, The. (See Lamb, Wilbert W., assignor.)
Lamb, Sidney R., Woodcliff Lake, N. J. Calculating device. (Reissue.) No. 13,569; May 27; Gaz. vol. 190; p. 1000.
Lamb, Wilbert W., Alhambra, Cal., assignor to The Lamb Railway Service Company, Cincinnati, Ohio. Track-cleaning machine. No. 1,061,549; May 13; Gaz. vol. 190; p. 375.
Lambert, Alfred, St. Paul, Oreg. Peavey or cant-hook. No. 1,061,188; May 6; Gaz. vol. 190; p. 214.
Lambert, John W., assignor to The Buckeye Manufacturing Company, Anderson, Ind. Friction transmission mechanism. No. 1,061,759; May 13; Gaz. vol. 190; p. 446.
Lancaster, Francis W., Flippin, Ark. Apparatus for paring and pitting fruit. No. 1,062,406; May 20; Gaz. vol. 190; p. 703.
Landers, Charles S., New London, Conn. Splice-bar. No. 1,063,044; May 27; Gaz. vol. 190; p. 955.
Landers, Frary & Clark. (See Carlson, Frederick E., assignor.)
Landers, Frary & Clark. (See Lamb, Joseph F., assignor.)
Lane Brothers Company. (See Lane, George, assignor.)
Lane, George, Poughkeepsie, N. Y., assignor to Lane Brothers Company. Grinding-mill. No. 1,062,481; May 20; Gaz. vol. 190; p. 727.
Lane, George E., Ellendale, N. D. Life-boat. No. 1,063,045; May 27; Gaz. vol. 190; p. 955.
Lane, Nathan C., Philadelphia, Pa. Pipe-coupling. No. 1,062,015; May 20; Gaz. vol. 190; p. 571.
Langenegger, Albert U. (See Norton and Langenegger.)
Langlet, Nils A., Gottenborg, Sweden. Precipitating ulmic compounds from the black liquors of soda pulp-mills. No. 1,062,016; May 20; Gaz. vol. 190; p. 571.
Lanigan, James F., Jr., Lawrence, Mass. Motor-drive for Jordan engines. No. 1,060,911; May 6; Gaz. vol. 190; p. 121.
Lankford, Orville D., Brooklyn, N. Y. Burglar-alarm. No. 1,062,482; May 20; Gaz. vol. 190; p. 728.
Lanning, Howard H. (See Jacobs and Lanning.)
Lanston Monotype Machine Company. (See Pierpont, Frank H., assignor.)
Lanz, Firm of Heinrich. (See Fuhr, Adam, assignor.)
Lapacek, Joseph T., Schuyler, Nebr. Hinge. No. 1,061,678; May 13; Gaz. vol. 190; p. 420.
Laridon, Louise B., New York, N. Y. Collar-supporter. No. 1,060,847; May 6; Gaz. vol. 190; p. 98.
Larocque, Nazaire E., Worcester, Mass. Tooth-brush attachment. No. 1,062,480; May 20; Gaz. vol. 190; p. 727.
Larsen, Daniel L., Duluth, Minn. Rifle-cleaning table. No. 1,062,922; May 27; Gaz. vol. 190; p. 915.
Larson, Caleb M., *et al.* (See Edman, John, assignor.)
Larson, David, Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Armature-lever pivot for alternating-current magnets. No. 1,062,017; May 20; Gaz. vol. 190; p. 572.
Larson, Halfdan. (See Sunvold and Larson.)
Larson, Lars A., Elgin, Ill. Combined leveler and weed-gatherer for cultivators. No. 1,061,387; May 13; Gaz. vol. 190; p. 317.
Larson-Singer Company. (See Singer, William W., assignor.)
Larsson, Gustaf O., assignor to Aktiebolaget L. M. Ericsson & Co., Stockholm, Sweden. Device for driving electric clocks and similar apparatus. No. 1,061,550; May 13; Gaz. vol. 190; p. 376.
Lasby, Edwin W., St. Louis, Mo. Food compound. No. 1,060,012; May 6; Gaz. vol. 190; p. 121.
Lash, Horace W., Cleveland, Ohio, assignor to The West Coast Iron Company, San Francisco, Cal. Making pig-iron from steel-scrap. No. 1,061,189; May 6; Gaz. vol. 190; p. 214.
Lash, Horace W., assignor to The Liquid Forged Steel Company, Cleveland, Ohio. Making dense steel ingots. No. 1,061,760; May 13; Gaz. vol. 190; p. 446.
Lassiter, Columbus K. (See Bocorselski and Lassiter.)
Lathrop, Frank S., assignor of one-half to W. Wiedliger, Park Rapids, Minn. Work-bench. No. 1,063,046; May 27; Gaz. vol. 190; p. 955.
Lattin, Albert N. (See Sternau, Strassburger, and Lattin.)
Laughlin, Elmyr A. (See Huntoon, Charles F., assignor.)
Lauhoff, Frank, Detroit, Mich. Roll. No. 1,062,170; May 20; Gaz. vol. 190; p. 624.
Laurenti, Cesare, assignor to Fiat-San Giorgio, Società Anonima, Spezia, Italy. Rudders for the submersion and the navigation of submarine vessels under water. No. 1,061,088; May 6; Gaz. vol. 190; p. 181.
Lawrence, Abram, Elizabethtown, Ill. Exchange system for telephone-lines and the like. No. 1,061,852; May 13; Gaz. vol. 190; p. 473.
Lawrence, Jay F., Chicago, Ill. Stopper. No. 1,060,913; May 6; Gaz. vol. 190; p. 121.
Lawrence, Robert J., Panola county, Tex. Saw-frame. No. 1,060,770; May 6; Gaz. vol. 190; p. 70.
Lawson, Hilda. (See Newell, George A., assignor.)
Layne, Mahlon E., Houston, Tex. Well-screen. No. 1,062,717; May 27; Gaz. vol. 190; p. 847.
Layne, Mahlon E., Houston, Tex. Forming concrete foundations and the like. No. 1,062,718; May 27; Gaz. vol. 190; p. 847.
Le Boeuf, Arthur W., Woonsocket, R. I., assignor to Electric Compositor Company, New York, N. Y. Casting-control mechanism for linotype-machines. No. 1,061,388; May 13; Gaz. vol. 190; p. 317.
Leach, Charles W., Jr., Wheeling, W. Va. Curtain shade and pole fixture. No. 1,062,018; May 20; Gaz. vol. 190; p. 572.
Leapley, Edward E., *et al.* (See Sloderbeck, Martin C., assignor.)
Leapley, William A., *et al.* (See Sloderbeck, Martin C., assignor.)
Lee, Gregory A., assignor of one-third to S. J. Taylor and one-third to F. L. Taylor, San Francisco, Cal. Clothing container and transferrer. No. 1,062,171; May 20; Gaz. vol. 190; p. 624.
Lee, Isaac E., Dayton, Va., assignor of one-third to W. F. Bowen, Washington, D. C., and one-third to C. W. Bane, Hagerstown, Md. Cheese-cutter. No. 1,060,771; May 6; Gaz. vol. 190; p. 71.
Lee, May L., Chicago, Ill. Hook and eye. No. 1,061,761; May 13; Gaz. vol. 190; p. 446.
Lee, Moses W., Philadelphia, assignor to National Roll Printer Company, Reading, Pa. Printing attachment for rolls. No. 1,062,979; May 27; Gaz. vol. 190; p. 933.
Lee, Roy A., San Francisco, Cal. Safety-catch. No. 1,062,284; May 20; Gaz. vol. 190; p. 662.
Leggett, Albert R., Niagara Falls, N. Y. Furnace. No. 1,062,483; May 20; Gaz. vol. 190; p. 728.
Lehman, Harley, Oysterville, Wash. Nut-lock. No. 1,061,853; May 13; Gaz. vol. 190; p. 474.
Lehman, Jay E. (See Beaumont, Beans, and Lehman.)
Leighton, Byron C. (See Farrar and Leighton.)

Leisch, Joseph, Tryon, N. C., assignor to The John Church Company, Cincinnati, Ohio. Combined transposition and automatic tracking device for player-pianos. No. 1,062,103; May 20; Gaz. vol. 190; p. 601.
Leisch, Joseph, Tryon, N. C., assignor to The John Church Company, Cincinnati, Ohio. Pneumatic player-piano. No. 1,062,104; May 20; Gaz. vol. 190; p. 602.
Leist, Jacob H., Portland, Oreg. Lath. No. 1,061,389; May 13; Gaz. vol. 190; p. 318.
Lemon, Addison T., Kansas City, Kans. Combined scrubber and mop. No. 1,062,105; May 20; Gaz. vol. 190; p. 602.
Lenahan, Michael. (See Miller, Cornelius, assignor.)
Lender, Francis, St. Petersburg, Russia. Reversing-gearing. No. 1,061,190; May 6; Gaz. vol. 190; p. 214.
Lenihan, Michael J., Philadelphia, Pa. Metal-worker's perforating-machine. No. 1,060,772; May 6; Gaz. vol. 190; p. 71.
Leonard, Harry W., Bronxville, N. Y. Electrical controlling device. No. 1,061,191; May 6; Gaz. vol. 190; p. 215.
Leonard, Harry W., Bronxville, N. Y. Means for controlling electromotive force. No. 1,061,192; May 6; Gaz. vol. 190; p. 215.
Leonard, John D., Kenneth, Mich. Mail-bag catcher and deliverer. No. 1,061,854; May 13; Gaz. vol. 190; p. 474.
Leslie, Edmon, Marshalltown, Iowa. Smoke-consumer. No. 1,063,130; May 27; Gaz. vol. 190; p. 983.
Leslie, Horace A., trustee. (See Richter, Harry J., assignor.)
Leuthesser, Fred W., Chicago, Ill. Air-valve for radiators. No. 1,062,407; May 20; Gaz. vol. 190; p. 703.
Levedahl, Axel, assignor to Aurora Automatic Machinery Company, Aurora, Ill. Valve for explosive-engines. No. 1,062,285; May 20; Gaz. vol. 190; p. 663.
Levin, Nils D., Chicago, Ill., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Motor-vehicle. No. 1,062,172; May 20; Gaz. vol. 190; p. 624.
Levy, Achille. (See Albertsen, Boje R., assignor.)
Levy, Alfred, assignor to A. Waldberg, Paris, France. Electrolytic solution for cleaning metallic articles. No. 1,061,089; May 6; Gaz. vol. 190; p. 181.
Levy, Isaac, Oakland, Cal. Plate-gage for sewing-machines. No. 1,061,090; May 6; Gaz. vol. 190; p. 181.
Lewis, Chester A., St. Louis, Mo. Airship. No. 1,062,545; May 20; Gaz. vol. 190; p. 747.
Lewis, Edward G. (See Daniel and Lewis.)
Lewis, Edward Z., Chicago, Ill., assignor to The General Manifold and Printing Company, Franklin, Pa. Manifolding salesman's check. No. 1,061,301; May 13; Gaz. vol. 190; p. 288.
Lewis Foundry and Machine Company. (See Osler, Jay T., assignor.)
Lewis, James C., Los Angeles, Cal. Wave-motor. No. 1,061,091; May 6; Gaz. vol. 190; p. 182.
Lewis, John F., Philadelphia, Pa. Shaping hollow metal articles. No. 1,062,719; May 27; Gaz. vol. 190; p. 848.
Lewis, Ora D., Rushville, Ill. Playing-cards. No. 1,062,720; May 27; Gaz. vol. 190; p. 848.
Lewis, Thomas. (See Windsor-Richards and Lewis.)
Lewis, Walter A., Batavia, Iowa. Coin-holder. No. 1,061,551; May 13; Gaz. vol. 190; p. 376.
Lewis, William, Utica, N. Y. Spring-seat. No. 1,062,597; May 27; Gaz. vol. 190; p. 807.
Lewis, William W., assignor of one-half to C. E. B. Williams and W. J. Capron, Oneida, N. Y. Trolling-spoon. No. 1,062,980; May 27; Gaz. vol. 190; p. 934.
Libbey, Frank O. (See Guernsey, Charles C., assignor.)
Liégey, Edouard, Paris, France. Fastening pins to artificial teeth. No. 1,061,244; May 6; Gaz. vol. 190; p. 234.
Lierfeld, Walther, Dortmund, Germany. Apparatus for drying substances. No. 1,061,762; May 13; Gaz. vol. 190; p. 447.
Lilley, John R., Coatesville, Pa. Car-fender. No. 1,061,245; May 6; Gaz. vol. 190; p. 234.
Lilliedale, Edward T., Hornbrook, Cal. Track-plate. No. 1,061,246; May 6; Gaz. vol. 190; p. 234.
Lillow, Charles E., Chicago, Ill., assignor to J. M. Lillow, Stratford, Ontario, Canada. Scaffold. No. 1,060,914; May 6; Gaz. vol. 190; p. 122.
Lillow, James M. (See Lillow, Charles E., assignor.)
Lincoln, Bert E., Cusick, Wash., assignor of one-half to J. Shean, Philadelphia, Pa. Machine for sawing shingles. No. 1,062,484; May 20; Gaz. vol. 190; p. 728.
Lincoln, John C., East Cleveland, assignor to The Electric Meat Curing Company, Cleveland, Ohio. Electromagnetic apparatus. No. 1,063,170; May 27; Gaz. vol. 190; p. 997.
Lindenberg, Frank H., Columbus, Ohio. Tank. No. 1,060,609; May 6; Gaz. vol. 190; p. 16.
Linder, John, Deer Park, Wash., assignor to Eastman Kodak Co., Rochester, N. Y. Photographic camera. No. 1,060,610; May 6; Gaz. vol. 190; p. 16.
Lindgren, John A., Sandpoint, Idaho. Car-loader. No. 1,062,485; May 20; Gaz. vol. 190; p. 729.
Link, Jacob J. (See Blofield and Link.)
Linkmeyer, Rudolf, Bremen, Germany. Producing cellulose formations. No. 1,062,106; May 20; Gaz. vol. 190; p. 602.
Linotype and Machinery Limited. (See Pearce, Parker, and Wright, assignors.)
Liquid Forged Steel Company, The. (See Lash, Horace W., assignor.)
Liquid Forged Steel Company, The. (See Maxwell, David, assignor.)
Litchfield, Norman, Glen Ridge, N. J. Car-sign. No. 1,062,598; May 27; Gaz. vol. 190; p. 808.
Littauer, Lucius N. (See Weis, Albert H., assignor.)
Litzman, Stephen, Erie, Pa. Twine-cutter. No. 1,060,773; May 6; Gaz. vol. 190; p. 71.
Livingston, Henry J., Baltimore, Md. Preserving wood from decay and fire. No. 1,062,286; May 20; Gaz. vol. 190; p. 663.
Lloyd, Eldon E. (See Curnutt and Lloyd.)
Lobo, Ernesto, Parras, Mexico. Instrument for woodworking or furniture. No. 1,061,855; May 13; Gaz. vol. 190; p. 474.
Lockett, Andrew M., New Orleans, La. Cards for games. No. 1,061,092; May 6; Gaz. vol. 190; p. 182.
Lockhart, Andrew E., Jonesboro, Ark. Locking mechanism for collapsible receptacles. No. 1,060,988; May 6; Gaz. vol. 190; p. 149.
Loeffler, Louis J., Stapleton, N. Y. Electric fire-alarm. No. 1,061,763; May 13; Gaz. vol. 190; p. 447.
Lofland, William A., Camden, N. J. Box. No. 1,061,619; May 13; Gaz. vol. 190; p. 400.
Logee, Frank S., Westwood, N. J. Carton for hats. No. 1,062,173; May 20; Gaz. vol. 190; p. 625.
Lohr, Dorsie A., Woodlawn, Pa. Advertising novelty. No. 1,061,302; May 13; Gaz. vol. 190; p. 288.
Lohrmann, Josef, Dusseldorf, Germany. Water-purifier. No. 1,063,047; May 27; Gaz. vol. 190; p. 955.
London, William J. A., Manchester, England, assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa. Elastic-fluid turbine. No. 1,061,856; May 13; Gaz. vol. 190; p. 474.
Long, Clarence E., Fort Wayne, Ind. Ticket-holder. No. 1,062,174; May 20; Gaz. vol. 190; p. 625.
Long, George A., assignor to The Gray Telephone Pay Station Company, Hartford, Conn. Coin-chute. No. 1,061,093; May 6; Gaz. vol. 190; p. 182.
Long, James J., New York, N. Y. Freight-car-door hanger. No. 1,062,599; May 27; Gaz. vol. 190; p. 808.
Lord, Charles, Minersville, Pa. Drill. No. 1,062,486; May 20; Gaz. vol. 190; p. 729.
Lotherington, Thomas, Little Rock, Ark. Hitching-strap. No. 1,061,247; May 6; Gaz. vol. 190; p. 234.
Louden Machinery Company. (See Neller, Albert H., assignor.)
Lourdin, Louis M. G., Paris, France. Dirigible headlight. No. 1,062,833; May 27; Gaz. vol. 190; p. 885.
Lowe, Edgar. (See Andrick, Lowe, and Haff.)
Lowe, P. Demarest. (See Hoffmann, Alexander, assignor.)
Lowe, Thaddeus S. C., Los Angeles, Cal. Airship. No. 1,061,484; May 13; Gaz. vol. 190; p. 351.
Lowman, Adonis G. E., Winnipeg, Manitoba, Canada. Earplate. No. 1,062,654; May 27; Gaz. vol. 190; p. 827.
Loy, Frank, Newark, N. J., assignor to Loy and Nawrath Company. Sheet-metal-bending machine. No. 1,062,244; May 20; Gaz. vol. 190; p. 640.
Loy and Nawrath Company. (See Loy, Frank, assignor.)
Lubbock, William L., Houston, Tex. Garbage-receptacle. No. 1,061,390; May 13; Gaz. vol. 190; p. 318.
Ludgate, George C., Brooklyn, N. Y. Adjustable dog. No. 1,060,915; May 6; Gaz. vol. 190; p. 122.
Ludington Basket Company. (See Harley, Charles, assignor.)
Luick Bassett Producer Company. (See Luick and Bassett, assignors.)
Luick, William F., and A. J. Bassett, Milwaukee, Wis., assignors to Luick Bassett Producer Company. Gas-producer. No. 1,062,721; May 27; Gaz. vol. 190; p. 848.
Lummen, Maurice van M. de, Cologne, Germany. Agitating or stirring device for use in mechanical roasting-furnaces. No. 1,061,303; May 13; Gaz. vol. 190; p. 289.
Lund, Thomas, Beverly, Mass., assignor to United Shoe Machinery Company, Paterson, N. J. Gang cutting device. No. 1,060,688; May 6; Gaz. vol. 190; p. 43.
Lundeberg, Carl F., Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,062,019; May 20; Gaz. vol. 190; p. 572.
Lupton, Henry W., assignor of one-half to A. I. McAlister, Willcox, Ariz. Pump-operating mechanism. No. 1,060,774; May 6; Gaz. vol. 190; p. 72.
Luschka, August R., assignor to American Slicing Machine Company, Chicago, Ill. Sharpening device for rotary cutters. No. 1,060,916; May 6; Gaz. vol. 190; p. 122.
Luten, Daniel B., Indianapolis, Ind. Arch. No. 1,060,917; May 6; Gaz. vol. 190; p. 123.
Luten, Daniel B., Indianapolis, Ind. Arch. No. 1,060,918; May 6; Gaz. vol. 190; p. 123.
Luten, Daniel B., Indianapolis, Ind. Clamp for concrete-reinforcing members. No. 1,060,919; May 6; Gaz. vol. 190; p. 123.
Luten, Daniel B., Indianapolis, Ind. Concrete bridge. No. 1,060,920; May 6; Gaz. vol. 190; p. 123.
Luten, Daniel B., Indianapolis, Ind. Concrete bridge. No. 1,060,921; May 6; Gaz. vol. 190; p. 124.
Luten, Daniel B., Indianapolis, Ind. Arch. No. 1,060,922; May 6; Gaz. vol. 190; p. 124.
Lyle, Fred W., Lynn, Mass., assignor to General Electric Company. Electric terminal. No. 1,060,989; May 6; Gaz. vol. 190; p. 149.

Lyle, Fred W., Lynn, Mass., assignor to General Electric Company. Electric signaling. No. 1,061,960; May 13; Gaz. vol. 190; p. 510.

Lynch, Charles C., Wanette, Okla. Title-card holder. No. 1,060,990; May 6; Gaz. vol. 190; p. 150.

Lynde, Frederick C., Withington, Manchester, assignor of one-half to C. V. Haworth, Poulton-le-Fylde, England. Carbureting apparatus. No. 1,062,981; May 27; Gaz. vol. 190; p. 934.

Lyon Metallic Manufacturing Company. (See Beecher, Herbert P., assignor.)

Lyon, Sarah E., Menominee, Mich. Spoon-holder. No. 1,062,107; May 20; Gaz. vol. 190; p. 603.

Lyon, William S., Auburn, N. Y. Box. No. 1,062,834; May 27; Gaz. vol. 190; p. 885.

M. D. Knowlton Company. (See Hoch, Otto M., assignor.)

Mabie, Henry C., Maywood, N. J. Clip for fountain-pens, pencils, and the like. No. 1,061,193; May 6; Gaz. vol. 190; p. 216.

MacBain, Donald R., Cleveland, Ohio. Freight-car ladder. No. 1,063,048; May 27; Gaz. vol. 190; p. 956.

MacConnell, John, assignor to N. H. Steward, Philadelphia, Pa. Drill. No. 1,062,342; May 20; Gaz. vol. 190; p. 682.

MacMillan, William G., New York, N. Y. Type-guard. No. 1,062,487; May 20; Gaz. vol. 190; p. 729.

MacOrquodale, Lorne H., Revere, assignor to The Forbes Lithograph Manufacturing Company, Boston, Mass. Display device. No. 1,062,020; May 20; Gaz. vol. 190; p. 573.

MacPherson Company, The. (See MacPherson, John G., assignor.)

MacPherson, John G., Philadelphia, Pa., assignor to The MacPherson Company, Incorporated. Periodic circuit-closer. No. 1,062,722; May 27; Gaz. vol. 190; p. 848.

Macdonald, Harry P., Montclair, assignor to The Snead and Company Iron Works, Jersey City, N. J. Roll-ramming mechanism. No. 1,060,848; May 6; Gaz. vol. 190; p. 98.

Machalske, Florentine J., assignor of one-half to C. Offenhauser, Philadelphia, Pa. Producing elementary silicon and by-products. No. 1,062,982; May 27; Gaz. vol. 190; p. 934.

Mack, William A., assignor to The Standard Sewing Machine Company, Cleveland, Ohio. Sewing-machine. No. 1,060,689; May 6; Gaz. vol. 190; p. 43.

Mackie, Henry A., *et al.* (See Olson, Rorem, and Hill, assignors.)

Macleod, Walter, Cincinnati, Ohio. Surface-heater. No. 1,062,655; May 27; Gaz. vol. 190; p. 827.

Macwilliam, James H., assignor to Siebrecht & Son, New York, N. Y. Tree-remover. No. 1,061,094; May 6; Gaz. vol. 190; p. 183.

Magee, John, assignor to Diamond Power Specialty Company, Detroit, Mich. Water-tube blower. No. 1,060,923; May 6; Gaz. vol. 190; p. 124.

Magill, Richard A., Atlanta, Ga. Automobile safety appliance. No. 1,060,611; May 6; Gaz. vol. 190; p. 16.

Mahoney, James H., Worcester, Mass. Dispensing apparatus. No. 1,062,343; May 20; Gaz. vol. 190; p. 682.

Mallory, Harry C., New York, N. Y. Hot-blast heating system. No. 1,061,679; May 13; Gaz. vol. 190; p. 421.

Malmstrom, Walter K. (See Murray, Brink, and Malmstrom.)

Maloney, Robert, De Lancey, Pa. Railway-tie. No. 1,063,049; May 27; Gaz. vol. 190; p. 956.

Malterner, Silas N., Canton, N. Y. Aeroplane. No. 1,061,917; May 13; Gaz. vol. 190; p. 495.

Mangelsdorff, Carl B., Bergedorff, Germany, assignor to A. M. Frame, New York, N. Y. Toy. No. 1,060,612; May 6; Gaz. vol. 190; p. 17.

Mann, Jan, Prague, Austria-Hungary. Cooking and domestic utensil heated by electricity. No. 1,062,344; May 20; Gaz. vol. 190; p. 683.

Manning, Thomas M., Rome, Ga. Handle-mount for plows. No. 1,060,924; May 6; Gaz. vol. 190; p. 124.

Manson, Joseph P., Hartland, Me. Potato-vine arranger. No. 1,062,021; May 20; Gaz. vol. 190; p. 573.

Mapes, Fred C., and W. M. Owen, Chelsea, Mich. Variable-resistance electric-lamp switch. No. 1,060,991; May 6; Gaz. vol. 190; p. 150.

Marcus, Aaron, New York, N. Y. Shape-preserver for open-ended neckties. No. 1,061,764; May 13; Gaz. vol. 190; p. 447.

Marfield, Dwight S., *et al.* (See Marfield, Paul B., assignor.)

Marfield, Paul B., assignor of one-fourth to D. S. Marfield and one-fourth to N. P. Riley, Cincinnati, Ohio. Friction-clutch. No. 1,062,568; May 20; Gaz. vol. 190; p. 755.

Markel, Emerich J., New Haven, Conn. Controlling mechanism. No. 1,061,765; May 13; Gaz. vol. 190; p. 447.

Markel, Harley R., Columbus, Ohio. Insulator. No. 1,061,620; May 13; Gaz. vol. 190; p. 400.

Marker, Burton, Chester, Pa. Indicating and recording device. No. 1,062,345; May 20; Gaz. vol. 190; p. 683.

Markham, Joseph T., assignor to Sellers Manufacturing Company, Chicago, Ill. Tie-plate. No. 1,060,775; May 6; Gaz. vol. 190; p. 72.

Markham Rifle Company. (See Roe, Ernest S., assignor.)

Marks, Nathaniel G. (See Lake and Marks.)

Marr, Alexander, Manchester, England. Diaphragm of telephonic receivers and like instruments. No. 1,061,766; May 13; Gaz. vol. 190; p. 448.

Marriott, Franciscus B., Homewood, Ala. Rail-joint. No. 1,061,621; May 13; Gaz. vol. 190; p. 400.

Mars, John O., Omaha, Nebr. Slack-adjuster. No. 1,060,613; May 6; Gaz. vol. 190; p. 17.

Marsh, Matthew G. (See Rich and Marsh.)

Martel, Gustave J., Chicago, Ill. Tire-patching device. No. 1,061,301; May 13; Gaz. vol. 190; p. 318.

Marten, Henry F., H. Grahn, and J. C. Andresen, San Francisco, Cal. Automatic stave-equalizing machine. No. 1,062,175; May 20; Gaz. vol. 190; p. 625.

Martignoni, Pasquale, and A. Jäger, Frankfort-on-the-Main, Germany. Die-stock. No. 1,061,485; May 13; Gaz. vol. 190; p. 352.

Martin, Calvin, Peabody, assignor to Carter Ticket Company, Boston, Mass. Numbering device. No. 1,062,783; May 27; Gaz. vol. 190; p. 868.

Martin, Thomas C., Nashville, Tenn. Trace-holder. No. 1,061,095; May 6; Gaz. vol. 190; p. 183.

Martini-Buchbinderei & Textilmaschinenfabrik A. G. (See Kugler, Friedrich, assignor.)

Maschinenfabrik Moenus A. G. (See Heldmann, Peter, assignor.)

Mason, Charles A., Juniata, Pa. Burial-vault. No. 1,060,849; May 6; Gaz. vol. 190; p. 99.

Mason, Frederick G. (See Johnson and Mason.)

Mason, George N., assignor to Reading Hardware Company, Reading, Pa. Vestibule-latch. No. 1,062,176; May 20; Gaz. vol. 190; p. 626.

Mathesius, Walther, and M. Freiberger, Charlottenburg, Germany. Bleaching. No. 1,061,392; May 13; Gaz. vol. 190; p. 318.

Mathesius, Walther, and M. Freiberger, Charlottenburg, Germany. Apparatus for treating fabric with liquids. No. 1,062,245; May 20; Gaz. vol. 190; p. 650.

Matricardi, Giuseppe, Pallanza, Italy, assignor to Société Harlé & Cie., Paris, France. Rope for haulage and other purposes. No. 1,061,252; May 6; Gaz. vol. 190; p. 236.

Matsen, Charles, *et al.* (See Buttsov, George P., assignor.)

Matsler, Benjamin T. (See Matsler, James M. and B. T.)

Matsler, James M. and B. T., Chappel, Tex. Mechanism for signaling track conditions. No. 1,062,022; May 20; Gaz. vol. 190; p. 573.

Matson, Theodore. (See Engdahl and Matson.)

Mattheus, Harry E., Birmingham, Ala. Tool-holder. No. 1,063,050; May 27; Gaz. vol. 190; p. 956.

Mavor, Henry A. (See Reid and Mavor.)

Maxim, Hiram P., Hartford, Conn. Silencer for gas-engines, &c. No. 1,060,925; May 6; Gaz. vol. 190; p. 125.

Maximilian, Max, assignor to J. B. Porter, Buffalo, N. Y. Check-valve. No. 1,063,131; May 27; Gaz. vol. 190; p. 983.

Maxwell, David, Detroit, Mich., assignor to The Liquid Forged Steel Company, Cleveland, Ohio. Making castings. No. 1,062,287; May 20; Gaz. vol. 190; p. 663.

Maxwell, David, Detroit, Mich., assignor to The Liquid Forged Steel Company, Cleveland, Ohio. Apparatus for treating castings. No. 1,062,288; May 20; Gaz. vol. 190; p. 664.

Maxwell, David, Detroit, Mich., assignor to The Liquid Forged Steel Company, Cleveland, Ohio. Apparatus for making castings. No. 1,062,289; May 20; Gaz. vol. 190; p. 664.

Maxwell, David, Detroit, Mich., assignor to The Liquid Forged Steel Company, Cleveland, Ohio. Apparatus for making castings. No. 1,062,290; May 20; Gaz. vol. 190; p. 664.

May, Henry H., New Albion, Iowa. Animal-trap. No. 1,061,304; May 13; Gaz. vol. 190; p. 289.

Mayer, Abraham, Red Bud, Ill. Propeller for boats. No. 1,060,776; May 6; Gaz. vol. 190; p. 73.

Mayer, Frederick J., New York, N. Y., assignor to Stettiner Chamotte-Fabrik Actien-Gesellschaft vorm. Didier, Stettin, Germany. Gasometer. No. 1,062,983; May 27; Gaz. vol. 190; p. 935.

Mayer, Joshua W. (See Spaney and Mayer.)

Mayer, Louis H., Johnstown, Pa. Heater for automobile-radiators. No. 1,060,992; May 6; Gaz. vol. 190; p. 150.

Mayer, Wilhelm, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Artillery-carriage. No. 1,063,051; May 27; Gaz. vol. 190; p. 957.

Mayhew, Edwin B., Levita, Tex. Folding car-step. No. 1,062,346; May 20; Gaz. vol. 190; p. 683.

Maynard, Frederick E., Berkeley, Cal. Trap-guard. No. 1,060,993; May 6; Gaz. vol. 190; p. 150.

Maynard, Harlan J., Newton Highlands, assignor to Thermolac Manufacturing Company, Boston, Mass. Nipple for nursing-bottles. No. 1,060,777; May 6; Gaz. vol. 190; p. 73.

McAlister, A. I. (See Lupton, Henry W., assignor.)

McAllister, John F., Pittsburgh, Pa. Folding umbrella. No. 1,061,305; May 13; Gaz. vol. 190; p. 289.

McAloney, William H. (See McEldowney, Wilber E., assignor.)

McAnulty, John A., Indianapolis, Ind. Spring for vehicles. No. 1,060,778; May 6; Gaz. vol. 190; p. 73.

McBerty, Frank R., New Rochelle, N. Y., assignor to Western Electric Company, Chicago, Ill. Forming cable. No. 1,062,347; May 20; Gaz. vol. 190; p. 683.

McBride, Lewis M., assignor to The Arcturus Electric and Manufacturing Company, Denver, Colo. Flaming-arc headlight. No. 1,062,408; May 20; Gaz. vol. 190; p. 704.

McCaa, David G., Lancaster, Pa. Apparatus for the production of high-potential electric currents. (Reissue.) No. 13,564; May 20; Gaz. vol. 190; p. 761.

McCairns, William, Eldorado, Ill. Airship-propeller. No. 1,061,961; May 13; Gaz. vol. 190; p. 511.

McCann, David S., Ambrose, N. D. Subsoil-disk. No. 1,062,246; May 20; Gaz. vol. 190; p. 650.

McCarthy, Daniel E. (See Kendrick, Frank J., assignor.)

McCarty, William F. M., Pleasantville, N. Y. Making artificial stone. No. 1,060,614; May 6; Gaz. vol. 190; p. 18.

McCluer, Marshall H., and A. C. Munn, Muskegon, Mich. Automatic fishing-reel. No. 1,062,488; May 20; Gaz. vol. 190; p. 730.

McColl, Ernest N., Brooklyn, N. Y. Window-cabinet for provisions. No. 1,062,409; May 20; Gaz. vol. 190; p. 704.

McColl, Irving G., New York, N. Y. Flash-light apparatus. No. 1,061,306; May 13; Gaz. vol. 190; p. 289.

McComis, Alvin B., Sedalia, Mo. Hay-rake. No. 1,062,784; May 27; Gaz. vol. 190; p. 868.

McConnell, John. (See Jones, Hang, and McConnell.)

McConnell, Thomas M., Elberton, Ga. Driving-lines. No. 1,063,052; May 27; Gaz. vol. 190; p. 957.

McConnell, William H., assignor to International Machine Corporation, Richmond, Va. Shoe-polishing machine. No. 1,061,307; May 13; Gaz. vol. 190; p. 290.

McCoy, Milton B., Pueblo, Colo. Combined mop head and wringer. No. 1,062,984; May 27; Gaz. vol. 190; p. 935.

McCreedie, David R., *et al.* (See Burgum, William C., assignor.)

McCrone, John W., San Antonio, Tex. Lantern-globe. No. 1,063,053; May 27; Gaz. vol. 190; p. 958.

McCulley, Burdette W., Woodston, Kans. Nail-extractor. No. 1,060,994; May 6; Gaz. vol. 190; p. 151.

McCulloch, Frederick L., and W. E. Dorchester, Tampa, Fla. Device for operating blinds of window-shutters. No. 1,061,096; May 6; Gaz. vol. 190; p. 183.

McCulloch, Henry A., New York, N. Y. Reversible turbine. No. 1,061,858; May 13; Gaz. vol. 190; p. 475.

McCumber, James R., and T. G. Fulcher, Princeton, W. Va. Cylinder-cock and steam-chest relief-valve. No. 1,063,164; May 27; Gaz. vol. 190; p. 994.

McDonald, Amanda, Central City, S. D. Broom attachment. No. 1,061,486; May 13; Gaz. vol. 190; p. 352.

McDonald, Charlotte J., London, England. Wrinkle-preventer. No. 1,062,600; May 27; Gaz. vol. 190; p. 808.

McDonald, Donald, Louisville, Ky. Regenerating iron-oxid used in gas purification. No. 1,061,859; May 13; Gaz. vol. 190; p. 476.

McDonald, Donald, Louisville, Ky. Feed-water heater and purifier. No. 1,063,132; May 27; Gaz. vol. 190; p. 984.

McDonnell, Edward J., Jr., Boston, Mass. Thermostatic device for determining the temperature of heated surfaces. No. 1,062,348; May 20; Gaz. vol. 190; p. 684.

McDowell, Alexander, Lynn, Mass. Counter-guard for heel-trimming machines. No. 1,060,690; May 6; Gaz. vol. 190; p. 43.

McEldowney, Wilber E., assignor of one-half to W. H. McAloney, Denver, Colo. Boring-bar. No. 1,060,926; May 6; Gaz. vol. 190; p. 125.

McElfatrick, James T., Denver, Colo. Register. No. 1,062,177; May 20; Gaz. vol. 190; p. 626.

McFarland, Frank H., Fort Worth, assignor, by mesne assignments, to Frantz Standard Buckle Co., Weatherford, Tex. Bale-tie buckle. No. 1,061,860; May 13; Gaz. vol. 190; p. 476.

McFetridge, Joseph, Vandergrift, assignor to American Sheet & Tin Plate Company, Pittsburgh, Pa. Stripping sheets. No. 1,063,054; May 27; Gaz. vol. 190; p. 958.

McGary, Alexander. (See Jepson and McGary.)

McGill, Daniel J., Davison, Mich. Fence-post. No. 1,061,097; May 6; Gaz. vol. 190; p. 184.

McGowen, Joseph H., Watha, N. C. Cultivator. No. 1,062,923; May 27; Gaz. vol. 190; p. 915.

McGrath, Nicholas B. (See Scott and McGrath.)

McHenry, Ernest L., Chicago, Ill. Hat-fastener. No. 1,061,682; May 13; Gaz. vol. 190; p. 422.

McInerney, Michael G., *et al.* (See Woodbridge, Howard C., assignor.)

McKee, Robert, Philadelphia, Pa. Explosive-engine. No. 1,061,308; May 13; Gaz. vol. 190; p. 291.

McKeen Motor Car Company. (See McKeen, William R., Jr., assignor.)

McKeen, William R., Jr., assignor, by mesne assignments, to McKeen Motor Car Company, Omaha, Nebr. Valve-gear. No. 1,061,098; May 6; Gaz. vol. 190; p. 184.

McKenney, Walter A., and S. Beatham, Lincoln, Me. Door-operating device. No. 1,060,995; May 6; Gaz. vol. 190; p. 151.

McKinnon, Allan, Holyoke, Mass. Chain pipe-wrench. No. 1,062,340; May 20; Gaz. vol. 190; p. 684.

McLanahan, Austin. (See Potts, Louis M., assignor.)

McLaughlin, John C., Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. No. 1,062,569; May 20; Gaz. vol. 190; p. 756.

McLaughlin, John C., Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. No. 1,062,835; May 27; Gaz. vol. 190; p. 885.

McLaughlin, John C., Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y. Typewriting machine. No. 1,063,165; May 27; Gaz. vol. 190; p. 995.

McLeod, George T., Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Company, Paterson, N. J. Heel-breasting machine. (Reissue.) No. 13,565; May 20; Gaz. vol. 190; p. 761.

McMahon, Henry G. (See Sanborn, McMahon, Overbury, and Young.)

McManis, John V., Baird, Tex., and W. L. Sherwood, Kirksville, Mo.; said Sherwood assignor to said McManis. Osteopathic table. No. 1,062,489; May 20; Gaz. vol. 190; p. 730.

McMillan, Hugh P., assignor to W. A. Tottle & Co., Baltimore, Md. Manufacture of brushes. No. 1,063,166; May 27; Gaz. vol. 190; p. 995.

McNab, Alexander, assignor to The McNab Company, Bridgeport, Conn. Draft-indicator for ships. No. 1,062,291; May 20; Gaz. vol. 190; p. 665.

McNab, Alexander, assignor to The McNab Company, Bridgeport, Conn. Audible signal for determining the temperatures of sea-water. No. 1,062,292; May 20; Gaz. vol. 190; p. 665.

McNab Company, The. (See McNab, Alexander, assignor.)

McNair, Robert W. M. (See Woods, Nelson T., assignor.)

McNeil, Chester, assignor to Union Special Machine Company, Chicago, Ill. Seam for sewed articles. No. 1,062,293; May 20; Gaz. vol. 190; p. 666.

McNerney, John J., Watervliet, N. Y. Fastening device for casket-covers. No. 1,061,552; May 13; Gaz. vol. 190; p. 376.

McNulty, Thomas E., San Francisco, Cal. Extension and lifting lid for desks. No. 1,061,194; May 6; Gaz. vol. 190; p. 216.

McOnat, Thomas, La Chute, Quebec, Canada. Valve for pulp-pumps. No. 1,061,768; May 13; Gaz. vol. 190; p. 449.

McPherson, Daniel J., Cheraw, S. C. Railway cross-tie and joint-clamp. No. 1,063,150; May 27; Gaz. vol. 190; p. 990.

McPherson, William A. (See Borchert, William, assignor.)

McQuown, Thomas H., Cambridge, Mass. Ship's log. No. 1,061,309; May 13; Gaz. vol. 190; p. 291.

McWilliams, Arthur C., Chicago, Ill. Metering panel-board. No. 1,061,195; May 6; Gaz. vol. 190; p. 216.

Mead Cycle Company. (See Tobin, John J., assignor.)

Mead, Harry. (See Gulberson and Mead.)

Mears, Charles W., Cleveland, Ohio. Machine for treating paper. No. 1,062,108; May 20; Gaz. vol. 190; p. 603.

Meinecke, Christian W., Jersey City, N. J., assignor to Whitall-Tatum Company, New York, N. Y. Surgical basin. No. 1,061,769; May 13; Gaz. vol. 190; p. 449.

Meisenburg, Kurt. (See Hofmann, Coutelle, Delbrück, and Meisenburg.)

Mela, Temistocle E., Sacramento, Cal. Mail-box. No. 1,062,785; May 27; Gaz. vol. 190; p. 869.

Mellin, Carl J., Schenectady, N. Y. Power-transmission mechanism. No. 1,062,985; May 27; Gaz. vol. 190; p. 935.

Mellon, George R., Kansas City, Mo. Drilling-machine. No. 1,061,622; May 13; Gaz. vol. 190; p. 401.

Melville Clark Piano Company. (See Burton, Charles S., assignor.)

Melvin, Alexander M., Glasgow, Scotland. Machine for dividing and molding dough and other plastic substances. No. 1,061,248; May 6; Gaz. vol. 190; p. 235.

Mennig, Charles F., Pottsville, Pa. Washer-forming machine and punch-press. No. 1,062,490; May 20; Gaz. vol. 190; p. 730.

Mercer, John B., Wilmington, N. C. Channel-plow. No. 1,062,924; May 27; Gaz. vol. 190; p. 915.

Merchant & Evans Company. (See Rose, James M., assignor.)

Mercier, Joseph T., Chicago, Ill. Ventilator. No. 1,061,623; May 13; Gaz. vol. 190; p. 401.

Merrell, Frederick H., and W. S. Amidon, assignors to National Wrapping Machine Company, Milwaukee, Wis. Wrapping-machine. No. 1,062,410; May 20; Gaz. vol. 190; p. 704.

Merritt, Matthew M., Middleton, Mass., assignor, by mesne assignments, to General Electric Company. Incandescent lamp. No. 1,062,836; May 27; Gaz. vol. 190; p. 886.

Mersilion, Arthur U., Colorado Springs, Colo. Clutch. No. 1,062,491; May 20; Gaz. vol. 190; p. 731.

Mertens, Albert, Cruybeke, Belgium. Automatic gas-analyzer. No. 1,060,996; May 6; Gaz. vol. 190; p. 151.

Mertz, Herman B., Beach View, Pa. Vacuum cleaning device. No. 1,062,837; May 27; Gaz. vol. 190; p. 886.

Messmer, Christian C., Salt Lake City, Utah. Key-ring and key-retainer. No. 1,061,393; May 13; Gaz. vol. 190; p. 319.

Metal Sectional Furniture Company. (See Fraser, John A., assignor.)

Metallic Barrel Company, The. (See Bauroth, Leonhard, assignor.)

Metallpapier-Bronzefarben-Blattmetallwerke Aktiengesellschaft. (See Heinrich, Jacob, assignor.)

Metallurgical Company of America. (See Burkey, Harvey M., assignor.)

Metallurgical Research Company. (See Blair, David W., assignor.)

Metcalf, Evert A., Forbes, Mo. Combined vest-pocket pencil and pen holder and electric light. No. 1,060,615; May 6; Gaz. vol. 190; p. 18.

Metropolitan Electric M'f'g. Co. (See Wesley, Joseph J., assignor.)

Metz, Ramer. (See Snyder and Metz.)
Metzgar, Clarence G., Kane borough, Pa. Railway-spike. No. 1,062,350; May 20; Gaz. vol. 190; p. 684.
Meuche, Theodore, *et al.*, trustees. (See Kohnle, Frederick, assignor.)
Meyer, Adolph F., St. Paul, Minn. Wall construction. No. 1,061,918; May 13; Gaz. vol. 190; p. 495.
Meyer, Albert W., New York, N. Y. Stove. No. 1,062,023; May 20; Gaz. vol. 190; p. 574.
Meyer, Frank W., assignor to The Oshkosh Trunk Company, Oshkosh, Wis. Garment-supporting fixture. No. 1,060,927; May 6; Gaz. vol. 190; p. 126.
Meyer, Kurt H., Munich, and F. Bergius, Hanover, Germany. Manufacture of monovalent phenols from monochloro-substitution products of aromatic hydrocarbons. No. 1,062,351; May 20; Gaz. vol. 190; p. 685.
Meyer, Ludwig F., *et al.* (See Miller, Philipp, assignor.)
Michener, John H., Jr., New York, N. Y. Conveyer. No. 1,061,394; May 13; Gaz. vol. 190; p. 319.
Michigan Motor Specialties Company. (See Beck, Charles W., assignor.)
Middleton, Harry N., Philadelphia, Pa., assignor to B. F. Sturtevant Company, Boston, Mass. Pneumatic conveyer apparatus. No. 1,062,352; May 20; Gaz. vol 190; p. 685.
Middleton, Robert, assignor to Elkhart Musical Instrument Company, Elkhart, Ind. Trombone. No. 1,060,779; May 6; Gaz. vol. 190; p. 73.
Milette, Charles A. (See Héroux, Edmond, assignor.)
Miller, Alvin S., Monroe, assignor of one-half to F. Alder, Shreveport, La. Sanitary drinking device. No. 1,062,786; May 27; Gaz. vol. 190; p. 869.
Miller, Andrew E., assignor to H. Cassard, Baltimore, Md. Broom-sewing machine. No. 1,062,546; May 20; Gaz. vol. 190; p. 747.
Miller, Clifford G., New York, N. Y. Magnetic switch. No. 1,061,919; May 13; Gaz. vol. 190; p. 496.
Miller, Commodore R., Woodlawn borough, assignor, by mesne assignments, to Superior Gas Improvement Company, Pittsburgh, Pa. Manufacturing gas. No. 1,061,861; May 13; Gaz. vol. 190; p. 476.
Miller, Cornelius, assignor to M. Lenahan, Providence, R. I. Device for threading shuttles. No. 1,063,133; May 27; Gaz. vol. 190; p. 984.
Miller, Du Brul & Peters Manufacturing Company, The. (See Kottusch, Emil W., assignor.)
Miller, Elmer E., Valley View, Pa. Automatic gas-valve. No. 1,062,178; May 20; Gaz. vol. 190; p. 626.
Miller, Elmer E., Valley View, Pa. Gas-valve. No. 1,062,179; May 20; Gaz. vol. 190; p. 627.
Miller, Jacob G., Lancaster, Pa. Soap-dispenser. No. 1,061,099; May 6; Gaz. vol. 190; p. 184.
Miller, John, Schenectady, N. Y., assignor to General Electric Company. Gear-wheel. No. 1,061,770; May 13; Gaz. vol. 190; p. 449.
Miller, John, Radnor, Ohio. Animal-holder. No. 1,062,109; May 20; Gaz. vol. 190; p. 603.
Miller, John A., Homewood, Ill. Pleasure-waterway. No. 1,062,838; May 27; Gaz. vol. 190; p. 887.
Miller, John A., Chicago, Ill. Handle-bar mechanism for pleasure-railways. No. 1,062,839; May 27; Gaz. vol. 190; p. 887.
Miller, John W., Bernharts, Pa. Horseshoe-calk. No. 1,061,395; May 13; Gaz. vol. 190; p. 319.
Miller, Thomas S., South Orange, N. J. Rope-drum. No. 1,062,723; May 27; Gaz. vol. 190; p. 848.
Miller, William L., assignor to Gisholt Machine Company, Madison, Wis. Clutch mechanism. No. 1,062,840; May 27; Gaz. vol. 190; p. 887.
Millice, Paul S., Hamilton, Ohio, assignor to Fire-Proof Furniture and Construction Company, New York, N. Y. Metal filing-cabinet. No. 1,060,691; May 6; Gaz. vol. 190; p. 44.
Mills, Orrie J., Hudson Falls, N. Y. Rossing apparatus for removing bark from logs. No. 1,060,928; May 6; Gaz. vol. 190; p. 126.
Mills Woven Cartridge Belt Company. (See Jennings, Victor H., assignor.)
Milton Bradley Company. (See Palmer, Harry B., assignor.)
Mincher, Jerry, Wills Point, Tex. Head and face protector. No. 1,061,962; May 13; Gaz. vol. 190; p. 511.
Miner, William H. (See Haseltine, Stacy B., assignor.)
Miner, William H. (See O'Connor, John F., assignor.)
Minetty, George A., Davenport, Iowa. Dumping-car. No. 1,062,353; May 20; Gaz. vol. 190; p. 685.
Mitchel, Charles C., Lyndhurst, N. J. Reamer. No. 1,062,841; May 27; Gaz. vol. 190; p. 888.
Mitchell, Louis J., Fresno, Cal. Photographic-printing apparatus. No. 1,062,294; May 20; Gaz. vol. 190; p. 666.
Mitchell, Thomas W., Buffalo, and R. A. Jones, East Aurora, assignors to Taber Pump Co., Buffalo, N. Y. Lubricator. No. 1,060,692; May 6; Gaz. vol. 190; p. 44.
Mitchell, William A., Sedalia, Mo. Freight-car ladder. No. 1,061,100; May 6; Gaz. vol. 190; p. 185.
Mitchell, William J., and M. W. Atkins, Ridgeway, Va. Headlight for automobiles. No. 1,062,842; May 27; Gaz. vol. 190; p. 888.
Mittasch, Alwin. (See Bosch and Mittasch.)
Mittasch, Alwin. (See Bosch, Mittasch, and Hecht.)
Mittinger, George E., Jr., assignor of fifteen-sixteenths to The Petroleum Iron Works Company, Sharon, Pa. Metal bung. No. 1,062,601; May 27; Gaz. vol. 190; p. 809.
Mittler, Arthur J., Wellston, assignor of one-half to J. G. Mittler, St. Louis, Mo. Collapsible receptacle. No. 1,062,656; May 27; Gaz. vol. 190; p. 828.
Mittler, Julius G. (See Mittler, Arthur J., assignor.)
Mitts & Merrill. (See Frederick, Tilghman G., assignor.)
Moine, Selest E., Tulia, Tex. Camera attachment. No. 1,062,247; May 20; Gaz. vol. 190; p. 651.
Molina, Edward C. (See Blauvelt and Molina.)
Molt, William, Spalding, Nebr. Stamp-canceling device. No. 1,061,862; May 13; Gaz. vol. 190; p. 477.
Monarch Typewriter Company, The. (See Gale, Walter L., assignor.)
Monarch Typewriter Company, The. (See Steele, Herbert H., assignor.)
Monberg, Soren C., Leadville, Colo. Cutting-tool. No. 1,060,929; May 6; Gaz. vol. 190; p. 127.
Monberg, Soren C., Leadville, Colo. Charge-receiving truck. No. 1,062,402; May 20; Gaz. vol. 190; p. 731.
Monitor Drill Company. (See Beeman and Brennan, assignors.)
Monitor Drill Company. (See Brennan, Thomas J., assignor.)
Monitor Drill Company. (See Rieske, Otto G., assignor.)
Monk, William B., assignor to Firm of G. Hattersley and Sons, Limited, Keighley, England. Warp stop mechanism for looms. No. 1,061,553; May 13; Gaz. vol. 190; p. 377.
Monnot, John F., assignor to Duplex Metals Company, New York, N. Y. Ship plate and hull. No. 1,060,930; May 6; Gaz. vol. 190; p. 127.
Monroe, William L., Denver, Colo. Forage-granulating machine. No. 1,061,920; May 13; Gaz. vol. 190; p. 496.
Moody, Jason B., Dallas, Tex. Interest-calculator. No. 1,060,997; May 6; Gaz. vol. 190; p. 152.
Mooney, Lawrence C., Montgomery, Ala. Exhaust-nozzle. No. 1,062,724; May 27; Gaz. vol. 190; p. 849.
Mooney, William A., Nashville, Tenn. Track-sanding device. No. 1,060,931; May 6; Gaz. vol. 190; p. 127.
Moore, Calvin, New Providence, Iowa. Gate-latch. No. 1,062,110; May 20; Gaz. vol. 190; p. 604.
Moore, Charles R., La Fayette, Ind. Electromotor. No. 1,061,624; May 13; Gaz. vol. 190; p. 401.
Moore, Harry W., assignor to R. A. Duff, Nebraska City, Nebr. Explosive-engine. No. 1,061,396; May 13; Gaz. vol. 190; p. 319.
Moore, J. Walter, Fort Edward, N. Y. Vehicle-spring. No. 1,061,310; May 13; Gaz. vol. 190; p. 292.
Moore, Jacob L., Butler, assignor to Pittsburgh-Hickson Company, East Butler, Pa. Tubular structure. No. 1,061,487; May 13; Gaz. vol. 190; p. 352.
Moore, John, Winnipeg, Manitoba, Canada. Calf-feeder. No. 1,062,657; May 27; Gaz. vol. 190; p. 828.
Moore Patent Car Company. (See Elmer, James P., assignor.)
Moore, Philip P. See Greenleaf and Moore.)
Moore, Robert C., Spickard, Mo., assignor of one-half to E. A. Hastings, Bloomfield, Iowa. Wireless corn-planter. No. 1,062,787; May 27; Gaz. vol. 190; p. 869.
Moore, Thomas L., San Antonio, Tex. Lantern. No. 1,063,055; May 27; Gaz. vol. 190; p. 958.
Moore, Walter W., Sioux City, Iowa. Spading-machine. No. 1,062,570; May 20; Gaz. vol. 190; p. 756.
Moore and White Company, The. (See White, Joseph A., assignor.)
Moore, William R., Windber, Pa. Radiator-cover. No. 1,062,986; May 27; Gaz. vol. 190; p. 936.
Morgan, Arthur M., Bridgeport, Ohio. Line-wire fastener. No. 1,061,311; May 13; Gaz. vol. 190; p. 292.
Morgan, Gerry A. (See Richardson and Morgan.)
Mork, Harry S., assignor to Chemical Products Company, Boston, Mass. Treating cellulose esters. No. 1,061,771; May 13; Gaz. vol. 190; p. 449.
Mork, Harry S., assignor to Chemical Products Company, Boston, Mass. Coated fabric. No. 1,062,725; May 27; Gaz. vol. 190; p. 849.
Morris, Vance L., Arbo, Miss. Trip-stanchion for logging-cars. No. 1,061,196; May 6; Gaz. vol. 190; p. 217.
Morrison, Egbert R., Sharon, Pa. Steam-boiler. No. 1,061,312; May 13; Gaz. vol. 190; p. 292.
Morrison, John A., Kelowna, British Columbia, Canada. Display-rack. No. 1,061,625; May 13; Gaz. vol. 190; p. 402.
Morrison, William F. (See Coe, Charles E., assignor.)
Morrison, William R., Chicago, Ill. Armored pneumatic tire. No. 1,061,313; May 13; Gaz. vol. 190; p. 293.
Morrissey, Thomas F., West Orange, N. J., assignor to United Button Company. Work-holder. No. 1,062,547; May 20; Gaz. vol. 190; p. 748.
Morse, Raymond P. (See Graham and Morse.)
Morton, Arthur H., Cleveland, Ohio. Pneumatic tire. No. 1,062,024; May 20; Gaz. vol. 190; p. 574.
Morton, Charles E., Edwardsville, Ill. Safety attachment for moving-picture machines. No. 1,061,101; May 6; Gaz. vol. 190; p. 185.
Morton, Edwin W. (See Wolfe and Morton.)
Morton, Frank M., Phoenix, Ala., assignor of one-third to H. L. Woodruff and one-third to W. H. Dismuke, Columbus, Ga. Revolving collapsible beam for dyeing-machines. No. 1,062,493; May 20; Gaz. vol. 190; p. 731.
Morton, Joseph C., and A. S. Rupard, Eldorado Springs, Mo. Tripod. No. 1,061,102; May 6; Gaz. vol. 190; p. 186.
Morton, Walter S., Harrisburg, Pa. Motor-vehicle frame. No. 1,062,789; May 27; Gaz. vol. 190; p. 870.

Morton, Walter S., Portsmouth Ohio, assignor to S. F. Dunkle, trustee, Harrisburg, Pa. Steering mechanism for traction-engines. No. 1,062,788; May 27; Gaz. vol. 190; p. 870.
Moses, Adolph, Mount Vernon, N. Y. Automatic vending-machine. No. 1,061,197; May 6; Gaz. vol. 190; p. 217.
Moskal, Joseph, Chicago, Ill. Safety-stop for elevators. No. 1,061,103; May 6; Gaz. vol. 190; p. 186.
Moss, Louis, New York, N. Y. Toy. No. 1,060,998; May 6; Gaz. vol. 190; p. 152.
Mowbray, James W., assignor of one-half to J. H. Chambers, Winnipeg, Manitoba, Canada. Carbureter. No. 1,061,626; May 13; Gaz. vol. 190; p. 402.
Mowlds, Thomas D., Bala, Pa. Stone-channeling mechanism. No. 1,062,700; May 27; Gaz. vol. 190; p. 871.
Mueller, Philip, assignor to H. Mueller Mfg. Co., Decatur, Ill. Clean-out ferrule for drain or soil pipes. No. 1,060,693; May 6; Gaz. vol. 190; p. 45.
Mueller, Philip, assignor to H. Mueller Mfg. Co., Decatur, Ill. Suction-hood for abrading-tools. No. 1,062,248; May 20; Gaz. vol. 190; p. 651.
Muiford, Logan W., Narberth, assignor to American Bar Lock Company, Philadelphia, Pa. Sidewalk, floor, vault, and roof light construction. No. 1,062,987; May 27; Gaz. vol. 190; p. 936.
Müller, Carl, Ludwigshafen-on-the-Rhine, and M. H. Isler, Mannheim, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Anthraquinone dye. No. 1,062,988; May 27; Gaz. vol. 190; p. 936.
Müller, Karl, Paris, France. Apparatus for drawing off water of condensation. No. 1,061,314; May 13; Gaz. vol. 190; p. 293.
Müller, Philipp, Frankfort-on-the-Main, assignor to H. Finkelstein and L. F. Meyer, Berlin, Germany. Manufacture of alimentary products. No. 1,061,488; May 13; Gaz. vol. 190; p. 352.
Munden, Joseph, Bradenville, Pa. Internal-combustion engine. No. 1,062,494; May 20; Gaz. vol. 190; p. 732.
Munn, Albert C. (See McCluer and Munn.)
Munn, Merton S., Stillwater, Minn. Shoe-sole trimmer. No. 1,060,694; May 6; Gaz. vol. 190; p. 45.
Munson, Charles and J. G., Cedar Rapids, Iowa. Street-car controller. No. 1,062,791; May 27; Gaz. vol. 190; p. 871.
Munson, John G. (See Munson, Charles and J. G.)
Murauer, Rudolf, Klagenfurt, Austria-Hungary. Valve-gear for engines. No. 1,062,843; May 27; Gaz. vol. 190; p. 888.
Muridge, Courtenay G., Elk Grove, Cal. Motor-cycle. No. 1,062,844; May 27; Gaz. vol. 190; p. 889.
Murphey, Frank P., Decatur, Ill. Rail intersection. No. 1,060,695; May 6; Gaz. vol. 190; p. 46.
Murphy, Maurice J., Philadelphia, Pa. Clothes-washer. No. 1,062,658; May 27; Gaz. vol. 190; p. 828.
Murphy, William F., Iowa City, Iowa. Conveyer. No. 1,062,548; May 20; Gaz. vol. 190; p. 748.
Murr, Lewis, *et al.* (See Coleman, George, assignor.)
Murray, Albert R. (See Snedden, James, assignor.)
Murray, Charles R., L. R. Brink, and W. K. Malmstrom, assignors to Barnhart Bros. & Spindler, Chicago, Ill. Electric welding. No. 1,062,571; May 20; Gaz. vol. 190; p. 756.
Murray, George C., Chicago, Ill., assignor to Continental Railway Equipment Company, Wilmington, Del. Draft-rigging. No. 1,061,315; May 13; Gaz. vol. 190; p. 293.
Murray, James E., Albuquerque, N. Mex. Tank-siphon for locomotives. No. 1,060,616; May 6; Gaz. vol. 190; p. 18.
Murray, Thomas E. (See Rhodes and Rypinski, assignors.)
Murray, Thomas E., New York, N. Y. Fuse-holding device. No. 1,060,617; May 6; Gaz. vol. 190; p. 19.
Musil, Joseph. (See Brewer, Governor L., assignor.)
Mussey, William P., Chicago, Ill. Bowling-pin. No. 1,060,932; May 6; Gaz. vol. 190; p. 128.
Myatt, William J., Birmingham, England. Device for stropping or sharpening razor-blades or the like. No. 1,061,772; May 13; Gaz. vol. 190; p. 449.
Myers, Charles H., Buffalo, N. Y. Worm-gearing. No. 1,060,933; May 6; Gaz. vol. 190; p. 128.
Myers, Charles H., Buffalo, N. Y. Carbureter. No. 1,062,180; May 20; Gaz. vol. 190; p. 627.
Myers, Edgar W., San Jose, Cal., assignor to Rudolph-Myers Manufacturing Co. Change-speed-transmission mechanism for motor-cycles. No. 1,060,999; May 6; Gaz. vol. 190; p. 153.
Myers, Edwin D. (See Binns, James R., assignor.)
Mygatt, Otis A., New York, N. Y. Illuminating appliance. No. 1,061,000; May 6; Gaz. vol. 190; p. 153.
Mymms, William H., Luton, England. Detachable sweat-band. No. 1,061,489; May 13; Gaz. vol. 190; p. 353.
Naegelen, Charles, assignor to The Cincinnati Butchers' Supply Company, Cincinnati, Ohio. Safety appliance for sausage-stuffers. No. 1,062,989; May 27; Gaz. vol. 190; p. 937.
Nahlinger, John, Cleveland, Ohio. Driving mechanism for spiral-tool drivers. No. 1,061,773; May 13; Gaz. vol. 190; p. 450.
Nase, Barnabas T., assignor to Stanley Paper Fiber Co., San Francisco, Cal. Treatment of wood-pulp. No. 1,061,316; May 13; Gaz. vol. 190; p. 294.
Nash, Nathan E., Toronto, Ontario, Canada. Heat-regulating apparatus. No. 1,060,780; May 6; Gaz. vol. 190; p. 73.
Nathan, Edwin B., New York, N. Y. Combined legging and thigh-covering. No. 1,061,317; May 13; Gaz. vol. 190; p. 294.
National Cash Register Company, The. (See Chambers, William G., assignor.)
National Clinch Hinge Company. (See Baker, Harvey C., assignor.)
National Clock and Electric Mfg. Co., The. (See Wurmb and Baumann, assignors.)
National Dump Car Company. (See Otis, Spencer, assignor.)
National Fire Proofing Company, The. (See Naylor, Harry B., assignor.)
National Gum & Mica Company. (See Alexander, Walter, assignor.)
National Lock Company. (See Thulander, Konstantine, assignor.)
National Malleable Castings Company, The. (See Pope, Henry F., assignor.)
National Malleable Castings Company, The. (See Stephenson and Wilson, assignors.)
National Metal Fabric Company, The. (See Clark, Norris E., assignor.)
National Piano Company. (See Watson, William A., assignor.)
National Radiator Company. (See Waters, Samuel B., assignor.)
National Roll Printer Company. (See Lee, Moses W., assignor.)
National Tube Company, The. (See Hock, John A., assignor.)
National Wrapping Machine Company. (See Merrell and Amidon, assignors.)
Nauckhoff, Sigurd A. G., Vinterviken, Liljeholmen, assignor to Nitroglycerine Aktiebolaget, Stockholm, Sweden. Explosive. No. 1,061,774; May 13; Gaz. vol. 190; p. 450.
Nauclér, Carl J., Falun, Sweden. Apparatus for raising sunken wood or the like. No. 1,060,696; May 6; Gaz. vol. 190; p. 46.
Naumann, Justus H., Woodlake, assignor of one-fourth to J. P. Scherf, Balaton, Minn. Transmission-gearing. No. 1,061,554; May 13; Gaz. vol. 190; p. 377.
Nawiasky, Paul, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Anthraquinone dyes and making them. No. 1,062,990; May 27; Gaz. vol. 190; p. 937.
Naylor, Harry B., assignor to The National Fire Proofing Company, Pittsburgh, Pa. Grain-crib. No. 1,061,683; May 13; Gaz. vol. 190; p. 422.
Neal, Frances P., North Plainfield, N. J. Range. No. 1,062,991; May 27; Gaz. vol. 190; p. 937.
Neilsen, Joe, Leesburg, Va. Portable foldable wardrobe. No. 1,062,845; May 27; Gaz. vol. 190; p. 889.
Neller, Albert H., assignor to Louden Machinery Company, Fairfield, Iowa. Cattle-stall. No. 1,062,295; May 20; Gaz. vol. 190; p. 667.
Nelson, Charles. (See Sternau and Nelson.)
Nelson, Charles, New York, assignor to S. Sternau & Company, Brooklyn, N. Y. Trivet. No. 1,061,319; May 13; Gaz. vol. 190; p. 295.
Nelson, Charles, and W. G. Barker, New York, assignors to S. Sternau & Company, Brooklyn, N. Y. Alcohol-lamp. No. 1,061,318; May 13; Gaz. vol. 190; p. 295.
Nelson, James D., Cincinnati, Ohio. Automatic alarm and signal device. No. 1,060,781; May 6; Gaz. vol. 190; p. 74.
Nelson, John H., Portland, Oreg. Live-bait tie. No. 1,062,726; May 27; Gaz. vol. 190; p. 849.
Nelson, John W., Hutchinson, Kans. Watering-tank. No. 1,062,792; May 27; Gaz. vol. 190; p. 872.
Nelson, Lewen R., Peoria, assignor, by mesne assignments, to Nickerson Wall Paper Exhibitor Co., Fairbury, Ill. Display-rack. No. 1,061,001; May 6; Gaz. vol. 190; p. 153.
Nelson, Nels H., Willmar, Minn. Traction-engine. No. 1,061,684; May 13; Gaz. vol. 190; p. 422.
Nester, Joseph. (See Bergen, Frank, assignor.)
Nestor, French, Elkins, W. Va. Cooking utensil. No. 1,061,555; May 13; Gaz. vol. 190; p. 377.
Nett, Frank W. (See Nett, Fred H. and F. W.)
Nett, Fred H. and F. W., Rialto, Cal. Traction-engine. No. 1,061,104; May 6; Gaz. vol. 190; p. 186.
Nevius, Marvin J., Burlington, Iowa, and J. H. Wilkins, Washington, D. C. Page-clamp. No. 1,062,659; May 27; Gaz. vol. 190; p. 828.
New Hartford Cotton Manufacturing Company. (See Steber, Bernard T., assignor.)
"New-Way" Motor Co., The. (See Bailey, Curtis L., assignor.)
Newby, Ellsberry and W., Reedley, Cal. Ink-well. No. 1,060,782; May 6; Gaz. vol. 190; p. 74.
Newby, Warner. (See Newby, Ellsberry and W.)
Newell, George A., assignor to H. Lawson, Buffalo, N. Y. Crutch. No. 1,061,397; May 13; Gaz. vol. 190; p. 320.
Newerf, Nicholas C. (See Kluck, Ernest M., assignor.)
Newerf, Nicholas C., Buffalo, N. Y. Mail-bag. No. 1,060,697; May 6; Gaz. vol. 190; p. 46.
Newhall, Henry B., Jr., Plainfield, and H. W. Pleister, Westfield, assignors to H. B. Newhall, Plainfield, N. J. One-part expansion-shield. No. 1,062,992; May 27; Gaz. vol. 190; p. 938.

Newhall, Henry B., Jr., Plainfield, and H. W. Pleister, Westfield, assignors to H. B. Newhall, Plainfield, N. J. Two-part expansion-shield. No. 1,062,993; May 27; Gaz. vol. 190; p. 938.

Newman Bros. Co. (See Anderson, Harry J., assignor.)

Newman, Samuel, New York, N. Y. Tooth-measuring instrument. No. 1,061,398; May 13; Gaz. vol. 190; p. 321.

Newton, Charles H., East Orange, and E. S. Canfield, Newark, N. J., assignors, by mesne assignments, to Standard Company, Torrington, Conn. Silencer for engines. No. 1,061,775; May 13; Gaz. vol. 190; p. 450.

Newton, George, Odessa, N. Y. Roofing. No. 1,061,685; May 13; Gaz. vol. 190; p. 423.

Nice, Fredrick J., Pontiac, Mich. Hydrocarbon-burner. No. 1,061,627; May 13; Gaz. vol. 190; p. 402.

Nichols, Bernard H., Ravenna, Ohio. Hat. No. 1,062,025; May 20; Gaz. vol. 190; p. 574.

Nichols, Perry J., Ames, Colo. Wrist and sleeve protector. No. 1,061,686; May 13; Gaz. vol. 190; p. 423.

Nickerson Wall Paper Exhibitor Co. (See Nelson, Lewen R., assignor.)

Nickum, Walter D., assignor to Railway Safety Signal Company, Los Angeles, Cal. Railway signal system. No. 1,061,863; May 13; Gaz. vol. 190; p. 477.

Nielsen, Catherine, *et al.* (See Nielsen, Rasmus, assignor.)

Nielsen, Holger J., C. J. Borglin, San Francisco, and L. C. A. Soeborg, Alameda, Cal. Concentrator. No. 1,061,106; May 6; Gaz. vol. 190; p. 187.

Nielsen, Holger J., C. J. Borglin, San Francisco, and L. C. A. Soeborg, Alameda, assignors to Bear Milling and Mining Company, San Francisco, Cal. Concentrator. No. 1,061,105; May 6; Gaz. vol. 190; p. 187.

Nielsen, Rasmus, assignor to C. Nielsen and H. S. Giles, Troy, N. Y. Lemon-squeezer. No. 1,063,056; May 27; Gaz. vol. 190; p. 950.

Niles, Henry E., assignor to Eastman Kodak Co., Rochester, N. Y. Photographic-printing mask. No. 1,060,618; May 6; Gaz. vol. 190; p. 19.

Nitroglycerine Aktiebolaget. (See Nauckhoff, Sigurd A. G., assignor.)

Noonan, John P., Pittsburgh, Pa. Insulated rail-joint. No. 1,062,296; May 20; Gaz. vol. 190; p. 667.

Nordgrén, Johan A., Worcester, Mass. Attachment for opera-chairs. No. 1,060,934; May 6; Gaz. vol. 190; p. 128.

Nordmark, Carl F., Lynn, Mass. Pump and prime mover. No. 1,061,107; May 6; Gaz. vol. 190; p. 188.

Nordqvist, Per E., Chicago, Ill., assignor to Concealed Door Check Company, Santa Barbara, Cal. Regulating device for door checks and closers. No. 1,062,297; May 20; Gaz. vol. 190; p. 667.

Nordstrom, Axel R., assignor of one-fourth to G. F. Hellstrom, Sr., and G. F. Hellstrom, Jr., West Lynn, three-sixteenths to M. Bowman, Rockport, and one-sixteenth to C. E. Norwall, West Lynn, Mass. Flying-machine. No. 1,061,108; May 6; Gaz. vol. 190; p. 188.

Nordstrom, Axel R., West Lynn, assignor of three-sixteenths to M. Bowman, Rockport, one-sixteenth to C. E. Norwall, and one-fourth to G. F. Hellstrom, Sr., and G. F. Hellstrom, Jr., West Lynn, Mass. Flying-machine. No. 1,061,198; May 6; Gaz. vol. 190; p. 218.

Norris, Edward, assignor to S. Mordan and Company, Limited, London, England. Pencil-case and kindred instrument. No. 1,063,134; May 27; Gaz. vol. 190; p. 984.

Northrup, Elmer C., assignor to Automatic Machine Company, San Francisco, Cal. Box-nailing machine. No. 1,063,171; May 27; Gaz. vol. 190; p. 997.

Norton, Eugene E., and A. U. Langenegger, assignors to The King Machine Company, Bridgeport, Conn. Ironing-machine. No. 1,061,109; May 6; Gaz. vol. 190; p. 189.

Norwall, Carin E., *et al.* (See Nordstrom, Axel R., assignor.)

Novario, Secondo. (See Dubois, Novario, and Jones.)

Novelty Hosiery Company. (See Hirner, Emil A., assignor.)

Nugent, Francis A., Sanford, Manitoba, Canada. Sod-pulverizing machine. No. 1,062,660; May 27; Gaz. vol. 190; p. 829.

Nusly, Albert J., Jr., assignor to Pinafour Toy Manufacturing Company, Canton, Ohio. Toy. No. 1,060,619; May 6; Gaz. vol. 190; p. 19.

Nutt, Buell, assignor to The Strong-Kennard & Nutt Company, Cleveland, Ohio. Device for advertising spectacle-lenses and the like. No. 1,061,002; May 6; Gaz. vol. 190; p. 154.

Nyboe, Sophus, Brooklyn, N. Y. Collapsible life-boat. No. 1,062,181; May 20; Gaz. vol. 190; p. 628.

Nylander, Joseph L., Seattle, Wash. Electric heater. No. 1,062,111; May 20; Gaz. vol. 190; p. 604.

Nyström, Carl W., Karlstad, Sweden. Apparatus for automatically operating piano-pedals. No. 1,062,249; May 20; Gaz. vol. 190; p. 651.

O. K. Manufacturing & Stamping Company, The. (See Sloan, Francis E., assignor.)

O'Brien, Daniel P., Woburn, Mass. Machine for treating hides, skins, and leather. No. 1,062,026; May 20; Gaz. vol. 190; p. 575.

O'Connor, James, New York, N. Y. Tempo-regulator for pneumatic piano-players. No. 1,067,783; May 6; Gaz. vol. 190; p. 75.

O'Connor, John F., assignor to W. H. Miner, Chicago, Ill. Friction draft-rigging for railway-cars. No. 1,060,698; May 6; Gaz. vol. 190; p. 47.

O'Hare, James, Washington, Ind. Nut-lock. No. 1,061,776; May 13; Gaz. vol. 190; p. 451.

O'Neill, Benjamin A. (See Williford, Joseph L., assignor.)

O'Neill, John W. (See Van Horn, Vandiver J., assignor.)

Ocumpaugh, Charles H., Rochester, N. Y. Voting-machine. No. 1,061,944; May 13; Gaz. vol. 190; p. 505.

Oechsle, Theodore F., Philadelphia, Pa. Metal sash-bar. No. 1,062,354; May 20; Gaz. vol. 190; p. 685.

Oertel, Karl, assignor to Gesellschaft für Patentverwertung m. b. H., Berlin, Germany. Headed wire pin. No. 1,063,057; May 27; Gaz. vol. 190; p. 959.

Offenhauser, Christopher. (See Machalske, Florentine J., assignor.)

Ogden, William H., Binghamton, N. Y. Rotary engine. No. 1,060,699; May 6; Gaz. vol. 190; p. 47.

Ohio Blower Company, The. (See Joch, Anton, assignor.)

Ohlsson, Olof. Söderteije, Sweden. Lubricator. No. 1,062,846; May 27; Gaz. vol. 190; p. 889.

Ohmer Fare Register Company. (See Ohmer, John F., assignor.)

Ohmer, John F., Dayton, Ohio, assignor to Ohmer Fare Register Company, Rochester, N. Y. Annunciator or indicator for street and interurban car lines. No. 1,061,628; May 13; Gaz. vol. 190; p. 402.

Ohmer, John F., Dayton, Ohio, assignor to Ohmer Fare Register Company, Rochester, N. Y. Operating mechanism for fare-registers. (Reissue.) No. 13,566; May 20; Gaz. vol. 190; p. 764.

Olin, Clarence G., Windsor, Ohio. Exercising device for horses. No. 1,062,495; May 20; Gaz. vol. 190; p. 733.

Oliver, Christian, and O. G. Jacobson, Baltimore, Md. Propelling mechanism. No. 1,061,110; May 6; Gaz. vol. 190; p. 189.

Oliver Typewriter Company, The, *et al.* (See Schneeloch and Smith, assignors.)

Olmsted, Clyde R. (See Wolff, William H., assignor.)

Olsen, Pedro A., Inglewood, Wash. Saw-set. No. 1,060,784; May 6; Gaz. vol. 190; p. 75.

Olsen, Svend. (See Thiem, Walter, assignor.)

Olson, Carl H., *et al.* (See Edman, John, assignor.)

Olson, Ingebrigt H., T. A. Rorem, and J. H. Hill, Tofield, Alberta, assignors of one-fourth to J. Cormack and H. A. Mackie, Edmonton, Canada. Brush-cutter. No. 1,063,176; May 27; Gaz. vol. 190; p. 999.

Olson, John, Bradley, assignor to Sears, Roebuck and Company, Chicago, Ill. Agricultural implement. No. 1,062,602; May 27; Gaz. vol. 190; p. 809.

Olsson, Zacharias, River View, Hampton Hill, assignor to Gummi (U. S. A.) Limited, London, England. Manufacture of elastic materials. No. 1,061,111; May 6; Gaz. vol. 190; p. 189.

Oppenheimer, Joseph E., assignor to The Snellenburg Clothing Company, Philadelphia, Pa. Coat. No. 1,061,945; May 13; Gaz. vol. 190; p. 506.

Optische Anstalt C. P. Goerz Aktiengesellschaft. (See Hofe, Christian von, assignor.)

Orange Hat Box Company. (See Cash, Arthur W., assignor.)

Ordnance Improvement Company. (See Gerdom, Gregory, assignor.)

Osborn, Francis C., assignor to Standard Computing Scale Company, Detroit, Mich. Computing-scale. No. 1,062,603; May 27; Gaz. vol. 190; p. 810.

Osborn Manufacturing Company, The. (See Atwater, Harry R., assignor.)

Osborne, Eugene F., assignor to Osborne Steam Engineering Company, Chicago, Ill. Valve. No. 1,061,556; May 13; Gaz. vol. 190; p. 378.

Osborne, Henry E., assignor to M. B. Johnston, Salt Lake City, Utah. Power-wheel. No. 1,061,399; May 13; Gaz. vol. 190; p. 321.

Osborne Steam Engineering Company. (See Osborne, Eugene F., assignor.)

Osgood, John H., Putnam, Conn. Reamer. No. 1,061,557; May 13; Gaz. vol. 190; p. 378.

Oshkosh Trunk Company, The. (See Meyer, Frank W., assignor.)

Osler, Jay T., Coraopolis, assignor to Lewis Foundry and Machine Company, Pittsburgh, Pa. Clutch mechanism for shearing-machines and the like. No. 1,060,850; May 6; Gaz. vol. 190; p. 99.

Osofs, Morris L., and M. R. Slutzky, New York, N. Y. Hydrocycle. No. 1,060,620; May 6; Gaz. vol. 190; p. 20.

Ostrovsky, Harry, assignor to Ostrovsky Musicians Hand Development Company, Ltd., London, England. Apparatus for promoting the flexibility of the joints of the hands. No. 1,061,003; May 6; Gaz. vol. 190; p. 154.

Ostrovsky Musicians Hand Development Company. (See Ostrovsky, Harry, assignor.)

Oswalt, John C. (See Oswalt, William C., assignor.)

Oswalt, William C., assignor of one-half to J. C. Oswalt, Percy, Iowa. Automatic cut-off for gas-lights. No. 1,060,621; May 6; Gaz. vol. 190; p. 20.

Otey, Eliga E., Junction City, Oreg. Oar-lock. No. 1,062,182; May 20; Gaz. vol. 190; p. 628.

Otis Elevator Company. (See Gale, Ernest L., Sr., assignor.)

Otis Elevator Company. (See Larson, David, assignor.)

Otis, Spencer, Chicago, Ill., assignor, by mesne assignments, to National Dump Car Company. Dump-car. No. 1,061,004; May 6; Gaz. vol. 190; p. 154.

Oustad, Martin, Hamar, Norway. Ignition-controller for internal-combustion engines. No. 1,061,921; May 13; Gaz. vol. 190; p. 497.

Overbury, John T. (See Sanborn, McMahon, Overbury, and Young.)

Oviatt, Howard. (See Simpson and Oviatt.)

Owen, Henry P., Liverpool, England. Packing of pistons, plungers, and the like. No. 1,060,622; May 6; Gaz. vol. 190; p. 20.

Owen, Wilmer M. (See Mapes and Owen.)

Owens, Benjamin F., Rockwell City, Iowa. Inspection device for grain-cars. No. 1,063,135; May 27; Gaz. vol. 190; p. 985.

Owens, Horace P., Atlanta, Ga. Reinforced-concrete fence-post and fastener therefor. No. 1,060,623; May 6; Gaz. vol. 190; p. 21.

Owrey, Lute D., Pittsburgh, Pa. Automatic oil-release. No. 1,062,411; May 20; Gaz. vol. 190; p. 705.

Oxygen Welding Works, The. (See Patrick, Hubert H., assignor.)

Pahl, August J., Alameda, Cal. Laying submarine power and other electric cables. No. 1,060,785; May 6; Gaz. vol. 190; p. 75.

Painter, William A., assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa. Chemical fire-extinguisher. No. 1,061,320; May 13; Gaz. vol. 190; p. 295.

Paisley, William R., Lewisville, Minn. Rural-mail delivering and collecting apparatus. No. 1,062,183; May 20; Gaz. vol. 190; p. 628.

Palen, Frank A., New York, N. Y. Apparatus for treating wood. No. 1,062,184; May 20; Gaz. vol. 190; p. 629.

Paler, Victor, Harvey, Ill. Trunk. No. 1,062,496; May 20; Gaz. vol. 190; p. 733.

Palin, Frank E. and R. A., San Mateo, Cal. Seat-spring for motor-cycles. No. 1,061,199; May 6; Gaz. vol. 190; p. 218.

Palin, Ronald A. (See Palin, Frank E. and R. A.)

Palmer, Charles. (See Blee, Black, and Palmer.)

Palmer, Frederick J., Providence, R. I. Hinge. No. 1,063,136; May 27; Gaz. vol. 190; p. 985.

Palmer, Granville E., assignor to The Hart Manufacturing Company, Hartford, Conn. Switch. No. 1,060,700; May 6; Gaz. vol. 190; p. 48.

Palmer, Harry R., New York, N. Y., assignor to Milton Bradley Company, Springfield, Mass. Game apparatus. No. 1,061,864; May 13; Gaz. vol. 190; p. 478.

Panoulias, Panayiotis, Hoboken, N. J. Device for use in candy-making. No. 1,062,661; May 27; Gaz. vol. 190; p. 829.

Pape, Herman G., Buffalo, N. Y. Passenger-driver telephone signal system for vehicles. No. 1,060,851; May 6; Gaz. vol. 190; p. 99.

Park, William H., New York, N. Y. Pasteurizing apparatus. No. 1,062,847; May 27; Gaz. vol. 190; p. 890.

Parke, Henrietta K., Chicago, Ill. Window-cleaner. No. 1,061,112; May 6; Gaz. vol. 190; p. 189.

Parker, Frank O., Washington, D. C., assignor of two-fifths to F. C. Smith, Waterbury, Conn. Vacuum massage device. No. 1,060,852; May 6; Gaz. vol. 190; p. 100.

Parker, Thomas R. G. (See Pearce, Parker, and Wright.)

Parkhurst, Otis K., Mulvane, Kans. Barber's apron. No. 1,062,497; May 20; Gaz. vol. 190; p. 733.

Parsegan, Jacob H., San Francisco, Cal. Hair-planting instrument. No. 1,061,005; May 6; Gaz. vol. 190; p. 155.

Parsons, Charles E. (See Hilliard and Parsons.)

Parsons, Ione F., San Francisco, Cal. Door-fastener. No. 1,061,620; May 13; Gaz. vol. 190; p. 403.

Pate, D. B. (See Schafer and Cook, assignors.)

Patent Rapid Scaffold Tie Company, Limited. (See Jones, Daniel P., assignor.)

Patitz, Johann F. M., assignor to Allis-Chalmers Company, Milwaukee, Wis. Gas-pressor. No. 1,061,006; May 6; Gaz. vol. 190; p. 155.

Patrick, Hubert H., Handsworth, Birmingham, assignor to The Oxygen Welding Works, Limited, Birmingham, England. Making hollow pistons. No. 1,061,922; May 13; Gaz. vol. 190; p. 497.

Patterson, Charles F., Orange, N. J. Sprinkler supervisory system. No. 1,063,058; May 27; Gaz. vol. 190; p. 959.

Patterson, Charles H., Trinidad, Colo. Colt or calf weaner. No. 1,061,113; May 6; Gaz. vol. 190; p. 190.

Paul, Amasa C. (See Williford, Joseph L., assignor.)

Pauling, Harry, assignor to Salpetersäure-Industrie Gesellschaft, G. m. b. H., Gelsenkirchen, Germany. Absorbing dilute nitrous gases. No. 1,061,630; May 13; Gaz. vol. 190; p. 403.

Paulson, Albert O., Los Angeles, Cal. Stabilizer for airships. No. 1,063,137; May 27; Gaz. vol. 190; p. 985.

Pauly, Anton J., Stockerau, Austria-Hungary. Potato-planting machine. No. 1,061,490; May 13; Gaz. vol. 190; p. 353.

Payne, Thomas F., Pittsburgh, Pa. Frost-proof water-closet valve. No. 1,062,412; May 20; Gaz. vol. 190; p. 705.

Payne, Thomas F., Pittsburgh, Pa. Water-closet. No. 1,062,413; May 20; Gaz. vol. 190; p. 706.

Paynter, William D., Grass Valley, Cal. Rock-drill tester. No. 1,062,662; May 27; Gaz. vol. 190; p. 829.

Pealer, James C., Marion, Ind., assignor of one-half to J. W. Kelley. Internal-combustion engine. No. 1,061,923; May 13; Gaz. vol. 190; p. 497.

Pearce, Herbert, T. R. G. Parker, and F. W. Wright, Broadheath, assignors to Linotype and Machinery Limited, London, England. Means for tripping the inking-rollers of printing-presses. No. 1,060,624; May 6; Gaz. vol. 190; p. 21.

Pease, William A., assignor to The E. M. Hulse Company, Columbus, Ohio. Sofa or davenport bed. No. 1,061,777; May 13; Gaz. vol. 190; p. 451.

Peck, John F., Madison, S. D. Culvert-mold. No. 1,061,491; May 13; Gaz. vol. 190; p. 353.

Peck, Lloyd C., Sylvan Grove, Kans. Stamp-vending machine. No. 1,061,865; May 13; Gaz. vol. 190; p. 478.

Pedersen, John D., Jackson, Wyo. Gun-operating cartridge. No. 1,062,604; May 27; Gaz. vol. 190; p. 810.

Peerless Motor Car Company, The. (See Schmidt, Charles, assignor.)

Peery, Roy W., Bristol, Tenn., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,061,631; May 13; Gaz. vol. 190; p. 403.

Peirce, Robert T., Newport News, Va. Reinforced concrete construction. No. 1,060,853; May 6; Gaz. vol. 190; p. 100.

Pelletier, Fredrick A., Elgin, Ill. Milking-stool. No. 1,061,321; May 13; Gaz. vol. 190; p. 295.

Pelton, Charles H., assignor to The Thomas Manufacturing Company, Springfield, Ohio. Fertilizer-distributer. No. 1,061,400; May 13; Gaz. vol. 190; p. 322.

Pembroke, Charles J., Rochester, N. Y. Motor-vehicle. No. 1,060,701; May 6; Gaz. vol. 190; p. 48.

Pendleton, Frank E., Montclair, N. J. Self-cleaning filter. No. 1,062,793; May 27; Gaz. vol. 190; p. 872.

Penn Surgical Manufacturing Company. (See Root, Charles M., assignor.)

Penn, William E., Lake Mills, Wis., assignor to Creamery Package Manufacturing Company, Chicago, Ill. Curd-mill. No. 1,061,401; May 13; Gaz. vol. 190; p. 322.

Pennsylvania Steel Company, The. (See Cohen and Hilpert, assignors.)

Perkett, Louis F., Traverse City, Mich. Humidostat. No. 1,060,786; May 6; Gaz. vol. 190; p. 75.

Perkins, Alonson D., Los Angeles, Cal. Hinge mechanism. No. 1,062,549; May 20; Gaz. vol. 190; p. 748.

Perkins, Douglas, Jr., Plano, Cal. Hat-pin. No. 1,062,498; May 20; Gaz. vol. 190; p. 733.

Perky, Henry D., deceased, Glencoe, Md.: L. Sparks, administrator, assignor, by mesne assignments, to The Shredded Wheat Company, Niagara Falls, N. Y. Form of food from grain and manufacturing the same. No. 1,060,702; May 6; Gaz. vol. 190; p. 49.

Perry, Hillyard, Oak Ridge, Ontario, Canada. Throttle-valve lever for locomotives. No. 1,060,625; May 6; Gaz. vol. 190; p. 21.

Persson, Adolph, Greenwich, N. Y. Parachute. No. 1,060,703; May 6; Gaz. vol. 190; p. 49.

Peter Gray & Sons. (See Briand, Charles C., assignor.)

Petermann, Otto, Groton, N. Y., assignor to Standard Typewriter Company. Type-writing-machine construction. No. 1,062,027; May 20; Gaz. vol. 190; p. 575.

Petermöller, Franz J., Berlin, Germany, assignor to General Electric Company. Centrifugal air-pump. No. 1,060,935; May 6; Gaz. vol. 190; p. 128.

Petermöller, Franz J., Berlin, Germany, assignor to General Electric Company. Centrifugal throwing air-pump. No. 1,060,936; May 6; Gaz. vol. 190; p. 129.

Petermöller, Franz J., Berlin, Germany, assignor to General Electric Company. Centrifugal pump. No. 1,060,937; May 6; Gaz. vol. 190; p. 130.

Peters, Ida M., Pleasant Valley, N. Y. Gardener's wheeled chair. No. 1,061,114; May 6; Gaz. vol. 190; p. 190.

Petersen, George, Spokane, Wash. Keyhole-closer. No. 1,061,866; May 13; Gaz. vol. 190; p. 479.

Peterson, Burt A. (See Colman and Peterson.)

Peterson, Burt A., assignor, by mesne assignments, to Barber-Colman Company, Rockford, Ill. Heddle and heddle-frame. No. 1,061,322; May 13; Gaz. vol. 190; p. 296.

Peterson, Burt A., assignor to Barber-Colman Company, Rockford, Ill. Magazine-loader. No. 1,061,492; May 13; Gaz. vol. 190; p. 353.

Peterson, Burt A., assignor to Barber-Colman Company, Rockford, Ill. Means for securing doffer-supporting rails to spinning-frames. No. 1,061,493; May 13; Gaz. vol. 190; p. 354.

Peterson, Burt A., assignor to Barber-Colman Company, Rockford, Ill. Apparatus for facilitating the loading of bobbin-magazines. No. 1,062,250; May 20; Gaz. vol. 190; p. 652.

Peterson, Burt A., assignor to Barber-Colman Company, Rockford, Ill. Magazine-loader. No. 1,062,848; May 27; Gaz. vol. 190; p. 890.

Peterson, Frank, Leadville, Colo. Cream-separator. No. 1,063,059; May 27; Gaz. vol. 190; p. 960.

Peterson, John A., Minneapolis, Minn. Monolithic concrete wall. No. 1,062,298; May 20; Gaz. vol. 190; p. 668.

Peterson, Niels, Teton, Idaho. Pneumatic wheel. No. 1,060,854; May 6; Gaz. vol. 190; p. 101.

Peterson, Tron O., assignor to Store Improvement Company, Inc., New York, N. Y. Device for exhibiting articles of merchandise. No. 1,060,787; May 6; Gaz. vol. 190; p. 76.

Petrasek, William J. (See Vahl and Petrasek.)

Petro, John A., Lorain, Ohio. Faucet. No. 1,062,112; May 20; Gaz. vol. 190; p. 604.

Petroleum Iron Works Company, The. (See Mittinger, George E., Jr., assignor.)

Petschauer, John, Chicago, Ill. Apparatus for treating wood. No. 1,062,550; May 20; Gaz. vol. 190; p. 748.
Pettingell Machine Company. (See Knights, George L., assignor.)
Pettis, Andrew, Vian, Okla. Cross-tie form. No. 1,061,946; May 13; Gaz. vol. 190; p. 506.
Petsold, Charles G., Providence, R. I. Hand-threading shuttle. No. 1,062,251; May 20; Gaz. vol. 190; p. 652.
Pfanstiehl, Carl A., North Chicago, Ill. Electric stove. No. 1,062,299; May 20; Gaz. vol. 190; p. 668.
Pfeifer, William, Jersey City, N. J. Clip for fastening roof-sheets. No. 1,062,355; May 20; Gaz. vol. 190; p. 686.
Pfager, Harry M. (See Howard and Pfager.)
Pharo, James E., and W. S. Benjamin, Seattle, Wash. Fish-trap. No. 1,062,849; May 27; Gaz. vol. 190; p. 891.
Phelps, Lewis H. (See Hildenbrand, Henry, assignor.)
Phelps, Meritt L., Colorado City, Colo. Anti-rail-creeping device. No. 1,063,060; May 27; Gaz. vol. 190; p. 960.
Philadelphia Textile Machinery Company, The. (See Schwartz and Coulston, assignors.)
Philipcik, John, Jr., New Canaan, Conn. Foot-warmer. No. 1,062,925; May 27; Gaz. vol. 190; p. 916.
Phillippi, Frank A., assignor of one-third to W. H. Reifsnyder and one-third to R. Keller, Pottstown, Pa. Beer-cooler. No. 1,062,727; May 27; Gaz. vol. 190; p. 849.
Phillips, Alfred D., *et al.* (See Phillips, William R., assignor.)
Phillips, Eugene R., Phillipsdale, R. I. Winding-machine. No. 1,061,947; May 13; Gaz. vol. 190; p. 507.
Phillips, Martin N., Elizabethtown, Ky. Hydrant. No. 1,062,356; May 20; Gaz. vol. 190; p. 686.
Phillips, Thomas W. S., Mount Vernon, assignor to Geo. Borgfeldt & Co., New York, N. Y. Package. No. 1,060,626; May 6; Gaz. vol. 190; p. 21.
Phillips, William R., Crafton, Pa., assignor of one-third to A. D. Phillips, Cincinnati, Ohio, and one-third to J. L. Adams, Coraopolis, Pa. Window. No. 1,062,794; May 27; Gaz. vol. 190; p. 872.
Phinney Engineering Company, The. (See Phinney, William B., assignor.)
Phinney, William B., assignor to The Phinney Engineering Company, Chillicothe, Ohio. Bean-snipping machine. No. 1,062,663; May 27; Gaz. vol. 190; p. 830.
Phoenix Silk Manufacturing Company, The. (See Cardot, Evan, assignor.)
Pickard, Alfred L., assignor of one-half to C. A. Hunt, Jr., Lexington, N. C. Traverse mechanism for spinning-machines. No. 1,061,687; May 13; Gaz. vol. 190; p. 423.
Pickard, Arthur G., Altrincham, England. Photographic camera. No. 1,061,115; May 6; Gaz. vol. 190; p. 190.
Pickering, Samuel H., Norristown, Pa. Gun-stock. No. 1,063,061; May 27; Gaz. vol. 190; p. 960.
Pielert, John H., Bengies, Md. Bed-bottom. No. 1,062,499; May 20; Gaz. vol. 190; p. 734.
Pieper, Henri, Liege, Belgium. Electromechanical system for the propulsion of automobiles. No. 1,062,551; May 20; Gaz. vol. 190; p. 749.
Pierce, George L., and N. Provencher, Manchester, N. H., assignors to L. T. Houghton, Worcester, Mass. Thread-guide for spinning-machines. No. 1,061,007; May 6; Gaz. vol. 190; p. 155.
Pierce, Guy C., assignor to California Valve and Air Brake Company, Los Angeles, Cal. Means for forming and supporting diaphragms. No. 1,062,300; May 20; Gaz. vol. 190; p. 668.
Pierce, Lonnie J., assignor to Window Glass Machine Company, Pittsburgh, Pa. Electric switch. No. 1,062,185; May 20; Gaz. vol. 190; p. 629.
Pierce, Robert C., assignor to The Toledo Electric Welder Company, Cincinnati, Ohio. Control means for electric switches. No. 1,062,728; May 27; Gaz. vol. 190; p. 850.
Pierce, Simeon F., assignor, by mesne assignments, to Cream Cone Machine Company, St. Paul, Minn. Trimmer for pastry cones. No. 1,062,028; May 20; Gaz. vol. 190; p. 575.
Pierpont, Frank H., Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa. Matrix gaging and sorting mechanism. No. 1,061,558; May 13; Gaz. vol. 190; p. 379.
Pierpont, Frank H., Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa. Type-casting machine. No. 1,061,559; May 13; Gaz. vol. 190; p. 379.
Pierpont, Frank H., Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa. Machine for the casting and composing of single types in Semitic languages. No. 1,061,560; May 13; Gaz. vol. 190; p. 380.
Pierpont, Frank H., Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa. Record-strip composing-machine. No. 1,061,561; May 13; Gaz. vol. 190; p. 380.
Pierpont, Frank H., Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa. Pump. No. 1,061,562; May 13; Gaz. vol. 190; p. 380.
Pierpont, Frank H., Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa. Stamping, punching, shearing, or similar machine. No. 1,061,563; May 13; Gaz. vol. 190; p. 381.
Pierpont, Frank H., Horley, county of Surrey, England, assignor to Lanston Monotype Machine Company, Philadelphia, Pa. Machine for severing uniform lengths from a rod or bar. No. 1,061,564; May 13; Gaz. vol. 190; p. 381.
Pierson, Edward, Rollwitz, Nebr. Eccentric-balance computing-scale. No. 1,061,116; May 6; Gaz. vol. 190; p. 191.
Pillsbury, Franklin C., Boston, assignor to W. Cressy, Gloucester, Mass. Apparatus for spraying oil on road-surfaces. No. 1,062,020; May 20; Gaz. vol. 190; p. 576.
Pinafour Toy Manufacturing Company. (See Nusly, Albert J., Jr., assignor.)
Pinney, Aron B. and O. L., Arlington, N. J. Apparatus for forming concrete blocks. No. 1,061,117; May 6; Gaz. vol. 190; p. 192.
Pinney, Ovid L. (See Pinney, Aron B. and O. L.)
Pioneer Implement Company. (See Ford, Ralph L., assignor.)
Pipher, Ellis E., Milton, Ohio. Plumb-bob. No. 1,060,855; May 6; Gaz. vol. 190; p. 101.
Piscicelli, Roberto T., Florence, Italy. Cash-register with a single set of keys. No. 1,061,924; May 13; Gaz. vol. 190; p. 498.
Pitman, Henry L., Pineville, Ky. Spring-motor. No. 1,060,704; May 6; Gaz. vol. 190; p. 49.
Pitner, Marion W., Chicago, Ill. Handle. No. 1,060,856; May 6; Gaz. vol. 190; p. 102.
Pitt, Rafford, New Rochelle, N. Y. Door for show-cases and other inclosures. No. 1,061,008; May 6; Gaz. vol. 190; p. 156.
Pittsburg Iron & Steel Foundries Company. (See Fownes and Hofwing, assignors.)
Pittsburgh-Hickson Company. (See Moore, Jacob L., assignor.)
Pittsburgh Lamp, Brass & Glass Company. (See Ewing, Robert E., assignor.)
Pittsburgh Lamp, Brass & Glass Company. (See Painter, William A., assignor.)
Pius, Schlama, assignor of two-fifths to Aktien-Gesellschaft Warschauer Schrauben und Drahtfabriken, Warsaw, Russia. Nut-lock. No. 1,062,357; May 20; Gaz. vol. 190; p. 687.
Plager, Harriet, Brock, Nebr. Vegetable-cutter. No. 1,061,867; May 13; Gaz. vol. 190; p. 479.
Plathner, Fritz, and V. Dorn, Berlin, Germany. Tinning and leading metals. No. 1,060,938; May 6; Gaz. vol. 190; p. 130.
Pleban, Frank, Denver, Colo. Miner's candlestick. No. 1,061,948; May 13; Gaz. vol. 190; p. 507.
Pleister, Henry W. (See Newhall and Pleister.)
Plug Connection Electric Company. (See Trood, Samuel, assignor.)
Plunkett, Charles L., assignor to American Couch Company, Brooklyn, N. Y. Spring-mattress fabric. No. 1,061,402; May 13; Gaz. vol. 190; p. 323.
Plunkett, Charles L., Brooklyn, N. Y. Couch or couch-bed. No. 1,061,403; May 13; Gaz. vol. 190; p. 323.
Podolsky, Jacob, Boston, Mass. Water-closet connection. No. 1,061,632; May 13; Gaz. vol. 190; p. 404.
Pohlmann, Frederick L. (See Huber, Edward R., assignor.)
Pointon, Charles E. and J. E., Peterborough, England. Bread-making plant. No. 1,062,795; May 27; Gaz. vol. 190; p. 873.
Pointon, John E. (See Pointon, Charles E. and J. E.)
Polacheck, Arthur, assignor to Chas. Polacheck & Bro. Co., Milwaukee, Wis. Fixture-coupling. No. 1,062,664; May 27; Gaz. vol. 190; p. 830.
Pollak, Alfred, Allach, near Munich, Germany. Increasing the fermentation property of yeast. No. 1,061,494; May 13; Gaz. vol. 190; p. 354.
Pollen, Arthur H., London, and H. Isherwood, York, England. Ball and disk variable-speed mechanism. No. 1,062,500; May 20; Gaz. vol. 190; p. 734.
Polo, Joseph B., Clear Lake, S. D. Tire-alarm. No. 1,061,200; May 6; Gaz. vol. 190; p. 219.
Ponninghaus, Wilhelm B. D., South Yarra, Prahran, Victoria, assignor of one-half to J. A. Wallace, Grazier, Australia. Device for raising or lowering curtain-poles and the like. No. 1,063,138; May 27; Gaz. vol. 190; p. 986.
Pool, Morris W., New York, assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,062,729; May 27; Gaz. vol. 190; p. 850.
Pope, Henry F., assignor to The National Malleable Castings Company, Cleveland, Ohio. Draft-gear. No. 1,062,252; May 20; Gaz. vol. 190; p. 652.
Pope Manufacturing Company. (See Donegan, William R., assignor.)
Pope, Thomas H., Brooklyn, N. Y. Composition for crayons. No. 1,062,253; May 20; Gaz. vol. 190; p. 653.
Popkess, Michael A., Kansas City, Mo. Road-surfacing machine. No. 1,062,552; May 20; Gaz. vol. 190; p. 749.
Popkess, Michael A., Kansas City, Mo., assignor to Bituminized Road Company, Phoenix, Ariz. Road-making machine. No. 1,062,113; May 20; Gaz. vol. 190; p. 605.
Poppert, Jesse G., Portland, Oreg. Coupling for uniting hose-pipes with faucets. No. 1,062,730; May 27; Gaz. vol. 190; p. 850.
Porter, John B. (See Maximilian, Max, assignor.)
Posson, Edward, Chicago, Ill. Car-framework. No. 1,062,731; May 27; Gaz. vol. 190; p. 851.

Posson, Edward, Chicago, Ill. Car-framework. No. 1,062,732; May 27; Gaz. vol. 190; p. 851.
Post, William E., Mansfield, Ohio. Wrench. No. 1,061,925; May 13; Gaz. vol. 190; p. 499.
Post, Willis H., assignor to Postum Cereal Company, Limited, Battle Creek, Mich. Beverage extract. No. 1,061,495; May 13; Gaz. vol. 190; p. 354.
Postum Cereal Company. (See Post, Willis H., assignor.)
Potter, James C., Pawtucket, R. I. Milling-machine. No. 1,060,705; May 6; Gaz. vol. 190; p. 50.
Potts, Louis M., assignor, by mesne assignments, to A. McLanahan, Baltimore, Md. Automatic telegraph-transmitter. No. 1,060,939; May 6; Gaz. vol. 190; p. 130.
Potts, Samuel W., assignor to Englander Spring Bed Company, Brooklyn, N. Y. Convertible divan or couch-bed. No. 1,061,196; May 13; Gaz. vol. 190; p. 354.
Powell, Andrew, Uniontown, Pa. Coal-loading machine. No. 1,061,778; May 13; Gaz. vol. 190; p. 451.
Power Washing Machine Co. (See Speas, John H., assignor.)
Powers Accounting Machine Company. (See Powers, James, assignor.)
Powers, Clarence R., Terre Haute, Ind. Compression grease-cup. No. 1,061,323; May 13; Gaz. vol. 190; p. 296.
Powers, James, Washington, D. C., assignor to Powers Accounting Machine Company, New York, N. Y. Machine for compiling and sorting statistics. No. 1,061,118; May 6; Gaz. vol. 190; p. 192.
Pratt, Matthew W., Winters, Tex. Cleaner for firearm-barrels. No. 1,061,119; May 6; Gaz. vol. 190; p. 193.
Prager, Moritz, Berlin, Germany. Apparatus for concentrating, drying, and crystallizing. No. 1,062,030; May 20; Gaz. vol. 190; p. 576.
Prather, Frank M., Los Angeles, Cal. Packing-joint. No. 1,061,633; May 13; Gaz. vol. 190; p. 404.
Pratt, Philip W., Boston, Mass. Flag and staff. No. 1,062,850; May 27; Gaz. vol. 190; p. 891.
Pratt & Whitney Company. (See Hanson, Bengt M. W., assignor.)
Pratt, William H., Lynn, Mass., assignor to General Electric Company. Electric meter. No. 1,062,031; May 20; Gaz. vol. 190; p. 576.
Preiswerk, Ernst, and W. Bernoulli, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Amids of the arylalkyloxyacetic acids and making same. No. 1,061,120; May 6; Gaz. vol. 190; p. 193.
Premo, Bertrand L., Newark, N. J. Safety-razor. No. 1,061,324; May 13; Gaz. vol. 190; p. 296.
Presto Electrical Manufacturing Company. (See Schoenberg, Milton H., assignor.)
Preston, Ray W., Connersville, Ind., assignor to United Vacuum Appliance Company, Paterson, N. J. Automatic valve-controlling means. No. 1,062,553; May 20; Gaz. vol. 190; p. 750.
Price, Frederick, Coventry, England. Adjustable reamer, tap, and the like. No. 1,062,114; May 20; Gaz. vol. 190; p. 605.
Price, Joseph, Providence, R. I. Continuous mixing-machine. No. 1,061,497; May 13; Gaz. vol. 190; p. 355.
Priddy, Edwin S., Gothenburg, Nebr., assignor to Western Mail Transfer Company, Incorporated. Mail-bag collecting and delivering apparatus. No. 1,061,498; May 13; Gaz. vol. 190; p. 355.
Pride, John H., Kidder, S. D. Bath-cabinet. No. 1,061,565; May 13; Gaz. vol. 190; p. 382.
Pride, John H., Kidder, S. D. Bathing-brush. No. 1,061,566; May 13; Gaz. vol. 190; p. 382.
Prisciantelli, Mike, assignor to Behning Piano Company, New York, N. Y. Front panel for player-pianos. No. 1,060,627; May 6; Gaz. vol. 190; p. 22.
Proctor, Charles M., Detroit, Mich. Electric bell. No. 1,060,628; May 6; Gaz. vol. 190; p. 22.
Progress Manufacturing Company. (See Riley, Lester S., assignor.)
Prouty, Theodore C., assignor to Acorn Brass Manufacturing Company, Aurora, Ill. Sad-iron. No. 1,061,634; May 13; Gaz. vol. 190; p. 404.
Provencher, Norven. (See Pierce and Provencher.)
Pruden, Clarence D., Baltimore, Md. Sheet-metal house. No. 1,062,994; May 27; Gaz. vol. 190; p. 938.
Prugh, Harry H., *et al.*, trustees. (See Kohnle, Frederick, assignor.)
Pugh, Enoch H., Nelsonville, Ohio. Car stopper and starter. No. 1,061,567; May 13; Gaz. vol. 190; p. 382.
Pulfer, Robert A. (See Cedergquist, Nils H., assignor.)
Pulit, Joseph, New Haven, Conn. Trolley. No. 1,062,414; May 20; Gaz. vol. 190; p. 706.
Pyle, Robert H., Indianapolis, assignor to Remy Electric Company, Anderson, Ind. Governor. No. 1,062,605; May 27; Gaz. vol. 190; p. 811.
Quade, Fritz, assignor to J. A. von Wülfing, Berlin, Germany. Producing compounds of formaldehyde with sugars. No. 1,062,501; May 20; Gaz. vol. 190; p. 734.
Quenzer, Arthur, New York, N. Y. Jock-strap. No. 1,063,062; May 27; Gaz. vol. 190; p. 960.
Quertier, Hilary, Melbourne, Victoria, Australia. Time and speed indicating and recording means. No. 1,061,121; May 6; Gaz. vol. 190; p. 193.
Quimby, Charles H., Jr., Mount Vernon, N. Y. Metal sheet-piling. No. 1,060,858; May 6; Gaz. vol. 190; p. 102.
Quinby, Albert O., Fresno, Cal. Gate. No. 1,060,857; May 6; Gaz. vol. 190; p. 102.
Quinby, John G., Norfolk, Va. Rotary engine. No. 1,061,122; May 6; Gaz. vol. 190; p. 194.
Quinn, John P., Lawton, Iowa. Automatic heat-regulator. No. 1,061,123; May 6; Gaz. vol. 190; p. 194.
Rabe, Albert, Berlin, Germany. Machine for producing ropes or threads. No. 1,062,796; May 27; Gaz. vol. 190; p. 873.
Radcliff, William, Burgettstown, Pa. Envelop. No. 1,062,851; May 27; Gaz. vol. 190; p. 891.
Rahlf, Henry L., Falls City, Nebr. Corn-crib. No. 1,060,788; May 6; Gaz. vol. 190; p. 76.
Rahotina, Anton, Lorain, Ohio. Box-cover fastener. No. 1,062,733; May 27; Gaz. vol. 190; p. 851.
Railway Safety Signal Company. (See Nickum, Walter D., assignor.)
Rains, Charles H., Elchorn, Ill. Wire-stretcher. No. 1,063,063; May 27; Gaz. vol. 190; p. 961.
Rakestraw, Thomas G., assignor of three-fourths to E. H. and A. F. Sellers, Detroit, Mich. Boiler-feeder and water-level-maintaining apparatus. No. 1,062,115; May 20; Gaz. vol. 190; p. 605.
Ralston Steel Car Company, The. (See Irwin and Tesseyman, assignors.)
Ramén, Arthur, Olympia, Sweden. Tunnel-furnace. No. 1,062,606; May 27; Gaz. vol. 190; p. 811.
Rampini, Christian, deceased; W. E. Warland, administrator, Brooklyn, N. Y., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Producing amino-anthraquinones and derivatives thereof. No. 1,063,172; May 27; Gaz. vol. 190; p. 998.
Rampini, Christian, deceased; W. E. Warland, administrator, Brooklyn, N. Y., assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Producing amino-anthraquinones and derivatives thereof. No. 1,063,173; May 27; Gaz. vol. 190; p. 998.
Ramsaur, John J., Lincolnton, N. C. Wheat-cleaner. No. 1,063,139; May 27; Gaz. vol. 190; p. 986.
Ramsay, William A., Honolulu, Hawaii. Friction-clutch. No. 1,063,064; May 27; Gaz. vol. 190; p. 961.
Ramsey, Albert F., Plymouth, Ohio. Fly-trap. No. 1,062,734; May 27; Gaz. vol. 190; p. 852.
Ramsey, George W., Peoria, Ill., assignor to Underwood Typewriter Company, New York, N. Y. Type-writer. No. 1,062,735; May 27; Gaz. vol. 190; p. 852.
Ramus, Carl, Port Townsend, Wash. Sound-reproducing machine. No. 1,061,124; May 6; Gaz. vol. 190; p. 195.
Randall, Egbert J., Pontiac, Mich., and S. A. Randall, Rochester, N. Y. Aeroplane. No. 1,062,116; May 20; Gaz. vol. 190; p. 606.
Randall, Horatio C., San Francisco, Cal. Motor for operating doors. No. 1,060,789; May 6; Gaz. vol. 190; p. 76.
Randall, Sherman A. (See Randall, Egbert J. and S. A.)
Ranger, Samuel E., Hilts, Cal. Band resaw-machine. No. 1,062,358; May 20; Gaz. vol. 190; p. 687.
Rasnick, Noah W., Dante, Va. Match-box. No. 1,060,706; May 6; Gaz. vol. 190; p. 50.
Ratcliff, Wilton F. (See Wilson and Ratcliff.)
Ratzlaff, Jacob, Portland, Oreg. Single-delivery receptacle. No. 1,061,926; May 13; Gaz. vol. 190; p. 499.
Rau, John, Indianapolis, Ind. Glass-blowing machine. No. 1,061,404; May 13; Gaz. vol. 190; p. 324.
Rau, John, Indianapolis, Ind. Making hollow glassware. No. 1,061,405; May 13; Gaz. vol. 190; p. 324.
Rauh, Leopold. (See Dana, William H., assignor.)
Rawstron, Donald, assignor to American Asphaltum and Rubber Co., Chicago, Ill. Penetration-machine. No. 1,062,032; May 20; Gaz. vol. 190; p. 577.
Reading Hardware Company. (See Mason, George N., assignor.)
Ready Tool Company, The. (See Fish, Harold, assignor.)
Reams, Herman S. (See Turner and Reams.)
Rechniewski, Stanislaw, St. Petersburg, Russia. Integral reinforced-concrete roof structure. No. 1,062,736; May 27; Gaz. vol. 190; p. 852.
Recker, Adolph C., Oakville, assignor to Waterbury Mfg. Co., Waterbury, Conn. Portable hand electric lamp. No. 1,062,117; May 20; Gaz. vol. 190; p. 606.
Redrup, Charles B., Canton, Cardiff, England. Valve-gear. No. 1,061,868; May 13; Gaz. vol. 190; p. 479.
Reece Button Hole Machine Company, The. (See Kiewicz, John, assignor.)
Reece Shoe Machinery Company *et al.* (See Coleman, George, assignor.)
Reed, Frank, and W. Rickardson, Eureka, Cal. Signaling device. No. 1,062,502; May 20; Gaz. vol. 190; p. 735.
Reed, John C., Steelton, Pa. System of electric-motor control. No. 1,060,940; May 6; Gaz. vol. 190; p. 130.
Reed, John C., Steelton, Pa. System of electric-motor control. No. 1,060,941; May 6; Gaz. vol. 190; p. 131.
Reed, Roy. (See Fiveshilling, Albert D., assignor.)
Reeves, William, and H. B. La Trobe, Henderson, New Zealand. Swingletree. No. 1,060,942; May 6; Gaz. vol. 190; p. 131.
Register, Brooks B., Martel, Fla. Saw-guide. No. 1,061,869; May 13; Gaz. vol. 190; p. 480.
Register Tracer System, The. (See Todd, John T., assignor.)
Regondi, Giuseppe, New York, N. Y. Pressure-regulator. No. 1,063,065; May 27; Gaz. vol. 190; p. 961.

Rehak, James, Cicero, assignor to The B. F. Cummins Company, Chicago, Ill. Mail-classifying machine. No. 1,060,943; May 6; Gaz. vol. 190; p. 131.
Rehfuss, John G. (See Tily and Rehfuss.)
Rehfuss, Martin O. (See Tily and Rehfuss.)
Reid, Bynum J., Milan, Ga. Churn. No. 1,062,254; May 20; Gaz. vol. 190; p. 653.
Reid, John, and H. A. Mavor, Glasgow, Scotland. Dredger. No. 1,062,926; May 27; Gaz. vol. 190; p. 916.
Reid, Robert M., Colorado Springs, Colo. Holder and deliverer for drinking-straws. No. 1,062,503; May 20; Gaz. vol. 190; p. 735.
Reifsnyder, William H., *et al.* (See Phillippi, Frank A., assignor.)
Reighard, William H., Akron, Ohio. Nut or bolt locking device. No. 1,061,125; May 6; Gaz. vol. 190; p. 195.
Reiland, Ernest S., St. Paul, Minn. Explosive-engine and valve-gear for same. No. 1,060,629; May 6; Gaz. vol. 190; p. 23.
Reilly, J. P. (See Showalter, Roy C., assignor.)
Reinartz, Henry J., Cleveland, Ohio. Embroidery-hoop support. No. 1,061,325; May 13; Gaz. vol. 190; p. 297.
Reinhard, Hugo. (See Schroeder and Reinhard.)
Remington Arms and Ammunition Company. (See Simpson, John O., assignor.)
Remington Arms and Ammunition Company. (See Tyler, Charles C., assignor.)
Remington Typewriter Company. (See Felbel, Jacob, assignor.)
Remington Typewriter Company. (See Peery, Roy W., assignor.)
Remington Typewriter Company. (See Pool, Morris W., assignor.)
Remington Typewriter Company. (See Schmidt, Wilhelm A., assignor.)
Remington Typewriter Company. (See Smith, Arthur W., assignor.)
Remington Typewriter Company. (See Yaw, Clio B., assignor.)
Remmers, Theodore W. (See Kirchhoff, William G., assignor.)
Remy Electric Company. (See Pyle, Robert H., assignor.)
Renninger, Paul J., Reading, Pa. Bookbinding. No. 1,061,779; May 13; Gaz. vol. 190; p. 452.
Reuss, Arthur E., Cincinnati, and O. Schnitzler, Remington, Ohio. Speed-changing mechanism. No. 1,060,707; May 6; Gaz. vol. 190; p. 50.
Reuther, John, East Aurora, N. Y. Potato-separator. No. 1,061,568; May 13; Gaz. vol. 190; p. 383.
Revere Rubber Company. (See Cobb, Henry Z., assignor.) (Reissue.)
Reymond, John A. T., Ottawa, Ontario, Canada. Button-fastener. No. 1,060,944; May 6; Gaz. vol. 190; p. 132.
Reynolds, Bert M., assignor of one-half to S. Reynolds, North Platte, Nebr. Metal picture-molding. No. 1,060,708; May 6; Gaz. vol. 190; p. 51.
Reynolds, John N. (See Craft and Reynolds.)
Reynolds, John P., *et al.* (See Woodbridge, Howard C., assignor.)
Reynolds, Scott. (See Reynolds, Bert M., assignor.)
Rheinische Metallwaaren- und Maschinenfabrik. (See Völler, Karl, assignor.)
Rhodes, Edgar, Scholes, Leeds, England, assignor to Continuous Rail Company, Wilmington, Del. Bending-machine. No. 1,062,033; May 20; Gaz. vol. 190; p. 577.
Rhodes, Edgar, Scholes, Leeds, England, assignor to Continuous Rail Company, Wilmington, Del. Compound-rail track construction. No. 1,062,186; May 20; Gaz. vol. 190; p. 629.
Rhodes, Samuel G., and A. B. Rypinski, assignors to T. E. Murray, New York, N. Y. Electric time-switch. No. 1,060,630; May 6; Gaz. vol. 190; p. 23.
Rice, Richard H., Lynn, Mass., assignor to General Electric Company. Preventing erosion in steam-turbines. No. 1,060,945; May 6; Gaz. vol. 190; p. 132.
Rice, Richard H., Lynn, Mass., assignor to General Electric Company. Turbine. No. 1,061,688; May 13; Gaz. vol. 190; p. 424.
Rice, Richard H., Lynn, Mass., assignor to General Electric Company. Governing mechanism for centrifugal air-compressors. No. 1,061,689; May 13; Gaz. vol. 190; p. 424.
Rice, Richard H., Lynn, Mass., assignor to General Electric Company. Valve for turbines. No. 1,061,690; May 13; Gaz. vol. 190; p. 425.
Rice, William P., Regina, Ky. Miner's lamp. No. 1,062,504; May 20; Gaz. vol. 190; p. 735.
Rich, Charles J., Norwood, Mass. Book-cover-cleaning machine. No. 1,062,505; May 20; Gaz. vol. 190; p. 735.
Rich, Frank K., and M. G. Marsh, East Eddington, Me. Toy. No. 1,060,631; May 6; Gaz. vol. 190; p. 23.
Richard Pick Manufacturing Company. (See Daum, Louis, assignor.)
Richards, Atkinson & Haserick. (See Townend, William, assignor.)
Richards, George M., Erie, Pa. Load-controlling device. No. 1,062,665; May 27; Gaz. vol. 190; p. 830.
Richards, Jerre T., Chicago, Ill. Automatic coaling-bucket. No. 1,062,359; May 20; Gaz. vol. 190; p. 687.
Richards, John C. B. (See Wilkins and Richards.)
Richards, Thomas P., Castle Shannon, Pa. Rail-joint. No. 1,062,034; May 20; Gaz. vol. 190; p. 578.
Richardson, Charles F., Woonsocket, R. I., and G. A. Morgan, Gofstown, N. H., assignors to Boston Automatic Machine Company, Boston, Mass. Clutch. No. 1,062,852; May 27; Gaz. vol. 190; p. 891.
Richardson, Willard C., Saugus, Mass. Expanding shoe-form. No. 1,060,859; May 6; Gaz. vol. 190; p. 102.
Richeson, Richard S., St. Louis, Mo. Gyromotor-body shifter. No. 1,062,415; May 20; Gaz. vol. 190; p. 706.
Richeson, Richard S., St. Louis, Mo. Gyromotor-wheel controller. No. 1,062,797; May 27; Gaz. vol. 190; p. 873.
Richir, Armand. (See Deprez and Richir.)
Richmond Cedar Works. (See Turner and Reams, assignors.)
Richter, Harry J., Wilmette, assignor to H. A. Leslie, trustee, Chicago, Ill. Steam-turbine blades. No. 1,062,737; May 27; Gaz. vol. 190; p. 853.
Rickard, Charles S., Traverse City, Mich. Mail-pouch lock. No. 1,062,506; May 20; Gaz. vol. 190; p. 736.
Rickardson, Werner. (See Reed and Rickardson.)
Ridny, Robert E., Chester, Pa. Clarinet. No. 1,060,946; May 6; Gaz. vol. 190; p. 132.
Rider, William H. C. (See Converse and Rider.)
Rieger, Emil. (See Bazlen, Rieger, and Wohlfahrt.)
Rieske, Otto G., St. Louis Park, Minn., assignor to Monitor Drill Company. Grain-drill. No. 1,061,499; May 13; Gaz. vol. 190; p. 356.
Righter, Edmund K., Newark, N. J. Wrench. No. 1,061,691; May 13; Gaz. vol. 190; p. 425.
Riley, Andrew J., Alabama City, Ala., assignor to Draper Company, Hopedale, Mass. Friction let-off mechanism for looms. No. 1,061,500; May 13; Gaz. vol. 190; p. 356.
Riley, Lester S., Boston, Mass., assignor to Progress Manufacturing Company. Universal counter. No. 1,061,126; May 6; Gaz. vol. 190; p. 195.
Riley, Lester S., Boston, Mass., assignor to Progress Manufacturing Company. Counter-pad. No. 1,061,127; May 6; Gaz. vol. 190; p. 196.
Riley, Neale P., *et al.* (See Marfield, Paul B., assignor.)
Rippel, Albert F., Greenwich, Conn. Smoking-pipe. No. 1,061,009; May 6; Gaz. vol. 190; p. 156.
Risberg, Johannes V. M., Fridhem, assignor to Aktiebolaget Baltic, Södertelje, Sweden. Combined steam-turbine centrifugal liquid-separator and liquid-heater. No. 1,062,853; May 27; Gaz. vol. 190; p. 892.
Risbridger, John, assignor of fifty-five one-hundredths to Eureka Tempered Copper Works, North East, Pa. Trolley. No. 1,060,947; May 6; Gaz. vol. 190; p. 133.
Ritchey, Harry W., Vandergrift, Pa. Automatic register-ing-faucet. No. 1,062,035; May 20; Gaz. vol. 190; p. 578.
Ritten, Louis N., Cherokee, Iowa. Can. No. 1,062,118; May 20; Gaz. vol. 190; p. 606.
Ritter, William O., French Lick, Ind. Display-hanger. No. 1,062,416; May 20; Gaz. vol. 190; p. 706.
Rivard, Theodore, Newport, Vt. Safety attachment for freight-cars. No. 1,062,255; May 20; Gaz. vol. 190; p. 653.
Roberts, John W., Sarnia, Ontario, Canada. Automatic pipe connection. No. 1,062,927; May 27; Gaz. vol. 190; p. 916.
Roberts, Lewis D. (See Halfpenny, James M., assignor.)
Roberts, Robert R., assignor or one-tenth to E. E. Allwine, Washington, D. C. Treating vegetable fibers. No. 1,062,187; May 20; Gaz. vol. 190; p. 630.
Robertson, James F., Pittsburgh, Pa. Automatic car-coupling. No. 1,061,406; May 13; Gaz. vol. 190; p. 324.
Robertson, John A., assignor to Eastman Kodak Company, Rochester, N. Y. View-finder. No. 1,060,709; May 6; Gaz. vol. 190; p. 51.
Robinson, Gleeson E., Esher, assignor to The Strand Accessories Company, Limited, London, England. Combined tobacco-receptacle and pipe-filler. No. 1,063,066; May 27; Gaz. vol. 190; p. 962.
Rochte, Augustine T., McClure, Ohio. Gasolene-lighting apparatus. No. 1,063,067; May 27; Gaz. vol. 190; p. 962.
Rockwell Furniture Company. (See Wise, Henry A., assignor.)
Rod, Isaac, Philadelphia, Pa. Combination buckle and hook. No. 1,062,798; May 27; Gaz. vol. 190; p. 873.
Rodes, Joseph H. (See Baskett and Rodes.)
Rodrigues, Manuel R., Brooklyn, N. Y. Magnetically-operated tripping device. No. 1,061,326; May 13; Gaz. vol. 190; p. 297.
Rodriguez, Vincente L., Douglas, Ariz. Flying-machine. No. 1,061,870; May 13; Gaz. vol. 190; p. 480.
Rodwick, Ernest C., Ukiah, Cal. Sash-holder. No. 1,061,128; May 6; Gaz. vol. 190; p. 196.
Roe, Albert, Beaver township, Noble county, Ohio. Hand-machine to undermine coal. No. 1,062,854; May 27; Gaz. vol. 190; p. 892.
Roe, Ernest S., assignor to Markham Rifle Company, Plymouth, Mich. Air-gun. No. 1,062,855; May 27; Gaz. vol. 190; p. 893.
Rogers, Edward, New York, N. Y. Runner for vehicle-wheels. No. 1,062,360; May 20; Gaz. vol. 190; p. 688.
Rogers, John E., Urbana, Ill. Shoe-lace attachment. No. 1,061,780; May 13; Gaz. vol. 190; p. 452.
Rohlfing, John M., assignor to American Car and Foundry Company, St. Louis, Mo. Car-underframe. No. 1,061,501; May 13; Gaz. vol. 190; p. 357.

Rojas, Floricel A., Providence, R. I. Adjustable hat-pin. No. 1,062,417; May 20; Gaz. vol. 190; p. 707.
Rojohn, Henry F., and W. Dick, Greenock, Pa. Firing mechanism. No. 1,062,418; May 20; Gaz. vol. 190; p. 707.
Rombacher, Huttenwerke. (See Schemmann and Bronn, assignors.)
Roof, Hugh H., Biloxi, Miss. Tilting gate. No. 1,062,928; May 27; Gaz. vol. 190; p. 917.
Rook, William T., Leedey, Okla. Mail-bag catching and delivering mechanism. No. 1,060,632; May 6; Gaz. vol. 190; p. 23.
Rooke, Michael, Handsworth, Birmingham, England. Continuous-wire-drawing machine. No. 1,062,036; May 20; Gaz. vol. 190; p. 578.
Rooney, Elwin H., assignor to The Whitin Machine Works, Whitinsville, Mass. Machine for working cotton waste. No. 1,061,327; May 13; Gaz. vol. 190; p. 297.
Rooney, Patrick J., Broughton, Pa. Lantern. No. 1,062,037; May 20; Gaz. vol. 190; p. 578.
Roos, Robert, Chicago, Ill. Apparatus for treating butter. No. 1,060,633; May 6; Gaz. vol. 190; p. 24.
Roose, Chauncey A., Atlanta, Nebr. Silo. No. 1,062,256; May 20; Gaz. vol. 190; p. 653.
Root, Charles M., assignor to Penn Surgical Manufacturing Company, Philadelphia, Pa. Stethoscope. No. 1,061,963; May 13; Gaz. vol. 190; p. 511.
Root, Wayland L., Spokane, Wash. Stall. No. 1,062,119; May 20; Gaz. vol. 190; p. 606.
Rorem, Thomas A. (See Olson, Rorem, and Hill.)
Rosanz, Charles, New York, N. Y. Gas-generator. No. 1,062,301; May 20; Gaz. vol. 190; p. 669.
Rose, Edward F., and I. E. Casteel, Atchison, Kans. Support for trays of trunks. No. 1,061,010; May 6; Gaz. vol. 190; p. 156.
Rose, James M., assignor to Merchant & Evans Company, Philadelphia, Pa. Ventilator. No. 1,063,068; May 27; Gaz. vol. 190; p. 963.
Rosén, Gustaf, Buffalo, N. Y. Die-maker's clearance-gage. No. 1,060,634; May 6; Gaz. vol. 190; p. 24.
Rosenberg, Herman, New York, assignor to Standard Varnish Works, Elm Park, Port Richmond, Staten Island, N. Y. Varnish and making the same. No. 1,062,419; May 20; Gaz. vol. 190; p. 707.
Rosenbrook, August C., Wall, S. D. Nut-lock. No. 1,060,790; May 6; Gaz. vol. 190; p. 76.
Ross, Oscar A., Rochester, N. Y. Heating system. No. 1,061,635; May 13; Gaz. vol. 190; p. 405.
Rothlisberger, August E., *et al.* (See Hines, William J., assignor.)
Rotter, Philip, and H. M. Smith, New York, N. Y. Fabric-sample-carding machine. No. 1,062,607; May 27; Gaz. vol. 190; p. 811.
Rottmann, August, assignor to Dr. C. Otto & Comp. Ges. mit beschränkter Haftung, Bochum, Germany. Recovery of by-products from gases of fuels. No. 1,061,949; May 13; Gaz. vol. 190; p. 507.
Rowe, George H., assignor to Electro-Magnetic Tool Company, Chicago, Ill. Electromechanical device. No. 1,062,799; May 27; Gaz. vol. 190; p. 874.
Rowley, George H., Chicago, Ill. Process of and means for making resilient inking-pads. No. 1,060,635; May 6; Gaz. vol. 190; p. 24.
Royer, Charles C. (See Smith and Royer.)
Rošić, Victor, Bakar, Austria-Hungary. Apparatus for indicating and recording the course of navigable vessels. No. 1,062,920; May 27; Gaz. vol. 190; p. 917.
Rudolph, Flavel A., Maplewood, Mo. Advertising device. No. 1,061,407; May 13; Gaz. vol. 190; p. 325.
Rudolph-Myers Manufacturing Co. (See Myers, Edgar W., assignor.)
Rudolph Wurlitzer Manufacturing Company, The. (See Hope-Jones, Robert, assignor.)
Ruggles, Hiram C., Phoenix, Ariz. Oil-burner. No. 1,061,011; May 6; Gaz. vol. 190; p. 157.
Ruggles, Percy B., Wyoming, Ohio. Needle for talking-machines. No. 1,061,408; May 13; Gaz. vol. 190; p. 325.
Rullman, Frank B., Hiawatha, Kans. Window-locking device. No. 1,061,560; May 13; Gaz. vol. 190; p. 383.
Runser, Karl W., *et al.* (See Burgum, William C., assignor.)
Rupard, Albert S. (See Morton and Rupard.)
Rush, Charles A., La Grange, Ill. Smoke-consumer. No. 1,061,502; May 13; Gaz. vol. 190; p. 357.
Russ Automatic Labeling Co. (See Shults, James C., assignor.)
Russell, Arthur L., Hyde Park, Mass., assignor to United Shoe Machinery Company, Paterson, N. J. Machine for use in the manufacture of boots and shoes. No. 1,060,710; May 6; Gaz. vol. 190; p. 51.
Russell, Arthur L., Hyde Park, Mass., assignor to United Shoe Machinery Company, Paterson, N. J. Lasting-machine. No. 1,060,711; May 6; Gaz. vol. 190; p. 52.
Russell, Charles C., Greenfield, Mass. Screw-plate. No. 1,061,129; May 6; Gaz. vol. 190; p. 196.
Rutledge, Robert P., and R. G. Boland, Scranton, Tex. Harrow-tooth. No. 1,061,570; May 13; Gaz. vol. 190; p. 383.
Ruttan, Alfred A., and C. E. Hutchings, assignors to Eastman Kodak Company, Rochester, N. Y. View-finder. No. 1,060,636; May 6; Gaz. vol. 190; p. 25.
Ryan, Catharine, St. Paul, Minn. Nut-lock. No. 1,061,871; May 13; Gaz. vol. 190; p. 480.
Ryan, Morgan, Chatsworth, Ill. End-gate for wagons. No. 1,061,409; May 13; Gaz. vol. 190; p. 325.
Ryan, William J. (See Johnston, Jeffries, and Ryan.)
Ryden, Claes, Providence, R. I., assignor to Universal Winding Company, Portland, Me. Winding-machine. No. 1,062,420; May 20; Gaz. vol. 190; p. 707.
Ryden, Claes, and F. D. Babcock, Providence, R. I., assignors to Universal Winding Company, Portland, Me. Winding-machine. No. 1,062,930; May 27; Gaz. vol. 190; p. 918.
Ryder, Malcolm P., White Plains, N. Y. Generator of intermittent electric currents. No. 1,062,361; May 20; Gaz. vol. 190; p. 688.
Ryon, Eppa H., Worcester, Mass., assignor to Crompton & Knowles Loom Works. Warper. No. 1,061,012; May 6; Gaz. vol. 190; p. 157.
Ryon, Eppa H., Waltham, Mass., assignor to Crompton & Knowles Loom Works. Cop or bobbin winding machine. No. 1,061,013; May 6; Gaz. vol. 190; p. 157.
Rypinski, Albert B. (See Rhodes and Rypinski.)
S. Mordan and Company. (See Norris, Edward, assignor.)
S. R. Dresser Manufacturing Company. (See Clark, James, assignor.)
S. R. Dresser Manufacturing Company. (See Whitaker, Louis P., assignor.)
Sachs, Ernst, Schweinfurt, Germany. Device for fastening coaster-brakes. No. 1,063,069; May 27; Gaz. vol. 190; p. 963.
Sachtleben, Friedrich, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Hydraulic recoil-brake. No. 1,063,070; May 27; Gaz. vol. 190; p. 964.
Safety Hasp Manufacturing Co. Inc., The. (See Edelin, James N., assignor.)
Sager, James H., Rochester, N. Y. Cushion-frame for cycles. No. 1,062,800; May 27; Gaz. vol. 190; p. 874.
Salmon, Lewis G., Philadelphia, Pa. Attachment for head-rests of barbers' or other chairs. No. 1,062,931; May 27; Gaz. vol. 190; p. 918.
Salpetersäure-Industrie Gesellschaft, G. m. b. H. (See Pauling, Harry, assignor.)
Saltman, Philip, assignor of one-fifth to D. Blumberg, one-fifth to W. Forman, one-fifth to I. Green, and one-fifth to L. Greenberg, Philadelphia, Pa. Cloth-cutting machine. No. 1,062,529; May 20; Gaz. vol. 190; p. 742.
Samson Cordage Works. (See Sidlau, Oscar C., assignor.)
Sanborn, Hamilton, H. G. McMahon, J. T. Overbury, San Francisco, and S. W. Young, Palo Alto, assignors to The Thlogen Company, San Francisco, Cal. Obtaining sulfur from smelter-gases. No. 1,062,120; May 20; Gaz. vol. 190; p. 607.
Sandberg, David, Chicago, Ill. Adjustable support. No. 1,061,328; May 13; Gaz. vol. 190; p. 298.
Sanders, Earl V., Pawnee, Ill. Washbasin-holder. No. 1,062,507; May 20; Gaz. vol. 190; p. 736.
Sanders, Fred G. (See Gregory and Sanders.)
Sandoz-Moritz, Charles, Tavannes, Switzerland. Pressure-air device. No. 1,062,608; May 27; Gaz. vol. 190; p. 812.
Sanitary Dairy Machine Company. (See Schuster, Frank B., assignor.)
Sargent, Charles E., assignor to Sargent Engineering Company, Chicago, Ill. Internal-combustion engine. No. 1,061,249; May 6; Gaz. vol. 190; p. 285.
Sargent & Company. (See Shaw, John H., assignor.)
Sargent Engineering Company. (See Sargent, Charles E., assignor.)
Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Series-multiple switch. No. 1,062,801; May 27; Gaz. vol. 190; p. 875.
Sattley Stacker Company, The. (See Brower, William W., assignor.)
Sauer, Frederick H., New York, N. Y. Air-valve. No. 1,062,802; May 27; Gaz. vol. 190; p. 875.
Sauer, Hans, assignor to J. P. Sauer & Sohn, Suhl, Germany. Semi-automatic locking device for the triggers of small-arms. No. 1,062,121; May 20; Gaz. vol. 190; p. 607.
Sauer & Sohn, J. P. (See Sauer, Hans, assignor.)
Saunders, Frederick S. (See Wilson, Dennis M., assignor.)
Sauvage, William H., New York, N. Y. Slack-adjuster for automatic brake systems. No. 1,062,666; May 27; Gaz. vol. 190; p. 831.
Sauvageon, Marius, Colombes, France. Electric furnace for the continuous manufacture of glass. No. 1,062,362; May 20; Gaz. vol. 190; p. 688.
Sauvert, Albert, Paris, France. Elastic wheel. No. 1,060,860; May 6; Gaz. vol. 190; p. 103.
Savage Arms Company. (See Chadwick, Francis C., assignor.)
Sawyer, Alfen P. (See Brown, Charles, assignor.)
Sawyer, Charles L., Grand Valley, Colo. Bag-handler. No. 1,061,014; May 6; Gaz. vol. 190; p. 158.
Sawyer, Franklin M., Kansas City, Mo. Baby-crib. No. 1,060,637; May 6; Gaz. vol. 190; p. 25.
Schaefer, Gustav, New York, N. Y. Tire-tool. No. 1,061,015; May 6; Gaz. vol. 190; p. 158.
Schafer, Walter F., and J. H. Cook, Mena, Ark., assignors to D. B. Pate, Hornbeck, La. Oil vaporizer and burner. No. 1,062,186; May 20; Gaz. vol. 190; p. 630.
Schaffer, John P., Pittsburgh, Pa. Hot-water and steam boiler. No. 1,061,563; May 13; Gaz. vol. 190; p. 357.
Schaller, Carl. (See Stemmler and Schaller.)

Schaller, Otto, Südende, near Berlin, Germany. Stop-cock or valve for vacuum pipe systems. No. 1,060,791; May 6; Gaz. vol. 190; p. 77.
Schalscha, Max, Summit, N. J. Pile-cap. No. 1,062,363; May 20; Gaz. vol. 190; p. 689.
Schantz, Gustaf von, New Britain, Conn. Hat-identifying device. No. 1,062,421; May 20; Gaz. vol. 190; p. 708.
Schaper, Walter and W., Charles City, Iowa. Device for guiding horses. No. 1,062,508; May 20; Gaz. vol. 190; p. 736.
Schaper, William. (See Schaper, Walter and W.)
Schappert, Jacob M., *et al.* (See White, William H., assignor.)
Schappert, Margaret, *et al.* (See White, William H., assignor.)
Scharding, Albert J., and P. J. Doyle, Pittsburgh, Pa. Gate-opening device for excavators. No. 1,062,038; May 20; Gaz. vol. 190; p. 579.
Schemmann, Wilhelm, and J. Bronn, assignors to Rombacher, Hüttenwerke, Rombach, Germany. Melting ferro alloys and keeping them in liquid state. No. 1,061,016; May 6; Gaz. vol. 190; p. 158.
Scherf, J. Paul. (See Naumann, Justus H., assignor.)
Scheuer, Ralph, New York, N. Y. Coloring-machine for apertures in belts and similar articles. No. 1,062,257; May 20; Gaz. vol. 190; p. 654.
Schidlowsky, Franz von, St. Petersburg, Russia. Nozzle for fire-extinguishing apparatus. No. 1,061,872; May 13; Gaz. vol. 190; p. 481.
Schimmel, Fridolin, assignor to Schimmel, Reid & Company, Faribault, Minn. Lock-nut. No. 1,062,039; May 20; Gaz. vol. 190; p. 579.
Schimmel, Reid & Company. (See Schimmel, Fridolin, assignor.)
Schisler, Frank J., Winthrop, Minn. Poultry drinking-fountain. No. 1,062,609; May 27; Gaz. vol. 190; p. 812.
Schisler, Frank J., Winthrop, Minn. Feed-hopper. No. 1,062,610; May 27; Gaz. vol. 190; p. 812.
Schleicher, John C., Mount Vernon, N. Y. Amusement device. No. 1,061,504; May 13; Gaz. vol. 190; p. 358.
Schlesinger, Curt. (See Arendt and Schlesinger.)
Schleuning, Wilhelm, Friedenau, Germany. Apparatus for manufacturing hollow bricks with closed ends. No. 1,063,071; May 27; Gaz. vol. 190; p. 964.
Schloemilch, Wilhelm, Berlin, Germany. Fork with movable supplementary prong. No. 1,062,189; May 20; Gaz. vol. 190; p. 630.
Schloss, Meyer W., New York, N. Y. Hose-supporter. No. 1,061,017; May 6; Gaz. vol. 190; p. 158.
Schlotter, Georg A., Dresden, Germany. Propeller. No. 1,062,258; May 20; Gaz. vol. 190; p. 654.
Schmidt, Albert, assignor to Champion Ignition Company, Flint, Mich. Spark-plug. No. 1,062,612; May 27; Gaz. vol. 190; p. 813.
Schmidt, Albrecht, and K. Thiess, assignors to Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany. Greenish-blue hexabromindigo. No. 1,061,781; May 13; Gaz. vol. 190; p. 452.
Schmidt, Bertel H. (See Schmidt and Seberg.)
Schmidt, Charles, assignor, by mesne assignments, to The Peerless Motor Car Company, Cleveland, Ohio. Controller mechanism for explosion-engines. No. 1,062,738; May 27; Gaz. vol. 190; p. 853.
Schmidt, Eduard, assignor to Firm of W. G. Schröder, Lübeck, Germany. Arrangement for mixing emulsions. No. 1,062,554; May 20; Gaz. vol. 190; p. 750.
Schmidt, Ferdinand L., New York, N. Y. Feeding mechanism for envelop-machines. No. 1,063,140; May 27; Gaz. vol. 190; p. 986.
Schmidt, Jacob O., Sheboygan, Wis. Folding stand. No. 1,062,190; May 20; Gaz. vol. 190; p. 630.
Schmidt, Johann. (See Simon, Wilhelm, assignor.)
Schmidt, Martin H. and B. H., and A. R. Seberg, Oakland, Cal. Attachment for hat-pins. No. 1,061,410; May 13; Gaz. vol. 190; p. 326.
Schmidt, Oscar, Jersey City, N. J. Neck for banjos or the like. No. 1,062,509; May 20; Gaz. vol. 190; p. 737.
Schmidt, Wilhelm A., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y. Grinding-machine. No. 1,061,692; May 13; Gaz. vol. 190; p. 425.
Schnebbe, Daniel W., New York, N. Y. Fountain-pen. No. 1,061,693; May 13; Gaz. vol. 190; p. 426.
Schneeloch, August, and J. L. Smith, assignors of two-thirds to E. C. Stearns & Co., Syracuse, N. Y., and one-third to The Oliver Typewriter Company, Chicago, Ill. Type-bar for type-writing machines. No. 1,061,018; May 6; Gaz. vol. 190; p. 159.
Schnelbie, Joseph, Chicago, Ill. Refrigerating apparatus. No. 1,062,856; May 27; Gaz. vol. 190; p. 893.
Schneider, Charles O., Wimbledon, London, England. Trousers-stretcher. No. 1,061,329; May 13; Gaz. vol. 190; p. 298.
Schneider, Eberhard, New York, N. Y. Adjustable film-perforating machine. No. 1,062,932; May 27; Gaz. vol. 190; p. 918.
Schneider, Heinrich. (See Kurrell, Schneider, and Bukowski.)
Schneider, Jacob, Philadelphia, Pa. Car-fender. No. 1,061,019; May 6; Gaz. vol. 190; p. 159.
Schneider, John E., Cortez, Colo. Flume-gate. No. 1,062,364; May 20; Gaz. vol. 190; p. 689.
Schneider, Stefan, Oak Park, Ill. Ball-bearing. No. 1,061,636; May 13; Gaz. vol. 190; p. 405.
Schnitzler, Oscar. (See Reuss and Schnitzler.)
Schnoor, Peter J. A. (See Ewoldt, Henry, assignor.)
Schnur, Mathias, Chicago, Ill. Safety device for elevators. No. 1,062,611; May 27; Gaz. vol. 190; p. 813.
Schoenfeld, Charles, Canton, Ohio. Lock. No. 1,062,302; May 20; Gaz. vol. 190; p. 669.
Schroder, Bernard A., Birmingham, Ala. Water-heater. No. 1,060,638; May 6; Gaz. vol. 190; p. 25.
Schröder, Firm of Wilh. G. (See Schmidt, Eduard, assignor.)
Schroeder, Eberhard, Volmarstein, Germany. Lock. No. 1,061,571; May 13; Gaz. vol. 190; p. 383.
Schroeder, Josef. (See Stumpf and Schroeder.)
Schroeder, Max, Berlin, and H. Reinhard, Oberhausen, Germany. Regenerator or hot-blast stove. No. 1,062,122; May 20; Gaz. vol. 190; p. 608.
Schroyer, Harry H., Chicago, Ill., assignor to The Acme Supply Company. Sectional vestibule-diaphragm. No. 1,060,639; May 6; Gaz. vol. 190; p. 26.
Schroyer, Harry H., Chicago, Ill., assignor to The Acme Supply Company. Ladder for cars. No. 1,062,191; May 20; Gaz. vol. 190; p. 631.
Schuh, Charles F., Newark, N. J., assignor of one-half to R. J. Wilkie, Saugus, Mass. Electric battery. No. 1,061,572; May 13; Gaz. vol. 190; p. 384.
Schulte, August J., Tacoma, Wash. Chuck mechanism for spindle-turning machines. No. 1,061,411; May 13; Gaz. vol. 190; p. 326.
Schulte, Edward D. N., Troy, N. Y., assignor to W. & L. E. Gurley. Support. No. 1,060,861; May 6; Gaz. vol. 190; p. 103.
Schulte, Henry P., Wheaton, Ill., assignor to W. Snyder and C. A. Dollinger. Hook. No. 1,062,365; May 20; Gaz. vol. 190; p. 690.
Schultz, Herman E., Jr., and F. Wetteroth, assignors to Zittlosen Manufacturing Company, St. Louis, Mo. Umbrella construction. No. 1,060,712; May 6; Gaz. vol. 190; p. 52.
Schultz Underwear Company, The. (See Heacock, Benjamin L., assignor.)
Schuster, Frank B., assignor, by mesne assignments, to Sanitary Dairy Machine Company, Inc., Buffalo, N. Y. Bottle-capping machine. No. 1,060,948; May 6; Gaz. vol. 190; p. 133.
Schwartz, Walter M., and H. Coulston, assignors to The Philadelphia Textile Machinery Company, Philadelphia, Pa. Machine for drying hosiery. No. 1,062,510; May 20; Gaz. vol. 190; p. 737.
Schwarz, August E. (See Schwarz, Emil and A. E.)
Schwarz, Charles. (See Tappenden and Schwarz.)
Schwarz, Emil and A. E., Tacoma, Wash. Electric-light bracket. No. 1,060,950; May 6; Gaz. vol. 190; p. 134.
Schwarz, Otto C., New Chicago, Ind. Building-blocks for toy castles. No. 1,061,637; May 13; Gaz. vol. 190; p. 405.
Schweter, Erich, Golutwin, Russia. Valve-gear. No. 1,061,130; May 6; Gaz. vol. 190; p. 196.
Scognamillo, Salvatore, New York, N. Y. Tire. No. 1,061,927; May 13; Gaz. vol. 190; p. 499.
Scott, Charles D., Topeka, Kans., assignor to P. E. Ginn, Winchester, Mass. Feeder for automatic weighing-machines. No. 1,060,792; May 6; Gaz. vol. 190; p. 77.
Scott, David J., *et al.*, executors. (See Scott, Walter.)
Scott Electrical Company. (See Scott, Ralph, assignor.)
Scott, George, Amsterdam, N. Y. Cloth-cutting machine. No. 1,061,782; May 13; Gaz. vol. 190; p. 453.
Scott, Isabella, *et al.*, executors. (See Scott, Walter.)
Scott, John, and N. B. McGrath, Southington, Conn. Spirit-level. No. 1,061,638; May 13; Gaz. vol. 190; p. 406.
Scott, Ralph, Newark, N. J., assignor, by mesne assignments, to Scott Electrical Company, New York, N. Y. Arc-lamp. No. 1,062,857; May 27; Gaz. vol. 190; p. 893.
Scott, Robert W., Leeds Point, assignor to Scott & Williams, Incorporated, Camden, N. J. Needle for knitting-machines. No. 1,062,366; May 20; Gaz. vol. 190; p. 690.
Scott, Robert W., Leeds Point, assignor to Scott and Williams, Incorporated, Camden, N. J. Ribbed knitted web and making same. No. 1,062,367; May 20; Gaz. vol. 190; p. 690.
Scott, Walter, deceased, Plainfield, N. J.; I. and D. J. Scott, executors. Printing-machine. No. 1,060,949; May 6; Gaz. vol. 190; p. 134.
Scott & Williams. (See Scott, Robert W., assignor.)
Scott & Williams. (See Swinglehurst, Harry, assignor.)
Scruggs, Loyd, assignor to Copper Clad Malleable Range Company, St. Louis, Mo. Combined draft-door and grate-bar cover. No. 1,062,739; May 27; Gaz. vol. 190; p. 853.
Seale, Jefferson W., Mineral Wells, Tex. Wrench. No. 1,060,862; May 6; Gaz. vol. 190; p. 104.
Seamans, Merritt G., Atlanta, Ga. Lining for milk-bottles. No. 1,061,131; May 6; Gaz. vol. 190; p. 196.
Seargeant, O. F., *et al.* (See De Hymel, Franklin O., assignor.)
Searle, Elbert H., Springfield, Mass. Air-rifle. No. 1,063,072; May 27; Gaz. vol. 190; p. 964.
Sears, Roebuck and Company. (See Olson, John, assignor.)
Seavey, Eugene, New York, N. Y. Filter. No. 1,061,928; May 13; Gaz. vol. 190; p. 499.

Seberg, Angelo R. (See Schmidt and Seberg.)
Seckinger, Charles A., Kansas City, Kans. Nut-lock. No. 1,061,873; May 13; Gaz. vol. 190; p. 481.
Seddon, Samuel M., Salt Lake City, Utah. Rotary cement-kiln. No. 1,062,259; May 20; Gaz. vol. 190; p. 654.
Seeley, Elmer E., Conneautville, Pa. Fluid-indicator. No. 1,061,874; May 13; Gaz. vol. 190; p. 481.
Seelye, William E., Sault Ste. Marie, Ontario, Canada. Chair. No. 1,061,875; May 13; Gaz. vol. 190; p. 481.
Segraves, Henry, Pikeville, Ky. Spoke-equalizing machine. No. 1,060,793; May 6; Gaz. vol. 190; p. 78.
Self, George L., Asheville, N. C. Twine-holder. No. 1,061,330; May 13; Gaz. vol. 190; p. 298.
Sellers, Albert F., *et al.* (See Rakestraw, Thomas G., assignor.)
Sellers, Elias H., *et al.* (See Rakestraw, Thomas G., assignor.)
Sellers Manufacturing Company. (See Markham, Joseph T., assignor.)
Sellman, Henry G., Ann Arbor, Mich. Machine for building concrete structures. No. 1,062,040; May 20; Gaz. vol. 190; p. 579.
Sells, George, assignor of one-half to V. A. Wolfe, East Las Vegas, N. Mex. Draw-bar-slack-adjusting safety appliance. No. 1,062,123; May 20; Gaz. vol. 190; p. 608.
Sells, Jos. E. (See Dorney, Clark L., assignor.)
Semmerling, John. (See Gesbeck and Semmerling.)
Semon, William H., Cleveland, Ohio. Holder for removable objects. No. 1,061,412; May 13; Gaz. vol. 190; p. 326.
Senderling, Martin L., Jersey City, N. J. Coke and coal wagon. No. 1,061,201; May 6; Gaz. vol. 190; p. 219.
Sennevoy, Robert de, Paris, France. Brush. No. 1,062,041; May 20; Gaz. vol. 190; p. 580.
Senterfitt, James H. (See Hersey, Haskell, assignor.)
Serpek, Ottokar, assignor to Societe Generale des Nitrures, Paris, France. Manufacture of nitrogen compounds of silicon and aluminium. No. 1,060,640; May 6; Gaz. vol. 190; p. 26.
Serviss, Uriah, Gridley, Cal. Irrigation water-gate. No. 1,062,042; May 20; Gaz. vol. 190; p. 580.
Sewall, Robert H. F., New Orleans, La. Cattle-guard. No. 1,060,713; May 6; Gaz. vol. 190; p. 52.
Seweryn, Ignac, Pittsburgh, Pa. Filling-machine. No. 1,060,951; May 6; Gaz. vol. 190; p. 135.
Seyd, Frank O., London, England. Gas-illuminated advertising apparatus. No. 1,063,073; May 27; Gaz. vol. 190; p. 965.
Seymour, John C., New York, N. Y. Curtain and shade roller support. No. 1,061,202; May 6; Gaz. vol. 190; p. 220.
Shackleton, Alfred, Chicago, Ill. Machine for assembling protecting-strips on files. No. 1,060,794; May 6; Gaz. vol. 190; p. 78.
Shallenberger, Charles S., assignor to Transom Draft Gear Company, St. Louis, Mo. Transom draft-gear. No. 1,061,331; May 13; Gaz. vol. 190; p. 299.
Shallow, Edward J. (See Silva and Shallow.)
Sharpe, George E., Steubenville, Ohio. Bath-room heater. No. 1,061,332; May 13; Gaz. vol. 190; p. 299.
Sharpe, Joseph, U. S. Army. Pocket-protractor. No. 1,062,740; May 27; Gaz. vol. 190; p. 854.
Sharpton, George T. (See Smith, Thomas, assignor.)
Shaw, Charles H., Denver, Colo. Hammer operated by compressed fluid. No. 1,061,203; May 6; Gaz. vol. 190; p. 220.
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,062,043; May 20; Gaz. vol. 190; p. 580.
Shean, John. (See Lincoln, Bert E., assignor.)
Shearer, John, Forestville, N. Y. Grape-tie holder. No. 1,061,132; May 6; Gaz. vol. 190; p. 197.
Shears, Albert L., Seattle, Wash. Oar-lock. No. 1,061,783; May 13; Gaz. vol. 190; p. 453.
Shedd, Hugh E., Minneapolis, Minn. Calendar. No. 1,061,133; May 6; Gaz. vol. 190; p. 197.
Sheehan, William E. (See Bogani and Sheehan.)
Sheldon, Sidney R., Galt, Ontario, Canada. Air-washer. No. 1,062,124; May 20; Gaz. vol. 190; p. 608.
Sherman, Erwin C., Youngstown, Ohio. Pot for hot metal, &c. No. 1,061,784; May 13; Gaz. vol. 190; p. 453.
Sherman, John C., Brookline, Mass. Transmission of power for use in vehicles. No. 1,060,714; May 6; Gaz. vol. 190; p. 53.
Sherwood, Walker L. (See McManis and Sherwood.)
Shields, Edward B., assignor to Turtle-Back Log Bunk and Car Stake Company, Tacoma, Wash. Log-bunk. No. 1,060,952; May 6; Gaz. vol. 190; p. 135.
Shinn, Elwood H., Masonville, N. J. Attachment for vehicle-lamps. No. 1,061,020; May 6; Gaz. vol. 190; p. 160.
Shinn, James E., Conway Springs, Kans. Coin and mail holding device for mail-boxes. No. 1,061,785; May 13; Gaz. vol. 190; p. 453.
Shirer, John B., Charlotte, N. C. Reamer. No. 1,063,074; May 27; Gaz. vol. 190; p. 965.
Shirey, Frank W., and J. W. Dodd, Tulsa, Okla. Rope-socket. No. 1,061,134; May 6; Gaz. vol. 190; p. 197.
Shoberg, David C., Sioux City, Iowa. Flash-light apparatus. No. 1,063,075; May 27; Gaz. vol. 190; p. 965.
Shoenberg, Milton H., assignor to Presto Electrical Manufacturing Company, San Francisco, Cal. Advertising device. No. 1,061,505; May 13; Gaz. vol. 190; p. 358.
Short, Henry W., London, England. Boot-lace. No. 1,062,511; May 20; Gaz. vol. 190; p. 737.
Showalter, Roy C., assignor of one-fourth to J. P. Reilly, Altoona, Pa. Wrench. No. 1,061,876; May 13; Gaz. vol. 190; p. 481.
Shredded Wheat Company, The. (See Perky, Henry D., assignor.)
Shults, James C., Meadville, Pa., assignor to Russ Automatic Labeling Co., New York, N. Y. Can-labeling machine. No. 1,061,021; May 6; Gaz. vol. 190; p. 160.
Shutt, Albert, Topeka, Kans. Guard for musical instruments. No. 1,061,877; May 13; Gaz. vol. 190; p. 482.
Sidilau, Oscar C., Shirley, assignor to Samson Cordage Works, Boston, Mass. Spindle-base. No. 1,062,044; May 20; Gaz. vol. 190; p. 580.
Sieber, Lawrence G., assignor to The J. H. Day Company, Cincinnati, Ohio. Packer. No. 1,062,741; May 27; Gaz. vol. 190; p. 854.
Siebers & Raisch Pattern Works. (See Boutell, John R., assignor.)
Siebert, George C., and A. Gerstmayr, Chicago, Ill.; said Gerstmayr assignor to said Siebert. Machine for cracking nuts. No. 1,062,742; May 27; Gaz. vol. 190; p. 854.
Siebert, Werner, Charlottenburg, Germany, assignor to General Electric Company. Device for synthesizing gas. No. 1,061,786; May 13; Gaz. vol. 190; p. 454.
Siebrecht & Son. (See Macwilliam, James H., assignor.)
Silbert, Gustaf L., Chicago, Ill., assignor to Federal Electric Company. Adapter for electric-lamp sockets. No. 1,060,953; May 6; Gaz. vol. 190; p. 135.
Sill, Charles C., Seattle, Wash. Wheel for vehicles. No. 1,062,260; May 20; Gaz. vol. 190; p. 655.
Silva, Michael F., and E. J. Shallow, Boston, Mass. Device for releasing persons caught by elevators. No. 1,062,667; May 27; Gaz. vol. 190; p. 831.
Simmons, Oliver G., Narberth, assignor of one-half to W. F. Fischer, Philadelphia, Pa. File. No. 1,063,076; May 27; Gaz. vol. 190; p. 965.
Simon, Nicholas and N., Jr., Chicago, Ill. Combined cheese-pressing hoop and cheese-shipping box. No. 1,061,929; May 13; Gaz. vol. 190; p. 500.
Simon, Wilhelm, assignor to J. Schmidt, Nuremberg, Germany. Device for closing tablet-capsules. No. 1,062,368; May 20; Gaz. vol. 190; p. 690.
Simond, Walter A., assignor of one-half to O. A. Towne, Franklin, N. H. Rotary pump. No. 1,062,803; May 27; Gaz. vol. 190; p. 875.
Simons, Edward L., assignor of one-half to H. E. Johnson, Lansdowne, Pa. Electric fixture. No. 1,062,555; May 20; Gaz. vol. 190; p. 751.
Simpson, Charles M., assignor of five-sixths to H. F. Smith, Houston, Tex. Track-laying machine. No. 1,062,743; May 27; Gaz. vol. 190; p. 855.
Simpson, John O., assignor to Remington Arms and Ammunition Company, Ilion, N. Y. Magazine-firearm. No. 1,061,787; May 13; Gaz. vol. 190; p. 454.
Simpson, Samuel E., Muscoda, Wis. Holder for end-gates. No. 1,060,715; May 6; Gaz. vol. 190; p. 53.
Simpson, William S., and H. Oviatt, London, England. Metallurgy of iron and steel. No. 1,061,950; May 13; Gaz. vol. 190; p. 508.
Singer Manufacturing Company, The. (See Cox, Henry J., assignor.)
Singer, William W., assignor of one-third to Larson-Singer Company, Olivia, Tex. Sewing-machine. No. 1,061,413; May 13; Gaz. vol. 190; p. 326.
Single Faucet Company, The. (See Bergens, William J., assignor.)
Sipes, Alfred M., Mobeetie, Tex. Safety-stirrup. No. 1,062,125; May 20; Gaz. vol. 190; p. 609.
Skinner, Mortimer B., Wilmette, Ill. Valve-dressing tool. No. 1,061,694; May 13; Gaz. vol. 190; p. 426.
Skitt, James H., assignor to Smith, Drum and Company, Philadelphia, Pa. Circulating rotary dyeing-machine. No. 1,060,954; May 6; Gaz. vol. 190; p. 136.
Sladden, Sidney C., New York, N. Y. Hinge-lock. No. 1,060,641; May 6; Gaz. vol. 190; p. 26.
Sleeman, Thomas, *et al.* (See Anson, Joseph, assignor.)
Sleeman, William, *et al.* (See Anson, Joseph, assignor.)
Sleeper, Frederick L., Chicago, Ill. Ceramic-paint package. No. 1,061,414; May 13; Gaz. vol. 190; p. 327.
Sloan, Francis E., assignor to The O. K. Manufacturing & Stamping Company, Baltimore, Md. Bed-riser. No. 1,061,695; May 13; Gaz. vol. 190; p. 426.
Sloderbeck, Martin C., assignor of one-third to E. E. Leapley and one-third to W. A. Leapley, Marion, Ind. Automatic derailer. No. 1,062,192; May 20; Gaz. vol. 190; p. 631.
Slusser, Edwin J., Freeland, Pa. Rail-joint. No. 1,061,333; May 13; Gaz. vol. 190; p. 299.
Slutzky, Morris R. (See Osofs and Slutzky.)
Small, Chester C., Newton, Mass., assignor to United Shoe Machinery Company, Paterson, N. J. Sole for boots or shoes. No. 1,061,415; May 13; Gaz. vol. 190; p. 327.
Small, Chester C., Newton, Mass., assignor to United Shoe Machinery Company, Paterson, N. J. Preparing soles for boots or shoes. No. 1,061,416; May 13; Gaz. vol. 190; p. 327.
Small, Henry M., Melrose, Mass. Lock. No. 1,062,512; May 20; Gaz. vol. 190; p. 738.
Smith, Albert W. (See Smith, Sterling W. and A. W.)
Smith, Aleksander E., Jersey City, and L. Zeglenski, Bayonne, N. J. Antirefillable bottle. No. 1,062,045; May 20; Gaz. vol. 190; p. 580.
Smith, Andrew, San Mateo, assignor to Smith Metal Perforating Company, San Mateo county, Cal. Drainage-casing. No. 1,062,303; May 20; Gaz. vol. 190; p. 670.

Smith, Anna H., *et al.* (See Smith and Hummel, assignors.)
Smith, Arthur W., New York, assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,061,639; May 13; Gaz. vol. 190; p. 406.
Smith, Ben R., assignor to Smith Repeatostop Company, Chicago, Ill. Sound-reproducing instrument. No. 1,060,955; May 6; Gaz. vol. 190; p. 136.
Smith, Ben R., assignor to Smith Repeatostep Company, Chicago, Ill. Sound-reproducing instrument. No. 1,062,369; May 20; Gaz. vol. 190; p. 691.
Smith, Billy H., Marshfield, Oreg. Attachment for barbers' chairs. No. 1,061,334; May 13; Gaz. vol. 190; p. 299.
Smith, Charles E., Paterson, N. J. Flying-machine. No. 1,062,572; May 20; Gaz. vol. 190; p. 767.
Smith, Charles H., and C. F. Adams, Chicago, Ill. Motorcycle lock. No. 1,062,744; May 27; Gaz. vol. 190; p. 855.
Smith, Clark J., assignor to The Hardsocg Wonder Drill Company, Ottumwa, Iowa. Rotating mechanism for rock-drills. No. 1,061,788; May 13; Gaz. vol. 190; p. 454.
Smith, Daniel C., and F. M. Hummel; said Smith assignor to A. H. and S. E. Smith, Des Moines, Iowa. Ozone-producing machine. No. 1,063,167; May 27; Gaz. vol. 190; p. 996.
Smith, Drum and Company. (See Skitt, James H., assignor.)
Smith, Franklin, Dallas, Iowa. Trap. No. 1,062,126; May 20; Gaz. vol. 190; p. 609.
Smith, Frederick C. (See Parker, Frank O., assignor.)
Smith, George F., Philadelphia, Pa. Lock. No. 1,062,513; May 20; Gaz. vol. 190; p. 738.
Smith, Goodwin B., Philadelphia, Pa. Combined corset-cover and bust-rumes. No. 1,062,858; May 27; Gaz. vol. 190; p. 894.
Smith, Harold B., Worcester, Mass., assignor, by mesne assignments, to Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa. Electrical apparatus. No. 1,062,046; May 20; Gaz. vol. 190; p. 531.
Smith, Henry, La Junta, Colo. Door-latch. No. 1,061,878; May 13; Gaz. vol. 190; p. 482.
Smith, Henry A., Elgin, Ill. Wrench of the adjustable alligator type. No. 1,062,047; May 20; Gaz. vol. 190; p. 581.
Smith, Henry M. (See Rotter and Smith.)
Smith, Howard F. (See Simpson, Charles M., assignor.)
Smith, Ira, Grayslake, Ill. Foot-warmer. No. 1,060,642; May 6; Gaz. vol. 190; p. 26.
Smith, James H., assignor of one-third to J. W. Burnes, Port Arthur, Tex. Safety oil-tank. No. 1,060,643; May 6; Gaz. vol. 190; p. 27.
Smith, John B., near Knoxville, Tenn. Concrete-mixture bucket. No. 1,062,613; May 27; Gaz. vol. 190; p. 813.
Smith, John L. (See Schneelock and Smith.)
Smith, John O., Moberly, Mo. Concealed cigar holder and mouthpiece. No. 1,061,696; May 13; Gaz. vol. 190; p. 427.
Smith, Kline & French Co. (See French, Harry B., assignor.)
Smith, Lester G., Rochester, N. Y. Rotary engine. No. 1,062,193; May 20; Gaz. vol. 190; p. 632.
Smith, Marjorie F., Redlands, Cal. Detachable bed-guard. No. 1,062,127; May 20; Gaz. vol. 190; p. 609.
Smith Metal Perforating Company. (See Smith, Andrew, assignor.)
Smith, Michael H., Kansas City, Mo. Adjustable shelf mechanism. No. 1,062,556; May 20; Gaz. vol. 190; p. 751.
Smith, Myrtle. (See Smith and Royer, assignors.)
Smith, Oberlin, Bridgeton, N. J. Gang punching-press. No. 1,062,995; May 27; Gaz. vol. 190; p. 939.
Smith Repeatostop Company. (See Smith, Ben R., assignor.)
Smith, Reuben S., Marshall, Tex. Electric-heated steering-rim. No. 1,062,745; May 27; Gaz. vol. 190; p. 856.
Smith, Robert H., Boston, Mass. Blue-print holder or drawing-holder. No. 1,061,335; May 13; Gaz. vol. 190; p. 300.
Smith, Sterling W. and A. W., Berkeley, Cal. Mounting for wall-beds and the like. No. 1,062,261; May 20; Gaz. vol. 190; p. 655.
Smith, Sylvia E., *et al.* (See Smith and Hummel, assignors.)
Smith, Thomas, assignor of one-half to G. T. Sharpton, San Luis Potosi, Mexico. Journal-box for cars. No. 1,060,956; May 6; Gaz. vol. 190; p. 137.
Smith, William A. (See Huss and Smith.)
Smith, William E., Colorado City, Colo. Copy-holder. No. 1,060,795; May 6; Gaz. vol. 190; p. 78.
Smith, William T., and C. C. Royer; said Royer assignor to M. Smith, Bellefontaine, Ohio. Tire. No. 1,061,204; May 6; Gaz. vol. 190; p. 221.
Snead and Company Iron Works, The. (See Macdonald, Harry P., assignor.)
Sneddon, James, assignor of one-third to A. R. Murray, Wichita, Kans. Hydrocarbon-burning furnace. No. 1,063,077; May 27; Gaz. vol. 190; p. 966.
Sneddon, William, Del Rio, Tex. Fuel-oil-controlling valve. No. 1,062,614; May 27; Gaz. vol. 190; p. 814.
Snellenburg Clothing Company, The. (See Oppenheimer, Joseph E., assignor.)
Snyder, David A., Jersey City, N. J. Antifriction-bearing for vehicle-wheels. No. 1,061,506; May 13; Gaz. vol. 190; p. 359.
Snyder, Ernest G. (See Heile and Snyder.)
Snyder, Herbert S., Fairview, and R. Metz, Metz, W. Va. Cable-splice. No. 1,060,644; May 6; Gaz. vol. 190; p. 27.
Snyder, John E., Swissvale, assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa. Blading. No. 1,061,640; May 13; Gaz. vol. 190; p. 406.
Snyder, William, *et al.* (See Schulte, Henry P., assignor.)
Sobra, Marguerite L., Chicago, Ill. Corset. No. 1,061,697; May 13; Gaz. vol. 190; p. 427.
Societa Anonima Italiana Gio. Ansaldo Armstrong & Co. (See Giolitti, Federico, assignor.)
Société Anonyme Des Etablissements Delaunay-Belleville. (See Delaunay-Belleville, Robert, assignor.)
Société des Etablissements Côte. (See Côte, Elysée, assignor.)
Societe Electro-Metallurgique Francaise. (See Héroult, Paul L. T., assignor.)
Societe Generale des Nitrures. (See Serpek, Ottokar, assignor.)
Société Harlé & Cie. (See Matricardi, Giuseppe, assignor.)
Society of Chemical Industry in Basle. (See Preiswerk and Bernoulli, assignors.)
Soeborg, Ludwig C. A. (See Nielsen, Borglin, and Soeborg.)
Sokolov, Jacob, assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,062,194; May 20; Gaz. vol. 190; p. 632.
Soper, William E., New York, assignor to F. Strauss, Yonkers, N. Y. Self-venting faucet for bottles. No. 1,062,615; May 27; Gaz. vol. 190; p. 815.
Sorg, William A., Minneapolis, Minn. Propeller means for self-propelled vehicles. No. 1,062,422; May 20; Gaz. vol. 190; p. 768.
Sornberger, George F., Sidney, N. Y. Folding table. No. 1,062,996; May 27; Gaz. vol. 190; p. 939.
Soule, George H., Fairfield, Vt. Sap-collecting apparatus. No. 1,061,135; May 6; Gaz. vol. 190; p. 198.
Sowers, David W., Buffalo, N. Y. Stove lid or cover. No. 1,060,645; May 6; Gaz. vol. 190; p. 27.
Spacie, Thomas, Blue Island, Ill. Roller-skate. No. 1,061,951; May 13; Gaz. vol. 190; p. 508.
Spain, Carroll J., Beloit, Kans. Tooth-crown. No. 1,062,048; May 20; Gaz. vol. 190; p. 581.
Spaney, Alfred, Piermont, and J. W. Mayer, New York, N. Y. Jewelry. No. 1,062,804; May 27; Gaz. vol. 190; p. 875.
Sparks, Laban, administrator. (See Perky, Henry D.)
Spaulding, George W., *et al.* (See Alyea, Courtland P., assignor.)
Spaulding, Marguerite. (See Spaulding, Russell, assignor.)
Spaulding, Russell, Chicago, Ill., assignor to M. Spaulding, New York, N. Y. Apparatus for producing electrical discharges. No. 1,060,957; May 6; Gaz. vol. 190; p. 137.
Speas, John H., Cazenovia, assignor, by mesne assignments, to Power Washing Machine Co., Peoria, Ill. Driving mechanism and support therefor. No. 1,061,022; May 6; Gaz. vol. 190; p. 161.
Speas, John H., Cazenovia, assignor, by mesne assignments, to Power Washing Machine Co., Peoria, Ill. Driving mechanism. No. 1,062,370; May 20; Gaz. vol. 190; p. 691.
Specialty Device Company, The. (See Bierce, Frederick N., assignor.)
Spencer Heater Company. (See Waddell, Joseph A., Jr., assignor.)
Spencer, Ira H., West Hartford, assignor to The Spencer Turbine Cleaner Company, Hartford, Conn. Apparatus for propelling fluids. No. 1,061,205; May 6; Gaz. vol. 190; p. 221.
Spencer, Ira H., West Hartford, assignor to The Spencer Turbine Cleaner Company, Hartford, Conn. Cleaning-tool. No. 1,063,078; May 27; Gaz. vol. 190; p. 966.
Spencer Turbine Cleaner Company, The. (See Spencer, Ira H., assignor.)
Spickerman, Christian, Sandwich, Ill. Door-mat. No. 1,062,195; May 20; Gaz. vol. 190; p. 633.
Spillan, Cornelius, Steubenville, Ohio. Valve. No. 1,061,698; May 13; Gaz. vol. 190; p. 427.
Spohrer, Gregory J., assignor to Wilson Motor Starter Company, Franklin, Pa. Engine-starter. No. 1,063,141; May 27; Gaz. vol. 190; p. 987.
Sprague, Frank E., Nashua, N. H. Metal box. No. 1,062,859; May 27; Gaz. vol. 190; p. 894.
Sprint, John W., assignor of one-half to G. W. Garvin, Boyce, Va. Commode. No. 1,061,879; May 13; Gaz. vol. 190; p. 482.
Stadtmiller, Henry R., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Knob shank and holder. No. 1,062,933; May 27; Gaz. vol. 190; p. 919.
Stahl, George, assignor to The Edgemont Machine Company, Dayton, Ohio. Friction-clutch. No. 1,062,800; May 27; Gaz. vol. 190; p. 894.
Stamets, Ira E. (See Harthill and Stamets.)
Stanton, Charles P., Lynn, assignor to United Shoe Machinery Company, Boston, Mass. Welt-preparing machine. No. 1,060,716; May 6; Gaz. vol. 190; p. 53.
Standard Company. (See Newton and Canfield, assignors.)

Standard Computing Scale Company. (See Osborn, Francis C., assignor.)
Standard Equipment Company. (See Kidd and Strong, assignors.)
Standard Gas Power Company. (See Akerlund, Gustaf, assignor.)
Standard Heat and Ventilation Company. (See Dixon, Robert M., assignor.)
Standard Manufacturing Company, The. (See Bilton, Clarence E., assignor.)
Standard Music Roll Company. (See Davis, George H., assignor.)
Standard Sewing Machine Company. (See Mack, William A., assignor.)
Standard Steel Car Company. (See Christianson, Andrew, assignor.)
Standard Typewriter Company. (See Petermann, Otto, assignor.)
Standard Underground Cable Company. (See Davis, Charles W., assignor.)
Standard Varnish Works. (See Rosenberg, Herman, assignor.)
Standard Welding Company, The. (See Champ, Joseph H., assignor.)
Standiford, Charles, *et al.* (See Edman, John, assignor.)
Stanford, William R. K., Lawley, Ala. Kitchen-range. No. 1,061,699; May 13; Gaz. vol. 190; p. 428.
Stanger, Ira L., Pensauken, N. J., and C. B. Fithian, Philadelphia, Pa. Stage-noise apparatus. No. 1,060,717; May 6; Gaz. vol. 190; p. 54.
Stanish, Antoni S., Madrid, Iowa. Window-operating device. No. 1,062,997; May 27; Gaz. vol. 190; p. 939.
Stanley, John C. W., assignor to Stanley Paper Fibre Company, San Francisco, Cal. Wood-pulp digester. No. 1,061,767; May 13; Gaz. vol. 190; p. 448.
Stanley Paper Fiber Co. (See Nase, Barnabas T., assignor.)
Stanley Paper Fibre Company. (See Stanley, John C. W., assignor.)
Stanley, William, Great Barrington, Mass., assignor to General Electric Company. Electric heater. No. 1,060,718; May 6; Gaz. vol. 190; p. 54.
Stanton, Luther B., and E. G. Dowda, Columbia, S. C.; said Dowda assignor to said Stanton. Well-bucket. No. 1,062,196; May 20; Gaz. vol. 190; p. 633.
Staples, Elial M., Elizabeth, N. J. Folding top for vehicles. No. 1,061,641; May 13; Gaz. vol. 190; p. 407.
Stearns, Frank A., Hot Springs, Ark. Well-bucket. No. 1,061,136; May 6; Gaz. vol. 190; p. 198.
Stearns, George C., Jr., Jackson, Mich. Sanitary drinking-cup. No. 1,060,863; May 6; Gaz. vol. 190; p. 104.
Steber, Bernard T., Utica, assignor to New Hartford Cotton Manufacturing Company, New York, N. Y. Cloth-guiding machine. No. 1,062,423; May 20; Gaz. vol. 190; p. 708.
Steber, Bernard T., assignor to The Steber Machine Company, Utica, N. Y. Knitting-machine. No. 1,062,557; May 20; Gaz. vol. 190; p. 751.
Steber Machine Company, The. (See Steber, Bernard T., assignor.)
Stecher, Frank A., assignor to Stecher Lithographic Co., Rochester, N. Y. Receptacle. No. 1,060,719; May 6; Gaz. vol. 190; p. 54.
Stecher Lithographic Co. (See Stecher, Frank A., assignor.)
Steele, Herbert H., Marcellus, assignor to The Monarch Typewriter Company, Syracuse, N. Y. Type-writing machine. No. 1,060,646; May 6; Gaz. vol. 190; p. 28.
Steele, Herbert H., Marcellus, assignor to The Monarch Typewriter Company, Syracuse, N. Y. Type-writing machine. No. 1,062,371; May 20; Gaz. vol. 190; p. 692.
Stegeman, Oscar, Denver, Colo. Bearing for supporting radiators in automobile-frames. No. 1,062,197; May 20; Gaz. vol. 190; p. 633.
Stein, Lloyd W., Lancaster, Ohio. Cooker. No. 1,060,864; May 6; Gaz. vol. 190; p. 104.
Steinbach, Frederick J., Chicago, Ill. Concrete-drill. No. 1,060,647; May 6; Gaz. vol. 190; p. 28.
Steinbecker, Karl, Charlottenburg, Germany, assignor to General Electric Company. Means for transmitting motion. No. 1,061,700; May 13; Gaz. vol. 190; p. 428.
Steineke, Margaretha, Chicago, Ill. Kitchen appliance. No. 1,062,304; May 20; Gaz. vol. 190; p. 670.
Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Incandescent lamp. No. 1,062,305; May 20; Gaz. vol. 190; p. 670.
Steinmetz, Charles P., Schenectady, N. Y., assignor to General Electric Company. Production of ammonium compounds. No. 1,062,805; May 27; Gaz. vol. 190; p. 876.
Stellard, Walter, assignor to Universal Paper Bottle Company, New York, N. Y. Sanitary fluid-dispensing apparatus. No. 1,061,417; May 13; Gaz. vol. 190; p. 328.
Stemmler, Ferdinand, and C. Schaller, assignors to Grimme, Natalis & Co., Commanditgesellschaft auf Actien Brunswick, Brunswick, Germany. Resetting mechanism for calculating-machines. No. 1,061,137; May 6; Gaz. vol. 190; p. 198.
Stephen Greene Co. (See Bissex, George E., assignor.)
Stephens, William A., Little Rock, Ark. Subsoil-plow attachment. No. 1,062,198; May 20; Gaz. vol. 190; p. 634.
Stephenson, John W., and L. B. Wilson, Toledo, assignors to The National Malleable Castings Company, Cleveland, Ohio. Journal-box. No. 1,061,507; May 13; Gaz. vol. 190; p. 359.
Stephenson, William P., London, Ontario, Canada. Step and tread plate. No. 1,062,199; May 20; Gaz. vol. 190; p. 634.
Sternau & Company, S. (See Nelson, Charles, assignor.)
Sternau & Company, S. (See Nelson and Barker, assignors.)
Sternau & Company, S. (See Sternau and Nelson, assignors.)
Sternau & Company, S. (See Sternau, Strassburger, and Lattin, assignors.)
Sternau, Sigmund, and C. Nelson, New York, assignors to S. Sternau & Company, Brooklyn, N. Y. Bottle shelf or support. No. 1,061,337; May 13; Gaz. vol. 190; p. 300.
Sternau, Sigmund, L. Strassburger, and A. N. Lattin, assignors to S. Sternau & Company, New York, N. Y. Tea or coffee pot. No. 1,061,336; May 13; Gaz. vol. 190; p. 300.
Stetler, Amos J., West Point, Pa. Cuff-button. No. 1,062,049; May 20; Gaz. vol. 190; p. 582.
Stettiner Chamotte-Fabrik Actien-Gesellschaft vorm. Didier. (See Gohmann, Arthur, assignor.)
Stettiner Chamotte-Fabrik Actien-Gesellschaft vorm. Didier. (See Meyer, Frederick J., assignor.)
Stevens, Richard H., Munhall, Pa. Apparatus for regenerating steam. No. 1,061,573; May 13; Gaz. vol. 190; p. 384.
Stevens, Sylvester G., Duluth, Minn. Soil-cultivator. No. 1,063,079; May 27; Gaz. vol. 190; p. 966.
Stevenson, Ashton G., Chicago, Ill. Variable liner for line-casting molds. No. 1,062,616; May 27; Gaz. vol. 190; p. 815.
Steward, N. Harper. (See MacConnell, John, assignor.)
Stewart, Alfred C., Los Angeles, Cal. Well-drilling apparatus. No. 1,062,050; May 20; Gaz. vol. 190; p. 582.
Stewart, Jesse T., Mabton, Wash. Vending-machine for envelops. No. 1,061,880; May 13; Gaz. vol. 190; p. 483.
Stewart, Richard F., Briarcliff Manor, N. Y. Wrapping-machine. No. 1,062,262; May 20; Gaz. vol. 190; p. 655.
Stinson, Alfred T., Lodi, Cal. Drag-saw. No. 1,062,200; May 20; Gaz. vol. 190; p. 634.
Stinson, George E., Cleveland, Ohio. Conducting-pipe. No. 1,061,418; May 13; Gaz. vol. 190; p. 328.
Stiriz, Anna A. (See Stiriz, Charles, assignor.)
Stiriz, Charles, assignor one-half to A. A. Stiriz, New York, N. Y. Dough-mixing machine. No. 1,062,201; May 20; Gaz. vol. 190; p. 635.
Stoble, William H., Waterville, Me., assignor to Hollingsworth & Whitney Company, Boston, Mass. Apparatus for disintegrating fibrous material used in the manufacture of paper-pulp. No. 1,062,306; May 20; Gaz. vol. 190; p. 671.
Stoble, William H., Waterville, Me., assignor to Hollingsworth & Whitney Company, Boston, Mass. Apparatus for disintegrating fibrous material used in the manufacture of paper-pulp. No. 1,062,307; May 20; Gaz. vol. 190; p. 671.
Stockhausen, Julius, Crefeld, Germany. Production of a plastic or elastic substance. No. 1,061,881; May 13; Gaz. vol. 190; p. 483.
Stockman, Henry. (See Brown, Henry C., assignor.)
Stockton, Elmer E., assignor to The E. Ingraham Co., Bristol, Conn. Alarm-clock. No. 1,061,023; May 6; Gaz. vol. 190; p. 161.
Stoddart, Edward R., Markesan, Wis. Fruit-picker. No. 1,061,138; May 6; Gaz. vol. 190; p. 199.
Stoffel, Henry, Tulsa, Okla. Trap-holder. No. 1,062,051; May 20; Gaz. vol. 190; p. 582.
Stöhr, Otto, Leipzig-Gohlis, Germany. Apparatus for the removal of projecting hairs and the like from wool-yarn threads. No. 1,062,806; May 27; Gaz. vol. 190; p. 876.
Stokes, Jeremiah, Jr., Salt Lake City, Utah. Stovepipe-fastener. No. 1,061,419; May 13; Gaz. vol. 190; p. 328.
Stone, Glenn A., Marietta, Minn. Nest. No. 1,062,861; May 27; Gaz. vol. 190; p. 894.
Stopp, Alvin C., Stoppington, Alberta, Canada. Safety attachment for wagon-benches. No. 1,062,558; May 20; Gaz. vol. 190; p. 752.
Store Improvement Company. (See Peterson, Tron O., assignor.)
Stott, Henry G., New York, N. Y., assignor to Westinghouse Electric & Manufacturing Company. Overspeed device for dynamo-electric machines. No. 1,062,052; May 20; Gaz. vol. 190; p. 583.
Stoup, Henry L., Ypsilanti, Mich. Clothes-line reel. No. 1,061,642; May 13; Gaz. vol. 190; p. 407.
Strand Accessories Company, The. (See Robinson, Gleeson E., assignor.)
Strassburger, Lionel. (See Sternau, Strassburger, and Lattin.)
Strasser, David, New York, N. Y. Cigar-wrapper counter. No. 1,061,930; May 13; Gaz. vol. 190; p. 501.
Strasser, David, New York, N. Y. Counter for tobacco-wrappers. No. 1,061,931; May 13; Gaz. vol. 190; p. 501.
Straub, Walther, Freiburg, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Berlin, Germany. Preparing alkaloid salts. No. 1,061,139; May 6; Gaz. vol. 190; p. 199.

Strauss, Ferdinand. (See Soper, William E., assignor.)
Strohmann, Karl, Bremen, Germany. Ball-bearing door-hanger. No. 1,062,862; May 27; Gaz. vol. 190; p. 895.
Stromberg Motor Devices Company. (See Anderson, Raymond M., assignor.)
Strong, Harry N., Chicago, Ill. Shampoo-brush. No. 1,062,053; May 20; Gaz. vol. 190; p. 583.
Strong, James B. (See Kidd and Strong.)
Strong-Kennard & Nutt Company, The. (See Nutt, Buell, assignor.)
Strouse, Moses A. (See Harnishfeger, Alexander, assignor.)
Stryker, Jacob, Somerville, Mass. Knife-cylinder for hide-working machines. No. 1,062,617; May 27; Gaz. vol. 190; p. 815.
Stucki, Arnold, Pittsburgh, Pa. Roller side bearing. (Reissue.) No. 13,567; May 20; Gaz. vol. 190; p. 764.
Stultz, Omer L. (See Taggart, Thomas O., assignor.)
Stumpf, Paul, and J. Schroeder, Berlin, Germany, assignors to General Electric Company. Controlling device for flying-machines. No. 1,061,701; May 13; Gaz. vol. 190; p. 428.
Stunz, William P., Lansdowne, assignor to G. R. Webb, Baltimore, Md. Cushion for diaphragms of telephonic and like instruments. No. 1,062,559; May 20; Gaz. vol. 190; p. 752.
Sturgis, Samuel D., Los Angeles, Cal. Metal-rolling machine. No. 1,062,807; May 27; Gaz. vol. 190; p. 876.
Sturtevant Engineering Company. (See Hessling, Waldemar, assignor.)
Suddarth, Lloyd J., Silex, Mo. Automatic weighing-machine. No. 1,061,338; May 13; Gaz. vol. 190; p. 301.
Sullivan, Frank, Port Royal, S. C., assignor of one-half to C. J. Batchelor, Baltimore, Md. Non-refillable bottle. No. 1,062,998; May 27; Gaz. vol. 190; p. 939.
Sullivan Machinery Company. (See Ball, Albert, assignor.)
Summey, David L., assignor to Chase Rolling Mill Co., Waterbury, Conn. Method of and machine for extruding metal. (Reissue.) No. 13,562; May 13; Gaz. vol. 190; p. 513.
Summit Rubber Company, The. (See Johnson, Lawrence J., assignor.)
Sundby, Hans, Stoughton, Wis. Wagon-axle. No. 1,062,863; May 27; Gaz. vol. 190; p. 895.
Sundh, August, Hastings-upon-Hudson, N. Y. Combined friction and spur gearing. No. 1,060,865; May 6; Gaz. vol. 190; p. 104.
Sundquist, Claus L., Rockford, Ill. Music-cabinet. No. 1,062,263; May 20; Gaz. vol. 190; p. 656.
Sunvold, Herman H., and H. Larson, Sacred Heart, Minn. Shock-absorber. No. 1,061,420; May 13; Gaz. vol. 190; p. 329.
Superior Gas Improvement Company. (See Miller, Commodore R., assignor.)
Suszycki, John, Reedsburg, Wis. Street-sweeper. No. 1,061,421; May 13; Gaz. vol. 190; p. 329.
Sutcliffe, Edgar R., Leigh, England. Kiln. No. 1,061,952; May 13; Gaz. vol. 190; p. 508.
Sutton, William S., Rockford, assignor to American Radiator Company, Chicago, Ill. Suction cleaning-tool. No. 1,061,422; May 13; Gaz. vol. 190; p. 329.
Suzzi, Taddeo C., assignor, by mesne assignments, to machine. No. 1,060,648; May 6; Gaz. vol. 190; p. 28.
United Fig & Date Co., Chicago, Ill. Nut-cracking machine. No. 1,060,648; May 6; Gaz. vol. 190; p. 28.
Swallow, Charles A., Buffalo, N. Y. Journal-box lid. No. 1,062,054; May 20; Gaz. vol. 190; p. 583.
Swan, John P., assignor to General Fire Extinguisher Company, Providence, R. I. Pipe-hanger. No. 1,062,372; May 20; Gaz. vol. 190; p. 692.
Swan, John P., assignor to General Fire Extinguisher Company, Providence, R. I. Pipe-hanger. No. 1,062,373; May 20; Gaz. vol. 190; p. 692.
Swanson, Andrew C., Seattle, Wash. Hat. No. 1,062,668; May 27; Gaz. vol. 190; p. 881.
Swanson, Hjalmar A., Clay Center, Nebr. Egg-tray. No. 1,063,080; May 27; Gaz. vol. 190; p. 967.
Swarts, Harry J., *et al.* (See Corus, John L., assignor.)
Swedlund, Erick J., Williston, N. D. Gearing. No. 1,062,128; May 20; Gaz. vol. 190; p. 609.
Sweeney, Edward, Trenton, N. J. Toy. No. 1,062,129; May 20; Gaz. vol. 190; p. 610.
Sweet, Lon D. (See Johnston, Robert N., assignor.)
Sweigart, H. W. (See Sweigart, Mary B., assignor.)
Sweigart, Mary B., assignor of one-half to H. W. Sweigart, Lewistown, Pa. Collar-support. No. 1,062,746; May 27; Gaz. vol. 190; p. 856.
Sweum, Benuri O., Hamar, N. D. Carpenter's square. No. 1,061,423; May 13; Gaz. vol. 190; p. 329.
Swick, Wilbert L., Glenwood Springs, Colo. Flume. No. 1,061,424; May 13; Gaz. vol. 190; p. 330.
Swinglehurst, Harry, Boston, Mass., assignor to Scott & Williams, Incorporated, Camden, N. J. Web receiver and take-up mechanism for knitting-machines. No. 1,061,024; May 6; Gaz. vol. 190; p. 162.
Sylvester, Charles, Fall River, Mass. Dobby. No. 1,062,864; May 27; Gaz. vol. 190; p. 895.
Symes, J. B. (See Beasecker, Clarence H., assignor.)
Taber Pump Co. (See Mitchell and Jones, assignors.)
Tabor, James W., Sumpter, Oreg. Nut-lock. No. 1,062,514; May 20; Gaz. vol. 190; p. 738.
Taff, Frederick ., assignor to Duane H. Nash Inc., Millington, N. J. Cultivator. No. 1,062,374; May 20; Gaz. vol. 190; p. 693.
Taggart, Thomas O., Morristown, assignor of one-fourth to O. L. Stultz, Zionsville, Ind. Portable power-saw. No. 1,061,702; May 13; Gaz. vol. 190; p. 429.
Tainter, Willis W. (See Freeman and Tainter.)
Talt, Godfrey M. S., Montclair, N. J., assignor to Talt Producer Company, New York, N. Y. Charging-hopper. No. 1,061,703; May 13; Gaz. vol. 190; p. 429.
Talt Producer Company. (See Talt, Godfrey M. S., assignor.)
Talbot, Henry P., executor. (See Talbot, Zephaniah.)
Talbot, Zephaniah, deceased, Holliston, Mass.; H. P. Talbot, executor. Window-screen. No. 1,061,425; May 13; Gaz. vol. 190; p. 330.
Talley, Thurmon H., Crowell, Tex. Tailor's-goose attachment. No. 1,061,140; May 6; Gaz. vol. 190; p. 199.
Tampier, René, Paris, France. Steering-gear for aeroplanes. No. 1,062,055; May 20; Gaz. vol. 190; p. 584.
Tanabe, Hakuiyo C., Marysville, Cal. Rail-joint. No. 1,062,515; May 20; Gaz. vol. 190; p. 738.
Tandy, John L., Kansas City, Mo. Convertible furniture. No. 1,061,426; May 13; Gaz. vol. 190; p. 330.
Tangeman, Cornelius H., New York, N. Y. Rotary combustion-engine. No. 1,061,025; May 6; Gaz. vol. 190; p. 162.
Tappenden, William, and C. Schwarz, Hornell, N. Y. Bottle. No. 1,061,882; May 13; Gaz. vol. 190; p. 483.
Tarbox, Charles W., *et al.* (See Edman, John, assignor.)
Tardif, Xavier T., St. Agatha, Me. Machine for bending and punching eyes in hooks. No. 1,060,866; May 6; Gaz. vol. 190; p. 105.
Tate, James A., Monticello, Ark. Electric fly-killer. No. 1,062,516; May 20; Gaz. vol. 190; p. 739.
Tate, Nannie M., Mocksville, N. C. Adjustable receptacle. No. 1,062,669; May 27; Gaz. vol. 190; p. 832.
Taylor, Agnes P. (See Taylor, Clarence W., assignor.)
Taylor, Albertis C. (See Winfield and Taylor.)
Taylor, Charles W., Los Angeles, Cal. Line-retriever. No. 1,062,202; May 20; Gaz. vol. 190; p. 635.
Taylor, Clarence W., assignor to A. P. Taylor, Chicago, Ill. Power-transmission mechanism. No. 1,062,934; May 27; Gaz. vol. 190; p. 919.
Taylor, F. L., *et al.* (See Lee, Gregory A., assignor.)
Taylor Instrument Companies. (See Hodgkinson, Edwin, assignor.)
Taylor, Joseph Q., Taunton, and C. T. Eaton, Somerville, Mass. Non-refillable bottle. No. 1,062,517; May 20; Gaz. vol. 190; p. 739.
Taylor, S. J., *et al.* (See Lee, Gregory A., assignor.)
Taylor, William H., Kewanee, Ill. Coal-hopper for windows and the like. No. 1,061,427; May 13; Gaz. vol. 190; p. 331.
Tebyrica, Mario W., Sao Paulo, Brazil. Separating-machine. No. 1,061,141; May 6; Gaz. vol. 190; p. 199.
Templeton, Eva R. (See Hitchcock, Forrest L., assignor.)
Terpezone Company, The. (See Hopkins, Nevil M., assignor.)
Terry, Carleton L., *et al.* (See Bergens, William J., assignor.)
Tesla, Nikola, New York, N. Y. Fluid propulsion. No. 1,061,142; May 6; Gaz. vol. 190; p. 200.
Tesla, Nikola, New York, N. Y. Turbine. No. 1,061,206; May 6; Gaz. vol. 190; p. 221.
Tesseyman, John E. (See Irwin and Tesseyman.)
Teste, Etienne, Paris, France. Horn for motor-cars, motorcycles, and cycles. No. 1,062,518; May 20; Gaz. vol. 190; p. 739.
Tevis, William S., Jr., San Francisco, Cal. Bridle-bit. No. 1,062,747; May 27; Gaz. vol. 190; p. 856.
Thermolac Manufacturing Company. (See Maynard, Harlan J., assignor.)
Therrien, Isidore, Quebec, Quebec, Canada. Smoke-consumer. No. 1,061,143; May 6; Gaz. vol. 190; p. 200.
Thiem, Walter, assignor to S. Oisen, Halle-on-the-Saale, Germany. Apparatus for the production of air-gas. No. 1,063,081; May 27; Gaz. vol. 190; p. 967.
Thiess, Karl. (See Schmidt and Thiess.)
Thlogen Company, The. (See Sanborn, McMahon, Overbury, and Young, assignors.)
Thomas B. Jeffery Company, The. (See Bayer, Paul, assignor.)
Thomas, David K., Kansas City, Mo. Safe and vault. No. 1,062,056; May 20; Gaz. vol. 190; p. 584.
Thomas, James F., and J. Haney, Odessa, Minn. Grading-scraper. No. 1,061,144; May 6; Gaz. vol. 190; p. 201.
Thomas, John G., Lima, Ohio. Communion-service tray. No. 1,061,026; May 6; Gaz. vol. 190; p. 163.
Thomas, Lindale E., Kermit, W. Va. Switch. No. 1,060,796; May 6; Gaz. vol. 190; p. 79.
Thomas Manufacturing Company, The. (See Pelton, Charles H., assignor.)
Thomas, Shirley, Marion, Ind. Cash-box. No. 1,061,145; May 6; Gaz. vol. 190; p. 201.
Thomas, William R., Jr. (See Thomas, William R., Sr., and W. R., Jr.)
Thomas, William R., Sr., and W. R., Jr., Catasauqua, Pa.; said Thomas, Sr., assignor to said Thomas, Jr. Valve mechanism for internal-combustion engines. No. 1,063,082; May 27; Gaz. vol. 190; p. 967.
Thomason, Louise C., Del Rosa, Cal. Cultivator attachment. No. 1,060,797; May 6; Gaz. vol. 190; p. 79.

Thompson, Albert R. (See Anderson and Thompson.)
Thompson, Augustus E., Brookline, Mass. Top-bow clamp. No. 1,061,574; May 13; Gaz. vol. 190; p. 385.
Thompson, George, Grand Rapids, Mich. Sectional door for cars. No. 1,062,057; May 20; Gaz. vol. 190; p. 585.
Thompson, George C., East Liverpool, Ohio. Safety-bolt. No. 1,063,083; May 27; Gaz. vol. 190; p. 968.
Thompson, Jesse C., Westfield, Mass. Vapor-burner. No. 1,060,867; May 6; Gaz. vol. 190; p. 105.
Thompson, William E., Ranger Lake, N. Mex. Washing-machine. No. 1,062,130; May 20; Gaz. vol. 190; p. 610.
Thomson, Julius, Offenbuch-on-the-Main, Germany. Apparatus for impressing patterns on leather and like soft materials. No. 1,063,084; May 27; Gaz. vol. 190; p. 968.
Thomson, William S., assignor to The H. D. Smith & Company, Plantsville, Conn. Wrench. No. 1,061,339; May 13; Gaz. vol. 190; p. 301.
Thormeyer, Franz E., Hamburg, Germany. Means for recording and reproducing lengthy speeches, compositions, and the like. No. 1,063,085; May 27; Gaz. vol. 190; p. 968.
Thorp, William T., Litchfield, Ill. Vehicle-wheel. No. 1,062,519; May 20; Gaz. vol. 190; p. 739.
Threlfall, Richard, Birmingham, England. Electrolytic cell. No. 1,062,058; May 20; Gaz. vol. 190; p. 585.
Thron, Heinrich, and C. Freund, assignors to Vereinigte Chininfabriken Zimmer & Co., G. m. b. H., Frankfort-on-the-Main, Germany. Manufacture and production of alkyl derivatives and substituted alkyl derivatives of hydrocupreine. No. 1,062,203; May 20; Gaz. vol. 190; p. 635.
Thulander, Konstantine, assignor to National Lock Company, Rockford, Ill. Guard for punch-presses and similar devices. No. 1,060,720; May 6; Gaz. vol. 190; p. 54.
Thummel, William G., St. Louis, Mo. Internal-combustion engine. No. 1,062,308; May 20; Gaz. vol. 190; p. 671.
Tibbals, Alfred L. (See Hess and Tibbals.)
Tichay, Paul, New York, N. Y. Attachment for aeroplanes. No. 1,060,958; May 6; Gaz. vol. 190; p. 137.
Tiefel, Charles G. (See Todd and Tiefel.)
Tietz, William, Richmond, Va.; R. G. Dashiell, curator of the estate of said William Tietz, deceased. Sectional shelving. No. 1,063,086; May 27; Gaz. vol. 190; p. 969.
Tilden, Bert O., assignor to American Sanitary Works, New York, N. Y. Flush-tank-operating device. No. 1,061,704; May 13; Gaz. vol. 190; p. 429.
Tilden, Bert O., assignor to American Sanitary Works, New York, N. Y. Flush-tank-operating mechanism. No. 1,061,705; May 13; Gaz. vol. 190; p. 430.
Tilton and Tilton. (See Arndt, Walter R., assignor.)
Tily, Stephen B., and J. G. and M. O. Rehfuss, assignors to John Wanamaker, Philadelphia, Pa. Card-punching machine. No. 1,061,883; May 13; Gaz. vol. 190; p 483.
Tim, Jacob, New York, N. Y. Cap. No. 1,061,884; May 13; Gaz. vol. 190; p. 484.
Timken-Detroit Axle Company, The. (See Alden, Herbert W., assignor.)
Tinnerman, George A., Cleveland, Ohio. Removable gas-burner for ovens. No. 1,062,670; May 27; Gaz. vol. 190; p. 832.
Tobias, Frank F., assignor of one-half to R. P. Inglis, Chicago, Ill. Fence-post. No. 1,063,142; May 27; Gaz. vol. 190; p. 987.
Tobin, John J., assignor to Mead Cycle Company, Chicago, Ill. Support and lock for cycles. No. 1,060,649; May 6; Gaz. vol. 190; p. 29.
Toda, Sozaburo, New York, N. Y. Combined mixer and sifter. No. 1,062,059; May 20; Gaz. vol. 190; p. 586.
Todd & Company, G. W. (See Todd and Tiefel, assignors.)
Todd, John T., assignor to The Register Tracer System, Springfield, Ill. Tracer. No. 1,061,643; May 13; Gaz. vol. 190; p. 407.
Todd, Libanus M., and C. G. Tiefel, assignors to G. W. Todd & Company, Rochester, N. Y. Printing apparatus. No. 1,061,508; May 13; Gaz. vol. 190; p. 359.
Todd, Libanus M., and C. G. Tiefel, assignors to G. W. Todd & Company, Rochester, N. Y. Electrically-controlled check-protector. No. 1,062,748; May 27; Gaz. vol. 190; p. 856.
Todt, Frederick W., Elkhart, Ind., assignor to C. G. Conn Co. Brass wind musical instrument. No. 1,061,885; May 13; Gaz. vol. 190; p. 484.
Toepper, Gerhart E., Washington, D. C. Water-heater. No. 1,060,950; May 6; Gaz. vol. 190; p. 138.
Toledo Electric Welder Company, The. (See Pierce, Robert C., assignor.)
Toledo Glass Company, The. (See Bock, William E., assignor.)
Toledo Pipe Threading Machine Company, The. (See Vosper, William W., assignor.)
Toledo Scale Company. (See De Vilbiss, Allen, Jr., assignor.)
Tone, Frank J. (See Allen and Tone.)
Tooth, Percy W., Leastalk, Cal. Rule-pocket. No. 1,061,886; May 13; Gaz. vol. 190; p. 484.
Torchiani, Harry, Chicago, Ill. Pitching-machine. No. 1,062,131; May 20; Gaz. vol. 190; p. 611.
Tottle & Co., Wm. A. (See McMillan, Hugh P., assignor.)
Towle, George C., Dayton, Ohio. Car-truck. No. 1,061,146; May 6; Gaz. vol. 190; p. 201.
Towne, Omar A. (See Simond, Walter A., assignor.)
Townend, Thomas, Winnipeg, Manitoba, Canada. Attachment to wheels. No. 1,062,618; May 27; Gaz. vol. 190; p. 815.
Townend, William, Philadelphia, Pa., assignor to Richards, Atkinson & Haserick, Boston, Mass. Shuttle. No. 1,062,060; May 20; Gaz. vol. 190; p. 586.
Townley, Charles E., Dryden, N. Y. Thill-coupling. No. 1,062,671; May 27; Gaz. vol. 190; p. 832.
Townsend, Isaac W., Teague, Tex. Pneumatic tool. No. 1,062,749; May 27; Gaz. vol. 190; p. 857.
Trachte, Arthur F. and G. A., Madison, Wis. Tank-heater. No. 1,061,147; May 6; Gaz. vol. 190; p. 201.
Trachte, George A. (See Trachte, Arthur F. and G. A.)
Traban, Camille, New Bedford, Mass. Railway-signal. No. 1,060,708; May 6; Gaz. vol. 190; p. 79.
Trane, James A., La Crosse, Wis. Heating system. No. 1,062,061; May 20; Gaz. vol. 190; p. 586.
Transom Draft Gear Company. (See Shallenberger, Charles S., assignor.)
Traut & Hine Manufacturing Company, The. (See Humphrey, Ernest N., assignor.)
Traylor, Bruce W., Allentown, Pa., assignor to Traylor Engineering & Manufacturing Company. Crusher. No. 1,062,520; May 20; Gaz. vol. 190; p. 740.
Traylor Engineering & Manufacturing Company. (See Traylor, Bruce W., assignor.)
Trieschmann, Luther H., assignor of one-half to F. W. Westervelt, Hartford, Conn. Swivel-holder for razor-strops. No. 1,061,250; May 6; Gaz. vol. 190; p. 235.
Triple "A" Machine Company. (See Anderson, Emil W., assignor.)
Troetel Burglar Alarm-Lock Company. (See Troetel, Elias, assignor.)
Troetel, Elias, New York, N. Y., assignor to Troetel Burglar Alarm-Lock Company. Auxiliary-bolt sash-fastener. No. 1,061,509; May 13; Gaz. vol. 190; p. 360.
Trood, Samuel, New York, N. Y., assignor, by mesne assignments, to Plug Connection Electric Company. Electric chandelier. No. 1,062,619; May 27; Gaz. vol. 190; p. 816.
Trotter, Edgar H., Columbus, Ohio. Gas-furnace. No. 1,062,521; May 20; Gaz. vol. 190; p. 740.
Trust, Henry, New York, N. Y. Vegetable-peeler. No. 1,062,935; May 27; Gaz. vol. 190; p. 919.
Tscherning, Henry, assignor to Arcade Manufacturing Company, Freeport, Ill. Apparatus for jarring and pressing granular materials. No. 1,062,808; May 27; Gaz. vol. 190; p. 876.
Tucker, Ernest H., *et al.* (See Fisher, George W., assignor.)
Tuerk, Gustavus A., Berlin, Ontario, Canada. Concrete-mixer. No. 1,062,936; May 27; Gaz. vol. 190; p. 920.
Tunstall, Albert E., Worcester, Mass. Hand-drill. No. 1,061,706; May 13; Gaz. vol. 190; p. 430.
Turner, Arnold, Danbury, Conn. Blocking and finishing hats. No. 1,062,062; May 20; Gaz. vol. 190; p. 586.
Turner, Edward W., Swansboro, and Jacob, New York, N. Y. Cap. No. 1,061,884; May 13; Gaz. vol. 190; p. 484.
Turner, Joseph L., assignor to The H. K. Mulford Company, Philadelphia, Pa. Metallic derivative or compound of the active principle of the suprarenal glands. No. 1,061,148; May 6; Gaz. vol. 190; p. 202.
Turner, Kelley M. (See Andrick, Lowe, and Haff, assignors.)
Turner, Vaughn & Taylor Company, The. (See Wheeler, Harry E., assignor.)
Turner, Walter V., Edgewood, assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa. Differential-pressure governor for pumps. No. 1,060,650; May 6; Gaz. vol. 190; p. 29.
Turtle-Back Log Bunk and Car Stake Company. (See Shields, Edward B., assignor.)
Tweedale, John C., Toronto, Ontario, Canada. Penholder. No. 1,062,620; May 27; Gaz. vol. 190; p. 816.
Tyler, Charles C., Bridgeport, Conn., assignor to Remington Arms and Ammunition Company, Ilion, N. Y. Magazine-firearm. No. 1,061,789; May 13; Gaz. vol. 190; p. 455.
Tyler, Clifford M. (See Farnum, Dwight, assignor.)
Tyson, Frank, Canton, Ohio. Pump. No. 1,062,375; May 20; Gaz. vol. 190; p. 693.
U. S. Bobbin & Shuttle Co. (See Hambleton, George, assignor.)
U. S. Hame Company. (See Wiedrich, Charles L., assignor.)
Ubbelohde, Leo, Karlsruhe, Germany. Electric-resistance furnace. No. 1,060,868; May 6; Gaz. vol. 190; p. 105.
Ugstad, Alfred, Carlisle township, Ottertail county, Minn. Windmill-regulator. No. 1,062,621; May 27; Gaz. vol. 190; p. 816.
Uhl, Edward L., assignor to Winchester Repeating Arms Co., New Haven, Conn. Mushrooming bullet. No. 1,062,865; May 27; Gaz. vol. 190; p. 895.
Ullrich, Georg, assignor to Fried. Krupp Aktiengesellschaft Grusonwerk, Magdeburg, Germany. Separation of substances by the wet magnetic process. No. 1,062,522; May 20; Gaz. vol. 190; p. 740.
Ulrich, Freidrich, Sr., and F., Jr., Dorchester, Wis. Potato-bug catcher and killer. No. 1,061,027; May 6; Gaz. vol. 190; p. 163.
Underhill, Charles R. (See Kemble and Underhill.)

Underwood Typewriter Company. (See Barnard, Walter E., assignor.)
Underwood Typewriter Company. (See Corcoran, Cornelius B., assignor.)
Underwood Typewriter Company. (See Hutches, Benjamin F., Jr., assignor.)
Underwood Typewriter Company. (See Kurowski, Alfred G. F., assignor.)
Underwood Typewriter Company. (See Lundeberg, Carl F., assignor.)
Underwood Typewriter Company. (See McLaughlin, John C., assignor.)
Underwood Typewriter Company. (See Ramsey, George W., assignor.)
Underwood Typewriter Company. (See Sokolov, Jacob, assignor.)
Underwood Typewriter Company. (See Young, Frank A., assignor.)
Union Special Machine Company. (See McNeil, Chester, assignor.)
United Button Company. (See Morrissey, Thomas F., assignor.)
United Electric Company, The. (See Dillon, Charles A., assignor.)
United Fig & Date Co. (See Suzzi, Taddeo C., assignor.)
United Shoe Machinery Company. (See Bates, Arthur, assignor.)
United Shoe Machinery Company. (See Bates and Cridland, assignors.)
United Shoe Machinery Company. (See Lund, Thomas, assignor.)
United Shoe Machinery Company. (See McLeod, George T., assignor.) (Reissue.)
United Shoe Machinery Company. (See Russell, Arthur L., assignor.)
United Shoe Machinery Company. (See Small, Chester C., assignor.)
United Shoe Machinery Company. (See Stanbon, Charles P., assignor.)
United Steel Company, The. (See Jones, Hang, and McConnell, assignors.)
United Vacuum Appliance Company. (See Preston, Ray W., assignor.)
Universal Caster & Foundry Company. (See Diss, Albert B., assignor.)
Universal Cork Extractor Company. (See Evans and Duryee, assignors.)
Universal Paper Bottle Company. (See Stellard, Walter, assignor.)
Universal Winding Company. (See Ryden, Claes, assignor.)
Universal Winding Company. (See Ryden and Babcock, assignors.)
Unser, John, Carthage, N. Y. Torch. No. 1,061,575; May 13; Gaz. vol. 190; p. 385.
Upton, Alva T., Mount Vernon, Ill. Coal-bit sharpener. No. 1,061,149; May 6; Gaz. vol. 190; p. 202.
Ussery, Walter R., and E. J. Cook, Cookville, Tex. Combined broom and cloth hanger. No. 1,061,150; May 6; Gaz. vol. 190; p. 202.
Vaaler, Jens, assignor to The Clemetsen Company, Chicago, Ill. Latch for type-writer-desk platforms. No. 1,061,707; May 13; Gaz. vol. 190; p. 431.
Vahl, William H., and W. J. Petrasek, Chicago, Ill. Stove. No. 1,062,560; May 20; Gaz. vol. 190; p. 752.
Valkelberg, Albert, Hiteman, Iowa. Rail tie and fastener. No. 1,063,087; May 27; Gaz. vol. 190; p. 969.
Van Aken, John C., Ridgway, Pa. Sled. No. 1,062,204; May 20; Gaz. vol. 190; p. 636.
Van Gorder, Harry R. (See Hites and Van Gorder.)
Van Horn, Vandiver J., assignor of one-half to J. W. O'Neill, Chicago, Ill. Feed mechanism for sewing-machines. No. 1,060,799; May 6; Gaz. vol. 190; p. 80.
Van Orden Corset Company. (See Greenfield, William R., assignor.)
Van Patten, Andrew L., Los Angeles, Cal. Ozone-generator. No. 1,060,651; May 6; Gaz. vol. 190; p. 29.
Van Patten, Andrew L., Los Angeles, Cal. Apparatus for producing medicated gas. No. 1,060,721; May 6; Gaz. vol. 190; p. 55.
Vance, William G., Hagle, Wyo. Harrow attachment. No. 1,062,063; May 20; Gaz. vol. 190; p. 587.
Vargyas, Eugene von, Pittsburgh, Pa. Rubber compound. No. 1,061,207; May 6; Gaz. vol. 190; p. 222.
Vaughan, Eliza. (See Black, Josiah, assignor.)
Vaughan, James H., Mobile, Ala. Adjustable car-step. No. 1,062,523; May 20; Gaz. vol. 190; p. 741.
Vereinigte Chininfabriken Zimmer & Co., G. m. b. H. (See Thron and Freund, assignors.)
Vereinigte Glanzstoff Fabriken Aktiengesellschaft. (See Bronnert, Emile, assignor.)
Verge, Reginald E. (See Cuveller, Louis, assignor.)
Vertical Drainage Company. (See Beall, Albert E., assignor.)
Vesta Accumulator Company. (See Heizer, Alexander L., assignor.)
Viall, William G., assignor to The Ives Manufacturing Corporation, Bridgeport, Conn. Commutator. No. 1,060,722; May 6; Gaz. vol. 190; p. 55.
Vickers, Edwin J., New Philadelphia, Ohio. Account-file. No. 1,061,340; May 13; Gaz. vol. 190; p. 301.
Victor, Alexander F., Davenport, Iowa. Stereopticon. No. 1,062,622; May 27; Gaz. vol. 190; p. 816.
Victor Talking Machine Company. (See Dennison, Wilburn N., assignor.)
Vierengel, Matthew, Brooklyn, N. Y. Envelop-fastener. No. 1,061,341; May 13; Gaz. vol. 190; p. 302.
Vietinghoff, Karl von. (See Bystron, Joseph, assignor.)
Vigneaux, Georges, Paris, France. Extraction of tartaric salts from waste tartarous materials. No. 1,060,869; May 6; Gaz. vol. 190; p. 106.
Vincent, Jesse G., assignor to Hudson Motor Car Company, Detroit, Mich. Lubricator. No. 1,063,143; May 27; Gaz. vol. 190; p. 987.
Völler, Karl, Dusseldorf, assignor to Rheinische Metallwaaren- und Maschinenfabrik, Dusseldorf-Derendorf, Germany. Combination-fuse for universal projectiles. No. 1,061,887; May 13; Gaz. vol. 190; p. 485.
Vollmer, Gustav C., St. Louis, Mo. Knife-sharpener. No. 1,061,708; May 13; Gaz. vol. 190; p. 431.
Vollmer, Joseph, Berlin, Germany. Explosion-motor. No. 1,062,132; May 20; Gaz. vol. 190; p. 611.
Von der Crone, August, Berlin, Germany. Self-closing funnel. No. 1,061,888; May 13; Gaz. vol. 190; p. 485.
Vosper, William W., assignor to The Toledo Pipe Threading Machine Company, Toledo, Ohio. Power transmission and control mechanism. No. 1,060,723; May 6; Gaz. vol. 190; p. 55.
Vouga, Maurice, Cortaillod, Switzerland. Manufacturing condensed milk. No. 1,062,133; May 20; Gaz. vol. 190; p. 611.
W. & L. E. Gurley. (See Schulte, Edward D. N., assignor.)
Wacker, Charles H. (See Bauroth, Leonhard, assignor.)
Wackershauser, Charles W., *et al.* (See Fisher, George W., assignor.)
Waddell, Joseph A., Jr., assignor to Spencer Heater Company, Scranton, Pa. Water-jacket furnace. No. 1,063,088; May 27; Gaz. vol. 190; p. 969.
Wadsworth Watch Case Company, The. (See Jeffery, Harold L., assignor.)
Wahl Adding Machine Company. (See Wahl, John C., assignor.)
Wahl, John C., Chicago, Ill., assignor, by mesne assignments, to Wahl Adding Machine Company, Wilmington, Del. Calculating-machine. No. 1,062,309; May 20; Gaz. vol. 190; p. 672.
Waing, Nikolaus, New York, N. Y. Lock. No. 1,060,960; May 6; Gaz. vol. 190; p. 138.
Wainwright, Charles, and F. J. Carney, Erie, Pa. Governing device for fluid-compressors. No. 1,061,208; May 6; Gaz. vol. 190; p. 222.
Waite, Harry F., New York, N. Y. X-ray system. No. 1,061,428; May 13; Gaz. vol. 190; p. 331.
Waite, Harry S., Yucca, Ariz. Tool. No. 1,062,310; May 20; Gaz. vol. 190; p. 672.
Waitz, Charles A., Rouseville, Pa. Sucker-rod packing for oil-well tubings. No. 1,060,961; May 6; Gaz. vol. 190; p. 138.
Wajda, Floryan, East Hammond, Ind., assignor of one-half to B. J. Gilnski, Chicago, Ill. Metallic tie and rail-fastener. No. 1,062,424; May 20; Gaz. vol. 190; p. 709.
Wajda, Floryan, assignor of one-half to A. M. Bakala, Hammond, Ind. Metallic tie and rail-fastener. No. 1,062,425; May 20; Gaz. vol. 190; p. 709.
Waldberg, Alexandre. (See Levy, Alfred, assignor.)
Walker, Charles, Knoxville, Tenn. Turning-plug. No. 1,062,524; May 20; Gaz. vol. 190; p. 741.
Walker, Otto, Zurich, Switzerland. Inhaling apparatus. No. 1,062,750; May 27; Gaz. vol. 190; p. 857.
Walker, William G., Westminster, London, England. Turbine. No. 1,063,089; May 27; Gaz. vol. 190; p. 970.
Wall, Clarence F., Holton, Kans. Automatic grain unloader and elevator. No. 1,062,205; May 20; Gaz. vol. 190; p. 636.
Wallace, Archie P., Keithsburg, Ill. Machine for cutting button-blanks. No. 1,062,672; May 27; Gaz. vol. 190; p. 832.
Wallace, James E., Paducah, Ky. Baking-pan attachment. No. 1,063,144; May 27; Gaz. vol. 190; p. 988.
Wallace, John A. (See Ponninghaus, Wilhelm B. D., assignor.)
Wallace, Thomas, Valparaiso, Ind. Apparatus for cleaning chalk-board erasers. No. 1,062,311; May 20; Gaz. vol. 190; p. 672.
Wallbillich, Gustav, Brown Station, N. Y. Ejector. No. 1,061,429; May 13; Gaz. vol. 190; p. 331.
Wallem, Axel B., Cynwyd, assignor to Harrison Safety Boiler Works, Philadelphia, Pa. Liquid-measuring apparatus. No. 1,062,937; May 27; Gaz. vol. 190; p. 920.
Waller, Thomas S., assignor to Diamond Power Specialty Company, Detroit, Mich. Blower for boilers. No. 1,060,800; May 6; Gaz. vol. 190; p. 80.
Walter, George W., assignor to E. G. Walthall, New York, N. Y. Trick-card. No. 1,061,576; May 13; Gaz. vol. 190; p. 385.
Walter, Otto W., Baltimore, Md. Umbrella attachment. No. 1,062,206; May 20; Gaz. vol. 190; p. 636.
Walthall, Edgar G. (See Walter, George W., assignor.)
Waltz, Claud M., Summitville, Ind. Vehicle-spring. No. 1,061,342; May 13; Gaz. vol. 190; p. 302.
Ward, Charles W., Hancock, Mich. Valve. No. 1,062,064; May 20; Gaz. vol. 190; p. 587.
Ward, Edward C., Sioux Falls, S. D. Filing-case. No. 1,062,673; May 27; Gaz. vol. 190; p. 833.
Ward, Ira J., Angora, Okla. Drag. No. 1,061,709; May 13; Gaz. vol. 190; p. 431.

Ward, Walter H., San Juan, Porto Rico. Gage. No. 1,062,525; May 20; Gaz. vol. 190; p. 741.
Warland, William E., administrator. (See Rampini, Christian.)
Wassenberg, Theodor. (See Böcker, Jacob, assignor.)
Wassermann, August von, Berlin, and E. Wassermann, Frankfort-on-the-Main, Germany. Preparation of colored seleniferous and telluriferous substances. No. 1,061,889; May 13; Gaz. vol. 190; p. 485.
Wassermann, Ernst. (See Wassermann, August von and E.)
Waterbury Mfg. Co. (See Recker, Adolph C., assignor.)
Waterbury Tool Company. (See Williams and Janney, assignors.)
Waterman, Raymond, Minneapolis, Minn. Grading-machine. No. 1,060,652; May 6; Gaz. vol. 190; p. 30.
Waters, John K., Banning, Cal. Door-hinge. No. 1,062,623; May 27; Gaz. vol. 190; p. 817.
Waters, Samuel B., assignor to National Radiator Company, Johnstown, Pa. Steam and water heater or boiler. No. 1,061,890; May 13; Gaz. vol. 190; p. 485.
Watertown Specialty Company. (See Cleiland, William J., assignor.)
Watkins, Frank M., Cincinnati, Ohio. Laundry-drier. No. 1,060,801; May 6; Gaz. vol. 190; p. 81.
Watkins, John W. (See Brogden and Watkins.)
Watkins, Orla H., assignor to himself, J. A. and W. J. Kelly, Clinton, Iowa. Worm-gear driving mechanism. No. 1,060,802; May 6; Gaz. vol. 190; p. 81.
Watkins, William J., assignor of one-half to N. G. Drumm, Fort Worth, Tex., and one-fourth to J. A. Wisherd, Stanton, Nebr. Puncture-closing compound. No. 1,062,426; May 20; Gaz. vol. 190; p. 709.
Watson, Cecil, London, England. Buffing and draft gear for railway and other rolling-stock. No. 1,062,312; May 20; Gaz. vol. 190; p. 673.
Watson, William A., Medford, assignor to National Piano Company, Boston, Mass. Key-rail for player-pianos. No. 1,061,430; May 13; Gaz. vol. 190; p. 332.
Watson, William T., Vancouver, British Columbia, Canada. Car-fender. No. 1,062,526; May 20; Gaz. vol. 190; p. 741.
Waverley Company, The. (See Kennedy, Harold H., assignor.)
Waverly Company, The. (See Kennedy, Harold H., assignor.)
Way, Arthur G., London, England. Electric-arc lamp. No. 1,062,809; May 27; Gaz. vol. 190; p. 877.
Wayte, Walter J., San Francisco, Cal. Driving mechanism for centrifugal machines. No. 1,061,343; May 13; Gaz. vol. 190; p. 302.
Weaser, William H., Pittsfield, Mass. Gaiter. No. 1,061,510; May 13; Gaz. vol. 190; p. 360.
Webb, Albert C., assignor to The Webb Motor Fire Apparatus Company, St. Louis, Mo. Piston-pump for automobile fire apparatus. No. 1,061,511; May 13; Gaz. vol. 190; p. 360.
Webb, Emma P. (See Alphin, Christopher, assignor.)
Webb, George R. (See Crapo, Henry T., assignor.)
Webb, George R. (See Stunz, William P., assignor.)
Webb Motor Fire Apparatus Company, The. (See Webb, Albert C., assignor.)
Webb, Robert D. (See Webb, Samuel J.)
Webb, Samuel F., Wichita, Kans. Stock-feeder. No. 1,061,710; May 13; Gaz. vol. 190; p. 431.
Webb, Samuel J.; R. D. Webb, Minden, La., by inheritance and by mesne assignments, owner of entire title. Gas-engine. No. 1,062,999; May 27; Gaz. vol. 190; p. 940.
Webb, Wilmer M., Philadelphia, Pa. Record-indicating file. No. 1,061,790; May 13; Gaz. vol. 190; p. 455.
Wedmore, Edmund B., and W. P. Hamlyn, Rugby, England, assignors to General Electric Company. Reverse-current relay. No. 1,060,724; May 6; Gaz. vol. 190; p. 56.
Weeks, Charles M. (See Jones and Weeks.)
Weidhaas, Gustave A. (See Daly and Weidhaas.)
Weidler, William L., Camden, N. J. License-tag holder. No. 1,063,090; May 27; Gaz. vol. 190; p. 970.
Weis, Albert H., Sparkill, assignor to L. N. Littauer, Gloversville, N. Y. Needle-loop take-up for sewing-machines. No. 1,061,645; May 13; Gaz. vol. 190; p. 408.
Weis, Charles, Huntingdon, Pa. Interchangeable heel for shoes. No. 1,061,028; May 6; Gaz. vol. 190; p. 163.
Weiss, David, Cleveland, Ohio. Tooth-brush. No. 1,060,962; May 6; Gaz. vol. 190; p. 139.
Weiss, George F., assignor of one-half to L. E. Wheeler, Springfield, Ill. Rotary engine. No. 1,062,866; May 27; Gaz. vol. 190; p. 896.
Weist, Martin S., assignor of one-half to H. Hall, Sedalia, Mo. Vehicle-wheel. No. 1,061,344; May 13; Gaz. vol. 190; p. 303.
Welch, Harry R., and C. H. Case, Logansport, Ind. Mechanism for automatically controlling the speed of and stopping engines. No. 1,060,803; May 6; Gaz. vol. 190; p. 81.
Welliver, Wilmot H., Elmira, N. Y. Cabinet. No. 1,061,646; May 13; Gaz. vol. 190; p. 409.
Welsbach Light Company. (See Knoedler, Elmer L., assignor.)
Wendt, Gustave A., Spokane, Wash. Current-motor. No. 1,062,624; May 27; Gaz. vol. 190; p. 817.
Wener, Nils H., assignor to Aktiebolaget Ingeniorsfirma Fritz Egnell, Stockholm, Sweden. Measuring instrument. No. 1,063,091; May 27; Gaz. vol. 190; p. 970.
Wentworth, Leslie C., Oxford, Mass. Pull-protector for boots and shoes. No. 1,062,751; May 27; Gaz. vol. 190; p. 857.
Wermentin, Fred, Jr. (See Fanning, Charles E., assignor.)
Werner, Adolph, and W. H. Fetter, Turtle Creek, Pa. Collar-buttoning device. No. 1,063,092; May 27; Gaz. vol. 190; p. 971.
Werner, Hans, Hanover, Germany. Transmission-gearing. No. 1,061,711; May 13; Gaz. vol. 190; p. 432.
Werner, Henry E. (See Dixon and Werner.)
Werth, Walter, New York, N. Y. Attachment for weighing and slicing machines. No. 1,062,065; May 20; Gaz. vol. 190; p. 587.
Wesley, Joseph J., Douglaston, N. Y., assignor to Metropolitan Electric M'f'g. Co. Flush switch. No. 1,061,647; May 13; Gaz. vol. 190; p. 409.
West Coast Iron Company, The. (See Lash, Horace W., assignor.)
West, Max A., Blind Slough, Oreg. Self-dumping scraper. No. 1,061,791; May 13; Gaz. vol. 190; p. 455.
West, William H. R., Winchester, England. Stand and fork for toasting. No. 1,061,431; May 13; Gaz. vol. 190; p. 332.
Western Cartridge Company. (See Clyne, Robert G., assignor.)
Western Electric Company. (See Craft and Reynolds, assignors.)
Western Electric Company. (See Dixon, Amos F., assignor.)
Western Electric Company. (See McBerty, Frank R., assignor.)
Western Mail Transfer Company. (See Priddy, Edwin S., assignor.)
Westervelt, Frank W. (See Trieschmann, Luther H., assignor.)
Westinghouse Air Brake Company, The. (See Augur, Robert C., assignor.)
Westinghouse Air Brake Company, The. (See Dewson, Edward H., assignor.)
Westinghouse Air Brake Company, The. (See Harris, Joseph D., assignor.)
Westinghouse Air Brake Company, The. (See Turner, Walter V., assignor.)
Westinghouse Electric & Manufacturing Company. (See Smith, Harold B., assignor.)
Westinghouse Electric & Manufacturing Company. (See Stott, Henry G., assignor.)
Westinghouse, George, Pittsburgh, Pa. Blades. No. 1,061,648; May 13; Gaz. vol. 190; p. 409.
Westinghouse, George, assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa. Elastic-fluid turbine. No. 1,061,792; May 13; Gaz. vol. 190; p. 456.
Weston, William S., Chicago, Ill. Adjustable curve-scriber. No. 1,061,345; May 13; Gaz. vol. 190; p. 303.
Wetteroth, Frank. (See Schultz and Wetteroth.)
Wheeler, Harry E., assignor to The Turner, Vaughn & Taylor Company, Cuyahoga Falls, Ohio. Baling-machine. No. 1,062,066; May 20; Gaz. vol. 190; p. 588.
Wheeler, Joel N., Geneva, Ill. Child's sulky. No. 1,062,867; May 27; Gaz. vol. 190; p. 896.
Wheeler, Joel N., Geneva, Ill. Child's sulky. No. 1,062,938; May 27; Gaz. vol. 190; p. 921.
Wheeler, L. E. (See Weiss, George F., assignor.)
Wheeler, Seth, Castleton, N. Y. Dispensing-cabinet. No. 1,060,725; May 6; Gaz. vol. 190; p. 56.
Wheeler, Truzy, Alvarado, Tex. Cotton-chopper. No. 1,062,674; May 27; Gaz. vol. 190; p. 833.
Wheeler, William I., Scottville, Ill. Internal-combustion engine. No. 1,062,675; May 27; Gaz. vol. 190; p. 834.
Wheeling Corrugating Company. (See Crotsly, Ashel W., assignor.)
Whitaker, Louis P., New York, N. Y., assignor to S. R. Dresser Manufacturing Company, Bradford, Pa. Wrought-metal ring for pipe-couplings. No. 1,061,712; May 13; Gaz. vol. 190; p. 432.
Whitall-Tatum Company. (See Meinecke, Christian W., assignor.)
White, Ernest M., Globe, Ariz. Oiling system for engines. No. 1,060,653; May 6; Gaz. vol. 190; p. 30.
White, Floyd H., Duke, Okla. Spring-wheel. No. 1,062,676; May 27; Gaz. vol. 190; p. 834.
White, George J., Washington, Pa. Wrench. No. 1,062,207; May 20; Gaz. vol. 190; p. 637.
White, Harry B., Canton, Ohio. Hammer. No. 1,061,512; May 13; Gaz. vol. 190; p. 361.
White, Herbert E., assignor to The General Fireproofing Company, Youngstown, Ohio. Metal-expanding machine. No. 1,061,953; May 13; Gaz. vol. 190; p. 508.
White, Jesse A., Wilsey, Kans. Wire-stretcher. No. 1,062,939; May 27; Gaz. vol. 190; p. 921.
White, Joseph A., assignor to The Moore and White Company, Philadelphia, Pa. Paper slitting and winding machine. No. 1,063,093; May 27; Gaz. vol. 190; p. 971.
White, William H., assignor of one-half to W. B. White, Hazleton, and one-third to J. M. and M. Schappert, Dorranceton, Pa. Tempering copper. No. 1,062,067; May 20; Gaz. vol. 190; p. 588.
White, William M., Milwaukee, Wis. Life-saving device. No. 1,061,209; May 6; Gaz. vol. 190; p. 222.
White, William N., Fortyfort, Pa. Traveling chute for coal-pockets. No. 1,061,151; May 6; Gaz. vol. 190; p. 202.

White, Winifred B., *et al.* (See White, William H., assignor.)
Whitehead, Mary J., Philadelphia, Pa. Attachment for umbrellas and the like. No. 1,061,029; May 6; Gaz. vol. 190; p. 164.
Whitehill, David B., North Clarendon, Pa. Clutch-actuating device. No. 1,062,625; May 27; Gaz. vol. 190; p. 817.
Whitin Machine Works, The. (See Rooney, Elwin H., assignor.)
Whiting, Richard R., Norwood, Ohio. Card-exhibiting device. No. 1,062,068; May 20; Gaz. vol. 190; p. 588.
Whitman, Alfred R., Berkeley, Cal. Reel-actuating device for cameras. No. 1,062,313; May 20; Gaz. vol. 190; p. 673.
Whitney, Asa N., Melbourne, Victoria, Australia. Rifle-range, target, and the like. No. 1,061,577; May 13; Gaz. vol. 190; p. 386.
Whitney Refrigeration Company. (See Whitney, William C., assignor.)
Whitney, William C., Newburgh, N. Y., assignor to Whitney Refrigeration Company. Motor mechanism. No. 1,063,168; May 27; Gaz. vol. 190; p. 996.
Whittington, George W., assignor to The Indiana Machine and Wire Company, Indianapolis, Ind. Wire-fabric machine. No. 1,061,432; May 13; Gaz. vol. 190; p. 332.
Whittington, John A., Spartanburg, S. C. Printing-press. No. 1,062,573; May 20; Gaz. vol. 190; p. 757.
Wick, Edward, Kiel, Wis. Horse-rake. No. 1,061,649; May 13; Gaz. vol. 190; p. 410.
Wicker, Hugh M., New York, N. Y. Electrical heating apparatus. No. 1,061,433; May 13; Gaz. vol. 190; p. 333.
Wicks, Frederick H., and C. Goodman, Roanoke, Va. Lathe. No. 1,061,891; May 13; Gaz. vol. 190; p. 486.
Wicksteed, Charles and R., Kettering, England. Machine-saw. No. 1,062,069; May 20; Gaz. vol. 190; p. 589.
Wicksteed, Ralph. (See Wicksteed, Charles and R.)
Wiebe, Sigurd, Brooklyn, N. Y., assignor, by mesne assignments, to M. C. Hathaway, Richmond, Va. Mixing and measuring apparatus. No. 1,060,804; May 6; Gaz. vol. 190; p. 82.
Wiebe, Sigurd, Brooklyn, N. Y., assignor, by mesne assignments, to M. C. Hathaway, Richmond, Va. Apparatus for hydrating lime and the like. No. 1,060,805; May 6; Gaz. vol. 190; p. 82.
Wiechmann, Ferdinand G., New York, assignor to Fenoform Corporation, Hastings-upon-Hudson, N. Y. Plastic material and preparing such plastic material. No. 1,061,346; May 13; Gaz. vol. 190; p. 303.
Wiediger, William. (See Lathrop, Frank S., assignor.)
Wiedrich, Charles L., assignor to U. S. Hame Company, Buffalo, N. Y. Tool. No. 1,062,626; May 27; Gaz. vol. 190; p. 818.
Wielgolaski, Frans H. A., Christiania, Norway. Method and apparatus for the production of long electric arcs for the treatment of gases. No. 1,061,892; May 13; Gaz. vol. 190; p. 486.
Wieser, Karl, Bredeney, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Percussion-fuse. No. 1,062,810; May 27; Gaz. vol. 190; p. 877.
Wieser, Karl, Bredeney, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Projectile. No. 1,063,094; May 27; Gaz. vol. 190; p. 971.
Wieser, Karl, Bredeney, assignor to Fried. Krupp Aktiengesellschaft, Essen-on-the-Ruhr, Germany. Impact-fuse. No. 1,063,095; May 27; Gaz. vol. 190; p. 972.
Wigham, John and J. R., South Hylton, Sunderland, England. Control device for steam-engines. No. 1,061,932; May 13; Gaz. vol. 190; p. 501.
Wigham, John R. (See Wigham, John and J. R.)
Wilcox, Sidney F., Garden City, N. Y. Tire-armor. No. 1,062,070; May 20; Gaz. vol. 190; p. 589.
Wilder, William H., Gardner, Mass., assignor to Central Oil and Gas Stove Company. Oil-stove. No. 1,062,677; May 27; Gaz. vol. 190; p. 834.
Wiley, Edgar C., Lynchburg, Va. Filter plant. No. 1,060,870; May 6; Gaz. vol. 190; p. 106.
Wilkie, Robert J. (See Schuh, Charles F., assignor.)
Wilkins, George E., and J. C. B. Richards, Wednesbury, England. Lifting-jack. No. 1,060,963; May 6; Gaz. vol. 190; p. 139.
Wilkins, James H. (See Nevius and Wilkins.)
Will, Anthony, Syracuse, N. Y. Candle-holder. No. 1,061,347; May 13; Gaz. vol. 190; p. 304.
Williford, Joseph L., assignor of one-half to B. A. O'Neill, Minneapolis, Minn. Adjustable feeder and mixer. No. 1,061,348; May 13; Gaz. vol. 190; p. 304.
Williford, Joseph L., Gladstone, Mich., assignor of two-fifths to A. C. Paul, Minneapolis, Minn. Preparing grain for milling. No. 1,061,933; May 13; Gaz. vol. 190; p. 502.
William L. Dines, Jr., Co. (See Dines, William L., Jr., assignor.)
William M. Crane Company. (See Erskine, James, assignor.)
Williams, Charle C., Cleveland, Ohio. Clam-shell bucket. No. 1,062,208; May 20; Gaz. vol. 190; p. 637.
Williams, Charles E. B., *et al.* (See Lewis, William W., assignor.)
Williams, Charles H. (See Eagar and Williams.)
Williams, George H. (See Kunkel and Williams.)
Williams, Guy V. (See Farkas, Karl, assignor.)
Williams, Harvey D., and R. Janney, New York, N. Y. Oscillation-control mechanism. No. 1,062,561; May 20; Gaz. vol. 190; p. 753.
Williams, Harvey D., and R. Janney, New York, N. Y., assignors to Waterbury Tool Company, Waterbury, Conn. Speed-adjusting means for rotary hydraulic devices. No. 1,062,071; May 20; Gaz. vol. 190; p. 589.
Williams, John B., assignor of one-half to E. Blomquist, San Francisco, Cal. Reversible flush-valve. No. 1,062,868; May 27; Gaz. vol. 190; p. 896.
Williams, John L., Jr., Jackson, Tenn. Sanitary drinking-fountain. No. 1,062,209; May 20; Gaz. vol. 190; p. 637.
Williams, Lee B., Lemon Grove, Cal. Artificially coloring citrus fruit. No. 1,061,253; May 6; Gaz. vol. 190; p. 236.
Williams, Thomas H., Buxton, Iowa. Transmission device. No. 1,061,893; May 13; Gaz. vol. 190; p. 487.
Williams, William E., Chicago, Ill. Machine for making shredded-wheat biscuits or similar articles. No. 1,062,627; May 27; Gaz. vol. 190; p. 818.
Williams, William G., Vinita, Okla. Attachment for suit-cases and the like. No. 1,062,752; May 27; Gaz. vol. 190; p. 858.
Williamson, George S., assignor of one-third to A. T. Johnston, McKeesport, Pa. Signal system. No. 1,063,096; May 27; Gaz. vol. 190; p. 972.
Willoughby, Alfred B. (See Brandt, Charles M., assignor.)
Willows, Ernest T., Cardiff, England. Airship, aeroplane, or aerostat. No. 1,061,434; May 13; Gaz. vol. 190; p. 333.
Willson, Thomas L., and M. M. Haff, Ottawa, Ontario, Canada; said Haff assignor to said Willson. Manufacturing an ammonium superphosphate fertilizer. No. 1,062,869; May 27; Gaz. vol. 190; p. 897.
Wilson, Ben T., and W. F. Ratcliff, Nacogdoches, Tex. Device for filling ice-cream cones. No. 1,062,940; May 27; Gaz. vol. 190; p. 921.
Wilson, Dennis M., assignor of one-half to F. S. Saunders, Muncie, Ind. Ignition-timing device for magnetos. No. 1,060,871; May 6; Gaz. vol. 190; p. 106.
Wilson, Francis P., Chicago, Ill. Boiler-tube cleaner. No. 1,062,941; May 27; Gaz. vol. 190; p. 922.
Wilson, James S., Chelsea, Mass. Apparatus for vulcanizing rubber articles and the like. No. 1,062,072; May 20; Gaz. vol. 190; p. 590.
Wilson, Joseph O., Chester, Pa. Key-puller. No. 1,060,872; May 6; Gaz. vol. 190; p. 107.
Wilson, Loren B. (See Stephenson and Wilson.)
Wilson Motor Starter Company. (See Spohrer, Gregory J., assignor.)
Wilson, Pinkney H., Pilot Grove, Mo. Gate-latch. No. 1,061,793; May 13; Gaz. vol. 190; p. 456.
Wilson, Richard T., assignor of one-half to A. E. Johnson, Hastings, Mich. Artificial bait. No. 1,060,873; May 6; Gaz. vol. 190; p. 107.
Wilson, Robert M., Victoria Island, Cal. Apparatus for swinging booms. No. 1,062,376; May 20; Gaz. vol. 190; p. 693.
Wilson, William, Oakland, Cal. Bottle. No. 1,061,794; May 13; Gaz. vol. 190; p. 456.
Wiltse, William J., Lisbon, N. D. Gate-closer. No. 1,063,151; May 27; Gaz. vol. 190; p. 990.
Winchester Repeating Arms Co. (See Johnson, Thomas C., assignor.)
Winchester Repeating Arms Co. (See Uhl, Edward L., assignor.)
Winde, Oswald, Lutzschena-Leipzig, Germany. Grain-steeping tank. No. 1,061,713; May 13; Gaz. vol. 190; p. 432.
Window Glass Machine Company. (See Pierce, Lonnie J., assignor.)
Windsor-Richards, Edgar J., and T. Lewis, Glengarnock, Scotland. Charging apparatus for blast-furnaces. No. 1,061,349; May 13; Gaz. vol. 190; p. 304.
Wineman, Parker, Chicago, Ill. Fastening device. No. 1,060,726; May 6; Gaz. vol. 190; p. 56.
Winfield Electric Welding Machine Co., The. (See Winfield and Taylor, assignors.)
Winfield, William C., and A. C. Taylor, assignors to The Winfield Electric Welding Machine Co., Warren, Ohio. Electric spot-welding machine. No. 1,063,097; May 27; Gaz. vol. 190; p. 972.
Winkelmeyer, Edward F., Beacon Hill, Mich. Front head for drills. No. 1,061,795; May 13; Gaz. vol. 190; p. 457.
Winkle, William, Waitsburg, Wash. Ratchet-wrench. No. 1,060,874; May 6; Gaz. vol. 190; p. 107.
Winn, Charles S., Rockford, Ill. Window-ventilator. No. 1,060,727; May 6; Gaz. vol. 190; p. 56.
Winsor, Harvey S., New York, N. Y. Siphon-charging mechanism. No. 1,063,145; May 27; Gaz. vol. 190; p. 988.
Winsworth, William H., Youngstown, assignor to The Columbus Railway Supply Company, Columbus, Ohio. Rail-anchor. No. 1,060,728; May 6; Gaz. vol. 190; p. 57.
Winsworth, William H., Youngstown, assignor to The Columbus Railway Supply Company, Columbus, Ohio. Combined tie-plate and rail-anchor. No. 1,060,729; May 6; Gaz. vol. 190; p. 57.
Wintemute, Augustus A., Fresno, Cal. Crude-oil burner. No. 1,062,073; May 20; Gaz. vol. 190; p. 590.
Winter, William G., St. Louis, Mo. Bottle holder and tray. No. 1,061,152; May 6; Gaz. vol. 190; p. 203.

Winton, Alexander, and H. B. Anderson, assignors to The Winton Motor Carriage Company, Cleveland, Ohio. Two-cycle engine. No. 1,061,796; May 13; Gaz. vol. 190; p. 457.
Winton Motor Carriage Company, The. (See Winton and Anderson, assignors.)
Wirsing, Andrew, Milwaukee, Wis. Hoisting-bucket. No. 1,060,730; May 6; Gaz. vol. 190; p. 57.
Wischhusen, Heinrich, and A. Hepke, Berlin, Germany. Push-button switch. No. 1,061,578; May 13; Gaz. vol. 190; p. 386.
Wischner, Heinrich O., Leipzig-Entritzsch, Germany. Apparatus for separating oil from steam. No. 1,062,264; May 20; Gaz. vol. 190; p. 656.
Wise, Henry A., assignor to Rockwell Furniture Company, Rockwell, N. C. Casket-top. No. 1,060,654; May 6; Gaz. vol. 190; p. 30.
Wisherd, John A. (See Gregson, William, assignor.)
Wisherd, John A., *et al.* (See Watkins, William J., assignor.)
Witt, Warren E., Raymond, Ill. Swingletree-hook. No. 1,061,435; May 13; Gaz. vol. 190; p. 334.
Witt, William E., Wichita, assignor of one-half to H. L. Cox, Cedar Vale, Kans. Hay-tester. No. 1,062,678; May 27; Gaz. vol. 190; p. 835.
Wittich, William F., Erie, Pa. Amusement device. No. 1,062,314; May 20; Gaz. vol. 190; p. 673.
Wittnauer & Co., A. (See Giset, Olaf E., assignor.)
Witzel, Charles J. (See Kreuzkamp, August J., assignor.)
Woeber, Adam, Denver, Colo. Tip for vehicle shafts, poles, and the like. No. 1,061,436; May 13; Gaz. vol. 190; p. 334.
Woerner, Eugen, Cannstatt, assignor to Firm of R. Bosch, Stuttgart, Germany. Lubricating system. No. 1,062,377; May 20; Gaz. vol. 190; p. 694.
Wogan, Jules M. (See Craig, James A., assignor.)
Wohlfahrt, Theodor. (See Bazlen, Rieger, and Wohlfahrt.)
Woldert Grocery Company. (See Gradick, Wiley N., assignor.)
Wolfe, David A., Turin, Iowa. Ship structure. No. 1,061,153; May 6; Gaz. vol. 190; p. 203.
Wolfe, Jacob C., New York, and E. W. Morton, White Plains, assignors to Automata Company, New York, N. Y. Adding attachment for type-writers. No. 1,062,870; May 27; Gaz. vol. 190; p. 897.
Wolfe, Virgil A. (See Sells, George, assignor.)
Wolff, Hugo, Mannheim, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Dyes containing sulfur and making them. No. 1,061,714; May 13; Gaz. vol. 190; p. 433.
Wolff, Hugo, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Anthracene dyes and making the same. No. 1,063,000; May 27; Gaz. vol. 190; p. 940.
Wolff, Wallace B., assignor to American Slicing Machine Company, Chicago, Ill. Sharpening device for slicing-machines. No. 1,063,098; May 27; Gaz. vol. 190; p. 973.
Wolff, William H., assignor of one-half to C. R. Olmsted, Nestor, Cal. Transplanting-tool. No. 1,062,679; May 27; Gaz. vol. 190; p. 835.
Wolffenstein, Richard, Berlin, Germany. Acidylsalicylic acid ester and making same. No. 1,063,099; May 27; Gaz. vol. 190; p. 973.
Wood, George, Cleveland, Ohio. Body-rest. No. 1,060,655; May 6; Gaz. vol. 190; p. 31.
Wood, Henry A. W., New York, N. Y., assignor, by mesne assignments, to The Autoplate Company of America, Jersey City, N. J. Combined molding-machine and steam-table. No. 1,060,875; May 6; Gaz. vol. 190; p. 108.
Woodbridge, Howard C., assignor of one-third to M. G. McInerney and one-third to J. P. Reynolds, Rochester, N. Y. Rail-shim. No. 1,060,656; May 6; Gaz. vol. 190; p. 31.
Woodlee, Elmer G., Altamont, Tenn. Spring-wheel. No. 1,063,100; May 27; Gaz. vol. 190; p. 973.
Woodley, Whitford W., Elizabeth City, N. C. Implement for punching and cutting belts. No. 1,062,753; May 27; Gaz. vol. 190; p. 858.
Woodman, Frederic S., Fairfield, Me. Wheel attachment for horse-hoes. No. 1,061,437; May 13; Gaz. vol. 190; p. 334.
Woodman, George A., assignor to Kirby Equipment Company, Chicago, Ill. Journal-box. No. 1,062,680; May 27; Gaz. vol. 190; p. 835.
Woodruff, H. L., *et al.* (See Morton, Frank M., assignor.)
Woods, Charles H., Decatur, Ill. Fare-collecting apparatus. No. 1,062,134; May 20; Gaz. vol. 190; p. 612.
Woods, Nelson T., Portland, Oreg., assignor to R. W. M. McNair, Vancouver, British Columbia, Canada. Air-strainer. No. 1,062,942; May 27; Gaz. vol. 190; p. 922.
Word, John B., Latrobe, assignor of one-half to W. F. Deaner, Amador City, Cal. Chambering attachment for rock-drills. No. 1,061,210; May 6; Gaz. vol. 190; p. 222.
Workman Manufacturing Company. (See Hughes, Joseph D., assignor.)
Worth, John S., assignor of one-half to W. P. Worth, Coatesville, Pa. Dishing metallic plates. No. 1,061,797; May 13; Gaz. vol. 190; p. 457.
Worth, William P. (See Worth, John S., assignor.)
Wottle, Hans, Vienna, Austria-Hungary. Apparatus for manufacturing rims for wooden belt-pulleys. No. 1,062,135; May 20; Gaz. vol. 190; p. 612.
Woznack, Michel J., Seattle, Wash. Car-fender. No. 1,061,438; May 13; Gaz. vol. 190; p. 334.
Wright, Fred W. (See Pearce, Parker, and Wright.)
Wilfing, Johann A. von. (See Quade, Fritz, assignor.)
Wurmb, Theodore H., and R. Baumann, assignors to The National Clock and Electric Mfg. Co., St. Louis, Mo. Thermostat. No. 1,062,136; May 20; Gaz. vol. 190; p. 613.
Yale & Towne Manufacturing Company, The. (See Stadtmiller, Henry R., assignor.)
Yaw, Clio B., Arlington, N. J., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,062,265; May 20; Gaz. vol. 190; p. 656.
Young, Daniel K. (See Young, Edwin A., assignor.)
Young, Edwin A., assignor of one-half to D. K. Young, Lander, Wyo. Hen's nest. No. 1,061,154; May 6; Gaz. vol. 190; p. 203.
Young, Frank A., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,060,806; May 6; Gaz. vol. 190; p. 82.
Young, Frank A., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,062,266; May 20; Gaz. vol. 190; p. 657.
Young, Frank A., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,062,681; May 27; Gaz. vol. 190; p. 835.
Young, Lucy A. (See Young, William W., assignor.)
Young Safety Razor Company. (See Cobb, Lyman H., assignor.) (Reissue.)
Young, Samuel, Cedar Point, Ill. Pick-holder. No. 1,062,527; May 20; Gaz. vol. 190; p. 742.
Young, Stewart W. (See Sanborn, McMahon, Overbury, and Young.)
Young, William W., assignor, by mesne assignments, to L. A. Young, Agawam, Mass. Acoustic diaphragm. No. 1,061,211; May 6; Gaz. vol. 190; p. 223.
Yourtee, Ralph F., St. Louis, Mo. Concrete garage. No. 1,061,798; May 13; Gaz. vol. 190; p. 457.
Zace, Philip A. (See Folz and Zace.)
Zahn, Friedrich, Hanau, Germany. Means for making cigar-fillers. No. 1,060,876; May 6; Gaz. vol. 190; p. 108.
Zanetti, Andrew and J., San Francisco, Cal. Paper-cutting machine. No. 1,062,427; May 20; Gaz. vol. 190; p. 709.
Zanetti, Joseph. (See Zanetti, Andrew and J.)
Zeglenski, Ludwig. (See Smith and Zeglenski.)
Zeiss, Firm of Carl. (See König, Albert, assignor.)
Zettel, Frederick, Cincinnati, Ohio. Bearing for lens-grinding machines. No. 1,061,030; May 6; Gaz. vol. 190; p. 164.
Zimmerman, Morris H., New York, N. Y. Boy's knicker-bockers. No. 1,062,628; May 27; Gaz. vol. 190; p. 818.
Zitliosen Manufacturing Company. (See Schultz and Wetteroth, assignors.)
Zitzerman, Isaac D., Kansas City, Mo. Lock-nut. No. 1,063,146; May 27; Gaz. vol. 190; p. 988.
Züblin, Eduard, Strassburg, Germany. Closure for exit-orifices of silos and the like. No. 1,061,579; May 13; Gaz. vol. 190; p. 386.

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

A. H. Heisey & Co. (See Sanford, Andrew J., assignor.)
Adamian, Parnag A., and A. Dahan, Boston, Mass. Casing for cigar-lighters. No. 44,090; May 27; Gaz. vol. 190; p. 1001.
Allen, Samuel L., Moorestown, N. J. Lever. No. 43,953; May 6; Gaz. vol. 190; p. 237.
American Boy Scouts. (See Stewart, David, assignor.)
Armstrong Cork Company. (See Drew, Arthur W., assignor.)
Averns, Raymond H., assignor to J. & J. Cash, Limited, Coventry, England. Braid or trimming. Nos. 43,977–83; May 13; Gaz. vol. 190; pp. 515–16.
Azzoni, Oreste E. S., Philadelphia, Pa. Statuette. No. 43,984; May 13; Gaz. vol. 190; p. 516.
Bandlow, Henry E., Chicago, Ill. Electric toaster and heater. No. 44,049; May 20; Gaz. vol. 190; p. 765.
Bigelow Carpet Company. (See Elliot, William A., assignor.)
Bigelow Carpet Company. (See Louden, Milton R., assignor.)
Bigelow Carpet Company. (See Moffat, John B., assignor.)
Bigelow Carpet Company. (See Sauer, Emil G., assignor.)
Bigelow Carpet Company. (See Spring, John, assignor.)
Bigelow Carpet Company. (See Vetter, Ignatius J., assignor.)
Bigney, Sidney O., Attleboro, Mass. Bracelet. No. 43,985; May 13; Gaz. vol. 190; p. 516.
Bowdidge, Thomas H. (See Gentle, Cuthbert, assignor.)
Boyce, Harrison H., Oyster Bay, N. Y. Casing for automobile radiator-indicators. No. 43,987; May 13; Gaz. vol. 190; p. 516.
Boyd, Harry E., and J. H. Neal, Akron, Ohio. Tire. No. 44,050; May 20; Gaz. vol. 190; p. 765.
Brander, Warner, Canton, S. D. Sewing-table. No. 44,051; May 20; Gaz. vol. 190; p. 765.
Bryant, Henry E., Jacksonville, Fla. Sewing-machine table and stand. No. 44,081; May 27; Gaz. vol. 190; p. 1001.
Burke, Wilbur B., Cleveland, Ohio. Cap for tire-valves. No. 44,082; May 27; Gaz. vol. 190; p. 1001.
Cantin, Alexander A., New York, N. Y. Capital and arch. No. 44,083; May 27; Gaz. vol. 190; p. 1001.
Cantin, Alexander A., New York, N. Y. Capital and architrave. No. 44,084; May 27; Gaz. vol. 190; p. 1001.
Cassard, Elizabeth H. (See Thayer and Cassard.)
Cheney Brothers. (See George, Gustave, assignor.)
Cheney Brothers. (See Maisch-Bitschenauer, H., assignor.)
Cheney Brothers. (See Ruepp, Robert, assignor.)
Cheney Brothers. (See Sins, Emile, assignor.)
Clarke, William E., Oakland, Cal. Fraternity-emblem. Nos. 44,052–3; May 20; Gaz. vol. 190; p. 765.
Codman, William C., assignor to Gorham Manufacturing Company, Providence, R. I. Handle for spoons, forks, or similar articles. No. 43,988; May 13; Gaz. vol. 190; p. 516.
Colburn, Serenus M., assignor of one-half to F. Kees, Minneapolis, Minn. Street-light standard. Nos. 44,054–7; May 20; Gaz. vol. 190; p. 766.
Congdon, Herbert W., assignor to The Delta Upsilon Fraternity, New York, N. Y. Male die for seals. No. 44,085; May 27; Gaz. vol. 190; p. 1002.
Cravath, James R., assignor to National X-Ray Reflector Company, Chicago, Ill. Reflector. No. 44,086; May 27; Gaz. vol. 190; p. 1002.
Curtis Publishing Company, The. (See Guild, Frank S., assignor.)
D'Ollier, Henry, Jr., Philadelphia, Pa., assignor, by mesne assignments, to General Electric Company. Shade or reflector holder. No. 43,989; May 13; Gaz. vol. 190; p. 517.
Dahan, Anton. (See Adamian and Dahan.)
Daniel, Charles A., Philadelphia, Pa. Automobile-tire. No. 44,087; May 27; Gaz. vol. 190; p. 1002.
David E. Kennedy, Incorporated. (See Parkinson, Edwin, assignor.)
Delta Upsilon Fraternity, The. (See Congdon, Herbert W., assignor.)
Doyle, James C., Portland, Oreg. Autotruck-body. No. 44,088; May 27; Gaz. vol. 190; p. 1002.
Drew, Arthur W., Ruislip, England, assignor to Armstrong Cork Company, Pittsburgh, Pa. Linoleum, oil-cloth, or floor-covering. No. 43,990; May 13; Gaz. vol. 190; p. 517.
Durand, Edward F., Columbus, Ohio, assignor to The Supreme Lodge, Knights of Pythias. Emblematic collar ornament. No. 44,089; May 27; Gaz. vol. 190; p. 1002.
Durand, Edward F., Columbus, Ohio, assignor to The Supreme Lodge, Knights of Pythias. Helmet-shield. No. 44,090; May 27; Gaz. vol. 190; p. 1002.
Durand, Edward F., Columbus, Ohio, assignor to The Supreme Lodge, Knights of Pythias. Cap-front ornament. No. 44,091; May 27; Gaz. vol. 190; p. 1003.
Eckiya, Charles N., Racine, Wis. Casing and stand for liquid-agitators. No. 43,991; May 13; Gaz. vol. 190; p. 517.
Einstein, Alfred C., St. Louis, Mo. Reflector. No. 44,092; May 27; Gaz. vol. 190; p. 1003.
Eisenmann, Joseph, London, England. Sailor-boy doll. No. 43,992; May 13; Gaz. vol. 190; p. 517.
Elliot, William A., Yonkers, N. Y., assignor to Bigelow Carpet Company. Carpet. Nos. 43,993–4; May 13; Gaz. vol. 190; pp. 517–18.
Elliot, William A., Yonkers, N. Y., assignor to Bigelow Carpet Company. Rug. No. 43,995; May 13; Gaz. vol. 190; p. 518.
Ellis, Claud A., assignor to The Faultless Iron Works, St. Charles, Ill. Metallic storage-cabinet. No. 44,093; May 27; Gaz. vol. 190; p. 1003.
Fahys, George E., Glen Cove, assignor to Joseph Fahys & Company, New York, N. Y. Back for mirrors, brushes, or similar articles. No. 43,954; May 6; Gaz. vol. 190; p. 237.
Faultless Iron Works, The. (See Ellis, Claud A., assignor.)
Fawcett, Willis G., Salem, Ohio. Umbrella-rack. No. 43,955; May 6; Gaz. vol. 190; p. 237.
Finlay Dicks & Co. (See Guidry, Ambrose J., assignor.)
Fletcher, Clifford C., Harrisburg, Pa. Tag. Nos. 43,956–7; May 6; Gaz. vol. 190; pp. 237–8.
Foster, John R., Arlington, Mass. Box or similar article. No. 44,058; May 20; Gaz. vol. 190; p. 766.
Frank, Harold, assignor to Frank and Lambert, Inc., New York, N. Y. Textile fabric. No. 43,996; May 13; Gaz. vol. 190; p. 518.
Frank and Lambert. (See Frank, Harold, assignor.)
Frank and Lambert. (See Lambert, Julius J., assignor.)
Frank and Lambert. (See Loomis, Harry T., assignor.)
Frank Tilk Ornamental Iron Works Co. (See Wight, Thomas, assignor.)
Frasard, Charles H., Detroit, Mich. Watch-holder. No. 44,094; May 27; Gaz. vol. 190; p. 1003.
French, Walter A., Kansas City, Mo. Cornet. No. 44,095; May 27; Gaz. vol. 190; p. 1003.
Gaffney, John L., Chicago, Ill. Match-box holder. No. 44,096; May 27; Gaz. vol. 190; p. 1003.
Garford, Arthur L., assignor to The Garford Company, Elyria, Ohio. Rear fender for automobiles. No. 43,997; May 13; Gaz. vol. 190; p. 518.
Garford Company, The. (See Garford, Arthur L., assignor.)
General Electric Company. (See D'Ollier, Henry, Jr., assignor.)
Gentle, Cuthbert, Dorchester, assignor to T. H. Bowdidge, Boston, Mass. Beverage-heater. No. 43,958; May 6; Gaz. vol. 190; p. 238.
George, Gustave, Paris, France, assignor to Cheney Brothers, South Manchester, Conn. Textile fabric. Nos. 43,998–44,001; May 13; Gaz. vol. 190; pp. 518–19.
Goldman, Jacob J., Mount Vernon, N. Y. Dress. No. 44,097; May 27; Gaz. vol. 190; p. 1004.
Gorham Manufacturing Company. (See Codman, William C., assignor.)
Gorton, Robert, West Newton, Mass. Button. No. 44,098; May 27; Gaz. vol. 190; p. 1004.
Greer, Charles, New Castle, Pa. Drinking-glass. No. 44,059; May 20; Gaz. vol. 190; p. 767.
Gribko, Antoni, Hatfield, Mass. Door-knob. No. 44,099; May 27; Gaz. vol. 190; p. 1004.
Griffin, Robert B., New York, N. Y. Wall-covering. No. 44,002; May 13; Gaz. vol. 190; p. 519.
Guidry, Ambrose J., assignor to Finlay Dicks & Co., Ltd., New Orleans, La. Dome-top toilet-powder can. No. 44,100; May 27; Gaz. vol. 190; p. 1004.
Guild, Frank S., Merchantville, N. J., assignor to The Curtis Publishing Company, Philadelphia, Pa. Font of type. No. 44,101; May 27; Gaz. vol. 190; p. 1004.
Harman, Charles W., New Rochelle, assignor to Joseph Fahys & Company, New York, N. Y. Handle for spoons, forks, or similar articles. Nos. 44,060–1; May 20; Gaz. vol. 190; p. 767.
Hartford Carpet Corporation, The. (See Pegel, Julius G., assignor.)
Hartford Carpet Corporation. (See Sayers, William E., assignor.)
Hawe, William F. M., assignor to Macbeth-Evans Glass Company, Pittsburgh, Pa. Lamp-shade. No. 44,102; May 27; Gaz. vol. 190; p. 1005.
Hawken, William H., assignor to Irving Cut Glass Company, Honesdale, Pa. Glassware vessel. No. 44,003; May 13; Gaz. vol. 190; p. 519.

Hepner, Adolf, Munich, Germany. Asparagus-holder. No. 44,103; May 27; Gaz. vol. 190; p. 1005.
Hewitt, Herbert H., Buffalo, N. Y. Resilient tire. No. 44,062; May 20; Gaz. vol. 190; p. 767.
Hirsh, Fred, New York, N. Y. Clasp. No. 44,063; May 20; Gaz. vol. 190; p. 767.
Hodgetts, Harold W., Springfield, Mass., assignor to The Strong Manufacturing Company, Winsted, Conn. Coffin-handle. No. 43,960; May 6; Gaz. vol. 190; p. 238.
Horton Manufacturing Co., The. (See Treadway, Morton C., assignor.)
Hunneman, William C. (See Lloyd, Frederic, assignor.)
Huttig, Ernest W., Pittsburgh, Pa., assignor to Jefferson Glass Company, Follansbee, W. Va. Lamp-shade. No. 44,104; May 27; Gaz. vol. 190; p. 1005.
International Silver Co. (See Stohrer, Samuel, assignor.)
International Silver Company. (See Shanley, Thomas A., assignor.)
Irving Cut Glass Company. (See Hawken, William H., assignor.)
J. & J. Cash. (See Averns, Raymond H., assignor.)
Jefferson Glass Company. (See Huttig, Ernest W., assignor.)
Jensen, Hattie C., Salt Lake City, Utah. Suit of playing-cards. No. 44,004; May 13; Gaz. vol. 190; p. 520.
Johnson, Eldridge R., Merion, Pa., assignor to Victor Talking Machine Company. Cabinet for talking-machines. No. 44,105; May 27; Gaz. vol. 190; p. 1005.
Johnson, Isaac G. (See Morat, Jacques, assignor.)
Johnson, Joseph W., assignor to T. R. Treiber, Kansas City, Mo. Chalk-holder. No. 44,005; May 13; Gaz. vol. 190; p. 520.
Joseph Fahys & Company. (See Fahys, George E., assignor.)
Joseph Fahys & Company. (See Harman, Charles W., assignor.)
Keen, Morris, Atlantic City, N. J., assignor to Keen-O-Phone Company. Cabinet for sound-reproducing machines. Nos. 43,961–4; May 6; Gaz. vol. 190; pp. 238–9.
Keen-O-Phone Company. (See Keen, Morris, assignor.)
Kees, Frederick. (See Colburn, Serenus M., assignor.)
Keller, Adam E., assignor to The Keller Manufacturing Company, New York, N. Y. Brooch, badge, or scarf-pin. No. 44,064; May 20; Gaz. vol. 190; p. 768.
Keller Manufacturing Company, The. (See Keller, Adam E., assignor.)
Kimbell, John L., Jr., Shreveport, La., assignor to The National Society of the Children of the American Revolution, Washington, D. C. Handle for spoons, forks, and similar articles. No. 44,065; May 20; Gaz. vol. 190; p. 768.
Kirk, Walter R., Boston, Mass. Bowling score-board. No. 44,066; May 20; Gaz. vol. 190; p. 768.
Koken Barbers' Supply Company. (See Koken, Walter F., assignor.)
Koken, Walter F., assignor to Koken Barbers' Supply Company, St. Louis, Mo. Chair. No. 44,006; May 13; Gaz. vol. 190; p. 520.
Kovats, Thomas A., Philadelphia, Pa. Automobile-body. No. 44,067; May 20; Gaz. vol. 190; p. 768.
Kursheedt, Alphonse H., New York, N. Y. Textile fabric. No. 44,007; May 13; Gaz. vol. 190; p. 520.
Lambert, Julius J., assignor to Frank and Lambert, Inc., New York, N. Y. Textile fabric. No. 44,008; May 13; Gaz. vol. 190; p. 521.
Leikauf, John E., Bedford Park, assignor to Park & Tilford, New York, N. Y. Candy-box. No. 44,009; May 13; Gaz. vol. 190; p. 521.
Lloyd, Frederic, Lewiston, Me., assignor to W. C. Hunneman, Brookline, Mass. Bedspread. No. 44,010; May 13; Gaz. vol. 190; p. 521.
Loomis, Harry T., Brooklyn, assignor to Frank and Lambert, Inc., New York, N. Y. Textile fabric. No. 44,011; May 13; Gaz. vol. 190; p. 521.
Loudon, Milton R., Brooklyn, N. Y., assignor to Bigelow Carpet Company. Carpet. Nos. 44,012–14; May 13; Gaz. vol. 190; pp. 521–2.
MacGregor, Peter G., New York, N. Y. Bracket for holding fire-extinguishers. No. 44,015; May 13; Gaz. vol. 190; p. 522.
Macbeth-Evans Glass Company. (See Hawe, William F. M., assignor.)
Maddock Pottery Company. (See May, Charles A., assignor.)
Maisch-Bitschenauer, H., Paris, France, assignor to Cheney Brothers, South Manchester, Conn. Textile fabric. No. 43,986; May 13; Gaz. vol. 190; p. 516.
Mallory, Frederick B., Portland, Oreg. Block side. No. 44,016; May 13; Gaz. vol. 190; p. 522.
Mallory, Frederick B., Portland, Oreg. Block side. No. 44,068; May 20; Gaz. vol. 190; p. 768.
Massey, Charles F., Chicago, Ill. Portable concrete house. No. 44,017; May 13; Gaz. vol. 190; p. 522.
May, Charles A., Trenton, N. J., assignor to Maddock Pottery Company, Trenton, N. J. Plate or similar article. Nos. 44,018–19; May 13; Gaz. vol. 190; p. 522.
McMurtrie, Adnah, assignor to Thomas & Betts Company, New York, N. Y. Coupling or nipple for pipes. No. 43,804; Apr. 1; Gaz. vol. 189; p. 229. [Withdrawn.]
Miller, Richard, New Berlin, Ohio. Harness-saddle. No. 44,069; May 20; Gaz. vol. 190; p. 768.
Moffat, John B., Bronxville, N. Y., assignor to Bigelow Carpet Company. Carpet. No. 44,020; May 13; Gaz. vol. 190; p. 523.
Morat, Jacques, Yonkers, assignor to I. G. Johnson, New York, N. Y. Vehicle-wheel. No. 44,021; May 13; Gaz. vol. 190; p. 523.
Myers, Burton D., assignor to Simeon L. and George H. Rogers Co., Wallingford, Conn. Spoon, fork, or similar article. No. 44,070; May 20; Gaz. vol. 190; p. 769.
Mygatt, Otis A., New York, N. Y. Shade, reflector, or the like. No. 43,965; May 6; Gaz. vol. 190; p. 239.
National Society of the Children of the American Revolution. (See Kimbell, John L., Jr., assignor.)
National X-Ray Reflector Company. (See Cravath, James R., assignor.)
Neal, Joseph H. (See Boyd and Neal.)
Neerken, Adrian J., assignor to Packard Motor Car Company, Detroit, Mich. Vehicle-body. No. 43,966; May 6; Gaz. vol. 190; p. 239.
Neff, August E., Chicago, Ill. Binding. No. 44,071; May 20; Gaz. vol. 190; p. 769.
Nelson, Charles, assignor to S. Sternau & Company, New York, N. Y. Vapor-lamp. No. 44,106; May 27; Gaz. vol. 190; p. 1006.
Nerney, George E., Attleboro, Mass. Handle for pierced spoons, forks, or similar articles. No. 44,022; May 13; Gaz. vol. 190; p. 523.
Newton, William G., assignor to The Peck Bros. & Co., New Haven, Conn. Faucet. No. 44,107; May 27; Gaz. vol. 190; p. 1006.
Onondaga Pottery Company. (See Wagner, William S., assignor.)
Onondaga Pottery Company. (See Wigley, John T., assignor.)
Owen, Raymond V., assignor to St. Louis Brass Manufacturing Company, St. Louis, Mo. Canopy or reflector for artificial light. No. 43,967; May 6; Gaz. vol. 190; p. 239.
Packard Motor Car Company. (See Neerken, Adrian J., assignor.)
Park & Tilford. (See Leikauf, John E., assignor.)
Parkinson, Edwin, Ridgefield Park, N. J., assignor to David E. Kennedy, Incorporated. Tile. No. 44,108; May 27; Gaz. vol. 190; p. 1006.
Peck Bros. & Co., The. (See Newton, William G., assignor.)
Pegel, Julius G., assignor to The Hartford Carpet Corporation, Thompsonville, Conn. Carpet or rug. No. 44,023; May 13; Gaz. vol. 190; p. 523.
Penney, Harold D., Pelham, N. Y., assignor to The St. Mungo Manufacturing Company of America, Newark, N. J. Golf-ball. No. 44,109; May 27; Gaz. vol. 190; p. 1006.
Persson, Paul, Chicago, Ill. Garbage-receptacle. No. 44,110; May 27; Gaz. vol. 190; p. 1006.
Phillips, George L., Newkirk, Okla. Button. No. 44,024; May 13; Gaz. vol. 190; p. 523.
Potomac Glass Company, The. (See Truog, George, Jr., assignor.)
Proctor, Carrie M., Gloucester, Mass. Comb. No. 44,072; May 20; Gaz. vol. 190; p. 769.
Quimby, Charles O., Wakefield, Mass. Shoe-conformer. No. 44,111; May 27; Gaz. vol. 190; p. 1007.
Quincy, Henry C., assignor to Towle Manufacturing Company, Newburyport, Mass. Fork or analogous article. No. 44,112; May 27; Gaz. vol. 190; p. 1007.
Raleigh, Albert C., Helena, Mont. Lamp-post. No. 43,968; May 6; Gaz. vol. 190; p. 240.
Rawlins, William T., Chicago, Ill., assignor to The Smith-Phillips China Company, East Liverpool, Ohio. Plate or similar article. Nos. 44,073–4; May 20; Gaz. vol. 190; p. 769.
Rhader, Emma, Ashland, Ohio. Globe. No. 43,969; May 6; Gaz. vol. 190; p. 240.
Rohrbeck, John E., West Hoboken, N. J. Mirror-plateau. No. 44,113; May 27; Gaz. vol. 190; p. 1007.
Rothschild, Walter L., New York, N. Y. Button. No. 43,970; May 6; Gaz. vol. 190; p. 240.
Ruepp, Robert, Paris, France, assignor to Cheney Brothers, South Manchester, Conn. Textile fabric. No. 44,025; May 13; Gaz. vol. 190; p. 524.
Sanford, Andrew J., assignor to A. H. Heisey & Co., Newark, Ohio. Molasses-jug. No. 44,026; May 13; Gaz. vol. 190; p. 524.
Sauer, Emil G., Richmond Hill, N. Y., assignor to Bigelow Carpet Company. Rug. No. 44,027; May 13; Gaz. vol. 190; p. 524.
Sauer, Emil G., Richmond Hill, N. Y., assignor to Bigelow Carpet Company. Carpet. No. 44,028; May 13; Gaz. vol. 190; p. 524.
Sauer, Emil G., Richmond Hill, N. Y., assignor to Bigelow Carpet Company. Rug. No. 44,029; May 13; Gaz. vol. 190; p. 524.
Sauer, Emil G., Richmond Hill, N. Y., assignor to Bigelow Carpet Company. Carpet. No. 44,030; May 13; Gaz. vol. 190; p. 524.
Sauer, Emil G., Richmond Hill, N. Y., assignor to Bigelow Carpet Company. Rug. No. 44,031; May 13; Gaz. vol. 190; p. 525.
Sayers, William E., assignor to Hartford Carpet Corporation, Thompsonville, Conn. Carpet or rug. Nos. 44,032–3; May 13; Gaz. vol. 190; p. 525.
Schleicher, William A., Cleveland, Ohio. Buckle. No. 44,075; May 20; Gaz. vol. 190; p. 770.
Searle, Elbert H., Springfield, Mass. Air-rifle. Nos. 44,034–5; May 13; Gaz. vol. 190; p. 525.
Shank, Chester, Marion, Mich. Sewing-stand. No. 44,076; May 20; Gaz. vol. 190; p. 770.

Shanley, Thomas A., assignor to International Silver Company, Meriden, Conn. Cut-glass vessel or similar article. No. 44,114; May 27; Gaz. vol. 190; p. 1007.
Simeon L. and George H. Rogers Co. (See Myers, Burton D., assignor.)
Sins, Emile, Paris, France, assignor to Cheney Brothers, South Manchester, Conn. Textile fabric. No. 44,036; May 13; Gaz. vol. 190; p. 526.
Sloan, Matthew H., assignor to The Wellington Glass Company, Cumberland, Md. Lamp-shade. No. 44,115; May 27; Gaz. vol. 190; p. 1007.
Smith-Phillips China Company, The. (See Rawlins, William T., assignor.)
Spring, John, New York, N. Y., assignor to Bigelow Carpet Company. Carpet. Nos. 44,037–8; May 13; Gaz. vol. 190; p. 526.
St. Louis Brass Manufacturing Company. (See Owen, Raymond V., assignor.)
St. Mungo Manufacturing Company of America, The. (See Penney, Harold D., assignor.)
Stackhouse, Oswald C., Brooklyn, N. Y. Nebulizer. No. 43,971; May 6; Gaz. vol. 190; p. 240.
Sternau & Company, S. (See Nelson, Charles, assignor.)
Stewart, David, assignor to American Boy Scouts, New York, N. Y. Badge. No. 44,039; May 13; Gaz. vol. 190; p. 526.
Stohrer, Samuel, assignor to International Silver Co., Meriden, Conn. Spoon, fork, or similar article. No. 44,040; May 13; Gaz. vol. 190; p. 526.
Strom, Olaf S., Los Angeles, Cal. Electroller. No. 43,972; May 6; Gaz. vol. 190; p. 240.
Strong Manufacturing Company, The. (See Hodgetts, Harold W., assignor.)
Supreme Lodge, Knights of Pythias, The. (See Durand, Edward F., assignor.)
Swartzenburg, Julia, Omaha, Nebr. Thermostat. No. 44,077; May 20; Gaz. vol. 190; p. 770.
Templin, Joseph H. (See Wiedemann and Templin.)
Thayer, Emma R. L., and E. H. Cassard, New York, N. Y. Folding playhouse. No. 44,041; May 13; Gaz. vol. 190; p. 526.
Tilton, Perley G., Melrose, Mass. Waterproof cap-covering. No. 44,042; May 13; Gaz. vol. 190; p. 527.
Towle Manufacturing Company. (See Quincy, Henry C., assignor.)
Treadway, Morton C., assignor to The Horton Manufacturing Co., Bristol, Conn. Display-rack. No. 44,078; May 20; Gaz. vol. 190; p. 770.
Treiber, Theodore R. (See Johnson, Joseph W., assignor.)
Truog, George, Jr., assignor to The Potomac Glass Company, Cumberland, Md. Drinking vessel or similar article. No. 44,043; May 13; Gaz. vol. 190; p. 527.
Van Ness, Willard L., Toledo, Ohio. Watch-fob or badge. No. 44,044; May 13; Gaz. vol. 190; p. 527.
Van Tochine, Joseph L., Fort Wayne, Ind. Collar attachment. No. 44,116; May 27; Gaz. vol. 190; p. 1008.
Vetter, Ignatius J., New York, N. Y., assignor to Bigelow Carpet Company. Rug. No. 44,045; May 13; Gaz. vol. 190; p. 527.
Victor Talking Machine Company. (See Johnson, Eldridge R., assignor.)
Vistard, Charles, Albert, W. Va. Miner's lamp. No. 44,079; May 20; Gaz. vol. 190; p. 770.
Volke, Margareth, Bovey, Minn. Apron. No. 44,046; May 13; Gaz. vol. 190; p. 527.
Wagner, William S., New York, assignor to Onondaga Pottery Company, Syracuse, N. Y. Plate. No. 43,973; May 6; Gaz. vol. 190; p. 241.
Waterman, Charles H., Athens, Mich. Wiring-cleat. No. 44,117; May 27; Gaz. vol. 190; p. 1008.
Weiser, Abraham G., South Pasadena, Cal. Drawer and cabinet pull. No. 43,974; May 6; Gaz. vol. 190; p. 241.
Wellington Glass Company, The. (See Sloan, Matthew H., assignor.)
White, Thomas C., St. Louis, Mo. Insulator. No. 44,118; May 27; Gaz. vol. 190; p. 1008.
Wiedemann, Theodore, and J. H. Templin, Philadelphia, Pa. Vacuum-cleaner casing. No. 44,119; May 27; Gaz. vol. 190; p. 1008.
Wight, Thomas, assignor to Frank Tilk Ornamental Iron Works Co., Kansas City, Mo. Lamp-bracket. No. 43,975; May 6; Gaz. vol. 190; p. 241.
Wigley, John T., assignor to Onondaga Pottery Company, Syracuse, N. Y. Plate. No. 43,976; May 6; Gaz. vol. 190; p. 241.
Worms & Loeb. (See Worms, Ralph, assignor.)
Worms, Ralph, assignor to Worms & Loeb, Chicago, Ill. Bracelet. Nos. 44,047–8; May 13; Gaz. vol. 190; p. 528.
Young, Lorin W., New York, N. Y. Lighting-fixture. No. 44,120; May 27; Gaz. vol. 190; p. 1008.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

A. G. Hyde & Sons, New York, N. Y. Cotton piece goods. No. 91,771; May 27; Gaz. vol. 190; p. 1024.

Aktiengesellschaft vormals B. Siegfried, Zofingen, Switzerland. Pharmaceutical solution. No. 91,628; May 20; Gaz. vol. 190; p. 787.

Aktieselskabet H. E. Gosch & Co.'s Tændstikfabriker Og Aktietændstikfabriken Godthaab, Copenhagen, Denmark. Matches. No. 91,657; May 20; Gaz. vol. 190; p. 788.

Alabastine Company, Grand Rapids, Mich. Liquid paint and wall-coating. No. 91,437; May 6; Gaz. vol. 190; p. 259.

Albany Perforated Wrapping Paper Company, Albany, N. Y. Toilet-paper. Nos. 91,438–9; May 6; Gaz. vol. 190; p. 259.

Albany Perforated Wrapping Paper Company, Albany, N. Y. Toilet-paper. Nos. 91,735–47; May 27; Gaz. vol. 190; p. 1023.

Aldabó, Enrique, Habana, Cuba. Mixed drink of alcoholic liquors. No. 91,629; May 20; Gaz. vol. 190; p. 787.

Alden, Flora S., Boston, Mass. Suspension-chains for electrical fixtures. No. 91,630; May 20; Gaz. vol. 190; p. 787.

Alexander Bros. Co., Savannah, Ga. Overalls. No. 91,748; May 27; Gaz. vol. 190; p. 1023.

Allen Medicine Co., J. P., St. Paul, Minn. Salves and blood-purifiers. No. 91,631; May 20; Gaz. vol. 190; p. 787.

American Hominy Company, Indianapolis, Ind. Stock feed. No. 91,542; May 13; Gaz. vol. 190; p. 543.

American Naval Stores Company, Savannah, Ga. Wood-turpentine. No. 91,442; May 6; Gaz. vol. 190; p. 259.

American Pin Company, Waterbury, Conn. Wastes and overflows. No. 91,443; May 6; Gaz. vol. 190; p. 259.

American Writing Paper Company, Holyoke, Mass. Writing and printing paper. No. 91,543; May 13; Gaz. vol. 190; p. 543.

Ancienne Fabrique Vacheron & Constantin Société Anonyme, Geneva, Switzerland. Watch cases, movements, and parts. No. 91,444; May 6; Gaz. vol. 190; p. 259.

Andrew Greis Company, Inc., The, New York, N. Y. Corrugated-iron roofing and siding. No. 91,767; May 27; Gaz. vol. 190; p. 1024.

Annin & Co., New York, N. Y. Bunting. No. 91,749; May 27; Gaz. vol. 190; p. 1023.

Anthrol Wood Preserving Co., New York, N. Y. Waterproof paint. No. 91,632; May 20; Gaz. vol. 190; p. 787.

Antikamnia Chemical Company, The, St. Louis, Mo. Medicinal tablets. No. 91,445; May 6; Gaz. vol. 190; p. 259.

Arny, L. C., New Orleans, La. Drink made from celery, ginger-ale, and club-soda. No. 91,634; May 20; Gaz. vol. 190; p. 787.

Aspegren & Co., New York, N. Y. Cotton-seed oil. Nos. 91,446–9; May 6; Gaz. vol. 190; p. 259.

Atlanta Utility Works, East Point, Ga. Certain machinery, tools, and parts thereof. No. 91,545; May 13; Gaz. vol. 190; p. 543.

Aurora Metal Company, Aurora, Ill. Metallic packings. No. 91,546; May 13; Gaz. vol. 190; p. 543.

Austin, Nichols & Co., New York, N. Y. Certain named foods. No. 91,450; May 6; Gaz. vol. 190; p. 259.

B. M. Shipman Co., New York, N. Y. Cod johnnies, bloaters, and herring. No. 91,808; May 27; Gaz. vol. 190; p. 1025.

Ball Chemical Company, Pittsburgh, Pa. Preparations for removing paint and other coatings from surfaces. No. 91,451; May 6; Gaz. vol. 190; p. 259.

Barbers United Syndicate, Brooklyn, N. Y. Shampoo preparation. No. 91,635; May 20; Gaz. vol. 190; p. 787.

Barbour-Stockwell Company, Cambridge, Mass. Railway mates, crossings, frogs, and turnouts. No. 91,751; May 27; Gaz. vol. 190; p. 1023.

Barrett Manufacturing Company, New York, N. Y. Naphthalene. No. 91,452; May 6; Gaz. vol. 190; p. 259.

Barrett Manufacturing Company, New York, N. Y. Tarred felt roofing. No. 91,547; May 13; Gaz. vol. 190; p. 543.

Bartlett, William A., Aurora, Ill. Face-cream. No. 91,636; May 20; Gaz. vol. 190; p. 787.

Belknap Hardware and Manufacturing Company, Louisville, Ky. Go-carts. No. 91,638; May 20; Gaz. vol. 190; p. 787.

Benjamin Moore & Co., Jersey City, N. J., and New York, N. Y. White paste paint. No. 91,501; May 6; Gaz. vol. 190; p. 261.

Bennett-Merwin Silver Company, The, New Milford, Conn. Certain flat, hollow, and table ware. No. 91,548; May 13; Gaz. vol. 190; p. 543.

Bentz, Harry, Montclair, N. J. Porous water-holding receptacles used as air-moisteners. No. 91,639; May 20; Gaz. vol. 190; p. 787.

Benzinwerke Rhenania Gesellschaft mit beschränkter Haftung, Dusseldorf-Reisholz, Germany. Turpentine and turpentine compositions. No. 91,540; May 6; Gaz. vol. 190; p. 262.

Berkel, William, Jersey City, N. J. Electroplating compound. No. 91,640; May 20; Gaz. vol. 190; p. 787.

Bigelow Brush Co., Baltimore, Md. Brushes. No. 91,454; May 6; Gaz. vol. 190; p. 259.

Bigelow Brush Co., The, Baltimore, Md. Brushes. Nos. 91,549–50; May 13; Gaz. vol. 190; p. 543.

Birdsey-Somers Co., New York, N. Y. Corsets. Nos. 91,455–6; May 6; Gaz. vol. 190; p. 259.

Blanchite Paint Company, New York, N. Y., assignor, by mesne assignments, to Blanchite Paint Company. Automobile and carriage paints. No. 91,752; May 27; Gaz. vol. 190; p. 1023.

Blum Brothers, Chicago, Ill. Underwear. No. 91,754; May 27; Gaz. vol. 190; p. 1023.

Bodega, Paris, France. Port and sherry wine. No. 91,753; May 27; Gaz. vol. 190; p. 1023.

Bollinger-Babbage Company, Louisville, Ky. Canned fruits and vegetables. No. 91,553; May 13; Gaz. vol. 190; p. 543.

Bowker Chemical Company, New York, N. Y. Compound for refining sugar. No. 91,641; May 20; Gaz. vol. 190; p. 787.

Bristol-Myers Company, Brooklyn, N. Y. Tonic laxative, cathartic, hepatic stimulant, &c. No. 91,642; May 20; Gaz. vol. 190; p. 787.

Brolt Limited, Birmingham, England. Certain electrical apparatus, machines, and supplies. No. 91,457; May 6; Gaz. vol. 190; p. 259.

Buchsbaum Fashion Company, Inc., New York, N. Y. Sketches, drawings, and prints and folders for same. No. 91,554; May 13; Gaz. vol. 190; p. 543.

Burley & Tyrrell Company, Chicago, Ill. Porcelain or earthenware articles. No. 91,643; May 20; Gaz. vol. 190; p. 787.

Butler-Irvins Co., The, Wilmington, Del. Tooth-powder. No. 91,644; May 20; Gaz. vol. 190; p. 787.

Callam Mills, Saginaw, Mich. Wheat-flour. No. 91,458; May 6; Gaz. vol. 190; p. 259.

Caprini, Alexander L., Pittsburgh, Pa. Olive-oil. No. 91,459; May 6; Gaz. vol. 190; p. 259.

Carbon Preservative Paint Co., The, Salt Lake City, Utah. Mixed paints and wood-preservatives. No. 91,460; May 6; Gaz. vol. 190; p. 259.

Cash, Laurence E., New York, N. Y., and Chicago, Ill. Remedy for certain named diseases. No. 91,645; May 20; Gaz. vol. 190; p. 787.

Cederberg, Knut H., Hagaström, Gefle, Sweden. Disinfectant. No. 91,673; May 20; Gaz. vol. 190; p. 788.

Chandler & Co., Inc., Boston, Mass. Certain named garments of textile and knitted materials. No. 91,756; May 27; Gaz. vol. 190; p. 1023.

Charles Hedden, Incorporated, New York, N. Y. Perfumes, toilet waters, and powders. No. 91,661; May 20; Gaz. vol. 190; p. 788.

Chas. A. Stevens & Bros., Chicago, Ill. Hosiery. No. 91,617; May 13; Gaz. vol. 190; p. 545.

Chemical Specialties Co., Jersey City, N. J. Chemical and laundry starches. No. 91,757; May 27; Gaz. vol. 190; p. 1023.

Chemische Fabrik Güstrow, Dr. Hillinghaus & Dr. Hellmann, Gustrow, Germany. Remedy for furunculosis and acne. No. 91,647; May 20; Gaz. vol. 190; p. 787.

Citro Chemical Co., Maywood, N. J. Toilet preparation. No. 91,646; May 20; Gaz. vol. 190; p. 787.

Claudius Ash Sons and Company Limited, London, England. Moldable material for dentists' use. No. 91,544; May 13; Gaz. vol. 190; p. 543.

Cleveland Foundry Company, The, Cleveland, Ohio. Oil stoves, ovens, and wicks. No. 91,555; May 13; Gaz. vol. 190; p. 543.

Concordia Creamery Company, The, Concordia, Kans. Butter. No. 91,461; May 6; Gaz. vol. 190; p. 259.

Condensite Company of America, Glen Ridge, N. J. Phenol-methylene plastic compounds. No. 91,556; May 13; Gaz. vol. 190; p. 543.

Consumers Refining Company, Chicago, Ill. Gasolene. No. 91,557; May 13; Gaz. vol. 190; p. 543.

Continental Paper Bag Company, Rumford, Me., and New York, N. Y. Wrapping-papers. No. 91,558; May 13; Gaz. vol. 190; p. 543.

Coonley Mfg. Co., Clyde, Ill. Enameled, galvanized, and tin ware. No. 91,462; May 6; Gaz. vol. 190; p. 259.

Corona Chemical Company, Milwaukee, Wis. Insecticides. No. 91,758; May 27; Gaz. vol. 190; p. 1023.

Crew's Liquidized Sulphur Co., Blountstown, Fla. Liquidized sulfur. No. 91,463; May 6; Gaz. vol. 190; p. 259.

Crown Mills Company, Belleville, Ill., and St. Louis, Mo. Wheat-flour. No. 91,649; May 20; Gaz. vol. 190; p. 787.
Cunningham, Walter C., Denver, Colo. Preparation for removing wrinkles. No. 91,650; May 20; Gaz. vol. 190; p. 787.
D. Antolini & Co., New York, N. Y. Claret-wine and champagne. No. 91,633; May 20; Gaz. vol. 190; p. 787.
Daimler-Motoren-Gesellschaft, Untertürkheim, near Stuttgart, Germany. Certain named articles of clothing. No. 91,759; May 27; Gaz. vol. 190; p. 1023.
Daimler-Motoren-Gesellschaft, Untertürkheim, near Stuttgart, Germany. Certain named articles of textile and woven fabric. No. 91,760; May 27; Gaz. vol. 190; p. 1023.
Davidson & Finkelbrand, New York, N. Y. Men's suits and overcoats. No. 91,651; May 20; Gaz. vol. 190; p. 787.
Davies & Meacham, Cleveland, Ohio. Paints, wall-finishes, stains, &c. No. 91,464; May 6; Gaz. vol. 190; p. 259.
Dean Auto Devices Company, Chicago, Ill. Choking devices for alternating-current circuits. No. 91,465; May 6; Gaz. vol. 190; p. 259.
Delac, Charles, Paris, France. Certain scientific appliances. No. 91,466; May 6; Gaz. vol. 190; p. 259.
Diamant-Gesellschaft m. b. H., Kahl-on-the-Main, Germany. Abrasive materials for grinding valves, &c. No. 91,559; May 13; Gaz. vol. 190; p. 543.
Diamond Expansion Bolt Co., New York, N. Y. Rock-drilling machines. No. 91,467; May 6; Gaz. vol. 190; p. 260.
Direct Importing Company, Boston, Mass. Machine-oil. No. 91,468; May 6; Gaz. vol. 190; p. 260.
Dougherty, Harry D., Philadelphia, Pa. Box-springs, mattresses, pillows, and bedsteads. No. 91,652; May 20; Gaz. vol. 190; p. 787.
Dubonnet & de la Bussière, Edouard, Montreuil, Seine, France. Aperitive wine. No. 91,561; May 13; Gaz. vol. 190; p. 543.
Dunlop's Sons, Jno., New York, N. Y. Thrown silks, silk threads, and yarns. No. 91,761; May 27; Gaz. vol. 190; p. 1023.
Durbar Co., The, Jersey City, N. J., and New York, N. Y. Spices, flavoring extracts, and olive-oil. No. 91,762; May 27; Gaz. vol. 190; p. 1023.
Duttenhofer, Frank, Cincinnati, Ohio. Gaskets and packing materials. No. 91,653; May 20; Gaz. vol. 190; p. 787.
E. C. McWatty Company Incorporated, New York, N. Y. Corsets. No. 91,683; May 20; Gaz. vol. 190; p. 788.
E. E. Downham Co., Alexandria, Va. Rye straight whisky. No. 91,560; May 13; Gaz. vol. 190; p. 543.
Eastern Chemical Company, Boston, Mass. Insecticides, soap spray, worm and ant destroyer, &c. No. 91,763; May 27; Gaz. vol. 190; p. 1023.
El Draco Cigar M'f'g Company, Camden, N. J., and Philadelphia, Pa. Cigars and cigarettes. No. 91,469; May 6; Gaz. vol. 190; p. 260.
Emil Grossman Company, New York, N. Y. Electric spark-plugs. Nos. 91,476–7; May 6; Gaz. vol. 190; p. 260.
Empire Dynamite Co., Chicago, Ill. Blasting-fuses. No. 91,562; May 13; Gaz. vol. 190; p. 543.
Erskine, Ralph C., Tryon, N. C. Chairs. No. 91,563; May 13; Gaz. vol. 190; p. 543.
Eulert, Ernst, New York, N. Y. Mustard. No. 91,541; May 13; Gaz. vol. 190; p. 543.
Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany. Chemical or biological reagent. No. 91,764; May 27; Gaz. vol. 190; p. 1024.
Fargo Mercantile Company, Fargo, N. D. Canned fruits, vegetables, pork and beans, &c. No. 91,470; May 6; Gaz. vol. 190; p. 260.
Fishel & Gorman, Inc., Brooklyn, N. Y. Embroidery-floss. No. 91,564; May 13; Gaz. vol. 190; p. 543.
Fisher Leather Belting Co., Inc., The, Philadelphia, Pa. Waterproof leather belting. No. 91,565; May 13; Gaz. vol. 190; p. 543.
Florida Growers Publishing Company, Tampa, Fla. Weekly periodical. No. 91,471; May 6; Gaz. vol. 190; p. 260.
Flower & Company, S. W., Toledo, Ohio. Clover, alsike, alfalfa, and timothy seeds. No. 91,472; May 6; Gaz. vol. 190; p. 260.
Forsheim & Konigsberg, New York, N. Y. Puzzles. No. 91,765; May 27; Gaz. vol. 190; p. 1024.
Foster's Adhesive Composition Company, Limited, Auckland, New Zealand. Lagging. No. 91,566; May 13; Gaz. vol. 190; p. 543.
Fulper Pottery Company, Flemington, N. J. Certain named articles of pottery. No. 91,655; May 20; Gaz. vol. 190; p. 788.
Fulton Fire Brick Company, Fulton, Mo. Fire-bricks. No. 91,567; May 13; Gaz. vol. 190; p. 543.
G. W. Armstrong Dining Room & News Company, The, Boston, Mass. Playing-cards. No. 91,750; May 27; Gaz. vol. 190; p. 1023.
Galt, Edith B., Washington, D. C. Certain named jewelry and precious-metal ware. No. 91,568; May 13; Gaz. vol. 190; p. 543.
Galvanized Steel Cupola Co., Owatonna, Minn. Ventilators. No. 91,569; May 13; Gaz. vol. 190; p. 543.
Geo. Borgfeldt & Co., New York, N. Y. Aluminum and tin ware and metal trays. No. 91,755; May 27; Gaz. vol. 190; p. 1023.
Geo. G. Sandeman, Sons & Co. Limited, London, England. Sherry-wine. No. 91,703; May 20; Gaz. vol. 190; p. 789.
George H. Rundle Company, The, Piqua, Ohio. Remedy for constipation. No. 91,802; May 27; Gaz. vol. 190; p. 1025.
Georgian Company, The, Atlanta, Ga. Sunday newspaper. No. 91,473; May 6; Gaz. vol. 190; p. 260.
Georgian Company, The, Atlanta, Ga. Daily newspaper. No. 91,474; May 6; Gaz. vol. 190; p. 260.
Gerstendorfer Bros., New York, N. Y. Certain named paints and painters' materials. No. 91,475; May 6; Gaz. vol. 190; p. 260.
Giessner Medicine Co., The, Findlay, Ohio. Cough and croup remedy. No. 91,656; May 20; Gaz. vol. 190; p. 788.
Goldberg, Bowen & Co., San Francisco, Cal. Baking-powder. No. 91,766; May 27; Gaz. vol. 190; p. 1024.
Goldsmith, Harry N., Philadelphia, Pa. Cigar-lighters. No. 91,570; May 13; Gaz. vol. 190; p. 543.
Greenebaum, Weil & Michels, San Francisco, Cal. Certain named garments made of textile material. No. 91,658; May 20; Gaz. vol. 190; p. 788.
Greif Bros. Cooperage Co., The, Cleveland, Ohio. Casks and barrels. Nos. 91,572–4; May 13; Gaz. vol. 190; p. 544.
Grimme, Natalis & Co., Commanditgesellschaft auf Actien, Brunswick, Germany. Calculating and adding machines. No. 91,659; May 20; Gaz. vol. 190; p. 788.
Gum Tragasol Supply Company Limited, The, Hooton, England. Painters' size and dressings and polishes for wood and iron. Nos. 91,478–9; May 6; Gaz. vol. 190; p. 260.
H. Schlinck & Cie. A. G., Hamburg, Germany. Margarin. No. 91,806; May 27; Gaz. vol. 190; p. 1025.
H. W. Gordinier and Sons Co., Troy, N. Y. Field and grass seeds. No. 91,571; May 13; Gaz. vol. 190; p. 544.
Haley, Ernest A., Cleveland, Ohio. Leather shoes. No. 91,480; May 6; Gaz. vol. 190; p. 260.
Halleyton, I. N., New York, N. Y. Astrological pamphlets, charts, and almanacs. No. 91,575; May 13; Gaz. vol. 190; p. 544.
Hammond, Standish & Co., Detroit, Mich. Lard, hams, bacon, cheese, &c. No. 91,481; May 6; Gaz. vol. 190; p. 260.
Hans Renold, Limited, Manchester, England. Driving-chains and sprocket-wheels for vehicles. No. 91,695; May 20; Gaz. vol. 190; p. 789.
Harry Vissering & Company, Louisville, Ky., and Chicago, Ill. Castings and forgings for certain named uses. No. 91,622; May 13; Gaz. vol. 190; p. 545.
Heekin Spice Company, The, Cincinnati, Ohio. Baking-powder. No. 91,483; May 6; Gaz. vol. 190; p. 260.
Heekin Spice Company, The, Cincinnati, Ohio. Flavoring extracts, tea, and coffee. No. 91,662; May 20; Gaz. vol. 190; p. 788.
Hemmeter Cigar Company, Detroit, Mich. Cigars. No. 91,484; May 6; Gaz. vol. 190; p. 260.
Henry E. Frankenberg Company, New York, N. Y. Certain named knitted, netted, and textile fabrics. No. 91,654; May 20; Gaz. vol. 190; p. 787.
Hibbard, Spencer, Bartlett & Co., Chicago, Ill. Ranges, stoves, base-burners, &c. No. 91,576; May 13; Gaz. vol. 190; p. 544.
Highland Pharmaceutical Co., Rochester, N. Y. Ointment, face-cream, massage-cream, &c. No. 91,663; May 20; Gaz. vol. 190; p. 788.
Hinton, Columbus J., Elizabeth City, N. C. Remedy for indigestion. No. 91,664; May 20; Gaz. vol. 190; p. 788.
Hoffmann-La Roche Chemical Works, The, New York, N. Y. Bromin compound. No. 91,769; May 27; Gaz. vol. 190; p. 1024.
Homberg, Felix, Barmen, Germany. Snap buttons and clasps. No. 91,577; May 13; Gaz. vol. 190; p. 544.
Home Mill & Grain Co., Mount Vernon, Ind. Wheat-flour. No. 91,770; May 27; Gaz. vol. 190; p. 1024.
Home Pattern Company, New York, N. Y. Periodically-published magazine. No. 91,486; May 6; Gaz. vol. 190; p. 260.
Huenergardt, George H., College View, Nebr. Laundry washing-machines. No. 91,487; May 6; Gaz. vol. 190; p. 260.
Illinois Canning Company, The, Hoopeston, Ill. Canned corn. No. 91,489; May 6; Gaz. vol. 190; p. 260.
Indian Chemical Co., Warriors Mark, Pa. Ointment. No. 91,665; May 20; Gaz. vol. 190; p. 788.
International Druggists' and Chemists' Laboratories, The. (See To-Kalon Manufacturing Company, The, assignor.)
J. C. Blair Company, Huntingdon, Pa. Certain named paper and stationery. Nos. 91,551–2; May 13; Gaz. vol. 190; p. 543.
J. F. & W. H. Warren Co., Worcester, Mass. Leather belting. No. 91,535; May 6; Gaz. vol. 190; p. 262.
J. S. Hall's Sons, Knoxville, Tenn. Overcoats, coats, vests, and trousers. No. 91,768; May 27; Gaz. vol. 190; p. 1024.
J. S. Humphreys and Co., Bloomington, Ill. Certain named foods. No. 91,488; May 6; Gaz. vol. 190; p. 260.
Jacob & Allison, Chas. W., New York, N. Y. Vegetable product used as basis for paste. No. 91,578; May 13; Gaz. vol. 190; p. 544.
James, William T., Chicago, Ill. Metal clasps. No. 91,579; May 13; Gaz. vol. 190; p. 544.
Jenkins, Thos. B., Sumter, S. C., and St. Louis, Mo. Automobile-springs. No. 91,666; May 20; Gaz. vol. 190; p. 788.

Jerguson Manufacturing Company, The, Boston, Mass. Water and steam gages and parts thereof. No. 91,667; May 20; Gaz. vol. 190; p. 788.
Johnson, William H., Ripley, Tenn. Chemical compound for use in cooking. No. 91,773; May 27; Gaz. vol. 190; p. 1024.
Jönköpings och Vulcans Tändsticksfabriksaktiebolag, Jönköping, Sweden. Matches. Nos. 91,668–70; May 20; Gaz. vol. 190; p. 788.
Joslin Mfg. Co., Providence, R. I. Lacing-tips. No. 91,671; May 20; Gaz. vol. 190; p. 788.
Kaempfer, Frederick, Chicago, Ill. Bird food. No. 91,580; May 13; Gaz. vol. 190; p. 544.
Kahn-Beck Company, Los Angeles, Cal. Cakes and crackers. No. 91,581; May 13; Gaz. vol. 190; p. 544.
Kavanagh, W. H. J., Chicago, Ill. Fresh leaf-lettuce and fresh limes. No. 91,582; May 13; Gaz. vol. 190; p. 544.
Kees Mfg. Co., F. D., Beatrice, Nebr. Eaves-trough hangers. No. 91,583; May 13; Gaz. vol. 190; p. 544.
Keystone Varnish Co., Brooklyn, N. Y. Varnish. No. 91,774; May 27; Gaz. vol. 190; p. 1024.
King, Florence, Chicago, Ill. Magazine. No. 91,490; May 6; Gaz. vol. 190; p. 260.
Kingsbury, John D., Washington, D. C. Coal-saving compound. No. 91,672; May 20; Gaz. vol. 190; p. 788.
Kleenser Co., The, Fostoria, Ohio. Washing-powder. No. 91,491; May 6; Gaz. vol. 190; p. 260.
Kraft & Stendel Fabrik Photographischer Papiere Gesellschaft mit beschränkter Haftung, Dresden, Germany. Photographic paper and cardboard. No. 91,584; May 13; Gaz. vol. 190; p. 544.
Kuhmarker Manufacturing Company, New York, N. Y. Waxed paper. No. 91,492; May 6; Gaz. vol. 190; p. 260.
La Salle Varnish Co., The, Chicago, Ill. Varnishes, stains, varnish-removers, &c. No. 91,674; May 20; Gaz. vol. 190; p. 788.
Lechner & Schoenberger Company, Pittsburgh, Pa. Piano-backs. No. 91,585; May 13; Gaz. vol. 190; p. 544.
Lee, Harry A., Atlantic City, N. J. Fountain-pens. No. 91,775; May 27; Gaz. vol. 190; p. 1024.
Lee Paper Company, Vicksburg, Mich. Writing-paper. No. 91,776; May 27; Gaz. vol. 190; p. 1024.
Letts, Arthur, Los Angeles, Cal. Leather or canvas shoes. No. 91,493; May 6; Gaz. vol. 190; p. 260.
Lily of France Corset Co., New York, N. Y. Corsets. No. 91,494; May 6; Gaz. vol. 190; p. 260.
Lipe, George, Salina, Kans. Hog-cholera medicine. No. 91,777; May 27; Gaz. vol. 190; p. 1024.
Longwell-Cummings Co., The, Logansport, Ind. Writing tablets and paper. No. 91,778; May 27; Gaz. vol. 190; p. 1024.
Loose-Wiles Company, Boston, Mass. Candy. No. 91,675; May 20; Gaz. vol. 190; p. 788.
Ludwig, William E., Toledo, Ohio. Ointment. No. 91,676; May 20; Gaz. vol. 190; p. 788.
Luscious Fruit Company, Hood River, Oreg. Fresh apples. No. 91,779; May 27; Gaz. vol. 190; p. 1024.
Lusk, Roy A., New York, N. Y. Prepared mustard. No. 91,586; May 13; Gaz. vol. 190; p. 544.
Lutey Bros., Butte, Mont. Certain named foods. Nos. 91,780–2; May 27; Gaz. vol. 190; p. 1024.
M. Rumely Company, Laporte, Ind. Traction-engines. No. 91,605; May 13; Gaz. vol. 190; p. 545.
Mack, Heinrich, Ulm, Germany. Sachet scent and perfume for toilet and bath. No. 91,677; May 20; Gaz. vol. 190; p. 788.
Margarella, Pasquale, New York, N. Y. Candies, chocolates, and bonbons. No. 91,587; May 13; Gaz. vol. 190; p. 544.
Markt & Co., New York, N. Y. Certain named cutlery, tools, and parts thereof. No. 91,495; May 6; Gaz. vol. 190; p. 260.
Markt & Hammacher Company, New York, N. Y. Gas-mantles. No. 91,496; May 6; Gaz. vol. 190; p. 260.
Marshall Chemical Co., Inc., Great Neck, N. Y. Remedy for cramps, &c. No. 91,497; May 6; Gaz. vol. 190; p. 260.
Mayer, Edward E., Jersey City, N. J. Jock-straps and suspensories. No. 91,588; May 13; Gaz. vol. 190; p. 544.
McCurdy Company, Dwight R., The, Chicago, Ill. Flavoring extracts. No. 91,783; May 27; Gaz. vol. 190; p. 1024.
McDonald Milling Company, McDonald, Pa. Wheat-flour. No. 91,784; May 27; Gaz. vol. 190; p. 1024.
McNab Company, Bridgeport, Conn. Signals for determining the temperature of sea-water and air. No. 91,498; May 6; Gaz. vol. 190; p. 260.
Melachrino & Co., M., New York, N. Y. Cigarettes. No. 91,589; May 13; Gaz. vol. 190; p. 544.
Melachrino & Co., M., New York, N. Y., assignor to M. Melachrino & Co., Incorporated. Cigarettes. No. 91,678; May 20; Gaz. vol. 190; p. 788.
Ménard, Georges, Fouras-les-Bains, France. Remedy for sclerosis. No. 91,679; May 20; Gaz. vol. 190; p. 788.
Merck, E., Darmstadt, Germany. Acid prepared for pharmaceutical use. No. 91,680; May 20; Gaz. vol. 190; p. 788.
Merck, Firm of E., Darmstadt, Germany. Compound of quinin and diethylbarbituric acid. No. 91,499; May 6; Gaz. vol. 190; p. 260.
Meyer, Firm of Arnold O., Hamburg, Germany. Wire nails, nuts, bolts and rivets, washers, screws, and tacks. No. 91,500; May 6; Gaz. vol. 190; p. 261.
Miller, William E., Alexandria Bay, N. Y. Sausage. No. 91,785; May 27; Gaz. vol. 190; p. 1024.
Milton Bradley Co., Springfield, Mass. Games. No. 91,786; May 27; Gaz. vol. 190; p. 1024.
Monmouthshire Steel and Tinplate Company Limited, The, Pontymister, England. Galvanized iron and steel sheetings. No. 91,590; May 13; Gaz. vol. 190; p. 544.
Montag Brothers, Atlanta, Ga. Brushes. No. 91,787; May 27; Gaz. vol. 190; p. 1024.
Moorman Mfg. Co., Quincy, Ill. Medicated salt, hog remedy, horse and cattle powder, &c. No. 91,788; May 27; Gaz. vol. 190; p. 1024.
Morehouse Manufacturing Co., The, Columbus, Ohio. Children's vehicles. No. 91,681; May 20; Gaz. vol. 190; p. 788.
Morey Mercantile Company, The, Denver, Colo. Baking-powder, ammonia, and bluing. No. 91,591; May 13; Gaz. vol. 190; p. 544.
Morgan Crucible Company Limited, The, London, England. Plumbago crucibles. No. 91,592; May 13; Gaz. vol. 190; p. 544.
Mortenson & Co., Samuel, Chicago, Ill. Fancy bags and cases. No. 91,682; May 20; Gaz. vol. 190; p. 788.
Mortenson & Co., Samuel, Chicago, Ill. Scarfs, table-covers, pennants, pillow-covers, &c. No. 91,789; May 27; Gaz. vol. 190; p. 1024.
Munger Brothers Company, Phoenix, Ariz. Canned ripe and green pickled olives. No. 91,502; May 6; Gaz. vol. 190; p. 261.
Nagel-Chase Manufacturing Company, The, Chicago, Ill. Gas-lamps. No. 91,503; May 6; Gaz. vol. 190; p. 261.
National Biscuit Company, Jersey City, N. J., and New York, N. Y. Biscuit. No. 91,504; May 6; Gaz. vol. 190; p. 261.
National India Rubber Company, Bristol, R. I. Rubber boots and shoes. No. 91,505; May 6; Gaz. vol. 190; p. 261.
Nestlé and Anglo-Swiss Condensed Milk Co., Cham and Vevey, Switzerland. Sterilized and condensed milk. No. 91,790; May 27; Gaz. vol. 190; p. 1024.
Nev-A-Hone Razor Strop Company, New York, N. Y. Razor-strops. No. 91,791; May 27; Gaz. vol. 190; p. 1024.
Nevins, Thomas F., Brooklyn, N. Y. Fresh fruit. No. 91,506; May 6; Gaz. vol. 190; p. 261.
New England Selling Co., New York, N. Y. Toothpicks. No. 91,593; May 13; Gaz. vol. 190; p. 544.
New Jersey Textile Art Corporation, Newark, N. J. Hosiery. No. 91,594; May 13; Gaz. vol. 190; p. 544.
New Prague Flouring Mill Company, New Prague, Minn. Wheat-flour. No. 91,507; May 6; Gaz. vol. 190; p. 261.
New York and London Drug Co., New York, N. Y. Antiseptics and germicides. No. 91,684; May 20; Gaz. vol. 190; p. 788.
Nichols, Fred K., Spokane, Wash. Hats. No. 91,508; May 6; Gaz. vol. 190; p. 261.
Nitritfabrik Aktiengesellschaft, Coepenick, near Berlin, Germany. Serum preparations for boils, &c. No. 91,685; May 20; Gaz. vol. 190; p. 788.
North Texas Dry Goods Company, Paris, Tex. Certain named piece goods. No. 91,792; May 27; Gaz. vol. 190; p. 1024.
Northern Light Milling Co., Owatonna, Minn. Self-rising buckwheat-flour. No. 91,686; May 20; Gaz. vol. 190; p. 788.
Nungesser Carbon & Battery Co., The, Cleveland, Ohio. Battery-cells. No. 91,509; May 6; Gaz. vol. 190; p. 261.
Old Berkshire Mills Company, Dalton, Mass. Writing-papers. No. 91,793; May 27; Gaz. vol. 190; p. 1024.
Old Dominion Paper Co., Norfolk, Va. Paper bags. Nos. 91,595–6; May 13; Gaz. vol. 190; p. 544.
Orangewood Company, Worcester, Mass. Head-washes, hair-invigorators, and dandruff remedies. No. 91,687; May 20; Gaz. vol. 190; p. 788.
Oriental Oil Co., Dallas, Tex. Certain named packing for steam, ammonia, and hydraulic purposes. No. 91,510; May 6; Gaz. vol. 190; p. 261.
P. H. Hanes Knitting Co., Winston-Salem, N. C. Combination-suits, shirts, and drawers. No. 91,482; May 6; Gaz. vol. 190; p. 260.
Palmer, Wm. M., New York, N. Y. Clothes-line reels. No. 91,597; May 13; Gaz. vol. 190; p. 544.
Parfay Company, The, Louisville, Ky. Tonic beverage and syrup for making the same. No. 91,598; May 13; Gaz. vol. 190; p. 544.
Paul F. Beich Company, Bloomington, Ill. Candy. No. 91,453; May 6; Gaz. vol. 190; p. 259.
Peavey, George W., Minneapolis, Minn. Eye-wash. No. 91,688; May 20; Gaz. vol. 190; p. 789.
Pereira & Pereira, New York, N. Y. Flavoring extracts. No. 91,512; May 6; Gaz. vol. 190; p. 261.
Petrocelli & Company, Joseph, New York, N. Y. Olive-oil. No. 91,599; May 13; Gaz. vol. 190; p. 544.
Petty and Schreck, Fort Collins, Colo. Hair-tonic. No. 91,513; May 6; Gaz. vol. 190; p. 261.
Phonoharp Company, The, Boston and East Boston, Mass. Citherns or zithers. No. 91,794; May 27; Gaz. vol. 190; p. 1024.
Pieper, O. R., Milwaukee, Wis. Coffee. No. 91,600; May 13; Gaz. vol. 190; p. 544.
Piver & Cie., L. T., Paris, France. Certain named chemical and pharmaceutical preparations. No. 91,514; May 6; Gaz. vol. 190; p. 261.

Porter, Ross, Neodesha, Kans. Remedies for constipation, biliousness, &c. No. 91,689; May 20; Gaz. vol. 190; p. 789.

Portland Flouring Mills Company, The, Portland, Oreg. Wheat-flour. No. 91,601; May 13; Gaz. vol. 190; p. 544.

Posner, Abraham, New York, N. Y. Leather shoes. No. 91,600; May 20; Gaz. vol. 190; p. 789.

Poulides Bros., New York, N. Y. Cigarettes. No. 91,691; May 20; Gaz. vol. 190; p. 789.

Prophylo Laboratory, The, Cleveland, Ohio. Ointments or salves. No. 91,795; May 27; Gaz. vol. 190; p. 1024.

Providence Brewing Company, Providence, R. I. Beer. No. 91,692; May 20; Gaz. vol. 190; p. 789.

Reed, Geo., Los Angeles, Cal. Paint and size. No. 91,693; May 20; Gaz. vol. 190; p. 789.

Reinschild Chemical Company, New York, N. Y. Biscuits. No. 91,694; May 20; Gaz. vol. 190; p. 789.

Remington Ammunition Co., Weshawken, N. J., assignor to Remington Arms and Ammunition Company, Ilion, N. Y. Cartridges, cartridge shells, caps, &c. No. 91,602; May 13; Gaz. vol. 190; p. 544.

Remington Arms and Ammunition Company. (See Remington Ammunition Co., assignor.)

Richardson Dry Goods Co., St. Joseph, Mo. Hosiery. No. 91,796; May 27; Gaz. vol. 190; p. 1024.

Ricketts & Shaw, Monson, Mass. Woolen piece goods. No. 91,797; May 27; Gaz. vol. 190; p. 1024.

Rindskopf, Henry P., New York, N. Y. Dress-shields, diapers, and bibs. Nos. 91,697–8; May 20; Gaz. vol. 190; p. 789.

Ritesize Underwear Co., Utica, N. Y. Knitted underwear. No. 91,798; May 27; Gaz. vol. 190; p. 1025.

Riverside Overall Co., Danville, Va. Overalls, work-shirts, drawers, and pants. No. 91,515; May 6; Gaz. vol. 190; p. 261.

Roberts, Alice A., New York, N. Y. Certain millinery ornaments of precious metal or set with jewels. No. 91,603; May 13; Gaz. vol. 190; p. 544.

Robinson Bros., New York, N. Y. Ammonia-water. No. 91,699; May 20; Gaz. vol. 190; p. 789.

Robt. H. Ingersoll & Bro., New York, N. Y. Watches and clocks. No. 91,772; May 27; Gaz. vol. 190; p. 1024.

Roessler & Hasslacher Chemical Company, The, New York, N. Y. Bleaching material. No. 91,700; May 20; Gaz. vol. 190; p. 789.

Rome & Sons, I., Worcester, Mass. Hosiery. No. 91,604; May 13; Gaz. vol. 190; p. 544.

Roth & Lederer, Markneukirchen, Germany. Certain musical instruments, parts therefor, bows and strings. Nos. 91,800–1; May 27; Gaz. vol. 190; p. 1025.

Rothschild Bros., Philadelphia, Pa. Whisky. No. 91,701; May 20; Gaz. vol. 190; p. 789.

Roy, Francois, Paris, France. Lactic ferments. No. 91,702; May 20; Gaz. vol. 190; p. 789.

Royal Valley Coffee Co., Detroit, Mich. Coffees and teas. No. 91,516; May 6; Gaz. vol. 190; p. 261.

S. R. White's Sons. (See White's Sons, S. R., assignor.)

Salt's Textile Manufacturing Company, The, Bridgeport, Conn., and New York, N. Y. Velvets and plushes in the piece. No. 91,803; May 27; Gaz. vol. 190; p. 1025.

Samuel Chemical Co., The, Cincinnati, Ohio. Ointments. No. 91,804; May 27; Gaz. vol. 190; p. 1025.

Samuel Ward Company, Boston, Mass. Diaries and calendars. No. 91,534; May 6; Gaz. vol. 190; p. 262.

Sanborn & Son, George W., Astoria, Oreg. Canned salmon. Nos. 91,606–7; May 13; Gaz. vol. 190; p. 545.

Sartorial Manufacturing Co., The, New York, N. Y. Raincoats. No. 91,704; May 20; Gaz. vol. 190; p. 789.

Saunders, Daniel G., Jr., Kansas City, Mo. Envelop-sealing machines. No. 91,805; May 27; Gaz. vol. 190; p. 1025.

Sawyer, Susan E., deceased; E. C. Sawyer, trustee, Dover, N. H. Milk and cream. No. 91,705; May 20; Gaz. vol. 190; p. 789.

Schuster Company, The, Cleveland, Ohio. Whisky. No. 91,608; May 13; Gaz. vol. 190; p. 545.

Seacoast Canning Co., Eastport, Me. Sardines. No. 91,807; May 27; Gaz. vol. 190; p. 1025.

Sears, Roebuck and Co., Chicago, Ill. Bicycles. No. 91,609; May 13; Gaz. vol. 190; p. 545.

Sel Amaigrissant Clarks Corporation, Richmond, Va., and New York, N. Y. Bath-salts. No. 91,706; May 20; Gaz. vol. 190; p. 789.

Sherer-Gillett Company, Chicago, Ill. Certain named foods. No. 91,517; May 6; Gaz. vol. 190; p. 261.

Sherman, Clay & Co., San Francisco, Cal. Violin-strings. No. 91,610; May 13; Gaz. vol. 190; p. 545.

Singer Manufacturing Company, Elizabeth, N. J. Sewing-machine needles. No. 91,518; May 6; Gaz. vol. 190; p. 261.

Singer Manufacturing Company, The, Elizabeth, N. J. Sewing-machine needles. No. 91,611; May 13; Gaz. vol. 190; p. 545.

Six Little Yankees Co., Philadelphia, Pa. Chemical used in gasolene-engines to remove carbon deposits. No. 91,707; May 20; Gaz. vol. 190; p. 789.

Sligo Iron & Steel Co., Connellsville, Pa. Wrought-iron. Nos. 91,708–9; May 20; Gaz. vol. 190; p. 789.

Smith Laundry Macoines Company, Seattle, Wash. Cutter-heads and lathes. No. 91,519; May 6; Gaz. vol. 190; p. 261.

Smith & Son, W. H., London, England. Fountain and stylographic pens. No. 91,809; May 27; Gaz. vol. 190; p. 1025.

Smoke-No-More Co., Winnfield, La. Remedy for the smoking habit. No. 91,810; May 27; Gaz. vol. 190; p. 1025.

Snow, Geo. E., Eastlake, Fla. Oranges. No. 91,520; May 6; Gaz. vol. 190; p. 261.

Snow, Mary A., Boston, Mass. Sherry and port wine. No. 91,811; May 27; Gaz. vol. 190; p. 1025.

Société Anonyme "Utocolor," La Garenne, Colombes, France. Developers, intensifiers, and fixing agents for photography. No. 91,710; May 20; Gaz. vol. 190; p. 789.

Societe Francaise des Films et Cinematographes Eclair, New York, N. Y. Moving-picture films. No. 91,613; May 13; Gaz. vol. 190; p. 545.

Societe Francaise des Films et Cinematographes Eclair, New York, N. Y. Moving-picture films. No. 91,711; May 20; Gaz. vol. 190; p. 789.

Societe "Savoia Film," Turin, Italy. Certain named measuring and scientific appliances. No. 91,612; May 13; Gaz. vol. 190; p. 545.

Solomon Medicine Co., E. E., Lonoke, Ark. Diarrhea remedies, chill-tonics, cough-syrup, &c. No. 91,521; May 6; Gaz. vol. 190; p. 261.

Solomon, Nathan F., St. Louis, Mo. White coating and cleaner for white shoes. No. 91,812; May 27; Gaz. vol. 190; p. 1025.

Soltmann, Edward G., New York, N. Y. Drawing-pencils. No. 91,614; May 13; Gaz. vol. 190; p. 545.

Sprout, Waldron & Co., Muncy, Pa. Certain machinery and tools and parts thereof. No. 91,615; May 13; Gaz. vol. 190; p. 545.

Standard Company, The, Torrington, Conn. Vehicle spokes and nipples. No. 91,813; May 27; Gaz. vol. 190; p. 1025.

Standard Oil Company, Whiting, Ind., and Chicago, Ill. Engine, turbine, transformer, and gas-engine oils. No. 91,522; May 6; Gaz. vol. 190; p. 261.

Standard Oil Company, Whiting, Ind., and Chicago, Ill. Cylinder, engine, machine, dynamo, &c., oil. No. 91,616; May 13; Gaz. vol. 190; p. 545.

Stanley, John T., New York, N. Y. Bleaching-powders. No. 91,712; May 20; Gaz. vol. 190; p. 789.

Stanley Remedy Company, Chicago, Ill. Remedy for throat and pulmonary diseases. No. 91,713; May 20; Gaz. vol. 190; p. 789.

Stauffer, Eshleman & Co. Ltd., New Orleans, La. Bush-hooks, bits, braces, chisels, &c. No. 91,714; May 20; Gaz. vol. 190; p. 789.

Stebbins, Martha J., Churchville, N. Y. Scalp-tonic. No. 91,715; May 20; Gaz. vol. 190; p. 789.

Stewart, Robert, Jr., Hartsville, S. C. Remedy for ingrowing nails. No. 91,716; May 20; Gaz. vol. 190; p. 789.

Stoves & Hardware Publishing Company, St. Louis, Mo. Weekly magazine. No. 91,814; May 27; Gaz. vol. 190; p. 1025.

Strouse-Baer Co., The, Baltimore, Md. Blouses. No. 91,815; May 27; Gaz. vol. 190; p. 1025.

Stubblefield, George G., Waco, Tex. Wheat-flour. No. 91,523; May 6; Gaz. vol. 190; p. 261.

Swarttz & Sons, M., Philadelphia, Pa. Men's suits and overcoats. No. 91,524; May 6; Gaz. vol. 190; p. 261.

Sweet Valley Wine Co., Sandusky, Ohio. Wines. No. 91,816; May 27; Gaz. vol. 190; p. 1025.

Sydney Ross Co., The, New York, N. Y. Cathartic pill. No. 91,799; May 27; Gaz. vol. 190; p. 1025.

Sylph Company, Inc., The, New York, N. Y. Preparation for preventing obesity and reducing fat. No. 91,717; May 20; Gaz. vol. 190; p. 789.

Tedcastle & Co., A. W., Boston, Mass. Boots and shoes. No. 91,817; May 27; Gaz. vol. 190; p. 1025.

Temperite Company, The, Philadelphia, Pa. Razors and razor-blades. No. 91,718; May 20; Gaz. vol. 190; p. 789.

Theo. Rickseeker Co., The, New York, N. Y. Perfumes, toilet waters, sachets, tooth-powders, &c. No. 91,606; May 20; Gaz. vol. 190; p. 789.

To-Kalon Manufacturing Company, The, Syracuse, N. Y., assignor to The International Druggists' and Chemists' Laboratories. Depilatory. No. 91,818; May 27; Gaz. vol. 190; p. 1025.

To-Kalon Manufacturing Company, The, Syracuse, N. Y., assignor to The International Druggists' and Chemists' Laboratories. Treatment of scalp disorders. No. 91,819; May 27; Gaz. vol. 190; p. 1025.

Tower Manufacturing & Novelty Co., New York, N. Y. Certain named hardware supplies. No. 91,525; May 6; Gaz. vol. 190; p. 261.

Tower Manufacturing & Novelty Co., New York, N. Y. Watches and clocks. No. 91,526; May 6; Gaz. vol. 190; p. 261.

Tower Manufacturing & Novelty Co., New York, N. Y. Certain named receptacles. No. 91,618; May 13; Gaz. vol. 190; p. 545.

Tower Manufacturing & Novelty Co., New York, N. Y. Type-writer oil. No. 91,619; May 13; Gaz. vol. 190; p. 545.

U. S. Phonograph Co., The. (See United States Phonograph Co., assignor.)

Ubry, Feliz, Chicago, Ill. Certain named pharmaceutical preparations. No. 91,719; May 20; Gaz. vol. 190; p. 789.

United Roofing and Manufacturing Co., Philadelphia, Pa. Floor and wall covering. No. 91,620; May 13; Gaz. vol. 190; p. 545.

United States Phonograph Co., assignor to The U. S. Phonograph Co., Cleveland, Ohio. Talking-machines. No. 91,527; May 6; Gaz. vol. 190; p. 261.

United States Specialty Company, New York, N. Y. Certain named hardware supplies. No. 91,528; May 6; Gaz. vol. 190; p. 261.

Upjohn Company, The, Kalamazoo, Mich. Pills. No. 91,720; May 20; Gaz. vol. 190; p. 789.

Upjohn Company, The, Kalamazoo, Mich. Antiseptic preparations. No. 91,820; May 27; Gaz. vol. 190; p. 1025.

Upmann, Carl, New York, N. Y. Little cigars. No. 91,621; May 13; Gaz. vol. 190; p. 545.

Vacuum Oil Company, Rochester, N. Y. Branding-paint. No. 91,529; May 6; Gaz. vol. 190; p. 261.

Valentine & Bentley Silk Co., The, Newton township, Sussex county, N. J., and New York, N. Y. Silk goods in the piece. No. 91,821; May 27; Gaz. vol. 190; p. 1025.

Valier & Spies Milling Co., St. Louis, Mo. Wheat-flour. No. 91,822; May 27; Gaz. vol. 190; p. 1025.

Van Nostrand, Frank D., New York, N. Y. Lubricating oils and greases. No. 91,721; May 20; Gaz. vol. 190; p. 790.

Victor Animatograph Company, Davenport, Iowa. Certain named scientific appliances. No. 91,722; May 20; Gaz. vol. 190; p. 790.

Victor Electric Company, Chicago, Ill. Certain electrical apparatus, machines, and supplies. No. 91,530; May 6; Gaz. vol. 190; p. 261.

Vincenty Hnos., Mexico, Mexico. Medicine-tablets. No. 91,485; May 6; Gaz. vol. 190; p. 260.

Voigt & Co., Chattanooga, Tenn. Medicinal tonic. No. 91,723; May 20; Gaz. vol. 190; p. 790.

W. H. Crawford Co., Baltimore, Md. Certain named foods. No. 91,648; May 20; Gaz. vol. 190; p. 787.

Waldes & Co., Prague-Wrschowitz, Austria-Hungary. Snap-buttons. Nos. 91,724–5; May 20; Gaz. vol. 190; p. 790.

Waldes & Co., Prague-Wrschowitz, Austria-Hungary. Snap-buttons. Nos. 91,823–6; May 27; Gaz. vol. 190; p. 1025.

Waldorf-Astoria Segar Company, Ltd., New York, N. Y. Cigars, cigarettes, and tobacco. No. 91,531; May 6; Gaz. vol. 190; p. 261.

Walworth Manufacturing Co., Boston, Mass. Metal gate-valves and couplings. No. 91,532; May 6; Gaz. vol. 190; p. 261.

Ward, Artemas, Detroit, Mich. Automobile runabouts and touring-cars. No. 91,827; May 27; Gaz. vol. 190; p. 1025.

Ward Baking Company, New York, N. Y. Bread, rolls, biscuits, cakes, &c. No. 91,625; May 13; Gaz. vol. 190; p. 545.

Ward, Howard B., New Rochelle, N. Y. Bread. No. 91,533; May 6; Gaz. vol. 190; p. 261.

Warner, John T., Holdenville, Ala. Scalp-tonics. No. 91,726; May 20; Gaz. vol. 190; p. 790.

Wattles, Waldo M., Litchfield, Mich. Molasses to be used in food of horses and cattle. No. 91,624; May 13; Gaz. vol. 190; p. 545.

Weissfeld Bros., New York, N. Y. Aprons, rubber aprons, slip-covers, and cooler-frocks. No. 91,626; May 13; Gaz. vol. 190; p. 545.

Wells & Richardson Company, Burlington, Vt. Dyes. No. 91,727; May 20; Gaz. vol. 190; p. 790.

Wells & Richardson Company, Burlington, Vt. Tonic, alterative, and diuretic medicine. No. 91,728; May 20; Gaz. vol. 190; p. 790.

Wells & Richardson Company, Burlington, Vt. Preparations for coloring butter. No. 91,729; May 20; Gaz. vol. 190; p. 790.

Wenner, Edward P., Williamsport, Pa. Washing and bleaching fluid and disinfectant. No. 91,828; May 27; Gaz. vol 190; p. 1025.

Werner, Joseph P., St. Louis, Mo. Remedy for diseases of the genital organs. No. 91,730; May 20; Gaz. vol. 190; p. 790.

White Cross Anti-Liquor Society, Kansas City, Mo. Liquor remedy. No. 91,731; May 20; Gaz. vol. 190; p. 790.

White's Sons, S. R., Norfolk, Va., assignor to S. R. White's Sons, Inc. Certain machinery, tools, and parts. No. 91,623; May 13; Gaz. vol. 190; p. 545.

Wimpfheimer & Bro., New York, N. Y. Certain named knitted, netted, and textile fabrics. No. 91,732; May 20; Gaz. vol. 190; p. 790.

Winans, Fenton J., Asheville, N. C. Germicidal compound. No. 91,536; May 6; Gaz. vol. 190; p. 262.

Winston, Harper, Fisher Company, Minneapolis, Minn. Certain named foods. No. 91,537; May 6; Gaz. vol. 190; p. 262.

Wise, Julius C., Kansas City, Mo. Anesthetic. No. 91,733; May 20; Gaz. vol. 190; p. 790.

Wolverine Mfg. Co., Detroit, Mich. Tables, chairs, desks, and cabinets. No. 91,538; May 6; Gaz. vol. 190; p. 262.

Wooster Hardware Co., The, Wooster, Ohio. Certain named cutlery, machinery, and tools. No. 91,734; May 20; Gaz. vol. 190; p. 790.

Young, Frank, Knights Landing, Cal. Coffee and tea. No. 91,627; May 13; Gaz. vol. 190; p. 545.

Zauder Bros., New York, N. Y. Certain named chemical preparations. No. 91,539; May 6; Gaz. vol. 190; p. 262.

Zimmerman, Joseph H., New York, N. Y. Remedy for stomachic disorders. No. 91,637; May 20; Gaz. vol. 190; p. 787.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

American Lithographic Company, New York, N. Y. "Fabrica De Tabacos Cigarros De Primeros." (For Cigars.) No. 16,994; May 13; Gaz. vol. 190; p. 546.

American Lithographic Company, New York, N. Y. "Quality Cigars." (For Cigars.) No. 16,995; May 13; Gaz. vol. 190; p. 546.

Bourne, Clifford N., Syracuse, N. Y. "The Drink of the Universe. Registered Sunol. Smooth, Snappy, Satisfying." (For a Drink.) No. 17,027; May 20; Gaz. vol. 190; p. 791.

Brewer, Clyde L., Trinidad, Colo. "Plastico Aceite Nacional." (For Medicinal Plasters.) No. 16,986; May 6; Gaz. vol. 190; p. 263.

Brookman Manufacturing Company, Chicago, Ill. "Bleach-It." (For Bleaching and Washing Powders.) No. 16,996; May 13; Gaz. vol. 190; p. 546.

Caprini, Alexander L., Pittsburgh, Pa. "La Margarita." (For Green Olives.) No. 16,997; May 13; Gaz. vol. 190; p. 546.

Church, William, Chicago, Ill. "Puncture Cure." (For Puncture-Curing Compound.) No. 16,998; May 13; Gaz. vol. 190; p. 546.

Columbia Brewing Co., Tacoma, Wash. "Alt Heidelberg Lager Beer." (For Beer.) No. 17,028; May 20; Gaz. vol. 190; p. 791.

Davies, J. M., Florin, Cal. "Golden State Brand Tokay." (For Grapes.) No. 17,038; May 27; Gaz. vol. 190; p. 1026.

Eagle Manufacturing Co., Inc., Baltimore, Md. "Eagle Cones." (For Cones.) No. 16,999; May 13; Gaz. vol. 190; p. 546.

Edgar & Son, W. H., Detroit, Mich. "Buckeye Feeding Molasses." (For Molasses.) No. 17,039; May 27; Gaz. vol. 190; p. 1026.

Ellis, Leon C., Lynn, Mass. "Crow Corn Corer." (For a Corn Remedy.) No. 17,029; May 20; Gaz. vol. 190; p. 791.

Glahn & Son, Henry von, Brooklyn, N. Y. "Vee Gee Brand." (For Canned Vegetables.) No. 17,045; May 27; Gaz. vol. 190; p. 1026.

Goldsmith, Ralph, New Orleans, La. "Domino." (For Rice.) No. 17,030; May 20; Gaz. vol. 190; p. 791.

Henschel & Co., A. C., Chicago, Ill. "Star Seal." (For Cigars.) No. 17,000; May 13; Gaz. vol. 190; p. 546.

Henschel & Co., A. C., Chicago, Ill. "Cigars." (For Cigars.) No. 17,001; May 13; Gaz. vol. 190; p. 546.

Howell & Company, Chicago, Ill. "Starbright Silverpolish." (For a Compound for Cleaning and Polishing.) No. 17,002; May 13; Gaz. vol. 190; p. 546.

Howell & Company, Chicago, Ill. "Sunbright Metal Polish." (For a Polish.) No. 17,003; May 13; Gaz. vol. 190; p. 546.

Howell & Company, Chicago, Ill. "Autol." (For a Polish.) No. 17,004; May 13; Gaz. vol. 190; p. 546.

J. A. Pozzoni Pharmacal Co., The, Chicago, Ill. "Polvere Di Riso." (For Rice Complexion-Powder.) No. 17,016; May 13; Gaz. vol. 190; p. 546.

Jamoka Company, The, Birmingham, Ala. "Java-Julep." (For Java-Julep.) No. 17,005; May 13; Gaz. vol. 190; p. 546.

Kaplowitz, Louis, New York, N. Y. "Russian Mixture." (For Smoking-Tobacco.) No. 17,006; May 13; Gaz. vol. 190; p. 546.

Kellar Investment Company, Tampa, Fla. "Avon Springs." (For Ginger-Ale.) No. 16,987; May 6; Gaz. vol. 190; p. 263.

Kline, Pratt, Jersey City, N. J. "Cabaret Chocolates." (For Chocolate Confectionery.) No. 17,007; May 13; Gaz. vol. 190; p. 546.

Magic Oil Co., The, New Orleans, La. "Magic Oil." (For a Polishing and Lubricating Oil.) No. 16,988; May 6; Gaz. vol. 190; p. 263.

McBride, John, Phoenix, Ariz. "Progress Phoenix." (For Cigars.) No. 17,031; May 20; Gaz. vol. 190; p. 791.

Miller, Solomon S., Reading, Pa. "The Miller Sock." (For Socks.) No. 17,032; May 20; Gaz. vol. 190; p. 791.

Mittelstaedt, Firm of E., New York, N. Y. "Close Fit." (For Hair-Nets.) No. 16,989; May 6; Gaz. vol. 190; p. 263.

Mittelstaedt, E., New York, N. Y. "4 U." (For Hair-Nets.) No. 17,033; May 20; Gaz. vol. 190; p. 791.

Moehle Lithographic Company, The, New York, N. Y. "Advantage." (For Cigars.) No. 17,008; May 13; Gaz. vol. 190; p. 546.

Moehle Lithographic Company, The, New York, N. Y. "Double Guarantee." (For Cigars.) No. 17,009; May 13; Gaz. vol. 190; p. 546.

Moehle Lithographic Company, The, New York, N. Y. "Henry Wilson." (For Cigars.) No. 17,010; May 13; Gaz. vol. 190; p. 546.

Moehle Lithographic Company, The, New York, N. Y. "La Cubitana." (For Cigars.) No. 17,011; May 13; Gaz. vol. 190; p. 546.

Moehle Lithographic Company, The, New York, N. Y. "James Weaver." (For Cigars.) No. 17,012; May 13; Gaz. vol. 190; p. 546.

Moehle Lithographic Company, The, New York, N. Y. "El Arte Cubano." (For Cigars.) No. 17,013; May 13; Gaz. vol. 190; p. 546.

Moehle Lithographic Company, The, New York, N. Y. "El Importador." (For Cigars.) No. 17,014; May 13; Gaz. vol. 190; p. 546.

Neely, Harwell & Co., Nashville, Tenn. "Blue Giant." (For Overalls.) No. 16,990; May 6; Gaz. vol. 190; p. 263.

New Ulm Bottling Works, New Ulm, Minn. "Waxsipahti." (For Spring-Water.) No. 17,015; May 13; Gaz. vol. 190; p. 546.

Progressive Co-operative Assn., Boston, Mass. "Progressive Co-operative Coupon." (For Bread.) No. 17,040; May 27; Gaz. vol. 190; p. 1026.

Reuter, G. A., Chicago, Ill. "Purenut Brand." (For Peanut-Butter.) No. 17,034; May 20; Gaz. vol. 190; p. 791.

Riverside Milling Co., Clinton, Iowa. "Twin Swan." (For Flour.) No. 16,991; May 6; Gaz. vol. 190; p. 263.

Rust, Carl, Frederick, Md. "Table Pride Bread." (For Bread.) No. 17,017; May 13; Gaz. vol. 190; p. 546.

Rymarczick, G., Rutherford, N. J. "Sellers Guarantee." (For Wearing-Apparel.) No. 17,035; May 20; Gaz. vol. 190; p. 791.

Samuel Sternberg Company, Philadelphia, Pa. "Ask for the Eclipse Shirt with Adjusto Sleeves." (For Shirts.) No. 17,036; May 20; Gaz. vol. 190; p. 791.

Sauquoit Toilet Paper Co., Inc., New Hartford, N. Y. "Caravan." (For Toilet-Paper.) No. 16,992; May 6; Gaz. vol. 190; p. 263.

Sauquoit Toilet Paper Co., Inc., New Hartford, N. Y. "Bengal." (For Toilet-Paper.) No. 17,020; May 13; Gaz. vol. 190; p. 546.

Schmidt & Co., New York, N. Y. "Trading Post." (For Cigars.) No. 17,018; May 13; Gaz. vol. 190; p. 546.

Schorn & Brower, New York, N. Y. "Schbro." (For Tooth-Powder.) No. 17,019; May 13; Gaz. vol. 190; p. 546.

Southern California Music Company, Los Angeles, Cal. "Invincible." (For Violin-Strings.) No. 17,041; May 27; Gaz. vol. 190; p. 1026.

Southern California Music Company, Los Angeles, Cal. "Silver Threads." (For Violin-Strings.) No. 17,042; May 27; Gaz. vol. 190; p. 1026.

Southern California Music Company, Los Angeles, Cal. "Lignoli." (For Violin-Strings.) No. 17,043; May 27; Gaz. vol. 190; p. 1026.

Stix, Baer & Fuller Dry Goods Company, St. Louis, Mo. "Dr. A. E. Block Prescription Shoe." (For Shoes.) No. 17,044; May 27; Gaz. vol. 190; p. 1026.

Swiss American Knitting Mills, Grand Rapids, Mich. "Elastic Closed Crotch." (For Underwear.) No. 17,021; May 13; Gaz. vol. 190; p. 546.

Van Camp Packing Company, The, Indianapolis, Ind. "Van Camp's Sauer Kraut." (For Sauer-Kraut.) No. 17,022; May 13; Gaz. vol. 190; p. 546.

Voltter, Adolph, New York, N. Y. "Cardinal Liqueur." (For Alcoholic Liquor.) No. 17,023; May 13; Gaz. vol. 190; p. 546.

Voltter, Adolph, New York, N. Y. "A V." (For Alcoholic Liquors.) No. 17,037; May 20; Gaz. vol. 190; p. 791.

Webster-Warnock Chemical Co., Memphis, Tenn. "Old Samoset." (For Whisky.) No. 17,024; May 13; Gaz. vol. 190; p. 546.

Western Bottling & Extract Co., Los Angeles, Cal. "Suprema." (For Ginger-Ale.) No. 17,025; May 13; Gaz. vol. 190; p. 546.

Western Bottling and Packing Company, Boise, Idaho. "Champagne Fizz." (For Celery Tonic.) No. 17,026; May 13; Gaz. vol. 190; p. 546.

Wiegaad, Cris W., Los Angeles, Cal. "Dandy Mirror." (For Mirrors.) No. 17,046; May 27; Gaz. vol. 190; p. 1026.

Winona Ice Cream and Butter Company, Winona, Minn. "Best Ever." (For Butter.) No. 16,993; May 6; Gaz. vol. 190; p. 263.

PRINTS.

American Drug Co., Washington, D. C. "A-Dru-Co." (For a Corn-Remover.) No. 3,255; May 13; Gaz. vol. 190; p. 546.

Bosch Magneto Company, New York, N. Y. "$1 ⁹⁸ Bosch Plugs." (For Spark-Plugs.) No. 3,272; May 27; Gaz. vol. 190; p. 1026.

Cluett, Peabody & Company, Troy, N. Y. "Arrow Collars and Shirts." (For Collars and Shirts.) No. 3,249; May 6; Gaz. vol. 190; p. 263.

Cluett, Peabody & Company, Troy, N. Y. "La Salle A Light, Deep Pointed Arrow Collar." (For Collars.) No. 3,250; May 6; Gaz. vol. 190; p. 263.

Cluett, Peabody & Company, Troy, N. Y. "Marley-Devon, Two Heights in the Modish London Cutaway Fronts." (For Collars.) No. 3,251; May 6; Gaz. vol. 190; p. 263.

Cluett, Peabody & Company, Troy, N. Y. "'Kenmore,' 'Baltic,' 'Devon' Arrow Collars." (For Collars.) No. 3,252; May 6; Gaz. vol. 190; p. 263.

Cluett, Peabody & Company, Troy, N. Y. "Arrow Wing Collars with Inserted Tips." (For Collars.) No. 3,256; May 13; Gaz. vol. 190; p. 546.

Colgate & Co., Jersey City, N. J., and New York, N. Y. "Colgate's Cashmere Bouquet Talc Powder." (For Talc Powder.) No. 3,257; May 13; Gaz. vol. 190; p. 546.

Colgate & Co., Jersey City, N. J., and New York, N. Y. "Colgate's Monad Violet Talc." (For Violet Talc.) No. 3,275; May 27; Gaz. vol. 190; p. 1026.

Colgate & Co., Jersey City, N. J., and New York, N. Y. "Colgate's Dactylis Talc." (For Dactylis Talc.) No. 3,276; May 27; Gaz. vol. 190; p. 1026.

Colgate & Co., Jersey City, N. J., and New York, N. Y. "Colgate's Éclat Talc." (For Éclat Talc.) No. 3,277; May 27; Gaz. vol. 190; p. 1026.

Cream of Wheat Co., Minneapolis, Minn. "Playing Hookey." (For Wheat Breakfast Food.) No. 3,258; May 13; Gaz. vol. 190; p. 546.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "The World Goes Bound." (For Bread and Yeast.) No. 3,262; May 20; Gaz. vol. 190; p. 791.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "The 'Lightest' Food." (For Bread and Yeast.) No. 3,263; May 20; Gaz. vol. 190; p. 791.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "Don't Outgrow the Bread and Milk Habit." (For Bread and Yeast.) No. 3,264; May 20; Gaz. vol. 190; p. 791.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "Fifty Ways to Use Bread." (For Bread and Yeast.) No. 3,265; May 20; Gaz. vol. 190; p. 791.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "In Bread There is Strength." (For Bread and Yeast.) No. 3,266; May 20; Gaz. vol. 190; p. 791.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "The 'Health Food' for Children." (For Bread and Yeast.) No. 3,267; May 20; Gaz. vol. 190; p. 791.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "Raising the Standard." (For Bread and Yeast.) No. 3,268; May 20; Gaz. vol. 190; p. 791.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "Bread is King." (For Bread and Yeast.) No. 3,269; May 20; Gaz. vol. 190; p. 791.

Fleischmann Company, The, Cincinnati, Ohio, and New York, N. Y. "The Harvest of Health." (For Bread and Yeast.) No. 3,270; May 20; Gaz. vol. 190; p. 791.

J. M. Chanut & Cie., Inc., New York, N. Y. "Washanew Glacé Kid Gloves." (For Gloves.) No. 3,274; May 27; Gaz. vol. 190; p. 1026.

Lange, Theodore, Springfield, Mass. "The Barr Baking & Catering Co., Ice Cream and Pastry. Catering at any distance." (For Ice-Cream and Pastry.) No. 3,278; May 27; Gaz. vol. 190; p. 1026.

Locklayer, R. P., Nashville, Tenn. "Dandergone." (For a Hair-Tonic.) No. 3,271; May 20; Gaz. vol. 190; p. 791.

New Columbia Shirt Co., New York, N. Y. "'Columbia' Cufturn Shirt." (For Shirts.) No. 3,253; May 6; Gaz. vol. 190; p. 263.

Owen M. Bruner Company, Philadelphia, Pa. "Maraschino White Pine From Idaho." (For White-Pine Lumber.) No. 3,273; May 27; Gaz. vol. 190; p. 1026.

Pittsburgh Hickson Company, East Butler, Pa. "Better than a Promise." (For Brass Beds.) No. 3,279; May 27; Gaz. vol. 190; p. 1026.

Powells, New York, N. Y. "Rosilia Paste." (For Candy.) No. 3,280; May 27; Gaz. vol. 190; p. 1026.

Revere Rubber Co., Providence, R. I. "Spring-Step Rubber Heels." (For Rubber Heels.) No. 3,281; May 27; Gaz. vol. 190; p. 1026.

Schandein & Lind Co., Philadelphia, Pa. "Garwood's Violet Breath Hearts." (For Perfumed Candy Tablets.) No. 3,254; May 6; Gaz. vol. 190; p. 263.

Wiegand, Nelson M., Truxton, N. Y. "Kuz." (For Pepsin Cough-Candy.) No. 3,259; May 13; Gaz. vol. 190; p. 546.

Worcester Salt Co., Silver Springs and New York, N. Y. "Take Out These Bottles and Shake Them." (For Salt.) No. 3,260; May 13; Gaz. vol. 190; p. 546.

Yecker Chocolate Company, Inc., New York, N. Y. "Yecker's Chocolate Nougat Bricks." (For Chocolate.) No. 3,261; May 13; Gaz. vol. 190; p. 546.

Yecker Chocolate Company Inc., New York, N. Y. "Cremola Wafers." (For Cremola Wafers.) No. 3,282; May 27; Gaz. vol. 190; p. 1026.

DISCLAIMERS.

Allen, William A., New York, N. Y.; disclaimer filed by patentee. Supporting and retaining device for spare tires. (Reissue.) No. 13,454; disclaimer filed May 13, 1913; Gaz. vol. 190; p. 798b.

Dickey, Joseph W., New York, N. Y.; disclaimer filed by assignee, Charles E. Chapin. Brush for electrical machines. No. 610,705; disclaimer filed May 13, 1913; Gaz. vol. 190; p. 1034.

Jewell, Omar H., Chicago, Ill.; disclaimer filed by assignee, Polar Ice Machine Company. Apparatus for making artificial ice. No. 934,732; disclaimer filed May 13, 1913; Gaz. vol. 190; p. 1034.

Jewell, Omar H., Chicago, Ill.; disclaimer filed by assignee, Polar Ice Machine Company. Making artificial ice. No. 934,972; disclaimer filed May 15, 1913; Gaz. vol. 190; p. 1034.

Starr, Ferdinand W., Springfield, Ohio; disclaimer filed by patentee. Cutting instrument. No. 683,809; disclaimer filed May 12, 1913; Gaz. vol. 190; p. 798b.

ALPHABETICAL LIST OF INVENTIONS

TO WHOM

PATENTS WERE ISSUED DURING THE MONTH OF MAY, 1913.

[Abbreviations: "Gaz."=Official Gazette.]

Abrading-tool suction-hood. P. Mueller. No. 1,062,248; May 20; Gaz. vol. 190; p. 651.

Accounting-exchange. W. F. Kemble and C. R. Underhill. No. 1,062,102; May 20; Gaz. vol. 190; p. 601.

Acid ester and making same. Acidylsalicylic. R. Wolffenstein. No. 1,063,099; May 27; Gaz. vol. 190; p. 973.

Acid. Production of organic derivatives of arsenic. H. Bart. No. 1,061,587; May 13; Gaz. vol. 190; p. 389.

Acid used in refining oils, Apparatus for the recovery of. A. Gellen. No. 1,063,025; May 27; Gaz. vol. 190; p. 948.

Acids and making same, Amids of the arylalkyloxyacetic. E. Preiswerk and W. Beurnouill. No. 1,061,120; May 6; Gaz. vol. 190; p. 193.

Acoustic diaphragm. W. W. Young. No. 1,061,211; May 6; Gaz. vol. 190; p. 223.

Adding-machine. A. J. Conen. No. 1,061,901; May 13; Gaz. vol. 190; p. 490.

Adjustable hanger. P. E. Doolittle. No. 1,063,149; May 27; Gaz. vol. 190; p. 989.

Advertising and like apparatus. T. Bowden. No. 1,061,520; May 13; Gaz. vol. 190; p. 365.

Advertising apparatus. F. Concannon. No. 1,063,010; May 27; Gaz. vol. 190; p. 943.

Advertising apparatus, Gas-illuminated. F. O. Seyd. No. 1,063,073; May 27; Gaz. vol. 190; p. 965.

Advertising apparatus, Street-car. H. Boerner. No. 1,061,260; May 13; Gaz. vol. 190; p. 274.

Advertising device. F. A. Rudolph. No. 1,061,407; May 13; Gaz. vol. 190; p. 325.

Advertising device. M. H. Shoenberg. No. 1,061,505; May 13; Gaz. vol. 190; p. 358.

Advertising device. C. N. Falk. No. 1,061,601; May 13; Gaz. vol. 190; p. 394.

Advertising novelty. D. A. Lohr. No. 1,061,302; May 13; Gaz. vol. 190; p. 288.

Advertising spectacle-lenses and the like, Device for. B. Nutt. No. 1,061,002; May 6; Gaz. vol. 190; p. 154.

Aeronautic engine, Non-gyroscopic. W. P. Holzmark. No. 1,060,597; May 6; Gaz. vol. 190; p. 11.

Aeroplane. B. T. B. Hyde and A. Gaul, Jr. No. 1,061,242; May 6; Gaz. vol. 190; p. 233.

Aeroplane. S. N. Malterner. No. 1,061,917; May 13; Gaz. vol. 190; p. 495.

Aeroplane. E. J. and S. A. Randall. No. 1,062,116; May 20; Gaz. vol. 190; p. 606.

Aeroplane. H. O. Eiane. No. 1,062,772; May 27; Gaz. vol. 190; p. 864.

Aeroplane attachment. P. Tichay. No. 1,060,958; May 6; Gaz. vol. 190; p. 137.

Aeroplane-steering gear. R. Tampier. No. 1,062,055; May 20; Gaz. vol. 190; p. 584.

Aeroplanes, Automatic lateral and longitudinal balance for. P. Allinio. No. 1,062,074; May 20; Gaz. vol. 190; p. 591.

Agricultural implement. J. Olson. No. 1,062,602; May 27; Gaz. vol. 190; p. 809.

Air and gases by means of liquid accelerated by a rotor-wheel, Process of and apparatus for rarefying and compressing. C. H. Jaeger. No. 1,063,034; May 27; Gaz. vol. 190; p. 951.

Air-compressor. J. R. Kinney. No. 1,061,181; May 6; Gaz. vol. 190; p. 212.

Air-compressors, Governing mechanism for centrifugal. R. H. Rice. No. 1,061,689; May 13; Gaz. vol. 190; p. 424.

Air-strainer. N. T. Woods. No. 1,062,942; May 27; Gaz. vol. 190; p. 922.

Air-washer. S. R. Sheldon. No. 1,062,124; May 20; Gaz. vol. 190; p. 608.

Airship. L. J. Evans. No. 1,061,363; May 13; Gaz. vol. 190; p. 309.

Airship. C. D. Browne. No. 1,061,445; May 13; Gaz. vol. 190; p. 337.

Airship. T. S. C. Lowe. No. 1,061,484; May 13; Gaz. vol. 190; p. 351.

Airship. C. A. Lewis. No. 1,062,545; May 20; Gaz. vol. 190; p. 747.

Airship, aeroplane, or aerostat. E. T. Willows. No. 1,061,434; May 13; Gaz. vol. 190; p. 333.

Airship-propeller. W. McCairns. No. 1,061,961; May 13; Gaz. vol. 190; p. 511.

Airship-stabilizer. A. O. Paulson. No. 1,063,137; May 27; Gaz. vol. 190; p. 985.

Alarm: See Burglar-alarm; Elevator-alarm; Fire-alarm; Gas-alarm; Storm and surge alarm; Tire-alarm.

Alarm and signal device, Automatic. J. D. Nelson. No. 1,060,781; May 6; Gaz. vol. 190; p. 74.

Alimentary products, Manufacture of. P. Müller. No. 1,061,488; May 13; Gaz. vol. 190; p. 352.

Alkaloid salts, Preparing. W. Straub. No. 1,061,139; May 6; Gaz. vol. 190; p. 199.

Alkyl derivatives and substituted alkyl derivatives of hydrocupreine, Manufacture and production of. H. Throu and C. Freund. No. 1,062,203; May 20; Gaz. vol. 190; p. 635.

Alloy. F. M. Becket. No. 1,062,480; May 20; Gaz. vol. 190; p. 711.

Alloys and keeping them in liquid state, Melting ferro. W. Schemmann and J. Bronn. No. 1,061,016; May 6; Gaz. vol. 190; p. 158.

Alloys, Making. R. A. Hadfield. No. 1,061,378; May 13; Gaz. vol. 190; p. 312.

Amino-anthraquinones and derivatives thereof, Producing. C. Rampini. No. 1,063,172; May 27; Gaz. vol. 190; p. 998.

Amino-anthraquinones and derivaties thereof, Producing. C. Rampini. No. 1,063,173; May 27; Gaz. vol. 190; p. 998.

Ammonium compounds, Production of. C. P. Steinmetz. No. 1,062,805; May 27; Gaz. vol. 190; p. 876.

Ammonium sulfate, Production of. C. Bosch, A. Mittasch, and L. Hecht. No. 1,063,007; May 27; Gaz. vol. 190; p. 942.

Amusement apparatus. H. D. Gardy. No. 1,062,702; May 27; Gaz. vol. 190; p. 842.

Amusement device. J. C. Schleicher. No. 1,061,504; May 13; Gaz. vol. 190; p. 358.

Amusement device. W. F. Wittich. No. 1,062,314; May 20; Gaz. vol. 190; p. 673.

Amusement device. N. Eby. No. 1,062,899; May 27; Gaz. vol. 190; p. 907.

Anchor-bolt, Detachable. C. Butler. No. 1,062,534; May 20; Gaz. vol. 190; p. 744.

Anesthetics, Apparatus for use in administering. S. G. Brown. No. 1,061,161; May 6; Gaz. vol. 190; p. 205.

Animal-holder. J. Miller. No. 1,062,109; May 20; Gaz. vol. 190; p. 603.

Animal-trap. H. H. May. No. 1,061,304; May 13; Gaz. vol. 190; p. 289.

Animal-trap. L. Hildreth. No. 1,061,477; May 13; Gaz. vol. 190; p. 349.

Annunciator or indicator for street and interurban car lines. J. F. Ohmer. No. 1,061,628; May 13; Gaz. vol. 190; p. 402.

Antimony compounds and making same, Organic. L. Kaufmann. No. 1,060,765; May 6; Gaz. vol. 190; p. 60.

Anti-rail-creeping device. M. L. Phelps. No. 1,063,060; May 27; Gaz. vol. 190; p. 960.

Antislipping device. E. A. Dunning. No. 1,062,326; May 20; Gaz. vol. 190; p. 677.

Apron, Barber's. O. K. Parkhurst. No. 1,062,497; May 20; Gaz. vol. 190; p. 733.

Apron-blank. L. Daum. No. 1,062,697; May 27; Gaz. vol. 190; p. 840.

Arch. D. B. Luten. No. 1,060,917; May 6; Gaz. vol. 190; p. 123.

Arch. D. B. Luten. No. 1,060,918; May 6; Gaz. vol. 190; p. 123.

Arch. D. B. Luten. No. 1,060,922; May 6; Gaz. vol. 190; p. 124.

Arch-support. E. J. Emery. No. 1,061,056; May 6; Gaz. vol. 190; p. 173.

Arch-support. A. E. Block. No. 1,061,353; May 13; Gaz. vol. 190; p. 306.

Armature-lever pivot for alternating-current magnets. D. Larson. No. 1,062,017; May 20; Gaz. vol. 190; p. 572.

Armatures, Spring-mounting for magnet-. C. J. Erickson. No. 1,062,586; May 27; Gaz. vol. 190; p. 804.

Armor-plates for the protection of ships and other steel objects, Manufacture of. F. Giolitti. No. 1,061,998; May 20; Gaz. vol. 190; p. 565.
Articulated engine. L. W. Barger. No. 1,060,883; May 6; Gaz. vol. 190; p. 111.
Artillery-carriage. W. Mayer. No. 1,063,051; May 27; Gaz. vol. 190; p. 957.
Auriscope. H. L. De Zeng. No. 1,062,698; May 27; Gaz. vol. 190; p. 841.
Automobile. F. Drew. No. 1,062,898; May 27; Gaz. vol. 190; p. 907.
Automobile. D. N. Baxter. No. 1,063,003; May 27; Gaz. vol. 190; p. 941.
Automobile curtain-fastener. W. H. Kinsel. No. 1,062,921; May 27; Gaz. vol. 190; p. 914.
Automobile-fender. J. Hadka. No. 1,062,705; May 27; Gaz. vol. 190; p. 843.
Automobile-fender. J. Hadka. No. 1,062,706; May 27; Gaz. vol. 190; p. 843.
Automobile light controlling device. B. D. Lake and N. G. Marks. No. 1,061,087; May 6; Gaz. vol. 190; p. 181.
Automobile number carrier and drop. G. H. Hewitt, Jr. No. 1,061,910; May 13; Gaz. vol. 190; p. 492.
Automobile safety appliance. R. A. Magill. No. 1,060,611; May 6; Gaz. vol. 190; p. 16.
Automobile transmission. L. W. Blymyer. No. 1,062,876; May 27; Gaz. vol. 190; p. 899.
Automobile transmission-lock. H. M. Johnstone. No. 1,061,943; May 13; Gaz. vol. 190; p. 505.
Automobile turn-table attachment. F. Helder. No. 1,061,073; May 6; Gaz. vol. 190; p. 177.
Automobile-wrench. Reversible friction-roll. H. G. Geils. No. 1,061,367; May 13; Gaz. vol. 190; p. 310.
Automobiles. Electromechanical system for the propulsion of. H. Pieper. No. 1,062,551; May 20; Gaz. vol. 190; p. 749.
Axle. Wagon-. H. Sundby. No. 1,062,863; May 27; Gaz. vol. 190; p. 895.
Baby jumper and swing, Combined. F. A. Hawk. No. 1,061,669; May 13; Gaz. vol. 190; p. 417.
Bag: *See* Hand-bag; Mail-bag.
Bag-fastening device. A. M. Bates. No. 1,062,948; May 27; Gaz. vol. 190; p. 924.
Bag-frame. F. A. Fuller. No. 1,062,391; May 20; Gaz. vol. 190; p. 699.
Bag-frame-handle fastening. F. A. Fuller. No. 1,062,390; May 20; Gaz. vol. 190; p. 698.
Bag-handler. C. L. Sawyer. No. 1,061,014; May 6; Gaz. vol. 190; p. 158.
Bag-holder. S. W. Anderson. No. 1,062,811; May 27; Gaz. vol. 190; p. 878.
Bag, satchel, and similar receptacle. M. J. H. Cunningham. No. 1,060,824; May 6; Gaz. vol. 190; p. 89.
Bait, Artificial. R. T. Wilson. No. 1,060,873; May 6; Gaz. vol. 190; p. 107.
Bait tie, Live-. J. H. Nelson. No. 1,062,726; May 27; Gaz. vol. 190; p. 849.
Baking cones. M. L. Hitchcock. No. 1,062,157; May 20; Gaz. vol. 190; p. 620.
Baking-pan attachment. J. E. Wallace. No. 1,063,144; May 27; Gaz. vol. 190; p. 988.
Baking-powder. W. Klapproth. No. 1,061,183; May 6; Gaz. vol. 190; p. 213.
Baling-machine. H. E. Wheeler. No. 1,062,066; May 20; Gaz. vol. 190; p. 588.
Baling mechanism. O. Kluge. No. 1,062,243; May 20; Gaz. vol. 190; p. 649.
Balloting-box for fraternal orders. H. Braasch. No. 1,063,111; May 27; Gaz. vol. 190; p. 977.
Banjos, &c., Neck for. O. Schmidt. No. 1,062,509; May 20; Gaz. vol. 190; p. 737.
Banking-pin. J. A. Freund. No. 1,062,645; May 27; Gaz. vol. 190; p. 825.
Bar: *See* Boring-bar; Sash-bar; Splice-bar.
Basin holder, Wash-. E. V. Sanders. No. 1,062,507; May 20; Gaz. vol. 190; p. 736.
Basket, Collapsible waste-. G. L. Johnson. No. 1,061,297; May 13; Gaz. vol. 190; p. 286.
Basket-machine. C. Harley. No. 1,061,939; May 13; Gaz. vol. 190; p. 504.
Bath-cabinet. J. H. Pride. No. 1,061,565; May 13; Gaz. vol. 190; p. 382.
Bath-room heater. G. E. Sharpe. No. 1,061,332; May 13; Gaz. vol. 190; p. 299.
Battery: *See* Electric battery; Primary battery.
Battery compound, Storage-. N. Fallek. No. 1,060,832; May 6; Gaz. vol. 190; p. 92.
Beach-chair. J. B. Cook. No. 1,061,270; May 13; Gaz. vol. 190; p. 275.
Bean-snipping machine. W. B. Phinney. No. 1,062,663; May 27; Gaz. vol. 190; p. 830.
Beans for cooking, Device for stringing and cutting. W. R. A. Kemp. No. 1,060,605; May 6; Gaz. vol. 190; p. 14.
Bearing. W. I. Chinnick. No. 1,061,899; May 13; Gaz. vol. 190; p. 489.
Bearing, Ball-. S. Schneider. No. 1,061,636; May 13; Gaz. vol. 190; p. 405.
Bearing for vehicle-wheels, Antifriction-. D. A. Snyder. No. 1,061,506; May 13; Gaz. vol. 190; p. 350.
Bearing-roller retainer. P. Bayer. No. 1,060,579; May 6; Gaz. vol. 190; p. 5.
Bearing, Roller side. A. Stucki. (Reissue.) No. 13,567; May 20; Gaz. vol. 190; p. 764.
Bearing, Vertical. C. A. Dillon. No. 1,062,638; May 27; Gaz. vol. 190; p. 822.
Beating-engine. T. W. Chase. No. 1,060,585; May 6; Gaz. vol. 190; p. 7.
Bed and divan, Convertible. B. B. Englander. No. 1,061,362; May 13; Gaz. vol. 190; p. 309.
Bed and divan, Convertible. B. B. Englander. No. 1,061,956; May 13; Gaz. vol. 190; p. 509.
Bed attachment. O. E. Brooks. No. 1,062,434; May 20; Gaz. vol. 190; p. 711.
Bed-bottom. J. H. Pielert. No. 1,062,499; May 20; Gaz. vol. 190; p. 734.
Bed-covering. A. E. Blofield and J. J. Link. No. 1,061,259; May 13; Gaz. vol. 190; p. 274.
Bed, Disappearing wall-. H. H. Hall. No. 1,060,753; May 6; Gaz. vol. 190; p. 65.
Bed-guard, Detachable. M. F. Smith. No. 1,062,127; May 20; Gaz. vol. 190; p. 609.
Bed, Invalid-. W. C. Feely. No. 1,061,168; May 6; Gaz. vol. 190; p. 206.
Bed-riser. F. E. Sloan. No. 1,061,695; May 13; Gaz. vol. 190; p. 426.
Bed, Sofa or davenport. W. A. Pease. No. 1,061,777; May 13; Gaz. vol. 190; p. 451.
Beds, &c., Mounting for wall-. S. W. and A. W. Smith. No. 1,062,261; May 20; Gaz. vol. 190; p. 655.
Bedstead, Sofa-. R. Coopersmith. No. 1,061,986; May 20; Gaz. vol. 190; p. 561.
Beer-cooler. F. A. Phillippi. No. 1,062,727; May 27; Gaz. vol. 190; p. 849.
Bell, Electric. C. M. Proctor. No. 1,060,628; May 6; Gaz. vol. 190; p. 22.
Bell or ringer, Harmonic electric. C. J. Erickson. No. 1,061,733; May 13; Gaz. vol. 190; p. 439.
Belt conveyer. J. Dierdorff. No. 1,062,325; May 20; Gaz. vol. 190; p. 677.
Belt-fastener. C. E. Coe. No. 1,062,078; May 20; Gaz. vol. 190; p. 593.
Belt-fasteners, Tool for clenching. J. K. Diamond. No. 1,060,746; May 6; Gaz. vol. 190; p. 63.
Belt, Safety-. G. C. Thompson. No. 1,063,083; May 27; Gaz. vol. 190; p. 968.
Belts, Implement for punching and cutting. W. W. Woodley. No. 1,062,753; May 27; Gaz. vol. 190; p. 858.
Bench: *See* Work-bench.
Bending-machine. J. Grady. No. 1,061,067; May 6; Gaz. vol. 190; p. 176.
Bending-machine. E. Rhodes. No. 1,062,033; May 20; Gaz. vol. 190; p. 577.
Beverage extract. W. H. Post. No. 1,061,495; May 13; Gaz. vol. 190; p. 354.
Bicycle-stand. H. T. Adams. No. 1,061,513; May 13; Gaz. vol. 190; p. 361.
Billiard-cue. R. F. Burwell. No. 1,062,816; May 27; Gaz. vol. 190; p. 880.
Binder, Loose-leaf. F. Bodenhofer. No. 1,061,897; May 13; Gaz. vol. 190; p. 488.
Binder, Temporary. J. D. Hughes. No. 1,060,599; May 6; Gaz. vol. 190; p. 12.
Binding-post. F. E. Bocorselski and C. K. Lassiter. No. 1,061,809; May 13; Gaz. vol. 190; p. 460.
Bit: *See* Bridle-bit.
Bit-holder. J. W. Johnson. No. 1,060,845; May 6; Gaz. vol. 190; p. 97.
Blacking set. G. W. Kelly. No. 1,062,339; May 20; Gaz. vol. 190; p. 681.
Blades. G. Westinghouse. No. 1,061,648; May 13; Gaz. vol. 190; p. 409.
Blading. J. E. Snyder. No. 1,061,640; May 13; Gaz. vol. 190; p. 406.
Bleaching. W. Matheslus and M. Freiberger. No. 1,061,392; May 13; Gaz. vol. 190; p. 318.
Blind, Window-. H. Krueger. No. 1,063,042; May 27; Gaz. vol. 190; p. 954.
Blinds, Device for operating window-shutter. F. McCulloch and W. E. Dorchester. No. 1,061,096; May 6; Gaz. vol. 190; p. 183.
Block: *See* Logging or butt chain lead-block; Toy-castle building-block.
Blower. N. E. Funk. No. 1,062,149; May 20; Gaz. vol. 190; p. 617.
Blower for boilers. T. S. Waller. No. 1,060,800; May 6; Gaz. vol. 190; p. 80.
Blower, Water-tube. J. Magee. No. 1,060,923; May 6; Gaz. vol. 190; p. 124.
Board: *See* Metering panel-board; Sounding-board; Washboard; Wood-chopper's footboard.
Boat. G. P. Buttsov. No. 1,061,355; May 13; Gaz. vol. 190; p. 306.
Boat, Collapsible life-. S. Nyboe. No. 1,062,181; May 20; Gaz. vol. 190; p. 628.
Boat, Life-. G. E. Lane. No. 1,063,045; May 27; Gaz. vol. 190; p. 955.
Boat system, Rapid-service life-. M. D. Compton. No. 1,062,637; May 27; Gaz. vol. 190; p. 821.
Bobbin. G. Hambleton. No. 1,061,239; May 6; Gaz. vol. 190; p. 232.
Bobbin. G. H. Benjamin. No. 1,063,174; May 27; Gaz. vol. 190; p. 998.
Bobbin-magazines, Apparatus for facilitating the loading of. B. A. Peterson. No. 1,062,250; May 20; Gaz. vol. 190; p. 652.
Body-rest. G. Wood. No. 1,060,655; May 6; Gaz. vol. 190; p. 31.

Boiler: *See* Egg-boiler; Hot-water and steam boiler; Steam-boiler.
Boiler. S. A. Griffis. No. 1,061,174; May 6; Gaz. vol. 190; p. 209.
Boiler and economizer. P. W. Britts. No. 1,061,444; May 13; Gaz. vol. 190; p. 336.
Boiler-feeder and water-level-maintaining apparatus. T. G. Rakestraw. No. 1,062,115; May 20; Gaz. vol. 190; p. 605.
Boiler-furnace. J. C. Heinrich. No. 1,061,379; May 13; Gaz. vol. 190; p. 314.
Boiler-tube cleaner. F. P. Wilson. No. 1,062,941; May 27; Gaz. vol. 190; p. 922.
Bolt: *See* Anchor-bolt; Stay-bolt.
Bonnet. M. B. Drullard. No. 1,062,991; May 20; Gaz. Vol. 190; p. 562.
Book and pencil holder, Combined. C. W. Colbert. No. 1,061,820; May 13; Gaz. vol. 190; p. 464.
Book-cover-cleaning machine. C. J. Rich. No. 1,062,505; May 20; Gaz. vol. 190; p. 735.
Bookbinding. P. J. Rennlnger. No. 1,061,779; May 13; Gaz. vol. 190; p. 452.
Boom-swinging apparatus. R. M. Wilson. No. 1,062,376; May 20; Gaz vol. 190; p. 693.
Boot and shoe. S. J. Harris. No. 1,062,826; May 27; Gaz. vol. 190; p. 883.
Boots and shoes, Machine for use in the manufacture of. A. L. Russell. No. 1,060,710; May 6; Gaz. vol. 190; p. 51.
Boots and shoes, Pull-protector for. L. C. Wentworth. No. 1,062,751; May 27; Gaz. vol. 190; p. 857.
Boots, Extension-cuff for tops of. H. W. Gehant. No. 1,061,740; May 13; Gaz. vol. 190; p. 441.
Boring-bar. W. E. McEldowney. No. 1,060,926; May 6; Gaz. vol. 190; p. 125.
Bottle. W. Wilson. No. 1,061,794; May 13; Gaz. vol. 190; p. 456.
Bottle. W. Tappenden and C. Schwarz. No. 1,061,882; May 13; Gaz. vol. 190; p. 483.
Bottle, Antirefillable. A. E. Smith and L. Zeglenski. No. 1,062,045; May 20; Gaz. vol. 190; p. 580.
Bottle-cap. H. R. Corey. No. 1,062,820; May 27; Gaz. vol. 190; p. 881.
Bottle-capping machine. F. B. Schuster. No. 1,060,948; May 6; Gaz. vol. 190; p. 133.
Bottle-holder and tray. W. G. Winter. No. 1,061,152; May 6; Gaz. vol. 190; p. 203.
Bottle lining, Milk-. M. G. Seamans. No. 1,061,131; May 6; Gaz. vol. 190; p. 196.
Bottle, Milk-. F. J. Kendrick. No. 1,062,542; May 20; Gaz. vol. 190; p. 746.
Bottle, Non-refillable. F. Anderson. No. 1,060,732; May 6; Gaz. vol. 190; p. 58.
Bottle, Non-refillable. P. J. Herbert. No. 1,061,288; May 13; Gaz. vol. 190; p. 284.
Bottle, Non-refillable. J. Q. Taylor. No. 1,062,517; May 20; Gaz. vol. 190; p. 739.
Bottle, Non-refillable. F. Sullivan. No. 1,062,998; May 27; Gaz. vol. 190; p. 939.
Bottle-opener. O. F. Foster. No. 1,060,674; May 6; Gaz. vol. 190; p. 37.
Bottle shelf or support. S. Sternau and C. Nelson. No. 1,061,337; May 13; Gaz. vol. 190; p. 300.
Bottle-stopper. A. D. Hites and H. R. Van Gorder. No. 1,062,972; May 27; Gaz. vol. 190; p. 931.
Bottles, Packaging. F. Bergen. No. 1,063,154; May 27; Gaz. vol. 190; p. 991.
Bow, Self-riveting non-detachable. H. L. Jeffery. No. 1,062,652; May 27; Gaz. vol. 190; p. 827.
Bowling-alley. P. S. Knapp. No. 1,062,162; May 20; Gaz. vol. 190; p. 621.
Bowling-pin. W. P. Mussey. No. 1,060,932; May 6; Gaz. vol. 190; p. 128.
Box: *See* Balloting-box; Car sand-box; Cash-box; Compression-box; Journal-box; Knockdown box; Lunch-box; Mail-box; Match-box; Metal box; Miter-box; Sound-box; Talking-machine sound-box; Wagon-box.
Box. W. A. Lofland. No. 1,061,619; May 13; Gaz. vol. 190; p. 400.
Box. W. S. Lyon. No. 1,062,834; May 27; Gaz. vol. 190; p. 885.
Box-corner stays, Machine for attaching. M. D. Knowlton. No. 1,061,084; May 6; Gaz. vol. 190; p. 180.
Box-cover fastener. A. Rahotina. No. 1,062,733; May 27; Gaz. vol. 190; p. 851.
Box-nailing machine. E. C. Northrup. No. 1,063,171; May 27; Gaz. vol. 190; p. 997.
Bracket: *See* Curtain-bracket; Electric-light bracket; Shade-bracket; Shade and curtain bracket.
Braided fabric and making it. H. Z. Cobb. (Reissue.) No. 13,568; May 27; Gaz. vol. 190; p. 999.
Brake: *See* Hand and air brake; Hydraulic recoil-brake.
Brake-beam fulcrum. P. T. Handiges. No. 1,062,330; May 20; Gaz. vol. 190; p. 678.
Brake-beams, Third suspension for. G. F. Huntoon. No. 1,060,842; May 6; Gaz. vol. 190; p. 96.
Brake-belt link. I. Coulombe. No. 1,062,442; May 20; Gaz. vol. 190; p. 714.
Brake control, Elevator-. E. L. Gale, Sr. No. 1,060,836; May 6; Gaz. vol. 190; p. 94.
Brake-fastening device, Coaster-. E. Sachs. No. 1,063,069; May 27; Gaz. vol. 190; p. 963.
Brake systems, Slack-adjuster for automatic. W. H. Sauvage. No. 1,062,666; May 27; Gaz. vol. 190; p. 831.
Bread-making plant. C. E. and J. E. Pointon. No. 1,062,795; May 27; Gaz. vol. 190; p. 873.
Bricks with closed ends, Apparatus for manufacturing. W. Schleuning. No. 1,063,071; May 27; Gaz. vol. 190; p. 964.
Bridle-bit. W. S. Tevis, Jr. No. 1,062,747; May 27; Gaz. vol. 190; p. 856.
Broom and cloth hanger, Combined. W. R. Ussery and E. J. Cook. No. 1,061,150; May 6; Gaz. vol. 190; p. 202.
Broom attachment. A. McDonald. No. 1,061,486; May 13; Gaz. vol. 190; p. 352.
Broom-bridle. M. C. Adams. No. 1,060,877; May 6; Gaz. vol. 190; p. 108.
Broom-bridle. A. D. Fiveshilling. No. 1,061,735; May 13; Gaz. vol. 190; p. 440.
Broom-holder. G. Else. No. 1,062,774; May 27; Gaz. vol. 190; p. 865.
Brush. T. M. Ellis. No. 1,061,276; May 13; Gaz. vol. 190; p. 280.
Brush. C. Burger. No. 1,061,814; May 13; Gaz. vol. 190; p. 401.
Brush. R. de Sennevoy. No. 1,062,041; May 20; Gaz. vol. 190; p. 580.
Brush and prophylactic container, Combined tooth-. D. C. Funcke. No. 1,062,961; May 27; Gaz. vol. 190; p. 928.
Brush attachment, Shoe-. J. E. Kenkel. No. 1,063,129; May 27; Gaz. vol. 190; p. 982.
Brush attachment, Tooth-. N. E. Larocque. No. 1,062,480; May 20; Gaz. vol. 190; p. 727.
Brush, Bathing-. J. H. Pride. No. 1,061,566; May 13; Gaz. vol. 190; p. 382.
Brush-cutter. I. H. Olson, T. A. Rorem, and J. H. Hill. No. 1,063,176; May 27; Gaz. vol. 190; p. 999.
Brush holder, Tooth-. W. S. Breeden. No. 1,061,976; May 20; Gaz. vol. 190; p. 558.
Brush, Sanitary shaving-. N. Ellis. No. 1,063,020; May 27; Gaz. vol. 190; p. 946.
Brush, Shampoo-. H. N. Strong. No. 1,062,053; May 20; Gaz. vol. 190; p. 583.
Brush, Tooth-. D. Weiss. No. 1,060,962; May 6; Gaz. vol. 190; p. 139.
Brushes. Manufacture of. H. P. McMillan. No. 1,063,166; May 27; Gaz. vol. 190; p. 995.
Bucket, Automatic coaling-. J. T. Richards. No. 1,062,359; May 20; Gaz. vol. 190; p. 687.
Bucket, Clam-shell. C. C. Williams. No. 1,062,208; May 20; Gaz. vol. 190; p. 637.
Bucket, Hoisting-. A. Wirsing. No. 1,060,730; May 6; Gaz. vol. 190; p. 57.
Bucket, Well-. F. A. Stearns. No. 1,061,136; May 6; Gaz. vol. 190; p. 198.
Bucket, Well-. L. B. Stanton and E. G. Dowda. No. 1,062,196; May 20; Gaz. vol. 190; p. 633.
Buckle. P. J. Kjelden. No. 1,062,715; May 27; Gaz. vol. 190; p. 846.
Buckle and box, Combined. J. Bloch. No. 1,061,954; May 13; Gaz. vol. 190; p. 509.
Buckle and hook, Combination. I. Rod. No. 1,062,798; May 27; Gaz. vol. 190; p. 873.
Buckle, Bale-tie. F. H. McFarland. No. 1,061,860; May 13; Gaz. vol. 190; p. 476.
Buckle, Harness-. E. C. Drake and E. S. Brown. No. 1,061,955; May 13; Gaz. vol. 190; p. 509.
Buffer and draft rigging, Swinging. A. Christianson. No. 1,061,817; May 13; Gaz. vol. 190; p. 462.
Building construction, Metallic. A. W. Crotsly. No. 1,060,745; May 6; Gaz. vol. 190; p. 62.
Bullet, Mushrooming. E. L. Uhl. No. 1,062,865; May 27; Gaz. vol. 190; p. 895.
Bullet, Mushrooming. T. C. Johnson. No. 1,062,919; May 27; Gaz. vol. 190; p. 914.
Bung, Metal. G. E. Mittinger, Jr. No. 1,062,601; May 27; Gaz. vol. 190; p. 809.
Burglar-alarm. O. D. Lankford. No. 1,062,482; May 20; Gaz. vol. 190; p. 728.
Burner: *See* Gas-burner; Hydrocarbon-burner; Liquid-fuel burner; Oil-burner; Petroleum-burner; Stump-burner; Vapor-burner.
Butt-welds, Making. E. Einfeldt. No. 1,062,641; May 27; Gaz. vol. 190; p. 823.
Butter-cutter. E. Balod. No. 1,062,429; May 20; Gaz. vol. 190; p. 710.
Butter-treating apparatus. R. Roos. No. 1,060,688; May 6; Gaz. vol. 190; p. 24.
Button-blank-cutting machine. A. P. Wallace. No. 1,062,672; May 27; Gaz. vol. 190; p. 832.
Button, Cuff-. A. J. Stetler. No. 1,062,049; May 20; Gaz. vol. 190; p. 582.
Button-fastener. J. A. T. Reymond. No. 1,060,944; May 6; Gaz. vol. 190; p. 132.
Buttoning device, Collar-. A. Werner and W. H. Fetter. No. 1,063,092; May 27; Gaz. vol. 190; p. 971.
Cabinet. W. H. Wellver. No. 1,061,646; May 13; Gaz. vol. 190; p. 409.
Cabinet, Dispensing-. S. Wheeler. No. 1,060,725; May 6; Gaz. vol. 190; p. 56.
Cabinet for provisions, Window-. E. N. McColl. No. 1,062,409; May 20; Gaz. vol. 190; p. 704.
Cabinet, Toilet-. A. Gaal. No. 1,062,962; May 27; Gaz. vol. 190; p. 928.
Cable, Forming. F. R. McBerty. No. 1,062,347; May 20; Gaz. vol. 190; p. 683.

Cable-roller. F. N. Bierce. No. 1,061,805; May 13; Gaz. vol. 190; p. 487.
Cable-splice. H. S. Snyder and R. Metz. No. 1,060,644; May 6; Gaz. vol. 190; p. 27.
Cables, Laying submarine power and other electric. A. J. Pahl. No. 1,060,785; May 6; Gaz. vol. 190; p. 75.
Calculating device. S. R. Lamb. (Reissue.) No. 13,569; May 27; Gaz. vol. 190; p. 1000.
Calculating-machine. J. O. Almen. No. 1,060,878; May 6; Gaz. vol. 190; p. 109.
Calculating-machine. H. E. Goldberg. No. 1,061,606; May 13; Gaz. vol. 190; p. 393.
Calculating-machine. J. C. Wahl. No. 1,062,309; May 20; Gaz. vol. 190; p. 672.
Calculating-machine resetting mechanism. F. Stemmler and C. Schaller. No. 1,061,137; May 6; Gaz. vol. 190; p. 198.
Calculator. M. L. Cleary. No. 1,061,810; May 13; Gaz. vol. 190; p. 463.
Calculator, Interest-. J. B. Moody. No. 1,060,997; May 6; Gaz. vol. 190; p. 152.
Calendar. H. E. Shedd. No. 1,061,133; May 6; Gaz. vol. 190; p. 197.
Calipers. A. Johnes. No. 1,061,614; May 13; Gaz. vol. 190; p. 398.
Calk-tongs. J. Caspers. No. 1,061,047; May 6; Gaz. vol. 190; p. 170.
Camera attachment. S. E. Moine. No. 1,062,247; May 20; Gaz. vol. 190; p. 651.
Camera-back. W. F. Folmer. No. 1,060,748; May 6; Gaz. vol. 190; p. 63.
Camera-back, Multiplying. W. F. Folmer. No. 1,061,736; May 13; Gaz. vol. 190; p. 440.
Camera focusing-hood. W. F. Folmer. No. 1,060,884; May 6; Gaz. vol. 190; p. 93.
Camera, Photographic. J. Linder. No. 1,060,610; May 6; Gaz. vol. 190; p. 16.
Camera, Photographic. A. G. Pickard. No. 1,061,115; May 6; Gaz. vol. 190; p. 190.
Camera reel-actuating device. A. R. Whitman. No. 1,062,313; May 20; Gaz. vol. 190; p. 673.
Can: *See* Paper-walled can; Powder-can.
Can. R. H. Kissinger. No. 1,060,767; May 6; Gaz. vol. 190; p. 69.
Can. L. N. Ritten. No. 1,062,118; May 20; Gaz. vol. 190; p. 606.
Can. C. E. Combs. No. 1,062,440; May 20; Gaz. vol. 190; p. 718.
Can holder, Oil-. C. W. Beck. No. 1,060,885; May 6; Gaz. vol. 190; p. 112.
Can opener and closure. J. Fountain. No. 1,061,602; May 13; Gaz. vol. 190; p. 394.
Canceling device, Stamp-. W. Molt. No. 1,061,862; May 13; Gaz. vol. 190; p. 477.
Candle-holder. A. Will. No. 1,061,347; May 13; Gaz. vol. 190; p. 304.
Candlestick, Miner's. F. Pleban. No. 1,061,948; May 13; Gaz. vol. 190; p. 507.
Candy-making device. P. Panoulias. No. 1,062,661; May 27; Gaz. vol. 190; p. 829.
Cane mill, Sugar-. A. F. Ewart. No. 1,061,535; May 13; Gaz. vol. 190; p. 370.
Caoutchouc and manufacturing same, Filler for. L. Elfrink. No. 1,062,958; May 27; Gaz. vol. 190; p. 927.
Caoutchouc-like substance and making same. F. Hofmann, C. Coutelle, K. Delbrück, and K. Meisenburg. No. 1,062,828; May 27; Gaz. vol. 190; p. 883.
Caoutchouc-like substance and making same. F. Hofmann, C. Coutelle, K. Delbrück, and K. Meisenburg. No. 1,062,912; May 27; Gaz. vol. 190; p. 912.
Caoutchouc substance and making same. F. Hofmann, C. Coutelle, K. Delbrück, and K. Meisenburg. No. No. 1,062,913; May 27; Gaz. vol. 190; p. 912.
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Cap. J. Tim. No. 1,061,884; May 13; Gaz. vol. 190; p. 484.
Capsules, Device for closing tablet-. W. Simon. No. 1,062,368; May 20; Gaz. vol. 190; p. 690.
Car body and truck locking device. J. M. Coleman. No. 1,061,984; May 20; Gaz. vol. 190; p. 560.
Car, Box-. W. E. Fowler. (Reissue.) No. 13,561; May 13; Gaz. vol. 190; p. 512.
Car, Combination stock and box. E. R. Haymes. No. 1,060,981; May 6; Gaz. vol. 190; p. 146.
Car construction, Metal underframe for. W. C. Gregg. No. 1,062,153; May 20; Gaz. vol. 190; p. 619.
Car controller, Street-. C. and J. G. Munson. No. 1,062,791; May 27; Gaz. vol. 190; p. 871.
Car-coupling, Automatic. J. F. Robertson. No. 1,061,406; May 13; Gaz. vol. 190; p. 324.
Car coupling, Mining-. J. Dubois, S. Novario, and J. B. Jones. No. 1,062,823; May 27; Gaz. vol. 190; p. 882.
Car door, Grain-. H. H. King. No. 1,062,476; May 20; Gaz. vol. 190; p. 726.
Car-door hanger, Freight-. J. J. Long. No. 1,062,599; May 27; Gaz. vol. 190; p. 808.
Car-door-operating mechanism, Hopper-. A. Campbell. No. 1,062,385; May 20; Gaz. vol. 190; p. 696.
Car-door, Sectional. G. Thompson. No. 1,062,057; May 20; Gaz. vol. 190; p. 585.
Car, Dump-. S. Otis. No. 1,061,004; May 6; Gaz. vol. 190; p. 154.
Car, Dumping-. A. Christianson. No. 1,061,818; May 13; Gaz. vol. 190; p. 463.
Car, Dumping-. G. A. Minetty. No. 1,062,353; May 20; Gaz. vol. 190; p. 685.
Car-fender. J. Schneider. No. 1,061,019; May 6; Gaz. vol. 190; p. 159.
Car-fender. J. R. Lilley. No. 1,061,245; May 6; Gaz. vol. 190; p. 234.
Car-fender. M. J. Woznack. No. 1,061,488; May 13; Gaz. vol. 190; p. 334.
Car-fender. W. T. Watson. No. 1,062,526; May 20; Gaz. vol. 190; p. 741.
Car-floor construction. W. E. Fowler, Sr. No. 1,062,701; May 27; Gaz. vol. 190; p. 842.
Car-framework. E. Posson. No. 1,062,731; May 27; Gaz. vol. 190; p. 851.
Car-framework. E. Posson. No. 1,062,732; May 27; Gaz. vol. 190; p. 851.
Car friction draft-rigging, Railway-. J. F. O'Connor. No. 1,060,698; May 6; Gaz. vol. 190; p. 47.
Car, Hopper-. F. L. Irwin and J. E. Tesseyman. No. 1,062,237; May 20; Gaz. vol. 190; p. 647.
Car, Hopper-bottom. A. Campbell. No. 1,062,384; May 20; Gaz. vol. 190; p. 696.
Car hose-coupling, Railway-. W. Gambonl. No. 1,061,908; May 13; Gaz. vol. 190; p. 491.
Car-inspection device, Grain-. B. F. Owens. No. 1,063,135; May 27; Gaz. vol. 190; p. 935.
Car-loader. J. A. Lindgren. No. 1,062,485; May 20; Gaz. vol. 190; p. 729.
Car-lock, Registering. G. Daniel and E. G. Lewis. No. 1,062,539; May 20; Gaz. vol. 190; p. 745.
Car metal underframe construction. W. P. Bettendorf. No. 1,062,690; May 27; Gaz. vol. 190; p. 838.
Car, Passenger-. P. N. Jones. No. 1,061,750; May 13; Gaz. vol. 190; p. 444.
Car, Pole dumping-. L. Dye. No. 1,062,956; May 27; Gaz. vol. 190; p. 927.
Car-replacer. A. L. Calhoun. No. 1,060,584; May 6; Gaz. vol. 190; p. 7.
Car-roof. H. A. Christy. No. 1,061,268; May 13; Gaz. vol. 190; p. 277.
Car safety attachment, Freight-. T. Rivard. No. 1,062,255; May 20; Gaz. vol. 190; p. 653.
Car sand-box, Street-. T. J. Delaney. No. 1,063,019; May 27; Gaz. vol. 190; p. 946.
Car side frame, Railway-. A. J. Bates. No. 1,062,316; May 20; Gaz. vol. 190; p. 674.
Car-step, Adjustable. J. H. Vaughan. No. 1,062,523; May 20; Gaz. vol. 190; p. 741.
Car-step, Folding. E. B. Mayhew. No. 1,062,346; May 20; Gaz. vol. 190; p. 683.
Car stopper and starter. E. H. Pugh. No. 1,061,567; May 13; Gaz. vol. 190; p. 382.
Car-underframe. W. P. Bettendorf. No. 1,061,351; May 13; Gaz. vol. 190; p. 305.
Car-underframe. J. M. Rohling. No. 1,061,501; May 13; Gaz. vol. 190; p. 357.
Car underframe, Dumping-. W. P. Bettendorf. No. 1,062,689; May 27; Gaz. vol. 190; p. 838.
Car wheel, Mine-. F. C. Hoeksmith. No. 1,061,746; May 13; Gaz. vol. 190; p. 443.
Car-wheels, Manufacture of. J. M. Hansen. No. 1,061,284; May 13; Gaz. vol. 190; p. 282.
Cars and the like, Wind-screen for motor-. W. T. Jolliffe. No. 1,062,402; May 20; Gaz. vol. 190; p. 701.
Cars, Angle-cock holder for railway-. L. A. Hoerr. No. 1,060,762; May 6; Gaz. vol. 190; p. 68.
Cars, Trip-stanchion for logging-. Y. L. Morris. No. 1,061,196; May 6; Gaz. vol. 190; p. 217.
Carbon for carbon filaments, Purifying. J. Billiter. No. 1,062,481; May 20; Gaz. vol. 190; p. 711.
Carbureter. G. A. Clement. No. 1,061,582; May 13; Gaz. vol. 190; p. 387.
Carbureter. J. W. Mowbray. No. 1,061,626; May 13; Gaz. vol. 190; p. 402.
Carbureter. E. Gobbi. No. 1,061,835; May 13; Gaz. vol. 190; p. 468.
Carbureter. C. F. Erickson. No. 1,061,995; May 20; Gaz. vol. 190; p. 563.
Carbureter. C. H. Myers. No. 1,062,180; May 20; Gaz. vol. 190; p. 627.
Carbureter. E. R. Conklin. No. 1,062,273; May 20; Gaz. vol. 190; p. 659.
Carbureter. W. H. C. Higgins, Jr. No. 1,062,333; May 20; Gaz. vol. 190; p. 679.
Carbureter. C. L. Bastian. No. 1,062,688; May 27; Gaz. vol. 190; p. 837.
Carbureter. W. Heidelmann. No. 1,063,030; May 27; Gaz. vol. 190; p. 950.
Carbureter. R. M. Anderson. No. 1,063,148; May 27; Gaz. vol. 190; p. 989.
Carbureting apparatus. F. C. Lynde. No. 1,062,981; May 27; Gaz. vol. 190; p. 934.
Card deck, Playing-. J. P. Bryan. No. 1,062,952; May 27; Gaz. vol. 190; p. 925.
Card-exhibiting device. R. R. Whiting. No. 1,062,068; May 20; Gaz. vol. 190; p. 588.
Card holder, Title-. C. C. Lynch. No. 1,060,990; May 6; Gaz. vol. 190; p. 150.

Card-punching machine. S. B. Tily, J. G. and M. O. Refuss. No. 1,061,883; May 13; Gaz. vol. 190; p. 483.
Card, Trick-. G. W. Walter. No. 1,061,576; May 13; Gaz. vol. 190; p. 385.
Cards for games. A. M. Lockett. No. 1,061,092; May 6; Gaz. vol. 190; p. 182.
Cards, Playing-. O. D. Lewis. No. 1,062,720; May 27; Gaz. vol. 190; p. 848.
Carding machine, Fabric-sample-. P. Rotter and H. M. Smith. No. 1,062,607; May 27; Gaz. vol. 190; p. 811.
Carpet-cleaner. G. Klumpp. No. 1,063,183; May 27; Gaz. vol. 190; p. 994.
Carriage-top. J. B. Ambler. No. 1,061,031; May 6; Gaz. vol. 190; p. 164.
Carrier: *See* Automobile number-carrier.
Carrier system. B. C. Batcheller. No. 1,061,036; May 6; Gaz. vol. 190; p. 166.
Carrier system. B. C. Batcheller. No. 1,061,214; May 6; Gaz. vol. 190; p. 223.
Carrier-system transit-tubing. B. C. Batcheller. No. 1,061,035; May 6; Gaz. vol. 190; p. 165.
Cartridge. R. G. Clyne. No. 1,060,817; May 6; Gaz. vol. 190; p. 87.
Cartridge. R. G. Clyne. No. 1,060,818; May 6; Gaz. vol. 190; p. 87.
Cartridge, Gun-operating. J. D. Pedersen. No. 1,062,604; May 27; Gaz. vol. 190; p. 810.
Case: *See* Egg-case; Filing-case; Letter-case; Necktie-case; Pencil-case; Type-case.
Cash-box. S. Thomas. No. 1,061,145; May 6; Gaz. vol. 190; p. 201.
Cash-register. W. G. Chambers. No. 1,062,767; May 27; Gaz. vol. 190; p. 863.
Cash-register with a single set of keys. R. T. Pisciceili. No. 1,061,924; May 13; Gaz. vol. 190; p. 498.
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Chuck. B. Cock. No. 1,062,223; May 20; Gaz. vol. 190; p. 642.
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Cigar holder and mouthpiece, Concealed. J. O. Smith. No. 1,061,696; May 13; Gaz. vol. 190; p. 427.
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Circuit-controlling device, Thermal. G. A. Adam. No. 1,063,101; May 27; Gaz. vol. 190; p. 974.
Circuits, Tie-wire for high-voltage. J. Cronin. No. 1,061,823; May 13; Gaz. vol. 190; p. 465.
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Clamp. I. G. Huston. No. 1,061,178; May 6; Gaz. vol. 190; p. 211.
Clarinet. R. E. Riday. No. 1,060,946; May 6; Gaz. vol. 190; p. 132.
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Cloth-cutting machine. G. Scott. No. 1,061,782; May 13; Gaz. vol. 190; p. 453.
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Clothes-drier and curtain-stretcher, Combined. F. Hunyady. No. 1,062,100; May 20; Gaz. vol. 190; p. 600.
Clothes-line holder. W. E. Hadley. No. 1,062,457; May 20; Gaz. vol. 190; p. 719.
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Clutch. L. E. Clémencet. No. 1,061,048; May 6; Gaz. vol. 190; p. 170.

Clutch. A. U. Mershon. No. 1,062,491; May 20; Gaz. vol. 190; p. 731.
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Coal, Hand-machine to undermine. A. Roe. No. 1,062,854; May 27; Gaz. vol. 190; p. 892.
Coal-hopper for windows and the like. W. H. Taylor. No. 1,061,427; May 13; Gaz. vol. 190; p. 331.
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Cock and steam-chest relief-valve, Cylinder-. J. R. McCumber and T. G. Fulcher. No. 1,063,164; May 27; Gaz. vol. 190; p. 994.
Cock or valve for vacuum pipe systems, Stop-. O. Schaller. No. 1,060,791; May 6; Gaz. vol. 190; p. 77.
Coin-chute. G. A. Long. No. 1,061,093; May 6; Gaz. vol. 190; p. 182.
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Coloring-machine for apertures in belts and similar articles. R. Scheuer. No. 1,062,257; May 20; Gaz. vol. 190; p. 654.
Coloring-matters of the anthraquinone series. M. H. Isler. No. 1,062,975; May 27; Gaz. vol. 190; p. 932.
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Comb and tooth-brush holder, Combination. J. H. Freese. No. 1,061,831; May 13; Gaz. vol. 190; p. 467.
Commode. J. W. Sprint. No. 1,061,879; May 13; Gaz. vol. 190; p. 482.
Commutator. W. G. Viall. No. 1,060,722; May 6; Gaz. vol. 190; p. 55.
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Compasses. J. J. Iacovino. No. 1,061,846; May 13; Gaz. vol. 190; p. 471.
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Compression-retractor. R. W. Binney. No. 1,060,738; May 6; Gaz. vol. 190; p. 60.
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Concentrating, drying, and crystallizing apparatus. M. Prager. No. 1,062,030; May 20; Gaz. vol. 190; p. 576.
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Concrete blocks, Apparatus for forming. A. B. and O. L. Pinney. No. 1,061,117; May 6; Gaz. vol. 190; p. 192.
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Concrete-mixer. G. A. Tuerk. No. 1,062,936; May 27; Gaz. vol. 190; p. 920.
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Condenser, Electrical. E. A. Bayles. No. 1,063,105; May 27; Gaz. vol. 190; p. 975.
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Confectionery-coating apparatus. J. W. Haythornthwaite. No. 1,063,029; May 27; Gaz. vol. 190; p. 950.
Connector. B. G. Jamieson and C. A. Keller. No. 1,060,600; May 6; Gaz. vol. 190; p. 12.
Controller-regulator. C. P. Ebersole. No. 1,061,055; May 6; Gaz. vol. 190; p. 172.
Controlling apparatus. W. G. Blanvelt and E. C. Molina. No. 1,061,519; May 13; Gaz. vol. 190; p. 364.
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Conveyer. J. H. Michener, Jr. No. 1,061,394; May 13; Gaz. vol. 190; p. 319.
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Cooker. L. W. Stein. No. 1,060,864; May 6; Gaz. vol. 190; p. 104.
Cooker. W. C. Anderson and A. R. Thompson. No. 1,062,379; May 20; Gaz. vol. 190; p. 694.
Cooking and domestic utensil heated by electricity. J. Mann. No. 1,062,344; May 20; Gaz. vol. 190; p. 688.
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Copper, Tempering. W. H. White. No. 1,062,067; May 20; Gaz. vol. 190; p. 588.
Copy-holder. W. E. Smith. No. 1,060,795; May 6; Gaz. vol. 190; p. 78.
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Corn-popper and peanut-roaster, Combined. F. C. Grob. No. 1,061,603; May 13; Gaz. vol. 190; p. 396.
Corn rack and stand, Seed-. L. W. Klug. No. 1,062,242; May 20; Gaz. vol. 190; p. 648.
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Cranking device, Automatic. C. H. Brown. No. 1,061,595; May 13; Gaz. vol. 190; p. 391.
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Crusher. B. W. Traylor. No. 1,062,520; May 20; Gaz. vol. 190; p. 740.
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Culvert-mold. J. F. Peck. No. 1,061,491; May 13; Gaz. vol. 190; p. 353.
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Cupola-furnace. W. N. Best. No. 1,061,158; May 6; Gaz. vol. 190; p. 204.
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Engines, Stripping roller of carding-. J. Edge. No. 1,061,167; May 6; Gaz. vol. 190; p. 206.
Envelop. W. Radcliff. No. 1,062,851; May 27; Gaz. vol. 190; p. 891.
Envelop-fastener. M. Vierengel. No. 1,061,341; May 13; Gaz. vol. 190; p. 302.
Envelop-machine-feeding mechanism. F. L. Schmidt. No. 1,063,140; May 27; Gaz. vol. 190; p. 986.
Envelop-machines, Imprinting attachment of. P. J. Dansereau. No. 1,062,895; May 27; Gaz. vol. 190; p. 906.
Envelop-manufacturing machine. R. M. Decker. No. 1,062,954; May 27; Gaz. vol. 190; p. 926.
Envelop, Safety-. F. Hoffmann. No. 1,061,077; May 6; Gaz. vol. 190; p. 178.
Erasers, Apparatus for cleaning chalk-board. T. Wallace. No. 1,062,311; May 20; Gaz. vol. 190; p. 672.
Evaporating apparatus. P. Kestner. No. 1,060,607; May 6; Gaz. vol. 190; p. 15.
Excavators, Gate-opening device for. A. J. Schardinger and P. J. Doyle. No. 1,062,038; May 20; Gaz. vol. 190; p. 579.
Explosion-engine. C. L. Cook. No. 1,062,323; May 20; Gaz. vol. 190; p. 676.
Explosion-motor. J. Vollmer. No. 1,062,132; May 20; Gaz. vol. 190; p. 611.
Explosive. S. A. G. Nauckhoff. No. 1,061,774; May 13; Gaz. vol. 190; p. 450.
Explosive-engine. H. E. Coffin. No. 1,060,819; May 6; Gaz. vol. 190; p. 87.
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Explosive-engine and valve-gear for same. E. S. Reiland. No. 1,060,629; May 6; Gaz. vol. 190; p. 23.
Explosive volatile liquids, Commercial package for. H. B. French. No. 1,062,565; May 20; Gaz. vol. 190; p. 754.
Extension-table. C. S. Burton. No. 1,062,884; May 27; Gaz. vol. 190; p. 902.
Extractor: *See* Cork-extractor; Nail-extractor; Weed-extractor.
Eyeglasses and spectacles, Frame for. I. Fox. No. 1,062,777; May 27; Gaz. vol. 190; p. 866.
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Fabrics with liquids, Apparatus for treating. W. Matheius and M. Freiberger. No. 1,062,245; May 20; Gaz. vol. 190; p. 650.
Fan or pump, Centrifugal. W. Hessling. No. 1,062,006; May 20; Gaz. vol. 190; p. 568.
Fare-collecting apparatus. C. H. Woods. No. 1,062,134; May 20; Gaz. vol. 190; p. 612.
Fare-register-operating mechanism. J. F. Ohmer. (Reissue.) No. 13,566; May 20; Gaz. vol. 190; p. 764.
Fastener suitable for show-cases and other purposes. J. S. Bruce. No. 1,062,763; May 27; Gaz. vol. 190; p. 862.
Fastening device. P. Wineman. No. 1,060,726; May 6; Gaz. vol. 190; p. 56.
Fastening device. L. H. Arens. No. 1,062,075; May 20; Gaz. vol. 190; p. 591.
Fastening device. A. F. Dixon. No. 1,062,145; May 20; Gaz. vol. 190; p. 616.
Faucet. J. A. Petro. No. 1,062,112; May 20; Gaz. vol. 190; p. 604.
Faucet, Antiscald-. J. R. Boutell. No. 1,061,975; May 20; Gaz. vol. 190; p. 557.
Faucet, Automatic registering-. H. W. Ritchey. No. 1,062,035; May 20; Gaz. vol. 190; p. 578.
Faucet, Automatic self-closing compound mixing-. J. G. Huye. No. 1,061,293; May 13; Gaz. vol. 190; p. 285.
Faucet for bottles, Self-venting. W. E. Soper. No. 1,062,615; May 27; Gaz. vol. 190; p. 815.
Feed-mixer. J. A. Craig. No. 1,061,987; May 20; Gaz. vol. 190; p. 561.
Feed-mixer. E. S. Dixon and H. E. Werner. No. 1,062,086; May 20; Gaz. vol. 190; p. 596.
Feed-regulator. W. L. Dines, Jr. No. 1,061,731; May 13; Gaz. vol. 190; p. 438.
Feed-water heater and purifier. D. McDonald. No. 1,063,132; May 27; Gaz. vol. 190; p. 984.
Feed-water purifying compounds, Heating and feeding apparatus for. S. E. Buck. No. 1,063,116; May 27; Gaz. vol. 190; p. 979.
Feeder and mixer, Adjustable. J. L. Williford. No. 1,061,848; May 13; Gaz. vol. 190; p. 304.
Feeder, Calf-. J. Moore. No. 1,062,657; May 27; Gaz. vol. 190; p. 828.
Feeder, Stock-. S. F. Webb. No. 1,061,710; May 13; Gaz. vol. 190; p. 434.
Feeding mechanism. W. G. Kirchhoff. No. 1,061,753; May 13; Gaz. vol. 190; p. 445.
Felt, Endless. A. H. Bogani and W. E. Sheehan. No. 1,062,877; May 27; Gaz. vol. 190; p. 900.
Fence-post. D. J. McGill. No. 1,061,097; May 6; Gaz. vol. 190; p. 184.
Fence-post. F. F. Tobias. No. 1,063,142; May 27; Gaz. vol. 190; p. 987.
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Fertilizer-distributer. C. H. Pelton. No. 1,061,400; May 13; Gaz. vol. 190; p. 322.
Fertilizer, Manufacturing an ammonium superphosphate. T. L. Willson and M. M. Haff. No. 1,062,869; May 27; Gaz. vol. 190; p. 897.
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Fibers, Treating vegetable. R. R. Roberts. No. 1,062,187; May 20; Gaz. vol. 190; p. 630.
Figure, Moving-eye. C. M. Daig and G. A. Weidhaas. No. 1,061,965; May 13; Gaz. vol. 190; p. 512.

Filaments, Forming-machine for tungsten. J. W. Howell. No. 1,062,281; May 20; Gaz. vol. 190; p. 662.
File. O. G. Simmons. No. 1,063,076; May 27; Gaz. vol. 190; p. 965.
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Filing-case. E. C. Ward. No. 1,062,673; May 27; Gaz. vol. 190; p. 833.
Filing-machine. J. Seweryn. No. 1,060,951; May 6; Gaz. vol. 190; p. 135.
Film apparatus. B. Day. No. 1,060,892; May 6; Gaz. vol. 190; p. 114.
Film-frame apparatus. B. Day. No. 1,063,015; May 27; Gaz. vol. 190; p. 945.
Film-frame apparatus. B. Day. No. 1,063,016; May 27; Gaz. vol. 190; p. 945.
Film-perforating machine, Adjustable. E. Schneider. No. 1,062,932; May 27; Gaz. vol. 190; p. 918.
Filter. G. M. Kneuper. No. 1,061,755; May 13; Gaz. vol. 190; p. 445.
Filter. E. Seavey. No. 1,061,928; May 13; Gaz. vol. 190; p. 490.
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Filter-plant. E. C. Wiley. No. 1,060,870; May 6; Gaz. vol. 190; p. 106.
Filter, Self-cleaning. F. E. Pendleton. No. 1,062,793; May 27; Gaz. vol. 190; p. 872.
Filter trap, Gasolene-. F. L. Hitchcock. No. 1,062,236; May 20; Gaz. vol. 190; p. 646.
Filtering material. W. L. Gilliam. No. 1,061,368; May 13; Gaz. vol. 190; p. 311.
Fire-alarm, Electric. L. J. Loeffler. No. 1,061,763; May 13; Gaz. vol. 190; p. 447.
Fire-alarm, Electric. H. Barditzky. No. 1,062,137; May 20; Gaz. vol. 190; p. 613.
Fire apparatus, Piston-pump for automobile. A. C. Webb. No. 1,061,511; May 13; Gaz. vol. 190; p. 360.
Fire-dog. J. W. Kinard. No. 1,060,686; May 6; Gaz. vol. 190; p. 42.
Fire-escape apparatus. T. Boldizzoni. No. 1,060,969; May 6; Gaz. vol. 190; p. 141.
Fire-extinguisher. S. L. Harwood. No. 1,062,463; May 20; Gaz. vol. 190; p. 721.
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Fireplace. M. V. Arnold. No. 1,061,718; May 13; Gaz. vol. 190; p. 434.
Fireproof arch. P. H. Bevier. No. 1,063,005; May 27; Gaz. vol. 190; p. 941.
Fish-trap. J. E. Pharo and W. S. Benjamin. No. 1,062,849; May 27; Gaz. vol. 190; p. 891.
Fishing-reel, Automatic. M. H. McCluer and A. C. Munn. No. 1,062,488; May 20; Gaz. vol. 190; p. 730.
Fixture-coupling. A. Polacheck. No. 1,062,664; May 27; Gaz. vol. 190; p. 830.
Flag and staff. P. W. Pratt. No. 1,062,850; May 27; Gaz. vol. 190; p. 891.
Flag-halyards cleat and carrier. J. J. Buckley. No. 1,061,042; May 6; Gaz. vol. 190; p. 169.
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Flushing apparatus. E. Kersey. No. 1,061,548; May 13; Gaz. vol. 190; p. 375.
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Fly-trap. D. L. Buck. No. 1,062,663; May 27; Gaz. vol. 190; p. 820.
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Foot-warmer. I. Smith. No. 1,060,642; May 6; Gaz. vol. 190; p. 26.
Foot-warmer. J. Philipcik, Jr. No. 1,062,925; May 27; Gaz. vol. 190; p. 914.
Forging-press. H. Haiss. No. 1,061,839; May 13; Gaz. vol. 190; p. 469.
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Gas-cleaner. A. Ernst. No. 1,062,446; May 20; Gaz. vol. 190; p. 715.
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Gas-synthesizing device. W. Siebert. No. 1,061,786; May 13; Gaz. vol. 190; p. 454.
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Gate. A. O. Quinby. No. 1,060,857; May 6; Gaz. vol. 190; p. 102.
Gate. J. Carroll. No. 1,061,448; May 13; Gaz. vol. 190; p. 337.
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Gear-wheel. J. Miller. No. 1,061,770; May 13; Gaz. vol. 190; p. 449.
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Grading-machine. R. Waterman. No. 1,060,652; May 6; Gaz. vol. 190; p. 30.
Grain-cleaner. C. L. Amen. No. 1,061,971; May 20; Gaz. vol. 190; p. 556.

Grain-drill. O. G. Rieske. No. 1,061,499; May 13; Gaz. vol. 190; p. 356.
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Grain unloader and elevator, Automatic. C. F. Wall. No. 1,062,205; May 20; Gaz. vol. 190; p. 636.
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Handle. M. W. Pitner. No. 1,060,856; May 6; Gaz. vol. 190; p. 102.
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Harness-hanger. T. O. Frazier. No. 1,061,366; May 13; Gaz. vol. 190; p. 310.
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Heater. W. R. Jeavons. No. 1,061,079; May 6; Gaz. vol. 190; p. 179.
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Hinge, Floor spring-. O. Katzenberger. No. 1,063,128; May 27; Gaz. vol. 190; p. 982.
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Hook. H. P. Schulte. No. 1,062,365; May 20; Gaz. vol. 190; p. 690.
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Hook-and-eye fastening. M. Froesé. No. 1,060,890; May 6; Gaz. vol. 190; p. 117.
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Hoop-making machine, Barrel-. E. F. Beugler. No. 1,062,874; May 27; Gaz. vol. 190; p. 898.
Hopper, Charging-. G. M. S. Tait. No. 1,061,703; May 13; Gaz. vol. 190; p. 420.
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Horse-rake. E. Wick. No. 1,061,649; May 13; Gaz. vol. 190; p. 410.
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Hub and axle connection. T. J. Cupstid. No. 1,062,226; May 20; Gaz. vol. 190; p. 643.
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Humidity-controlling apparatus. J. H. Brady. No. 1,062,269; May 20; Gaz. vol. 190; p. 658.
Humidostat. L. F. Perkett. No. 1,060,786; May 6; Gaz. vol. 190; p. 75.
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Hydrocarbon-burner. F. J. Nice. No. 1,061,627; May 13; Gaz. vol. 190; p. 402.
Hydrocarbon-burning furnace. J. Snedden. No. 1,063,077; May 27; Gaz. vol. 190; p. 966.
Hydrocycle. M. L. Osofs and M. R. Slutzky. No. 1,060,620; May 6; Gaz. vol. 190; p. 20.
Ice-cream-cone-filling device. B. T. Wilson and W. F. Ratcliff. No. 1,062,940; May 27; Gaz. vol. 190; p. 921.
Ice-manufacturing apparatus. W. E. Armistead. No 1,062,530; May 20; Gaz. vol. 190; p. 743.
Ignition device. A. S. Kiefer. No. 1,060,906; May 6; Gaz. vol. 190; p. 119.
Illuminating appliance. O. A. Mygatt. No. 1,061,000; May 6; Gaz. vol. 190; p. 153.
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Ingot. E. Gathmann. No. 1,061,467; May 13; Gaz. vol. 190; p. 345.
Inhaling apparatus. O. Walker. No. 1,062,750; May 27; Gaz. vol. 190; p. 857.
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Inseam-trimming machine. H. A. Ballard. No. 1,062,756; May 27; Gaz. vol. 190; p. 859.
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Insects and their eggs, Destroying. J. W. Blosser. No. 1,061,443; May 13; Gaz. vol. 190; p. 336.
Insole. G. Coleman. No. 1,062,536; May 20; Gaz. vol. 190; p. 744.
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Insulator. J. E. Bicknell. No. 1,060,886; May 6; Gaz. vol. 190; p. 112.
Insulator. H. R. Markel. No. 1,061,620; May 13; Gaz. vol. 190; p. 400.
Internal-combustion engine. C. E. Sargent. No. 1,061,249; May 6; Gaz. vol. 190; p. 235.
Internal-combustion engine. J. C. Pealer. No. 1,061,923; May 13; Gaz. vol. 190; p. 497.
Internal-combustion engine. W. G. Thummel. No. 1,062,308; May 20; Gaz. vol. 190; p. 671.
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Interrupter. L. J. Flint. No. 1,062,090; May 20; Gaz. vol. 190; p. 597.
Invalid lifter and carrier. W. A. Allen. No. 1,061,715; May 13; Gaz. vol. 190; p. 433.
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Irrigating implement, Subsoil-. J. A. La Rue. No. 1,062,169; May 20; Gaz. vol. 190; p. 623.
Jack: *See* Floor-jack; Lifting-jack.
Jack-spool. J. C. Hebden. No. 1,062,005; May 20; Gaz. vol. 190; p. 567.
Jewelry. A. Spaney and J. W. Mayer. No. 1,062,804; May 27; Gaz. vol. 190; p. 875.
Jig. H. P. Altman. No. 1,061,581; May 13; Gaz. vol. 190; p. 387.
Jock-strap. A. Quenzer. No. 1,063,062; May 27; Gaz. vol. 190; p. 960.
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Joints of the hands, Apparatus for promoting the flexibility of the. H. Ostrovsky. No. 1,061,003; May 6; Gaz. vol. 190; p. 154.
Jointing device. W. H. Greenleaf, Jr., and P. P. Moore. No. 1,062,456; May 20; Gaz. vol. 190; p. 719.
Journal-bearing. H. Hess. No. 1,062,649; May 27; Gaz. vol. 190; p. 826.
Journal-box. J. W. Stephenson and L. B. Wilson. No. 1,061,507; May 13; Gaz. vol. 190; p. 359.
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Journal-box lid. C. A. Swallow. No. 1,062,054; May 20; Gaz. vol. 190; p. 583.
Juice and pulp extractor, Orange and lemon. F. S. Fiske. No. 1,061,734; May 13; Gaz. vol. 190; p. 439.
Key-puller. J. O. Wilson. No. 1,060,872; May 6; Gaz. vol. 190; p. 107.
Key-ring and key-retainer. C. C. Messmer. No. 1,061,393; May 13; Gaz. vol. 190; p. 319.
Key-seating-machine cutter. T. G. Frederick. No. 1,060,749; May 6; Gaz. vol. 190; p. 64.
Keyhole-closer. G. Petersen. No. 1,061,866; May 13; Gaz. vol. 190; p. 479.
Kiln: *See* Cement-kiln; Tubular kiln.
Kiln. E. R. Sutcliffe. No. 1,061,952; May 13; Gaz. vol. 190; p. 508.
Kitchen appliance. M. Steineke. No. 1,062,304; May 20; Gaz. vol. 190; p. 670.
Knickerbockers, Boy's. M. H. Zimmerman. No. 1,062,628; May 27; Gaz. vol. 190; p. 818.
Knife: *See* Cotton-knife; Skinning-knife.
Knitted web and making same, Ribbed. R. W. Scott. No. 1,062,367; May 20; Gaz. vol. 190; p. 690.
Knitting-machine. B. T. Steber. No. 1,062,557; May 20; Gaz. vol. 190; p. 751.
Knitting machine, Circular-. J. Black. No. 1,062,875; May 27; Gaz. vol. 190; p. 899.

Knitting-machine needle. R. W. Scott. No. 1,062,366; May 20; Gaz. vol. 190; p. 690.
Knitting-machine thread-changing mechanism. E. A. Hirner. No. 1,062,911; May 27; Gaz. vol. 190; p. 911.
Knitting-machine web receiver and take-up mechanism. H. Swingleburst. No. 1,061,024; May 6; Gaz. vol. 190; p. 162.
Knob fastener, Door-. O. N. Howerton. No. 1,061,844; May 13; Gaz. vol. 190; p. 471.
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Labeling-machine, Gravitation. A. B. Ainsworth. No. 1,062,267; May 20; Gaz. vol. 190; p. 657.
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Ladder for cars. H. H. Schroyer. No. 1,062,191; May 20; Gaz. vol. 190; p. 631.
Ladder, Freight-car. W. A. Mitchell. No. 1,061,100; May 6; Gaz. vol. 190; p. 185.
Ladder, Freight-car. D. R. MacBain. No. 1,063,048; May 27; Gaz. vol. 190; p. 956.
Ladle-runner. E. L. Ford. No. 1,061,280; May 13; Gaz. vol. 190; p. 281.
Lamp. H. N. Kerr. No. 1,062,340; May 20; Gaz. vol. 190; p. 681.
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Lamp-burner attachment. C. H. Fredrick. No. 1,063,022; May 27; Gaz. vol. 190; p. 947.
Lamp, Electric-arc. A. G. Way. No. 1,062,809; May 27; Gaz. vol. 190; p. 877.
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Lamp, Incandescent electric. R. Jahida. No. 1,063,035; May 27; Gaz. vol. 190; p. 952.
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Lamp, Portable hand electric. A. C. Recker. No. 1,062,117; May 20; Gaz. vol. 190; p. 606.
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Lantern. P. J. Rooney. No. 1,062,037; May 20; Gaz. vol. 190; p. 578.
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Latch, Door-. H. Smith. No. 1,061,878; May 13; Gaz. vol. 190; p. 482.
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Leg, Artificial. S. R. Anderson. No. 1,063,175; May 27; Gaz. vol. 190; p. 998.
Legging. T. Burberry. No. 1,061,163; May 6; Gaz. vol. 190; p. 205.
Legging and thigh-covering, Combined. E. B. Nathan. No. 1,061,317; May 13; Gaz. vol. 190; p. 294.
Lemon-grader. R. B. Farrar and B. C. Leighton. No. 1,062,775; May 27; Gaz. vol. 190; p. 865.
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Lens-grinding machines, Bearing for. F. Zettel. No. 1,061,030; May 6; Gaz. vol. 190; p. 164.
Lens-support. W. T. Field, C. E. Jones, and F. T. Field. No. 1,062,540; May 20; Gaz. vol. 190; p. 745.
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Leveling instrument. G. A. Jenning. No. 1,060,602; May 6; Gaz. vol. 190; p. 13.
Lever lock, Gear-shifting-. O. W. Hahn. No. 1,061,938; May 13; Gaz. vol. 190; p. 503.
Life-detecting apparatus. P. J. Backus. No. 1,061,802; May 13; Gaz. vol. 190; p. 458.
Life-preserver. K. Brauer. No. 1,060,889; May 6; Gaz. vol. 190; p. 113.
Life-preserver and pillow. S. P. Edmonds. No. 1,061,275; May 13; Gaz. vol. 190; p. 279.
Life-preserver suit. J. W. Buchanan. No. 1,062,435; May 20; Gaz. vol. 190; p. 711.
Life-saving device. W. M. White. No. 1,061,209; May 6; Gaz. vol. 190; p. 222.
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Lifter: *See* Invalid-lifter.
Lifting appliance. B. Hausmann. No. 1,062,971; May 27; Gaz. vol. 190; p. 931.
Lifting heavy weights, Mechanism for. F. W. Cohen and M. G. Hilpert. No. 1,063,156; May 27; Gaz. vol. 190; p. 991.
Lifting-jack. G. E. Wilkins and J. C. B. Richards. No. 1,060,963; May 6; Gaz. vol. 190; p. 139.
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Light-holder, Adjustable. T. N. Burke. No. 1,062,691; May 27; Gaz. vol. 190; p. 839.
Light-shade. R. E. Ewing. No. 1,061,277; May 13; Gaz. vol. 190; p. 280.
Lightning-arrester. J. D. Hilliard, Jr., and C. E. Parsons. No. 1,061,671; May 13; Gaz. vol. 190; p. 418.
Lightning-rod. J. Z. Curnutt and E. E. Lloyd. No. 1,061,824; May 13; Gaz. vol. 190; p. 465.
Lime and the like, Apparatus for hydrating. S. Wiebe. No. 1,060,805; May 6; Gaz. vol. 190; p. 82.
Line-casting molds, Variable liner for. A. G. Stevenson. No. 1,062,616; May 27; Gaz. vol. 190; p. 815.
Line-reel. F. R. Jennings. No. 1,061,749; May 13; Gaz. vol. 190; p. 444.
Line-retriever. C. W. Taylor. No. 1,062,202; May 20; Gaz. vol. 190; p. 635.
Linotype-machines, Casting-control mechanism for. A. W. Le Boeuf. No. 1,061,388; May 13; Gaz. vol. 190; p. 317.
Linotype-machines, Single-type-casting attachment for. J. F. Hanrahan. No. 1,060,679; May 6; Gaz. vol. 190; p. 39.
Liquid-dispenser. J. N. Baskett and J. H. Rodes. No. 1,062,576; May 20; Gaz. vol. 190; p. 759.
Liquid-dispensing vessel. J. Crawford. No. 1,061,663; May 13; Gaz. vol. 190; p. 415.
Liquid-flask. J. Koenig. No. 1,062,716; May 27; Gaz. vol. 190; p. 847.
Liquid-fuel burner. R. N. Johnston. No. 1,062,714; May 27; Gaz. vol. 190; p. 846.
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Liquid-separator and liquid-heater, Combined steam-turbine centrifugal. J. V. M. Risberg. No. 1,062,853; May 27; Gaz. vol. 190; p. 892.

Liquid-supply regulator. W. C. Culbertson. No. 1,062,537; May 20; Gaz. vol. 190; p. 744.
Liquids from crushed-ore products, Separation of. W. A. Caldecott. No. 1,061,660; May 13; Gaz. vol. 190; p. 414.
Liquids over crest-weirs and the like, Adjustment for regulating the discharge of. J. A. G. Harrisson. No. 1,061,240; May 6; Gaz. vol. 190; p. 232.
Load-controlling device. G. M. Richards. No. 1,062,665; May 27; Gaz. vol. 190; p. 830.
Loader, Magazine-. B. A. Peterson. No. 1,061,492; May 13; Gaz. vol. 190; p. 353.
Loader, Magazine-. B. A. Peterson. No. 1,062,848; May 27; Gaz. vol. 190; p. 890.
Loading and unloading mechanism for mixing-drums or other receptacles. W. B. Hahn. No. 1,063,159; May 27; Gaz. vol. 190; p. 992.
Lock: *See* Automobile transmission-lock; Car-lock; Cycle-lock; Door-lock; Lamp-lock; Lever-lock; Mail-pouch lock; Nut-lock; Oar-lock; Sash-lock; Spring-lock; Window-lock.
Lock. N. Waing. No. 1,060,960; May 6; Gaz. vol. 190; p. 138.
Lock. H. S. Hashim. No. 1,061,177; May 6; Gaz. vol. 190; p. 210.
Lock. E. W. Bassick. No. 1,061,442; May 13; Gaz. vol. 190; p. 336.
Lock. E. Schroeder. No. 1,061,571; May 13; Gaz. vol. 190; p. 383.
Lock. J. H. Shaw. No. 1,062,043; May 20; Gaz. vol. 190; p. 580.
Lock. C. Schoenfeld. No. 1,062,302; May 20; Gaz. vol. 190; p. 669.
Lock. H. M. Small. No. 1,062,512; May 20; Gaz. vol. 190; p. 738.
Lock. G. F. Smith. No. 1,062,513; May 20; Gaz. vol. 190; p. 738.
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Locket. R. M. Ewing. No. 1,061,364; May 13; Gaz. vol. 190; p. 309.
Locking mechanism for collapsible receptacles. A. E. Lockhart. No. 1,060,988; May 6; Gaz. vol. 190; p. 149.
Locomotives, Apparatus for controlling the artificial blast in. G. De Grahl. No. 1,061,668; May 13; Gaz. vol. 190; p. 417.
Locomotives, Tank-siphon for. J. E. Murray. No. 1,060,616; May 6; Gaz. vol. 190; p. 18.
Log-bunk. E. B. Shields. No. 1,060,952; May 6; Gaz. vol. 190; p. 135.
Logging or butt chain lead-block. J. E. Gilchrist. No. 1,060,676; May 6; Gaz. vol. 190; p. 38.
Loom. E. Graf. No. 1,061,836; May 13; Gaz. vol. 190; p. 468.
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Loom shedding mechanism. A. A. Gordon, Jr. No. 1,062,151; May 20; Gaz. vol. 190; p. 618.
Loom warp stop mechanism. W. B. Monk. No. 1,061,553; May 13; Gaz. vol. 190; p. 377.
Loom weft-replenishing mechanism, Automatic. B. Elmendorf and J. Gabler. No. 1,060,830; May 6; Gaz. vol. 190; p. 91.
Loom weft-replenishing mechanism, Automatic. B. Elmendorf and J. Gabler. No. 1,060,831; May 6; Gaz. vol. 190; p. 92.
Looms, Friction let-off mechanism for. A. J. Riley. No. 1,061,500; May 13; Gaz. vol. 190; p. 356.
Lubricating system. E. Woerner. No. 1,062,377; May 20; Gaz. vol. 190; p. 694.
Lubricator. T. W. Mitchell and R. A. Jones. No. 1,060,692; May 6; Gaz. vol. 190; p. 44.
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Lubricator. J. G. Vincent. No. 1,063,143; May 27; Gaz. vol. 190; p. 987.
Lunch-box. J. F. Lamb. No. 1,061,386; May 13; Gaz. vol. 190; p. 316.
Magnetic separator. H. W. Freese. No. 1,061,666; May 13; Gaz. vol. 190; p. 415.
Magnetic switch. C. G. Miller. No. 1,061,919; May 13; Gaz. vol. 190; p. 496.
Magneto-generator. L. J. Flint. No. 1,062,089; May 20; Gaz. vol. 190; p. 597.
Magneto, Ignition-. A. L. Helzer. No. 1,062,156; May 20; Gaz. vol. 190; p. 620.
Magnetos, Ignition-timing device for. D. M. Wilson. No. 1,060,871; May 6; Gaz. vol. 190; p. 106.
Mail-bag. N. C. Newerf. No. 1,060,697; May 6; Gaz. vol. 190; p. 46.
Mail-bag catcher. F. Hansen. No. 1,062,461; May 20; Gaz. vol. 190; p. 720.
Mail-bag catcher and deliverer. J. D. Leonard. No. 1,061,854; May 13; Gaz. vol. 190; p. 474.
Mail-bag collecting and delivering apparatus. W. T. Rook. No. 1,060,632; May 6; Gaz. vol. 190; p. 23.
Mail-bag collecting and delivering apparatus. E. S. Priddy. No. 1,061,498; May 13; Gaz. vol. 190; p. 355.
Mail-box. J. A. Ammann. No. 1,060,659; May 6; Gaz. vol. 190; p. 32.
Mail-box. T. E. Mela. No. 1,062,785; May 27; Gaz. vol. 190; p. 869.
Mail-boxes, Coin and mail holding device for. J. E. Shinn. No. 1,061,785; May 13; Gaz. vol. 190; p. 453.
Mail-classifying machine. J. Rehak. No. 1,060,943; May 6; Gaz. vol. 190; p. 131.
Mail-crane. C. Jones. No. 1,062,239; May 20; Gaz. vol. 190; p. 648.
Mail delivering and collecting apparatus, Rural-. W. R. Paisley. No. 1,062,183; May 20; Gaz. vol. 190; p. 628.
Mail-handling apparatus. N. K. Bowman. No. 1,060,888; May 6; Gaz. vol. 190; p. 113.
Mail-pouch lock. C. S. Rickard. No. 1,062,506; May 20; Gaz. vol. 190; p. 736.
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Mailing-folder. W. B. Henri. No. 1,060,596; May 6; Gaz. vol. 190; p. 11.
Manifolding device. P. Hano. No. 1,062,968; May 27; Gaz. vol. 190; p. 930.
Mantle-retainer. C. M. Brandt. No. 1,061,659; May 13; Gaz. vol. 190; p. 413.
Mantle-retainer. C. M. Brandt. No. 1,061,812; May 13; Gaz. vol. 190; p. 461.
Mantles, Manufacture of inverted. E. L. Knoedler. No. 1,062,163; May 20; Gaz. vol. 190; p. 622.
Massage device, Vacuum. F. O. Parker. No. 1,060,852; May 6; Gaz. vol. 190; p. 100.
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Match-box. N. W. Rasnick. No. 1,060,706; May 6; Gaz. vol. 190; p. 50.
Matrix gaging and sorting mechanism. F. H. Pierpont. No. 1,061,558; May 13; Gaz. vol. 190; p. 379.
Mattress fabric, Spring-. C. L. Plunkett. No. 1,061,402; May 13; Gaz. vol. 190; p. 323.
Mattress side guard, Spring-. A. J. Kreuzkamp. No. 1,061,616; May 13; Gaz. vol. 190; p. 399.
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Measuring instrument. N. H. Wener. No. 1,063,091; May 27; Gaz. vol. 190; p. 970.
Measuring instrument, Tooth-. S. Newman. No. 1,061,398; May 13; Gaz. vol. 190; p. 321.
Measuring or controlling instrument. E. H. Bristol and W. E. Goodyear. No. 1,060,812; May 6; Gaz. vol. 190; p. 84.
Measuring the play between relatively movable parts, Mechanism for. M. Gohlke and W. Dahlmann. No. 1,062,566; May 20; Gaz. vol. 190; p. 755.
Meat-sawing machine. G. T. Francisco. No. 1,062,644; May 27; Gaz. vol. 190; p. 824.
Merchandise articles, Device for exhibiting. T. O. Peterson. No. 1,060,787; May 6; Gaz. vol. 190; p. 76.
Metal articles, Shaping hollow. J. F. Lewis. No. 1,062,719; May 27; Gaz. vol. 190; p. 848.
Metal box. F. E. Sprague. No. 1,062,859; May 27; Gaz. vol. 190; p. 894.
Metal-expanding machine. H. E. White. No. 1,061,953; May 13; Gaz. vol. 190; p. 508.
Metal-foil molds or forms, Apparatus for composing and decomposing. J. Heinrich. No. 1,062,588; May 27; Gaz. vol. 190; p. 804.
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Metal, Method of and machine for extruding. D. L. Summey. (Reissue.) No. 13,562; May 13; Gaz. vol. 190; p. 513.
Metal, Rolled. E. R. Hoyt. No. 1,061,674; May 13; Gaz. vol. 190; p. 419.
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Metallic fabric. J. D. Haggard. No. 1,062,967; May 27; Gaz. vol. 190; p. 930.
Metallic tie. D. Crawford, Jr. No. 1,063,013; May 27; Gaz. vol. 190; p. 944.
Metallic tie. D. Crawford, Jr. No. 1,063,014; May 27; Gaz. vol. 190; p. 944.
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Meter-testing apparatus. R. L. Dezendorf. No. 1,061,271; May 13; Gaz. vol. 190; p. 278.
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Milking-machine. H. Droutlege. No. 1,060,828; May 6; Gaz. vol. 190; p. 91.
Mill: *See* Cane-mill; Curd-mill; Grinding-mill.
Milling-machine. J. C. Potter. No. 1,060,705; May 6; Gaz. vol. 190; p. 50.
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Mixer: *See* Concrete-mixer; Feed-mixer; Gaseous-fuel mixer.
Mixer and sifter, Combined. S. Toda. No. 1,062,059; May 20; Gaz. vol. 190; p. 586.
Mixing and measuring apparatus. S. Wiebe. No. 1,060,804; May 6; Gaz. vol. 190; p. 82.
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Mold-making machine. H. R. Atwater. No. 1,061,440; May 13; Gaz. vol. 190; p. 335.
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Motor-governor. W. N. Dennison. No. 1,060,827; May 6; Gaz. vol. 190; p. 90.
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Muffler. E. M. Kluck. No. 1,060,768; May 6; Gaz. vol. 190; p. 70.
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Musical-instrument guard. A. Shutt. No. 1,061,877; May 13; Gaz. vol. 190; p. 482.
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Nozzle, Exhaust-. L. C. Mooney. No. 1,062,724; May 27; Gaz. vol. 190; p. 849.
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Nutcracker. W. N. Gradick. No. 1,061,470; May 13; Gaz. vol. 190; p. 346.
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Oil-burner. H. C. Ruggles. No. 1,061,011; May 6; Gaz. vol. 190; p. 157.
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Oiling system, Engine-. E. M. White. No. 1,060,653; May May 6; Gaz. vol. 190; p. 30.
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Oscillation-control mechanism. H. D. Williams and R. Janney. No. 1,062,561; May 20; Gaz. vol. 190; p. 753.
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Ozone-generator. A. L. Van Patten. No. 1,060,651; May 6; Gaz. vol. 190; p. 29.
Ozone-producing machine. D. C. Smith and F. M. Hummel. No. 1,063,167; May 27; Gaz. vol. 190; p. 996.
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Package. T. W. S. Phillips. No. 1,060,626; May 6; Gaz. vol. 190; p. 21.
Package. F. Emmons. No. 1,061,531; May 13; Gaz. vol. 190; p. 369.
Package for materials liable to be injured by exposure. W. Alexander. No. 1,061,439; May 13; Gaz. vol. 190; p. 335.
Package, Knockdown shipping-. G. S. Bowman. No. 1,062,878; May 27; Gaz. vol. 190; p. 900.
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Packing, Elastic-fluid. S. Bondy. No. 1,061,657; May 13; Gaz. vol. 190; p. 413.
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Packing-joint. F. M. Prather. No. 1,061,633; May. 13; Gaz. vol. 190; p. 404.
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Packing-ring, Metallic. J. J. Clark. No. 1,060,586; May 6; Gaz. vol. 190; p. 8.
Packing-ring, Piston. N. D. Hamel. No. 1,062,095; May 20; Gaz. vol. 190; p. 599.
Pad: *See* Counter-pad.
Page-clamp. M. J. Nevius and J. H. Wilkins. No. 1,062,659; May 27; Gaz. vol. 190; p. 828.
Pail attachment, Milk-. J. A. Blair. No. 1,062,532; May 20; Gaz. vol. 190; p. 742.
Pail cover, Milk-. C. W. Hudson. No. 1,062,650; May 27; Gaz. vol. 190; p. 826.
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Paper-bag holder. F. D. Croce. No. 1,061,357; May 13; Gaz. vol. 190; p. 307.
Paper-cutting machine. A. and J. Zanetti. No. 1,062,427; May 20; Gaz. vol. 190; p. 709.
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Paper-feeding machines, Sheet-separating mechanism for. R. E. Jones. No. 1,063,037; May 27; Gaz. vol. 190; p. 952.
Paper-folder and envelop-filler, Hand. A. J. Gore. No. 1,063,124; May 27; Gaz. vol. 190; p. 981.
Paper-pulp, Apparatus for disintegrating fibrous material used in the manufacture of. W. H. Stobie. No. 1,062,306; May 20; Gaz. vol. 190; p. 671.
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Paper-treating machine. C. W. Mears. No. 1,062,108; May 20; Gaz. vol. 190; p. 603.
Paper-walled can. J. R. Harbeck. No. 1,062,002; May 20; Gaz. vol. 190; p. 566.
Parachute. A. Persson. No. 1,060,703; May 6; Gaz. vol. 190; p. 49.
Paring and pitting apparatus, Fruit. F. W. Lancaster. No. 1,062,406; May 20; Gaz. vol. 190; p. 703.
Pasteboard wrapper, Corrugated. F. A. Antoni. No. 1,061,654; May 13; Gaz. vol. 190; p. 412.
Pasteurizing apparatus. W. H. Park. No. 1,062,847; May 27; Gaz. vol. 190; p. 890.
Pastry-cone trimmer. S. F. Pierce. No. 1,062,028; May 20; Gaz. vol. 190; p. 575.
Pattern-setting machine. J. J. Brennan. No. 1,063,114; May 27; Gaz. vol. 190; p. 978.
Patterns on leather and like soft materials, Apparatus for impressing. J. Thomson. No. 1,063,084; May 27; Gaz. vol. 190; p. 968.
Pavement, Wood-. H. G. Jennison. No. 1,061,296; May 13; Gaz. vol. 190; p. 286.
Paving and like purposes, Manufacturing a composition for. J. H. Amies. No. 1,062,686; May 27; Gaz. vol. 190; p. 837.
Paving-block composition. A. Deidesheimer. No. 1,062,771; May 27; Gaz. vol. 190; p. 864.
Peanut-picker and pea-huller. W. C. Berry. No. 1,061,591; May 13; Gaz. vol. 190; p. 390.
Peavey or cant-hook. A. Lambert. No. 1,061,188; May 6; Gaz. vol. 190; p. 214.
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Pen, Fountain-. D. W. Schnebbe. No. 1,061,693; May 13; Gaz. vol. 190; p. 426.
Pens, pencils, and the like, Clip for fountain-. H. C. Mable. No. 1,061,193; May 6; Gaz. vol. 190; p. 216.
Penholder. J. C. Tweedale. No. 1,062,620; May 27; Gaz. vol. 190; p. 816.
Pencil. H. L. Fischer. No. 1,062,274; May 20; Gaz. vol. 190; p. 660.
Pencil and pen holder and electric light, Combined vest-pocket. E. A. Metcalf. No. 1,060,615; May 6; Gaz. vol. 190; p. 18.
Pencil, book, and card holder. E. M. Chandler. No. 1,060,666; May 6; Gaz. vol. 190; p. 34.
Pencil-case and kindred instrument. E. Norris. No. 1,063,134; May 27; Gaz. vol. 190; p. 984.
Penetration-machine. D. Rawstron. No. 1,062,032; May 20; Gaz. vol. 190; p. 577.
Perforating-machine. G. H. Davis. No. 1,061,051; May 6; Gaz. vol. 190; p. 171.
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Perforating-machine, Metal-worker's. M. J. Lenihan. No. 1,060,772; May 6; Gaz. vol. 190; p. 71.
Petroleum-burner. F. Hendricks. No. 1,063,126; May 27; Gaz. vol. 190; p. 981.
Phonograph brake and stop. B. J. Genesy. No. 1,061,282; May 13; Gaz. vol. 190; p. 281.
Phonograph-records, Making duplicate. J. W. Aylsworth. No. 1,060,577; May 6; Gaz. vol. 190; p. 4.
Photographic plate and paper developing machine. E. S. Gerhard. No. 1,061,867; May 13; Gaz. vol. 190; p. 416.
Photographic-printing apparatus. L. J. Mitchell. No. 1,062,294; May 20; Gaz. vol. 190; p. 666.
Photographic-printing device. F. A. Brownell. No. 1,060,813; May 6; Gaz. vol. 190; p. 85.
Photographic-printing mask. H. E. Niles. No. 1,060,618; May 6; Gaz. vol. 190; p. 19.
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Photographic screen. W. C. Huebner. No. 1,060,982; May 6; Gaz. vol. 190; p. 146.
Piano-pedals, Apparatus for automatically operating. C. W. Nyström. No. 1,062,249; May 20; Gaz. vol. 190; p. 651.
Piano-players, Tempo-regulator for pneumatic. J. O'Connor. No. 1,060,783; May 6; Gaz. vol. 190; p. 75.
Piano, Pneumatic player-. J. Lelsch. No. 1,062,104; May 20; Gaz. vol. 190; p. 602.
Pianos, Combined transposition and automatic tracking device for player-. J. Lelsch. No. 1,062,103; May 20; Gaz. vol. 190; p. 601.
Pianos, Front panel for player-. M. Prisciantelli. No. 1,060,627; May 6; Gaz. vol. 190; p. 22.
Pianos, Key-rail for player-. W. A. Watson. No. 1,061,430; May 13; Gaz. vol. 190; p. 332.
Pianoforte pedal mechanism. F. Denninger. No. 1,062,955; May 27; Gaz. vol. 190; p. 926.
Pick-holder. S. Young. No. 1,062,527; May 20; Gaz. vol. 190; p. 742.
Picker: *See* Fruit-picker; Peanut-picker.
Picture and voice-reproducing machine, Motion-. H. T. Crapo. No. 1,062,324; May 20; Gaz. vol. 190; p. 676.
Picture-frame. A. K. Hoodwin and E. J. Kipp. No. 1,062,710; May 27; Gaz. vol. 190; p. 845.
Picture machines, Safety attachment for moving-. C. E. Morton. No. 1,061,101; May 6; Gaz. vol. 190; p. 185.
Picture-molding, Metal. B. M. Reynolds. No. 1,060,708; May 6; Gaz. vol. 190; p. 51.
Picture-projecting apparatus. C. H. Converse and W. H. C. Rider. No. 1,062,081; May 20; Gaz. vol. 190; p. 594.
Pictures, designs, or ornaments, Producing. F. B. Bannan. No. 1,061,804; May 13; Gaz. vol. 190; p. 459.
Pile-cap. M. Schalscha. No. 1,062,363; May 20; Gaz. vol. 190; p. 689.
Piling, Metal sheet-. C. H. Quimby, Jr. No. 1,060,858; May 6; Gaz. vol. 190; p. 102.
Pin: *See* Banking-pin; Bowling-pin; Clothes-pin; Hat-pin; Wire pin.
Pin-tumbler mechanism. C. F. Kohlberger. No. 1,060,769; May 6; Gaz. vol. 190; p. 70.
Pipe: *See* Conducting-pipe; Sheet-metal pipe; Smoking-pipe; Stand-pipe; Tobacco-pipe.
Pipe connection, Automatic. J. W. Roberts. No. 1,062,927; May 27; Gaz. vol. 190; p. 916.
Pipe-coupling. N. C. Lane. No. 1,062,015; May 20; Gaz. vol. 190; p. 571.
Pipe-couplings, Wrought-metal ring for. L. P. Whitaker. No. 1,061,712; May 13; Gaz. vol. 190; p. 432.
Pipe fitting, Soil-. J. G. Huss and W. A. Smith. No. 1,062,008; May 20; Gaz. vol. 190; p. 568.
Pipe-hanger. J. P. Swan. No. 1,062,372; May 20; Gaz. vol. 190; p. 692.
Pipe-hanger. J. P. Swan. No. 1,062,373; May 20; Gaz. vol. 190; p. 692.
Pipe-threading tool. B. Borden. No. 1,062,218; May 20; Gaz. vol. 190; p. 640.
Pipe-threading tools, Die or chaser for. M. W. Bechtel. No. 1,062,212; May 20; Gaz. vol. 190; p. 638.
Pipe-wrench. E. K. Jones. No. 1,060,685; May 6; Gaz. vol. 190; p. 42.
Pipe-wrench. L. D. Benedict. No. 1,063,153; May 27; Gaz. vol. 190; p. 990.
Pipe-wrench, Chain. A. McKinnon. No. 1,062,849; May 20; Gaz. vol. 190; p. 684.
Pipes, Clean-out ferrule for drain or soil. P. Mueller. No. 1,060,693; May 6; Gaz. vol. 190; p. 45.
Piston. C. Y. Knight. No. 1,061,756; May 13; Gaz vol. 190; p. 445.
Pistons, Making hollow. H. H. Patrick. No. 1,061,922; May 13; Gaz. vol. 190; p. 497.
Pitching-machine. H. Torchiani. No. 1,062,131; May 20; Gaz. vol. 190; p. 611.
Placards with sunk characters or imprints, Producing. H. Flock. No. 1,061,059; May 6; Gaz. vol. 190; p. 178.
Planers and shapers, Attachment for metal. A. D. Gregory and F. G. Sanders. No. 1,062,396; May 20; Gaz. vol. 190; p. 700.
Planter attachment. A. H. Burns. No. 1,061,596; May 13; Gaz. vol. 190; p. 392.
Planter cultivator attachment. R. W. Bruene. No. 1,062,882; May 27; Gaz. vol. 190; p. 901.

Planter dropping device, Corn-. R. L. Ford. No. 1,062,449; May 20; Gaz. vol. 190; p. 717.
Planter-frame. A. M. Crisman. No. 1,061,456; May 13; Gaz. vol. 190; p. 341.
Planter, Peanut-. E. Knowlton. No. 1,061,384; May 13; Gaz. vol. 190; p. 316.
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Planter, Wireless corn-. R. C. Moore. No. 1,062,787; May 27; Gaz. vol. 190; p. 869.
Planting machine, Potato-. A. J. Pauly. No. 1,061,490; May 13; Gaz. vol. 190; p. 353.
Plaster-board-cutting machine. D. F. Bernhardt. No. 1,062,314; May 27; Gaz. vol. 190; p. 879.
Plasterer's implement. C. O. Blee, C. Black, and C. Palmer. No. 1,060,810; May 6; Gaz. vol. 190; p. 84.
Plastic material and preparing the same. F. G. Wiechmann. No. 1,061,348; May 13; Gaz. vol. 190; p. 303.
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Plates, Dishing metallic. J. S. Worth. No. 1,061,797; May 13; Gaz. vol. 190; p. 457.
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Plow. C. A. Brostrom. No. 1,062,141; May 20; Gaz. vol. 190; p. 614.
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Plumb-bob. E. E. Pipher. No. 1,060,855; May 6; Gaz. vol. 190; p. 101.
Plunger-elevator. T. J. Kirn. No. 1,060,907; May 6; Gaz. vol. 190; p. 120.
Pneumatic-despatch-tube receiving-terminal. B. C. Batcheller. No. 1,061,034; May 6; Gaz. vol. 190; p. 165.
Pneumatic wheel. N. Peterson. No. 1,060,854; May 6; Gaz. vol. 190; p. 101.
Pocket for garments, Elastic. R. E. Kelly. No. 1,062,160; May 20; Gaz. vol. 190; p. 621.
Pocket-guard. C. J. Bukouski. No. 1,061,162; May 6; Gaz. vol. 190; p. 205.
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Post: *See* Binding-post; Concrete fence-post; Fence-post.
Pot: *See* Tea and coffee pot.
Pot for hot metal, &c. E. C. Sherman. No. 1,061,784; May 13; Gaz. vol. 190; p. 453.
Potash alum, Making. E. Hart. No. 1,062,278; May 20; Gaz. vol. 190; p. 661.
Potato-bug catcher and killer. F., Sr., and F. Ulrich, Jr. No. 1,061,027; May 6; Gaz. vol. 190; p. 163.
Potato-separator. J. Reuther. No. 1,061,568; May 13; Gaz. vol. 190; p. 383.
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Power-drill. W. Hartel. No. 1,061,474; May 13; Gaz. vol. 190; p. 348.
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Power-generating apparatus. A. Best. No. 1,062,815; May 27; Gaz. vol. 190; p. 879.
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Preservative and making the same. B. R. Albertsen. No. 1,062,683; May 27; Gaz. vol. 190; p. 836.
Preserving food, Process and apparatus for. R. D. Elliott. No. 1,061,460; May 13; Gaz. vol. 190; p. 343.
Press: *See* Forging-press; Gas-press; Power-press; Printing-press; Punching-press.
Presses or the like, Safety device for. E. Hilfrank. No. 1,062,097; May 20; Gaz. vol. 190; p. 599.
Pressure-air device. C. Sandos-Morits. No. 1,062,608; May 27; Gaz. vol. 190; p. 812.
Pressure-gage. G. T. Hackley. No. 1,061,472; May 13; Gaz. vol. 190; p. 347.
Pressure-regulator. G. Regondi. No. 1,063,065; May 27; Gaz. vol. 190; p. 961.
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Primary battery. E. E. Hudson and D. Elmes. No. 1,061,541; May 13; Gaz. vol. 190; p. 373.
Primer. C. A. Bailey. No. 1,060,965; May 6; Gaz. vol. 190; p. 140.
Print holder or drawing-holder, Blue-. R. N. Smith. No. 1,061,335; May 13; Gaz. vol. 190; p. 300.
Printing apparatus. L. M. Todd and C. G. Tiefel. No. 1,061,508; May 13; Gaz. vol. 190; p. 359.
Printing attachment for rolls. M. W. Lee. No. 1,062,979; May 27; Gaz. vol. 190; p. 933.
Printing-machine. W. M. Bacon. No. 1,060,578; May 6; Gaz. vol. 190; p. 5.
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Printing-press feed and delivery attachment. S. W. Cortissez. No. 1,061,526; May 13; Gaz. vol. 190; p. 367.
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Projector control. J. L. Hall. No. 1,060,754; May 6; Gaz. vol. 190; p. 65.
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Propelling mechanism. C. Oliver and O. G. Jacobson. No. 1,061,110; May 6; Gaz. vol. 190; p. 189.
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Protractor, Pocket-. J. Sharpe. No. 1,062,740; May 27; Gaz. vol. 190; p. 854.
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Puller. H. Harsey. No. 1,061,840; May 13; Gaz. vol. 190; p. 470.
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Pulp digester, Wood-. J. C. W. Stanley. No. 1,061,767; May 13; Gaz. vol. 190; p. 448.
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Pump. W. U. Griffiths. No. 1,060,594; May 6; Gaz. vol. 190; p. 10.
Pump. R. B. Carter. No. 1,060,815; May 6; Gaz. vol. 190; p. 86.
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Pump, Centrifugal. F. J. Petermöller. No. 1,060,937; May 6; Gaz. vol. 190; p. 130.
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Pump, Compound steam-. R. C. Augur. No. 1,061,969; May 20; Gaz. vol. 190; p. 555.
Pump differential-pressure governor. W. V. Turner. No. 1,060,650; May 6; Gaz. vol. 190; p. 29.
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Pump valve, Pulp-. T. McOuat. No. 1,061,768; May 13; Gaz. vol. 190; p. 449.

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Quick-adjusting wrench. A. Carp. No. 1,061,046; May 6; Gaz. vol. 190; p. 170.
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Radiator-cover. W. R. Moore. No. 1,062,986; May 27; Gaz. vol. 190; p. 936.
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Rail, Compound. C. H. Beasecker. No. 1,061,037; May 6; Gaz. vol. 190; p. 166.
Rail, Compound. J. G. Campau. No. 1,061,726; May 13; Gaz. vol. 190; p. 437.
Rail-fastener. W. L. Eby. No. 1,062,957; May 27; Gaz. vol. 190; p. 927.
Rail intersection. F. P. Murphey. No. 1,060,695; May 6; Gaz. vol. 190; p. 46.
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Rail-support. F. O. Hellstrom. No. 1,061,475; May 13; Gaz. vol. 190; p. 348.
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Railway-rail joint and brace. F. S. Jainett. No. 1,061,958; May 13; Gaz. vol. 190; p. 510.
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Railway-spike. C. G. Metzgar. No. 1,062,350; May 20; Gaz. vol. 190; p. 684.
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Ratchet-wrench. W. Winkle. No. 1,060,874; May 6; Gaz. vol. 190; p. 107.
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Razor-strop scraper and surfacer. H. J. Galsman. No. 1,062,393; May 20; Gaz. vol. 190; p. 699.
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Reach end, Detachable. J. L. Corns. No. 1,062,760; May 27; Gaz. vol. 190; p. 864.
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Refrigerating apparatus. J. Schneible. No. 1,062,856; May 27; Gaz. vol. 190; p. 893.
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Regenerator or hot-blast stove. M. Schroeder and H. Reinhard. No. 1,062,122; May 20; Gaz. vol. 190; p. 608.
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Register. J. T. McElfatrick. No. 1,062,177; May 20; Gaz. vol. 190; p. 626.
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Resilient wheel. H. Lafleur. No. 1,061,086; May 6; Gaz. vol. 190; p. 180.
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Rifle-cleaning table. D. L. Larsen. No. 1,062,922; May 27; Gaz. vol. 190; p. 915.
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Road-surfacing machine. M. A. Popkess. No. 1,062,552; May 20; Gaz. vol. 190; p. 749.

Rock-drill chambering attachment. J. B. Word. No. 1,061,210; May 6; Gaz. vol. 190; p. 222.
Rock-drill-rotating mechanism. C. J. Smith. No. 1,061,788; May 13; Gaz. vol. 190; p. 454.
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Rolling-mill guide. J. Kennedy. No. 1,061,676; May 13; Gaz. vol. 190; p. 420.
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Ropes or threads, Machine for producing. A. Rabe. No. 1,062,796; May 27; Gaz. vol. 190; p. 873.
Rossing apparatus for removing bark from logs. O. J. Mills. No. 1,060,928; May 6; Gaz. vol. 190; p. 126.
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Rotary engine. A. M. Condit. No. 1,061,452; May 13; Gaz. vol. 190; p. 340.
Rotary engine. L. G. Smith. No. 1,062,193; May 20; Gaz. vol. 190; p. 632.
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Rule, Sliding. J. W. Bussell. No. 1,062,321; May 20; Gaz. vol. 190; p. 675.
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Sand-tempering apparatus. J. W. Brown, Jr. No. 1,061,160; May 6; Gaz. vol. 190; p. 205.
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Screw-plate. C. C. Russell. No. 1,061,129; May 6; Gaz. vol. 190; p. 196.
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Seat clamp, Detachable-vehicle-. E. H. Kesselhuth. No. 1,061,752; May 13; Gaz. vol. 190; p. 444.
Seat or stool. W. Groenendyke. No. 1,060,838; May 6; Gaz. vol. 190; p. 94.
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Shade-holder. K. J. Kornbau. No. 1,061,186; May 6; Gaz. vol. 190; p. 214.
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Sharpeners, Carriage-return mechanism for gang-saw. J. P. Hedstrom. No. 1,060,758; May 6; Gaz. vol. 190; p. 66.
Sharpening device for rotary cutters. A. R. Luschka. No. 1,060,016; May 6; Gaz. vol. 190; p. 122.
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Sheet-metal house. C. D. Pruden. No. 1,062,994; May 27; Gaz. vol. 190; p. 938.
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Shelf-support. S. C. Entwistle. No. 1,062,901; May 27; Gaz. vol. 190; p. 908.
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Ships' compartments, Apparatus for flooding. J. L. and W. P. Brunton. No. 1,061,262; May 13; Gaz. vol. 190; p. 275.
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Shirts, Adjustable protector for laundried. N. J. Goodman. No. 1,062,150; May 20; Gaz. vol. 190; p. 618.
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Shock-absorber. H. H. Sunvold and H. Larson. No. 1,061,420; May 13; Gaz. vol. 190; p. 329.
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Shuttle. W. Townsend. No. 1,062,060; May 20; Gaz. vol. 190; p. 586.
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Shuttle, Hand-threading. C. G. Petzold. No. 1,062,251; May 20; Gaz. vol. 190; p. 652.
Shuttle-threading device. C. Miller. No. 1,063,133; May 27; Gaz. vol. 190; p. 984.
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Side-guard-holding means. A. J. Kreuzkamp. No. 1,061,483; May 13; Gaz. vol. 190; p. 351.
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Sign. F. E. Ferguson. No. 1,061,997; May 20; Gaz. vol. 190; p. 564.
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Sign-holder. D. A. Brumbaugh. No. 1,061,261; May 13; Gaz. vol. 190; p. 275.
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Signal system. G. S. Williamson. No. 1,063,096; May 27; Gaz. vol. 190; p. 972.
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Signaling device. F. Reed and W. Rickardson. No. 1,062,502; May 20; Gaz. vol. 190; p. 735.
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Signaling track conditions, Mechanism for. J. M. and B. T. Matsler. No. 1,062,022; May 20; Gaz. vol. 190; p. 578.
Silicon and by-products, Producing elementary. F. J. Machalske. No. 1,062,982; May 27; Gaz. vol. 190; p. 934.
Silicon, Manufacture of. T. B. Allen and F. J. Tone. No. 1,061,256; May 13; Gaz. vol. 190; p. 273.
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Siphon-charging mechanism. H. S. Winsor. No. 1,063,145; May 27; Gaz. vol. 190; p. 988.
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Skinning-knife, Safety. F. W. Groschopp. No. 1,062,906; May 27; Gaz. vol. 190; p. 910.
Slack-adjuster. J. O. Mars. No. 1,060,613; May 6; Gaz. vol. 190; p. 17.
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Sleigh, Convertible. W. Beilstein. No. 1,062,760; May 27; Gaz. vol. 190; p. 861.
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Slicing-machine. W. C. Anderson and A. R. Thompson. No. 1,062,378; May 20; Gaz. vol. 190; p. 694.
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Smoking-pipe. A. F. Rippel. No. 1,061,009; May 6; Gaz. vol. 190; p. 156.
Snap-hook. J. J. Bayer. No. 1,060,736; May 6; Gaz. vol. 190; p. 60.

Snap-hook. C. E. Koons. No. 1,062,653; May 27; Gaz. vol. 190; p. 827.
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Soldering-iron, Electric. F. M. Giffen. No. 1,061,170; May 6; Gaz. vol. 190; p. 207.
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Sole for boots or shoes. C. C. Small. No. 1,061,415; May 13; Gaz. vol. 190; p. 327.
Sole for slippers, Wool. E. Dillberg. No. 1,060,589; May 6; Gaz. vol. 190; p. 9.
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Sole trimmer, Shoe-. M. S. Munn. No. 1,060,694; May 6; Gaz. vol. 190; p. 45.
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Sound-box. A. Hayes. No. 1,061,071; May 6; Gaz. vol. 190; p. 177.
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Sound-record molds, Making. J. W. Aylsworth and E. L. Aiken. No. 1,061,258; May 13; Gaz. vol. 190; p. 273.
Sound-reproducing instrument. B. R. Smith. No. 1,060,955; May 6; Gaz. vol. 190; p. 136.
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Sounding-board. F. F. Frankel. No. 1,062,275; May 20; Gaz. vol. 190; p. 660.
Spacer device, Proportional-. J. A. Firsching. No. 1,062,700; May 27; Gaz. vol. 190; p. 841.
Spacer selecting and releasing mechanism. B. F. Bellows No. 1,060,580; May 6; Gaz. vol. 190; p. 6.
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Spectacles-adjuster. W. O. Boyle. No. 1,061,216; May 6; Gaz. vol. 190; p. 224.
Speeches, compositions, and the like, Means for recording and reproducing lengthy. F. E. Thormeyer. No. 1,063,085; May 27; Gaz. vol. 190; p. 968.
Speed-adjusting means for rotary hydraulic devices. H. D. Williams and R. Janney. No. 1,062,071; May 20; Gaz. vol. 190; p. 589.
Speed-changing mechanism. A. E. Reuss and O. Schnitzler. No. 1,060,707; May 6; Gaz. vol. 190; p. 50.
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Speed mechanism, Ball-and-disk variable-. A. H. Pollen and H. Isherwood. No. 1,062,500; May 20; Gaz. vol. 190; p. 734.
Speed of ships, Apparatus for indicating and recording the. A. J. Cooper. No. 1,061,985; May 20; Gaz. vol. 190; p. 561.
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Spindle-base. O. C. Sidilau. No. 1,062,044; May 20; Gaz. vol. 190; p. 580.
Spindle-turning machines, Chuck mechanism for. A. J. Schulte. No. 1,061,411; May 13; Gaz. vol. 190; p. 326.
Spinning and twisting machines, Combination separator and stray-yarn severer for. C. E. Collins. No. 1,062,272; May 20; Gaz. vol. 190; p. 659.
Spinning-frames, Means for securing doffer-supporting rails to. B. A. Peterson. No. 1,061,493; May 13; Gaz. vol. 190; p. 354.
Spinning-machine, Mechanism for supplying single hairs to a. R. Grabein. No. 1,062,152; May 20; Gaz. vol. 190; p. 618.
Spinning-machine thread-guide. G. L. Pierce and N. Provencher. No. 1,061,007; May 6; Gaz. vol. 190; p. 155.
Spinning-machine traverse mechanism. A. L. Pickard. No. 1,061,687; May 13; Gaz. vol. 190; p. 423.
Spinning-spindle. C. H. Chapman. No. 1,061,266; May 13; Gaz. vol. 190; p. 276.
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Splice-bar. C. S. Landers. No. 1,063,044; May 27; Gaz. vol. 190; p. 955.
Spoke-equalizing machine. H. Segraves. No. 1,060,793; May 6; Gaz. vol. 190; p. 78.
Spool and needle holder. R. H. Bennet. No. 1,061,590; May 13; Gaz. vol. 190; p. 390.
Spoon-holder. S. E. Lyon. No. 1,062,107; May 20; Gaz. vol. 190; p. 603.
Spraying oil on road-surfaces, Apparatus for. F. C. Pillsbury. No. 1,062,029; May 20; Gaz. vol. 190; p. 576.
Spring: *See* Vehicle-spring.
Spring forming and tempering machine. G. H. Beaumont, J. F. Beans, and J. E. Lehman. No. 1,061,721; May 13; Gaz. vol. 190; p. 435.
Spring-lock. A. Harlan. No. 1,062,909; May 27; Gaz. vol. 190; p. 911.
Spring-motor. H. L. Pitman. No. 1,060,704; May 6; Gaz. vol. 190; p. 49.
Spring-seat. W. Lewis. No. 1,062,597; May 27; Gaz. vol. 190; p. 807.
Spring structure. W. E. Andrew. No. 1,060,879; May 6; Gaz. vol. 190; p. 109.
Spring structure. G. B. Brink. No. 1,061,218; May 6; Gaz. vol. 190; p. 225.
Spring structure. G. B. Brink. No. 1,061,219; May 6; Gaz. vol. 190; p. 225.
Spring-switch. F. H. Ellis. No. 1,061,530; May 13; Gaz. vol. 190; p. 368.
Spring-wheel. M. H. Cruise. No. 1,060,823; May 6; Gaz. vol. 190; p. 89.
Spring-wheel. B. Anderson. No. 1,061,799; May 13; Gaz. vol. 190; p. 458.
Spring-wheel. F. H. White. No. 1,062,676; May 27; Gaz. vol. 190; p. 834.
Spring-wheel. E. G. Woodlee. No. 1,063,100; May 27; Gaz. vol. 190; p. 973.
Spring-wheel. O. H. Hinds. No. 1,063,161; May 27; Gaz. vol. 190; p. 993.
Sprinkler supervisory system. C. F. Patterson. No. 1,063,058; May 27; Gaz. vol. 190; p. 959.
Square, Carpenter's. B. O. Sweum. No. 1,061,423; May 13; Gaz. vol. 190; p. 329.
Stage-noise apparatus. I. L. Stanger and C. B. Fithian. No. 1,060,717; May 6; Gaz. vol. 190; p. 54.
Stall. W. L. Root. No. 1,062,119; May 20; Gaz. vol. 190; p. 606.
Stall, Cattle-. A. H. Neller. No. 1,062,295; May 20; Gaz. vol. 190; p. 667.
Stamping-machine. Automatic. H. C. Brown. No. 1,061,040; May 6; Gaz. vol. 190; p. 167.
Stamping, punching, shearing, or similar machine. F. H. Pierpont. No. 1,061,563; May 13; Gaz. vol. 190; p. 381.
Stand: *See* Bicycle-stand; Folding stand; Instrument-stand; Toasting-stand.
Stand-pipe or water-column. E. E. Johnson. No. 1,060,844; May 6; Gaz. vol. 190; p. 97.
Starch-drying apparatus. L. P. Bauer. No. 1,061,720; May 13; Gaz. vol. 190; p. 435.
Stave-equalizing machine, Automatic. H. F. Marten, H. Grahn, and J. C. Andresen. No. 1,062,175; May 20; Gaz. vol. 190; p. 625.
Stay-bolt for locomotive and other boilers. E. I. Dodds. No. 1,061,274; May 13; Gaz. vol. 190; p. 279.
Stay-washer. J. Kennedy. No. 1,061,480; May 13; Gaz. vol. 190; p. 350.
Steam and water heater or boiler. S. B. Waters. No. 1,061,890; May 13; Gaz. vol. 190; p. 485.
Steam, Apparatus for separating oil from. H. O. Wischner. No. 1,062,264; May 20; Gaz. vol. 190; p. 656.
Steam-boiler. E. R. Morrison. No. 1,061,312; May 13; Gaz. vol. 190; p. 292.
Steam-boiler. J. O. Gagné. No. 1,062,451; May 20; Gaz. vol. 190; p. 717.
Steam-boiler. T. Hudson. No. 1,063,032; May 27; Gaz. vol. 190; p. 951.
Steam-controlling apparatus, Exhaust-. F. F. Coggin. No. 1,062,079; May 20; Gaz. vol. 190; p. 595.
Steam, Mechanism for controlling the flow of exhaust-. F. F. Coggin. No. 1,062,080; May 20; Gaz. vol. 190; p. 593.
Steam-regenerating apparatus. R. H. Stevens. No. 1,061,573; May 13; Gaz. vol. 190; p. 384.
Steam-trap. J. Boylston. No. 1,062,632; May 27; Gaz. vol. 190; p. 820.
Steel bars, Making. H. R. Jones, E. L. Hang, and J. McConnell. No. 1,060,764; May 6; Gaz. vol. 190; p. 69.
Steel ingots, Making dense. H. W. Lash. No. 1,061,760; May 13; Gaz. vol. 190; p. 446.
Steering-knuckle. H. H. Kennedy. No. 1,060,606; May 6; Gaz. vol. 190; p. 14.
Steering-rim, Electric-heated. R. S. Smith. No. 1,062,745; May 27; Gaz. vol. 190; p. 850.
Step and tread plate. W. P. Stephenson. No. 1,062,199; May 20; Gaz. vol. 190; p. 634.
Step, Folding. P. M. Engelhardt. No. 1,061,828; May 13; Gaz. vol. 190; p. 466.
Stereopticon. A. F. Victor. No. 1,062,622; May 27; Gaz. vol. 190; p. 816.
Sterilization. R. A. Kiefer. No. 1,062,404; May 20; Gaz. vol. 190; p. 702.
Sterilizer. J. S. Forbes. No. 1,062,776; May 27; Gaz. vol. 190; p. 865.
Stethoscope. C. M. Root. No. 1,061,963; May 13; Gaz. vol. 190; p. 511.
Stirrup. C. Erbe. No. 1,062,327; May 20; Gaz. vol. 190; p. 678.
Stirrup, Safety-. A. M. Sipes. No. 1,062,125; May 20; Gaz. vol. 190; p. 609.
Stone-channeling mechanism. T. D. Mowlds. No. 1,062,790; May 27; Gaz. vol. 190; p. 871.
Stone, Making artificial. W. F. C. M. McCarty. No. 1,060,614; May 6; Gaz. vol. 190; p. 18.
Stool and bath holder, Infant's. W. W. Greenwood. No. 1,062,704; May 27; Gaz. vol. 190; p. 843.
Stool, Milking-. F. A. Pelletier. No. 1,061,321; May 13; Gaz. vol. 190; p. 295.
Stop device for automatic machines, Automatic. R. L. Folz and P. A. Zace. No. 1,061,169; May 6; Gaz. vol. 190; p. 207.
Stopper: *See* Bottle-stopper.

Stopper. J. F. Lawrence. No. 1,060,913; May 6; Gaz. vol. 190; p. 121.
Stopper. F. Evans and G. A. Duryee. No. 1,061,829; May 13; Gaz. vol. 190; p. 467.
Storm and surge alarm for transmission-lines. E. E. F. Creighton. No. 1,062,083; May 20; Gaz. vol. 190; p. 594.
Stove. A. W. Meyer. No. 1,062,023; May 20; Gaz. vol. 190; p. 574.
Stove. W. H. Vahl and W. J. Petrasek. No. 1,062,560; May 20; Gaz. vol. 190; p. 752.
Stove, Combined heating and cooking. M. Jones. No. 1,061,959; May 13; Gaz. vol. 190; p. 510.
Stove-door. J. A. Alexander and F. K. Berry. No. 1,060,808; May 6; Gaz. vol. 190; p. 83.
Stove, Electric. C. A. Pfanstiehl. No. 1,062,299; May 20; Gaz. vol. 190; p. 668.
Stove, Hot-blast. W. J. Brown. No. 1,062,221; May 20; Gaz. vol. 190; p. 641.
Stove lid or cover. D. W. Sowers. No. 1,060,645; May 6; Gaz. vol. 190; p. 27.
Stove-lighting device, Gas-. H. C. Fritz. No. 1,061,738; May 13; Gaz. vol. 190; p. 440.
Stove, Oil-. W. H. Wilder. No. 1,062,677; May 27; Gaz. vol. 190; p. 834.
Stovepipe-fastener. J. Stokes, Jr. No. 1,061,419; May 13; Gaz. vol. 190; p. 328.
Strap: *See* Hitching-strap; Jock-strap.
Street-sweeper. J. Suszycki. No. 1,061,421; May 13; Gaz. vol. 190; p. 329.
Strip-applying machine. G. E. Bissez. No. 1,061,966; May 13; Gaz. vol. 190; p. 512.
Stump-burner. W. C. Beckham. No. 1,061,350; May 13; Gaz. vol. 190; p. 305.
Stump-puller. E. A. Grundeen. No. 1,061,370; May 13; Gaz. vol. 190; p. 311.
Stump-puller. J. O. Johnston. No. 1,062,470; May 20; Gaz. vol. 190; p. 723.
Suitcases and the like, Attachment for. W. G. Williams. No. 1,062,752; May 27; Gaz. vol. 190; p. 858.
Sulfur from smelter-gases, Obtaining. H. Sanborn, H. G. McMahon, J. T. Overbury, and S. W. Young. No. 1,062,120; May 20; Gaz. vol. 190; p. 607.
Sulky, Child's. J. N. Wheeler. No. 1,062,867; May 27; Gaz. vol. 190; p. 896.
Sulky, Child's. J. N. Wheeler. No. 1,062,938; May 27; Gaz. vol. 190; p. 921.
Superheater, Steam-generator. W. F. Kiesel, Jr. No. 1,061,180; May 6; Gaz. vol. 190; p. 212.
Support. E. D. N. Schulte. No. 1,060,861; May 6; Gaz. vol. 190; p. 103.
Support, Adjustable. D. Sandberg. No. 1,061,328; May 13; Gaz. vol. 190; p. 298.
Suprarenal glands, Metallic derivative or compound of the active principle of the. J. L. Turner. No. 1,061,148; May 6; Gaz. vol. 190; p. 202.
Surface-heater. W. Macleod. No. 1,062,655; May 27; Gaz. vol. 190; p. 827.
Surgical basin. C. W. Meinecke. No. 1,061,769; May 13; Gaz. vol. 190; p. 449.
Sweat-band, Detachable. W. H. Mymms. No. 1,061,489; May 13; Gaz. vol. 190; p. 353.
Swimming device. F. W. J. Goersch. No. 1,062,587; May 27; Gaz. vol. 190; p. 804.
Swing-seat. B. G. Foster. No. 1,061,462; May 13; Gaz. vol. 190; p. 343.
Swingletree. W. Reeves and H. B. La Trobe. No. 1,060,942; May 6; Gaz. vol. 190; p. 131.
Swingletree-hook. W. E. Witt. No. 1,061,435; May 13; Gaz. vol. 190; p. 334.
Switch: *See* Electric switch; Electric-circuit switch; Electric time-switch; Flush switch; Lamp-switch; Push-button switch; Series multiple switch; Spring-switch.
Switch. G. E. Palmer. No. 1,060,700; May 6; Gaz. vol. 190; p. 48.
Switch. L. E. Thomas. No. 1,060,796; May 6; Gaz. vol. 190; p. 79.
Switch-operating mechanism. E. J. Knowlton. No. 1,061,185; May 6; Gaz. vol. 190; p. 213.
Switch-operating mechanism. E. Carrau. No. 1,062,817; May 27; Gaz. vol. 190; p. 880.
Switch-stand target. W. C. Kidd and J. B. Strong. No. 1,062,014; May 20; Gaz. vol. 190; p. 571.
Switch-throwing device. O. Dmen. No. 1,061,457; May 13; Gaz. vol. 190; p. 342.
Table: *See* Extension-table; Folding table; Ironing-table; Osteopathic table; Rifle-cleaning table.
Tack-placer. H. F. Haynes. No. 1,062,464; May 20; Gaz. vol. 190; p. 722.
Tag holder, License-. W. L. Weidler. No. 1,063,090; May 27; Gaz. vol. 190; p. 970.
Tailor's-goose attachment. T. H. Talley. No. 1,061,140; May 6; Gaz. vol. 190; p. 199.
Talking-machine. J. W. Aylsworth. No. 1,062,579; May 27; Gaz. vol. 190; p. 801.
Talking-machine needle. P. B. Ruggles. No. 1,061,408; May 13; Gaz. vol. 190; p. 325.
Talking-machine sound-box. W. N. Dennison. No. 1,060,672; May 6; Gaz. vol. 190; p. 37.
Tamper. W. Kammer. No. 1,063,030; May 27; Gaz. vol. 190; p. 953.
Tank: *See* Grain-steeping tank; Oil-tank; Watering-tank.
Tank. F. H. Lindenberg. No. 1,060,609; May 6; Gaz. vol. 190; p. 16.
Tank and heater. J. Ambruster. No. 1,060,658; May 6; Gaz. vol. 190; p. 32.
Tank-heater. A. F. and G. A. Trachte. No. 1,061,147; May 6; Gaz. vol. 190; p. 201.
Tap, Barrel-. H. Hildenbrand. No. 1,062,779; May 27; Gaz. vol. 190; p. 867.
Tar-boiling apparatus, Portable. J. T. M. Johnston. No. 1,061,916; May 13; Gaz. vol. 190; p. 494.
Tartaric salts from waste tartarous materials, Extraction of. G. Vigneaux. No. 1,060,869; May 6; Gaz. vol. 190; p. 106.
Tea or coffee pot. S. Sternau, L. Strassburger, and A. N. Lattin. No. 1,061,336; May 13; Gaz. vol. 190; p. 300.
Teeth, Fastening pins to artificial. E. Liégey. No. 1,061,244; May 6; Gaz. vol. 190; p. 234.
Teeth, Removable bridge for. H. A. Gollobin and N. A. Bornstein. No. 1,062,233; May 20; Gaz. vol. 190; p. 646.
Telegraph system. C. M. Edwards. No. 1,062,824; May 27; Gaz. vol. 190; p. 882.
Telegraph-transmitter, Automatic. L. M. Potts. No. 1,060,939; May 6; Gaz. vol. 190; p. 130.
Telemeter, Base-line. C. von Hofe. No. 1,060,902; May 6; Gaz. vol. 190; p. 118.
Telemeter, Stereoscopic. A. König. No. 1,062,166; May 20; Gaz. vol. 190; p. 623.
Telephone-exchange system. C. A. Bals. No. 1,061,516; May 13; Gaz. vol. 190; p. 363.
Telephone-lines, &c., Exchange system for. A. Lawrence. No. 1,061,852; May 13; Gaz. vol. 190; p. 473.
Telephone lock-out. W. L. Campbell. No. 1,061,898; May 13; Gaz. vol. 190; p. 488.
Telephone-receiver. E. B. Craft and J. N. Reynolds. No. 1,062,082; May 20; Gaz. vol. 190; p. 594.
Telephone-signal. A. U. Gerber. No. 1,061,238; May 6; Gaz. vol. 190; p. 232.
Telephone system. R. C. M. Hastings. No. 1,061,287; May 13; Gaz. vol. 190; p. 283.
Telephone system. F. G. Agrell. No. 1,061,650; May 13; Gaz. vol. 190; p. 410.
Telephone system. F. G. Agrell. No. 1,061,651; May 13; Gaz. vol. 190; p. 411.
Telephone system. R. C. M. Hastings. No. 1,062,004; May 20; Gaz. vol. 190; p. 567.
Telephone system. E. E. Kleinschmidt. No. 1,062,577; May 20; Gaz. vol. 190; p. 759.
Telephone system, Measured-service. J. Erickson. No. 1,062,387; May 20; Gaz. vol. 190; p. 697.
Telephone systems, Selecting apparatus for. R. C. M. Hastings. No. 1,061,286; May 13; Gaz. vol. 190; p. 283.
Telephone-wires, Apparatus for grounding. P. T. Hudson. No. 1,060,598; May 6; Gaz. vol. 190; p. 12.
Telephones, Busy-signal attachment for. A. M. Beeler. No. 1,061,589; May 13; Gaz. vol. 190; p. 390.
Telephonic and like instruments, Cushion for diaphragms of. W. P. Stunz. No. 1,062,559; May 20; Gaz. vol. 190; p. 752.
Telephonic apparatus. C. Adams-Randall. No. 1,062,754; May 27; Gaz. vol. 190; p. 858.
Telephonic-apparatus key construction and support. W. P. Andrick, E. Lowe, and H. W. Haff. No. 1,060,576; May 6; Gaz. vol. 190; p. 4.
Telephonic receivers, &c., Diaphragm for. A. Marr. No. 1,061,766; May 13; Gaz. vol. 190; p. 448.
Telephony. C. A. Bals. No. 1,061,515; May 13; Gaz. vol. 190; p. 362.
Telephony. S. G. Brown. No. 1,061,813; May 13; Gaz. vol. 190; p. 461.
Telephony. I. Kitsee. No. 1,062,161; May 20; Gaz. vol. 190; p. 621.
Telephony, Selective system of. R. C. M. Hastings. No. 1,061,285; May 13; Gaz. vol. 190; p. 283.
Testing the durability of material which is exposed to repeatedly-applied stresses, Means for. G. Kapp. No. 1,062,595; May 27; Gaz. vol. 190; p. 807.
Textile and other manufactures, Product for use in. P. C. D. Castle. No. 1,063,118; May 27; Gaz. vol. 190; p. 980.
Therapeutic device for utilizing radiant energy. S. A. Cunningham. No. 1,061,225; May 6; Gaz. vol. 190; p. 227.
Thermal cut-out. C. D. Haskins. No. 1,060,757; May 6; Gaz. vol. 190; p. 66.
Thermostat. T. H. Wurmb and R. Baumann. No. 1,062,136; May 20; Gaz. vol. 190; p. 613.
Thermostatic device for determining the temperature of heated surfaces. E. J. McDonnell, Jr. No. 1,062,348; May 20; Gaz. vol. 190; p. 684.
Thill-coupling. C. E. Townley. No. 1,062,671; May 27; Gaz. vol. 190; p. 832.
Thread-treating apparatus. C. S. Althouse. No. 1,061,652; May 13; Gaz. vol. 190; p. 411.
Threads, Apparatus for the removal of projecting hairs and the like from wool-yarn. O. Stöhr. No. 1,062,806; May 27; Gaz. vol. 190; p. 876.
Threshing-machine. W. W. Brower. No. 1,060,890; May 6; Gaz. vol. 190; p. 113.
Threshing-machine feeder. J. Hovey. No. 1,061,478; May 13; Gaz. vol. 190; p. 349.
Ticket-holder. C. A. Bowles. No. 1,061,810; May 13; Gaz. vol. 190; p. 460.
Ticket-holder. C. E. Long. No. 1,062,174; May 20; Gaz. vol. 190; p. 625.

Ticket, Railway-. C. H. Cosgrove. No. 1,061,821; May 13; Gaz. vol. 190; p. 464.
Tie: *See* Bait-tie; Concrete railway-tie; Metallic tie; Rail-tie; Railway-tie; Railway cross-tie; Railway-rail tie; Scaffold-tie.
Tie-plate. J. T. Markham. No. 1,060,775; May 6; Gaz. vol. 190; p. 72.
Tie-plate and rail-anchor, Combined. W. H. Winsworth. No. 1,060,729; May 6; Gaz. vol. 190; p. 57.
Tile, Hollow. W. H. Burk. No. 1,062,077; May 20; Gaz. vol. 190; p. 592.
Tiling-tool. O. M. Anderson. No. 1,062,045; May 27; Gaz. vol. 190; p. 923.
Tilting gate. H. H. Roof. No. 1,062,928; May 27; Gaz. vol. 190; p. 917.
Time and speed indicating and recording means. H. Quertier. No. 1,061,121; May 6; Gaz. vol. 190; p. 103.
Time recorder and indicator. H. T. Goss and J. W. Bryce. No. 1,061,607; May 13; Gaz. vol. 190; p. 395.
Timepiece indicating mechanism. O. E. Giset. No. 1,061,171; May 6; Gaz. vol. 190; p. 208.
Tinner's seam-beating device. F. Jones. No. 1,061,848; May 13; Gaz. vol. 190; p. 472.
Tinning and leading metals. F. Plathner and V. Dorn. No. 1,060,938; May 6; Gaz. vol. 190; p. 130.
Tire. W. T. Smith and C. C. Royer. No. 1,061,204; May 6; Gaz. vol. 190; p. 221.
Tire. W. A. Binion. No. 1,061,807; May 13; Gaz. vol. 190; p. 460.
Tire. S. Scognamillo. No. 1,061,927; May 13; Gaz. vol. 190; p. 499.
Tire-alarm. H. E. Knies. No. 1,061,184; May 6; Gaz. vol. 190; p. 213.
Tire-alarm. J. B. Polo. No. 1,061,200; May 6; Gaz. vol. 190; p. 219.
Tire-armor. J. J. Bukolt. No. 1,061,523; May 13; Gaz. vol. 190; p. 365.
Tire-armor. J. J. Bukolt. No. 1,061,524; May 13; Gaz. vol. 190; p. 366.
Tire-armor. S. F. Wilcox. No. 1,062,070; May 20; Gaz. vol. 190; p. 589
Tire, Armored pneumatic. W. R. Morrison. No. 1,061,313; May 13; Gaz. vol. 190; p. 293.
Tire cover, Pneumatic-. J. T. Johnson and F. G. Mason. No. 1,062,401; May 20; Gaz. vol. 190; p. 701.
Tire-deflation indicator. H. Jacoby. No. 1,062,567; May 20; Gaz. vol. 190; p. 755.
Tire-fastener. L. G. Fleming. No. 1,061,905; May 13; Gaz. vol. 190; p. 490.
Tire of wheels of vehicles or the like. J. Cairns. No. 1,063,117; May 27; Gaz. vol. 190; p. 979.
Tire-patching device. G. J. Martel. No. 1,061,301; May 13; Gaz. vol. 190; p. 318.
Tire, Pneumatic. A. H. Morton. No. 1,062,024; May 20; Gaz. vol. 190; p. 574.
Tire-protector. G. Bellemare. No. 1,062,631; May 27; Gaz. vol. 190; p. 819.
Tire-support. A. Harnishfeger. No. 1,062,462; May 20; Gaz. vol. 190; p. 721.
Tire-tool. G. Schaefer. No. 1,061,015; May 6; Gaz. vol. 190; p. 158.
Tire, Vehicle-. C. F. Jenkins. No. 1,062,011; May 20; Gaz. vol. 190; p. 570.
Tire, Vehicle-. W. E. Budd. No. 1,063,008; May 27; Gaz. vol. 190; p. 942.
Tires, Device for shaping the outer casings of pneumatic. G. W. Bell. No. 1,061,722; May 13; Gaz. vol. 190; p. 436.
Tires puncture-proof, Composition of matter to be introduced into the inner tubes of pneumatic tires for rendering the. T. S. Causey. No. 1,062,535; May 20; Gaz. vol. 190; p. 744.
Toasting stand and fork. W. H. R. West. No. 1,061,431; May 13; Gaz. vol. 190; p. 332.
Tobacco-pipe. H. Froehlich. No. 1,061,234; May 6; Gaz. vol. 190; p. 230.
Tobacco-receptacle and pipe-filler, Combined. G. E. Robinson. No. 1,063,066; May 27; Gaz. vol. 190; p. 962.
Tobacco, Treating. D. A. Gallagher. No. 1,062,093; May 20; Gaz. vol. 190; p. 598.
Tobacco-wrapper counter. D. Strasser. No. 1,061,931; May 13; Gaz. vol. 190; p. 501.
Tone-modifying device. W. H. Cook. No. 1,062,224; May 20; Gaz. vol. 190; p. 642.
Tongue support, Cultivator-. F. C. Hron. No. 1,061,845; May 13; Gaz. vol. 190; p. 471.
Tool. H. S. Waite. No. 1,062,310; May 20; Gaz. vol. 190; p. 672.
Tool. C. L. Wiedrich. No. 1,062,626; May 27; Gaz. vol. 190; p. 818.
Tool, Combination-. A. Bisko. No. 1,061,352; May 13; Gaz. vol. 190; p. 305.
Tool, Combination-. J. W. Crossley. No. 1,062,584; May 27; Gaz. vol. 190; p. 803.
Tool drivers, Driving mechanism for spiral-. J. Nahlinger. No. 1,061,773; May 13; Gaz. vol. 190; p. 450.
Tool-holder. C. J. Crowley. No. 1,062,225; May 20; Gaz. vol. 190; p. 643.
Tool-holder. H. Fish. No. 1,062,448; May 20; Gaz. vol. 190; p. 716.
Tool-holder. H. E. Mattheus. No. 1,063,050; May 27; Gaz. vol. 190; p. 956.
Tool holder, Multiple- machine-. R. B. Craig. No. 1,061,822; May 13; Gaz. vol. 190; p. 464.
Tool-holding device. J. Becker. No. 1,062,630; May 27; Gaz. vol. 190; p. 810.
Tool, Pneumatic. I. W. Townsend. No. 1,062,749; May 27; Gaz. vol. 190; p. 857.
Tooth-crown. C. J. Spain. No. 1,062,048; May 20; Gaz. vol. 190; p. 581.
Toothpicks, &c., Machine for rounding. C. C. Freeman and W. W. Tainter. No. 1,061,063; May 6; Gaz. vol. 190; p. 175.
Top-bow clamp. A. E. Thompson. No. 1,061,574; May 13; Gaz. vol. 190; p. 385.
Torch. J. Unser. No. 1,061,575; May 13; Gaz. vol. 190; p. 385.
Towel-holder, Sanitary. J. Q. Adams. No. 1,062,943; May 27; Gaz. vol. 190; p. 922.
Toy. C. B. Mangelsdorff. No. 1,060,612; May 6; Gaz. vol. 190; p. 17.
Toy. A. J. Nusly, Jr. No. 1,060,619; May 6; Gaz. vol. 190; p. 19.
Toy. F. K. Rich and M. G. Marsh. No. 1,060,631; May 6; Gaz. vol. 190; p. 23.
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Ventilator. J. T. Mercier. No. 1,061,623; May 13; Gaz. vol. 190; p. 401.
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Vise, Machine-. J. Hammann. No. 1,060,980; May 6; Gaz. vol. 190; p. 145.
Voting-machine. C. H. Ocumpaugh. No. 1,061,944; May 13; Gaz. vol. 190; p. 505.
Voting-machine. W. H. Dana. No. 1,062,893; May 27; Gaz. vol. 190; p. 905.
Wagon-box, Convertible. L. F. Bonaly. No. 1,062,761; May 27; Gaz. vol. 190; p. 861.
Wagon, Coke and coal. M. L. Senderling. No. 1,061,201; May 6; Gaz. vol. 190; p. 219.
Wagon, Dump-. C. D. Helle and E. G. Snyder. No. 1,061,743; May 13; Gaz. vol. 190; p. 442.
Wagon-reach safety attachment. A. C. Stopp. No. 1,062,558; May 20; Gaz. vol. 190; p. 752.
Wagon-standard. S. A. Cowart. No. 1,061,224; May 6; Gaz. vol. 190; p. 226.
Wagons of the end-dump type, Locking device for dump-. C. J. Flenhold. No. 1,060,976; May 6; Gaz. vol. 190; p. 144.
Wall construction. A. F. Meyer. No. 1,061,918; May 13; Gaz. vol. 190; p. 495.
Wall, Reinforced block. J. S. Banks. No. 1,061,441; May 13; Gaz. vol. 190; p. 335.
Walls, Waterproofing construction for building-. B. Foster. No. 1,062,091; May 20; Gaz. vol. 190; p. 598.
Wardrobe, Portable foldable. J. Neilsen. No. 1,062,845; May 27; Gaz. vol. 190; p. 889.
Warp-drawing machine. E. D. Colman. No. 1,062,271; May 20; Gaz. vol. 190; p. 659.
Warper. E. H. Ryon. No. 1,061,012; May 6; Gaz. vol. 190; p. 157.
Washboard. M. B. Felnen. No. 1,062,447; May 20; Gaz. vol. 190; p. 716.
Washer: *See* Air-washer; Clothes-washer; Stay-washer.
Washer-forming machine and punch-press. C. F. Mennig. No. 1,062,490; May 20; Gaz. vol. 190; p. 730.
Washing-machine. W. E. Thompson. No. 1,062,130; May 20; Gaz. vol. 190; p. 610.
Watchcase-bows, Producing. H. L. Jeffery. No. 1,061,080; May 6; Gaz. vol. 190; p. 179.
Water-closet. A. A. and A. J. Bruder. No. 1,061,522; May 13; Gaz. vol. 190; p. 365.
Water-closet. T. F. Payne. No. 1,062,413; May 20; Gaz. vol. 190; p. 706.
Water-closet connection. J. Podolsky. No. 1,061,632; May 13; Gaz. vol. 190; p. 404.
Water-closet valve, Frost-proof. T. F. Payne. No. 1,062,412; May 20; Gaz. vol. 190; p. 705.
Water-gate, Irrigation. U. Serviss. No. 1,062,042; May 20; Gaz. vol. 190; p. 580.
Water-heater. B. A. Schroder. No. 1,060,638; May 6; Gaz. vol. 190; p. 25.
Water-heater. G. E. Toepper. No. 1,060,959; May 6; Gaz. vol. 190; p. 138.
Water-heater. C. S. Folsom. No. 1,062,574; May 20; Gaz. vol. 190; p. 758.

Water-jacket furnace. J. A. Waddell, Jr. No. 1,063,088; May 27; Gaz. vol. 190; p. 969.
Water-motor. G. S. Gillett. No. 1,061,605; May 13; Gaz. vol. 190; p. 395.
Water of condensation, Apparatus for drawing off. K. Müller. No. 1,061,314; May 13; Gaz. vol. 190; p. 293.
Water purification, Thermal. H. F. Hodges. No. 1,060,901; May 6; Gaz. vol. 190; p. 117.
Water-purifier. J. Lohrmann. No. 1,063,047; May 27; Gaz. vol. 190; p. 955.
Water-purifying apparatus. C. R. Darnall. No. 1,060,669; May 6; Gaz. vol. 190; p. 35.
Watering-tank. J. W. Nelson. No. 1,062,792; May 27; Gaz. vol. 190; p. 872.
Waterway, Pleasure-. J. A. Miller. No. 1,062,838; May 27; Gaz. vol. 190; p. 887.
Wattmeter, Recording-. F. F. Kinney. No. 1,060,984; May 6; Gaz. vol. 190; p. 147.
Wattmeter, Recording-. F. F. Kinney. No. 1,061,182; May 6; Gaz. vol. 190; p. 212.
Wave-actuated motive apparatus. T. Kurrell, H. Schneider, and L. Bukowski. No. 1,062,832; May 27; Gaz. vol. 190; p. 884.
Wave-motor. J. Frame. No. 1,061,061; May 6; Gaz. vol. 190; p. 174.
Wave-motor. J. C. Lewis. No. 1,061,091; May 6; Gaz. vol. 190; p. 182.
Weaner, Colt or calf. C. H. Patterson. No. 1,061,113; May 6; Gaz. vol. 190; p. 190.
Weather-strip-forming machine. C. Engdahl and T. Matson. No. 1,060,897; May 6; Gaz. vol. 190; p. 116.
Weed-extractor. J. D. Ellis. No. 1,061,361; May 13; Gaz. vol. 190; p. 308.
Weed-pulling device. J. F. Guy and J. H. Blom. No. 1,061,175; May 6; Gaz. vol. 190; p. 210.
Weeder, Garden-. L. Gedney. No. 1,061,237; May 6; Gaz. vol. 190; p. 231.
Weighing and slicing machine attachment. W. Werth. No. 1,062,065; May 20; Gaz. vol. 190; p. 587.
Weighing-machine. J. Dobson. No. 1,061,229; May 6; Gaz. vol. 190; p. 228.
Weighing-machine, Automatic. L. J. Suddarth. No. 1,061,338; May 13; Gaz. vol. 190; p. 301.
Weighing - machine, Automatic. W. Clothier. No. 1,061,983; May 20; Gaz. vol. 190; p. 560.
Weighing-machine feeder, Automatic. C. D. Scott. No. 1,060,792; May 6; Gaz. vol. 190; p. 77.
Weight, Garment-. T. Kahn. No. 1,062,403; May 20; Gaz. vol. 190; p. 702.
Welding, Electric. J. A. Heany. No. 1,061,375; May 13; Gaz. vol. 190; p. 312.
Welding, Electric. C. R. Murray, L. R. Brink, and W. K. Malmstrom. No. 1,062,571; May 20; Gaz. vol. 190; p. 756.
Welding-machine, Electric. J. A. Heany. No. 1,061,378; May 13; Gaz. vol. 190; p. 313.
Welding machine, Electric spot-. W. C. Winfield and A. C. Taylor. No. 1,063,097; May 27; Gaz. vol. 190; p. 972.
Welding system, Electric. J. A. Heany. No. 1,061,377; May 13; Gaz. vol. 190; p. 313.
Well-casing shoe. S. A. Gulberson, Jr., and H. Mead. No. 1,062,647; May 27; Gaz. vol. 190; p. 825.
Well-drilling apparatus. A. C. Stewart. No. 1,062,050; May 20; Gaz. vol. 190; p. 582.
Well-screen. M. E. Layne. No. 1,062,717; May 27; Gaz. vol. 190; p. 847.
Welt-preparing machine. C. P. Stanbon. No. 1,060,716; May 6; Gaz. vol. 190; p. 53.
Wheat-cleaner. J. J. Ramsaur. No. 1,063,139; May 27; Gaz. vol. 190; p. 986.
Wheel: *See* Car-wheel; Elastic wheel; Gear-wheel; Pneumatic wheel; Power-wheel; Resilient wheel; Spring-wheel; Traction-wheel; Vehicle-wheel.
Wheel. W. C. Fownes, Jr., and F. Hofwing. No. 1,060,835; May 6; Gaz. vol. 190; p. 93.
Wheel. C. E. Foust. No. 1,061,603; May 13; Gaz. vol. 190; p. 394.
Wheel. S. Kaye. No. 1,062,472; May 20; Gaz. vol. 190; p. 724.
Wheel attachment. T. Townend. No. 1,062,618; May 27; Gaz. vol. 190; p. 815.
Wheel-runner, Vehicle. E. Rogers. No. 1,062,360; May 20; Gaz. vol. 190; p. 688.
Wheels from sliding, Safety device to keep. J. A. Gruber. No. 1,061,369; May 13; Gaz. vol. 190; p. 311.
Wheeled chair, Gardener's. I. M. Peter. No. 1,061,114; May 6; Gaz. vol. 190; p. 190.
Wheelbarrow. D. H. Brand. No. 1,063,112; May 27; Gaz. vol. 190; p. 977.
Whiffletree. G. Culli. No. 1,061,166; May 6; Gaz. vol. 190; p. 206.
Whiffletree-hook. P. Johnson. No. 1,061,545; May 13; Gaz. vol. 190; p. 374.
Winding-machine. E. R. Phillips. No. 1,061,947; May 13; Gaz. vol. 190; p. 507.
Winding-machine. C. Ryden. No. 1,062,420; May 20; Gaz. vol. 190; p. 707.
Winding-machine. C. Ryden and F. D. Babcock. No. 1,062,930; May 27; Gaz. vol. 190; p. 918.
Winding machine, Cop-. J. Hunz. No. 1,061,542; May 13; Gaz. vol. 190; p. 373.
Winding machine, Cop-. J. Hunz. No. 1,061,543; May 13; Gaz. vol. 190; p. 374.
Winding machine, Cop or bobbin. E. H. Ryon. No. 1,061,013; May 6; Gaz. vol. 190; p. 157.
Winding-machine for yarn and thread. T. A. Boyd. No. 1,062,562; May 20; Gaz. vol. 190; p. 753.
Windmill-regulator. A. Ugstad. No. 1,062,621; May 27; Gaz. 190; p. 816.
Window. W. R. Phillips. No. 1,062,794; May 27; Gaz. vol. 190; p. 872.
Window-cleaner. H. K. Parke. No. 1,061,112; May 6; Gaz. vol. 190; p. 189.
Window-cleaner. C. F. Conant. No. 1,062,322; May 20; Gaz. vol. 190; p. 676.
Window-lock, Automatic. F. Grimshaw. No. 1,062,234; May 20; Gaz. vol. 190; p. 646.
Window-locking device. F. B. Rullman. No. 1,061,569; May 13; Gaz. vol. 190; p. 383.
Window-operating apparatus. H. C. Desbecker. No. 1,062,085; May 20; Gaz. vol. 190; p. 595.
Window-operating device. A. S. Staniah. No. 1,062,997; May 27; Gaz. vol. 190; p. 939.
Window-screen. Z. Talbot. No. 1,061,425; May 13; Gaz. vol. 190; p. 330.
Window-ventilator. C. S. Winn. No. 1,060,727; May 6; Gaz. vol. 190; p. 56.
Wire-drawing machine, Continuous-. M. Rooke. No. 1,062,036; May 20; Gaz. vol. 190; p. 578.
Wire-fabric machine. G. W. Whittington. No. 1,061,432; May 13; Gaz. vol. 190; p. 332.
Wire fastener, Lime-. A. W. Morgan. No. 1,061,311; May 13; Gaz. vol. 190; p. 292.
Wire pin, Headed. K. Oertel. No. 1,063,057; May 27; Gaz. vol. 190; p. 959.
Wire-stretcher. J. Harrison. No. 1,062,331; May 20; Gaz. vol. 190; p. 678.
Wire-stretcher. J. A. White. No. 1,062,939; May 27; Gaz. vol. 190; p. 921.
Wire-stretcher. C. H. Rains. No. 1,063,063; May 27; Gaz. vol. 190; p. 961.
Wood-chopper's foot-board. J. R. Andrus. No. 1,062,685; May 27; Gaz. vol. 190; p. 837.
Wood from decay and fire, Preserving. H. J. Livingston. No. 1,062,286; May 20; Gaz. vol. 190; p. 663.
Wood or the like, Apparatus for raising sunken. C. J. Nauclér. No. 1,060,696; May 6; Gaz. vol. 190; p. 46.
Wood-treating apparatus. F. A. Palen. No. 1,062,184; May 20; Gaz. vol. 190; p. 629.
Wood-treating apparatus. J. Petschauer. No. 1,062,550; May 20; Gaz. vol. 190; p. 748.
Woodworking or furniture, Instrument for. E. Lobo. No. 1,061,855; May 13; Gaz. vol. 190; p. 474.
Work-bench. F. S. Lathrop. No. 1,063,046; May 27; Gaz. vol. 190; p. 955.
Work-holder. T. F. Morrissey. No. 1,062,547; May 20; Gaz. vol. 190; p. 748.
Work-support. A. Bates and E. A. Cridland. No. 1,060,735; May 6; Gaz. vol. 190; p. 59.
Wrapping-machine. R. F. Stewart. No. 1,062,262; May 20; Gaz. vol. 190; p. 655.
Wrapping-machine. F. H. Merrell and W. S. Amidon. No. 1,062,410; May 20; Gaz. vol. 190; p. 704.
Wrapping machine, Gum-. H. J. Kempf. No. 1,060,983; May 6; Gaz. vol. 190; p. 147.
Wrench: *See* Pipe-wrench; Quick-adjusting wrench; Ratchet-wrench; Screw-wrench.
Wrench. C. Goelz. No. 1,060,752; May 6; Gaz. vol. 190; p. 65.
Wrench. J. W. Seale. No. 1,060,862; May 6; Gaz. vol. 190; p. 104.
Wrench. A. B. Carll. No. 1,060,891; May 6; Gaz. vol. 190; p. 114.
Wrench. W. S. Thomson. No. 1,061,339; May 13; Gaz. vol. 190; p. 301.
Wrench. C. C. Guernsey. No. 1,061,609; May 13; Gaz. vol. 190; p. 396.
Wrench. M. E. Crandall. No. 1,061,662; May 13; Gaz. vol. 190; p. 414.
Wrench. E. K. Righter. No. 1,061,691; May 13; Gaz. vol. 190; p. 425.
Wrench. R. C. Showalter. No. 1,061,876; May 13; Gaz. vol. 190; p. 481.
Wrench. W. E. Post. No. 1,061,925; May 13; Gaz. vol. 190; p. 499.
Wrench. J. H. and R. C. Brown. No. 1,061,978; May 20; Gaz. vol. 190; p. 558.
Wrench. G. J. White. No. 1,062,207; May 20; Gaz. vol. 190; p. 637.
Wrench of the adjustable alligator type. H. A. Smith. No. 1,062,047; May 20; Gaz. vol. 190; p. 581.
Wringer: *See* Mop-wringer.
Wrinkle-preventer. C. J. McDonald. No. 1,062,600; May 27; Gaz. vol. 190; p. 805.
Wrinkle-remover. A. M. Hess and A. L. Tibbals. No. 1,062,399; May 20; Gaz. vol. 190; p. 701.
Wrist and sleeve protector. P. J. Nichols. No. 1,061,686; May 13; Gaz. vol. 190; p. 423.
Writing habit, Means for producing a correct. M. M. Hughes. No. 1,061,913; May 13; Gaz. vol. 190; p. 493.
X-ray system. H. F. Waite. No. 1,061,428; May 13; Gaz. vol. 190; p. 331.
Yeast, Increasing the fermentation property of. A. Pollak. No. 1,061,494; May 13; Gaz. vol. 190; p. 354.
Zinc oxid and sinter from alloys containing zinc, Obtaining. H. M. Burkey. No. 1,061,447; May 13; Gaz. vol. 190; p. 337.

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Air-rifle. E. H. Searle. Nos. 44,034–5; May 13; Gaz. vol. 190; p. 525.
Apron. M. Volke. No. 44,046; May 13; Gaz. vol. 190; p. 527.
Asparagus-holder. A. Hepner. No. 44,103; May 27; Gaz. vol. 190; p. 1005.
Automobile-body. T. A. Kovats. No. 44,067; May 20; Gaz. vol. 190; p. 768.
Automobile radiator-indicators, Casing for. H. H. Boyce. No. 43,987; May 13; Gaz. vol. 190; p. 516.
Automobile rear fender. A. L. Garford. No. 43,997; May 13; Gaz. vol. 190; p. 518.
Badge. D. Stewart. No. 44,039; May 13; Gaz. vol. 190; p. 526.
Bedspread. F. Lloyd. No. 44,010; May 13; Gaz. vol. 190; p. 521.
Beverage-heater. C. Gentle. No. 43,958; May 6; Gaz. vol. 190; p. 238.
Binding. A. E. Neff. No. 44,071; May 20; Gaz. vol. 190; p. 769.
Block side. F. B. Mallory. No. 44,016; May 13; Gaz. vol. 190; p. 522.
Block side. F. B. Mallory. No. 44,068; May 20; Gaz. vol. 190; p. 768.
Box or similar article. J. R. Foster. No. 44,058; May 20; Gaz. vol. 190; p. 766.
Bracelet. S. O. Bigney. No. 43,985; May 13; Gaz. vol. 190; p. 516.
Bracelet. R. Worms. Nos. 44,047–8; May 13; Gaz. vol. 190; p. 528.
Braid or trimming. R. H. Averns. Nos. 43,977–83; May 13; Gaz. vol. 190; pp. 515–16.
Brooch, badge, or scarf-pin. A. E. Keller. No. 44,064; May 20; Gaz. vol. 190; p. 768.
Buckle. W. A. Schleicher. No. 44,075; May 20; Gaz. vol. 190; p. 770.
Button. W. L. Rothschild. No. 43,970; May 6; Gaz. vol. 190; p. 240.
Button. G. L. Phillips. No. 44,024; May 13; Gaz. vol. 190; p. 523.
Button. R. Gorton. No. 44,098; May 27; Gaz. vol. 190; p. 1004.
Cabinet for sound-reproducing machines. M. Keen. Nos. 43,961–4; May 6; Gaz. vol. 190; pp. 238–9.
Cabinet, Metallic storage-. C. A. Ellis. No. 44,093; May 27; Gaz. vol. 190; p. 1003.
Candy-box. J. E. Leikauf. No. 44,009; May 13; Gaz. vol. 190; p. 521.
Canopy or reflector for artificial light. R. V. Owen. No. 43,967; May 6; Gaz. vol. 190; p. 239.
Cap-covering, Waterproof. P. G. Tilton. No. 44,042; May 13; Gaz. vol. 190; p. 527.
Cap-front ornament. E. F. Durand. No. 44,091; May 27; Gaz. vol. 190; p. 1003.
Capital and arch. A. A. Cantin. No. 44,083; May 27; Gaz. vol. 190; p. 1001.
Capital and architrave. A. A. Cantin. No. 44,084; May 27; Gaz. vol. 190; p. 1002.
Cards, Suit of playing-. H. C. Jensen. No. 44,004; May 13; Gaz. vol. 190; p. 520.
Carpet. W. A. Elliot. Nos. 43,993–4; May 13; Gaz. vol. 190; pp. 517–18.
Carpet. M. R. Loudon. Nos. 44,012–14; May 13; Gaz. vol. 190; pp. 521–2.
Carpet. J. B. Moffat. No. 44,020; May 13; Gaz. vol. 190; p. 523.
Carpet. E. G. Sauer. No. 44,028; May 13; Gaz. vol. 190; p. 524.
Carpet. E. G. Sauer. No. 44,030; May 13; Gaz. vol. 190; p. 524.
Carpet. J. Spring. Nos. 44,037–8; May 13; Gaz. vol. 190; p. 526.
Carpet or rug. J. G. Pegel. No. 44,023; May 13; Gaz. vol. 190; p. 523.
Carpet or rug. W. E. Sayers. Nos. 44,032–3; May 13; Gaz. vol. 190; p. 525.
Casing and stand for liquid-agitators. C. N. Ecklyn. No. 43,991; May 13; Gaz. vol. 190; p. 517.
Chair. W. F. Koken No. 44,006; May 13; Gaz. vol. 190; p. 520.
Chalk-holder. J. W. Johnson. No. 44,005; May 13; Gaz. vol. 190; p. 520.
Cigar-lighter casing. P. A. Adamian and A. Dahan. No. 44,080; May 27; Gaz. vol. 190; p. 1001.
Clasp. F. Hirsh. No. 44,063; May 20; Gaz. vol. 190; p. 767.
Coffin-handle. H. W. Hodgetts. No. 43,960; May 6; Gaz. vol. 190; p. 238.
Collar attachment. J. I. Van Tochine. No. 44,115; May 27; Gaz. vol. 190; p. 1008.
Collar ornament, Emblematic. E. F. Durand. No. 44,089; May 27; Gaz. vol. 190; p. 1002.
Comb. C. M. Proctor. No. 44,072; May 20; Gaz. vol. 190; p. 769.
Concrete house, Portable. C. F. Massey. No. 44,017; May 13; Gaz. vol. 190; p. 522.
Cornet. W. A. French. No. 44,095; May 27; Gaz. vol. 190; p. 1003.
Display-rack. M. C. Treadway. No. 44,078; May 20; Gaz. vol. 190; p. 770.
Doll, Sailor-boy. J. Eisenmann. No. 43,992; May 13; Gaz. vol. 190; p. 517.
Drawer and cabinet pull. A. G. Weiser. No. 43,974; May 6; Gaz. vol. 190; p. 241.
Dress. J. J. Goldman. No. 44,097; May 27; Gaz. vol. 190; p. 1004.
Drinking vessel or similar article. G. Trueg, Jr. No. 44,043; May 13; Gaz. vol. 190; p. 527.
Electrolier. O. S. Strom. No. 43,972; May 6; Gaz. vol. 190; p. 240.
Emblem, Fraternity-. W. E. Clarke. Nos. 44,052–3; May 20; Gaz. vol. 190; p. 765.
Fabric, Textile. H. Maisch-Bitschenauer. No. 43,986; May 13; Gaz. vol. 190; p. 516.
Fabric, Textile. H. Frank. No. 43,996; May 13; Gaz. vol. 190; p. 518.
Fabric, Textile. G. George. Nos. 43,998–44,001; May 13; Gaz. vol. 190; pp. 518–19.
Fabric, Textile. A. H. Kursheedt. No. 44,007; May 13; Gaz. vol. 190; p. 520.
Fabric, Textile. J. J. Lambert. No. 44,008; May 13; Gaz. vol. 190; p. 521.
Fabric, Textile. H. T. Loomis. No. 44,011; May 13; Gaz. vol. 190; p. 521.
Fabric, Textile. R. Ruepp. No. 44,025; May 13; Gaz. vol. 190; p. 524.
Fabric, Textile. E. Sins. No. 44,036; May 13; Gaz vol. 190; p. 526.
Faucet. W. G. Newton. No. 44,107; May 27; Gaz. vol. 190; p. 1006.
Fire-extinguishers, Bracket for holding. P. G. MacGregor. No. 44,015; May 13; Gaz. vol. 190; p. 522.
Fork or analagous article. H. C. Quincy. No. 44,112; May 27; Gaz. vol. 190; p. 1007.
Garbage-receptacle. P. Persson. No. 44,110; May 27; Gaz. vol. 190; p. 1006.
Glass, Drinking-. C. Greer. No. 44,059; May 20; Gaz. vol. 190; p. 767.
Glass vessel or similar article, Cut-. T. A. Shanley. No. 44,114; May 27; Gaz. vol. 190; p. 1007.
Glassware vessel. W. H. Hawken. No. 44,008; May 13; Gaz. vol. 190; p. 519.
Globe. E. Rhader. No. 43,969; May 6; Gaz. vol. 190; p. 240.
Golf-ball. H. D. Penney. No. 44,109; May 27; Gaz. vol. 190; p. 1006.
Helmet-shield. E. F. Durand. No. 44,090; May 27; Gaz. vol. 190; p. 1002.
Insulator. T. C. White. No. 44,118; May 27; Gaz. vol. 190; p. 1008.
Jug, Molasses-. A. J. Sanford. No. 44,026; May 13; Gaz. vol. 190; p. 524.
Knob, Door-. A. Gribko. No. 44,099; May 27; Gaz. vol. 190; p. 1004.
Lamp-bracket. T. Wight. No. 43,975; May 6; Gaz. vol. 190; p. 241.
Lamp, Miner's. C. Vistard. No. 44,079; May 20; Gaz. vol. 190; p. 770.
Lamp-post. A. C. Raleigh. No. 43,968; May 6; Gaz. vol. 190; p. 240.
Lamp-shade. W. F. M. Hawe. No. 44,102; May 27; Gaz. vol. 190; p. 1005.
Lamp-shade. E. W. Huttig. No. 44,104; May 27; Gaz. vol. 190; p. 1005.
Lamp-shade. M. H. Sloan. No. 44,115; May 27; Gaz. vol. 190; p. 1007.
Lamp, Vapor-. C. Nelson. No. 44,106; May 27; Gaz. vol. 190; p. 1006.
Lever. S. L. Allen. No. 43,953; May 6; Gaz. vol. 190; p. 237.
Light standard, Street-. S. M. Colburn. Nos. 44,054–7; May 20; Gaz. vol. 190; p. 766.
Lighting-fixture. L. W. Young. No. 44,120; May 27; Gaz. vol. 190; p. 1008.
Linoleum, oil-cloth, or floor-covering. A. W. Drew. No. 43,990; May 13; Gaz. vol. 190; p. 517.
Match-box holder. J. L. Gaffney. No. 44,096; May 27; Gaz. vol. 190; p. 1003.
Mirror-plateau. J. E. Rohrbeck. No. 44,113; May 27; Gaz. vol. 190; p. 1007.

Mirrors, brushes, or similar articles, Back for. G. E. Fahys. No. 43,954; May 6; Gaz. vol. 190; p. 237.
Nebulizer. O. C. Stackhouse. No. 43,971; May 6; Gaz. vol. 190; p. 240.
Plate. W. S. Wagner. No. 43,973; May 6; Gaz. vol. 190; p. 241.
Plate. J. T. Wigley. No. 43,976; May 6; Gaz. vol. 190; p. 241.
Plate or similar article. C. A. May. Nos. 44,018–19; May 13; Gaz. vol. 190; p. 522.
Plate or similar article. W. T. Rawlins. Nos. 44,073–4; May 20; Gaz. vol. 190; p. 769.
Playhouse, Folding. E. R. L. Thayer and E. H. Cassard. No. 44,041; May 13; Gaz. vol. 190; p. 526.
Powder can, Dome-top toilet-. A. J. Guidry. No. 44,100; May 27; Gaz. vol. 190; p. 1004.
Reflector. J. R. Cravath. No. 44,086; May 27; Gaz. vol. 190; p. 1002.
Reflector. A. C. Einstein. No. 44,092; May 27; Gaz. vol. 190; p. 1003.
Rug. W. A. Elliot. No. 43,995; May 13; Gaz. vol. 190; p. 518.
Rug. E. G. Sauer. No. 44,027; May 13; Gaz. vol. 190; p. 524.
Rug. E. G. Sauer. No. 44,029; May 13; Gaz. vol. 190; p. 524.
Rug. E. G. Sauer. No. 44,031; May 13; Gaz. vol. 190; p. 525.
Rug. I. J. Vetter. No. 44,045; May 13; Gaz. vol. 190; p. 527.
Saddle, Harness-. R. Miller. No. 44,069; May 20; Gaz. vol. 190; p. 768.
Score-board, Bowling. W. R. Kirk. No. 44,066; May 20; Gaz. vol. 190; p. 768.
Seals, Male die for. H. W. Congdon. No. 44,085; May 27; Gaz. vol. 190; p. 1002.
Sewing-machine table and stand. H. E. Bryant. No. 44,081; May 27; Gaz. vol. 190; p. 1001.
Shade or reflector holder. H. D'Oller, Jr. No. 43,989; May 13; Gaz. vol. 190; p. 517.
Shade, reflector, or the like. O. A. Mygatt. No. 43,965; May 6; Gaz. vol. 190; p. 239.
Shoe-conformer. C. O. Quimby. No. 44,111; May 27; Gaz. vol. 190; p. 1007.
Spoon, fork, or similar article. S. Stohrer. No. 44,040; May 13; Gaz. vol. 190; p. 526.
Spoon, fork, or similar article. B. D. Myers. No. 44,070; May 20; Gaz. vol. 190; p. 769.
Spoons, forks, and similar articles, Handle for. J. L. Kimball. No. 44,065; May 20; Gaz. vol. 190; p. 768.
Spoons, forks, or similar articles, Handle for. W. C. Codman. No. 43,988; May 13; Gaz. vol. 190; p. 516.
Spoons, forks, or similar articles, Handle for. C. W. Harman. Nos. 44,060–1; May 20; Gaz. vol. 190; p. 767.
Spoons, forks, or similar articles, Handle for pierced. G. E. Nerney. No. 44,022; May 13; Gaz. vol. 190; p. 523.
Stand, Sewing-. C. Shank. No. 44,076; May 20; Gaz. vol. 190; p. 770.
Statuette. O. E. S. Azzoni. No. 43,984; May 13; Gaz. vol. 190; p. 516.
Table, Sewing-. W. Brander. No. 44,051; May 20; Gaz. vol. 190; p. 765.
Tag. C. C. Fletcher. Nos. 43,956–7; May 6; Gaz. vol. 190; pp. 237–8.
Talking-machine cabinet. E. R. Johnson. No. 44,105; May 27; Gaz. vol. 190; p. 1005.
Thermostat. J. Swartzenburg. No. 44,077; May 20; Gaz. vol. 190; p. 770.
Tile. E. Parkinson. No. 44,108; May 27; Gaz. vol. 190; p. 1006.
Tire. H. E. Boyd and J. H. Neal. No. 44,050; May 20; Gaz. vol. 190; p. 765.
Tire, Automobile-. C. A. Daniel. No. 44,087; May 27; Gaz. vol. 190; p. 1002.
Tire, Resilient. H. H. Hewitt. No. 44,062; May 20; Gaz. vol. 190; p. 767.
Tire-valve cap. W. B. Burke. No. 44,082; May 27; Gaz. vol. 190; p. 1001.
Toaster and heater, Electric. H. E. Bandlow. No. 44,049; May 20; Gaz. vol. 190; p. 765.
Truck body, Auto-. J. C. Doyle. No. 44,088; May 27; Gaz. vol. 190; p. 1002.
Type, Font of. F. S. Guild. No. 44,101; May 27; Gaz. vol. 190; p. 1004.
Umbrella-rack. W. G. Fawcett. No. 43,955; May 6; Gaz. vol. 190; p. 237.
Vacuum-cleaner casing. T. Wiedemann and J. H. Templin. No. 44,119; May 27; Gaz. vol. 190; p. 1008.
Vehicle-body. A. J. Neerken. No. 43,966; May 6; Gaz. vol. 190; p. 239.
Vehicle-wheel. J. Morat. No. 44,021; May 13; Gaz. vol. 190; p. 523.
Wall-covering. R. B. Griffin. No. 44,002; May 13; Gaz. vol. 190; p. 519.
Watch-fob or badge. W. L. Van Ness. No. 44,044; May 13; Gaz. vol. 190; p. 527.
Watch-holder. C. H. Frasard. No. 44,094; May 27; Gaz. vol. 190; p. 1003.
Wiring-cleat. C. H. Waterman. No. 44,117; May 27; Gaz. vol. 190; p. 1008.

ALPHABETICAL LIST OF TRADE-MARKS.

Abrasive materials for grinding valves, &c. Diamant-Gesellschaft m. b. H. No. 91,559; May 13; Gaz. vol. 190; p. 543.
Acid for pharmaceutical use. E. Merck. No. 91,680; May 20; Gaz. vol. 190; p. 788.
Air-moisteners. H. Bentz. No. 91,639; May 20; Gaz. vol. 190; p. 787.
Aluminum and tin ware and metal trays. Geo. Borgfeldt & Co. No. 91,755; May 27; Gaz. vol. 190; p. 1023.
Ammonia-water. Robinson Bros. No. 91,699; May 20; Gaz. vol. 190; p. 789.
Anesthetic. J. C. Wise. No. 91,733; May 20; Gaz. vol. 190; p. 790.
Antiseptic preparations. The Upjohn Company. No. 91,820; May 27; Gaz. vol. 190; p. 1025.
Antiseptics and germicides. New York and London Drug Co. No. 91,684; May 20; Gaz. vol. 190; p. 788.
Apples, Fresh. Luscious Fruit Company. No. 91,779; May 27; Gaz. vol. 190; p. 1024.
Aprons, rubber aprons, slip-covers, and cooler-frocks. Weissfeld Bros. No. 91,626; May 13; Gaz. vol. 190; p. 545.
Automobile runabouts and touring-cars. A. Ward. No. 91,827; May 27; Gaz. vol. 190; p. 1025.
Automobile-springs. T. B. Jenkins. No. 91,666; May 20; Gaz. vol. 190; p. 788.
Bags and cases, Fancy. S. Mortenson & Co. No. 91,682; May 20; Gaz. vol. 190; p. 788.
Baking-powder. The Heekin Spice Company. No. 91,483; May 6; Gaz. vol. 190; p. 260.
Baking-powder. Goldberg, Bowen & Co. No. 91,766; May 27; Gaz. vol. 190; p. 1024.
Baking-powder, ammonia, and bluing. The Morey Mercantile Company. No. 91,591; May 13; Gaz. vol. 190; p. 544.
Battery-cells. The Nungesser Carbon & Battery Co. No. 91,509; May 6; Gaz. vol. 190; p. 261.
Beer. Providence Brewing Company. No. 91,692; May 20; Gaz. vol. 190; p. 789.
Belting, Leather. The J. F. & W. H. Warren Co. No. 91,535; May 6; Gaz. vol. 190; p. 262.
Belting, Waterproof leather. The Fisher Leather Belting Co. No. 91,565; May 13; Gaz. vol. 190; p. 543.
Bicycles. Sears, Roebuck and Co. No. 91,609; May 13; Gaz. vol. 190; p. 545.
Biscuit. National Biscuit Company. No. 91,504; May 6; Gaz. vol. 190; p. 261.
Biscuits. Reinschild Chemical Company. No. 91,694; May 20; Gaz. vol. 190; p. 789.
Bleaching material. The Roessler & Hasslacher Chemical Company. No. 91,700; May 20; Gaz. vol. 190; p. 789.
Bleaching-powders. J. T. Stanley. No. 91,712; May 20; Gaz. vol. 190; p. 789.
Blouses. The Strouse-Baer Co. No. 91,815; May 27; Gaz. vol. 190; p. 1025.
Boots and shoes. A. W. Tedcastle & Co. No. 91,817; May 27; Gaz. vol. 190; p. 1025.
Box-springs, mattresses, pillows, and bedsteads. H. D. Dougherty. No. 91,652; May 20; Gaz. vol. 190; p. 787.
Bread. H. B. Ward. No. 91,533; May 6; Gaz. vol. 190; p. 261.
Bread, rolls, biscuits, cakes, &c. Ward Baking Company. No. 91,625; May 13; Gaz. vol. 190; p. 545.
Bricks, Fire-. Fulton Fire Brick Company. No. 91,567; May 13; Gaz. vol. 190; p. 543.
Bromin compound. The Hoffmann-La Roche Chemical Works. No. 91,769; May 27; Gaz. vol. 190; p. 1024.
Brushes. The Bigelow Brush Co. No. 91,454; May 6; Gaz. vol. 190; p. 259.
Brushes. The Bigelow Brush Co. Nos. 91,549–50; May 13; Gaz. vol. 190; p. 543.
Brushes. Montag Brothers. No. 91,787; May 27; Gaz. vol. 190; p. 1024.
Bunting. Annin & Co. No. 91,749; May 27; Gaz. vol. 190; p. 1023.
Bush-hooks, bits, braces, chisels, &c. Stauffer, Eshleman & Co. No. 91,714; May 20; Gaz. vol. 190; p. 789.
Butter. The Concordia Creamery Company. No. 91,461; May 6; Gaz. vol. 190; p. 259.
Butter-coloring preparations. Wells & Richardson Company. No. 91,729; May 20; Gaz. vol. 190; p. 790.
Buttons and clasps, Snap. F. Homberg. No. 91,577; May 13; Gaz. vol. 190; p. 544.
Buttons, Snap-. Waldes & Co. Nos. 91,724–5; May 20; Gaz. vol. 190; p. 790.
Buttons, Snap-. Waldes & Co. Nos. 91,823–6; May 27; Gaz. vol. 190; p. 1025.
Cakes and crackers. Kahn-Beck Company. No. 91,581; May 13; Gaz. vol. 190; p. 544.
Calculating and adding machines. Grimme, Natalis & Co., Commanditgesellschaft auf Actien. No. 91,659; May 20; Gaz. vol. 190; p. 788.
Candles, chocolates, and bonbons. P. Margarella. No. 91,587; May 13; Gaz. vol. 190; p. 544.
Candy. Paul F. Beich Company. No. 91,453; May 6; Gaz. vol. 190; p. 259.
Candy. Loose-Wiles Company. No. 91,675; May 20; Gaz. vol. 190; p. 788.
Canned corn. The Illinois Canning Company. No. 91,489; May 6; Gaz. vol. 190; p. 260.
Canned fruits and vegetables. Bollinger-Babbage Company. No. 91,553; May 13; Gaz. vol. 190; p. 543.
Canned fruits, vegetables, pork and beans, &c. Fargo Mercantile Company. No. 91,470; May 6; Gaz. vol. 190; p. 260.
Canned salmon. G. W. Sanborn & Son. Nos. 91,606–7; May 13; Gaz. vol. 190; p. 545.
Cards, Playing-. The G. W. Armstrong Dining Room & Newa Company. No. 91,750; May 27; Gaz. vol. 190; p. 1023.
Cartridges, cartridge-shells, caps, &c. Remington Ammunition Co. No. 91,602; May 13; Gaz. vol. 190; p. 544.
Casks and barrels. The Greif Bros. Cooperage Co. Nos. 91,572–4; May 13; Gaz. vol. 190; p. 544.
Castings and forgings. Harry Vissering & Company. No. 91,622; May 13; Gaz. vol. 190; p. 545.
Chairs. R. C. Erskine. No. 91,563; May 13; Gaz. vol. 190; p. 543.
Chemical admixture, Certain compressed. Six Little Yankees Co. No. 91,707; May 20; Gaz. vol. 190; p. 789.
Chemical and pharmaceutical preparations, Certain named. L. T. Piver & Cie. No. 91,514; May 6; Gaz. vol. 190; p. 261.
Chemical compound for use in cooking. W. H. Johnson. No. 91,773; May 27; Gaz. vol. 190; p. 1024.
Chemical or biological reagent. Farbwerke vorm. Meister Lucius & Brüning. No. 91,764; May 27; Gaz. vol. 190; p. 1024.
Chemical preparations, Certain named. Zauder Bros. No. 91,539; May 6; Gaz. vol. 190; p. 262.
Cigar-lighters. H. N. Goldsmith. No. 91,570; May 13; Gaz. vol. 190; p. 543.
Cigars. Hemmeter Cigar Company. No. 91,484; May 6; Gaz. vol. 190; p. 260.
Cigars. C. Upmann. No. 91,621; May 13; Gaz. vol. 190; p. 545.
Cigars and cigarettes. El Draco Cigar M'f'g Company. No. 91,469; May 6; Gaz. vol. 190; p. 260.
Cigars, cigarettes, and tobacco. Waldorf-Astoria Segar Company. No. 91,531; May 6; Gaz. vol. 190; p. 261.
Cigarettes. M. Melachrino & Co. No. 91,589; May 13; Gaz. vol. 190; p. 544.
Cigarettes. M. Melachrino & Co. No. 91,678; May 20; Gaz. vol. 190; p. 788.
Cigarettes. Poullides Bros. No. 91,691; May 20; Gaz. vol. 190; p. 789.
Circuits, Choking devices for alternating-current. Dean Auto Devices Company. No. 91,465; May 6; Gaz. vol. 190; p. 259.
Citherns or zithers. The Phonoharp Company. No. 91,794; May 27; Gaz. vol. 190; p. 1024.
Clasps, Metal. W. T. James. No. 91,579; May 13; Gaz. vol. 190; p. 544.
Clothes-line reels. W. M. Palmer. No. 91,597; May 13; Gaz. vol. 190; p. 544.
Clothing, Certain named articles of. Daimler-Motoren-Gesellschaft. No. 91,759; May 27; Gaz. vol. 190; p. 1023.
Coal-saving compound. J. D. Kingsbury. No. 91,672; May 20; Gaz. vol. 190; p. 788.
Cod johnnies, bloaters, and herring. B. M. Shipman Co. No. 91,808; May 27; Gaz. vol. 190; p. 1025.
Coffee. O. R. Pieper. No. 91,600; May 13; Gaz. vol. 190; p. 544.
Coffee and tea. F. Young. No. 91,627; May 13; Gaz. vol. 190; p. 545.
Coffees and teas. Royal Valley Coffee Co. No. 91,516; May 6; Gaz. vol. 190; p. 261.
Corsets. Birdsey-Somers Co. Nos. 91,455–6; May 6; Gaz. vol. 190; p. 259.
Corsets. Lily of France Corset Co. No. 91,494; May 6; Gaz. vol. 190; p. 260.
Corsets. E. C. McWatty Company. No. 91,683; May 20; Gaz. vol. 190; p. 788.
Cotton piece goods. A. G. Hyde & Sons. No. 91,771; May 27; Gaz. vol. 190; p. 1024.
Cream, Face-. W. A. Bartlett. No. 91,636; May 20; Gaz. vol. 190; p. 787.

Crucibles, Plumbago. The Morgan Crucible Company. No. 91,592; May 13; Gaz. vol. 190; p. 544.
Cutlery, machinery, and tools, Certain named. The Wooster Hardware Company. No. 91,734; May 20; Gaz. vol. 190; p. 790.
Cutlery, tools, and parts thereof, Certain named. Markt & Co. No. 91,495; May 6; Gaz. vol. 190; p. 260.
Cutter-heads and lathes. Smith Cannery Machines Company. No. 91,519; May 6; Gaz. vol. 190; p. 261.
Dentists' moldable material. Claudius Ash Sons and Company. No. 91,544; May 13; Gaz. vol. 190; p. 543.
Depilatory. The To-Kalon Manufacturing Company. No. 91,818; May 27; Gaz. vol. 190; p. 1025.
Diaries and calendars. Samuel Ward Company. No. 91,534; May 6; Gaz. vol. 190; p. 262.
Disinfectant. K. H. Cederberg. No. 91,673; May 20; Gaz. vol. 190; p. 788.
Dress-shields, diapers, and bibs. H. P. Rindskopf. Nos. 91,697–8; May 20; Gaz. vol. 190; p. 789.
Drink made from celery, ginger-ale, and club-soda. L. C. Army. No. 91,634; May 20; Gaz. vol. 190; p. 787.
Drink of alcoholic liquors, Mixed. E. Aldabó. No. 91,629; May 20; Gaz. vol. 190; p. 787.
Dyes. Wells & Richardson Company. No. 91,727; May 20; Gaz. vol. 190; p. 790.
Eaves-trough hangers. F. D. Kees Mfg. Co. No. 91,583; May 13; Gaz. vol. 190; p. 544.
Electric spark-plugs. Emil Grossman Company. Nos. 91,476–7; May 6; Gaz. vol. 190; p. 260.
Electrical apparatus, machines, and supplies, Certain. Brolt Limited. No. 91,457; May 6; Gaz. vol. 190; p. 259.
Electrical apparatus, machines, and supplies, Certain. Victor Electric Company. No. 91,530; May 6; Gaz. vol. 190; p. 261.
Electrical fixtures, Suspension-chains for. F. S. Alden. No. 91,630; May 20; Gaz. vol. 190; p. 787.
Electroplating compound. W. Berkel. No. 91,640; May 20; Gaz. vol. 190; p. 787.
Enameled, galvanized, and tin ware. Coonley Mfg. Co. No. 91,402; May 6; Gaz. vol. 190; p. 259.
Engines, Traction-. M. Rumely Company. No. 91,605; May 13; Gaz. vol. 190; p. 545.
Eye-wash. G. W. Peavey. No. 91,688; May 20; Gaz. vol. 190; p. 789.
Feed, Stock. American Hominy Company. No. 91,542; May 13; Gaz. vol. 190; p. 543.
Flat, hollow, and table ware, Certain. Bennett-Merwin Silver Company. No. 91,548; May 13; Gaz. vol. 190; p. 543.
Flavoring extracts. Pereira & Pereira. No. 91,512; May 6; Gaz. vol. 190; p. 261.
Flavoring extracts. The D. B. McCurdy Company. No. 91,783; May 27; Gaz. vol. 190; p. 1024.
Flavoring extracts, tea, and coffee. The Heekin Spice Company. No. 91,662; May 20; Gaz. vol. 190; p. 788.
Floor and wall coverings. United Roofing and Manufacturing Co. No. 91,620; May 13; Gaz. vol. 190; p. 545.
Floss, Embroidery-. Fishel & Gorman. No. 91,564; May 13; Gaz. vol. 190; p. 543.
Flour, Self-rising buckwheat-. Northern Light Milling Co. No. 91,686; May 20; Gaz. vol. 190; p. 788.
Flour, Self-rising wheat-. Home Mill & Grain Co. No. 91,770; May 27; Gaz. vol. 190; p. 1024.
Flour, Wheat-. Callam Mills. No. 91,458; May 6; Gaz. vol. 190; p. 259.
Flour, Wheat-. New Prague Flouring Mill Company. No. 91,507; May 6; Gaz. vol. 190; p. 261.
Flour, Wheat-. G. G. Stubblefield. No. 91,523; May 6; Gaz. vol. 190; p. 261.
Flour, Wheat-. The Portland Flouring Mills Company. No. 91,601; May 13; Gaz. vol. 190; p. 544.
Flour, Wheat-. Crown Mills Company. No. 91,649; May 20; Gaz. vol. 190; p. 787.
Flour, Wheat-. McDonald Milling Company. No. 91,784; May 27; Gaz. vol. 190; p. 1024.
Flour, Wheat-. Valier & Spies Milling Co. No. 91,822; May 27; Gaz. vol. 190; p. 1025.
Food, Bird. F. Kaempfer. No. 91,580; May 13; Gaz. vol. 190; p. 544.
Foods, Certain named. Austin, Nichols & Co. No. 91,450; May 6; Gaz. vol. 190; p. 259.
Foods, Certain named. J. F. Humphreys and Co. No. 91,488; May 6; Gaz. vol. 190; p. 260.
Foods, Certain named. Sherer-Gillett Company. No. 91,517; May 6; Gaz. vol. 190; p. 261.
Foods, Certain named. Winston, Harper, Fisher Company. No. 91,537; May 6; Gaz. vol. 190; p. 262.
Foods, Certain named. W. H. Crawford Co. No. 91,648; May 20; Gaz. vol. 190; p. 787.
Foods, Certain named. Lutey Bros. Nos. 91,780–2; May 27; Gaz. vol. 190; p. 1024.
Fruit, Fresh. T. F. Nevins. No. 91,506; May 6; Gaz. vol. 190; p. 261.
Fuses, Blasting-. Empire Dynamite Co. No. 91,562; May 13; Gaz. vol. 190; p. 543.
Gages and parts thereof, Water and steam. The Jerguson Manufacturing Company. No. 91,667; May 20; Gaz. vol. 190; p. 788.
Games. Milton Bradley Co. No. 91,786; May 27; Gaz. vol. 190; p. 1024.
Garments made of textile material, Certain named. Greenebaum, Weil & Michels. No. 91,658; May 20; Gaz. vol. 190; p. 788.
Garments of textile and knitted materials, Certain named. Chandler & Co. No. 91,756; May 27; Gaz. vol. 190; p. 1023.
Gas-mantles. Markt & Hammacher Company. No. 91,496; May 6; Gaz. vol. 190; p. 260.
Gaskets and packing materials. F. Duttenhofer. No. 91,653; May 20; Gaz. vol. 190; p. 787.
Gasolene. Consumers Refining Company. No. 91,557; May 13; Gaz. vol. 190; p. 543.
Germicidal compound. F. J. Winans. No. 91,536; May 6; Gaz. vol. 190; p. 262.
Go-carts. Belknap Hardware and Manufacturing Company. No. 91,638; May 20; Gaz. vol. 190; p. 787.
Hair-tonic. Petty and Schreck. No. 91,513; May 6; Gaz. vol. 190; p. 261.
Hardware supplies, Certain named. Tower Manufacturing & Novelty Co. No. 91,525; May 6; Gaz. vol. 190; p. 261.
Hardware supplies, Certain named. United States Specialty Company. No. 91,528; May 6; Gaz. vol. 190; p. 261.
Hats. F. K. Nichols. No. 91,508; May 6; Gaz. vol. 190; p. 261.
Head-washes, hair-invigorators, and dandruff remedies. Orangewood Company. No. 91,687; May 20; Gaz. vol. 190; p. 788.
Hosiery. New Jersey Textile Art Corporation. No. 91,594; May 13; Gaz. vol. 190; p. 544.
Hosiery. I. Rome & Sons. No. 91,604; May 13; Gaz. vol. 190; p. 544.
Hosiery. Chas. A. Stevens & Bros. No. 91,617; May 13; Gaz. vol. 190; p. 545.
Hosiery. Richardson Dry Goods Co. No. 91,796; May 27; Gaz. vol. 190; p. 1024.
Insecticides. Corona Chemical Company. No. 91,758; May 27; Gaz. vol. 190; p. 1023.
Insecticides, soap spray, worm and ant destroyer, &c. Eastern Chemical Company. No. 91,763; May 27; Gaz. vol. 190; p. 1023.
Iron and steel sheeting. The Monmouthshire Steel and Tinplate Company. No. 91,590; May 13; Gaz. vol. 190; p. 544.
Iron, Wrought-. Sligo Iron & Steel Co. Nos. 91,708–9; May 20; Gaz. vol. 190; p. 789.
Jewelry and precious-metal ware, Certain. E. B. Galt. No. 91,568; May 13; Gaz. vol. 190; p. 543.
Jock-straps and suspensories. E. E. Mayer. No. 91,588; May 13; Gaz. vol. 190; p. 544.
Knitted combination-suits, shirts, and drawers. P. H. Hanes Knitting Co. No. 91,482; May 6; Gaz. vol. 190; p. 260.
Knitted, netted, and textile fabrics, Certain named. Henry E. Frankenberg Company. No. 91,654; May 20; Gaz. vol. 190; p. 787.
Knitted, netted, and textile fabrics, Certain named. A. Wimpfheimer & Bro. No. 91,732; May 20; Gaz. vol. 190; p. 790.
Knitted underwear. Ritesize Underwear Co. No. 91,798; May 27; Gaz. vol. 190; p. 1025.
Lacing-tips. Joslin Mfg. Co. No. 91,671; May 20; Gaz. vol. 190; p. 788.
Lactic ferments. F. Roy. No. 91,702; May 20; Gaz. vol. 190; p. 789.
Lagging. Foster's Adhesive Composition Company. No. 91,566; May 13; Gaz. vol. 190; p. 543.
Lamps, Gas-. The Nagel Chase Manufacturing Company. No. 91,503; May 6; Gaz. vol. 190; p. 261.
Lard, hams, bacon, cheese, &c. Hammond, Standish & Co. No. 91,481; May 6; Gaz. vol. 190; p. 260.
Laxative, cathartic, hepatic stimulant, &c. Bristol-Myers Company. No. 91,642; May 20; Gaz. vol. 190; p. 787.
Lettuce and fresh limes, Fresh leaf-. W. H. J. Kavanagh. No. 91,582; May 13; Gaz. vol. 190; p. 544.
Machinery and tools and parts thereof, Certain. Sprout, Waldron & Co. No. 91,615; May 13; Gaz. vol. 190; p. 545.
Machinery, tools, and parts, Certain. S. R. White's Sons. No. 91,623; May 13; Gaz. vol. 190; p. 545.
Machinery, tools, and parts thereof, Certain. Atlanta Utility Works. No. 91,545; May 13; Gaz. vol. 190; p. 543.
Magazine. F. King. No. 91,490; May 6; Gaz. vol. 190; p. 260.
Magazine, Periodically-published. The Home Pattern Company. No. 91,486; May 6; Gaz. vol. 190; p. 260.
Magazine, Weekly. Stoves & Hardware Publishing Company. No. 91,814; May 27; Gaz. vol. 190; p. 1025.
Margarin. H. Schlinck & Cie. A. G. No. 91,806; May 27; Gaz. vol. 190; p. 1025.
Matches. Aktieselskabet H. E. Gosch & Co.'s Tændstikfabriker Og Aktietændstikfabriken Godthaab. No. 91,657; May 20; Gaz. vol. 190; p. 788.
Matches. Jönköpings och Vulcans Tändsticksfabriksaktiebolag. Nos. 91,668–70; May 20; Gaz. vol. 190; p. 788.
Measuring and scientific appliances, Certain named. Societe "Savoia Film." No. 91,612; May 13; Gaz. vol. 190; p. 545.
Medicated salt, hog remedy, horse and cattle powder, &c. Moorman Mfg. Co. No. 91,788; May 27; Gaz. vol. 190; p. 1024.
Medicinal tablets. The Antikamnia Chemical Company. No. 91,445; May 6; Gaz. vol. 190; p. 258.

Medicinal tonic. Voigt & Co. No. 91,723; May 20; Gaz. vol. 190; p. 790.
Medicine, Hog-cholera. G. Lipe. No. 91,777; May 27; Gaz. vol. 190; p. 1024.
Medicine-tablets. Vincenty Hnös. No. 91,485; May 6; Gaz. vol. 190; p. 260.
Medicines, tonic, alterative, &c. Wells & Richardson Company. No. 91,728; May 20; Gaz. vol. 190; p. 790.
Milk and cream. S. E. Sawyer. No. 91,705; May 20; Gaz. vol. 190; p. 789.
Milk, Sterilized and condensed. Nestle and Anglo-Swiss Condensed Milk Co. No. 91,790; May 27; Gaz. vol. 190; p. 1024.
Millinery ornaments of precious metal or set with jewels, Certain. A. A. Roberts. No. 91,603; May 13; Gaz. vol. 190; p. 544.
Molasses to be used in food of horses and cattle. W. M. Wattles. No. 91,624; May 13; Gaz. vol. 190; p. 545.
Musical instruments, parts, and bows and strings thereof, Certain. Roth & Lederer. Nos. 91,800–1; May 27; Gaz vol. 190; p. 1025.
Mustard. E. Eulert. No. 91,541; May 13; Gaz. vol. 190; p. 543.
Mustard, Prepared. R. A. Lusk. No. 91,586; May 13; Gaz. vol. 190; p. 544.
Nails, nuts, bolts, rivets, &c., Wire. A. O. Meyer. No. 91,500; May 6; Gaz. vol. 190; p. 261.
Naphthalene. Barrett Manufacturing Company. No. 91,452; May 6; Gaz. vol. 190; p. 259.
Newspaper. The Georgian Company. Nos. 91,473–4; May 6; Gaz. vol. 190; p. 260.
Oil, Cotton-seed. Aspegren & Co. Nos. 91,446–9; May 6; Gaz. vol. 190; p. 259.
Oil, Machine-. Direct Importing Company. No. 91,468; May 6; Gaz. vol. 190; p. 260.
Oil, Olive-. A. L. Caprini. No. 91,459; May 6; Gaz. vol. 190; p. 259.
Oil, Olive-. J. Petrocelli & Company. No. 91,599; May 13; Gaz. vol. 190; p. 544.
Oil, Type-writer. Tower Manufacturing & Novelty Co. No. 91,619; May 13; Gaz. vol. 190; p. 545.
Oils and greases, Lubricating. F. D. Van Nostrand. No. 91,721; May 20; Gaz. vol. 190; p. 790.
Oils, Cylinder, engine, machine, dynamo, &c. Standard Oil Company. No. 91,616; May 13; Gaz. vol. 190; p. 545.
Oils, Engine, turbine, and transformer. Standard Oil Company. No. 91,522; May 6; Gaz. vol. 190; p. 261.
Ointment. Indian Chemical Co. No. 91,665; May 20; Gaz. vol. 190; p. 788.
Ointment. W. E. Ludwig. No. 91,676; May 20; Gaz. vol. 190; p. 788.
Ointment, face and massage cream, manicure-paste, &c. Highland Pharmaceutical Co. No. 91,663; May 20; Gaz. vol. 190; p. 788.
Ointments. The Samuel Chemical Co. No. 91,804; May 27; Gaz. vol. 190; p. 1025.
Ointments or salves. The Prophylo Laboratory. No. 91,795; May 27; Gaz. vol. 190; p. 1024.
Olives, Canned ripe and green pickled. Munger Brothers Company. No. 91,502; May 6; Gaz. vol. 190; p. 261.
Oranges. G. E. Snow. No. 91,520; May 6; Gaz. vol. 190; p. 261.
Overalls. Alexander Bros. Co. No. 91,748; May 27; Gaz. vol. 190; p. 1023.
Overalls, work shirts and pants, and drawers. Riverside Overall Co. No. 91,515; May 6; Gaz. vol. 190; p. 261.
Overcoats, coats, vests, and trousers. J. S. Hall's Sons. No. 91,768; May 27; Gaz. vol. 190; p. 1024.
Packing for steam, ammonia, and hydraulic purposes. Oriental Oil Co. No. 91,510; May 6; Gaz. vol. 190; p. 261.
Packings, Metallic. Aurora Metal Company. No. 91,546; May 13; Gaz. vol. 190; p. 543.
Paint and a wall-coating, Liquid for use as a. Alabastine Company. No. 91,437; May 6; Gaz. vol. 190; p. 259.
Paint and other coatings from surfaces, Preparation for removing. Ball Chemical Company. No. 91,451; May 6; Gaz. vol. 190; p. 259.
Paint and size. G. Reed. No. 91,693; May 20; Gaz. vol. 190; p. 789.
Paint, Branding-. Vacuum Oil Company. No. 91,529; May 6; Gaz. vol. 190; p. 261.
Paint, Waterproof. Anthrol Wood Preserving Co. No. 91,632; May 20; Gaz. vol. 190; p. 787.
Paint, White paste. Benjamin Moore & Co. No. 91,501; May 6; Gaz. vol. 190; p. 261.
Paints and painters' materials, Certain named. Gerstendorfer Bros. No. 91,475; May 6; Gaz. vol. 190; p. 260.
Paints and wood-preservatives. The Carbon Preservative Paint Co. No. 91,460; May 6; Gaz. vol. 190; p. 259.
Paints, Automobile and carriage. Blanchite Paint Company. No. 91,752; May 27; Gaz. vol. 190; p. 1023.
Paints, wall-finishes, stains, enamels, &c. Davies & Meacham. No. 91,464; May 6; Gaz. vol. 190; p. 259.
Painters' size and dressing, and polishes for wood and iron. The Gum Tragasol Supply Company. Nos. 91,478–9; May 6; Gaz. vol. 190; p. 260.
Pamphlets, charts, and almanacs, Astrological. I. N. Halleyton. No. 91,575; May 13; Gaz. vol. 190; p. 544.
Paper and stationery, Certain. J. C. Blair Company. Nos. 91,551–2; May 13; Gaz. vol. 190; p. 543.
Paper bags. Old Dominion Paper Co. Nos. 91,595–6; May 13; Gaz. vol. 190; p. 544.
Paper, Toilet-. Albany Perforated Wrapping Paper Company. Nos. 91,438–41; May 6; Gaz. vol. 190; p. 259.
Paper, Toilet-. Albany Perforated Wrapping Paper Company. Nos. 91,735–47; May 27; Gaz. vol. 190; p. 1023.
Paper, Waxed. Kuhmarker Manufacturing Company. No. 91,492; May 6; Gaz. vol. 190; p. 260.
Paper, Writing-. Lee Paper Company. No. 91,776; May 27; Gaz. vol. 190; p. 1024.
Paper, Writing and printing. American Writing Paper Company. No. 91,543; May 13; Gaz. vol. 190; p. 543.
Papers, Wrapping-. Continental Paper Bag Company. No. 91,558; May 13; Gaz. vol. 190; p. 543.
Papers, Writing-. Old Berkshire Mills Company. No. 91,793; May 27; Gaz. vol. 190; p. 1024.
Pencils, Drawing-. E. G. Soltmann. No. 91,614; May 13; Gaz. vol. 190; p. 545.
Pens, Fountain-. H. A. Lee. No. 91,775; May 27; Gaz. vol. 190; p. 1024.
Pens, Fountain and stylographic. W. H. Smith & Son. No. 91,809; May 27; Gaz. vol. 190; p. 1025.
Perfumes, toilet waters and powders. Charles Hedden, Incorporated. No. 91,661; May 20; Gaz. vol. 190; p. 788.
Periodical, Weekly. Florida Growers Publishing Company. No. 91,471; May 6; Gaz. vol. 190; p. 260.
Pharmaceutical preparations, Certain named. The Theo. Ricksecker Co. No. 91,696; May 20; Gaz. vol. 190; p. 789.
Pharmaceutical preparations, Certain named. F. Uhry. No. 91,719; May 20; Gaz. vol. 190; p. 789.
Pharmaceutical solution. Aktiengesellschaft vormals B. Siegfried. No. 91,628; May 20; Gaz. vol. 190; p. 787.
Phenol-methylene plastic compounds. Condensite Company of America. No. 91,556; May 13; Gaz. vol. 190; p. 543.
Photographic paper and cardboard. Kraft & Steudel Fabrik Photographischer Papiere Gesellschaft mit beschränkter Haftung. No. 91,584; May 13; Gaz. vol. 190; p. 544.
Photography, Developers, intensifiers, &c., for. Société Anonyme "Utocolor." No. 91,710; May 20; Gaz. vol. 190; p. 789.
Piano-backs. Lechner & Schoenberger Company. No. 91,585; May 13; Gaz. vol. 190; p. 544.
Picture films, Moving-. Societe Francaise des Films et Cinematographes Eclair. No. 91,613; May 13; Gaz. vol. 190; p. 545.
Picture films, Moving-. Societe Francaise des Films et Cinematographes Eclair. No. 91,711; May 20; Gaz. vol. 190; p. 789.
Piece goods, Certain named. North Texas Dry Goods Company. No. 91,792; May 27; Gaz. vol. 190; p. 1024.
Pill, Cathartic. The Sydney Ross Co. No. 91,799; May 27; Gaz. vol. 190; p. 1025.
Pills. The Upjohn Company. No. 91,720; May 20; Gaz. vol. 190; p. 789.
Porcelain or earthenware articles. Burley & Tyrrell Company. No. 91,643; May 20; Gaz. vol. 190; p. 787.
Pottery, Certain named articles of. Fulper Pottery Company. No. 91,655; May 20; Gaz. vol. 190; p. 788.
Powder, Tooth-. The Butler-Ivins Co. No. 91,644; May 20; Gaz. vol. 190; p. 787.
Preparation for preventing obesity and reducing fat. The Sylph Company. No. 91,717; May 20; Gaz. vol. 190; p. 789.
Preparation for removing wrinkles. W. C. Cunningham. No. 91,650; May 20; Gaz. vol. 190; p. 787.
Puzzles. Forsheim & Konigsberg. No. 91,765; May 27; Gaz. vol. 190; p. 1024.
Quinin and diethylbarbituric acid, Compound of. E. Merck. No. 91,499; May 6; Gaz. vol. 190; p. 260.
Railway mates, crossings, frogs, and turnouts. Barbour-Stockwell Company. No. 91,751; May 27; Gaz. vol. 190; p. 1023.
Rain-coats. The Sartorial Manufacturing Co. No. 91,704; May 20; Gaz. vol. 190; p. 789.
Ranges, stoves, base-burners, &c. Hibbard, Spencer, Bartlett & Co. No. 91,576; May 13; Gaz. vol. 190; p. 544.
Razor-strops. Nev-A-Hone Razor Strop Company. No. 91,791; May 27; Gaz. vol. 190; p. 1024.
Razors and razor-blades. The Temperite Company. No. 91,718; May 20; Gaz. vol. 190; p. 789.
Receptacles, Certain named. Tower Manufacturing & Novelty Co. No. 91,618; May 13; Gaz. vol. 190; p. 545.
Remedies, chill-tonics, cough-syrups, &c., Diarrhea. The E. E. Solomon Medicine Co. No. 91,521; May 6; Gaz. vol. 190; p. 261.
Remedies for constipation, biliousness, headache, &c. R. Porter. No. 91,689; May 20; Gaz. vol. 190; p. 789.
Remedy, Cough and croup. Giessner Medicine Co. No. 91,656; May 20; Gaz. vol. 190; p. 788.
Remedy for certain named diseases. L. E. Cash. No. 91,645; May 20; Gaz. vol. 190; p. 787.
Remedy for constipation. The George H. Rundle Company. No. 91,802; May 27; Gaz. vol. 190; p. 1025.
Remedy for cramps, &c. Marshall Chemical Co. No. 91,497; May 6; Gaz. vol. 190; p. 260.
Remedy for diseases of the genital organs. J. P. Werner. No. 91,730; May 20; Gaz. vol. 190; p. 790.
Remedy for furunculosis and acne. Chemische Fabrik Güstrow. Dr. Hillringhaus & Dr. Heil. No. 91,647; May 20; Gaz. vol. 190; p. 787.

Remedy for indigestion. C. J. Hinton. No. 91,664; May 20; Gaz. vol. 190; p. 788.
Remedy for ingrowing nails. R. Stewart, Jr. No. 91,716; May 20; Gaz. vol. 190; p. 789.
Remedy for sclerosis. G Ménard. No. 91,679; May 20; Gaz. vol. 190; p. 788.
Remedy for stomachic disorders. J. H. Zimmerman. No. 91,637; May 20; Gaz. vol. 190; p. 787.
Remedy for the smoking habit. Smoke-No-More Co. No. 91,810; May 27; Gaz. vol. 190; p. 1025.
Remedy for throat and pulmonary diseases. Stanley Remedy Company. No. 91,713; May 20; Gaz. vol. 190; p. 789.
Remedy, Liquor. White Cross Anti-Liquor Society. No. 91,731; May 20; Gaz. vol. 190; p. 790.
Rock-drilling machines. Diamond Expansion Bolt Co. No. 91,467; May 6; Gaz. vol. 190; p. 260.
Roofing and siding, Corrugated-iron. The Andrew Greis Company. No. 91,767; May 27; Gaz. vol. 190; p. 1024.
Roofing, Tarred felt. Barrett Manufacturing Company. No. 91,547; May 13; Gaz. vol. 190; p. 543.
Rubber boots and shoes. National India Rubber Company. No. 91,505; May 6; Gaz. vol. 190; p. 261.
Sachet scent and perfume. H. Mack. No. 91,677; May 20; Gaz. vol. 190; p. 788.
Salts, Bath-. Sel Amaigrissant Clarks Corporation. No. 91,706; May 20; Gaz. vol. 190; p. 789.
Salves and blood-purifiers. J. P. Allen Medicine Co. No. 91,631; May 20; Gaz. vol. 190; p. 787.
Sardines. Seacoast Canning Co. No. 91,807; May 27; Gaz. vol. 190; p. 1025.
Sausage. W. E. Miller. No. 91,785; May 27; Gaz. vol. 190; p. 1024.
Scalp disorders, Treatment of. The To-Kalon Manufacturing Company. No. 91,819; May 27; Gaz. vol. 190; p. 1025.
Scalp-tonic. M. J. Stebbins. No. 91,715; May 20; Gaz. vol. 190; p. 789.
Scalp-tonics. J. T. Warner. No. 91,726; May 20; Gaz. vol. 190; p. 790.
Scarfs, table-covers, pennants, pillow-covers, &c. S. Mortenson & Co. No. 91,789; May 27; Gaz. vol. 190; p. 1024.
Scientific appliances, Certain. C. Delac. No. 91,466; May 6; Gaz. vol. 190; p. 259.
Scientific appliances, Certain named. Victor Animatograph Company. No. 91,722; May 20; Gaz. vol. 190; p. 790.
Sealing machines, Envelop-. D. G. Saunders, Jr. No. 91,805; May 27; Gaz. vol. 190; p. 1025.
Seeds, Clover, alsike, alfalfa, and timothy. S. W. Flower & Company. No. 91,472; May 6; Gaz. vol. 190; p. 260.
Seeds, Field and grass. H. W. Gordinier and Sons Co. No. 91,571; May 13; Gaz. vol. 190; p. 544.
Serum for boils, &c. Nitritfabrik Aktiengesellschaft. No. 91,685; May 20; Gaz. vol. 190; p. 788.
Sewing-machine needles. The Singer Manufacturing Company. No. 91,518; May 6; Gaz. vol. 190; p. 261.
Sewing-machine needles. The Singer Manufacturing Company. No. 91,611; May 13; Gaz. vol. 190; p. 545.
Shampoo preparation. Barbers United Syndicate. No. 91,635; May 20; Gaz. vol. 190; p. 787.
Shoes. A. Letts. No. 91,493; May 6; Gaz. vol. 190; p. 260.
Shoes, Leather. E. A. Haley. No. 91,480; May 6; Gaz. vol. 190; p. 260.
Shoes, Leather. A. Posner. No. 91,690; May 20; Gaz. vol. 190; p. 789.
Shoes, White coating and cleaner for white. N. F. Solomon. No. 91,812; May 27; Gaz. vol. 190; p. 1025.
Signals for determining the temperature of sea-water and air. The McNab Company. No. 91,498; May 6; Gaz. vol. 190; p. 260.
Silk goods in the piece. The Valentine & Bentley Silk Co. No. 91,821; May 27; Gaz. vol. 190; p. 1025.
Silks and silk threads and yarns, Thrown. J. Dunlop's Sons. No. 91,761; May 27; Gaz. vol. 190; p. 1023.
Size and finish for textile and other products, &c. C. W. Jacob and Allison. No. 91,578; May 13; Gaz. vol. 190; p. 544.
Sketches, drawings, and prints and folders for same. Buchsbaum Fashion Company. No. 91,554; May 13; Gaz. vol. 190; p. 543.
Spices, flavoring extracts, and olive-oil. The Durbar Co. No. 91,762; May 27; Gaz. vol. 190; p. 1023.
Starches, Chemical and laundry. Chemical Specialties Co. No. 91,757; May 27; Gaz. vol. 190; p. 1023.
Stoves, ovens, and wicks, Oil. The Cleveland Foundry Company. No. 91,555; May 13; Gaz. vol. 190; p. 543.
Sugar-refining compound. Bowker Chemical Company. No. 91,641; May 20; Gaz. vol. 190; p. 787.
Suits and overcoats, Men's. M. Swartz & Sons. No. 91,524; May 6; Gaz. vol. 190; p. 261.
Suits and overcoats, Men's. Davidson & Finkelbrand. No. 91,651; May 20; Gaz. vol. 190; p. 787.
Sulfur, Liquidized. Crew's Liquidized Sulphur Co. No. 91,463; May 6; Gaz. vol. 190; p. 259.
Tables, chairs, desks, and cabinets. Wolverine Mfg. Co. No. 91,538; May 6; Gaz. vol. 190; p. 262.
Talking-machines. The United States Phonograph Co. No. 91,527; May 6; Gaz. vol. 190; p. 261.
Textile and woven fabric, Certain named articles of. Daimler-Motoren-Gesellschaft. No. 91,760; May 27; Gaz. vol. 190; p. 1023.
Toilet preparation. Citro Chemical Co. No. 91,646; May 20; Gaz. vol. 190; p. 787.
Tonic beverage and syrup for making the same. The Parfay Company. No. 91,598; May 13; Gaz. vol. 190; p. 544.
Toothpicks. New England Selling Co. No. 91,593; May 13; Gaz. vol. 190; p. 544.
Turpentine and turpentine compositions. Benzinwerke Rhenania Gesellschaft mit beschränkter Haftung. No. 91,540; May 6; Gaz. vol. 190; p. 262.
Turpentine, Wood-. American Naval Stores Company. No. 91,442; May 6; Gaz. vol. 190; p. 259.
Underwear. Blum Brothers. No. 91,754; May 27; Gaz. vol. 190; p. 1023.
Valves and couplings, Metal gate-. Walworth Manufacturing Co. No. 91,532; May 6; Gaz. vol. 190; p. 261.
Varnish. Keystone Varnish Co. No. 91,774; May 27; Gaz. vol. 190; p. 1024.
Varnishes, stains, varnish-removers, &c. The La Salle Varnish Co. No. 91,674; May 20; Gaz. vol. 190; p. 788.
Vehicle driving-chains and sprocket-wheels. Hans Renold, Limited. No. 91,695; May 20; Gaz. vol. 190; p. 789.
Vehicle spokes and nipples. The Standard Company. No. 91,813; May 27; Gaz. vol. 190; p. 1025.
Vehicles, Children's. The Morehouse Manufacturing Co. No. 91,681; May 20; Gaz. vol. 190; p. 788.
Velvets and plushes in the piece. The Salt's Textile Manufacturing Company. No. 91,803; May 27; Gaz. vol. 190; p. 1025.
Ventilators. Galvanized Steel Cupola Co. No. 91,569; May 13; Gaz. vol. 190; p. 543.
Violin-strings. Sherman, Clay & Co. No. 91,610; May 13; Gaz. vol. 190; p. 545.
Washing and bleaching fluid and disinfectant. E. P. Wenner. No. 91,828; May 27; Gaz. vol. 190; p. 1025.
Washing-machines, Laundry. G. H. Huenergardt. No. 91,487; May 6; Gaz. vol. 190; p. 260.
Washing-powder. The Kleenser Co. No. 91,491; May 6; Gaz. vol. 190; p. 260.
Wastes and overflows. American Pin Company. No. 91,443; May 6; Gaz. vol. 190; p. 259.
Watch cases, movements, and parts. Ancienne Fabrique Vacheron & Constantin Société Anonyme. No. 91,444; May 6; Gaz. vol. 190; p. 259.
Watches and clocks. Tower Manufacturing & Novelty Co. No. 91,526; May 6; Gaz. vol. 190; p. 261.
Watches and clocks. Robt. H. Ingersoll & Bro. No. 91,772; May 27; Gaz. vol. 190; p. 1024.
Whisky. E. E. Downham Co. No. 91,560; May 13; Gaz. vol. 190; p. 543.
Whisky. The Schuster Company. No. 91,608; May 13; Gaz. vol. 190; p. 545.
Whisky. Rothschild Bros. No. 91,701; May 20; Gaz. vol. 190; p. 789.
Wine and champagne, Claret-. D. Antolini & Co. No. 91,633; May 20; Gaz. vol. 190; p. 787.
Wine, Aperitive. E. Dubonnet & de la Bussière. No. 91,561; May 13; Gaz. vol. 190; p. 543.
Wine, Port and sherry. Bodega. No. 91,753; May 27; Gaz. vol. 190; p. 1023.
Wine, Sherry-. Geo. G. Sandeman, Sons & Co. No. 91,703; May 20; Gaz. vol. 190; p. 789.
Wine, Sherry and port. M. A. Snow. No. 91,811; May 27; Gaz. vol. 190; p. 1025.
Wines. Sweet Valley Wine Co. No. 91,816; May 27; Gaz. vol. 190; p. 1025.
Woolen piece goods. Ricketts & Shaw. No. 91,797; May 27; Gaz. vol. 190; p. 1024.
Writing tablets and paper. The Longwell-Cummings Co. No. 91,778; May 27; Gaz. vol. 190; p. 1024.

ALPHABETICAL LIST OF LABELS.

"A V." (For Alcoholic Liquors.) A. Voltter. No. 17,037; May 20; Gaz. vol. 190; p. 791.
"Advantage." (For Cigars.) The Moehle Lithographic Company. No. 17,008; May 13; Gaz. vol. 190; p. 546.
"Alt Heidelberg Lager Beer." (For Beer.) Columbia Brewing Co. No. 17,028; May 20; Gaz. vol. 190; p. 791.
"Ask for the Eclipse Shirt with Adjusto Sleeves." (For Shirts.) Samuel Sternberger Company. No. 17,036; May 20; Gaz. vol. 190; p. 791.
"Autol." (For a Polish.) Howell & Company. No. 17,004; May 13; Gaz. vol. 190; p. 546.
"Avon Springs." (For Ginger-Ale.) Kellar Investment Company. No. 16,987; May 6; Gaz. vol. 190; p. 263.
"Bengal." (For Toilet-Paper.) Sauquoit Toilet Paper Co. No. 17,020; May 13; Gaz. vol. 190; p. 546.
"Best Ever." (For Butter.) Winona Ice Cream and Butter Company. No. 16,993; May 6; Gaz. vol. 190; p. 263.
"Bleach-It." (For Bleaching and Washing Powders.) Brookman Manufacturing Company. No. 16,996; May 13; Gaz. vol. 190; p. 546.
"Blue Giant." (For Overalls.) Neely, Harwell & Co. No. 16,990; May 6; Gaz. vol. 190; p. 263.
"Buckeye Feeding Molasses." (For Molasses.) W. H. Edgar & Son. No. 17,039; May 27; Gaz. vol. 190; p. 1026.
"Cabaret Chocolates." (For Chocolate Confectionery.) P. Kline. No. 17,007; May 13; Gaz. vol. 190; p. 546.
"Caravan." (For Toilet-Paper.) Sauquoit Toilet Paper Co. No. 16,992; May 6; Gaz. vol. 190; p. 263.
"Cardinal Liqueur." (For Alcoholic Liquor.) A. Voltter. No. 17,023; May 13; Gaz. vol. 190; p. 546.
"Champagne Fizz." (For a Celery Tonic.) Western Bottling and Packing Company. No. 17,026; May 13; Gaz. vol. 190; p. 546.
"Cigars." (For Cigars.) A. C. Henschel & Co. No. 17,001; May 13; Gaz. vol. 190; p. 546.
"Close Fit." (For Hair-Nets.) E. Mittelstaedt. No. 16,989; May 6; Gaz. vol. 190; p. 263.
"Crow Corn Corer." (For a Corn Remedy.) L. C. Ellis. No. 17,029; May 20; Gaz. vol. 190; p. 791.
"Dandy Mirror." (For Mirrors.) C. W. Wiegand. No. 17,046; May 27; Gaz. vol. 190; p. 1026.
"Domino." (For Rice.) R. Goldsmith. No. 17,030; May 20; Gaz. vol. 190; p. 791.
"Double Guarantee." (For Cigars.) The Moehle Lithographic Company. No. 17,009; May 13; Gaz. vol. 190; p. 546.
"Dr. A. E. Block Prescription Shoe." (For Shoes.) Stix, Bauer & Fuller Dry Goods Company. No. 17,044; May 27; Gaz. vol. 190; p. 1026.
"Eagle Cones." (For Cones.) Eagle Manufacturing Co. No. 16,999; May 13; Gaz. vol. 190; p. 546.
"El Arte Cubano." (For Cigars.) The Moehle Lithographic Company. No. 17,013; May 13; Gaz. vol. 190; p. 546.
"El Importador." (For Cigars.) The Moehle Lithographic Company. No. 17,014; May 13; Gaz. vol. 190; p. 546.
"Elastic Closed Crotch." (For Underwear.) Swiss American Knitting Mills. No. 17,021; May 13; Gaz. vol. 190; p. 546.
"Fabrica De Tabacos Cigarros De Primeros." (For Cigars.) American Lithographic Company. No. 16,994; May 13; Gaz. vol. 190; p. 546.
"4 U." (For Hair-Nets.) E. Mittelstaedt. No. 17,033; May 20; Gaz. vol. 190; p. 791.
"Golden State Brand Tokay." (For Grapes.) J. M. Davies. No. 17,038; May 27; Gaz. vol. 190; p. 1026.
"Henry Wilson." (For Cigars.) The Moehle Lithographic Company. No. 17,010; May 13; Gaz. vol. 190; p. 546.
"Invincible." (For Violin-Strings.) Southern California Music Company. No. 17,041; May 27; Gaz. vol. 190; p. 1026.
"James Weaver." (For Cigars.) The Moehle Lithographic Company. No. 17,012; May 13; Gaz. vol. 190; p. 546.
"Java-Julep." (For Java-Julep.) The Jamoka Company. No. 17,005; May 13; Gaz. vol. 190; p. 546.
"La Cubitana." (For Cigars.) The Moehle Lithographic Company. No. 17,011; May 13; Gaz. vol. 190; p. 546.
"La Margarita." (For Green Olives.) A. L. Caprini. No. 16,997; May 13; Gaz. vol. 190; p. 546.
"Lignoll." (For Violin-Strings.) Southern California Music Company. No. 17,043; May 27; Gaz. vol. 190; p. 1026.
"Magic Oil." (For a Polishing and Lubricating Oil.) The Magic Oil Co. No. 16,988; May 6; Gaz. vol. 190; p. 263.
"Old Samoset." (For Whisky.) Webster-Warnock Chemical Co. No. 17,024; May 13; Gaz. vol. 190; p. 546.
"Plastico Aceite Nacional." (For Medicinal Plasters.) C. L. Brewer. No. 16,986; May 6; Gaz. vol. 190; p. 263.
"Polvere Di Riso." (For Rice Complexion-Powder.) The J. A. Pozzoni Pharmacal Co. No. 17,016; May 13; Gaz. vol. 190; p. 546.
"Progress Phoenix." (For Cigars.) J. McBride. No. 17,031; May 20; Gaz. vol. 190; p. 791.
"Progressive Co-operative Coupon." (For Bread.) Progressive Co-operative Assn. No. 17,040; May 27; Gaz. vol. 190; p. 1026.
"Puncture Cure." (For a Puncture-Curing Compound.) W. Church. No. 16,998; May 13; Gaz. vol. 190; p. 546.
"Purenut Brand." (For Peanut-Butter.) G. A. Reuter. No. 17,034; May 20; Gaz. vol. 190; p. 791.
"Quality Cigars." (For Cigars.) American Lithographic Company. No. 16,995; May 13; Gaz. vol. 190; p. 546.
"Russian Mixture." (For Smoking-Tobacco.) L. Kaplowitz. No. 17,006; May 13; Gaz. vol. 190; p. 546.
"Schbro." (For Tooth-Powder.) Schorn & Brower. No. 17,019; May 13; Gaz. vol. 190; p. 546.
"Sellers Guarantee." (For Wearing-Apparel.) G. Rymarczick. No. 17,035; May 20; Gaz. vol. 190; p. 791.
"Silver Threads." (For Violin-Strings.) Southern California Music Company. No. 17,042; May 27; Gaz. vol. 190; p. 1026.
"Star Seal." (For Cigars.) A. C. Henschel & Co. No. 17,000; May 13; Gaz. vol. 190; p. 546.
"Starbright Silverpolish." (For a Compound for Cleaning and Polishing.) Howell & Company. No. 17,002; May 13; Gaz. vol. 190; p. 546.
"Sunbright Metal Polish." (For a Polish.) Howell & Company. No. 17,003; May 13; Gaz. vol. 190; p. 546.
"Suprema." (For Ginger-Ale.) Western Bottling & Extract Co. No. 17,025; May 13; Gaz. vol. 190; p. 546.
"Table Pride Bread." (For Bread.) C. Rust. No. 17,017; May 13; Gaz. vol. 190; p. 546.
"The Drink of the Universe, Sunol, Registered Smooth, Snappy, Satisfying." (For a Drink.) C. N. Bourne. No. 17,027; May 20; Gaz. vol. 190; p. 791.
"The Miller Sock." (For Socks.) S. S. Miller. No. 17,032; May 20; Gaz. vol. 190; p. 791.
"Trading Post." (For Cigars.) Schmidt & Co. No. 17,018; May 13; Gaz. vol. 190; p. 546.
"Twin Swan." (For Flour.) Riverside Milling Co. No. 16,991; May 6; Gaz. vol. 190; p. 263.
"Van Camp's Sauer Kraut." (For Sauer-Kraut.) The Van Camp Packing Company. No. 17,022; May 13; Gaz. vol. 190; p. 546.
"Vee Gee Brand." (For Canned Vegetables.) H. von Glahn & Son. No. 17,045; May 27; Gaz. vol. 190; p. 1026.
"Waxsipahti." (For Spring-Water.) New Ulm Bottling Works. No. 17,015; May 13; Gaz. vol. 190; p. 546.

PRINTS.

"A-Dru-Co." (For a Corn-Remover.) American Drug Co. No. 3,255; May 13; Gaz. vol. 190; p. 546.

"Arrow Collars and Shirts." (For Collars and Shirts.) Cluett, Peabody & Company. No. 3,249; May 6; Gaz. vol. 190; p. 263.

"Arrow Wing Collars with inserted tips." (For Collars.) Cluett, Peabody & Company. No. 3,256; May 13; Gaz. vol. 190; p. 546.

"Better than a Promise." (For Brass Beds.) Pittsburgh-Hickson Company. No. 3,279; May 27; Gaz. vol. 190; p. 1026.

"Bread is King." (For Bread and Yeast.) The Fleischmann Company. No. 3,269; May 20; Gaz. vol. 190; p. 791.

"Colgate's Cashmere Bouquet Talc Powder." (For Talc Powder.) Colgate & Co. No. 3,257; May 13; Gaz. vol. 190; p. 546.

"Colgate's Dactylis Talc." (For Dactylis Talc.) Colgate & Co. No. 3,276; May 27; Gaz. vol. 190; p. 1026.

"Colgate's Éclat Talc." (For Éclat Talc.) Colgate & Co. No. 3,277; May 27; Gaz. vol. 190; p. 1026.

"Colgate's Monad Violet Talc." (For Violet Talc.) Colgate & Co. No. 3,275; May 27; Gaz. vol. 190; p. 1026.

"'Columbia' Cufturn Shirt." (For Shirts.) New Columbia Shirt Co. No. 3,253; May 6; Gaz. vol. 190; p. 263.

"Cremola Wafers." (For Cremola Wafers.) Yecker Chocolate Company. No. 3,282; May 27; Gaz. vol. 190; p. 1026.

"Dandergone." (For a Hair-Tonic.) R. P. Locklayer. No. 3,271; May 20; Gaz. vol. 190; p. 791.

"Don't Outgrow the Bread and Milk Habit." (For Bread and Yeast.) The Fleischmann Company. No. 3,264; May 20; Gaz. vol. 190; p. 791.

"Fifty Ways to Use Bread." (For Bread and Yeast.) The Fleischmann Company. No. 3,265; May 20; Gaz. vol. 190; p. 791.

"Garwood's Violet Breath Hearts." (For Perfumed Candy Tablets.) Schandein & Lind Co. No. 3,254; May 6; Gaz. vol. 190; p. 263.

"In Bread There is Strength." (For Bread and Yeast.) The Fleischmann Company. No. 3,266; May 20; Gaz. vol. 190; p. 791.

"'Kenmore,' 'Baltic,' 'Devon,' Arrow Collars." (For Collars.) Cluett, Peabody & Company. No. 3,252; May 6; Gaz. vol. 190; p. 263.

"Kuz." (For Pepsin Cough-Candy.) N. M. Wiegand. No. 3,259; May 13; Gaz. vol. 190; p. 546.

"La Salle A Light, Deep Pointed Arrow Collar." (For Collars.) Cluett, Peabody & Company. No. 3,250; May 6; Gaz. vol. 190; p. 263.

"Maraschino White Pine From Idaho." (For White-Pine Lumber.) Owen M. Bruner Company. No. 3,273; May 27; Gaz. vol. 190; p. 1026.

Marley-Devon, Two Heights in the Modish London Cut-away Fronts." (For Collars.) Cluett, Peabody & Company. No. 3,251; May 6; Gaz. vol. 190; p. 263.

"$1.25 Bosch Plugs." (For Spark-Plugs.) Bosch Magneto Company. No. 3,272; May 27; Gaz. vol. 190; p. 1026.

"Playing Hookey." (For Wheat Breakfast Food.) Cream of Wheat Co. No. 3,258; May 13; Gaz. vol. 190; p. 546.

"Raising the Standard." (For Bread and Yeast.) The Fleischmann Company. No. 3,268; May 20; Gaz. vol. 190; p. 791.

"Rosilla Paste." (For Candy.) Powell's. No. 3,280; May 27; Gaz. vol. 190; p. 1026.

"Spring-Step Rubber Heels." (For Rubber Heels.) Revere Rubber Co. No. 3,281; May 27; Gaz. vol. 190; p. 1026.

"Take Out These Bottles and Shake Them." (For Salt.) Worcester Salt Co. No. 3,260; May 13; Gaz. vol. 190; p. 546.

"The Barr Baking & Catering Co., Ice Cream and Pastry. Catering at any distance." (For Ice-Cream and pastry.) T. Lange. No. 3,278; May 27; Gaz. vol. 190; p. 1026.

"The Harvest of Health." (For Bread and Yeast.) The Fleischmann Company. No. 3,270; May 20; Gaz. vol. 190; p. 791.

"The 'Health Food' for Children." (For Bread and Yeast.) The Fleischmann Company. No. 3,267; May 20; Gaz. vol. 190; p. 791.

"The 'Lightest' Food." (For Bread and Yeast.) The Fleischmann Company. No. 3,263; May 20; Gaz. vol. 190; p. 791.

"The World Goes Round." (For Bread and Yeast.) The Fleischmann Company. No. 3,262; May 20; Gaz. vol. 190; p. 791.

"Washanew Glacé Kid Gloves." (For Gloves.) J. M. Chanut & Cie. No. 3,274; May 27; Gaz. vol. 190; p. 1026.

"Yecker's Chocolate Nougat Bricks." (For Chocolate.) Yecker Chocolate Company. No. 3,261; May 13; Gaz. vol. 190; p. 546.

DISCLAIMERS.

Cutting instrument. F. W. Starr. No. 663,809; date of patent Oct. 1, 1901; disclaimer filed May 12, 1913; Gaz. vol. 190; p. 798b.

Electrical machines, Brush for. J. W. Dickey. No. 610,705; date of patent Sept. 13, 1898; disclaimer filed May 13, 1913; Gaz. vol. 190; p. 1034.

Ice-making apparatus, Artificial. O. H. Jewell. No. 934,732; date of patent Sept. 21, 1909; disclaimer filed May 15, 1913; Gaz. vol. 190; p. 1034.

Ice, Making artificial. O. H. Jewell. No. 934,972; date of patent Sept. 21, 1909; disclaimer filed May 15, 1913; Gaz. vol. 190; p. 1034.

Tires, Supporting and retaining device for spare. W. A. Allen. (Reissue.) No. 13,454; date of patent Aug. 6, 1912; disclaimer filed May 13, 1913; Gaz. vol. 190; p. 798b.

OFFICIAL GAZETTE

OF THE

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ERRATA.

1,063,386, page 162, third claim, line 9, after the word "expanded" insert the word *air*.

1,064,405, page 458, fourth claim, line 4, after the word "weft" insert the words *thread about the warp*.

1,064,625, page 532, first claim, line 6, before the word "thereby" insert the words *at a point sufficiently remote from the place of said separation to prevent contact of the lighter gases with the oxygen or the flame.*

1,064,914, page 662, in heading, assignment, residence of assignee, for "Sedgwick, Kansas" read *Wichita, Kansas.*

1,065,054, page 708, fourth claim, line 3, for the word "disintegrating" read *disintegrated.*

1,065,614, page 935, second claim, lines 6–7, strike out the words "both the body portion and extension forming a loop encircling said parts," and claim 4, line 8, after the word "portion" insert the words *both the body portion and extension forming a loop encircling said parts.*

44,190, 44,191, and **44,192,** (Designs) pages 803–4, in heading, middle name of patentee, for "Rocknell" read *Rockwell.*

92,228, (Trade-Marks) page 1063, name of registrant for "Kar Brak" read *KarBrak.*

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JUNE, 1913.

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DIGEST

OF THE

DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

JUNE, 1913.

[Decisions of the Court of Appeals of the District of Columbia are indicated by one star (*), and of the Supreme Court of the United States by two stars (**).]

ABANDONMENT OF APPLICATIONS.

See Prosecution of Applications, 3, 5, 8.

ABANDONMENT OF TRADE-MARKS.

APPLICANT AND REGISTRANT—PRIMA FACIE SHOWING OF ABANDONMENT—REBUTTING AFFIDAVITS.

Where in an interference involving an applicant and a registrant the applicant filed letters from the registrant stating that he did not make goods specified in the registration bearing a certain name which is shown in his registration and that he did not handle the goods specified, *Held* that a sufficient showing of abandonment had been made out to justify a requirement that the registrant present affidavits overcoming such showing before the case be set down for the taking of testimony.

[Imperial Soap and Oil Co. *v.* Brandly, 291.

ACTION BY THE EXAMINER.

See Drawings, 3; Prosecution of Applications, 1, 2, 3, 4, 5, 7, 8.

AFFIDAVIT.

See Abandonment of Trade-Marks; Designs.

AMENDMENT.

See Dissolution of Interference; Drawings, 1; Prosecution of Applications, 3, 7.

TRADE-MARKS—AFTER ADVERSE DECISION IN OPPOSITION—AUTHORITY OF COMMISSIONER TO ADMIT.

After an adverse decision in an opposition applicant filed an amendment changing the particular description of his goods, *Held* that the Commissioner had authority to permit such amendment and allow the application if, in his opinion, the amendment was such as to avoid the judgment in the opposition.

[Underwood Typewriter Co. *v.* The Universal Stenotype Co., 831.

ANTICIPATION.

See Process and Apparatus.

APPEAL TO THE EXAMINERS-IN-CHIEF.

See Prosecution of Applications, 1, 2, 3, 4.

APPLICANT AND REGISTRANT.

See Abandonment of Trade-Marks.

APPLICATIONS.

See Designs; Drawings; Invention; Prosecution of Applications.

ARGUMENTS.

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See Prosecution of Applications, 6, 7.

AUTHORITY OF THE COMMISSIONER OF PATENTS.

See Amendment; Dissolution of Interference; Interference, 2.

CANCELATION OF CLAIMS.

See Prosecution of Applications, 3, 7, 8.

CANCELATION OF DRAWINGS.

See Drawings, 3.

CONCEPTION OF INVENTION.

See Priority of Invention, 3, 4.

CONSTRUCTION OF CLAIMS.

PATENTABILITY—HAT.

Claims for a hat *Held* unpatentable in view of the prior art.

[**In re* Taylor, 836.

CONSTRUCTION OF RULES.

See Drawings, 1; Interference, 1; Prosecution of Applications, 3, 7.

CONSTRUCTION OF SPECIFICATIONS AND PATENTS.

METHOD OF CONDENSING STEAM.

A method of condensing steam *Held* unpatentable in view of a prior patent showing a condenser where it appears that the several steps of the process are directly carried out by the patented device, all that applicants have discovered being the underlying principle of that device.

[**In re* Moulton and Jones, 588.

CONSTRUCTION OF STATUTES.

See Drawings, 1; Patent-Rights, 1, 2; Prosecution of Applications, 6

DELAY IN PROSECUTION OF APPLICATIONS.

See Prosecution of Applications, 5, 6.

DESCRIPTIVE MARKS.

See Registration of Trade-Marks, 2.

DESIGNS.

PATENTABILITY—FONT OF TYPE.

When a design for a font of type differs from the references principally in that the heavier lines are heavier and the lighter lines lighter and the ceriphs sharper, but the change on the whole gives the type a more pronounced or bolder effect, and it being shown by affidavits that the type has been recognized by the trade as having a distinctive face, *Held* that such design is new and ornamental and that its production required the exercise of the inventive faculties, (citing *ex parte Smith*, 130 O. G., 1688; *in re Schraubstadter*, 120 O. G., 1167; 26 App. D. C., 331, distinguished.)

[*Ex parte* Weatherly, 833.

DILIGENCE.

See Priority of Invention, 2. 3.

DISSOLUTION OF INTERFERENCE.

See Prosecution of Applications, 4.

DISSOLUTION TO PERMIT CORRECTION OF AN OBVIOUS MISTAKE IN THE DRAWING—QUESTION OF PRIORITY NOT RES ADJUDICATA.

Where an interference was dissolved on the ground that as shown in the drawing the device of one of the parties was not operative and it appeared that this showing did not agree with the specification and amendment to the drawing was permitted, *Held* that the dissolution did not render the question of priority *res adjudicata* and that the Commissioner had authority to redeclare the interference.

[*Moore, Commissioner of Patents, *v.* United States, *ex rel.* Colburn Machine Glass Co., 293.

DRAWINGS.

See Dissolution of Interference; Prosecution of Applications, 4.

1. INTERFERENCE—REISSUE APPLICATION—AMENDMENT TO CORRECT OBVIOUS MISTAKE IN THE DRAWING—NOT FORBIDDEN BY THE RULES OR THE STATUTE.

Where during the progress of an interference involving a reissue application it was discovered that the drawing showed a shaft extended across the path of the sheets of glass, but it was obvious from the description that the shaft was not intended to be so extended, *Held* that the correction of this mistake in the drawing was not an amendment in the sense of the rule prohibiting amendments of applications in interference or the statute and rule relating to reissue applications.

[*Moore, Commissioner of Patents, *v.* United States, *ex rel.* Colburn Machine Glass Co., 293.

2. SAME—OBVIOUS MISTAKE IN THE DRAWING—MAY BE DISREGARDED.

Where during the progress of an interference it is discovered that through an error in the drawing the machine is apparently shown as inoperative and that it is obvious from the description that the machine was not intended to be so shown, *Held* that this manifest mistake should have been disregarded and the machine should have been treated as operative. [*Id.

3. CONSTRUCTION NOT COVERED BY THE CLAIM—CANCELATION.

Where the claims are limited to a chain composed of links of a certain specified construction, *Held* that the Examiner properly required cancelation of a figure which is described as showing "a modified form of construction to illustrate the applicability to other than chain construction." [*Ex parte* Parks, 831.

EXAMINER OF INTERFERENCES.

See Priority of Invention, 2.

FINAL HEARING.

See Interference, 1.

FINAL REJECTION OF CLAIMS.

See Prosecution of Applications, 2, 3, 8.

FORMER DECISIONS CITED.

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FUNCTION.

See Invention.

INFRINGEMENT.

See Patent-Rights.

INOPERATIVENESS.

See Dissolution of Interference; Drawings, 2; Prosecution of Applications, 4.

INTERFERENCE.

See Abandonment of Trade-Marks; Dissolution of Interference; Drawings, 1, 2; Priority of Invention; Tribunals of the Patent Office.

1. RULE 130—WHAT MAY BE ARGUED THEREUNDER.

Neither the question of the patentability of the issue nor the question whether the claims have different meanings as applied to the applications of the respective parties can be argued at final hearing under the provisions of Rule 130.

[Molyneux *v.* Onderdonk, 292.

2. MANDAMUS.

A mandamus directing the Commissioner to set aside the redeclaration of an interference *Held* improperly granted, since under the circumstances of the case the Commissioner had authority to so redeclare the interference.

[*Moore, Commissioner of Patents, *v.* United States, *ex rel.* Colburn Machine Glass Co., 293.

INVENTION.

See Designs; Process and Apparatus; Prosecution of Applications, 7, 8.

1. PATENTABILITY—DOUBT RESOLVED IN FAVOR OF THE APPLICANT.

"It is easy to dispose of a case, where the issue of invention is close, by holding that the advance over the prior art constitutes a mere mechanical change apparent to those skilled in the art. But, in the absence of proof to support this conclusion, and where the question of patentability is close, the doubt should be resolved in favor of the applicant. (*In re Eastwood*, 144 O. G., 819; 33 App. D. C., 291.)" [*In re* Harbeck, 586.

2. SAME—CHANGE OF MATERIAL.

"While the use of new materials to produce a known result, or of known materials to produce a new but obvious result, may not always constitute invention, if the new idea, when applied, brings success out of failure, produces a new and useful result and saving in operation or production, or efficiency instead of inefficiency, gives to the device new functions and useful properties, it is invention, and may be patented." [*Id.

LIMITATION OF CLAIMS.

See Drawings, 3.

MACHINE.

See Drawings, 2.

MANDAMUS.

See Interference, 2.

MECHANICAL SKILL.

See Invention, 1.

MISTAKE.

See Dissolution of Interference; Drawings, 1, 2.

NAME OF INDIVIDUAL.

"MARK"—MERE SURNAME—NOT REGISTRABLE.

The word "Mark" *Held* properly refused registration on the ground that it is a mere surname.

[*Ex parte* Henry Thayer & Company, 292.

NEW CLAIMS.

See Prosecution of Applications, 3, 7, 8.

NEW MATERIALS.

See Invention.

NEW MATTER.

See Prosecution of Applications, 3, 4, 7, 8

NEW RESULTS.

See Invention.

OPPOSITION TO REGISTRATION OF TRADE-MARKS.

See Amendment.

PATENT-RIGHTS.

1. STATUTE—RIGHTS CONFERRED THEREBY.

"The right to make, use, and sell an invented article is not derived from the patent law. This right existed before and without the passage of the law and was always the right of an inventor. The act secured to the inventor the *exclusive* right to make, use, and vend the thing patented, and consequently to prevent others from exercising like privileges without the consent of the patentee. (*Bloomer* v. *McQuewan*, 14 How., 539, 549; *Continental Paper Bag Co.* v. *Eastern Paper Bag Co.*, 135 O. G., 1297; 210 U. S., 405, 425.)"

[**Bauer & Cie. and The Bauer Chemical Company *v.* O'Donnell, 1068.

2. SAME—SAME—DEFINITION.

"The right to use is a comprehensive term and embraces within its meaning the right to put into service any given invention. And Congress did not stop with the express grant of the rights to make and to use. * * * To vend is also a term readily understood and of no doubtful import. Its use in the statute secured to the inventor the exclusive right to transfer the title for a consideration to others." [**Id.

3. INFRINGEMENT—SELLING AT PRICE LESS THAN THAT FIXED BY OWNER OF PATENT—DOES NOT CONSTITUTE.

The owner of a patent sold an article covered thereby with a notice thereon that it was "licensed by us for sale and use at a price not less than one dollar ($1.00.) Any sale in violation of this condition, or use when so sold, will constitute an infringement of our Patent No. 601,995." A purchaser of such article sold it at less than the price specified. *Held* that such sale did not constitute an infringement of the patent. (*Henry* v. *Dick*, 176 O. G., 751; 224 U. S., 1, distinguished.) [**Id.

PATENTABILITY.

See Construction of Claims; Construction of Specifications and Patents; Designs; Interference, 1; Invention; Priority of Invention; Process and Apparatus.

PETITION TO THE COMMISSIONER OF PATENTS.

See Prosecution of Applications, 4.

PRIOR PATENTS.

See Construction of Specifications and Patents; Process and Apparatus.

PRIORITY OF INVENTION.

See Dissolution of Interference.

1. PAPER-WALL CAN.

A can-body composed of layers of paper united to each other by a fused cement *Held* patentable over the prior art.

[**In re* Harbeck, 586.

2. INTERFERENCE—TESTIMONY—NOT PRINTED—NEED NOT BE CONSIDERED.

Where testimony was filed on behalf of both parties, but the junior party did not print his testimony, *Held* that the Examiner of Interferences properly awarded priority to the senior party without considering the testimony. [Brown *v.* Gillett, 832.

3. DILIGENCE.

It is well settled that where one is the first to conceive but the last to reduce to practice he must show the exercise of diligence at the time the subsequent inventor entered the field. This rule is not affected by the fact that the later inventor was negligent, since he was the first to reduce to practice.

[*Grabowsky *v.* Gallaher, 835.

4. SAME.

Record reviewed and *Held* that appellant, who was the first to conceive, was not diligent in reducing the invention to practice at the time the appellee entered the field and that priority was properly awarded to the latter. [*Id.

PROCESS AND APPARATUS.

PATENTABILITY—ANTICIPATION.

"It is true, of course, that a process and an apparatus, or mechanism by which it may be performed may constitute separate and independent inventions. It is also true, as contended by the appellants, that a process is not anticipated by a prior mechanism, by which, with some alterations, it might have been performed. It is not only necessary that the prior patents might have been used to carry out the process, but that such use was either contemplated or would have occurred, in the ordinary mechanical operation of the device. (*Carnegie Steel Company* v. *Cambria Iron Company*, 99 O. G., 1866; 185 U. S., 403; *in re Creveling*, 117 O. G., 1167; 25 App. D. C., 530, 535.)"

[**In re* Moulton and Jones, 588.

PROOF.

See Invention.

PROSECUTION OF APPLICATIONS.

See Drawings.

1. REOPENING OF DECIDED CASE.

Where the Examiner stated that certain differences between applicant's device and those of the references were immaterial and insufficient upon which to base a patent and the Examiners-in-Chief on appeal stated that there was no coöperation or relationship between the details admittedly different from the references and the many other specific features to which the claims were limited, *Held* that the ground of rejection was in fact the same, only differently stated, and that there was no reason for reopening the case, especially as there had been twenty-one actions in the application prior to the appeal. [*Ex parte* Porter, 291.

2. FINAL REJECTION—APPEAL.

"The mere fact that applicant had presented a claim after final rejection, which the Examiner refused to enter, would have constituted no ground for not forwarding the appeal had no reference been made to this refusal in the appeal itself. (*Ex parte Durafort*, 110 O. G., 2017, and *ex parte Back*, 118 O. G., 1363.)"

[*Ex parte* Pillard, 585.

3. SAME—SAME—ABANDONMENT.

Where after a final rejection the applicant filed an amendment directing the cancelation of the claims and the presentation of one new claim in lieu thereof and the Examiner held that this amendment could not be entered, since applicant had not complied with the provisions of Rule 68, and on the last day of the year following the final rejection applicant appealed and assigned as one of the errors refusal to admit the amendment, *Held* that the application should not have been held abandoned, but that the appeal should have been forwarded and attention merely called to the fact that one ground of the appeal presented a question not reviewable by the Examiners-in-Chief. [Id.

4. NEW MATTER—REJECTION—REVIEWABLE ON APPEAL.

Where the Examiner rejected claims on the ground that they cover an inoperative device and thereafter refused to permit a change in the drawing on the ground that the proposed change included an entirely different organization from that originally disclosed, *Held* that his action is reviewable on appeal and not on petition to the Commissioner. [*Ex parte* Thomas, 832.

5. ABANDONMENT.

Following a rejection the applicant filed a substitute specification, which the Examiner held could not be entered and notified applicant that proper response to the prior letter was awaited; but no further action was taken by the applicant until more than a year after the rejection. *Held* that as applicant was notified by the Examiner that the case awaited proper response to the first Office letter the application is abandoned unless the delay in the prosecution was unavoidable. [*Ex parte* Henrich, 1067.

6. SAME.

Where the record shows that the attorneys have an elaborate system for keeping track of pending applications and employ reasonable checks for the purpose of preventing through oversight the time for action expiring without such action being taken and that through the failure of a clerk to make a proper entry on such records action was not taken until after the year allowed by law had expired, *Held* that the delay in the prosecution of the application was unavoidable within the meaning of section 4894, Revised Statutes. [Id.

7. GROUND OF REJECTION SUFFICIENTLY STATED.

Where the Examiner required that certain claims be canceled on the ground that applicant had elected to prosecute a different invention and thereafter an amendment was filed canceling these claims and substituting a claim in place thereof and requesting reconsideration, *Held* that in view of the fact that the attorneys of record were familiar with the practice of the Patent Office and highly skilled in the art to which this application relates the contention that the Examiner did not comply with Rule 65 was without merit, especially as the Examiner was not requested to explain his position. [*Ex parte* Ehrlich and Berthelm, 1068.

8. SUBSTITUTION OF CLAIM SUBSTANTIALLY SAME AS CLAIM REJECTED—FINAL ACTION SHOULD BE GIVEN.

Where in response to a requirement that certain claims be canceled as for an invention different from that elected applicant presented a claim which the Examiner held substantially the same as the claims canceled, *Held* that his action with respect to such action should have been made final and the application not held abandoned. [Id.

PUBLIC PROPERTY

See Registration of Trade-Mark.

REDECLARATION OF INTERFERENCE.

See Interference, 2.

REDUCTION TO PRACTICE.

See Priority of Invention, 3, 4.

REFERENCES.

See Designs; Prosecution of Applications, 1, 2.

REGISTRATION OF TRADE-MARKS.

See Name of Individual.

1. PUBLIC PROPERTY.
The word "Mark" *Held* properly refused registration on the ground that any one has a right to use this word on his goods in connection with the word "Trade" and that this word is therefore public property. [*Ex parte* Henry Thayer & Company, 292.

2. "ARAB," FOR DATES—DESCRIPTIVE.
The word "Arab" as applied to dates *Held* descriptive, and therefore not registrable.
[*Ex parte* U. H. Dudley & Company, 586.

REISSUE APPLICATIONS.

See Drawings, 1.

REJECTION OF CLAIMS.

See Prosecution of Applications, 1, 4, 5, 7.

REOPENING OF DECIDED CASES.

See Prosecution of Applications, 1.

RES ADJUDICATA.

See Dissolution of Interference.

RESPONSIVE ACTION BY THE APPLICANT.

See Prosecution of Applications, 5, 6, 8.

SPECIFICATIONS.

See Dissolution of Interference; Prosecution of Applications, 1

STATE OF THE ART.

See Construction of Claims; Construction of Specifications and Patents; Invention; Priority of Invention, 1

TESTIMONY.

See Abandonment of Trade-Marks; Priority of Invention, 2.

TRADE-MARKS.

See Abandonment of Trade-Marks; Amendment; Name of Individual; Registration of Trade-Marks.

TRIBUNALS OF THE PATENT OFFICE.

INTERFERENCE—CLAIMS HAVING SAME MEANING IN BOTH APPLICATIONS—UNIFORM DECISIONS OF THE PATENT OFFICE TRIBUNALS—NOT DISTURBED EXCEPT IN CASE OF CLEAR ERROR.
Where the tribunals of the Patent Office hold uniformly that while the structures of the respective parties to the interference are specifically different the terms of the claims in issue are properly applicable to both, *Held* that such ruling will not be disturbed unless error is clearly apparent. [*In re* Grabowsky *v.* Gallaher, 835.

Patents 1,063,177 to No. 1,063,944.

THE OFFICIAL GAZETTE OF THE United States Patent Office.

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ISSUE OF JUNE 3, 1913.

Patents	782—No.	1,063,177 to No.	1,063,944, inclusive.
Designs	29—No.	44,121 to No.	44,149, inclusive.
Trade-Marks	97—No.	91,229 to No.	91,325, inclusive.
Labels	19—No.	17,047 to No.	17,065, inclusive.
Prints	9—No.	3,293 to No.	3,301, inclusive.
Reissues	1—No.	12,570.	
Total	924		

TO RESIDENTS OF THE UNITED STATES.

States.	Patents and Designs.	Trade-Marks, Labels, and Prints.	States.	Patents and Designs.	Trade-Marks, Labels, and Prints.
Alabama	4	....	North Carolina	2	1
Arizona	....	....	North Dakota	4	....
Arkansas	3	....	Ohio	45	6
California	40	1	Oklahoma	5	....
Colorado	8	....	Oregon	5	1
Connecticut	18	1	Pennsylvania	71	5
Delaware	1	....	Rhode Island	6	5
Florida	....	....	South Carolina	2	....
Georgia	4	....	South Dakota	2	....
Idaho	....	....	Tennessee	4	1
Illinois	83	7	Texas	9	....
Indiana	6	1	Utah	3	....
Iowa	11	....	Vermont	4	....
Kansas	12	1	Virginia	9	....
Kentucky	4	....	Washington	8	1
Louisiana	1	....	West Virginia	2	1
Maine	7	1	Wisconsin	14	....
Maryland	7	1	Wyoming	....	....
Massachusetts	54	10			
Michigan	25	5	Alaska, District of	....	....
Minnesota	17	1	Canal Zone	....	....
Mississippi	2	....	District of Columbia	4	1
Missouri	16	7	Hawaii Territory	....	....
Montana	3	....	Philippine Islands	....	2
Nebraska	3	1	Porto Rico	....	....
Nevada	....	....	U. S. Army	....	....
New Hampshire	3	....	U. S. Navy	1	....
New Jersey	40	14			
New Mexico	1	....	Total to residents of the United States	714	104
New York	141	30			

TO RESIDENTS OF FOREIGN COUNTRIES.

Countries.	Patents and Designs.	Trade-Marks.	Countries.	Patents and Designs.	Trade-Marks.
Argentina	....	....	Netherlands	....	....
Austria-Hungary	....	2	Newfoundland	....	....
Belgium	1	1	New South Wales	....	....
Brazil	....	....	New Zealand	....	....
British West Indies	....	....	Norway	....	....
Canada	12	....	Queensland	....	....
Cape Colony	....	....	Roumania	....	....
Chile	....	....	Russia	2	....
China	....	....	Scotland	....	1
Costa Rica	....	....	South Australia	1	....
Cuba	....	....	Spain	....	....
Denmark	....	1	Sweden	....	....
Ecuador	....	....	Switzerland	5	....
England	10	1	Transvaal, South Africa	....	....
France	8	....	Victoria	....	....
Germany	48	6	Western Australia	....	....
Ireland	....	....			
Isle of Jersey	....	....	Total to residents of foreign countries	92	12
Italy	1	....			
Japan	....	....			
Mexico	....	....			

Photographic Copies of Drawings.

The Patent Office will furnish photographic prints of any unbound drawing, foreign or domestic, which may be in its possession. These prints will be made only in two sizes, 8 by 12½ at 15 cents per sheet and 10 by 15 at 25 cents per sheet.

This Office has no printed copies of foreign patents for sale.

In ordering photographic copies of drawings of foreign patents cited as references, applicants must state the date and number thereof, the name of the patentee, the country in which each patent was granted, and the class and subclass in which the patent is classified. If the class and subclass were not given in the Office letter citing the patent, the applicant must state the serial number of the application in which it was cited, the number of the action therein, the name of the inventor, and the title of the invention.

The photoprints will be furnished more expeditiously if the number of the division is also given in which they may be found. A separate order should be made for each case, for which the Office will furnish blanks gratuitously upon request.

BOUND VOLUMES CANNOT BE USED FOR MAKING PRINTS.

Failure to give the fullest data whereby the mounted drawing may be found will cause unnecessary delay and correspondence.

Applicants and attorneys are strongly urged to file a set of prints, small size, 8 by 12½ inches, or order them to be made by the Office, 15 cents per sheet, at the time of filing an application. Such procedure will save delay later, if correction of the drawing is desired or required.

Trade-Marks.

Extra copies of the trade-mark portion of the GAZETTE which will be sold separately, may be obtained single or in quantities for five cents each. Coupons will be taken in payment therefor.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business May 31, 1913.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
313	1. Fences; Harrows and Diggers; Plows; Seeders and Planters; Trees, Plants, and Flowers.	Mar. 25	Apr. 1	722
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Pneumatic Despatch; Pneumatics; Presses; Store-Service; Tobacco.	Feb. 18	Apr. 1	673
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Metal-Founding; Metallurgy; Plastic Metal Working.	May 3	May 19	241
232	4. Bridges; Conveyers; Excavating; Hoisting; Hydraulic Engineering; Loading and Unloading; Metallic Building Structures; Traversing Hoists.	Feb. 27	Apr. 12	636
167	5. Bookbinding; Harvesters; Jewelry; Music.	Mar. 15	Mar. 18	556
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Medicines; Preserving; Sugar and Salt; Substance Preparation.	Feb. 7	Mar. 26	773
312	7. Educational Appliances; Clutches; Games and Toys; Mechanical Motors; Optics; Velocipedes.	Jan. 14	Mar. 25	986
131	8. Beds; Chairs; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Feb. 10	May 7	603
142	9. Air and Gas Pumps; Fluid-Pressure Regulators; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Wind-Wheels.	Jan. 21	Apr. 24	619
235	10. Carriages and Wagons.....	Jan. 13	Mar. 27	1186
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whips and Whip Apparatus.	Apr. 5	Apr. 11	410
322	12. Elevators; Journal-Boxes, Pulleys, and Shafting; Lubrication; Machine Elements.	Mar. 10	Mar. 10	1138
320	13. Arms, Projectiles, and Explosive Charges, Making; Bolt, Nail, Nut, Rivet, and Screw Making; Boring and Drilling; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 11	Mar. 14	719
307	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Metal-Ornamenting; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 12	May 1	545
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Liquid Coating Compositions; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastic Compositions; Plastics.	Jan. 2	Mar. 26	1304
109	16. Radiant Energy; Telegraphy; Telephony.	Jan. 21	Mar. 17	542
303	17. Matrix-Making; Paper Manufactures; Printing; Type-Bar Making.	Apr. 14	May 1	284
327	18. Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 14	Apr. 17	235
236	19. Dampers, Automatic; Furnaces; Heat-Distributing Systems; Stoves and Furnaces.	Feb. 24	Apr. 10	549
179	20. Artificial Limbs; Builders' Hardware; Dentistry; Locks and Latches; Safes; Undertaking.	Mar. 20	May 7	187

Applications Under Examination—Continued.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
112	21. Brakes and Gins; Carding; Cloth-Finishing; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 5	Mar. 11	599
249	22. Aeronautics; Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Firearms; Marine Propulsion; Ordnance; Ships.	Feb. 7	Apr. 23	376
379	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Time-Controlling Mechanism.	Feb. 18	Mar. 20	534
144	24. Apparel; Apparel Apparatus; Sewing-Machines.	Mar. 13	May 1	526
315	25. Butchering; Mills; Threshing; Vegetable Cutters and Crushers.	Apr. 26	May 3	213
106	26. Electricity, Generation; Motive Power.	Jan. 3	Feb. 19	618
372	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 12	Apr. 7	534
65	28. Internal-Combustion Engines.	Jan. 17	Jan. 21	1157
147	29. Coopering; Fire-Escapes; Ladders; Rods. Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking-Tools.	Dec. 4	Apr. 8	793
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Mar. 5	May 12	441
172	31. Alcohol; Ammonia, Water, and Wood-Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue.	Feb. 21	Mar. 1	507
278	32. Carbonating Beverages; Dispensing Beverages; Dispensing-Cans; Ornamentation; Packaging Liquids; Refrigeration.	Feb. 27	May 2	399
71	33. Cutlery; Domestic Cooking Vessels; Masonry and Concrete Structures; Paving; Tents, Canopies, Umbrellas, and Canes.	Dec. 27	Apr. 7	416
304	34. Railways; Railway-Brakes; Railway Rails and Joints; Railway Rolling-Stock; Railway Ties and Fasteners.	Apr. 7	Apr. 1	434
244	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Garment-Supporters; Toilet.	Mar. 12	Apr. 30	898
264	36. Drafting; Driers; Engraving; Measuring Instruments; Photography.	Mar. 29	Apr. 1	848
107	37. Electric Lamps; Electricity, Conductors; Electricity, Conduits; Electricity, General Applications.	Nov. 16	Jan. 29	963
378	38. Animal Husbandry; Artesian and Oil Wells; Fishing and Trapping; Stationery; Stone-Working.	Feb. 3	Mar. 17	835
221	39. Water Distribution.....	Mar. 8	Apr. 25	465
220	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Feb. 27	Mar. 24	968
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	Apr. 15	Apr. 21	556
279	42. Electric Railways; Electric Signaling; Railway Signaling; Signals.	Feb. 12	Feb. 27	798
282	43. Baths and Closets; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Mar. 31	Apr. 14	271

Oldest new case, Nov. 16; oldest amended, Jan. 21.
Total number of applications awaiting action..... 27,037

161	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.			
	Trade-Marks.....	Apr. 2	May 9	872
	Designs.....	Apr. 17	May 15	226
	Labels and Prints.....	May 20	May 21	67

PATENTS

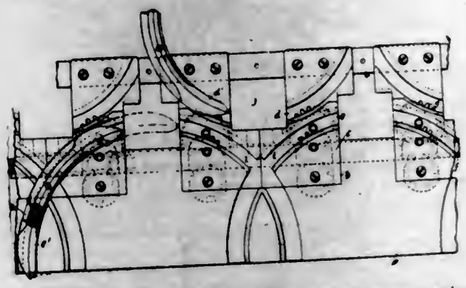
GRANTED JUNE 3, 1913.

1,063,177. COMPOUND FOR ACCELERATING FERMENTATION. WILLIAM GEORGE ANDREWS, Chicago, Ill., assignor to Andrews Milling Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1912. Serial No. 716,766. (Cl. 99—10.)

1. A compound in powderlike form to be used in bread-making, consisting of a material containing soluble nitrogenous and phosphatic bodies in considerable quantities, a starch product distinguished by having substantially all of the starch granules modified or ruptured to such a degree as to be more readily acted upon by malt diastase than the starch of flour, and a material containing starch-converting enzym.

2. A compound in the form of a powder to be used in bread-making, consisting of a material containing a high percentage of soluble nitrogenous and phosphatic bodies, a starch product distinguished by having all of the starch granules modified or ruptured to such a degree as to be more readily acted upon by malt diastase, and a material of high diastatic power.

1,063,178. BATTEN STRUCTURE FOR NARROW-WARE LOOMS. FREDERICK BENZ, Jr., Haledon, N. J., assignor to Joseph Frank, New York, N. Y. Filed Dec. 20, 1912. Serial No. 737,788. (Cl. 139—19.)



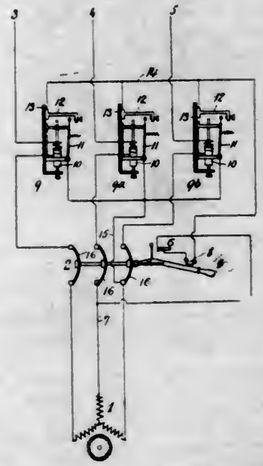
1. A batten structure for narrow ware looms having pairs of spaced removable shuttle blocks and forwardly open shuttle-guiding grooves each formed in a pair of the blocks and in portions of said structure adjacent said pair at both sides thereof, and shuttles respectively arranged in said grooves, each shuttle having a longitudinal upright retaining flange and each groove having a similar upright retaining flange bearing against the forward side of the shuttle flange and terminating at or within the sides of said pair of blocks, whereby, on shifting each shuttle to a position where it clears one block, the latter, carrying the shuttle, may be removed unobstructedly from the structure, substantially as described.

2. A batten structure for narrow ware looms having pairs of spaced shuttle blocks formed with downwardly curved upper shuttle-guiding grooves *d* and upwardly curved lower shuttle-guiding grooves *e* staggered relatively to grooves *d*, the adjoining blocks in each two adjoining pairs having formed therein a downward weaving-space-forming recess terminating at the front short of the grooves *e* and having its bottom surface beveled rearwardly, substantially as described.

3. A batten structure for narrow ware looms having pairs of spaced shuttle blocks formed with downwardly curved upper shuttle-guiding grooves *d* and upwardly curved lower shuttle-guiding grooves *e* staggered relatively to grooves *d*, the adjoining blocks in each two adjoining pairs having formed therein a downward weaving-space-forming recess terminating at the front short of the grooves *e*, substantially as described.

4. A batten structure for narrow ware looms having pairs of spaced removable shuttle blocks and forwardly open upwardly curved shuttle guiding grooves each formed in a pair of the blocks and each extending into the adjacent blocks of the pairs of blocks immediately next to that in which said groove is formed, and shuttles respectively arranged in said grooves and each having a longitudinal upright retaining flange, each groove having a similar upright retaining flange bearing against the forward side of said shuttle flange, the material of the blocks between the upper surfaces of the end portions of two adjoining grooves being cut away from the backs of said grooves to the front surfaces of the blocks and thereby forming a substantially triangular cut-out, substantially as described.

1,063,179. PROTECTING ELECTRIC MOTORS. GEORGE AUGUSTUS BURNHAM, Cliftondale, Mass., assignor to Sears B. Condit, Jr., Brookline, Mass. Filed Mar. 30, 1911. Serial No. 617,806. (Cl. 172—289.)



1. Means for protecting counter electro-motive apparatus, taking a larger starting than running current, comprising a circuit breaker having electro-responsive tripping means and adapted to connect said apparatus with the source of supply, means for operating said tripping means on overload and underload, the said underload operating means preventing operation of said overload operating means by starting current.

2. Protection apparatus for electric motors comprising a circuit breaker having a trip coil and adapted to connect the motor with line, said circuit breaker having its trip coil in a normally open circuit, and overload and underload relay armatures for closing the circuit of the trip coil, the underload armature in its retracted position increasing the reluctance of the magnetic circuit of the

overload armature to prevent tripping the circuit breaker under starting load.

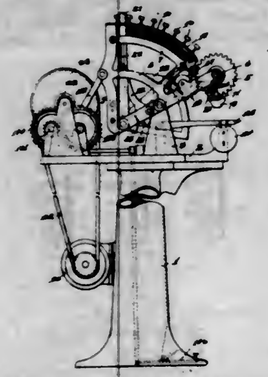
3. Means for protecting electric motors comprising a circuit breaker having a trip coil and adapted to connect the motor with line, a normally open circuit including the trip coil, and a combined underload and overload relay in the motor circuit adapted to close the trip circuit of the circuit breaker, said relay having a common magnetic circuit for the overload and underload armatures, the underload armature when retracted producing an air gap in said magnetic circuit to prevent tripping the circuit breaker when the motor is started.

4. Means for protecting electric motors comprising a circuit breaker having a trip coil, a normally open circuit including the trip coil, an overload and underload relay in the motor circuit adapted to close the trip circuit, and an auxiliary switch governed by the circuit breaker for closing the trip circuit when the circuit breaker is cramped into latching position.

5. Means for protecting counter electro-motive apparatus, taking a larger starting than running current, comprising a circuit breaker having electro-responsive tripping means and adapted to connect said apparatus with the source of supply, a relay having overload and underload armatures controlling said tripping means, the said underload armature preventing operation of said overload armature by starting current.

[Claim 6 not printed in the Gazette.]

1,063,180. MARKING-MACHINE. CHESTER W. CANINE, Cincinnati, Ohio, assignor to The National Marking Machine Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 21, 1909. Serial No. 503,404. (Cl. 101—83.)



1. In a marking machine, a base, a stationary printing platen thereon, a swinging frame mounted on said base, a series of type disks journaled on said frame, their peripheries arranged in the form of gears, a sector for each type disk mounted on said swinging frame, transmission elements between each sector and each type disk, means for serially actuating the sectors operative by a single lever for presenting a character upon the type disk to its printing position, means for locking each type disk in its adjusted position, and means for rocking said frame to and from said platen.

2. A marking machine comprising a swinging frame, a series of type disks journaled thereon, a sector lever for each type disk in operative connection therewith, means for serially swinging said levers, character indicating key levers movable in the path of the sector swing for limiting the movement thereof, and common to all the sectors of the series, to present a given character upon the type disk to its printing position, a printing platen, and means for moving said swinging frame to and from said platen.

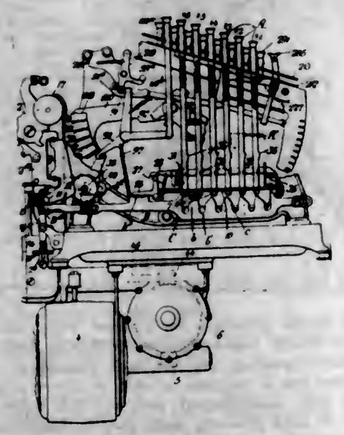
3. A marking machine comprising a swinging frame, a series of type disks mounted thereon, means for actuating each disk independently to present a given character upon the type disk to its printing position, a series of type disk character designating keys of a number equal to the number of characters on a single disk, means whereby said keys will control the actuation of all the type disks of the series for presenting a given character of each type disk to its printing position, a stationary printing platen, means for swinging said frame to and from said platen, and inking means upon said frame movable therewith and to and from the type disks relatively with the rocking action of said frame.

4. In a marking machine, a swinging frame, a series of type disks supported thereon, means for independently serially revolving each disk to set a given character on each disk to its printing position, means for independently locking each disk of the series in its set position, means for simultaneously releasing all of said locks of the series, means for simultaneously returning all of the disks to normal position, a single lever for operating said lock releasing mechanism and disk returning mechanism.

5. In a marking machine, a swinging frame, a series of type disks supported thereon, means for independently serially revolving each disk to set a given character on each disk to its printing position, means for independently locking each disk of the series in its set position, means for simultaneously returning all of the disks to normal position, a single lever for operating said lock releasing mechanism and disk returning mechanism provided with means for effecting a lock release in advance of the disk return.

[Claims 6 to 23 not printed in the Gazette.]

1,063,181. TABULATING MECHANISM. JOHN J. CHAPIN, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 25, 1910. Serial No. 594,068. (Cl. 197—177.)



1. The combination with a laterally shiftable paper carriage capable of occupying any one of a plurality of columnar positions, and unitary motor means for propelling it in both directions; of column-determining and motor-means-controlling devices including provisions for effecting automatic shift of the carriage from an advanced columnar position to any other columnar positions by continuous action in one and the same direction of movement.

2. The combination with a laterally shiftable paper carriage capable of occupying any one of a plurality of columnar positions, and unitary motor means for propelling it in both directions; of column-determining and motor-means-controlling devices including provisions for effecting automatic shift of the carriage from any columnar position to any other by continuous action in one direction of movement.

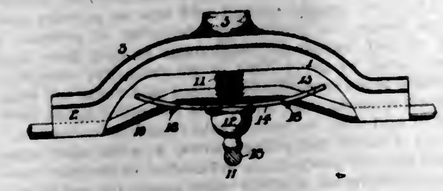
3. The combination of a paper carriage laterally shiftable back and forth to occupy any one of several columnar positions; unitary motor means for shifting it in both directions; and column-determining and motor-means-controlling devices with provisions for effecting automatic shift of the carriage from an advanced columnar position back to a precedent columnar position passing one or more intermediate columnar positions under continuous movement in the one direction.

4. The combination of a paper carriage laterally shiftable back and forth to occupy any one of several columnar positions; reversible unitary motor means for shifting it; double-acting column-determining means settable to provide for shift of the carriage from an advanced to a precedent columnar position or vice versa; and motor-means controlling devices regulated automatically as to enabling the motor-means for propulsion of the carriage one way or the other, by the setting of said column-determining means to provide for shift of the carriage from an advanced columnar position to a precedent columnar position or vice versa.

5. The combination with a laterally shiftable paper carriage capable of occupying any one of a plurality of columnar positions, a rotary motor for propelling it in both directions; of column determining and motor controlling devices including provisions for effecting automatic shift of the carriage from an advanced columnar position to any other columnar position by continuous action in one and the same direction of movement.

[Claims 6 to 15 not printed in the Gazette.]

1,063,182. TROLLEY-WIRE HANGER. JOHN CHRISTENSEN, Evans City, Pa. Filed Dec. 26, 1911. Serial No. 667,689. Renewed Nov. 23, 1912. Serial No. 733,180. (Cl. 191—40.)



1. A wire hanger comprising an arch construction having a groove at each end and an offset portion at the center thereof, a yieldable clamping member engaging the lower face of the central portion of said arch and further engaging said offset portion constituting means for retaining a hanger wire in engagement with the lower face of said arch construction and means extending through said member and said offset portion for maintaining the member in clamping position, said means capable of supporting a trolley wire.

2. A trolley wire hanger comprising an arch construction, a trolley wire support adjustably connected to said arch construction, and a slotted yieldable clamping member carried by said trolley wire support and adapted to engage the under side of said arch construction for retaining a hanger wire in engagement therewith.

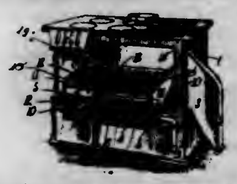
3. A wire hanger comprising an arch having an offset portion, a trolley wire support adjustably mounted in the offset portion of said arch, and a hanger wire clamped under said arch at the side of the offset portion of said arch by said trolley wire support.

4. In a wire hanger, an arch having an offset portion, a yieldable locking member for retaining a hanger wire in engagement with said arch, and means extending through said offset portion and said member for retaining the latter in position, said means capable of supporting a trolley wire.

5. In a trolley wire hanger, an arch having an offset portion, a trolley wire support adjustably mounted in the offset portion of said arch, a yieldable convexo-concave locking member carried by said trolley wire support and extending under said arch and adapted to retain a hanger wire in engagement with said arch.

[Claims 6 and 7 not printed in the Gazette.]

1,063,183. WITHDRAWING SKELETON OVEN. STAMFORD R. CHRISTIAN, Delaware Water Gap, Pa. Filed Jan. 29, 1912. Serial No. 673,981. (Cl. 126—337.)



1. A device of the kind described comprising a frame to be moved into and out of an oven, said frame including a U-shaped member located at the front thereof and a rectangular-shaped member located at the rear thereof, a removable bar connecting the ends of the arms of the U-shaped member together, members extending longitudinally of said frame to join said U-shaped member to said rectangular-shaped member, and means carried by said frame for supporting a plurality of grids thereon.

2. A device of the kind described comprising a frame to be moved into and out of an oven, said frame including a U-shaped member located at the front thereof and a rectangular-shaped member located at the rear thereof, a removable bar connecting the ends of the arms of the U-shaped member together, members extending longitudinally of said frame to join said U-shaped member to said rectangular-shaped member, and grids removably carried by the top and bottom of said frame, the removal of said bar and said upper grid permitting articles of greater height than said frame to be carried by the same.

3. The combination of an oven, a frame to be moved into and out of said oven, means carried by said frame for supporting articles thereon, C-shaped guides for said frame mounted inside of said oven, C-shaped guides having telescoping engagement with the first-named guides and having lugs thereon, shoulders on the first-named guides adapted to be engaged by the lugs to prevent the second-named guides from being with drawn from the first-named guides, and a pair of tubular guides secured to the sides of the frame and having telescoping engagement with said second-named C-shaped guides, said tubular guides having lugs thereon and shoulders on said second-named C-shaped guides adapted to be engaged by the last-named lugs to prevent the withdrawal of said tubular guides from said second-named C-shaped guides, said guides permitting said frame to be pulled out of said oven into projecting position and to be pushed back into said oven.

4. A device of the kind described comprising a frame to be moved into and out of an oven, said frame including a U-shaped member at one side and a rectangular-shaped member at the opposite side, a removable bar connecting the arms of the U-shaped member together, and members for connecting said U-shaped member to the rectangular-shaped member.

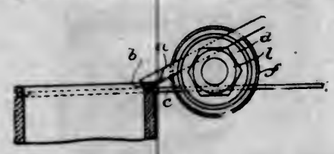
5. A device of the kind described comprising a box-like frame, means carried by said frame for supporting a plurality of grids thereon, guides carried by the frame and extending along the opposite sides of the same, members receiving said guides in telescoping engagement, and means for slidably connecting said members to the inside of an oven to suspend the frame from its sides and enable it to be moved into and out of said oven.

[Claim 6 not printed in the Gazette.]

1,063,184. APPARATUS FOR CUTTING AND FACING ARTICLES. ROSTO E. COLTON, Easthampton, Mass., assignor to Colton Combination Tool Company, Chester, Vt., a Corporation of Maine. Filed July 8, 1909. Serial No. 506,557. (Cl. 82—37.)

1. A means for cutting faced articles comprising a tool holder having coöperating clamping members provided with grooves or channels to contain cutting tools, and tools having their shanks contained in such grooves or channels, one of the tools having a cutting edge on its end and the

other having a longitudinal cutting edge on the side adjacent to the first tool, and the grooves being inclined to one another and the tools placed therein in such manner that they converge toward the ends having the cutting edges.



2. A means for cutting faced articles comprising a tool holder having tool clamping members and provisions in said members for containing the shanks of cutting tools, and a plurality of tools having their shanks secured by and between said clamping members, one of said tools having a longitudinal cutting edge at its side, and the other of said tools having a cutting edge on its end and being located at the side of the first tool whereon said longitudinal edge is located, whereby the first tool is adapted to finish the end face of a piece of stock, and the second tool is adapted to enter the side of the stock and cut off the portion thereof of which the end face is finished by the first tool.

3. A tool holder comprising a post and a pair of clamping collars mounted on said post, said collars having channels in the faces thereof nearest to one another and on opposite sides of their axis to contain the shanks of cutting tools, the channels being at an angle to each other, so that movement of such shanks endwise therein may adjust the distance between the cutting edges of the tools, in combination with tools having their shanks contained in such grooves, one of said tools having a cutting edge on its end and the other having a cutting edge on the side adjacent to the first tool.

1,063,185. PROTECTED PILING. CLOUD CLIFFORD CONKLING, Buffalo, N. Y., assignor to Lackawanna Steel Company, Lackawanna, N. Y., a Corporation of New York. Filed Nov. 15, 1911. Serial No. 660,411. (Cl. 61—62.)



1. A protected sheet piling section comprising a steel core having a web and interlocking members on the web edges, said web being formed with a series of holes, tie-bars extending through said holes and having perforated ends, and tie-rods arranged to extend through said perforations and having their ends engaging with the steel core.

2. A protected piling section consisting of at least one steel core section and of concrete applied to the surface of the core, said core being provided with interlocking members on both edges, and also with tie-bars extending through holes in the web of the core and with rods inserted through holes in the tie-bars to bind the concrete.

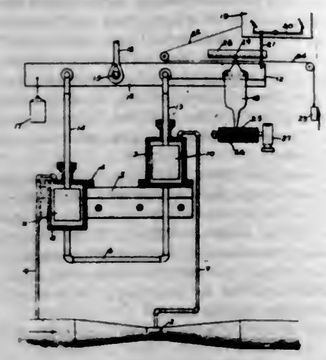
3. A steel core for protected piling having interlocking elements on its edges, tie-bars extending through openings in the web and binding rods inserted through holes in the bars to bind the concrete on the core.

4. As a new article of manufacture, a protected pile element, comprising an arched-web steel core and a protecting coating of concrete applied to both sides thereof, said core having interlocking members on both edges extending beyond the concrete and a series of holes along the center of its web to receive tie-bars, extending on both sides of the web at unequal distances, said bars having end holes for tie-rods, which are bent in to engage with the core on both and to exert a resilient tension to counteract each other.

5. A steel core for protected piling, tie bars adjustably extending through openings in the steel core, and binding rods extending through holes in the bars and having their ends turned inwardly to engage with the said core.

[Claims 6 and 7 not printed in the Gazette.]

1,063,186. DISPLACEMENT-FLOAT FOR FLUID-MEASURING DEVICES. FREDERICK N. CONNET, Providence, R. I. Filed June 21, 1907. Serial No. 380,046. (Cl. 73—167.)



1. In a liquid measuring device, a main pipe, means in said pipe for producing a differential of pressure therein, two receptacles provided with means for establishing communication between them, and containing between them a liquid of greater specific gravity than the fluid to be measured, means for establishing communication between the respective receptacles and said pipe on opposite sides of the means for producing differential of pressure, a float in each receptacle, the volume of each float being nearly equal to the volume of its respective receptacle, a pivoted beam, connections between said floats and beam, a recording mechanism, and means controlled by the movement of said beam to operate said recording mechanism.

2. In a liquid measuring device, a main pipe, means in said pipe for producing a differential of pressure therein, two receptacles provided with means for establishing communication between them, and containing between them a liquid of greater specific gravity than the fluid to be measured, means for establishing communication between the respective receptacles and said pipe on opposite sides of the means for producing differential of pressure, a float in each receptacle, the volume of each float being nearly equal to the volume of its respective receptacle, a pivoted beam, connections between said floats and beam, a recording mechanism carried by one end of said beam, a counterweight carried by the opposite end of said beam, and means controlled by the movement of the beam to operate said recording mechanism.

3. In a liquid measuring device, a main pipe, means in said pipe for producing a differential of pressure therein, two receptacles provided with means for establishing communication between them, and containing between them a fluid of greater specific gravity than the fluid to be measured, means for establishing communication between the respective receptacles and on opposite sides of the means for producing differential of pressure, a float in each receptacle, the volume of each float being nearly equal to the volume of its respective receptacle, a pivoted beam free to move independently of said receptacles, connections between said floats and beam, a recording mechanism, and means controlled by the movement of said beam for operating said recording mechanism.

4. In a liquid measuring device, a main pipe, means in said pipe for producing a differential of pressure therein, two receptacles provided with means for establishing communication between them and containing between them a fluid of greater specific gravity than the fluid to be measured, means for establishing communication between the respective receptacles and said pipe, and on opposite sides of the means for producing differential of pressure, whereby the relative amounts of fluid in said

receptacles are varied in accordance with the differential pressures in said pipe, a float in each receptacle, the volume of each float being nearly equal to the volume of its respective receptacle, a pivoted beam free to move independently of said receptacles, connections between said floats and beam, a recording device mounted on said beam, and means operated by said beam for controlling said recording device.

5. In a fluid measuring device, a main pipe, two receptacles, means for establishing communication between said receptacles, said receptacles containing between them a liquid of greater specific gravity than the fluid to be measured, means for connecting said receptacles with said pipe, a float in one of said receptacles, said float being of a volume nearly equal to the volume of the receptacle in which it is located, means supported independently of said float for counterbalancing the pressure exerted by and upon said float, and an exhibitor actuated by said counterbalancing means.

[Claims 6 to 8 not printed in the Gazette.]

1,063,187. LIGHTING DEVICE. JOSEPH DAFT, Eden Vale, Cal. Filed Oct. 29, 1912. Serial No. 728,523. (Cl. 67—20.)



1. In a device of the character described, the combination with a pyrophoric material, of a rotative member supported in operative relation thereto, an oscillatory member, an operating member, a yielding member between said operating member and said oscillatory member, means for connecting said oscillatory member to said rotative member and means for holding said rotative member against movement during initial movement of the operating member and for then releasing said rotative member.

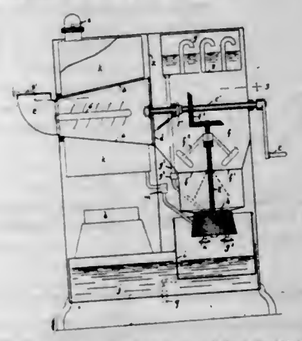
2. In a device of the character described, the combination with a pyrophoric material, of a rotative member supported in operative relation thereto, an oscillatory member, an operating member, a yielding member between said operating member and said oscillatory member, means for connecting said oscillatory member to said rotative member, means for holding said rotative member against movement during initial movement of the operating member and for then releasing said rotative member, and spring means connected to said oscillatory member for returning the parts to normal position.

3. In a device of the character described the combination with a pyrophoric material, of a rotative member supported in operative relation thereto, an oscillatory member, an operating member, a yielding member between said operating member and said oscillatory member, means for connecting said oscillatory member to said rotative member, means for holding said rotative member against movement during initial movement of the operating member and for then releasing said rotative member and means for advancing said material toward said wheel.

4. In a device of the character described, the combination with a pyrophoric material supporting casing, of a roughened wheel supported in operative relation thereon, a ratchet wheel carried by said roughened wheel, a pawl engaging said ratchet wheel, an operating lever having a lost motion engagement with said pawl, a drum, a flexible member passing over said drum, a spring interposed between said flexible member and said operating member and a pawl and ratchet connection between said drum and said roughened wheel.

5. In a device of the character described, the combination with a pyrophoric material supporting casing, of a roughened wheel supported in operative relation thereon, a ratchet wheel carried by said roughened wheel, a pawl engaging said ratchet wheel, an operating lever having a lost motion engagement with said pawl, a drum, a flexible member passing over said drum, a spring interposed between said flexible member and said operating member, a pawl and ratchet connection between said drum and said roughened wheel, and a fixed spring to which the opposite end of said flexible member is connected.

1,063,188. COFFEE-MAKING MACHINE. MICHELE GUGLIELMO DE SIMONE, New York, N. Y., assignor to Angelo C. Scavullo, New York, N. Y. Filed Jan. 20, 1912. Serial No. 672,511. (Cl. 53—3.)



1. A coffee making machine comprising means for roasting the coffee, means for distilling the essences from roasted coffee, means for grinding the coffee, and an infusion device which is adapted to receive the distillate and ground coffee.

2. A coffee making machine comprising a roasting device, a distilling device, means for transferring the coffee from the roaster to the distilling device, a grinding device, means for transferring the coffee to the grinding device from the distilling device, an infusion device, and means for transferring the ground coffee to the infusion device.

3. A coffee making machine comprising a roasting device, a distilling device, means for transferring the coffee from the roaster to the distilling device, a grinding device, means for transferring the coffee to the grinding device from the distilling device, an infusion device, means for transferring the ground coffee to the infusion device, and mechanism for controlling the operation of the above devices.

4. A coffee making machine comprising a roaster, a distilling device, means for agitating the roasted berries in said distilling device, means for collecting the essences therefrom, a grinding device, means for transferring the berries from the distilling device to the grinding device, an infusion device adapted to receive the ground coffee, and means for transferring the essences to said infusion device.

5. A coffee making machine comprising a roaster, a boiler for water, a distilling device adapted to receive the essences from the roasted coffee, a grinding device, an infusion device, means for transferring water from said boiler to said infusion device, and means for transferring the essences from the distilling device.

[Claim 6 not printed in the Gazette.]

1,063,189. PENCIL. MARION J. DUTTON, Groseclose, Va. Filed Oct. 19, 1912. Serial No. 726,719. (Cl. 120—22.)

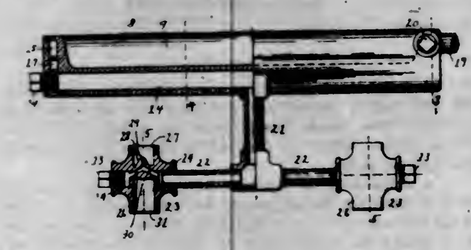
In combination, a shell member open at one end and closed at the other end, and provided with an elongated slot in the wall of the shell adjacent the closed end, said

shell on the interior thereof adjacent the opened end having an annular inclined portion; an elongated tube open at one end and closed at the other telescopically arranged in the shell, and provided at its closed end with an enlarged head having a sleeve socket extension, while the open end of the tube is provided with a series of spring arms terminating in lugs adapted to embed in the wood of a pencil received by the tube, owing to the arms contacting with the inclined portion of the shell; a spring interposed between the closed end of the shell and the sleeve



socket extension, to hold the tube extended whereby the arms are pressed toward the pencil by the inclined portion; a threaded projection or lug carried by the enlarged head and extending through the elongated slot to guide the tube; and means threaded on the projection to hold the tube in adjusted positions against the action of the spring; said slot having an offset notch at one end to receive the projection to hold the tube fully retracted against the action of the spring.

1,063,190. OIL-BURNER. GEORGE FRASER, Topeka, Kans. Filed May 20, 1912. Serial No. 698,413. (Cl. 158—64.)

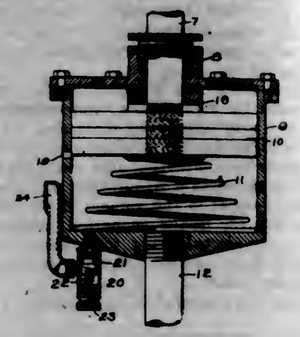


1. In an oil burner, the combination of an elongated casting formed as a trough with closed ends and having a series of parallel passages extending through its side walls and bottom, which passages are connected through the ends so as to form one single continuous passage through said casting, said casting being formed with an inlet to and an outlet from said passage; a burner proper arranged below said casting; and a pipe leading from said outlet to said burner proper.

2. In a burner, a body having a central passage extending therethrough, a nipple within said passage for emitting gas thereinto, arms extending from said nipple across said central passage to the surrounding portion of said body, the surrounding portion of said body having an annular passage about said central passage, said arms provided with passages communicating with the passage in said nipple and said annular passage, and said surrounding portion having threaded openings communicating with said annular passage and disposed at diametrically opposite sides of said annular passage and communicating therewith.

3. In a burner, a body having a central passage extending therethrough, a nipple within said passage for emitting gas thereinto, arms extending from said nipple across said central passage to the surrounding portion of said body, the surrounding portion of said body having an annular passage about said central passage, said arms provided with passages communicating with the passage in said nipple and said annular passage, and said surrounding portion having openings communicating with said annular passage and disposed at diametrically opposite sides of said annular passage and communicating therewith.

1,063,191. MACHINE FOR APPLYING CLOSURES TO BOTTLES. BERNARD GALLAGHER, Lynn, Mass. Filed Aug. 24, 1910. Serial No. 578,644. (Cl. 113—2.)

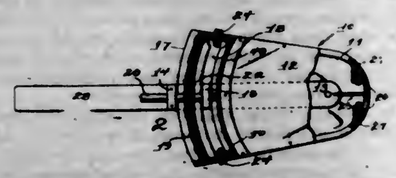


1. A machine for applying closures to bottles, having, in combination, two members constituting a closure-applying head and a bottle support, and means for supporting said members and for moving one member toward the other to affix a closure to a bottle on the bottle support, said means including a pneumatic-pressure device operated by said movement, and means for adjusting the initial distance between said members to vary the pressure transmitted by the pneumatic-pressure device, substantially as described.

2. A machine for applying closures to bottles, having in combination, two members comprising a closure-applying head and a bottle support, and means for supporting said members and for moving one member toward and from the other to affix a closure to a bottle on the bottle support, said means including a pneumatic pressure device comprising a cylinder having an air-tight piston therein operated by said movement to control the pressure applied to the bottle, and said cylinder having a port open to the atmosphere to equalize the air pressure within and without said device before pressure is applied but closed by the movement of said piston, substantially as described.

3. A machine for applying caps to bottles, having in combination, a bottle capping head, a pneumatic-pressure device, a bottle support carried by said pressure device intermediate said device and the capping head arranged to transmit pressure from the device to the head, and means for adjusting the pressure device relative to the head to regulate the amount of pressure transmitted, substantially as described.

1,063,192. RAZOR-STROPPING DEVICE. JOSEPH F. GAU, St. Paul, Minn. Filed Jan. 30, 1913. Serial No. 745,165. (Cl. 51—16.)



1. In a device of the class described, the combination of a hand grip, a curved rack on said grip, a bar pivoted in said grip, a spring carried by said bar, adjustable stops on the grip for engaging said spring to retard the movement of said bar near the completion of its strokes, a shaft revolubly supported on said bar, blade holding means detachably secured to said shaft, a gear on the shaft engaging said rack for rotating said shaft to turn said holder and a guide attached to said bar and adapted to frictionally engage a strop.

2. In a device of the class described, the combination of a hand grip, a curved rack on said grip, a bar pivoted in the grip, blocks carried by the bar and arranged on opposite sides of the rack, a shaft revolubly in said blocks,

blade holding means detachably secured to said shaft, a gear on the shaft in mesh with said rack for rotating said shaft to turn the holder, a shield comprising a guard for said rack and gear and finger rests for the user, and a guide removably attached to said bar and adapted to frictionally engage a strop.

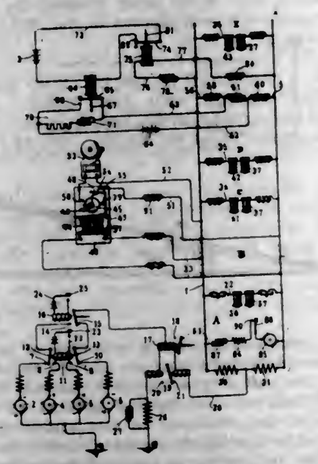
3. In a device of the class described, the combination of a hand grip, a curved rack on said grip, a bar pivoted in the grip, posts carried by the bar and arranged on opposite sides of the rack, a shaft revoluble in said posts, blade holding means secured to said shaft, a gear on the shaft in mesh with said rack for rotating said shaft to turn the holder, a guide removably attached to said bar and adapted to frictionally engage a strop, and a rest on one of said posts for the thumb of the user.

4. In a device of the class described, the combination of a hand grip, a curved rack on said grip, a bar pivoted in the grip, posts carried by the bar and arranged on opposite sides of the rack, a shaft revoluble in said posts, blade holding means detachably secured to said shaft, a gear on the shaft in mesh with said rack for rotating said shaft to turn the holder, a shield comprising a guard for said rack and gear and finger rests for the user, a guide on said bar adapted to frictionally engage a strop, and a thumb rest secured to one of said posts and overlapping said shield.

5. In a device of the class described, the combination with a razor strop comprising a pair of flexible members, of a hand grip, a bar pivoted in the grip, means for retarding the movement of said bar near the completion of its strokes, means supported by said bar for holding a razor blade, and a guide carried by said bar adapted to frictionally engage one member of said strop, while the razor blade is applied to the other member.

[Claim 6 not printed in the Gazette.]

1,063,193. COMBINED TELEGRAPH AND SIGNALING SYSTEM. EDWIN R. GILL, Yonkers, N. Y., assignor, by mesne assignments, to General Railway Equipment Company, a Corporation of Maine. Filed Oct. 21, 1910. Serial No. 588,360. (Cl. 178—300.)



1. In a system of the class described, a line comprising a pair of metallic sides, telegraphic apparatus including a source of current supply interposed between ground and one end of the line, a plurality of signaling devices in bridge of the line, current supplying means located intermediate the ends of the line, said last named means being operated by current of a different characteristic.

2. In a system of the class described, a line comprising a pair of metallic sides, multiplex telegraphic apparatus including a source of current supply interposed between ground and one end of the line, a plurality of selective signaling devices in bridge of the line, means connected intermediate the ends of the line for supplying current to operate said selective signaling apparatus, and means for impressing a current of a different characteristic on the line to operate said last named means.

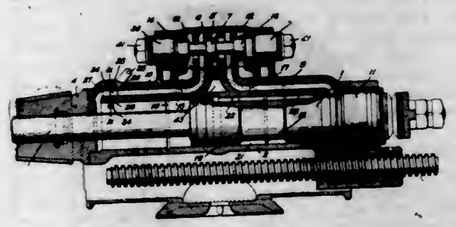
3. In a system of the class described, a line comprising a pair of metallic sides, a bridge comprising a pair of resistances at the end of the line, telegraphic apparatus connected with ground and with said bridge intermediate said resistances, a plurality of signaling apparatus connected in bridge of the line at various stations along the line, means for impressing signaling impulses on the line at a point intermediate said stations, and means for impressing a current of a different characteristic on the line to operate said last named means.

4. In a system of the class described, in combination, a line comprising a pair of metallic sides, telegraphic apparatus connected with said line and operable therewith for one part of the circuit, a plurality of selective signaling devices connected in bridge of said line, means for supplying current of one characteristic to said line intermediate the ends thereof to operate said selector signaling devices, and means for applying a current of a different characteristic to the line to determine the operation of said last named means.

5. In a system of the class described, in combination, a line comprising a pair of metallic sides, telegraphic apparatus interposed between ground and said line including suitably proportioned resistances, a plurality of selective signaling devices arranged in bridge of the line, a source of direct current supply connected in said line intermediate the ends thereof, and means for applying an alternating current to the line to render operative said direct current supplying means.

[Claim 6 not printed in the Gazette.]

1,063,194. ENGINE FOR ROCK-DRILLS. GEORGE H. GILMAN, Claremont, N. H., assignor to Sullivan Machinery Company, Claremont, N. H., a Corporation of Maine. Filed Jan. 3, 1911. Serial No. 600,403. (Cl. 121—11.)



1. In a direct-acting engine, the combination with a piston and a cylinder having two passages leading to one end of the cylinder, of a check-valve in one of said passages adapted to admit pressure fluid to and restrict the exhaust from said end of the cylinder, and means for cutting off said cylinder end from the exhaust through the second passage while opening the cylinder to the admission through said check valve and the first passage.

2. In a direct-acting engine, the combination with a piston and a cylinder having two passages leading to one end of the cylinder, a normally inoperative inwardly opening check valve in one of said passages, and means for cutting off said cylinder end from the exhaust through the second passage, while rendering said check-valve operative.

3. In a direct-acting engine the combination with a piston and cylinder of a valve for alternately admitting pressure-fluid to, and exhausting the same from, the opposite ends of the piston, a normally inoperative check valve, and means for cutting off a cylinder end from the exhaust while opening the cylinder to the admission through the said check valve.

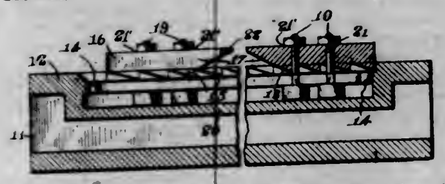
4. In a direct-acting engine, the combination with a piston and a cylinder having two passages leading to one end of the piston, of an inwardly opening check-valve,

and means whereby one of said passages may be closed and at the same time the other opened through said check-valve.

5. In a direct-acting engine, the combination with a piston and a cylinder having two ports located at two different points longitudinally of the cylinder, of an inwardly opening check-valve for the port most remote from the end of the cylinder, and a manually operable valve for closing the other port.

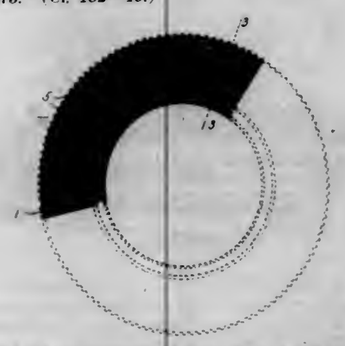
[Claims 6 to 13 not printed in the Gazette.]

1,063,195. RAILWAY-TIE. CHARLES W. GLOSOP, Delton, Mich. Filed Nov. 9, 1912. Serial No. 730,360. (Cl. 238—5.)



A hollow railway tie having spaced parallel slots in the top wall, teeth on the side edges of said slots, the teeth of one slot pointing in an opposite direction from the teeth of the other slot, stop plates within said tie extending longitudinally of said slots, rail clamps on said top wall each having teeth on the bottom face adapted to mesh with the teeth of the corresponding slot in said top wall, the confronting faces of said clamps being beveled, and bolts passed through said clamps and through said slots and bearing against said stop plates.

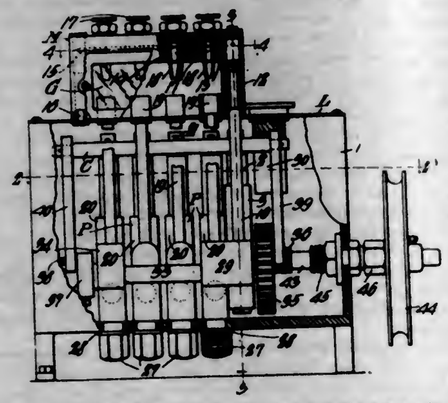
1,063,196. AUTOMOBILE-TIRE. WILLIAM F. HAAS, Hartford, Conn. Filed Dec. 29, 1910. Serial No. 599,975. (Cl. 152—13.)



A tire or shoe comprising superposed layers of endless, circular, knitted bands, each without lap or seam, said bands being formed of a continuous thread or yarn knitted in a circle of a diameter substantially the same as the diameter of the tire or shoe, and having the ribs or chain of the knitting stitch extending transversely of the bands, whereby the threads or yarns are not severed at the edges of the bands, and a resilient cementing compound impregnating the superposed bands.

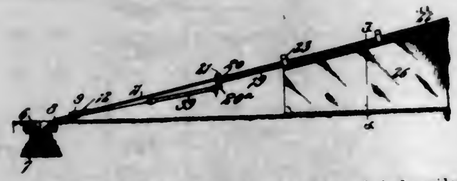
1,063,197. FORCE-FEED LUBRICATOR. JOHN G. HALL, Buffalo, N. Y., assignor of one-third to R. T. G. Liesinger and one-third to A. C. Lembke, Buffalo, N. Y. Filed Jan. 8, 1912. Serial No. 670,012. (Cl. 184—27.)

1. A force feed lubricator, having a main reservoir and a distributing reservoir disposed thereabove and in communication therewith through a supply and an overflow channel, a casting carrying a supply pump and a distributing pump connected to the bottom of and disposed within the main reservoirs, a plurality of separable distributing pumps detachably connected to the bottom of and disposed within the main reservoir, the distributing pump at the opposite end to the supply pump and also the supply pump being each provided with a journaling lug, a shaft journaled in said lugs, means for rotating said shaft, a bar detachably connected to the plungers of all pumps, and means for operably connecting said shaft to the bar, whereby the rotation of the shaft reciprocates the bar.



2. A force feed lubricator, having a main reservoir and a distributing reservoir disposed thereabove and in communication therewith through a supply and an overflow channel, a casting carrying a supply pump and a distributing pump connected to the bottom of and disposed within the main reservoir, a plurality of separable distributing pumps detachably connected to the bottom of and disposed within the main reservoir, the distributing pump at the opposite end to the supply pump and also the supply pump being each provided with a journaling lug, a shaft journaled in said lugs, means for rotating said shaft, a bar detachably connected to the plungers of all pumps, and two rods, one connected to each end of the bar and to the respective ends of the shaft, whereby the rotation of the shaft imparts a reciprocation to the plungers through the rods and bar.

1,063,198. PROTECTIVE COVER FOR BASE-BALL-PLAYING FIELDS AND THE LIKE. ROBERT L. HEDGES and ARTHUR M. BRANCH, St. Louis, Mo. Filed Mar. 21, 1912. Serial No. 685,304. (Cl. 46—4.)



1. The combination with a plurality of independent flexible cover-supporting-members adapted to be extended obliquely over and secured across a base-ball field or the like, of a field-cover of flexible material arranged for movement on and relatively to said supporting-members and adapted to be obliquely supported thereby in operative position over the surface of the field, and means adapted to move said cover upwardly along said supporting-means into inoperative position; substantially as described.

2. The combination with a plurality of independent flexible cover-supporting-members adapted to be extended obliquely over and secured across a base-ball field or the like, of a field-cover of flexible material arranged for movement on and relatively to said supporting-members and adapted to be obliquely supported thereby in operative position over the surface of the field, said cover being movable by gravity on said supporting-members into operative position, and means adapted to raise said cover upwardly along said supporting members into inoperative position; substantially as described.

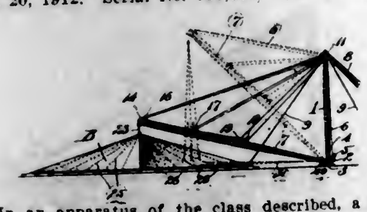
3. The combination with a plurality of independent flexible cover-supporting-members adapted to be extended obliquely over and secured across a base-ball field or the like, of a field-cover of flexible material arranged for movement on said supporting members and adapted to be obliquely supported thereby in operative position over the surface of the field, said cover being movable by gravity on said supporting-means into operative position, and means adapted to limit the gravity movement of said cover on said supporting-members into operative position; substantially as described.

4. The combination with a plurality of independent flexible cover-supporting-members adapted to be extended obliquely over and secured across a base-ball field or the like, of a field-cover of flexible material arranged for movement on said supporting-members and adapted to be obliquely supported thereby in operative position over the surface of the field, said cover being movable by gravity on said supporting-members into operative position, means comprising a plurality of independent flexible members adapted to limit the gravity movement of said cover on said supporting-members into operative position, and means including a plurality of flexible members adapted to draw said cover upwardly along said supporting-members into inoperative position; substantially as described.

5. The combination with a support fixedly arranged at the side of a base-ball field or the like, of a plurality of independent flexible cover-supporting-cables engaging at one end with said support and adapted to be extended therefrom over and removably secured across said field, and a field-cover of flexible material arranged for movement on said cables and adapted to be supported thereby in operative position over and away from the surface of the field; substantially as described.

[Claims 6 to 27 not printed in the Gazette.]

1,063,199. PROTECTIVE COVER FOR BASE-BALL-PLAYING FIELDS AND THE LIKE. ROBERT L. HEDGES and ARTHUR M. BRANCH, St. Louis, Mo. Filed Dec. 20, 1912. Serial No. 737,870. (Cl. 46—4.)



1. In an apparatus of the class described, a mast, a pivoted boom operatively associated with said mast, a ground-protecting cover carried by said boom, said cover, when in open position, depending and being suspended from said boom, and means having engagement with said boom and said cover adapted to draw said cover in closed position longitudinally upon said boom; substantially as described.

2. In an apparatus of the class described, a mast, a pivoted boom operatively associated with said mast, a ground-protecting cover carried by said boom, said cover, when in open position, depending and being suspended from said boom, means for controlling the pivoted movement of said boom, and means having engagement with said boom and said cover adapted to draw said cover in closed position longitudinally upon said boom; substantially as described.

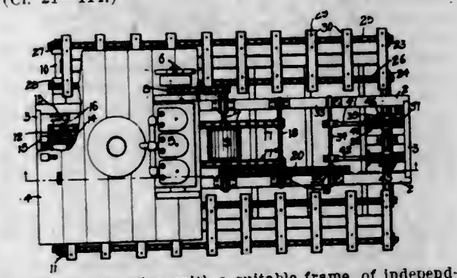
3. In an apparatus of the class described, a mast, a pivoted boom operatively associated with said mast, a ground-protecting cover carried by said boom, said cover, when in open position, depending and being suspended from said boom, means for controlling the pivoted movement of said boom, means for releasably anchoring the edges of said cover to the ground when in open position, and means having engagement with said cover and said boom adapted to draw said cover in closed position longitudinally upon said boom on the disengagement of said anchoring means; substantially as described.

4. In an apparatus of the class described, a fixed base, a mast rotatably mounted on said base, a boom pivotally connected to, and rotatably movable with, said mast, a ground-protecting cover carried by said boom, said cover, when in open position, depending and being suspended from said boom, means for controlling the pivoted movement of said boom, means for releasably anchoring the edges of said cover to the ground when in open position, and means having engagement with said cover and said boom adapted to draw said cover in closed position longitudinally upon said boom on the disengagement of said anchoring means; substantially as described.

5. In an apparatus of the class described, a ground-protecting cover, means for anchoring the edges of said cover to the ground, and means connected to the central part of said cover for raising or lowering the same relatively to the surface of the ground; substantially as described.

[Claims 6 to 13 not printed in the Gazette.]

1,063,200. TRACTION-MACHINE. ANTON I. HOVLAND, St. Paul, Minn. Filed Aug. 3, 1909. Serial No. 511,067. (Cl. 21—114.)



1. The combination, with a suitable frame, of independent shafts 10 and 11 at the forward end of said frame, and independent shafts 21 and 22 at the rear end of said frame, a set of traction belts supported by said shafts 10 and 21, and an independent set of traction belts supported by said shafts 11 and 22, a suitable engine mounted on said frame, driving means between said engine and said shaft 10, independent driving means between said engine and said shaft 11, and means for disconnecting, at will, the driving means from either, or both, of said shafts 10 and 11.

2. The combination, with a suitable frame, of traction belts provided at each side thereof, a suitable engine mounted on said frame, independent driving means between said engine and the belts on each side of the frame, means for disconnecting, at will, said driving means from either or both sets of traction belts, a ratchet mechanism operatively connected with said belts, and having driving connections with said engine, whereby said traction belts may be driven continuously from said engine through said first named driving means, or may be driven with a step by step motion through said ratchet mechanism.

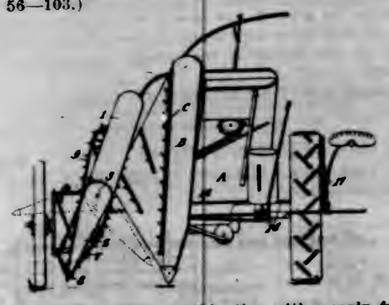
3. The combination, with a suitable frame, of traction belts provided on each side thereof, a suitable engine mounted on said frame, independent drive means between said engine and the belts on each side of the frame, means for disconnecting said driving means from said traction belts, ratchet mechanisms operatively connected with said traction belts and having driving connections with said engine, and means for varying the speed of one ratchet mechanism with respect to the speed of the other.

4. The combination, with a suitable frame, of traction belts provided on each side thereof, a suitable engine mounted on said frame, independent driving means between said engine and the belts on each side of the frame, means for disconnecting said driving means from either or both sets of traction belts, ratchet mechanisms connected with said traction belts and having driving connections with said engine, and means for varying the speed of either ratchet mechanism with respect to the other.

5. The combination, with a suitable frame, of traction belts provided on each side thereof, an engine mounted on said frame, means connecting said engine with said traction belts for operating the same at a continuous speed, means for throwing out such connection, and a ratchet mechanism operatively connected with each traction belt for operating it with a step by step movement and having a driving connection with the engine.

[Claims 6 to 18 not printed in the Gazette.]

1,063,201. CORN-BINDER. JAMES H. JACOBS, Middleport, N. Y. Filed May 11, 1912. Serial No. 696,777. (Cl. 56—103.)



1. In a corn binder, the combination with a main frame and an inner divider fixedly mounted thereon, of an outer divider having its upper portion fixedly mounted on the main frame and its lower portion mounted to swing laterally in either direction relative to the upper portion and to the main frame, a gathering chain extending longitudinally of said movable portion, additional gathering chains extending longitudinally of the fixed portion and of the inner divider, and means under the control of the operator for shifting the movable portion of the outer divider laterally.

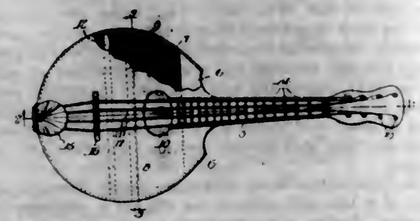
2. In a binder, the combination with a main frame and an inner stationary divider, of an outer divider having a fixed upper portion connected to the main frame and a lower portion mounted to swing laterally in either direction relative to the main frame, a rod fixedly connected to and movable with the movable portion, gathering chains extending longitudinally of the fixed and movable portions of the outer divider and longitudinally of the inner divider, and means under the control of the operator for actuating the rod to swing the movable portion of the outer divider laterally in either direction.

1,063,202. COMBINED STORM AND FLY-SCREEN CONSTRUCTION FOR DOORS AND WINDOWS. EMIL KLAWUHN, Detroit, Mich. Filed Nov. 13, 1911. Serial No. 659,903. (Cl. 20—36.)



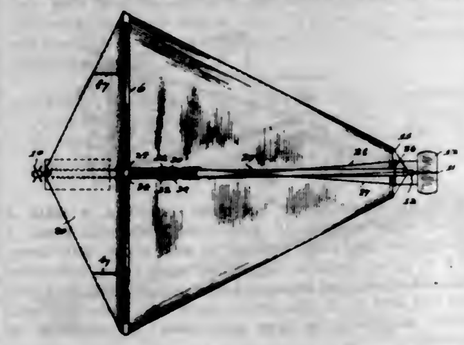
In a device of the character described, an inclosing frame rabbeted to receive and support abutting auxiliary frames supporting glass, wood, or wire screen panels, and mortised to receive the ends of a locking bar, abutting auxiliary frames disposed within the inclosing frame, the abutting auxiliary frames rabbeted to jointly provide a groove for the reception of the locking bar, a hinged locking bar lodged within the groove formed by the auxiliary frames, the ends of the bar being adapted to enter the mortises of the inclosing frame, and means to secure said bar against buckling when in place, whereby the auxiliary frames are held in position.

1,063,203. MANDOLIN. FRANK KORDICK, Chicago, Ill., assignor to Regal Musical Instrument Co., Chicago, Ill., a Corporation of Illinois. Filed Oct. 16, 1911. Serial No. 654,880. (Cl. 84—137.)



A mandolin comprising a neck formed to provide an integral end block having flat front and back faces, side pieces secured to the ends of said block, front and back faces secured to the front and back faces of said end block, the front piece being cut away to form a slot terminating in a sound hole, and a finger board secured to the front face of said neck and disposed in said slot in the front piece, the end of said finger board terminating at the sound hole and forming a part of the perimeter thereof.

1,063,204. AEROPLANE. HENRY J. KRAFT, Chicago, Ill. Filed July 22, 1912. Serial No. 710,799. (Cl. 244—29.)



1. An aeroplane comprising a frame having a longitudinal base member and a forward transverse fabric-supporting member having flexible and upwardly curved ends, a support secured to the forward end of said base member, a covering secured to said frame members and having one edge thereof slidably connected to said support, means for flexing the ends of said transverse members, means for vertically shifting the edge of said covering along said support and means for propelling and guiding said aeroplane.

2. An aeroplane comprising a frame having a longitudinal base member and a forward transverse fabric-supporting member having upwardly curved and flexible ends, a covering for said frame member, a supporting post secured to the forward end of said base member and to which the forward edge of said covering is slidably secured, a movable rear tail piece secured to said base member, means for simultaneously moving said covering on said support and said movable tail piece, means for flexing the ends of said transverse frame member and means for propelling and guiding said aeroplane.

3. An aeroplane comprising a frame having a longitudinal base member and a forward transverse fabric-supporting member having flexible and upwardly curved ends, a support secured to the forward end of said base member, a covering secured to said frame member and having one edge thereof slidably connected to said support, a tail piece movably connected to the rear end of said base member, a lever, connecting means between the edge of said covering that is slidably connected to said support and said lever and between said lever and said tail piece whereby the movement of said lever simultaneously changes the angle of both the forward edge of said covering and said tail piece, and spring means for returning both the forward edge of said covering and said tail piece to normal position and means for propelling and guiding said aeroplane.

4. An aeroplane comprising a frame having a longitudinal base member and a forward transverse fabric-supporting member having flexible and upwardly curved ends, a support secured to the forward end of said base member, a covering secured to said frame members and having its forward edge slidably connected to said support, steering planes connected to the rear of said base member for giving both vertical and horizontal direction to said aeroplane, a steering post hinged to said base member and capable of being swung longitudinally of said base member in either direction, a steering wheel carried by said steering post, means connecting said steering planes with said steering wheel, means connecting said steering wheel with said flexible and upwardly curved ends whereby a single movement of said steering wheel simultaneously operates said curved ends and guides said aeroplane in a horizontal direction and means connecting said steering planes with said steering post whereby a swinging movement of said steering post guides said machine in a vertical direction.

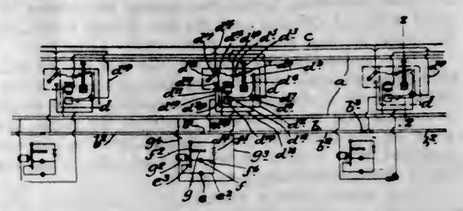
1,063,205. NOISELESS SOLE. EDWIN L. LEONARD, Woodward, Okla. Filed Jan. 18, 1913. Serial No. 742,945. (Cl. 36—72.)



A sole adapted to be detachably worn upon a shoe, said sole comprising a series of layers of composition of canvas and rubber vulcanized together, a central strengthening or stay strip positioned between two of the sections and provided with laterally and forwardly extending arms, terminating in upwardly extending attaching means for attaching the sole to a shoe, said strengthening or stay strip having spurs for preventing displacement of the strip, the junction between the upper two layers of the sole and heel conforming exactly to the contour of the junction between a sole and heel of a shoe, and the lower layer of the sole gradually merging from the forward portion of the sole into the top lift of the heel.

1,063,206. THIRD-RAIL ELECTRIC-RAILWAY SYSTEM. MORRIS M. MARX, New York, N. Y. Filed June 12, 1912. Serial No. 703,119. (Cl. 191—20.)

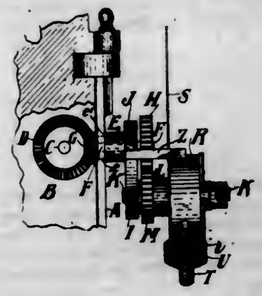
1. In a third rail electric railway system, a third rail which is divided into separate insulated parts dividing the track into blocks, a main feed wire or conductor, and a switch apparatus placed at the beginning of each block and in electrical connection with the corresponding third rail section and main feed wire, said switch device including a plunger operated by the wheel or wheels of a car or cars, an arm operated by said plunger, a spring for holding said arm and said plunger both in inoperative position, a bell-crank lever one arm of which is provided with a hook-head adapted to be engaged by said arm and the other arm of which is provided with an armature and a magnet in connection with which said armature operates.



2. In a third rail electric railway system, a third rail which is divided into separate insulated parts dividing the track into blocks, a main feed wire or conductor, and a switch apparatus placed at the beginning of each block and in electrical connection with the corresponding third rail section and main feed wire, said switch device including a plunger operated by the wheel or wheels of a car or cars, an arm operated by said plunger, a spring for holding said arm and said plunger both in inoperative position, a bell-crank lever one arm of which is provided with a hook-head adapted to be engaged by said arm and the other arm of which is provided with an armature and a magnet in connection with which said armature operates, said arm being in electrical connection with the feed wire and said lever with the corresponding section of the third rail.

3. In a third rail electric railway system, a third rail which is divided into separate insulated parts dividing the track into blocks, a main feed wire or conductor, and a switch apparatus placed at the beginning of each block and in electrical connection with the corresponding third rail section and main feed wire, said switch device including a plunger operated by the wheel or wheels of a car or cars, an arm operated by said plunger, a spring for holding said arm and said plunger both in inoperative position, a bell-crank lever one arm of which is provided with a hook-head adapted to be engaged by said arm and the other arm of which is provided with an armature, a magnet in connection with which said armature operates, and a signal apparatus placed at the beginning of each block and in electrical connection with the corresponding switch apparatus.

1,063,207. MOVING-PICTURE MACHINE. WILLIAM B. MOORE and THOMAS H. ARMSTRONG, Chicago, Ill., assignors, by mesne assignments, to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed June 25, 1906. Serial No. 323,270. (Cl. 88—17.)



1. In a moving picture machine, the combination of a main frame provided with means for imparting a progressive movement to a film, a door hinged thereto, a movable screen carried on said door, and means under the control of the film moving mechanism operable to move said screen when the door is closed and inoperative for this purpose when the door is open, substantially as set forth.

2. In a moving picture machine, the combination of a main frame provided with film moving mechanism, a door hinged thereto, a movable film protecting screen on said door and centrifugal means for moving said screen engaged with and operable from the film moving mechanism only when the door is closed, substantially as set forth.

3. In a moving picture machine, the combination of a main frame provided with film moving mechanism, a door hinged thereto, a movable screen on said door, and means for moving said screen located partly on the frame and partly on the door, the parts thereof being operatively positioned with respect to one another only when the door is closed, substantially as set forth.

4. In a moving picture machine, the combination of a main frame provided with film moving mechanism, a door hinged thereto, a movable screen on said door and mechanical means for moving said screen controlled by the film moving mechanism and located partly on the frame and partly on the door, the said parts being so situated relative to one another as not to interfere with the opening of the door, substantially as set forth.

5. In a moving picture machine, the combination of a main frame provided with means for imparting a progressive movement to a film, a door hinged to said frame, and having an exposure opening therein, a movable screen arranged to extend normally across said opening, and adjacent thereto, a revoluble shaft supported in said frame, mechanical means connecting said screen to said shaft to cause said screen to be moved away from said opening when said shaft is rotated, said mechanical means and said screen being constructed and arranged so as not to interfere with the opening of said door.

[Claims 6 to 42 not printed in the Gazette.]

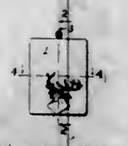
1,063,208. ART OF PREPARING NUTS FOR FOOD. SERENO E. NORTON, Thorsby, Ala., assignor to Carle C. Conway, New York, N. Y. Filed June 24, 1912. Serial No. 705,447. (Cl. 99—11.)

1. The herein described process of treating nut meats which consists in immersing the raw meats for a brief period of time not exceeding two minutes in a highly heated fatty medium, at a temperature not below 300 degrees Fahrenheit.

2. The herein described process of treating nut meats which consists in immersing the raw meats for the brief period of one minute and a quarter to one minute in a highly heated fatty medium, at a temperature of 400 to 450 degrees Fahrenheit.

3. The product, consisting of nut meats partly popped in a highly heated oil.

1,063,209. LOCKET. FREDERICK W. ORDING, Jersey City, N. J., assignor of one-third to H. C. Perley and one-third to C. N. Perley, New York, N. Y. Filed Nov. 14, 1911. Serial No. 660,169. (Cl. 63—18.)

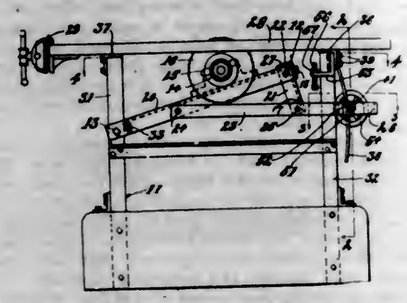


1. A locket comprising an outer case having a front, top, sides and back, grooves on the inner faces of the sides, and an inner holder comprising a plate, lugs on the plate engaging the grooves in the sides of the case, a bottom on the inner case, and means for holding the parts together when closed.

2. A locket comprising an outer case having a front, top, sides and a back, grooves in the inner faces of the sides, and an inner holder comprising a plate, a tongue thereon, lugs on the plate engaging the grooves in the sides of the case, a bottom on the inner case, and means for holding the parts together when closed.

3. A locket comprising an outer case having a front, top, sides and back extending part of the length of the back, grooves in the inner faces of the sides, and an inner holder comprising a plate, lugs on the plate engaging the grooves in the sides of the case, a bottom on the inner case and a thickened portion on the plate filling the space in the back of the outer case and means for holding the parts together when closed.

1,063,210. WOODWORKING MACHINERY. LEWIS F. PARKS, Cincinnati, Ohio. Filed Oct. 20, 1911. Serial No. 655,692. (Cl. 143—132.)



1. In means of the character described, the combination of a main frame, a mandrel-support comprising side angle-iron stringers whose rear ends are pivoted with relation to said main frame and which slant upwardly toward the front of said main frame, side-bars which extend forwardly under said stringers, and struts secured in the angle between said stringers and side bars, a mandrel, said stringers, side bars and struts forming triangular side-frames upon the upper stretches of which said mandrel is journaled, said mandrel arranged for receiving a wood-working instrument, and adjusting means between the forward portions of said side bars and main frame.

2. In means of the character described, the combination of a main frame, a mandrel-support comprising side angle-iron stringers whose rear ends are pivoted with relation to said main frame and which slant upwardly toward the front of said main frame, side bars which extend forwardly under said stringers, a front cross-bar between said side bars for manipulating said support, and struts secured in the angle between said stringers and side bars, a mandrel, said stringers and struts forming triangular side-frames upon the upper stretches of which said mandrel is journaled, said mandrel arranged for receiving a woodworking instrument, and adjusting means between the forward portions of said side bars and main frame.

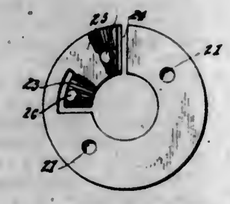
3. In means of the character described, the combination of a mandrel-support comprising side angle-iron stringers whose rear ends are provided with pivoting means, side bars secured to said stringers intermediate of the ends of said stringers and extending at an angle therefrom, struts secured to the forward ends of said stringers and to said side-bars intermediate of the ends of the latter, for forming triangular side-frames in front of which the forward portions of said side bars extend, an angle-iron cross-bar between said side-frames, and a cross-bar between the forwardly extending portions of said side bars for connecting the same, and a mandrel journaled on said stringers, said mandrel arranged for receiving a wood-working instrument, substantially as described.

4. In means of the character described, the combination of a mandrel-support comprising side angle-iron stringers whose rear ends are provided with pivoting means, side bars secured to said stringers intermediate of the ends of said stringers and extending at an angle therefrom, and struts secured to the forward ends of said stringers and to said side bars intermediate of the ends of the latter, for forming triangular side-frames in front of which the forward portions of said side bars extend, an angle-iron cross-bar between said side-frames, and a cross-bar between the forwardly extending ends of said side bars for connecting the same, a mandrel journaled on said stringers, said mandrel arranged for receiving a wood-working instrument, a cross screw-rod on the forwardly extending ends of said side bars, a clamp-shoe operated thereby and movable with said side-bars, and positioning means acted on by said clamp-shoe, substantially as described.

5. In means of the character described, the combination of a mandrel-support comprising side angle-iron stringers whose rear ends are provided with pivoting means, side bars secured at their rear ends to said stringers respectively intermediate of the ends of the latter, said side bars having a front-bar integral therewith connecting the same, and struts secured to the front ends of said stringers and the intermediate portions of said side bars respectively for forming triangular side-frames, and an angle-iron cross-bar connecting said stringers, a mandrel having journal-support on said stringers, said mandrel arranged for receiving a wood-working instrument, a cross screw-rod in said side bars adjacent to said front bar, a clamp-shoe adjacent to each of said side bars operated by said screw-rod and movable with said side-bars, and coacting means with which said clamp-shoes cooperate, substantially as described.

[Claims 6 to 12 not printed in the Gazette.]

1,063,211. NUT-LOCK. JACOB H. PISOR, Livingston, Mont., assignor of one-half to Henry J. Walcott, Livingston, Mont. Filed Nov. 10, 1910. Serial No. 591,612. (Cl. 151—41.)

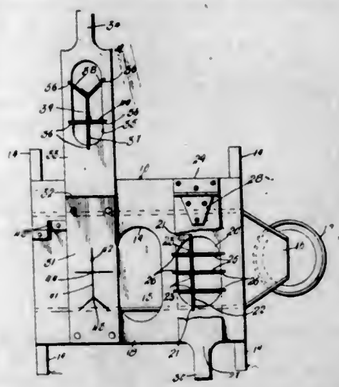


1. In a nut lock, in combination, a washer comprising an annular body of resilient sheet metal having a radial slot extending partially through the annulus and a second slot disposed at an angle to the first and communicating therewith to form a tongue, said tongue curved upwardly and provided with a semi-globular projection on its upper surface, said body formed with a radial slit therethrough, one end of the body adjacent the slit being curved upwardly and also provided on its upper face with a semi-globular projection, and a nut having semi-globular recesses in its inner face for engaging the projections of the tongues and locking the nut against rotation.

2. In a nut lock, in combination, a washer comprising an annular body of resilient sheet metal having a radial slot extending partially through the annulus and a second slot disposed at an angle thereto and communicating therewith to form a tongue, said tongue curved upwardly, a semi-globular projection formed on the upper surface of the tongue, the body member formed with a radial slit, an end of the body member adjacent the slit being curved upwardly and provided on its upper surface with a semi-globular projection, the other end of the body being cut off at an angle to the radial slit and the resultant edge beveled, a nut formed with semi-globular recesses in its under surface for engaging the projections on the washer and thus locking the nut against rotation.

1,063,212. POTATO-SEED CUTTER. EDWIN POWELL, Emma, Colo. Filed Aug. 29, 1911. Serial No. 646,627. (Cl. 146—7.)

In a potato seed cutter, the combination with a support and a bed plate carried thereby, of a plate mounted on the bed plate and provided with indicating marks, a lever pivoted at one end to the plate, said lever having an elongated opening therethrough and notches at the sides and at one end of the opening, a transverse blade extending across the opening adjacent one end thereof and secured within certain of the side notches, a V-shaped blade secured at its ends within certain other of the side notches and having its apex projecting toward the center of the opening, and a longitudinal blade secured at one end within the end notch of the elongated opening and having its opposite end portion seated in a groove at the apex of the V-shaped blade and offset to lie against the inner face of one side of the V-shaped blade, all of said blades being adapted to register with the indicating marks upon the plate.



1,063,213. FRICTION DRAFT-GEAR. HERMAN C. PRIEBE, Blue Island, Ill. Filed Nov. 27, 1912. Serial No. 733,826. (Cl. 213—64.)

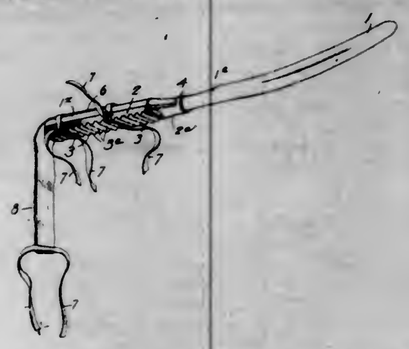


1. A friction draft gear including a coupler stem; a sheet of spring metal wound spirally into the form of a cylinder with overlapping layers thereof in frictional engagement, this cylinder being so disposed as to have its bore substantially horizontal and substantially longitudinal of the line of draft of the gear; and cylinder contracting mechanism subject to draft strains of sufficient strength to contract said cylinder to produce friction, said cylinder contracting mechanism including flaring seats between which said cylinder is disposed and wedging blocks entering said seats and engaging the exterior of said cylinder.

2. A friction draft gear including a coupler stem; substantially co-axial conical seats substantially horizontally disposed longitudinally of the line of draft, one seat being movable toward the other by the stem when subject to sufficient pull and the other seat being movable toward the first mentioned one by the stem when subject to sufficient push; wedging elements entering said seats; and movable therein transversely of the line of draft, and friction producing means operated by the wedging elements.

3. A friction draft gear including a coupler stem; substantially co-axial conical seats substantially horizontally disposed longitudinally of the line of draft, one seat being movable toward the other by the stem when subject to sufficient pull and the other seat being movable toward the first mentioned one by the stem when subject to sufficient push; and spaced apart friction producing means operated by the wedging elements, said seats and wedging elements having interengaging formations to maintain the wedging elements in separated relation.

1,063,214. TOOTH-BRUSH. JOHN THOMPSON RANKIN, Los Angeles, Cal. Filed June 13, 1912. Serial No. 703,467. (Cl. 15—39.)



1. The combination with a tooth brush handle having a head, of a resilient base portion arranged to lie next to the head, said base portion being transversely corrugated and being provided with longitudinal grooves crossing the corrugations on the side opposite the head, means for securing said base portion to said head, a fabric portion arranged to cover the corrugated base, and means for securing said fabric portion to said head.

2. The combination with a tooth brush handle having a head, a rubber base portion having a flat surface on one side arranged to abut the head and being provided with ridges and grooves on its opposite side, said base having an extended portion arranged to encircle the handle, a fabric strip arranged to lie adjacent to the corrugated side of the base portion, said fabric being tufted on the opposite side of the strip from said base portion, said strip having a portion arranged to extend around the end of the head and backwardly over a portion of the head, and means for securing said strip and said base portion to said head.

3. The combination with a tooth brush handle having a head, a rubber base portion having a flat surface on one side arranged to abut the head and being provided with ridges and grooves on its opposite side, said base having an extended portion arranged to encircle the handle, a fabric strip arranged to lie adjacent to the corrugated side of the base portion, said fabric being tufted on the opposite side of the strip from said base portion, said strip having a portion arranged to extend around the end of the head and backwardly over a portion of the head, means for securing said strip and said base portion to said head, said means comprising a plurality of bands or strings secured to the strip and arranged to encircle the head and the base portion, and bands at one end of said tufted portion arranged to encircle the handle.

4. The combination with a tooth brush handle having a head, a rubber base portion having a flat surface on one side arranged to abut the head and being provided with transverse ridges and grooves on its opposite side and longitudinal grooves intersecting said transverse grooves, means for securing said base to said handle, a fabric strip arranged to lie adjacent to the corrugated side of the base portion, said fabric being tufted on the opposite side of the web from said base portion, said strip having a portion arranged to extend around the end of the head, and means for securing the end of said extended portion of the strip.

1,063,215. CHUCK. CHARLES FRANKLIN REAM, Lansing, Mich. Filed June 18, 1912. Serial No. 704,280. (Cl. 29—141.)

1. In a chuck, the combination of, a body having a cylindrical socket with a squared driving portion at its inner end and an enlargement at its outer end, there being an annular collar shoulder at the inner end of the enlargement; a tool holder having a squared portion at its inner end adapted to coact with the squared portion of said body socket and a collar adapted to engage said shoulder at the inner end of said enlargement of said socket; a sleeve having an internal annular groove and a slot therein mounted on said holder; a stop pin on said holder engaging said slot of said sleeve to limit the movement of the sleeve on the holder; spaced cam lugs on the inner end of said sleeve; spaced coacting lugs on said body; and a coiled spring arranged in said groove of said sleeve, one end of said spring being connected to said stop, the other being connected to said sleeve whereby the sleeve is automatically actuated by the spring to engage and retain said lugs in their engaging position.



2. In a chuck, the combination of, a body having a cylindrical socket with a squared driving portion at its inner end and an enlargement at its outer end; a tool holder having a squared portion at its inner end adapted to coact with the squared portion of said body socket; a sleeve having an internal annular groove and a slot therein mounted on said holder; a stop pin on said holder engaging said slot of said sleeve to limit the movement of the sleeve on the holder; spaced cam lugs on the inner end of said sleeve; spaced coacting lugs on said body; and a coiled spring arranged in said groove of said sleeve, one end of said spring being connected to said stop, the other being connected to said sleeve whereby the sleeve is automatically actuated by the spring to engage and retain said lugs in their engaging position.

3. In a chuck, the combination of, a body having a cylindrical socket with a squared driving portion at its inner end and an enlargement at its outer end, there being an annular collar shoulder at the inner end of the enlargement; a tool holder having a squared portion at its inner end adapted to coact with the squared portion of said body socket and a collar adapted to engage said shoulder at the inner end of said enlargement of said socket; a sleeve mounted on said holder; a stop for limiting the rotative movement of the sleeve on the holder; spaced lugs on said sleeve; spaced coacting lugs on said body; and a spring arranged to act on said sleeve to engage and retain said lugs in their engaging position.

4. In a chuck, the combination of, a body having a cylindrical socket with a squared driving portion at its inner end and an enlargement at its outer end; a tool holder having a squared portion at its inner end adapted to coact with the squared portion of said body socket; a sleeve mounted on said holder; a stop for limiting the rotative movement of the sleeve on the holder; spaced lugs on said sleeve; spaced coacting lugs on said body; and a spring arranged to act on said sleeve to engage and retain said lugs in their engaging position.

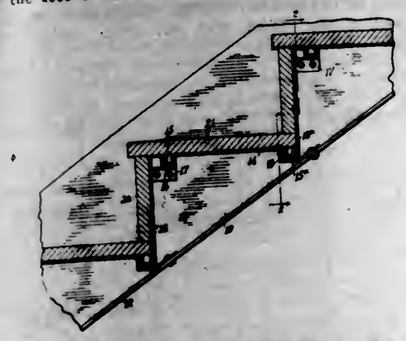
5. In a chuck, the combination of, a body having a socket therein; a tool holder adapted to be inserted into said socket and having driving engagement with said body; a sleeve mounted on said holder for limited rotative movement thereon; spaced cam lugs on said sleeve; spaced coacting lugs on said body; and a spring arranged to act on said sleeve to engage said lugs and retain them in their engaging position.

[Claims 6 to 8 not printed in the Gazette.]

1,063,216. STAIR. ARTHUR E. RENDLE and JOHN T. NESDALL, New York, N. Y.; said Nesdall assignor to said Rendle and New York Bridge & Iron Company, a Corporation of New York. Filed Mar. 9, 1910. Serial No. 548,206. (Cl. 189—43.)

1. In a stair, a tread and a riser having interlocking channels separably connecting them.

2. In a stair, treads and risers having interlocking channels separably connecting them together, said channels formed in the top faces of the treads and respectively arranged at or near the outer edge of the tread and at the feet of the risers.



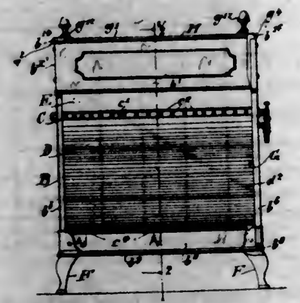
3. In a stair, treads and risers having interlocking channels detachably holding them together, the channels of the risers being located respectively at the head and foot thereof, and the channels of the treads arranged adjacent to their inner and outer edges and facing in the same direction, with the channel at the inner edge of each tread fitting within the channel at the foot of each riser, and the channel at the head of each riser fitting within the channel at the outer edge of each tread.

4. In a stair, treads and risers having interlocking channels detachably connecting them together, with the channels opening upwardly to permit of the treads and risers being vertically separated in successive order.

5. In a stair, treads and risers having interlocking portions movable vertically into and out of engagement and permitting of the risers and treads being vertically separated in successive order, the said interlocking portions formed in the top faces of the treads.

[Claims 6 to 14 not printed in the Gazette.]

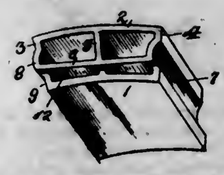
1,063,217. GAS-HEATER. JESSE T. REZNOR, Mercer, Pa., assignor to Reznor Manufacturing Company, Mercer, Pa., a Corporation of Pennsylvania. Filed July 29, 1912. Serial No. 711,074. (Cl. 126—86.)



1. A gas heater having vertically extending members rectangularly arranged and each provided with a beaded portion at the top, a top member provided with beaded portions which fit the outside of the beaded portions on the vertically extending members, an inner corner member fitting within the last mentioned portions, an outer cap member fitting upon the outer part of the beaded top member, and means for holding the inner and outer corner members together whereby they will hold the vertically extending members and the top member firmly together.

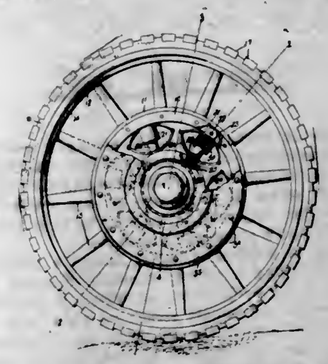
2. A gas heater having sheet metal vertically extending front, side and back members arranged at right angles to each other, a top member, an inner corner member, an outer corner member and a screw member, the upper edges of the front, side and rear members being beaded, the outer edges of the top member being beaded and fitting with the beaded edges of the front, side and rear members, the inner corner member fitting the interior beaded portion of the upright members, the outer corner member fitting the exterior of the beaded portion of the top member and the screw means passing through the inner and outer corner members whereby they may be drawn toward each other and serve as clamping means to hold the top member and the vertically extending members together.

1,063,218. SEWER-PIPE-SECTION. WILLIAM H. ROOK, Jr., Akron, Ohio, assignor to George Reuben Hill, Akron, Ohio. Filed Oct. 4, 1912. Serial No. 723,983. (Cl. 72—53.)



A hollow tile having inner and outer parallel walls united at their ends by lateral radial walls, said radial walls united by a transverse wall or web spaced from the inner wall to provide a mortar chamber, the outer wall and web cut away at one end of the section and the inner wall cut away at the opposite end of the section, the projecting or uncut portions constituting shoulders whereby when two tile are abutted longitudinally the transverse web of one tile overlaps the projecting inner wall of a co-adjacent section and out of contact therewith to form a transverse mortar groove, the chamber existing between the inner wall and said transverse web constituting a mortar receiving recess communicating with the groove to provide a mortar clench.

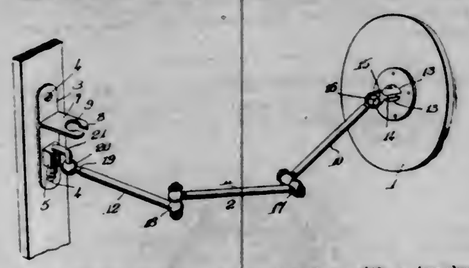
1,063,219. SPRING-WHEEL. ROBERT RUTHERFORD, Portland, Oreg. Filed July 6, 1911. Serial No. 637,090. (Cl. 152—44.)



In a wheel, a felly member having a series of recesses in its inner face, a hub member having a series of recesses in its outer face, radially disposed cups, apertured lugs on the cups disposed in the recesses, transverse bolts pivotally connecting the lugs to the felly member, radially arranged plungers slidably engaged in the cups, apertured lugs on the plungers pivotally secured in the recesses of the hub member, coil springs in the cups, elliptical springs comprising outer and inner members, each of the cups having a groove on each side of its lug, the said slot which receives the said lug, the portions of said member adjacent the slot being disposed in the said

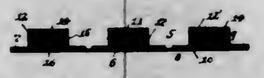
grooves, the inner member of each of said elliptical springs having a slot which receives the lug of one of the cups.

1,063,220. MIRROR-SUPPORT. PERCY R. SEAMON, Boston, Mass., assignor of fifty-one one-hundredths to George R. Hussey and nineteen one-hundredths to Harry R. Wheeler, Providence, R. I. Filed Aug. 23, 1912. Serial No. 716,589. (Cl. 45—97.)



In a mirror support, the combination with a bracket in the form of a supporting plate adapted to be secured to a wall and having a boss rigid therewith and extending laterally therefrom, said boss having a vertically-extending aperture, of a folding arm provided at its end with a supporting finger which has a portion extending laterally from said arm, a portion extending parallel thereto, and another laterally-extending portion parallel to the first-named portion but of sufficient length to extend across the end of the arm, said latter portion being separated from said end and adapted to enter the aperture in the boss, a slotted guard flange rigid with the supporting plate and extending laterally therefrom above the boss, the distance between the guard flange and the top of the boss being slightly less than the length of the last-named laterally-extending portion of the supporting finger and the slot in said guard flange being situated to permit the supporting finger to be withdrawn from the apertured boss when the arm is lifted as far as the guard flange will permit and then tilted slightly, and a mirror sustained by said arm.

1,063,221. TIRE. HENRY C. SEIPP, Pittsburgh, Pa. Filed June 24, 1912. Serial No. 705,481. (Cl. 152—14.)



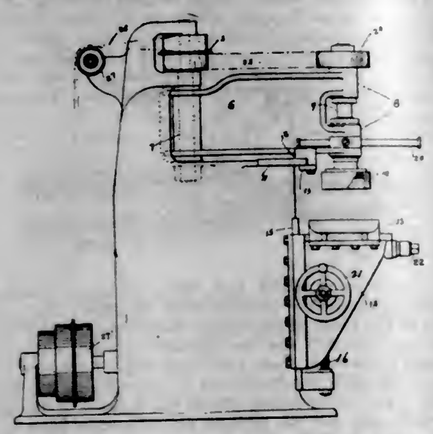
1. A tire of resilient material having a tread device therein comprising a circumferentially disposed strip around the tire, transverse strips engaging with the same, and flanges struck up from each of said circumferential and transverse strips and interfitting to form receptacles for reception of a non-slipping material.

2. A tire of resilient material having a tread device therein comprising a circumferentially disposed flexible strip around the tire, transverse flexible strips engaging with the same, and flanges struck up from each of said circumferential and transverse strips and interfitting to form receptacles for reception of a non slipping material.

3. A tire of resilient material having a tread device therein comprising a circumferentially disposed strip around the tire, transverse strips engaging with the same, flanges struck up from each of said circumferential and transverse strips and interfitting and forming openings in said strips, and fillers secured in the bottom of said openings to form receptacles for the reception of a non-slipping material.

4. A tire of resilient material having a tread device therein comprising a circumferentially disposed flexible strip around the tire, transverse flexible strips engaging with the same, flanges struck up from each of said circumferential and transverse strips and interfitting and forming openings in said strips, and fillers secured in the bottom of said openings to form receptacles for the reception of a non-slipping material.

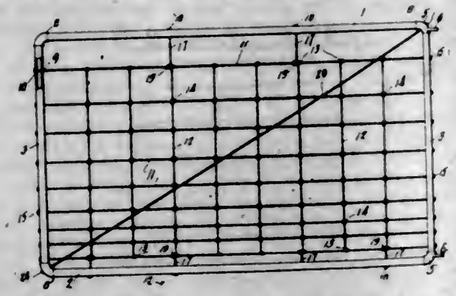
1,063,222. GRINDING-MACHINE. CHARLES G. SMALL, Hartford, Conn. Filed May 27, 1911. Serial No. 629,869. (Cl. 51—12.)



1. In a grinding machine, an oscillatory member, a grinding tool carried by said oscillatory member and rotative about an axis parallel to the axis of motion of said oscillatory member, and an annular flange upon the framing of the machine to which said oscillatory member is gibbed for sliding movement.

2. In a grinding machine, an oscillatory member, a rotary, surface-grinding wheel supported by said oscillatory member, the plane of the working face of said wheel being transverse to the axis of rotation of said wheel and said axis being in parallelism with the axis of motion of said oscillatory member, and means for positively preventing motion of said oscillatory member in the direction of said axes.

1,063,223. GATE. WILLIAM H. SOMMER, Peoria, Ill. Filed Feb. 26, 1912. Serial No. 680,133. (Cl. 39—100.)

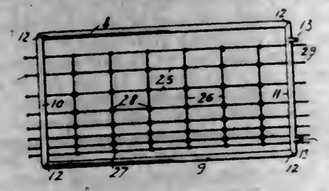


1. In a metallic structure, a frame formed of top and bottom and end members, said end members provided with a plurality of sets of openings diametrically opposite to each other, the inner opening of each set of openings being larger than the outside opening, a plurality of wires forming the central body portion of the structure and having their ends passing loosely through a set of openings in each of said end members, and the extremities of the wires being headed.

2. In a metallic structure, a frame formed of top and bottom and end members, said members being provided with a series of sets of openings, a section of a fabric comprising longitudinal and transverse wires forming the central body of said structure, the ends of the longitudinal wires passing loosely through a set of openings in each of said end members and the extremities thereof being headed; and means for staying said section of fabric from the top and bottom members, comprising wires connected with the marginal wires of the section of fabric, each of said wires passing loosely through a set of perforations in the top and bottom members and being headed on their ends.

3. In a metallic structure, a tubular member having alined openings, one of said openings being larger than the other and the smaller opening having a concave seat, a wire passing through said openings and having a head adapted to seat itself in the concave seat aforesaid.

1,063,224. METHOD OF MAKING A METALLIC STRUCTURE. WILLIAM H. SOMMER, Peoria, Ill. Filed May 20, 1912. Serial No. 698,621. (Cl. 39—100.)



1. The method of making a metallic structure, which consists in forming a frame including end members provided with openings; inserting wires through the openings in the end members to be loosely held therein; providing the extremital portions of the wires with means for preventing the withdrawal of the wires from the frame; providing a connecting means for the end members, and moving the end members apart a predetermined distance to stretch and firmly secure the wires taut in the frame.

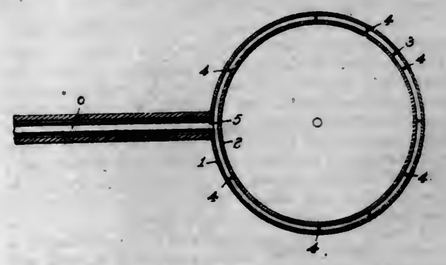
2. The method of making a metallic structure, which consists in forming a frame including end members provided with openings; inserting wires previously stretched to uniform length, through the openings in the end members to be loosely held therein; providing the extremital portions of the wires with means for preventing the withdrawal of the wires from the frame; providing a connecting means for the end members, and moving the end members apart a predetermined distance to stretch and firmly secure the wires taut in the frame.

3. The method of making a metallic structure, which consists in forming a frame including end members provided with openings, and longitudinal members connecting said end members; suitably shaping said longitudinal members to shorten the distance between said end members; inserting wires through the openings in the end members to be loosely held therein; the ends of said wires being subsequently provided with means to prevent withdrawal of the wires from the end members; then re-shaping the longitudinal members to space the end members apart a predetermined distance and thereby stretch and firmly secure the wires taut in the frame.

4. The method of making a metallic structure, which consists in forming a frame including end members provided with openings, and longitudinal members connecting said end members; bending said longitudinal members to shorten the distance between said end members; inserting wires through the openings in the end members to be loosely held therein; the ends of said wires being subsequently provided with means to prevent withdrawal of the wires from the end members; then re-bending the longitudinal members to space the end members apart a predetermined distance and thereby stretch and firmly secure the wires taut in the frame.

5. The method of making a metallic structure, which consists in forming a frame including end members provided with openings, and longitudinal members connecting said end members; bending said longitudinal members to shorten the distance between said end members; inserting wires previously stretched to uniform length, through the openings in the end members to be loosely held therein; the ends of said wires being subsequently provided with means to prevent withdrawal of the wires from the end members; then re-bending the longitudinal members to space the end members apart a predetermined distance and thereby stretch and firmly secure the wires taut in the frame.

1,063,225. LADLE. SAMUEL G. STUCKEY, Lockland, Ohio, assignor to Charles C. Stutz, Norwood, Ohio. Filed Sept. 7, 1912. Serial No. 719,240. (Cl. 22—86.)

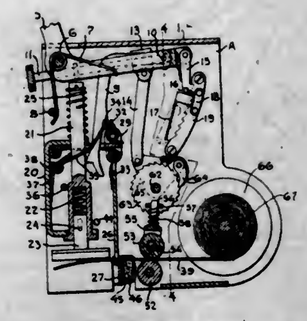


1. A ladle consisting of an outer shell and an inner shell of smaller dimensions than the outer shell, the edges of the shells being hermetically united, the outer shell being provided with inlet and outlet openings in combination with a pipe secured to the outer shell around one of said openings and a hollow shaft or handle secured to the outer shell around the supply pipe and the other opening.

2. A ladle consisting of an outer shell, and an inner shell of smaller dimensions than the outer shell, the edges of the shells being hermetically united, the outer shell having inlet and outlet openings, in combination with a perforated partition interposed between the shells and lying in a plane passing between the inlet and outlet openings, a pipe secured to the outer shell around one of said openings and a hollow shaft or handle secured to the outer shell around said pipe and the other opening.

3. A ladle consisting of an outer shell having inlet and outlet openings formed therethrough and an inner shell of smaller dimensions than the outer shell and having its edges hermetically secured to the edges of the outer shell in combination with a perforated partition interposed between said shells and lying in a plane intermediate the inlet and outlet openings, a spacing block interposed between the lower ends of said shells, a pipe secured to the outer shell around one of said openings and a hollow shaft or handle secured to the outer shell around said pipe and the other opening.

1,063,226. STAMP-AFFIXING MACHINE. JOHN D. THOMPSON, Toronto, Ontario, Canada. Filed Aug. 7, 1912. Serial No. 713,742. (Cl. 216—25.)



1. A stamp affixing machine, having in combination, moistening means, severing means, stamp impacting means, an actuator operating to actuate the severing means and then the impacting means, feeding means and

an actuating lever for operating the actuator and the feeding means, substantially as described.

2. A stamp affixing machine, having in combination, a moistener, means for feeding the stamp strip a prescribed distance across the moistener, a severing knife adapted to cross the stamp strip, a stamp affixing plunger, and an actuator provided with a shoulder adapted to engage the knife and cause it to cross the stamp strip, and a second shoulder adapted to engage the stamp affixing plunger and cause it to strike the stamp after it has been severed by the knife, substantially as described.

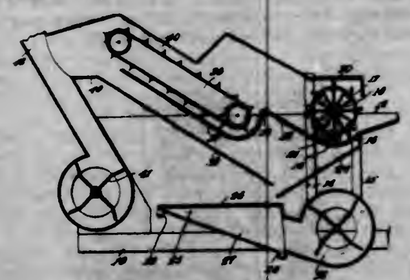
3. A stamp affixing machine, having in combination, a moistener, feeding mechanism, a stamp affixing plunger, a knife crossing the path of the stamp, an actuator provided with a shoulder for engaging the knife, means for disengaging the shoulder and the knife at a predetermined time, a second shoulder on the actuator for engaging the plunger and forcing the same against the stamp, means for disengaging the plunger and the second shoulder at a predetermined time, means for returning the plunger to initial position and means for returning the knife to initial position, substantially as described.

4. A stamp affixing machine, having in combination, a moistener, stamp severing means comprising a knife having, a blade, a hinge member and a double knuckle-pin member connecting the hinge member to the blade, springs for holding the hinge member yieldingly in a given position with respect to the blade of the knife, an actuator having a shoulder adapted to engage with the hinge piece to drive the knife across the path of the stamps, means for returning the knife to its initial position when the hinge piece and the shoulder of the actuator disengage, and means for impacting the stamp to the package or envelop, substantially as described.

5. A stamp affixing machine, having in combination, a moistener, severing means comprising a knife having a hinge piece, yieldably connected with the main portion of the knife, a stamp affixing plunger yieldably held in uppermost position, an actuator provided with a pair of shoulders, one of which engages the hinge piece of the knife, means for returning the knife to its initial position when the shoulder and the hinge piece disengage, the said actuator being provided with a second shoulder for engaging the plunger and causing it to descend upon the stamp and means for disengaging the second shoulder from the plunger to allow the plunger to return to its initial position and feeding mechanism for advancing the stamp strip, substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

1,063,227. GRAIN-THRESHER. JOHN L. THOMPSON, Vinson, Okla. Filed Mar. 26, 1912. Serial No. 686,904. (Cl. 130—22.)



1. In a threshing machine the combination of a hopper, threshing means located adjacent and communicating with said hopper, a belt conveyer, an upwardly extending perforated plate composed of two portions lying in parallel planes and united by an arcuate portion conforming to the lower end of the said conveyer, said threshing means being adapted to allow the grain and chaff to fall therefrom and adapted to deliver the threshed material below and in contact with said belt conveyer, said belt conveyer being adapted to push the said material along the upper surface of said upwardly extending perforated plate, a discharge tube into which said material is delivered from said belt conveyer, a guide plate arranged beneath said upwardly extending perforated plate and adapted to guide any and all grain and chaff which falls from the threshed material during the conveying of the latter, means for guiding the grain and chaff falling from said threshing means upon a grain shoe.

2. In a threshing machine the combination of a perforated plate, a hopper adapted to deliver the material to be threshed to said perforated plate, said perforated plate provided with projections and having a drum adapted to rotate thereabove, said drum having projections adapted to interdigitate with the projections carried by said plate, said perforated plate extending upwardly and composed of two portions lying in parallel planes and united by an arcuate portion which conforms to the end of a belt conveyer, a belt conveyer adapted to move the threshed material along said perforated plate beneath said belt conveyer, a discharge tube into which said material is adapted to be delivered, a fan located at one end of said discharge tube and adapted to blow the threshed material out the other end thereof, a guide plate located beneath said conveyer, a guide plate located beneath said perforated plate beneath said drum, said guide plates being adapted to guide the grain and chaff upon a grain shoe.

1,063,228. FIRE-EXTINGUISHER. GEORGE A. THORNTON, Pawtucket, R. I., assignor of one-half to Archie F. Place, Cranston, R. I. Filed May 23, 1912. Serial No. 699,166. (Cl. 169—14.)



1. In an automatic fire extinguisher, the combination of a hollow body provided with an open end, a fixed suspension rod in the body, a rotary head removably connected with the rod and in contact with the open end of the body, and means independent of the rod for rotating the head.

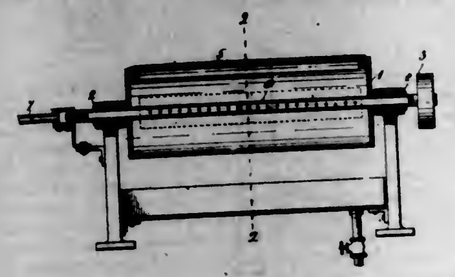
2. In an automatic fire extinguisher, the combination of a hollow body provided with an open end, of a rod fixed in the body and extending below the same, a vertical tube fixed in the body adjacent with the rod and provided with a shoulder upon its lower end, a head detachably connected to the rod below the body, a sleeve upon the head slidable upon the tube, and a spring in the body pressing downwardly upon the head.

3. In an automatic fire extinguisher, the combination of a body comprising a base and a side wall, said base being provided with an opening, a tube fixed to the base and surrounding the rod and provided with a shoulder, a head detachably connected to the rod below the body, a sleeve upon the head slidably engaging the tube, and a spring having one end pressing against the base and the opposite end pressing against the head.

4. In an automatic fire extinguisher, the combination of a body comprising a base and a side wall, a vertical rod fixed to the base and extending below the wall, a tube fixed to the base, adjacent to the rod, provided with a shoulder, and provided with a lug above the shoulder, a head detachably fixed to the rod below the wall, a sleeve upon the head slidable upon the tube and provided with a longitudinal slot adapted to receive the lug, and a spring surrounding the tube and sleeve and abutting at one end against the base and at the other end against the head.

5. In an automatic fire extinguisher, the combination of a body comprising a base and a side wall, a rod fixed in the body and extending below the wall, a tube in the body adjacent to the rod and of less length than the rod, and provided with a shoulder, a head comprising a top plate adapted to contact with the end of the wall, and provided with a central opening, a curved plate fixed to the top plate and provided with an opening in a line with the opening in the top plate, and a sleeve fixed to the top plate around the first mentioned opening and slidably engaging the tube, the rod entering the opening in the curved plate and engaged therein by solder, and a vertical spring within the wall of the body having one end abutting against the base and the other end abutting against the top plate.

1,063,229. PROCESS OF OBTAINING GLUE OR GELATIN. GEORGE UPTON, Salem, Mass. Filed Mar. 15, 1911. Serial No. 614,582. (Cl. 87—7.)



1. The process of treating glue stock for obtaining glue, consisting in subjecting the glue stock to the action of heat and moisture and at the same time effecting a mechanical separation of the glue as it forms from the surfaces of the dissolving pieces of stock and removing the formed glue immediately as it is so separated.

2. The process of treating glue stock for obtaining glue, consisting in subjecting the glue stock to the action of steam, effecting a mechanical separation of the glue as it forms from the surfaces of the dissolving pieces of stock, and immediately removing the formed glue so separated from the influence of said steam.

3. The process of treating glue stock for obtaining glue, consisting in subjecting the glue stock to the action of heat and moisture and at the same time agitating the mass and separating the glue as it forms from the surfaces of the dissolving pieces of stock by the attrition thus induced and removing the formed glue immediately as it is so separated.

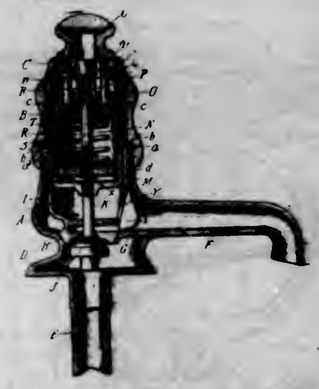
4. The process of treating glue stock for obtaining glue consisting in subjecting the glue stock to the action of steam and at the same time agitating the mass by which the steam may have intimate access to said stock and the glue separated as it forms from the surfaces of the dissolving pieces of stock by the attrition thus induced, and immediately removing the formed glue so separated from the influence of said steam.

5. The process of treating glue stock for obtaining glue which consists in placing the stock in a digester, admitting steam to the chamber of the digester and at the same time agitating the mass of stock therein by which the steam may have intimate access to said stock and the glue be separated as it forms from the surfaces of the dissolving pieces of stock by the attrition so induced, and allowing the formed glue in solution with the water of the condensing steam to gravitate immediately as it is so formed and escape from said digester.

[Claim 6 not printed in the Gazette.]

1,063,230. BASIN-COCK. HARL G. WATROUS, Chicago, Ill. Filed Aug. 29, 1911. Serial No. 646,469. (Cl. 137—4.)

1. In a basin-cock, the combination, with a casing having an inlet and an outlet, with a waterway and valve-seat between them, of a fixed piston M having a tubular stem N provided with a port S, a regulating screw Q—R controlling the port S, a closed cylinder L surrounding and traveling upon the piston M, a concentrically disposed push button U vertically movable in the upper part of the casing and provided with the depending pins W, W engaging the upper end of the cylinder L on opposite sides of the piston stem N, a coiled spring T interposed between the piston M and upper end of the cylinder L, and a valve stem K and valve J carried by said cylinder; substantially as described.



2. In a basin-cock, the combination, with a casing having an inlet and an outlet, with a waterway and valve-seat between them, of a fixed piston M having a tubular stem N provided with a port S, a regulating screw Q—R controlling the port S, a closed cylinder L surrounding and traveling upon the piston M, a push button U located in the top of the casing and guided vertically upon the head of the regulating screw Q—R, devices intermediate said button and the cylinder L for causing the depression of the button to depress the cylinder, a coiled spring T for raising the cylinder, and a valve stem K and valve J carried by the cylinder; substantially as described.

3. In a basin-cock, the combination, with a casing having an inlet and an outlet, with a waterway and valve-seat between them, of a plate O secured in the upper part of the casing and having a central boss P, a hollow piston rod N secured at its upper end in the plate O and provided with the port S, a piston M secured to the lower end of said rod, a regulating screw Q—R screwed at its upper end into the central boss P of the plate O and extending downward through the hollow piston stem N into position to control the port S, a closed cylinder L surrounding the piston M, a valve stem K and valve J carried by said cylinder, a push button U located in the upper part of the casing and provided with the depending pins W, W passing through holes in the plate O on diametrically opposite sides of the central boss P, and a spring T surrounding the piston stem N within the cylinder L for lifting the latter after it has been depressed by the push button U; substantially as described.

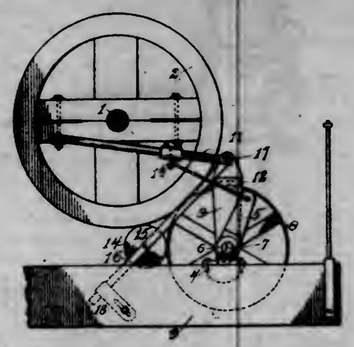
4. In a basin-cock, the combination, with a casing having an inlet and an outlet, of a removable cage secured in said casing and having a waterway and valve-seat formed in its lower end between the inlet and outlet of the casing, and provided with a horizontal deflector plate above said waterway and valve-seat, a fixed piston having a tubular stem provided with a port, a regulating screw controlling said port, a closed cylinder surrounding and traveling upon the fixed piston within the aforesaid cage, a valve stem and valve carried by said cylinder, means for depressing the cylinder to open the valve, and a spring for lifting the cylinder to close the valve; substantially as described.

5. In a basin-cock, the combination, with a casing having an inlet E and outlet F and provided between them with a horizontal diaphragm or partition G having a tapering seat formed in it, a cage I secured in said casing and

provided with a tapering lower end H fitting the tapering seat in the partition G and having a waterway and valve-seat formed in it, and provided with a horizontal deflector plate X above said waterway and valve-seat, a fixed piston M having a hollow stem N provided with a port S, a regulating screw Q—R for controlling said port, a closed cylinder L surrounding and traveling upon said piston within the cage I, a valve stem K and valve J carried by said cylinder, means for depressing said cylinder to open the valve, and a spring for lifting the cylinder to close the valve; substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

1,063,231. REVERSIBLE FRICTION-GEARING. JOHN A. WEBER, Toledo, Ohio. Filed Oct. 28, 1911. Serial No. 657,302. (Cl. 74—26.)



In a device of the described character, a driving friction-wheel, a rock-arm, a friction-pulley, a shaft for the pulley having one end supported in said rock-arm, a second friction-pulley mounted in close proximity to the wheel and the pulley first mentioned, a movable support for said second pulley, arms pivotally supported upon said shaft, a controlling rod pivotally connected with said arms, connections between said rod and said rock-arm, and a pivotal connection between said pulley-support and said arms.

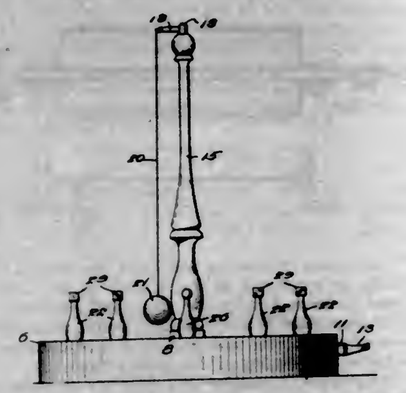
1,063,232. NUMBERING-MACHINE. PETER WEBER, Orange, N. J., assignor to Bates Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Nov. 1, 1911. Serial No. 657,966. (Cl. 101—185.)



1. In a numbering machine, the combination of the main frame, a vertically movable numbering wheel frame, a plunger connected to said wheel frame and provided with a recess, a spring for normally holding the plunger and wheel frame in an elevated position, a pin fixed to said main frame and against which one end of said spring bears, and a catch pivoted at one end to said pin in such a position as to be engaged at its free end with said recess when the plunger is depressed, the upper wall of said recess being beveled so as to liberate the catch by movement of the plunger in a downward direction, substantially as set forth.

2. In a numbering machine, the combination of the main frame, a vertically movable numbering wheel frame, a plunger connected to said wheel frame and provided with a recess, a spring for normally holding the plunger and wheel frame in an elevated position, a pin fixed to said main frame and against which one end of said spring bears, a catch pivoted at one end to said main frame in such position as to be engaged at its free end with said recess when the plunger is depressed, and a spring for normally holding said catch away from said plunger, substantially as set forth.

1,063,233. GAME APPARATUS. JOHN F. WILHELM, Williamsport, Pa., assignor of one-half to Edward H. Young, Lock Haven, Pa. Filed Dec. 12, 1912. Serial No. 736,312. (Cl. 46—59.)



1. In a game apparatus of the character described, a playing pin, a die permanently connected with the playing pin and means to knock down the playing pin.

2. In a game apparatus of the character described, a playing pin having a portion thereof formed polygonal in cross-section and provided with die marks, and means to knock down the playing pin.

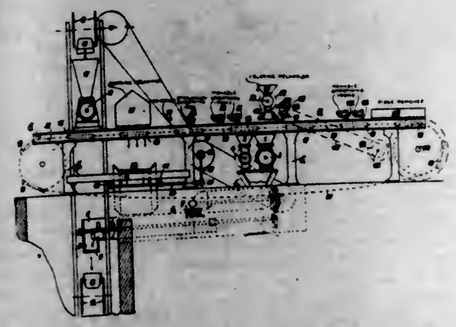
3. In a game apparatus, a board, a central upstanding mast, a flexible element connected with the upper portion of the mast, a striker ball connected with the flexible element, and a plurality of playing pins having their upper ends in the form of dice and adapted to be arranged about the central mast in a circle.

4. In a game apparatus of the character described, upper and lower shells which have telescoping action, means to effect the telescoping action, a plurality of playing pins mounted upon one of the shells, a flexible element connected with the lower portion of each playing pin and with the relatively stationary shell, and means to knock down the playing pins.

5. In a game apparatus of the character described, a lower relatively stationary shell, an upper vertically movable shell having telescoping action with the relatively stationary shell, a hub connected with the upper movable shell and provided with a depending forked extension, an operating lever having its inner end disposed within the forked extension and its outer end extending outwardly beyond the shells, a pivot support for the operating lever, said hub being provided at its upper end with a socket, a mast provided with an extension to fit within the socket, a flexible element connected with the mast, a striker ball connected with the free end of the flexible element, playing pins mounted upon the movable shell, and a resetting flexible element connected with the lower end of each playing pin and with the stationary shell.

[Claims 6 and 7 not printed in the Gazette.]

1,063,234. MACHINE FOR THE MANUFACTURE OF ROOF-TILES OR OTHER SIMILAR ARTICLES. OTTO ROBERT HERMANN ZEITZ, Kiel, Germany. Filed Nov. 21, 1911. Serial No. 661,601. (Cl. 25—42.)



1. In a machine of the kind described, molding means, conveying means adapted to move said molding means continuously through the machine, means for delivering a quantity of material into said molding means, means for automatically shaping said material into an article during the progress of the molding means, means for moistening the material so shaped, means comprising a fixed smoothing iron for smoothing the moistened material, means comprising movable irons for troweling or rubbing the smoothed material, and means for removing the article from the machine.

2. In a machine of the kind described, molding means, conveying means adapted to move said molding means continuously through the machine, means for delivering a quantity of material into said molding means, means for ramming and distributing the material therein to form an article, means for moistening the rammed material, means comprising a fixed iron for smoothing the surface of the moistened material, means comprising a movable iron for rubbing or troweling the smoothed material, means for coloring the troweled material, and means for removing the article from the machine.

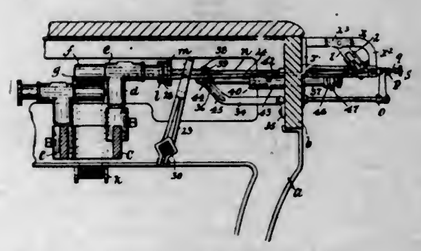
3. In a machine of the kind described, molding means, conveying means adapted to move said molding means continuously through the machine, means for delivering a quantity of material into said molding means, means for automatically ramming and distributing the material therein to form an article, means for automatically moistening the rammed material, means comprising a movable iron for automatically troweling or rubbing the surface thereof, means for automatically coloring the troweled material, means comprising a polishing iron for automatically further troweling or rubbing the surface of the colored material to polish the same, means for automatically trimming the edges of the article, and means for automatically removing the article from the machine.

4. In a machine of the kind described, the combination of a series of molding means, means for supplying a quantity of material thereinto, conveying means adapted to move said molding means through the machine, means for automatically shaping said material into an article during the progress of the molding means, means for moistening the material so shaped, means comprising stationary irons for smoothing the surface of the moistened article, and means comprising movable irons to trowel or rub the smoothed material, and means for removing the article from the machine.

5. In a machine of the kind described, the combination of a series of mold boxes having removable bottoms, means adapted to contain a quantity of material, conveying means adapted to move said mold boxes through the machine, means for shaping the material into an article during the progress of the mold boxes, means to moisten the material so shaped, means comprising a fixed member to smooth the moistened material, means comprising movable members to trowel or rub the material so smoothed, means for removing the article together with the mold box-bottom, and means coacting with the removing means to trim the edges of the article.

[Claims 6 and 7 not printed in the Gazette.]

1,063,235. QUILLING-MACHINE. GEORGE ADSIT, Paterson, N. J., assignor to Benjamin Eastwood Company, Paterson, N. J. Filed Aug. 24, 1910. Serial No. 578,676. (Cl. 242—43.)



1. In combination, with a suitable support, a rotary spindle journaled therein, a carrier pivoted in the support on an axis crossing the spindle axis, means for moving the carrier back and forth on its axis, and a thread guiding means resting against the cop being wound and movable with the carrier and having its thread guiding portion pivoted in the carrier on an axis crossing the axis of the spindle, substantially as described.

2. The combination of a suitable support, a rotary spindle journaled therein, a carrier means pivoted in the support to move in a plane substantially parallel with the spindle, a thread-guide means pivoted in the carrier means on an axis extending transversely of the axis of the carrier means, said thread-guide means being normally movable toward the axis of the spindle and having its thread-guide portion pivoted on an axis parallel with that of the carrier means, means for rotating the spindle and means for oscillating the carrier means, substantially as described.

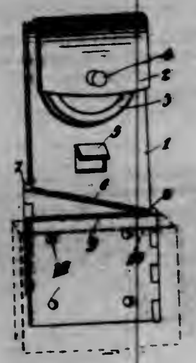
3. The combination of a suitable support, a rotary spindle journaled therein, a thread-guide normally movable toward the spindle axis, an actuating member for the thread-guide movable back and forth in a plane substantially parallel with the spindle axis, means, affording a universal joint connection between the thread-guide and said member, for causing the thread-guide to move back and forth with said member, said thread-guide being adapted to rest against the windings of the cop being formed, means for rotating the spindle and means for causing the back and forth movements of said member, substantially as described.

4. The combination, with a support, a rotary means on which to deposit the windings, a thread-guiding means, one of said means being reciprocatory longitudinally of the axis of winding, and means for actuating the reciprocatory means including a part for varying one of the constants of the reciprocating stroke, of means for controlling said part having a bent guideway engaged by the latter, substantially as described.

5. The combination of a suitable support, a rotary horizontal spindle journaled therein, thread-guiding means comprising a pivoted member movable in a vertical plane, another member also movable in a vertical plane and having a sliding connection with the pivoted member, a guideway for the second member having parts thereof differently distanced from the horizontal plane of the spindle axis, means for rotating the spindle and means for reciprocating the second member, substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

1,063,236. DOOR-HANGER. JOHN WILLIAM ANDERSON, Hamilton, Ontario, Canada, assignor of one-half to Allith Manufacturing Company, Limited, Hamilton, Canada. Filed Feb. 7, 1912. Serial No. 675,932. (Cl. 16—7.)



In a combined door hanger and hinge, a rectangular body portion having an overturned end portion, a wheel journaled between said overturned portion and body portion, an inwardly projecting lug beneath said wheel, a plate pivotally connected to one of the side edges of the rectangular body portion, a second plate pivotally connected to said first mentioned plate to form a hinge, the same being of a width practically corresponding to that of the said body portion, said second mentioned plate being provided with openings, and means passed through the openings for securing the hinge to a door.

1,063,237. WELDED RECEIVER. VICTOR ANDERSON, New York, N. Y., assignor to Western Electric Company, New York, N. Y., a Corporation of Illinois. Filed Apr. 3, 1912. Serial No. 688,200. (Cl. 179—119.)



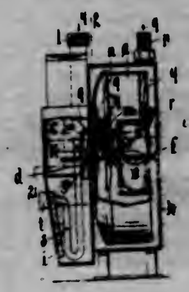
1. In a telephone receiver, the combination of a magnet, a pole piece welded thereto, and a cup clamped between the pole piece and the magnet.

2. In a telephone receiver, the combination of a magnet of the horse-shoe type, pole pieces for said magnet provided with shoulders, said pole pieces being welded to said magnet, a cup clamped between the pole pieces and the magnet by the shoulders on the pole pieces, said cup holding the pole pieces in fixed relation to each other.

3. In a telephone receiver, in combination a cup, and a magnet having soft iron cores provided with shoulders, said cores extending through holes in the cup and being welded to the magnet, whereby the cup is clamped to the magnet by means of the shoulders on said cores.

4. In a telephone receiver, in combination, a magnet system comprising two bar magnets spaced apart, a spacing stud secured between the ends of the magnets, pole pieces for said bar magnets provided with shoulders, said pole pieces welded to the bar magnets at the end remote from the spacing stud, and a cup clamped between the shoulders on the pole pieces and the bar magnets and acting as a spacing means for the pole pieces.

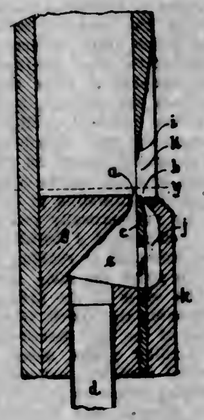
1,063,238. GAS-MEASURING INSTRUMENT OF THE WET-METER TYPE. HERMANN ARON, Wilmersdorf, near Berlin, Germany. Filed Aug. 14, 1912. Serial No. 715,081. (Cl. 73—1.)



1. The combination in a wet gas meter of a non-volatile oil employed as a sealing liquid, and a casing acting as a container for the oil, said meter having an overflow passage arranged considerably above the normal level of the sealing liquid to permit a predetermined rise in the level of the oil, and a double measuring drum for compensating for changes in the level of the oil.

2. In a wet gas meter the combination of a non-volatile oil as a sealing liquid and a casing acting as a container for the oil with a considerably elevated overflow passage, a closable level determining tube and two measuring drums arranged one inside the other on a common axle rigidly secured to each other.

1,063,239. ORGAN-PIPE. ROBERT Y. BARROWS, Rutherford, N. J., assignor of one-half to George H. Harman, Glen Ridge, N. J. Filed July 23, 1912. Serial No. 711,021. (Cl. 84—22.)

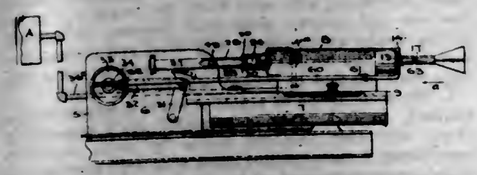


1. A labial organ pipe having means to divide its slit from end to end so that it may discharge the air across the mouth in two parallel sheets, and means to supply air under pressure simultaneously to both divisions of the slit.

2. A labial organ pipe having one mouth, one wind inlet, and two parallel discharge openings for delivering two sheets of air under pressure simultaneously across the mouth.

3. A labial organ pipe having the air passage which forms the wind sheet cut partly in the block and partly in the cap and provided with a separating member placed between the cap and the block and perforated to allow air to enter the passage in the cap from that in the block.

1,063,240. IMPACT-ENGINE. GEORGE B. BENNETT, Denver, Colo. Filed May 4, 1908. Serial No. 430,773. (Cl. 123—10.)



1. The combination with a source of expansible fluid, of a housing communicating therewith, and including principal and auxiliary chambers having port communication with each other, an element disposed for reciprocation in the principal chamber and having a member extending through the auxiliary chamber, means for propelling said element against the fluid contained in said housing, a member movable within the auxiliary chamber, and means provided upon the first-named member for actuating the second-named member during excess movement in the working stroke of said element, whereby the fluid contained in said auxiliary chamber is converted into a cushion to oppose such excess movement.

2. The combination, with a source of expansible fluid, of a housing communicating therewith and including principal and auxiliary chambers having port communication with each other, an element disposed for reciprocation in the principal chamber, means for propelling said element against the fluid contained in said housing, an element disposed for reciprocation in the auxiliary chamber for converting the fluid contained therein into a cushion during excess movement in the working stroke of the first named element, to oppose such movement, and means for actuating the second-named element.

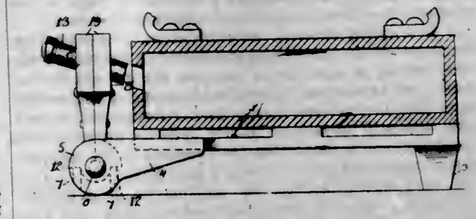
3. The combination, with a housing divided into communicating chambers, of means for conducting motive fluid thereinto, a piston disposed for reciprocation in one of said chambers, and having a rod extending through the other chamber, a piston disposed for reciprocation in the second chamber, means provided upon said rod for engaging the second piston, to actuate the same during excessive movement of the first piston in one direction and thereby convert the fluid contained in said second chamber into a cushion to oppose such excessive movement, and means for propelling said rod and piston in the opposite direction against the action of the fluid, and for liberating the same at a predetermined point in such movement.

4. The combination, with a housing divided into communicating chambers, of means for conducting motive fluid thereinto, a piston disposed for reciprocation in one of said chambers and having a rod extending through the other chamber, a piston disposed for reciprocation in the second chamber, a head provided upon said rod and adapted to impact against the second piston to actuate the same during excessive movement of the first piston in one direction, and thereby oppose such excessive movement, and means for propelling said rod and piston in the opposite direction against the action of the fluid and for liberating the same at a predetermined point in such movement.

5. The combination with a source of expansible fluid, of a housing in communication therewith and including principal and auxiliary compression chambers, communicating by a valve-controlled air inlet and an outlet of less diameter, an element disposed for reciprocation within the principal chamber and having a member projecting through the auxiliary one, a piston, whose area exceeds that of the element, mounted for reciprocation in the auxiliary chamber, means to propel the said element against the fluid contained in the housing, the said member being adapted to impingingly engage the said piston during motion of the said element in opposite direction in excess of a predetermined stroke.

[Claim 6 not printed in the Gazette.]

1,063,241. SAD-IRON HEATER. AUGUST H. BICKEL, Bridgeport, Conn. Original application filed July 21, 1910, Serial No. 573,085. Divided and this application filed Mar. 8, 1912. Serial No. 682,476. (Cl. 126—230.)



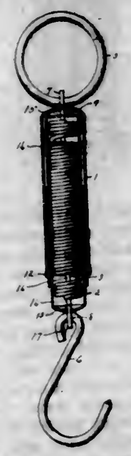
1. A heater for sad irons, comprising a pair of members for supporting a pair of irons, extensions carried by said members, a rod supported by the extensions, a burner support slidably mounted on the rod, and means for preventing the burner support from rotating.

2. A heater for sad irons, comprising a pair of members for supporting a pair of irons, a pair of extensions carried by the members, a burner support adapted for longitudinal travel between the extensions, and means carried by the extensions for supporting the burner support.

3. A sad iron heater comprising a pair of supports for supporting a pair of irons, an extension formed integral with each support and arranged in spaced parallel relation, a rod having its opposite ends connected to the extensions, a burner support slidably mounted on the rod and having shoulders carried thereby, a pair of spaced arms formed upon each opposing face of the extensions, and adapted to coact with the shoulders of the burner support to prevent the same from rotating.

4. A heater for sad irons comprising a plurality of members for supporting irons, a burner slidably supported adjacent the members for successively heating the irons.

1,063,242. SPRING-BALANCE. PLINY CATUCCI, Newark, N. J., assignor to A. F. Meisselbach & Brother, a Corporation of New Jersey. Filed Aug. 13, 1912. Serial No. 714,766. (Cl. 73—46.)



1. In a spring balance, the combination of a balance spring, apertured connecting pieces adjustably secured to the ends of said spring, a tubular case and a scale tube for inclosing said spring, with said connecting pieces extending outside of said case and tube and external means for locking said connecting pieces respectively to said case and tube.

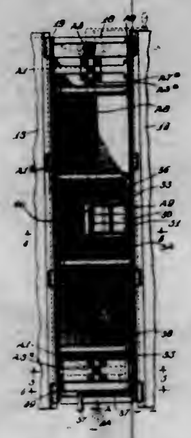
2. In a spring balance, the combination of a tubular case having one of its ends closed and slotted, a flat con-

necting piece having an aperture in one end thereof and lateral shouldered projections thereon, said apertured end adapted to pass through and closely fit the slotted end of said case with said projections bearing upon the inside of said closed end, and a suspending ring in the aperture of said connecting piece outside of said case.

3. In a spring balance, the combination of a scale tube having one of its ends closed and slotted, a flat connecting piece having an aperture in one end thereof and lateral shouldered projections thereon said apertured end adapted to pass through and closely fit the slotted end of said tube, with said projections bearing upon the inside of said closed end, and a supporting hook secured in the aperture of said connecting piece outside of said tube.

4. In a spring balance, the combination of a tubular case having one of its ends closed and slotted, a scale tube having one of its ends closed and slotted, a pair of flat connecting pieces each having an aperture in one end and lateral shouldered projections, said apertured ends respectively adapted to pass through and closely fit the slotted end of said tubular case and of said scale tube respectively, with the corresponding projections bearing upon the inside of the closed end of said tube and case, a spring adjustably secured to said connecting pieces and external means for locking said connecting pieces respectively to said tube and case.

1,063,243. TEMPORARY BINDER. LA RUE R. COPPAGE, Chicago, Ill. Filed Oct. 1, 1912. Serial No. 723,353. (Cl. 129—13.)



1. The combination of a pair of cover members movable relatively to each other, a rotatable shaft mounted between said cover members, means by which said shaft may impart a reciprocating motion to said members, means for manually rotating said shaft in one direction, a spring operatively connected with said shaft for rotating the same in the other direction, and means for controlling the rotation of said shaft by said spring.

2. The combination of a pair of cover members movable relatively to each other, a rotatable shaft mounted between said cover members, means by which said shaft may impart a reciprocating motion to said members, and resilient means associated with said shaft for rotating it in one direction and causing said cover members to separate.

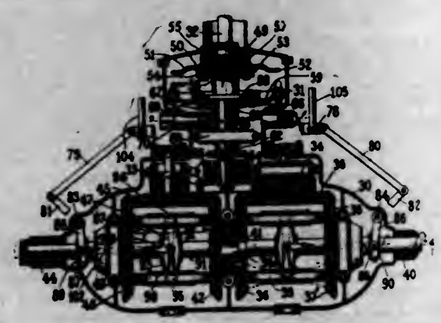
3. The combination of a pair of cover members movable relatively to each other, a rotatable shaft mounted between said cover members, means by which said shaft may impart a reciprocating motion to said members, resilient means associated with said shaft for rotating it in one direction and causing said cover members to separate, and locking means which engage said shaft and prevent rotation thereof and motion of the cover members.

4. The combination of a pair of cover members movable relatively to each other, a rotatable shaft mounted between said cover members, means by which said shaft may impart a reciprocating motion to said members, resilient means associated with said shaft for rotating it in one direction and causing said cover members to separate, locking means which engage said shaft and prevent rotation thereof and motion of the cover members, and a rotatable shaft adapted to release said locking means.

5. The combination of a pair of cover members movable relatively to each other, a rotatable shaft mounted between said cover members, means by which said shaft may impart a reciprocating motion to said members, resilient means associated with said shaft for rotating it in one direction and causing said cover members to separate, locking means which engage said shaft and prevent rotation thereof and motion of the cover members, a rotatable shaft adapted to release said locking means, and means for preventing the operation of said shaft.

[Claims 6 to 13 not printed in the Gazette.]

1,063,244. VARIABLE-POWER TRANSMITTING AND CONTROLLING MECHANISM. LUDWIG MARIA DIETERICH, Kansas City, Mo. Filed Mar. 18, 1908. Serial No. 421,805. (Cl. 74—26.)



1. In combination, a driving member, plurality of members driven thereby at the same speed, in opposite directions of rotation and a rotary driven member, intermediate said driven members and deriving rotary and revoluble motion therefrom.

2. In combination, a driving member, a plurality of members driven thereby at uniform speeds, in opposite directions of rotation, and an intermediate rotary driven member deriving purely rotary or rotary and revoluble movements therefrom.

3. In combination, a driving member, a plurality of members driven thereby at uniform speeds, in opposite directions of rotation, a rotary and revoluble driven member intermediate said driven members, deriving motions therefrom, and means for holding last mentioned driven member in position to derive purely rotary motion, or changing and then maintaining the position of said driven member to derive additional revoluble motions from said driven members moving in opposite directions.

4. A driving member, a plurality of members driven thereby at uniform speeds, in opposite directions of rotation, a rotary driven member, intermediate said oppositely rotating driven members deriving motion therefrom and means for varying the individual driving effect of either of the driven members with respect to the intermediate driven member.

5. A primary driving member, a pair of members deriving motion therefrom at uniform speeds in opposite directions of rotation, a driven member in contact with both of said driving members, and means for holding said driven member in a contacting position to receive an equal driving effect from both of said driving members, or for varying the contacting position of said driven member whereby the driving effect of said driving members will cause revoluble motion of said driven member.

[Claims 6 to 17 not printed in the Gazette.]

1,063,245. DRIVE-CHAIN LINKS. JAMES M. DODGE, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 20, 1910. Serial No. 588,061. (Cl. 74—32.)



1. The combination in a chain of a series of link plates, pivot pins coupling the several sections of the link plates, the outside link plates having portions extending over the ends of the pivots, and transversely arranged clips independent of the pivots for securing the linked plates together.

2. The combination in a chain of a series of link plates, plain cylindrical pins coupling said plates, the outside plates having portions extending over the ends of the pins so as to retain them in position, each link plate having teeth to engage the teeth of the sprocket wheels, with means extending from one side of the chain to the other in the space between the teeth and engaging the end plates, for holding the plates together.

3. The combination in a chain, of a series of link plates, plain pivot pins having an even diameter throughout coupling the link plates, each inner link plate having openings for the pivot pins and having teeth arranged to engage the teeth of the sprocket wheel and offset at the center, with a clip extending transversely between the teeth of a series of link plates, the arms of the clip being bent over and entering the offset portions of the link plates, said end link plates having portions which extend over the ends of the pivot pins holding them in place.

4. The combination in a chain, of a series of links composed of link plates having pivot pin openings and extended bearings at the openings, a series of plain cylindrical pivot pins coupling the links, the pivot pin openings in the intermediate link plates being shaped to receive the extended bearings of adjoining links, end link plates having portions extending over the ends of the pivot pins leaving U-shaped slots for the reception of extended bearings of adjoining link plates, with clips extending across the chain in the space between the teeth, the clips engaging the end link plates.

5. The combination of a link consisting of a series of plates arranged side by side, each plate having two teeth; with a clip extending transversely in the space between the teeth; and having arms bearing upon the outside plates and holding the plates in position.

[Claims 6 and 7 not printed in the Gazette.]

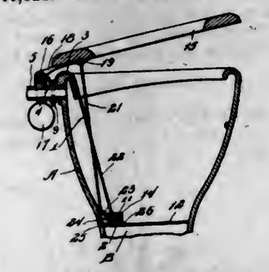
1,063,246. APPURTENANCE TO HEATERS OF FREIGHT-CARS. WILLIAM E. EASTMAN, Boston, Mass. Filed Apr. 6, 1911. Serial No. 619,445. (Cl. 237—3.)



1. The combination with an exterior heater for freight cars, of an air receptacle located transversely of and beneath the car and having openings in the front and rear sides of each end portion of the said receptacle; a deflecting wall obstructing the direct passage of air through the openings at each end portion; whereby air entering the receptacle regardless of the force or direction of the air, will not objectionably affect the air within the receptacle; and means whereby air may flow to the flame of the heater.

2. The combination with an exterior heater for freight cars, of a cylindrical air receptacle, located transversely of the car, and having a cylindrical projecting member at each end; each projecting member having openings in the front and rear sides thereof; a deflecting member extending inwardly within each projecting member, whereby a current of air entering an opening, is deflected by said members, and must pass into the receptacle; and a conduit leading from the lower portion of the receptacle to the burner.

1,063,247. STRAINER FOR CLOSET-BOWLS. ANTHONY EBERT, Baltimore, Md. Filed Jan. 8, 1913. Serial No. 740,823. (Cl. 4—20.)



1. The combination with a closet bowl, and a swinging seat therefor, of a supporting arm extending into the bowl, a strainer pivotally mounted on said arm for movement toward or from the throat of the bowl, and an operating rod directly connecting said strainer with the swinging seat.

2. The combination with a closet bowl, and a swinging seat therefor, of a supporting arm extending into the bowl, a strainer pivotally mounted for movement toward and from the throat of the bowl, and an operating rod pivoted at one end to the strainer and pivotally and slidably connected at its opposite end with the seat.

3. The combination with a closet bowl structure including a swinging seat, of a supporting arm depending into the bowl, a strainer pivoted to said arm for movement toward and from the throat of the bowl, and a direct operating connection between the strainer and swinging seat.

4. The combination with a closet bowl structure including a swinging seat, of a supporting arm depending into the bowl, a strainer pivoted to said arm for movement toward and from the throat of the bowl, and a rod in guided connection with said arm and coupling the strainer to the seat for operation thereby.

5. The combination with a closet bowl structure including a swinging seat, of an arm depending downwardly and forwardly at an angle into the bowl, a strainer pivoted to said arm for movement toward and from the throat of the bowl, and an operating rod extending at an angle to and in guided connection with the arm, said rod being coupled to the swinging seat and pivotally connected with the strainer at a point in rear of its pivotal connection with the arm.

[Claims 6 to 10 not printed in the Gazette.]

1,063,248. FLUX FOR COATING METAL ARTICLES. SAMUEL EDWARDS, Pittsburgh, Pa. Filed Feb. 24, 1913. Serial No. 750,449. (Cl. 75—187.)

1. A flux for use in coating metal articles formed by adding zinc, aluminum and sal ammoniac to hydrochloric acid in substantially the proportions stated.

2. The herein described method of forming a flux for coating with lead, which consists in dissolving zinc in suitable quantity of hydrochloric acid, mixing aluminum and sal ammoniac in a substantially equal quantity of hydrochloric acid, and then mixing the two solutions.

1,063,249. PROTECTOR. Paul R. Emmons, New York, N. Y., assignor to Western Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 16, 1909. Serial No. 483,945. (Cl. 175—30.)



A protector for electrical circuits comprising two discharge plates, one being of copper and the other of an alloy of copper, a thin sheet of insulating material having an opening therethrough located between said plates; and means for clamping said plates and sheet together.

1,063,250. WEED-EXTERMINATOR. Christina Felt, Brocket, N. D. Filed Sept. 1, 1911. Serial No. 647,212. (Cl. 55—109.)



1. In a weed exterminator, a main frame suitably supported and provided with a power transmission axle, a carrier chute mounted on said main frame having one end inclined for contact with the ground, transverse paddles arranged on shafts operatively connected and mounted in the inclined portion of the carrier chute, rotary knives mounted on a shaft journaled in the carrier chute and operatively connected with the last named shafts and with the power transmission axle, a transmission shaft mounted in the rear end of the carrier chute operatively connected with the rotary knife shaft, a hopper, a stub shaft operatively connected with the said transmission shaft and depending within the said hopper and rotary knives terminally carried by the said stub shaft.

2. In a weed exterminator, a main frame suitably supported and provided with a power transmission axle, a carrier chute mounted on said main frame having one end inclined for contact with the ground, transverse paddles arranged on shafts operatively connected and mounted in the inclined portion of the carrier chute, rotary knives mounted on a shaft journaled in the carrier chute and operatively connected with the last named shafts and with the power transmission axle, a transmission shaft mounted in the rear end of the carrier chute operatively connected with the rotary knife shaft, a hopper, a stub shaft operatively connected with the said transmission shaft and depending within the hopper, rotary knives terminally carried by the said stub shaft; an auxiliary frame secured to the rear end of the main frame, transverse shafts journaled in the auxiliary frame, rollers terminally carried by the last named shafts, a rocker arm connected to the last named shafts, a lever connected to the said rocker arm and tooth bars, provided with teeth, connected together and connected with the aforesaid rollers.

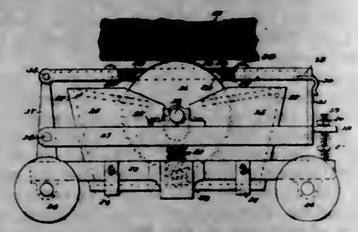
1,063,251. WATCH-MOVEMENT. Joseph A. Fasuno, Waltham, Mass., assignor to The Keystone Watch Case Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 10, 1911. Serial No. 659,462. (Cl. 58—140.)

For use in a watch movement, an impulse roller provided with a central opening, a balance staff tapered to be driven into said opening to form a force fit, portions of the metal of said roller between the periphery thereof and said central opening being removed thereby forming



a continuous and elastic wall around said opening and permitting said balance staff to be assembled with said roller without danger of cracking the latter.

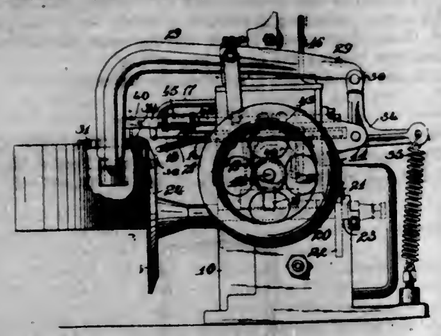
1,063,252. MACHINE FOR PRINTING CARPET-YARNS. Victor Fussgänger, Höchst-on-the-Main, Germany, assignor to Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, a Corporation of Germany. Filed May 26, 1911. Serial No. 629,717. (Cl. 101—27.)



1. In an apparatus for printing carpet-yarns, a color-disk having its periphery uniformly hatched, pitted or roughened, and a scraper or scrapers adjacent to said pehiphery.

2. In an apparatus for printing carpet-yarns, the combination of a yarn-drum, a color-disk bearing on said drum and having its periphery uniformly hatched, pitted or roughened, and a scraper or scrapers adjacent to said periphery.

1,063,253. SEWING-MACHINE. Welcome P. Gammons, Jr., New York, N. Y. Filed Aug. 24, 1911. Serial No. 645,862. (Cl. 112—81.)

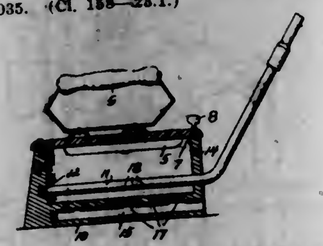


1. A sewing machine comprising a support for the material to be sewed, a reciprocating needle and its operating mechanism, an awl-rod, a lever swinging at the end of the awl-rod, a pin in the awl-rod, a sleeve sliding on the awl-rod and having a slot to receive the pin, the sleeve being adapted to inclose both the rod and the lever to hold the lever in its operative position, and an awl secured to the lever.

2. A sewing machine comprising a support for the material to be sewed, a reciprocating needle and its operating mechanism, an awl-rod, a lever swinging at the end of the awl-rod, a pin in the awl-rod, a sleeve sliding on the awl-rod and having a slot to receive the pin, the sleeve

being adapted to inclose both the rod and the lever to hold the lever in its operative position, a plate adjustably secured on the lever, and an L-shaped awl adjustably secured to the plate, the awl being vertically adjustable on the plate and the plate being horizontally adjustable on the lever.

1,063,254. SELF-HEATING SAD-IRON. Charles Gunn, Jr., Mount Royal, N. J. Filed Dec. 28, 1912. Serial No. 739,035. (Cl. 158—23.1.)



1. An iron comprising a body having a base of uniform vertical thickness throughout and edge walls, the inner surfaces of which are at right angles to the plane of the inner surface of the base, said base having passages extending longitudinally thereof and located between the upper and lower surfaces of the base and terminating at one end thereof, said passages also being located at the opposite sides of the median longitudinal dimension of the base and spaced from the inner surfaces of the edge walls, said base also having orifices which communicate with the said passages and the interior of the body, a tube extending along the median longitudinal dimension of the body and spaced from the base and provided at its lower portion with jet orifices disposed toward the inner ends of the first mentioned orifices, the vertical walls having openings at their upper portions and a cover for the base.

2. In a sad iron, a burner extending longitudinally therein above the base thereof and having opposite series of jet orifices in its lower face, the front end of the burner being closed by the point wall of the sad iron and the other end passing through the rear wall of the said iron, the base being provided with parallel air passages and parallel rows of air orifices communicating with said passages and with the interior of the said iron, said air orifices being disposed on opposite sides of the burner and in the range of the jet orifices, and the air passages communicating with the atmosphere through the rear end of the sad iron.

1,063,255. COMBINED WASTE-DETECTOR AND WATER-METER. Frederick W. Hanks, Cleveland, Ohio. Filed Nov. 20, 1905. Serial No. 288,167. (Cl. 234—34.)



1. The combination with a water main and service pipe connected therewith, of means for detecting waste from the pipe consisting of a valve in the pipe arranged to rise and fall freely on its seat according to the water flow in the pipe, and having the greatest exposed area upon the outlet side, a record sheet or roll, a recording point adapted to be in contact with said roll, said point being operatively connected with said valve, a rod to which said point is attached, a lever pivoted to said rod, a stop rod operatively connected with said lever, and clock mechanism adapted to operate said roll, said clock mechanism having an escapement in accordance with the movements of said point.

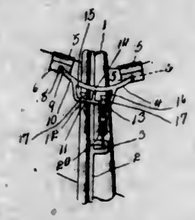
2. In a recording device, the combination with a movable rod, and a recording point attached thereto, of a propelling roller, having points in its periphery adapted to engage and hold a record sheet, a holding roll, and a winding roll therefor, a friction device for the holding roll and a winding spring for the winding roll, clock mechanism for operating said propelling roller at a predetermined rate of speed, and a stop rod and lever adapted to stop and release the said clock mechanism and mechanically connected with said movable rod to which the said recording point is attached.

1,063,256. LIFE-PRESERVER. Charles M. Hannis, Hudson, Mass., assignor of one-half to Barnett Matross, Boston, Mass. Filed July 24, 1912. Serial No. 711,301. (Cl. 9—20.)



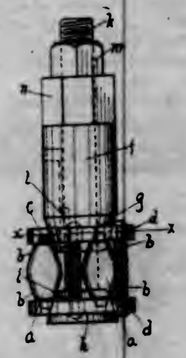
A garment, comprising a body portion, said garment being provided with an open end, a cap for said open end, said garment being provided with an opening, a tube formed with a collar which is secured to the garment, the portion of said tube which is disposed exteriorly being curved downwardly, a metallic sleeve disposed in the portion of said tube which is arranged interiorly of the garment, and means arranged to embrace the head of the wearer to provide an air space.

1,063,257. BRIDGE-COLLAR PAD. Samuel E. Harsh, Wabash, Ind. Filed Aug. 27, 1912. Serial No. 717,298. (Cl. 54—67.)



A bridge collar pad comprising a pair of webbed straps having arranged in each of the ends thereof a reinforcing metallic strip, a curved connecting bar riveted to the adjacent ends of said webbed straps, a lower bar formed on said connecting bar and having a central partition connecting the said connecting bar with the said lower bar to provide two open spaces, an upright element formed on either side of the said central partition and extending upwardly into each of said open spaces, each upright element being curved inwardly and provided at its upper end with an elongated head adapted to receive a chain, each of said upright elements on said lower bar being at a sufficient distance from said central partition to accommodate a strap on said lower bar between said central partition and either of said upright elements, substantially as described.

1,063,258. DEVICE FOR EXPANDING PIPES, TUBES, &c. WILLIAM R. HAYSOM, Quincy, Mass. Filed Sept. 27, 1907. Serial No. 394,780. (Cl. 153—82.)



1. The combination of a plurality of rollers constructed with tapered ends, a path for said rollers made in two parts each having tapered surfaces adapted to bear upon tapered surfaces at one end of each of said rollers, a key to prevent the rotation but permit lateral movement of the two parts of said path with relation one to the other, and means for changing the lateral positions of the two parts of said path and thereby change the effective diameter of said path in relation to said rollers, substantially as described.

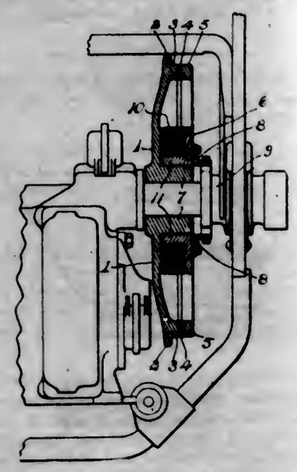
2. An expander, including, in combination with a plurality of rollers having conical ends, two parts constructed with oppositely inclined conical surfaces adapted to bear upon the conical surfaces of said rollers, a key arranged to prevent rotation but permit lateral movement of said two parts upon one another and means for forcing said two parts toward one another, substantially as described.

3. An expanding device comprising a plurality of expanding rollers each tapering in opposite directions from the central diametrical plane, a spindle constructed with conical surfaces corresponding to and adapted to bear upon one of the taper ends of each of said rollers provided with threads at the other end thereof, a sleeve traversed by said spindle constructed with tapered surfaces at one end thereof adapted to bear upon tapered surfaces at the other ends of said expanding rollers, a key adapted to prevent rotation of said sleeve with respect to said spindle, and a nut engaging with the threads upon said spindle whereby longitudinal movement of said sleeve upon said spindle may be produced substantially as and for the purposes described.

4. An expanding device comprising a plurality of expanding rollers each constructed with double conical surfaces and having a pivot at each end thereof; a cage constructed with elongated bearings to receive said pivots upon said rollers; a spindle threaded at one end thereof and constructed at the other end thereof with conical surfaces adapted to engage with the conical surfaces at one end of said rollers; a sleeve constructed with conical surfaces to engage with the conical surfaces of said rollers at the other ends thereof; a key to prevent relative movement of said spindle with respect to said sleeve, and a nut whereby the conical surfaces upon said sleeve may be caused to approach the conical surfaces upon said spindle; substantially as and for the purposes described.

5. An expander, including in combination with a plurality of rollers constructed with working surfaces which are surfaces of spheres whose centers are at the axes of the rollers and driving surfaces which are oppositely inclined conical surfaces whose axes coincide with the axes of the rollers, a path for said rollers in two parts, each adapted to bear upon the conical driving surfaces of said rollers, and means for varying the relative positions of the two parts of said path to change the effective diameter thereof in relation to said rollers, substantially as described.

1,063,259. MAGNETIC WHEEL. JOHN O. HEINZE, Jr., Detroit, Mich. Filed June 19, 1912. Serial No. 704,547. (Cl. 105—175.)



1. A magnetic wheel comprising a body formed of magnetic metal having an inner tread portion, an outer tread portion formed of magnetic material, a non-magnetic tread portion interposed between said inner and outer tread portions, a member encircling the wheel hub and having a laterally extending portion with its outer side in juxtaposition to one of the tread portions, and a magnetic coil carried by said member adjacent the center of the wheel.

2. A magnetic wheel comprising a hub and body formed of magnetic material with a tread portion upon the body forming part of the wheel tread, a ring member forming a part of the wheel tread, an intervening ring of non-magnetic material securing the tread portion and ring together, a member having a sleeve encircling the hub and a portion extending laterally therefrom with its end adjacent the inner side of the ring, and a magnetic coil on the sleeve.

3. A magnetic wheel comprising a body portion formed of magnetic material and a rim formed of an inner tread portion integral therewith and an outer tread portion of magnetic material magnetically insulated from said inner portion, a yoke having a sleeve encircling the wheel hub and a laterally extending portion with its outer end adjacent the inner periphery of the outer tread portion, and a coil encircling the sleeve.

4. A magnetic wheel comprising a body of magnetic material, an inner tread portion integral therewith, an outer tread portion of magnetic material and an intervening ring of non-magnetic material intimately securing the tread portions together; a yoke having a laterally extending portion surrounding the hub of the wheel and with its outer end adjacent the inner side of the outer tread portion, and a field coil encircling the portion of the yoke surrounding the hub, the coil and yoke being supported substantially within the plane of the wheel, and means for holding the yoke against turning with the wheel.

1,063,260. SASH-LOCK. FREDERICK A. HERMAN, San Francisco, Cal. Filed Aug. 9, 1912. Serial No. 714,151. (Cl. 16—146.)

A device of the character described comprising a plate provided with upper and lower openings, pivot lugs formed upon the inner face of said plate upon opposite sides of said upper opening, a stop pivotally mounted between said lugs and adapted to pass through the upper opening and having its lower end portion formed into a hook, perforated lugs positioned above and below the lower opening, a detent passing through said perforated lug and having its lower end portion reduced, a spring coiled about the reduced end portion of said detent and normally holding said shaft in a raised position to engage said stop for holding the same in an adjusted position,



and means extending from said detent through the lower opening to permit said detent to be moved vertically for permitting adjustment of said stop.

1,063,261. CAR-SEAL. GALEN F. HIX, Portland, Me., assignor of one-half to himself and one-half to Beverly H. Kitchen, Portland, Me. Filed July 1, 1912. Serial No. 706,918. (Cl. 70—99.)



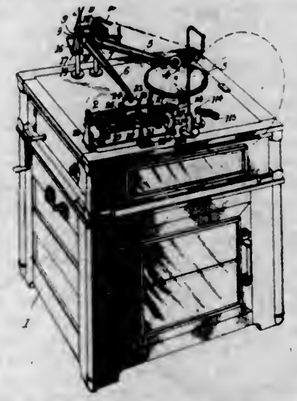
A seal of the class described comprising a strip having an opening in its free end, a barbed lip struck up from the strip at its opposite end, an integral flap formed at one side of said opposite strip end and comprising a portion adapted to overlie one end of the strip, a portion to be passed beneath the end of the strip to form a pocket, and a raised portion on said flap to arch the said up struck lip thereof, the folds thus formed being compressed longitudinally along the two sides and across the strip, and a double bend integrally formed adjacent to the free end of the strip, one of the folds of which is left open to receive the forward edge of the overlying portion of the integral flap against which it abuts when the strip is looped, the free end of the strip being inserted under the overlying portion of the flap and into the flattened part thereof, where it is forced into engagement with the barbed lip.

1,063,262. COMBINED PHONOGRAPH AND GRAPHOPHONE AND OPERATIVE MECHANISM THEREFOR. JOHN HOSLER, Llewellyn, Pa., assignor to William O. Hosler, Llewellyn, Pa. Filed Feb. 29, 1912. Serial No. 680,716. (Cl. 181—3.)

1. In a combined phonograph and graphophone having a cylinder support and a disk record support and means for actuating the same, the combination of a single horn transmitter therefor; a tone arm for each of said supports; a common means for mounting said arms; and means for shifting said horn to communicate with either of said arms, substantially as described.

2. In a combined phonograph and graphophone having a cylinder support and a disk record support with means for supporting and actuating the same; the combination of a single horn transmitter therefor; a tone arm for each of said supports; a supporting plate constructed with guideways and having apertures communicating with said tone arms; and a plate slidably mounted within said guideways and having connected thereto one end of the horn transmitter, said plate adapted to be shifted to bring the horn transmitter into communication with either of said tone arms, substantially as described.

3. In a combined phonograph and graphophone having a cylinder support and a disk record support with means for supporting and actuating the same; the combination of a single horn transmitter therefor; a tone arm for each of said supports; a supporting plate constructed with guideways and having apertures communicating with said tone arms; a plate slidably mounted within said guideways on said supporting plate and provided with an aperture; means for swivelly connecting one end of the horn transmitter to said slidable plate; and a device for manually shifting the slidable plate whereby to bring the swiveled end of said horn transmitter into communication with either of the tone arms, substantially as described.



4. In a combined phonograph and graphophone having a cylinder support and a disk record support with means for supporting and actuating the same; the combination of a single horn transmitter therefor; a tone arm for each of said supports; a supporting plate constructed with guideways and having apertures communicating with said tone arms; a plate slidably mounted within said guideways on said supporting plate and provided with an aperture; means for swivelly connecting one end of the horn transmitter to said slidable plate; a lever having a link connection with said slidable plate for manually shifting said plate whereby to bring the horn transmitter into communication with either of said tone arms; and an arcuate plate having stops adapted to limit the movement of said lever.

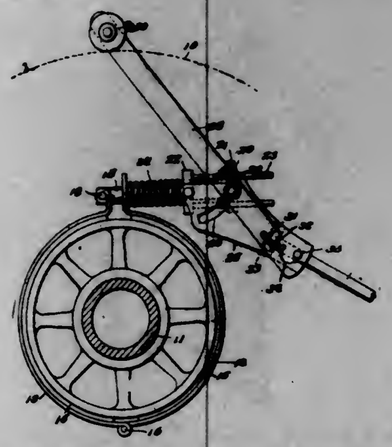
5. In a combined phonograph and graphophone having a cylinder support and disk record support with means for supporting and actuating the same; the combination of a single horn transmitter therefor; a tone arm for each of said supports; a supporting plate; strips secured on said plate providing guideways; a plate slidably mounted on said supporting plate within said guideways, said slidable plate having an aperture and a countersunk portion adapted to receive one end of the horn transmitter; an arcuate plate secured to said slidable plate and retaining said transmitter horn end within the countersunk portion; a lever having a link connection with said slidable plate adapted for shifting said plate whereby to bring said transmitter horn into communication with either of said tone arms; and an arcuate plate provided with stops for limiting the movement of said lever, substantially as described.

1,063,263. TENSION-REGULATING DEVICE FOR WEB-PRESSES. WALTER W. HOWE, New York, N. Y. Filed June 20, 1912. Serial No. 704,806. (Cl. 242—75.)

1. In a tension reguluating device, in combination with a shaft and a roll of paper, shaft engaging means, a bar carried thereby, a slidable member on said bar, a spring between said sliding member and said shaft engaging member, a lever carried by said bar, a roller mounted at the end of said lever adapted to engage the periphery of a roll of paper and said lever moving said slidable member to control the action of the shaft engaging means.

2. In a tension regulating device, in combination with a shaft having a brake-wheel thereon, a roll of paper on

said shaft, brake-bands adapted to frictionally engage said brake-wheel, a bar carried by one of said brake-bands, said bar receiving the free end of the other brake-band, a fixed head carried by said bar, a slidable head on said bar between the fixed head and brake-band, a spring between said slidable head and brake-band, a lever fulcrumed on the fixed head and engaging the periphery of a roll of paper, said lever being awung as the diameter of the roll decreases and said lever operating means for moving said slidable head.

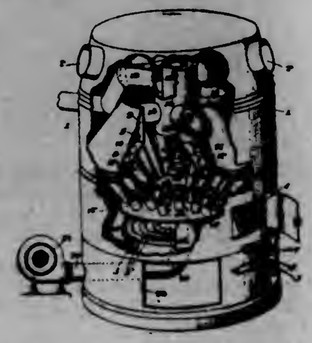


3. In a tension regulating device, in combination with a shaft having a roll of paper and brake-wheel thereon, brake-bands frictionally engaging said brake-wheel, a bar pivoted to one of said brake-bands and receiving the end of the other brake-band, a fixed head on said bar, a slidable head between said fixed head and brake-bands, a spring between said slidable head and brake-bands, plates carried by said slidable head having eccentric slots therein, pins carried by said fixed head passing through said eccentric slots, a lever carried by one of the pins in the fixed head, said lever extending from said pin, to engage the periphery of a roll of paper, a pin carried by one of the plates pivoted to one of said slidable heads and said lever extending from said pivoted pin to engage the said pin carried by one of the plates and means for limiting the movement of the lever in one direction.

4. In a tension regulating device, in combination with a shaft having a roll of paper and a brake-wheel thereon, brake-bands having one end thereof carried by a fixed point and surrounding said brake-wheel to frictionally engage the same, a bar pivoted to one of said brake bands, said bar receiving a bifurcated end of the other brake-band, a fixed head at the end of said bar, a slidable head between said fixed head and the brake-band, a spring between said sliding head and brake-bands, guides carried by said slidable head working through said fixed head, plates pivoted to said slidable head and having eccentric slots therein, pins extending from one of said plates, pins from a fixed head to engage said eccentric slots in the pivoted plates, a lever fulcrumed on one of the pins extending from the fixed head, said lever being adapted to engage the periphery of a roll of paper to one side of the fulcrum point and said lever being slotted and notched to receive the pins carried by one of the side plates, a head between the plates pivoted to said slidable member and a handle extending therefrom.

1,063,264. GAS-FURNACE. LOUIS JACOBSON, Los Angeles, Cal. Filed Feb. 3, 1913. Serial No. 746,237. (Cl. 126—116.)

1. A gas furnace comprising a casing, an outlet flue for products of combustion extending within the casing, walls extending inwardly and upwardly from the sides of the casing, a vertically extending wall connecting the inner ends of the aforesaid walls and forming therewith a chamber, pipes establishing communication from said chamber to said outlet flue, a deflector cone in the casing below the aforesaid chamber, tubes extending from said deflector cone obliquely upward and outward to said chamber, and opening at their lower ends into the space below said cone, and at their upper ends into said chamber, and a burner located beneath said cone, said casing being provided with air inlet means below said cone and with air outlet means above said chamber.



2. A gas burner comprising a casing, walls extending inwardly and upwardly from said casing, and forming therewith an annular chamber, pipes extending inwardly from said chamber, a drum communicating with said pipes, an outlet flue communicating with said drum, a deflector cone below said chamber, tubes opening at their lower ends into the space below said cone and extending upwardly and outwardly and opening at their upper ends into said chamber, a burner beneath said cone, said casing having an air inlet opening at the lower portion thereof, and air outlet means at the upper portions thereof.

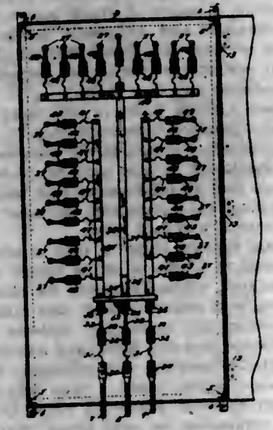
3. A gas furnace comprising a casing, an outlet flue for products of combustion, extending within the casing, walls extending inwardly and upwardly from the sides of the casing a vertically extending wall connecting the inner ends of the aforesaid walls and forming therewith a chamber, pipes establishing communication from said chamber to said outlet flue, a deflector cone in the casing below the aforesaid chamber, tubes extending from said deflector cone obliquely upward and outward to said chamber, and opening at their lower ends into the space below said cone, and at their upper ends into said chamber, a burner located beneath said cone, said casing having an air inlet at the lower portion thereof, and air outlet means at the upper portion thereof, and a fan rotatably mounted on a vertical axis in said casing, above said cone.

4. A gas furnace comprising a casing, an outlet flue for products of combustion, extending within the casing, walls extending inwardly and upwardly from the sides of the casing a vertically extending wall connecting the inner ends of the aforesaid walls and forming therewith a chamber, pipes establishing communication from said chamber to said outlet flue, a deflector cone in the casing below the aforesaid chamber, tubes extending from said deflector cone obliquely upward and outward to said chamber, and opening at their lower ends into the space below said cone, and at their upper ends into said chamber, a burner located beneath said cone, said casing having an air inlet at the lower portion thereof, air outlet means at the upper portion thereof, a fan rotatably mounted on a vertical axis in said casing, above said cone, a pipe extending through the casing, and upwardly through said cone and below said fan, and a blower connected to said pipe to force air therethrough.

1,063,265. ELECTRIC-SERVICE BOARD. NELS JOLEEN, Chicago, Ill. Filed Aug. 25, 1911. Serial No. 645,984. (Cl. 247—13.)

1. Apparatus of the class described, comprising a cabinet, a panel arranged vertically therein, and a set of

rectangular plates forming a portion of the side wall of the cabinet, said plates being rectangular in outline and located edge to edge and being individually removable for the purpose described.

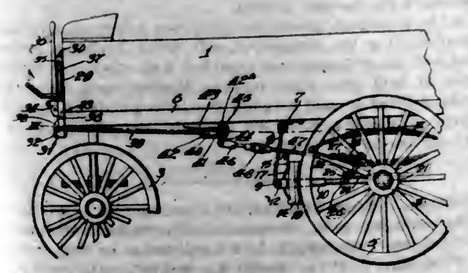


2. An electric service apparatus comprising a cabinet, a panel board arranged vertically therein between the front and the back thereof, electric connections on the front of the board and plates forming a portion of the side walls of the cabinet behind the panel board, said plates being rectangular in outline and located edge to edge and being individually removable for the purpose described.

3. An electric service apparatus comprising a cabinet of fixed size, a panel board therein located between the front and back, electrical connections on the front of the board, a plurality of plates forming a portion of a wall of the cabinet behind the panel, said plates being rectangular in outline and individually removable and fastening means for each of said plates accessible from the outside of the cabinet.

4. Apparatus of the class described comprising a cabinet consisting of side walls, a top wall and a bottom wall reinforced by bars, a door for the front of the cabinet, a panel arranged vertically within the cabinet between the front and rear edges thereof, bus bars attached to the front of the panel, terminal blocks arranged parallel to the bus bars, there being an aperture in the panel adjacent to each of said terminal blocks, and a set of removable plates rectangular in outline and removably secured to the reinforcing bars of the cabinet edge to edge, said plates being apertured substantially as described.

1,063,266. VEHICLE-BRAKE. GERHARD H. KANKE, St. Louis, Mo. Filed July 19, 1911. Serial No. 639,350. (Cl. 21—8.)



1. In a device of the character described, the combination with a pair of rods through which power is transmitted to a braking system, one of said rods being provided with a cross head, of a link pivotally connected intermediate of its ends with said cross head, and at one end pivotally connected with the other rod, and means for engaging the free end of said link to impart a swinging movement thereto during its reciprocatory movement under the action of said cross head.

2. In a device of the character described, the combination with a power transmitting connection rod provided with a cross head, of guides for said cross head, a link pivotally connected to said cross head intermediate of its ends, a system of brake levers operably connected to one end of said link, and means connected with said cross head guides for impinging the free end of said link to oscillate it about its pivot as said pivot reciprocates.

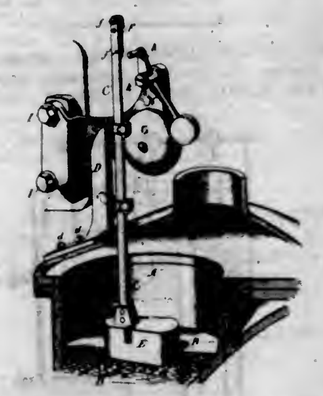
3. In a device of the character described, the combination with an axle, of a bracket provided with arms engaging the upper and lower faces of said axle, said arms being provided with upwardly and downwardly deflected ends to hold the bracket against displacement, an arm extending longitudinally of said bracket, means for clamping the last said arm to said axle, and a brake operating lever pivotally mounted on said bracket.

4. In a device of the character described, the combination with a system of brake operating levers including a power transmitting connecting rod, of a transmission lever pivotally connected to one end of the connecting rod, said transmission lever being pivotally mounted on a moving axis and connected to said system of brake operating levers, and means for applying power to said power transmitting connecting rod.

5. In a device of the character described, the combination with a braking apparatus including a power transmitting connecting rod, of an operating lever pivotally mounted, a transmission lever pivotally connected at one end with said connecting rod, said transmission lever being pivotally supported by said operating lever at a distance from the pivotal axis of the latter, and means for movably retaining the upper end of said transmission lever.

[Claims 6 to 8 not printed in the Gazette.]

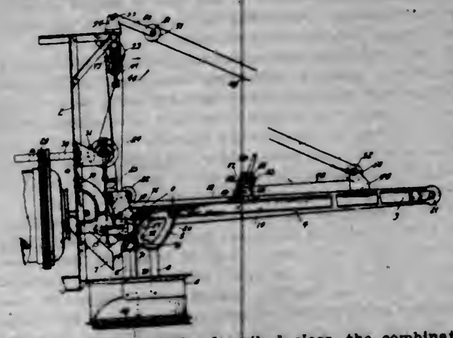
1,063,267. LINE-CASTING MACHINE. DAVID S. KENNEDY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed May 7, 1910. Serial No. 560,022. (Cl. 22—70.)



1. The fixed bracket H, having the bell and the striker thereon, in combination with the support D attached to the movable pot A, the vertically guided rod C, the float E attached thereto, and the dog F pivoted to said rod.

2. In a line-casting machine, the combination of a bell and a movable striker, with a movable pot and the vertically guided rod carried thereby, said rod provided with a float and a striker actuating device arranged to act by direct contact upon the striker; whereby the movement of the pot effects the movement of the striker and rings the bell.

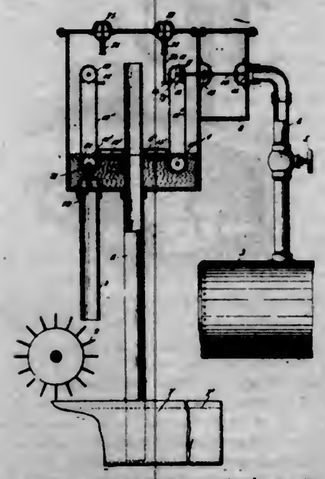
1,063,268. CONCRETE-DISTRIBUTER. PHILIP A. KOEHRING, Milwaukee, Wis. Filed Sept. 7, 1909. Serial No. 516,451. (Cl. 214—14.)



1. In a device of the described class, the combination of a vertical frame, manually actuated means for revolving said frame a partial revolution around its pivotal support, a crane pivotally supported at one end from said frame, a track carried by said crane, a carriage mounted upon said track, a cable suspended from said carriage, a receptacle suspended from said cable, means for communicating a forward and backward movement to said carriage, and means carried by said crane for raising and lowering the same.

2. In a device of the described class, the combination of a vertical frame, a plurality of pulleys connected with the respective ends of said frame, means for raising and lowering the pulleys, supported from the upper end of said frame, and thereby regulating the tension of a cable, manually actuated means for revolving said frame a partial revolution around its pivotal support, a crane pivotally supported at one end from said vertical frame, a track carried by said crane, a carriage mounted on said track, a cable suspended from said carriage, a receptacle suspended from said cable, a drum mounted on said crane, a pulley connected with the upper end of said vertical frame, a cable communicating between said drum and pulley, and a crank for revolving said drum, whereby as said drum is revolved in opposite directions, said crane is adapted to be raised and lowered, all substantially as and for the purpose specified.

1,063,269. STEAM VACUUM-PUMP. GEORGE E. LOVEJOY, Boston, and JOHN G. ROBINSON, Melrose, Mass. Filed Feb. 16, 1912. Serial No. 678,027. (Cl. 160—1.)



1. In a steam vacuum pump, a tank, a steam chamber connected thereto, a source of steam supply connected to said steam chamber, and means for closing the connection between said steam chamber and tank and simultaneously opening the connection between said steam chamber and source, and vice versa.

2. In a steam vacuum pump, a tank, a steam chamber connected thereto, a source of steam supply connected to said steam chamber, and automatic means for closing the connection between said steam chamber and tank and simultaneously opening the connection between said steam chamber and source, and vice versa.

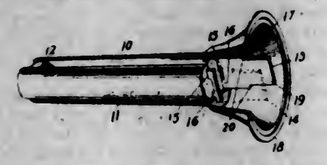
3. In a steam vacuum pump, a tank arranged to hold liquid, a steam chamber connected thereto, a source of steam supply connected to said steam chamber, and means operated by the liquid in said tank for closing the connection between said steam chamber and tank and simultaneously opening the connection between said steam chamber and source, and vice versa.

4. In a steam vacuum pump, a tank, a steam chamber connected thereto, a source of steam supply connected to said steam chamber, automatic means for closing the connection between said steam chamber and tank and simultaneously opening the connection between said steam chamber and source, and vice versa, and manually operated means for initially operating said automatic means.

5. In a steam vacuum pump, a tank arranged to hold liquid, a steam chamber connected thereto, a source of steam supply connected to said steam chamber, means operated by the liquid in said tank for closing the connection between said steam chamber and tank and simultaneously opening the connection between said steam chamber and source, and vice versa, and manually-operated means for initially operating the liquid-operated means.

[Claims 6 to 12 not printed in the Gazette.]

1,063,270. WELDED RECEIVER. JOHN J. LYNG, Yonkers, N. Y., assignor to Western Electric Company, New York, N. Y., a Corporation of Illinois. Filed Apr. 3, 1912. Serial No. 688,147. (Cl. 179—119.)



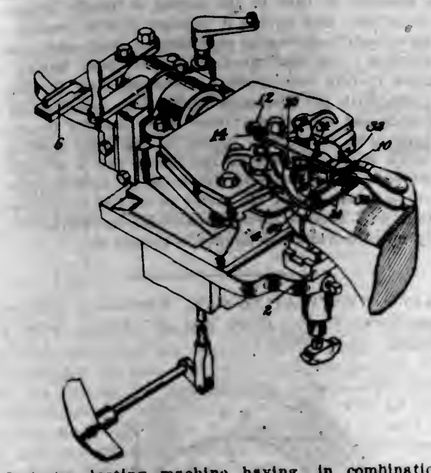
1. In a magnet system for telephone receivers, the combination of the bar magnets, pole-pieces having forked ends welded to the bar magnets, and an inclosing cup clamped between the pole-pieces and the bar magnets.

2. In a magnet system for telephone receivers, the combination of two bar magnets spaced apart and parallel to each other, means for maintaining the relation of the bar magnets to each other consisting of a heel-piece secured to the bar magnets at one end thereof, and a perforated cup at the end remote from the heel-piece, pole-pieces having forked ends electrically welded to the bar magnets, said forked ends passing through the perforations in the cup whereby the cup is permanently attached to the magnet system.

3. In a magnet system for telephone receivers, the combination of a bar magnet, a pole piece having a forked end and an inclosing cup provided with slots, the forked ends of said pole piece passing through said slots and being secured to said magnet, the forked ends of the pole piece coöperating with the slots in the cup to secure the cup to the bar magnet.

1,063,271. TOE-SPREADER. ALBERT A. MACLEOD, Swampscott, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 9, 1911. Serial No. 613,297. (Cl. 12—14.)

1. A toe lasting mechanism having, in combination, a vertically movable head, inwardly moving wipers thereon, an expansible spreader, and manually actuated mechanism for positively spreading the upper out over the wipers and clamping it thereon with a degree of force controlled by the operator during the vertical movement of the head for stretching the upper.



2. A toe lasting machine having, in combination, a vertically moving head, inwardly moving wipers thereon; a spreader pivotally mounted upon the toe-head, and arranged for manual manipulation against the upstanding margin of the toe portion of the upper to clamp the same against the wipers with a force controlled by the operator during the movement of the wipers.

3. A lasting machine having, in combination, a vertically moving toe-head, inwardly moving wipers, a spreader and operating means for forcing the upstanding marginal portion of the upper against the wipers at the end of the toe, and additional means for thereafter progressively advancing the operative action of the spreader toward the ends of the wipers at the sides of the toe.

4. A device of the class described, comprising spreader plates pivoted together and shaped, when their free ends are moved outwardly, to conform to the curve of the wipers, manually operated means for moving the spreader forwardly over the wipers and down upon them, and means also manually operated for moving outwardly the free ends of the plates.

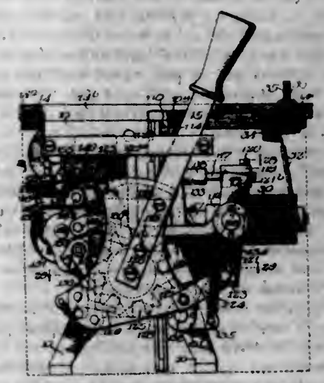
5. In a lasting machine, a vertically movable lasting head, forwardly and inwardly moving wipers, and operating means for forcing the upper outwardly first against the portion of greatest curvature of the wipers and then at the will of the operator outwardly against the straighter portions thereof at the two sides simultaneously.

[Claims 6 to 38 not printed in the Gazette.]

1,063,272. TIME-RECORDING REGISTER. HORACE B. MCCABE, Chicago, Ill., assignor to Gisholt Machine Company, Madison, Wis., a Corporation of Wisconsin. Filed Nov. 8, 1911. Serial No. 659,125. (Cl. 234—43.)

1. In a time recording register, the combination with registering and printing mechanism, a card chute adapted to position a card or other object with respect to the said registering and printing mechanism, there being an opening provided adjacent one end of the said card, and spring-controlled means within the said chute adapted to coöperate with the opening in the said card and prevent the entrance of the same into the chute unless the card shall be correctly positioned upon being presented to the chute.

2. In a time recording register, the combination with registering and printing mechanism, of a card chute adapted to position a card or other object with respect to said registering and printing mechanism, there being an opening provided within the body of the card, a detent movably mounted adjacent the card chute and in the normal path of movement of the said opening in the card, a member normally projecting into the path of the card in the chute, and a connection between the last said member and the detent whereby the engagement of the member by the card will operate the detent into the path of the card and the hole therein.



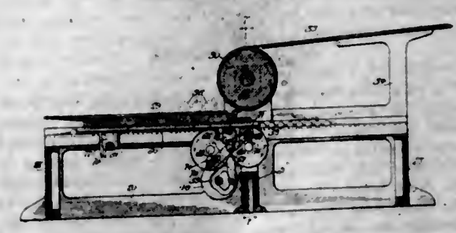
3. In a time recording register, the combination with registering and printing mechanism, of a card chute adapted to position a card or other object with respect to said registering and printing mechanism, there being an opening provided within the body of the card, a detent movably mounted adjacent the card chute and in the normal path of movement of the said opening in the card, a member normally projecting into the path of the card in the chute, and an elastic connection between the last said member and the detent whereby the engagement of the member by the card will operate the detent into the path of the card and the hole therein.

4. In a time recording register, the combination with registering and printing mechanism, of a card chute adapted to position a card or other object with respect to the said registering and printing mechanism, there being an opening provided in the said card, a detent movably mounted adjacent the path of the card in the chute and in the path of the opening therein, a controller for the detent positioned normally within the path of the card in the chute, and means whereby the engagement of the card with the controller will operate the detent into the path of the card and the hole therein.

5. The combination with time registering mechanism being provided with a card chute, of means adjacent the chute for perforating the card entirely within the body portion upon each correct insertion thereof in the chute, and means in the chute adapted to coöperate with the perforated portions of the card to position the card with respect to the perforating and registering mechanism.

[Claims 6 to 28 not printed in the Gazette.]

1,063,273. RECIPROCATING MECHANISM FOR PRINTING-PRESSES AND THE LIKE. CYRUS A. MCCAIN, Oak Park, Ill. Filed Mar. 11, 1912. Serial No. 683,023. (Cl. 101—58.)



1. In a printing press, the combination of a reciprocating member, a wheel for driving said member, means for throwing said wheel out of operative driving relation with said member when the latter approaches the end of its

movement, and means, including a connecting link intermediate of said wheel and member, operative upon less than a quarter revolution of said wheel to retard and stop said member.

2. In a printing press, the combination of a reciprocating member, a wheel for driving said member, means for throwing said wheel out of operative driving relation with said member when the latter approaches the end of its movement, a crank pin on said wheel, and mechanism, including a link coöperating with said pin, to subsequently retard and stop said member upon other than a quarter revolution of said wheel.

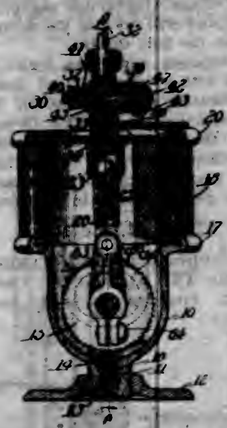
3. In a printing press, the combination of a reciprocating member, a wheel for driving said member, means for throwing said wheel out of operative driving relation with said member when the latter approaches the end of its movement, and mechanism, including a second wheel and a link connected between said wheels, for subsequently retarding and stopping said member upon other than a quarter revolution of said first wheel.

4. In a printing press, the combination of a reciprocating member, a rack on said member, a gear wheel for engaging said rack to drive said member, means for throwing said gear wheel out of mesh with said rack when the latter approaches the end of its movement, and means, including a connecting link intermediate of said wheel and member, operative upon less than a quarter revolution of said wheel to retard and stop said member.

5. In a printing press, the combination of a reciprocating member, a pair of driving wheels for alternately driving said member in opposite directions, means for throwing each wheel out of operative driving relation with said member as the latter approaches the end of its movement under the driving action of said wheel, and means subsequently operative at each end of the movement of said member to retard and stop said member upon other than a quarter revolution of said wheels.

[Claims 6 to 76 not printed in the Gazette.]

1,063,274. FORCE-FEED LUBRICATOR. JOHN F. MCCANNA, Chicago, Ill., assignor to Imperial Brass Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 20, 1912. Serial No. 692,092. (Cl. 184—27.)



1. In a force-feed lubricator, the combination with a reservoir, of a pump associated therewith, a pipe leading from said pump, a valve casing in said pipe, a valve body mounted to turn in the casing, a handle secured to the valve body and having a passage therein leading into the valve body, a discharge pipe leading from said valve to the element to be lubricated, said valve body having two passages therein, one passage being adapted to connect the pump with the discharge pipe in one position of the valve body and the other passage being adapted to connect the pump with the hollow handle in the other position of the valve body, and means to operate the pump.

2. In a force-feed lubricator, the combination with a reservoir, of a pump associated therewith, a pipe leading from said pump, a valve casing in said pipe, a valve body mounted to turn in the casing, a handle secured to the valve body and having a passage therein leading into the valve body, a discharge pipe leading from said valve to the element to be lubricated, said valve body having two passages therein, one passage being adapted to connect the pump with the discharge pipe in one position of the valve body and the other passage being adapted to connect the pump with the hollow handle in the other position of the valve, means to operate the pump, and a strainer in the top of the reservoir into which the oil is discharged by the valve handle when the latter is turned to its testing position, said strainer being removable by lifting it vertically upward when the handle is turned up.

1,063,275. VENTILATING-FAN. STEPHEN A. MCINTIRE, New York, N. Y. Filed May 31, 1911. Serial No. 630,413. (Cl. 230—11.)



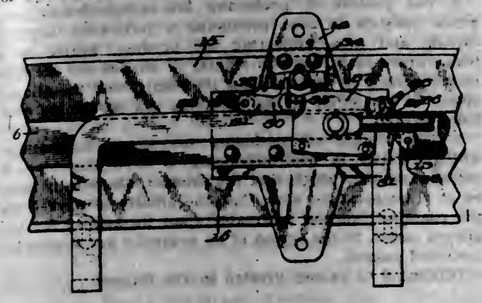
1. The combination with a plate, of a shaft extending transversely therethrough, a second plate having a central intake opening, a peripheral opening, means for securing said plates together, and a plurality of blades mounted between said plates, each blade being inclined to the axis of rotation and curved in a semi-circle inscribed on a radius of said inlet opening, said blades having extended flat extremities extending from the inclined portions tangent to the periphery of said inlet opening.

2. The combination with a revolving blower, adapted to be inclosed in a cylindrical drum, said drum having one end closed, the other end being open at the center, the periphery of the drum being open and of predetermined width proportional to said inlet opening, a plurality of blades rotating in said drum, the portion of each blade outside the inlet having a plane surface tangent to the circular opening in the open base of the drum and parallel to the axle and rings connecting the flat portions of said blades, said blower rotating in the direction opposite to that in which each blade points.

1,063,276. DUMP-CAR. THOMAS R. MCKNIGHT, Aurora, Ill., assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed Mar. 17, 1911. Serial No. 615,062. (Cl. 105—190.)

1. In a dump-car having a compressed-air cylinder, a valve for admitting air thereto, and a piston moving in said cylinder, the combination with piston-operated mechanism for rocking the car bed, of means operatively engaged by said piston-operated mechanism when the same moves in one direction for moving said valve in one direction, said piston-operated mechanism being arranged to pass said valve-moving means without operation thereof when moving in the other direction.

2. In a dump-car having a compressed-air cylinder, a valve for admitting air thereto, and a piston moving in said cylinder, the combination with piston-operated mechanism for rocking the car bed, of a movable member, means connecting said member with said valve for operating the same, and means pivotally carried by said member and intermittently coacting with said piston-operated mechanism for operating the valve.



3. In a dump-car having a compressed-air cylinder, a valve for admitting air thereto, and a piston moving in said cylinder, the combination with piston-operated mechanism for rocking the car bed, of a reciprocating member, means connecting said member with said valve for operating the same, and means pivotally carried by said member and intermittently coacting with said piston-operated mechanism for operating the valve.

4. In a dump-car having a compressed-air cylinder, a valve for admitting air thereto, and a piston moving in said cylinder, the combination with piston-operated mechanism for rocking the car bed, of valve-operating mechanism connected with said valve and actuated by said piston-operated mechanism when the latter is moved in one direction, said piston-operated mechanism being movable independently of said valve-operating mechanism in the opposite direction.

5. In a dump-car having a compressed-air cylinder, a valve for admitting air thereto, and a piston moving in said cylinder, the combination with piston-operated mechanism for rocking the car bed, of a reciprocating member connected with said valve, and a pivoted stop carried by said member and adapted to be engaged by said piston-operated mechanism, said stop having means for limiting the extent to which it may rock in one direction.

[Claims 6 to 17 not printed in the Gazette.]

1,063,277. CASING-PERFORATOR. EDWARD L. MILLS, Los Angeles, Cal. Filed Apr. 20, 1912. Serial No. 692,109. (Cl. 81—188.)



1. A casing perforator, comprising an upright lateral bearing plate, a pivot spaced from and movable vertically with relation thereto, a knife pivoted on said pivot, supporting means for the bearing plate, and means connected with said knife whereby it may be moved about said pivot.

2. A casing perforator, comprising an upright lateral bearing plate, a member spaced from the plate and longitudinally movable with relation thereto, a casing perforating knife pivoted on said member, and means directly connected with the knife for causing its movement about its pivot and for also causing movement of the pivot and said member when the knife engages a casing.

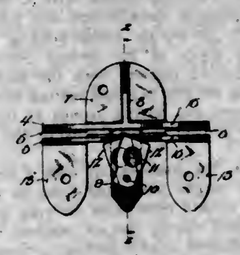
3. A casing perforator, comprising an upright lateral bearing plate, a member supported on the plate and freely movable vertically with relation thereto, a casing perforating knife pivoted on said member and having a casing engaging point capable of being projected beyond said member, and means directly connected to the knife to move it about its pivot, whereby the pivot and said member are moved longitudinally when the knife point engages a casing.

4. A casing perforator, comprising a lateral bearing plate, transverse links pivoted at one end to said plate, a longitudinally movable member carried on the other ends of the links, and a casing perforating knife pivoted to said member.

5. A casing perforator, comprising a lateral bearing plate, transverse links pivoted at one end to said plate, a longitudinally movable member carried on the other ends of the links, a casing perforating knife pivoted to said member, and stops on said member engageable by said knife.

[Claims 6 to 9 not printed in the Gazette.]

1,063,278. BOX-FASTENER. LOBEGOTT MOLLART, Watertown, Wis., assignor to G. B. Lewis Company, Watertown, Wis. Filed Oct. 8, 1912. Serial No. 724,554. (Cl. 70—3.)



1. A springless box-fastener comprising a bolt-member the bolt of which is longitudinally slotted, and a keeper-member having a guide for the bolt, these fastener-members being respectively attachable to the cover and body of a box; a pivot crossing the bolt-slot, a plurality of tumblers eccentrically hung in said slot on said pivot to thereby automatically dispose themselves outwardly by gravity in opposition to said keeper-member of the fastener when the bolt is shot therein, the tumblers being then exposed to manual grip; and a stop-pin that also crosses the bolt-slot through play openings provided in said tumblers that are retractile by the grip aforesaid into the confines of said bolt-slot preliminary to parting of said fastener.

2. A springless box-fastener comprising a bolt-member the bolt of which is longitudinally slotted, and a keeper-member having a guide for the bolt, these fastener-members being respectively attachable to the cover and body of a box; a pivot crossing the bolt-slot; a tumbler eccentrically hung in said slot on said pivot to thereby automatically dispose itself outwardly by gravity in opposition to said keeper-member of the fastener when the bolt is shot therein, the tumbler being then exposed to manual grip; and means with said bolt limiting outward pivotal play of said tumbler that is retractile into the confines of said bolt-slot preliminary to parting of the fastener.

1,063,279. BRUSH. ROBERT J. MONTGOMERY, Chicago, Ill. Filed May 24, 1912. Serial No. 699,453. (Cl. 15—29.)



1. In a brush, the combination with a bristle-holding frame having its upper face concaved so that its side edges are higher than its central portion and having bristle-holding plugs projecting from its under face, of a metal back curved from side to side and fitting over and upon said bristle-holding frame with its edge portions turned down against the sides of the said frame and provided with prongs that project between some of the said bristle-holding plugs.

2. In a brush, the combination with a bristle-holding frame having its upper face concaved so that its side edges are higher than the central portion and having openings through it, of a metal back curved from side to side and having its central portion cut away so that water may be passed through both the frame and back, said back being curved from side to side to correspond to the curvature of the frame and having its edge portions turned down and provided with means for engaging the under face of said bristle-holding frame to hold the frame and back together.

3. In a brush, the combination with a bristle-holding frame having openings therethrough, of a metal back cut away in its central portion so that water can be passed through both the said frame and back, and having its side portions resting upon the upper face of said frame and turned down and in to engage the under face of said frame to hold the said two members together.

4. In a brush, the combination with a bristle-holding frame having openings therethrough and provided on its under face with projecting bristle-holding plugs, of a metal back cut away in its central portion so that water can be passed through both the said frame and back, and having its side portions resting upon the upper face of said frame and having prongs at the edges that are turned in to project between some of the said bristle-holding pings.

5. In a brush, the combination with a bristle-holding frame having a tongue projecting from its rear end, of a back secured to said frame and carrying a handle portion, and a second handle portion adapted to be united to said first-mentioned handle portion to form a complete handle, said second-mentioned handle portion having a flange that abuts against the rear end of the bristle-holding frame and being provided with an opening through which projects said tongue.

[Claims 6 to 8 not printed in the Gazette.]

1,063,280. PROCESS OF PRODUCING LOW-CARBON FERRO-ALLOYS. JOHN M. MOREHEAD, Chicago, Ill., assignor to Electro Metallurgical Company, Chicago, Ill., a Corporation of West Virginia. Filed Sept. 24, 1907. Serial No. 394,273. (Cl. 204—64.)

1. The process of producing low-carbon ferro-alloys, which consists in first producing a ferro-alloy high in carbon, and then subjecting the produet, heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the alloyed metal, to the action of gaseous oxygen.

2. The process of producing low-carbon ferro-alloys, which consists in first producing a ferro-alloy high in carbon, and then subjecting the product, electrically heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the alloyed metal, to the action of gaseous oxygen.

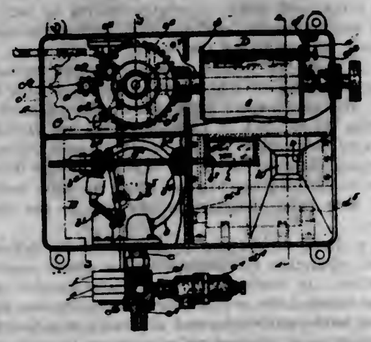
3. The process of producing low-carbon ferro-alloys, which consists in electrically smelting a compound of the alloying metal, an excess of carbon and a source of iron, and subjecting the high-carbon produet, electrically heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the alloyed metal, to the action of gaseous oxygen.

4. The process of producing low-carbon ferro-alloys, which consists in first producing a ferro-alloy high in carbon, and then subjecting the product, heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the alloyed metal, to the action of an oxidising gas containing combined oxygen.

5. The process of producing low-carbon ferro-alloys, which consists in first producing a ferro-alloy high in carbon, and then subjecting the product, electrically heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the alloyed metal, to the action of an oxidising gas containing combined oxygen.

[Claims 6 to 14 not printed in the Gazette.]

1,063,281. RECORDING-GAGE. JOSEPH W. MOTHERWELL, Chicago, Ill., assignor to The Ashton Valve Company, Boston, Mass., a Corporation of Connecticut. Filed Aug. 7, 1909. Serial No. 511,783. (Cl. 234—20.)



1. In a device of the character described the combination of a movable recording sheet; means to advance the sheet; a marker to engage the sheet and make a diagram thereon as the sheet is advanced; and a casing with an opening through which a portion of the recording sheet is accessible from the outside of the casing for recording when the marker is at the initial point of said diagram but which becomes inaccessible from the outside of the casing before said diagram is completed.

2. In a device of the character described the combination of a movable recording sheet; means to advance the sheet; a marker to engage the sheet and make a diagram thereon as the sheet is advanced; a casing having an opening opposite said diagram with a transparent closure for the opening and a second opening through which a portion of the recording sheet is accessible from the outside of the casing for recording when the marker is at the initial point of said diagram but which becomes inaccessible from the outside of the casing before said diagram is completed.

3. In a device of the character described the combination of a movable recording sheet; means to advance the sheet; a marker to engage said sheet and make a diagram thereon; and a casing having an opening opposite that portion of the sheet where the diagram is made, a transparent closure for said opening and a second opening, the advance end of the second opening, being substantially on a line with said marker transversely to the direction of movement of the sheet.

4. In a device of the character described the combination of a marker; means to move the marker on a recording sheet and make a diagram thereon in accordance with the pressure; and reciprocating means which advances the sheet during one of the reciprocating movements but which leaves the sheet stationary during the other reciprocating movement; and a casing with an opening through which a portion of the recording sheet is accessible from the outside of the casing for recording when the marker is at the initial point of said diagram but which becomes inaccessible from the outside of the casing before said diagram is completed.

5. In a device of the character described the combination of a movable recording sheet; means to advance the sheet; a marker to engage one portion of the sheet and make a diagram thereon as the sheet is advanced; and a casing with an opening through which that portion of the sheet engaged by the marker is inaccessible but through which another portion of the sheet is accessible from the outside of the casing for recording when the marker is at the initial point of said diagram but which becomes inaccessible from the outside of the casing before said diagram is completed.

[Claims 6 and 7 not printed in the Gazette.]

1,063,282. HANDPIECE FOR DENTAL MACHINES. CHARLES EDGAR NORTHROP, Thorsby, Ala. Filed June 6, 1912. Serial No. 702,023. (Cl. 32—15.)



1. A device of the class described, comprising a shell, a hollow shaft within said shell, a clamp in one end of said hollow shaft and adapted to receive the shank of a tool, a plunger in said shaft for engagement with said clamp, a lever in said hollow shaft, one end of said lever engaging said plunger, and the other end of said lever being fulcrumed on the hollow shaft, and means for actuating the lever to force the plunger to engage the clamp, thereby causing the clamp to grip the tool shank.

2. A device of the class described, comprising a shell, a hollow shaft positioned in said shell, a clamp at one end and within said shaft, a plunger in said hollow shaft and in engagement at one end with said clamp, the other end of said plunger being rounded, a lever in said hollow shaft provided with an inclined face at one end, and fulcrumed at the other end, the said inclined face of the lever engaging with the rounded end of the said plunger, and means associated with said lever and hollow shaft whereby said plunger is forced to engage the said clamp, thus gripping a shank of a tool within said clamp.

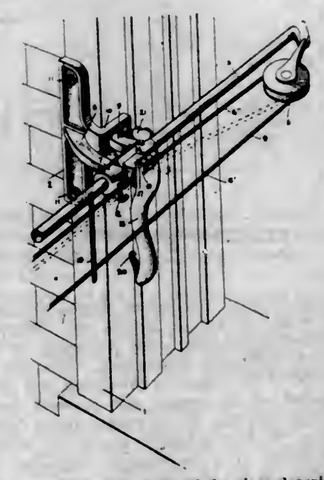
3. A device of the class described, comprising a shell, a hollow shaft within said shell, a clamp, a plunger, and a lever within said hollow shaft, the plunger having a rounded end, said lever having at one end an inclined face for engagement with the rounded end of the plunger and projecting at said end through the hollow shaft, the other end of said lever having a notch engaging a projection on the surface of said hollow shaft to fulcrum the lever and means associated with said lever whereby a tool is clamped in said clamp.

4. A device of the class described, comprising a shell, a hollow shaft within said shell and provided with a slot, a clamp within said hollow shaft at one end, a plunger in said hollow shaft for engagement with said clamp, an angular lever in said hollow shaft and having a beveled face at one end for engagement with the end of the plunger, the other end of said lever being fulcrumed on the hollow shaft at the end of the slot, the said lever normally projecting through said slot, a shaft held against longitudinal movement and extending at one end into the hollow shaft and engaging the said lever below the fulcrum, and means for actuating the lever to force the plunger to engage the clamp.

5. A device of the class described, comprising a shell, a hollow shaft in said shell, a clamp within said hollow shaft at one end, a plunger in said hollow shaft and in engagement with said clamp, a lever in said hollow shaft and projecting through a slot in the same, one end of said lever engaging the end of the plunger and the other end being fulcrumed, a shaft extending into the hollow shaft and engaging the last mentioned end of said lever adjacent its fulcrum, means for holding the said shaft against longitudinal movement, a slidable collar on the hollow shaft for engagement with the projecting portion of said lever, and means for actuating said slidable collar.

[Claims 6 and 7 not printed in the Gazette.]

1,063,283. CLOTHES-LINE SUPPORT. ARVID OLANDER, New York, N. Y., assignor of one-half to Alec T. Moberg, New York, N. Y. Filed May 28, 1912. Serial No. 700,154. (Cl. 68—3.)



1. In a clothes line support of the class described, a supporting bracket formed with a guiding member constructed substantially in the form of facing hooks, an adjustable bar mounted on said bracket, means connected with said adjustable bar for supporting a clothes line, said clothes line being adapted to be guided by said facing hooks, and a clamping member adapted to engage said clothes line near said facing hooks for clamping the same to said bracket.

2. In a clothes line support of the class described, a supporting bracket, an adjustable bar mounted on said bracket, means connected with said bar for supporting a clothes line, said bracket being formed with a pair of extensions, one of said extensions acting as guiding means for the clothes line, and a clamping member for clamping said clothes line in the second of said extensions.

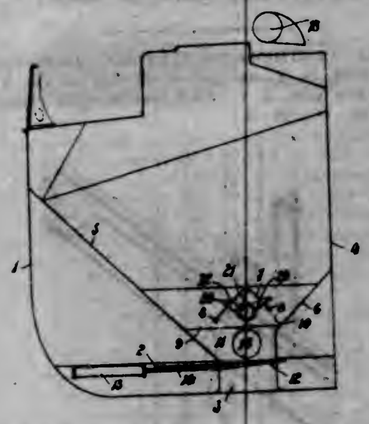
3. In a clothes line support of the class described, a supporting bracket formed with a tubular member, said tubular member being formed with a grooved projection and with a pair of facing hooks, a bar fitting into said tubular member, means mounted on said bar for supporting a clothes line so that the same will extend between said facing hooks and through the groove in said projection, and clamping means engaging said clothes line for rigidly holding the clothes line in said groove.

1,063,284. DREDGE-HOPPER. JOHN REID, New York, N. Y. Filed Nov. 21, 1911. Serial No. 661,457. (Cl. 114—36.)

1. A dredge hopper, comprising sloping and perpendicular walls leading to a trough portion at the bottom thereof, a protecting roof for said trough portion and discharge openings through the skin of the vessel at intervals from said trough, and a water pipe arranged under said protecting roof and having spraying nozzles extending into the hopper proper and adapted to keep the dredged material moving.

2. A dredge hopper, comprising sloping and perpendicular walls leading to a longitudinal trough at the bottom end thereof, a protecting roof over said trough extending the full length of the hopper and discharge passages from said trough and extending through the skin of the vessel, doors closing said openings and a water pipe having noz-

zles extending laterally therefrom and adapted to send jets of water directed to those parts of the hopper construction, on which the dredged material ordinarily collects.



3. A dredge hopper, comprising sloping side walls to a trough formation at the bottom and perpendicular end walls and intermediate cross bulkheads, said intermediate cross bulkheads terminating above the trough at the bottom of the hopper, a protecting roof extending the full length of the hopper and passages from said trough through the skin of the vessel, sliding doors closing the ways to said passages, means for driving the dredged material in a comminuted condition to said trough, and means for operating said doors.

4. A dredge hopper, comprising sloping side walls and perpendicular end walls, a trough portion and intermediate walls, said intermediate walls terminating at their lower ends above the trough, a protecting roof extending the full length of the hopper beneath said intermediate cross bulkheads and partially closing in the trough, said trough having dump openings extending through the skin of the vessel at a position below said intermediate cross bulkheads, doors closing said opening and a longitudinal pipe under said protecting roof and adapted to contain water under pressure and having spraying nozzles extending laterally therefrom within each of the hopper compartments, said nozzles being adapted to project jets of water into the dredged material and maintain said material during discharge in a comminuted condition.

5. A dredge hopper comprising longitudinal walls converging to a trough-shaped formation, a bottom and end walls, one of said end walls having at one end of the trough the pump suction pipe therethrough and the other end wall having an inlet from the seawater, and a shelter extending the full length of said hopper slightly above the bottom and partially covering in the trough and shaped to bring the sand thereunder substantially on a level with its lower edge and leave a space between said sand level and the underside of said shelter for the accumulation of still water adapted to initiate the flow of sand and water in said trough between the sea inlet and pump suction pipe during discharging operations.

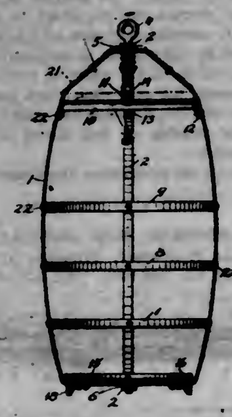
1,063,285. HOISTING-GAGE. GEORGE S. RICE, Pittsburgh, Pa. Filed Feb. 1, 1912. Serial No. 674,846. (Dedicated to the public.) (Cl. 187—1.)

1. A supporting frame for a hoisting cage comprising a plurality of frame members, and connecting means adapted to permit relative movement of said members into a collapsed position.

2. A collapsible frame for a hoisting cage comprising a plurality of frame members of different dimensions adapted to lie one within another when in the collapsed position.

3. A frame for a hoisting cage comprising a plurality of frame members so connected as to be capable of pivotal movement relative to each other approximately about the vertical axis of the cage.

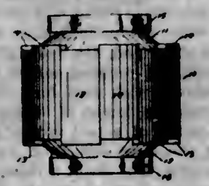
4. A frame for a hoisting cage comprising a plurality of endless frame members and means for pivotally connecting said members.



5. A collapsible frame for a hoisting cage comprising a plurality of endless frame members of approximately elliptical outline and means for pivotally connecting said members.

[Claims 6 to 12 not printed in the Gazette.]

1,063,286. SHOCK-ABSORBER. GERALD H. RICHMOND, Buffalo, N. Y. Filed Oct. 20, 1910. Serial No. 588,048. (Cl. 21—50.)

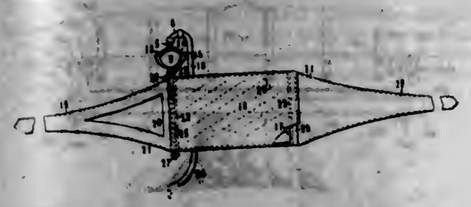


1. A shock absorber comprising an inclosed casing formed with an upper and a lower part, a plurality of slidably interlocking fingers carried by each of said upper and lower parts, and cushioning means carried within said casing, said plurality of fingers completely inclosing said cushioning means, whereby said casing parts may be moved toward or away from each other and the said casing kept completely closed.

2. A shock absorber comprising an inclosed casing formed with an upper and a lower part each of said parts being provided with a plurality of fingers, the fingers of one part being slidably disposed between the fingers of the other said part, and a pneumatic ball carried within said casing, said plurality of fingers completely inclosing said pneumatic ball, whereby said casing parts may be moved toward or away from each other and the said casing kept completely closed.

3. A shock absorber comprising an inclosed casing formed with an upper and a lower part, a plurality of slidably interlocking fingers carried by each of said upper and lower parts, each of said upper and lower parts having a substantially spherical interior and cushioning means carried by said casing, said plurality of fingers completely inclosing said cushioning means, whereby said casing parts may be moved toward or away from each other while the said casing is kept completely closed and so that said cushioning means are kept from undue wear and from being pinched.

1,063,287. SPHYGMOMANOMETER. OSCAR H. ROGERS, Yonkers, N. Y., and HAROLD C. MACDONALD, Bayonne, N. J.; said Macdonald assignor to said Rogers. Filed May 23, 1911. Serial No. 629,048. (Cl. 73—44.)



1. In an apparatus of the character described, in combination, a binder comprising a flexible inelastic fabric having an intermediate bag retaining portion, an air bag retained by said portion, a relatively stiff portion at each side of the intermediate portion, and oppositely extending portions adapted to secure the binder in position.

2. In an apparatus of the character described, in combination, a binder adapted to hold an air bag in position against an anatomical part, and means on said binder adapted to support an indicator.

3. In an apparatus of the character described, in combintion, a binder adapted to hold an air bag in position against an anatomical part, a clasp device permanently secured to said binder, and a manometer adapted to be held in operative position by said clasp.

4. In an apparatus of the character described, in combination, a binder comprising a flexible inelastic strip of fabric having means for retaining an air bag, and an air bag retained thereby and having flexible tubular portions extending from opposite edges of the binder.

5. In an apparatus of the character described, in combination, a binder comprising a flexible inelastic strip of fabric having means for retaining an air bag, and an air bag retained thereby and having flexible tubular portions extending in opposite directions therefrom.

[Claims 6 to 24 not printed in the Gazette.]

1,063,288. APPARATUS FOR MAKING TUFTS. ARMIN ROSENBERG, Milwaukee, Wis. Filed June 8, 1911, Serial No. 631,949. Renewed Aug. 12, 1912. Serial No. 714,709. (Cl. 28—13.)

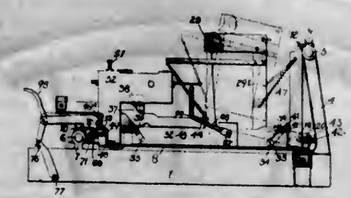


1. A device for forming tufts comprising a spool having longitudinal grooves extending from end to end inwardly on opposite sides of the spool to a sufficient depth to allow the passage of a cutting tool on one side and a needle on the other side, underneath a skein of yarn or thread wound upon the central portion of the spool, and a rotative support for the spool adapted to communicate motion thereto, substantially as described.

2. A device for forming tufts consisting in the combination of a rotary spindle and a spool centrally apertured to receive said spindle, each of said spools being provided with longitudinal diametrically opposite channels adapted to permit the passage of a tool in said channels underneath a skein of fabric wound upon such spool, one of such channels extending entirely through the wall of the spool on one side of the spindle and forming an open slot adapted to receive the blade of a pair of shears.

3. A device for forming tufts consisting in the combination of a rotary spindle and a set of spools centrally apertured to receive said spindle, each of said spools being provided with longitudinal diametrically opposite channels adapted to permit the passage of a tool in said channels underneath a skein of fabric wound upon such spool, one of said channels extending entirely through the wall of the spool on one side to the spindle receiving aperture and constituting an open slot adapted to receive the blade of a pair of shears.

1,063,289. TYPE-WRITER. JOHN A. RUFFIN and GEORGE G. GOING, New York, N. Y. Filed July 20, 1908. Serial No. 444,444. (Cl. 197—2.)



1. In combination in a typewriter, a plurality of upwardly standing type bars, each carrying a plurality of type at different angles, said bars being arranged to strike downwardly and rearwardly, a support for the type bars pivotally supported at its rear portion, means for tipping up the front of said support and means for sliding the support forwardly to bring another case type into play from that when the support is in its lowest position, and key levers for operating the type bars in either position, substantially as described.

2. In combination in a typewriter, a platen, a plurality of type bars, a segmental plate in which said type bars are pivotally mounted, said plate having its ends directed rearwardly, said bars being arranged to strike downwardly and rearwardly upon a visible printing point, and key levers for operating the type bars, said type bar frame being pivoted at the rearwardly directed ends of its arms and means for adjusting said frame, substantially as described.

3. In combination in a typewriter, a plurality of type bars, carrying a plurality of type in different angular positions, a support for said type bars with means for adjusting the same to bring either set of type into play, and key levers having each a plurality of engaging points to operate the type bars, said type bars being positioned in appropriate relation to either one or the other of said bearing points by the adjustment of said support.

4. In combination in a typewriter, a platen, a series of key levers, a plurality of type bars carrying each a plurality of type at angles to each other, and a support for said type bars adjustable upwardly and longitudinally in relation to said key levers to throw said type bars into connection with different portions of key levers, substantially as described.

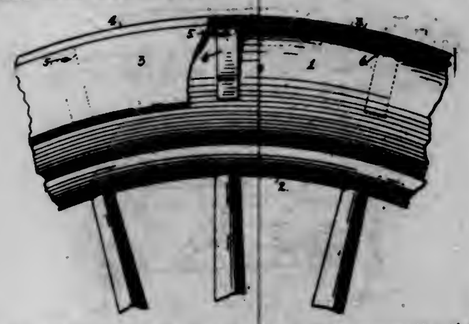
5. In combination in a typewriter frame, a platen, a series of key levers, type bars each having a plurality of type in different angular positions in respect to each other, a pivotally and slidably mounted support for said type bars, said support having a pin and slot connection with the frame, and means for adjusting said support upwardly and longitudinally in respect to the key levers, substantially as described.

[Claims 6 to 13 not printed in the Gazette.]

1,063,290. TIRE-PROTECTOR. JOHN T. RYAN, Vallejo, Cal., assignor to American Tire Armor Company, Phoenix, Ariz., a Corporation of Arizona. Filed Mar. 13, 1908, Serial No. 420,905. Renewed Sept. 19, 1911. Serial No. 650,255. (Cl. 152—33.)

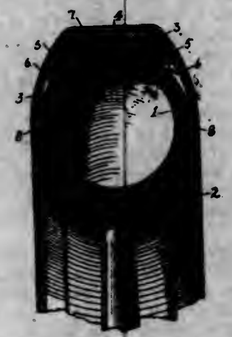
1. In an armor for pneumatic tires, a rigid arch shaped shield adapted to surround the tire, the sides of said shield being adapted to lie in close proximity to the sides of the tire when the shield is in position thereon, and a plurality of crescent shaped strips carried by the shield and projecting inwardly therefrom, said strips being adapted to engage the outer portion of the tire and being of a thickness to form, when the shield is in normal position on an

inflated tire normally vacant spaces between the outer surface of the tire and the shield into which the tire may expand under distorting pressure.



2. The combination with a rim, of a pneumatic tire thereon, a rigid arch shaped shield for the tire having an inside diameter sufficiently greater than the extreme diameter of the tire when inflated to form at all points between the shield and tire a space in which portions of the tire can project when under load pressure, said casing having depending sides adapted to lie in close proximity to the sides of the tire below the center thereof, and a series of spaced cross members interposed between the shield and tire and rigidly secured to one of said members, said cross members diminishing in thickness toward the ends thereof, and extending down the sides of the shield, the thickness of said cross pieces being such that they engage the outer surface of the tire, and the inner surface of the shield and bridge the space between the tire and shield.

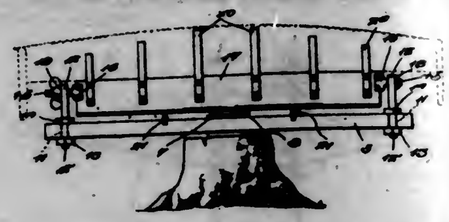
1,063,291. ARMORED PNEUMATIC TIRE. JOHN T. RYAN, Vallejo, Cal., assignor to American Tire Armor Company, Phoenix, Ariz., a Corporation of Arizona. Filed Mar. 26, 1908, Serial No. 423,292. Renewed Sept. 19, 1911. Serial No. 650,256. (Cl. 152—33.)



An armored tire comprising a pneumatic tire provided with a plurality of circumferentially disposed separated ribs projecting from the periphery thereof, a non-puncturable rigid arch shaped shield overlying the tire and resting upon the circumferential ribs projecting therefrom, and a plurality of transversely disposed spaced bearings arranged between the outer surface of the tire and said shield and positioned between the circumferential ribs projecting from the tire, the circumferential ribs and bearings engaging the inner surface of the shield and being of a thickness to provide, when the shield is in normal position on the inflated tire, normally vacant spaces between the bearings into which the tire may expand under distorting pressure.

1,063,292. SAW-VISE. WILLIAM SCHILDERS and WALTER MURPHY, Whitlow, Ark. Filed May 1, 1912. Serial No. 694,570. (Cl. 76—78.)

1. The combination with a saw vise including a body bar, of anchoring pins loosely mounted in the body bar, and retaining plates for said pins secured to opposite sides of the body bar and provided with openings in which said pins have limited longitudinal movement.

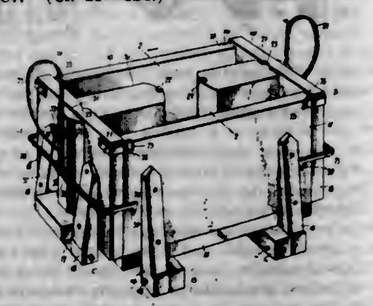


2. The combination with a saw vise including a body bar, of anchoring pins loosely mounted in the body bar and adapted to be driven into a tree stump or other support said pins having annular enlargements intermediate of their ends, and stop members secured to the body bar and coacting with the enlargements to retain the pins in said bar.

3. In a device of the character described, the combination with a body bar having spaced transverse ribs on its upper surface, of bearing standards vertically movable in the ends of said bar, a saw supporting bar pivotally mounted in said standard, and means for positioning said standards in the ends of the body bar to dispose said supporting bar above said ribs, said latter means including removable elements whereby the standards may be moved in the ends of the body bar and the supporting bar rigidly engaged with said ribs.

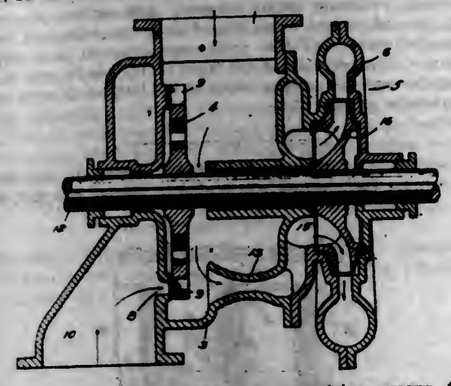
4. In a device of the character described, the combination with a body bar, of bearing standards vertically movable in the ends of said bar, a saw supporting bar rotatably mounted in said standards, means to rigidly secure the supporting bar between the standards against pivotal movement, spaced transverse ribs seated in the upper surface of the body bar, an adjusting nut threaded upon the lower end of each of the standards and washers disposed upon said standards and on the upper surface of the body bar, said washers being adapted for removal from the standards whereby the nuts may be adjusted into engagement with the body bar and the standards moved through the ends of said bar to rigidly bind the saw supporting bar upon said transverse ribs.

1,063,293. CEMENT-BLOCK MOLD. JOHN C. SEARLS, Smiths Creek, Mich. Filed Feb. 5, 1912. Serial No. 675,487. (Cl. 25—121.)



A mold box including a bottom having an upstanding pin near one end, sides, and ends pivoted to said bottom, means for holding said sides and ends in upright position, one of said ends being formed with an opening, a core slidably fitted in said opening and having a longitudinal slot in the bottom receiving said pin, said pin contacting with the ends of said slots and limiting insertion and withdrawal of said core through said end, a revoluble cross bar on said core having terminal hooks extending along said sides, pins on said sides engageable with said hooks, an upright handle fixedly secured to said cross bar and extending upwardly along said core, and spring jaws on said core adapted to engage with said handle and hold said cross bar against movement.

1,063,294. FLUID-TRANSLATING DEVICE. EDWARD SEAVER, Jr., Pittsburgh, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 8, 1910. Serial No. 576,188. (Cl. 230—14.)



1. A fluid translating device comprising means for breaking a liquid stream into successive leaves, and means for imparting additional energy to the stream of fluid and for ejecting it from said device.

2. A fluid translating device comprising means for breaking a stream of liquid into successive leaves, and a pump for receiving the stream discharge from said means and for imparting pressure thereto and discharging it from said device.

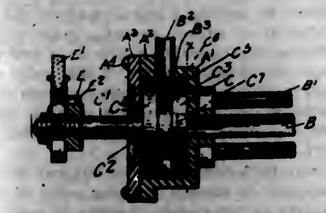
3. A fluid translating device comprising means for breaking a liquid stream into successive leaves, and a rotatable impeller for receiving the stream delivered by said means and for discharging it from said device.

4. A fluid translating device comprising a casing provided with a fluid admission port, a liquid delivery port, a bladed wheel for breaking up the stream of liquid delivered by said delivery port into a succession of separate leaves, means for collecting the divided stream delivered by said blades, and means for imparting additional energy to said stream and for ejecting it from said apparatus.

5. A fluid translating device comprising a casing provided with a fluid admission port and a liquid delivery port, a rotatable bladed wheel for breaking up the stream of liquid delivered by said port into a succession of separate leaves without imparting velocity thereto, means for collecting the divided stream delivered by said blades, and means for imparting additional pressure to said stream and for ejecting it from said device.

[Claims 6 to 9 not printed in the Gazette.]

1,063,295. ROTARY CONTROL FOR SPRAY-HEADS FOR AIR-WASHERS. SIDNEY RANDOLPH SHELDON, Galt, Ontario, Canada. Filed July 30, 1912. Serial No. 712,343. (Cl. 137—26.)

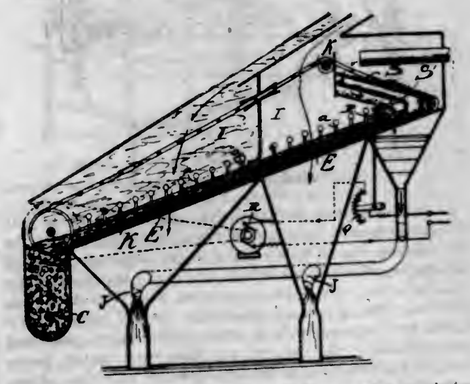


1. In a rotary control for spray heads for air washers, an outer stationary cylindrical member, a supply pipe leading into the periphery of the stationary member, and a relief pipe leading axially therefrom, and a series of pipes leading from the stationary member and arranged circumferentially around the relief pipe, a rotary member held within the stationary member, and means in the rotary member for successively establishing communication between the pipes leading from the stationary member and the supply pipe and means for normally establishing communication between the relief pipe and the said pipes leading from the stationary member, and means for rotating the rotary member as and for the purpose specified.

2. In a rotary control for spray heads for air washers, a cylindrical casing, a supply pipe leading peripherally therefrom, a relief pipe leading axially therefrom, a series of pipes arranged circumferentially around the relief pipe, a rotary member having a peripheral annular groove with which the supply pipe communicates, and an opening leading from the annular groove circumferentially in alinement with the openings of said series of pipes, and a recess formed in the base of the rotary member opposite the relief pipe and with which the openings of said series of pipes normally communicate, and means for rotating the rotary member, as and for the purpose specified.

3. In a device of the type described a casing, a rotary member within said casing, having a peripheral annular groove, said rotary member also having a lateral passage communicating with said groove, said casing having a supply pipe communicating with the peripheral annular groove of said rotary member, said rotary member also having a recess of mutilated cylindrical outline, the mutilated outline being opposite said lateral passage, a plurality of pipes normally communicating with said recess, said lateral passage adapted to be successively brought into communication with the last mentioned pipes, a relief pipe communicating with said recess and means for actuating said rotary member.

1,063,296. PROCESS FOR FREEING SLACK COAL FROM WATER. CHRISTIAN SIMON, Essen-on-the-Ruhr, Germany. Filed Aug. 6, 1912. Serial No. 713,621. (Cl. 83—84.)



A process for freeing slack coal from water consisting in forming and moving the coal in an evenly distributed layer having the coarser particles at the bottom, over a draining support, constantly loosening up the upper stratum of said layer and delivering air laden with dried coal to said layer and passing the air through said layer.

1,063,297. METHOD OF UTILIZING WASTE PRODUCTS OF CANNING INDUSTRY. PHILIP A. SINGER, Chicago, Ill., assignor of one-half to Carl S. Miner, Chicago, Ill. Filed Dec. 26, 1912. Serial No. 738,781. (Cl. 99—11.)

1. The method of utilizing the waste products of the corn canning industry which consists in removing the

portions of the kernels—including the bran, germs and milk—which remain on the cob after the upper portions of such kernels have been removed for canning, then removing substantially all of the juice from the mass, then drying the mass and subjecting it, either with or without previous removal of the bran, to pressure to extract the oil therefrom and form oil cake of the residue.

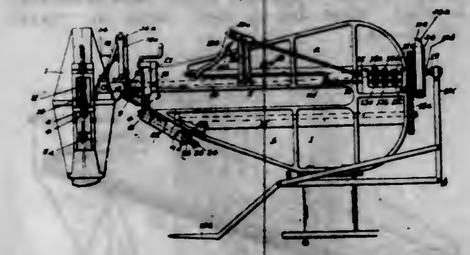
2. The method of utilizing the waste products of the corn canning industry which consists in removing the portions of the kernels—including the bran, germs and milk—which remain on the cob after the upper portions of such kernels have been cut off for canning, then subjecting the mass to pressure to expel substantially all of the juice therefrom, then expelling the oil in the germs while in a dry state by pressure to produce corn oil.

3. The method of utilizing the waste products of the corn canning industry which consists in removing the portions of the kernels—including the bran, germs and milk—which remain on the cob after the upper portions of such kernels have been cut off for canning, then expelling substantially all of the juice from the mass, drying the mass, and then expelling the oil from the dried mass to produce corn oil and oil cake.

4. A method of utilizing the waste products of the corn canning industry which consists in removing substantially all of the portions of the kernels—including the bran, germs and milk—which remain on the cob after the upper portions of such kernels have been removed for canning, and then subjecting the mass so removed to pressure to express substantially all the milk or juice therefrom.

5. As a new article of manufacture, a compressed oil cake including the germ and bran of sweet corn separated from the milk and from which the oil has been extracted, characterized by a high content of natural corn sugar and a sweet taste, substantially as described.

1,063,298. SHEARS FOR CUTTING METAL. HENRY COLLIER SMITH, Detroit, Mich. Filed Aug. 28, 1911. Serial No. 646,462. (Cl. 164—63.)



1. In a shearing machine, the combination of a pair of cutters formed by zones of cones, revoluble shafts for said cutters, tipped with respect to the plane of the work and tipped with respect to each other, the tipping and the shaping of the cutters being arranged with respect to each other so that planes perpendicular to the axes of the shafts and passing through the cutting edges cross and two surfaces of the cutters, one from each cutter, lie in parallel and closely contiguous planes so that the cutters can pass each other up to as far as their respective shafts and maintain their shearing relation, and means for adjustably moving one of said cutters in a path parallel with such last mentioned planes, substantially as described.

2. A shearing machine, having in combination, a frame, a pair of cutters, one of which is journaled in the frame and both of which are formed by zones of cones, revoluble shafts for said cutters tipped with respect to the plane of the work and tipped with respect to each other, the tipping being arranged with respect to the shape of the cutters so that planes perpendicular to the axes of the shafts and passing through the cutting edges cross and two surfaces, one from each cutter, lie in parallel and closely contiguous planes so that the said cutters can pass each other up to as far as their respective shafts and maintain the shearing relation, a bearing-block for carrying the other cutter shaft, a guide attached to said frame in which the bearing-block reciprocates in a path parallel to the planes of the aforementioned two surfaces of the cutters, means for adjustably reciprocating said bearing-block in the guide, flexible driving connections with the shaft carried in said bearing-block and driving connections for the other shaft, substantially as described.

3. In a cutting machine, the combination of a pair of cutters, revoluble shafts carrying said cutters, the said shafts and cutters being tipped from the work and from the horizontal and also from each other so as to cause planes perpendicular of the axes of the shafts and passing through the cutting edges of the cutters to cross substantially as described.

1,063,299. CINDER-DEFLECTOR. DAVID A. SOX, Carrollton, Ga. Filed Dec. 5, 1912. Serial No. 735,164. (Cl. 105—27.)



A cinder-deflector for car windows designed for attachment to the exterior surface of a car wall between adjacent windows and above the sill thereof, the same being horizontally V-shaped and comprising angularly disposed wings or walls connected at their front edges to define a vertical acute-angular outer edge and curved toward each other at their upper ends to form a dome, and meeting to define an acute angle on a quadrantal curve in continuation of said vertical outer edge, the lower edges of the sides or wings being inclined downwardly and outwardly to conform to, and bear upon, the window sill and form cinder-deflecting elements projecting below the plane of the window opening, and a web or plate connecting the wings or walls at their lower ends.

1,063,300. RAILROAD-TIE. CHARLES H. SUMMERSON, Jr., Pittsburgh, Pa. Filed Sept. 16, 1912. Serial No. 720,569. (Cl. 238—5.)



1. A railway tie having rail engaging members having a part depending into said tie, means for locking the same, said means consisting of a pivoted member, said depending part having teeth and said pivoted member having teeth to engage therewith.

2. A railway tie having a pair of integral rail engaging members adapted to engage opposing sides of two rails, a pair of sliding rail engaging members on said tie adapted to engage the opposing sides of said rails, said sliding members having racks depending thereupon whereby they are held in position, wedging members adapted to engage said depending members, said wedging members being hinged.

3. A railway tie having a pair of integral rail engaging members adapted to engage opposing sides of two rails, a pair of sliding rail engaging members on said tie adapted to engage the opposing sides of said rails, said sliding members having racks depending thereupon whereby they are held in position, wedging members adapted to engage said depending members, said wedging members being hinged and having arcuate racked surfaces to engage said depending members.

4. A railway tie having a pair of integral rail engaging members adapted to engage opposing sides of two rails, a pair of sliding rail engaging members on said tie adapted to engage the opposing sides of said rails, said sliding members having racks depending thereupon whereby they are held in position, wedging members adapted to engage said depending members, said wedging members being hinged and having arcuate racked surfaces to engage said depending members, and means for holding said sliding members against vertical movement.

5. A railway tie having rail engaging members having a part depending into said tie, means for locking the same, said means consisting of a pivoted member, said depending part having teeth and said pivoted member having teeth to engage therewith, said first members being slidable.

[Claims 6 to 11 not printed in the Gazette.]

1,063,301. PENCIL-HOLDER. HOWARD W. THOMAS, Charleroi, Pa. Filed Jan. 2, 1913. Serial No. 739,870. (Cl. 24—11.)



1. A pencil holder comprising an ear encircling portion having one end extended upwardly, bent at substantially a right angle, then directed downwardly and engaged around the main part of the ear encircling portion to provide a pencil engaging member, the upwardly and downwardly directed portions of the pencil engaging member being curved for engagement with the pencil to retain the same in position engaged against the side of the head above the ear.

2. An article of manufacture comprising a pencil holder formed of a resilient ear encircling member having one end turned upon itself and directed upwardly, then turned and extended at an angle with its extremity directed downwardly and secured to the body of the ear encircling member for retaining a pencil in position against the head immediately above the ear.

1,063,302. CONCENTRATED FOOD PRODUCT. LIVINGSTON A. THOMPSON, Milwaukee, Wis. Filed Apr. 22, 1910. Serial No. 557,038. (Cl. 99—11.)

1. A concentrated dry food product composed of digested blood and malt sugar.

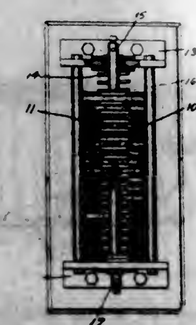
2. A concentrated dry food product composed of digested blood, sugar and milk.

3. The herein described method of preparing a concentrated food product which consists in first digesting blood by breaking open the red corpuscles thereof and subjecting it to the action of pepsin and papain, then adding sugar thereto in the form of a solution produced by allowing wheat flour and barley malt to stand together in water until the starch is digested, and then evaporating such mixture to a dry form.

1,063,303. ELECTRICAL RESISTANCE. ELIHU THOMSON, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 13, 1909. Serial No. 507,405. (Cl. 219—68.)

1. In a resistance unit, the combination of a material having a high cold resistance and a high negative temperature resistance coefficient similar to boron, and a body of material having better heat conductivity than boron in thermal and electric conductive relation thereto.

2. The combination of a disk of boron material and a metallic disk of good heat conductivity in contact therewith.



3. The combination of a plurality of plates of material of the nature of boron in its electrical break-down characteristics and a plurality of heat radiators in thermal and electrical contact with said plates.

1,063,304. SCREW-DRIVER. WILLIAM N. TITUS, Jr., Watertown, Mass. Filed June 3, 1911. Serial No. 631,161. (Cl. 145—50.)



1. A screw driver, comprising a bit, a handle, and means mounted to turn about the axis of the screw driver independently of the bit for gripping the walls of a kerf.

2. A screw driver, comprising a bit, a handle, and a turning member mounted to turn about the axis of the screw driver independently of the bit for gripping the walls of a kerf, having a laterally extending operating device.

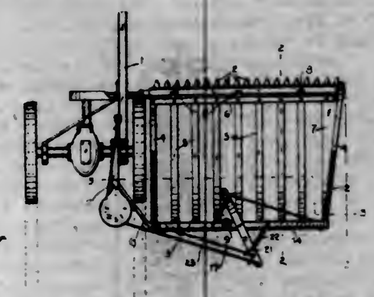
3. A screw driver, comprising a bit, a handle, a turning device mounted to turn about the axis of the screw driver independently of the bit for gripping the walls of a kerf, provided with a laterally extending operating device, and means for locking said device in position to hold the gripping device gripped against the walls of a kerf.

4. A screw driver, comprising a bit, a handle, a device mounted to turn about the axis of the screw driver independently of the bit for gripping the walls of a kerf, operating means for said device having provision to lock said device in kerf gripping position, said operating means being formed to exert a yielding pressure on the kerf gripping device.

5. A screw driver, comprising a handle, a bit, with an axial opening therethrough, a kerf gripping device mounted to turn about the axis of the screw driver in said opening independently of the bit, and means for operating said device.

[Claims 6 and 7 not printed in the Gazette.]

1,063,305. ATTACHMENT FOR MOWING-MACHINES. RASMUS TROELSON, Irwin, Nebr. Filed Jan. 29, 1913. Serial No. 745,031. (Cl. 56—128.)



1. In an attachment for mowing machines, the combination with a finger bar; of a receptacle comprising side bars, a bottom therefor, composed of longitudinal and spaced apart strips, certain of which are extended beyond the ends of the side bars and secured to the finger bar, a rear wall hingedly secured to the rear ends of said strips and adapted to abut the rear ends of said side bars, an arch bar secured to said side bars at the rear ends thereof, a lever fulcrumed intermediate of its ends on the hinged portion of said arch bar, connecting means between said lever and said hinged rear wall, means in connection with said arch bar and said lever to normally retain the latter in such position as to dispose the hinged rear wall to its raised position, and means for actuating said lever.

2. In an attachment for mowing machines, the combination with a finger bar; of a receptacle comprising a pair of side bars, a bottom therefor consisting of a plurality of longitudinally spaced apart strips, means for retaining said strips in spaced relation to one another, certain of said strips being extended beyond the forward ends of said side bars and secured to said finger bar, a plate hingedly engaged with the rear ends of said strips and adapted to abut the rear ends of the side bars to form a rear wall for the receptacle, an arch bar having the sides thereof secured to the side bars, a lever fulcrumed intermediate of its ends on the horizontal portion of said arch bar, flexible connections having one of their ends engaged with the upper end of said hinged rear wall, the opposite ends thereof being respectively engaged with the lever on opposite sides of the fulcrum point thereof, means on the inner opposed faces of the side bars and side arms of the arch bar for guiding said flexible connections, spring means engaged with said arch bar said lever for normally disposing said lever in position to retain the hinged wall in its raised position, and means for actuating said lever to permit said hinged wall to be lowered.

3. In an attachment for mowing machines, the combination with a finger bar; of a receptacle comprising a pair of side bars, a bottom therefor consisting of a plurality of longitudinally spaced apart straps, means for retaining said straps in spaced relation to one another, certain of said straps being extended beyond the forward ends of said side bars, and secured to said finger bar, a plate hingedly engaged with the rear ends of said straps and adapted to abut the rear ends of the side bars to form a rear wall for the receptacle, an arch bar having the side arms thereof secured to the side bars, a lever fulcrumed intermediate of its ends on the horizontal portion of said arch bar, flexible connections having one of their ends engaged with the upper end of said hinged wall, the opposite ends thereof being respectively engaged with the lever on opposite sides of the fulcrum point thereof, guide pulleys, and guide rollers carried respectively on said arch bar and side bars of the receptacle over which said flexible connections extend, coil spring members connected with said lever and the horizontal portion of said arch bar on opposite sides of the aforesaid fulcrum point, said spring members normally retaining said lever in such position as to normally dispose the rear wall in its raised position, and means for actuating said lever to permit said hinged wall to be lowered.

1,063,306. AEROPLANE. JOSEPH VOLPE, New York, N. Y. Filed Mar. 17, 1911. Serial No. 615,074. (Cl. 244—25.)

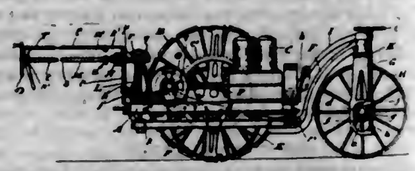


1. An aeroplane including a guiding structure, an aviator's seat thereon, a bearing element universally mounted at a point in advance of the aviator's seat, a propeller, a longitudinal shaft carrying said propeller and journaled in the bearing element normally coincident with the longitudinal axis of the gliding structure, a motor arranged at a point between the aviator's seat and the bearing element, a transmission shaft composed of slidably connected sections and universally jointed to the propeller shaft and motor shaft and a rigid controlling device directly fixed to said bearing element and extending longitudinally therefrom to a position in proximity to the aviator's seat, whereby said bearing element may be directly and positively adjusted.

2. An aeroplane including a gliding structure, an aviator's seat thereon, a bearing element universally mounted at a point in advance of the aviator's seat, a propeller, a longitudinal shaft carrying said propeller and journaled in the bearing element coincident with the longitudinal axis of the gliding structure, a motor arranged at a point between the aviator's seat and the bearing element and having its shaft arranged in a plane below the normal horizontal plane of the propeller shaft, a normally inclined transmission shaft composed of slidably connected sections and universally jointed to the propeller shaft and motor shaft and a rigid controlling device directly fixed to said bearing element and extending longitudinally therefrom to a position in proximity to the aviator's seat, whereby said bearing element may be directly and positively adjusted.

3. An aeroplane including a gliding structure, an aviator's seat mounted thereon, a spherical element universally supported upon the gliding structure at a point in advance of the aviator's seat, a longitudinal propeller shaft journaled in and extending through said spherical element and normally arranged horizontally and coincident with the longitudinal axis of the gliding structure, a propeller upon the forward end of said shaft, a motor arranged at a point between the aviator's seat and spherical element, a transmission shaft composed of slidably connected elements universally jointed to the motor shaft and rear end of the propeller shaft, and a rigid controlling device directly fixed to said bearing element and extending longitudinally therefrom to a position in proximity to the aviator's seat, whereby said bearing element may be directly and positively adjusted.

1,063,307. TRACTION-ENGINE. ALEXANDER H. WELKER, Berlin, Ontario, Canada. Filed Jan. 19, 1911. Serial No. 603,520. (Cl. 21—114.)



1. In a traction engine the combination of a frame; a single driving wheel; a laterally offset balance wheel; a forwardly extending steering wheel frame pivoted on the main frame; a steering wheel carried by said steering wheel frame; means for swinging the steering wheel frame relative to the main frame comprising chains led to and connected to the steering wheel frame in front of and behind its pivot; a steering post adapted to operate said chains; a worm wheel on said post; a steering rod and a worm on said rod engaging the worm wheel.

2. In a driving engine the combination of a frame; a single driving wheel; a laterally offset balance wheel; a forwardly extending steering wheel frame pivoted on the main frame; a steering wheel carried by said steering wheel frame; means for swinging the steering wheel frame relative to the main frame comprising chains led to and connected to the steering wheel frame in front of and behind its pivot; a steering post adapted to operate said chains; a worm wheel on said post; a telescopic rod provided with a universal joint; and a worm on said rod engaging the worm wheel.

1,063,308. RAILWAY-SWITCH CONSTRUCTION. FRANK WERTZ, Johnstown, Pa., assignor to The Lorain Steel Company, Johnstown, Pa., a Corporation of Pennsylvania. Filed Nov. 3, 1911. Serial No. 658,378. (Cl. 104—96.)

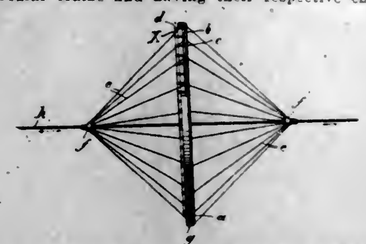


1. A railway switch comprising in combination a bridle rod having a dab forming a fork, a switch rail clip whereby said rail is connected to the fork, said dab and rail clip having transverse openings therethrough, a flanged eccentric projecting downwardly into said transverse openings, said eccentric being rotatable to adjust the switch rail clip in the fork of said bridle rod, and a bolt extending through registering openings in said eccentric and dab to secure the eccentric in place, said dab having a series of irregularly spaced apart holes around the periphery of the transverse opening therein, and the eccentric having a projection on the under side of the flange thereof arranged to project into the holes in the dab to hold the eccentric in adjusted position in the dab.

2. A switch rail construction comprising in combination a forked bridle rod having a dab thereon forming the fork, a switch rail clip whereby said rail is connected to the bridle rod, said dab and rail clip having registering transverse openings therein, a flanged eccentric having reduced portions projecting downwardly respectively into the transverse openings in the dab and the rail clip, said eccentric being rotatable to adjust the clip relative to the bridle rod, a plurality of holes spaced unequally around the periphery of the transverse opening in said dab, and a plurality of projections on the under face of the flange on said eccentric arranged to extend into said holes to hold the eccentric against rotation, and a bolt extending through registering openings in the eccentric and the bridle rod whereby the eccentric is secured in adjusted position on said bridle rod.

1,063,309. PROPELLING MEANS FOR AERIAL AND LIKE VESSELS. VINCENT WISNIEWSKI, Berlin, Germany, assignor to Luftschiffantrieb Gesellschaft mit beschränkter Haftung, Berlin, Germany, a Corporation of Germany. Filed Oct. 23, 1912. Serial No. 727,407. (Cl. 244—25.)

A device of the character described comprising a circular frame; a plurality of transversely crossing wires secured to said frame; a plurality of flaps disposed in parallel relation transversely of the frame and secured to the adjacent parallel wires of the frame; a ring secured to the circular frame and providing an annular flange to scoop the wind; an operating cable passing through the circular frame axially thereof; and a plurality of bracing strands connecting said circular frame and the cable, said strands disposed equidistant and secured on the circular frame and having their respective ends disposed to opposite sides of the frame and gathered and connected to the operating cable.



1,063,310. INDEX-TAB. PHILIP H. YAWMAN, Rochester, N. Y., assignor to Yawman & Erbe Mfg. Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 27, 1909. Serial No. 524,921. (Cl. 40—123.)



1. In an index tab, the combination with two resilient clamping jaws adapted to engage upon opposite sides of a sheet, shank portions connected to the jaws and adapted to project beyond the edge of the sheet, and shoulders arranged at the juncture of the jaws and shanks, the jaws being formed to normally converge from said shoulders toward gripping portions at their free ends and the shanks to normally converge from the same point toward their free ends, of a removable and replaceable tubular locking sleeve engaging upon opposite sides of the shank portion to press them together, the inner extremity of the sleeve being arranged to abut the shoulders at the edge of the sheet when the tab is in place on the latter.

2. In an index tab, the combination with two flat resilient clamping jaws adapted to engage upon opposite sides of a sheet, flat shank portions forming continuations of the jaws and adapted to project in superposed relation beyond the edge of the sheet, the jaws being wider than the shank portions to form shoulders at their juncture, and being formed to normally converge from said shoulders toward gripping portions at their free ends, and the shank portions being formed to normally converge from the same point toward their free ends, of a removable and replaceable locking sleeve composed of a piece of sheet material bent in the form of a flattened tube completely surrounding the shank portions, the inner extremity of the tube being arranged to abut the shoulders and the edge of the sheet, when the tab is in place on the latter, with the outer extremity terminating at the outer extremity of the shanks and an index character affixed to one of the outer flat faces of the tubular sleeve.

1,063,311. PIANO-ACTION SPRING. FREDERICK H. ABENDSCHEIN, New York, N. Y. Filed Mar. 24, 1911. Serial No. 616,660. (Cl. 84—26.)

1. In a piano action the combination with two members, one of said members being pivoted to the other, the last named member being formed with a transverse groove in its face, said groove being circular in form and opening upon the face of the member, the opening having a width less than the diameter of the circular groove, of a spring fixedly attached at one end to one of said members and at its other end formed with a resilient open bead engag-

ing in said groove, said bead having a lip projecting out of the groove whereby it may be contracted.



2. In a piano action, the combination with two members pivoted to each other, of a spring fixedly attached to one of said members, curved for a part of its length in an approximate semicircle around the pivot of the members, then extended parallel to one face of the other member, the adjacent end of the spring being fixedly attached to the last named member.

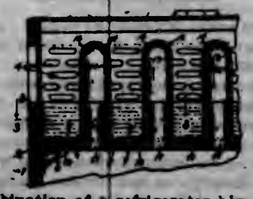
3. In a piano action, the combination with two members pivoted to each other, of a spring fixedly attached to one of said members, then curved for a part of its length in an approximate semicircle around the pivot of the members, then extended parallel to one face of the other member and attached at its end to the last named member, and a stress regulating screw passing through the last named member and engaging the inner face thereof.

4. In a piano action, the combination with two members pivoted to each other, one of said members being longitudinally slotted, of a spring fixedly attached to the other of said members extending through the slot of the first named member and curved for a part of its length in an approximate semicircle around the pivot of the members, then projecting through said slot and extending parallel to one face of the first named member and fixedly attached at its end thereto, and a stress regulating screw passing through the first named member and engaging the face of the parallel portion of the spring.

5. In a piano action, the combination with two members pivoted to each other, one of said members extending at an angle to the other member, one face of each of the members being formed with a circular groove extending transversely to the length of the member, of a spring, one end of the spring having a circular resilient bead engaging with one of said grooves, the spring then being curved outward for a part of its length in an approximate semicircle around the pivot of the members, then extending parallel to one face of the other member and at its end having a circular resilient bead expanded in the groove of that member and snugly engaging the wall of the groove, and a stress regulating screw passing through the last named member and engaging the parallel portion of the spring.

[Claims 6 and 7 not printed in the Gazette.]

1,063,312. REFRIGERATING APPARATUS. WILLIAM N. AMSBARY, Los Angeles, Cal. Filed Dec. 18, 1911, Serial No. 666,602. Renewed Feb. 24, 1913. Serial No. 750,418. (Cl. 62—10.)



1. The combination of a refrigerator box, a basin fitted in the top part of said box, said basin having openings in the bottom thereof in communication with the cooling chamber of said refrigerator box, a hollow part affixed to said basin at each of said openings, said part open at each end thereof, a hollow part fitted on the first mentioned hollow part, the last mentioned hollow part closed at the top thereof and extending upwardly above said basin, and absorbent material affixed on the last mentioned part.

2. The combination of a refrigerator box, a basin fitted in the top part of said box, said basin formed with a heat insulating bottom having openings therein in communication with the cooling chamber of said refrigerator box, a hollow part affixed to said bottom at each of said openings, said part open at each end thereof, a hollow part fitted on the first mentioned hollow part, the last mentioned hollow part closed at the top thereof and extending upwardly above said basin, and absorbent material affixed on the last mentioned part.

3. The combination of a refrigerator box having a perforated upper portion, a basin fitted in the interior of said box and extending below the perforated upper portion, said basin formed with a heat insulating bottom having openings therein in communication with the cooling chamber of said refrigerator box, a hollow part affixed to said bottom at each of said openings, said part open at each end thereof, a hollow part fitted on the first mentioned hollow part, the last mentioned hollow part closed at the top thereof and extending upwardly into the region of the perforated upper portion of said box, and absorbent material affixed on the last mentioned part.

1,063,313. INSECTICIDE. GEORGE ANDRAS, Galesburg, Ill. Filed Aug. 26, 1912. Serial No. 717,086. (Cl. 167—6.)

The herein described insecticide consisting of phenol, lead sulfate, zinc hydroxid, mercuric ammonium chlorid, ammonia water, ammonium acetate, oil of cedar, oil of sassafras and oil of spike.

1,063,314. WRENCH. JOHN F. ANDERSON, San Francisco, Cal. Filed Aug. 31, 1909, Serial No. 515,508. Renewed Mar. 10, 1913. Serial No. 753,424. (Cl. 81—128.)

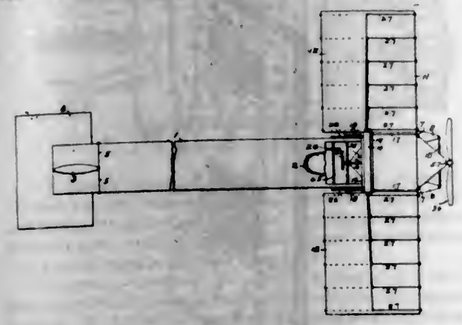


A wrench comprising a handle, a stationary jaw, a slidable jaw having an obliquely disposed inner end wall provided with a groove having one of its walls providing a flange, said flange extending throughout the full transverse extent of the inner end wall and of less height than the width of the inner end wall, a screw in the handle having a grooved circular inner end adapted to overhang and interlock with the flange of the slidable jaw forming the sole means for preventing the screw from turning and an operating nut on the screw.

1,063,315. AEROPLANE. JESSE W. BAKER, Pittsburgh, Pa. Filed June 12, 1912. Serial No. 703,106. (Cl. 244—29.)

1. In a monoplane, an elongated body, a transversely disposed supporting plane pivotally mounted thereupon and terminating at each side of the body in a rearwardly flexible wing, adapted to be inclined upon its pivotals in the direction of flight, means for controlling the inclination of said plane, a plurality of draw wires connected to each wing for flexing the same, and means for operating said draw wires.

2. In a monoplane, an elongated body, a transversely disposed supporting plane pivotally mounted thereupon and terminating at each side of the body in a rearwardly flexible wing, adapted to be inclined upon its pivotals in the direction of flight, means for controlling the inclination of said plane, a plurality of draw wires connected to each wing for flexing the same, and means for operating said draw wires for flexing either wing.



3. In a monoplane, an elongated body provided with stabilizers at its rear, a transversely disposed supporting plane pivotally mounted thereupon and terminating at each side of the body in a rearwardly flexible wing, adapted to be inclined upon its pivotals in the direction of flight, means for controlling the inclination of said plane, means for flexing the flexible wings of the plane transversely to the direction of flight, vertically disposed steering rudders of elliptic form in cross-section each pivotally mounted beneath and to the forward end of the body, and means for adjusting said steering rudders upon their pivotals.

4. In a monoplane, an elongated body provided with stabilizers at its rear, a transversely disposed supporting plane pivotally mounted thereupon and terminating at each side of the body in a rearwardly flexible wing, adapted to be inclined upon its pivotals in the direction of flight, means for controlling the inclination of said plane, means for flexing either of the flexible wings of the plane transversely to the direction of flight, vertically disposed steering rudders of elliptic form in cross-section each pivotally mounted beneath and to the forward end of the body, and means for adjusting said steering rudders upon their pivotals.

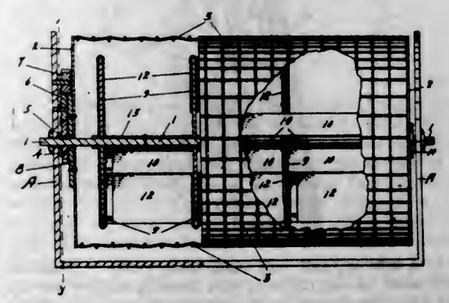
5. In a monoplane, an elongated body provided with stabilizers at its rear, a transversely disposed supporting plane pivotally mounted thereupon and terminating at each side of the body in a rearwardly extended flexible wing, adapted to be inclined upon its pivotals in the direction of flight, means for controlling the inclination of said plane, a plurality of draw wires connected to each wing for flexing the same, means for operating said draw wires, vertically disposed steering rudders of elliptic form in cross-section each pivotally mounted beneath and to the forward end of the body, and means for adjusting said steering rudders upon their pivotals.

[Claims 6 to 14 not printed in the Gazette.]

1,063,316. REVOLVING FISH-SCREEN. GEORGE V. BALLARD, Salt Lake City, Utah, assignor, by mesne assignments, to Franklin Spencer, Jr., Los Angeles, Cal. Filed Aug. 26, 1912. Serial No. 717,210. (Cl. 61—5.)

1. A fish screen consisting of a horizontal shaft; a drum screen journaled thereon; a power wheel concentrically placed in said screen consisting of a sleeve on said shaft; spokes having their base end secured to said sleeve; radially disposed and longitudinally placed blades fastened to said spokes; other blades having one edge pivoted on one of said spokes and the free end adapted to engage the spoke adjacent when swung on its pivot by the current of a flowing stream; and a chain of gears coacting to impart the motion of said shaft to said drum screen to continuously rotate it in the reverse direction on said shaft.

2. A revolving screen consisting of a drum screen journaled on a horizontal shaft; a sleeve on said shaft; radial spokes spaced apart in rows and having the base of each secured to said sleeve; radially disposed blades fastened to the spokes in each row; swinging blades having one edge of each pivoted to one of said spokes and the opposite edge free to swing practically one quarter of a circle and to engage another of said spokes; and a chain of gears adapted to impart the motion of said shaft to said drum screen to rotate it in the opposite direction to that of said shaft.



3. A revolving fish screen consisting of a drum screen; a horizontal shaft; radially disposed spokes spaced apart in longitudinal rows on said shaft; radially disposed and longitudinally placed blades fastened on said spokes near the base thereof; other blades having one edge of each pivoted on the outer portion of said spokes and adapted when swung on their pivots to have their free ends engage an adjacent spoke; and intermeshing gears adapted to impart the motion of said shaft to said drum screen to rotate it in the reverse direction to that of said shaft.

4. A revolving fish screen consisting of a frame; a shaft horizontally mounted therein; a drum screen journaled on said shaft; a sleeve fastened on said shaft within said screen radial spokes spaced apart in longitudinal rows on said sleeve; longitudinally placed blades fastened to the lower end portion of said spokes; an outer blade pivoted on each of said spokes, except one of the end ones of each row, of length sufficient to engage the adjacent spoke when swung on its pivot by the current of a running stream to rotate said shaft; and intermeshing gears adapted to impart the motion of said shaft to said drum screen to rotate it in a reverse direction to that of said shaft, as and for the purposes described.

1,063,317. SAFE OR VAULT WALL. CARL BARTELS, Hamilton, Ohio, assignor to The Mosler Safe Company, New York, N. Y. Filed Mar. 3, 1913. Serial No. 751,699. (Cl. 109—1.)

1. A safe or vault wall comprising, plates of unmachinable metal having their edges in abutting contact and having their inner surfaces provided with integrally formed studs near the joint between the edges of the plates, a bar of machinable metal secured to the inner surface at the edge of each plate by means of said studs being riveted in holes in the bars, a plate disposed against the inner surface of said bars, and screws passing through the last-mentioned plate and screwed into the bars, combined substantially as set forth.

2. A safe or vault wall comprising, plates of unmachinable metal having their edges in abutting contact and having their inner surfaces provided with integrally formed studs near the joint between the edges of the plates, a bar of machinable metal disposed against the inner surface at the edge of one plate and overlapping the other plate and secured to its plate by means of said studs being riveted in holes in the bar, a bar of machinable metal similarly secured to the other plate and having its inner edge in contact with the inner edge of the first-mentioned bar, a plate disposed against the inner surface of said bars, and screws passing through the last-men-

tioned plate and screwed into the bars, combined substantially as set forth.



3. A safe or vault wall comprising, plates of unmachinable metal having their edges in abutting contact and having their inner surfaces provided with integrally formed studs near the joint between the edges of the plates, a bar of machinable metal disposed against the inner surface at the edge of one plate and overlapping the other plate and secured to its plate by means of said studs being riveted in holes in the bar, a bar of machinable metal similarly secured to the other plate and having its inner edge in contact with the inner edge of the first-mentioned bar, the inner edge of one of the bars engaging to the rear of the inner edge of the other bar, a plate disposed against the inner surface of said bars, and screws passing through the last-mentioned plate and screwed into the bars, combined substantially as set forth.

4. A safe or vault wall comprising, plates of unmachinable metal having their edges in abutting contact and having their inner surfaces provided with integrally formed studs near the joint between the edges of the plates, a bar of machinable metal secured to the inner surface at the edge of each plate by means of said studs being riveted in holes in the bars, a series of plates disposed against the inner surfaces of said bars, and screws passing through the last-mentioned plates and screwed into the bars, combined substantially as set forth.

1,063,318. SAFE OR VAULT WALL. CARL BARTELS, Hamilton, Ohio, assignor to The Mosler Safe Company, New York, N. Y. Filed Mar. 3, 1913. Serial No. 751,700. (Cl. 109—1.)

1. A safe or vault wall comprising, wall plates having their edges in contact, bars secured to the inner surface of said plates at the sides of the joint and having dovetailed tapering edges, and a series of clamp-blocks disposed against the inner faces of said bars and engaging their outer edges, combined substantially as set forth.

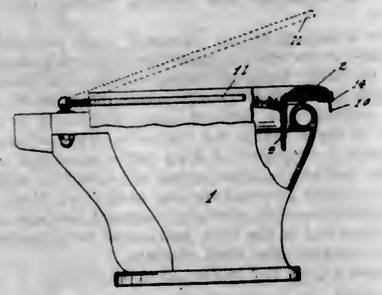
2. A safe or vault wall comprising, wall plates having their edges in contact, bars secured to the inner surface of said plates at the sides of the joint and having dovetailed tapering edges, and a series of clamp-blocks disposed against the inner faces of said bars and engaging their outer edges the dovetailed edges of the bars and the engaging edges of the clamp-blocks being notched to permit of the clamp-blocks being applied facewise to the bars, combined substantially as set forth.

3. A safe or vault wall comprising, plates of unmachinable metal having their edges in abutting contact and having their inner surfaces provided with integrally formed studs near the joint between the edges of the plates, a bar of metal disposed at the inner surface at the edge of each plate and having their outer edges dovetailed and tapered and the bars being secured to the plates by means of said studs being riveted in holes in the bars, and clamp-blocks disposed across the inner face of said bars and engaging the dovetailed tapering edges of the bars, combined substantially as set forth.



4. A safe or vault wall comprising, plates of unmachinable metal having their edges in abutting contact and having their inner surfaces provided with integrally formed studs near the joint between the edges of the plates, a bar of metal disposed at the inner surface at the edge of each plate and having their outer edges dovetailed and tapered and the bars being secured to the plates by means of said studs being riveted in holes in the bars, and clamp-blocks disposed across the inner face of said bars and engaging the dovetailed tapering edges of the bars the outer edges of the bars and the engaging surfaces of the clamp-blocks being notched to permit of the clamp-blocks being applied facewise to the bars, combined substantially as set forth.

1,063,319. SANITARY TOILET-SEAT COVER. SYDNEY N. BARUCH, Oakland, Cal., assignor of one-third to J. John Eppinger, San Francisco, Cal. Filed Dec. 11, 1912. Serial No. 736,149. (Cl. 4—18.)



1. In a device of the class described, the combination with a seat, a guard sheet positioned upon said seat, a clamping band, said band adapted to fit upon the outer periphery of said seat for holding said sheet upon said seat, of an L-shaped stop positioned upon said seat, said band adapted to bear upon the upper portion of said stop for limiting the downward movement of said band.

2. In a device of the class described the combination with a seat, a guard sheet positioned upon said seat, a clamping band, said band adapted to fit upon the outer periphery of said seat for holding said sheet upon said seat, of an L-shaped stop positioned upon said seat, the upper portion of said stop provided with a U-shaped pocket, said band adapted to rest within said pocket for limiting the downward movement of said band and the engagement of the edges adjacent said pocket of said stop and said band constituting a binding engagement for holding said sheet in position.

1,063,320. SMOKE-CONSUMER. LEE BAYER, Willisville, Ill. Filed Feb. 23, 1912. Serial No. 679,230. (Cl. 110—142.)

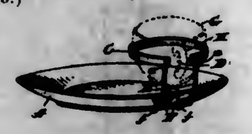


1. A smoke-consumer comprising a casing, a series of vertical screens disposed therein, a trough disposed above and between adjacent screens and shedding water from its opposite sides against the adjacent faces of said screens, and a water supply for said troughs.

2. A smoke-consumer comprising a casing, a series of spaced vertical screens disposed therein, troughs disposed between the adjacent screens and supplying a stream of running water to both sides of each screen, and a water supply connected with all of said troughs.

3. A smoke-consumer comprising a casing, a series of vertically disposed screens disposed therein, a series of troughs disposed above said screens for discharging water onto both faces thereof, and a water supply for said troughs, and a series of rods carried by each screen and intersecting the current of air passing thereto, the rods of the successive screens being disposed in different planes relative to the direction of the air current.

1,063,321. BUFFET-SERVER. ADELAIDE M. BLACKWELL, Seattle, Wash. Filed Feb. 27, 1912. Serial No. 680,255. (Cl. 65—65.)



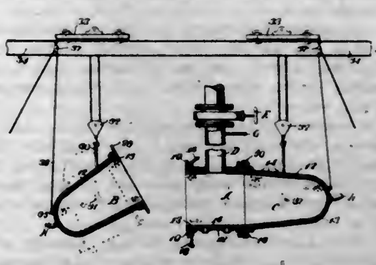
1. A cup support or attachment of the character described comprising a supporting standard adapted to be secured to and project upwardly from the rim of a plate and provided with an inwardly turned cup engaging portion adapted to overhang the plate and formed to receive the bowl of the cup, the cup engaging portion comprising a ring formed with an open portion to accommodate a lateral cup handle.

2. An attachment of the character described comprising a cup engaging ring provided with an open portion, a pair of supports connected to the terminals of the supporting ring, and means for securing the supports to the rim of a plate, said last mentioned means including a part formed to embrace the rim of the plate and connecting the standards together.

3. A cup supporting attachment of the character described having a base, a supporting standard projecting upwardly from said base, and a cup engaging ring at the upper end of the supporting standard adapted to support a cup and having an outwardly disposed opening to accommodate a cup handle.

1,063,322. SEPARATOR. IRVING BLOUNT, New York, N. Y. Filed Jan. 19, 1912. Serial No. 672,051. (Cl. 87—6.)

1. In an apparatus of the kind described, a container having an inner and an outer wall, with a space between the inner wall being adapted to retain solid matter and to permit liquid to pass into said space, said container having end sections secured thereto and adapted to be removed therefrom, means for suspending said end sections when removed from the middle section, and means to turn said end sections into a downwardly open position for the discharge of the solid matter contained therein.



2. In an apparatus of the kind described, a container comprising a fixed section and a section removably secured thereto and adapted to be disconnected therefrom, means for suspending the removable section when removed from the fixed section and means to turn the removable section to a downwardly open position for the discharge of solid matter therefrom, each of said sections having inner and outer walls with a space between, the inner walls being adapted to permit liquid to pass into said space and to retain solid matter, and means through which the container is supplied with material to be treated and with a fluid for extracting said material.

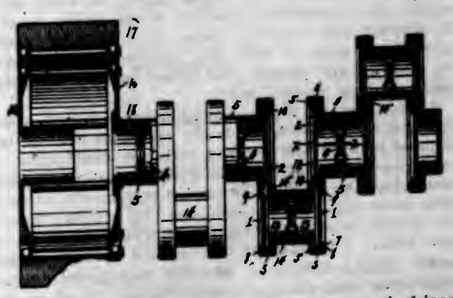
3. An apparatus of the kind described, having a treating chamber consisting of a stationary middle section and two connected end sections adapted to be disconnected from said middle section, means for suspending the removable end sections and means for limiting the swing of said sections and moving them into downwardly open position for the discharge of solid matter therefrom.

4. An apparatus of the class described, consisting of a stationary section and a removable section connected thereto, means for suspending the removable section so that its open end will be upward when removed from the stationary section, and means for removing the said section from the stationary section.

5. An apparatus of the class described, consisting of a stationary section and a removable section connected thereto, means for suspending the removable section so that its open end will be upward when removed from the stationary section, and means connected to the removable section for swinging it on its pivot to turn the open end downward for discharge.

[Claim 6 not printed in the Gazette.]

1,063,323. CRANK-SHAFT. HENRY L. BOCK, Toledo, Ohio, assignor to William E. Bock, Toledo, Ohio. Filed Apr. 10, 1911. Serial No. 620,214. (Cl. 74—38.)



1. A crank-shaft having a crank-arm composed of inner and outer rigidly connected sheet metal members, one having a portion drawn outwardly to form a shaft part and the other having a portion drawn outwardly to form a wrist-pin part.

2. A crank-shaft having a multiple section sheet metal crank-arm, the sections being secured together to form

a space therebetween, and one section having an outwardly drawn hollow wrist-pin part in communication with such space.

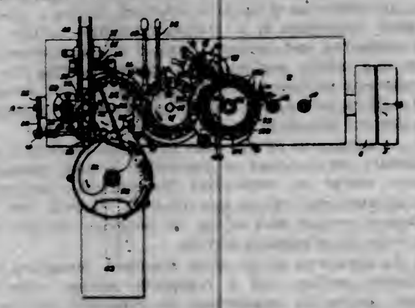
3. A crank-shaft having a multiple section sheet metal crank-arm, the sections being secured together to form a space therebetween, and one of said sections having an outwardly drawn hollow shaft part tin communication with such space.

4. A crank-shaft having a multiple section sheet metal crank-arm, the sections being secured together to form a space therebetween, one of said sections having an outwardly drawn hollow shaft part and another having an outwardly drawn hollow wrist-pin part, with each of said parts in communication with said space.

5. A crank-arm comprising an inner member of sheet metal, and an outer member of sheet metal partially inclosing said inner member, one of said members being provided with a tubular portion integral with it and constituting a shaft-part, the other member being provided with a tubular portion integral with it and forming a wrist-pin part.

[Claims 6 to 10 not printed in the Gazette.]

1,063,324. MACHINE FOR ASSEMBLING BOTTLE-CLOSURES OR LIKE ARTICLES. SAMUEL C. BOND, Hollyoak, Del., assignor to Bond Bottle Sealing Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 12, 1912. Serial No. 683,258. (Cl. 113—80.)



1. In a machine for assembling a bottle closure which comprises a cap, a gasket, and a fusible cementing material between said cap and gasket, in combination a means for cutting and a means for placing in the cap a disk of fusible cementing material while the cap is being continuously moved in a carrier, a second continuously moving carrier into which the cap carrying the fusible material is transferred from the first carrier, means for effecting said transfer, means for heating said cap and fusing the cementing material therein while in said second carrier, a third continuously moving carrier to which said heated cap is transferred from said second carrier, means for effecting said transfer, a means for carrying a gasket to said cap while in said third carrier, and a plunger for pressing and holding said gasket in said cap until said cementing material is set.

2. In a machine for assembling a bottle closure, comprising a cap, a gasket, and fusible cementing material interposed between said cap and gasket in combination, a continuously rotating pocketed wheel for carrying a cap containing the cementing material, a peripherally notched disk above and rotating with said cap carrying wheel, the notches in said disk registering with the pockets in said wheel, a peripherally notched and radially slotted gasket feeding disk, a race in which said gasket feeding disk turns, longitudinally movable fingers carried by the slots in said gasket feeding disk, a cam for directing the movements of said fingers, plungers rotating with said cap carrying wheel adapted to drive a gasket out between the notches in said notched disks to a cap and to press upon said gasket until the cementing material is set, and a means for carrying and a means for operating said plungers.

3. In a mechanism for assembling and pressing together the several members of a bottle or like closure, in combination, a traveling head, a multiplicity of plungers carried by said head, a cap carrier traveling with said head, means for elevating and depressing said plungers, and a means operating in connection with said head for limiting the downward movement of said plungers.

4. In a mechanism for assembling and pressing together the several members of a bottle or like closure, in combination, a rotating head, a multiplicity of plungers concentrically carried by said head, a cap carrier traveling with said head, means for elevating and depressing said plungers, and a means operating in connection with said head for limiting the downward movement of said plungers.

5. In a mechanism for assembling and pressing together the several members of a bottle or like closure, in combination, a rotating head, a multiplicity of plungers concentrically carried by said head, a cap carrier traveling with said head, springs for depressing said plungers, a cam-ring for lifting, holding, and releasing said plungers, and a means operating in connection with said head for limiting the fall of said plungers.

[Claims 6 to 14 not printed in the Gazette.]

1,063,325. RAILROAD-SIGNAL. ALEXANDER WILLIAM BOWER, Derby, Colo. Filed Dec. 2, 1910. Serial No. 595,258. (Cl. 246—21.)



1. A signal of the character deacribed comprising two pairs of electro-magnets, said magnets being connected to a source of current supply, a rock shaft, an armature plate to be attracted by one pair of the magnets, a movable supporting means to which said armature is attached, an arm fixed on the rock shaft engaging with the supporting means for the armature to rock said shaft upon the energization of the one pair of magnets, a second armature loosely mounted on the rock shaft to be attracted by the other pair of magnets, means actuated upon the attraction of said armature to limit the reverse movement of said shaft, in combination with a semaphore arm, and a movable connection between the semaphore arm and the rock shaft to position said semaphore arm upon the energization of the magnets, substantially as and for the purpose set forth.

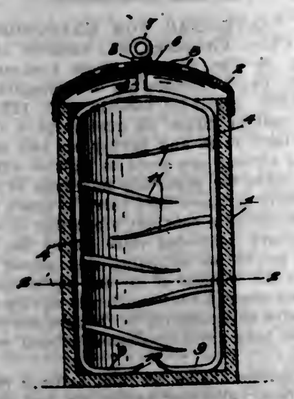
2. A signal of the character described comprising two pairs of electro-magnets connected to a suitable source of electric supply, a vertically disposed pivotally mounted standard, an armature plate carried by said standard to be attracted by one pair of magnets, a rock shaft, an arm fixed on said rock shaft and engaging said standard whereby the shaft is rocked upon the attraction of the armature, a second armature loosely mounted on the rock shaft to be attracted by the other pair of magnets, means actuated upon the attraction of said armature to limit the reverse movement of said shaft, a rod rigidly fixed on the rock shaft, in combination with a semaphore arm, and a flexible connection between the semaphore arm and said rod to position said semaphore arm upon the energization of the magnets, substantially as and for the purpose set forth.

3. A signal of the character described comprising two pairs of electro-magnets, said magnets being wired to a suitable source of electric supply, a pivotally mounted standard, an armature plate carried by said standard for attraction by one pair of magnets, a rock shaft, an arm fixed on the rock shaft, a roller mounted on said arm, a guide for said roller carried by the standard, a second arm loosely mounted on the rock shaft, an armature plate carried by the arm for attraction by the other pair of magnets, means actuated upon the attraction of said armature to limit the reverse movement of said shaft, in combination with a semaphore arm, and a flexible connection between the semaphore arm and the rock shaft to position said semaphore arm upon the energization of the magnets, substantially as and for the purpose set forth.

4. A signal of the character described comprising two pairs of electro-magnets, said magnets being wired to a suitable source of electric supply, a movably mounted armature to be attracted by one pair of magnets, a rock shaft, means for rocking said shaft upon the attraction of the armature, a second armature loosely mounted on the rock shaft, said armature being adapted for attraction by the other pair of magnets, means actuated upon the attraction of said armature to limit the reverse movement of said shaft, a rod fixed on the rock shaft, in combination with a semaphore arm, and means connecting the semaphore arm and said rod whereby said semaphore arm is positioned upon the energization of the magnets.

5. A signal of the character described comprising two pairs of electro-magnets wired to a suitable source of electric supply, a movably supported armature plate to be attracted by one pair of said magnets, a rock shaft, means for rocking said shaft upon the attraction of the armature, a block loosely mounted on the shaft, a atop fixed on the shaft to limit the independent movement of the shaft relative to the block in one direction, an arm removably fixed in the block, an armature plate carried by the arm for attraction by the other pair of magnets, a collar fixed centrally on the rock shaft, a rod carried by the collar, in combination with a semaphore arm, and a flexible connection between the semaphore arm and said rod to position the semaphore arm upon the energization of the magnets, substantially as and for the purpose set forth.

1,063,326. CONDIMENT-HOLDER. MARIE E. BROOKS, Cedarhurst, N. Y. Filed Oct. 26, 1912. Serial No. 727,093. (Cl. 65—57.)



1. In a device of the character described, the combination of a holder having a yoke arranged therein, inwardly projecting curved spurs formed upon the side portions of said yoke and arranged in opposed relation, the ends of said side portions being curved inwardly and disposed at right angles to the side portions, and upwardly curved points formed on the extreme ends of the side portions.

2. In combination with a holder having a perforated top provided with a centrally arranged opening, of a yoke arranged within the holder, a stem formed integral with the intermediate portion of the yoke and extending up through the central opening, a finger hold secured to the upper end of the stem whereby the yoke may be rotated, the ends of said yoke being curved inwardly and upwardly and having their extreme ends pointed, alternately arranged inwardly extending spurs formed integral with the side portions of the yoke and curved in opposite directions.

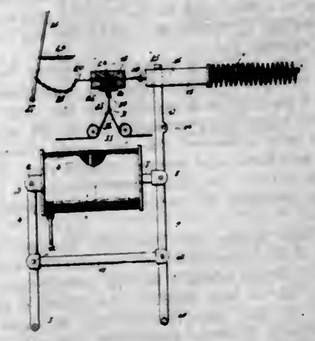
3. In combination with a holder having a perforated cover provided with a central opening, of a yoke arranged within said holder, a stem formed at its intermediate portion and extending upwardly through the central opening, a finger hold secured to the upper end of the stem whereby the yoke may be rotated, the ends of said yoke being curved inwardly and upwardly and the extreme ends thereof pointed, alternately arranged inwardly extending spurs formed upon the side portions of said yoke, the ends of said spurs extending downwardly from the body portion thereof and the spurs upon one side of the side portions being curved in opposite directions from the spurs upon the other side portion.

4. In a device of the character described, the combination of a holder having a yoke arranged therein, a plurality of alternately arranged inwardly projecting curved spurs formed upon the side portions of the yoke and arranged in opposed relation, the ends of said yoke being curved inwardly and upwardly and arranged in longitudinal alinement, and the extreme ends of said yoke being provided with upwardly curved points.

5. In combination with a holder having a perforated top provided with a centrally arranged opening, of a yoke arranged within the holder and having a stem projecting up through the central opening, the ends of said yoke being curved inwardly and upwardly and having their extreme ends pointed and inwardly projecting spurs formed upon the side portions of the yoke and disposed in opposed relation.

[Claim 6 not printed in the Gazette.]

1,063,327. BRAKE-SETTING MECHANISM. ALBERT W. BUELL, St. Paul, Minn., assignor to Melville H. O. Fisher, St. Paul, Minn. Filed May 3, 1912. Serial No. 694,819. (Cl. 188—16.)



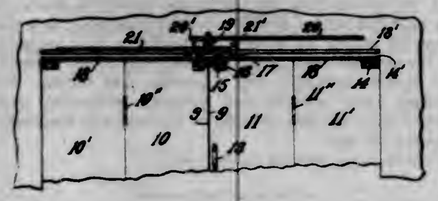
1. The combination with a brake cylinder, cylinder levers and cylinder lever rods, an emergency brake setting mechanism, a connection between said mechanism and one of the cylinder levers, latching means normally holding said mechanism inoperative and adapted to render the same operative, and means associated with said latching means and operable to relieve the brake setting mechanism of the influence of the latching means.

2. The combination with a brake cylinder, cylinder levers and cylinder lever rods, of an emergency brake setting mechanism, a connection between said mechanism and one of the cylinder levers, and latching means normally holding said mechanism inactive and adapted to render the same operative, said latching means comprising a block, a strip slidably disposed within the block and connected to the brake setting mechanism, a latching pin within the block and adapted to engage the strip, and means for disengaging the latching pin from the strip.

3. The combination with a brake cylinder, cylinder levers and cylinder lever rods, of an emergency brake setting mechanism, a connection between said mechanism and one of the cylinder levers, latching means normally holding said mechanism inactive and adapted to render the same operative, and a resetting device for said mechanism, said resetting device including a lever manually operable to restore the brake setting mechanism subsequent to the release of the latching means, and a connection between said lever and latching means.

4. The combination with a brake cylinder, cylinder levers and cylinder lever rods, of an emergency brake setting mechanism, a connection between said mechanism and one of the cylinder levers, latching means normally holding said mechanism inoperative, and adapted to render the same operative, and means associated with the latching means and operable manually and automatically to relieve the emergency brake setting mechanism of the influence of the latching means.

1,063,328. GATE. ALVAH B. CHRISTOPHER, Boston, Mass. Filed Apr. 1, 1910, Serial No. 552,764. Renewed Mar. 17, 1913. Serial No. 755,014. (Cl. 39—94.)

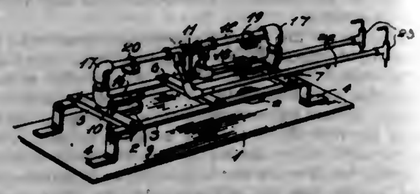


1. A gate comprising a pair of movable barriers in combination with a rack and bracket and a pair of rollers on each barrier; a pinion engaged by both racks; ways for the rollers, to guide the movement of the barriers; the rollers in each pair being fixed at a distance apart in the direction of travel; and the ways being adapted to engage either the top or bottom of a roller but not both top and bottom at once.

2. A gate having a collapsible barrier, said barrier having two parts hinged together; a support for each part at a place thereon remote from the hinge; the parts and their hinge being arranged all in the same vertical plane to form a barrier; the said points of support being outside said plane and movable toward each other to collapse the barrier, the hinge then traveling a path which does not intersect the vertical plane in which the supports are.

3. A gate having two bi-partite barriers, each being adapted to fold upon itself, in combination with a guideway and brackets movable thereon toward one side of the gateway; one of said brackets comprising a pivotal support for the leaf most remote from said side; and the other of said brackets supporting pivotally the nearer portion of the nearer leaf of the same barrier, and also the remote portion of the farther leaf of the nearer barrier; a differential pinion fixed in position; a rack meshing in the larger diameter of the pinion and connected with said farther bracket; and another rack meshing in the smaller diameter and connected with the nearer bracket; whereby the said barriers move toward and collapse at said side of the gateway.

1,063,329. OIL-BURNER. GEORGE J. CLARK, Defiance, Ohio. Filed Nov. 11, 1912. Serial No. 730,715. (Cl. 158—63.)



1. An oil burner comprising a supporting structure having an intermediate pipe stand and recessed end lugs, a retort pipe resting on said stand, burner tubes arranged below and in a plane parallel with said pipe, elbows connecting said tubes with the ends of said pipe, said tubes having jet openings therein, and flame spreaders disposed above said jet openings.

2. An oil burner comprising side bars having offset feet, cross bars connecting said side bars near the opposite ends thereof and having generating pans extending laterally therefrom, recessed lugs projecting upwardly from the cross bars, a retort pipe stand supported by said side bars, a retort pipe extending longitudinally of said bars in a plane thereabove and supported on said pipe stand, burner tubes connected with the ends of said pipe and disposed in the vertical plane of and below said pipe, said tubes having jet openings therein, valved oil supply pipes connected with said pipe, and flame spreaders on said pipe.

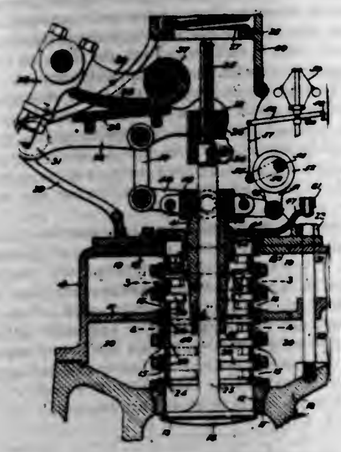
3. An oil burner comprising side bars having offset feet, cross bars connecting said side bars near the opposite ends thereof and having generating pans extending laterally therefrom, recessed lugs projecting upwardly from the cross bars, a retort pipe stand supported by said side bars, a retort pipe extending longitudinally of said bars in a plane thereabove and supported on said pipe stand, burner tubes connected with the ends of said pipe and disposed in the vertical plane of and below said pipe, said tubes having jet openings therein, valved oil supply pipes connected with said retort pipe, flame spreaders on said pipe, said pipe having a solid intermediate portion between its connection with said supply pipes to form vaporizing chambers.

4. A supporting frame for an oil burner comprising laterally spaced side bars having longitudinally extended offset feet, end cross bars connecting said side bars and each having one face thereof reduced at its opposite ends to form shoulders for attaching the inner ends of said side bars, a generating pan extending laterally from one side edge of each cross bar, recessed lugs extending upwardly from said cross bars, and an intermediate cross bar having a pipe stand.

1,063,330. VALVE-GEAR FOR EXPLOSION-MOTORS. MARK B. CRIST, Pittsburgh, Pa., assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed July 20, 1909. Serial No. 508,636. (Cl. 123—110.)

1. In an ignition engine, an inlet valve, a valve casing around the inlet valve and having air and gas ports, a valve having air and gas ports to register with those in the casing, means for imparting movement to said second mentioned valve and said inlet valve to admit the charge, means for delivering a constant proportion of air and gas from said second mentioned valve during the entire suction stroke, means for adjusting said second mentioned valve to vary the volumes of air and gas passing through said ports, and means for intermittently moving said second mentioned valve longitudinally of the first mentioned valve to change the port areas uncovered by said second mentioned valve.

2. In an ignition engine, an inlet valve, a valve casing around the inlet valve and having air and gas ports, a valve having air and gas ports to register with those in the casing, means for imparting movement to said second mentioned valve and said inlet valve to admit the charge, means for delivering a constant proportion of air and gas from said second mentioned valve during the entire suction stroke, means for adjusting said second mentioned valve to vary the volumes of air and gas passing through



said ports and governor controlled means for intermittently changing the relative positions of one of said valves with relation to the other whereby the port areas uncovered by the second mentioned valve will be changed.

1,063,331. TURBINE-BUCKET. CHARLES W. DAKE, Chicago, Ill., assignor to Pyle-National Electric Headlight Company, Chicago, Ill., a Corporation of New Jersey. Filed June 12, 1912. Serial No. 703,124. (Cl. 121—60.)



1. A turbine motor bucket comprising two sides, one of them having a projection, a bottom with two flanges, one inclined, a ring-shaped top with a series of perforations to receive the projections, a bed plate with slots, one undercut, to receive the flanges, and a securing block in one slot to hold the inclined flange against the undercut portion of the slot.

2. A turbine motor bucket comprising two sides, a bottom with two flanges, one inclined, an extended top to cover and thus complete a series of buckets, means for attaching the top to the buckets and a bed plate on which the buckets are secured.

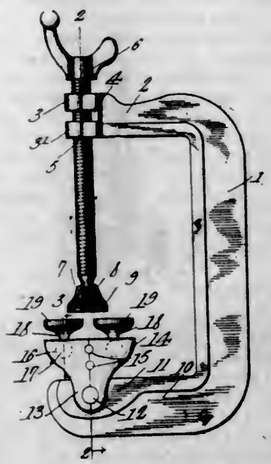
3. A turbine motor bucket comprising two sides, a bottom with two flanges, one inclined, an extended top to cover and thus complete a series of buckets, means for attaching the top to the buckets, and a bed plate with slots, one undercut, to receive the flanges, and a securing block in one slot to hold the inclined flange against the undercut portion of the slot.

4. A turbine motor bucket comprising two sides, a bottom with two flanges, one inclined, an extended top to cover and thus complete a series of buckets, means for attaching the top to the buckets, and a bed plate with extended slots, one undercut, to receive the flanges, and an extended securing block in one slot to hold the inclined flanges of a series of buckets against the undercut portion of the slot.

5. A fluid motor bucket comprising a flat bottom member, side members projecting upwardly from either side of said bottom member and flanges projecting downwardly from either end of said bottom member.

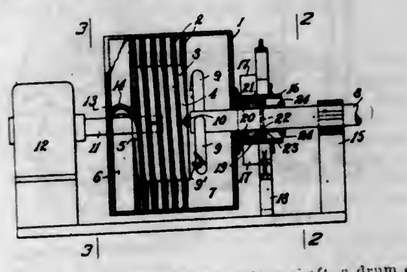
[Claims 6 to 12 not printed in the Gazette.]

1,063,332. CLAMP. JACOB DIEHL, Sheboygan, Wis. Filed May 10, 1912. Serial No. 696,525. (Cl. 144—304.)



A C-clamp, having a screw fitted in one terminal, an abutment plate connected to the screw by a ball-and-socket joint, two plates connected together and having terminal straddling lugs pivoted astride the other terminal of the clamp for back and forth swinging movement relatively to the abutment plate of the screw, and two abutment plates connected each by a ball-and-socket joint to the two swinging plates and for coöperation with the abutment plate of the screw.

1,063,333. STEAM-TURBINE. SHADRACH MILES DOBSON, Portland, Me. Filed Apr. 22, 1912. Serial No. 692,320. (Cl. 121—57.)



1. A rotary motor comprising a rotary shaft, a drum on said shaft and having a continuous passage in a plurality of turns spirally disposed thereabout in the direction of the rotation thereof, a casing inclosing said shaft, an axial vapor supply entering said drum at one end, a nozzle arm within said casing and a nozzle on said rim and directed toward said passage in substantial alinement therewith.

2. In a rotary motor, a casing, a tubular bearing on said casing and having an opening therethrough, an intake pipe passing through the opening of said bearing and entering said casing, a shell surrounding said intake pipe, a carbon pack in said shell and bearing against said casing around the entry of said intake pipe and a resilient backing for said shell.

3. In a rotary motor a rotatable steam drum, a tubular bearing at one end thereof, a concentric intake pipe enter-

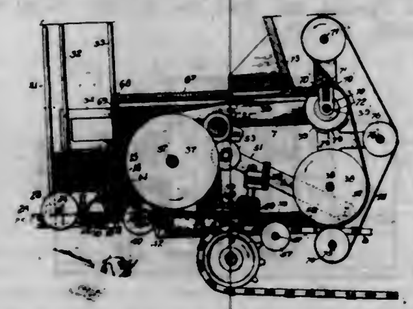
ing said bearing, a frame inclosing said bearing and a plurality of rollers mounted on said frame and supporting said tubular bearing.

1,063,334. VALVE FOR HYDROCARBONS. JOHN RICHARD DONNELLY, Portland, Me., assignor of one-half to himself and one-half to Charles F. Libby, Portland, Me. Filed Apr. 8, 1910. Serial No. 554,107. (Cl. 158—120.)



A valve of the class described comprising a casing, said casing having an intake and outlet opening, a partition dividing said casing between said openings, and having a passage way therethrough, a valve seat formed about said passage way, a hollow valve stem in said casing having a conical valve on its end adapted to find said seat, a longitudinal opening through the conical point of said valve and communicating with said hollow stem, transverse openings in said valve stem communicating with one side of said casing, an auxiliary valve stem threaded within said first named valve stem, and a needle on the end of said auxiliary valve stem adapted to enter the opening in the point of said first named valve and adapted to be protruded therethrough.

1,063,335. ENVELOP-FEEDING MECHANISM. JOSEPH S. DUNCAN, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 1, 1909. Serial No. 480,598. (Cl. 101—39.)



1. In a feeding mechanism of the class described, the combination of a drawing roll, a throat plate mounted in front of the vertical center of said roll to permit the forward end of a stack of envelops to be supported by said roll, the lower edge of said throat plate being disposed below the top of said roll and beveled to flex the forward end of the lowermost envelop over the roll to thereby permit withdrawal of said envelop, and means for adjusting the throat plate vertically to accommodate envelops of various thicknesses.

2. In a feeding mechanism of the character described, the combination of a frame, a drawing roll, a supporting roll movable in an arc on said frame and adjustably mounted so that the distance between said rolls may be varied, a throat plate having a beveled lower edge mounted in a vertical plane in front of the vertical center of the drawing roll, and means for adjusting said plate relatively to the roll.

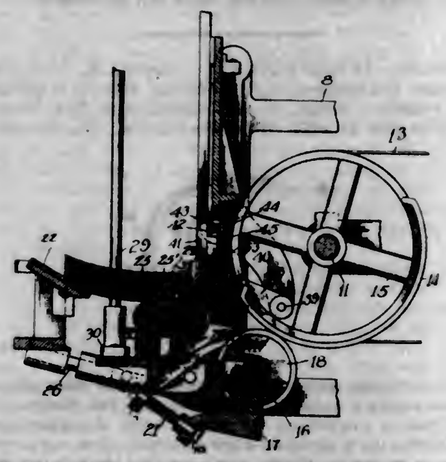
3. In a feeding mechanism of the class described, the combination of a main frame, a drawing roll mounted in said frame, a two-part frame mounted to swing on said main frame, one of said parts being adjustable relative to the other and toward and away from the drawing roll, and a supporting roll carried by said adjustable part.

4. In a feeding mechanism of the class described, the combination of a main frame, a drawing roll mounted in said frame, a two-part frame comprising one part pivotally mounted in the main frame and another part adjustably supported on said pivoted part, and a supporting roll carried by said adjustable part behind the drawing roll.

5. In a feeding mechanism of the class described, the combination of a main frame, a drawing roll mounted in said frame, a two-part frame comprising one part pivotally mounted in the main frame and another part adjustably supported on said pivoted part, said pivotal part having transverse openings therein and said adjustable part having rods adjustable in said openings, means for securing the rods in adjusted position in the openings, and a supporting roll carried by said adjustable part.

[Claims 6 to 17 not printed in the Gazette.]

1,063,336. ENVELOP-FEEDING MECHANISM. JOSEPH S. DUNCAN, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 15, 1910. Serial No. 538,187. (Cl. 101—39.)



1. In a feeding mechanism of the class described, the combination of a continuously rotated feed roll, an intermittently operated drawing roll, a driven gear loosely mounted on said drawing roll, connections between said gear and the drawing roll permitting a rotary movement of the drawing roll in one direction independently of the gear, a driving gear loosely mounted on the feed roll, a train of gears connecting said driving and driven gears, and means for intermittently connecting said driving gear with the feed roll to impart a rotary movement to said drawing roll.

2. In a feeding mechanism of the class described, the combination of a continuously operated feed roll, a driving gear loosely mounted thereon, a drawing roll, a driven gear loosely mounted thereon, pawl and ratchet mechanism for connecting said driven gear to the drawing roll, means for operatively connecting said driven gear with said driving gear, and means for intermittently connecting the driving gear to the continuously rotating feed roll whereby an intermittent rotary movement is imparted to the drawing roll.

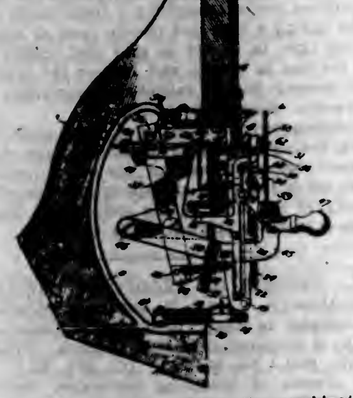
3. In a feeding mechanism of the class described, the combination of a continuously rotating feed roll, a drawing roll, a supporting roll, a driven gear loosely mounted on said drawing roll, connections between said driven gear and the drawing roll connections between said driven gear and the supporting roll, whereby both of said rolls are operated from the driven gear, each of said connections permitting each roll to rotate in one direction independently of the movement of the driven gear and of each other.

4. In a feeding mechanism of the class described, the combination of a continuously rotating feed roll, a drawing roll, means for connecting said drawing roll to the feed roll, a supporting roll and means for connecting said supporting roll to the drawing roll, whereby the supporting and drawing rolls may be operated from the feed roll and are capable of rotary movement independent of said feed roll and of each other, and means for controlling the connection between the feed roll and the drawing roll to automatically establish and break the connection between said rolls.

5. In a feeding mechanism of the class described, the combination of a continuously rotating feed roll shaft, a gear loosely mounted thereon, a ratchet integral with said gear, a pawl mounted to travel with the shaft and adapted to engage said ratchet, stationary means for controlling the operation of said pawl, whereby the connection between said shaft and said gear is automatically and intermittently established and broken, a drawing roll, and operative connections between said drawing roll and said gear.

[Claims 6 to 23 not printed in the Gazette.]

1,063,337. TYPE-SETTING MACHINE. JOSEPH S. DUNCAN, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed July 25, 1910. Serial No. 573,590. (Cl. 101—195.)



1. In a type setting machine, the combination of a series of channels, a series of teeth fixed with respect to the channels and projecting rearwardly therefrom, a carriage adapted to travel adjacent the channels, an ejector slidably mounted on said carriage behind said channels, a lever pivoted on the carriage and operatively connected with the ejector, said lever being adapted to engage with the teeth at the rear of the channels to position the carriage during the ejecting operation, a beveled lug secured to the lower end of said lever, a key lever mounted on the carriage, a beveled lug on said key lever adapted to engage with and actuate said ejector lever and means for returning said levers independently to normal position.

2. In a type setting machine, the combination of a series of channels, a series of teeth fixed with respect to the channels and projecting rearwardly therefrom, a carriage adapted to travel adjacent to and in front of the channels, an ejector slidably mounted on said carriage behind said channels, a lever pivoted on the carriage and operatively connected with the ejector, said lever being adapted to engage with the teeth at the rear of the channels to position the carriage during the ejecting operation, a beveled lug secured to the lower end of said lever, a key lever mounted on the carriage, a beveled lug on said key lever adapted to engage with and actuate said ejector lever, a holder adjustably mounted on said carriage, and means connected with said key lever to be actuated thereby when said key lever approaches the limit of its movement for positioning an ejected type in said holder.

3. In a type setting machine, the combination of a plurality of type channels, a carriage adapted to travel adjacent said channels, a type holder removably mounted on the carriage and having one or more type grooves, means for adjusting the holder on the carriage, an ejector adapted to push a type outward from said channels, means for positioning said carriage with a groove in the type holder in alinement with one of said channels during the ejecting operation, a type setter adapted to position an ejected type in the holder, and a key lever mounted on the carriage to actuate the carriage positioning means, the ejector and the type setter.

4. In a type setting machine, the combination of a frame provided with a series of type channels closed at their lower ends and provided with an opening in their rear walls near the bottom thereof, a carriage adapted to travel adjacent said type channels, a transfer pocket mounted on said carriage, a carriage lock, an ejector for introducing the type into said pocket, a type holder, a type setter for positioning the type in the holder, and means pivotally mounted on the carriage for operating successively said carriage lock, ejector and type setter.

5. In a type setting machine, the combination of a series of channels provided with openings in their rear walls near the lower ends thereof, said channels being closed at their lower ends to prevent the escape of type, a carriage, a transfer pocket mounted thereon, a frame slidably mounted on said carriage, a type holder detachably secured to said frame, means for retaining said frame in adjusted position on the carriage, means for locking the carriage relatively to a type channel, means for forcing the lower type in a channel forwardly out of the channel and into said pocket in alinement with a groove in the type holder, and means for removing the type from said pocket and positioning the type in a groove in the holder.

[Claims 6 to 8 not printed in the Gazette.]

1,063,338. ENVELOP-FEEDING MECHANISM. JOSEPH S. DUNCAN, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed July 28, 1910. Serial No. 574,412. (Cl. 101—39.)

1. In an envelop feeding mechanism, the combination of a feeding device adapted to engage the flap of an envelop, and a separator movably mounted on one face of the feeding device and projecting on the opposite face thereof.

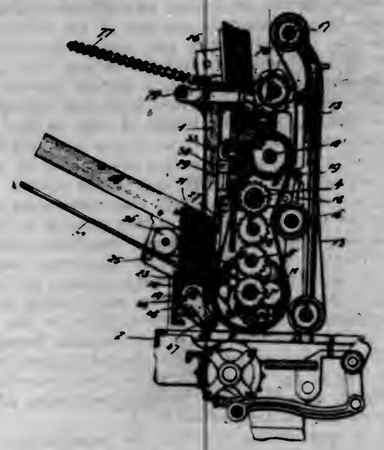
2. In an envelop feeding mechanism, the combination of a feeding device adapted to engage the flap of an envelop, and a separator carried by the feeding device and movable relatively thereto to open the flap so that the device may engage therewith.

3. In an envelop feeding mechanism, the combination of a feeding device adapted to engage the flap of an envelop, and a separator yieldingly mounted on the feeding device and capable of movement in the direction of movement of the feeding device to open the flap so that the feeding device may engage therewith.

4. In an envelop feeding mechanism, the combination of a feeding device adapted to engage the flap of an envelop, and a separator yieldingly mounted on the feeding device to open the flap so that the feeding device may engage therewith.

5. In an envelop feeding mechanism, the combination of a feeding device adapted to engage the flap of an

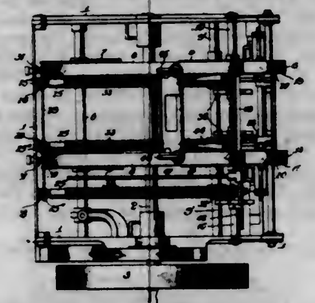
envelop, and a separator yieldingly mounted on the back of the feeding device and projecting in front of and be-



low the feeding device to open the flap so that the feeding device may engage therewith.

[Claims 6 to 11 not printed in the Gazette.]

1,063,339. ENVELOP-DELIVERY MECHANISM. JOSEPH S. DUNCAN, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 18, 1910. Serial No. 577,737. (Cl. 101—29.)



1. In a mechanism of the character described, the combination of a rod provided with feeding threads of a relatively small pitch to feed an envelop along the rod at a relatively slow speed and threads of a greater pitch at the receiving end for quickly delivering the envelop to said feeding threads, means for rotating said rod and means for delivering an envelop to the rod.

2. In a mechanism of the character described, a threaded rod adapted to engage the envelops, said rod having a triple spiral thread at its receiving end and a helical thread beyond said triple spiral thread whereby the envelops are continuously fed along the rod at varying speeds, and means for turning the rod to feed the envelops.

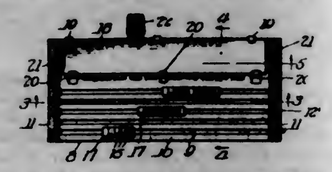
3. In a mechanism of the character described, a threaded rod adapted to engage the envelops, said rod being made in two parts, detachable one from the other, one of said parts having thereon a triple spiral thread and the other part having thereon a helical thread whereby the envelops are fed longitudinally of the rod at a relatively fast and slow speed by the triple thread and the helical thread, respectively, and means for turning the rod to feed the envelops.

4. In a mechanism of the character described, a plurality of threaded rods on which the envelops are delivered on edge threaded to positively feed the envelops at varying speeds, a worm and gear for turning each rod, and means for simultaneously operating said worms and gears.

5. In a mechanism of the character described, a threaded rod on which the envelops are delivered on edge, a pivotal support for one end of said rod, a rigid support for the other end of said rod, and means for locking the rod in place on said rigid support.

[Claims 6 to 15 not printed in the Gazette.]

1,063,340. PRINTING DEVICE. JOSEPH S. DUNCAN, Chicago, Ill., assignor to Addressograph Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 18, 1911. Serial No. 649,788. (Cl. 101—169.)



1. A printing device comprising a frame of sheet metal and having a type slot extending therethrough and open at one end to receive the type to be set in said slot, and spacing flanges extending transversely of the slot at opposite edges of the frame.

2. A printing device comprising a frame made of sheet metal and having a type slot extending therethrough approximately from end to end of the device and open at one end to receive the type to be set in said slot, and spacing flanges extending transversely of the slot at opposite edges of the frame.

3. A printing device comprising a frame made of sheet metal and having a plurality of parallel type slots therein, each of said slots being open at one end to receive the type to be set in the slots, and spacing flanges extending transversely of the slots at opposite edges of the frame.

4. A printing device comprising a frame made of sheet metal and having a type slot therein open at one end to receive the type to be set in said slot, guides at the sides of the slot to engage and support the type in the slot, and spacing flanges extending transversely of the slot at opposite edges of the frame.

5. A printing device comprising a frame made of sheet metal and having a plurality of parallel type slots and guides, each slot being open at one end to receive the type to be set in the slots, and spacing flanges extending transversely of the slots at the ends of the frame.

[Claims 6 to 8 not printed in the Gazette.]

1,060,341. PROCESS OF PRODUCING LOW-CARBON FERRO-ALLOYS. ISAAC R. EDMANDS, Niagara Falls, N. Y., assignor to Electro Metallurgical Company, Chicago, Ill., a Corporation of West Virginia. Filed Sept. 24, 1907. Serial No. 394,272. (Cl. 204—63.)

1. The process of producing low-carbon ferro-alloys, which consists in first producing a ferro-alloy high in carbon, and then subjecting the product, heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the alloyed metal, to the action of an oxidising gas.

2. The process of producing low-carbon ferro-alloys, which consists in first producing a ferro-alloy high in carbon, and then subjecting the product, electrically heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the alloyed metal, to the action of an oxidising gas.

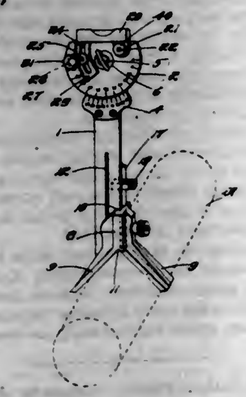
3. The process of producing low-carbon ferro-alloys, which consists in electrically smelting a compound of the alloying metal, an excess of carbon and a source of iron, and subjecting the high-carbon product, electrically heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the alloyed metal, to the action of an oxidising gas.

4. The process of producing low-carbon ferrochromium, which consists in first producing ferrochromium high in carbon, and then subjecting the product, heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for the chromium, to the action of an oxidising gas.

5. The process of producing low-carbon ferrochromium, which consists in first producing ferrochromium high in carbon, and then subjecting the product, electrically heated to a temperature such that the affinity of oxygen for the contained carbon is greater than its affinity for chromium, to the action of an oxidising gas.

[Claims 6 and 7 not printed in the Gazette.]

1,063,342. COMBINATION CENTERHEAD, LEVEL, AND BEVEL-PROTRACTOR. PER ERIK EKMAN, Woburn, Mass. Filed Mar. 19, 1912. Serial No. 684,758. (Cl. 73—145.)



1. A centerhead and bevel protractor having a blade, a sector-shaped protractor pivotally connected to the blade at the center of curvature of the protractor, a level pivotally connected at one end to the protractor, said level being capable of being turned on its pivot, means for turning the said level on its pivot with relation to the protractor and means for retaining the level in its adjusted position.

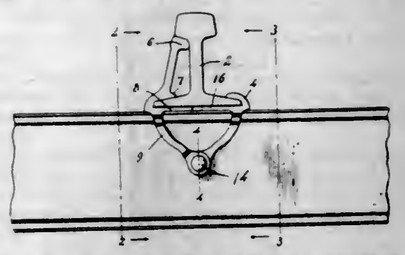
2. A centerhead and bevel protractor having a blade, a protractor pivotally connected therewith, a level mounted on the protractor, a stock with a guideway to receive said blade, and a bar also mounted in said guideway having a gage foot projecting therefrom.

3. A centerhead and bevel protractor having a protractor, a level having at one end an arm which is pivotally connected to the protractor, the other end of the level having an arm with an arc-shaped slot on a curve of which said pivot is the center, a stud projecting from said protractor through said slot and means connected with said stud and with said arc shaped arm whereby the arc-shaped arm may be actuated to move the level on its pivot.

4. A centerhead and bevel protractor having a protractor, a level having at one end an arm which is pivotally connected to the protractor, the other end of the level having an arm with an arch-shaped slot on a curve of which said pivot is the center, said arc-shaped arm having teeth on its periphery and a pinion engaging with said teeth whereby said arc-shaped arm may be actuated.

5. In combination with a center head having diverging legs, a gage bar having a toe guided by the center head, the outer end of the toe of the gage bar serving to engage the side of a groove, the toe of said foot being downwardly inclined from the heel of the foot so that the toe may extend down against the side of the groove in the stock while the heel of the foot is above the groove, said downwardly inclined form of the foot permitting the foot to be drawn into the crotch while still permitting the extreme end of the foot to engage the groove to adapt it for stock of small diameters.

1,063,343. STEEL-TIE CLAMP. HENRY J. ELLENBERGER, Sault Ste. Marie, Ontario, Canada. Filed Nov. 8, 1912. Serial No. 730,247. (Cl. 238—4.)



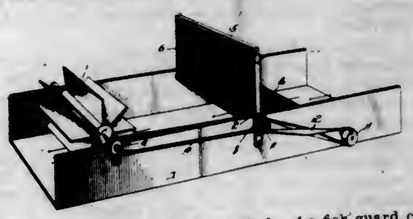
1. In means for sustaining rails upon transversely arranged ties, a pair of clamping members each including rail engaging lips, and each provided with base plates which are adapted to lie upon the tie below the base flange of the rail, and each of the said clamps being provided with downwardly extending inclined arms, and a connecting element for securing the arms upon the tie.

2. A clamp for securing a rail upon an I beam tie, comprising a pair of clamping members, each formed with rail flange engaging lips, and each being provided with inturned plates which are disposed between the rail and the upper face of tie, each of the said members having oppositely arranged inturned arms which are formed to correspond with the shape of the upper portion of the opposite sides of the tie, the said arms terminating in overlapping portions having registering openings and a securing element passing through the openings and through the tie.

3. A clamp for the purpose set forth, embodying rail engaging members each of which including an inwardly extending base plate and oppositely arranged arms which terminate in eyes, and a pivoted member connecting the eyes.

4. As a means for retaining a rail upon a transversely arranged tie embodying an I beam, a pair of elements each provided with a lip which engages with the opposite base flanges of the rail, each of said elements being provided with inturned plates which are arranged between the rail and the tie, each of said elements being provided with spaced arms which conform to the shape of the opposite faces of the tie, and which have their extremities provided with overlapping eyes, a member passing through the eyes and through the tie to secure the elements upon the tie, and one of the said elements being formed with an upwardly inclined body portion which has its extremity formed with an inturned lip that engages the ball of the rail upon one of its sides.

1,063,344. FISH-GUARD FOR DITCHES. JOSEPH FLEISHMAN, Winthrop, Wash., assignor of one-half to G. W. Clark, Winthrop, Wash. Filed June 7, 1912. Serial No. 702,365. (Cl. 61—5.)



The combination with a drain ditch, of a fish guard comprising upper and lower rollers arranged out of vertical alinement with each other, an endless screen traveling over said rollers, means for driving said screen an upright frame arranged in vertical alinement with the upper roller, and a rectangular guard hinged within said frame at its upper corners, the lower edge of said hinged guard being parallel to and adjacent the upper roller.

1,063,345. SASH CONSTRUCTION. GEORGE H. FORSYTH, Chicago, Ill. Filed July 1, 1907. Serial No. 381,683. (Cl. 189—72.)



1. The combination with a hollow sash and a guide therefor, of an angularly movable adjusting strip mounted in said hollow sash and adapted to engage said guide, said adjusting strip being of wedge form in cross-section whereby, under outward movement, it operates to force the sides of said sash into engagement with the side walls of the guide, substantially as described.

2. The combination with a hollow sash and a guide therefor, of a hollow adjusting strip mounted in said hollow sash and adapted to engage said guide, said adjusting strip being transversely elastic and of wedge form in cross-section whereby, under outward movement, it operates to yieldingly press the sides of said sash into engagement with the side walls of the guide, substantially as described.

3. The combination with a hollow metal sash stile having inwardly turned lips on the outer margins of its sides, and a guide therefor, of an adjusting strip of wedge form in cross-section mounted in said hollow sash, said adjusting strip being adapted to engage said guide at its outer margin and slidably engaging said lips by its inclined sides, whereby outward movement of said adjusting strip operates to yieldingly press the sides of said stile into engagement with the side walls of the guide, substantially as described.

4. The combination with a hollow metal sash stile having inwardly turned lips on the outer margins of its sides, and a guide therefor, of a hollow adjusting strip mounted in said hollow sash, said adjusting strip being transversely elastic and of wedge form in cross-section and engaging said lips and guide on its inclined sides and outer edge, respectively, whereby outward movement of said adjusting strip operates to yieldingly press the sides of said stile into engagement with the side walls of the guide, substantially as described.

5. The combination with a hollow metal sash stile and a guide-groove therefor, of an adjusting strip in said stile, a link pivotally connecting said adjusting strip at or near its longitudinal center to said stile, manually operable means for swinging said link inwardly whereby to retract said adjusting strip, and spring means tending to swing said link outwardly whereby to project said adjusting strip into engagement with the guide, substantially as described.

[Claims 6 to 14 not printed in the Gazette.]

1,063,346. WINDOW CONSTRUCTION. GEORGE H. FORSYTH, Chicago, Ill. Filed Aug. 12, 1907. Serial No. 388,180. (Cl. 189—76.)

1. A sheet-metal window-sash bent to provide a pair of parallel grooves having resilient walls for the accommodation of a pair of plates, said sash having a portion between the plates forming parts of said grooves and acting to resiliently maintain the plates in proper spaced relation, substantially as described.

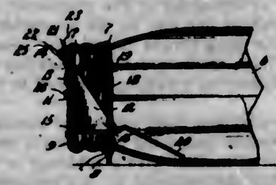


2. A sheet metal window sash having walls bent to provide a pair of parallel grooves for the accommodation of a pair of plates, said sash having a portion between the plates forming part of said grooves and acting to resiliently maintain the plates in proper spaced relation, the sash when disengaged from its guide groove being wider than said groove, and thereby maintaining spring engagement with the sides of said groove when engaged with the same, substantially as described.

3. A sheet metal window sash having walls bent to provide a pair of grooves and having flexible spring engagement with a pair of plates, said sash having a portion between the plates which forms part of the walls of said grooves and acts to maintain the plates in proper spaced relation, substantially as described.

4. A metal window sash having walls bent to provide parallel grooves for the accommodation of a pair of plates and resilient means disposed between said grooves for maintaining said sash walls in lateral engagement with the walls of the sash guide, substantially as described.

1,063,347. ANIMAL-TRAP. CHARLES HALL, Detroit, Mich. Filed Mar. 29, 1912. Serial No. 687,123. (Cl. 43—24.)

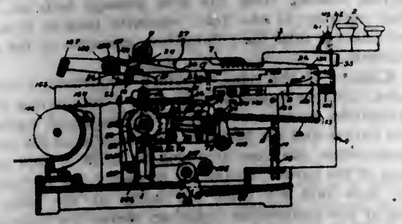


A trap comprsing a receptacle having an open end, a closure for said end having an opening therein to form an entrance, a housing for said entrance extending into said receptacle, said housing including a perforated bottom, an inclined perforated door pivotally mounted in said housing and extending inwardly with respect to said receptacle and adapted to normally close said entrance, said door having struck therefrom at its upper end a locking extension, oppositely disposed wings struck from said closure and means engaging said wings and said locking extension for retaining said door in its normal position.

1,063,348. ADDING-MACHINE. JOHN P. HARRISON, Jr., Ludlow, Ky. Filed Jan. 3, 1911. Serial No. 600,513. (Cl. 235—60.)

1. In a machine of the character described, the combination of a series of longitudinally slidable and laterally movable computing bars, said parts movable in right lines and said respective movements being at right angles to each other, a series of key-operated parts, said key-operated parts and computing bars being provided with coacting selective stops, substantially as described.

2. In a machine of the character described, the combination of a series of longitudinally and laterally movable computing bars, said parts movable in right lines and said respective movements being at right angles to each other, key-operated parts, said key-operated parts and computing-bars having selective stops between them, and accumulating wheels, said accumulating wheels and computing-bars having operative connection between them for accumulating into said accumulating wheels the operative effect of said stops.



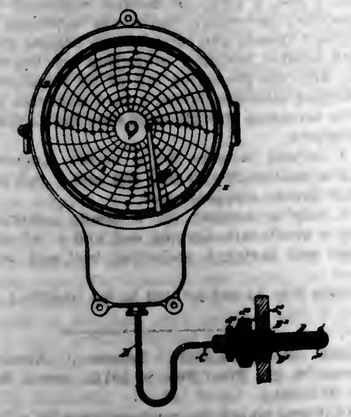
3. In a machine of the character described, the combination of longitudinally movable computing-bars, said parts movable in right lines and said respective movements being at right angles to each other, key-operated parts, said key-operated parts and computing-bars having selective stops between them for arresting said computing-bars at selective points for computing, ratchet and pawl mechanism for maintaining said computing-bars in arrested positions, and accumulating wheels having operative connection with said computing-bars for accumulating into said wheels the accumulating effect of the longitudinal movements of said computing-bars.

4. In a machine of the character described, the combination of longitudinally and laterally movable computing-bars, key-operated parts, said key-operated parts and computing-bars having selective stops between them, accumulating wheels having operative connection with said computing bars for accumulating into said wheels the computing effect of said computing-bars, and extended carry-mechanism for said accumulating wheels having operative connection with said accumulating wheels upon lateral movement of said computing-bars.

5. In a machine of the character described, the combination of longitudinally movable computing-bars, means for selectively stopping the advance movements of said computing-bars, accumulating wheels, arresting means for the retractive movements of said computing-bars, and means for selectively bringing said accumulating wheels and arresting means into and out of range with relation to said computing-bars.

[Claims 6 to 77 not printed in the Gazette.]

1,063,349. INDICATOR AND RECORDER. EDWIN HODGKINSON, Rochester, N. Y., assignor to Taylor Instrument Companies, Rochester, N. Y., a Corporation of New York. Filed Oct. 3, 1910. Serial No. 585,014. (Cl. 73—52.)



1. A stem for recording thermometers comprising a capillary tube provided at one end with a bulb adapted to contain an expansive fluid and at the opposite extremity with a portion adapted to be rendered active by the action of said fluid, said tube having its interior area reduced by a longitudinally extending filling piece closely fitting the interior of the tube throughout substantially its entire length.

2. A thermometer capillary tube having a longitudinally extending bore provided with a closely fitting filling piece introduced therein and extending substantially its entire length.

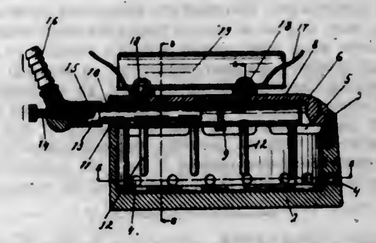
3. A tube adapted to be used as a capillary tube for thermometers having a longitudinally extending bore provided with a closely fitting filling piece inserted lengthwise therein which reduces the area of the bore but does not completely close it.

4. A flexible thermometer capillary tube having a flexible filling piece extending throughout substantially the length of its bore.

5. A thermometer capillary tube having a bulb at one end and an active portion at its opposite extremity, said bulb and tube containing expansive fluid and provided with a filling piece in its bore extending from the bulb to the active portion to reduce the volume of expansive fluid in said tube.

[Claims 6 to 8 not printed in the Gazette.]

1,063,350. SELF-HEATING SAD-IRON. GEORGE A. HUMPHREY, New York, N. Y. Filed June 5, 1912. Serial No. 701,741. (Cl. 158—23.1.)



1. In a self-heating sad iron, the combination of a chambered body having side walls provided with air openings adjacent to the bottom and notch-like air openings in their upper edges, the inner side of the bottom being longitudinally corrugated, a chambered top removably secured to said body, a tubular burner body arranged longitudinally within the top with its rear end abutting the rear wall thereof, a securing screw for said burner body arranged transversely therethrough, tube-like burners arranged on said burner body in downwardly diverging pairs and with their ends adjacent to said corrugated bottom, and a mixing tube arranged through the rear wall of the top and projecting into the burner body to deliver at a central point therein, said mixing tube being arranged eccentrically of the tubular burner body.

2. In a self-heating sad iron, the combination of a chambered body, a chambered top for said body, a tubular burner body arranged longitudinally within the top with its rear end abutting the rear wall thereof, downwardly projecting tubular burners arranged on said burner body with their ends adjacent to the bottom, and a mixing tube arranged through the rear wall of the top and projecting into the burner body to deliver at a central point therein, said mixing tube being arranged eccentrically of the said burner body.

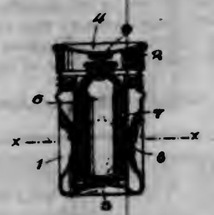
3. In a self-heating sad iron, the combination of a chambered body, a chambered top for said body, a tubular burner body arranged longitudinally within the top with its rear end abutting the rear wall thereof, a securing screw for said burner body arranged transversely therethrough, downwardly projecting tubular burners arranged on said burner body with their ends adjacent to the bottom, and a mixing tube arranged through the rear wall of the top projecting into the burner body to deliver at a central point therein.

4. In a self-heating sad iron, the combination of a chambered body, a chambered top for said body, a tubular burner body arranged longitudinally within the top with its rear end abutting the rear wall thereof, downwardly projecting tubular burners arranged on said burner body with their ends adjacent to the bottom, and a mixing tube arranged through the rear wall of the top and projecting into the burner body to deliver at a central point therein.

5. In a self-heating sad iron, the combination of a chambered body, a chambered top for said body, a tubular burner arranged within the top, downwardly projecting tubular burners arranged on said body, and a mixing tube arranged eccentrically of the said burner body.

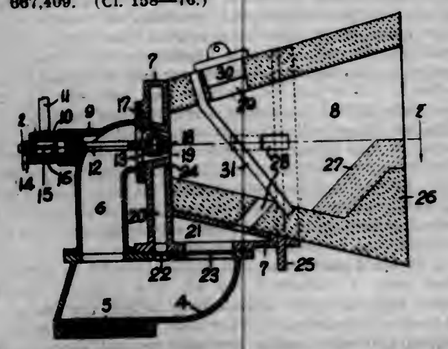
[Claims 6 to 12 not printed in the Gazette.]

1,063,351. PROTECTIVE CASING FOR GLASS BOTTLES. FRANK S. HYATT, Brooklyn, N. Y. Filed Aug. 25, 1911. Serial No. 646,047. (Cl. 215—3.)



An anti-breakage container for bottles and other receptacles made of glass or similar fragile material, consisting of a sheet metal body portion having a plurality of longitudinal inwardly disposed concavities in its side walls terminating intermediate of its ends, an inwardly disposed concavity in the bottom of said body portion and a cap or closure adapted to close the opening of said body and provided with an inwardly disposed concavity, the said concavities being adapted to hold the contained bottle out of contact with the outer edges of the container.

1,063,352. OIL-BURNER. FRANCIS A. JACOBS, Montreal, Quebec, Canada. Filed Dec. 22, 1911. Serial No. 667,409. (Cl. 158—76.)



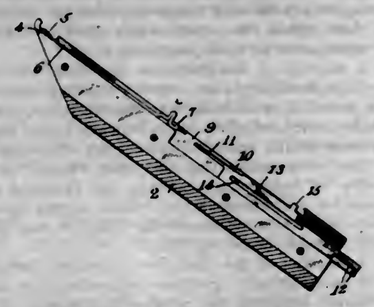
1. A device of the character described comprising a casing an air passage at the back of said casing, a combustion chamber supported by said casing, an air passage in the side of the combustion chamber for admitting air thereto, a burner body associated with the combustion chamber, a burner in said body, a deflector supported within said combustion chamber, and a baffle located in the mouth of said combustion chamber, for throwing the flame upward.

2. An oil burner comprising a body having a tapering outlet, a tip supported in said outlet whereby a tapering annular orifice is formed, said tip having a plurality of oil ducts spaced from the center thereof, means for heating air and a tapering annular orifice from said air heating means surrounding said first named orifice.

3. A device of the class described comprising a burner, a casing, an air passage at the back of said casing, a second air passage at the sides and bottom of the casing, a combustion chamber supported by the casing, an air manifold connected to said burner and passages, an annular orifice leading from the first passage into the combustion chamber at the rear, conduits leading from the second passage into the combustion chamber at the sides and bottom.

4. A device of the class described comprising a burner, a casing having air passages therein, a combustion chamber supported in said casing, an air manifold connected to said burner and air passages, an air inlet at the rear of the combustion chamber arranged to form a cone of air in front of the burner, means for throwing the oil from the burner into said air cone, air inlets at the sides and bottom of the combustion chamber, means for controlling the flow of air through said air inlets and means for concentrating the flame of combustion.

1,063,353. NEEDLE AND NEEDLE-HELPER. JOSEF KELLNER, Brooklyn, N. Y., assignor to Franklin Knitting Mills, New York, N. Y., a Corporation of New York. Filed Feb. 16, 1912. Serial No. 677,907. (Cl. 66—28.)



1. A needle mechanism for flat knitting machines comprising a bed, a needle supported thereby for reciprocatory movement and means extending beyond the tail end of the needle for advancing said needle and comprising a helping member having a slot and means for guiding said helping member.

2. A needle mechanism for flat knitting machines comprising a bed, a series of needles supported thereby for reciprocatory movement, and means extending beyond the tail thereof a helping member, each helping member having a projecting tail located in alternation with the projecting tail of its companion member.

3. A needle mechanism for flat knitting machines comprising a bed, a series of needles supported thereby for reciprocatory movement, and means extending beyond the tail of each thereof and comprising a helping member, each helping member having a projecting tail located in alternation with the projecting tail of its companion member, said helping members having alined slots and butts, and a member extending through said slots for guiding the helping members.

4. A helping member for a needle comprising a bar having a needle-tail-engaging end and a tail at its opposite end and an elongated slot.

5. A helping member for a needle comprising a bar having a needle-tail-engaging end and a tail at its opposite end and having a projecting butt and an elongated slot.

[Claims 6 to 14 not printed in the Gazette.]

1,063,354. ROPE-CLAMP. ROBERT J. KIMLIN, Poughkeepsie, N. Y. Filed Feb. 8, 1912. Serial No. 676,219. (Cl. 24—134.)

1. In a rope clamp, the combination with a body having upstanding lugs at its extremities; of a toggle lever comprising two pivotally connected links whereof one link is longitudinally slotted, a pivot connecting the other link with one lug, a pin in the opposite lug engaging said slot, and a cam pivoted off its center on the intermediate pivot of the toggle and having its high face adapted to coact with the face of one lug.



2. In a rope clamp, the combination with a body having upstanding lugs at its extremities, one of them being pierced with a longitudinal hole; of a toggle lever comprising two pivotally connected links whereof one link is longitudinally slotted, a pivot connecting the other link with the perforated lug, a pin in the opposite lug engaging said slot, and a roller on the intermediate pivot of the toggle and adapted to be moved toward the body between said lugs as the toggle is straightened out or to be raised away from said body and lugs by the rope which passes under said roller.

3. In a rope clamp, the combination with a body having upstanding spaced lugs, one of them being pierced with a longitudinal hole and the other grooved for the passage of a rope; of a two-link toggle lever at each side of said body, a single pin forming the intermediate pivots for both levers, the outer end of one link of each lever being pivoted to one lug and the other links being provided with longitudinal slots, a pin through the opposite lug and on which said slots are slidably mounted, the outer ends of these links being connected, a rope attached to such ends, and a roller on the intermediate pivot pin and drawn toward said lugs when tension is applied to said rope.

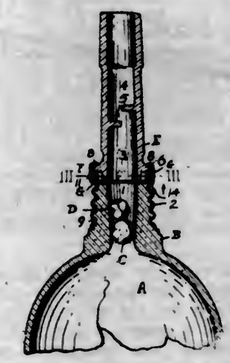
4. In a rope clamp, the combination with a body having upstanding lugs at its extremities, one of them being pierced with a longitudinal hole; of a double toggle lever comprising two pairs of links and an intermediate pivot pin connecting them, one pair being pivoted to one lug and the other pair longitudinally slotted, a pin through the opposite lug engaging said slots, a cam pivoted on said intermediate pivot pin and adapted to coact with the face of the perforate lug, and pins in the extremities of the cam projecting under the lower edges of said links.

5. In a rope clamp, the combination with a body having upstanding lugs at its extremities provided with openings for the passage of the rope; of a double toggle lever comprising two pairs of links and an intermediate pivot pin connecting them, one pair being pivoted to one lug and the other pair being longitudinally slotted where they pass astride the opposite lug and connected at their outer ends, a rope attached to such connected ends, a pin through the last-named lug engaging said slots, a cam pivoted off its center on the intermediate pivot pin of the toggles and having its high face adapted to coact with the face of one lug when said rope is put under tension, and a pin in the extremity of the cam projecting under the lower edges of certain of said links.

1,063,355. NON-REFILLABLE BOTTLE. ARPATH KISH, Port View borough, Pa., assignor of one-half to Joseph Skrak, Pittsburgh, Pa. Filed Mar. 18, 1913. Serial No. 755,083. (Cl. 215—103.)

1. A non-refillable bottle comprising a body provided with a neck outwardly threaded and having an inwardly tapered bore, balls mounted in said bore and adapted to seal the same, an auxiliary neck provided with a shoulder mounted on said bottle neck and prevented from rotation thereon, a collar provided with locking seats adapted to be screwed down onto said bottle neck and provided with an inwardly extending annular flange adapted to engage the shoulder on said auxiliary neck, and spring fingers mounted on said auxiliary neck and engaging said locking seats whereby the unscrewing of said collar is prevented.

2. A non-refillable bottle comprising a body provided with a neck outwardly threaded and having an inwardly tapered bore, balls mounted in said bore and adapted to seal the same, an auxiliary neck provided with a shoulder mounted on said bottle neck and prevented from rotation thereon, means contained in said false neck to prevent the



escape of said balls, a collar provided with locking seats adapted to be screwed down onto said bottle neck and provided with an inwardly extending annular flange adapted to engage the shoulder on said auxiliary neck, and spring fingers mounted on said auxiliary neck and engaging said locking seats whereby the unscrewing of said collar is prevented.

1,063,356. MANUFACTURE OF SULFID OF ZINC. JOSEPH KOETSCHET and JOANNES CLAUDE ANTOINE MEYER, Lyon, France; said Koetschet assignor, by mesne assignments, to said Meyer. Filed Dec. 1, 1908. Serial No. 465,542. (Cl. 134—78.)

1. A process for the manufacture of sulfid of zinc comprising subjection of a concentrated solution of zinc salts of mineral acids to intimate and prolonged contact with sulfureted hydrogen.

2. A process for the manufacture of sulfid of zinc comprising subjection of a concentrated solution of sulfate of zinc to intimate and prolonged contact with sulfureted hydrogen.

3. A process for the manufacture of sulfid of zinc, comprising subjection of a solution of crude zinc sulfate to preliminary treatment with sulfureted hydrogen with the object of precipitating impurities, filtration of the liquid, and subjection of the same as a concentrated solution to intimate and prolonged contact with sulfureted hydrogen to precipitate zinc sulfid.

4. A process for the manufacture of sulfid of zinc, comprising subjection of a concentrated solution of crude zinc sulfate to intimate and prolonged contact with sulfureted hydrogen until the solution attains strong acidity.

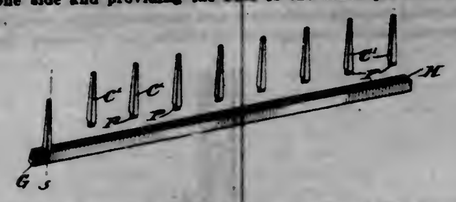
5. A process for the manufacture of sulfid of zinc comprising the subjection of a concentrated solution of zinc salts of mineral acids containing a greater proportion than one per cent. of metallic zinc to intimate and prolonged contact with sulfureted hydrogen.

[Claims 6 to 13 not printed in the Gazette.]

1,063,357. PROCESS OF ELECTRIC WELDING. MAURICE LACHMAN, New York, N. Y., assignor to Standard Pulley Manufacturing Company, a Corporation of New York. Filed Oct. 17, 1908. Serial No. 339,339. Renewed Aug. 22, 1908. Serial No. 449,821. (Cl. 219—10.)

1. The process substantially as herein described of forming an angle or T weld, which consists in providing one of the parts to be welded with a groove and the other part with a tongue of shorter length than the depth of the groove, placing the tongue in the groove, passing a current of electricity through said parts and simultaneously therewith forcing them together.

2. The process substantially as herein described of forming an angle or T weld, which consists in providing one part to be welded with a longitudinal groove along one side and providing the butt of the other part with a



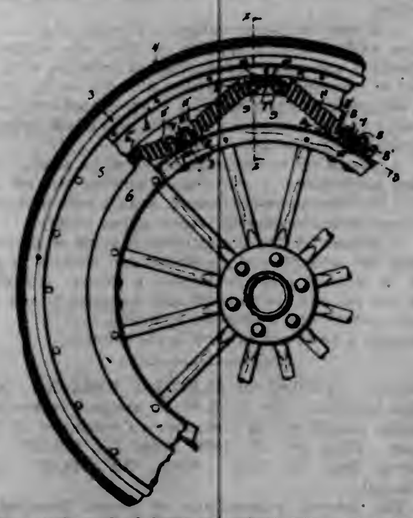
tongue of shorter length than the depth of the groove, placing the tongue in the groove, passing a current of electricity through said parts and simultaneously therewith forcing them together.

1,063,358. PROCESS OF PREPARING A PORK AND CEREAL FOOD. WALTER LAMB, Erie, Pa. Filed Feb. 13, 1913. Serial No. 748,091. (Cl. 99—11.)

1. The process of making a new food product which consists in dividing pork into pieces and extracting nutritive and flavoring constituents of the same by subjecting it to the action of a liquid, cooking the pork and liquid and using a cereal in combination to form a mush; seasoning to taste; and forming a cooked mass composed of particles of meat, cereal, meat extract and seasoning in combination, substantially as described.

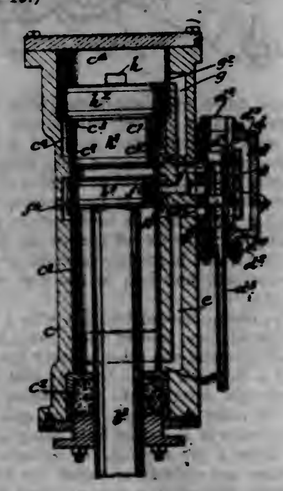
2. The process of making a new food product which consists in dividing pork into pieces and extracting nutritive and flavoring constituents of the same by subjecting it to the action of a liquid; cooking the pork and liquid together, using a cereal in combination to form a mush; seasoning to taste; and forming a cooked mass composed of particles of meat, cereal, meat extract and seasoning in combination; and then preserving the same in air-tight receptacles, substantially as described.

1,063,359. SPRING-RIM FOR WHEELS. WILLIAM A. LANGJAHR, Plymouth, Wis. Filed Jan. 2, 1913. Serial No. 739,610. (Cl. 152—37.)



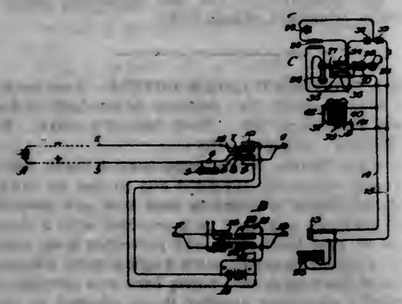
In a spring wheel having a wheel felly and a floating rim; the combination of alternate series of blocks disposed about the floating rim and felly, each block being provided with bolt apertures at its ends and having circular spring seats about the apertures, the said seats being intersected by end grooves, coiled springs having looped ends and straight stretches respectively seated within the circular grooves and the intersecting end grooves, bolts for securing certain of the spring loops, blocks and floating rim together, and bolts for securing other of the spring loops, blocks and wheel felly together.

1,063,360. STEAM-HAMMER. AKSEL J. LARSEN, Brooklyn, N. Y. Filed Aug. 16, 1912. Serial No. 715,315. (Cl. 121—19.)



In an apparatus of the class described, a vertical cylinder having in the bottom portion thereof a main piston chamber and in the top portion thereof an enlarged supplemental piston chamber at the bottom of which is an annular shoulder, a vertically movable hammer operating piston in the main piston chamber, a supplemental vertically movable unattached piston in the supplemental piston chamber and provided with a downwardly directed extension movable in the main piston chamber, a steam supply passage communicating with the top portion of the supplemental piston chamber, a second steam supply passage communicating with the top portion of the main piston chamber, by-passes formed in the sides of the main piston chamber and communicating therewith above and below the second steam passage, and by-passes formed in the sides of the top portion of the main piston chamber and opening radially thereinto below said annular shoulder and opening upwardly through said annular shoulder.

1,063,361. TELEPHONE SYSTEM. OSCAR M. LEICH, Genoa, Ill., assignor to Cracraft, Leich Electric Company, Genoa, Ill. Filed Mar. 27, 1911. Serial No. 617,136. (Cl. 179—41.)



1. The combination with a trunk circuit from a central energy exchange, a source of current at the exchange end of said trunk circuit, normally establishing during operative conditions a pre-determined polarity, throughout the conductors of said trunk circuit, a branch exchange, a source of current thereat, a subscriber's instrument having a signal receiving device, means associated with said receiving device whereby it is responsive to currents of one polarity only, and means associated with said trunk circuit to impress current from said second source on said signal receiving device to operate same, of a reverse polarity to that impressed by said first aforesaid source.

2. The combination with a trunk circuit from a central energy exchange, a source of current at the exchange end of said trunk circuit, a branch exchange, a source of current thereat, a subscriber's instrument having a signal receiving device, means associated with said receiving device whereby it is responsive to currents of one polarity only, and means associated with said trunk circuit to impress current from said second source on said signal receiving device to operate same, of a reverse polarity to that impressed by said first aforesaid source.

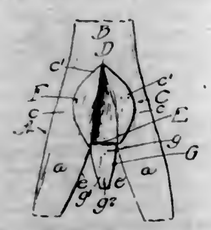
3. The combination with a trunk circuit from a central energy exchange, a source of current at the exchange end of said trunk circuit, normally establishing during operative conditions a pre-determined polarity throughout the conductors of said trunk circuit, a branch exchange, a source of current thereat, a subscriber's instrument having a signal receiving device responsive to currents of one polarity only, and means associated with said trunk circuit to impress current from said second source on said signal receiving device to operate same, of a reverse polarity to that impressed by said first aforesaid source.

4. The combination with a trunk circuit from a central energy exchange, a source of current at the exchange end of said trunk circuit, a branch exchange, a source of current thereat, a subscriber's instrument having a signal receiving device responsive to currents of one polarity only, and means associated with said trunk circuit to impress current from said second source on said signal receiving device to operate same, of a reverse polarity to that impressed by said first aforesaid source.

5. The combination with a trunk circuit from a central energy exchange, a source of current at the exchange end of said trunk circuit, normally establishing during operative conditions a pre-determined polarity throughout the conductors of said trunk circuit, a branch exchange, a source of current thereat, a subscriber's instrument having a vibratory contact signal receiving device, means associated with said receiving device whereby it is responsive to currents of one polarity only, and means associated with said trunk circuit to impress current from said second source on said signal receiving device to operate same, of a reverse polarity to that impressed by said first aforesaid source.

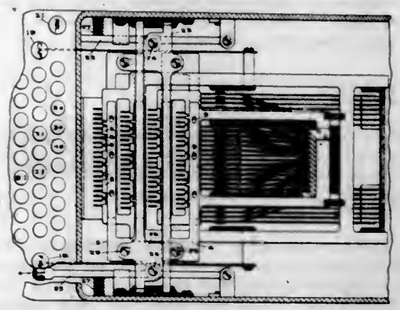
[Claims 6 to 10 not printed in the Gazette.]

1,063,362. DRAWERS FOR WOMEN. CHARLES H. LEWY, Chicago, Ill. Filed Sept. 27, 1912. Serial No. 722,624. (Cl. 2—144.)



A closed front under garment for women provided with a slit extending from the crotch up the back of the garment, means for closing said slit, consisting of two laterally overlapping flaps and of a third flap attached to the crotch portion of the garment, and extending rearwardly and upwardly, the same being adapted to overlie said overlapping flaps, and means for detachably connecting said three flaps together.

1,063,363. MACHINE FOR PRODUCING CHARACTERS. TIDEMAN M. LILLEBERG, Woodstock, Ill. Filed Dec. 15, 1911. Serial No. 665,931. (Cl. 197—77.)



1. Apparatus of the character described including a plurality of relatively movable character forming wires; a toothed member for selecting and moving wires from among the said plurality of wires to form a character; and means for re-grouping the teeth of said toothed member to enable the selection of wires of another grouping for the production of another character.

2. Apparatus of the character described including a plurality of relatively movable character forming wires; and a toothed member for selecting and moving wires from among the said plurality of wires to form a character, the teeth of said member being adapted to be changed in their relative positions thereby to enable the selection of wires of another grouping for the production of another character.

3. Apparatus of the character described including a plurality of relatively movable character forming wires; a toothed member for selecting and moving wires from among said plurality of wires to form a character; and lever operated mechanism for re-grouping the teeth of said toothed member to enable the selection of wires of another grouping for the production of another character.

4. Apparatus of the character described including a plurality of relatively movable character forming wires; and a toothed member for selecting and moving wires from among said plurality of wires to form a character, said toothed member including relatively adjustable toothed bars whereby the re-grouping of the teeth of said toothed member may be effected to enable the selection of wires of another grouping for the production of another character.

5. Apparatus of the character described including a plurality of relatively movable character forming wires; a toothed member for selecting and moving wires from among said plurality of wires to form a character, said toothed member including relatively adjustable toothed bars whereby the re-grouping of the teeth of said toothed member may be effected to enable the selection of wires of another grouping for the production of another character; key mechanism for moving said toothed member to cause it to actuate character forming wires; and shifting mechanism for shifting the bars comprising said toothed member with respect to each other to change the grouping of the teeth of the toothed member.

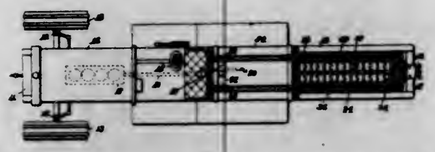
[Claims 6 to 10 not printed in the Gazette.]

1,063,364. TRACTION-ENGINE. ALVIN O. LOMBARD, Waterville, Me. Filed June 25, 1910. Serial No. 568,895. (Cl. 21—114.)

1. In a traction engine, a tractor consisting of a frame having central slots at each end; a sprocket wheel in each slot; two separated traction belts movable about said frame and in the same plane therewith; pivot pins connecting said belts together; rollers on said pins between said belts and engaging said sprocket wheels; and means for driving said sprocket wheels.

2. In a traction engine, a tractor consisting of a frame having central slots at each end; a sprocket wheel in each

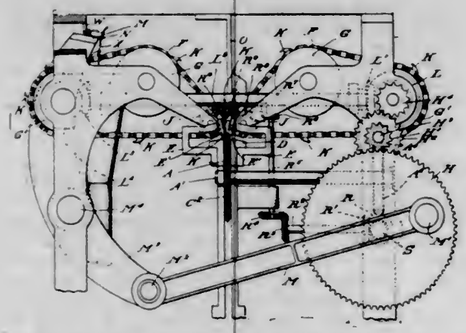
slot having elongated spaces between the teeth; two separated traction belts movable about said frame; pivot pins connecting said belts together; rollers on said pins between said belts and engaging said sprocket wheels, said rollers occupying but a portion of the spaces between the teeth; and means for driving said sprocket wheels.



3. In a traction engine, a tractor consisting of a frame having central slots at each end; a sprocket wheel in each slot; a traction belt movable about said frame; a curved end plate at one end of said frame having an elongated slot therethrough; clamping bolts secured to said frame and extending through said slot; a plurality of rollers movable independently of said traction belt over said frame and curved plate and interposed between them and said traction belt; and means for adjusting the position of said end plate relative to said frame.

4. In a traction engine, a tractor consisting of a frame composed of two separated parallel runners each having an outward extension thereon; bearings in opposite ends of said runners, revoluble shafts therein; a sprocket wheel secured to each shaft between said runners; curved members adjustable on each runner relative to the ends of said extensions; a flexible traction belt on each runner; pivot pins connecting the two traction belts; sprocket engaging rollers on said pivot pins; a roller clamping chain surrounding each extension and the curved members at each end thereof, the rollers of said chains being interposed between said extensions and said traction belts.

1,063,365. SHREDDING-MACHINE. GEORGE A. LOWRY, Malden, Mass. Filed May 6, 1912. Serial No. 695,480. (Cl. 13—2.)



1. In a shredding machine, the combination of a conveyer furnished with splitting points adapted to form initial transverse slits in material, and shredding knives with means to enter the knives in said initial slits and move them from the splitting points outward.

2. In a shredding machine, the combination of a conveyer furnished with splitting points adapted to form initial transverse slits in material and shredding knives with means to enter the knives in said initial slits and move them from the splitting points outward at either side of the conveyer.

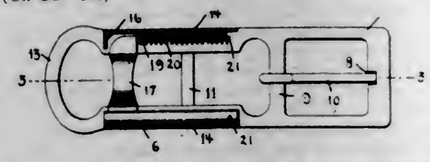
3. In a shredding machine, the combination of a conveyer furnished with splitting points adapted to form initial transverse slits in material, and shredding knives with means to enter the knives in said initial slits and move them from the splitting points outward at either side of the conveyer simultaneously.

4. In a shredding machine, the combination of a conveyer furnished with splitting points adapted to form initial transverse slits in material, and shredding knives with means to move the knives in succession to enter successive initial slits and thence from the splitting points outward.

5. In a shredding machine, the combination of a conveyer furnished with splitting points adapted to form initial transverse slits in material, and shredding knives with means to move the knives in succession to enter successive initial slits and thence from the splitting points outward at either side of the conveyer.

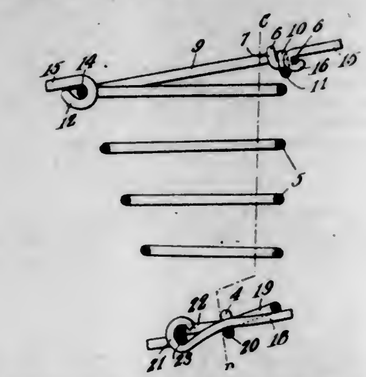
[Claims 6 to 16 not printed in the Gazette.]

1,063,366. TRACE-END SNAP. ROBERT A. LUKE, Columbus, Ga. Filed July 17, 1912. Serial No. 709,898. (Cl. 54—53.)



A combined buckle and trace end snap, comprising a substantially rectangular flat open frame, one end of which serves as a buckle frame and the opposite end as a trace end snap frame, a tongue pivotally connected with the buckle frame and disposed upon one side thereof, longitudinal housings formed upon the opposite side of the open frame and provided with longitudinal slots, a block having its reduced ends disposed in the housings, pins carried by the reduced ends of the block, springs mounted in the housings and receiving the pins, and a guard disposed upon the opposite side of the open frame with relation to the housings to receive the end of the trace for holding the same flat and in engagement with the open frame.

1,063,367. BED-SPRING. WILLIAM H. MACY and BERT E. WILBUR, Miami, Okla. Filed Nov. 28, 1911. Serial No. 662,894. (Cl. 5—29.)

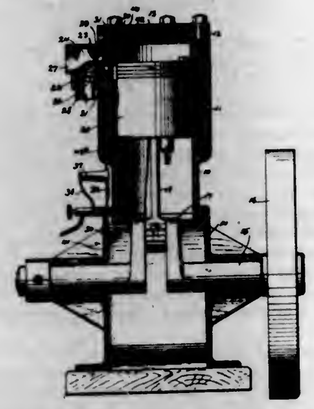


1. In a spring bed, a guy wire having a depressed, laterally extended bend in its intermediate portion; a spring having one of its convolutions extended beneath the guy and across the top of the bend, the said convolution having a depressed bend fitting into the bend of the guy, the bends constituting the sole interengaging elements for preventing a rotation of the spring upon the guy, the bend of the spring abutting against the bend of the guy to reinforce the latter; the free end of the said convolution constituting the sole connection with the corresponding convolution of an adjoining spring, and terminating in a hook engaged through the bend of an adjoining guy at right angles thereto, and abutting against the bend of the said adjoining spring.

2. In a bed, a spring, the lower end of which terminates in a finger, provided with a hook; and a similar spring resting upon the finger and having a plurality of its lower convolutions engaged in the hook, those portions of the convolutions which are engaged in the hook, being alined, transversely of the mouth of the hook to prevent a disengagement of the convolution from the hook.

3. In a bed, a spring, the lower convolution of which terminates in a finger, provided with a hook; a similar spring resting upon the finger and having a plurality of its lower convolutions engaged in the hook, said convolutions being alined, whereby the same may be inserted into the mouth of the hook, a rotation of the spring serving to dispose the alined convolutions, transversely of the mouth of the hook; and a guy extended across the top of the lower convolution of the spring, the guy having a bend, engaging beneath the finger.

1,063,368. GAS-ENGINE. GEORGE E. MCELROY, Newark, N. J., assignor to McElroy Engine Company, Newark, N. J., a Corporation of New Jersey. Filed Feb. 15, 1912. Serial No. 677,851. (Cl. 123—188.)



1. A gas engine comprising a cylinder having a segmental recess in one wall, opening directly into the cylinder and with exhaust and intake ports leading into said recess, a valve seated and sliding in the aforesaid recess so as to open and close the intake and exhaust ports, the inner wall of the valve being subject to the cylinder pressure, a piston reciprocating in the cylinder, and means for actuating the valve by the movement of the piston.

2. A gas engine comprising a cylinder having a segmental recess in its inner wall, inlet and exhaust ports connected with the recess, a valve seated and sliding in the recess so as to open and close the said ports, a valve rod sliding in the cylinder wall and connected to the said valve, arms projecting inwardly from the rod near the upper and lower ends of the cylinder, and means carried by the piston to engage the said arms and actuate the valve.

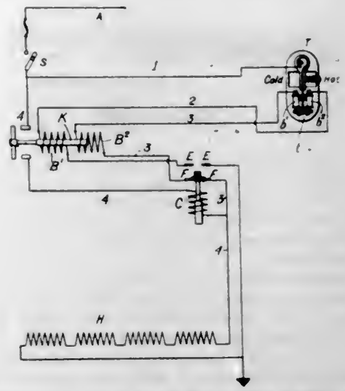
3. A gas engine comprising a cylinder having in-take and exhaust ports, a valve moving in a recess in the inner wall of the cylinder opposite the said ports, a valve rod extending longitudinally through the cylinder wall and connected to the said valve, arms projecting inwardly from the upper and lower portions of the rod, and pins or abutments on the piston to engage the said arms and actuate the valve.

4. A gas engine comprising a cylinder, a piston reciprocating in the cylinder, a valve sliding in a recess in the cylinder wall and controlling the in-take and exhaust ports to the cylinder, a valve rod extending longitudinally of the cylinder and connected to the aforesaid valve, arms projecting from the rod near the upper and lower end thereof, means carried by the piston to strike the arms and operate the valve, and an automatic device in the piston to regulate the length of the said arm striking means.

5. In a gas engine the combination with the cylinder having in-take and exhaust ports, of the slide valve controlling said ports, a piston sliding in the cylinder, means for actuating the valve by the piston strokes, and a retaining device arranged to temporarily hold the slide valve in position to close both ports and at the same time close the spark plug circuit of the engine.

[Claims 6 to 11 not printed in the Gazette.]

1,063,369. CIRCUIT-CONTROLLING THERMOSTAT. JAMES F. MCELROY, Albany, N. Y., assignor to Consolidated Car-Heating Company, a Corporation of West Virginia. Filed June 1, 1911. Serial No. 630,679. (Cl. 177—128.)



1. The combination with a thermostat having its movable member connected to the line side of a grounded main circuit, magnets, contacts carried by the pole pieces of the magnets and in circuit with the latter, said magnets cooperating with the thermostat to control the circuit, circuit wires leading from said magnets to ground, a motor connected with said wires so as to be reversely operated thereby, said main circuit controlled by said motor, a switch for normally completing the circuit through one of said wires to the motor when said thermostat is in engagement with one of said contacts, and magnetic means controlled by the main circuit for operating said switch to complete the circuit through the second wire to the motor when the thermostat is in engagement with the other contact, the circuit through one wire being closed by said switch simultaneously with the opening of the circuit through the other wire.

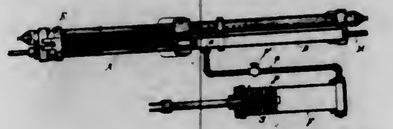
2. The combination with a grounded main electric circuit, of a thermostat, a connection between one side of said circuit and the movable member of the thermostat, two contacts either of which may be engaged by said movable member, two conductors leading from said contacts respectively, two retaining magnets for said movable member each connected with one of the two conductors aforesaid, two oppositely acting magnetic coils each of which is also connected with one of the two conductors aforesaid, a switch controlled by said coils, and means controlled by said switch for connecting either of said conductors to the ground side of the main circuit.

3. The combination with a grounded main circuit, of a translating device therein, a switch controlling said device, circuits which shunt said switch, electro-magnets of high resistance included in said shunt circuits for operating said switch, a thermostat having its contact tongue connected to the line side of said switch, contacts forming the respective terminals of said shunt circuits and arranged to be engaged alternately by said contact tongue, retaining magnets for said contact one one in each of said shunt circuits, and a magnet in series with said translating device and controlling the shut circuits.

4. The combination with a grounded main circuit, of a translating device therein, a switch controlling said device, circuits which shunt said switch and of which one

is in series with said translating device, electro-magnets of high resistance included in said shunt circuits for operating said switch, a thermostat having its contact tongue connected to the line side of said switch, contacts forming the respective terminals of said shunt circuits and arranged to be engaged alternately by said contact tongue, retaining magnets for said contact tongue one in each of said shunt circuits, and a magnet in series with said translating device and controlling the shunt circuits.

1,063,370. DOOR AND STEP MOTOR. JAMES F. McELROY, Albany, N. Y., assignor to Consolidated Car-Heating Company, a Corporation of West Virginia. Filed Feb. 29, 1912. Serial No. 680,697. (Cl. 105—88.)



1. The combination with a step-operating motor of a door operating motor including a door-closing cylinder having a port, a pneumatic connection between the port and the step operating motor, and a piston in said cylinder and coöperating with said port to control the step-operating motor.

2. The combination with a step-operating cylinder and a step-operating spring of a door-closing cylinder having a port controlled by its piston and controlling the said step-operating cylinder.

3. The combination with a step-operating cylinder and a step-operating spring, of a door-closing cylinder and a separate door-opening cylinder having its piston connected with the piston of the door-closing cylinder and serving to retract the same, the piston of the said door-closing cylinder serving to control a port which is alternately the admission and exhaust port of the step-operating cylinder.

4. The combination with a step-raising cylinder, of a step-starting spring compressed by the piston of said cylinder and a door closing cylinder controlling a port which communicates with said step-raising cylinder and serves alternately as the admission and exhaust port therefor.

5. The combination with a step-raising cylinder and a step-starting spring acting in opposition to the pressure in said cylinder, of an inlet pipe communicating with the rear end of said cylinder, a controlling cock in said pipe, an open-ended door-closing cylinder communicating with said pipe and a piston therein acting to put the pipe in communication with the pressure side and the exhaust side thereof alternately.

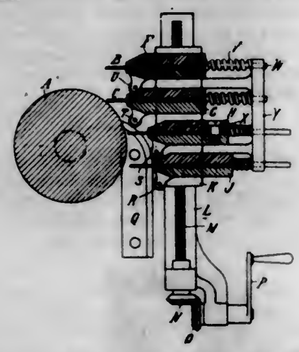
[Claims 6 and 7 not printed in the Gazette.]

1,063,371. INTAGLIO-PRINTING-MACHINE MECHANISM. EDUARD MERTENS, Freiburg, Germany. Filed Apr. 10, 1911. Serial No. 620,218. (Cl. 101—104.)

1. Improved scraper mechanism for the rotary printing cylinder of an intaglio printing machine comprising in combination, a plurality of scraper blades, and adjustable support adapted to hold any one of said blades in operative contact with the rotary printing cylinder, and mechanism for moving a blunted blade out of contact and a sharp blade into contact with the rotary printing cylinder without stopping the machine.

2. Improved scraper mechanism for the rotary cylinder of an intaglio printing machine comprising in combination, a plurality of spring-impelled scraper blades arranged over or near one another, an adjustable support adapted to bring any one of the blades into operative contact with the surface of the rotary cylinder, and manually operated mechanism for applying a sharp blade to the rotary surface and removing a blunt blade therefrom without stopping the machine.

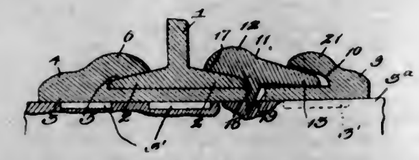
3. Improved scraper mechanism for the rotary cylinder of an intaglio printing machine comprising in combination, a plurality of spring-impelled scraper blades arranged over or near one another, an adjustable support adapted to bring any one of the blades into operative contact with the surface of the rotary cylinder, and manually operated lever mechanism for displacing the adjustable support from the periphery of which the scrapers project, for the purpose of moving a blunted blade out of contact with the rotary cylinder and bringing a sharp blade into operative contact therewith without stopping the machine.



4. An improved scraper mechanism for the rotary cylinder of an intaglio printing machine comprising in combination a plurality of spring-impelled scraper blades arranged over or near one another, an adjustable support adapted to bring any one of the blades into operative contact with the surface of the rotary cylinder and manually operated lever mechanism for rotating the adjustable support from the periphery of which the scrapers project, for the purpose of moving a blunted blade out of contact with the rotary cylinder and bringing a sharp blade into operative contact therewith without stopping the machine.

5. An improved scraper mechanism for the rotary cylinder of an intaglio printing machine comprising in combination a plurality of spring-impelled scraper blades arranged over or near one another, an adjustable support adapted to bring any one of the blades into operative contact with the surface of the rotary cylinder, and manually operated lever mechanism for moving horizontally the adjustable support of said blades for the purpose of moving a blunted blade out of contact with the rotary cylinder and bringing a sharp blade into operative contact therewith without stopping the machine.

1,063,372. RAIL TIE-PLATE. WILLIAM W. MEUSER, Galion, Ohio. Filed Sept. 11, 1912. Serial No. 719,838. (Cl. 238—2.)



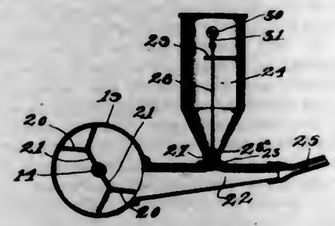
1. The combination with a rail and a tie, of a tie plate having formed thereon a rail flange engaging lug at one end and a clamping lug formed thereon at the opposite end, a clamping member, said member including a clamping jaw adapted to overlie one of the rail flanges, and a base plate formed integral with the clamping jaw and projecting beneath the clamping lug on the tie plate, and a depending tooth formed on said clamping member adapted to secure said parts together and to the tie.

2. The combination with a rail and a tie, of a tie plate having a rail flange engaging lug formed integral therewith at one end, and a clamping lug formed integral therewith at the opposite end, said lugs being under-cut to provide overlapping flanges, a clamping member arranged upon the tie plate and disposed between the clamping lug and one of the rail flanges, said member including a clamping jaw adapted to overlie the rail flanges, and a base plate formed integral with the clamping jaw and projecting beneath the overlapping flange of the clamping lug, and means carried by the clamping member adapted to secure said parts together and to the tie, said base plate and tie being provided with alining openings for the reception of spikes for the purpose set forth.

3. The combination with a rail and a tie, of a tie plate having a rail flange engaging lug formed integral at one end thereof, and a clamping lug formed integral therewith at the opposite end, said lugs being under-cut to provide overlapping flanges, the tie plate being further provided with openings adjacent the rail flanges, a clamping member disposed between the clamping lug and the rail flange upon the tie plate, said member including a clamping jaw adapted to overlie the rail flange, and a base plate extending laterally from the clamping jaw and under-lying the overhanging flange of the clamping lug, teeth depending from the under side of the clamping member and adapted to project through the openings in the tie plate to be driven down into the tie, the length of said openings and the distance between the rail flange and the outer extremity of the under-cut portion of the clamping lug being sufficient to permit the clamping member to be moved upwardly on the rail flange, substantially as and for the purpose set forth.

4. The combination with a rail and a tie, of a tie plate having a rail flange engaging lug formed integral therewith at one end and a clamping lug formed integral therewith at the opposite end, a clamping member arranged upon the tie and disposed between the clamping lug and one of the rail flanges, said tie plate being formed with an opening adjacent one of the rail flanges, and a depending tooth formed on said clamping member, said tooth being disposed through the opening in said tie plate and engaged with the tie to secure said parts together and to the tie.

1,063,373. PLANT-DUSTING MACHINE. JOHN A. MORGAN and HUGH W. LINDSAY, Dover, Tenn. Filed June 3, 1912. Serial No. 701,414. (Cl. 43—14.)

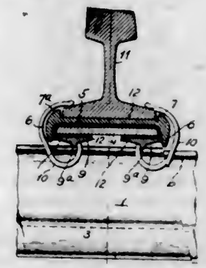


1. In a dusting machine, a spout, a hopper above the spout, said hopper having a tapered end terminating in a relatively straight portion, partition strips secured to the inner walls of the relatively straight portion, a stirring member having paddles adapted to operate between the partitions, means for operating the stirring member, and a pipe associated with the spout for distributing dust.

2. In a dusting machine, a spout, a hopper having one end thereof communicating with the interior of said spout, partition strips secured to the inner walls of one end of the hopper, a stirring member associated with the partitions, means for operating the stirring member, and means associated with the spout for distributing dust.

1,063,374. MEANS FOR SECURING RAILS TO METAL TIES. WILLIAM HENRY MORGAN, Alliance, Ohio. Filed Sept. 12, 1912. Serial No. 720,031. (Cl. 238—4.)

1. The combination of a straight metal tie, a plate secured to the top thereof transversely of the tie and projecting at both sides of the latter, a flanged chair on said plate, a rail on the chair, and spring clamps supported by the underside of the projecting ends of the plate and overhanging the base flange of the rail.



2. The combination of a straight metal tie, a plate secured to the top thereof transversely of the tie and projecting at both sides of the latter, the free ends of said plate having downwardly flanged ends, a flanged chair on said plate, a rail on the chair, and spring clamps supported by the underside of the projecting ends of the plate and overhanging the base flange of the rail.

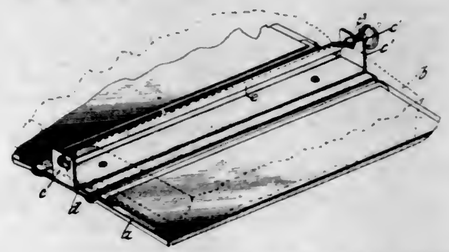
3. The combination of a straight metal tie, a plate secured to the top thereof transversely of the tie and projecting at both sides, the ends of said plate being bent upwardly to form raised seats for the chair, a flanged chair resting on said seats, a rail on the chair and spring clamps supported by the underside of the projecting ends of the plate and overhanging the base flange of the rail.

4. The combination of a straight metal tie, a plate secured to the top thereof transversely of the tie and projecting at both sides of the latter, the projecting ends of said plates being bent upwardly to form raised seats and the extreme ends turned downwardly to form end abutments, a flanged chair resting on said seats and spring clamps supported by the underside of the projecting ends of the plate and bearing against the base flange of the rail.

5. The combination of a straight metal tie, a plate secured to the top thereof transversely of the tie and projecting at both sides of the latter, a flanged chair seated on said plate, ribbed armor plates resting against the underside of the projecting ends of the plate, and spring clamps each bearing at one end against an armor plate with its other end overhanging the base flange of the rail.

[Claims 6 to 9 not printed in the Gazette.]

1,063,375. BOOKBINDER. ROBERT J. NICHOLSON, Chicago, Ill. Filed Feb. 16, 1912. Serial No. 678,039. (Cl. 129—38.)



1. A device for holding books, including a back element carrying an arm provided with an opening having a restricted outlet, a bar adapted to be engaged at its ends with the back element and adapted for insertion between the leaves of the book to be held and having a fastening portion adapted for passage through said restricted outlet and adapted to be received by the opening in said arm, said bar being rotatable or turnable about an axis extending longitudinally of the back element, whereby the part thereof received by the opening in said arm may

be brought into position, to be passed through the outlet from said opening or may be brought into position to have its passage through said outlet prevented, the bar having unequal cross-sectional dimensions, which permit it to be held by the book when in normal relation with the bar, to prevent the bar from being moved to that position in which the fastening portion may be moved through the outlet provided for the opening in the arm.

2. A device for holding books, including a back element carrying an arm provided with an opening having a restricted outlet, a bar adapted to be engaged at its ends with the back element and adapted for insertion between the leaves of the book to be held, the portion thereof received between the leaves of the book having unequal cross-sectional dimensions, in order that the book that is being held may hold the bar in relation to the book, the end portion of the bar adjacent to said arm also having unequal cross-sectional dimensions, the said two portions of the bar lying in different planes, whereby the book may hold the bar to prevent the end portion of the bar from being removed through said outlet, said bar being rotatable or turnable about an axis extending longitudinally of the back element when the book is opened, in order to permit said end portion to be moved through said outlet.

3. A device for holding books, including a back element carrying one part of a fastening device and a bar adapted to be engaged at its ends with the back element and adapted for insertion between the leaves of the book to be held, and carrying a fastening part complemental to the aforesaid part of the fastening device, said bar being rotatable or turnable about an axis extending longitudinally of the back element, said parts of the fastening devices being separable when the bar is rotated to occupy one position, and being inseparable when occupying an alternative position, the bar having unequal cross-sectional dimensions, which permit it to be held by the book when in normal relation with the bar, to prevent the bar from being moved to that position in which the aforesaid complemental parts of the fastening device may be separated.

4. A device for holding books, including a back element carrying one part of a fastening device and a bar adapted to be engaged at its ends with the back element and adapted for insertion between the leaves of the book to be held, and carrying a fastening part complemental to the aforesaid part of the fastening device, said bar being rotatable or turnable about an axis extending longitudinally of the back element, said parts of the fastening devices being separable when the bar is rotated to occupy one position and being inseparable when occupying an alternative position.

5. A device for holding books, including a back element carrying an arm provided with an opening having a restricted outlet, a bar adapted to be engaged at its ends with the back element and rotatable about an axis extending longitudinally of the back element, and adapted for insertion between the leaves of the book to be held, and having a fastening portion adapted, when the bar is rotated to one position, for passage through said restricted outlet, and, when rotated to another position, adapted to be received by the opening in said arm.

[Claims 6 to 12 not printed in the Gazette.]

1,063,376. PROCESS OF MAKING PORCELAIN INLAYS. FREDERICK H. NIES, New York, N. Y. Filed Jan. 31, 1911. Serial No. 605,751. (Cl. 32—32.)

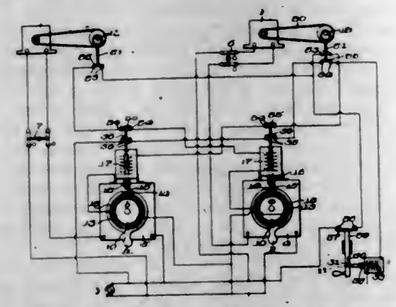


1. The method of manufacturing inlays which comprises forming an unyielding fireproof mold of earthy material conforming to the cavity, filling said mold with porcelain, subjecting the mold and porcelain to the action of heat and separating the fused inlay from the mold.

2. The method of manufacturing inlays, which comprises forming a mold of fireproof earthy material conforming to a cavity, filling said mold with porcelain, subjecting the mold and porcelain therein to the action of heat, and disintegrating said mold to separate the inlay therefrom.

3. The method of manufacturing inlays which comprises forming a substantially unyielding mold conforming to the cavity, forming a thin coat in said mold of crystalline material, then filling said mold with porcelain, then subjecting the mold and its contained filling to the action of heat and separating the fused inlay from the mold.

1,063,377. SYSTEM OF ELECTRIC-MOTOR CONTROL. CLARENCE H. NORWOOD, Chicago, Ill. Filed Jan. 4, 1913. Serial No. 740,158. (Cl. 172—179.)



1. A power transmission system including two electric motors whose order of operation is to be controlled; circuits for said motors; a switch for controlling the circuit of the motor that is to be the second to operate; and mechanism governed by the first motor to operate for holding the switch while the first motor is operating then to prevent the second motor from operating, such mechanism being released when the first motor has operated then to permit the second motor to operate.

2. A power transmission system including two electric motors whose order of operation is to be controlled: circuits for said motors; a switch for controlling the circuit of the motor that is to be the second to operate; an electro-magnetic device for locking said switch to prevent the motor to which it is individual from being operated; a circuit for said electro-magnetic device; and switching mechanism for governing the circuit of said electro-magnetic device and governed by the motor first to be operated, this switching mechanism serving to control the circuit of the electro-magnetic device to maintain said switch locked when the motor first to be operated is operating and operating to alter such circuit when the motor first to be operated has operated to release the switch thereafter to permit the operation of the motor second to be operated.

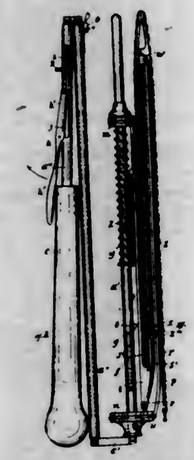
3. A power transmission system including two motors whose order of operation is to be controlled; circuits for said motors; a controller for the motor that is to be the second to operate; and mechanism governed by the first motor to operate for holding the controller while the first motor is operating then to prevent the second motor from operating, such mechanism being released when the first motor has operated.

4. A power transmission system including two electric motors whose order of operation is to be controlled; circuits for said motors; a switch individual to each motor for controlling its operation; an electro-magnetic device for locking the switch individual to one motor; a circuit for said electro-magnetic device; and switching mechanism governed by the switch individual to the other motor and taking part in the control of the circuit of said electro-magnetic device.

5. A power transmission system including two electric motors whose order of operation is to be controlled: circuits for said motors; a switch individual to each motor for controlling its operation; an electro-magnetic device for locking the switch individual to one motor; a circuit for said electro-magnetic device; and switching mechanism governed by the switch individual to the other motor and taking part in the control of the circuit of said electro-magnetic device, said switching mechanism being so interrelated with the motor controlling switch that operates it as to maintain the other motor controlling switch in idle position when the motor which is individual to the switch that operates said switching mechanism is operating.

[Claims 6 and 7 not printed in the Gazette.]

1,063,378. FOLDING UMBRELLA. JOHN W. OLSSON, Newport News, Va. Filed May 2, 1912. Serial No. 694,616. (Cl. 135—25.)



1. In a staff structure for an umbrella, a plurality of tubular members, and connected means including a spring associated therewith to maintain the adjoining ends of said members in abutting and alined relation to each other, said means also including an operating device for imparting longitudinal pressure to said members and movable relatively to said members to free the same from said pressure.

2. In a staff structure for an umbrella, a plurality of tubular members, and a connected spring-including train of parts associated therewith to maintain the adjoining ends of said members in abutting and alined relation to each other, said train of parts also including an operating device for imparting longitudinal pressure to said members and movable relatively to the latter to free the same from said pressure.

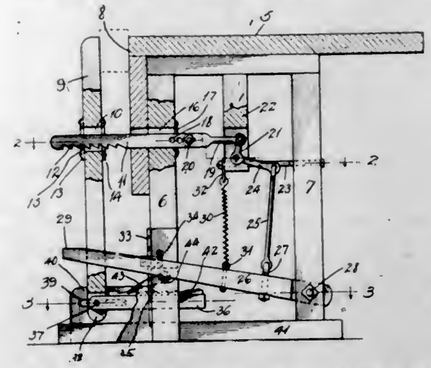
3. In a staff structure for an umbrella, a plurality of tubular members, and a connected spring-including train of parts partially housed in said members and attached at one end to one of the terminal members, said train of parts serving to maintain the adjoining ends of the members in abutting and alined relation to each other, said train also including an operating device connected to the other terminal member for imparting longitudinal pressure to the members, said operating device being movable relatively to the members to free the same from said pressure.

4. In a staff structure for an umbrella, a plurality of tubular members adapted to be alined in abutting relation to each other, and connected means associated therewith to maintain the members in such relation, said means including a spring, a folding shaft connected to said spring and housed within said members, said shaft being movable longitudinally of the members in the alined position thereof to bring its joint portion into and out of coincidence with the abutting ends of said members, and an operating device for imparting longitudinal pressure to said members, said device being movable relatively to said members to free the same from said pressure.

5. In a staff structure for an umbrella, upper, intermediate and lower tubular members alined with each other and movable into separated and inter-abutting relation, a shaft inclosed in said members, attached to the upper member and including upper, intermediate and lower sections pivotally jointed together, and means, connected with the lower shaft section and including a fulcrum operating device engaged with the lower tubular member, for exerting upward pressure upon the latter and thereby holding the same against the intermediate member and said intermediate member against the upper member, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,063,379. BENCH-VISE. MILO PAGE, Benton, Cal. Filed Oct. 21, 1912. Serial No. 726,955. (Cl. 81—24.)



1. In a bench vise, in combination with a bench, having a jaw facing formed thereon, of a pivotally and slidably mounted jaw adjacent said jaw face, a pair of toothed bars connected to said jaw, a pivoted operating lever mounted on said bench, a bell crank lever pivoted to said bench, means to connect said bell crank lever to one of said toothed bars and to said operating lever, a pawl engaging with the other of said toothed bars and a locking means to secure said lever in positive relation in the actuation of said toothed bar.

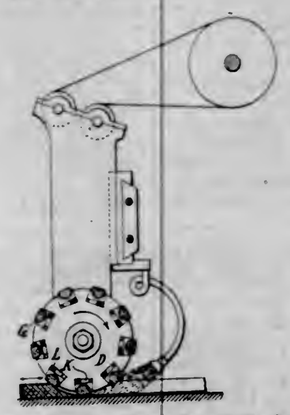
2. In a bench vise, in combination with a bench having a jaw face and a bench supporting means, of a slotted jaw pivotally and slidably mounted in relation to said jaw face, a lower toothed bar secured by pivotal means to said jaw, a pawl adapted to engage the said toothed bar, an upper toothed bar engaging in said slot in said jaw provided with adjusting means, a bell crank lever mounted on said bench adjacent said upper toothed bar, an operating lever pivoted to one of the supports of said bench, rods connecting said bell crank lever to said tooth bar and said operating lever, and a spring adapted to lift said lever.

1,063,380. MAKING DEEP CUTS IN MARBLE OR SIMILAR STONE. JOHN ROYDEN PEIRCE, New York, N. Y., assignor to Royden Marble Machinery Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 9, 1909. Serial No. 527,081. (Cl. 125—18.)

1. The process of making deep cuts in marble by means of carborundum, which consists in feeding it to a thin wheel having a toothed carborundum periphery and simultaneously rotating said wheel at approximately a minimum rate limited by the clogging of the wheel with particles of marble, so as to remove the marble in as large pieces as possible and to avoid fine grinding of the marble.

2. The process of making deep cuts in marble by means of carborundum, which consists in feeding it to a thin wheel having a toothed carborundum periphery, the particles of carborundum being bonded with a rubber bond, and simultaneously rotating said wheel at

approximately a minimum rate limited by the clogging of the wheel with particles of marble, so as to remove the marble in as large pieces as possible and to avoid fine grinding of the marble.



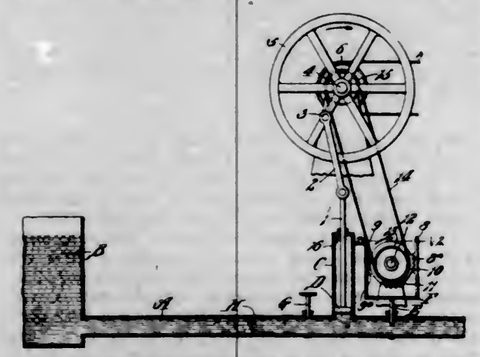
3. The process of making deep cuts in marble by means of carborundum, which consists in feeding it to a thin carborundum wheel rotating at a speed of its cutting periphery below 4500 linear feet per minute.

4. The process of making deep cuts in marble by means of carborundum, which consists in feeding it to a thin cutting wheel having teeth of carborundum bonded with a rubber bond, feeding the marble to said wheel at a maximum rate limited by the strength of the marble and the carborundum and rotating said wheel at approximately a minimum rate limited by the clogging of the wheel with particles of marble, feeding water copiously to the faces of the teeth to clear the particles of marble therefrom, the carborundum being laterally supported by metal extending nearly to the edges of the teeth so as to make them substantially unyielding laterally.

5. The process of making deep cuts in marble by means of carborundum, which consists in feeding it to a thin carborundum wheel, and simultaneously rotating said wheel at approximately a minimum rate limited by the clogging of the wheel and the smoothness of running and the condition of the arris, so as to remove the marble in as large pieces as possible and to avoid fine grinding of the marble.

[Claims 6 to 13 not printed in the Gazette.]

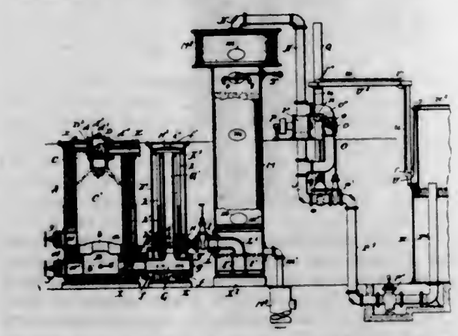
1,063,381. HYDRAULIC MOTOR. ALONZO H. PERRY, Bartlesville, Okla. Filed Aug. 26, 1912. Serial No. 717,072. (Cl. 138—2.)



1. A hydraulic motor comprising a conduit that communicates with a source of water supply, a hydraulic ram having a cylinder that communicates with said conduit, a piston in said cylinder, a driving shaft operatively connected to said piston and provided with a fly-wheel, a cut-off valve arranged in said conduit at a point beyond said cylinder, a valve-actuating member for moving said cut-off valve provided with parallel portions that have gear teeth, an actuating shaft arranged between said parallel members and provided with mutilated gears that coöperate with the teeth on said members, and means for driving said actuating shaft from said driving shaft.

2. A hydraulic motor comprising a conduit that communicates with a source of water supply, a hydraulic ram having a cylinder that communicates with said conduit, a piston in said cylinder, a driving shaft operatively connected to said piston and provided with a fly-wheel, a cut-off valve arranged in said conduit at a point beyond said cylinder, a valve-actuating member for moving said cut-off valve provided with parallel portions that have gear teeth, an actuating shaft arranged between said parallel members and provided with mutilated gears that coöperate with the teeth on said members, means for driving said actuating shaft from said driving shaft, a check-valve arranged in said conduit between the cylinder of the ram and the source of water supply, and means under control of the operator for interrupting the flow of the water through said conduit so as to cause the motor to stop.

1,063,382. PROCESS OF MANUFACTURING GAS. HAWLEY PETTIBONE, New Rochelle, N. Y., assignor to The Power and Mining Machinery Company, a Corporation of New Jersey. Filed Sept. 15, 1906. Serial No. 334,821. (Cl. 48—207.)



1. The process of producing gas, which consists in introducing air centrally within and below the surface of a body of fuel ignited below the air inlet, consuming the oxygen of the air in oxidizing the interior coal before the air can reach and cause combustion of carbon in contact with the brick walls, feeding fresh or green fuel above the central air inlet and along the side walls, and drawing off the resulting gaseous products centrally down through the fuel and out of direct contact with the side walls, thereby preventing active combustion along the brick lining for better effecting gasification of the fuel and preventing formation of clinker on said lining of the producer.

2. The process of producing gas, which consists in passing air centrally down into and below the surface of a body of ignited fuel, consuming the oxygen of the air in oxidizing the interior coal before the air can reach and cause combustion of carbon in contact with the brick walls, at the same time feeding fresh bituminous coal above and around the central air draft and along in contact with the brick lining and drawing the resulting gases of distillation and combustion centrally down through the body of incandescent fuel out of direct contact with said lining at the side walls for converting hydrocarbon vapors and carbon dioxid into fixed combustible gas and preventing formation of clinker on the brick lining of the producer.

3. The process of producing gas, which consists of admitting air or air and steam, centrally within and below the surface of a body of fuel and drawing it down into the same, consuming the oxygen of the air in oxidizing the interior coal before the air can reach and cause combustion of carbon in contact with the brick walls, feeding fresh or green fuel above the central air inlet and along the side walls, drawing the resulting gases down through the incandescent fuel, compressing and storing a volume of such gas under pressure, intermittently shutting off the upper air supply, opening an upper purge pipe and admitting a counter blast of said compressed gas at the base of the fuel, thereby blowing dust and ashes out into the open air through the purge pipe, then closing the purge pipe, again admitting air within the body of fuel and drawing gas down through the same and continuing the manufacture of gas by said intermittent operations.

1,063,383. ART OF MAKING HYDROGEN PEROXID. ALBERT PIETZSCH and GUSTAV ADOLPH, Munich, Germany. Filed Oct. 6, 1910. Serial No. 585,570. (Cl. 23—10.)

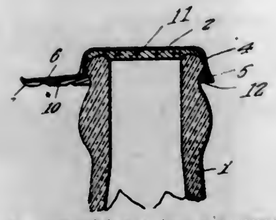
1. The process of producing hydrogen peroxid, which consists in reacting on a purified persulfate with diluted sulfuric acid and heating the mixture.

2. The process of producing hydrogen peroxid, which consists in reacting on a purified persulfate with diluted sulfuric acid and heating the mixtures until all of the active oxygen of the persulfate has been converted into hydrogen-peroxid.

3. The process of producing hydrogen-peroxid, which consists in mixing a solid persulfate with sulfuric acid and subjecting the mixture to distillation.

4. The process of producing hydrogen-peroxid, which consists in mixing a solid persulfate with sulfuric-acid and subjecting the mixture to distillation, water being added as the distillation proceeds.

1,063,384. BOTTLE-CLOSURE. HUBERT PRELL, Baltimore, Md. Filed Dec. 19, 1911. Serial No. 666,734. (Cl. 215—10.)

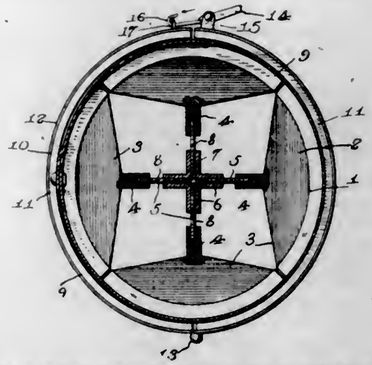


A bottle cap, comprising a top, a corrugated flange depending from said top and adapted to engage the bead upon a bottle-neck entirely around its circumference, and an opening lip projected from said flange and being a continuation of the same from approximately diametrically opposite sides of the cap, corrugated to its edge coincident with the corrugations in the flange, and concavo-convex in cross-section from its connection with said flange, thereby gradually decreasing the depth of said flange from the sides of said lip to its center.

1,063,385. SOUND-DEADENING DEVICE. WILLIS C. REED, Cambridge, Ill. Filed Nov. 6, 1912. Serial No. 729,863. (Cl. 78—46.)

1. In a sound deadening device, the combination of a circular body formed in sections and adapted to be arranged within a boiler, a rubber facing upon each of said sections, an internally threaded socket formed upon each of said sections and extending inwardly toward the center of the body, and means engaging with said sockets for moving the sections toward and away from the inner wall of the boiler to which the device is secured, and means engaged around the outer side of the boiler and adapted to coöperate with the body on the inside of the boiler to deaden any ringing sound therefrom.

2. In a sound deadening device, the combination of a circular body formed in sections, a rubber secured to each of said sections, an internally threaded socket formed integral with each of said sections and extending inwardly toward the center of the body, a spider centrally arranged within the body, outwardly extending internally threaded sleeves formed integral with the spider and arranged in alinement with the sockets on each of the sections, threaded rods having one of their ends engaging in the sleeves and their other ends engaging within the sockets whereby the turning movement of the rods will move the sections toward and away from the inner wall of the boiler to which the device is secured and means arranged around the outer side of the boiler and coöperating with the circular body to deaden any ringing sound from the boiler.



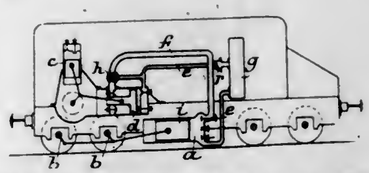
3. In a sound deadening device, the combination of a circular body adapted to be arranged within a boiler, a rubber facing formed upon the outer periphery of said body and adapted to engage with the inner wall of the boiler, and means arranged around the outer side of the boiler and coöperating with the body within the boiler, to deaden any ringing sound from the boiler.

4. In a sound deadening device, the combination of means adapted to be arranged within a boiler and adapted to engage the inner wall thereof, and means adapted to be arranged upon the outer side thereof and coöperating with the first means upon the insioe to deaden any sound therefrom.

5. In a sound deadening device, the combination of a circular body formed in sections and adapted to be arranged in a boiler, a rubber facing formed upon each section, an internally threaded socket formed integral with each section and extending in toward the center of the body, a spider arranged within the center of the body, internally threaded sleeves extending outwardly from said spider and arranged in alinement with the sockets, and threaded rods having one of their ends engaging within the sockets and their other ends engaged with the sleeves whereby the turning movement of the rods will move the sections toward and away from the inner wall of the boiler.

[Claims 6 to 8 not printed in the Gazette.]

1,063,386. SYSTEM FOR OPERATING COMBUSTION-ENGINES. THEODOR REUTER, Winterthur, Switzerland. Filed Sept. 13, 1910. Serial No. 581,862. (Cl. 123—1.)



1. The method of operating a two cycle internal combustion engine of the Diesel type, wherein combustion is supported in part by compressed air and in part by scavenging air, which comprises admitting fuel to the cylinder and so regulating the relative amounts of compressed

and scavenging air that the compressed air supply decreases as the load on the engine decreases, while the scavenging air supply increases correspondingly, substantially as described.

2. The method of operating an internal combustion engine of the two-cycle Diesel type, wherein combustion is supported in part by compressed air and in part by scavenging air, which comprises admitting fuel to the cylinder and so regulating the relative amounts of compressed and scavenging air respectively consumed in the engine cylinder, that the amount of scavenging air consumed increases with the decrease in load on the engine, while the compressed air consumed decreases; substantially as described.

3. The method of operating a two-cycle internal combustion engine, wherein combustion is supported by separate supplies of compressed and scavenging air, generated outside of the engine, which consists in starting the engine on compressed air alone, then, after starting, admitting fuel to the cylinder and changing over to combustion with both compressed and scavenging air, and finally, as the speed of the engine increases, increasing the supply of scavenging air and decreasing the supply of compressed air, substantially as described.

4. The method of operating a two-cycle internal combustion engine, wherein combustion is supported in part by scavenging air compressed outside of the engine cylinder and in part by compressed air, also compressed outside of the engine cylinder, which comprises admitting fuel to the cylinder and so regulating the supplies of compressed and scavenging air that the former decreases as the load on the engine decreases, while the scavenging air supply increases correspondingly, substantially as described.

5. The method of operating a two-cycle internal combustion engine wherein combustion is supported in part by compressed air supplied from a suitable exterior source, and in part by scavenging air supplied from a suitable exterior source, which comprises admitting fuel to the cylinder and increasing the supply of scavenging air to the cylinder as the speed of the engine increases, and simultaneously decreasing the compressed air supply, substantially as described.

[Claims 6 to 24 not printed in the Gazette.]

1,063,387. DEVICE FOR MEASURING AND PACKAGING MATCHES, TOOTHPICKS, AND SIMILAR ARTICLES. CHARLES P. RICKER and WINTHROP L. GUILD, Dixfield, Me., assignors to Dixfield Toothpick Company, Dixfield, Me., a Corporation of Maine. Filed Aug. 5, 1912. Serial No. 713,228. (Cl. 73—135.)



1. In a device of the character described, a chute provided with an article holding channel adapted to contain a quantity of articles in mass and having a measuring arm receiving opening in the vertical wall thereof, in combination with a rotatable wheel located outside of said chute and adjacent said opening and provided with radially disposed measuring arms adapted to pass through said opening into and out of said chute, as the wheel rotates.

2. In a device of the character described, a chute provided with an article receiving channel and a measuring arm receiving opening in the vertical wall thereof, in combination with a rotatable wheel provided with radially movable measuring arms, and means for causing said arms to move into said opening and across said channel.

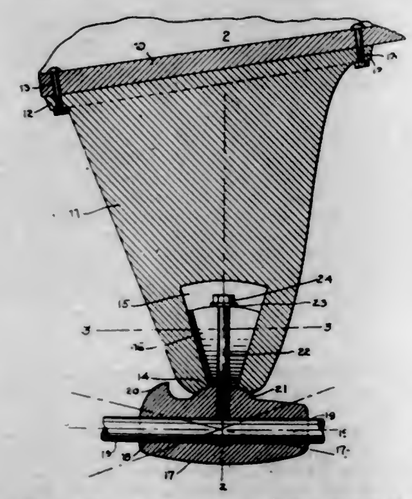
3. In a device of the character described, a chute provided with an article receiving channel, a measuring arm receiving opening in the vertical wall thereof, and a recess in said channel opposite said opening, in combination with a rotatable wheel provided with radially movable measuring arms, and means for causing said arms to move into said opening and across said channel.

4. In a device of the character described, a chute provided with an article receiving channel and a vertical measuring arm receiving opening in the front wall thereof, a rotatable wheel provided with radially movable measuring arms, means for causing said wheel to rotate, means for causing said arms successively to move into said opening and across said channel, and means for successively withdrawing said arms.

5. In a device of the character described, a chute provided with an article receiving channel, an opening in the vertical wall of said chute, a rotatable wheel provided with a series of radially moving measuring arms, means for causing said arms to move into said opening and across said channel, said arms being spaced apart so that any two arms during rotation shall intercept and include a measured quantity of articles contained in the chute, and means for quickly withdrawing the lower arm before the next upper arm is withdrawn.

[Claims 6 to 9 not printed in the Gazette.]

1,063,388. UNIVERSAL STRUT. ALFONZO D. ROBBINS, Freeport, N. Y. Filed June 6, 1912. Serial No. 702,005. (Cl. 115—34.)



1. In an outboard support for propeller shafts, a pedestal adapted to be secured to the fashion plate of a boat, a bearing at the lower end of said pedestal, a ball and socket formed on the bearing and pedestal, and a securing bolt arranged to hold said ball and socket in adjusted position.

2. In a device of the kind described, a pedestal comprising a body having a socket at its lower end, said pedestal furthermore having a transverse opening extending therethrough and a slot extending to the pedestal, said opening being arcuate in shape and the slot having diverging ends, a bearing comprising a body having an opening therethrough, and a segmento-spherical boss adapted to fit said socket, and a bolt secured to said bearing and passing through said slot into said opening, said bolt being provided at its upper end with a nut.

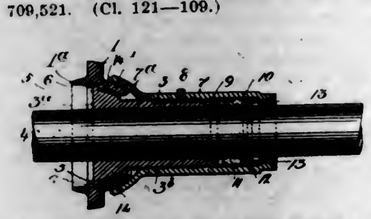
3. In a device of the kind described, a pedestal comprising a body having a socket at its lower end, said pedestal furthermore having a transverse opening extending therethrough and a slot extending to the pedestal, said opening being arcuate in shape and the slot having diverging ends, a bearing comprising a body having an opening therethrough, and a segmento-spherical boss adapted to fit said socket, a bolt secured to said bearing and passing through said slot into said opening, said bolt being provided at its upper end with a nut, and an upwardly extending shield on the front end of said bearing.

4. A universal support for shafts comprising a pedestal provided with a socket at one end, said pedestal having an arcuate transverse opening extending therethrough and a slot that connects the opening and socket, a bearing provided with a shaft opening and having a boss extending into the pedestal socket, a bolt carried by the bearing and extending through and movable vertically and transversely of the slot, and fastening means carried by the bolt and bearing on the base of the opening.

5. A universal support for shafts comprising a hanger, a shaft bearing, means for universally connecting the bearing to the hanger, and a shield carried by the bearing for guarding the connection between the hanger and the bearing.

[Claim 6 not printed in the Gazette.]

1,063,389. FLEXIBLE STUFFING-BOX. ALFONZO D. ROBBINS, Freeport, N. Y. Filed July 15, 1912. Serial No. 709,521. (Cl. 121—109.)



1. A flexible stuffing box comprising a seat, a partially spherical head within said seat, a lug and slot connection between said head and seat to permit said head to rock without rotation, and a cap secured to said head and receiving said seat.

2. A flexible stuffing box comprising a seat, a partially spherical head within said seat, a lug and slot connection between said head and seat to permit said head to rock without rotation, and a cap secured to said head and receiving said seat, and packing within the cap to fit upon a shaft.

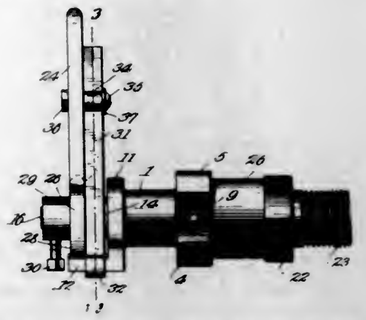
3. A flexible stuffing box comprising a flange having a spherically disposed seat and a slot, a sleeve having a head within said seat and provided with a lug entering said slot to permit said head to rock without rotation, a cap upon said sleeve and provided with a jaw receiving said seat, and means for securing said cap upon said sleeve.

4. A flexible stuffing box comprising a flange having a spherically disposed seat and a slot, a sleeve having a head within said seat and provided with a lug entering said slot to permit said head to rock without rotation, a cap upon said sleeve and provided with a jaw receiving said seat, means for securing said cap upon said sleeve, said cap having an interior packing ring, and means for forcing said ring toward said sleeve.

5. A flexible stuffing box comprising a flange having a collar projecting from one side and a spherically disposed seat extending from the other side, said flange having an interior slot, a sleeve having a head fitted within said seat and provided with a lug entering said slot, a cap upon said sleeve having a jaw receiving said seat, and means for securing said cap in adjusted position upon said sleeve.

[Claims 6 to 10 not printed in the Gazette.]

1,063,390. GAGE-COCK. HARRY B. ROBINSON, Muskegon, Mich. Filed Sept. 18, 1912. Serial No. 721,083. (Cl. 137—7.)



1. In a device of the class described, a casing; a valve journaled in the casing; an operating member upon the stem and provided with spaced shoulders, the casing having a finger located between the shoulders, the casing and the valve having alinable openings, one shoulder and the finger coöperating to adjust the relative positions of the openings; and resilient means engaging the operating member and the finger to hold the other shoulder engaged with the finger.

2. In a device of the class described, a casing; a valve rotatable therein; and an operating member secured to the valve and provided with spaced shoulders, there being a finger on the casing, located between the shoulders; and resilient means connected with the finger and with the operating member for maintaining one shoulder engaged with the finger.

3. In a device of the class described, a casing having a lug; a valve journaled in the casing; and a spring operatively connected with the valve, the spring comprising a plurality of individually removable laminæ having interfitting element engaged around the lug.

4. In a device of the class described, a casing; a valve journaled therein; an operating member connected with the valve; and a spring bearing intermediate its ends upon the casing, the ends of the spring being detachably connected with the casing and with the operating member respectively, whereby the spring may be reversed and flexed across opposed portions of the casing to swing the operating member in opposite directions.

5. In a device of the class described, a casing provided with a finger; a valve journaled in the casing; an operating member connected with the valve; a projection upon the operating member; and a spring engaged by the projection and by the finger, to flex the intermediate portion of the spring against the casing between the projection and the finger.

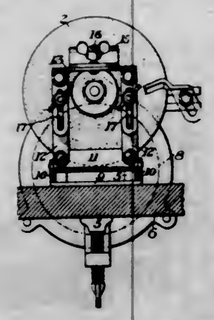
[Claims 6 to 8 not printed in the Gazette.]

1,063,391. SCISSORS-SHARPENING ATTACHMENT FOR GRINDING-MACHINES. ASHMEAD G. RODGERS, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed July 12, 1912. Serial No. 709,046. (Cl. 51—7.)

1. A tool holding attachment for grinding wheels, comprising a member adapted to be secured in fixed relation to a grinding wheel, a bar member pivoted to said member, a frame pivoted to the bar member and arranged to swing at right angles to the movement of the bar member, and a tool holding clamp pivoted to the upper end of the frame; substantially as described.

2. A tool holding attachment for grinding machines, comprising a base member adapted to be secured in fixed

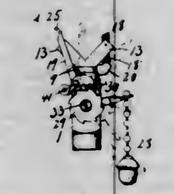
relation to the grinding machine, a horizontal bar member pivotally mounted in said base member, parallel links pivoted to the bar member, and a tool holding clamp pivoted to the upper ends of the links; substantially as described.



3. A tool holding attachment for grinding machines, comprising a base member adapted to be secured in fixed relation to the grinding machine, a horizontal member pivotally mounted in said base member, links pivoted to the rotary member, the axis of said links being at right angles to the axis of the horizontal member, a tool holding clamp carried by said links, and means for adjusting the length of said links; substantially as described.

4. An attachment for grinding machines, comprising a parallel movement frame pivoted to move toward and away from and across the face of a grinding wheel, and a tool holding clamp pivotally supported on the said frame; substantially as described.

1,063,392. GAS-LIGHTER. JOSEPH K. RUSH, Syracuse, N. Y. Filed Dec. 29, 1911. Serial No. 668,546. (Cl. 175—116.)



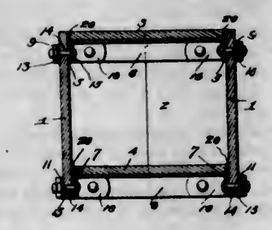
1. In combination with a gas burner having a rotary valve, an electric igniting device comprising contact terminals normally positioned at opposite sides of the vertical plane of the axis of said valve, means for moving one of the terminals to and beyond the normal position of the other terminal so as to leave said other terminal in the return path of the first named terminal, additional means actuated by the first named means for adjusting the valve rotarily to allow the escape of air while the first named terminal, is being moved to and beyond the normal position of the other terminal, and a spring for returning the first named terminal to its normal position independently of the valve, said terminals breaking contact to produce the igniting spark on the return of the first named terminal.

2. In combination with a gas burner having a rotary gas controlling valve, an electric igniting device comprising contact terminals normally disposed at opposite sides of the vertical plane of the axis of the valve, means for moving one of said terminals from its normal position to and beyond the normal position of the other terminal so as to leave said other terminal in the return path of the first named terminal to make and break contact on such return, means actuated by the movement of the first named terminal from its normal position for opening the valve, and a spring for retracting said first named terminal to its normal position independently of the valve.

3. In combination with a gas burner having a rotary valve, an electric igniting device comprising a spring contact terminal normally positioned some distance to one side of the vertical plane of the axis of the valve, a separate contact terminal normally positioned some distance to the opposite side of said plane and movable to and beyond the normal position of the first named terminal, the said first named terminal being positioned in the return path of the second named terminal to produce the igniting spark on the return of the second named terminal, means for moving the second named terminal from its normal position, additional means actuated by the first named means for adjusting the valve rotarily while the second named terminal is being moved from its normal position and separate means for returning the second named terminal to its normal position independently of the valve.

4. In combination with a gas burner having a normally closed rotary valve, an electric igniting device comprising a spring terminal attached to the burner at one end of the valve and having its contact portion normally disposed some distance to one side of the vertical plane of the axis of said valve, a separate contact terminal loosely journaled upon the opposite end of the valve and having its contact portion normally disposed some distance to the opposite side of said plane, means for moving the second named terminal about the axis of the valve for shifting its contact portion to and beyond the normal position of the contact portion of the first named terminal leaving the contact portion of the first named terminal in the return path of the second named terminal to produce an igniting spark on such return, means for moving the second named terminal from its normal position, additional means actuated by the first named means for opening the valve to allow the escape of air while the second named terminal is being moved from its normal position and allowing time for the escape of gas before the igniting spark takes place on the return of the second named terminal and separate retracting means for said second named terminal.

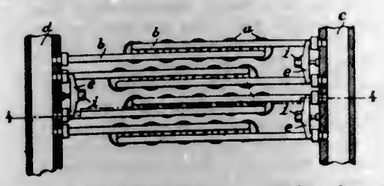
1,063,393. BURIAL-VAULT. ISAAC H. RYAN, Lancaster, Pa. Filed Oct. 20, 1911. Serial No. 655,708. (Cl. 72—7.)



1. A burial vault comprising a plurality of side and end sections, flanged bars located against the inner faces of the side sections and connecting the lower ends thereof together, said bars having their lower edges flush with the lower ends of the sections, flanged bars connecting the upper ends of the sections and located against the inner sides of the same, the last mentioned bars being located below the upper ends of the sections, bottom sections resting upon the flanges of the lower bars and top sections resting upon the flanges of the upper bars.

2. A burial vault comprising a plurality of side and end sections, flanged bars connecting the lower ends of the said side sections together and located against the inner faces of the said sections, angle braces secured to the adjacent ends of the angle bars, angle bars located against the inner sides of the said sections and connecting the upper ends thereof together, angle braces connecting the ends of the last mentioned bars together, bottom sections resting upon the flanges of the first mentioned bars and top sections resting upon the flanges of the last mentioned bars.

1,063,394. SMOKE-TUBE SUPERHEATER. WILHELM SCHMIDT and PETER THOMSEN, Cassel-Wilhelmshöhe, Germany, assignors to Schmidt'sche Heissdampf-Gesellschaft M. B. H., Cassel, Germany. Filed Oct. 3, 1912. Serial No. 723,661. (Cl. 122—462.)



1. A smoke tube superheater comprising, in combination, a boiler provided with parallel rows of smoke tubes, steam collectors on opposite sides of said tubes and parallel rows of superheater elements in some of said smoke tubes all the wet steam ends of each row of said elements being bent to one of said collectors and all the superheated steam ends being bent to the other of said collectors the openings of said wet steam ends and of said superheated ends lying respectively each in a single row.

2. A smoke tube superheater comprising, in combination, a boiler provided with parallel rows of smoke tubes, steam collectors on opposite sides of said tubes and perpendicular to said rows, and parallel rows of superheater elements in some of said smoke tubes all the wet steam ends of each row of said elements being bent to one of said collectors and all the superheated steam ends being bent to the other of said collectors, the openings of said wet steam ends and of said superheated ends lying respectively each in a single row.

3. In a smoke tube superheater comprising, in combination, a boiler provided with parallel rows of smoke tubes, and steam collectors on opposite sides of said tubes and perpendicular to said rows, a row of superheater elements in one of said smoke tube rows, all the wet steam ends of said row of elements being connected in a single row to one of said collectors and all the superheated steam ends of said row being connected in a single row to the other of said collectors.

4. A smoke tube superheater comprising, in combination, a boiler provided with parallel rows of smoke tubes, steam collectors on opposite sides of said tubes and parallel rows of superheater elements in adjacent rows of smoke tubes, all the wet steam ends of each of said rows of elements being connected in a single row to one of said collectors and all the superheated steam ends being similarly connected to the other of said collectors, adjacent rows of ends belonging to adjacent rows of elements being further connected in pairs now to one collector and then to the other alternately.

5. A smoke tube superheater comprising, in combination, a boiler provided with parallel rows of smoke tubes, steam collectors on opposite sides of said tubes and perpendicular to said rows, and parallel rows of superheater elements in adjacent rows of smoke tubes, all the wet steam ends of each of said rows of elements being connected in a single row to one of said collectors, the ends of elements belonging to different rows being also arranged in rows, and all the superheated steam ends of the several rows of elements being similarly arranged and connected to the other of said collectors, adjacent rows of ends belonging to adjacent rows of elements being further connected in pairs now to one collector and then to the other alternately.

1,063,395. SELF-WATERING FLOWER-POT. WILLIAM A. SCRIBNER, Minneapolis, Minn. Filed Nov. 25, 1912. Serial No. 733,406. (Cl. 47—23.)

1. The combination with a flower pot, of a water receptacle, a water-conveying conduit leading from said water receptacle to said flower pot and arranged to deliver water into said flower pot at the roots of a plant therein, the delivery end portion of said conduit being embedded in said flower pot, substantially as described.

2. The combination with a water receptacle having a discharge opening, of a flower pot, a plurality of water-conveying conduits leading from said discharge opening in said water receptacle, and having their delivery end portions embedded in and supporting said flower pot, and arranged to deliver water to the roots of the plant therein, substantially as described.



3. The combination with a suspended water receptacle having a discharge opening, of a flower pot, a plurality of water-conveying conduits leading from the discharge opening in said water receptacle to said flower pot and having their lower end portions embedded in and supporting said flower pot and arranged to deliver water to the roots of the plant therein, and a valve for regulating the flow of water from said receptacle.

1,063,396. MEANS FOR INCREASING THE SPEED OF TRANSMISSION OF SIGNALS OVER TELEGRAPH AND CABLE LINES. GEORGE SEIBT, New York, N. Y. Filed Oct. 12, 1909. Serial No. 522,225. (Cl. 178—45.)



1. As a means for increasing the speed of transmission of telegraphic signals over a conductor, artificial leakages connected to the conductor at points in the length thereof of increasing distances apart from the mid-point of the length of such conductor toward the ends thereof.

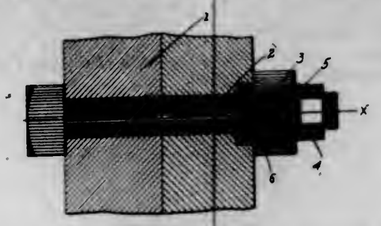
2. In a means for increasing the speed of transmission of telegraphic signals over a conductor, the combination with the conductor having a portion of its core reduced in diameter and a resistance coil connected to the reduced portion of the conductor core and to ground or return.

3. In a means for increasing the speed of transmission of telegraphic signals over a conductor, the combination with a conductor having a core reduced in size for a portion of its length, and insulating spools carrying resistance coils connected in series, one end of the resistance coils being connected to the reduced portion of the cable core, and the other end connected to ground or return.

1,063,397. NUT-LOCK. JOHN J. SHULTS, Paskenta, Cal. Filed Jan. 5, 1911. Serial No. 600,948. (Cl. 151—19.)

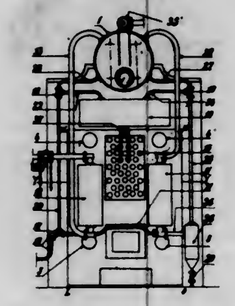
A nut lock comprising a member to be bolted, such member being provided with a recess in its side, a bolt projecting through said member and said recess, an auxiliary nut mounted on said bolt and projecting into the said recess, a threaded shank on said auxiliary nut, said shank

having a plurality of longitudinal incisions cut in its inner end permitting said shank to be flared outwardly,



and a nut mounted on said shank and abutting against the part to be bolted, as described.

1,036,398. STEAM- BOILER. EMILE SOLOMIAC, Paris, and ANDRÉ OLIER, Clermont-Ferrand, France. Filed Sept. 6, 1911. Serial No. 647,905. (Cl. 122—477.)



1. In a steam boiler, the combination with the reservoir (1) of the boiler, of tubular legs (2) supporting the reservoir, a sheet metal flue (F) also supporting the reservoir and forming a ceiling above the central part of the boiler, tubular standards (3) in communication with the tubular legs and upon which the tubular legs and sheet metal flue are supported, lower headers (5) upper headers (4) vaporizing tubes (8) and return tubes (9) carried by the lower headers and supporting the upper headers, flange tubes (6, 7) connecting the tubular standards to the headers, and a furnace located at the bottom of the central part of the boiler and supporting the lower headers substantially as described and for the purpose set forth.

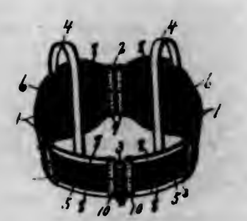
2. In a steam boiler, the combination with the reservoir (1) of the boiler, of tubular legs (2) supporting the reservoir, a sheet metal flue (F) also supporting the reservoir and forming a ceiling above the central part of the boiler, tubular standards (3) in communication with the tubular legs and upon which the tubular legs and sheet metal flue are supported, lower headers (5) upper headers (4), vaporizing tubes (8) and return tubes (9), carried by the lower headers and supporting the upper headers, flange tubes (6, 7) removably connecting the tubular standards to the headers and a furnace mounted on rollers at the bottom of the central part of the boiler so as to be removable from the latter, and supporting the lower headers, substantially as described and for the purpose set forth.

3. In a steam boiler, the combination, with the reservoir (1) of the boiler, of tubular legs (2) supporting the reservoir, a sheet metal flue (F) also supporting the reservoir and forming a ceiling above the central part of the boiler, tubular standards (3) in communication with the tubular legs and upon which the tubular legs and sheet metal flue are supported, lower headers (4) vaporizing tubes (8) and return tubes (9) carried by the lower headers and supporting the upper headers, flange tubes (6, 7) connecting the tubular standards to the headers, a furnace located at the bottom of the central part of the boiler and supporting the lower headers, two side flues (B, C) for the heated gases in said furnace, a nest of tubes (11) inserted in one side flue and acting as a feed water heater, a nest of tubes (12) in the other side flue and acting as a steam superheater, a central space (D) communicating with both side flues by openings and dampers (36) controlling said openings, substantially as described and for the purpose set forth.

4. In a steam boiler, the combination with the reservoir (1) of the boiler, of tubular legs (2) supporting the reservoir, a sheet metal flue (F) also supporting the reservoir and forming a ceiling above the central part of the boiler, tubular standards (3) in communication with the tubular legs and upon which the tubular legs and sheet metal flue are supported, lower headers (5) upper heads (4) vaporizing tubes (8) and return tubes (9) carried by the lower headers and supporting the upper headers, flange tubes (6, 7) connecting the tubular standards to the headers, a furnace located at the bottom of the central part of the boiler and supporting the lower headers, two side flues (B, C) for the heated gases in said furnace, a nest of tubes (11) inserted in one side flue and acting as a feed water heater, a nest of tubes (12) in the other side flue and acting as a steam superheater, a central space (D) communicating with both side flues by openings, dampers (36) controlling said openings, a nest of tubes (10) in the sheet metal flue (F), means for establishing a communication between the sheet metal flue (F) and the central space (D), means for introducing the feed water to the nest of tubes (10) and means for connecting the tubular nest (10) to the tubular nest (11) substantially as described and for the purpose set forth.

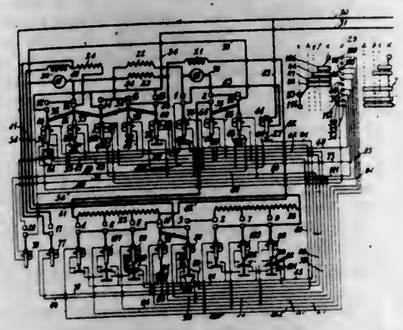
5. In a steam boiler, the combination with the reservoir (1) of the boiler, of tubular legs (2) supporting the reservoir, a sheet metal flue (F) also supporting the reservoir and forming a ceiling above the central part of the boiler, tubular standards (3) in communication with the tubular legs and upon which the tubular legs and a sheet metal flue are supported, lower headers (5) upper headers (4) vaporizing tubes (8) and return tubes (9) carried by the lower headers and supporting the upper headers, flange tubes (6, 7 connecting the tubular standards to the headers, a furnace located at the bottom of the central part of the boiler, and supporting the lower headers, side flues (B, C) for the heated gases in said furnace, a vertical partition (38) dividing each of said flues into two parts, means for directing the flames from the furnace, firstly into the back portions of both flues and then into the front portions thereof and tubular nests (11, 12) inserted on the front portions of both side flues, substantially as described and for the purpose set forth.

1,063,399. BUST-GIRDLE. MAUDE V. STANSBURY, Auburn, N. Y. Filed July 3, 1912. Serial No. 707,453. (Cl. 2—87.)



A bust girdle composed of opposite half sections arranged end to end, means for connecting them at both their rear and front ends, a pocket formed on each of said sections by attaching thereto a piece of material upon three of its sides, a flexible strip of material of substantially equal length with the width of said pockets attached to the free side of said pieces of material attached to form said pockets, and adapted to hold said pockets in closed position.

1,063,400. SYSTEM OF ELECTRIC-MOTOR CONTROL. THEODORE VARNEY, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Sept. 18, 1911. Serial No. 649,916. (Cl. 172—179.)



1. In a control system, the combination with a supply circuit, two motors, and resistors, of means for connecting the motors in independent circuits for operation in one direction, in a single circuit for operation in the opposite direction and in independent local circuits for braking.

2. A hoist control system comprising a supply circuit, a pair of electric motors, resistors, and means for connecting the motors to the supply circuit in multiple relation for hoisting, in series relation for kick-off and in two local circuits for braking.

3. A hoist control system comprising a supply circuit, a pair of electric motors, resistors, and means for connecting the motors to the supply circuit in multiple relation for hoisting, in series relation, with their armature circuits reversed, for kick-off and in two independent local circuits for braking.

4. A hoist control system comprising a supply circuit, a pair of electric motors, resistors, and means for connecting the motors in series relation in a local circuit when they are at rest, for connecting the motors to the supply circuit in multiple relation for hoisting, in series relation for kick-off and in independent local circuits for braking.

5. A hoist control system comprising a supply circuit, a pair of electric motors, resistors, and means for connecting the motors in series relation in a local circuit when they are at rest, for connecting the motors to the supply circuit in multiple relation for hoisting and in independent local circuits for braking.

[Claim 6 not printed in the Gazette.]

1,063,401. LAMP FOR PICTURE-DISPLAY MACHINES. ALEXANDER FERDINAND VICTOR, Davenport, Iowa. Filed Dec. 9, 1911. Serial No. 664,886. (Cl. 240—103.)

1. A lamp comprising a cylindrical casing, the ends of which are open, a front end and a rear reflector mounted in said open ends and facing each other, and an illuminant agent disposed between said reflectors.

2. A lamp, comprising a cylindrical casing, the ends of which are open, a front and a rear reflector mounted in said open ends, the former of which has a central opening and faces the latter, and an illuminant agent disposed between said reflectors.

3. A lamp comprising a cylindrical casing, the ends of which are open, a front and a rear concave reflector mounted in said ends, the former of which is of greater concavity than the latter and faces the same, and an illuminant agent disposed between said reflectors.

4. A lamp comprising a cylindrical casing, the ends of which are open, a front and a rear concave reflector of different foci mounted in said open ends and facing each other, and an illuminant agent disposed between said reflectors.

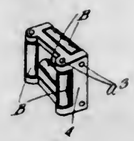
5. A lamp comprising a cylindrical casing, the ends of which are open, a front and a rear concave reflector of different foci mounted in said open ends and facing each



other, and an illuminant agent disposed between said reflectors at approximately the focus of said front reflector.

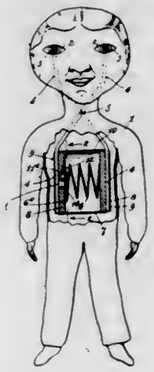
[Claims 6 and 7 not printed in the Gazette.]

1,063,402. FISHING-ROD. THOMAS DELANO WHISTLER, Pimlico, London, England. Filed Sept. 7, 1911. Serial No. 648,155. (Cl. 43—16.)



In a fishing rod ring, a frame formed with slotted apertures, jewel bearings situated therein, rollers having journal pins supported in such bearings, and means for connecting the frame with the fishing rod.

1,063,403. TOY. JOHN N. WHITEHOUSE, New York, N. Y. Filed Apr. 6, 1912. Serial No. 688,850. (Cl. 46—40.)



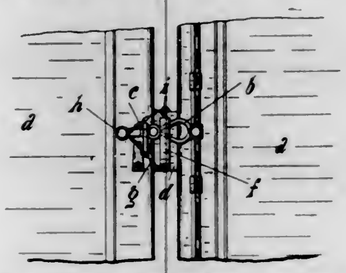
1. A toy having movable eyes and containing eye-supporting members movable to and away from each other, and yielding means acting on said members to hold them at a normal position apart.

2. A toy having movable eyes and containing elongated eye-supporting members which cross each other and are there pivotally connected, and elastic means acting upon the ends of said crossed members to yieldingly hold them in a normal relative position.

3. A toy having movable eyes and containing elongated eye-supporting members which cross each other and are there pivotally connected, and a spring located between the ends of said members on the opposite side of their pivotal connection from the aforesaid eyes of said members.

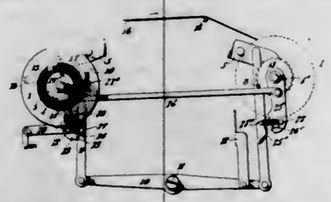
4. A toy having movable eyes and containing elongated eye-supporting members which cross each other and are there pivotally connected, a spring located between the ends of said members on the opposite side of their pivotal connection from the aforesaid eyes of said members, and a closed collapsible chamber also located between the ends of said elongated members, said chamber having an air hole opening through it, and a valve and sounding device at said opening operative to be sounded from the passage of air at said opening.

1,063,404. SECURING DEVICE FOR WINDOWS. JOHANNES WICHERS, Hamburg, Germany. Filed Sept. 4, 1912. Serial No. 718,551. (Cl. 16—22.)



Securing device for half opened windows with Spanish sash comprising in combination a block *d* inserted between the wings of the half opened window, an elastic hook (*f*) affixed to said block and surrounding the lever (*b*) of the said Spanish sash, a chain (*g*) affixed to said elastic hook (*g*) said chain wound around the lever (*b*) and hook (*c*) of said Spanish sash and means for affixing the free end of said chain to the elastic hooks, (*f*) means for inserting plates (*e*) of different sizes in grooves of said block.

1,063,405. RIBBON MECHANISM. CHARLES V. WILCUS, Kingston, Pa., assignor to The Adder Machine Company, Wilkes-Barre, Pa., a Corporation of Pennsylvania. Filed Oct. 16, 1911. Serial No. 655,013. (Cl. 197—160.)



1. In a ribbon mechanism, the combination with ribbon spools, and pawl and ratchet feed mechanisms for the respective spools; of a reversing mechanism to alternately silence one of said feed mechanisms and render the other effective, including reversing levers for the respective spools, said levers connected to operate together; means to connect the levers with their respective feed pawls; and a ribbon-controlled trip arm for each spool adapted, when released, to shift the reversing levers to cause one of said levers to strike and positively disengage the corresponding feed pawl from its ratchet, and substantially simultaneously therewith, to cause the other lever to engage the remaining feed pawl with its ratchet.

2. In a ribbon mechanism, the combination with ribbon spools; feed mechanism therefor, including ratchets and pawls; reversing levers flexibly connected to the respective pawls; and means connecting the reversing levers, of trip arms controlled by the ribbon and alternately operated to shift the reversing levers, to cause one of said levers to strike the adjacent pawl to positively disengage the latter from its ratchet and effect the engagement of the opposite pawl with its ratchet; and a latch to hold the pawls where adjusted.

3. In a ribbon mechanism, the combination with ribbon spools; feed mechanism therefor, including a ratchet and pawl for each spool, and reversing levers connected to operate together; of trip arms controlled by the ribbon, to shift the levers, and silence one of said pawls; pull springs connecting the reversing levers and pawls to effect the engagement of the other of said pawls with its ratchet; and a latch to hold the feed mechanism where adjusted.

4. In a ribbon mechanism, the combination with ribbon spools; and feed mechanisms therefor, including ratchets and pawls, one of which is idle while the other is effective; of a reversing mechanism comprising reversing levers, means connecting said levers; trip arms controlled by the ribbon to shift the reversing levers to cause one of said levers to strike and positively disengage the operative pawl from its ratchet; pull springs connecting the levers and pawls, one of said springs being tensioned by the shifting of the levers to engage the idle pawl with its ratchet; and a latch to hold the feed mechanism where adjusted.

5. In a ribbon mechanism, the combination with spools; and ribbon feed mechanism, including alternately effective pawls and ratchets; of reversing levers connected to operate together, each lever having a contact face; trip arms controlled by the ribbon, to alternately strike their adjacent reversing levers to shift one of said levers away from the idle pawl and the other into contact with the operative pawl to positively disengage the latter from its ratchet; springs connecting the levers and their adjacent pawls, to draw the respective pawls into engagement with their ratchets when said levers are alternately shifted away from their pawls; and a latch to hold said reversing levers where adjusted against the tension of their springs, with the contact face of one of said levers in the path of the idle pawl, to maintain the latter inoperative during the feed of the ribbon in one direction.

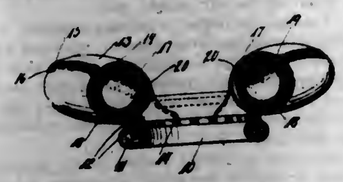
[Claims 6 and 7 not printed in the Gazette.]

1,063,406. INHALER. OTTO JOHANN JULIUS WITT, Hamburg, Germany. Filed Nov. 4, 1908. Serial No. 461,080. (Cl. 128—13.)



An inhaler comprising, in combination, a cylindrical tube or casing, a hollow nipple adapted to be inserted in the mouth or applied to the nostrils engaging the aforesaid casing at each end thereof and producing an annular shoulder therein, a medicine-holding plug formed of a blank of corrugated absorbent material wound up spirally to a cylindrical body inserted into the aforesaid casing, said plug terminating at a distance from both nipples, a disk of coarse gauze at each end of the plug, a disk of fine gauze at the internal annular shoulder of both nipples and a tubular member between the two gauze disks at each end of the plug, said tubular members of a length so as to firmly lock the plug between the two nipples, substantially as described and shown and for the purpose set forth.

1,063,407. PNEUMATIC HORSE-COLLAR. FRED BATCHELER, Bomarton, Tex. Filed Aug. 24, 1910. Serial No. 578,624. (Cl. 54—19.)



A horse collar comprising oppositely disposed pockets, an inflated air sack in each pocket and a slicker cloth loosely wrapped about each sack in a plurality of convolutions.

1,063,408. GARMENT-STAY. MARCUS M. BEEMAN, Meadville, Pa., assignor to The Spirella Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1908. Serial No. 466,149. (Cl. 2—76.)



1. A garment stay comprising wire bent to form two series of loops or eyes and having the wire of the closed ends thereof indented or crimped sidewise from the plane of the stay.

2. A garment stay comprising wire bent to form two series of oppositely disposed loops or eyes having the wire at their closed ends curved out of the plane of the stay and toward the center line thereof, all of the loops being curved in the same direction.

3. A garment stay comprising wire bent to form two series of oppositely disposed loops or eyes with the intermediate connecting portions deflected in the same direction from the plane of the stay, whereby the stay in cross-section is concave on one side said loops or eyes having their closed ends indented or crimped sidewise from the plane of the stay.

4. A garment stay comprising wire bent to form two series of loops or eyes and having the wire of their closed ends indented or crimped both sidewise from the plane of the stay and laterally in said plane.

5. A garment stay comprising wire bent to form two series of oppositely disposed loops or eyes with the intermediate connecting portions or crossings deflected from the plane of the stay to render said stay concave in cross section, said loops or eyes having their closed ends indented or crimped flatwise from the plane of the stay toward the convex side thereof.

[Claim 6 not printed in the Gazette.]

1,063,409. ATTACHMENT FOR LOOMS. JULIUS BENZ, Bethlehem, Pa. Filed July 27, 1912. Serial No. 711,802. (Cl. 139—29.)



1. An attachment of the character described, comprising a support, a shuttle swell engaging member projecting at one end beyond the support, means for adjusting said member toward and away from the support, and a cushioning device on the free end of said member adapted to be positioned against the swell of a shuttle box, substantially as described.

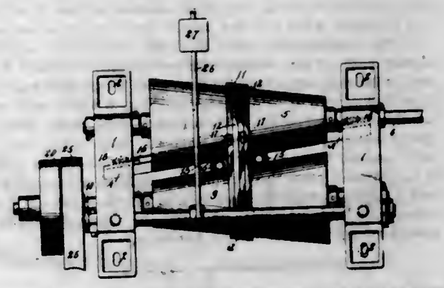
2. An attachment of the character described, comprising a support, an arm adjustable on said support, said arm having a hollow head at its free end, an elastic cushion in said hollow head adapted to be positioned against the swell of a shuttle box, and means for adjusting the arm toward and away from the support, substantially as described.

3. An attachment of the character described, comprising a support, an arm adjustable on said support, said arm having a hollow head at its free end, an elastic cushion in said hollow head adapted to be positioned against the swell of a shuttle box, a screw engaging the arm and constructed to adjust the same toward and away from the support, substantially as described.

4. An attachment of the character described, comprising a base, a post on the base, an arm pivotally connected to the post, a cushion block supported in the free end of the arm, a perforated tongue on the arm between its ends, and a headed screw projected through said tongue and adapted to adjust the arm toward and away from the base, substantially as described.

5. In a loom, the combination with a lay, shuttle boxes on the lay, and movable swells in the shuttle boxes, of swell engaging devices comprising base plates secured to the lay, arms pivotally connected to the base plates, cushion blocks in the free ends of the arms, and screws engaging said arms and screwed into the boxes, whereby the cushion blocks are adjusted toward and away from the swells, substantially as described.

1,063,410. VARIABLE-SPEED MECHANISM. WILLARD G. BIXBY, New York, N. Y. Filed Sept. 24, 1904. Serial No. 225,753. (Cl. 74—21.)



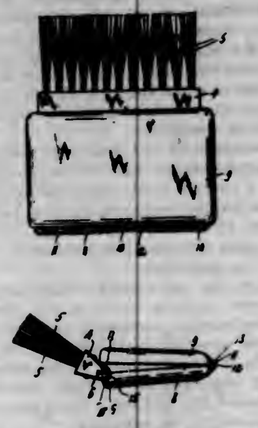
1. A variable speed apparatus comprising two cone pulleys having their axes substantially parallel, and one of said pulleys movably journaled so that it may be drawn toward or away from the other pulley, a belt surrounding and connecting said pulleys so that the distance between the centers of the pulleys is not greater than their mean diameters, another pulley on the movable journals, and a belt surrounding said pulley and constantly tending to draw the same away from the other pulley so as to keep taut the belt surrounding the two pulleys.

2. A variable speed apparatus comprising two cone pulleys having their axes substantially parallel, loosely suspended hangers in which one of said pulleys is journaled so that it may be drawn toward or away from the other pulley, and a belt surrounding said pulleys so that the distance between the centers of the pulleys is not greater than their diameters, and said belt holding the suspended pulley away from the position it would naturally assume by gravity, whereby the gravity of said pulley will tend to keep the belt taut.

3. A variable speed apparatus comprising two cone pulleys having their axes substantially parallel, loosely suspended hangers in which one of said pulleys is journaled so that it may be drawn toward or away from the other pulley, and a belt surrounding said pulleys so that the distance between the centers of the pulleys is not

greater than their mean diameters, and said belt holding the suspended pulley away from the position it would naturally assume by gravity, and means for drawing said pulley toward said position.

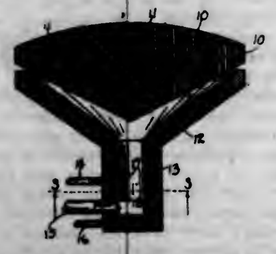
1,063,411. FOLDING BRUSH. FRITZ BRÜPRACHER, New York, N. Y. Filed July 17, 1912. Serial No. 710,000. (Cl. 15—30.)



1. The combination with a brush body, of a box like handle made of two sections hinged together at their rear ends, a hinged connection between said brush body and the front end of one of said handle sections, whereby said two handle sections are adapted to inclose said brush body, and means adapted to cause automatically said brush body to move around its hinge out of the handle section to which it is fastened when the two handle sections are separated.

2. The combination with a brush body, of a box-like handle made of two sections hinged together at their rear ends, a hinged connection between said brush body and the front end of one of said handle sections, whereby said two handle sections are adapted to inclose said brush body, a spring adapted to cause automatically said brush body to move around its hinge out of the handle section to which it is fastened when the two handle sections are separated, and a spring for holding the two handle sections with the brush body inclosed thereby against the action of said first named spring in their closed positions.

1,063,412. OIL-BURNER. HENRY H. BUCKMAN, Jr., Indianapolis, Ind., assignor, by direct and mesne assignments, to Columbia Heating Company, Indianapolis, Ind., a Corporation. Filed June 24, 1912. Serial No. 705,507. (Cl. 158—53.)



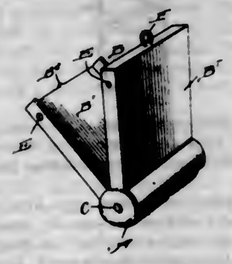
1. An oil burner including a mixing chamber, means for supplying mixture centrally thereto, a burner top on said mixing chamber with its upper surface convex and its lower surface tapering downwardly, and passages extending upwardly through said burner top.

2. An oil burner including a mixing chamber, a burner top thereon with passageways extending upwardly therethrough, a tubular downward extension from said mixing chamber, an air supply pipe entering said extension, and an oil supply nozzle in said extension and discharging vertically in front of the air supply pipe.

3. An oil burner including a mixing chamber, a burner top mounted thereon, a central tubular extension from said mixing chamber having a vertical boss in one side, a downwardly discharging nozzle passageway in said boss, an oil supply pipe communicating with said nozzle, and an air blast pipe discharging into said extension transversely of the nozzle discharge.

4. An oil burner including a downwardly tapering mixing chamber, a central downward extension therefrom, a downwardly discharging nozzle passageway in said extension, an oil supply pipe communicating with said nozzle, an air blast pipe discharging into said extension transversely of the nozzle discharge, a burner top on the upper end of said mixing chamber, the underside of which is conical and extends downward and is spaced from the wall of the mixing chamber, and passageways extending upwardly through said burner top.

1,063,413. COMBINED CHECK-PROTECTOR AND POSTAGE-STAMP HOLDER. CORNELIUS J. CALLAHAN and EDWARD F. CHANDLER, New York, N. Y. Filed Mar. 30, 1912. Serial No. 687,304. (Cl. 101—64.)



1. A device of the kind described comprising a sheet metal case composed of two sections pivotally connected at their lower ends, and a roller having a rough surface, said roller being journaled between the lower ends of the sheet metal case, the pivot of the roller serving also as the pivotal connection for the case sections, as set forth.

2. A device of the kind described comprising a roller having a roughened surface, a sheet metal case composed of two sections pivotally connected at their lower ends, the pivot of the roller serving as the pivotal connection for the said sections, means for holding said sections together and means for suspending the device as a whole.

1,063,414. MANUFACTURE OF FLOUR AND BREAD. CHARLES WOODLAND CHITTY, Dover, and WILLIAM JAGO, London, England. Filed Jan. 27, 1912. Serial No. 673,734. (Cl. 99—10.)

1. The hereindescribed combination of matter for making bread comprising flour mixed with a small quantity of a harmless persalt which on decomposition yields products having an acid reaction.

2. The hereindescribed combination of matter for making bread comprising flour mixed with a small quantity of potassium persulfate.

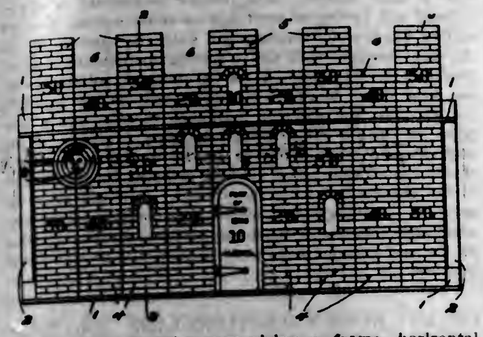
3. The hereindescribed combination of matter for making bread comprising dough mixed with a small quantity of a harmless persalt, which on decomposition yields products having an acid reaction.

4. The hereindescribed combination of matter for making bread comprising dough mixed with a small quantity of potassium persulfate.

5. The hereindescribed combination of matter for making bread comprising flour mixed with a small quantity of a harmless persalt which on decomposition yields products having an acid reaction and a malt preparation of high diastatic character.

[Claims 6 to 8 not printed in the Gazette.]

1,063,415. GAME APPARATUS. MARTHA SHOLL COMEGYS, Burlington, N. J. Filed Aug. 14, 1912. Serial No. 714,957. (Cl. 46—35.)



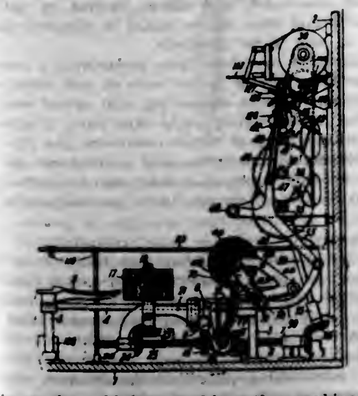
1. A game apparatus comprising a frame, horizontal bars on the frame, blocks positioned against the bars and having sockets therein in their lower portions only, and pins in the bars projected into the sockets, loosely fitting the sockets and permitting the blocks to be tilted to dislodge them from the bars, substantially as described.

2. A game apparatus comprising a frame consisting of horizontal parallel angle bars, and upright posts connecting the same, blocks positioned on both bars and having sockets in their rear faces at their lower portions only, and dowel pins in the bars projecting into the sockets, substantially as described.

3. A game apparatus comprising a frame consisting of horizontal parallel angle bars, and upright posts, connecting the same, blocks positioned on both bars and having sockets in their rear faces at the lower portions only, dowel pins in the bars projecting into the sockets, said blocks constructed with a restricted passage therethrough, and a portable figure back of the blocks and in line with said passage, substantially as described.

4. A game apparatus comprising a frame consisting of horizontal parallel angle bars, and upright posts connecting the same, blocks positioned on both bars and having sockets in their rear faces at their lower portions only, dowel pins in the bars projecting into the sockets, said blocks constructed with a restricted passage therethrough, a portable figure back of the blocks and in line with said passage, each of said blocks containing numerals, and a numeral on said blocks adjacent the said passage, substantially as described.

1,063,416. AUTOMATIC SHOE-SHINING MACHINE. ANDREW A. COOK, Irwin, Pa., assignor to National Electric Shoe Shining Machine Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Oct. 20, 1910. Serial No. 588,201. (Cl. 15—61.)



1. In a shoe shining machine, the combination of a foot rest, a horizontally reciprocating main carrier movable toward and from the foot rest, an auxiliary carrier mounted to move transversely on the main carrier, a plurality of toe-brushes mounted for rotation thereon, and mechanism for automatically moving said auxiliary carrier transversely of the main carrier.

2. In a shoe polishing machine, the combination of a foot rest, a horizontally reciprocating main carrier movable toward and from the foot rest, an auxiliary carrier mounted to move transversely on the main carrier, a plurality of toe-brushes mounted for rotation thereon, cam mechanism for automatically moving said auxiliary carrier step-by-step transversely of said main carrier, and a spring arranged to return said auxiliary carrier to normal position.

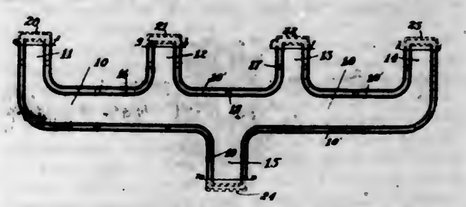
3. In a shoe polishing machine, the combination of a foot rest, a primary horizontally reciprocating carrier, side brushes operated by said carrier, an auxiliary carrier mounted on said primary carrier and movable horizontally transversely thereto, toe brushes carried by said auxiliary carrier, and a cam arranged to move said auxiliary carrier periodically transversely on the primary carrier.

4. In a shoe polishing machine, the combination of a foot rest, a reciprocating carrier, a plurality of toe brushes, an auxiliary carrier therefor mounted to move transversely on the primary carrier, and automatic mechanism for moving said auxiliary carrier transversely on the main carrier, said mechanism being actuated by reciprocation of the main carrier.

5. In a shoe polishing machine, the combination of a foot rest, a primary horizontally reciprocating carrier, a plurality of toe brushes, an auxiliary carrier therefor mounted to move transversely on the main carrier, and a cam actuated on the return stroke of the main carrier and arranged to move said auxiliary carrier stepwise transversely of the main carrier.

[Claims 6 to 11 not printed in the Gazette.]

1,063,417. PROCESS OF MAKING COMPOUND HOLLOW METAL BODIES. EDWARD G. COOK, Brooklyn, N. Y., assignor to Brass & Copper Products Company, New York, N. Y. Filed Feb. 14, 1912. Serial No. 677,507. (Cl. 204—8.)



1. A process for making hollow metal bodies consisting of forming a body of plastic material in the desired shape and electro-depositing a coating of metal upon the said form, then forming a body of plastic material upon said metal coating and electro-depositing upon said second plastic material another coating of metal.

2. A process of making hollow metal bodies consisting in shaping a body of plastic material to the desired contour, and electro-depositing a film of metal upon said form, and then coating the metal body formed thereby with a covering of plastic material of the desired thickness, and forming notches thereon in desired places in the said coating, said notches being formed by the removal of said plastic coating until the metal of the first said coating is exposed, and then coating the said plastic body with a covering of metal of the desired thickness by electro-deposition, the said notches cut into the said plastic coating thereby forming connecting members or chaplets between the two said metal bodies.

3. A process of making hollow metal bodies consisting in forming a body of plastic material of the desired contour, and electro-depositing a film of metal upon said form, and then coating the metal body formed thereby

with a covering of plastic material of the desired thickness, and forming notches thereon in desired places in the said coating, said notches being formed by the removal of said plastic coating until the metal of the first said coating is exposed, and then coating the said plastic body with a covering of metal of the desired thickness by electro-deposition, the said notches cut into the said plastic coating thereby forming connecting members or chaplets between the two said metal bodies, the two attaching metal bodies formed thereby being then cut at pre-determined places and being immersed in boiling water thereby to remove the plastic core forms and leaving a pair of connected tubular members.

4. A process of making hollow metal bodies, comprised of a plurality of metal bodies, one inside the other and of like contour, consisting of molding a plastic material like wax into the desired shape of the first or interior body, and electro-depositing thereon a coating of metal and covering the body of metal formed thereby with a coating of like plastic material, and providing openings in said plastic material at the desired points and coating the said plastic wall with a coating of metal by electro-deposition, and again coating the formed metal body with a coating of plastic material of requisite thickness and providing openings in the second said plastic wall at the desired points, and again coating the said second plastic form with an outer coating of metal by electro-deposition, the said openings formed in the two said outer plastic walls affording connecting means respectively between two of the said walls, and then cutting off the ends of the metal bodies formed thereby at pre-determined points and immersing the said bodies in a boiling fluid thereby causing the said plastic material to become fluid and leaving a three walled metal body.

5. A process for making hollow metal bodies consisting of electro-depositing a metal coating upon a plastic core form and then by successive coatings of plastic material and electro-depositing of metal thereon, to form a multi-walled hollow metal body.

[Claims 6 to 8 not printed in the Gazette.]

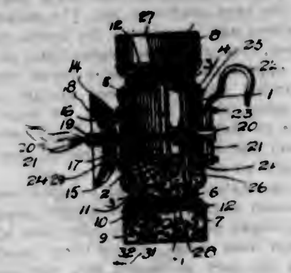
1,063,418. COUPLING. GEORGE J. COURTNEY, Richmond Hill, N. Y., assignor to Sanger Nozzle Co., Inc., a Corporation of New York. Filed Feb. 11, 1911. Serial No. 607,923. (Cl. 137—28.)



1. In a coupling of the character described, the combination of a coupler adapted for connecting two pieces of hose, or pipe, each of the ends to be coupled being fitted with a female member, said coupler comprising a tubular sleeve having two tapered ends, each adapted for engagement with the beveled annular interiorly disposed flange upon the female member of the coupling, and each of said tapered ends having an annular flange said flange having a shoulder for engagement by the gripping members of the female member of the coupling, said sleeve having also a centrally disposed annular flange on its exterior periphery, said flange having on each edge thereof a series of teeth integrally formed therewith, said teeth having inclined edges, and an annular collar rotatably mounted and longitudinally adjustable upon the said sleeve on each side of said flange, each of said collars having on one edge a series of teeth with inclined edges adapted for engagement with the teeth upon the said flange, said collars each having its opposite edge reduced to a knife edge whereby an inclined surface is provided for engagement with the gripping members, whereby the gripping members may be released by the said collars when the collars are actuated by a rotary movement, substantially as shown and described.

2. In a coupling of the character described, the combination of a coupler adapted for connecting two pieces of hose or pipe, each of the ends to be coupled being fitted with a male member, said coupler comprising a sleeve or band and having at each end an inner annular beveled surface adapted for engagement with the tapered end of the male member, said sleeve having an annular channel provided therein, adapted for retaining a suitable packing, said sleeve having also upon each end an enlarged portion upon the exterior periphery thereof, and a plurality of spaced longitudinal channels provided in the said enlarged portion of the sleeve, and seated in each of said spaced channels a yielding gripping member, adapted for engagement with the shoulder provided upon the flange of the tapered end of the male member of the coupling, said enlarged portion serving as a suitable housing for the said gripping members, substantially as shown and described.

1,063,419. MINER'S ACETYLENE-LAMP. JOHN COURTNEY, Forbes Road, Pa. Filed Jan. 30, 1913. Serial No. 745,167. (Cl. 48—23.)



1. An invertible miner's acteylene lamp comprising a water reservoir, carbid reservoirs carried by the top and bottom thereof, a longitudinal valvular member connecting said carbid reservoirs and adapted to alternately establish communication between said carbid reservoirs and said water reservoir, and a gas tube rotatably supported by said water reservoir and adapted to be alternately placed in communication with said carbid reservoirs.

2. An invertible acetylene lamp comprising a water reservoir, carbid reservoirs adapted to be alternately placed in communication with said water reservoir, and a rotatable gas tube extending into said water reservoir and adapted to be alternately placed in communication with said carbid reservoirs.

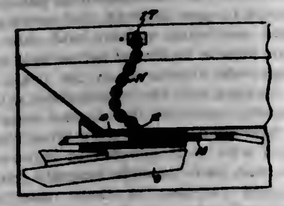
3. An invertible acetylene lamp comprising a water reservoir, carbid reservoirs adapted to be alternately placed in communication with said water reservoir, a rotatable gas tube extending into said water reservoir and adapted to be alternately placed in communication with said carbid reservoirs, and means carried by said gas tube whereby said tube can be locked in adjusted position relatively to said water reservoir.

4. An invertible acetylene lamp comprising a reservoir, carbid reservoirs carried by the ends of said water reservoir, a valvular member connecting said carbid reservoirs and adapted to alternately place said water reservoir in communication with said carbid reservoirs, gas pipes connecting said carbid reservoirs, and a rotatable gas tube supported by said pipes and said water reservoir and adapted to be alternately placed in communication with said pipes.

5. An invertible acetylene lamp comprising a water reservoir, carbid reservoirs detachably mounted upon the ends thereof, gas pipes connecting said carbid reservoirs, a rotatable gas tube supported by said water reservoir and adapted to be alternately placed in communication with said carbid reservoirs through the medium of said gas pipes, and means connecting said carbid reservoirs for alternately establishing communication between said carbid reservoirs and said water reservoir.

[Claim 6 not printed in the Gazette.]

1,063,420. STOKER MECHANISM. DAVID F. CRAWFORD, Pittsburgh, Pa. Filed Oct. 23, 1911. Serial No. 656,128. (Cl. 198—24.)



1. In apparatus of the character described, the combination of a hopper or containing receptacle, a discharge orifice therefor, a movable member for controlling the discharge of the coal from the hopper through the discharge orifice, and an agitator located above said orifice, one end of which is secured to the movable member and the other end supported in the hopper against movement of translation.

2. In stoking mechanism, the combination with a hopper or containing receptacle, of a conveyer located therebeneath, a movable plunger for feeding the contents of the hopper into the conveyer, and an agitator located in the hopper, one end of which is secured to the movable plunger and the other end fastened in the hopper against movement of translation.

3. In stoking mechanism the combination with a hopper or receiving receptacle, of a conveyer located thereibeneath a movable feed plunger for discharging the contents of the hopper into the conveyer, and a flexible agitator, one end of which is secured to the reciprocating plunger and the other end supported in the upper portion of the hopper against movement of translation.

4. In underfeed stoking mechanism for locomotives, the combination of a conveyer located beneath the locomotive tender, a reciprocating feed plunger for feeding the contents of the tender into the conveyer, and a flexible agitator, one end of which is secured to the reciprocating plunger and the other end supported from the side of the tender against movement of translation.

5. In underfeed stoking mechanism for locomotives, the combination of a conveyer located beneath the locomotive tender, a reciprocating feed plunger for feeding the contents of the tender into the conveyer, and a flexible agitator comprising a chain secured at one end to the reciprocating plunger and supported at the other end from the side of the tender against movement of translation.

1,063,421. BIFOCAL LENS. ANDREW JAY CROSS, New York, N. Y. Filed May 16, 1912. Serial No. 697,618. (Cl. 88—54.)



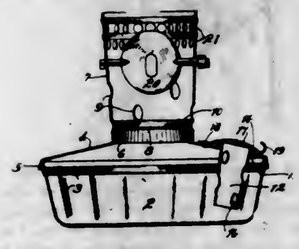
1. A bifocal lens comprising two members of essentially the same superficial size, the close vision member being complete, and the opposite member having a section removed to expose a clear section or segment of the close vision member.

2. As an improved article of manufacture, a bifocal lens comprising two combined members, one member being complete and the opposite member being of substantially the same superficial size as the complete member but having a section removed to expose a corresponding portion of the complete member, and leaving the incomplete member overhanging the complete member.

3. A bifocal lens for glasses and spectacles, comprising two combined members of essentially the same circumference and principal axes, each adapted to be straddled by a stud strap, one member constituting the close vision glass being complete, and the second or overlapping member having a portion removed to expose a clear section of the first or close vision member.

4. A bifocal lens comprising two members, one member being complete, the second or overlapping member being incomplete so as to expose a clear segment of the first or close vision member, and the two members being combined to produce the desired distance vision.

1,063,422. ORCHARD-HEATER. EMANUEL W. DUNN, Oakland, Cal. Filed Dec. 17, 1912. Serial No. 737,229. (Cl. 158—91.)



1. An orchard heater comprising a container for a liquid fuel, means for conveying air downwardly into said container as the surface of the oil recedes, a perforated combustion stack projecting upwardly from the container, and an opening in the top of the container of smaller area than the transverse area of the stack, thereby enabling the gases generated in the container when passing through the top of the container to become immediately in contact with additional air or oxygen necessary to provide perfect combustion.

2. An orchard heater comprising a container for a liquid fuel, a cover for the container forming a substantially closed generating chamber, a means for admitting air into the chamber over the surface of the liquid therein, said cover having an opening for the outlet of gases generated in the chamber, the size of the opening being determined by the quality of the liquid fuel, and a stack on the cover, the transverse area of which exceeds the area of the opening in the cover, said stack having apertures for the admission of air with which the gases from the opening are immediately intimately commingled for perfect combustion in the stack.

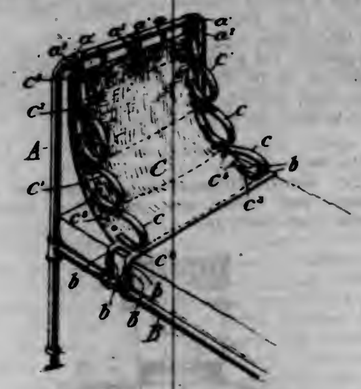
3. An orchard heater comprising a substantially closed gas generator containing a liquid fuel, having a gas vent, the area of which is in proportion to the specific gravity of the fuel liquid, and a stack on the container having apertures, said stack forming a chamber with an area in excess of the area of the gas vent, into which chamber the gas issues and is immediately mixed with a quantity of air sufficient to produce a perfect combustion.

4. An orchard heater having a container for a liquid fuel, a cover for the container forming therein a chamber for the generation of a combustible gas from the liquid, a stack projecting upwardly from the cover and having perforations for the admission of air to its interior, and means for admitting air into the generating chamber, said cover having an opening of less area than the transverse area of the stack through which the generated gases pass into the stack wherein they are mixed with oxygen and perfectly combusted.

5. An orchard heater comprising a container for a liquid fuel, a removable cover having a snug rim fit with the container and having interchangeable vent plates each with an opening of a size different from the others, a perforated stack adjustable on the cover into which gases from the container will enter through the opening in the plate on the cover, a removable device adjustable on the cover for conveying air into the container, and cover parts for said device and for the stack.

[Claims 6 and 7 not printed in the Gazette.]

1,063,423. BACK-REST FOR BEDS. ISABELLE LEE EDELIN, Washington, D. C. Filed Oct. 19, 1911. Serial No. 655,564. (Cl. 5—43.)



1. A back rest for beds comprising a flexible back piece, means for detachably securing one edge of said back rest to the head of the bed, means for detachably securing an opposite edge of the back piece to the side members of the bed, and pillow holding means applied to one face of the back piece, along each side edge thereof.

2. A back rest for beds comprising a flexible back piece or web, means for securing its upper and lower edges to the head and side pieces respectively of the bed, and a plurality of pillow holding loops applied to the back piece along each side edge, each of said loops being independently adjustable to accommodate it to pillows of different sizes.

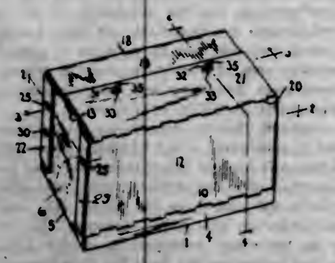
3. A back rest for beds comprising a back piece or web of flexible material, and a plurality of connected loops formed by straps arranged along opposite side edges of the back piece, the upper loops overhanging those immediately beneath them.

4. A back rest for beds comprising a back piece or web having fastening devices arranged along the side edges thereof, and pillow holding loops arranged in parallel series along said side edges and having fastening devices to coöperate with those of the back piece, to adjust the loops to pillows of different sizes, the loops at each edge of the back piece being interconnected so that the upper loops overhang those immediately beneath them.

5. A back rest for beds comprising a web, means to attach it to the bed in an inclined position, and pillow holding straps each applied at one end to the upper surface of the web and having at their opposite ends hooks to coact with series of eyelets in the web, whereby said straps may confine the end portions of differently sized pillows.

[Claims 6 to 9 not printed in the Gazette.]

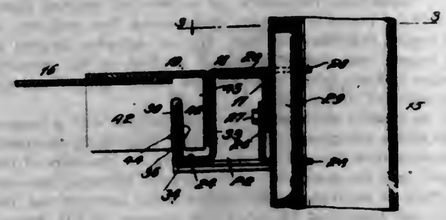
1,063,424. COLLAPSIBLE BOX. JAMES H. FASH, Farmington, Ill. Filed Oct. 7, 1912. Serial No. 724,469. (Cl. 220—17.)



1. In a collapsible box, the combination with a top and bottom, two ends hingedly connected with the latter and having openings near their upper extremities, and two sides hingedly connected with said bottom and each having inturned flanges at both ends carrying staples projecting toward each other and standing parallel with said side and adapted to pass through said openings; of hooks pivoted within and lying against said ends in position to permit their bills to be moved across said openings and passed through said staples when the parts are set up.

2. In a collapsible box, the combination with a bottom, the sides hingedly connected thereto and carrying at their upper edges flaps adapted to overlap when the box is set up and pierced with slots adapted to register with each other at this time, and the ends hingedly connected with said bottom and carrying at their upper edges flaps adapted to underlie the side flaps when the box is set up; of staples struck from said end-flaps in position to pass through said registering openings and receive fastening devices, substantially as described.

1,063,425. CORNER-FASTENING FOR BEDSTEADS. LOUIS FRANK, Brooklyn, N. Y. Filed Apr. 7, 1913. Serial No. 759,348. (Cl. 5—55.)



1. A corner-fastening for bedsteads comprising a member connected with the side-rail having a downwardly projecting hook-portion and a member connected with the corner-post having an upwardly projecting hook-portion of the side-rail member, said post-member being formed of sheet metal and comprising a top, opposite sides the inner one of which is adapted to receive the end of a bedstead end-rail, a bottom having near the corner-post an upwardly turned lip to which the end of said end-rail may be secured, and a part connected with said top constituting said upwardly projecting hook-portion and comprising a front section extending downwardly from the end of said top, a horizontal section extending from the lower end of said front section and a member extending upwardly from said horizontal section between said sides.

2. A corner-fastening for bedsteads comprising a member connected with the side-rail having a downwardly projecting hook-portion and a member connected with the corner-post having an upwardly projecting hook-portion to receive and interlock with said hook-portion of the side-rail member, said post-member being formed of sheet metal and comprising a top, opposite sides the inner one of which is adapted to receive the end of a bedstead end-rail, a bottom having near the corner-post an upwardly turned lip to which the end of said end-rail may be secured, and a part connected with said top constituting said upwardly projecting hook-portion and comprising a front section extending downwardly from the end of said top, a horizontal section extending from the lower end of said front section and a member extending upwardly from said horizontal section between said sides, and said bottom at its outer end having an upwardly turned section close against the outer face of said upwardly extending member of said upwardly projecting hook-portions and coöperating therewith.

3. A corner-fastening for bedsteads comprising a member connected with the side-rail having a downwardly projecting hook-portion and a member connected with the corner-post having an upwardly projecting hook-portion to receive and interlock with said hook-portion of the side-rail member, said post-member being formed of sheet metal and comprising a top, opposite sides the inner one of which is adapted to receive the end of a bedstead end-rail, a bottom having near the corner-post an upwardly turned lip to which the end of said end-rail is secured, and a part connected with said top constituting said upwardly projecting hook-portion and comprising a front section extending downwardly from the end of said top, a horizontal section extending from the lower end of said front section and a member extending upwardly from said horizontal section between said sides, and said bottom at its outer end having an upwardly turned section close against the outer face of said upwardly extending member of said upwardly projecting hook-portions and coöperating therewith.

4. A corner-fastening for bedsteads comprising a member connected with the side-rail having a downwardly projecting hook-portion and a member connected with the corner-post having an upwardly projecting hook-portion to receive and interlock with said hook-portion of the side-rail member, said post-member being formed of sheet metal and comprising a top, and opposite sides the inner one of which is adapted to receive the end of a bedstead end-rail, a bottom having near the corner-post an upwardly turned lip to which the end of said end-rail is secured, and a part connected with said top constituting said upwardly projecting hook-portion and comprising a front section extending downwardly from the end of said top, a horizontal section extending from the lower end of said front section and a member extending upwardly from said horizontal section between said sides, and said bottom at its outer end having an upwardly turned section close against the outer face of said upwardly extending member of said upwardly projecting hook-portions and coöperating therewith.

5. A corner-fastening for bedsteads comprising a member connected with the side-rail having a downwardly projecting hook-portion and a member connected with the corner-post having an upwardly projecting hook-portion to receive and interlock with said hook-portion of the side-rail member, said post-member being formed of sheet metal and comprising a top, and opposite sides the inner one of which is adapted to receive the end of a bedstead end-rail, a bottom having near the corner-post an upwardly turned lip to which the end of said end-rail is secured, and a part connected with said top constituting said upwardly projecting hook-portion and comprising a front section extending downwardly from the end of said top, a horizontal section extending from the lower end of said front section and a member extending upwardly from said horizontal section between said sides, and said side-rail member being formed of sheet metal and having a top and vertical sides which are slotted to create the said downwardly projecting hook portion of said member.

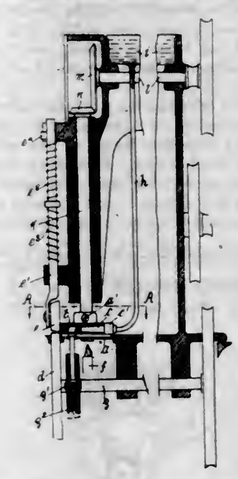
[Claims 6 and 7 not printed in the Gazette.]

1,063,426. HAT-PIN-POINT PROTECTOR. JOHN GADECKI, Mystic, Iowa. Filed Apr. 21, 1911. Serial No. 622,529. (Cl. 24—155.)



In combination a hat pin having a recess adjacent its pointed end, a shell recessed to provide a socket for the reception of said end, the wall of the socket formed with a longitudinal groove and a holdfast member having a resilient bow-shaped end extending into said groove and with the free terminus thereof projecting into the socket, said member having a portion seated against the inner edge of the shell and its remaining portion positioned against the periphery of the shell and secured thereto, the bow-shaped portion of said member engaging in the recess of the pin for holding the latter within the shell.

1,063,427. LEATHER-EDGE-POLISHING MACHINE. HEINRICH GAUBATZ, Pirmasens, Germany. Filed June 7, 1911. Serial No. 631,819. (Cl. 69—17.)



1. A leather edge polishing machine comprising in combination a polishing roller, driving means therefor, leather feed mechanism, driving means for said feed mechanism, a polish transferring roller consisting of outer rigid faces and absorbent material interposed between such faces, said roller being arranged in advance of said polishing roller, and polish feeding means adapted to supply the periphery of the absorbent material with polish substantially as set forth.

2. A leather edge polishing machine comprising in combination a polishing roller, driving means therefor, leather feed mechanism, driving means for said feed mechanism, an absorbent polish transferring roller arranged in advance of said polishing roller, polish feeding means adapted to supply said absorbent roller with polish, and gearing between said feed mechanism and said polish transferring roller, substantially as set forth.

3. A leather edge polishing machine comprising in combination a polishing roller having a plurality of grooves of different sizes in its periphery, adjustable fixing means for said roller adapted to secure the latter in desired position along its shaft, driving means for said polishing roller, a polish transferring roller arranged in advance of said polishing roller, polish feeding means adapted to supply said transferring roller with polish, and leather feed mechanism adapted to feed articles to be polished in contact with said rollers, substantially as set forth.

4. A leather edge polishing machine comprising in combination a polishing roller, driving means therefor, a feed roller, slow speed driving means for said feed roller, a presser foot comprising a roller adapted to coöperate with said feed roler, a polish transferring roller arranged in advance of said polishing roller, and polish feeding means adapted to supply said transferring roller with polish, substantially as set forth.

5. A leather edge polishing machine comprising in combination a polishing roller, driving means therefor, a feed roller, slow speed driving means for said feed roller, a presser foot comprising a roller adapted to coöperate with said feed roller, a presser spring and a buffer spring in operative relation with said foot, a polish transferring roller arranged in advance of said polishing roller, and polish feeding means adapted to supply said transferring roller with polish, substantially as set forth.

[Claim 6 not printed in the Gazette.]

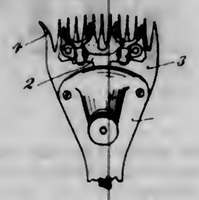
1,063,428. PROCESS OF PRODUCING TANNING EXTRACTS. GIUSEPPE GIANOLI, Milan, Italy, assignor to The Firm of Lepetit, Dollfus and Gansser, Milan, Italy. Filed June 30, 1908. Serial No. 441,205. (Cl. 167—4.)

1. The process of producing a soluble quebracho tanning extract which consists of treating crude resinous quebracho extract with lignosulfonate of soda solution at a temperature of from 95 degrees to 115 degrees C.

2. The process of producing soluble quebracho tanning extracts which consists in treating crude quebracho extract with waste liquor from sulfite pulp making, said liquor being freed from sulfurous acid and lime compounds, and conducting such treatment at a temperature of from 95° to 115° C.

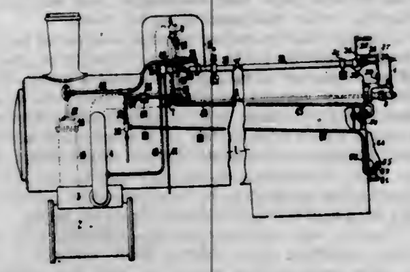
3. The process of producing a soluble quebracho tanning extract which consists in treating waste liquor from sulfite pulp making with lime water to free said liquor from sulfurous acid, then treating said liquor with sulfate of soda to free the same from lime compounds, and heating the liquor so treated with crude resinous quebracho extract to a temperature of from 95 degrees to 115 degrees C.

1,063,429. ANIMAL-SHEARS. GUSTAV A. GILBERTSON, Benson, Minn. Filed Jan. 27, 1913. Serial No. 744,416. (Cl. 30—1.)



In animal shears having a comb and a vibratory cutter coöperating therewith, the said comb having an outwardly bent or curved end tooth at one edge, and which tooth is outside of the swath when the shears are in use, substantially as and for the purposes set forth.

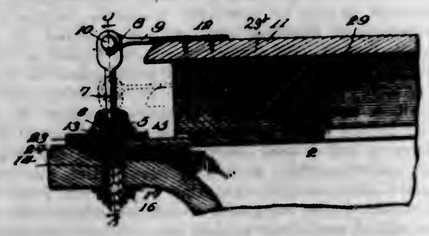
1,063,430. APPARATUS FOR CONTROLLING THE ARTIFICIAL BLAST IN LOCOMOTIVES. GUSTAV DE GRAHL, Zehlendorf, near Berlin, Germany. Filed Dec. 28, 1911. Serial No. 668,263. (Cl. 110—150.)



1. In apparatus for controlling the artificial draft in furnaces of locomotives the combination with the valve box 15 having a steam supply chamber 23, said valve box being larger in diameter at one end than at the other, having steam operated pistons 17 and 18, the latter 18 being larger in diameter than the former and slidable in the larger part 19 of the valve box, said larger part 19 being connected with the steam chest 3 of the steam engine, the first named piston 17 being slidable in the smaller part of the valve box, steam nozzles 70, an auxiliary blast 47, a pipe 43 connecting the said valve box 15 with said nozzles, another pipe 48 connecting the said valve box 15 with said auxiliary blast 47, a passage 67 connecting the former pipe 43 with the latter pipe 48 in said passage a non-return valve 68 opening toward the pipe 43 leading to the steam nozzles, a valve disk 20, connected with the smaller piston 17, said valve disk being adapted to shut off steam from the pipe 48 leading to the auxiliary blast and simultaneously to close almost completely the steam admission to the said steam nozzles as soon as the engine is started.

2. In apparatus for controlling the artificial draft in furnaces of locomotives the combination with the valve box 15 having a steam supply chamber 23, said valve box being larger in diameter at one end than at the other, having steam operated pistons 17 and 18, the latter 18 being larger in diameter than the former and slidable in the larger part 19 of the valve box, said larger part being connected with the steam chest 3 of the steam engine, the first named piston 17 being slidable in the smaller part of the valve box, steam nozzles 70, an auxiliary blast 47, a pipe 43 connecting the said valve box 15 with said nozzles, another pipe 48 connecting the said valve box 15 with said auxiliary blast 47, a passage 67 connecting the former pipe 43 with the latter pipe 48 in said passage, a non-return valve 68 opening toward the pipe 43 leading to the steam nozzles 70, a valve disk 20 connected with the smaller piston 17, said valve disk being adapted to shut off steam from the pipe 48 leading to the auxiliary blast and simultaneously to close almost completely the steam admission to the said steam nozzles as soon as the engine is started, another valve 51 for connecting and disconnecting said steam supply chamber 23 with the pipe leading to the auxiliary blast.

1,063,431. SANITARY WATER-CLOSET SEAT. FRANK J. GRAVES, Springfield, Mass. Filed Sept. 11, 1912. Serial No. 719,815. (Cl. 4—18.)



1. A water closet seat including a pad composed of superimposed sheets of paper, and means detachably holding the sheets in engagement with each other, the superimposed sheets being formed with registering perforations whereby to permit the easy removal of the sheets.

2. The combination with a closet bowl of pivoted pad supporting members, pads composed of superimposed layers of paper mounted upon said members, and a treadle operatively connected to the supporting members to shift the same out of the way of the opening of the bowl.

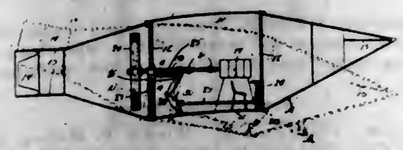
3. The combination with a closet bowl of oppositely disposed semi-circular pivoted supporting members, semi-circular pads composed of superimposed sheets of paper mounted upon said supporting members, and treadle actuated means for shifting said supporting members away from each other to carry the pads away from the opening of the bowl.

4. The combination with a water closet bowl of semi-circular supporting members pivoted at their rear ends to the bowl, semi-circular pads composed of superimposed sheets of paper mounted upon said supporting members, means urging the supporting members into position over the rim of the bowl, and treadle actuated means for shifting the supporting members away from each other and away from the rim of the bowl.

5. The combination with a water closet bowl of semi-circular supporting members each pivoted at its rear end and each carrying a sector gear, the sector gears intermeshing with each other, spring actuated means for holding the supporting members closed and over the rim of the bowl, manually actuatable means for shifting one of said supporting members laterally, to carry the supporting members away from the rim of the bowl, and semi-circular pads carried upon said supporting members and including superimposed sheets of paper.

[Claims 6 to 11 not printed in the Gazette.]

1,063,432. FLYING-MACHINE. EDWARD D. GREEN, Chicago, Ill. Filed Jan. 16, 1911. Serial No. 602,757. (Cl. 244—23.)



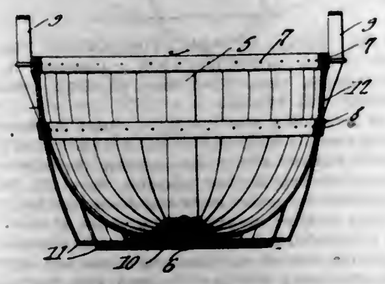
1. In a flying machine, the combination with a body to be sustained in the air, of a motor driven propeller, a gyroscopic wheel rotatively mounted on an axis coincident with the axis of said propeller and having a rim encircling said propeller, and a unidirectional clutch mechanism coupling said gyroscopic wheel and propeller.

2. In a flying machine, a propeller, a motor driven shaft secured directly to said propeller, a gyroscopic wheel, rotatively mounted on said shaft, and having a rim encircling said propeller and unidirectional clutch mechanism directly coupling said gyroscopic wheel to said shaft but permitting said wheel to revolve independently thereof.

3. In a flying machine, the combination with an aeroplane, of a motor, a flexible motor shaft, a propeller rigidly mounted on said shaft, a gyroscopic wheel driven by said motor shaft but capable of independent, relative revolution in the same direction, a bearing supporting one end of said motor shaft and capable of a rocking movement, and a controlling device, including mechanism for changing the angular relation between the aeroplane body and one section of said motor shaft.

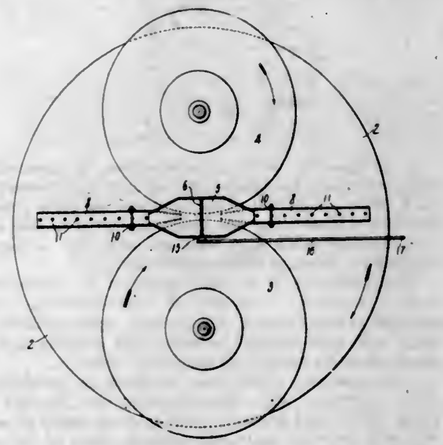
4. In a flying machine, the combination with an aeroplane, of a motor, a flexible motor shaft, a propeller driven thereby, a gyroscopic wheel driven by said motor shaft but capable of independent, relative revolution in the same direction, a bearing supporting one end of said motor shaft and capable of a rocking movement, a fixed support on the aeroplane upon which said bearing is fulcrumed, a movable support on the aeroplane secured to the free end of the bearing, and a controlling device for shifting said movable support to vary the angular relation between the aeroplane body and one section of said motor shaft.

1,063,433. STAVE OR SPLINT BASKET THAT IS MADE FROM VENEER. CHARLES E. GUILE and THOMAS WARNER WINDNAGLE, Penn Yan, N. Y. Filed Nov. 10, 1911. Serial No. 659,671. (Cl. 217—122.)



A basket comprising inner crossed flexible splints, outer crossed relatively stiff splints, a securing member engaged through the intersections of the inner and outer splints, the inner splints being bowed from the securing member to their respective ends, each half of each outer splint having an intermediate score and being bent at approximately a right angle, the ends of the inner and outer splints lying together, and the corners of the outer splints being spaced from the inner splints, and hoops secured to the ends of the inner and outer splints to secure them together.

1,063,434. APPARATUS FOR DELIVERING ABRASIVE MATERIAL. HENRY WILLIAM HACHMEISTER, James City, Pa., assignor to James W. Cruikshank, Pittsburgh, Pa. Filed Aug. 23, 1912. Serial No. 716,637. (Cl. 51—11.)



1. The combination with a glass grinding table and its runners, of a receiving trough for abrasive material having a delivery terminal, a supplemental trough arranged to receive the material therefrom and to be variously tilted and actuating means therefor, substantially as set forth.

2. The combination with a glass grinding table and its runners, of a receiving trough for abrasive material having oppositely disposed terminals, supplemental troughs arranged to receive the material therefrom and to be variously tilted and actuating means therefor, substantially as set forth.

3. The combination with a glass grinding table and its runners, of a receiving trough for abrasive material having a delivery terminal, a supplemental trough arranged to receive the material therefrom and to be variously tilted having a perforated bottom and actuating means therefor, substantially as set forth.

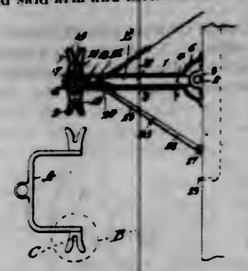
4. The combination with a glass grinding table and its runners, of a main trough provided with a deflecting valve and oppositely extending inclined delivery portions, a pivotally mounted distributing trough at each end of said main trough adapted to receive the material therefrom, and means for vertically adjusting said troughs, substantially as set forth.

5. The combination with a glass grinding table and its runners, of a receiving vessel located above the middle portion of the table and having an outlet terminal, a distributing trough adjustably mounted below the outlet terminal of said vessel and adapted to receive material therefrom and to deliver it to the middle portion or outer portion of the table, and means for adjusting the distributing trough, substantially as set forth.

1,063,435. MAIL-BAG-HANDLING APPARATUS. HARRY F. HANSMANN, Thorpe, Wis. Filed Nov. 12, 1912. Serial No. 730,845. (Cl. 105—231.)

1. In apparatus of the class described, in combination with a doorway, a swinging object-delivering arm mounted to swing toward said doorway in a substantially horizontal plane, means to maintain said arm projected, and means adjacent said doorway to automatically engage said arm during swinging movement toward the doorway from projected position and hold said arm caught.

2. In apparatus of the class described, in combination with a doorway, an object-delivering arm, latch means automatically operable upon movement of said arm, spring means exerting pressure to normally maintain said arm projected and said arm and latch means disengaged.



3. In apparatus of the class described, in combination with a doorway, an object-delivering arm, links pivoted to each other, one pivoted to said arm and the other pivoted adjacent said doorway, and means connected to said arm and exerting pressure to maintain said links extended, limiting the swinging movement of said arm.

4. In apparatus of the class described, in combination with a doorway, a plurality of object-delivering arms mounted to swing toward said doorway, separate means to latch said arms fastened adjacent said doorway, and a single operating member for said latter means.

5. In apparatus of the class described, in combination with a doorway, and object-delivering arm mounted to swing toward said doorway, object-catching means on said arm, and means to rotate said catching means as the arm swings toward said doorway.

[Claims 6 to 15 not printed in the Gazette.]

1,063,436. SEAM-RIPPER. ELIZABETH E. HANSON, South Portland, Me. Filed Aug. 1, 1911. Serial No. 641,835. (Cl. 30—14.)

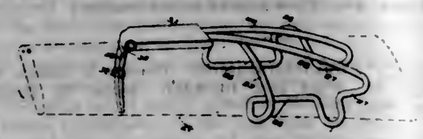


1. A seam ripper including an operating handle having a downwardly depending shank, and a cutting blade secured to the lower end of the shank, said shank being disposed at right angles to the plane of the blade, said blade having adjacent cutting edges extending at an acute angle from each other, one of the cutting edges extending longitudinally throughout the length of the blade and parallel to the opposite longitudinal edge of the blade, which latter edge is blunt.

2. A seam ripper including a handle having a downwardly depending shank, and a cutting blade secured to the lower end of the shank, said shank being disposed at right angles to the plane of the blade, said blade having adjacent cutting edges extending at an acute angle from a common point, said cutting edges being formed by beveling both the upper and lower faces of the blade.

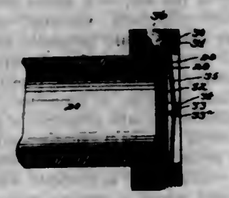
1,063,437. TRACE-HOLDER. FREDERICK HARDY, Columbia, Tenn. Filed May 6, 1910. Serial No. 559,797. (Cl. 21—79.)

A trace holder formed from a single wire and comprising coacting longitudinally extending members bent into loops spaced apart at one end adapted to engage around a whiffle-tree and with a depending hook at the other end adapted to movably engage through an aperture in



a whiffle-tree, a coupling member clamped around the longitudinal members and provided with a depending portion bearing against said depending hook and reinforcing the same.

1,063,438. FLUME-GATE. WILSON P. HARLAN, Brawley, Cal. Filed July 18, 1912. Serial No. 710,178. (Cl. 61—46.)



1. In a flume gate structure of the character described, a flume, a plate disposed near the end thereof and provided with an opening leading into the opening of the flume and having its wall beveled, a valve to be moved into and out of the opening and having its periphery beveled, a leaf spring connected with the valve, and guide means receiving the ends of the leaf spring.

2. In a flume gate structure of the character described, a flume, a sheet-metal plate disposed near the end of the flume and provided with an opening which leads into the flume and having flanges formed upon corresponding edges thereof to provide sockets, a valve to normally close the opening in the sheet-metal plate, leaf-springs connected with the valve and movably mounted in the sockets, means to move the valve, and means to connect the sheet-metal plate with the flume.

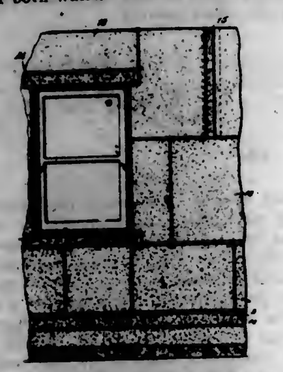
3. In a flume gate structure, a flume, a sheet metal plate disposed adjacent one end thereof and having an opening formed therethrough which leads into the flume, said sheet metal plate having its material adjacent its longitudinal edges bent back upon itself to form longitudinal sockets, a valve to cover and uncover the opening of the sheet metal plate, means connected with the valve and slidably mounted in the sockets, and a plastic head molded about the end of the flume and the sheet metal plate to form a secure and water tight connection therebetween.

1,063,439. BOND AND REINFORCEMENT FOR HOLLOW-WALL CONSTRUCTION. CHARLES B. HARP, Los Angeles, Cal. Filed May 23, 1912. Serial No. 699,300. (Cl. 72—44.)

1. In a building construction, a series of slabs spaced apart to form an inner and an outer wall, a stud between the slabs, and ties with wings engaging the slabs near the studs and overlapping and engaging the studs, interlocking the inner and outer walls and studs together.

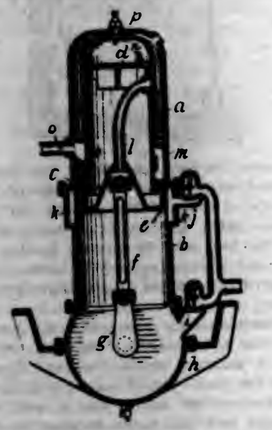
2. In a building construction, a series of slabs spaced apart to form an inner and an outer wall, a concrete stud between the ends of the slabs, the inner and outer faces of the stud being substantially flush with the inner and outer faces of the slabs, and ties with wings engaging the slabs near the studs and overlapping and engaging the studs, interlocking the inner and outer walls and studs together.

3. In a building construction, a series of slabs spaced apart to form an inner and an outer wall, a concrete stud between the ends of the slabs, and ties with wings engaging the slabs near the studs and overlapping and engaging the studs, interlocking the inner and outer walls and studs together, the ties having wings engaging the inner faces of both walls.



4. In a building construction, a series of slabs spaced apart to form an inner and an outer wall, a concrete stud between the ends of the slabs, and ties with wings engaging the slabs near the studs and overlapping and engaging the studs, interlocking the inner and outer walls and studs together, and a bracket cast integral with the stud and projecting from the outer face thereof.

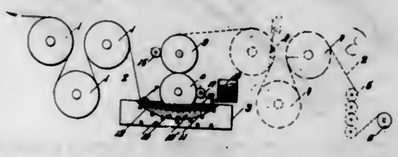
1,063,440. INTERNAL-COMBUSTION ENGINE. WILLIAM HARPER, Jr., New Bloomfield, Pa., assignor, by mesne assignments, of three-tenths to Harper Engineering Company, a Corporation of New York, and seven-tenths to Thomas A. Nevins, East Orange, N. J. Filed June 20, 1906, Serial No. 322,566. Renewed Oct. 30, 1912. Serial No. 728,727. (Cl. 123—73.)



1. An internal-combustion engine comprising tandem communicating cylinders of different diameters, a reciprocating part consisting of connected piston heads operating in the cylinders and forming a power-chamber in the smaller cylinder, a compression chamber in the outer end of the larger cylinder, and an annular compression-chamber between the walls of the reciprocating part and the walls of the larger cylinder, inlet ports for both compression-chambers, means for closing both of the inlet ports, a suitably controlled communicating port between the compression-chambers, a suitably controlled communicating port between the compression-chamber of the outer end of the larger cylinder and the power-chamber, and an exhaust port for the power-chamber, substantially as described.

2. An internal-combustion engine comprising tandem communicating cylinders of different diameters, a reciprocating part consisting of rigidly connected piston heads operating in the cylinders and forming a power-chamber in the smaller cylinder, a compression-chamber in the outer end of the larger cylinder, and an annular compression-chamber between the walls of the reciprocating part and the walls of the larger cylinder, inlet ports for both compression-chambers, means for closing both of the inlet ports, a suitably controlled communicating port between the compression-chambers, a suitably controlled communicating port between the compression-chamber of the outer end of the larger cylinder and the power-chamber which includes a port through the reciprocating part, and an exhaust port for the power-chamber, substantially as described.

1,063,441. MAKING WAXED PAPER. ALEXANDER W. HARRINGTON, Brooklyn, N. Y., assignor to A. W. Harrington Company, New York, N. Y. a Copartnership. Filed Nov. 28, 1905. Serial No. 289,458. (Cl. 91—68.)



1. The process of treating paper which consists in first immersing the paper in a heated glutinous fluid composition to fill the pores and interstices of the paper therewith and bind the fibers together more firmly, then as the paper is withdrawn from said heated fluid composition while the same is still hot applying to the paper so treated a waxy composition, whereby the heat of the glutinous composition assists in the distribution and spreading of the waxy composition, and the latter becomes united with the glutinous composition in the pores of the paper.

2. The process of treating paper which consists in floating a waxy composition upon the heated glutinous composition, leading the paper to be treated into the heated glutinous composition to fill the pores and interstices of the paper therewith, and withdrawing said paper from said glutinous composition through the superimposed waxy composition, whereby the latter becomes united with the glutinous composition filling the pores of the paper and forms a superficial coating on the paper.

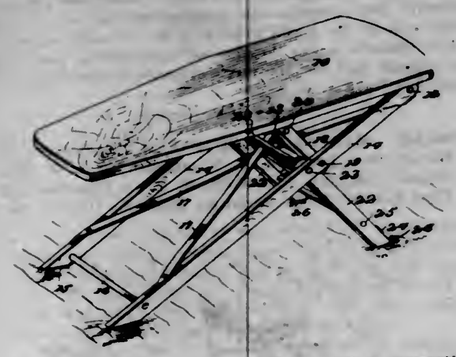
3. The process of making waxed paper in a continuous operation which consists in first leading the paper into and through a heated liquid composition comprising a glutinous material and glycerin to fill the pores and interstices thereof immediately thereafter leading the paper so treated through the waxing composition whereby the heat of the glutinous material assists in spreading the waxing composition upon the surface of the paper.

1,063,442. IRONING-TABLE. PHILIP P. HARTER, Nuremberg, Pa. Filed Mar. 29, 1911. Serial No. 617,773. (Cl. 68—10.)

1. An ironing table comprising a board, a supporting frame hinged at one end to the board and including spaced side members, a prop pivoted to said frame members, near their upper edges and adapted to bear upon the floor, a table support pivoted to the frame members near their lower edges and bearing against the board, said prop and table support overlapping at their contiguous ends and mutually supporting each other, and resilient diagonal braces extending between the pivots of the prop and support and connected at their ends to the frame members.

2. An ironing table comprising a board, a supporting frame including spaced side members hinged at one end to the board and adapted to bear at the other end upon a floor, intermediate transverse members spaced apart and journaled in the frame side members near their upper and lower edges, a table support secured to the lowermost transverse member for engagement with the board,

a prop secured to the upper most transverse member for engagement with the floor to support the frame, said table support and prop having over-lapping portions, the over-lapping portions being in contact and mutually supporting the table support and prop when extended, and spring braces connected at their ends to said side members and extending between the transverse members.



3. An ironing table, comprising a board, a supporting frame hinged at one end to the board, a table support hinged to the frame and bearing beneath the board, a prop hinged to the frame and adapted to engage floor, and diagonally disposed yieldable braces connected to the supporting frame and bearing against the table support and the prop and holding the same in closed or open position.

1,063,443. ERASER. MICHAEL F. HAYES, New York, N. Y. Filed Apr. 15, 1912. Serial No. 690,716. (Cl. 120—36.)



1. An eraser of the character designated, comprising a rigid tubular holder, a conoidally tipped eraser formed with a cylindrical portion which fits snugly within said rigid tubular holder, and a rigid attrition cap formed with a cylindrical portion fitting snugly over, and slidable and rotatable in either direction upon, said rigid tubular holder, said cap being also formed with an internal concave abrasive surface adapted to contact with the conoidal tip of the eraser, for the purpose set forth.

2. An eraser of the character designated, comprising a rigid tubular holder, a conoidally tipped eraser formed with a cylindrical portion which fits snugly within said rigid tubular holder, and a longitudinally corrugated rigid attrition cap fitting snugly over, and slidable and rotatable in either direction upon, said rigid tubular holder, said attrition cap being also formed with an internal concave abrasive surface adapted to contact with the conoidal tip of the eraser, as and for the purpose set forth.

1,063,444. VALVE-OPERATING MECHANISM. WILLIAM HEAP, Grand Haven, Mich., assignor to William Heap & Sons, Grand Haven, Mich., a Firm. Filed Feb. 11, 1910. Serial No. 543,325. (Cl. 4—5.)

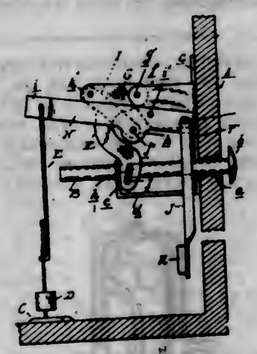
1. In closet flushing apparatus, the combination with the tank, of the flushing valve therein, a rotatable arm, an elongated fixed pivot pin or rod, a valve operating lever formed with an offset, spaced bearing portions carried by the offset and engaging the pivot, and a link connection between the rotary arm and lever at substantially the junction of the offset.

2. In closet flushing apparatus, the combination with the tank, of the flushing valve, a rotatable arm pivoted upon the wall of the tank, a fixed pivot pin, a lever engaging said pivot pin and formed with an offset portion on the side of the pivot opposite the rotatable arm, a connection between the lever and valve, and an operative connection between the arm and lever at substantially the junction of the offset portion.



3. In closet flushing apparatus, the combination with the tank, of the flushing valve therein, a rotatable arm pivoted upon the wall of the tank, an elongated fixed pivot pin, a valve operating lever formed with an off-set portion, spaced bearing portions carried by the off-set engaging the pivot, a link connecting said lever and arm, its connection with the lever being substantially at the junction of the offset portion and on the side of the pivot opposite the connection between the link and arm.

1,063,445. CLOSET-FLUSHING MECHANISM. WILLIAM LIONEL HEAP, Grand Haven, Mich., assignor to William Heap & Sons, Grand Haven, Mich., a Firm. Filed Feb. 11, 1910. Serial No. 543,335. (Cl. 4—5.)



1. In a closet flushing apparatus, the combination with a tank formed with an opening in one of its walls, of a push rod located within the opening and projecting beyond the wall sides, a two-point bearing within the tank supporting the inwardly projecting portion of the rod, a flush valve, and a lever connection between the valve and the rod secured to said rod intermediate the two points of said bearings.

2. In a closet flushing apparatus, the combination with a tank, a push rod extending through the tank wall, a flush valve, a member within the tank having a portion spaced from the wall thereof supporting the rod and limiting the travel of the latter, and a lever connection between the rod and the valve secured to the rod intermediate said member and said tank wall.

3. In closet flushing apparatus, the combination with the tank and the flushing valve, of a bracket secured to one wall of the tank, having spaced bearings, a push rod extending through the tank wall and engaging said bearings, and a lever connection between said rod and valve, the point of connection with said rod being intermediate of said bearings.

4. In closet flushing apparatus, the combination with the tank and the flushing valve, of a bracket secured to one wall of the tank, having spaced bearings, a push rod extending through the tank wall and engaging said bearings, a lever connection between said rod and valve, and means adapted to alternately engage said bearings, for limiting the travel of said rod.

5. In closet flushing apparatus, the combination with the tank and the flushing valve, of a bracket secured to one wall of the tank, a push rod for operating said valve, and a multiplying lever connecting said valve with the push rod, including a bell-crank lever fulcrumed upon the bracket and connected to said rod.

[Claims 6 to 9 not printed in the Gazette.]

1,063,446. SPRING DOOR-HINGE. ROBERT HIGHET and DUNCAN G. MCLENNAN, Vancouver, British Columbia, Canada. Filed Jan. 13, 1913. Serial No. 741,734. (Cl. 16—46.)



1. In a door hinge, a hinge member adapted to be secured to the door frame, a hinge member adapted to be secured to the door, a connection between said hinge members which includes a hinge pin located in the mid-plane of the door and door frame in virtue of which said door may be swung to either side of said mid-plane, door closing springs coöperatively connected with said hinge pin for closing the door, and a checking spring coöperatively connected with said hinge pin for checking the action of said closing springs as the door approaches the mid-plane of the door frame.

2. In a door hinge of the class described, a butt plate having a rearwardly projecting chambered housing insertible into a recess in the door frame, a projection extending forwardly from the said butt plate and having a passage, a second butt plate securable to the door and having a recess to receive said projection, a hinge pin carried by said door butt plate and passing through said projection passage, said projection having an elongated slot to receive said hinge pin, resilient means mounted in said housing and connected with said pin for continuously tending to draw said pin toward said door frame butt plate, and other means mounted in said housing and connected with said pin for opposing the action of said continuously tending means at predetermined times.

3. A door hinge including a hinge member attached to the door, and a hinge member attached to the door frame, said hinge members each including butt plate portions and interprojecting portions, said interprojecting portions being located in the mid-plane of the door and frame when the door is closed, a hinge pin projecting through said interprojecting portions in virtue of which said door may be swung to either side of the door frame, means continuously tending to hold said butt plate portions in contact, means for adjusting the door within the plane of the door frame, said means comprising a bearing plate interposed between the butt plate portions of said hinge members, and means for adjusting said bearing plate in relation to the plane of one of said butt plate portions.

4. A door hinge including a hinge member attached to the door, and a hinge member attached to the door frame, said hinge members including butt plate portions and interprojecting portions, said interprojecting portions located in the mid-plane of the door and frame when the door is closed, a connection between said hinge members and including a hinge pin projecting through said interprojecting portions in virtue of which said door may be swung to either side of the door frame, means continuously tending to hold said butt plate portions in contact, means for adjusting the door within the plane of the door frame, said adjusting means comprising a bearing plate interposed between said butt plate portions, screws threaded into one of said butt plate portions and having shouldered ends passing through said bearing plate in virtue of which the plane of said bearing plate may be changed with relation to the plane of the butt plate portion to which it is attached.

5. In a door hinge of the class described, having door closing springs connected by rods to the hinge pin of the door, the combination therewith of a check spring within a casing secured to the butt plate, a plug closing the end of the casing and endwise adjustable therein and a rod connected to the hinge pin and having a piston secured to it and bearing on the spring.

[Claim 6 not printed in the Gazette.]

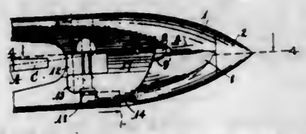
1,063,447. SURVEYOR'S ROD. ROSS HOLLINGSWORTH, Canon City, Colo., assignor of one-sixth to Henry L. White, one-sixth to William B. White, and one-sixth to Edwin H. Stinemeyer, Fremont county, Colo. Filed May 15, 1912. Serial No. 697,565. (Cl. 88—66.)



1. A device of the character described, including a rod proper, the opposite faces of said rod displaying a scale, front and rear movable runners mounted on opposite faces of said rod and also provided with scales, and targets carried by the respective runners, the scales of the rod coöperating with the respective targets for indicating the elevations, and the scales of the runners indicating the differences of the elevations.

2. A device of the character described, including a rod proper, the opposite faces of said rod displaying a scale, front and rear movable runners mounted on opposite faces of said rod and also provided with scales, and targets carried by the respective runners, the scales of the rod coöperating with the respective targets for indicating the elevations, and the scales of the runners indicating the differences of the elevations, one of said targets being provided with laterally projecting wings, said wings being hingedly mounted whereby they may be folded back out of line of vision.

1,063,448. LOOM-SHUTTLE. ALFRED ISHERWOOD, New Bedford, Mass. Filed Dec. 31, 1910. Serial No. 600,208. (Cl. 139—27.)



1. In a loom-shuttle provided at its outward end with two substantially parallel longitudinal grooves separated by a ridge, a threader having a hook extending downwardly into one groove and a guard extending downwardly into the other.

2. In a loom-shuttle provided at its outward end with two substantially parallel longitudinal grooves separated

by a ridge, a threader having a hook extending downwardly into one groove, a guard extending downwardly into the other, and a thread-guide located between said hook and the bobbin.

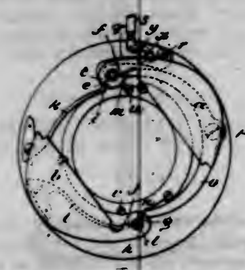
3. In a loom-shuttle, a removable delivery-eye inserted transversely into the throat of the shuttle and provided with a slot, and a threader having a thread-guide projecting into said slot, said threader being provided with a hook at its outward end, and said hook extending downwardly into a groove at the outer end of the shuttle.

4. In a loom-shuttle, a removable delivery-eye inserted transversely into the throat of the shuttle and provided with a slot, and a threader having a thread-guide projecting into said slot, said threader being provided with a hook and a guard at its outward end.

5. In a loom-shuttle, a removable delivery-eye inserted transversely in the throat of the shuttle and provided with a thread retaining slot and an inner tension-tongue extending across the lower portion of said eye and so arranged as to retain the thread between itself and the lower wall of the eye between said slot and the frontward end of said eye.

[Claims 6 to 12 not printed in the Gazette.]

1,063,449. SHUTTER FOR WATCHES, MEDALLIONS, PENDANTS, AND THE LIKE. EDMOND JAEGER, Paris, France. Filed Nov. 29, 1910. Serial No. 594,758. (Cl. 58—102.)



1. The combination with the case of a watch, locket or the like having a sight-opening therein, of a shutter made in two parts pivoted separately, spring-means tending to hold said shutter parts in their closed position, manually operable means for rotating one shutter part on its pivot to its open position, and a bent lever fulcrumed between its ends to the case at one side of the sight-opening said lever being actuated at one end by the opening of said shutter-part and at its other end acting upon the other shutter-part to open the same.

2. The combination with the case of a watch or the like having a sight-opening therein, of a shutter adapted to close said opening, a knob or stem on the watch adapted to be moved preparatory to use thereof in setting the hands of the watch, and means operable by said movement of the knob for moving said shutter to a position to open said sight-opening.

3. The combination with the case of a watch, or the like having a sight-opening therein, of a shutter positioned inside of said case and adapted to close said sight-opening, a knob or stem adapted to be moved longitudinally preparatory to setting the hands of the watch, a pusher in said knob, and means operable either by the longitudinal movement of said knob or by actuation of said pusher for moving said shutter to a position to open said sight-opening.

1,063,450. ROTARY DRILL-BIT. WILLIAM KAMMERER, Los Angeles, Cal. Filed Aug. 31, 1910, Serial No. 579,947. Renewed Apr. 10, 1913. Serial No. 760,317. (Cl. 255—61.)

1. In a rock drill, the combination of a head formed with a circular cross section and provided with a central longitudinal bore, one end of the head being constructed for engagement with a stock while the opposite end is provided with a series of inwardly converging radially disposed dove-tail recesses extending from the central bore to the periphery of the head, a series of cutetrs provided with dove-tail tenons adapted to be received within the before mentioned dove tail recesses, the inner ends of the tenons being substantially flush with the walls of the bore through the head while the outer ends of the tenons project slightly beyond the head, and a sleeve threaded upon the exterior of the head, one edge of the sleeve being designed to project over the outer ends of the tenons and being inclined so as to force the tenons inwardly and cause them to be securely wedged in the dove-tail recesses.



2. In a rock drill, the combination of a head having a circular cross section and provided with a central longitudinal bore, one end of said head being surrounded by a bead and provided with a series of inwardly converging radially disposed dove-tail recesses extending from the bore toward the exterior of the head and having a uniform depth, a series of cutters provided with dove-tail tenons adapted to be wedged within the said recesses, the inner ends of the tenons being substantially flush with the walls of the central bore through the head while the outer ends of the tenons project slightly beyond the head and have the base thereof cut away beyond the bead surrounding the head, and a retaining sleeve threaded upon the exterior of the head, one edge of the sleeve being adapted to engage the cut away portions of the tenons upon the cutters and being inclined so as to force the tenons inwardly toward the center of the head and cause them to be wedged within the dove-tail recesses, the working edges of the cutters extending radially beyond the sleeve.

1,063,451. METALLIC SPRING-MATTRESS. JOHN KAPP, Dubuque, Iowa. Filed Nov. 11, 1912. Serial No. 730,732. (Cl. 5—39.)

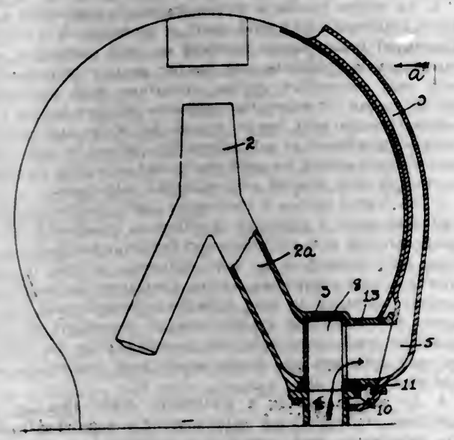


In a device of the character described, a frame, a mattress composed of loop units and each unit consisting of a plurality of wires twisted together, links for connecting the parts of the units together and for connecting the units together and for holding the parts of each unit from contact with each other, helical springs connecting the units to the frame, and a plate yieldingly connected to the frame and located at the side of the mattress over the side of the frame.

1,063,452. BLAST-PIPE FOR LOCOMOTIVES AND LIKE ENGINES. JOHN KAY, Manchester, England. Filed July 29, 1911. Serial No. 641,371. (Cl. 110—156.)

1. In a locomotive or similar engine having a blast pipe of bifurcated form, a valve in one of the bifurcations, said valve being movable entirely aside from the path of steam to present no impediment when the passage is open, the other bifurcation being unobstructed, the bifurcation having the valve being provided with a by-pass, and means for manually controlling said valve whereby steam may be entirely cut off from said by-pass or directed through it.

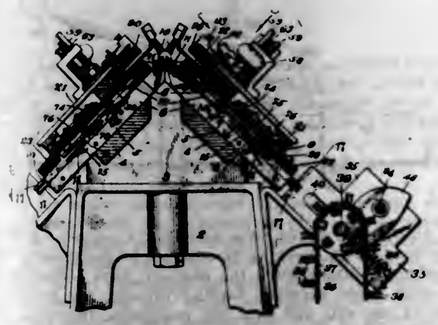
2. In a locomotive or similar engine having a blast pipe of bifurcated form, a valve in one of the bifurcations, the other bifurcation being unobstructed, the bifurcation having the valve being provided with a by-pass, a manually operable rack mechanism for actuating said valve whereby steam may be entirely cut off from said by-pass or directed through it.



3. In a locomotive or similar engine having a smoke box and a blast pipe of bifurcated form located in said smoke box, a valve in one of the said bifurcations, the other bifurcation being unobstructed, a by-pass connected with the bifurcation having the valve, said by-pass being within and shaped to conform to the contour of the inner surface of the smoke box, and means for manually controlling the valve whereby steam may be entirely cut off from said by-pass or directed through it.

4. In a locomotive or similar engine having a blast pipe of bifurcated form, a valve in one of the bifurcations, the other bifurcation being unobstructed, the bifurcation having the valve being provided with a by-pass, said blast pipe and by-pass being detachable so as to facilitate their removal from operative positions, and means for manually controlling said valve whereby steam may be entirely cut off from said by-pass or directed through it.

1,063,453. FLAT-KNITTING MACHINE. JOSEF KELLNER, Brooklyn, and SIDNEY WORMS, New Rochelle, N. Y., assignors to Franklin Knitting Mills, New York, N. Y., a Corporation of New York. Filed Apr. 1, 1912. Serial No. 687,564. (Cl. 66—30.)



1. In a knitting machine of the class described, the combination of a needle bed, a bank of needles and needle helpers carried thereby, jacquard mechanism for selecting and positioning the needle helpers, a shiftable carriage, and duplicate and spaced means carried thereby for shifting the needle helpers selected by the jacquard mechanism thereby to project the needles.

2. In a knitting machine of the class described, the combination of a needle bed, a bank of needles and needle helpers carried thereby, jacquard mechanism for selecting and positioning the needle helpers, a shiftable carriage, and means carried thereby for shifting the needle helpers selected by the jacquard mechanism thereby to project the needles, said helpers having their jacquard engaging ends located in staggered relation.

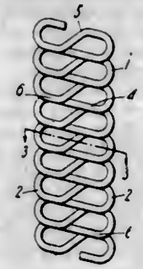
3. In a knitting machine of the class described, the combination of a needle bed, a bank of needles and needle helpers carried thereby, jacquard mechanism for selecting and positioning the needle helpers, a shiftable carriage, and a double set of spaced cam locks carried thereby for shifting the needle helpers selected by the jacquard mechanism thereby to project the needles.

4. A knitting machine constructed to knit a fabric having a fancy design therein and comprising a bank of needles, means for successively projecting all of said needles during the knitting of a portion of said fabric, means for selecting certain of said needles at a predetermined time and effective to select any of the needles of the bank of needles according to the design to be knit, and means for successively projecting the so selected needles a predetermined distance beyond the normal path of projection of the unselected needles.

5. In a knitting machine of the class described, the combination of a needle bed, a bank of needles and needle helpers carried thereby, jacquard mechanism for selecting and positioning the needle helpers, a shiftable carriage, and a plurality of spaced means each comprising a fixed cam and a pair of movable side cams carried by said carriage for shifting the needle helpers selected by the jacquard mechanism thereby to project the needles.

[Claims 6 to 64 not printed in the Gazette.]

1,063,454. GARMENT-STAY. JOHN F. KITCHEN, Meadville, Pa., assignor to The Spirella Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Sept. 9, 1910. Serial No. 581,169. (Cl. 2—76.)



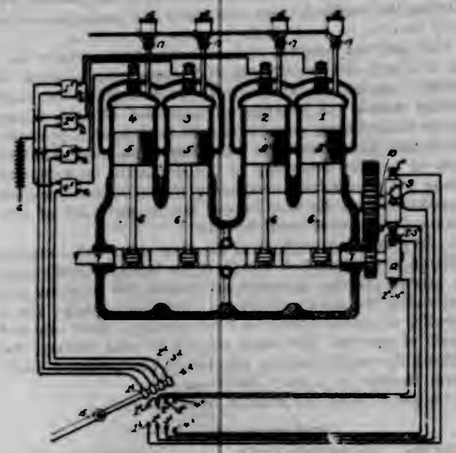
1. A garment stay comprising wire bent back and forth to form a series of oppositely disposed progressively arranged loops or eyes and connecting crossings, the loops or eyes having straight sides extending substantially transverse to the length of the stay, and the straight sides of adjacent loops or eyes overlapping each other and lying in substantial parallelism, thereby distributing frictional wear between said loops or eyes over the length of said parallel portions.

2. A garment stay comprising wire bent back and forth to form oppositely disposed loops or eyes and alternate straight and bent crossings, the bent crossings having straight end portions at opposite edges of the stay, said straight end portions and said straight crossings forming the transverse sides of the loops or eyes and overlapping each other and lying in substantial parallelism and inclined to a line transversely of the stay, thereby distributing frictional wear between adjacent overlapping loops or eyes over the length of said parallel portions.

3. A garment stay comprising wire bent back and forth to form a series of oppositely disposed loops or eyes lying along the side edges of the stay and connected by alternate straight and bent crossings, each bent crossing having a straight portion at one end overlapping the adjacent

straight crossing of the next loop or eye on one edge of the stay and a straight portion at its other end overlapping the straight crossing of the next loop or eye on the other edge of the stay, said straight portions and straight crossings lying in substantial parallelism whereby, upon flexure of the stay, wear between successive overlapping portions is distributed over a considerable length of wire.

1,063,455. SPARKING DEVICE FOR EXPLOSIVE-ENGINES. WILLIAM S. LIMING, Scranton, Pa. Filed Feb. 20, 1907. Serial No. 358,356. (Cl. 123—184.)



1. The combination, in an engine of the explosive type, of sparking devices having, as elements, a branched circuit, two circuit closers with means for rotating the same at different speeds, one of said circuit closers being in one branch of the circuit and the other in the other branch of the same, and a switch movable into engagement with either branch terminal whereby either branch may constitute part of the operative circuit.

2. The combination, in a multiple-cylinder engine of the explosive type, of sparking devices with independent circuit closers, one circuit closer having an independent terminal for each cylinder and the other having a less number of terminals than there are cylinders, means for connecting each terminal of one circuit closer to the sparking device of its respective cylinder, and means for connecting each terminal of the other circuit closer to sparking devices of a plurality of cylinders.

1,063,456. ROTARY MULTIPLE-CYLINDER FOUR-CYCLE ENGINE. WILLIAM E. LOONEY, Fort Worth, Tex. Filed June 2, 1911. Serial No. 630,959. (Cl. 123—43.)



1. An engine having a stationary shaft, controllers normally stationary therewith, each controller having an intake chamber and an exhaust chamber and ports for said chambers, a plurality of cylinders, chambered rotary heads carrying said cylinders and revolving about said controllers and having ports adapted to be brought in communication with the ports of said controllers, pistons for said cylinders, said cylinders communicating with the chambers in said rotary heads, means for sparking said cylinders, actuating members operatively connected with said shaft and with said pistons whereby said cylinders are rotated about said shaft, means for supplying said controllers with explosive mixture, and means for shifting said controller.

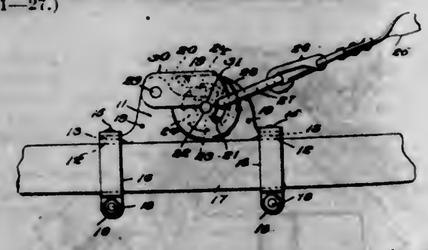
2. An engine having a stationary shaft, controllers normally stationary with said shaft, a plurality of cylinders, chambered rotary heads mounted on said controllers and carrying said cylinders and having ports communicating with said controllers during operation, said controllers having means for supplying explosive mixture to said cylinders through said heads, means for axial and circumferential movement of said controller, pistons in said cylinders, cams mounted on said shaft, and actuating members carried by said pistons and engaging said cams.

3. An engine having a stationary shaft, controllers rigid with said shaft, a plurality of cylinders, chambered rotary heads carrying said cylinders and forming communications from said controllers to said cylinders, pistons in said cylinders, said controllers having provisions for supplying explosive mixture to said cylinders through said heads, means for axial and circumferential movement of said controller, and means actuated by said pistons for revolving said cylinders and heads about said controllers and said shaft.

4. An engine having a stationary shaft, two sets of cylinders, controllers on said shaft for supplying explosive mixture to said cylinders, a cylinder of one set coacting with the opposite cylinder of the other set, means for shifting said controllers circumferentially on said shaft to vary the times of sparking, intake, compression, expansion and exhaust, means carrying said cylinders and coöperating with said controllers to feed said cylinders, pistons for said cylinders, and means actuated by said pistons for causing said cylinders to revolve about said shaft.

5. An engine having a stationary shaft, two sets of cylinders, ball bearing collars surrounding said shaft and carrying said cylinders, means for supplying explosive mixture to said cylinders, a cylinder of one set co-acting with the opposite cylinder of the other set, a common piston rod for a cylinder and its co-acting cylinder, piston heads operating said piston rods, cams on said shaft and cam cinches on said piston rods for causing reciprocating motion of said piston rods, a casing attached to said collars and inclosing said piston rods and cams and constituting an oiling means for said cams and piston rods, and means for supplying oil to said piston rods and cams.

1,063,457. HOLDBACK. MATHIAS MARX, Nellisville, Wis. Filed Oct. 28, 1912. Serial No. 728,238. (Cl. 21—27.)



1. In a device of the class described, a supporting shell comprising plates engaging face to face at their edges and spaced apart intermediate the edges to form a receptacle and with guide channels leading through the engaging edges at one side and into the receptacle, fastening devices extending through the engaging portions of said shell, and a member mounted for rotation within said receptacle and extending across said channel and provided with a plurality of radial recesses.

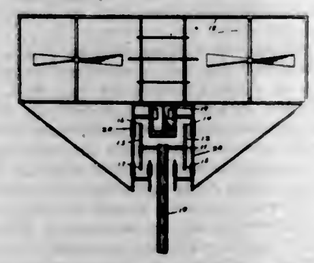
2. In a device of the class described, a supporting shell comprising plates engaging face to face at their edges and spaced apart intermediate the edges to form a receptacle and extended at the opposite ends, and with guide channels leading through the engaging edges at one side and into the receptacle, said extended portions of the plates bent at right angles thereto and superimposed, fastening devices extending through the engaging portions of said plates and through the superimposed extensions, and a member mounted for rotation within said receptacle and extending across said channel and provided with a plurality of radial recesses.

3. In a device of the class described a hollow body adapted to be attached to a thill and provided with guide channels, a member mounted for rotation within said body and extending over said guide channels, said rotating member having a plurality of radial recesses, a ring coupled to a hold-back member and engaging in said channels and in one of the recesses of the revolving member, and a guard pivoted to said body and bearing over the same and inclosing the outer end of said channels and engaging against the ring.

4. In a device of the class described, a supporting shell comprising plates engaging face to face at their edges and spaced apart intermediate the edges to form a receptacle and extended at the opposite ends, and with guide channels leading through the engaging edges at one side and into the receptacle, said extended portions of the plates bent at right angles thereto, fastening devices extending through the engaging portions of said plates and through the extensions, and thill engaging clips bearing over said extensions.

5. In a device of the class described, a hollow body adapted to be attached to a thill and provided with guide channels, a member mounted for rotation within said body and extending over said guide channels, said rotating member having a plurality of radial recesses, said channels being adapted to receive a holding ring which also enters one of the recesses of the revolving member, and a guard pivoted to said body and bearing over the same and inclosing the outer end of said channels.

1,063,458. AERIAL TRANSPORTATION SYSTEM. CHARLES F. MCBEE, Athens, Ohio. Filed Feb. 1, 1912. Serial No. 674,733. (Cl. 104—111.)



1. An aerial transportation system comprising an elevated wire guide way; a free moving self propelled aerial device; guards rigidly secured to the aerial device, said guards extending outside the wire guide way and extending inwardly around same but not coming into contact therewith except at intervals, substantially as shown and described.

2. An aerial transportation system comprising an elevated wire guide way constructed of a pair of upper and a pair of lower, parallel wires, mounted on standards set in the ground; an aerial device; guards secured to the aerial device depending therefrom outside the two sets of wires the upper and lower portions of said guards extending inwardly and toward each other so as to partially encircle their respective wires but not to come into contact therewith except at intervals, substantially as shown and described.

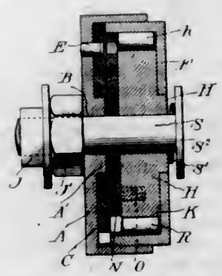
3. In an aerial transportation system comprising a free moving aerial device and wire guide way, guards depending from the aerial device, said guards so constructed as to resemble a double lined letter H the lower cross bar being omitted, substantially as shown and described.

4. In an aerial transportation system an elevated wire guide way constructed of four parallel wires, two above and two below, mounted on cross arms of centrally located standards set in the ground; an aerial device provided with guards designed to depend outside their respective wires the upper part of the guards being projected inwardly and thence downwardly to partially surround their respective upper wires and the lower portions of said guards projecting inwardly and thence upwardly to partially surround their respective lower wires, the distance between the inner ends of each guard being less than the distance between the upper and lower wires of their respective sides of the guide way, substantially as shown and described.

5. An aerial transportation system comprising an elevated guide way constructed of a plurality of parallel strips, some above and some below; an aerial device; guards depending from the aerial device and designed to partially surround the guide way but not to come into contact therewith except at intervals; rollers mounted on the guards at all points thereon which may come into contact with the guide way, substantially as shown and described.

[Claims 6 to 11 not printed in the Gazette.]

1,063,459. SHOCK-ABSORBER. DANIEL F. MCCARTHY, Moline, Ill. Filed Jan. 20, 1912. Serial No. 672,471. (Cl. 21—105.)

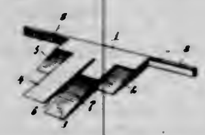


A shock absorber comprising two centrally apertured, circumferentially flanged shells adapted to telescope within each other, the inner face of one of said shells having a boss about the aperture therein, a friction disk having a central aperture surrounding said boss and fastened to the shell having said boss, said disk being of smaller diameter than the shell to which it is fastened, leaving an annular space about the disk for the reception of the flange of the other shell, a cylindrical, centrally apertured clutch plate having a boss upon the outer face thereof engaging an opening in the inner telescoping shell and provided with a series of angular outlined recesses in its circumference, friction rollers seated in said recesses, a friction disk fastened to the inner face of said clutch plate and having its circumference inside the inner marginal edges of said recesses, a headed bolt having a bearing in central apertures in said plate and outer telescoping shell, a nut upon said bolt, and a spring interposed between the boss upon said clutch plate and the head of the bolt, as set forth.

1,063,460. WEDGE. JAMES A. MCDONALD, Carter, Okla. Filed Mar. 1, 1912. Serial No. 680,814. (Cl. 145—81.)

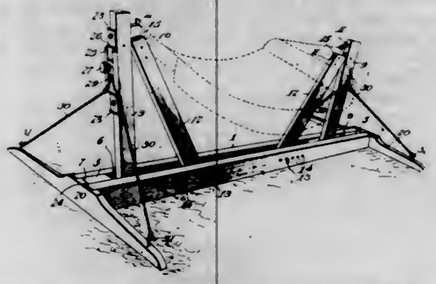
1. A device of the class described comprising a body, a plurality of wedge members extending from the body in the same general direction, the outside wedge members being tapered equally upon opposite sides and the inside wedge members being each tapered on one side only and from opposite sides, and malleable ferrule holding arms projecting in opposite directions from the body.

2. A device of the class described comprising a body, a pair of separated prongs extending outwardly from the body, said prongs being tapered on one side only and from



opposite sides, a pair of prongs extending outwardly from the body and each tapered from opposite sides, and ferrule holding arms projecting in opposite directions from the body at right angles to the prongs.

1,063,461. HAMMOCK-SUPPORT. ROBERT F. MEEKS, Columbus, Ohio. Filed Apr. 1, 1912. Serial No. 687,796. (Cl. 5—32.)



1. A hammock support comprising a base including spaced parallel base members, a combined spacer and rest between and connecting the central portions of the base members, said spacer and rest being disposed below the plane of the upper surfaces of said members, hammock supporting standards pivotally mounted between the members and adapted to be folded onto the spacer and rest to dispose the standards entirely within the space between the two members with their upper surfaces flush with the upper surfaces of said members, and means for bracing the standards.

2. A hammock support comprising a base provided with a longitudinal recess forming a housing, hammock supporting standards hinged to the ends of the base and adapted to lie entirely within the housing when folded with their upper surfaces flush with the upper surface of the housing, supporting struts hinged to the standards and adapted to lie entirely within the housing when folded with their lower surfaces flush with the lower surface of said housing, and detachable means for fastening the struts to the base.

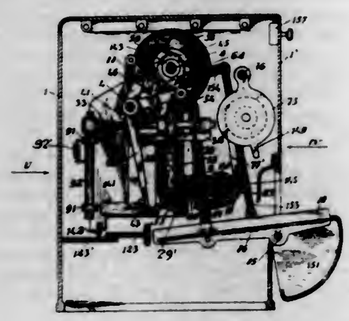
3. A hammock support comprising a base provided with a longitudinal housing, a centrally disposed rest block within the housing and provided with recesses, standards hinged to the base within the housing and adapted to rest on the central block when folded, hammock engaging hooks carried by the standards and adapted to enter the recesses of the block when the standards are folded, and means for bracing the standards.

4. A hammock support comprising a base provided with a longitudinal housing, a rest centrally disposed within the housing below the upper surface thereof and provided with beveled ends, end rests within the housing above the lower surface thereof and provided with beveled inner ends, standards hinged within the ends of the housing and having beveled lower ends, said standards being adapted to lie within the housing when folded with their upper surfaces flush with the upper surface of said housing with their free ends resting on the central rest and their beveled ends in engagement with the beveled ends of the end rests, bracing struts hinged to the standards and adapted to lie on the bottom surface of the end rests when folded with their bottom surfaces flush with the bottom surface of the housing, the struts having beveled upper ends for engagement with the beveled ends of the central rest, and detachable means for fastening the struts to the base to hold the same in standard supporting positions.

5. A hammock support comprising a base provided with a vertical groove in each end, lugs carried by the ends of the base and disposed on opposite sides of the grooves, end feet provided with central grooves having slots therein for the reception of the lugs and tongues for engaging the grooves, and hammock supporting means carried by the base.

[Claims 6 to 10 not printed in the Gazette.]

1,063,462. MACHINE FOR AFFIXING STAMPS, LABELS, OR THE LIKE TO ENVELOPS OR THE LIKE. ISAC MICHEL and RUDOLF STEIN, Frankfort-on-the-Main, Germany. Original application filed Aug. 24, 1910, Serial No. 578,621. Divided and this application filed Nov. 6, 1911. Serial No. 658,864. (Cl. 216—11.)



1. A machine for affixing sections of strips such as stamps, labels and the like to envelops or the like, comprising a plurality of feed rollers, actuating mechanism for said rollers, a plunger, a moistening device, and a device slidable with the plunger and moistening device, for coupling a selected feed roller with its actuating mechanism.

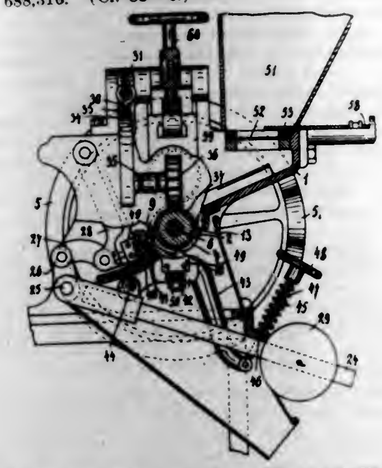
2. In a machine for affixing sections of strips, such as stamps, labels and the like to envelopes or the like, the combination of feeding means for the strip, a pair of cheeks, slidably disposed with respect to the feeding means, means for severing sections from the strips, means for moistening the sections, means for attaching the sections to an envelop or the like, said severing, moistening and attaching means being adjustable with respect to the feeding means and connected to said cheeks.

3. In a machine for affixing sections of strips, such as stamps, labels and the like to envelops or the like, the combination of a plurality of feeding rollers, means for severing sections from the strip, means for moistening the sections, means for attaching the sections to an envelop or the like, said severing, moistening and attaching means being adjustable with respect to the feeding rollers, and a common actuating element for all of said means.

4. In a machine for affixing sections of strips, such as stamps, labels and the like to envelops or the like, the combination of a plurality of feeding rollers, means for severing sections from the strip, means for moistening the sections, means for attaching the sections to an envelop or the like, and an element for adjusting all of said means simultaneously with respect to said rollers.

5. In a machine for affixing sections of strips, such as stamps, labels and the like to envelops or the like, the combination of a casing, a plurality of feeding rollers, means for severing sections from the strip, means for moistening the sections, means for attaching the sections to an envelop or the like, and an element for adjusting all of said means simultaneously with respect to said rollers, said adjusting element being accessible from the outside of said casing.

1,063,463. CRUSHING AND GRINDING MILL. JULIUS MOHS, Dessau, Germany. Filed Apr. 3, 1912. Serial No. 688,316. (Cl. 83—6.)



1. In a crushing and grinding mill, a grinding roller composed of ring-shaped saw-blades clamped together on a core and arranged at an angle to the roller axis, the teeth of said blades being arranged some distance apart, spacing elements arranged between said blades so as to form grooves of less width than the distance between the teeth of adjacent blades, and clearing fingers adapted to work in said grooves so as to be out of contact with the teeth, substantially as and for the purpose set forth.

2. In a crushing and grinding mill, a grinding roller composed of ring-shaped saw-blades clamped together on a core, a breast plate held by a pivoted arm against said roller, a rock-shaft, an arm mounted on said shaft, a link connecting said arm with the breast plate, a weighted arm mounted on said shaft and tending to press the breast plate against the roller, a pivoted lever arranged above said weighted arm, a rod connecting the free end of said arm with the weighted arm, a cam-shaft arranged underneath said lever, a cam arranged on said shaft so as to rock the lever and withdraw the breast plate temporarily from the roller, and connections between the roller-shaft and the cam-shaft for rotating the latter, substantially as and for the purpose set forth.

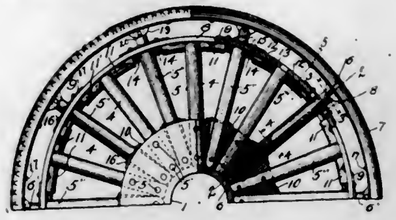
3. In a crushing and grinding-mill, a grinding roller composed of ring-shaped saw-blades clamped together on a core and arranged at an angle to the roller axis, said blades having spaced teeth, a breast plate held by a pivoted arm against said roller, and a weighted double-armed lever arranged in the mill so as to intersect the vertical plane of the grinding roller, said lever having a short arm which is set at an angle and linked to the free end of the breast plate arm for pressing the breast plate against the roller, substantially as and for the purpose set forth.

1,063,464. WINDOW-VENTILATOR. ALFRED N. OLANDER, Salina, Kans. Filed Nov. 20, 1911. Serial No. 661,303. (Cl. 98—3.)



A window ventilator comprising strips of metal cut to provide triangular shaped brackets each having its outer edge bent into the form of an inwardly opening U-shaped guide, said bracket having its inner edge bent at right angles to the body of the bracket to provide an outwardly projecting attaching flange, each of said flanges having an angular depending extension to permit of its engagement with the inner face of the sill of the window frame, and a plate removably received in the U-shaped guides.

1,063,465. SPRING-WHEEL. OTTO J. OLSON, Courtenay, N. D. Filed Jan. 19, 1912. Serial No. 672,167. (Cl. 152—28.)



1. In a spring wheel, the combination of a hub, a rim, rigid spokes connecting the hub and rim, said hub and rim having openings therein, a tread member spaced from the rim, a series of spoke members for supporting the tread member, said spoke members comprising plungers pivotally connected at their outer ends to the tread member and passing through the rim openings aforesaid, tubular casings in which the plungers are mounted, pivotally secured to the hub and passing through the hub openings, springs in said casings on which the plungers are seated, resilient means carried by the rim between the rigid spokes and casings to permit circumferential movement of the spoke members, coverings for the openings aforesaid having slots therein, and fastening means for said coverings passing through the slots, whereby the circumferential movement of the spoke members may be limited.

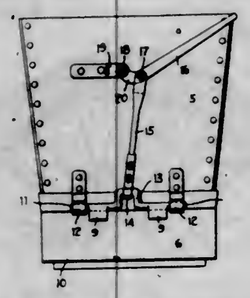
2. In a spring wheel, the combination of a hub formed with side plates, a rim having a series of elongated openings therein, rigid spokes mounted at one end between the plates of the hub and connected at their other end to the rim aforesaid, a series of spoke members intermediate the rigid spokes aforesaid and comprising tubular casings pivotally mounted at one end between the plates of said hub and engaging the rim at the other end, springs mounted in said casings, plungers seated at one end against the springs and passing through the openings in the rim and connected at their other end to the tread member to support the same, circumferential rim casings secured to the rim at opposite sides of the rigid spoke members, springs mounted in said rim casings, and lateral plungers bearing at one end against the springs in the rim and at their other end against the tubular casings aforesaid to permit circumferential movement of the spoke members.

1,063,466. LATCH MECHANISM. JAMES H. O'NEILL and MORRIES T. COLEMAN, Macedon, N. Y. Filed Aug. 8, 1912. Serial No. 714,082. (Cl. 57—13.)

1. In a drop-bottom bucket with a hinged bottom, latch-mechanism for holding the bottom closed, said mechanism comprising a latch movably mounted on the body of the bucket and adapted to engage the bottom with an upward movement, a hand-lever pivoted upon the body and arranged to swing in a plane substantially parallel with and close to a side of the body, and a link connecting the latch and the hand-lever and constituting, with the latter, a toggle whereby the latch may be forced positively into engagement with the bottom.

2. In a drop-bottom bucket with a hinged bottom, latch-mechanism for holding the bottom closed, said mechanism comprising a latch pivoted on the body of the bucket outside of the bottom and adapted to swing upwardly against the bottom so as to force the latter toward closed position, and manually-operable mechanism acting positively to swing the latch upwardly.

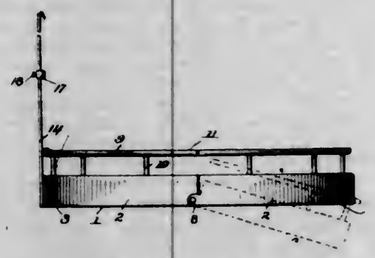
3. In a drop-bottom bucket with a hinged bottom, latch-mechanism for holding the bottom closed, said mechanism comprising a latch pivoted on the body of the bucket outside of the bottom and adapted to swing upwardly against the bottom so as to force the latter toward closed position, and toggle-mechanism for actuating the latch positively in said direction, said mechanism including a manually-operable lever pivoted upon the body to swing in a plane substantially parallel with a side of the body.



4. In a drop-bottom bucket with a hinged bottom, latch-mechanism for holding the bottom closed, said mechanism comprising a latch carried by the body and movable out of and into engagement with the bottom in a direction to force the bottom toward closed position, and manually-operable mechanism for actuating the latch positively in said direction.

5. In a drop-bottom bucket with a hinged bottom, latch-mechanism for holding the bottom closed, said mechanism comprising a latch pivoted on the body of the bucket near the lower edge thereof and having a part adapted to swing upwardly into engagement with the bottom and to force the bottom toward closed position, and toggle-mechanism and a hand-lever for actuating the latch, the hand-lever normally acting, through its weight, to force the latch toward its upper position.

1,063,467. SKIRT-MARKING GAGE. GERTRUDE OSBORNE, Neoga, Ill. Filed Oct. 31, 1911. Serial No. 657,750. (Cl. 73—48.)



1. A device of the class described, comprising a base-ring, a second ring, means connecting said rings and spacing the same apart, a slide pivotally mounted on said second ring and open on one side to pass said connecting means, and an upright gage carried by said slide, substantially as described.

2. A device of the class described, comprising a base ring, said base ring being formed of halves hingedly connected, a second ring formed of halves and the halves thereof arranged above the respective halves of the base ring, means spacing said rings apart and securing the respective halves together, a slide pivotally mounted on said second ring, and an upright gage carried by said slide, substantially as described.

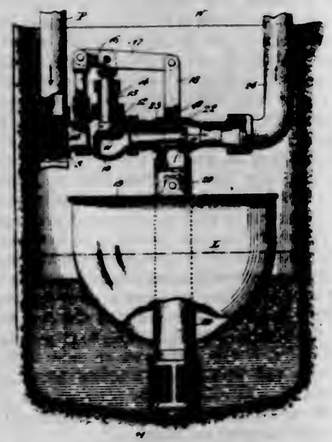
3. A device of the class described, comprising a base ring formed of halves hingedly connected and each of said halves being formed of two parts adjustably connected whereby the size of said ring may be adjusted, a second ring arranged above said base ring, said second ring being formed of two halves and each half being formed of two parts, an adjustable connection, the halves of the second ring being secured to the respective halves of the base ring, a slide on said second ring, and a gage carried by said slide, substantially as described.

4. In a device of the class described, a base ring formed of two parts hingedly connected, a second ring formed of two parts, means for attaching the parts respectively of the second ring to the respective parts of the base ring, a sleeve slidably and rotatably mounted on said second ring, and a gage carried by said sleeve, substantially as described.

5. A device of the class described, comprising a ring, a base supporting the ring in elevated position, a slide pivotally and slidably mounted on said ring, and an upright gage carried by said slide.

[Claims 6 to 10 not printed in the Gazette.]

1,063,468. AUTOMATIC CELLAR-DRAINER. ALEXIS R. PRIBIL, Detroit, Mich., assignor to Penberthy Injector Co., Detroit, Mich., a Corporation of Michigan. Filed Sept. 13, 1911. Serial No. 649,141. (Cl. 162—3.)



1. In a device of the character described and in combination, a fluid-pressure supply, a waste discharge element having a permanently open inlet, injecting means adapted to be operated by such supply and extending into said discharge element above its inlet end, and means for controlling the passage of the supply to the injecting means, said controlling means including a float carried by and movable longitudinally of said element below the plane of the injecting means, said element acting as a guide for the float.

2. In a device of the character described and in combination, a waste discharge element having its inlet end adapted to extend into a collecting basin, said element including a pipe leading upwardly from the inlet end, waste fluid ejecting mechanism, and means for controlling said mechanism, said means including a float movable longitudinally of and guided by said pipe, said mechanism being operative in said element above the float, the movements of the float controlling the operation of the mechanism.

3. In a device of the character described and in combination, a fluid-pressure supply, a waste discharge element, an injector nozzle extending into the discharge element at a point above and removed from its inlet end, a valve between said supply and nozzle, a float movable longitudinally of and guided by said element below the plane of the nozzle, and connections between said float and the valve to cause the upward movement of the float to open the valve when the flotation pressure reaches the pressure of the supply on the valve.

1,063,469. SMOKELESS NITROCELLULOSE-NITROGLYCERIN POWDER AND METHOD OF MAKING THE SAME. FRIEDRICH ALEXANDER RITSCHKE, Geesthacht-on-the-Elbe, Germany, assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Nov. 14, 1911. Serial No. 660,288. (Cl. 52—3.)

1. An improvement in the method of manufacturing smokeless powders containing nitrocellulose and less than thirty per cent. of nitroglycerin which consists in adding to the ingredients a double salt of ammonium without employing volatile solvents.

2. An improvement in the method of manufacturing smokeless powders containing nitrocellulose and less than thirty per cent. of nitroglycerin which consists in adding to the ingredients a double salt of ammonium without employing volatile solvents, shaping the mixture under heat and pressure.

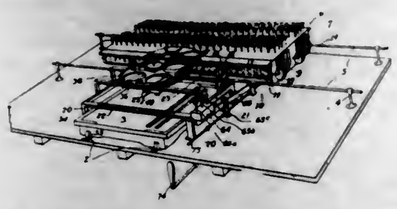
3. An improvement in the method of manufacturing smokeless powders containing nitro glycerin and nitro cellulose, which consists in adding to the ingredients a double salt of ammonia without employing volatile solvents, heating the mixture to a temperature of about 90° to 100° C., and shaping under a pressure of from 400 to 1000 atmospheres.

4. An improvement in the method of manufacturing smokeless powders containing nitroglycerin and nitro cellulose, which consists in adding to the ingredients a double salt of ammonium in amount not exceeding five per cent. without employing volatile solvents.

5. An improvement in the method of manufacturing smokeless powders containing nitroglycerin and nitro cellulose, which consists in adding to the ingredients a double salt of ammonium in amount not exceeding five per cent. without employing volatile solvents and shaping the mixture under heat and pressure.

[Claims 6 and 7 not printed in the Gazette.]

1,063,470. MACHINE FOR TYPE-WRITING MUSICAL SIGNS AND INDICATIONS. JOSÉ SANAHUJA RIVERA, Mixcoac, Mexico. Filed June 12, 1912. Serial No. 703,233. (Cl. 197—8.)



1. In a machine for typewriting musical notes and symbols, the combination, with a table; of a keyboard carriage and a guide carriage mounted for movement upon said table in parallel relation to each other; gearing connecting said carriages for moving the keyboard carriage from the guide carriage; a paper carrier mounted upon said table beneath and transversely of said carriages; and spacer mechanism for shifting said paper carrier.

2. In a machine for typewriting musical notes and symbols, the combination, with a table; of a keyboard carriage and a guide carriage mounted upon said table for movement parallel with each other; gearing connecting said keyboard carriage and said guide carriage for moving the former from the latter; and an indicating mechanism carried by said guide carriage for controlling the operation of said gearing.

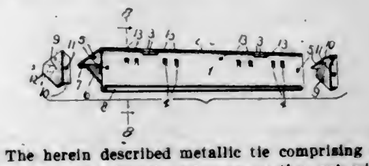
3. In a machine for typewriting musical notes and symbols, the combination, with a table; of a keyboard carriage and a guide carriage mounted upon said table for movement parallel with each other; gearing connecting said keyboard carriage and said guide carriage for moving the former from the latter; and an indicating mechanism for controlling the operation of said gearing embodying a stationary index carried by said guide carriage, a movable element mounted upon said guide carriage and provided with a plurality of pointer arms movable across said index, and means connecting said element with one element of said gearing for operating the latter from the former.

4. In a machine for typewriting musical notes and symbols, the combination, with a table; of a keyboard carriage and a guide carriage mounted upon said table for movement parallel with each other; a longitudinal rack connected to the front edge of the keyboard carriage; a pinion carried by the guide carriage in mesh with said rack; and means for rotating said pinion to move said keyboard carriage.

5. In a machine for typewriting musical notes and symbols, the combination, with a table; of a keyboard carriage and a guide carriage mounted upon said table for movement parallel with each other; a longitudinal rack connected to the front edge of the keyboard carriage; a pinion carried by the guide carriage in mesh with said rack; a stationary index and a rotatable element carried by said guide carriage, said element having a plurality of pointers movable over said index; and a connection between said element and said pinion for rotating the latter from and in unison with the former.

[Claims 6 to 8 not printed in the Gazette.]

1,063,471. METALLIC RAILWAY-TIE. FRANK J. SCHISLER, Winthrop, Minn. Filed Apr. 22, 1912. Serial No. 692,340. (Cl. 238—5.)



1. The herein described metallic tie comprising a body member of inverted V-shaped cross section cut with parallel slits forming pairs of tongues inturned toward each other so as to constitute rail seats in the ridge of the body, the sides of the latter being also cut so as to produce fingers at the opposite sides of each sent and with their tips bent inward; and a base member whose substantially horizontal body is disposed between the sides above their lower edges, and whose edges are bent downward and then upward into flanges embracing the lower edges of said sides.

2. The herein described metallic tie comprising a body member of inverted V-shaped cross section cut with parallel slits forming pairs of tongues inturned toward each other so as to constitute rail seats in the ridge of the body; a base member whose substantially horizontal body is disposed between the sides above their lower edges, and whose edges are bent downward and then upward into flanges embracing the lower edges of said sides; and end members closing the extremities of the triangular structure thus formed.

3. The herein described metallic tie comprising a body member of inverted V-shaped cross section cut with parallel slits forming pairs of tongues inturned toward each other so as to constitute rail seats in the ridge of the body, and the sides formed with indentations near their extremities; a base member whose substantially horizontal body is disposed between the sides near their lower edges, and whose edges are bent downward and then upward into flanges embracing the lower edges of said sides; and end members each comprising a flat body of substantially triangular form having a lip at its lower edge depending below the flat body of the base member and converging flanges along its side edges adapted to pass inside the sides of the body and themselves provided with perforations adapted to coact with the indentations in the body.

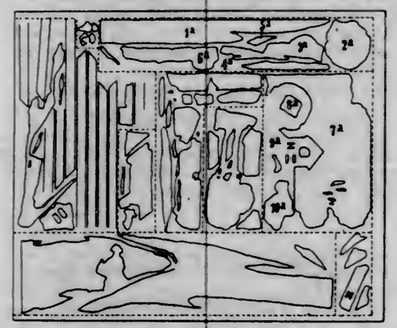
4. The herein described metallic tie comprising a body member of inverted V-shaped cross section having rail seats in its ridge and indentations in its sides near their extremities; a base member connecting said sides; and

end members each comprising a flat body of substantially triangular form, and converging flanges along its side edges adapted to pass inside the triangular structure formed by the body and base and rest upon the latter, the flanges having perforations adapted to coact with the indentations in said body.

5. The herein described metallic tie comprising a body member of inverted V-shaped cross section provided with rail seats along its ridge, the sides of the body being also cut so as to produce fingers at opposite sides of each seat and with their tips bent inward; a base member having a substantially flat body, and upturned flanges along its edges embracing the lower edges of the sides of the body member; and end members closing the extremities of the tubular structure thus formed.

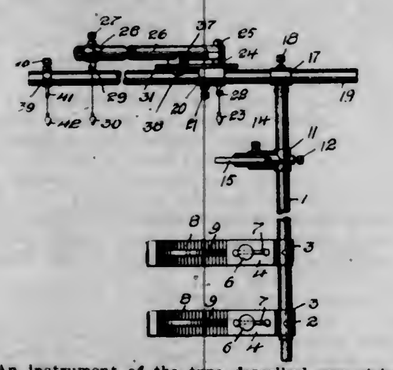
[Claims 6 to 19 not printed in the Gazette.]

1,063,472. GAME. HEINRICH ANTON JOHANNES SCHULTZ. Hamburg, Germany. Filed Dec. 11, 1912. Serial No. 736,134. (Cl. 46—37.)



A sheet serving for the production of colored pictures provided on one side with differently colored spaces and with outlined objects represented on the other side.

1,063,473. UNIVERSAL PLUMB. GUSTAF ADOLF SKOOG, Youngstown, Ohio. Filed Oct. 28, 1912. Serial No. 728,040. (Cl. 72—133.)



1. An instrument of the type described comprising an upright, clamping members adapted to support said upright, a V-shaped notched line holder adjustably mounted upon said upright, a beam adjustably supported by the upper end of said upright at right angles thereto, a bearing adjustably mounted upon said beam, a sleeve adjustably mounted upon said beam, plumb bobs supported by said sleeve and said bearing, arms supported by said bearing, and plumb bobs adjustably supported by said arms.

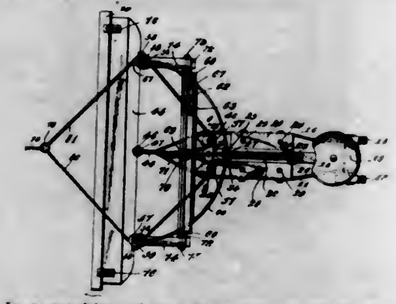
2. An instrument of the type described comprising an upright, an adjustable line holder supported by said upright, an adjustable beam positioned upon the upper end of said upright at right angles thereto, a bearing adjustably mounted upon said beam, a segment mounted upon said bearing, arms pivotally mounted above said segment and guided thereby, and adjustable plumb bobs suspended from said beam and said arms.

3. An instrument of the type described comprising an upright, an adjustable line holder supported by said upright, an adjustable beam positioned upon the upper end of said upright at right angles thereto, a bearing adjustably mounted upon said beam, a segment mounted upon said bearing, arms pivotally mounted above said segment and guided thereby, adjustable plumb bobs suspended from said beam and said arms, and means connected to said upright and adapted to support said upright relatively to a piece of work.

4. An instrument of the type described comprising an upright, a line holder adjustably connected thereto, a beam adjustably connected at the upper end of said upright, a bearing adjustably mounted upon said beam, a plumb bob suspended therefrom and adapted to coöperate with said line holder, a segment carried by said bearing, arms pivotally supported above said segment and guided thereby, and plumb bobs adjustably suspended from said arms and said beam.

5. An instrument of the type described comprising an upright, a line holder adjustably connected thereto, a beam adjustably connected at the upper end of said upright, a bearing adjustably mounted upon said beam, a plumb bob suspended therefrom and adapted to coöperate with said line holder, a segment carried by said bearing, arms pivotally supported above said segment and guided thereby, plumb bobs adjustably suspended from said arms and said beam, and clamping members adapted to hold said upright relatively to a piece of work.

1,063,474. DRAG AND GRADER. TOLA FRED STOBER, West Grove, Iowa. Filed Aug. 1, 1912. Serial No. 712,812. (Cl. 37—5.)



1. In a machine of the character described, an operating element, and flexible means for connecting a draft means with said machine and for bracing said operating element.

2. A machine of the character described comprising a frame, a scraping blade pivotally connected with said frame, and common means for connecting a draft means with said machine and for bracing said blade against pivotal movement.

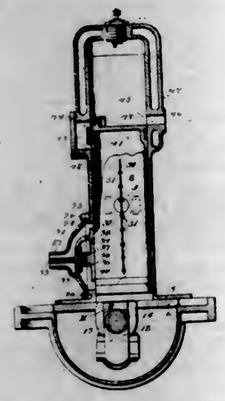
3. A machine of the character described comprising a frame, a scraping blade pivotally connected with said frame, and flexible means for connecting a draft means with said machine and for bracing said blade against pivotal movement.

4. A machine of the character described comprising a frame, a scraping blade pivotally connected with said frame, cables connected with said blade and frame, a bar pivotally connected with the central portion of said blade and with the inner ends of said cables, and attaching means connected with the outer ends of said cables.

5. A machine of the character described comprising a frame, a scraping blade pivotally connected with said frame, pulley wheels carried at the forward end of said frame and at the ends of said blade, cables connected at their outer ends and passing around the pulleys of said blade to and around the pulley of said frame, a bar secured to said blade and connected with the inner ends of said cables, and attaching means connected with the outer ends of said cables.

[Claims 6 to 12 not printed in the Gazette.]

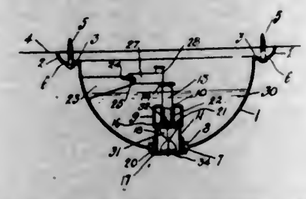
1,063,475. VAPOR-ENGINE. WILLIAM F. STONE, Woodbury N. J., assignor, by mesne assignments, to The Engineering and Development Company of America, Salisbury, Md., a Corporation of Maryland. Original application filed Feb. 18, 1911, Serial No. 609,477. Divided and this application filed May 12, 1911, Serial No. 626,847. Renewed Nov. 1, 1912. Serial No. 729,041. (Cl. 123—74.)



1. A vapor engine, having in combination a cylinder closed at both ends and having a fuel port adjacent its lower head and two fuel transfer ports above said fuel port, a hollow piston having a port therein adapted to register with the lower fuel transfer port in the final downward position of the piston, to permit a charge to pass to the explosion chamber, said piston being adapted to close the fuel port at the lower end of the cylinder in the lowermost position of the piston, so that a full charge contained in the piston is transferred to the explosion chamber, a crank shaft and mechanism connected with the piston for transmitting motion to said crank shaft.

2. A vapor engine having in combination, a cylinder closed at both ends and having a fuel port adjacent its lower head, a valve for controlling the supply of fuel through said port, said cylinder also having two fuel transfer ports above the fuel port, a hollow piston having a port therein adapted to register with the lower fuel transfer port in the final downward position of the piston, to permit the charge to pass to the explosion chamber, said piston being adapted to close the port at the lower end of the cylinder in its lowermost position so that a full charge contained in the piston is transferred to the explosion chamber, a crank shaft and exterior mechanism connected with the piston for transmitting motion to the crank shaft.

1,063,476. FIRE-EXTINGUISHER. GEORGE A. THORNTON, Pawtucket, R. I., assignor of one-half to Archie F. Place, Cranston, R. I. Filed July 31, 1912. Serial No. 712,410. (Cl. 169—8.)



1. In an automatic fire extinguisher, the combination with a hollow body provided with a central opening, of a housing in the opening provided with an opening in its top, a cage slidably mounted in the housing, a post upon the cage extending through the last mentioned opening, solder uniting the cage with the body, a distributing member in the cage, a bracket in the body, and a bottle pivotally connected with the bracket and normally resting upon the post.

2. In an automatic fire extinguisher, the combination with a body adapted to hold a liquid and provided with an opening, of a housing within the body fixed in the opening and provided with an opening in its top, a cage slidably mounted in the housing, a post upon the cage extending through the opening in the housing and provided with an annular shoulder exterior of the housing, a spring upon the post intermediate the housing and the cage, a distributing member mounted in the cage, a bracket in the body, and a bottle pivotally mounted in the bracket and resting upon the end of the post.

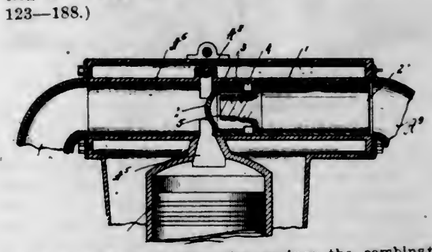
3. In an automatic fire extinguisher, the combination with a body, a housing fixed therein, a cage slidably mounted in the housing, a post upon the cage extending through an opening in the housing, a distributing member rotatably mounted in the cage and carried by said post, a spring upon the post normally tending to force the cage outward and a bottle pivotally mounted within the body and normally resting in upright position upon said post.

4. In an automatic fire extinguisher, the combination with a body adapted to hold a liquid and provided with an opening, of a housing within the body fixed in the opening and provided with an opening in its top, a cage slidably mounted in the housing, a post upon the cage extending through the opening in the housing, spring means in the housing for downwardly pressing the cage, a distributing member mounted in the cage, a bracket in the body, and a bottle pivotally mounted in the bracket and resting upon the post.

5. In an automatic fire extinguisher, the combination of a body adapted to hold a liquid and provided with an opening, a slidable bearing member fixed in the opening by solder fusible at a predetermined temperature, and a receptacle pivotally mounted at one end within the body independent of said slidable member and having its free end supported by the latter.

[Claim 6 not printed in the Gazette.]

1,063,477. ENGINE VALVE MECHANISM. OSCAR TREIER, Brooklyn, N. Y. Original application filed Mar. 23, 1912, Serial No. 685,866. Divided and this application filed Aug. 10, 1912. Serial No. 714,327. (Cl. 123—188.)



1. In a valve mechanism for engines the combination with the engine cylinder having an admission and outlet passage, of a tubular valve chamber, having an admission opening at one end, an exhaust opening at the other and circumferential openings in alinement with the said passage, a tubular valve body slidably mounted in said chamber and having circumferential openings, the inner end of said valve body being tightly closed and the outer end thereof being open, a nozzle in the interior of said tubular valve directed toward the said closed end of the latter, said valve being adapted to alternately establish communication between the said cylinder and the said chamber to permit the fuel to exhaust, and between its interior and the said cylinder to admit fresh fuel.

2. In a valve mechanism for engines, the combination with an engine cylinder having a passage for the admission and exhaust of fuel, of a tubular valve chamber having

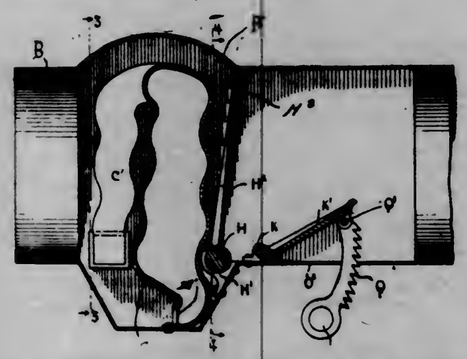
an admission opening at one end, an exhaust opening at its opposite end and circumferential openings in alinement with the said passage, a tubular valve body slidably mounted in said chamber and having circumferential openings, the inner end of said valve being tightly closed and the outer end thereof open, and a spiral nozzle in the interior of said tubular valve directed toward the said closed end of the latter, said valve being adapted to alternately establish communication between the said passage and the said chamber to permit the fuel to exhaust, and between its interior and the said cylinder to admit the fuel.

1,063,478. PROCESS FOR POLISHING SILVER UTENSILS. JEAN UEBERSAX, Chaux-de-Fonds, Switzerland, assignor to The Firm of Wenger & Co., Delémont, Switzerland. Filed Apr. 7, 1911. Serial No. 619,553. (Cl. 51—14.)



The method herein described of polishing articles, consisting in subjecting the articles to rotation while suspended within a polishing mass, the relative specific gravity of the articles and polishing mass being such as to maintain the articles approximately central of the polishing medium during rotation, substantially as described.

1,063,479. ATTACHMENT FOR COMBUSTION-GENERATORS, &c. BENJAMIN B. VAN AUKEN, Rahway, N. J. Filed Dec. 22, 1910. Serial No. 598,743. (Cl. 110—58.)



1. A combustion promoter comprising a casing through which smoke and products of combustion from a furnace are adapted to pass, an air heating chamber located therein having contracted branching portions leading through the wall of said casing and opening into the atmosphere, said chamber communicating with the interior of the casing, automatically operated dampers positioned in the inlet ends of said branching portions of the chamber and designed to prevent the escape of noxious gases when the pressure of the latter exceeds the normal pressure of the outside atmospheric air, a damper mounted in said casing and provided with openings to allow for the free passage to the atmosphere of incombustible portions of the gases, and a cold air check damper regulating an opening in the bottom of the casing.

2. A combustion promoter comprising a casing through which smoke and products of combustion from a furnace are adapted to pass, an air heating chamber located therein having contracted branching portions leading through the wall of said casing and opening into the atmosphere, said chamber communicating with the interior of the casing, automatically operated dampers positioned in the inlet ends of said branching portions of the chamber and designed to prevent the escape of noxious gases when the pressure of the latter exceeds the normal pressure of the outside atmospheric air, a damper mounted in said casing and provided with openings to allow for the free passage to the atmosphere of incombustible portions of the gases, a cold air check damper pivotally mounted adjacent to an opening in the bottom of the casing, a ratchet segment pivoted to said check damper and having teeth adapted to engage the marginal edge of said opening.

3. A combustion promoter comprising a casing through which smoke and products of combustion from a furnace are adapted to pass, an air heating chamber positioned within the latter and having a corrugated wall and contracted branching portions leading through the wall of the casing and communicating with the atmosphere, an automatically operated damper positioned in each of said branching portions, said chamber having a flaring inner end with series of exit openings, the chamber having gradually increasing capacity from its inlet to its outlet ends to allow for the expansion of the heated air.

1,063,480. VEHICLE WHEEL-RIM. JAMES H. WAGENHORST, Akron, Ohio. Filed Jan. 16, 1912. Serial No. 671,492. (Cl. 152—21.)



1. A tire-carrying rim for vehicle wheels comprising two rings, an endless ring having a tire-retaining flange at one edge thereof and having a series of downwardly turned lugs at the other edge thereof, and a ring transversely split on a plane inclined to that of the major plane of the wheel and to the cylindrical surface of the rim at the point where the rim is split, said ring having a tire-retaining flange at one edge thereof, and having at the other edge thereof a series of offset slotted lugs, said lugs projecting beneath the edge of the endless ring, the lugs on the endless ring entering the slots in the lugs on the split ring.

2. A tire-carrying rim for vehicle wheels comprising a split ring and an endless ring adapted to inclose a portion of said split ring, each of said rings carrying at its outer edge tire-retaining means, one of said rings being provided with a circumferential series of slots and the other of said rings carrying a plurality of lugs adapted to enter said slots, one end of said split ring overlapping the other end thereof, and means for locking the overlapping end of said split ring to the endless ring, whereby both ends of said split ring are retained in position with relation to said endless ring.

3. A tire-carrying rim for vehicle wheels comprising a split ring and an endless ring adapted to inclose a portion of said split ring, each of said rings carrying at its outer edge tire-retaining means, one of said rings being provided with a circumferential series of slots, and the other of said rings carrying a plurality of lugs adapted to enter said slots, and means for locking an end of said split ring to the endless ring comprising a latch pivoted to the undersurface of said split ring, said latch having a portion engaging a portion of the end of said split ring when the latch is turned to operative position.

4. A tire-carrying rim for vehicle wheels comprising two rings, an endless ring having a tire-retaining flange at one edge thereof and having a series of downwardly turned lugs at the other edge thereof, and a transversely split ring having a tire-retaining flange at one edge thereof, and having at the other edge thereof a series of offset slotted lugs, said lugs projecting beneath the edge of the endless ring, the lugs on the endless ring entering the slots in the lugs on the split ring, and means for locking an end of said split ring to said endless ring comprising a latch pivoted to the undersurface of said endless ring, said latch having a portion engaging and overlying one of the lugs on the split ring when the latch is turned to operative position.

5. A tire-carrying rim for vehicle wheels comprising two rings, an endless ring having a tire-retaining flange at one edge thereof, and having a series of downwardly turned lugs at the other edge thereof, and a transversely split ring having a tire-retaining flange at one edge thereof, and having at the other edge thereof a series of offset slotted lugs, said lugs projecting beneath the edge of the endless ring, the lugs on the endless ring entering the slots in the lugs on the split ring, and means for locking an end of said split ring to said endless ring comprising a latch pivoted to the undersurface of said endless ring, said latch having an undercut edge portion of curved outline adapted to engage with a beveled portion of one of the lugs on the split ring when the latch is turned to operative position.

[Claims 6 to 11 not printed in the Gazette.]

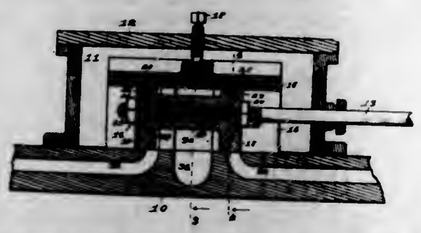
1,063,481. FILLER FOR ICE-CREAM. JOHN H. WALES, New York, N. Y. Filed May 23, 1910. Serial No. 563,037. (Cl. 99—11.)

1. A filler for ice cream, &c., comprising sugar with which is incorporated a small proportion of edible oil and a much larger proportion of powdered edible gum.

2. The herein described filler for ice cream, &c., comprising 160 parts granulated sugar, seven parts edible oil and sixty parts powdered edible gum.

3. The herein described filler for ice cream, &c., which consists of 160 parts granulated sugar, seven parts edible oil, sixty parts powdered edible gum and a small amount of a cereal product.

1,063,482. ENGINE-VALVE. JAMES P. WALSH, Marengo, Iowa. Filed Jan. 14, 1911. Serial No. 602,661. (Cl. 136—1.)

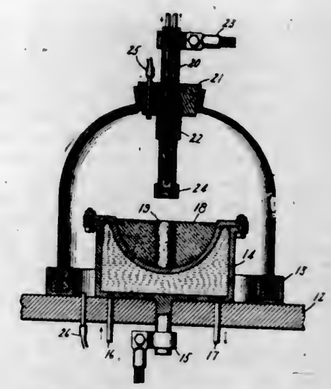


In combination with a cylinder having an inlet, outlet and an exhaust between the inlet and outlet, a valve in said cylinder composed of two spaced and connected triangular end members, a cover in the cylinder having its interior of triangular cross-section, the rear side wall of said cover being formed with three chambers arranged so that one of same alines with the inlet, another with the outlet and the remaining one with said exhaust of the cylinder, each of said chambers extending from a point adjacent the apex of the triangular cover at the rear side wall thereof through the base of the said rear side wall of said cover, the front side wall of the cover being turned downwardly and seating on the cylinder, a bar at the apex of said valve end members that conformably engages in the apex of the cover, and a second bar at the lower front end of the valve end members that engages the cylinder, the front side wall of the cover and said downturned portion thereof.

1,063,483. REFRACTORY CONTAINER. EZECHIEL WEINTRAUB, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 11, 1912. Serial No. 690,112. (Cl. 204—64.)

1. An envelop for a furnace operable at temperatures exceeding 1700° C., consisting of a compressed mass of boron nitrid, which is chemically inert and infusible at the highest temperatures obtainable in said furnace.

2. A molded envelop consisting of compressed self-bonded boron nitrid, which is inert, infusible and a substantial non-conductor of electricity at the highest obtainable temperatures.

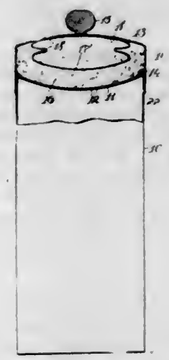


3. The combination of an electrical working conductor adapted to be raised to a high temperature, an insulating envelop therefor consisting of compressed boron nitrid and a metal casing surrounding and supporting said boron nitrid envelop.

4. In a furnace, a container consisting of boron nitrid, means for maintaining an inert environment about said container, and means for heating said container to temperatures exceeding 1700° C.

5. In a heating device, the combination of an electrical working conductor adapted to be raised to a high temperature, an insulating envelop of compressed boron nitrid therefor, a metal casing therefor and means for introducing an inert gas into said casing.

1,063,484. POWDER-BOX. JOSEPH W. WEISMANTEL, Newark, N. J., assignor to Meyer W. Schloss, New York, N. Y. Filed Oct. 14, 1911. Serial No. 654,653. (Cl. 132—11.)



1. A powder box, a cover adapted to be placed on the box, a powder puff arranged to be slid within the cover by the box when the cover is placed on the box, and means for automatically projecting the powder puff from the cover when the cover is removed from the box.

2. A powder box having a perforated top plate, a cover adapted to be placed over the perforated end of the box, a powder puff arranged to slide within the cover and adapted to be engaged by the top plate of the box when the cover is put on the box and to be forced thereby within the cover, and means for projecting the puff from the cover when the cover is removed from the box.

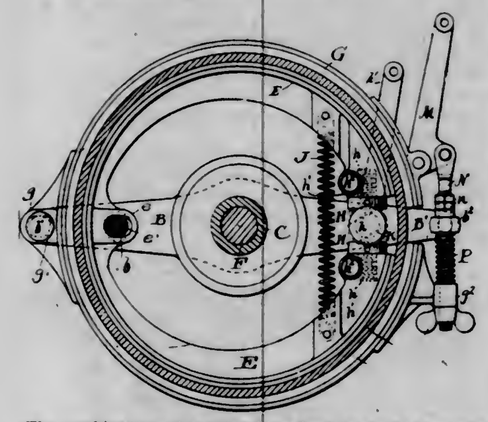
3. A powder box having a perforated top plate, a cover adapted to be placed over the perforated end of the box, a powder puff arranged to slide within the cover and

adapted to be engaged by the top plate of the box when the cover is put on the box and to be forced thereby within the cover, and a spring within the cover for projecting the powder puff from the cover when the cover is removed from the box.

4. A powder box having a perforated top plate, a cover adapted to be placed over the perforated end of the box, a powder puff arranged to slide within the cover and adapted to be engaged by the top plate of the box when the cover is put on the box and to be forced thereby within the cover, and a spring secured to the puff and secured to the cover, said spring acting to limit the outward movement of the puff and adapted to project the puff from the cover when the cover is removed from the box.

5. A dispensing appliance comprising a receptacle, a recessed cover therefor, a brush mounted in said cover to normally protrude out of the mouth of the same, said brush adapted to be driven into the recess in said cover, when the latter is applied to the receptacle by the coaction of said cover, brush and receptacle.

1,063,485. AUTOMOBILE-BRAKE. ROLLIN H. WHITE, Cleveland, Ohio, assignor to The White Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 9, 1908. Serial No. 456,856. (Cl. 21—8.)



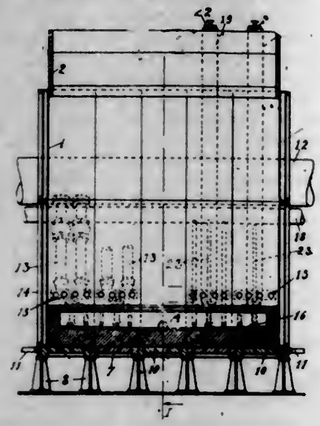
The combination of a rotatable wheel having an annular brake flange, a non-rotatable members adjacent thereto and having a bearing stud mounted thereon, a floating inner split brake band having on the side opposite the split a slotted boss which engages said stud, flanges at the ends of the bearing portion of the stud which embrace the sides of the boss, a rock shaft mounted on a fixture and having a cam which lies between and acts upon the ends of the brake band, and having flanges at its ends which embrace the sides of the band ends, whereby the flanges on the bearing stud and on the cam hold the floating ring against lateral displacement.

1,063,486. METHOD OF OBTAINING VALUES FROM COPPER-BEARING MATERIAL. HOWARD F. WIERUM, Upper Montclair, N. J. Filed Dec. 29, 1911, Serial No. 668,507. Renewed Oct. 30, 1912. Serial No. 728,731. (Cl. 75—62.)

1. The process of operating a blast furnace which comprises smelting a mass containing a matte forming metal therein to form matte and treating this matte in the same receptacle with silicious material by injecting said material directly into the molten body of the matte by fluid pressure.

2. The metallurgical process which comprises smelting a mass containing a matte forming metal to form matte, subjecting this matte to the action of a converting blast while in the same receptacle and introducing fluxing material into the molten body of matte by fluid pressure.

3. The metallurgical process which comprises smelting a mass containing a matte forming metal to form matte, subjecting this matte to the action of a converting blast while in the same receptacle, and introducing fluxing material into the molten body of matte through the instrumentality of said converting blast.

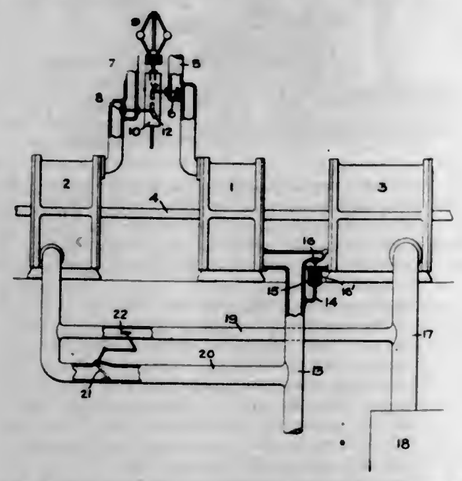


4. The mteallurgical process which comprises smelting a mass containing a matte forming metal to form matte, and simultaneously subjecting said matte to a converting blast laden with fluxing material.

5. The metallurgical process which comprises smelting a mass containing a matte forming metal to form matte and simultaneously subjecting said matte to a converting blast with silicious material.

[Claims 6 to 14 not printed in the Gazette.]

1,063,487. EXTRACTING STEAM FROM TURBINES. JAMES WILKINSON, Boston, Mass., assignor to General Electric Company, a Corporation of New York. Filed Oct. 29, 1912. Serial No. 728,373. (Cl. 121—118.)



1. A steam turbine comprising two high pressure sections and a low pressure section, means for extracting steam for industrial purposes from one of said high pressure sections, and means for automatically connecting said section to the low pressure section when the demand for industrial steam drops to a predetermined amount.

2. A steam turbine compriaing two high pressure sections and a low pressure section, means for supplying steam to said high pressure sections in succession, a pipe for extracting steam from the first of said high pressure sections, and means for automatically connecting said section with the low pressure section when the demand for industrial steam lessens.

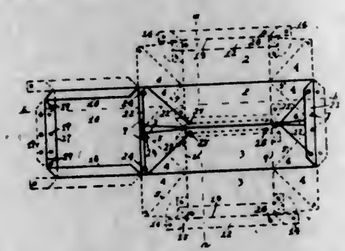
3. A steam turbine comprising two high pressure sections and a low pressure section, speed responsive means for admitting steam to said high pressure sections in succession, a pipe for extracting steam for industrial purposes leading from the first of the high pressure sections, a pipe connecting the second high pressure section with said extracting pipe, a condenser connected to the low pressure section and to the second high pressure section, and means for automatically controlling said pipes.

4. A steam turbine comprising two high pressure sections and a low pressure section, speed responsive means arranged to admit steam to said high pressure sections in succession, a connection between the first high pressure and the low pressure sections, a pipe for extracting steam for industrial purposes leading from said first high pressure section, a valve responsive to pressure in said pipe and controlling the connection to the low pressure section, and a branch pipe between said pipe and the second high pressure section.

5. A steam turbine comprising two high pressure sections and a low pressure section, speed responsive means arranged to admit steam to said high pressure sections in succession, a connection between the first high pressure and the low pressure sections, a pipe for extracting steam for industrial purposes leading from said first high pressure section, a valve responsive to pressure in said pipe and controlling the connection to the low pressure section, a branch extraction pipe between said pipe and the second high pressure section, and a check valve in said branch extraction pipe.

[Claims 6 and 7 not printed in the Gazette.]

1,063,488. COLLAPSIBLE BOX. ALLISON H. WILSON, Hamilton, Ohio. Filed Mar. 28, 1912. Serial No. 686,824. (Cl. 229—41.)

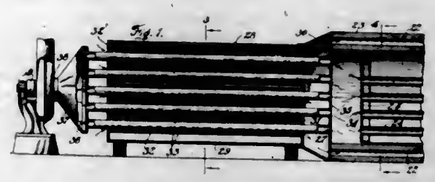


1. A collapsible box comprising a single sheet of suitable material and creased to form a rectangular bottom, encircling walls, folding corners, and flanges on two of the opposing walls, the ends of said flanges being folded and secured to the adjacent corners, and a draw cord movably engaging with the walls and the flanges for moving and maintaining the walls perpendicular to and the flanges parallel with the bottom.

2. A collapsible box comprising a rectangular bottom, four walls extending therefrom, corner folds connecting adjacent walls, flanges extending from two opposite walls and having their ends folded and secured to adjacent corners in such manner that when the box is being collapsed or erected said flanges will be automatically folded toward or unfolded to a perpendicular position from the inner sides of the said corresponding walls.

3. A collapsible box comprising a rectangular bottom, four walls extending therefrom and alternately adapted to fold outwardly and inwardly, folding corners connecting the ends of adjacent walls and secured to the middle portion of the outwardly folding walls, flanges extended from the inwardly folding walls and having their ends folded and secured to adjacent corners in such manner that when the box is being collapsed or erected the flanges will be automatically folded toward or unfolded from the inner face of the respective said walls, and an erecting cord secured to one of the outwardly folding walls and movable through apertures in the other walls for simultaneously moving said walls into an erected position.

1,063,489. BOILER-FURNACE. JOHN F. WOLVIN, St. Clair, Mich. Filed Sept. 18, 1911. Serial No. 649,924. (Cl. 110—28.)



1. In a furnace, the combination of a structure having an outer wall and an inner wall spaced from the outer wall and formed circular in cross section to form a longitudinally extending tubular fire chamber, said structure being also formed with an air chamber at its forward end into which the forward end of the fire chamber and air space between said walls open, and an expansion chamber at the rear end of the fire chamber which is of greater diameter than said fire chamber, baffles extending across the fire chamber near the rear end thereof, a tubular boiler inclosed within the structure in longitudinal axial alinement with the fire chamber, a suction device connected to the rear end of the structure to induce a flow of air through the fire chamber and expansion chamber and boiler, a fluid supply pipe within the air chamber at the forward end of the structure opening rearwardly into the forward end of the fire chamber, and means for introducing fuel into the fluid entering through said pipe.

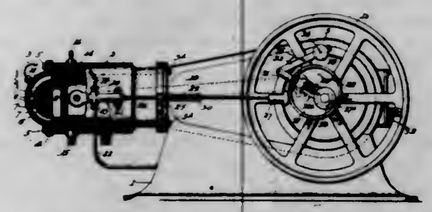
2. In a furnace, the combination of a structure having an outer wall and an inner wall with an air space between said walls, said inner wall being circular in cross section to form a longitudinally extending tubular fire chamber, said structure being also formed with an air chamber at its forward end into which the forward end of the fire chamber and air space open, and a chamber of greater diameter than the diameter of the fire chamber into which the rear end of the fire chamber opens, said outer wall of the structure surrounding the chamber at the rear of the fire chamber, being formed with air passages opening at their forward ends into the air space between the outer wall and the wall of the fire chamber, a tubular boiler within the structure in longitudinal axial alinement with the said chambers, an air heater at the rear of the boiler comprising a series of air inlet tubes communicating at their forward ends with said air passages in the wall of the structure and a series of outlet tubes extending through the air tubes and communicating at their forward ends with a space into which the rear ends of the boiler flues open, a suction device connected to the rear ends of the outlet tubes, a steam pipe in the air chamber at the forward end of the structure opening rearwardly into the fire chamber and communicating at its opposite end with the boiler, and means for introducing fuel into the forward end of the fire chamber.

3. In a furnace, the combination of a structure having an outer wall and an inner wall which is circular in cross section with an air space between said walls, said inner wall forming a longitudinally extending fire chamber, said structure being formed with an air chamber at its forward end into which the forward end of the fire chamber and air space open and formed with a chamber into which the rear end of the fire chamber opens forming an expansion chamber which is circular in cross section and which is surrounded by an extension of the outer wall of the structure which wall is formed with a series of air passages communicating at their forward ends with the air space surrounding the fire chamber, a tubular boiler surrounded by the extension of the outer wall of the structure formed with the air passages, an air heater at the rear of the boiler having outlet tubes communicating at their forward ends with the boiler flues and having air tubes communicating at their forward ends with the air passages in the wall of the structure, a suction fan for drawing the air from the outlet tubes, a steam pipe in the air space surrounding the fire chamber and

extending into the air chamber at the forward end of the structure with its rearwardly flaring end opening into the forward end of the fire chamber and communicating at its opposite end with the boiler, and means for feeding fuel into the steam entering through said pipe.

4. In a furnace, the combination of a structure having an outer wall, an inner wall forming an air space between them and a longitudinal fire chamber, said structure being also formed with an air chamber at its forward end into which said fire chamber opens and with which said air space is in open communication and with an expansion chamber at the rear of and in axial alinement with said fire chamber, a tubular boiler within the structure in longitudinal alinement with the fire chamber with its tubes opening at their forward ends into said expansion chamber, a plurality of spaced baffles extending across the fire chamber near its rear end, a baffle extending across the expansion chamber adjacent to the forward end of the boiler, a suction device for drawing air from the fire chamber through the expansion chamber and boiler flues, and means opening into the forward end of said fire chamber for blowing fuel into said chamber.

1,063,490. LIQUID-FUEL-OIL-FEEDING GOVERNOR FOR INTERNAL-COMBUSTION ENGINES. JAMES I. WOOD, Denver, Colo. Filed Apr. 18, 1911. Serial No. 621,818. (Cl. 123—140.)



1. In an automatic governing mechanism for internal combustion engines, the combination with a cylinder, the piston, its coöperating crank shaft and fly wheels, and the pump and its pump rod and coöperating mechanism secured to the side of said cylinder, one of the said fly wheels being provided with a flattened reduced hub portion, of an eccentric disk provided with an oblong slot slidably mounted on the flattened reduced portion of said fly wheel, an expansive spring between the end of said elongated aperture and the hub of said fly wheel, arranged to normally hold said disk at the limit of its eccentric throw, a link pivotally secured at one end to said disk, a lever pivotally secured intermediate of its ends to one of the spokes of said fly wheel, and pivotally secured at its opposite end to the opposite ends of said link, and a weight slidably mounted on and adjustably secured to said lever, said pump being arranged to engage the peripheral surface of said sliding eccentric disk.

2. In a governing mechanism for internal combustion engines, a fly-wheel having a flattened hub portion, an eccentric comprising a shallow cylinder having a rectangular slot in its bottom and slidably mounted on said hub portion, means for yieldingly maintaining the cylinder in its eccentric position, a weighted member pivotally mounted on said fly-wheel and adapted as moved by centrifugal force to move said eccentric against the action of said yielding means, and a fuel pump controlled by said eccentric.

3. In a governing mechanism for internal combustion engines, a fly-wheel having a flattened reduced hub portion, a shallow cylinder having a rectangular slot in its bottom and slidably mounted on said hub portion, a spring for yieldingly maintaining the cylinder in an eccentric position, a removable plate for securing the eccentric to said hub portion in its slidable relation, a weighted member pivotally mounted on said fly-wheel and adapted as moved by centrifugal force to move said eccentric against the action of said spring, and a fuel pump controlled by said eccentric.

1,063,491. COLLAPSIBLE CORE. JOHN YEMIKER and FREDERICK S. STILES, Akron, Ohio, assignors to The Faultless Machine and Manufacturing Company, Akron, Ohio, a Corporation of Ohio. Filed May 6, 1912. Serial No. 695,554. (Cl. 18—45.)



1. A collapsible core, including a plurality of separable segmental sections adapted to abut against each other to produce a circular body and provided at their inner edges with flanges forming an annular bead, said bead being provided on one side with an annular shoulder, a mandrel mounted within the circle of said bead and engaging the latter, a clamping ring engaging the shouldered side of said bead and formed with a flange engaging said shoulder, said ring being adapted to be contracted around said shoulder, and fastening devices for securing the clamping ring to the bead.

2. A collapsible core for the purpose specified, including a plurality of separable segmental sections adapted to abut at their ends to produce a circular body, said sections being formed at their inner edges with segmental flanges designed to form an annular bead, a mandrel fitting within the circle of said bead and engaging the latter, the bead being formed on one side with an annular under cut shoulder, a split clamping ring engaging the shouldered side of said bead and formed with an under cut flange engaging with the under cut shoulder of the bead, the clamping ring being adapted to be contracted around the shoulder, and fastening devices for securing the ends of the clamping ring to the bead.

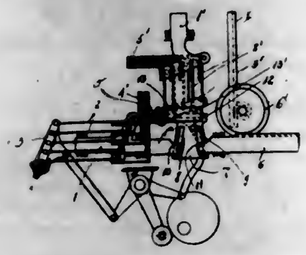
3. A collapsible mold, for the purpose specified, including a plurality of separable segmental sections adapted to abut at their ends to form a circular body, said sections being formed at their inner edges with segmental flanges designed to produce an annular bead, the bead being formed on one side with an inwardly facing annular shoulder, a mandrel fitting within the circle of the bead and engaging the latter and formed on one side with a flange engaging said shoulder, a clamping ring engaging one side of said bead and adapted to draw the sections together, and means for connecting the clamping ring to the bead.

4. A collapsible core, for the purpose specified, including a plurality of separable segmental sections designed to abut at their ends to produce a circular body, said sections being formed at their inner edges with segmental flanges designed to produce an annular bead, the bead being formed on one side with an inwardly facing annular shoulder and with an outwardly facing annular shoulder, a mandrel fitting within the circle of the bead and engaging the latter and formed at one side with a flange engaging the inwardly facing annular shoulder, a clamping ring engaging one side of the bead and formed with a flange engaging the outwardly facing annular shoulder and adapted to be contracted thereon, and means for fastening the clamping ring to the bead.

5. A collapsible core for the purpose specified, including a plurality of separable segmental sections adapted to abut at their ends to produce a circular body, the sections being formed at their inner edges with segmental flanges designed to produce an annular bead, the bead being formed with an inwardly facing annular shoulder and with an outwardly facing annular shoulder, a mandrel fitting within the circle of the bead and engaging the latter and formed with a flange engaging the inwardly facing shoulder, a clamping ring engaging one side of said bead and formed with a flange engaging the outwardly facing shoulder and adapted to be contracted thereon, and fastening devices for securing the clamping ring to the bead.

[Claim 6 not printed in the Gazette.]

1,063,492. JACQUARD EMBROIDERING-MACHINE. ROBERT ZAHN, Plauen, Germany. Original application filed Feb. 5, 1910, Serial No. 542,305. Divided and this application filed June 17, 1912. Serial No. 704,105. (Cl. 112—7.)



1. In an automatic embroidery machine the combination with a driven member and allotting members connected therewith, of a mechanism for combining the various movement of said allotting members and comprising an intermediate member provided with oblique guides and movable parallel to the direction of movement of the driven member, said intermediate member being journaled in one of the allotting members with which it is movable in a transverse direction relative to said driven member.

2. In an automatic embroidery machine, the combination with jacquard controlled horizontal and vertical allotting members and a driven member, of a mechanism for combining the different movements of said allotting members and comprising an intermediate member between said allotting members and said driven member having slots at an acute angle with respect to each other, blocks carried by one of said allotting members and by said driven member and engaging said slots, and a connection between said intermediate member and said other allotting member, whereby the intermediate member is caused to move transversely to the first named allotting member and driven member to draw the same together or apart and which permits the said intermediate member to move parallel to the said first named allotting member and said driven member.

1,063,493. CHAIN-LINK. WILLIAM P. ALLEN, Little Rock, Ark. Filed Aug. 7, 1911. Serial No. 642,764. (Cl. 74—32.)



1. A chain comprising links and pivots connecting them, said pivots each comprising two portions, one eccentric to the other, said portions engaging the connected ends of adjacent links, respectively, and means for securing the pivots against rotation in one of the links.

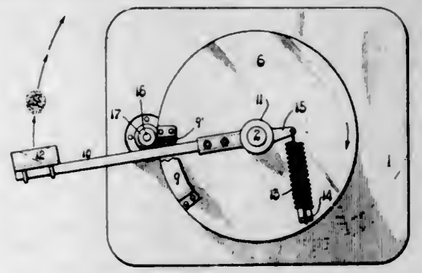
2. A chain comprising links and pivots connecting them, said pivots each comprising two portions, one portion being formed regularly about an axis, the other portion being of circular cross section eccentric to said axis, said portions engaging the connected ends of adjacent links, respectively, and the links being adapted to hold the regularly formed portions of said pivots against rotation.

3. A sprocket chain comprising links each of which consists of side bars and a cross bar connecting them at one end, link pivots each consisting of two portions one eccentric to the other, the cross bar of each link being recessed to receive one portion of a link pivot and the side bars being each apertured at the other end of the link to receive the other portion of the link pivot, and means for securing one portion of the pivot against rotation in the link.

4. A sprocket chain comprising links each of which consists of side bars and a cross bar connecting them at one end, the other end of each side bar being apertured to receive a pivot, a pair of link pivots each comprising two portions, one portion being formed regularly about an axis and the other portion being of circular cross section eccentric to said axis, the cross bar being recessed at both ends to receive the said regularly formed portions of the pivots, and the apertures in the side bars being adapted to receive the circular portions of the pivots, the link pivots being axially apertured, and a tie bolt passing through said axial apertures for securing the pivots in place.

5. A sprocket chain comprising links each of which consists of side bars and a cross bar connecting them at one end, the other end of each side bar being apertured to receive pivots, link pivots, each consisting of a tapered shank, a circular head eccentric thereto, a polygonal shoulder formed regularly about the axis of the shank adjacent to the head, the cross bar of each link being recessed to receive said shank and shoulder, the shoulder recess in said cross bar being formed to prevent rotation of the polygonal shoulder in the link and the apertures in the side bars being each adapted to receive the circular head of a pivot, each pivot being axially apertured, and a tie bolt passing through said axial aperture into the cross bar for securing the pivot in place.

1,063,494. AUTOMATIC SAMPLING-MACHINE. JOHN O. BARDILL, Herculaneum, Mo. Filed Dec. 11, 1911. Serial No. 664,942. (Cl. 73—21.)



1. In an automatic sampling machine, a driver, a sweep coöperable with said driver and movable independently thereof, said sweep being provided with a cutter whereby an approximate right angled section may be removed from a stream of material, means for temporarily holding said sweep in restraint, and means for imparting an impulse to said sweep for sample gathering action.

2. In an automatic sampling machine, a rotatable driver, a sweep coöperable with said driver and pivotally movable independently thereof, said sweep being provided with a cutter whereby an approximate right angled section may be removed from a stream of material, means for temporarily holding said sweep in restraint, and means for imparting an impulse to said sweep for sample gathering action.

3. In an automatic sampling machine, a driver, a sweep movable with said driver, means for temporarily holding said sweep in restraint during movement of said driver, and means for actuating said sweep for sample gathering action after it is freed of restraint.

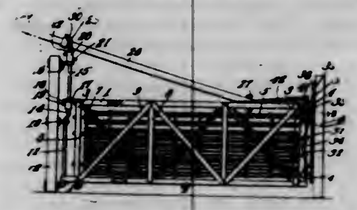
4. In an automatic sampling machine, a driver, a sweep coöperable with said driver, said sweep being provided

with a cutter whereby an approximate right angled section may be removed from a stream of material, means for temporarily holding said sweep in restraint during movement of said driver, and means for actuating said sweep for sample gathering action after it is freed of restraint.

5. In an automatic sampling machine, a driver, a sweep movable with said driver, means for temporarily holding said sweep in restraint during movement of said driver, and means for actuating said sweep for sample gathering action after it is freed of restraint; said last named means being put in condition for action during the restraint of said sweep.

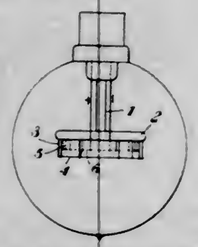
[Claims 6 to 12 not printed in the Gazette.]

1,063,495. GATE. HARVEY H. BELL, Rochester Minn. Filed Jan. 13, 1912. Serial No. 671,062. (Cl. 39—14.)



The combination with a post, of a pivot rod connected thereto and having an offset upper portion, a gate mounted to swing upon the rod and its offset portion, a combined brace and sweep connected to the gate, a guide swiveled on the pivot rod and slidably engaged by the sweep, means adjustably mounted on the sweep and coöperating with the guide for limiting the longitudinal movement of the sweep in one direction, and means for actuating the sweep to swing the gate.

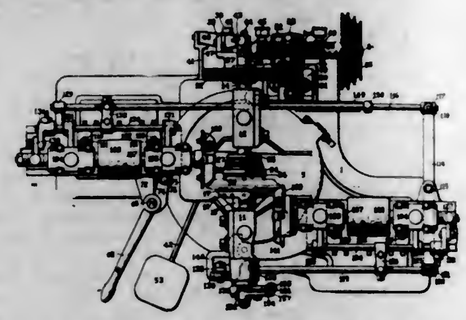
1,063,496. ELECTRIC INCANDESCENT LAMP. EMILE GABRIEL ROYER, Paris, France, assignor to Société Anonyme "Oriona," Brussels, Belgium. Original application filed Feb. 4, 1911, Serial No. 606,605. Divided and this application filed Sept. 19, 1912. Serial No. 721,234. (Cl. 176—39.)



An electric incandescent lamp comprising a bulb, a cap onto said bulb, a filament holder secured by one of its ends onto said cap, an extension of the opposite end of said holder, two sets of hooks of different lengths fixed onto said extension and a filament on each of said sets of hooks, both said filaments being secured in alternate positions in two horizontal planes or layers at different levels in such a manner that in vertical projection each filament portion of the upper plane of filaments is arranged substantially between every two filament portions of the lower plane of filaments.

1,063,497. BARREL-HEAD-SHAPING MACHINE. EDWIN F. BEUGLER, Buffalo, N. Y., assignor to E. & B. Holmes Machinery Company, Buffalo, N. Y., a Corporation of New York. Filed Feb. 23, 1912. Serial No. 679,411. (Cl. 147—40.)

1. In a machine of the class described, a machine frame having a low base of an elongated angular form provided with a short central raised portion, and vertical supporting portions projecting up from the opposite ends of the base, cutter mechanisms supported in parallel non-alined position from the vertical supporting mechanism and clamping mechanism pivotally mounted on the short central raised portion of the machine frame and in interposed position between the cutter mechanisms.



2. In a machine of the class described, two diagonally opposed cutter mechanisms having cutters in separated parallel planes constructed and arranged to cut on opposite sides of the peripheral edge of the work and work supporting mechanism located between said opposed cutter mechanisms and adapted to be moved to simultaneously bring the work in cutting position with both cutter mechanisms.

3. In a machine of the class described, two diagonally opposed cutter mechanisms having cutters in separated parallel planes constructed and arranged to cut on opposite sides of the peripheral edge of the work and at points diagonally opposite each other and work supporting mechanisms located between said opposed cutter mechanisms and adapted to be moved to simultaneously bring the work in cutting position with both cutter mechanisms.

4. In a machine of the class described, two diagonally opposed cutter mechanisms having cutters in separated parallel vertical planes constructed and arranged to cut on opposite sides of the peripheral edge of the work and work supporting mechanism located between said opposed cutter mechanisms and adapted to be moved horizontally in a curved path to simultaneously bring the work in cutting position with both cutter mechanisms and to be rotated slowly while in said cutting position.

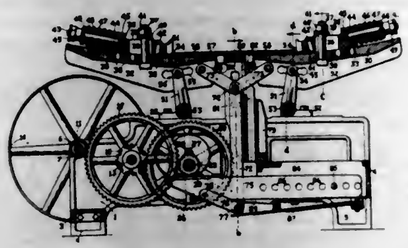
5. In a machine of the class described, a machine frame having a low base provided with a central raised portion and comparatively high vertical end extensions arranged out of longitudinal alinement with other, work supporting mechanism having a swing table pivotally mounted on the central raised portion, opposed longitudinally alined shafts journaled in the swing table and carrying clamping members at their inner ends and cutter mechanisms each mounted on one of the vertical end extensions.

[Claims 6 to 14 not printed in the Gazette.]

1,063,498. STAVE-BENDING MACHINE. EDWIN F. BEUGLER, Buffalo, N. Y., assignor to E. & B. Holmes Machinery Company, Buffalo, N. Y., a Corporation of New York. Filed Apr. 24, 1912. Serial No. 692,889. (Cl. 144—257.)

1. In a machine of the class described, a machine frame, two opposed stave gripping members pivotally linked to the frame between which a stave is adapted to be clamped, each of said stave gripping members being composed of a main block, a slide block slidably mounted on the main block and provided with a rectangular opening, an anchor block fitted in the rectangular opening in the slide block and bolted to the main block; said anchor block being considerably shorter in length than the rectangular opening, and a spring device fastened to the anchor block and connected to the slide block for cushioning said slide block.

2. In a machine of the class described, a machine frame, two opposed stave gripping members between which a stave is adapted to be clamped, each of said stave gripping members consisting of a main block pivotally linked to the machine frame, and a spring mounted slide block on said main block, a spring cushion connecting the stave gripping members, a middle stave gripping member extending between and connected to the stave gripping members, and means for tilting the stave gripping members.

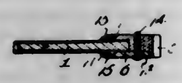


3. In a machine of the class described, a machine frame, two opposed stave gripping members between which a stave is adapted to be clamped, each of said stave gripping members consisting of a main block pivotally linked to the machine frame, and a spring mounted slide block on said main block, a middle stave gripping member extending between and connected to the stave gripping members, a spring cushion extending between and connected to the stave gripping members below the middle stave gripping member, and means for tilting the stave gripping members.

4. In a machine of the class described, two opposed stave gripping members each having a main block and a slide block mounted on the main block, means connected to the main blocks for tilting said members, and a spring cushion device extending between and pivoted at its ends to the main blocks of said stave gripping members.

5. In a machine of the class described, two opposed stave gripping members each having a main block and a slide block mounted on the main block, means connected to the main blocks for tilting said members and a spring cushion device consisting of a slide socket pivoted to the main block of one member, a screw socket pivoted to the main block, a bar having one end slidably fitted in the slide socket and the opposite end screwed in the screw socket and a cushioning spring on said bar.

1,063,499. EYEGLASSES. CHARLES M. BLACKFORD, Trenton, N. J. Filed Jan. 24, 1912. Serial No. 673,037. (Cl. 88—47.)

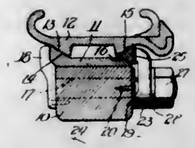


1. In a device of the class specified, the combination with a lens, of a semi-spherical knob permanently cemented on the surface thereof and projecting therefrom, and a detachable mounting embodying a socketed portion and means for mechanically retaining the same in relation to said knob and permitting separation between the knob and mounting.

2. In a device of the class described, the combination with a lens, of semispherical knobs permanently cemented on opposite sides thereof and projecting therefrom, and a mounting separable and embodying relatively movable clamping members provided with oppositely lying socketed portions to receive the knobs on the lens, and means for mechanically retaining the members of the mounting in fixed relation to said knobs.

3. The combination with a lens having permanently attached knobs projecting from the opposite sides thereof, of a mounting for the purpose specified, embodying two lens-engagiug members socketed to receive said knobs one of which members comprises a lens brace, a bridge seat, and a shank connecting the brace and seat, the other member having spaced angular arms which straddle said shank, and a fastener inserted through both members between the lens brace and bridge seat.

1,063,500. DEMOUNTABLE VEHICLE-RIM. PERCY B. BOSWORTH, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed July 5, 1911. Serial No. 637,030. (Cl. 152—21.)



1. A vehicle wheel having a demountable rim, and means for securing the same in place including a clamp locking plate secured to the wheel, and a clamp movable toward and from the side of the wheel rim, said clamp and its locking plate having interfitting projecting and recessed portions to prevent relative turning thereof.

2. A vehicle wheel having a demountable rim and means for securing the same in place including a clamp locking plate secured to the wheel, and a clamp operatively associated therewith, said clamp and its locking plate having separable alternately engaging interfitting projecting and recessed portions to prevent relative turning thereof first when clamping the rim in place and second when out of clamping position respecting the rim.

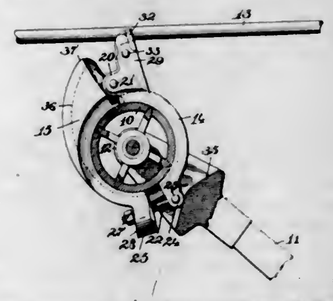
3. In a vehicle wheel, the combination of a demountable rim, a rotatable clamp for holding said rim in position, and a projection on the inner face of said clamp adapted to engage a suitable depression in said wheel, whereby said clamp is prevented from rotating when rotated away from clamping relation to the demountable rim, substantially as described.

4. In a vehicle wheel, the combination with a felly, of a demountable tire rim, a rotatable clamp for securing said rim in position on said felly, said clamp having a projection thereon adapted to engage any of a number of suitable depressions associated with said felly, whereby said clamp is maintained in any one of a plurality of adjusted positions, substantially as described.

5. In a vehicle wheel, the combination of a felly, a demountable tire rim, a retaining ring for holding said rim in position, a rotatable clamp adapted to engage said retaining ring, said clamp having a projection thereon, and a clamp lock between said clamp and said felly, said clamp lock having a depression adapted to be engaged by the projection on said clamp, whereby the latter is prevented from rotating when in an adjusted position, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,063,501. SLEET-SCRAPER FOR TROLLEYS. MICHAEL J. BRENNAN, Tompkinsville, N. Y. Filed July 27, 1911. Serial No. 640,761. (Cl. 191—62.)



1. A sleet remover for trolleys comprising a device having means thereon for engaging a trolley wire to scrape it,

the device having a portion of its surface formed to slide on the trolley wire, the scraping and sliding being accomplished by governing the direction of movement of the device on the wire, means for securing the device to a trolley-wheel, and means on the device for engaging the support of the trolley-wheel for limiting the swing of the device.

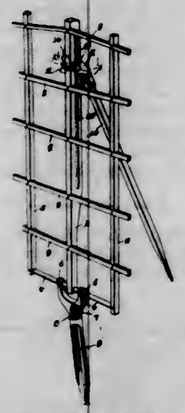
2. The combination of a trolley-wheel and its wire, with a sleet remover arranged to swing on the trolley-wheel, a scraper on the sleet remover, the sleet remover having a grooved portion to engage the wire and slide thereon, the remover being adapted to swing to bring the scraper and the groove alternately in engagement with the trolley wire by a forward or backward movement of the remover, respectively, and means for limiting the swinging of the remover.

3. The combination of a trolley-wheel, and a trolley wire, with a sleet remover consisting of two members, means for clamping the members on the trolley-wheel, a scraper on one member, the second member having a groove in its periphery, the periphery being eccentric to the trolley-wheel, and means for limiting the swinging movement of the remover with the trolley-wheel.

4. The combination of a trolley-wheel, and a trolley wire, with a sleet remover consisting of two members, means for clamping the members on the trolley-wheel, a scraper on one member, the second member having a groove in its periphery, the periphery being eccentric to the trolley-wheel, the portion of the grooved periphery farthest removed from the trolley-wheel being adjacent to the scraper, and means for limiting the swinging of the remover with the trolley-wheel.

5. The combination with a trolley-wheel, its support and a trolley wire, with a sleet remover, consisting of a scraping member and a sliding member, means for detachably securing the members on the trolley-wheel, and a scraper on the scraping member, the sliding member having its outer edge eccentric to the trolley-wheel, the periphery being grooved, the trolley support and the remover having co-acting means for limiting the swing of the remover so as to hold either the scraper or groove in contact with the trolley wire.

1,063,502. VINE-TRELLIS. JOHN B. BRYAN, Downers Grove, Ill. Filed Sept. 21, 1912. Serial No. 721,629. (Cl. 47—12.)



1. A vine trellis comprising a frame; an anchoring post adapted to be driven into the ground; a tiltable rotatable connection between said post and the base of said frame; and means for locking said frame in positions of tilting and rotary adjustment, substantially as described.

2. A vine trellis comprising a frame; an anchoring post adapted to be driven into the ground; a tiltable rotatable connection between said post and the base of said frame; and means adapted to pierce the ground for locking said frame in positions of tilting and rotary adjustment, substantially as described.

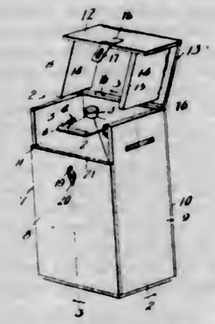
3. A vine trellis comprising a frame; an anchoring post adapted to be driven into the ground; a tiltable rotatable connection between said post and the base of said frame; and a member having one end pivotally connected with said member and having its other end pointed for piercing the ground for locking said frame in positions of tilting and rotary adjustment, substantially as described.

4. A vine trellis comprising a frame; an anchoring post adapted to be driven into the ground; a tiltable rotatable connection between said post and the base of said frame; and a frame having one end pivotally and longitudinally adjustably connected with said frame and having its other end pivoted for piercing the ground, for locking said frame in positions of tilting and rotary adjustment, substantially as described.

5. A vine trellis comprising a frame; an anchoring post adapted to be driven into the ground; a tiltable rotatable connection between said post and the base of said frame; and an elongated brace bar at one side of said frame having one end adjustably secured to said frame by means of a bolt passing through an elongated slot provided in said frame, the opposite end of said bar being pointed for piercing the ground, substantially as described.

[Claim 6 not printed in the Gazette.]

1,063,503. INCASED SHIPPING-CAN FOR OIL AND OTHER FLUIDS. ALFRED H. BUCKLEY, Philadelphia, Pa., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 14, 1910. Serial No. 543,650. (Cl. 220—138.)

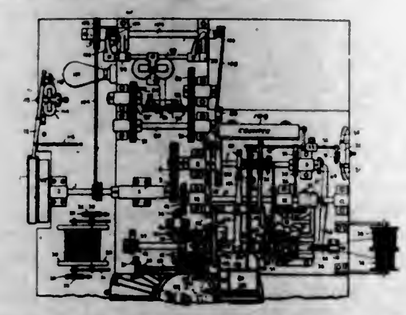


1. An article of manufacture of the character described comprising, in combination: a sheet metal can having a tapered top and a pouring nozzle: and a case provided with a hinged lid and entirely inclosing the can and its nozzle, said lid being free from engagement with the nozzle when closed and having a rigid member fixedly secured thereto which is adapted to engage the tapered top of the can at a point near the junction of said top with the body portion to thereby hold the can firmly in position when the lid is closed and prevent the nozzle from coming in contact with the lid when the can is inverted, substantially as specified.

2. An article of the character described comprising, in combination: a sheet metal can having a tapered top and pouring nozzle; and a case having a hinged lid and entirely inclosing the can and its nozzle, the lid being free from engagement with the nozzle when in closed position, said lid being provided with a pair of parallel depending cleats fitting inside the case on opposite sides of the can nozzle and engaging the tapered top of the can at points adjacent the junction of the top with the body portion to thereby hold the can firmly in position without danger of movement when the lid is closed and preventing the nozzle from coming in contact with the lid when the can is inverted, the can being freely removable from the case when the lid is in open position, substantially as specified.

3. An article of the character described comprising, in combination: a sheet metal can having a top and pouring nozzle; and a case having a hinged lid and entirely inclosing the can and its nozzle, said lid being free from engagement with the nozzle when in closed position and having secured thereto rigid depending cleats fitting inside the case and engaging the top of the can on opposite sides of the nozzle to hold the can firmly in position within the case when the lid is closed to thereby prevent the nozzle from coming in contact with the lid when the can is inverted, said cleats being movable with the lid to thereby permit the can to be readily removed from the case when the lid is in opened position, substantially as specified.

1,063,504. WELDING-MACHINE. WILLIAM R. BURROWS, Newark, N. J., assignor to General Electric Company, a Corporation of New York. Filed Oct. 12, 1904. Serial No. 228,218. (Cl. 78—82.)



1. In a wire welding machine, the combination of a feed mechanism for feeding a wire, a heater mounted adjacent the path of said wire and in a position to render the end of said wire plastic, a regulator for varying the effect of said heater on the wire, a second feeding mechanism for feeding wire to bring its end into engagement with the end of the wire fed by the first feeding mechanism, and common operating means for actuating said first feeding mechanism to feed the wire, then actuating said regulator to reduce the effect of said heater, and finally actuating said second feeding mechanism while the end of the wire fed by said first feeding mechanism is still plastic.

2. In a wire welding machine, the combination of feeding mechanism for feeding a wire, a burner mounted to direct its flame against said wire, a regulator for varying the effect of said flame on said wire, a second feeding mechanism for feeding a second wire into contact with the first, and common operating means arranged to actuate the first feeding mechanism and regulator and the second feeding mechanism in sequence.

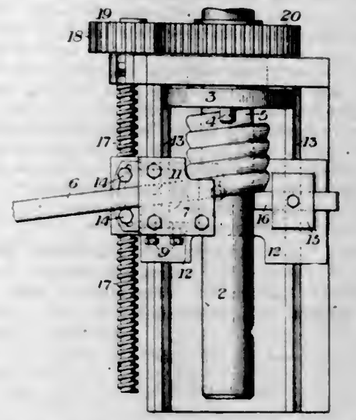
3. In a wire welding machine, the combination of two adjacent feeding mechanisms for feeding wires into engagement with each other at a point between said mechanisms, a burner mounted between said mechanisms to raise one of said wires to welding temperature at said point, a valve for raising and lowering the flame from the burner, a driving shaft, and connections from the shaft to said feeding mechanisms and said valve for actuating one feeding mechanism, lowering the flame and actuating the other feeding mechanism in sequence.

4. In a wire welding machine, the combination of a heater, a feeding mechanism adapted to be actuated to advance the end of a wire into the heater to soften the end of the wire, a second feeding mechanism for feeding a second wire into the softened end of the first mentioned wire, a regulator for varying the effect of the heater on said first mentioned wire, and common operating means for actuating said feeding mechanism and said regulator.

5. In a wire welding machine, the combination with a burner, of feeding mechanism arranged to advance a wire into the flame of the burner and then bring another wire and said first mentioned wire together to effect a weld between them, a regulator arranged to raise and to lower the flame of the burner when actuated, and common operating means for actuating said feeding mechanism and said regulator in definite time relation to each other to cause the flame of the burner to be raised while said first mentioned wire is in the flame and to be lowered before the two wires are brought together.

[Claims 6 to 24 not printed in the Gazette.]

1,063,505. METHOD OF MAKING COILED SPRINGS. CLARENCE P. BYRNES, Sewiskley, Pa. Filed Jan. 23, 1908. Serial No. 412,276. (Cl. 29—173.)

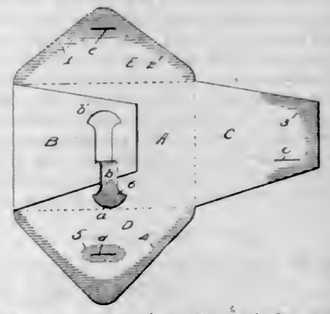


1. The method of making spiral springs having co-acting flanges or projections, consisting in winding a bar of spring steel and of unsymmetrical cross-section into spiral form, and simultaneously changing the cross-sectional shape by the act of coiling; substantially as described.

2. The method of forming coil springs having co-acting coils of irregular cross-section, consisting in winding a spring steel bar of irregular cross-section other than that desired in the final spring and changing the cross-sectional shape of the bar by the act of winding into coil shape; substantially as described.

3. The method of making coil springs, consisting in feeding a spring steel bar of irregular cross-section other than that desired in the final spring through a guide, winding the bar into a spiral and changing its cross-sectional shape after leaving the guide and during the act of winding; subtsantially as described.

1,063,506. SAFETY-ENVELOP. MIRA E. CALDWELL, East Lynn, Mass. Filed Jan. 9, 1913. Serial No. 740,983. (Cl. 229—82.)

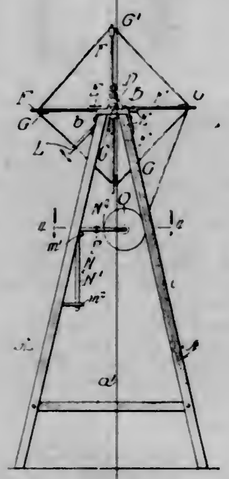


1. A safety envelop, comprising a body portion with two end flaps and an upper and lower side flap, the end flaps being made of a length to lap over each other and one of the end flaps having a transverse tongue cut from the material in the overlapped end portion of the same wholly within its marginal edges and the other end flap having a slit near its lower edge adapted to receive the tongue when overlaid upon the same and the top and bottom side flaps having longitudinal slits near their free ends out of coincidence with each other when folded and

adapted to receive also the tongue to lock all four flaps together by the one tongue of the end flap.

2. A safety envelop, comprising a body portion with two end flaps and an upper and lower side flap, the end flaps being made of a length to lap over each other and one of the end flaps having a transverse tongue cut from the material in the overlapped end portion of the same wholly within its marginal edges and the other end flap having a slit near its lower edge adapted to receive the tongue when overlaid upon the same and the top and bottom side flaps having longitudinal slits near their free ends adapted to receive also the tongue to lock all four flaps together by the one tongue of the end flap, the slits of the top and bottom flaps being spaced away from each other and out of coincidence to expose a portion of the tongue on the back of the envelop, the top and bottom flaps being gummed on each side of their slits and the end flaps being gummed, the one on the inner face of the tongue and the other on the inner face of its marginal edges.

1,063,507. TAPE-SHRINKING MACHINE. ABRAHAM CANTOR, Chicago, Ill., assignor of one-half to Harry Schallman, Chicago, Ill. Filed May 17, 1912. Serial No. 697,970. (Cl. 242—110.)

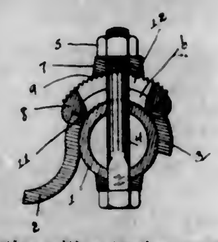


A device for shrinking tape or like material, comprising a frame or standard provided at its top with open bearings, a reel removably supported on said bearings, the same comprising an axle, radial arms, and cross arms connecting said radial arms, one of said cross arms being adjustable inwardly to permit the shrinkage of the tape wound on said reel, and means for rotatably holding a spool in position below and parallel with the reel comprising arms pivoted upon the frame and adapted to engage the ends of the spool, and a spring connecting said arms and acting to constantly draw the arms against the ends of the spool for the purpose of producing frictional resistance to the rotation of the spool and to maintain the tape under tension.

1,063,508. HARROW-TOOTH CLIP. SANFORD L. CLUETT, Hoosick Falls, N. Y. Filed Sept. 19, 1912. Serial No. 721,219. (Cl. 55—36.)

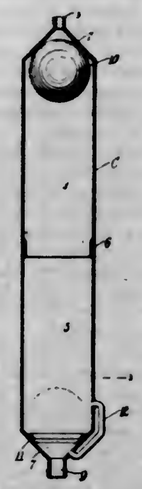
1. The combination with a tooth-supporting shaft; and a screw-bolt projecting therefrom; of a harrow-tooth having a curved shank adjustably mounted upon said shaft; a saddle interlocked with said shank; a nut on the end of said bolt; and a washer interposed between said nut and said saddle, said saddle and said shank being provided with longitudinal slots through which said bolt passes, and said washer and said saddle having serrated surfaces interchangeable in different positions of rotative adjustment of said shank and saddle upon said shaft.

2. The combination with a tooth-supporting shaft; and a screw-bolt projecting therefrom; of a tooth having a curved shank adjustably mounted upon said shaft and provided with a longitudinal slot through which said bolt passes; a saddle superimposed upon the slotted portion of said shank, having inwardly projecting lugs occupying the opposite ends of the slot in said shank and provided with a slot through which said bolt passes; a nut on the end of said bolt; and a washer interposed between said nut and said saddle, said nut and said saddle having curved serrated surfaces adapted to interengage in different positions of rotative ajustment of said shank and saddle upon said shaft.



3. The combination with a tooth-supporting shaft; and a screw-bolt projecting therefrom; of a tooth having a curved shank adjustably mounted upon said shaft and provided with a longitudinal slot through which said bolt passes; a saddle superimposed upon the slotted portion of said shank, having inwardly projecting lugs occupying the opposite ends of the slot in said shank, and having side flanges adapted to embrace between them said shank and provided with a longitudinal slot through which said bolt passes; a nut on the end of said bolt; and a washer interposed between said nut and said saddle, said washer and said saddle having curved serrated surfaces adapted to engage in different positions of rotative adjustment of said shank and saddle upon said shaft.

1,063,509. FLOAT CONTROL. HARRISON TAYLOR CRONK, New York, N. Y. Filed Nov. 23, 1911. Serial No. 661,920. (Cl. 4—5.)



1. In a tank, a water inlet at the top thereof, a water outlet at the bottom thereof, valve seats at the top and bottom of said tank, a single ball float within said tank adapted when the tank is full, to rest against said upper valve seat to close the inlet, said outlet being of relatively larger bore than the inlet, and a valve controlling the passage of water through said outlet, whereby the opening of said valve will cause said tank to empty and position said ball float on said lower valve seat, to close said outlet.

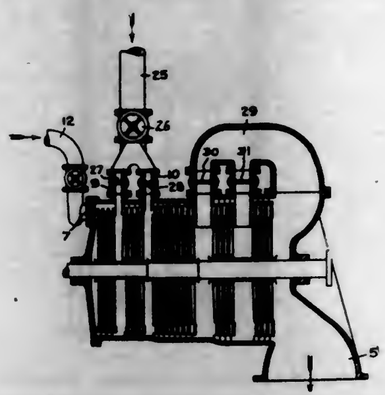
2. In combination, a closed tank continually open to a water supply and having an outlet at its lower end, a float adapted to close said outlet, a continually opened by-pass connecting the tank immediately above said float with the tank immediately below said float, whereby an uninterrupted stream may pass through the tank during the filling of the same.

3. In a cylindrical tank having an inlet at its upper end and an outlet at its lower end, a float valve of a diameter slightly less than the diameter of the tank normally closing said inlet when the tank is filled with water and adapted when the tank is empty, to close said outlet, a ring gasket within said tank adjacent said outlet adapted to carry the float while the tank is being filled, and a by-pass connecting said tank above said gasket with part of the tank below said gasket.

4. A tank having an outlet at the bottom and an inlet at the top thereof, a manually-controlled valve normally closing said outlet, a valve seat adjacent the bottom of said tank, a float closing said inlet when the tank is filled and resting on said seat when the tank is filling, closing fluid communication between the portion of the tank above said seat and the portion below the seat, and a relatively small by-pass connecting the portion above the seat with the portion below the seat, whereby the portion between the valve and the seat will be filled, whereby the float will be unseated to raise and close said inlet.

5. In a tank having an inlet at the upper end and an outlet at its lower end, a float valve normally closing said inlet when the tank is filled and adapted when the tank is empty to close said outlet, and a valve seat adjacent said outlet adapted to carry said float while the tank is being filled, and a by-pass straddling said seat and connecting the part of the tank above with the part of the tank below said seat, placing the portion of said tank below said seat continually in fluid communication with the portion above the same.

1,063,510. STEAM-TURBINE. LUDWIG CUBELIC, Charlottenburg, and GEORG FORNER, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed Dec. 27, 1911. Serial No. 668,044. (Cl. 121—118.)



1. In combination, a steam turbine divided into a plurality of stages, a conduit for admitting high pressure fluid to the turbine, a conduit for admitting low pressure fluid to the turbine, and means for changing the number of active low pressure fluid stages when the turbine is operating on steam supplied wholly or in part by the high pressure conduit.

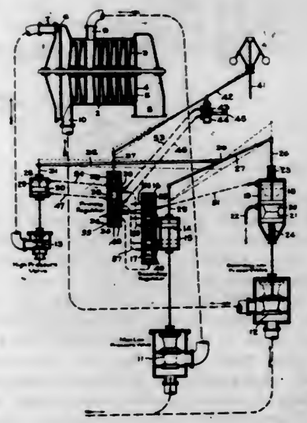
2. In combination, a steam turbine divided into a plurality of stages, conduits admitting high and low pressure motive fluid to the turbine, controlling valves therefor, and valve means for changing the number of active low pressure stages.

3. In combination, a steam turbine divided into a plurality of stages, a conduit admitting high pressure motive fluid to the turbine, conduits admitting low pressure motive fluid to stages of the turbine of different pressures, and valve mechanism for controlling the number of active low-pressure stages.

4. In combination, a steam turbine divided into a plurality of stages, a conduit admitting high pressure motive fluid to the turbine, conduits admitting low pressure motive fluid to stages of the turbine of different pressures, valve mechanism for controlling the passage of fluid through said conduits, and means for cutting out one or more stages when the turbine is operating on the mixed or high pressure plan.

5. In combination, a multi-stage turbine comprising a stage that utilizes high pressure fluid only, one or more stages that normally utilize low pressure but which utilize high pressure fluid only when the turbine is operating on the mixed pressure plan, and stages that normally utilize low pressure fluid but which utilize both low and high pressure fluid when the turbine is operating on the mixed pressure plan, and means for cutting out certain of the low pressure stages when the turbine is operating on the mixed or high pressure plan.

1,063,511. STEAM-TURBINE AND GOVERNING MECHANISM THEREFOR. LUDWIG CUBELIC, Charlottenburg, and GEORG FORNER, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed May 24, 1912. Serial No. 699,389. (Cl. 121—118.)



1. A turbine having a high pressure inlet and an exhaust outlet between which a drop in pressure takes place, low pressure conduits connected to the turbine at points intermediate the inlet and outlet where different pressures exist, and means responsive to an operating condition of the turbine for controlling the flow of low pressure fluid between the turbine and one or another of said conduits.

2. A turbine comprising relatively movable parts for extracting energy from an elastic fluid, and an exhaust outlet, in combination with conduits for supplying low pressure fluid to parts thereof which have different cross-sectional areas of discharge, and means responsive to an operating condition of the turbine to change the admission from one of the conduits to another.

3. A turbine comprising high and low pressure portions, an inlet for the high pressure portion, an inlet for the low pressure portion, an exhaust, and a conduit which admits low pressure fluid to the high pressure portion under certain conditions.

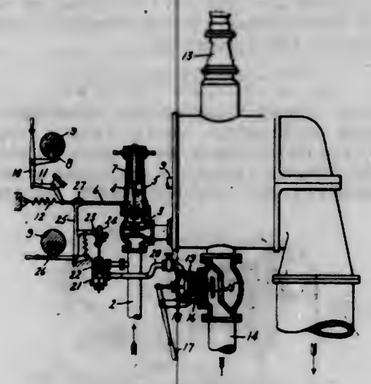
4. A mixed pressure turbine, in combination with a conduit for supplying steam to a given stage for low pressure operation, a conduit for supplying low pressure steam to a stage of the turbine having a smaller cross-sectional area of the working passage than the one first named for mixed pressure operation, a conduit for admit-

ting high pressure steam to a stage having a still smaller cross-sectional area for mixed pressure operation, and means for controlling the conduits.

3. A mixed pressure turbine having a high pressure inlet and an exhaust outlet, in combination with low pressure conduits connected to regions of different pressure therein, high and low pressure valves, and governing means organized and arranged to cause one of the low pressure valves to close and another to open when the supply of fluid from the low pressure source changes.

[Claims 6 to 17 not printed in the Gazette.]

1,063,512. SAFETY DEVICE FOR TAPPED TURBINES. LUDWIG CUBELIC, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 20, 1913. Serial No. 743,097. (Cl. 121—118.)



1. The combination with a tapped turbine, of two governors timed to act in succession, a valve in the extraction pipe, means for closing said valve controlled by the earlier acting governor, and connections whereby the later acting governor will effect the closing of said valve in case the earlier acting governor fails to operate.

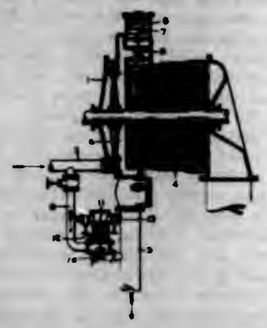
2. The combination with a tapped turbine, of two governors timed to act in succession, a valve in the extraction pipe, means for closing said valve controlled by the earlier acting governor, a throttle valve for the turbine, means for enabling the later acting governor to close said throttle valve, and connections whereby it will also at the same time effect the closing of the valve in the extraction pipe.

3. The combination with a tapped turbine, of two governors timed to act in succession, a valve in the extraction pipe, means for closing said valve by fluid pressure including a pipe conveying steam to said valve from the righ pressure main and a regulator in said pipe, means for tripping said regulator by the earlier acting governor, a throttle valve in the high pressure main controlled by the later acting governor, and a connection between the operative connections of said governors whereby the later acting one will at the same time trip the regulator of the pipe conveying steam to the valve in the extraction pipe.

1,063,513. TAPPED TURBINE. LUDWIG CUBELIC, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 22, 1913. Serial No. 743,550. (Cl. 121—118.)

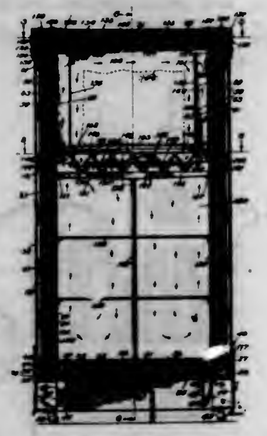
1. A tapped turbine provided with an overflow valve controlling the flow of steam to the low pressure portion of the machine, a valve controlling a supply of high pressure steam to the extraction pipe, and means for regulating the operations of said valves so that the overflow valve will close before the auxiliary valve opens and the latter will close before the former opens.

2. A tapped turbine provided with an overflow valve automatically controlling the flow of steam to the low pressure portion of the machine, an auxiliary valve controlling the supply of high pressure steam to the extraction pipe, means rendering said auxiliary valve responsive to the pressure in the extraction pipe, and means for regulating the effect of such presure on said valve, whereby it will not open until after the overflow valve has closed, and will close before the overflow valve opens.



3. A tapped turbine provided with an overflow valve automatically controlling the flow of steam to the low pressure portion of the machine, an auxiliary valve controlling a branch main leading from the high pressure main to the extraction pipe, a spring-actuated piston for operating said valve, a pipe conveying pressure from the extraction pipe to said piston, and a throttle valve controlling the admission of such pressure.

1,063,514. REFRIGERATOR. FOREST V. DETWILER, Chicago, Ill. Filed June 18, 1909. Serial No. 502,874 (Cl. 62—10.)



1. A sectional refrigerator including independent wall panels constructed of sheet material, one edge of one panel being disposed in closed proximity to one edge of the adjacent panel, and an independent fastening element engaging over said edges for securing the panels together to form unit members.

2. A sectional refrigerator including independent wall panels constructed of sheet materials, one edge of one panel being disposed adjacent one edge of the next adjacent panel, and fastening means engaging over the adjacent edges for securing the panels together.

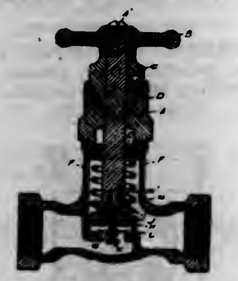
3. A sectional refrigerator including independent wall panels, one edge of one panel being disposed adjacent one edge of the next adjacent panel, fastening clips engaging the adjacent edges for securing the panels together, and means for preventing displacement of the clips.

4. A sectional refrigerator, including independent wall panels, one edge of one panel being disposed adjacent one edge of the next adjacent panel, fastening clips engaging the adjacent edges for securing the panels together, and inter-engaging means on the clip and panel for preventing displacement of the clip.

5. A sectional refrigerator including independent wall panels, one edge of one panel being disposed adjacent one edge of the next adjacent panel, fastening clips engaging the adjacent edges for securing the panels together, the clip and the panel being provided one with an aperture and the other with a cut out portion adapted to enter said aperture for securing the clip against displacement.

[Claims 6 to 56 not printed in the Gazette.]

1,063,515. VALVE. EDWARD H. DONAHOE, Peoria, Ill. Filed Nov. 24, 1911. Serial No. 662,162. (Cl. 137—4.)

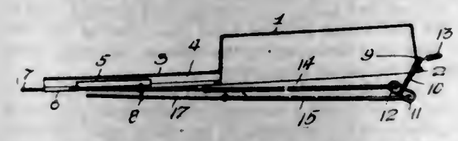


1. In a valve, the combination with the valve and stem thereof, of a passageway therethrough, an adjustable hollow screw provided with a vertical slot through the wall thereof open below and above the valve and adapted for manipulation in said passageway so as to expose a portion of the slot below the main valve seat to permit a small flow through the screw and valve.

2. In a valve, in combination with the valve and stem thereof, of a way therethrough and a hollow screw provided with a vertical slot through the wall thereof open below and above the valve and adapted for manipulation in said way for the purpose of exposing the slot in the screw below the valve to permit a flow therethrough and through the main valve for the purpose of keeping the water in continuous movement.

3. In a valve, in combination with the valve and stem thereof, of a way through the valve stem and a hollow screw provided with a vertical slot through the wall thereof open below and above the valve and adapted for manipulation in said way for the purpose of exposing the slot in the screw below the valve to permit a flow therethrough and through the main valve for the purpose of keeping the water in continuous movement, and means for holding the valve parts together relative to the screw, substantially as shown.

1,063,516. COMBINATION COOKING UTENSIL. LEON S. DUNN and ELISCE GUELFF, Point Marion, Pa. Filed Mar. 29, 1912. Serial No. 687,255. (Cl. 53—5.)

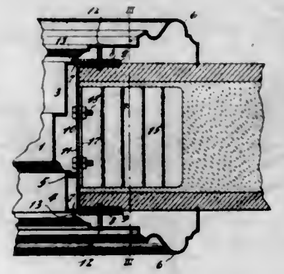


1. A combination cooking utensil comprising a pan, a channel-shaped handle projecting therefrom, a portion of each of the sides of said handle being cut away, rods carried by the sides of said handle, a bar movably mounted upon said rods, said cut away portions of said sides providing clearances for said rods, toasting frames loosely and detachably connected to the front wall of said pan, and handles carried by said frame and adapted to be engaged by said bar whereby the handles are retained in engagement with the handle of the pan.

2. A combination cooking utensil comprising a pan with a handle and further having its front formed with an opening, a T-shaped member having its stem extending through said member and means engaging with said stem for detachably connecting it to said pan, the head of said member formed of a forward and rearward loop, a toasting frame having its forward end connected to said rear loop and provided with a handle, and a toasting frame arranged from the first mentioned frame and having its forward end connected to said forward loop and provided with a handle.

3. A combination cooking utensil comprising a pan with a handle and further having its front formed with an opening, a T-shaped member having its stem extending through said member and means engaging with said stem for detachably connecting it to said pan, the head of said member formed of a forward and rearward loop, a toasting frame having its forward end connected to said rear loop and provided with a handle, a toasting frame arranged from the first mentioned frame and having its forward end connected to said forward loop and provided with a handle, and means carried by the handle of the pan and capable of overlapping the handle of the second mentioned frame for connecting the handle of the frame to the handle of the pan.

1,063,517. HOLLOW METAL DOOR-FRAME AND THE LIKE. ALFRED J. ELLIS, Woodcliff-on-Hudson, N. J., assignor to A. J. Ellis, Inc., a Corporation of New Jersey. Filed Mar. 4, 1911. Serial No. 612,225. (Cl. 189—46.)



1. In a device of the class described, sheet metal buck-forming parts having flanges at the respective sides thereof said flanges being returned to form recesses, jamb sections having flanges adapted to enter the recesses in the buck flanges, moldings, and means for securing said buck-forming parts, jamb sections and moldings together.

2. In a device of the class described, a sheet metal buck-forming member having a flange said flange being returned to form a recess therein, a molding section and a jamb section, one of said sections having a portion thereof adapted to be inserted into the recess in said flange, and common means for fastening said buck-forming part and sections together.

3. In a device of the class described, a sheet metal buck-forming member having a flange said flange being returned to form a recess therein, a molding section and a jamb section, one of said sections having a portion thereof adapted to be inserted into the recess in said flange, and means for fastening said buck-forming part and sections together.

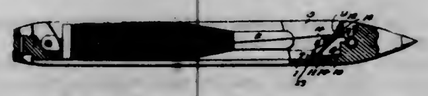
4. In a device of the class described, a sheet metal buck-forming member having a recessed flange, a molding section and a jamb section, one of said sections having a portion thereof adapted to be inserted into the recess in said flange and a uniting device adapted to engage all three of said parts to hold the same together.

5. In a device of the class described, a sheet metal member having a flange laterally projecting from one side thereof, said flange being grooved, a second member insertable into the groove of said flange, a third member

having a flange adapted to bear against one of the two members first mentioned, each of said members having a hole therein, said holes being substantially in alinement when the parts are in assembled relationship, and a uniting device adapted to be inserted into said holes to hold said members together.

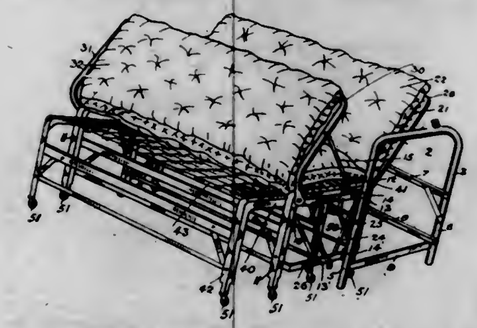
[Claims 6 to 8 not printed in the Gazette.]

1,063,518. TENSION DEVICE FOR LOOM-SHUTTLES. JEROME EVERETT EMERSON, Lockport, N. Y. Filed Mar. 5, 1912. Serial No. 681,706. (Cl. 139—46.)



A tension device for shuttles comprising a member formed of resilient metal, said member including an upstanding portion the terminal of which is disposed between the tension roller of the shuttle and the shuttle eye, said terminal being bent in a direction to partially embrace the tension roller, the member being apertured at the line on which it is bent, the thread passing beneath the roller and through the aperture of the member to the eye of the shuttle.

1,063,519. TWO-MOTION DIVANETTE. BENJAMIN B. ENGLANDER, New York, N. Y., assignor to Englander Spring Bed Company, Brooklyn, N. Y., a Corporation of New York. Filed Jan. 18, 1913. Serial No. 742,823. (Cl. 5—46.)



1. A divanette comprising a stationary section or frame, a pair of sliding sections movable relatively to said stationary section both to extend beyond one side of said stationary section and one sliding section to extend beyond the other, each of said sliding sections including an independent spring and comprising in itself a complete bed structure so that each spring is in every position of its section under tension and in its normal mattress supporting position, and a back hinged to one of said sliding sections and adapted to be supported by the stationary section when the back is in its lowered position.

2. A divanette comprising a stationary section or frame, a pair of sliding sections movable relatively to said stationary section both to extend beyond one side of said stationary section and one sliding section to extend beyond the other, and a reversible section hinged to one of said sliding sections and adapted when reversed to be supported by the other sliding section.

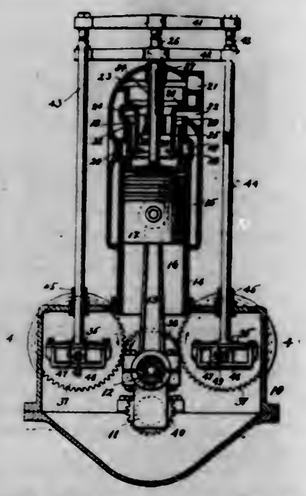
3. A divanette comprising a stationary section or frame, a pair of sliding sections movable relatively to said stationary section both to extend beyond one side of said stationary section and one sliding section to extend beyond the other, a back hinged to one of said sliding sections and adapted to be supported by the stationary section when the back is in its lowered position, and a reversible section hinged to one of said sliding sections and adapted when reversed to be supported by the other sliding section.

4. A divanette comprising a stationary section, a pair of sliding sections movable relatively thereto to extend beyond one side of said stationary section, one of said sliding sections being under the other, a back hinged to one of said sliding sections, and a reversible section hinged to the opposite side of the same sliding section and adapted to be supported by the other sliding section when the structure is extended to form a bed.

5. A divanette comprising a stationary section or frame, a pair of sliding sections movable relatively thereto from one side to the other thereof, one comprising a central sliding section and the other a front sliding section, a back hinged to said central sliding section and adapted to be supported by said stationary section when such back is lowered, a reversible section also hinged to said central sliding section and adapted to be supported by said front sliding section when reversed, and means connecting the reversible section with the front sliding section whereby the latter is shifted on the reversal of said reversible section.

[Claims 6 to 14 not printed in the Gazette.]

1,063,520. INTERNAL-COMBUSTION ENGINE. JUSTUS B. ENTZ, Cleveland, Ohio, assignor to The White Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 11, 1910. Serial No. 566,293. (Cl. 123—78.)



1. In combination in an internal combustion engine, a cylinder, a piston and a movable cylinder head in said cylinder, said cylinder head having a port for the passage of gases to and from the cylinder, and means for shifting said cylinder head so that a small clearance space is provided between the piston and cylinder head at the end of the exhaust stroke of the piston, and a relatively large clearance space is provided at the end of the compression stroke.

2. In combination in an internal combustion engine, a cylinder, a piston and a movable cylinder head working in the cylinder, said cylinder head having a port for the passage of gases to and from the cylinder, a valve coöperating with said port and controlling both the admission and exhaust, and means for shifting said cylinder head so that the piston and cylinder head move toward and then away from each other during the exhaust and compression strokes of the piston respectively.

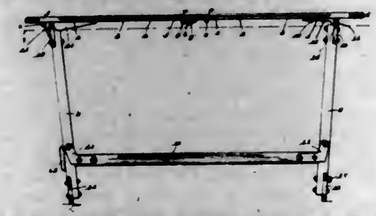
3. In combination, in an internal combustion engine, a cylinder, a piston and a movable cylinder head working in said cylinder and coöperating to provide a small clearance space at the end of the exhaust stroke, and a relatively large clearance space at the end of the compression stroke, said cylinder head having a port for the admission of gases to and exhaust of gases from the cylinder, a valve controlling the admission and exhaust through said port, and means for shifting said cylinder head and valve.

4. In combination in an internal combustion engine, a cylinder, a piston and a movable hollow cylinder head working in said cylinder, said cylinder head having a port for the passage of gases to and from the cylinder, a valve within said cylinder head and coöperating with said port, and means for shifting said cylinder head and valve so that a small clearance space and then a relatively large clearance space is provided between the piston and cylinder head at the end of the exhaust and compression strokes of the piston respectively and so that gases are withdrawn from and then supplied to the cylinder through said port during the exhaust and suction strokes respectively.

5. In combination in an internal combustion engine, a cylinder, a piston and a movable hollow cylinder head working in said cylinder, said cylinder head having a side port for the passage of gases to and from the cylinder, a valve working in said cylinder head and coöperating with said port, and means for shifting said cylinder head and said valve so that said piston and cylinder head move toward each other and the gases are expelled from the cylinder through said port during the exhaust stroke of the piston, and so that said cylinder head and valve move away from each other and an explosive charge is supplied to the cylinder through said port during the suction stroke of the piston.

[Claims 6 to 24 not printed in the Gazette.]

1,063,521. FOLDING TABLE. JOHN H. D. EVERETT, Sault Ste. Marie, Mich. Filed Sept. 7, 1911. Serial No. 648,149. (Cl. 45—116.)



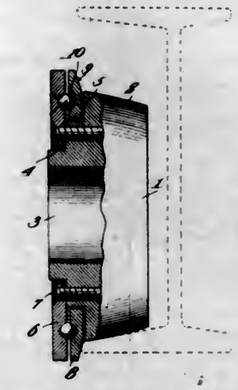
1. In a table, a pair of legs, a longitudinal brace hingedly connected to each of said legs and limiting the outward swing of the upper ends thereof, said legs being provided with enlarged upper ends, a top adapted to rest upon said upper ends, a stop arranged on the under face of said top and adapted to abut the inner face of the upper end of the adjacent leg, means for detachably securing said leg in engagement in said stop, the enlarged upper end of the opposite leg being provided with a recess, and a sliding member arranged upon the under face of said top and adapted to engage in said recess, substantially as described.

2. A table comprising a pair of legs provided with spread feet, transverse members secured to the outer faces of the upper ends of said legs forming enlarged upper ends therefor, a longitudinal brace hingedly connected to said legs and limiting the outward movement of the upper ends thereof, a top, a pair of stops secured to the under side of said top adjacent one end thereof adapted to receive the upper end of the adjacent leg between them and to abut the inner face of the respective transverse member, means for detachably securing said leg and its member in engagement with said stops, the transverse member of the other leg being provided with an aperture, and a sliding member on the under face of said top adapted to engage in said aperture, substantially as described.

1,063,522. BALL-BEARING FLANGED TROLLEY-WHEEL. BION BRADFORD FARNHAM, Kenmore, N. Y. Filed Jan. 4, 1913. Serial No. 740,255. (Cl. 105—149.)

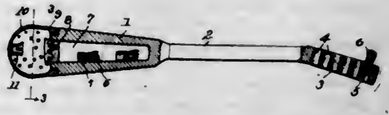
1. In a device of the class described, a wheel provided with a fixed peripheral flange; a projecting ring rotatable upon the wheel, the ring and the flange being provided with coöperating ball races; and a single set of balls engaged in the ball races.

2. A wheel having in one end, communicating annular recesses of different diameters; a flange located in the larger recess; a ring rotatable in the smaller recess; and a securing element connecting the flange with the wheel, between the base of the larger recess and the base of the smaller recess.



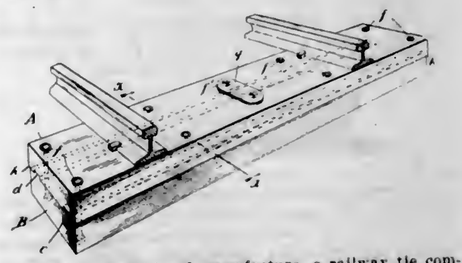
3. In a device of the class described, a wheel having a conical periphery; and a ring journaled for rotation upon the wheel, the ring having a beveled face projecting beyond the conical periphery of the wheel.

1,063,523. TOOTH-BRUSH. WALTER T. FARRAR, Louisville, Ky. Filed May 31, 1911. Serial No. 630,508. (Cl. 15—39.)



A tooth brush having a shank provided with a head disposed at an obtuse angle thereto and having a series of openings therein, which extend through the head from side to side, said openings being internally threaded, externally threaded plugs adapted to be inserted in the openings at either side of the head, and bristles carried by the plugs, said plugs and bristles when inserted in the head from one side terminating short of the opposite side of the head.

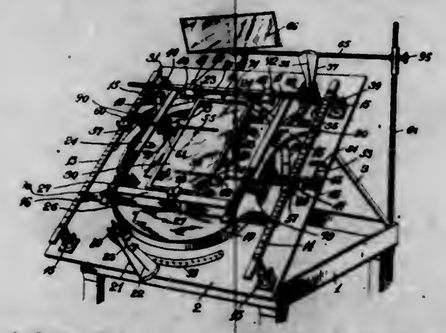
1,063,524. RAILWAY-TIE. JAMES B. FINCH, Superior, Wis. Filed June 9, 1911. Serial No. 632,178. (Cl. 238—1.)



1. As a new article of manufacture, a railway tie comprising an upper portion of hard wood, a groove on the under side of said portion, a lower portion of relatively softer wood, a tongue on the upper surface of said lower portion, and means for securing the portions together.

2. As a new article of manufacture, a railway tie comprising an upper portion of hard wood, a groove on the under side of said portion and extending throughout its entire length, a lower portion of relatively softer wood, a tongue on the upper surface of said lower portion and extending throughout its entire length, and means for securing the portions together.

1,063,525. PRINTING. THOMAS S. FOX, Brooklyn, N. Y. Filed Nov. 16, 1904. Serial No. 232,999. (Cl. 101—162.)



1. In marking apparatus, a marking member and a work supporting member, one of said members above the other, and means for measurably adjusting, rotatably and laterally, either of said members.

2. In marking apparatus, a marking member and a work supporting member, one of said members above the other, and means for measurably adjusting, rotatably and laterally, said work supporting member.

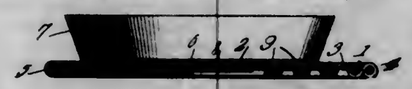
3. In marking apparatus, a marking member, and a work supporting member, one of said members above the other, said marking member provided with marks having definite angular relation, means for relatively rotating the said members and means for imparting relative movement to said work supporting member in a line with said marks.

4. In marking apparatus, a marking member and a work supporting member, one of said members above the other, said marking member provided with marks having definite angular relation, means for relatively moving said members in a rotary manner, means for imparting movement to said work supporting member in a line with said marks, and said members relatively movable laterally.

5. In a marking apparatus, a marking member, and a work supporting member, one of said members above the other, said marking member provided with marks having definite angular relation, means for relatively moving said members in a rotary manner, means for determining the angular relation of said marks upon said marking member to said work supporting member, and means for relatively moving said work supporting member along a determined radial line.

[Claims 6 to 8 not printed in the Gazette.]

1,063,526. HEAT EQUALIZING AND RADIATING PLATE. LOUIS F. FULLER, Girard, Kans. Filed May 2, 1912. Serial No. 694,662. (Cl. 126—215.)

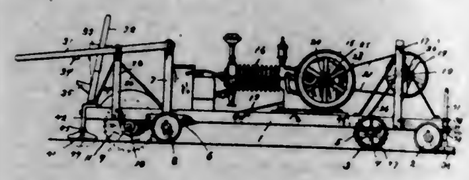


1. A heat equalizing and radiating plate having a central circular disk and a plurality of convolutions extending outwardly and concentrically of said central disk, the elevated portions of the convolutions upon each side of the plate forming a utensil rest with the disk below the facial lines of such elevations.

2. The combination with a cooking utensil, of a heat equalizing and radiating plate, having a flat central disk and a plurality of concentrically disposed convolutions, the elevations of which upon either side of the plate when in contact with the bottom of the utensil to form a central air chamber and a plurality of concentrically disposed annular air chambers.

3. A heat equalizing and radiating plate, having a central circular disk and a plurality of convolutions extending outwardly and concentrically of said central disk, the outer convolution being turned inwardly toward the body of the plate to form a rim, a reinforcement wire in said rim, the elevated portions of the convolutions upon each side of the plate forming a utensil rest with the central disk centrally of the two facial lines of the convolutions to form with the utensil a central chamber.

1,063,527. POWER ICE-CUTTING MACHINE. RUFUS A. GAUL, Ephrata, Pa. Filed Apr. 17, 1912. Serial No. 691,492. (Cl. 62—8.)

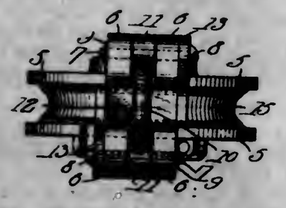


1. In an ice cutting machine of the class described, the combination with a frame having a motor mounted thereon, and of a rotary ice cutting saw, supporting wheels mounted upon said frame near the rear end thereof, traction wheels mounted adjacent to said supporting wheels, and adapted to be operated by said motor, vertically movable supporting wheels mounted near the forward end of said frame, means for raising the forward portion of said frame with respect to said vertically movable supporting wheels for the purpose of raising the traction wheels and the rotary saw clear of the ice, and guiding means for governing the direction of the travel of said machine.

2. In an ice cutting machine of the class described, the combination with a frame having a motor mounted thereon and provided with a rotary ice cutting saw operated by said motor, of supporting wheels attached to said frame near the ends thereof, the rear pair of said wheels stationary with respect to the frame, means for raising the frame in a vertical manner with respect to the forward pair of said wheels, means for retaining said frame in a raised position, and adjustable means for guiding the travel of said machine.

3. In an ice cutting machine of the class described, the combination with a frame having a motor mounted thereon, a counter-shaft and a rotary ice cutting saw driven by said motor, of traction wheels mounted under said frame near the rear end thereof and driven by said counter-shaft, supporting wheels mounted under said frame near the rear end thereof, means for raising the forward portion of said machine on said rear supporting wheels as a pivot, comprising vertically movable arms mounted upon said frame, supporting wheels carried on the lower ends of said arms, means for raising the frame on said arms, and adjustable guiding means for said machine.

1,063,528. PULLEY-BLOCK. JOHN EBENEZER GILCHRIAT, South Bend, Wash. Filed May 24, 1912. Serial No. 699,520. (Cl. 57—34.)

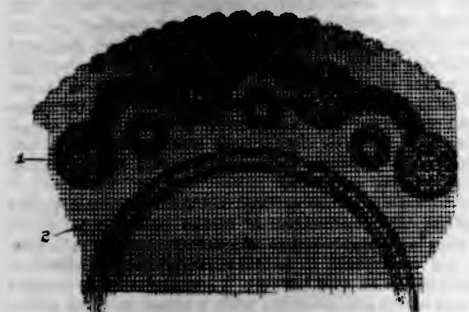


1. A pulley block embodying two cheek plates, a sheave journaled between the cheek plates, a shackle, and a guard arranged between the cheek plates and between the shackle and sheave and a locking member securing one end of the shackle and the guard to each cheek plate so that the member may be partially withdrawn to free the shackle without freeing the guard.

2. A pulley block embodying two cheek plates, an axle connecting them, a sheave journaled on the axle, a locking member carried by each cheek plate, a shackle engaged at its ends by the said locking members, and a guard disposed between the cheek plates and between the sheave and shackle and engaged by the said locking members.

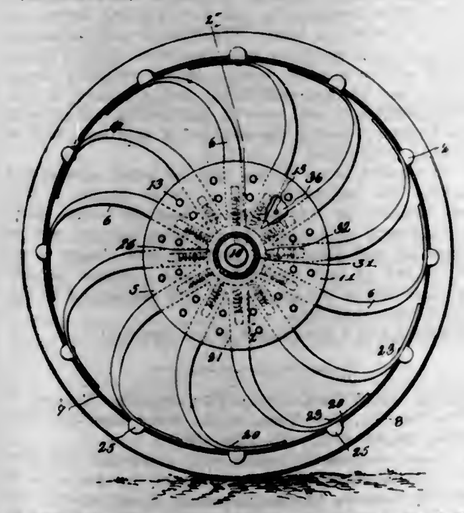
3. A pulley block embodying two cheek plates, an axle connecting them, a sheave journaled on the axle, each cheek plate having a pair of ears at one edge, a shackle having ears at its ends received by the respective pairs of ears, a guard disposed snugly between the cheek plates and between the sheave and shackle, and having oppositely projecting ears at its ends overlapping the corresponding ears of the former pairs, headed locking pins passing through the respective sets of ears with the heads abutting against the last mentioned ears, and members engageable with the free ends of the locking pins.

1,063,529. PROCESS FOR FORMING DESIGNS UPON ARTICLES. JOSEPH V. GILES, Chicago, Ill. Filed Oct. 16, 1911. Serial No. 655,019. (Cl. 41—29.)



The process of forming designs upon fabrics which consists in stretching a normally flat fabric and a lace stencil over a bulging and resilient form; and then spraying a dyeing liquid against said fabric, substantially as described.

1,063,530. MOTOR-CAR WHEEL. JAMES A. GLENN, Albany, N. Y. Filed Jan. 9, 1912. Serial No. 670,337. (Cl. 152—29.)



1. In a wheel, the combination, with a hub and a flexible rim; of a series of endwise-adjustable spokes having rigid stems connected to said hub, and spring tongues connected to said rim; and means engaged with the stem of all of said spokes for adjusting the latter simultaneously in the same direction.

2. In a wheel, the combination with a hub and a flexible rim; of a series of spokes permanently occupying a common plane disposed at right angles to said hub and adjustable endwise in such plane; and means engaged with the stems of all of said spokes for adjusting the latter simultaneously in the same direction.

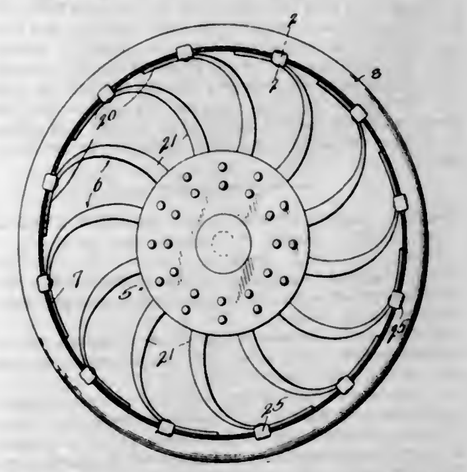
3. In a wheel, the combination, with a hub and a flexible rim; of a series of endwise-adjustable spokes connecting said hub and rim, each spoke having a threaded axial socket formed in its inner end; a series of radiating screws revolubly carried by said hub and projecting into said sockets; a gear attached to each screw; and a main operating gear revolubly connected with said hub and meshing with all of the first-named gears, for rotating the same in unison, to simultaneously adjust all of said spokes.

4. In a wheel, the combination, with a hub and a flexible rim; of a series of endwise-adjustable spokes having spring tongues connected to said rim, and rigid stems formed with threaded axial sockets; a series of radiating screws revolubly carried by said hub and projecting into said sockets; a gear attached to each screw; and a main operating gear revolubly connected with said hub and meshing with all of the first-named gears, for rotating the same in unison, to simultaneously adjust all of said spokes.

5. In a wheel, the combination, with a hub and a flexible rim; of a series of spokes movable endwise bodily and connecting said hub and rim; a series of radially-disposed members carried by said hub and engaged individually with the inner ends of the individual spokes; and means for operating all of said members in unison, to simultaneously move all of said spokes.

[Claim 6 not printed in the Gazette.]

1,063,531. RIM, CONSTRUCTION. JAMES A. GLENN, Albany, N. Y. Filed Apr. 26, 1912. Serial No. 693,411. (Cl. 152—29.)



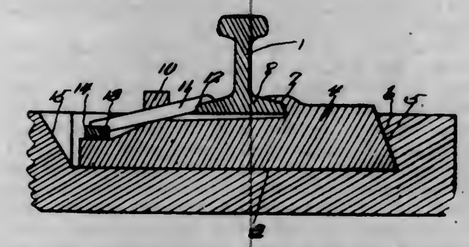
1. In a wheel, the combination, with a hub and a series of radiating spokes; of a rim to which said spokes are attached comprising a band of metal fabric formed of rows of links interwoven together.

2. In a wheel, the combination, with a hub and a series of radiating spokes; of a rim to which said spokes are attached comprising a band of metal fabric formed of rows of links interwoven together and having their mutually-intersecting portions bent to produce approximately flat inner and outer surfaces.

1,063,532. COMBINATION RAIL-TIE AND RAIL-CLAMP. LUM LAFAYETTE GOMILLION, Shreve, Ala. Filed Oct. 19, 1912. Serial No. 726,722. (Cl. 238—4.)

1. In combination, a rail tie having a recess provided at one end with an under cut beveled wall, a rail clamp ar-

ranged in said recess and provided with a beveled end to engage the under cut beveled wall, said rail clamp having an integral lug, under which the rail engages, and provided with a second lug, a clamp bar extending through the second lug and provided at one end with a recess to receive the opposite side of the base of the rail, the clamping bar having a second recess at its other end, and means engaging the second recess for forcing the clamping bar against the base of the rail so as to firmly hold the rail betweeen the clamping bar and the first lug, said means also acting to force the beveled end of the rail clamp in contact with the under cut wall of the recess of the tie.



2. In combination, a rail tie having a recess provided at one end with an under cut beveled wall, a rail clamp arranged in said recess and provided with a beveled end to engage the under cut beveled wall, said rail clamp having an integral lug, under which the rail engages, and provided with a second lug, a clamp bar extending through the second lug and provided at one end with a recess to receive the opposite side of the base of the rail, the clamping bar having a second recess at its other end, a wedge key extending transversely of the tie to engage the second recess of the clamping bar to force the clamping bar firmly in engagement with the base of the rail so as to force the base in contact with the first lug, said wedge key also acting to force the beveled end of the rail clamp in contact with the under cut wall of the recess of the tie, through the coöperation of the clamping bar, the rail and the first lug, said wedge key also engaging one end of the rail clamp to prevent upward displacement thereof, and means for holding the wedge key against movement in one direction.

1,063,533. CANDY PRODUCT AND PROCESS OF MAKING SAME. GEORGE S. GORDON, New York, N. Y. Filed Oct. 31, 1912. Serial No. 728,784. (Cl. 127—4.)

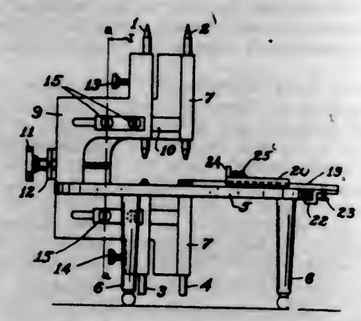
1. A sweetmeat consisting of about 35% corn syrup, 15% granulated sugar, 50% of a whitish peanut butter and a flavoring essence.

2. A bleached sweetmeat compound, composed of approximately 35% corn syrup, 15% granulated sugar, and 50% of a whitish peanut butter.

3. The herein described process of producing a sweetmeat, which consists in first boiling approximately 35% of corn syrup and 15% of granulated sugar to a pasty or mushy consistency; then adding thereto, during the boiling, a vegetable bleaching agent; thereupon adding to the mixture approximately 50% of slightly roasted ground peanuts, and finally kneading the mixture, as herein set forth.

1,063,534. PALLET-STONE-SETTING TOOL. BENJAMIN H. GREEN, Kansas City, Mo. Filed Oct. 19, 1912. Serial No. 726,678. (Cl. 81—7.)

1. In a pallet stone setting tool for watch making and repairing the combination of a graduated platen, a housing rigid with said platen and provided with bearings to receive the shaft of the escapement, a housing mounted on said first mentioned housing and provided with bearings to receive the shaft of an escape wheel, a lever constructed to swing partially around the center of said escapement shaft and an adjustable pin mounted on said lever and constructed to engage centrally the end of the lever portion of said escapement, whereby the pallet stones may be set by the manipulation of said lever and the turning of said escape wheel.



2. In a pallet stone setting tool for watch making and repairing, the combination of a disk shaped platen supported by legs, a housing rigid with said platen and provided with a lower shaft extending upward through and centrally located in said platen, said housing provided with an upper shaft adjustable vertically and suspended above said platen, means to lock said shaft in position, cup points in the nearest ends of said shafts to receive the escapement shaft of a watch, means to hold the escape wheel of a watch in a fixed relative position to said escapement, and means to rigidly hold said escapement in predeterminable position, so that the pallet stones may be set by turning said wheel.

3. In a pallet stone setting tool for watch making and repairing, the combination of means comprising a platen a swing lever and bearings adjustably mounted in a housing and constructed to hold an escapement in locked positions, slides on said housing, a housing slidably mounted on said slides and provided with a screw to effect sliding adjustment, screws to rigidly hold said adjustment, and adjustable bearings to hold the escape wheel of a watch whereby by turning said wheel the pallet stones are accurately fixed in working adjustment.

4. In a pallet stone setting tool for watch making and repairing, the combination of a stationary housing rigidly constructed with a disk shaped platen, a slidable housing slidably mounted on said stationary housing, a screw to slide said slidable housing, screws to lock said slidable housing, shafts mounted in said housings and having cup points to receive the escape wheel shaft and the escapement shaft of a watch, a swinging lever on said platen provided with a locking clamp a pin to centrally engage the lever end of said escapement and a pointer to indicate the position of said lever on said platen, and an index on said platen whereby the position of said lever may be accurately determined.

5. In a pallet stone setting tool for watch making and repairing, the combination of a platen having a dial, means mounted on said platen to hold the escape wheel and escapement of a watch in operative position, a lever mounted on said platen and provided with means to engage the end of said escapement, and a pointer on said lever to determine the position of said escapement by registration with said dial.

[Claims 6 and 7 not printed in the Gazette.]

1,063,535. ELECTRIC HEATING DEVICE. WILLIAM S. HADAWAY, Jr., New York, N. Y. Filed Sept. 11, 1911. Serial No. 648,602. (Cl. 219—37.)

1. In an electrically heated roll, a metallic roll having a chamber therein and openings in its ends, a shaft extending into one of said openings, a cap covering another of said openings, and a heating unit positioned in said chamber by said shaft and cap.

2. In an electrically heated roll, a metallic roll having a chamber therein and a neck of reduced diameter, a heating unit housed in said chamber, means for positioning said unit in said chamber and an annular member to which the unit leads are connected snugly fitted upon the neck of said roll and hermetically sealing said unit in said chamber.



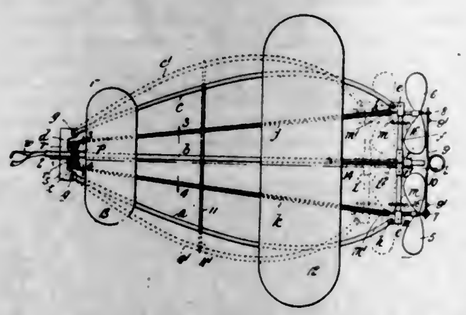
3. In an electrically heated roll, a metallic roll having a chamber therein, said chamber having an opening in its end, a heating unit housed in said chamber having its leads extending through said opening, a metallic sealing member for said opening, and slip rings connected to said leads and carried on said sealing member.

4. In an electrically heated roll, a metallic roll having a chamber formed therein, said chamber having openings in its ends, a substantially cylindrical heating unit housed in said chamber, said heating unit having a plurality of passages extending through the same for its conductors, and means for holding said unit in position.

5. In an electrically heated roll, a metallic roll having a chamber formed therein, said chamber having openings in its ends, a shaft extending into said roll, a cap fixed to one end of said roll and sealing one end of said chamber, said cap coöperating with said shaft to position said unit in said chamber, and electrical connections for said unit arranged to permit said unit to be withdrawn from one end of said roll.

[Claims 6 to 12 not printed in the Gazette.]

1,063,536. TOY AEROPLANE. WILLIAM FRANKLIN HALEY, Springfield, Mass. Filed May 10, 1912. Serial No. 696,320. (Cl. 244—2.)



1. In a toy aeroplane, the combination with the framework and the propellers located thereon, elastic bars extending from the propellers to the winding means, said means comprising a rotatable member, elastic devices extending from said member to the propellers, means to cause the elastic devices to be operated in opposite directions.

2. In a toy aeroplane, the combination with a supporting frame, of a plurality of propeller blades, a winding device, elastic connections between the blades and said device, the said winding device being provided with projections over which a winding tape device passes, means to retain the propeller blades stationary during the winding operation, and to simultaneously release them at the end of the winding operation.

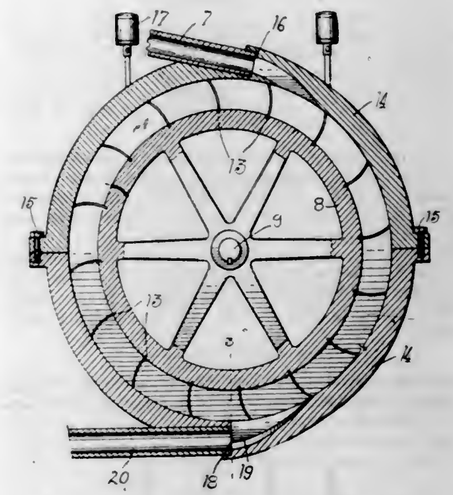
3. In a toy aeroplane, the combination with a supporting frame of a plurality of propeller blades, a winding drum, elastic connections between the blades and the drum, the drum being provided with projections over which a winding tape passes, means to retain the propeller blades stationary during the winding operation and to simultaneously release them at the end of the winding operation, a supporting plane and means to automatically incline the plane during the winding operation and to cause it to assume substantially a horizontal position during the unwinding operation.

4. A winding device for toy aeroplanes comprising a member mounted for rotation, a V-shaped element carried thereby, a device into which the V-shaped element projects, whereby when an elastic motor device or band is attached to the V-shaped element a twisting motion will be imparted thereto.

5. In a toy aeroplane the combination, a supporting frame flexible members at the side adapted to bow outward, an inclined element on the frame, a supporting plane engaging said element to cause it to assume an inclined position as the side members are bowed outward.

[Claims 6 to 13 not printed in the Gazette.]

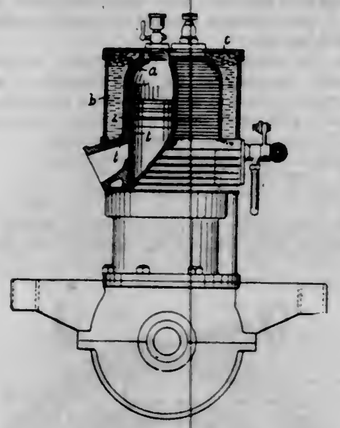
1,063,537. ENGINE. ARTHUR C HALL, Fulton, N. Y. Filed Dec. 2, 1912. Serial No. 734,573. (Cl. 121—58.)



1. The combination with an engine, of a fly wheel for said engine having an annular channel in its periphery and an annular shoulder at each side of the channel, spaced blades fixed in the walls of said channel, a two-part casing arranged upon the periphery of the fly wheel and loosely engaged upon said annular shoulders, a pipe leading from the exhaust of the engine cylinder and connected to said casing to direct the exhausted actuating fluid against the blades on said fly wheel, a discharge pipe connected to said casing to discharge the actuating fluid to the atmosphere, and brace bars connecting the casing sections to the intake and discharge pipes.

2. The combination with an engine, of a fly wheel for said engine provided with a deep annular channel in its periphery and annular shoulders at each side of said channel, a two-part casing arranged upon the periphery of the fly wheel and loosely contacting with said shoulders, a plurality of spaced blades fixed in the walls of said channel, a pipe connected to the exhaust of the engine cylinder and to one of the casing sections to direct the exhausted gases from the engine cylinder against the blades of said fly wheel, the other of said casing sections being provided with an outlet port, a discharge pipe connected thereto, the inner wall of said casing section being provided with a gradually deepening pocket to direct the gases from the blades of the fly wheel into the discharge pipe, and obliquely disposed brace bars connecting the respective casing sections to the intake and discharge pipes.

1,063,538. INTERNAL-COMBUSTION ENGINE. WILLIAM HARPER, Jr., New Bloomfield, Pa., assignor, by mesne assignments, of three-tenths to Harper Engineering Company, a Corporation of New York, and seven-tenths to Thomas A. Nevins, East Orange, N. J. Original application filed June 10, 1907, Serial No. 378,147. Divided and this application filed Dec. 6, 1907, Serial No. 405,301. Renewed Oct. 30, 1912. Serial No. 728,725. (Cl. 123—173.)



1. In an internal combustion engine, a power-chamber, means coöperating with the walls of which to form steam-retaining pockets, and a water-jacket surrounding the pocket forming means and directly communicating with the pockets, substantially as described.

2. In an internal combustion engine, a power-chamber, the walls of which are surrounded by a coil of wire forming with the walls steam-retaining pockets, and a water-jacket surrounding the coil of wire, substantially as described.

1,063,539. ANIMAL-BRANDER. MONARD VINSON HAYES, Deport, Tex. Filed Oct. 10, 1912. Serial No. 725,089. (Cl. 101—24.)



1. In an animal brander, the combination of a frame having a pair of cross-bars arranged in superposed relation, holders mounted upon each cross-bar, a plate corresponding to the contour of the face of each holder and adapted to be secured relative to said holder, a character carried by said plate, and means permitting the adjusting of the holders longitudinally of one bar with respect to the holder of the other bar.

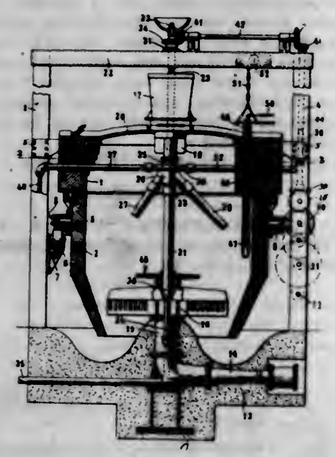
2. In an animal brander, the combination of a frame, having a support, a holder mounted upon said support, a plate having its edges flush with the edges of the holder and adapted to be secured relative to said holder, and a character carried by said plate, said plate and holder being longitudinally adjustable relative to said support.

3. A portable brander comprising a frame having a pair of cross members, characters mounted upon each of said members, means for permitting the adjusting of said characters longitudinally and in spaced relation with respect to each of the members, all of said characters being adapted to be simultaneously applied to the surface to be branded upon a single operation.

4. In an animal brander, the combination of a frame having a support, a holder mounted upon said support and having an opening, a character plate having a base the edges of which lie flush with the edges of the holder, a lug carried by said base and adapted to be received in said opening, and means for fastening said lug with respect to the holder.

5. In an animal brander, the combination of a frame having a rod, a support mounted upon said rod, a plate having an outline identical with the outline of the support whereby the ends and sides of the support are adapted to coincide with the ends and sides of the plate, means for securing the plate relative the support, and a character carried by said plate.

1,063,540. GAS-PRODUCER. JAMES A. HERRICK, New York, N. Y. Filed July 10, 1911. Serial No. 637,615. (Cl. 48—85.2.)



1. In a gas producer, in combination, a casing provided with a cover portion, the latter having a central aperture, a fuel hopper carrying a delivery chute located in said aperture, a hollow shaft extending through said fuel hopper, a stirring member having an outwardly extending arm carried upon the lower end of said shaft, a twyer box located in the lower portion of the producer, a journal formed in said twyer box, and a shaft extending downwardly through the producer from said stirring member and resting in said journal box.

2. In a gas producer, in combination, a casing provided with a cover portion, the latter being provided with a centrally disposed aperture, a revoluble fuel hopper resting upon said cover portion and extending through said aperture, said hopper being provided with a depending delivery chute, which is located within the producer, a shaft extending downwardly through said hopper into the interior of the producer, a stirring member provided with an outwardly extending arm mounted upon the lower end of said shaft, a blast pipe extending upwardly into the producer at its lower end, a twyer box located in the lower portion of the producer immediately above the upper end of said blast pipe, said twyer box having a centrally disposed journal formed in its upper portion, a shaft extending downwardly through the producer from said stirring member and resting in said journal box, and means for discharging water through said first mentioned hollow shaft whereby said water will flow therethrough into said first mentioned stirring member, thence through said second mentioned shaft, said twyer box structure, and the pipe connected with said second mentioned shaft which leads through said blast pipe and discharges the water exteriorly of the producer.

[Claim 3 not printed in the Gazette.]

3. In a gas producer, in combination, a casing provided with a cover portion, the latter being provided with a centrally disposed aperture, a revoluble fuel hopper resting upon said cover portion and extending through said aperture, said hopper being provided with a depending delivery chute, which is located within the producer, a shaft extending downwardly through said hopper into the interior of the producer, a stirring member provided with outwardly extending arms mounted upon the lower end of said shaft, a blast pipe extending upwardly into the producer at its lower end, a twyer box located in the lower portion of the producer immediately above the upper end of said blast pipe, said twyer box having a centrally disposed journal formed in its upper portion, a shaft extending downwardly through the producer from said stirring member and having its lower end seated in said journal, a plurality of outwardly extending stirring members carried upon the lower end of said last mentioned shaft, and means extending transversely of the producer within the same which engages said stirring member and forms a steadying support therefor.

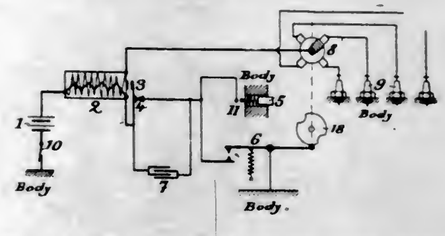
4. In a gas producer, in combination, a casing provided with a cover portion having a centrally arranged aperture, a revoluble fuel hopper resting upon said cover portion and having its lower end extending through said aperture, a fuel distributing member or chute carried by said revoluble hopper and depending therefrom into the interior of the producer, a hollow shaft extending downwardly through said hopper into the interior of the producer, a stirring member provided with a plurality of outwardly extending hollow arms mounted upon the lower end of said shaft, a hollow shaft extending upwardly through the interior of the producer from said stirring member and having its lower end seated in said journal, a plurality of outwardly extending arms carried upon the lower end of said last mentioned shaft immediately above said twyer box structure.

5. In a gas producer, in combination, a casing provided with a cover portion having a centrally arranged aperture, a revoluble fuel hopper resting upon said cover portion and having its lower end extending through said aperture, a fuel distributing member or chute carried by said revoluble hopper and depending therefrom into the interior of the producer, a hollow shaft extending downwardly through said hopper into the interior of the producer, a stirring member provided with a plurality of outwardly extending hollow arms mounted upon the lower end of said shaft, a hollow shaft extending upwardly through the interior of the producer from said stirring member, a blast pipe extending upwardly into the lower end of the producer and disposed centrally thereof, a twyer box structure mounted upon the upper end of said blast pipe having a journal formed in its upper portion, the lower end of said last mentioned shaft being seated in said journal a plurality of outwardly extending arms carried upon the lower end of said last mentioned shaft immediately above said twyer box structure, means for discharging water through said first mentioned hollow shaft whereby said water will flow therethrough into said first mentioned stirring member, thence through said second mentioned shaft, said twyer box structure, and the pipe connected with said second mentioned shaft which leads through said blast pipe and discharges the water exteriorly of the producer.

[Claim 6 not printed in the Gazette.]

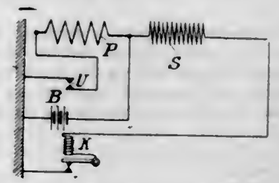
1,063,541. APPARATUS FOR STARTING MULTIPLE-CYLINDER INTERNAL-COMBUSTION ENGINES. GOTTLOB HONOLD, Stuttgart, Germany, assignor to The Firm of Robert Bosch, Stuttgart, Germany. Filed Sept. 13, 1910. Serial No. 581,782. (Cl. 123—148.)

1. In apparatus for starting multiple-cylinder internal combustion engines, ignition mechanism including a buzzer, an interrupter connected in electrical parallel therewith, an auxiliary contact and connections for completing the circuit of said buzzer independently of said interrupter, and means for opening the circuit of said interrupter; substantially as described.



2. In apparatus for starting multiple-cylinder internal combustion engines, ignition mechanism including a buzzer, an interrupter connected in electrical parallel therewith, and means for successively completing the circuit of said buzzer independently of said interrupter and opening the circuit of said interrupter; substantially as described.

1,063,542. ELECTRICAL IGNITION SYSTEM FOR INTERNAL-COMBUSTION ENGINES. GOTTLOB HONOLD, Stuttgart, Germany, assignor to The Firm of Robert Bosch, Stuttgart, Germany. Filed Oct. 27, 1910. Serial No. 589,309. (Cl. 123—147.)



1. In an ignition system for internal combustion engines, a transformer, a battery and a mechanical interrupter in electrical series in the primary circuit of the transformer, and the winding of an electromagnetic spark plug in the secondary circuit of the transformer; substantially as described.

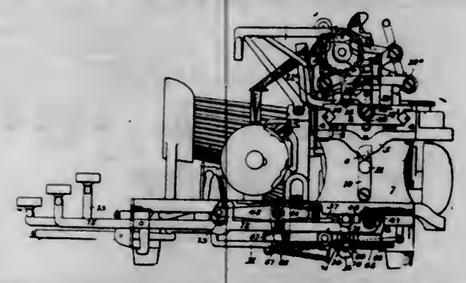
2. In an ignition system for internal combustion engines, a transformer having one terminal of its primary winding electrically connected to one terminal of its secondary winding, a battery and a mechanical interrupter in electrical series in the circuit of the primary winding, and the winding of an electromagnetic spark plug in the circuit of the secondary winding; substantially as described.

3. In an ignition system for internal combustion engines, a battery common to two electrical circuits, the primary winding of a transformer and a mechanical interrupter in one of said circuits, and the secondary winding of the transformer and the winding of an electromagnetic spark plug in the other of said circuits; substantially as described.

4. In an ignition system for internal combustion engines, a battery and the primary winding of a transformer common to two electrical circuits, a mechanical interrupter in one of said circuits, and the secondary winding of the transformer and the winding of an electromagnetic spark plug in the other of said circuits; substantially as described.

5. In an ignition system for internal combustion engines, a transformer having a primary and a secondary winding, the primary winding being common to two electrical circuits, a battery and an interrupter in one of said circuits, and the secondary winding and the winding of an electromagnetic spark plug in the other of said circuits; substantially as described.

1,063,543. TYPE-WRITER CARRIAGE MECHANISM. WILLIAM J. KAUFFMAN, Cleveland, Ohio. Filed June 11, 1906. Serial No. 321,099. (Cl. 197—72.)



1. In typewriters, a frame, a carriage bed detachably secured thereto, a carriage base arranged to move on the carriage bed, and a platen carrier detachably secured to said carriage base and movable with relation thereto; substantially as described.

2. In typewriters, a frame, a carriage bed interfitting therewith and having hand operated locking devices, a carriage base movable on the bed, and a vertically movable platen carrier removably mounted on the carriage base; substantially as described.

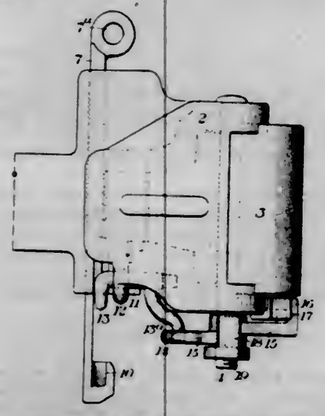
3. In typewriters, a carriage base, a vertically movable platen carrier mounted thereon and having a platen, and hand-operated swinging locking devices for holding the platen carrier in position on the base; substantially as described.

4. In a typewriter, a frame, a carriage bed removably mounted thereon, hand-operated locking devices for said bed, a carriage base movable on the bed, a vertically movable platen carrier removably mounted on the carriage base and having hand-operated locking devices for holding it in place, and connections for moving the platen carrier vertically relatively to the carriage base; substantially as described.

5. In typewriters, a carriage base having swinging holding devices, a platen carrier having a platen removably held on the base by said holding devices, said devices having top and bottom stops for the platen carrier, and connections arranged to lift the platen carrier vertically relative to the base; substantially as described.

[Claims 6 to 23 not printed in the Gazette.]

1,063,544. CAR-COUPLING. JOSEPH P. KITTREDGE, Sharon, Pa., assignor to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 22, 1911. Serial No. 661,737. (Cl. 213—10.)



1. A car coupler having a pivoted knuckle, a lock, a lock-lifting device, a bell crank lever journaled at the under side of the coupler head and arranged to be engaged by the lock-lifting member after the lock has been released, and a lever comprising an actuating connection between the bell crank lever and the knuckle, substantially as described.

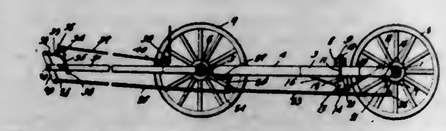
2. A car coupler having a pivoted knuckle, a lock and a lock-releasing member, the latter extending below the coupler head, a bell crank lever journaled upon the under side of the coupler head and having an end portion to be engaged by the lock-lifting member, and a lever connecting the bell crank lever with the nose of the knuckle, substantially as described.

3. In a car coupler, knuckle-throwing mechanism, comprising a lever journaled on the under side of the coupler head to swing in a horizontal plane and having an engagement with the nose portion of the knuckle, a bell crank lever journaled on the under side of the coupler head to move in a vertical plane and connected with the first named lever, and means for actuating the last named lever, substantially as described.

4. In a car coupler, knuckle-throwing mechanism, comprising a lever journaled on the under side of the coupler head to swing in a horizontal plane and having an engagement with the nose portion of the knuckle, a bell crank lever journaled on the under side of the coupler head to move in a vertical plane and connected with the first named lever, and a lock-releasing member having a portion to engage and move the last named lever after the lock had been released, substantially as described.

5. In a car coupler, the combination with a pivoted knuckle and a lock therefor, of a lock-releasing member extending vertically through the head and terminating in a U-shaped portion at its lower end, a vertically movable lever fulcrumed on the under side of the coupler head and arranged to be engaged by said U-shaped portion, and an actuating connection between said lever and the nose of the knuckle, substantially as described.

1,063,545. WAGON-BRAKE. PETER KESLER, Monroe, Wis. Filed Aug. 7, 1912. Serial No. 713,833. (Cl. 21—9.)

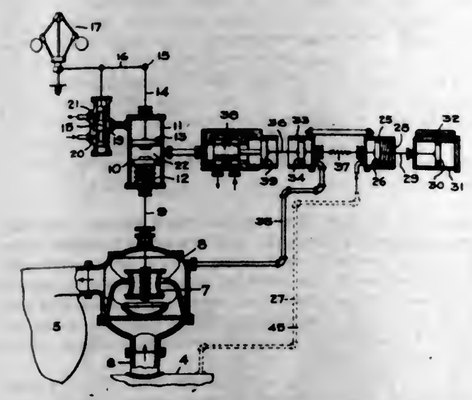


The combination with a vehicle, a brake, a neck yoke connected to the tongue for vertical swinging movement, and a lever pivoted to the ends of the tongue and operably connected to the brake, of means for connecting and disconnecting the yoke to the upper end of the lever, comprising a link pivoted to the upper end of the lever, a hook carried by the yoke for connecting the link to the yoke, and a flexible connection guided over the yoke and having one end connected to the link, the other end being disposed to be pulled upon from a distant point to disconnect the link from the yoke.

1,063,546. REGULATING MECHANISM FOR STEAM-TURBINES. WALTER KIESER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 7, 1911. Serial No. 631,678. (Cl. 121—118.)

1. A governing mechanism comprising a main valve, means for actuating it, and a speed responsive device for controlling the means, in combination with a device sensitive to pressure changes in the source of supply, and a device sensitive to the pressure of the fluid on the discharge side of the valve, both of said devices modifying the position of the valve as determined by the speed responsive device.

2. A governing mechanism comprising a main valve, means for actuating it, and a speed responsive device for controlling the means, in combination with a device sensitive to pressure changes in the source of supply, a device sensitive to the pressure of the fluid on the discharge side of the valve, both of said devices modifying the position of the valve as determined by the speed responsive device, and a means for neutralizing the effects of fluctuation in pressure.



3. A governing mechanism comprising a main valve, means for actuating it, and a speed responsive device for controlling the means, in combination with a device sensitive to pressure changes in the source of supply, a device sensitive to the pressure of the fluid on the discharge side of the valve, both of said devices modifying the position of the valve as determined by the speed responsive device, and a damping device to retard the action of said pressure responsive devices.

4. A governing mechanism comprising a main valve, means for actuating it, and a speed responsive device for controlling the means, in combination with a device sensitive to pressure changes in the source of supply, a device sensitive to the pressure of the fluid on the discharge side of the valve, both of said devices modifying the position of the valve as determined by the speed responsive device, means for neutralizing the effects of pressure fluctuations, and a damping device which coöperates with said means.

5. In a governing mechanism for low pressure turbines, the combination of a main valve, means for actuating it comprising a pair of pistons located in the same cylinder and separated by a chamber, a pilot valve for controlling their simultaneous movement in the same direction, a governor for the pilot valve, a valve controlling the passage of fluid to said chamber, and means responsive to pressure for moving the last named valve.

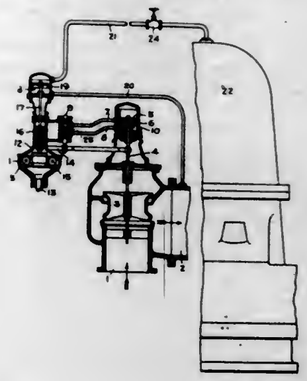
[Claims 6 to 24 not printed in the Gazette.]

1,063,547. GOVERNING MECHANISM FOR TURBINES. WALTER KIESER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 18, 1912. Serial No. 671,929. (Cl. 121—118.)

1. In combination, a turbine, a valve for regulating the supply of motive fluid thereto, a motor for operating the valve, a controlling device for the motor, a governor for actuating the device to regulate the position of the valve with respect to its seat in response to changes in speed of the turbine, means sensitive to pressure variations on the outlet side of the valve for modifying the action of the governor on said device, and a connection between said means and the governor including a spring.

2. In combination, a turbine, a valve for regulating the supply of motive fluid thereto, a fluid actuated motor for the valve, a pilot valve for the motor, a governor for controlling the pilot valve to regulate the position of the first valve in response to changes in speed of the turbine, means sensitive to the pressure of the fluid driving the turbine for changing the position of the pilot valve to cause variations in the regulating valve opening independently of speed changes, and a connection between said means and the governor including a spring.

3. In combination, a turbine, a valve for regulating the supply of motive fluid thereto, a speed governor for controlling the valve that rotates about a given axis, a spring which acts on the governor and is arranged in axial alinement therewith, and a pressure sensitive means that is connected to the spring and changes its force.

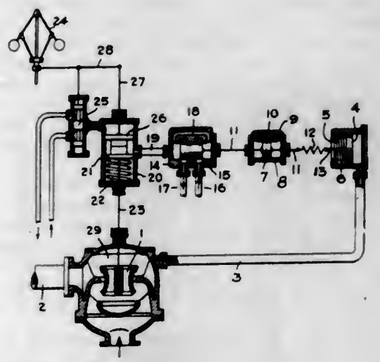


4. In combination, a turbine, a valve for regulating the supply of motive fluid thereto, a speed governor for controlling the valve, and a device comprising a cylinder and a loosely fitting piston that is sensitive to pressure changes, said piston as it changes its position acting on the speed governor and causing it to change the position of the valve irrespective of speed changes.

5. In combination, a turbine, a regulating valve therefor, a speed governor that controls the valve, a pressure responsive device for modifying the action of the governor on the valve, a conduit admitting fluid from one side of the valve to the device, and a second conduit connecting the other side of the device to the turbine exhaust, there being a passage connecting the opposite sides of the device to normally equalize the pressures thereon.

[Claims 6 to 11 not printed in the Gazette.]

1,063,548. REGULATING MECHANISM FOR STEAM-TURBINES. WALTER KIESER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 7, 1912. Serial No. 676,048. (Cl. 121—118.)

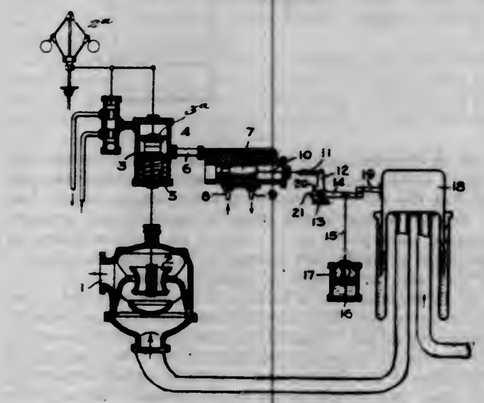


1. The combination with an admission valve for an engine, of means for automatically regulating the same, consisting of a piston connected to said valve, a valve controlling a supply of fluid pressure to the piston, a movable abutment exposed to the steam pressure in a region between the admission valve and the engine, and connec-

tions between the abutment and said controlling valve comprising means for taking up small variations in movement and means for opposing sudden movements.

2. The combination with an admission valve for an engine, of means for automatically regulating the same, consisting of a piston connected to said valve, a valve controlling a supply of fluid pressure to the piston, a movable abutment exposed to the steam pressure in a region between the admission valve and the engine, and connections between the abutment and said controlling valve comprising spring means for taking up small variations in movement and a fluid brake for opposing sudden movements.

1,063,549. REGULATING MECHANISM FOR STEAM-TURBINES. WALTER KIESER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 7, 1912. Serial No. 676,052. (Cl. 121—118.)



1. The combination with the admission valve of a steam turbine, of a fluid pressure motor for actuating the valve, a controlling valve for the motor, a movable steam receiver, and operative connections whereby the receiver can actuate the controlling valve in one direction of its movement only.

2. The combination with the admission valve of a steam turbine, of a fluid pressure motor for actuating the valve, a controlling valve for the motor, a movable steam receiver, operative connections whereby the receiver can actuate the controlling valve in one direction of its movement only, and means for retarding the movement of the controlling valve in the opposite direction.

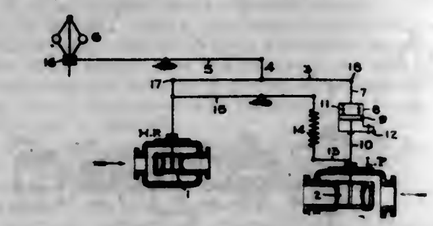
3. The combination with an admission valve of a steam turbine, of a fluid pressure motor for actuating the valve, a controlling valve for the motor, a movable steam receiver, a lever for opening the controlling valve, a tappet on the receiver for actuating the lever, and a dash-pot connected to the lever for retarding the closing movement of the controlling valve.

4. The combination with the admission valve of a steam turbine, of a fluid pressure motor for actuating the valve, a controlling valve for the motor, a bell crank lever for opening the controlling valve, a dash-pot connected with the lever and adapted to retard its upward movements, a movable steam receiver, and a tappet on the receiver adapted to operate the lever in its downward movements only.

5. The combination with an admission valve for a steam turbine, of a motor for actuating the valve, a controller for the motor, a steam receiver for supplying motive fluid to the turbine having a movable member that changes its position with changes in the quantity of the steam supply, and operative connections whereby said member actuates the controller only when the quantity of steam in the receiver decreases.

[Claims 6 to 8 not printed in the Gazette.]

1,063,550. REGULATING TURBINES. WALTER KIESER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 5, 1912. Serial No. 724,032. (Cl. 121—118.)

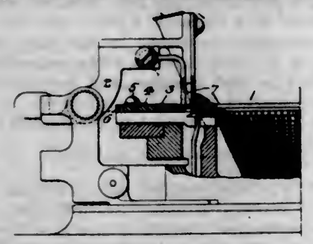


1. In a turbine, the combination with the live steam valve mechanism and the exhaust steam throttle valve, of a speed governor controlling both, a device responsive to fluctuations in the exhaust steam adapted to actuate the exhaust steam valve, and means for causing said actuation to exert a compensating effect upon the speed governor, whereby the number of revolutions of the turbine will remain constant.

2. In a turbine, the combination with the live steam valve mechanism and the exhaust steam throttle valve, of a speed governor controlling both, a steam for the exhaust valve composed of separate parts, means whereby fluctuations of the exhaust steam pressure can vary the effective length of said steam, and means whereby said variation can exert a compensating effect upon the speed governor.

3. In a turbine, the combination with the valves for live and exhaust steam, of a stem for the exhaust valve composed of two separable parts, means whereby the fluctuations of the exhaust steam can vary the distance between said parts, a lever connected to that part of said stem which carries the valve, and operative connections whereby said lever can exert a compensating effect upon the speed governor.

1,063,551. KNITTING-MACHINE. AUGUST F. KILLIAN, Palmyra, N. J., assignor to William F. Taubel, Incorporated, Riverside, N. J., a Corporation of New Jersey. Filed Sept. 15, 1911. Serial No. 649,530. (Cl. 66—21.)



1. The combination with a knitting machine, of the frame, a bank of needles adapted to carry a stocking in process of manufacture, a member carried by the frame for engaging a loose thread end extending from said stocking, and guiding means for delivering said loose thread end adjacent the knitting thread whereby it may be knitted with the same into the body of the stocking.

2. The combination with a knitting machine, of the frame, a bank of needles adapted to carry a stocking in process of manufacture, a spring clip carried by the frame for engaging a loose thread end extending from said stocking, and guiding means for delivering said loose thread end adjacent the knitting thread whereby it may be knitted wth the same into the body of the stocking.

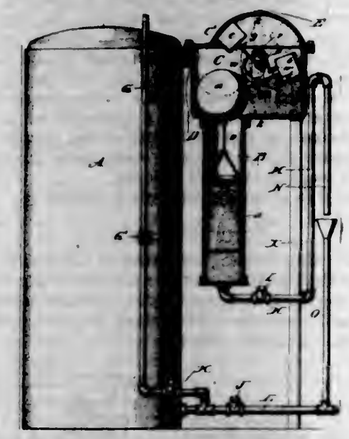
3. The combination with a knitting machine, of a frame, a bank of needles, sinkers, said needles being adapted to carry a rib top or welt, a thread guide, and a guard lying above and substantially parallel with the thread guide and having an end extending adjacent the top of the sinkers.

4. The combination with a knitting machine, of a frame, a bank of needles, sinkers, said needles being adapted to carry a rib top or welt, a thread guide, and a guard above the sinkers having an end extending adjacent the inner edge of the sinker cap top.

5. The combination with a knitting machine, of the frame, a bank of needles adapted to carry a stocking in process of manufacture, a member carried by the frame for engaging a loose thread end extending from said stocking, a rotatable member for engaging said thread end, and guiding means for delivering said loose thread end adjacent the knitting thread whereby it may be knitted with the same into the body of the stocking.

[Claims 6 to 8 not printed in the Gazette.]

1,063,552. PUMP DEVICE. JOHN H. KINEALY, Ferguson, Mo. Filed Sept. 16, 1912. Serial No. 720,633. (Cl. 160—3.)



1. A pump device comprising a primary vessel, a secondary vessel, a pipe connecting said secondary vessel to said primary vessel, a suction pipe having means whereby flow therethrough from said device is prevented, a discharge pipe for said primary vessel having means whereby flow therethrough into said vessel is prevented, a discharge pipe for said secondary vessel having means whereby flow therethrough into said vessel is prevented, means whereby steam is supplied to said device, means whereby water is supplied to said device, and means governed by the quantity of water in said secondary vessel whereby steam and water are alternately admitted into said secondary vessel, substantially as described.

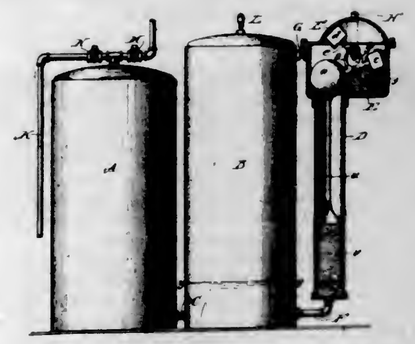
2. A pump device comprising a primary vessel, a secondary vessel, a pipe connecting said secondary vessel to said primary vessel, a suction pipe connected to said primary vessel near the bottom thereof and having means whereby flow therethrough from said vessel is prevented, a discharge pipe for said primary vessel having means whereby flow therethrough into said vessel is prevented, a discharge pipe for said secondary vessel having means whereby flow therethrough into said vessel is prevented, means whereby steam is supplied to said device, means whereby water is supplied to said device, and means governed by the quantity of water in said secondary vessel whereby steam and water are alternately admitted into said secondary vessel, substantially as described.

3. A pump device comprising a primary vessel, a secondary vessel, a pipe connecting said primary vessel to said secondary vessel at a point above the highest level of water in said secondary vessel, a suction pipe connected to said primary vessel near the bottom thereof and having means whereby flow therethrough from said vessel is prevented, a discharge pipe for said primary vessel having means whereby flow therethrough into said vessel is prevented, a discharge pipe for said secondary vessel having means whereby flow therethrough into said vessel is prevented, a steam pipe connected to said secondary vessel above the highest level of the water therein, a water pipe connected to said secondary vessel above the highest level of the water therein, and means governed by the quantity of water in said secondary vessel whereby steam and water are alternately admitted through said steam and water pipes into said secondary vessel, substantially as described.

4. A pump device comprising a primary vessel, a secondary vessel, a pipe connecting said primary vessel to said secondary vessel at a point above the highest level of water in said secondary vessel, a suction pipe connected to said primary vessel near the bottom thereof and having means whereby flow therethrough from said vessel is prevented, a discharge pipe for said primary vessel having means whereby flow therethrough into said vessel is prevented, a steam pipe connected to said secondary vessel above the highest level of water therein, a water pipe connected to said secondary vessel above the highest level of water therein, means governed by the quantity of water in said secondary vessel whereby steam and water are alternately admitted through said steam and water pipes into said secondary vessel, a discharge pipe for said secondary vessel having means whereby flow therethrough into said vessel is prevented, and having a siphon whose highest point is above the highest level of water in said secondary vessel, substantially as described.

5. A pump device comprising a primary vessel, a secondary vessel, a pipe connecting said primary vessel to said secondary vessel at a point above the highest level of water in said secondary vessel, a suction pipe connected to said primary vessel near the bottom thereof, a check valve in said suction pipe, a discharge pipe for said primary vessel, a check valve in said discharge pipe, a steam pipe connected to said secondary vessel above the highest level of water therein, a valve in said steam pipe, a water pipe connected to said secondary vessel above the highest level of water therein, a valve in said water pipe, means governed by the quantity of water in said secondary vessel whereby said valve in said steam pipe is opened and said valve in said water pipe is closed when the water reaches the highest level in said secondary vessel and whereby said valve in said steam pipe is closed and said valve in said water pipe is opened when the water reaches the lowest level in said secondary vessel, a discharge pipe for said secondary vessel having a siphon whose highest point is above the highest level of water in said secondary vessel, and a check valve in said discharge pipe, substantially as described.

1,063,553. PUMP DEVICE. JOHN H. KINEALY, Ferguson, Mo. Filed Sept. 23, 1912. Serial No. 721,813. (Cl. 160—3.)



1. A pump device comprising a closed primary vessel, a closed secondary vessel, a pipe connecting said secondary vessels near the bottom, a suction pipe connected to said primary vessel and having means whereby flow therethrough from said

vessel is prevented, a discharge pipe connected to said primary vessel and having means whereby flow therethrough into said vessel is prevented, an air valve on said secondary vessel, a steam pipe connected to said secondary vessel, and means whereby steam from said steam pipe is alternately admitted to and debarred from said secondary vessel, substantially as described.

2. A pump device comprising a closed primary vessel, a closed secondary vessel, a pipe connecting said vessels near the bottom, a suction pipe connected to said primary vessel and having means whereby flow therethrough from said vessel is prevented, a discharge pipe connected to said primary vessel and having means whereby flow therethrough into said vessel is prevented, an air valve on said secondary vessel, a steam pipe connected to said secondary vessel, a water pipe connected to said secondary vessel, and means whereby steam from said steam pipe and water from said water pipe are alternately admitted to said secondary vessel, substantially as described.

3. A pump device comprising a closed primary vessel, a closed secondary vessel, a pipe connecting said vessels near the bottom, a suction pipe connected to said primary vessel at the top thereof and having means whereby flow therethrough from said vessel is prevented, a discharge pipe connected to said primary vessel at the top thereof and having means whereby flow therethrough into said vessel is prevented, an air valve on said secondary vessel, a steam pipe connected to said secondary vessel, and means whereby steam from said steam pipe is alternately admitted to and debarred from said secondary vessel, substantially as described.

4. A pump device comprising a closed primary vessel, a closed secondary vessel, a pipe connecting said vessels near the bottom, a suction pipe connected to said primary vessel at the top thereof and having means whereby flow therethrough from said vessel is prevented, a discharge pipe connected to said primary vessel at the top thereof and having means whereby flow therethrough into said vessel is prevented, an air valve on said secondary vessel, a steam pipe connected to said secondary vessel, a water pipe connected to said secondary vessel, and means whereby steam from said steam pipe and water from said water pipe are alternately admitted to said secondary vessel, substantially as described.

5. A pump device comprising a closed primary vessel, a closed secondary vessel, a pipe connecting said vessels near the bottom, a suction pipe connected to said primary vessel and having means whereby flow therethrough from said vessel is prevented, a discharge pipe connected to said primary vessel and having means whereby flow therethrough into said vessel is prevented, an air valve on said secondary vessel, a water pipe connected to said secondary vessel, and means whereby steam from said steam pipe and water from said water pipe are alternately admitted to said secondary vessel, substantially as described.

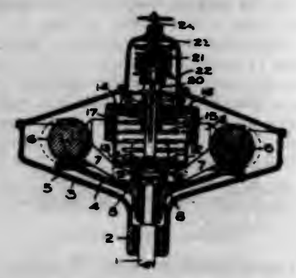
[Claim 6 not printed in the Gazette.]

1,063,554. CENTRIFUGAL GOVERNOR. BERNHARD KRÄMER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 28, 1910. Serial No. 589,560. (Cl. 121—112.)

1. In a centrifugal governor having a plurality of movable weights and a movable element, a plurality of knife edge blades loosely interposed between the weights and said element, and means connecting said knife edge blades so that they mutually support each other.

2. In a centrifugal governor having a plurality of movable weights and a movable rod, a plurality of knife edge blades loosely interposed between said weights and said rod and grouped symmetrically around the axis of said rod, and means connecting the blades of the group together.

3. In a centrifugal governor having a plurality of movable weights and a movable element, a plurality of knife edge blades loosely interposed between the weights and said element, the blades being grouped symmetrically around the axis of the governor in the form of a substantially closed polygon and adapted to mutually restrain each other with respect to longitudinal movement.

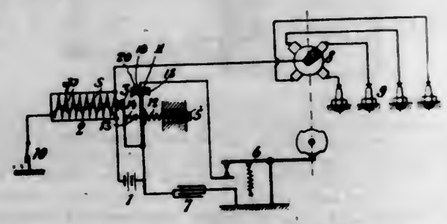


4. In a centrifugal governor having a plurality of movable weights and a movable element, a plurality of knife edge blades loosely interposed between the weights and said element, said knife edge blades mutually supporting each other, and a band loosely attached to said blades.

5. In a centrifugal governor, the combination with a plurality of movable weights, of a spring-pressed follower, a rod actuated thereby, and a plurality of knife edge blades grouped in a substantially closed polygon and inclined toward each other, said blade being interposed between the weights and said follower.

[Claims 6 to 11 not printed in the Gazette.]

1,063,555. ELECTRIC IGNITION SYSTEM FOR INTERNAL-COMBUSTION ENGINES. FRANZ KRATZ, Stuttgart, Germany, assignor to The Firm of Robert Bosch, Stuttgart, Germany. Filed Sept. 19, 1911. Serial No. 650,248. (Cl. 123—148.)



1. In combination with an electric ignition system for running internal combustion engines wherein there is employed a mechanical interrupter and the winding of an ignition coil connected in electrical series therewith, of apparatus for starting the engine by ignition comprising a plurality of coöperating contacts and connections therefor arranged to effect continued vibration of the vibratory armature when the mechanical interrupter is in open position, and to effect single movements of the vibratory armature when the mechanical interrupter is in a closed position.

2. An electric ignition system for internal combustion engines comprising a mechanical interrupter driven by the engine and capable of coming to rest in either an open or a closed position, an ignition coil for generating ignition currents, a source of electric current, electrical connections for connecting the source to the ignition coil and the mechanical interrupter, and a switch adapted to complete a path in electrical parallel with the mechanical interrupter and also adapted to actuate a plurality of coacting contacts arranged in the path of the mechanical interrupter in such manner as, upon operation with the mechanical interrupter at rest to open the connection to the mechanical interrupter, to complete the circuit through the parallel path, and also to reëstablish the connection to the mechanical interrupter.

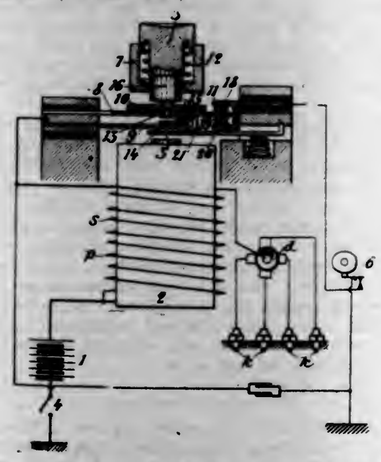
3. An electric ignition system for internal combustion engines, comprising a mechanical interrupter driven by the engine and capable of coming to rest in either an open or a closed position, an ignition coil for generating ignition currents, a source of electric current, electrical connections for connecting the source to the buzzer and the mechanical interrupter, and a switch adapted to complete a path in electrical parallel with the mechanical interrupter and also adapted to actuate a plurality of coacting contacts arranged in the path of the mechanical interrupter in such manner, as upon operation with the mechanical interrupter at rest in a closed position, to interrupt the circuit through the mechanical interrupter, and to complete the circuits through the switch and the interrupter.

4. An electric ignition system for internal combustion engines, comprising a mechanical interrupter driven by the engine and capable of coming to rest in either an open or a closed position, an ignition coil for generating ignition currents, a source of electric current, electrical connections for connecting the source to the buzzer and the mechanical interrupter, and a switch adapted to complete a path in electrical parallel with the mechanical interrupter and also adapted to actuate a plurality of coacting contacts arranged in the path of the mechanical interrupter in such manner, as upon operation with the mechanical interrupter in an open position, to open the connection to the mechanical interrupter, to complete the circuit through the parallel path, and also to reëstablish the connection to the mechanical interrupter.

5. An electric ignition system for multicylinder internal combustion engines provided with spark plugs, comprising a mechanical interrupter driven by the engine and capable of coming to rest in either an open or a closed position, an ignition coil having a primary and a secondary winding for generating sparks at the spark plugs, a distributer for distributing the currents induced in the secondary winding of the ignition coil to the spark plugs, a source of electric current, electric connections for connecting the source to the primary winding of the ignition coil and to the mechanical interrupter, and a switch adapted to complete a path in electrical parallel with the mechanical interrupter and also adapted to actuate a plurality of coöperating contacts arranged in the path of the mechanical interrupter in such manner, as upon operation, to first open the connection to the mechanical interrupter and then to complete the circuit through the parallel path and also to reëstablish the connection to the mechanical interrupter.

[Claims 6 to 10 not printed in the Gazette.]

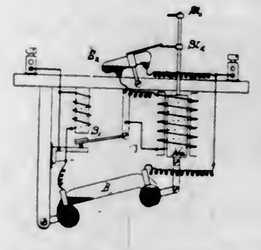
1,063,556. CIRCUIT-CONTROLLING DEVICE FOR ELECTRIC IGNITON SYSTEMS. FRANZ KRATZ, Stuttgart, Germany, assignor to The Firm of Robert Bosch, Stuttgart, Germany. Filed Oct. 26, 1911. Serial No. 656,858. (Cl. 123—148.)



1. The combination with an ignition coil having a vibratory armature and a contact moved thereby, of a push-button carrying a contact member coöperating with the said armature contact, two oppositely disposed contacts electrically connected together, and a conducting contact-member moving between said oppositely disposed contacts and engaged by the push-button in its movement of depression; substantially as and for the purpose described.

2. The combination with an ignition coil having a vibratory armature, of a push-button, a spring plate carrying contacts and having an aperture through which the end of said push-button is adapted to pass, a spring plate vibrated by the armature of the ignition coil and carrying a contact coöperating with the end of the push-button, a contact adapted to engage one of the contacts carried by the first named spring plate when the push button is not depressed and a second contact adapted to engage another contact carried by the first named spring plate when the push-button is depressed.

1,063,557. SHUNT-CIRCUIT TILTING DEVICE FOR MERCURY-VAPOR LAMPS. RICHARD KÜCH, Hanau, Germany, assignor, by mesne assignments, to General Electric Company, a Corporation of New York. Filed May 23, 1910. Serial No. 562,976. (Cl. 176—48.)



1. A shunt circuit tilting device for mercury vapor lamps comprising an electrically operated tilting device connected in a normally closed circuit in shunt to the lamp, means responsive to the main current for electromagnetically keeping said shunt circuit open while the main current is flowing, and additional means for mechanically opening the shunt current on the completion of the tilting motion and for closing the shunt current after the lamp tilts back to initial position, whereby a repetition of the tilting motion is secured when necessary to start the lamp.

2. The combination with a vapor electric device started by tilting, a main electric circuit including electrodes at opposite ends of the device, a shunt circuit, an electromagnet controlled by said shunt circuit to tilt the device to close the main circuit through said electrodes at opposite ends of the device, and means for automatically rendering the shunt circuit inoperative when the main circuit is properly established through the length of the device, a switch actuated by the reciprocating movement of said electromagnet, said electromagnet being provided with means constructed to open the switch near the limit of travel of said electromagnet and to reëstablish the circuit by the return stroke.

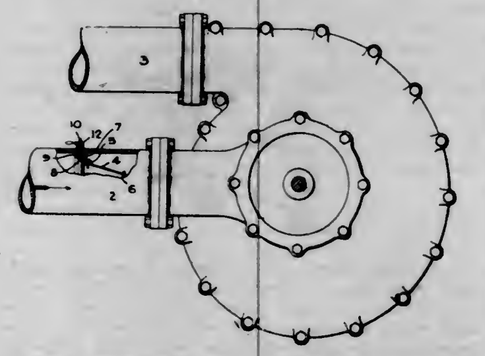
3. The combination with a vapor electric lamp started by tilting, a main electric circuit including electrodes at opposite ends of the lamp, a shunt circuit, a magnet energized by the shunt circuit to tilt the lamp, and a switch for opening the shunt circuit when the main circuit is properly completed through the lamp, of a second switch in the shunt circuit automatically opened and left open by each tilting movement of the lamp, and positively closed by the return of said lamp to its initial position.

4. The combination with a vapor electric lamp started by tilting, a main electric circuit including electrodes at opposite ends of the lamp, and a shunt circuit including a switch for opening said circuit when the main circuit is properly completed through the lamp, of means actuated in response to current flow in the shunt circuit for tilting the lamp and opening said shunt circuit as one end of the lamp reaches the limit of its upward movement, and means for closing the shunt circuit only at the conclusion of the downward movement of said end of the lamp.

5. The combination with a vapor electric lamp started by tilting, a main electric circuit including a plurality of fluid electrodes in the lamp, and a shunt circuit including a switch opened when the main circuit is properly completed through the lamp, of a magnet energized by current flow in the shunt circuit and having a movable member connected with the lamp for tilting it, a second switch in the shunt circuit constructed to remain open until positively closed, and means actuated by the movable member of the magnet for positively opening and closing said switch during each tilting movement of the lamp.

[Claims 6 to 11 not printed in the Gazette.]

1,063,558. PREVENTING PULSATIONS IN CENTRIFUGAL AIR-COMPRESSORS. LOUIS C. LOEWENSTEIN, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1912. Serial No. 731,146. (Cl. 230—24.)



1. The combination with a centrifugal air-compressor, of means for checking a backward rush of air, which consists of a nozzle in the air conduit shaped to permit the air to pass more freely in the forward direction than in the other.

2. The combination with a centrifugal air-compressor, of a frusto-conical nozzle in the air conduit, having its smaller end pointing in the direction of proper flow.

3. The combination with a centrifugal air-compressor, of a nozzle in the air conduit, and ports surrounding the base of said nozzle.

4. The combination with a centrifugal air-compressor, of a frusto-conical nozzle in the air conduit, and ports surrounding the base of said nozzle.

5. The combination, with a centrifugal air-compressor, of a frusto-conical nozzle in the air conduit, ports surrounding the base of said nozzle, and means for adjusting the opening of said ports.

[Claims 6 to 8 not printed in the Gazette.]

1,063,559. CLEANING-MACHINE. ADAM A. LONG, Rochester, N. Y., assignor to The Tailor's Accessories Co., Rochester, N. Y., a Corporation of New York. Filed July 7, 1910. Serial No. 570,743. (Cl. 15—8.)

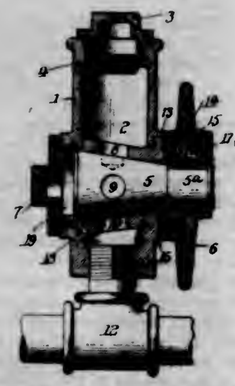


1. In a cleaning machine, the combination with a rotary brush, of a casing inclosing the brush having an intake passage formed therein, and means for adjusting the size of the opening of the intake passage embodying a tongue rigidly attached to one wall of the passage.

2. In a cleaning machine, the combination with a rotary brush of a casing inclosing the brush having an intake passage formed therein, and means for adjusting the size of the opening of the intake passage embodying a tongue of pliable material rigidly attached to one wall of the passage and arranged to project transversely within the passage.

3. The combination with a rotary brush, of a casing inclosing the brush having an intake passage formed therein, the wall of the latter in proximity to the brush being shorter than the other wall, and a tongue composed of pliable material carried by the shorter wall and arranged to project within the opening of the intake passage.

1,063,560. LUBRICATOR. EDWIN M. MACKIE and JAMES A. THOMPSON, Chicago, Ill., assignors to Chicago Pneumatic Tool Company, Chicago, Ill., a Corporation of New Jersey. Filed May 3, 1907. Serial No. 371,718. (Cl. 184—83.)

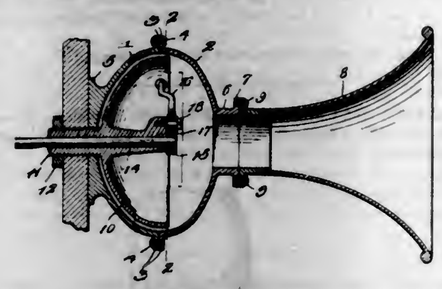


1. In a device of the class described, a casing containing a chamber for a supply of the lubricant and having a valve chamber therebelow and communicating therewith, a rotatable plug valve arranged in said valve chamber provided with a plurality of pockets each adapted in one position to receive the lubricant and in another position to deliver the same and means revoluble with said plug and extending parallel therewith for holding the plug to its seat and in different correct positions corresponding with the registry of the pockets and ports, said plug being tapered and said means engageable with said casing and acting in the direction opposed to the taper of said plug.

2. In a device of the class described, a casing containing a chamber for a supply of the lubricant and having a valve chamber below and at right angles thereto and communicating therewith, a tapered rotatable plug valve arranged in said chamber and having a plurality of pockets in its periphery, said plug valve having an operating stem projecting beyond the chamber, the outer wall of the casing having a plurality of sockets, means on said stem for rotating the valve and spring means within said operating means for engagement with said sockets, said spring means being disposed substantially parallel with the axis of the valves and acting in a direction opposed to the taper of said valve.

1,063,561. AUTOMOBILE-HORN. LOUIS A. MARCOTTE, Beverly Cove, Mass. Filed Sept. 6, 1912. Serial No. 718,905. (Cl. 116—33.)

1. An alarm comprising a casing embodying sections detachably connected together, the rear section of said casing being formed with a base plate having a threaded opening therein, a bell arranged within said casing having an integral rearwardly projecting threaded stud adapted for engagement with the threaded opening in the rear section of said casing, whereby the casing may be secured to a suitable support, said threaded stud being adapted to hold the bell in adjustable spaced relation with the casing, said bell being also provided with an integral bearing projecting forwardly from the central portion thereof, a striker arm pivotally mounted on said bearing, means connected to said bearing for actuating said striker arm, and means for establishing communication between the interior of the bell casing and the atmosphere.



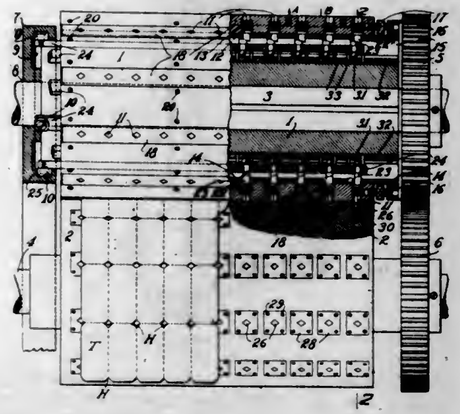
2. An alarm comprising a casing embodying sections detachably connected together, the rear section of said casing being formed with a base plate having a threaded opening therein, a bell arranged within said casing, having a rearwardly projecting threaded stud adapted for engagement with the threaded opening, said threaded stud being adapted to hold the bell in adjustable spaced relation with said casing, said bell being also provided with a centrally arranged forwardly projecting bearing, a striker arm pivotally mounted on said bearing a revoluble shaft mounted in said bearing and extending through said stud, means formed on the forward end of said shaft and adapted to operate said striker arm when said shaft is rotated, and means for establishing communication between the interior of the bell and the atmosphere.

3. An alarm comprising a casing embodying sections detachably connected together, the rear section of said casing being formed with a base plate having a threaded opening therein, a bell arranged within said casing having a rearwardly projecting threaded stud adapted for engagement with the threaded opening in the rear section of said casing whereby said casing may be secured to a suitable support, said threaded stud being adapted to hold the bell in adjustable spaced relation with said casing, said bell being also provided with a forwardly projecting bearing from the central portion thereof, a striker arm pivotally mounted on said bearing and provided with a cam on one end thereof, a revoluble shaft disposed in said bearing and extending through the casing, a cam formed on the forward end of said shaft and adapted to engage with the cam on the striker arm, when said shaft is rotated, and means for establishing communication between the interior of the bell casing and the atmosphere.

1,063,562. TICKET-PUNCHING DEVICE. CALVIN MARTIN, Peabody, Mass., assignor to Carter Ticket Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1912. Serial No. 684,325. (Cl. 164—99.)

1. In a ticket punching machine a pair of rolls, a plurality of longitudinal series of die pairs carried by said rolls, each of said die pairs comprising a male member and a female member, a spring for holding said male member retracted, a longitudinal slideway beneath said male dies, a slide movably mounted in said slideway, effective to shift said plate upon the coincidence of each of said series of male and female dies, said slides having inclined surfaces disposed to contact with said male dies, said female dies each comprising a die plate, a shouldered follower having an end projecting within the opening of said die plate and a spring below said shoulder and normally holding said follower with its end within said die.

2. In a ticket punching machine a pair of rolls, a plurality of longitudinal series of die pairs carried by said rolls, each of said die pairs comprising a male member and a female member, a spring for holding said male member retracted, a longitudinal slideway beneath said male dies, a slide movably mounted in said slideway, a plurality of balls between said slide and said slideway, a cam having a cam slot effective to shift said slide upon the coincidence of each of said series of male and female dies, said slides having inclined surfaces adapted to contact with said male dies, said female dies each comprising a die plate, a shouldered follower having an end projecting within the opening of said die plate and a spring control below said shoulder and normally holding said follower with its end within said die.



3. In a ticket punching machine a pair of rolls, a plurality of longitudinal series of die pairs carried by said rolls, each of said die pairs comprising a male member and a female member, a spring for holding said male member retracted, an inclined heel, a longitudinal slideway beneath said heel, a slide movably mounted in said slideway, a plurality of balls between said slide and said slideway, a cam having a cam slot effective to shift said slide upon the coincidence of each of said series of male and female dies, a plurality of studs on said slides and having inclined surfaces adapted to contact with said beveled heels and said male dies, said female dies each comprising a die plate, a shouldered follower having an end projecting within the opening of said die plate and a spring control below said shoulder and normally holding said follower with its end within said die.

1,063,563. BASE-BALL BAT. LINCOLN S. MAY, Plainville, Conn., assignor of one-half to Arthur A. Hadden, New Britain, Conn. Filed Apr. 5, 1912. Serial No. 688,686. (Cl. 46—4.)

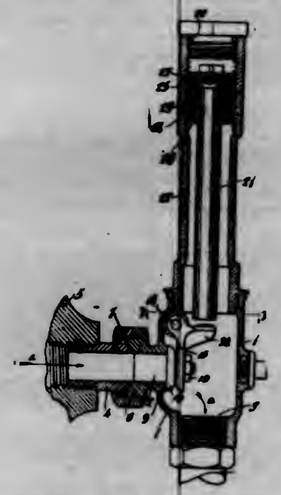


1. A base ball bat comprising an outer body portion of wood having a grain extending diametrically across the axis and provided with an axial bore and a core of wood having a grain extending across the axis and positioned in the said bore, the said bore being cylindrical throughout its length, the said core fitting and filling the said bore, and the said grain of the wood of the outer body portion being positioned at an angular relation to the said grain of the wood of the core.

2. In a base ball bat comprising a body portion of wood having an axial bore and a core of wood filling the said bore, the grains of the wood of the said body portion and core being arranged at right angles one to the other.

3. In a base ball bat comprising a body portion having an axial bore filled with a core comprising a steel tubing filled with wood, the grains of the wood of the said body portion and core being arranged at right angles one to the other.

1,063,564. THERMOSTATIC VALVE. ROBERT S. MAYER, Norwood, Ohio. Filed May 23, 1910. Serial No. 562,991. (Cl. 236—9.)



1. In a thermostatic valve, the combination of a casing having a valve-seat therein whose longitudinal projection extends laterally, said valve-seat provided with an opening which communicates with a source of pressure-supply, said casing having an outlet, a valve for said valve-seat, said valve having a pivot thereabove in said casing for normally gravitating said valve against said valve-seat in closed relation, and an expansion-member acting on said valve for pressing said valve against said valve-seat, the line of operative expansion of said expansion-member being transverse to the longitudinal projection of said valve-seat, substantially as described.

2. In a thermostatic valve, the combination of a casing, a valve-support therein, said valve-support having a pivot at its upper part in said casing, a valve on said support, said casing being provided with a valve-seat for said valve, the longitudinal projections of said valve and valve-seat being substantially horizontal, and the face of said valve being substantially vertical, the said pivot of said valve-support being outside said longitudinal projections, and arranged for normally gravitating said valve against said valve-seat in closed relation, and an expansion-member acting on said valve-support, substantially as described.

3. In a thermostatic valve, the combination of a casing, a valve-support therein, a valve on said support, said casing being provided with a valve-seat comprising an inlet-port, the longitudinal projections of said valve and valve-seat being substantially horizontal, and constructed and arranged for normally gravitating said valve against said valve-seat in closed relation, and an expansion-member acting on said valve-support, said valve-casing being provided with an outlet-port, and the side of said valve removed from said valve-seat being of greater cross-sectional area than said inlet-port of said valve-seat, and the said side of said valve removed from said valve-seat being exposed to communication from said outlet-port, substantially as described.

4. In a thermostatic valve, the combination of a casing having a valve-seat therein and an inlet-passage for said valve-seat, said casing being provided with an outlet-passage, a valve-support pivoted in said casing in said outlet-passage, a valve loosely mounted thereon, the center of gravity of said valve-support and valve being within said outlet-passage, an expansion member arranged to act against said valve-support, the said valve having a face exposed to said outlet-port of greater cross-sectional area than the cross-sectional area of said inlet-passage, substantially as described.

5. In a thermostatic valve mechanism, the combination of a casing provided with an inlet-passage, an outlet-passage and a valve-seat surrounding said inlet-passage, a valve-support pivoted in said casing, a valve on said support for said valve-seat, said valve-support having a bracket thereon for forming a bell-crank lever, the center of gravity of said valve-support and valve being within said outlet-passage, and an expansion-member arranged to act on said bracket for closing said valve, substantially as described.

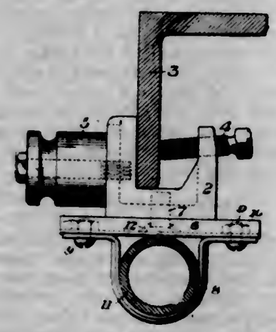
[Claims 6 and 7 not printed in the Gazette.]

1,063,565. HAT-MARKER. JOHN H. MCCORD, Pierre, S. D. Filed Sept. 3, 1912. Serial No. 718,324. (Cl. 40—9.)



As a new article of manufacture, the herein described hat marker, including an attaching plate formed with means whereby it may be attached to the sweat band of a hat and a card holding plate hingedly connected at one end to one end of the attaching plate, said card holding plate being formed on that face which is adapted to fold toward the attaching plate, with card retaining means, one of said plates being formed with a lip extended past the pivot point and the other being formed with a spring tongue adapted to overlie said lip and engage the latter and with a lug designed to underlie the lip, whereby to limit the opening movement of the card holding plate.

1,063,566. PIPE HANGER OR SUPPORT. GEORGE H. MCFEATERS, Johnstown, Pa. Filed May 18, 1911. Serial No. 628,139. (Cl. 248—3.)



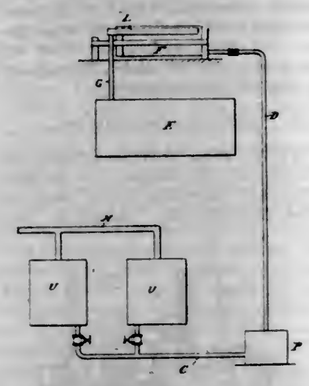
1. A device of the character described, comprising a support having means for clamping it to a structural element, a single channel member extending in a transverse direction with relation to the pipe, a pipe supporting strap, means for securing the ends of the strap to the ends of the channel member, and means for securing the channel member to the support; substantially as described.

2. A pipe support or hanger, comprising a single channel member, said channel member having openings through each end thereof, a pipe-supporting strap, securing screws passing through openings in the ends of the pipe-supporting strap and the openings in the ends of the channel member, and a supporting device passing through an opening in the center of the channel member; substantially as described.

3. A pipe support or hanger, comprising a single channel member, said channel member having openings through each end thereof, a pipe-supporting strap, securing screws passing through openings in the ends of the pipe-supporting strap and the openings in the ends of the channel member, a supporting device passing through an opening in the center of the channel member, and means for preventing the rotation of the supporting device; substantially as described.

4. A device of the character described, comprising a device having two upwardly extending jaws, a clamping screw having threaded engagement with one of the jaws for clamping the device to a support, a single member having a channel extending in a transverse direction with relation to the pipe, there being openings through each end of said member, a pipe supporting strap, means passing through openings in the channel member for securing the strap thereto, and means for securing the channel member to the lower face of the jaw device; substantially as described.

1,063,567. PROCESS OF PRECIPITATING AND RECOVERING MATERIALS FROM SOLUTIONS. CHARLES W. MERRILL, Berkeley, Cal. Filed Mar. 1, 1911. Serial No. 611,722. (Cl. 75—185.)



1. The method of maintaining reducing conditions throughout the precipitation of metal containing material from a cyanid solution, which consists in agitating said solution with a metallic precipitant, conveying the mixture without rest to a filter and excluding oxidizing gases from mixture during the precipitation periods and the intervals between them.

2. The process for precipitating and recovering material from its solution which consists in adding a precipitant to said solution while in motion, conducting the mixture without rest to a filter, and maintaining reducing conditions in the filter during the precipitation periods and the intervals between them.

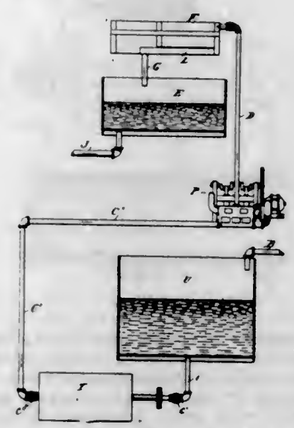
3. The process for precipitating and recovering material from its solution which consists in adding a precipitant to the duct through which said solution is being conveyed to a filter and maintaining reducing conditions in the filter during the precipitation periods and the intervals between them.

4. The process for precipitating and recovering material from its solution which consists in conveying said solution to a pressure filter, simultaneously forcing a precipitant into said pressure filter with said solution and maintaining reducing conditions in the filter during the precipitation periods and the intervals between them.

5. The process for precipitating and recovering material from its solution which consists in adding a precipitant to the duct in which said solution is conveyed, forcing the mixture into the bottom of a pressure filter, and maintaining reducing conditions in the filter during the precipitation periods and the intervals between them.

[Claim 6 not printed in the Gazette.]

1,063,568. PROCESS OF PRECIPITATION OF MATERIAL FROM CYANID SOLUTIONS. CHARLES W. MERRILL, Berkeley, Cal. Filed July 15, 1911. Serial No. 638,733. (Cl. 75—185.)



1. The hereinbefore described process of precipitation of metals from their solutions, which consists in causing the said solutions to pass through a comminuting apparatus, in which they are brought in contact with a metallic precipitant of said metals, with which has been incorporated a substance capable of intensifying the comminution of said precipitant.

2. The hereinbefore described process of precipitation of metals from their solutions, which consists in causing the said solutions to pass through a comminuting apparatus in which they are brought in contact with a metallic precipitant of said metals, with which has been incorporated a metallic substance capable of intensifying the comminution of said precipitant.

3. The hereinbefore described process of precipitation of metals from their solutions, which consists in causing said solutions to pass through a comminuting apparatus in which they are brought in contact with a brittle alloy containing a metallic precipitant of said metals.

4. The hereinbefore described process of precipitating metals from cyanid solutions, which consists in passing the solution, which has already been partially precipitated, together with such a partial precipitate and precipitant through a comminuting apparatus.

5. The hereinbefore described process of precipitating metals from cyanid solutions, which consists in passing the solution, which has already been partially precipitated, together with such a partial precipitate and precipitant, through a comminuting apparatus in which they come in contact with a precipitant.

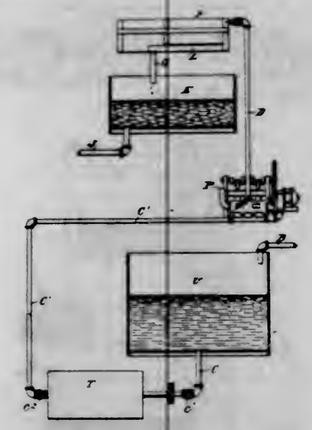
[Claims 6 to 8 not printed in the Gazette.]

1,063,569. PROCESS OF PRECIPITATION OF MATERIAL FROM CYANID SOLUTIONS. CHARLES W. MERRILL, Berkeley, Cal. Filed Dec. 9, 1911. Serial No. 664,735. (Cl. 75—185.)

1. The hereinbefore described process of precipitation of metals from their solutions, which consists in passing the said solutions through a comminuting apparatus in which they are brought in contact with a metallic precipitant of said metals, in which an abrasive substance has been incorporated.

2. The hereinbefore described process of precipitation of metals from their solutions, which consists in passing said solutions through a comminuting apparatus, in which

they are brought in contact with a metallic precipitant of said metals, and in which the comminution of said precipitant is intensified by the incorporation therewith of an abrasive substance.



3. The hereinbefore described process of precipitation of metals from their solutions, which consists in passing the said solutions through a comminuting apparatus in which they are brought in contact with a metallic precipitant of said metals, with which precipitant an inert, non-metallic abrasive substance has been incorporated.

4. The hereinbefore described process of precipitation of metals from their solutions which consists in passing the said solutions through a comminuting apparatus in which they are brought in contact with a metallic precipitant of said metal, and intensifying the comminution of the said precipitant by the incorporation therewith of an inert, non-metallic abrasive substance.

1,063,570. PRECIPITANT FOR RECOVERING METALS FROM SOLUTIONS. CHARLES W. MERRILL, Berkeley, Cal. Filed Apr. 16, 1912. Serial No. 691,247. (Cl. 75—185.)

A precipitant for recovering metals from cyanid solutions, which consists of a powder made from an alloy containing a substance capable of effecting the desired precipitation and an abrasive substance, substantially as described.

1,063,571. MEAT-SMOKING APPARATUS. AUGUST M. MILLER, Lake Preston, S. D. Filed Oct. 17, 1912. Serial No. 726,379. (Cl. 34—19.)

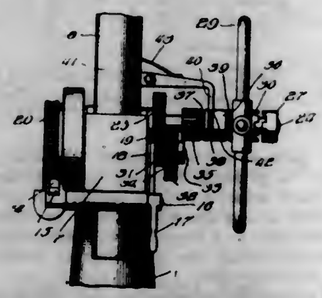


1. In an apparatus of the class described, a smoke generator comprising a smoke producing stove having a grate, a pipe for conveying the products of combustion into the chamber to be charged, said stove having an intake and having a connection in communication with said pipe below the grate, a valve that normally closes over the bottom of the grate and opens under suction action, a back check valve in said pipe and a pump in communication with said pipe and with the stove below the grate.

2. In an apparatus of the character stated, a smoke generator comprising a smoke producing stove including a grate and a discharge portion below the grate, an offtake pipe in communication with said discharge portion for leading the smoke into the chamber to be charged, a by-pass pipe communicating with said offtake pipe and with the top of the stove, a pump in communication with said offtake pipe and with the discharge portion of said stove, a back check valve in said offtake pipe between the point of connection of said by-pass pipe with said offtake pipe and the discharge of said stove, said back check valve serving to close said offtake pipe when in one position and to close said by-pass pipe when in the opposite position, and a check valve in said stove beneath said grate for closing the passage through the grate when said valve is in one position.

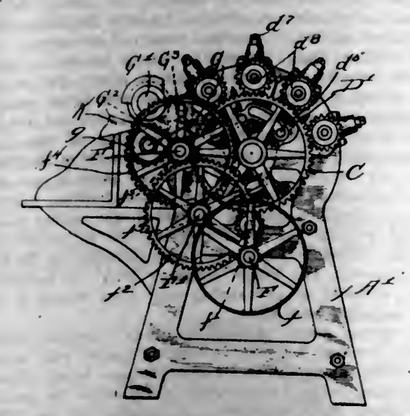
3. In an apparatus of the character described the combination of a smoke house, of a smoke generator comprising a stove, a smoke collecting chamber in communication with the bottom of the stove, a pump in connection with a part of said chamber, an offtake for the said chamber that connects with the smoke house, a pipe connection between said offtake and the top of the stove, a valve between the stove outlet and the said pipe connection, which under one adjustment closes the said pipe connection to the top of the stove and under another adjustment closes the outlet to the smoke house, a valve that normally closes off the stove from said chamber, the aforesaid parts being arranged so that on the suction stroke of the piston smoke will be drawn through the stove into said chamber and pump, and on the other stroke of the pump piston smoke will be passed through said chamber and offtake into the smoke house.

1,063,572. FEED FOR DRILL-SPINDLES. ROBERT MILNE, Rockford, Ill., assignor to Rockford Drilling Machine Company, Rockford, Ill., a Corporation of Illinois. Filed May 16, 1911. Serial No. 627,526. (Cl. 77—32.)



The combination with the rack of a feed for drill spindles, of a pinion shaft, a pinion secured thereon and meshing with the rack to raise and lower the same, an internal gear secured to one end of the said shaft, an auxiliary shaft extending in a direction substantially parallel to the said pinion shaft, a pinion on the said auxiliary shaft meshing with the internal gear, a gear and pinion mounted free to rotate on the said pinion shaft, a gear secured to the said auxiliary shaft and meshing with the pinion of the gear and pinion, a clutch block secured to the auxiliary shaft, and a clutch hand wheel and pinion slidably mounted on the auxiliary shaft between the said clutch block and the gear of the auxiliary shaft, whereby when the said hand wheel clutch block and pinion are thrown out the clutch will engage the clutch block of the auxiliary shaft to directly drive the same, and whereby when the said hand wheel, clutch block and pinion are thrown in the said pinion will engage the gear of the gear and pinion to drive the auxiliary shaft through the medium of the gear and pinion, substantially as described.

1,063,573. IRONING-MACHINE. SIVERT MOE, Chicago, Ill. Filed Nov. 15, 1909. Serial No. 527,976. (Cl. 68—9.)



1. An ironing machine embracing a frame, a main cylinder, smaller cylinders peripherally engaging the same, a plurality of feed rolls, a gear train connecting one of said feed rolls and the peripheral rolls, a gear train connecting said main cylinder and another of said feed rolls, alternately tight and loose gears of different diameters adapted to connect the said gear trains affording different speed relations between the main roller and a feed roller relative to the smaller cylinders.

2. A machine of the class described embracing a main rotative cylinder, smaller cylinders bearing peripherally thereon, relatively large feed rolls coacting to deliver fabrics to be treated inwardly toward the cylinder, smaller feed rolls positioned between the large rolls and the main cylinder, means driving the smaller cylinders at uniform rate, and means adapted to be operated without stopping the machine for varying the rate of the drive of one of the feed rolls and the main cylinder with reference to the rate of drive of the smaller cylinders and smaller feed rolls.

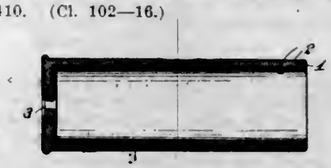
3. A machine of the class described embracing a frame, a main cylinder, gudgeons on the ends of said cylinder adapted to extend through said frame, a driving gear secured on one of said gudgeons, a plurality of small cylinders bearing peripherally upon the main cylinder, a plurality of pairs of feed rollers, a drive shaft for the main cylinder, a relatively large gear rotatably secured on the outer end thereof, a smaller gear rotatably secured upon said shaft between the main frame and the large gear and in engagement with said driving gear, a stud shaft secured upon said frame, large and small axially connected gears rotatably secured upon said stud shaft, the smaller of which meshes with the larger gear upon the driving shaft and the larger of which acts to actuate one of the feed rollers and mesh with the smaller gear upon the driving shaft, and means on the driving shaft adapted to engage either of said gears to vary the peripheral rate of drive of one of the feed rollers and main cylinder with respect to the smaller cylinders.

4. A machine of the class described embracing a frame, a main cylinder, gudgeons on the ends of said cylinder adapted to extend through said frame, a driving gear secured on one of said gudgeons, small cylinders adapted to bear peripherally upon the main cylinder, feed rollers, a drive shaft for the main cylinder, a relatively large gear rotatably secured thereon, a smaller gear rotatably secured upon said shaft between the main frame and the large gear and in engagement with the driving gear on said gudgeon, a stud shaft, gears rotatably secured upon said stud shaft, one of which meshes with the larger gear upon the driving shaft and the other of which acts to actuate one of the feed rollers and mesh with the smaller gear upon the driving shaft, and means on the driving shaft adapted to engage either of said gears to vary the peripheral rate of drive of one of the feed rollers and main cylinder with respect to the smaller cylinders.

5. A machine of the class described embracing a frame, a main cylinder, a plurality of peripheral rollers adapted to engage the same, a plurality of pairs of feed rollers, means acting to simultaneously separate a pair of said feed rollers one from another and also said peripheral rollers from said main cylinder, and means simultaneously affording different speed relations between two feed roleirs, and also the main cylinder and the peripheral rollers.

[Claim 6 not printed in the Gazette.]

1,063,574. HOLLOW COMPOUND-METAL ARTICLE. JOHN FERREOL MONNOT, New York, N. Y., assignor to Duplex Metals Company, New York, N. Y., a Corporation of New York. Filed Dec. 26, 1905. Serial No. 293,410. (Cl. 102—16.)



1. As an article of manufacture, a hollow metal object having a wall composed of a thickness of compound metal comprising a ferrous metal body and an impervious, planished film-like coating of an unlike, high-melting non-ferrous metal weld-united thereto, said coating being drawn over and covering the edges of the ferrous metal body.

2. As an article of manufacture, a hollow metal object having a wall composed of a thickness of compound metal comprising a ferrous metal body and an impervious, planished film-like coating of a cupriferous metal weld-united thereto, said coating being drawn over and covering the edges of the ferrous metal body.

3. As an article of manufacture, a hollow metal object having a wall composed of a thickness of compound metal comprising a ferrous metal body and an impervious, planished film-like coating of copper weld-united thereto, said coating being drawn over and covering the edges of the ferrous metal body.

4. As an article of manufacture, a cartridge shell composed of a compound metal having a body of ferrous metal provided with an impervious, planished film-like coating of an unlike, high-melting non-ferrous metal weld-united thereto, said coating being drawn over and covering the edges of the ferrous metal body.

5. As an article of manufacture, a cartridge shell composed of a compound metal having a body of ferrous metal provided with an impervious, planished film-like coating of a cupriferous metal weld-united thereto, said coating being drawn over and covering the edges of the ferrous metal body.

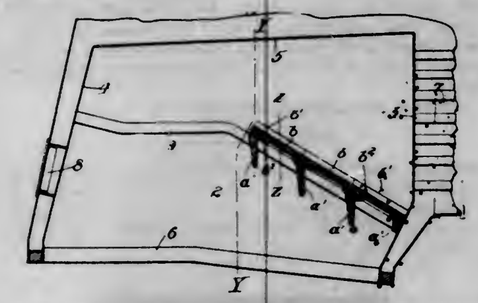
[Claims 6 to 9 not printed in the Gazette.]

1,063,575. REFRACTORY BRICK ARCH FOR LOCOMOTIVE-BOILER FURNACES. CHARLES BREARLEY MOORE, Evanston, Ill., assignor, by mesne assignments, to American Arch Company, New York, N. Y., a Corporation of New York. Filed Sept. 23, 1908. Serial No. 454,351. (Cl. 110—87.)

1. A locomotive boiler firebox having a plurality of arch tubes, in combination with a refractory arch body resting on said tubes, said body comprising spans which extend between and rest on said tubes, said spans being disposed in spaced-apart rows, and panel or cover bricks which rest on said spans space the same apart and close the spaces between the rows thereof, and said spans being provided with a plurality of transverse depending portions opening from the tubes, substantially as described.

2. A locomotive boiler firebox having a plurality of inclined arch tubes, in combination with a refractory arch body resting upon said tubes, said body comprising a plurality of rows of refractory spans spaced apart on said tubes and presenting a plurality of transverse, ver-

tical portions depending between said arch tubes, and rows of thin bricks which rest upon, extend between, and close the spaces between said rows of spans, substantially as described.



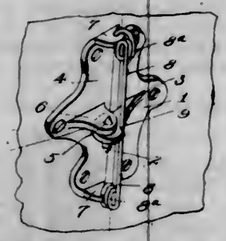
3. A locomotive boiler firebox having a plurality of arch tubes, in combination with transverse rows of span bricks supported by and depending from and between said arch tubes, and a plurality of arch top forming bricks in turn supported by said span bricks and closing the openings between the rows thereof from side to side of the firebox, substantially as described.

4. A locomotive boiler firebox having a plurality of arch tubes, in combination with a plurality of transverse rows of bricks spaced apart upon and depending from and between said arch tubes and a plurality of arch top forming bricks, through the medium of said transverse bricks being also supported by said arch tubes, said top forming bricks closing the spaces between said transverse bricks and having transverse shoulders on their undersides, which serve as stops and spacers for said transverse bricks, substantially as described.

5. In a locomotive firebox arch two transversely arranged and longitudinally spaced refractory arch spans each composed of a plurality of individual span bricks arranged end to end and each brick adapted to be supported by two firebox arch tubes, in combination with a plurality of panel bricks supported at the ends by said spans, closing the space between them and therewith completing the arch, substantially as described.

[Claims 6 to 14 not printed in the Gazette.]

1,063,576. SPRING-HINGE. ELISHA MOORE, Worcester, Mass., assignor to Guy Stanley Moore, Fall River, Mass. Filed Oct. 7, 1912. Serial No. 724,374. (Cl. 16—25.)



1. A spring hinge comprising hinge members having brackets provided with interengaging pintle and socket, and a spring anchored at its ends on one hinge member and engaging at an intermediate point with the bracket of the other hinge member; the bracket of the hinge anchoring member being constructed to receive the intermediate portion of the spring when the hinge is open and relieve the spring engaging member from tension, whereby the spring members may be separated.

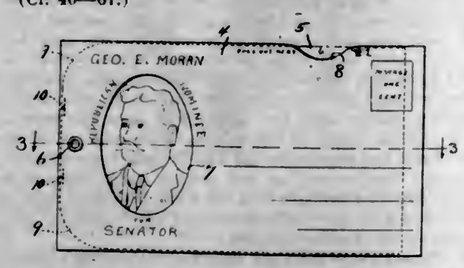
2. A spring hinge comprising hinge members having brackets provided with interengaging pintle and socket, and a spring anchored at its ends on one hinge member and engaging at an intermediate point with the bracket of the other hinge member; the bracket of the hinge anchoring member being constructed to receive the intermediate portion of the spring when the hinge is open and relieve the spring engaging member from tension, whereby the spring members may be separated, said spring engaging bracket being notched to confine the spring thereon and said notch being in position to hold the hinge open when moved beyond the normal range of swinging.

3. A spring hinge comprising hinge members having brackets provided with interengaging pintle and socket, and a spring anchored at its ends on one hinge member and engaging at an intermediate point with the bracket of the other hinge member; the bracket of the hinge anchoring member being constructed to receive the intermediate portion of the spring when the hinge is open and relieve the spring engaging member from tension, whereby the spring members may be separated, the spring engaging bracket being notched to confine the spring thereon and being formed with a cam edge leading up to said notch, whereby the hinge members may be assembled without pressure of the spring and then swung to the spring engaging position.

4. A spring hinge comprising hinge members having brackets provided with interengaging pintle and socket, and a spring anchored at its ends on one hinge member and engaging at an intermediate point with the bracket of the other hinge member; the bracket of the hinge anchoring member being constructed to receive the intermediate portion of the spring when the hinge is open and relieve the spring engaging member from tension, whereby the spring members may be separated; the spring anchoring hinge member being constructed with lugs provided with slots in position to receive the ends of the spring and extending in the direction to have the spring held therein by the tension imposed upon the spring when in use.

5. A spring hinge comprising hinge members having brackets provided with interengaging pintle and socket, and a spring anchored at its ends on one hinge member and engaging at an intermediate point with the bracket of the other hinge member; the bracket of the hinge anchoring member being constructed to receive the intermediate portion of the spring when the hinge is open and relieve the spring engaging member from tension, whereby the spring members may be separated; said spring comprising a bar forming the intermediate portion thereof and coils interposed between said bar and the anchorage ends of the spring.

1,063,577. JACKKNIFE POST-CARD. GEORGE E. MORAN, Chicago, Ill. Filed Dec. 12, 1912. Serial No. 736,450. (Cl. 40—67.)



1. In a device of the class described, a card folded to form a pocket, an insert in said pocket, a rivet at one end of the pocket securing said card and insert together so that the insert can swing on said rivet in and out of the pocket, a perforation in said pocket to display a portion of the insert and a corner of the insert nearest the rivet cut so as to prevent the corner from entering any part of the perforation.

2. In a device of the class described, a pocket formed of two sheets secured together at two opposite ends an insert comprising a plurality of sheets bound together at one end by two or more staples so that the sheets cannot be shifted with respect to one another, said insert secured to the pocket so as to swing about a pivot into and out of the pocket, a perforation in said pocket to display a portion of the insert, and a corner of the insert nearest the pivotal point cut so as to prevent the corner of the insert from entering any part of the perforation.

3. In a device of the class described, a pocket formed of two sheets secured together at opposite ends, an insert in said pocket comprising a plurality of sheets bound together at one end, a rivet at one end of the pocket securing the pocket and insert together so that the insert is free to swing about said rivet in and out of the pocket, a perforation in one sheet of said pocket to display a portion of the insert and a corner of the insert nearest the rivet formed so as to prevent the corner from entering any part of the perforation.

1,063,578. TIRE OR TREAD THEREFOR. WILLIAM ROBERT MORRISON, Chicago, Ill. Filed Mar. 2, 1911. Serial No. 611,856. (Cl. 152—4.)



1. A tire tread embracing a plurality of separable layers of reticulated bands, and integral lateral members of alternate band layers extended to afford attaching means therefor.

2. A tire tread embracing in combination with a wheel and a tire thereon, a plurality of reticulated bands to fit about the tire and each other, laterally directed portions on alternate bands which project beyond the rim and means for securing the tread to the wheel.

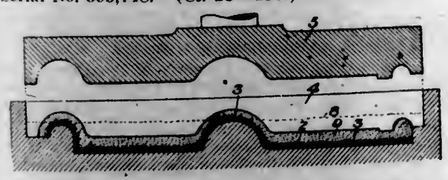
3. A tire tread embracing a plurality of interfitting bands arranged about the rim, the one within the other, projecting members extending from each edge of alternate bands and co-acting means carried at each side of the wheel and acting to engage said projecting portion of the bands and draw the bands tight.

4. The combination with a wheel and a rim thereon of a tire tread embracing a plurality of interfitting bands arranged around the rim one within the other, portions of alternate bands projecting on each side, and gripping means carried at each side of the wheel and acting to engage said portions to draw the bands tight.

5. The combination with a wheel of a tire tread embracing a plurality of interfitting reticulated bands arranged about the rim, one within the other, transverse strands of alternate bands extending beyond the rim and releasable gripping means at each side the wheel acting to frictionally engage said strands to hold said bands tight.

[Claim 6 not printed in Gazette.]

1,063,579. METHOD OF MANUFACTURING REINFORCED TILES. SOLOMON B. MYERS, Plainfield, N. J. and JOSEPH FREUND, St. Louis, Mo., assignors to American Cement Tile Manufacturing Company, Wampum, Pa., a Corporation of Pennsylvania. Filed Dec. 5, 1910. Serial No. 595,748. (Cl. 25—154.)

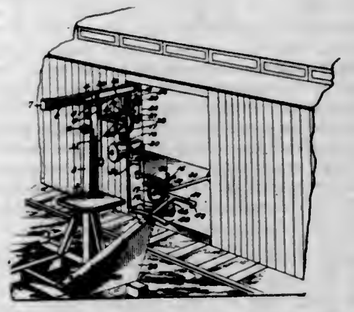


1. The method of manufacturing reinforced tiles, which consists in first covering the bottom of the mold with a mixture of dry cement and sand, then placing a reinforce

in the mold and supporting it above the bottom thereof, then placing a batch of mud on the reinforce, then working the mud through the reinforce to moisten the dry sand and cement in the bottom of the mold, then moistening the upper surface of the first batch of mud to replace the water absorbed by the dry material and also to moisten the top of the first batch so that the second batch will properly intermingle therewith, then placing a second batch of mud on the first batch, and then forming the tile; substantially as described.

2. The method of manufacturing reinforced tiles, which consists in placing a reinforce in a forming mold so that it is spaced from the bottom of the mold by the projections, then placing a batch of mud on the reinforce, then working the mud through the reinforce, then moistening the upper surface of the first batch, then placing a second batch of mud of greater consistency on the first batch, and then forming the tile, substantially as described.

1,063,580. MAIL-BAG CATCHING AND DELIVERING MECHANISM. WILLIAM H. NEWTON, Marion, S. C. Filed June 10, 1912. Serial No. 702,911. (Cl. 105—231.)



1. In an apparatus for the purpose set forth, the combination of a support disposed adjacent a track, a collar hung thereon, a bag suspending device comprising an undivided ring and a clasp extending from said ring and yieldably engaging the collar, and a take-up arm adapted to be secured to a car and engage the said ring.

2. In an apparatus for the purpose set forth, the combination of a support, a collar hung thereon, a bag suspending device having a clasp adapted to be inserted in and yieldably engage said collar, and a take-up arm adapted to pass through and engage the said bag suspending device.

3. In an apparatus for the purpose set forth, the combination of a support, a non-circular collar hung thereon, a clasp adapted to fit within and yieldably engage the said collar, an undivided ring rigid with said clasp, a bag securing device attached to said ring, and a take-up arm adapted to pass through the ring and detach the clasp from the collar.

4. The combination of a support, a non-circular collar hung thereon, a clasp consisting of resilient fingers adapted to pass upwardly through said collar and engage the upper edge thereof, a ring permanently attached to said clasp, a bag securing device permanently attached to the said ring, and a take-up arm adapted to pass through the ring and engage the same so as to release the resilient fingers from the suspended collar.

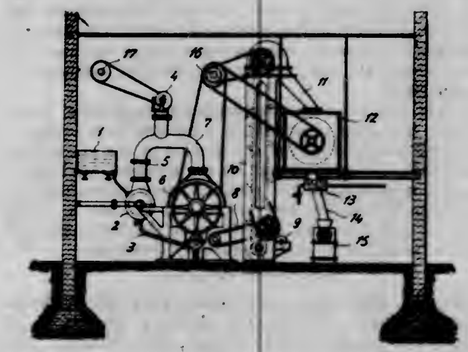
5. In an apparatus for the purpose set forth, the combination of a supporting bracket, an arm detachably pivoted upon the said bracket and provided adjacent the bracket with lateral lugs, and a spring fixed adjacent the bracket and bearing upon the said lugs.

[Claims 6 to 9 not printed in the Gazette.]

1,063,581. METHOD OF DRYING MILK. OSCAR NICOLAI, Viersen, Germany. Filed Jan. 31, 1912. Serial No. 674,482. (Cl. 99—5.)

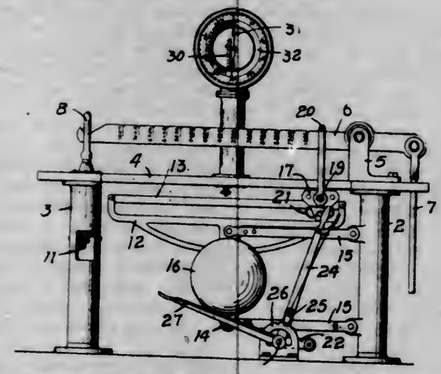
1. Method of treating milk which consists in heating the milk so as to thicken the same, spreading the thickened

milk in a thin stratum, heating said stratum to a higher degree for a short period to form a skin, cooling the skin, reheating the same to expel the moisture, and cooling the dephlegmated skin.



2. The method of drying milk consisting in exposing the milk for from half an hour to one hour to the action of a temperature of about 65° to 85° centigrade so as to thicken the milk up to about 6 to 9° Baumé, immediately afterward exposing the milk in a thin layer for a few seconds to the action of a temperature of about 90° to 100° centigrade, so as to turn the milk into a wet milk skin as thin as paper, thereupon cooling the mostly dried milk, exposing it for half an hour to the action of a temperature of about 65° to 85° centigrade, so as to free it from water excepting the water of crystallization of the milk sugar, and cooling the completely dried milk.

1,063,582. SCALE. NILS NILSON, Wayzata, Minn. Filed July 30, 1908, Serial No. 446,091. Renewed Nov. 28, 1910. Serial No. 594,601. (Cl. 73—46.)



1. The combination, with a scale beam, of a dial having graduations thereon and an indicator hand therefor, means operatively connecting said indicator hand with said beam, a comparatively heavy beam weight and support therefor, said support being capable of vertical movement with said weight, means preventing horizontal movement of said support, a carriage adapted to slide on said support and having a part to engage said beam, said carriage, when elevated out of engagement with said beam, being capable of movement lengthwise thereof without disturbing said weight, and means yieldingly resisting the movement of said connecting means.

2. In a scale, the combination, with a beam having graduations thereon, of a graduated dial and an indicator hand therefor, means operatively connecting said indicator hand with said beam, means yieldingly resisting the movement of said operating means, a pivoted yoke, a carriage adapted to slide thereon and having a link to engage said beam, a beam weight carried by said yoke and means for raising and lowering said yoke and carriage.

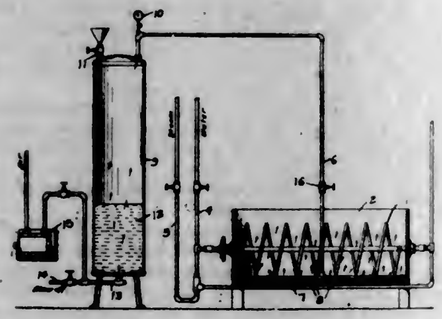
3. In a scale, the combination, with a scale beam, of a dial having graduations thereon and an indicator hand therefor, means operatively connecting said hand with said beam, means yieldingly resisting the movement of said operating means, a beam weight, means connecting said weight with said beam, means for raising or lowering said weight to render said connecting means operative or inoperative, said connecting means in its operative position being movable back and forth on said beam without moving said weight.

4. In a scale, the combination, with a scale beam, of a beam weight and yoke whereon said beam weight is supported, a carriage slidably mounted on said yoke and having a part to engage said beam, means for raising said yoke to relieve said carriage of the strain thereon and permit it to be moved lengthwise of said beam, and means preventing horizontal movement of said yoke.

5. In a scale, the combination, with a beam having graduations thereon, of a comparatively large beam weight and supporting means therefor, a carriage mounted on said supporting means and having a part to engage said beam and support said weight and its supporting means from said beam, said carriage being capable of movement back and forth over said beam independently of said weight and its support when said carriage is relieved of the strain thereon, substantially as described, and means preventing horizontal movement of said supporting means.

[Claims 6 to 13 not printed in the Gazette.]

1,063,583. AIR-PURIFYING DEVICE FOR CREAMERY-VATS. FRANK R. NOONAN, Alexandria, Minn. Filed Jan. 6, 1910. Serial No. 536,706. (Cl. 31—90.)

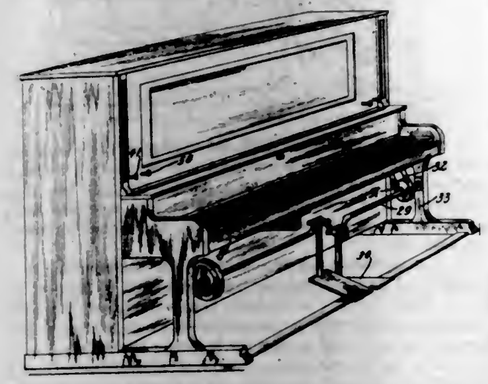


A device of the class described comprising a vat adapted to contain cream or milk, a pipe through which air may be delivered within said vat near the bottom thereof, a closed tank having a pipe connection in its upper walls with said air pipe and vat and adapted to contain a liquid purifying agent, an air pump having a pipe connection with the lower walls of said tank below the level of said purifying agent, there being a comparatively large space within said tank above said purifying agent serving as a reservoir for the air accumulating under pressure therein, the air expanding within said tank and precipitating impurities which may have passed through said purifying agent, the pipe leading from said tank to said vat having a valve therein for regulating the flow of air under pressure to said vat.

1,063,584. PIANO. ALFRED J. OSSWALD, Chicago, Ill. Filed May 23, 1912. Serial No. 699,124. (Cl. 84—70.)

1. A piano comprising a plurality of hammers, a rotatable serrated member, means for rotating the same, a rocking lever upon which each of said hammers is mounted, means intermediate said serrated member and said lever over which means the teeth of said rotatable member are adapted to ride, key-controlled means to carry said intermediate means into or out of engagement with said rotatable member, a pivoted yoke in which said rotatable member is mounted, said rotatable member being normally out of reach of said intermediate members, and means engaging with said yoke and adapted to force said rotatable member into engagement with said intermediate member.

2. A piano comprising a plurality of hammers, a rotatable serrated member, means for rotating the same, a rocking lever upon which each of said hammers is mounted, means intermediate said serrated member and said lever over which means the teeth of said rotatable member are adapted to ride, key-controlled means to carry said intermediate means into or out of engagement with said rotatable member, a pivoted yoke in which said rotatable member is mounted, said rotatable member being normally out of reach of said intermediate members, a bell-crank pivotally mounted upon the piano and adapted to co-act with said yoke thereby to force said serrated member toward said intermediate members, and means for operating the bell-crank.

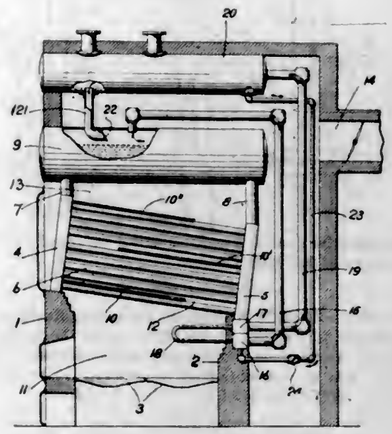


3. A piano comprising a plurality of hammers, a rotatable serrated member, means for rotating the same, a rocking lever upon which each of said hammers is mounted, means intermediate said serrated member and said lever over which means the teeth of said rotatable member are adapted to ride, key-controlled means to carry said intermediate means into or out of engagement with said rotatable member, a pivoted yoke in which said rotatable member is mounted, said rotatable member being normally out of reach of said intermediate members, a spring against the resistance of which said yoke is adapted to move, a bell-crank adapted to engage with said yoke thereby to force said serrated member toward said intermediate members, and means for operating the bell-crank.

4. A piano comprising a plurality of hammers and two sets of strings, a rotatable serrated member, means for rotating the same, a rocking lever upon which each of said hammers is mounted, means intermediate said serrated member and said lever over which means the teeth of said rotatable member are adapted to ride, key-controlled means to carry said intermediate means into or out of engagement with said rotatable member, a pivoted yoke in which said rotatable member is mounted, said rotatable member being normally out of reach of said intermediate members, means co-acting with said yoke and adapted to force said rotatable member into engagement with said intermediate member, a pair of hammers, one adapted to move in one direction and the other adapted to move in the opposite direction, and means for operating said second-mentioned hammer by means of the same key which operates the hereinbefore mentioned key-controlled means.

1,063,585. STEAM-SUPERHEATER. JOHN C. PARKER, Philadelphia, Pa. Filed Nov. 28, 1908. Serial No. 464,931. (Cl. 122—472.)

1. In a superheater, the combination of a furnace and a generator having a steam collecting chamber, with a set of superheater tubes exposed to the direction action of the furnace fire, a conduit for carrying steam from said collecting chamber to said superheater tubes, a reservoir, a conduit for carrying steam from said superheater tubes to said reservoir, and a conduit for carrying water from said reservoir to said superheater tubes.



2. In a superheater, the combination of a generator with a set of superheater tubes, a conduit for carrying steam from said generator to said superheater tubes, a reservoir, a conduit for carrying steam from said superheater tubes to said reservoir, a conduit having an inlet above the bottom of said reservoir for carrying water therefrom to said generator, and a conduit for carrying water from said reservoir to said superheater tubes.

3. In a superheater, in combination with a generator, a set of superheater tubes, a conduit for carrying steam from said generator to said superheater tubes, a reservoir, a conduit for carrying water from said reservoir to said superheater tubes, a check valve for preventing reverse flow through the second named conduit, and a conduit for carrying water from said reservoir to said generator, said last named conduit having an inlet above the inlet to said second named conduit.

4. In a superheater, in combination with a generator having a steam collecting chamber, a set of superheater tubes, a conduit leading from said collecting chamber to said superheater tubes, a reservoir, a conduit leading from said superheater tubes to said reservoir, a conduit having an inlet above the bottom of said reservoir and leading therefrom to said collecting chamber, a check valve for preventing reverse flow through said conduit last named, a conduit leading from the bottom of said reservoir to said superheater tubes, and a check valve for preventing reverse flow through said last named conduit.

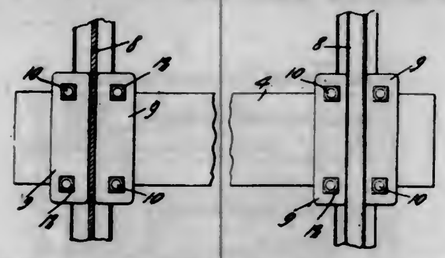
5. In a superheater, the combination of a furnace and a generator, with a set of superheater tubes, a conduit for carrying steam from said generator to said tubes, a reservoir, a conduit for carrying steam from said tubes to said reservoir, and a conduit for carrying water from said reservoir to said generator.

[Claim 6 not printed in the Gazette.]

1,063,586. CONCRETE RAILROAD-TIE. JOSEPH P. PARSHALL, Sabinsville, Pa., assignor of one-third to Michael W. Butts and one-third to Wallace R. Burrell, Sabinsville, Pa. Filed Mar. 17, 1913. Serial No. 754,934. (Cl. 238—3.)

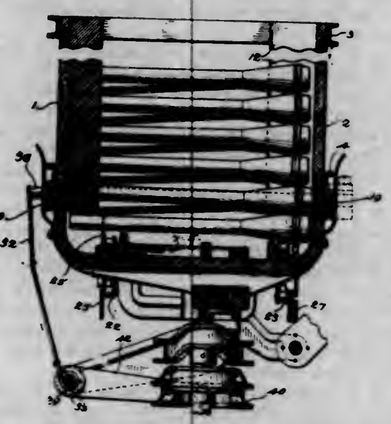
A reinforced plastic tie having upper transverse channels for the reception of the rail flanges and having upright semi-circular grooves in its sides directly adjoining the respective edges of the channels, a plate bearing against the bottom of the tie below each channel, transverse locking strips resting flatly on the tie adjoining and overhanging the respective edges of the channels to retain the rail flanges in the channels, and bolts fitting partially

in the said grooves so as to protrude from the sides of the tie and connecting the respective ends of the strips and



the respective plates, the bolts being arranged to engage the edges of the base flanges.

1,063,587. DOFFER. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed July 20, 1910. Serial No. 572,823. (Cl. 118—13.)



1. In a doffer, a magazine for filling bobbins provided with means forming two separate spaces for the butts of the bobbins and a single space for the tips of all the bobbins.

2. In a doffer, a magazine for filling bobbins comprising two opposite side walls, one of said walls having tip-receiving spaces therein, and the opposite sides of the magazine having butt-receiving spaces, there being twice as many butt-receiving spaces as there are tip-receiving paces, each butt-receiving space being only wide enough to receive a single bobbin-butt.

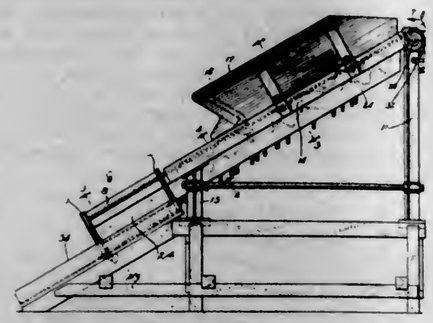
3. In a doffer, a bobbin magazine having a withdrawable closure for its lower end, a support for the lower end of said magazine, an endless conveyer beneath said magazine, said conveyer having a plane upper side on which the bobbins in the magazine rest when said closure is withdrawn, said closure being withdrawable below the uppr side of said conveyer, and mechanism acting upon bobbins in the magazine to control their descent onto the conveyer.

4. In a doffer, a magazine, a support upon which said magazine rests, and a member movable through one side of said support into position to press against one end of a bobbin and press said bobbin against the opposite side of the support.

5. In a doffer, a magazine adapted to contain a vertical column of bobbins, an endless conveyer located beneath said magazine and supporting the column, and operating tranaversely of the bobbins, and mechanism acting upon bobbins in the column to control their gravitational movement onto the conveyer.

[Claims 6 to 9 not printed in the Gazette.]

1,063,588. BOBBIN-HANDLING APPARATUS. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed Jan. 6, 1912. Serial No. 669,768. (Cl. 118—13.)



1. In a bobbin-sorter, the combination of two members arranged in parallel relation and spaced apart a distance greater than the diameter of a bobbin-tip and less than the diameter of a bobbin-butt, one of said members being a roll against which the bobbins bear, and means for rotating said roll.

2. In a bobbin-magazine loader, the combination of a plurality of inclined parallel rolls arranged to support between them bobbins extending transversely of the rolls, means for supporting a magazine so as to inclose a portion of the rolls, and means for rotating the rolls.

3. In a bobbin-magazine loader, the combination of a plurality of inclined parallel rolls arranged to support between them bobbins extending transversely of the rolls, means for rotating the rolls, and means for normally supporting a magazine so as to inclose a portion of the rolls, the magazine-supporting means including a table inclined similarly to the rolls and arranged adjacent to the lower ends of said rolls.

4. In a bobbin-sorter, the combination of a set of spaced parallel bars, a hopper-like structure over a portion of said set of bars, and rolls supported by said bars and presenting a portion of their peripheries in the spaces between said bars, said rolls being adapted to support bobbins.

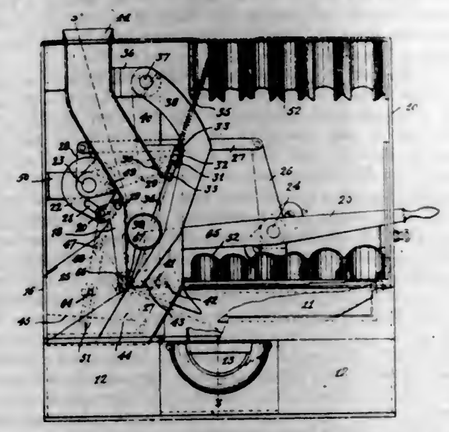
5. In an apparatus of the character described, in combination, an inclined series of spaced parallel bars, a hopper-like structure the bottom of which is constituted of the upper portion of said bars, an inclined table the upper portion of which extends beneath the lower portion of said bars, said lower portion of the bars being adapted to extend within a magazine positioned upon the upper portion of said table, and means for locking a magazine in such position.

[Claim 6 not printed in the Gazette.]

1,063,589. COIN-ACTUATED CHANGE-MACHINE. THOMAS IRVING POTTER, Portland, Oreg. Filed Mar. 24, 1911. Serial No. 616,673. (Cl. 133—2.)

1. In a change making machine, the combination with a plurality of coin stacks and coin ejecting mechanism for discharging coins from each of said stacks separately, of a coin deposit chute, a gate intersecting the passage for coins through said chute positioned to arrest coins of all denominations at the same point and to be moved distances proportional to the diameter of the coins arrested thereby, and connections intermediate said gate and coin ejecting mechanism, whereby upon the operation of the gate by the passage of a coin through the chute ejecting mechanism determined by the diameter of the coin and extent of movement of the gate is operated.

2. In a change making machine, the combination with a plurality of coin holding stacks, and ejecting mechanism for discharging coins therefrom separately in succession, of a coin deposit chute, a gate intersecting the path of travel of coins through the chute, positioned to arrest coins of all denominations at the same point and to be moved distances proportional to the diameter of the coins arrested thereby, connections intermediate said gate and said ejecting mechanism, whereby the ejecting mechanism is operated and coins discharged as determined by the diameter of the arrested coin when the gate is placed by the passage of said coin through the chute, and means for forcing the coin to displace the gate.



3. In a change making machine, the combination with a plurality of coin holding stacks and ejecting mechanism for ejecting coins from each stack, of a coin deposit chute, a gate intersecting the path of travel of all coins through the chute said gate having a coin engaging surface inclined in the direction of movement of the coin through the chute and positioned to arrest coins of all diameters at substantially the same point, connections intermediate said gate and ejecting mechanism, and a movable carriage for advancing the coin to displace the gate in proportion to the diameter of the coin and thereby selectively operate the ejecting mechanism.

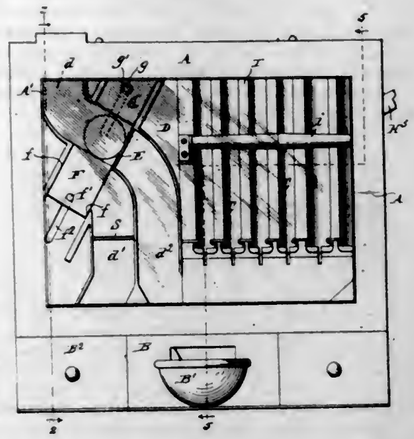
4. In a change making machine, the combination with the coin holders and ejecting mechanism for discharging coins from the holders in succession, of a coin deposit chute, a pivoted gate intersecting the path of travel of a deposited coin through the chute, connections intermediate said gate and ejecting mechanism, whereby the discharged coins are controlled by the extent of movement of the gate as determined by the size of the deposited coin, and means whereby the coin may be positively forced through the chute and past the gate interposed therein.

5. In a change making machine, the combination with the coin holders and ejecting mechanism for discharging coins therefrom, of a coin deposit chute, a gate interposed in the patn of travel of a deposited coin through the chute, connections intermediate said gate and ejecting mechanism whereby the ejecting mechanism will be operated in proportion to the degree of movement of the gate as controlled by the size of the deposited coin, a carriage for advancing the coin in the chute to displace the gate, and a hand lever for operating said carriage.

[Claims 6 to 12 not printed in the Gazette.]

1,063,590. CHANGE COMPUTING AND DELIVERY MACHINE. THOMAS IRVING POTTER, Portland, Oreg. Filed Dec. 27, 1911. Serial No. 668,031. (Cl. 133—2.)

1. In a change calculating and ejecting machine, the combination with a plurality of coin stacks, an ejector for each stack and a single chute for deposited coins of all denominations for which the change is desired, of two members movable relatively toward and from each other in said chute for gaging the diameter of a deposited coin of any denomination, means for moving said members simultaneously in the same direction and connections intermediate one of said members and the ejectors whereby the ejectors to be operated are selectively determined by the diameter of the deposited coin.



2. In a change calculating and ejecting machine, the combination of a plurality of coin stacks, an ejector for each stack, a single coin chute for the reception of coins of all denominations for which change is desired, members movable relatively toward and from each other in said chute for gaging the diameter of all coins deposited therein, means for moving said members relatively toward each other and for moving said members simultaneously different distances in the same direction when their relative movement is arrested by interposed coins of different diameters and connections controlled by one of said members for selectively determining which of the ejectors shall be operated in accordance with the diameter of the coin between said members.

3. In a change calculating and ejecting machine, the combination with coin stacks and ejectors, and a controlling mechanism for the ejectors embodying members movable relatively toward and from each other, and simultaneously in the same direction, of a single chute for retaining deposited coins of all denominations between said members, means for moving said members toward each other until arrested by the interposed coin and for moving the members simultaneously different distances when their relative movement is arrested by coins of different diameters and selective connections controlled by the member moved by the interposed coin for operating the ejectors.

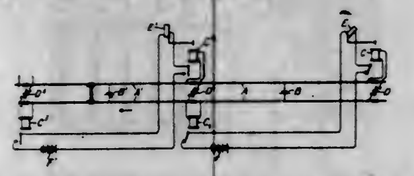
4. In a change calculating and ejecting machine, the combination with coin stacks and ejectors and a chute for deposited coins, of members movable toward and from each other in said chute for gaging the diameter of the deposited coin and simultaneously in the same direction to control the ejecting mechanism, means for locking said members against movement away from each other, means for moving said members simultaneously in same direction when locked together, connections intermediate one of said members and ejecting mechanism and a trip for releasing the locking mechanism to permit of the discharge of a coin held between the members.

5. In a change calculating and ejecting machine, the combination with coin stacks, an ejector for each stack and a chute for coins for which change is desired, of members movable relatively toward and from each other in said chute and between which a deposited coin is adapted to be held, means for moving one of said members toward the other, a lock for connecting said members when their relative movement is arrested by an interposed coin, means for moving said members simultaneously when locked together, a trip for releasing said lock during reverse movement of members and connections intermediate one of said members and ejectors for de-

termining which of the ejectors shall be operated in accordance with the diameter of the coin held between said members.

[Claims 6 to 15 not printed in the Gazette.]

1,063,591. BLOCK-SIGNAL SYSTEM. WILLIAM B. POTTER, Schenectady, N. Y., assignor, by mesne assignments, to The Union Switch and Signal Company, a Corporation of Pennsylvania. Filed Jan. 22, 1910. Serial No. 539,470. (Cl. 246—30.)

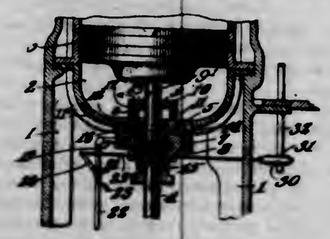


1. In a block signal system, in combination with a railway having the rails of adjacent blocks separated by insulated joints, resistances between adjacent blocks each connecting a rail of one block with the diagonally opposite rail of an adjacent block, sources of current for the track circuits, polarized track relays each having a winding connected around one of said insulated joints, and signals controlled by said relays.

2. In a block signal system, in combination with a railway having the rails of adjacent blocks separated by insulated joints, sources of current connected to the rails, polarized track relays each having a winding connected around one of said insulated joints, and resistances connecting diagonally opposite rails of adjacent blocks and forming with the sources, rails, and relay windings closed track circuits, said resistances being common to adjacent track circuits, and signals controlled by said relays.

3. In a block signal system, in combination with a railway having the rails of adjacent blocks separated by insulated joints, sources of current connected across the rails near the centers of the blocks, resistances connecting diagonally opposite rails of adjacent blocks, polarized relays, one at each end of each block connected across one of said insulated joints, and signals controlled by said relays.

1,063,592. LUBRICATING DEVICE FOR EXPLOSIVE-ENGINE PISTON-RODS. RALPH RAGAN, Atlanta, Ga. Filed Dec. 14, 1911. Serial No. 665,726. (Cl. 123—196.)



1. The combination with an explosive engine having an explosive cylinder with a concentric bore in the explosion end thereof, a piston head reciprocatingly mounted in the cylinder, and a rod connected to said head and passing through the said bore, of a lubricating and packing device for said rod disposed in the bore of the cylinder about the rod, and having a circumferentially disposed lubricant holding chamber through which the rod passes, said casing being provided with two channels leading thereinto and into the chamber thereof for permitting the circulation of the lubricant within said chamber and about the rod, and means controlled through the reciprocation of the piston head for intermittently opening and closing the supply of lubricant to said chamber.

2. The combination with an explosive engine having a cylinder with a concentric bore in the explosion end thereof, a piston head reciprocatingly mounted in the cylinder, and a rod connected to the piston head and projecting through said bore, of a lubricating and packing device for the piston rod, comprising a casing fitted within the bore of the cylinder and surrounding the piston rod, said casing being provided with a chamber surrounding the piston rod and with a supply channel and outlet channel leading to and from said chamber, an adjustable solid packing means mounted in the lower end of said casing about the piston rod, conduits leading to and from the respective channels of the casing, a single valve control for controlling simultaneously the admission and escape of the lubricant from and for sealing the chamber, and means for actuating said valve.

3. The combination with an explosive engine having a cylinder with a concentric bore in the explosion end thereof, a piston head reciprocatingly mounted in the cylinder, and a rod connected to the piston head and projecting through said bore, of a lubricating and packing device for the piston rod, comprising a casing fitted within the bore of the cylinder and surrounding the piston rod, said casing being provided with a chamber surrounding the piston rod, and with a supply channel and outlet channel leading to and from said chamber, an adjustable solid packing means mounted in the lower end of said casing about the piston rod, conduits leading to and from the respective channels of the casing, a single valve control for controlling simultaneously the admission and escape of the lubricant from and for sealing the chamber, and means operable through the reciprocation of the piston for closing the valve upon the explosive stroke of the piston and for opening the valve upon the exhaust-stroke thereof.

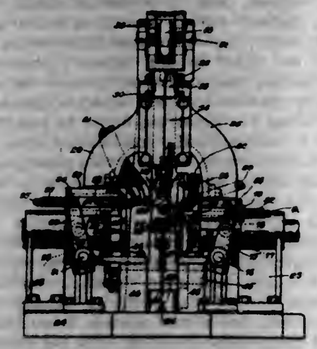
4. The combination with an explosive engine, of a lubricating and packing device for the reciprocating piston rod of the engine, having a casing surrounding the piston rod and through which the rod reciprocates, said casing being provided with an upper lubricant retaining and packing chamber and a lower solid packing retaining chamber, means for retaining the solid packing in the lower chamber, said casing being provided with two channels leading from the outside into the lubricant chamber, the supply channel being of greater area than the escape channel thereof, and a single valve for controlling the circulation of the lubricant to and from and for sealing the chamber, and through the respective channels.

5. The combination with an explosion engine, of a lubricating and packing device for the reciprocating piston rod of the engine, having a casing surrounding the piston rod and through which the rod reciprocates, said casing being provided with an upper lubricant retaining and packing chamber and a lower solid packing retaining chamber, means for retaining the solid packing in the lower chamber, said casing being provided with two channels leading from the outside into the lubricant chamber, the supply channel being of greater area than the escape channel thereof, two conduits leading to and from the respective channels of the casing, the larger conduit being a supply conduit and the smaller conduit being an outlet conduit, and a valve connected in both of said conduits for controlling the supply and escape of the lubricant and the consequent circulation and sealing thereof within the chamber of the casing.

[Claims 6 and 7 not printed in the Gazette.]

1,063,593. NAIL-CAPPING MACHINE. ANDREW RAICHE, Fairhaven, Mass., assignor to Atlas Tack Company, Fairhaven, Mass., a Corporation of New Jersey. Filed May 20, 1911. Serial No. 628,585. (Cl. 10—157.)

1. A machine of the character described, comprising coactive dies, means for placing a fastener in operative position between said dies, means for placing a cap blank in operative position between said fastener and one of said dies, means for placing a lining blank between said fastener and the other of said dies, and means for causing relative movement of said dies to place said cap blank against one end of the fastener, to move the fastener through said lining blank, and to upset a portion of one of said blanks about the other blank while the fastener and blanks are assembled.



2. A machine of the character described, comprising coactive dies, means for supporting a fastener in alinement with the dies, means for supporting a cap blank in position between said fastener and one of said dies, means for supporting a lining blank in position between said fastener and the other die, means for moving one of said dies to move the cap blank against the fastener and move the fastener through said lining blank and into the other die, means for retracting said fastener-supporting means, and means for retracting said lining-blank-supporting means after the end of the fastener is inserted into the last mentioned die, whereby the fastener and lining blank are detached from their respective supporting means, said die-moving means being adapted to further actuate the die to completely assemble the fastener and the two blanks, and to upset one of said blanks so as to interlock the blanks upon the fastener.

3. A machine of the character described, comprising coactive dies, retractory means for supporting a fastener between said dies, retractory means for supporting a lining blank between said fastener and one of said dies, means for holding a cap blank in alinement between said fastener and the other of said dies, means for causing relative closing movement of said dies to insert one end of said fastener through said lining blank and into the adjacent die, means for retracting said fastener-supporting means while the fastener is held by the dies, means for retracting the lining-blank-supporting means while the blank is held by the fastener, and means for closing the dies to swage one of said blanks to interlock said blanks upon the fastener.

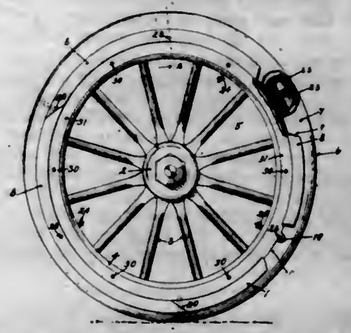
4. In a machine of the character described, a cap-forming die, means for supporting a nail in alinement with said die, movable means for carrying a cap blank between said die and a nail, and means for receiving a cap blank from said carrying means, said cap-blank-receiving means being adapted to support the cap blank above the nail when the carrying means is retracted.

5. In a machine of the character described, coactive dies for forming a blank, and jaws supported by one of the dies for supporting a blank in operative position between said dies, said jaws being movable with relation to their supporting die, said die and blank-supporting jaws having coactive engaging portions adapted to open said jaws.

[Claims 6 to 15 not printed in the Gazette.]

1,063,594. RESILIENT VEHICLE-WHEEL. WILLIAM M. RESSA, Los Angeles, Cal. Filed Nov. 13, 1911. Serial No. 660,157. (Cl. 152—35.)

1. An improved vehicle wheel comprising a felly, a one-piece metallic tread part having substantially arc-shaped recesses therein, stationary parts affixed on the felly and having flange portions overlapping the tread part, bedplates arranged in said stationary parts and provided with side flanges, said flange portions and said side flanges formed with portions to guide the tread part, the stationary parts and the bedplates therein having adjacent ends thereof cut in the arc of a circle with the center at the inner edge of the preceding of the adjacent ends, pins extending between the flange portions of the stationary parts and the side flanges of the bedplates and disposed in the recesses to be normally equidistant from the extremities of the recesses, and a plurality of bags for containing air under pressure interposed between said tread part and said bedplates.



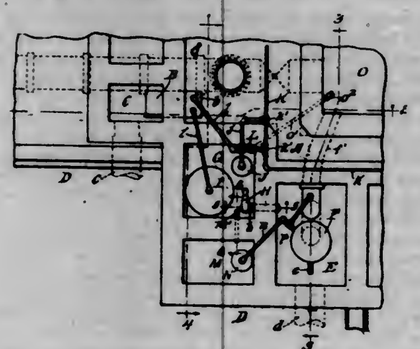
2. An improved vehicle wheel comprising a felly, an outer casing including a one-piece metallic tread part and a plurality of stationary parts affixed to the felly, said stationary parts provided with flange portions and said tread part having substantially arc-shaped recesses therein and overlapping said flange portions on the stationary parts, bedplates in the stationary parts, said bedplates provided with side flanges, the stationary parts and the bedplates therein having adjacent ends thereof cut in the arc of a circle with the center at the inner edge of the preceding of the adjacent ends, pins extending between the flange portions of the stationary parts and the side flanges of the bedplates and disposed in the recesses to be normally equidistant from the extremities of said recesses, and a pneumatic cushion between said tread part and said stationary parts consisting of sheathed bags between the bedplates and said tread part, substantially as described.

3. An improved vehicle wheel comprising a felly, a plurality of stationary parts on the felly and each consisting of a piece of sheet metal formed with a portion adapted to fit on the felly and with flange portions on each side of and substantially at right angles to said portion, a metallic bedplate in each of said stationary parts, said bedplate formed with side flanges spaced from and substantially in parallel with the flange portions on the stationary parts, the stationary parts and the bedplates therein having adjacent ends thereof cut in the arc of a circle with the center at the inner edge of the preceding of the adjacent ends, a one-piece metallic tread part formed circular and provided with spaced side flanges extending into the space between the flange portions on the stationary parts and the side flanges on the bedplates and provided with substantially arc-shaped recesses therein, a plurality of bags for containing air under pressure interposed between said tread part and said stationary parts, and pins extending between the flange portions on the stationary parts and the side flanges on the bedplates and disposed to normally occupy a position substantially equally distant from the extremities of said recesses.

4. An improved vehicle wheel comprising a felly, a one-piece metallic tread part having substantially arc-shaped recesses therein, a plurality of stationary parts affixed on the felly and having flange portions overlapping the tread part, bedplates arranged in said stationary parts and provided with side flanges, the stationary parts and the bedplates therein having adjacent ends thereof cut in the arc of a circle with the center at the inner edge of the preceding of the adjacent ends, pins extending between the flange portions of the stationary parts and the side flanges of the bedplates and disposed in said recesses, a plurality of bags for containing air under pressure interposed between said tread part and said bedplates, and retaining plates secured to said felly and adapted to engage with said stationary parts, substantially as described.

5. An improved vehicle wheel comprising a felly, a plurality of stationary parts on the felly and each consisting of a piece of sheet metal formed with a portion adapted to fit on the felly and with side portions formed with lateral offsets and flanges substantially at right angles to said lateral offsets, metallic bedplates arranged in said stationary parts, said bedplates formed with side flanges secured to said lateral offsets and spaced from and substantially in parallel with the flanges on the stationary parts, the stationary parts and the bedplates therein having adjacent ends thereof cut in the arc of a circle with the center at the inner edge of the preceding of the adjacent ends, a one-piece metallic tread part formed circular and provided with spaced side flanges extending into the space between the flanges in the stationary parts and the side flanges on the bedplates and provided with substantially arc-shaped recesses therein, a plurality of pneumatic bags interposed between the tread part and the stationary parts, and pins extending between the flanges on the stationary parts and the side flanges on the bedplates and disposed in said recesses, substantially as described.

1,063,595. TIMED SIPHON. LESTER E. REIN, Chicago, Ill., assignor to Pacific Flush Tank Company, Chicago, Ill., a Corporation of Illinois. Filed May 25, 1912. Serial No. 699,716. (Cl. 137—106.)



1. As a means for filling and discharging a receptacle, the combination with such receptacle, of a feeding device for said receptacle, a main siphon, means for venting said siphon, embracing a starting bell, a timing chamber containing said starting bell, a separate chamber, means for supplying liquid to and withdrawing liquid from said separate chamber, operating to fill said chamber when the liquid in the receptacle reaches its maximum level and to empty said chamber when said receptacle is emptied, means contained within said separate chamber adapted to automatically close said feeding device by the rise of the liquid therein, and a feed-pipe connecting the bottom of said separate chamber with the bottom of said timing chamber.

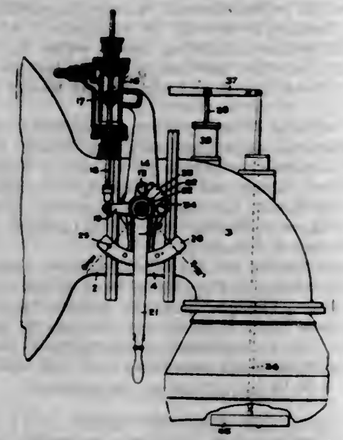
2. As a means for filling and discharging a contact bed or other receptacle, the combination with such receptacle, of means controlled by air pressure and embracing a compression dome for supplying liquid to the receptacle, a compression chamber containing said compression dome, means for filling and emptying said compression chamber, operating to fill the chamber when the liquid rises to its predetermined maximum level in the receptacle and to empty said chamber when the receptacle is emptied, a siphon for discharging the receptacle, means for venting said siphon, embracing a starting bell, a timing chamber containing said starting bell, and a feed-pipe connecting the bottom of the compression chamber with the bottom of the timing chamber.

3. As a means for filling and discharging a liquid tank or receptacle, the combination with such receptacle, of a feeding device for said receptacle, a main siphon, means for venting said siphon, embracing a starting bell, a timing chamber containing said starting bell, a chamber separated from said timing chamber, a pipe of inverted U-form adapted to deliver water from the receptacle to the said separated chamber, and to withdraw liquid from said chamber by siphonic action, means contained within said separate chamber adapted to close said feeding device by the rise of the liquid in said separate chamber, and a feed pipe affording communication between the lower parts of the timing chamber and said separate chamber.

4. As a means for supplying liquid to and discharging liquid from a receptacle, the combination with the receptacle, of a feeding device having a feed passage adapted to be air-locked, and an air-compression dome in communication with said feed passage, a compression chamber containing said compression dome, a feed siphon connecting the receptacle with said compression chamber, a main siphon for discharging liquid from said receptacle, a blow-off trap for venting said main siphon, a starting bell for operating said blow-off trap, a timing chamber containing said starting bell, and a feed passage connecting the bottom of said compression chamber with the bottom of said timing chamber.

5. As a means for filling and discharging a liquid tank or receptacle, the combination with the receptacle, of a feeding device having a feed passage adapted to be air locked, a main siphon, means for venting said main siphon, embracing a blow-off trap, a starting bell communicating with said blow-off trap, a timing chamber containing said starting bell, a separate chamber, a compression dome contained in said separate chamber and communicating with the feed passage of said feeding device, means for supplying liquid to and withdrawing it from said separate chamber, operating to fill said chamber when the liquid in the receptacle reaches its maximum level, and to empty said chamber when the receptacle is emptied, a feed pipe connecting the bottom of said separate chamber with the bottom of the timing chamber, and a valved drain pipe leading from said separate chamber.

1,063,596. SEMI-AUTOMATIC BLAST-GATE FOR CENTRIFUGAL COMPRESSORS. RICHARD H. RICE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 15, 1911. Serial No. 660,400. (Cl. 230—24.)



1. The combination of a centrifugal air compressor having an intake, a constant volume governor located in the intake, and an automatic check valve located in the intake between the governor and the compressor and operating to prevent back blasts.

2. The combination of a centrifugal air compressor and its intake, a constant volume governor located in the intake, and a valve located in the intake between the governor and the compressor which is unbalanced, is moved by the fluid passing through the pipe and has a tendency to close.

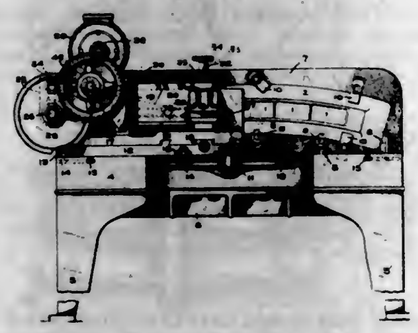
3. The combination of a centrifugal air compressor having an intake, a governing device for regulating the output of the compressor, and valve means located in the intake and operating to check back flow of the air.

4. The combination with the intake pipe of a centrifugal air compressor, of a governing device for the compressor arranged in the intake pipe, and a butterfly valve located in the pipe adjacent to the governing device and mounted upon a spindle, said valve having the area of its portion on one side of the axis of the spindle greater than that of its portion on the opposite side of said axis so that air flowing to the compressor tends to open the valve and air flowing back through the compressor tends to close the valve.

5. The combination with the intake pipe of a centrifugal air compressor, of a governing device located in the intake pipe, a butterfly valve arranged in the pipe adjacent to the governing device, said valve being adapted to open to the incoming air and to be moved toward its closed position by the back flow of the air, and a dash pot for retarding the closing movements of the valve.

[Claims 6 to 9 not printed in the Gazette.]

1,063,597. NOZZLE-PLANING MACHINE. WALTER F. RICE, Quincy, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 8, 1909. Serial No. 506,599. (Cl. 29—23.5.)



1. A nozzle planing machine comprising a bedplate having concentric grooves, a bracket secured thereto, an upright back-plate rising from said bracket and provided with slots, studs adjustable along said slots, a swivel base pivoted concentric with said grooves and having clamping bolts engaging therewith, a motor-driven tool supported on said base and reciprocating parallel therewith, and means for adjusting said tool transversely and vertically.

2. A nozzle-planing machine comprising a bedplate, a base swiveled thereon, a slide frame adjustable transversely on said base, a slide movable lengthwise of said frame, and a vertically-adjustable tool-block on each side of said slide.

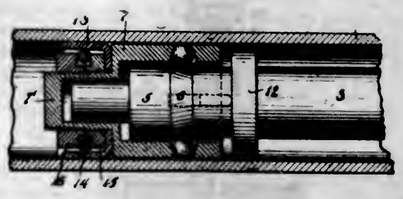
3. A nozzle-planing machine comprising a bedplate, a swivel base thereon, a slide frame adjustable transversely on said base, and comprising a longitudinal beam, a slide movable on said beam, means for reciprocating said slide, and a vertically adjustable tool-block on each side of said slide.

4. A nozzle-planing machine comprising a bedplate, a swivel base thereon, a slide frame adjustable transversely on said base and comprising a longitudinal beam, a power-driven crank shaft on said frame, a slide on said beam, a connecting rod pivoted to the slide and the crank, and a vertically adjustable tool-block on each side of said slide.

5. A nozzle-planing machine comprising a bedplate, a swivel base thereon, a slide frame adjustable transversely on said base and comprising a longitudinal beam, an inverted-U-shaped slide on said beam, a crank shaft on said frame connected to said slide, a motor on said frame geared to said shaft, and a vertically adjustable tool-block on each side of said slide.

[Claims 6 to 8 not printed in the Gazette.]

1,063,598. DRILLING-MACHINE. CHARLES B. RICHARDS and WILLIAM H. JENKINS, Cleveland, Ohio, assignors, by mesne assignments, to The Cleveland Rock Drill Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 23, 1909. Serial No. 524,274. (Cl. 121—10.)



1. In combination, a feed cylinder, a head, a feed member having a lost motion connection with the head, locking means actuated by the relative movement of the feed member and head in one direction to lock the head in position in the cylinder, and actuated by the relative movement of the feed member and head in the other direction to release the head.

2. In combination, a feed cylinder, a head, a feed member having a lost motion connection with the head, locking means actuated by the relative movement of the feed member and head in one direction to lock the head in position in the cylinder, and actuated by the relative movement of the feed member and head in the other direction to release the head, spring means being provided to automatically secure the said relative movement to locked position when the device is not in use, and the movement to release position being secured by the admission of fluid pressure behind the head.

3. A drill feed locking mechanism comprising in combination, a cylinder, a feed member mounted therein, a tapered portion on the feed member, a piston head slidably mounted on the feed member, and a locking member coacting with the tapered portion of the feed member and with the cylinder to lock the feed member, said locking member being operable through the movement of the piston head.

4. A drill feed locking mechanism comprising in combination a cylinder, a feed member mounted therein, a tapered portion on the feed member, a piston head slidably mounted on the feed member, locking members coacting with the tapered portion of the feed member and the cylinder operable through the movement of the piston head, and means normally holding the locking members in locked position.

5. In drilling mechanism, the combination with a feed cylinder and a head therein, of a bar swiveled in the head and having a limited longitudinal movement with respect to the head, locking means for maintaining the head against rearward movement when the bar is in one extreme of longitudinal movement with respect to the head, and means whereby the locking means is released when the bar is in the other extreme of longitudinal movement with respect to the head.

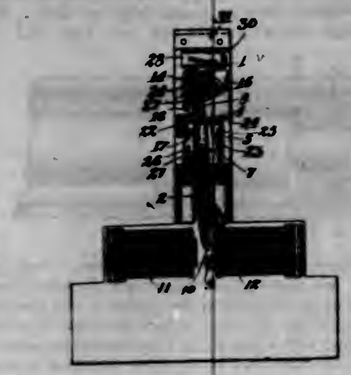
[Claims 6 to 9 not printed in the Gazette.]

1,063,599. TELEPHONE REGISTER AND LOCK-OUT DEVICE. CHARLES V. RICHEY, Washington, D. C., assignor to Phone Call Recorder Company, of Delaware. Filed Sept. 19, 1912. Serial No. 721,185. (Cl. 179—14.)

1. In a telephone exchange system, a combined substation lockout device and register comprising the usual transmitter and receiver circuits, a register and register actuating means, said actuating means being responsive to ringing current over the line, and normally closed contacts in said receiver circuit adapted to be opened during the energization of said actuating means by ringing current, whereby buzzing of the receiver is prevented.

2. In a telephone exchange system, a combined lockout and register substation equipment comprising the usual transmitter and receiver circuits, a register and actuating means therefor responsive to ringing current over the line, and contacts in said receiver circuit biased to a normally

closed position and adapted to be momentarily opened during the application of ringing current as aforesaid.



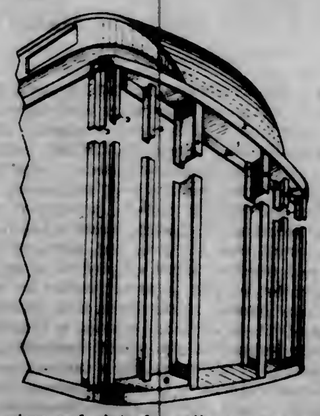
3. In a telephone exchange system, a lockout and register substation equipment comprising the usual transmitter and receiver circuits, a registering device, actuating means therefor in the transmitter circuit responsive to ringing current over the line, and normally closed contacts in the receiver circuit under the control of said actuating means whereby the receiver circuit is opened when ringing current is applied as aforesaid.

4. In a telephone exchange system, a lock-out and register substation equipment comprising the usual transmitter and receiver circuits, the register and actuating means therefor responsive to ringing current over the line, restoring means for said register operative upon replacing the receiver upon its hook, and means independent of the receiver hook for making and breaking the talking circuit, whereby the operator may be signaled before restoring the register.

5. In a telephone exchange system, a lock-out and register substation equipment comprising the usual transmitter and receiver circuits, a lockout comprising normally closed contacts in the transmitter circuit which may be opened at will, means for momentarily closing the line circuit to give the operator an emergency signal independently of the transmitter, and means at the substation responsive to current of a distinctive character and under the control of the operator to enable the disabled transmitter circuit at will, whereby conversation may proceed in emergency conditions in spite of the lockout.

[Claims 6 to 10 not printed in the Gazette.]

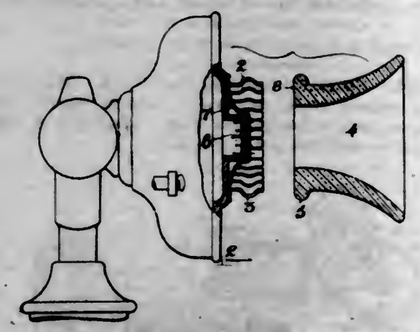
1,063,600. END PLATE FOR RAILWAY-CARS. HARRY R. ROCHESTER, Dayton, Ohio, assignor to The Barney and Smith Car Company, Dayton, Ohio, a Corporation of West Virginia. Filed Feb. 3, 1912. Serial No. 675,153. (Cl. 105—201.)



1. A one piece end plate for railway cars comprising a body portion having one edge straight and the opposite edge curved, and depending flanges completely surrounding said body portion for receiving the upper ends of the car posts.

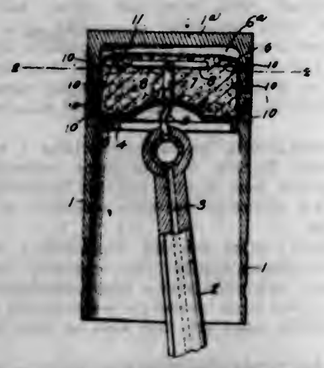
2. An end plate for railway cars comprising a flat body portion having one edge straight and the opposite edge curved to give said body portion a substantially semi-elliptical shape, and flanges arranged at right agles to the plane of said body portion and extending completely about the same for receiving the upper ends of the car posts, the entire plate being pressed from a single piece of metal.

1,063,601. ANTISEPTIC MOUTHPIECE FOR TELEPHONES AND SIMILAR INSTRUMENTS. MAX ROSENWALD, New York, N. Y., and JOHN C. DORAN, Danbury, Conn., assignors to Frank A. Weeks Mfg. Co. Filed Oct. 21, 1911. Serial No. 655,959. (Cl. 179—185.)



In a device of the class described, a perforated diaphragm, spring fingers surrounding the same, a gauze stretched over said diaphragm and a mouthpiece held by said spring fingers and resting on said gauze, whereby the same is stretched over the diaphragm.

1,063,602. PISTON FOR INTERNAL-COMBUSTION ENGINES. JOHN D. RUSS, Spencer, W. Va. Filed Aug. 3, 1912. Serial No. 713,100. (Cl. 121—104.)



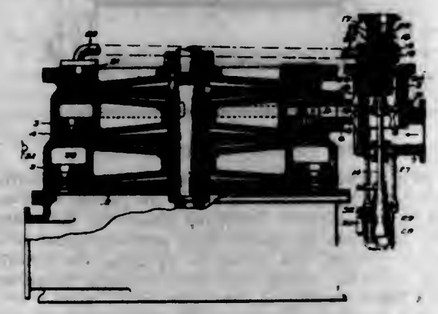
1. In a piston, a partition carried transversely therewithin, near one end thereof, forming a chamber therebetween and the head of the piston, said chamber having apertures through the circumferential side wall thereof, a cup-shaped member disposed within said chamber and formed of reticulated, wire-mesh material, and a body of absorbent material contained within said cup-shaped member.

2. In a piston, a partition carried transversely therewithin, near one end thereof, forming a chamber therebetween and the head of the piston, said chamber having apertures through the circumferential side wall thereof, a cup-shaped member disposed within said chamber and formed of reticulated, wire-mesh material, a body of absorbent material contained within said cup-shaped member, and means projecting through said partition for supplying lubricant to said absorbent material.

3. In a piston, a partition carried transversely therewithin, near one end thereof, forming a chamber therebetween and the head of the piston, said chamber having apertures through the circumferential side wall thereof, a cup-shaped member disposed within said chamber and formed of reticulated, wire-mesh material, a body of absorbent material contained within said cup-shaped member, a piston-rod having an internal, longitudinally-extending lubricant-passage, and means for supplying lubricant from said lubricant-passage to said absorbent material, comprehending a flexible tube projecting through said partition and communicating with said lubricant-passage.

4. In a piston, a partition carried transversely therewithin, near one end thereof, forming a chamber therebetween and the head of the piston, said chamber having apertures through the circumferential wall thereof, a cup-shaped member disposed within said chamber and formed of reticulated, wire-mesh material, a body of absorbent material contained within said cup-shaped member, and a lubricant-distributing member also disposed within said cup-shaped member, and comprising a tube projecting through said partition and having, at its end, radial, hollow, open-ended arms.

1,063,603. GOVERNING MECHANISM FOR TURBINES. FREDERICK SAMUELSON, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Aug. 1, 1907. Serial No. 386,591. (Cl. 121—118.)



1. An elastic-fluid turbine arranged to receive and operate on motive fluid from two separate sources, in combination with governing valves that control the admission of fluid to the turbine from both sources of supply and a motor which is common to and actuates said valves.

2. In combination, a turbine having an inlet connected to a source of high pressure fluid, an inlet connected to a source of low pressure fluid, mechanically connected valves for regulating the flow through the inlets, and a speed governor constituting the sole means for controlling the valves whereby the high pressure valve will be opened after the low pressure valve to supply high pressure steam to the turbine when the supply of low pressure steam is insufficient to drive the turbine at normal speed, the valves being closed in the reverse order.

3. An elastic-fluid turbine arranged to receive motive fluid from separate sources at high and low pressure, the said pressures being independently variable, in combination with valves controlling the admission of fluid from both of said sources, and fluid actuated means for operating the valves which under conditions of increasing load fully opens the low pressure controlling valve and subsequently opens the high pressure controlling valve, and which closes the latter and then the former under decreasing load conditions.

4. An elastic-fluid turbine having an inlet for low pressure motive fluid, and a second inlet for high pressure fluid, in combination with a valve casing having ports communicating with both inlets, valves in the casing which control the ports, a motor for moving the valves, and a governor for the motor.

5. An elastic-fluid turbine having an inlet for low pressure motive fluid, and a second inlet for high pressure fluid, in combination with a valve casing having a port communicating with the low pressure inlet and the turbine, ports communicating with the high pressure inlet and the turbine, a valve which controls the low pressure port by a throttling action, and a valve which cuts the high pressure ports into and out of service successively.

[Claims 6 to 19 not printed in the Gazette.]

1,063,604. WATER-GAGE FOR STEAM-BOILERS. MICHAEL F. SCALLEY, Middletown, N. Y. Filed Apr. 22, 1912. Serial No. 692,285. (Cl. 73—54.)



1. In a gage of the character designated, the combination of the front cap plate formed with a longitudinal sight opening and with screw-tapped sockets on its inner side, stud posts the bodies of which are angular in cross section and which are formed with threaded inner ends engaging the said screw tapped sockets in the front cap plate, whereby the stud posts are rigidly secured thereto as a base, said stud posts being also formed near their outer ends with key slots, an intermediate channel plate recessed to fit over said stud posts and formed with end inlet passages and tapped pipe sockets, sight glasses seated upon either side of said intermediate channel plate, a rear cap plate recessed to fit over said stud posts and formed with a longitudinal sight slot, wedge shaped keys fitting in the key slots in the protruding end of the stud posts, and means for securing the said wedge shaped keys in position, as and for the purpose set forth.

2. In a gage of the character designated, the combination of the front cap plate formed with a longitudinal sight opening and with screw-tapped sockets on its inner side, stud posts the bodies of which are angular in cross section and which are formed with threaded inner ends engaging the said screw-tapped sockets in the front cap plate, whereby the stud posts are rigidly secured thereto as a base, said stud posts being also formed near their outer ends with key slots, an intermediate channel plate recessed to fit over said stud posts and formed with end inlet passages and tapped pipe sockets, sight glasses seated upon either side of said intermediate channel plate, a rear cap plate recessed to fit over said stud posts and formed with a longitudinal sight slot, wedge shaped keys fitting in the key slots in the protruding ends of the stud posts and formed with threaded extremities, and screw nuts engaging said treaded extremities of the keys and bearing against the said rear cap plate, as and for the purpose set forth.

3. In a gage of the character designated, the combination of the front cap plate formed with a longitudinal sight opening and with screw-tapped sockets on its inner side, stud posts the bodies of which are angular in cross section and which are formed with threaded inner ends engaging the said screw tapped sockets in the front cap plate, whereby the stud posts are rigidly secured thereto as a base, said stud posts being also formed near their outer ends with key slots, an intermediate channel plate recessed to fit over said stud posts and formed with end inlet passages and tapped pipe sockets, sight glasses seated upon either side of said intermediate channel plate, a rear cap plate recessed to fit over said stud posts, and formed with a longitudinal sight slot, and also with longitudinal key grooves on its outer surface, wedge shaped keys fitting in said longitudinal grooves in the rear cap plate and in the key slots in the protruding ends of the stud posts, said

wedge shaped keys being formed with threaded extremities, and screw nuts engaging said threaded extremities of the wedge shaped keys and bearing against the rear cap plate, as and for the purpose set forth.

4. In a gage of the character designated, the combination of the front cap plate formed with a longitudinal sight opening and with screw-tapped sockets on its inner side, stud posts the bodies of which are angular in cross section and which are formed with threaded inner ends engaging the said screw tapped sockets in the front cap plate, whereby the stud posts are rigidly secured thereto as a base, said stud posts being also formed near their outer ends with key slots, an intermediate channel plate recessed to fit over said stud posts and formed with end inlet passages and tapped pipe sockets, sight glasses seated upon either side of said intermediate channel plate, a rear cap plate recessed to fit over said stud posts, and formed with a longitudinal sight slot, and also with longitudinal key grooves on its outer surface, wedge shaped keys fitting in said longitudinal grooves in the rear cap plate and in the key slots in the protruding ends of the stud posts, said wedge shaped keys being formed with threaded extremities, screw nuts engaging said threaded extremities of the wedge shaped keys and bearing against the rear cap plate, and locking screw bolts passing through holes formed for their reception in the rear cap plate and the intermediate plate and screwing into threaded holes formed for the purpose in the inner side of the front cap plate, as and for the purpose set forth.

5. In a gage of the character designated, the combination of the front cap plate formed with a longitudinal sight opening and with screw-tapped sockets on its inner side, stud posts the bodies of which are angular in cross section and which are formed with threaded inner ends engaging the said screw tapped sockets in the front cap plate, whereby the stud posts are rigidly secured thereto as a base, said stud posts being also formed near their outer ends with key slots, an intermediate channel plate recessed to fit over said stud posts and formed with end inlet passages and tapped pipe sockets, sight glasses seated upon either side of said intermediate channel plate, a rear cap plate recessed to fit over said stud posts and formed with a longitudinal sight slot, wedge shaped keys fitting in the key slots in the protruding ends of the stud posts, means for securing the said wedge-shaped keys in position, and a framed safety screen removably supported on recessed lugs on the front cap plate, as and for the purpose set forth.

1,063,605. SLIDING GUIDE FOR DOORS. ROBERT A. SCARBOROUGH, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 9, 1912. Serial No. 682,713. (Cl. 20—20.)



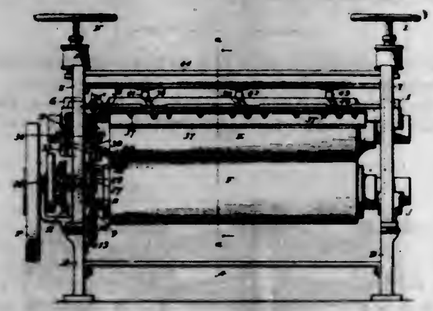
1. The combination of two doors pivotally connected together, the first door being hung to a fixed post; a longitudinal guide rail above the doors; a slide arranged to move longitudinally on the outer end of the second door and guided by the said rail so that it will travel over the guide rail when the doors are moved from the open to the closed position; the slide accommodating itself to the position of the doors when open.

2. The combination of two doors pivotally connected together; the first door being hung to a fixed post; longitudinal guide rails above the doors; a bracket at the outer upper end of the second door and having a longitudinal slideway therein; with a slide adapted to the slideway and having a roller; said roller being located so as to travel between the fixed rails when the door is moved from the open to the closed position; said slide accommodating itself to the position of the doors when closed.

3. The combination of two doors pivotally connected together, the first door being hung to a fixed post; longitudinal guide rails above the doors; a bracket secured to the outer, upper end of the second door and having a slideway therein; a slide adapted to the slideway; a pin projecting from the slideway; a flanged roller mounted on the pin; a stop on the bracket for limiting the movement of the slide in one direction; and two fixed longitudinal guide rails above the doors between which the roller travels when the doors are turned on their hinges.

4. The combination of two doors pivotally connected together; the first door being hung to a fixed post; longitudinal guides; a roller and a sliding connection between the guides and the second door; said sliding connection moving substantially parallel to the face of the said second door.

1,063,606. DEVICE FOR REMOVING PULP LAPS. GARRET SCHENCK, Jr., Millinocket, Me., assignor to Great Northern Paper Company, Millinocket, Me., a Corporation of Maine. Filed Apr. 8, 1912. Serial No. 689,253. (Cl. 92—67.)



1. In a machine of the class described, the combination with a collecting member, of means for cutting stock collected on said member, actuating means for the cutting means, said actuating means being normally locked in inoperative position, and means for releasing the normally locked actuating means and simultaneously connecting driving means thereto.

2. In a machine of the class described the combination with a collecting member, of means for cutting stock collected on said member, actuating means for the cutting means, driving means for the actuating means, the actuating means being normally maintained in inoperative position, a reciprocable member operatively connected with the collecting member, and means operable by the reciprocable member for simultaneously releasing the actuating means and connecting the driving means thereto.

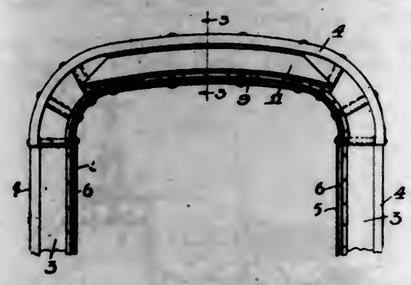
3. In a machine of the class described, the combination with a collecting member, of means for cutting stock collected on said member, actuating means for the cutting means, said actuating means being normally locked in inoperative position, means including a trip and trip lever for releasing the normally locked actuating means and applying driving means thereto when the stock on the collecting member attains a predetermined thickness.

4. In a machine of the class described, the combination with a collecting member, of means for cutting and removing stock collected on said member, actuating means for the cutting means, means for locking the actuating means in inoperative position, means including a trip and trip lever for releasing the locking means, driving means for the actuating means, and means for connecting the driving means to the actuating means.

5. In a machine of the class described, the combination with a collecting member, of means for supplying stock to the member, means for cutting the stock collected on said member, means for actuating the cutting means, means for locking the actuating means in inoperative position, means including a trip and tripping lever for releasing the locking means at a predetermined thickness of the stock on the collecting member, driving means for the actuating means, and means operable by said releasing means for connecting the driving means to the actuating means upon release of the locking means.

[Claims 6 to 23 not printed in the Gazette.]

1,063,607. DIAPHRAGM-HOOD. HARRY H. SCHROYER, Chicago, Ill., assignor to The Acme Supply Company, a Corporation of Illinois. Filed Apr. 22, 1912. Serial No. 692,445. (Cl. 105—61.)



1. A metallic hood for diaphragms embracing a metallic sheet engaged at its upper edge along the top of the hood and extending downwardly between the plaits and flanged upwardly at its lower edge, and a corresponding plate engaged on the adjacent plait and extending downwardly into the trough afforded by said flange, said sheets being of a length to extend approximately to the legs of the diaphragm.

2. A metallic hood for diaphragms embracing sheets of metal engaged across the top of the diaphragm at adjacent outwardly directed angles thereof, and extending downwardly into the plait with their lower edges interfitting.

3. A metallic top for diaphragms embracing resilient sheets or plates engaged at their upper edges along the adjacent outer ribs or angles of the diaphragm and extending inwardly to the bottom of the plait, one of said sheets having at its lower edge an upwardly turned flange within which the lower edge of the other engages.

4. A metallic hood for diaphragms embracing sheets engaged on adjacent ribs of the diaphragm top and extending inwardly of the plait, the edge of one of said sheets affording a trough adapted to receive the edge of the other.

5. A diaphragm hood embracing sheets of metal engaged at their upper edges at the outwardly directed ribs of the diaphragm and extending into the plait at their free edges, an upwardly turned flange in one of the strips adapted to fit in the angle between the ribs, the free edge of the other of said strips extending outwardly and downwardly and within the flange.

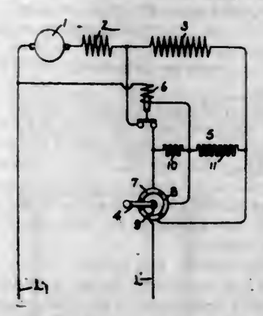
[Claims 6 to 14 not printed in the Gazette.]

1,063,608. SYSTEM OF REGULATION. EDWARD T. SHAW and JAMES M. NAUL, Pittsfield, Mass., assignors to General Electric Company, a Corporation of New York. Filed Oct. 11, 1912. Serial No. 725,119. (Cl. 172—179.)

1. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and means for placing said resistance in shunt to one of the part of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

2. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and automatic means for placing said resistance in shunt to one of the parts of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

3. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and means dependent on the supply voltage for placing said resistance in shunt to one of the parts of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

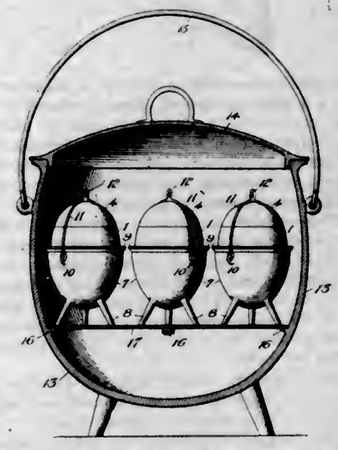


4. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and a relay connected between one of said supply mains and an intermediate point on said resistance for placing said resistance in shunt to one of the parts of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

5. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and a relay dependent on the supply voltage and connected between one of said supply mains and an intermediate point on said resistance for placing said resistance in shunt to one of the parts of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

[Claims 6 to 10 not printed in the Gazette.]

1,063,609. DOMESTIC COOKING VESSEL. WILLIAM C. SHAW and CYRUS D. CHAPMAN, Cleveland Park, D. C. Filed Aug. 15, 1912. Serial No. 715,232. (Cl. 53—1.)



1. In an egg cooking and serving device the combination with an egg receptacle having a removable end, of a relatively thick heat absorbing holder for said receptacle adapted to impart heat to the latter, and a bail upon said holder arranged and adapted to close over the removable end aforesaid for detachably retaining all of said parts together.

2. In an egg cooking and serving device the combination with an egg receptacle having a removable end, of a relatively thick heat absorbing holder for said receptacle adapted to closely fit the latter and impart heat thereto, and a bail upon said holder arranged and adapted to close over the removable end aforesaid for detachably retaining all of said parts together.

wedge shaped keys being formed with threaded extremities, and screw nuts engaging said threaded extremities of the wedge shaped keys and bearing against the rear cap plate, as and for the purpose set forth.

4. In a gage of the character designated, the combination of the front cap plate formed with a longitudinal sight opening and with screw-tapped sockets on its inner side, stud posts the bodies of which are angular in cross section and which are formed with threaded inner ends engaging the said screw tapped sockets in the front cap plate, whereby the stud posts are rigidly secured thereto as a base, said stud posts being also formed near their outer ends with key slots, an intermediate channel plate recessed to fit over said stud posts and formed with end inlet passages and tapped pipe sockets, sight glasses seated upon either side of said intermediate channel plate, a rear cap plate recessed to fit over said stud posts, and formed with a longitudinal sight slot, and also with longitudinal key grooves on its outer surface, wedge shaped keys fitting in said longitudinal grooves in the rear cap plate and in the key slots in the protruding ends of the stud posts, said wedge shaped keys being formed with threaded extremities, screw nuts engaging said threaded extremities of the wedge shaped keys and bearing against the rear cap plate, and locking screw bolts passing through holes formed for their reception in the rear cap plate and the intermediate plate and screwing into threaded holes formed for the purpose in the inner side of the front cap plate, as and for the purpose set forth.

5. In a gage of the character designated, the combination of the front cap plate formed with a longitudinal sight opening and with screw-tapped sockets on its inner side, stud posts the bodies of which are angular in cross section and which are formed with threaded inner ends engaging the said screw tapped sockets in the front cap plate, whereby the stud posts are rigidly secured thereto as a base, said stud posts being also formed near their outer ends with key slots, an intermediate channel plate recessed to fit over said stud posts and formed with end inlet passages and tapped pipe sockets, sight glasses seated upon either side of said intermediate channel plate, a rear cap plate recessed to fit over said stud posts and formed with a longitudinal sight slot, wedge shaped keys fitting in the key slots in the protruding ends of the stud posts, means for securing the said wedge-shaped keys in position, and a framed safety screen removably supported on receased lugs on the front cap plate, as and for the purpose set forth.

1,063,605. SLIDING GUIDE FOR DOORS. ROBERT A. SCARBOROUGH, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 9, 1912. Serial No. 682,713. (Cl. 20—20.)



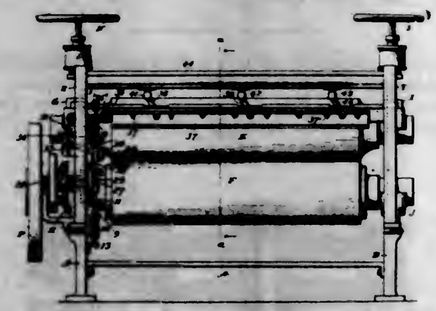
1. The combination of two doors pivotally connected together, the first door being hung to a fixed post; a longitudinal guide rail above the doors; a slide arranged to move longitudinally on the outer end of the second door and guided by the said rail so that it will travel over the guide rail when the doors are moved from the open to the closed position; the slide accommodating itself to the position of the doors when open.

2. The combination of two doors pivotally connected together; the first door being hung to a fixed post; longitudinal guide rails above the doors; a bracket at the outer upper end of the second door and having a longitudinal slideway therein; with a slide adapted to the slideway and having a roller; said roller being located so as to travel between the fixed rails when the door is moved from the open to the closed position; said slide accommodating itself to the position of the doors when closed.

3. The combination of two doors pivotally connected together, the first door being hung to a fixed post; longitudinal guide rails above the doors; a bracket secured to the outer, upper end of the second door and having a slideway therein; a slide adapted to the slideway; a pin projecting from the slideway; a flanged roller mounted on the pin; a stop on the bracket for limiting the movement of the slide in one direction; and two fixed longitudinal guide rails above the doors between which the roller travels when the doors are turned on their hinges.

4. The combination of two doors pivotally connected together; the first door being hung to a fixed post; longitudinal guides; a roller and a sliding connection between the guides and the second door; said sliding connection moving substantially parallel to the face of the said second door.

1,063,606. DEVICE FOR REMOVING PULP LAPS. GARRET SCHENCK, Jr., Millinocket, Me., assignor to Great Northern Paper Company, Millinocket, Me., a Corporation of Maine. Filed Apr. 8, 1912. Serial No. 689,253. (Cl. 92—67.)



1. In a machine of the class described, the combination with a collecting member, of means for cutting stock collected on said member, actuating means for the cutting means, said actuating means being normally locked in inoperative position, and means for releasing the normally locked actuating means and simultaneously connecting driving means thereto.

2. In a machine of the class described the combination with a collecting member, of means for cutting stock collected on said member, actuating means for the cutting means, driving means for the actuating means, the actuating means being normally maintained in inoperative position, a reciprocable member operatively connected with the collecting member, and means operable by the reciprocable member for simultaneously releasing the actuating means and connecting the driving means thereto.

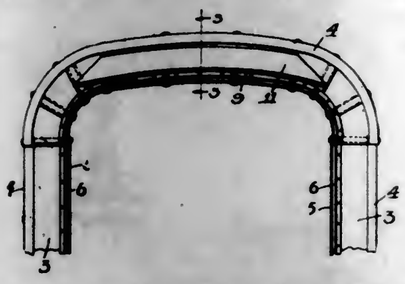
3. In a machine of the class described, the combination with a collecting member, of means for cutting stock collected on said member, actuating means for the cutting means, said actuating means being normally locked in inoperative position, means including a trip and trip lever for releasing the normally locked actuating means and applying driving means thereto when the stock on the collecting member attains a predetermined thickness.

4. In a machine of the class described, the combination with a collecting member, of means for cutting and removing stock collected on said member, actuating means for the cutting means, means for locking the actuating means in inoperative position, means including a trip and trip lever for releasing the locking means, driving means for the actuating means, and means for connecting the driving means to the actuating means.

5. In a machine of the class described, the combination with a collecting member, of means for supplying stock to the member, means for cutting the stock collected on said member, means for actuating the cutting means, means for locking the actuating means in inoperative position, means including a trip and tripping lever for releasing the locking means at a predetermined thickness of the stock on the collecting member, driving means for the actuating means, and means operable by said releasing means for connecting the driving means to the actuating means upon release of the locking means.

[Claims 6 to 23 not printed in the Gazette.]

1,063,607. DIAPHRAGM-HOOD. HARRY H. SCHROYER, Chicago, Ill., assignor to The Acme Supply Company, a Corporation of Illinois. Filed Apr. 22, 1912. Serial No. 692,445. (Cl. 105—61.)



1. A metallic hood for diaphragms embracing a metallic sheet engaged at its upper edge along the top of the hood and extending downwardly between the plaits and flanged upwardly at its lower edge, and a corresponding plate engaged on the adjacent plait and extending downwardly into the trough afforded by said flange, said sheets being of a length to extend approximately to the legs of the diaphragm.

2. A metallic hood for diaphragms embracing sheets of metal engaged across the top of the diaphragm at adjacent outwardly directed angles thereof, and extending downwardly into the plait with their lower edges interfitting.

3. A metallic top for diaphragms embracing resilient sheets or plates engaged at their upper edges along the adjacent outer ribs or angles of the diaphragm and extending inwardly to the bottom of the plait, one of said sheets having at its lower edge an upwardly turned flange within which the lower edge of the other engages.

4. A metallic hood for diaphragms embracing sheets engaged on adjacent ribs of the diaphragm top and extending inwardly of the plait, the edge of one of said sheets affording a trough adapted to receive the edge of the other.

5. A diaphragm hood embracing sheets of metal engaged at their upper edges at the outwardly directed ribs of the diaphragm and extending into the plait at their free edges, an upwardly turned flange in one of the strips adapted to fit in the angle between the ribs, the free edge of the other of said strips extending outwardly and downwardly and within the flange.

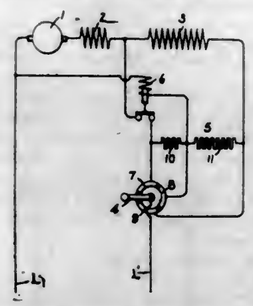
[Claims 6 to 14 not printed in the Gazette.]

1,063,608. SYSTEM OF REGULATION. EDWARD T. SHAW and JAMES M. NAUL, Pittsfield, Mass., assignors to General Electric Company, a Corporation of New York. Filed Oct. 11, 1912. Serial No. 725,119. (Cl. 172—179.)

1. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and means for placing said resistance in shunt to one of the part of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

2. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and automatic means for placing said resistance in shunt to one of the parts of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

3. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and means dependent on the supply voltage for placing said resistance in shunt to one of the parts of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

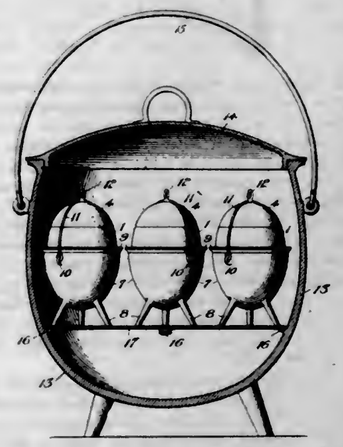


4. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and a relay connected between one of said supply mains and an intermediate point on said resistance for placing said resistance in shunt to one of the parts of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

5. In combination, supply mains, a motor comprising an armature and a field winding divided into a plurality of parts, a resistance, and a relay dependent on the supply voltage and connected between one of said supply mains and an intermediate point on said resistance for placing said resistance in shunt to one of the parts of said field winding when the supply voltage is low and for opening said shunt when the supply voltage is high.

[Claims 6 to 10 not printed in the Gazette.]

1,063,609. DOMESTIC COOKING VESSEL. WILLIAM C. SHAW and CYRUS D. CHAPMAN, Cleveland Park, D. C. Filed Aug. 15, 1912. Serial No. 715,232. (Cl. 53—1.)



1. In an egg cooking and serving device the combination with an egg receptacle having a removable end, of a relatively thick heat absorbing holder for said receptacle adapted to impart heat to the latter, and a bail upon said holder arranged and adapted to close over the removable end aforesaid for detachably retaining all of said parts together.

2. In an egg cooking and serving device the combination with an egg receptacle having a removable end, of a relatively thick heat absorbing holder for said receptacle adapted to closely fit the latter and impart heat thereto, and a bail upon said holder arranged and adapted to close over the removable end aforesaid for detachably retaining all of said parts together.

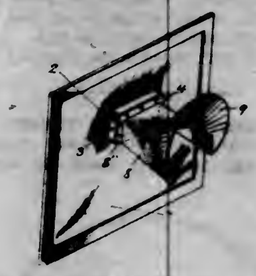
3. In an egg cooking and serving device the combination with an egg receptacle having a removable end, of a relatively thick heat absorbing holder for said receptacle adapted to impart heat to the latter, means for maintaining the entire device in a vertical position, and a bail upon said holder arranged and adapted to close over the removable end aforesaid for detachably retaining all of said parts together.

4. In an egg cooking and serving device the combination with an egg receptacle having a removable end, of a relatively thick heat absorbing holder for said receptacle adapted to impart heat to the latter, supporting legs for maintaining the entire device in a vertical position, and a bail upon said holder arranged and adapted to close over the removable end aforesaid for detachably retaining all of said parts together.

5. In an egg cooking and serving device the combination with an egg receptacle having a convex removable upper end, of a relatively thick heat absorbing holder substantially conforming in shape to the lower portion of said receptacle adapted to impart heat thereto, and a spring bail upon said holder arranged and adapted to close over the convex removable end aforesaid for detachably retaining all of said parts together.

[Claims 6 to 9 not printed in the Gazette.]

1,063,610. **STORM-WINDOW ATTACHMENT.** FRANK W. SHUPERT and WILLIAM J. LEIGHTY, Topeka, Kans., assignors to Storm Shield Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1910. Serial No. 543,242. (Cl. 20—40.5.)



1. The combination with a member of transparent material, of a protecting hood or casing arranged to project therefrom, and having a transverse pane of transparent material therein and of means for securing the hood at different positions opposite said member with its pane spaced from said member and the intervening space between said pane and member inclosed.

2. A storm window attachment comprising in combination with a window glass, a hood located in front of the glass and adapted for protecting a portion of same, said hood being closed at the side and top and a deflector carried by the hood and extending at an angle therefrom, whereby a current of air is deflected through the hood out of contact with the protected portion of the glass, for the purpose set forth.

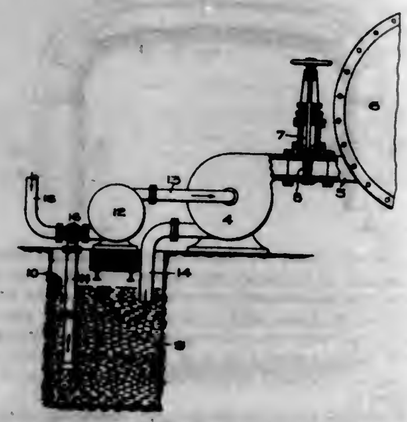
3. A storm window comprising in combination with a window glass, a hood secured to said glass and extending forwardly therefrom, said hood being closed at the sides and top and open at the bottom and ends, a deflector on the forward end of said hood projecting at a forward angle from the sides and top, the angle of projection of said hood being such as to deflect a current of air through the hood and out of contact with the protected portion of the glass.

4. A storm window attachment comprising in combination with a window glass, a hood having air tight connection with the window glass and projecting forwardly therefrom, said hood being open at its forward end and at the bottom and provided with an upwardly and laterally directed deflector at its forward end, substantially as and for the purpose set forth.

5. A device of the class described, comprising in combination with a window, a hood located in front of said window, said hood being open at the bottom and at its forward end, an inclined air deflecting extension at the front of the hood, means for attaching the other end of the hood to the window, and revolubie means adjacent to the deflecting portion of the hood for receiving and dissipating a deflected air current.

[Claims 6 and 7 not printed in the Gazette.]

1,063,611. **CENTRIFUGAL PUMP.** AUGUST SIEGEL, Charlottenburg, and FRANS GOLDSTEIN, Berlin, Germany, assignors to General Electric Company, a Corporation of New York. Filed June 24, 1910. Serial No. 568,653. (Cl. 230—14.)



1. In combination, a condenser chamber, a throwing pump for exhausting the chamber, a well, a conduit through which throwing water is drawn from the well into the pump by suction, a starting water conduit connected to the first conduit at a point adjacent to the well for supplying water under pressure to set the contents of the first conduit in motion toward the pump, valve means for controlling the flow through the two conduits, a conduit leading from the pump discharge to the well, a conduit connecting the pump with the chamber, and valve means in the last mentioned conduit including a device having an area less than the full opening of said conduit for permitting a flow from the portion of the conduit at one side of said means to the portion at the opposite side thereof when said means is closed.

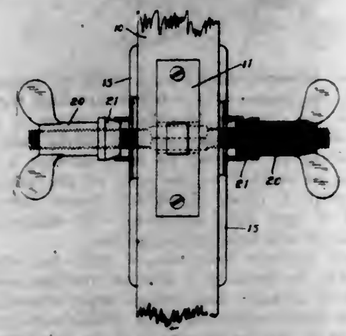
2. In combination, a condenser chamber, a throwing pump for exhausting the chamber, means for supplying starting and regular throwing water to the pump, a connection between the pump and the chamber, a valve in said connection, and a by-pass around said valve having an area less than the full valve opening for permitting a flow from one side of the valve to the other when said valve is closed.

3. In combination, a chamber, a throwing pump for exhausting the chamber, a conduit for supplying throwing water from a suitable source to the pump, a conduit connected to the throwing water conduit adjacent its inlet end for supplying starting water to the pump under pressure, means controlling the flow through said conduits, a connection between the pump and the chamber, and means for varying the effective area of said connection.

4. In combination, a condenser chamber, a throwing pump for exhausting the chamber, a conduit supplying throwing water from a suitable source to the pump, a conduit connected to the throwing water conduit near said source for supplying starting water to the pump under pressure, valve means for controlling the flow through said conduits, a connection between the pump and the chamber, and valve means in said connection including a device having an area less than the full valve opening for permitting a flow from one side of said valve means to the other.

5. In combination, a chamber, a throwing pump for exhausting the chamber, a well, a conduit supplying throwing water from the well to the pump, a cooler arranged in said conduit, a starting water conduit connected to the first conduit between the well and the cooler, a three-way valve at the junction of said conduits for controlling the flow therethrough, a conduit leading from the pump discharge to the well, a conduit connecting the pump to the chamber, and a valve in said conduit provided with by-pass means having a flow area less than the full valve opening for permitting a flow from one side of the valve to the other.

1,063,612. **ESCUTCHEON-PLATE ADJUSTER.** ROBERT A. SILCOX, Norwalk, Conn. Filed Mar. 20, 1912. Serial No. 685,122. (Cl. 73—189.)



A tool for locating escutcheon plates for door knobs, comprising a threaded shank having an angular central portion, for the purpose set forth, and elongated nuts adjustably mounted on the opposite ends of said shank and provided with tapering heads adapted to engage and support opposite escutcheon plates whereby the latter may be centered and secured in position with relation to the shank.

1,063,613. **COMBINATION BED AND COUCH.** GEORGE A. SMITHWICK, Metaline Falls, Wash. Filed Jan. 17, 1913. Serial No. 742,626. (Cl. 5—8.)



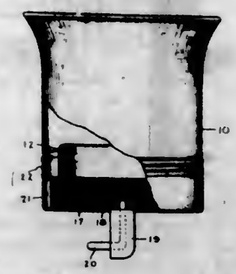
1. A convertible couch and bed having, in combination, relatively movable sides, winding shafts carried by said sides, locking means for the winding shafts, telescopic connections between the sides, an extensible and collapsible bed bottom, and connections to said bed bottom which are adapted to wind on the shafts, said bed bottom being collapsible or extensible between said shafts.

2. A convertible couch and bed having, in combination, relatively movable sides, telescopically arranged channel iron braces connecting the sides, means for locking the braces in different positions of extension or contraction, and an extensible and collapsible bed bottom.

3. A convertible couch and bed having, in combination, relatively movable sides, telescopically arranged channel iron braces connecting the sides, means for locking the braces in different positions of extension or contraction, telescopic guides connected to the sides, an extensible and collapsible bed bottom having parts slidable on said guides, and means on the sides adapted for extending or collapsing the bed bottom.

4. A convertible couch and bed having, in combination, relatively movable sides, telescopically arranged channel iron braces connecting the sides, means for locking the braces in different positions of extension or contraction, telescopic guides connected to the sides, an extensible and collapsible bed bottom having parts slidable on said guides, winding shafts on the sides between which the bed bottom moves, locking means for the winding shafts, and flexible connections adapted to wind on said shafts which are connected to the bed bottom.

1,063,614. **ELECTRIC HEATER.** WILLIAM STANLEY and HERBERT M. SMITH, Pittsfield, Mass., assignors to General Electric Company, a Corporation of New York. Filed Jan. 6, 1909. Serial No. 470,939. (Cl. 219—43.)



1. An electric heater comprising a receptacle having its bottom bent upward to form an annular recess, an annular heating unit arranged to enter said recess so as to be in intimate thermal relation with the walls thereof, and means for securing the unit within the recess.

2. An electric heater comprising a receptacle having a bottom provided with an upwardly extending annular recess whose walls are integral with the bottom of the receptacle and an annular heating unit secured to the receptacle and extending into the recess.

3. An electric heater comprising a receptacle having its bottom bent upward to form an annular recess, an annular heating unit arranged to enter said recess so as to be in thermal relation with the walls thereof, a base for said heating unit, and means for securing the base to the bottom of the receptacle.

4. An electric heater comprising a receptacle having its bottom bent upward to form an annular recess, an annular heating unit arranged to enter said recess so as to be in thermal relation with the walls thereof, a base for said unit having fixed terminal connections secured thereto, and means for securing said base to the bottom of the receptacle.

5. An electric heating device, comprising a cylindrical heating unit providing metallic outer and inner walls, and means therebetween to heat said walls, a utensil having its bottom shaped to provide an upwardly extending, outwardly opening, annular chamber to receive said heating unit, the metallic walls of said heating unit contacting with the walls of said bottom chamber, and means to support said unit in such position of contact with the said walls of the bottom chamber.

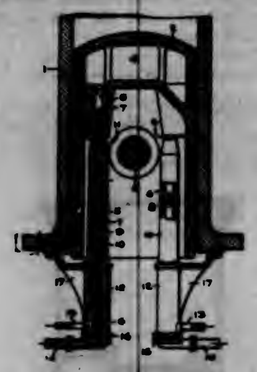
[Claim 6 not printed in the Gazette.]

1,063,615. **PISTON-COOLING DEVICE FOR INTERNAL-COMBUSTION ENGINES.** KARL STEINBECKER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Sept. 7, 1911. Serial No. 648,012. (Cl. 123—176.)

1. The combination with a cylinder and a hollow piston therein, of means for conveying cooling fluid to and from the piston, comprising two stationary concentric pipes or tubes, and a third tube secured to the piston and extending into the annular space between the first two tubes, the relatively movable sections of said tubes being packed by means of the throttling gap between them.

2. The combination with a cylinder, of a hollow piston, stationary pipes parallel with the axis of said cylinder, tubes secured to said piston and telescoping over said stationary pipes, said pipes and tubes being of such length and diameter as to provide a relatively long, narrow throttling gap between them, and cylindrical jackets surround-

ing the tubes and separated from the outer walls thereof by a narrow annular space.



3. The combination with a hollow piston, of telescopic pipes connected therewith and affording throttling gaps between them, and stationary jackets surrounding said pipes and provided with drainage outlets.

4. The combination with a hollow piston, of telescopic pipes connected therewith and affording throttling gaps between them, and jackets surrounding said pipes and provided with drainage outlets at their lower ends and with throttling gap packing at their upper ends.

5. The combination with a cylinder and a hollow piston therein, of means for conveying cooling fluid to and from the interior of the piston, comprising two concentric pipes or tubes mounted on the cylinder, a fluid conveying conduit connected to the inner tube, a drain for conveying leakage from the outer tube, and a third tube connected to the interior of the piston and extending into the annular space between the first two tubes, there being a relatively small clearance between it and the walls of the other tubes.

[Claim 6 not printed in the Gazette.]

1,063,616. CAR-AXLE BOX. JOHN R. STEPHENS, Kansas City, Mo. Filed Apr. 27, 1910. Serial No. 557,972. (Cl. 64—54.)



1. The combination with a car axle box, an upper rocking bearing for the axle extending longitudinally therewith and adapted to bear upon and having a rolling contact with the upper, inner surface of the box, and an independent lower swinging axle support extending at right angles to and beneath said axle, and adapted to adjust itself in position independently of the rocking position of the upper bearing.

2. The combination with a car axle box, an upper rocking bearing for the axle extending longitudinally therewith and adapted to bear upon and having a rolling contact with the upper, inner surface of the box, a plate or stirrup extending at right angles to and beneath the axle, and swinging suspension means for said plate connected with the axle box and adapted to permit the independency of the rocking movement of the upper bearing.

3. In a lubricating car axle box, a rocking axle bearing extending longitudinally therewith and adapted to bear upon the upper, inner surface of the box, parallel ribs on said inner surface of the box spaced apart, and between which ribs said bearing is adapted to rock forwardly and rearwardly, by rolling contact with the rib against which it is pressed said box having openings in the upper portion thereof and swinging suspension bolts smaller in circumference than said openings and supported therein, and a narrow supporting plate for the axle adjustably connected with the lower ends of said bolts and adapted to adjust itself in position independently of the rocking movements of said upper bearings.

1,063,617. SASH-ADJUSTER. CLINTON D. TABOR, New Dorp, N. Y., assignor to Tabor Sash Fixture Company, Newark, N. J., a Corporation of New Jersey. Filed Sept. 30, 1910. Serial No. 584,603. (Cl. 16—22.)



1. A sash adjuster comprising a guide bar adapted to be secured to the frame of a window provided with guide flanges on its opposite longitudinal edges, a carriage provided with guide hooks engaging behind said flanges, a link pivoted at one end on said carriage, a bracket adapted to be secured to the sash of the window and provided with a pivot pin which passes through the other end of said link, and means for supporting the central part of said link on the carriage.

2. A sash adjuster comprising a guide bar adapted to be secured to the frame of a window provided with guide flanges on its opposite longitudinal edges, a carriage provided with guide hooks engaging behind said flanges, a link pivoted at one end on said carriage, a bracket adapted to be secured to the sash of the window and provided with a pivot pin which passes through the other end of said link, and means for supporting the central part of said link on the carriage comprising a pair of supporting lugs arranged on the carriage and adapted to receive the link between them.

3. A sash adjuster comprising a guide bar adapted to be secured to a window frame and provided with a row of notches which are of progressively greater width from the front to the rear end of the row, a carriage slidable on said bar, a detent mounted on the carriage and engaging with said notches, and a link connected with said carriage and adapted to be connected with the sash of the window.

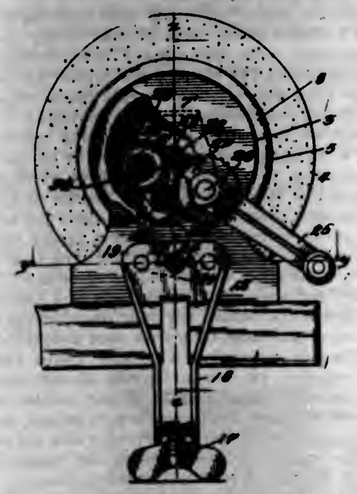
4. A sash adjuster comprising a guide bar adapted to be secured to a window frame and provided with a row of notches which are of progressively greater width from the front to the rear end of the row, a carriage slidable on said bar and provided with a pocket, a rolling detent arranged in said pocket and engaging said notches, a spring operating to press said detent into said notches, and a link adapted to connect said carriage with the sash of the window.

5. A sash adjuster comprising a guide bar adapted to be secured to a window frame and provided with a row of notches which are of progressively greater width from the front to the rear end of the row, a carriage slidable on said bar and provided with a pocket, a rolling detent arranged in said pocket and engaging said notches, a spring bearing at one end against said detent and pressing the same into said notches, a screw arranged in said pocket and bearing against the other end of said spring, and a link adapted to connect said carriage with the sash of the window.

1,063,618. GRINDING-MACHINE. JAMES M. THOMPSON, Milwaukee, Wis. Filed Nov. 4, 1911. Serial No. 658,526. (Cl. 51—7.)

1. The combination with a set of driving connections, of a casing therefor comprising one fixed and one movable member, said movable member having a peripheral rim encircling the driving connections and a grinding wheel secured to said periphery.

2. The combination with a supporting casing member, driving connections mounted upon said casing member, a rotary casing member coöperating with said supporting casing member to inclose said driving connections, and a grinding wheel mounted upon said rotary casing member.



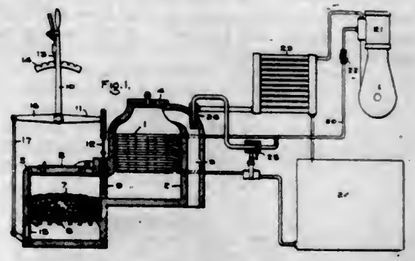
3. The combination with a set of fixed and removable casing members assembled to form a gear receiving cavity, an auxiliary bearing member supported from the fixed casing member, shafts having bearings in the fixed casing member and bearing member respectively, a train of intermeshing gears on said shafts, a crank, a connection between the crank and driving shaft of said train, a connection between the driving shaft of said train and the movable casing member, and a grinding wheel mounted upon the movable casing member.

4. The combination with a set of fixed and removable casing members assembled to form a gear receiving cavity, an auxiliary bearing member supported from the fixed casing member, shafts having bearings in the fixed casing members and bearing member respectively, a train of intermeshing gears on said shafts, a crank, a connection between the crank and driving shaft of said train, a connection between the driving shaft and said train and the movable casing member, and a grinding wheel mounted upon the movable casing member, said movable casing member having a wheel receiving periphery, an outwardly projecting flange against which the wheel abuts, and a clamping collar for binding the grinding wheel against said outwardly projecting flange.

5. The combination with a supporting plate, a clamping bracket detachably secured thereto, a train of driving gears mounted upon one side of said plate, a crank on the other side of said plate operatively connected to actuate said gear, a rotary casing member coöperating with said plate to inclose said gears, and a grinding wheel mounted upon said casing member.

1,063,619. STEAM-POWER SYSTEM. ELIHU THOMSON, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed July 30, 1908. Serial No. 446,084. (Cl. 110—2.)

1. The combination with a generator for supplying motive fluid to a prime mover, of a chamber containing said generator, a fire-box in which fuel is burned to supply heat to the generator, a passage connecting the fire-box with the chamber to deliver heat to the latter, means arranged in the passage for checking the radiation of heat from the fire-box to the chamber to check the generation of motive fluid when the prime mover is shut down, a device for shutting off the admission of air to the fire-box so that in coöperation with said means combustion and loss of heat by radiation will be substantially prevented, valve means for regulating the admission of motive fluid to the prime mover, and means for simultaneously closing the valve and said device.



2. The combination with a boiler for supplying steam to an engine, of a chamber in which the boiler is located, a fire-box in which fuel is burned to supply heat to the boiler, a conduit between the fire-box and the chamber, means for confining the heat of the fire to the fire-box and checking combustion when the engine is shut down, comprising a non-conducting lining for the walls of the fire-box, means for shutting off the admission of air to the fire-box, and a device arranged in said conduit for checking the radiation of heat from the fire-box to the boiler, a valve for regulating the admission of steam to the engine, and mechanism for simultaneously opening and closing the valve and said means for shutting off the admission of air to the fire-box.

3. The combination with a generator for supplying elastic fluel vapor to a prime mover, of a chamber containing said generator, a fire-box for heating the generator which is arranged separate from said chamber but in communication therewith and means including devices arranged adjacent to the inlet and outlet of the fire-box for simultaneously shutting off the heat from the chamber to check the generation of vapor and the entrance of air to the fire-box to arrest combustion therein when the prime mover is shut down.

4. The combination with a generator for supplying elastic fluid vapor to a prime mover, of a chamber containing said generator, a separately arranged fire-box, a grate for said fuel in said fire-box, a damper between the fire-box and the chamber, a door for regulating the supply of air to the fire-box, and means for operating said damper and door to simultaneously shut off the heat of the fire from the generator and check the entrance of air in the fire-box.

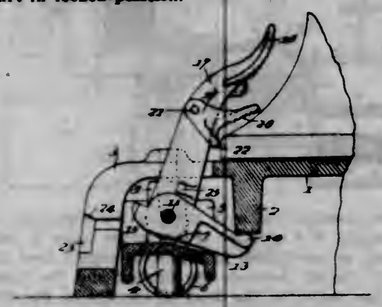
5. The combination with a generator for supplying elastic fluid to a prime mover, of a chamber containing the generator, a fire-box separate from the chamber, a grate for solid fuel arranged in said fire-box, a conduit for conveying gases heated by the combustion of the fuel from the fire-box to the chamber to heat the generator during its normal operation, a damper in the conduit, a door for controlling the supply of air to the fire, means connecting the damper and the door, and a device for actuating said means to shut off the heat from the chamber to check the generation of fluid and arrest combustion in the fire-box when the prime mover is shut down.

[Claims 6 and 7 not printed in the Gazette.]

1,063,620. GYMNASIUM APPARATUS. ALBERT J. THORNLEY, Pawtucket, R. I., assignor to Narragansett Machine Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed Apr. 26, 1912. Serial No. 693,393. (Cl. 46—69.)

1. In combination with a base having a depending abutment and a slotted portion, a pair of depending guide posts carried by the base, a caster carrier slidingly mounted on said posts, a horizontal pin carried by the carrier, a short lever mounted on the pin having its rear end disposed for engagement with the lower end of the abutment and having a pair of shoulders at its front end, the front end of said lever being bifurcated, a long lever mounted on said pin and disposed at its rear end in the

bifurcation of the short lever, a lug on each side of the long lever to engage the shoulders of the short lever, the free end of the long lever extending through the slot of the base, said slot of the base being formed to provide abutments, and a dog pivoted to the long lever and having a shoulder to engage said abutments of the base to hold the part in locked position.



2. The combination with a base and a vertically slidable caster carrier connected thereto, lever machanism pivotally carried by the carrier for engagement with the base and the carrier to raise the base by engagement with the latter and with the carrier.

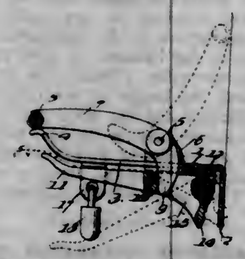
3. In combination with a base and a vertically slidable caster carrier connected thereto, lever mechanism carried by the carrier for engagement with the same and with the base to effect raising of the base by depression of the lever mechanism.

4. In combination with a base and a vertically slidable carrier connected thereto, lever mechanism carried by the carrier for engagement with the same and with the base to effect raising of the base by depression of the lever mechanism, and means to lock the lever mechanism against movement when same is in operative position.

5. In combination with a base and a caster carrier movably connected thereto, a lever engageable between the under side of the base and the top of the carrier, and a second lever for depressing the first lever.

[Claims 6 to 12 not printed in the Gazette.]

1,063,621. RACK FOR HOLDING GYMNASIUM APPARATUS. ALBERT J. THORNLEY, Pawtucket, R. I., assignor to Narragansett Machine Company, Pawtucket, R. I., a Corporation of Rhode Island. Filed July 27, 1912. Serial No. 711,847. (Cl. 211—14.)



1. A rack for supporting dumb bells and the like consisting of a horizontal plate having its rear side turned downwardly for securement to a support, arms pivotally mounted on said plate above the same and having their free ends extending adjacent the front side thereof, a rod carried by said free ends of the arms, said plate having its front side slotted outwardly to extend adjacent said rod when the latter is in normal position, a tail depending from the rear end of each arm and extending down through a slot provided therefor in said plate, a shaft journaled below the plate and at the rear side of said plate, a locking lever secured to said shaft and having an opening to receive the tail of one of the arms, a perforated lug depending from the plate and passing through an opening provided therefor in said lever, a padlock to engage through the perforation of the lug to lock the lever against downward movement and second locking members for the remainder of the arm tails rigid on the shaft and slotted to receive said last named tails.

2. A rack for supporting dumb bells and the like consisting of a slotted plate, arms pivoted to the plate and having depending tails that project down through slots provided therefor in the plate, a rod carried by the arms to close the outer ends of the slots, and means coöperating with the tails to lock the arms against movement.

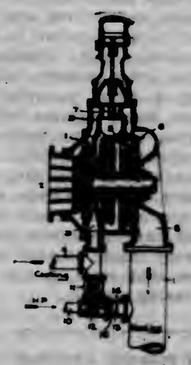
3. A rack for supporting dumb bells and the like consisting of a slotted plate, arms pivoted to the plate and having depending tails that project down through slots provided therefor in the plate, a rod carried by the arms to close the outer ends of the slots, a shaft journaled beneath the plate, slotted locking elements rigidly connected to said shaft to receive the tails in said slots thereof, and means to lock the shaft against rotary movement.

4. A rack for supporting dumb bells and the like including a member to receive the dumb bells, means to prevent removal of the dumb bells from said member, a series of projections in connection with said means extending below the member, an element having pivotal movement and being mounted longitudinally of said member beneath the latter to lock said means against movement, said element having a series of devices thereon which are movable therewith to engage said projections, and means to lock the element against pivotal movement.

5. A rack for supporting dumb bells and the like, consisting of a slotted supporting member, pivoted means to close the slots of said supporting member having a plurality of projections which extend below the supporting member, pivoted means common to all of the projections located beneath the supporting member and formed to receive each of said projections to lock the closing means against pivotal movement and means to lock the pivoted means against movement.

[Claim 6 not printed in the Gazette.]

1,063,622. TAPPED TURBINE. HEINRICH TREITEL, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Oct. 1, 1912. Serial No. 723,320. (Cl. 121—118.)



1. The combination with a turbine supplying for industrial purposes and at different pressures motive fluid that has had some of its energy extracted, of means for supplementing the fluid used for one of said purposes by motive fluid supplied direct from the source of supply.

2. The combination with a turbine supplying for industrial purposes and at different pressures motive fluid that has had some of its energy extracted, of means responsive to the pressure of the fluid supplied for one of said purposes for controlling the passage of fluid supplied for another purpose.

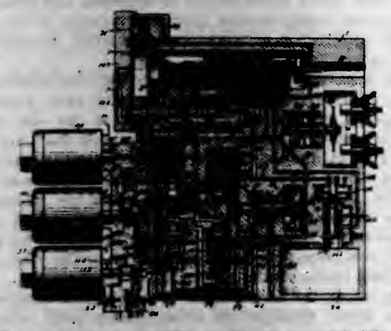
3. In combination, a turbine arranged to supply motive fluid at different pressures for industrial purposes, conduits leading from the turbine and carrying said fluid, and valve means sensitive to fluid pressure and controlling the passage of fluid through the conduits, the valve means controlling the supply of higher pressure being responsive to the pressure in the conduit supplying the lower pressure fluid.

4. The combination with a turbine supplying high-pressure steam for cooking and exhaust steam for heating, of means for supplementing the cooking steam with steam direct from the boiler.

5. The combination with a turbine supplying high-pressure steam for cooking and exhaust steam for heating, of means for supplementing the cooking steam with steam direct from the boiler, and means for automatically controlling said supplemental supply by variations in the heating steam pressure.

[Claims 6 and 7 not printed in the Gazette.]

1,063,623. ELECTROPNEUMATIC BRAKE. WALTER V. TURNER, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 23, 1911. Serial No. 645,615. (Cl. 188—4.)



1. In an electro-pneumatic brake, the combination with a train pipe and an automatic valve device operating upon a gradual reduction in train pipe pressure to make its full traverse and effect a service application of the brakes, of an electrically controlled valve means for effecting a gradual reduction in train pipe pressure, means for producing an emergency application of the brakes, and an electrically controlled emergency device for effecting the operation of said means.

2. In an electro-pneumatic brake, the combination with a train pipe and an automatic valve device operating upon a gradual reduction in train pipe pressure to make its full traverse and effect a service application of the brakes, of an electrically controlled valve means for effecting a gradual reduction in train pipe pressure, means operating upon a sudden reduction in train pipe pressure for producing an emergency application of the brakes, and an electrically controlled emergency device for effecting a sudden reduction in pressure on said means.

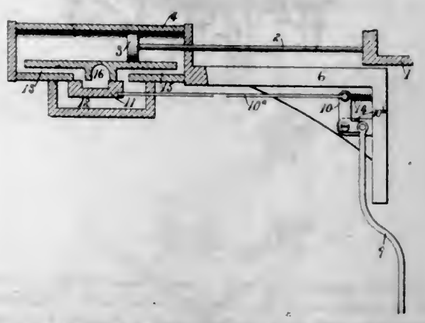
3. In an electro-pneumatic brake, the combination with a train pipe and a valve device operating upon a gradual reduction in train pipe pressure for effecting a service application of the brakes, of means operating upon a sudden reduction in fluid pressure for effecting an emergency application of the brakes, an electrically controlled valve for venting air from the train pipe to the brake cylinder for operating said valve device, and electrically controlled valve means for effecting a sudden reduction in fluid pressure to operate said means.

4. In an electro-pneumatic brake, the combination with electrically controlled means for effecting a service application of the brakes and electrically controlled means for effecting an emergency application of the brakes, of a device having one position for cutting the electric service means out of action and another position for cutting the electric emergency means out of action.

5. In an electro-pneumatic brake, the combination with electrically controlled means for effecting a service application of the brakes and electrically controlled means for effecting an emergency application of the brakes, of a device having positions for cutting either the electric service, or emergency means, or both out of action.

[Claims 6 to 18 not printed in the Gazette.]

1,063,624. TYPE-WRITING MACHINE. CHARLES H. VOGEL, Vancouver, British Columbia, Canada, assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Original application filed Aug. 22, 1910, Serial No. 578,457. Divided and this application filed May 3, 1911. Serial No. 624,828. (Cl. 197—82.)



1. A typewriting machine having a carriage in combination with a pneumatic cylinder, a piston rod actuated thereby and attached to said carriage, a valve coöperating with said cylinder, means for normally holding said valve in a position to cause said piston rod to advance said carriage in the letter-feeding direction, a key for actuating said valve to cause said piston rod to move said carriage in the reverse direction, and means to return the key and valve whenever the key is released whereby the point at which the return movement of the carriage is arrested is under the control of the operator.

2. In a typewriting machine, the combination of a traveling carriage, pneumatic means for moving the carriage in either direction, controlling mechanism comprising a key operable to supply pneumatic pressure for returning the carriage, and means to automatically reverse the controlling mechanism whenever the key is released and supply pressure to the carriage in letter-feeding direction.

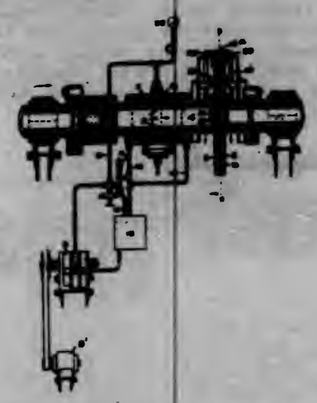
3. In a typewriting machine, the combination with a traveling carriage, of a cylinder, a piston therein, a connection between the piston and the carriage, a reversing valve to admit fluid pressure to either side of the piston, a controlling key, connections from the key to the valve for moving the valve to a position to admit pressure for returning the carriage when the key is depressed, and means operable automatically when the key is released to reverse the valve and apply pressure for moving the carriage forward.

4. In a typewriting machine, the combination with a machine frame, of a traveling carriage, a cylinder supported on the machine frame, a piston working in the cylinder, a piston rod connecting the piston to the carriage, a reversing valve movable into positions to admit pressure at either side of the piston, a spring to move said valve into position to admit pressure to operate the carriage in letter-feeding direction, a finger key, and connections between the key and valve for moving the latter against the tension of the spring into position to admit pressure to return the carriage.

1,063,625. APPARATUS FOR MEASURING THE AXIAL THRUST ACTING UPON A SHAFT. PAUL WAGNER, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Sept. 28, 1910. Serial No. 584,187. (Cl. 73—15.)

1. The combination with a shaft made in sections, of a coupling for said sections comprising members fixedly attached to the adjacent ends of the sections and forming a

chamber between them that is closed at its periphery, one member and section being movable relatively to the other so as to vary the size of the chamber, means supplying fluid under pressure to the inner portion of the chamber, a pressure indicating device and devices for transmitting rotary motion from one member to the other.



2. The combination with a shaft made in two sections, of an elastic coupling therefor capable of longitudinal movement, and stops to limit such movement and enable the thrust to be directly transmitted when it exceeds a predetermined amount.

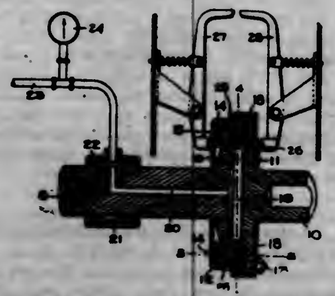
3. The combination with a shaft made in two sections, of an elastic coupling therefor capable of longitudinal movement, and a bayonet joint connecting together the coupling parts attached to the two sections of the shaft, said joint permitting axial play.

4. The combination with a shaft made in two sections, of a hollow elastic coupling therefor, a bayonet joint for connecting said sections and limiting the axial play thereof, and stationary levers bearing respectively against the parts of said coupling and having their free ends in proximity.

5. The combination with a hollow shaft made in two sections, of a hollow elastic coupling therefor, a stationary sleeve surrounding the shaft and having a circumferential groove communicating with the interior of said shaft, a fluid pump connected with said groove, a controllable by-pass for the pump, and means for determining the pressure of the fluid supplied to the interior of the shaft.

[Claims 6 to 10 not printed in the Gazette.]

1,063,626. APPARATUS FOR MEASURING THE THRUST OR PULL ON SHAFTS. PAUL WAGNER, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed June 13, 1911. Serial No. 632,916. (Cl. 73—15.)



1. In apparatus of the class described, the combination of two shafts arranged in substantially axial alinement and having the end of one adjacent to the end of the other, a member carried by the end of one shaft, a member carried by the end of the other shaft in sliding engagement with the first member, there being a pressure chamber between said members to which fluid under pressure can be supplied, and means for transmitting rotary motion from one member to the other without interfering with the relative axial movement of the members.

2. In apparatus of the class described, the combination of two shafts arranged in substantially axial alinement to rotate together and having the end of one adjacent to the end of the other, a member carried by the end of one shaft and having an annular rim, a member carried by the end of the other shaft and in sliding engagement with said annular rim, there being a pressure chamber between said members, means for supplying fluid under pressure to the chamber, a pressure indicating device, and means for indicating the position of the members relative to each other.

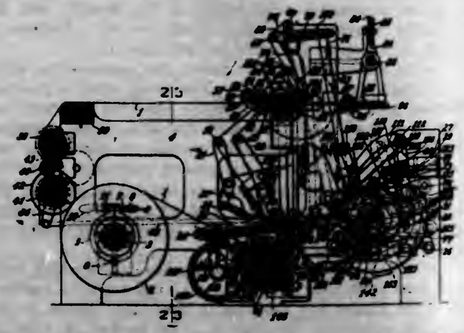
3. In apparatus of the class described, the combination of two shafts arranged in substantially axial alinement and having the end of one adjacent to the end of the other, a member carried by the end of one shaft and having an annular portion, a disk-like member carried by the end of the other shaft and in sliding engagement with said portion, there being a chamber between the members to which fluid under pressure can be supplied, and means for transmitting rotary motion from one member to the other without interfering with the relative axial movement of the members.

4. In apparatus of the class described, the combination of two shafts arranged in substantially axial alinement and having the end of one adjacent to the end of the other, a member carried by the end of one shaft and provided with an annular rim, a disk-like member carried by the end of the other shaft and in sliding engagement with said rim, there being a chamber between the members, a conduit in one of the shafts for supplying fluid under pressure to the chamber, and anti-friction means for transmitting rotary motion from one member to the other while permitting relative axial movement of the members.

5. In apparatus of the class described, the combination of two shafts arranged in substantially axial alinement a disk-like member carried by the end of one shaft that has an annular rim, a disk-like member carried by the end of the other shaft and in sliding engagement with said rim, and means for transmitting rotary motion from one member to the other while permitting relative axial movement of the members, said means including lugs on one member that are arranged in alternating relation to coöperating lugs on the other member.

[Claims 6 to 10 not printed in the Gazette.]

1,063,627. LOOM FOR WEAVING KNOTTED FABRICS. THOMAS P. WALSH, Worcester, Mass., assignor to Walsh-Baker Corporation, Portland, Me., a Corporation of Maine. Filed Apr. 27, 1908. Serial No. 429,297. (Cl. 139—66.)



1. A loom, warp supporting means, means to shed the warp threads, means to introduce binder threads in the shed, and means to knot weft thread across the width of the loom between binder threads.

2. A loom, warp supporting means, means to shed the warp threads, means to introduce binder threads in the shed, means to knot weft thread across the width of the loom between binder threads, and means to beat up the binder threads and knotted weft thread.

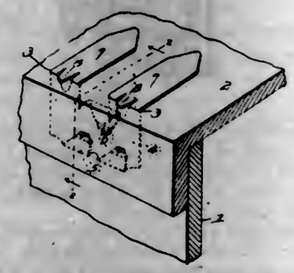
3. In a loom, warp-supporting means, weft mechanism for forming weft pile loops in an intact weft thread, means for laying binder filling, and mechanism for knotting together said intact looped weft thread and the warp threads to hold said weft pile loops immovably in place.

4. In a loom, means for supporting a series of warp threads, mechanism for forming a series of weft pile loops in a single weft thread, and knotting mechanism for knotting together successively a plurality of looped weft threads and said warp threads, each weft thread being knotted against movement at the knot lengthwise of said weft thread, and means for laying binder filling.

5. In a loom, means for supporting a series of warp threads, mechanism for forming a series of weft pile loops in a single weft thread, knotting mechanism for knotting together successively a plurality of looped weft threads and said warp threads, and means for beating up the knotted piles.

[Claims 6 to 55 not printed in the Gazette.]

1,063,628. BOX-COVER FASTENER. GEORGE CLARENCE WARE, Plainville, Mass. Filed Dec. 18, 1912. Serial No. 737,458. (Cl. 70—3.)



1. A box cover fastener composed of a body having spaced lower prongs on its bottom side and having a flap on its upper side disposed substantially in the space between said lower prongs, an arm on each side of said flap extending upwardly from the body and a tongue struck out from each arm at the base thereof.

2. A box cover fastener composed of a body having spaced lower prongs on its bottom side and having a flap on its upper side disposed substantially in the space between said lower prongs, said body being secured to an end wall of the box, the flap extending over the top edge of said wall and being clenched thereto and the prongs extending through the end wall and clenched thereto, an arm on each side of the flap, and a tongue struck out from each arm at the base thereof, the arms being for engagement through the box cover slots and adapted to seat thereon, the tongues being for seating engagement on the cover on the opposite sides of the slots on which said arms are disposed.

3. A box cover fastener composed of an element secured to the box and having an arm for engagement through a slot in the box cover and for seating on the latter, said arm having a tongue for seating on the box cover on the side of the slot opposite to that on which the arm seats.

4. A box cover fastener including a body secured to the box and means carried by said body for penetration through the cover and for engagement with the cover on opposite sides of the point of penetration of said means.

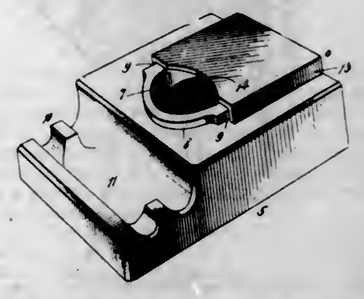
5. A box cover fastener including a member secured to the box and means carried by the member for penetration through the cover, said means having a part which is automatically engaged with the cover on the side of the point of penetration of said means through the cover opposite to the side on which said means engages when the means is bent to seat on the cover.

[Claim 6 not printed in the Gazette.]

1,063,629. RECOVERING COPPER FROM ITS ORES. UTLEY WEDGE, Ardmore, Pa., assignor to The Furnace Patent Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 18, 1909. Serial No. 523,179. (Cl. 75—18.)

The mode herein described of recovering copper from copper ore, said mode consisting in subjecting the ore under oxidizing conditions and in the presence of a sulfate of another metal to such temperature that the sulfate will react upon the copper to form copper sulfate, progressively moving the mass of ore during its treatment, and conveying the gases developed during the first part of the treatment to a point in advance of that at which they were developed and there causing said gases to act upon the partially sulfated ore.

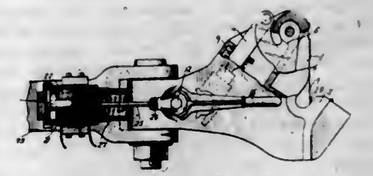
1,063,630. INKSTAND. FRANK A. WEEKS, Plainfield, N. J. Filed Dec. 22, 1909. Serial No. 534,423. (Cl. 120—57.)



1. A two-part inkstand comprising an integral base having an ink-well therein and a raised flange at the front of said well and guides at the sides thereof, and a slidable cover freely mounted on said base and capable of being lifted directly therefrom and having depending side flanges embracing said guides; substantially as set forth.

2. A two-part inkstand comprising a base having an ink-well therein and a raised flange at the front of said well and guides at the sides thereof, and a slidable cover freely mounted on said base and having a depending rear flange, depending side flanges embracing said guides and a stop-pin on its lower side to arrest the cover when the same is moved rearwardly to a proper extent, said guides serving to arrest said cover when the same is moved frontwardly; substantially as set forth.

1,063,631. INTERLOCK FOR A COMBINED CAR AND ELECTRIC COUPLING. HENRY H. WESTINGHOUSE, New York, N. Y., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 25, 1910. Serial No. 568,887. (Cl. 213—40.)



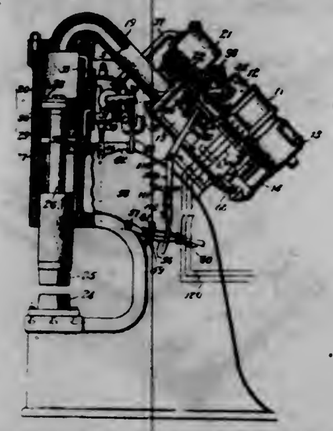
1. In a coupling mechanism for cars, means for coupling an electric train line circuit, and locking means controlled by the current in said circuit for preventing the release of the coupler.

2. In a coupling mechanism for cars, automatic means for coupling electric train line circuits, means for manually releasing the coupler and an electric locking device adapted to be operated by the current in said circuits for prevent-

ing the release of the coupler when said circuits are energised.

3. In a coupling mechanism for cars, automatic means for coupling train line circuits, a manually operated latch for the coupler, and an electric locking device controlled by current in said circuits for preventing the operation of the latch to release the coupler when said circuits are energised.

1,063,632. FORGING-PRESS. MORRIS C. WHITE and OTHO C. DURYEA, Chicago, Ill. Filed Jan. 7, 1910, Serial No. 536,947. Renewed Nov. 4, 1912. Serial No. 729,471. (Cl. 138—17.)



1. In a machine of the character described, the combination of a hydraulic cylinder, a confined liquid column communicating therewith, a piston in said cylinder, a work-performing member operated by said piston, and an internal combustion power-generator having a cylinder, a plunger, a piston connected with the said plunger and having limited independent motion with relation thereto, the piston operating, under the force of an explosion in the generator cylinder, to force the plunger against the said column to actuate the work-performing member, and means for returning the piston to scavenge the cylinder.

2. In a machine of the character described, the combination of a hydraulic cylinder, a confined liquid column communicating therewith, a piston in said cylinder, a work-performing member operated by said piston, an internal combustion power-generator having a cylinder and a piston operating against the said column, under the force of an explosion in the generator cylinder, to actuate the work-performing member, and means for moving said hydraulic cylinder-piston to position the work-performing member away from and toward the work, said means being independent, for its control, from said generator.

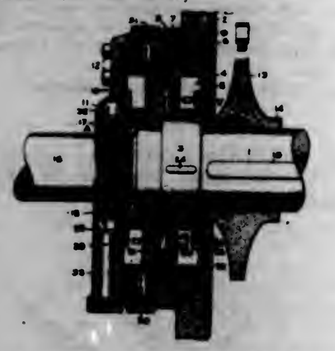
3. In a machine of the character described, the combination of a hydraulic cylinder, a confined liquid-column communicating therewith, a piston in said cylinder, a work-performing member operated by said piston, an internal combustion power-generator having a cylinder and a piston operating against the said column, under the force of an explosion in the generator-cylinder, to actuate the work-performing member, and fluid-pressure means for moving said hydraulic-cylinder-piston to position the work-performing member away from and toward the work, said means being independent, for its control, from the said generator.

4. In a machine of the character described, the combination of a hydraulic cylinder, a confined liquid-column communicating therewith, a piston in said cylinder, a work-performing member operated by said piston, an internal combustion power-generator having a cylinder and a piston operating against the said column, under the force of an explosion in the generator-cylinder, to actuate the work-performing member, and hydraulic means for moving said hydraulic-cylinder-piston to position the work-performing member away from and toward the work, said means being independent, for its control, from the said generator.

5. In a machine of the character described, the combination of an internal combustion power-generator having a cylinder and piston, a work-performing member operated by said piston, under the force of an explosion in said cylinder, and means for positioning the work-performing member against the work prior to an explosion in the cylinder, said means being independent, for its control, from said generator.

[Claims 6 to 8 not printed in the Gazette.]

1,063,633. SHAFT-PACKING. JAMES WILKINSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 14, 1911. Serial No. 654,721. (Cl. 121—109.)



1. In a packing, a packing chamber, a rotatable packing element, a shaft on which said element is adjustably mounted, and a flexible fluid tight driving connection between said element and shaft, which permits the said element to move axially on said shaft.

2. The combination with a rotatable shaft, of a packing therefor, comprising a packing chamber, an internally chambered packing element mounted with a slip fit on a shaft and disposed in said chamber, a flexible diaphragm clamped to the shaft and to the annular wall of said chamber in the element, and a positive driving connection between the shaft and element which permits the latter to slip axially.

3. The combination with a rotatable shaft, of a packing therefor comprising a stationary element, a packing element coöperating therewith and divided into two parts or sections in a radial plane, said parts being cut away to form a chamber between them, a circular flexible diaphragm connected by a fluid tight joint to said shaft, said diaphragm being disposed in said chamber in the element and clamped at its periphery between the sections of said element, and means to join said sections together.

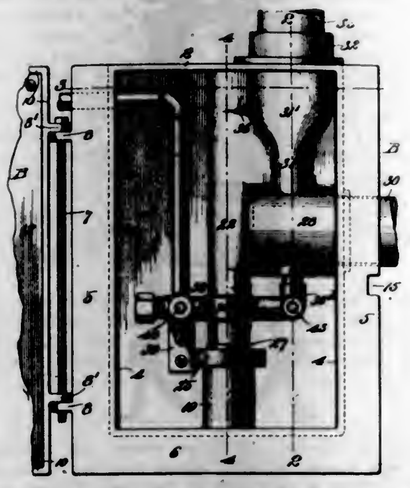
4. The combination with a rotatable shaft, of a packing comprising a packing element mounted with a slip fit on said shaft and rotatable therewith, said element being axially adjustable on said shaft, an internal chamber in said element, and packing means which divides the chamber into two parts, prevents leakage between the element and shaft, and acts independently of centrifugal force.

5. The combination with a rotating shaft, of a packing comprising a chamber, an element in the chamber that is mounted with a slip fit on said shaft, means to rotate said element with said shaft, and surfaces at the ends of said element which clear the side walls of said chamber, and liquid means to seal said clearances.

[Claims 6 to 14 not printed in the Gazette.]

1,063,634. GENERATOR-BOX FOR VAPOR LIGHTING SYSTEMS. JOHN H. ZIMMER, St. Louis, Mo., assignor to Taylor Brothers Churn and Manufacturing Company, St. Louis, Mo., a Corporation of Arizona. Filed June 24, 1912. Serial No. 706,562. (Cl. 158—58.)

1. A device of the class described integrally comprising a body portion, a hollow burner-plate supporting portion, a hollow portion communicating with the exterior and providing a mixing-chamber, a hollow portion leading from said mixing-chamber portion and providing an outlet passage therefrom, and a hollow portion leading into said outlet portion and providing a communicating passage therebetween and said burner-plate supporting portion; substantially as described.



2. A device of the class described integrally comprising a body portion, a hollow burner-plate supporting portion, a hollow portion communicating with the exterior and providing a mixing-chamber, a hollow portion leading at one end, and providing an outlet passage, from said mixing-chamber portion, said last-named portion flaring, and providing an enlarged chamber, at its upper end, and a hollow portion leading from said enlarged chamber of said outlet portion and providing a communicating passage therebetween and said burner-plate supporting portion; substantially as described.

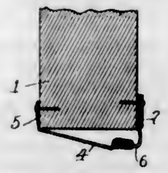
3. A device of the class described integrally comprising a body portion, a tubular vertically-disposed burner-plate supporting portion, a hollow horizontally-disposed portion communicating with the exterior and providing a mixing-chamber, a vertically-disposed tubular portion leading at one end, and providing an outlet passage, from said mixing-chamber portion, said last-named tubular portion flaring, and providing an enlarged chamber, at its upper end, and a tubular portion leading from said enlarged chamber and providing a communicating passage therebetween and said burner-plate supporting portion; substantially as described.

4. A device of the class described integrally comprising a substantially box-shaped body portion open at its front and having back, top and bottom, and side walls, a tubular vertically-disposed burner-plate supporting portion on said bottom wall, a hollow horizontally-disposed portion within said body portion above said burner-plate supporting portion, said last-named hollow portion communicating with the exterior and providing a mixing chamber, a vertically-disposed tubular extension leading at one end, and providing an outlet passage, from said mixing-chamber portion, said extension at its upper end flaring and providing an enlarged chamber and uniting with said top wall, a diagonally-disposed tubular portion arranged within said body portion at the top wall thereof and communicating at one end with said enlarged chamber, and a vertically-disposed tubular portion within said body portion and on said back wall thereof and leading from the opposite end of said diagonally-disposed portion and providing a communicating passage therebetween and said burner-plate supporting portion; substantially as described.

5. In a device of the class described, a box-shaped body portion, a burner in said body portion, a mixing-chamber in and integral with said body portion, a tubular extension integral with, and leading at one end, and providing an outlet passage, from, said mixing-chamber, said extension flaring and providing an enlarged chamber at its upper end, a tubular portion integral with said body-portion providing a communicating passage between said enlarged chamber of said extension and said burner, and means in said extension adapted to limit the amount of mixed air and vapor passing from said mixing chamber through said tubular portion to said burner; substantially as described.

[Claims 6 to 15 not printed in the Gazette.]

1,063,635. WEATHER-STOP FOR DOORS AND THE LIKE. ISAAC H. ATHEY, Chicago, Ill., assignor to Athey Sanitary Equipment Co., a Corporation of Illinois. Filed Aug. 2, 1911. Serial No. 642,026. (Cl. 20—69.)



1. A weather guard for swinging doors embracing a resilient plate or strip adapted to be engaged near the outer side of the bottom rail of the door and extending beneath the door, and a flexible strip secured on the bottom rail near the inner side of the door and permanently secured to the inner edge of said resilient plate, and of a width to afford a packing strip between the inner side of the door and the threshold when the door is closed.

2. A weather guard for swinging doors embracing a resilient plate or strip adapted to be engaged on the bottom rail of the door near the stop side thereof and extending beneath the door, and a flexible strip such as leather secured on the bottom rail at the opposite side of the door and permanently secured on the inner edge of said plate, and of a width to fold as a packing strip between the inner side of the door and the threshold.

3. A weather guard for swinging doors embracing a resilient plate or strip adapted to be engaged on the stop side of the bottom rail of the door and extending beneath the door, and obliquely downwardly to engage on the threshold, and a flexible non-metallic strip secured on the bottom rail at the inner side of the door and folded into the inner edge of said resilient plate, and of a width to afford a packing strip between the inner side of the door and the floor.

4. A weather guard for swinging doors embracing a resilient strip of sheet metal engaged near the outer side of the bottom rail of the door, and extending beneath the door inwardly and downwardly to engage the threshold, a strip of leather secured on the bottom rail at the inner side of the door and permanently secured and folded into the inner edge of said resilient strip and of a width to afford a packing strip between the inner side of the door and the threshold, and a metal binding strip folded onto the upper edge of said strip and affording a finish.

5. A weather guard for doors embracing a resilient plate engaged near one side of the bottom rail of the door and extending obliquely inwardly to engage the threshold when the door is closed and a flexible strip having one edge secured on the other side of the bottom rail of the door and the other edge secured to the inner edge of the resilient plate to afford a packing.

[Claims 6 and 7 not printed in the Gazette.]

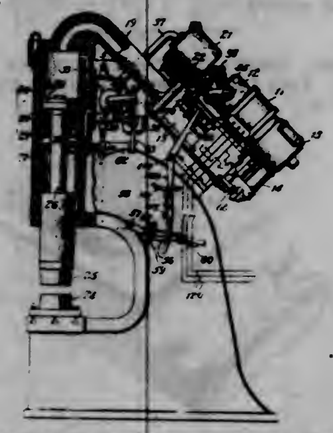
1,063,636. METHOD OF AND APPARATUS FOR FORCING OR COMPRESSING FLUIDS. ALFRED BARBEZAT, Paris, France, assignor to General Electric Company, a Corporation of New York. Filed Oct. 13, 1911. Serial No. 654,441. (Cl. 230—11.)

1. The method of forcing or compressing a fluid which consists of heating a portion of the stream of fluid to decrease its density, accelerating the velocity of the cooler and denser portion of the stream by centrifugal action due

ing the release of the coupler when said circuits are energised.

3. In a coupling mechanism for cars, automatic means for coupling train line circuits, a manually operated latch for the coupler, and an electric locking device controlled by current in said circuits for preventing the operation of the latch to release the coupler when said circuits are energised.

1,063,632. FORGING-PRESS. MORRIS C. WHITE and OTHO C. DURYEA, Chicago, Ill. Filed Jan. 7, 1910, Serial No. 536,947. Renewed Nov. 4, 1912. Serial No. 729,471. (Cl. 138—17.)



1. In a machine of the character described, the combination of a hydraulic cylinder, a confined liquid column communicating therewith, a piston in said cylinder, a work-performing member operated by said piston, and an internal combustion power-generator having a cylinder, a plunger, a piston connected with the said plunger and having limited independent motion with relation thereto, the piston operating, under the force of an explosion in the generator cylinder, to force the plunger against the said column to actuate the work-performing member, and means for returning the piston to scavenge the cylinder.

2. In a machine of the character described, the combination of a hydraulic cylinder, a confined liquid column communicating therewith, a piston in said cylinder, a work-performing member operated by said piston, an internal combustion power-generator having a cylinder and a piston operating against the said column, under the force of an explosion in the generator cylinder, to actuate the work-performing member, and means for moving said hydraulic cylinder-piston to position the work-performing member away from and toward the work, said means being independent, for its control, from said generator.

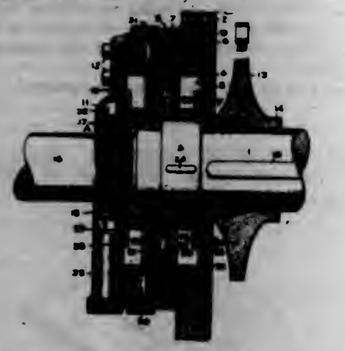
3. In a machine of the character described, the combination of a hydraulic cylinder, a confined liquid-column communicating therewith, a piston in said cylinder, a work-performing member operated by said piston, an internal combustion power-generator having a cylinder and a piston operating against the said column, under the force of an explosion in the generator-cylinder, to actuate the work-performing member, and fluid-pressure means for moving said hydraulic-cylinder-piston to position the work-performing member away from and toward the work, said means being independent, for its control, from the said generator.

4. In a machine of the character described, the combination of a hydraulic cylinder, a confined liquid-column communicating therewith, a piston in said cylinder, a work-performing member operated by said piston, an internal combustion power-generator having a cylinder and a piston operating against the said column, under the force of an explosion in the generator-cylinder, to actuate the work-performing member, and hydraulic means for moving said hydraulic-cylinder-piston to position the work-performing member away from and toward the work, said means being independent, for its control, from the said generator.

5. In a machine of the character described, the combination of an internal combustion power-generator having a cylinder and piston, a work-performing member operated by said piston, under the force of an explosion in said cylinder, and means for positioning the work-performing member against the work prior to an explosion in the cylinder, said means being independent, for its control, from said generator.

[Claims 6 to 8 not printed in the Gazette.]

1,063,633. SHAFT-PACKING. JAMES WILKINSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 14, 1911. Serial No. 654,721. (Cl. 121—109.)



1. In a packing, a packing chamber, a rotatable packing element, a shaft on which said element is adjustably mounted, and a flexible fluid tight driving connection between said element and shaft, which permits the said element to move axially on said shaft.

2. The combination with a rotatable shaft, of a packing therefor, comprising a packing chamber, an internally chambered packing element mounted with a slip fit on a shaft and disposed in said chamber, a flexible diaphragm clamped to the shaft and to the annular wall of said chamber in the element, and a positive driving connection between the shaft and element which permits the latter to slip axially.

3. The combination with a rotatable shaft, of a packing therefor comprising a stationary element, a packing element coöperating therewith and divided into two parts or sections in a radial plane, said parts being cut away to form a chamber between them, a circular flexible diaphragm connected by a fluid tight joint to said shaft, said diaphragm being disposed in said chamber in the element and clamped at its periphery between the sections of said element, and means to join said sections together.

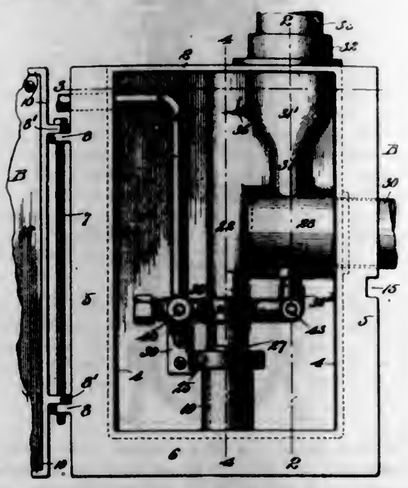
4. The combination with a rotatable shaft, of a packing comprising a packing element mounted with a slip fit on said shaft and rotatable therewith, said element being axially adjustable on said shaft, an internal chamber in said element, and packing means which divides the chamber into two parts, prevents leakage between the element and shaft, and acts independently of centrifugal force.

5. The combination with a rotating shaft, of a packing comprising a chamber, an element in the chamber that is mounted with a slip fit on said shaft, means to rotate said element with said shaft, and surfaces at the ends of said element which clear the side walls of said chamber, and liquid means to seal said clearances.

[Claims 6 to 14 not printed in the Gazette.]

1,063,634. GENERATOR-BOX FOR VAPOR LIGHTING SYSTEMS. JOHN H. ZIMMER, St. Louis, Mo., assignor to Taylor Brothers Churn and Manufacturing Company, St. Louis, Mo., a Corporation of Arizona. Filed June 24, 1912. Serial No. 705,562. (Cl. 158—58.)

1. A device of the class described integrally comprising a body portion, a hollow burner-plate supporting portion, a hollow portion communicating with the exterior and providing a mixing-chamber, a hollow portion leading from said mixing-chamber portion and providing an outlet passage, and a hollow portion leading into said outlet portion and providing a communicating passage therebetween and said burner-plate supporting portion; substantially as described.



2. A device of the class described integrally comprising a body portion, a hollow burner-plate supporting portion, a hollow portion communicating with the exterior and providing a mixing-chamber, a hollow portion leading at one end, and providing an outlet passage, from said mixing-chamber portion, said last-named portion flaring, and providing an enlarged chamber, at its upper end, and a hollow portion leading from said enlarged chamber of said outlet portion and providing a communicating passage therebetween and said burner-plate supporting portion; substantially as described.

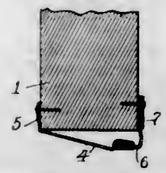
3. A device of the class described integrally comprising a body portion, a tubular vertically-disposed burner-plate supporting portion, a hollow horizontally-disposed portion communicating with the exterior and providing a mixing-chamber, a vertically-disposed tubular portion leading at one end, and providing an outlet passage, from said mixing-chamber portion, said last-named tubular portion flaring, and providing an enlarged chamber, at its upper end, and a tubular portion leading from said enlarged chamber and providing a communicating passage therebetween and said burner-plate supporting portion; substantially as described.

4. A device of the class described integrally comprising a substantially box-shaped body portion open at its front and having back, top and bottom, and side walls, a tubular vertically-disposed burner-plate supporting portion on said bottom wall, a hollow horizontally-disposed portion within said body portion above said burner-plate supporting portion, said last-named hollow portion communicating with the exterior and providing a mixing chamber, a vertically-disposed tubular extension leading at one end, and providing an outlet passage, from said mixing-chamber portion, said extension at its upper end flaring and providing an enlarged chamber and uniting with said top wall, a diagonally-disposed tubular portion arranged within said body portion at the top wall thereof and communicating at one end with said enlarged chamber, and a vertically-disposed tubular portion within said body portion and on said back wall thereof and leading from the opposite end of said diagonally-disposed portion and providing a communicating passage therebetween and said burner-plate supporting portion; substantially as described.

5. In a device of the class described, a box-shaped body portion, a burner in said body portion, a mixing-chamber in and integral with said body portion, a tubular extension integral with, and leading at one end, and providing an outlet passage, from, said mixing-chamber, said extension flaring and providing an enlarged chamber at its upper end, a tubular portion integral with said body-portion providing a communicating passage between said enlarged chamber of said extension and said burner, and means in said extension adapted to limit the amount of mixed air and vapor passing from said mixing chamber through said tubular portion to said burner; substantially as described.

[Claims 6 to 15 not printed in the Gazette.]

1,063,635. WEATHER-STOP FOR DOORS AND THE LIKE. ISAAC H. ATHEY, Chicago, Ill., assignor to Athey Sanitary Equipment Co., a Corporation of Illinois. Filed Aug. 2, 1911. Serial No. 642,026. (Cl. 20—69.)



1. A weather guard for swinging doors embracing a resilient plate or strip adapted to be engaged near the outer side of the bottom rail of the door and extending beneath the door, and a flexible strip secured on the bottom rail near the inner side of the door and permanently secured to the inner edge of said resilient plate, and of a width to afford a packing strip between the inner side of the door and the threshold when the door is closed.

2. A weather guard for swinging doors embracing a resilient plate or strip adapted to be engaged on the bottom rail of the door near the stop side thereof and extending beneath the door, and a flexible strip such as leather secured on the bottom rail at the opposite side of the door and permanently secured on the inner edge of said plate, and of a width to fold as a packing strip between the inner side of the door and the threshold.

3. A weather guard for swinging doors embracing a resilient plate or strip adapted to be engaged on the stop side of the bottom rail of the door and extending beneath the door, and obliquely downwardly to engage on the threshold, and a flexible non-metallic strip secured on the bottom rail at the inner side of the door and folded into the inner edge of said resilient plate, and of a width to afford a packing strip between the inner side of the door and the floor.

4. A weather guard for swinging doors embracing a resilient strip of sheet metal engaged near the outer side of the bottom rail of the door, and extending beneath the door inwardly and downwardly to engage the threshold, a strip of leather secured on the bottom rail at the inner side of the door and permanently secured and folded into the inner edge of said resilient strip and of a width to afford a packing strip between the inner side of the door and the threshold, and a metal binding strip folded onto the upper edge of said strip and affording a finish.

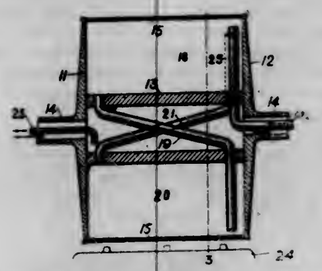
5. A weather guard for doors embracing a resilient plate engaged near one side of the bottom rail of the door and extending obliquely inwardly to engage the threshold when the door is closed and a flexible strip having one edge secured on the other side of the bottom rail of the door and the other edge secured to the inner edge of the resilient plate to afford a packing.

[Claims 6 and 7 not printed in the Gazette.]

1,063,636. METHOD OF AND APPARATUS FOR FORCING OR COMPRESSING FLUIDS. ALFRED BARBEZAT, Paris, France, assignor to General Electric Company, a Corporation of New York. Filed Oct. 13, 1911. Serial No. 654,441. (Cl. 230—11.)

1. The method of forcing or compressing a fluid which consists of heating a portion of the stream of fluid to decrease its density, accelerating the velocity of the cooler and denser portion of the stream by centrifugal action due

to rotating said portion before it is heated, and causing this denser portion at relatively high velocity to act upon the less dense heated portion.



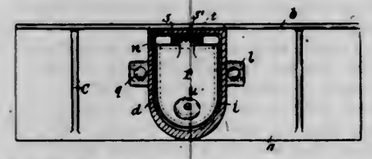
2. The method of forcing or compressing a fluid which consists in accelerating the velocity of the cooler and denser portion of the stream of fluid by centrifugal action due to rotating said portion, delivering said portion at relatively high velocity radially outwardly from its axis of rotation, heating the next succeeding portion of the stream to decrease its density, and causing the denser portion as it is delivered at high velocity to act upon the less dense portion and force it toward the axis of rotation.

3. Apparatus for forcing or compressing a fluid, which comprises a chamber having walls permeable to heat, and mounted for rotation, a supply pipe extending radially in said chamber and having a discharge opening adjacent its outer wall, a delivery pipe, and a central cooling chamber through which the supply and delivery pipes pass.

4. Apparatus for forcing or compressing a fluid, comprising a rotatable central cooling chamber having refractory walls, a plurality of chambers surrounding the same and permeable to heat, radial pipes in said chambers having discharge openings adjacent their outer walls, pipes connecting said chambers with said radial pipes, a supply pipe entering the first chamber, and a delivery pipe leaving the last chamber.

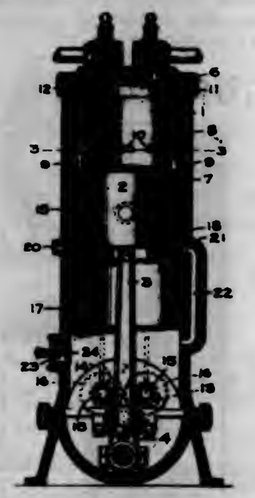
5. Apparatus for forcing or compressing a fluid, comprising a plurality of rotating heating chambers, means for introducing relatively cool fluid into the outer portions of the heating chambers in succession under the centrifugal action due to its rotation, a device for heating the fluid in the chambers, means for conveying the fluid from the inner portion of one chamber to the introducing means of the next chamber, and means for subjecting the fluid to a cooling process in its passage from one chamber to the next.

1,063,637. SEWER-VALVE. FRED BARKER, Paterson, N. J. Filed Apr. 6, 1912. Serial No. 688,874. (Cl. 182—10.)



As an improved article of manufacture, an outlet structure for a catch basin, comprising an elongated wall having a centrally-disposed opening formed therein, a hollow outlet body surrounding said opening and projecting from one face of said wall, the upper portion of said outlet body adjoining the upper edge of the wall being flattened and lying flush with said upper edge, an outwardly-extending horizontal flange formed on the upper edge of the wall at each side of said outlet body, said flanges merging into the flush flattened upper portion of the outlet body and constituting therewith a horizontal sill which extends throughout the length of said wall, whereby to support the curbing of the pavement adjacent to the wall, and means associated with the opening of the wall for controlling communication therethrough.

1,063,638. INTERNAL-COMBUSTION ENGINE. ASA F. BATCHELDER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 28, 1910. Serial No. 584,176. (Cl. 123—6.)



1. In an internal combustion engine, the combination of a main and an auxiliary piston that are connected to move together, a main and an auxiliary cylinder, an air chamber that surrounds the main cylinder and is in constant communication with the auxiliary cylinder, a port in the main cylinder that establishes communication between it and the chamber and is controlled by the main piston, an exhaust port for the auxiliary cylinder that is controlled by the auxiliary piston, means for supplying air to the auxiliary cylinder, inlet and exhaust ports for the main cylinder, and a shaft driven by the pistons.

2. In an internal combustion engine, the combination of a main and an auxiliary piston, a main and an auxiliary cylinder, an air chamber that surrounds the main cylinder and is in constant communication with the auxiliary cylinder, a port in the main cylinder that establishes communication between it and the chamber and is controlled by the main piston, an exhaust port for the auxiliary cylinder that is controlled by its piston, a closed crank case forming a pump chamber, a conduit connecting the pump chamber with the auxiliary cylinder, an air inlet for the pump chamber, inlet and exhaust ports for the main cylinder, and a shaft driven by the pistons.

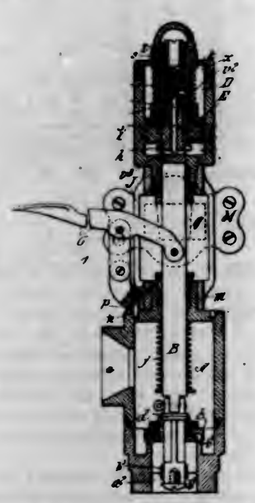
3. In an internal combustion engine, the combination of a main and an auxiliary piston, a main and an auxiliary cylinder, an air chamber that surrounds the main cylinder and is in constant communication with the auxiliary cylinder, a controlled port in the main cylinder through which the products of combustion pass into the air chamber before they are fully expanded, a controlled port for the auxiliary cylinder through which a mixture of expanded and burned products of combustion pass, a pump for supplying air to the auxiliary cylinder and said air chamber, inlet and exhaust ports for the main cylinder and communicating with the outer end thereof, mechanically actuated valves for opening and closing said ports, and a shaft driven by the pistons.

4. In an internal combustion engine, the combination of a main and an auxiliary piston forming a single unit, a shaft, a connecting rod uniting the pistons and shaft, a main cylinder, an auxiliary cylinder, a chamber surrounding the main cylinder which is always in communication with the auxiliary cylinder, exhaust ports in the main cylinder wall that communicate with the chamber and are uncovered by the main piston shortly before it completes its outward stroke, an exhaust port for the auxiliary cylinder that is controlled by its piston, a pump for supplying pure air to the auxiliary cylinder and said chamber, the discharge of said pump being con

trolled by the auxiliary piston, a valve admitting a combustible mixture to the main cylinder, and an exhaust valve for the main cylinder that is open during the scavenging stroke of its piston.

5. In an internal combustion engine, the combination of a main and an auxiliary piston, a shaft, a driving connection between the pistons and the shaft, main and auxiliary cylinders, an annular chamber that surrounds the main cylinder and is in uninterrupted communication with the auxiliary cylinder, the cubical contents of the main cylinder and that of the chamber being substantially equal, ports located in the main cylinder wall at a point about two-thirds of its piston stroke, said ports being controlled by the main piston, inlet and exhaust ports for the main cylinder, inlet and exhaust ports for the auxiliary cylinder, the ports being so related that some of the exhaust products of the main cylinder escape through the exhaust ports of the auxiliary cylinder, and a means for supplying pure air to the auxiliary cylinder and the annular chamber.

1,063,639. FLUSHING-VALVE. JOHN L. BECK, Springfield, Mass., assignor, by direct and mesne assignments, to The Sterling Valve Company, Springfield, Mass., a Corporation of Massachusetts. Filed May 2, 1912. Serial No. 694,635. (Cl. 137—93.)

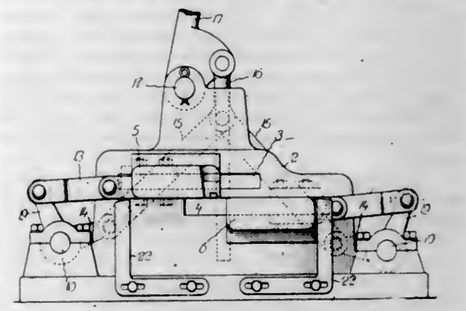


1. The combination of a valve casing having a lateral inlet and a terminal outlet, a duplex valve controlling said outlet, said valve comprising an annular main valve carrying an apertured depending spider and an auxiliary valve seating on said main valve, a stem passing through the annular main valve and apertured spider and provided at its terminal with a head normally spaced from said spider but adapted to engage therewith in the opening of the duplex valve, said stem also carrying said auxiliary valve and passing through said casing and terminating in an apertured end, a supporting member mounted rotatably and adjustably on said casing and having dowel pin connection therewith, an operating lever pivoted to said member and also having pivot connection with said stem, a dash pot cylinder secured to said supporting member and receiving the said apertured valve stem end, a piston within said dash pot cylinder and loosely mounted on said apertured stem end and cooperating therewith to control the closing movement of the duplex valve and a spring acting on said valve stem to return the duplex valve to closed position.

2. A flushing valve comprising a stem projecting vertically and upwardly therefrom having at the top of its body an upstanding hub, an inclosed casing into which the valve stem extends, located above the valve, means in said inclosed casing coöperating with the valve stem for exerting a retarding action against the closing movement of the stem, and a frame by which the casing is supported, having at the lower portion thereof a clamping yoke revolubly adjustably engaged about the said upstanding hub of the valve body, said valve body and clamping yoke having, the one a plurality of sockets, and the other a dowel engageable in any one of said sockets.

3. The combination with a valve casing having an inlet and an outlet, a valve controlling-communication between the inlet and the outlet, a frame having a bearing sleeve rotatably mounted on the casing and provided with a second sleeve in opposing relation to said first sleeve, a dash pot cylinder mounted in said second sleeve, said sleeves being provided with clamping means for securing them respectively to said casing and cylinder, a valve stem connected to said valve and extending through the valve casing and into the dash pot cylinder, the end of the valve stem received by said dash pot cylinder having longitudinal passages opening to the cylinder, a piston loosely mounted on said valve stem end, a member secured to said valve stem end and adapted to engage said piston to close one of said passages, a lever pivoted to said frame and having pivot connection with the valve stem, a dowel pin connection for adjusting said frame on said valve casing, and a spring for holding the valve normally seated.

1,063,640. FLASHER. FRANK BEHAN, Flint, Mich. Filed Jan. 6, 1913. Serial No. 740,506. (Cl. 90—33.)



1. A flasher comprising a base provided with guideways, knife blocks reciprocable past each other in the guide-ways with registering channels in their proximate faces, shear knives mounted in the blocks with cutting edges conforming to and projecting into the respective channels, and means on the base for reciprocating the blocks past each other.

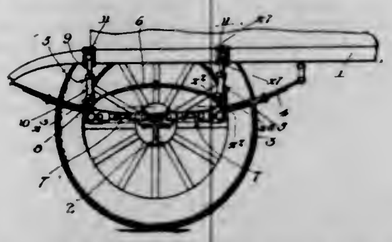
2. A flasher comprising a base, a pair of guide ribs thereon, pairs of overlapping guide slots in parallel spaced relation in the ribs, knife blocks reciprocable past each other in the slots with registering guide channels in their proximate faces, shear knives mounted in the blocks with cutting edges conforming to and projecting into the respective channels, and means on the base for reciprocating the blocks past each other.

3. A flasher comprising a base, a pair of guide ribs thereon, pairs of overlapping guide slots in parallel spaced relation in the ribs, knife blocks reciprocable past each other in the slots with registering guide channels in their proximate faces, shear knives mounted in the blocks with cutting edges conforming to and projecting into the respective channels, a pair of rock shafts journaled on the base each operatively coupled to a block, an operating lever pivoted on the base, and toggle connections between the lever and rock shafts to swing the latter in opposite directions.

1,063,641. SHOCK-ABSORBER. KARL V. BENNIS, Los Alamitos, Cal. Filed July 8, 1912. Serial No. 708,381. (Cl. 21—105.)

1. A vehicle body, an axle, radius members pivoted to the axle and normally extending horizontally in opposite

directions from the axle, rod members pivotally connected to the body and extending downwardly therefrom and pivotally connected at their lower ends to the radius members, and a compression spring connected to said downwardly extending rod members to resist by its compression, angular movement of the radius members in either direction from the horizontal position.



2. In combination with a vehicle body and an axle, of shock absorbing means connected to said body and axle, and comprising rod members pivotally connected to the body, a compression spring connected to said rod members and radius members connected to the axle and to the rod members and extending normally in line with one another and with the line of action of the spring and at right angles to the rod members.

3. The combination with a vehicle body and an axle, of shock absorbing means connecting said body and axle and comprising rod members pivotally connected with the body, and provided with means for adjusting the length thereof, a compression spring connected to said rod members, and radius members pivotally connected to the axle and to said rod members, said radius members being normally in line with one another and with the line of action of the spring thereon.

4. In combination with a vehicle body and an axle, of shock absorbing means connecting said body and axle, comprising rod members pivotally connected to the vehicle body and adjustable longitudinally with relation to said body, so as to enable their pivotal connections to the body to be brought nearer together, or farther apart, a compression spring connected to said rod members and radius members pivotally connected to the axle and to the rod members, said radius members normally extending in alinement with each other and with the line of action with the spring thereon.

5. In combination with a vehicle body and an axle, of shock absorbing means therefor, comprising rod members pivotally connected to the body, a compression spring connected to said rod members and radius members pivotally connected to the axle and to said rod members, said radius members being normally in line with each other and with the line of action of the spring thereon, and said radius members being adjustable in length.

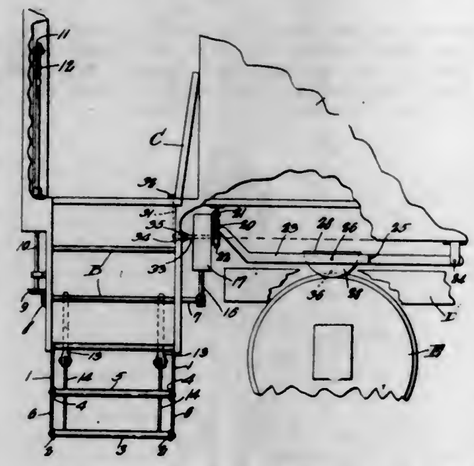
[Claims 6 and 7 not printed in the Gazette.]

1,063,642. FOLDING AND ADJUSTABLE TABLE. IRA D. BIRDSALL, Grand Rapids, Mich., assignor to Durfee Embalming Fluid Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Aug. 29, 1910. Serial No. 579,384. (Cl. 45—116.)



A foldable table comprising top sections hingedly connected together and including side rails and end rails at their abutting inner ends, a transverse plate attached to the lower edges of the side rails of each top section, an extension table slidable between each top section, its side rails and the corresponding transverse plate, a pair of legs pivotally carried by each extension which are foldable against the corresponding extension for movement into the space between the corresponding top section and the corresponding transverse plate, by which latter the pairs of legs are held in folded positions, means for locking the extensions in their outward positions, the abutting ends of the top sections forming one end of the structure when folded and the outer ends of the sections forming the other end of the structure when the latter is folded.

1,063,643. FOLDING CAR-STEP. JOHN S. BLAKE and FRED D. BLAKE, Charlotte, N. C., assignors to The Blake Car Steps Works Incorporated, a Corporation of North Carolina. Filed June 10, 1912. Serial No. 702,810. (Cl. 105—86.)



1. The combination with a fixed car step, of parallel hangers extending downwardly from the front and back portions of the ends of the fixed step, upper and lower movable steps, and means extending rearwardly from each of the movable steps and pivotally connected to said hangers.

2. The combination with a car structure, of a foldable step, a weight for holding the same normally retracted, a catch, means upon the weight and coöperating with the catch for locking the step in extended position, means for extending the step, and means for shifting the catch to unlock the step.

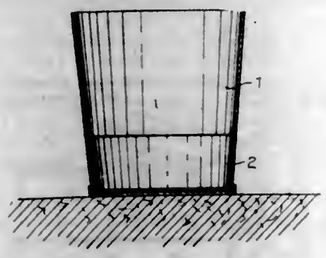
3. The combination with a car structure, of a foldable step, a weight for holding the same retracted, a catch, means on the weight and coöperating with the catch for holding the step extended, means for extending the step, means for disengaging the catch from the weight, said weight being movable by gravity to normal position.

4. The combination with a car structure including a fixed step, of foldable steps, a weighted shaft, an arm radiating therefrom, a link connection between one of the movable steps and the arm, the other movable step, when extended, engaging the link connection, a catch, means on the weight and coöperating with the catch for locking the steps when extended, means for extending the steps, and means for unlocking the catch from the weight.

5. The combination with a car structure, of a foldable step, yielding means for holding the step normally retracted, a locking element, means for extending the step to active position, means for engaging the locking element to hold the step extended, means operated by a car wheel, when rotating, for unlocking the step, and means actuated by the step when projected, for placing said unlocking means in operative relation with the wheel.

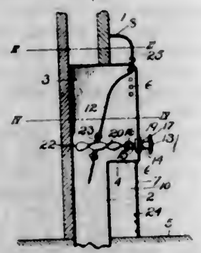
[Claims 6 to 9 not printed in the Gazette.]

1,063,644. SANITARY SHAVING-CUP. EDWIN O. BLANCHARD, Randolph, Vt. Filed Feb. 1, 1913. Serial No. 745,683. (Cl. 132—15.)



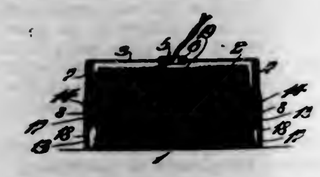
A sanitary device of the class described comprising a receptacle, the inner face of the walls and bottom thereof being coated with a thin layer of soap.

1,063,645. HOT-AIR REGISTER. EDGAR E. BOLES, Carrollton, Mo. Filed Apr. 9, 1912. Serial No. 689,557. (Cl. 126—326.)



The combination with a furnace pipe for supplying heated air and having a register box provided with an open end, of a register having an apertured front portion disposed across the open end of said box and having end flanges spaced therefrom to form air channels thereabout, a damper plate having a vertical slot disposed therein adjacent its lower edge, and being adapted for positioning in the open end of said box and projecting into the furnace pipe, a screw pivotally mounted on said register and disposed in said plate slot, whereby the said plate is actuated by the revolution of the screw to regulate the volume of air from the said pipe, said register having a plurality of openings disposed in its upper and lower portions and communicating with the air channels, to provide a continuous circulation of air around the box, the lower openings being adapted for admitting cold air into the channels and the upper openings for discharging air in a heated state.

1,063,646. UNREELING DEVICE FOR ELECTRIC CONDUCTORS. ANTOINE BOURNONVILLE, Philadelphia, Pa. Filed Aug. 7, 1912. Serial No. 713,713. (Cl. 242—159.)

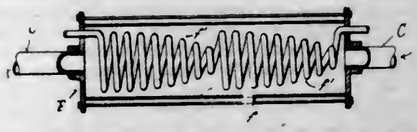


1. In an unreeling device for insulated conductors, the combination of an electric conductor coiled to form a transverse opening centrally disposed thereof having diverging walls and extending from the bottom to the top thereof, said opening being formed by superposed convolutions of said conductor, the diameters of said convolutions successively increasing from bottom to top of the coils of said conductor, an end of said conductor leading outwardly from said opening, and a receptacle having an inclosing wall, a lid movably attached to said wall and provided with a reinforced aperture, said aperture being alined with the axis of said conductor opening and adapted for the passage of the free end of said conductor therethrough, said lid being adapted to be raised to inspect the contents of the receptacle, and means for securing said lid in closed position.

2. In an unreeling device for insulated electric conductors, the combination of an insulated electric conductor coiled to form a transverse opening centrally disposed thereof and extending from bottom to top thereof in the form of an inverted truncated cone, said cone being formed by superposed convolutions of said insulated conductor, the diameters of said convolutions successively increasing from bottom to top of said conductor, an end of said conductor leading outwardly from said opening, and a receptacle comprising an inclosing wall, a lid movably attached to said wall and provided with a reinforced aperture or eyelet, said aperture being alined with the axis of said conductor opening and adapted for the passage of the free end of said insulated conductor therethrough, means for enabling said lid to be raised to inspect the condition of the insulated conductor coil, and means for securing said lid in closed position.

3. In an unreeling device for insulated electric conductors, the combination of a plurality of insulated electric conductors twisted together and coiled to form a transverse opening extending from top to bottom thereof, said opening being formed by superposed twisted convolutions of said conductors, the diameters of said twisted convolutions successively increasing from bottom to top of the coils of said conductor, an end of said conductors leading outwardly from said opening and a receptacle having a lid provided with a reinforced aperture, said aperture being juxtaposed in substantial alinement with respect to said conductor opening.

1,063,647. AUTOMOBILE HEATING APPARATUS. LEO A. BRIGEL, Cheviot, Ohio. Filed Oct. 2, 1909. Serial No. 520,660. (Cl. 237—5.)



1. An automobile heating mechanism comprising in combination with a motor and a radiator adapted to contain a liquid heating medium, a heating and muffling member through which the motor exhaust is adapted to be circulated, said heating member comprising a chamber through which the motor exhaust is circulated and a coil of pipe of conical configuration located within said chamber and through which a liquid heating medium is adapted to be circulated to become heated from the motor exhaust, and means to circulate a liquid through said coil to and from the radiator.

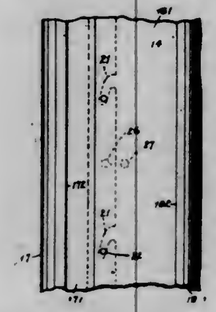
2. In an automobile heating mechanism a heating and muffling member comprising a chamber through which the motor exhaust is adapted to be circulated, and a chambered body of conical configuration located within said exhaust receiving chamber and through which a liquid heating medium is adapted to be circulated to become heated from the motor exhaust and thence to be circulated through a radiator.

3. An automobile heating mechanism comprising a radiator through which a liquid heating medium is adapted to be circulated, a heating and muffling member comprising a chamber through which the motor exhaust is adapted to be circulated and muffled, a chambered member located within said exhaust receiving chamber and through which a liquid medium is adapted to be circulated and to receive heat from the motor exhaust, a liquid reservoir located at a higher level than said radiator and muffler, and connections between said radiator, heating member and reservoir

to permit a circulation of a liquid heating medium through said radiator, heating member and reservoir.

4. An automobile heater comprising a motor, a motor exhaust pipe and a muffler through which the exhaust from said motor passes, said muffler comprising a chamber through which the motor exhaust passes and a chamber containing a liquid heating medium to be heated by said motor exhaust, a radiator in position to warm the car occupants by the circulation of a liquid heating medium through said radiator, a reservoir for said heating medium located at a higher level than said radiator, a conduit connecting the liquid chamber of said muffler with said reservoir, a conduit connecting the liquid chamber of said muffler with said radiator, and a conduit connecting said radiator with said reservoir, one of the conduits to said reservoir being connected thereto near the top and the other conduit near the bottom of said reservoir.

1,063,648. DEMOUNTABLE RIM FOR VEHICLE-WHEELS. JOHN W. BRODERICK, Newark, N. J. Filed Jan. 12, 1910. Serial No. 537,617. (Cl. 152—12.)

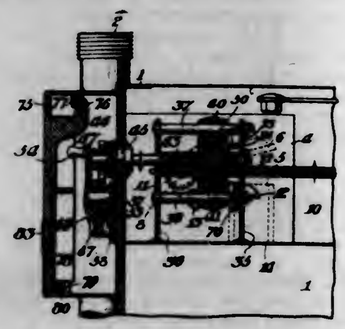


1. In a wheel, the combination of a felly having bolt holes extending transversely through itself adjacent to its periphery and conically enlarged at one end through the circumference of the felly, a band tight on said felly comprising a strip with portions at one edge of itself depressed into said conical enlargements and a flange at its other edge inclined laterally and radially outward, said strip having apertures at said depressed portions in the line of said bolt holes in the felly, bolts in said bolt holes extending through said apertures and each having at one end a head fitting against the felly and said inclined flange of the band, conical nuts on the other ends of said bolts in said depressions of the strip, and a tire rim outside said band having inclined inner lateral edges adapted to engage said conical nuts and inclined flange of the strip.

2. In a wheel, the combination of a felly portion having bolt holes extending transversely of itself adjacent to its periphery and flaringly enlarged at one end through said periphery, a band on said felly portion comprising a strip depressed at one longitudinal edge into the flaring enlargements of said bolt holes and having at the other edge a flange flaring laterally and radially outward, said strip having apertures in line with said bolt holes, clamping bolts in the bolt holes each extending through said apertures and having at one end a head beneath said flange of the strip and at the other end a tapered member in the opposite depression of the band, and a tire rim outside said band having inclined inner lateral edges adapted to engage said tapered members and flange of the strip.

3. The combination of a wheel body having a felly portion with bolt holes extending transversely therethrough and flaringly enlarged at one end through the periphery of the felly portion, a band on said felly portion comprising a strip depressed at one edge into the flaring enlargements of said bolt holes and having at the other edge a flange flaring laterally and radially outward, and clamping bolts in said bolt holes each extending through the said strip and having on opposite sides thereof a head beneath the flange of the strip and a tapered member lying in a depression of the strip and flaring outward oppositely to said flange.

1,063,649. PREPAYMENT-METER MECHANISM. WILLIAM L. BROWN, Lansdowne, Pa. Filed Aug. 20, 1912. Serial No. 715,991. (Cl. 235—132.)



1. In a prepayment gas meter, the combination with a valve controlling the passage of gas through the meter and having an operating lever; of a reciprocatory carriage, carrying a pin, movable to open and close said valve by engagement with said lever; a guide for said carriage; a screw shaft extending through said carriage parallel with said guides; a stop lever carried by said screw shaft at the inner end thereof, and a stop pin carried by said carriage adapted to project in the path of said stop lever; whereby, the opening movement of said carriage is limited by the engagement of said stop pin with said stop lever.

2. In a prepayment gas meter, the combination with a valve controlling the passage of gas through the meter and having an operating lever; of a reciprocatory carriage, carrying a pin, movable to open and close said valve by engagement with said lever; a guide for said carriage; a screw shaft parallel with said guide; a nut on said screw shaft rotatably mounted in said carriage and having external gear teeth; valve closing shaft having a gear with which said nut gear is continually engaged despite its reciprocatory traverse on said screw shaft; an interchangeable price gear on said screw shaft exterior to the meter casing; a box inclosing said price gear, having a lid provided with a lock; a bearing plate in said box having a stud shaft; a driving gear on said stud shaft, engaging said price gear; a handle and a ratchet rotatable with said driving gear; and, a pawl adapted to engage said ratchet and prevent reverse movement of said handle; said plate being adjustable and having clamping means; whereby said driving gear may be adjusted toward and away from the axis of said screw shaft to engage different sizes of price gears thereon.

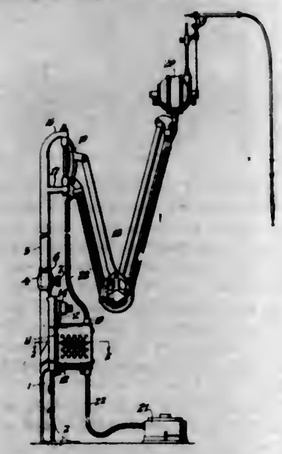
3. In a prepayment gas meter, the combination with a valve controlling the passage of gas through the meter and having an operating lever; of a reciprocatory carriage, having means to open and close said valve by engagement with said lever; a guide for said carriage; a screw shaft parallel with said guide; a nut on said screw shaft rotatably mounted in said carriage and having external gear teeth; a valve closing shaft having a gear with which said nut gear is continually engaged despite its reciprocatory traverse on said screw shaft; a price gear on said screw shaft exterior to the meter casing; a lockable box inclosing said price gear; a driving gear engaging said price gear; a handle and a ratchet rotatable with said driving gear; and, a pawl adapted to engage said ratchet and prevent reverse movement of said handle.

4. In a prepayment gas meter, the combination with a valve controlling the passage of gas through the meter; of a reciprocatory carriage, having means to open and close said valve; a guide for said carriage; a screw shaft parallel with said guide; a nut on said screw shaft rotatably mounted in said carriage and having external gear teeth; a valve closing shaft having a gear with which said nut gear is continually engaged despite its reciprocatory traverse on said screw shaft; a price gear on said screw shaft exterior to the meter casing; a lockable box inclosing said price gear; a driving gear engaging said price gear; a handle and a ratchet rotatable with said driving gear; and, a pawl adapted to engage said ratchet and prevent reverse movement of said handle.

5. In a prepayment gas meter, the combination with a valve controlling the passage of gas through the meter; of a reciprocatory carriage, having means to open and close said valve; a guide for said carriage; a screw shaft parallel with said guide; a nut on said screw shaft rotatably mounted in said carriage and having external gear teeth; a valve closing shaft having a gear engaged by said nut gear; a price gear on said screw shaft exterior to the meter casing; a lockable box inclosing said price gear; a driving gear engaging said price gear; a handle and a ratchet rotatable with said driving gear; said ratchet having but one notch; and, a pawl adapted to engage said ratchet notch and prevent reverse movement of said handle.

[Claims 6 to 12 not printed in the Gazette.]

1,063,650. INDEPENDENT STANDARD FOR SUPPORTING DENTAL ENGINES. ARTHUR W. BROWNE, Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 7, 1911. Serial No. 664,353. (Cl. 32—22.)



1. A standard for supporting a dental engine bracket, the lower end of which standard is provided with an integral base having a straight rear edge and which is adapted to be secured to the floor or other support and the rear side of the lower portion of the said standard being hollowed out and the rear edges of the said standard being in alinement with the straight edge of the said base and the front side of the said standard above the hollowed out portion upon the rear side being also hollowed out as described.

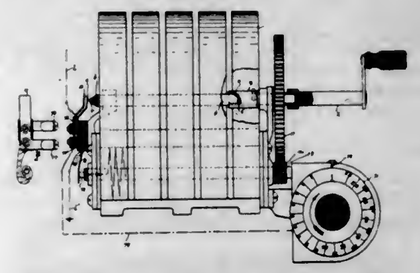
2. A standard adapted for supporting a dental engine bracket which standard rises from a base which is adapted to be secured to a floor or other suitable support and the rear side of the lower part of said standard being hollowed out and the portion thereof immediately above the said hollowed out part being hollow also to form a receptacle, the said hollow portions being separated by a web having an opening therethrough through which pass electric supply wires having electrical connection with dental engine mechanism.

3. A standard for supporting dental engine brackets, the lower end of which is provided with a base which is adapted to be secured to the floor and the rear side of the lower part of the said standard being hollowed out and the front side of the upper portion thereof being also hollowed out, the said hollowed out portions being separated by a web and the said standard being provided with means adapted to support a resistance device.

4. A standard for supporting a bracket and a dental engine carried by said bracket which standard includes a lower member having a base adapted to be secured to the floor or other support and also having a socket in its upper end and an upper member which is secured in said socket and the lower end portion of the said lower member being hollowed out upon its rear side and the upper portion of the said lower member being hollowed out upon its front side, the said two hollowed out portions being separated by a web having an opening therethrough for the purpose stated and the said lower member also having means secured thereto for supporting a resistance device.

5. A standard for supporting a bracket and a dental engine carried by said bracket which standard includes a lower member and an upper member detachably connected thereto, the said lower member being provided with a base for securing the said bracket to the floor or other support and the rear side of the lower part of the said lower member being hollow and the upper portion of the said lower member being enlarged and having a box-like part formed upon its front side and said lower member having a web extending transversely thereof and separating the hollow and box-like parts, the said web being provided with an opening having an insulating member secured therein through which pass electric supply wires having electrical connection with the said dental engine.

1,063,651. ATTACHMENT FOR MAGNETOS. WILLIAM S. BURNETT, Milwaukee, Wis., assignor to Morse Code Signal Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 12, 1909. Serial No. 489,320. (Cl. 179—85.)



1. The combination with a magneto generator provided with an armature driving mechanism, of an axially movable, rotary member adapted in one position of adjustment to be actuated from the driving mechanism of the generator, means for automatically shifting the rotary member into such position of adjustment when manually retracted therefrom, a stop to prevent such shifting movement, and means connected with the generator for retracting the stop from holding position after a given number of revolutions of the generator armature, together with circuit closing means in operative relation to said rotary member during its interval of rotary movement, said rotary member being formed to break the circuit on completing such movement.

2. The combination with a magneto generator provided with an armature driving mechanism, of an axially movable, rotary member adapted in one position of adjustment to be actuated from the driving mechanism of the generator, means for automatically shifting the rotary member into such position of adjustment when manually retracted therefrom, a stop to prevent such shifting movement, and means connected with the generator for retracting the stop from holding position after a given number of revolutions of the generator armature, together with circuit closing means in operative relation to said rotary member during its interval of rotary movement, said rotary member being formed to break the circuit on completing such movement, together with an independently operated circuit closer and means for actuating the same when said rotary member is in circuit breaking position.

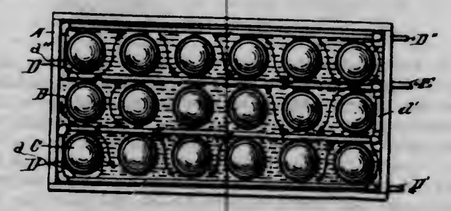
3. The combination with a magneto generator, provided with an armature and armature driving mechanism, of an axially shiftable rotary member adapted to be differentially rotated to various positions with reference to a normal position, means connected with the armature driving mechanism for releasing the member and driving connections adapted to rotate the member to normal position when so released, together with a brush controlling the circuit of the magneto generator and arranged for circuit closing contact with the member only when released and out of normal position, and means connected with said driving mechanism for closing an electrical circuit of said generator independently of the member after the same has reached its normal position.

4. The combination with a magneto generator having an armature shaft provided with a traveler actuating threaded portion, an axially adjustable rotary switch member, means, adapted to initially control the generator circuit, a switch member engaging latch, means for releasing the latch from the switch member, a contact brush in the path of the switch when released, a circuit closer independent of the switch member, and means, dependent upon the number of shaft revolutions, for releasing the latch.

5. The combination with a magneto generator provided with an armature and driving mechanism therefor, of a circuit closing brush electrically connected in circuit with one pole of said armature, an axially movable rotary member electrically connected with the other pole of said armature, a spring arranged to push said member axially in the direction of normal position, a latch adapted to engage and hold said member against the tension of the spring, and means, connected with the driving mechanism of the armature, for retracting the latch, and rotating said member to normal position from any position of rotative adjustment,—said member being arranged to rotate in contact with said brush to a position out of contact therewith.

[Claims 6 to 9 not printed in the Gazette.]

1,063,652. COOLING-TANK FOR HARDENING ICE-CREAM. ARTHUR L. BURTON, Miles City, Mont. Filed Aug. 2, 1911. Serial No. 642,027. (Cl. 62—6.)

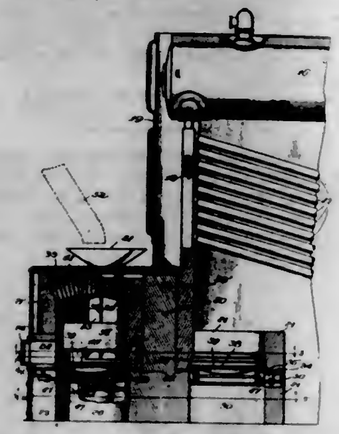


In a device of the class described, a tank having its side walls and bottom lined with heat insulating material, a supporting piece or cover at the top of the tank, having apertures therein, receptacles for holding ice cream secured in said apertures and extending down into the tank, cooling coils arranged in tiers located between said receptacles, and an outer cover composed of two parts hinged together and located above said supporting piece or cover.

1,063,653. BOILER-FURNACE. THOMAS R. BUTMAN, Manistee, Mich. Filed Aug. 17, 1911. Serial No. 644,609. (Cl. 110—36.)

1. In a furnace the combination with a boiler and a Dutch oven projecting therefrom, of a rotatable grate adapted and arranged for rotation, partly under said boiler and partly in said oven, means for depositing green fuel on said grate at a point thereon nearer the boiler side from which said grate moves than the side toward which it moves, and means for directing the gases arising from the freshly deposited fuel over the grate through the shortest path to the boiler.

2. In a furnace, the combination with a boiler and a Dutch oven projecting therefrom, of a rotatable grate adapted and arranged for rotation partly under the boiler and partly in said oven, means for depositing green fuel on said grate at a point thereon near the boiler side from which said grate moves than the side toward which it moves, means providing a chamber surrounding said depositing means, said chamber-providing means shaped to provide communication from one side to the other side thereof, and means for directing the gases arising from the freshly deposited fuel over the grate through the shorter path so provided to the boiler.



3. In a furnace the combination of a rotatable grate adapted and arranged for rotation in a substantially horizontal plane, means for depositing green fuel for combustion at a given radial point thereon, whereby the rotation of said grate will cause the deposit to lie in a substantially circular zone near the axis of said grate, means in advance of said depositing means for moving fuel that has been partially consumed into a zone farther removed from said axis, and means to direct the hot gases of combustion over said partly consumed fuel to ignite the freshly deposited fuel.

4. In a furnace of the class described, a substantially flat grate adapted and arranged for rotation in a horizontal plane, a scraper bar overlying the fuel-receiving surface of said grate extending tangentially from a point near the axis toward the periphery thereof, said bar being box like in form with its open side confronting the grate and one of its side walls being perforated for passage of air that comes through the grate.

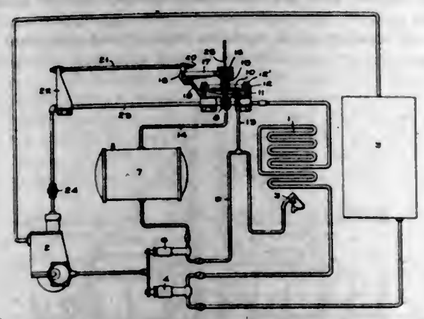
5. In a furnace of the class described, a grate adapted and arranged for rotation in a horizontal plane, a central support, a scraper member having vertical walls providing therebetween a space, and means at the free end of one of said walls for detachably securing the member to a support, the other wall of said member being disposed for abutment of its end against said support.

[Claims 6 to 9 not printed in the Gazette.]

1,063,654. THERMOSTATIC CONTROL OF LIQUID FUELS. JOHN G. CALLAN, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 14, 1908. Serial No. 452,923. (Cl. 236—5.)

1. The combination with a vapor generator, of a burner for heating the generator, means for supplying the burner with liquid fuel under pressure, an abutment movable in one direction in response to the pressure of the fuel and adapted to vary said pressure, means which opposes said movement of the abutment, and a device responsive to the temperature of the vapor generated which varies the action of said means on the abutment to thereby control the fuel pressure at the burner.

2. The combination with a vapor generator, of a burner, means for supplying said burner with liquid fuel under pressure, a spring-pressed movable abutment exposed to said pressure and adapted to vary the same, and a thermostat exposed to the vapor and controlling said spring to regulate the variation of the fuel pressure.



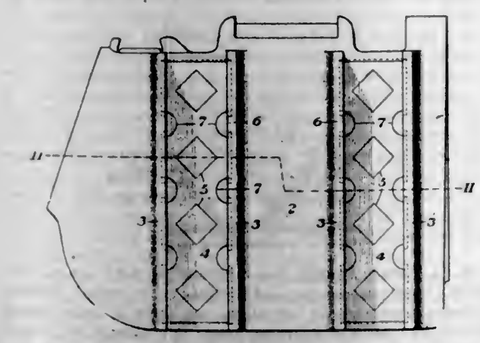
3. The combination with a vapor generator, of a burner, means for supplying said burner with liquid fuel under pressure, a movable abutment exposed to said pressure and adapted to vary the same, a spring pressing on said abutment and opposing the action of the fuel pressure thereon, a movable support for said spring, and a thermostat exposed to the vapor and adapted to move said support.

4. The combination with a vapor generator, of a burner, means for supplying said burner with liquid fuel under pressure, a movable abutment exposed on one side to said pressure, a by-pass valve controlled by said abutment, a spring pressing on the opposite side of said abutment, and a thermostat adapted to vary the tension of said spring in accordance with variations in the temperature of the vapor.

5. The combination with a vapor generator, of a burner, a reservoir for liquid fuel connected with said burner, a pump for forcing the liquid fuel to the burner, a by-pass around said pump to the reservoir, a valve controlling said by-pass and adapted to be opened by the pressure of the liquid fuel, a spring tending to hold the valve closed against the action of said pressure, and a thermostat adapted to vary the tension of said spring in accordance with variations in the temperature of the vapor.

[Claims 6 to 10 not printed in the Gazette.]

1,063,655. JOURNAL-BOX AND WEAR-PLATE THEREFOR. WILLIAM CASE, Chicago, Ill., assignor to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 3, 1912. Serial No. 669,196. (Cl. 22—203.)

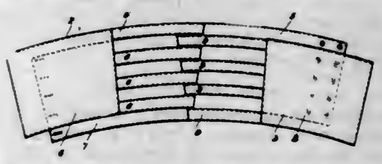


1. A wear plate or insert for castings, comprising a piece of metal having a web, and lateral flanges at an angle to the web, and also having a plurality of openings in the angles between the flanges and the web, said openings being partly in the web and partly in the flanges; substantially as described.

2. An insert or wear plate for castings, comprising a piece of metal consisting of a web and side flanges, the flanges being at substantially right angles to the web, and both the flanges and the web having bonding or anchoring openings therein; substantially as described.

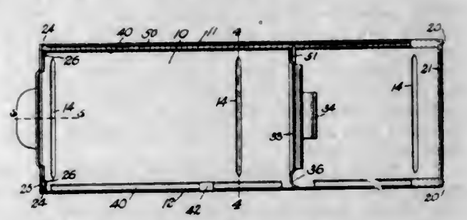
3. A casting having a groove, and a hard metal wear plate cast in said groove to form a lining therefor, said plate consisting of a web and side flanges and having openings at the angles between the web and flanges which are filled by the metal of the body of the casting, such portions of the metal forming anchors for the wear plate; substantially as described.

1,063,656. ADJUSTABLE ABDOMINAL BANDAGE. WILHELMINA CEDERQUIST, New York, N. Y. Filed Oct. 18, 1912. Serial No. 726,532. (Cl. 128—3.)



In a device of the class described, two parts each composed of ends united by bands with the bands of one member passing between the bands of the other member between the ends of said parts, one end of each part adapted to be secured to the other in an inner layer, and the other ends of each part to be secured together in an outer layer, when the device is in use, and means without projections for holding the ends together in the inner layer, whereby each part extends around the body partly in the inner layer and partly in the outer layer.

1,063,657. FILING APPARATUS. WILLIAM E. CHOATE, Melrose, Mass. Filed Dec. 7, 1907. Serial No. 405,510. (Cl. 129—16.)



1. The combination of a filing receptable having suitable side members and a bottom member, with a follower having integral yielding means to engage said side members and integral yielding means to engage said bottom member.

2. The combination of a filing receptacle having sides formed to engage a follower against withdrawal, with a follower engaging said sides thereof and yieldingly and slidingly pressing against them.

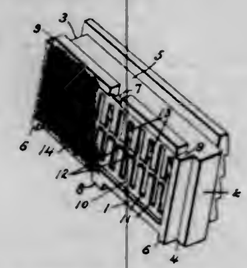
3. In a filing receptacle the combination of a bottom member and side members, with a follower supported on the bottom member, and opposite yielding means forming a part of said follower pressing against each side member to position the follower on the bottom member and to hold it positioned frictionally without obstructing the receptacle while permitting the follower to slide along the receptacle.

4. The combination of a card filing receptacle having an open top with indexing means therein adjustable to indicate the number of filing cards in the receptacle, and graduated means to coöperate therewith.

5. The combination with a card filing receptacle having an open top of scale means for measuring the number of filing cards contained in the receptacle; and movable index means to coöperate therewith.

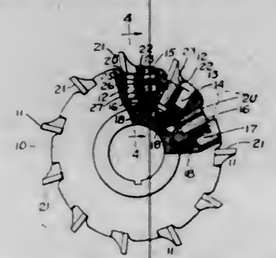
[Claims 6 to 14 not printed in the Gazette.]

1,063,658. CONCRETE FLOOR AND WALL. COLON A. CLEHOUS, Haven, Kans. Filed Aug. 12, 1912. Serial No. 714,506. (Cl. 27—38.)



A concrete building block having grooves in its inner side and ventilating openings extending downwardly from said grooves to the outer side of the block and a screen covering said openings.

1,063,659. MILLING-CUTTER. GEORGE W. CONKLIN, Shelton, Conn., assignor to The O. K. Tool Holder Company, Shelton, Conn., a Corporation of New York. Filed Dec. 2, 1912. Serial No. 734,490. (Cl. 29—105.)



1. A cutter of the character described, comprising a disk having radial sockets in its periphery and other sockets parallel with the radial sockets, teeth having shanks engaging the radial sockets and outwardly extending inclines, locking blocks having undercut inclines engaging the inclines of the teeth and shanks engaging the second mentioned sockets and locking screws having rotary engagement with the locking blocks and threaded engagement with the disk.

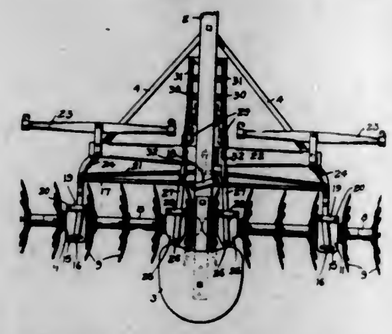
2. A cutter of the character described, comprising a disk having radial sockets in its periphery, other sockets parallel with the radial sockets, and flat surfaces, teeth having bases engaging said surfaces and shanks engaging the radial sockets, locking blocks having shanks engaging the other sockets and locking screws in the shanks of the blocks and engaging the disk, whereby the blocks are caused to lock the teeth.

3. A cutter of the character described, comprising a disk having radial sockets in its periphery, other sockets parallel with the radial sockets and walls partly inclosing said other sockets, teeth having reduced shanks engaging the radial sockets, locking blocks lying within said walls and having reduced shanks engaging said other sockets and locking screws engaging the blocks and having threaded engagement with the disk.

1,063,660. QUACK-GRASS AND WEED ERADICATOR. PETER B. CRANE, Long Lake, Minn. Filed Jan. 24, 1911. Serial No. 604,459. (Cl. 55—81.)

1. A machine of the class described comprising a pair of axles arranged end to end, wheels mounted thereon, a draft pole above the abutting ends of said axles, drag bars connecting said pole and axles, a transverse yoke having its ends secured to said drag bars near said axles, and an evener centrally mounted on said yoke, whereby the draft will be applied thereon near said wheels.

2. In a machine of the class described, axles and wheels mounted thereon, boxes carried by said axles, each box consisting of an upper and a lower section and bolts securing them together, drag bars pivotally mounted on the rear bolts of said box and straps secured by the forward bolts of said box and spaced from the upper portions thereof forming guide ways to receive said drag bars and permit horizontal oscillation of said axles and wheels.

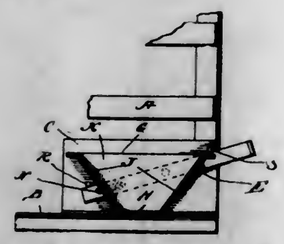


3. A machine of the class described comprising axles, wheels mounted thereon, a draft pole connected with said axles, leaf spring drag bars connected at their forward ends to said pole and at their rear ends to said axles and means for applying pressure to said drag bars between said ends to force said wheels into the soil.

4. A machine of the class described comprising axles, wheels therefor, a draft pole, a seat thereon, drag bars connecting said pole with the outer portions of said axles, leaf spring drag bars connecting the inner portions of said axles with said pole, and levers mounted on said pole and having means for engaging the middle portions of said leaf spring drag bars for putting the same under tension and depressing the inner ends of said axles.

5. A machine of the class described comprising axles placed end to end, wheels mounted thereon, a draft pole having a driver's seat, drag bars connecting said pole with the outer portions of said axles, leaf spring drag bars attached to the inner portions of said axles, levers mounted on said pole and connected to the forward ends of said leaf spring drag bars for oscillating said axles in a horizontal plane, and means between said levers and said axles for flexing said leaf spring drag bars to depress the inner ends of said axles and force the inner wheels into the soil.

1,063,661. STOCK-TROUGH. FRANK A. CRITZ, Jr., West Point, Miss. Filed May 21, 1912. Serial No. 698,719. (Cl. 119—61.)



1. In a stock trough, the combination with spaced supports, a rod connecting said supports, a trough pivoted thereon, a member on one of the supports, a lever having a slot and stud connection with the trough to permit sufficient play to clear said member on the support, and a locking member for said lever.

2. In a stock trough, the combination with supports, of a trough pivoted therebteween, a lug on one of said supports, an operating lever having a slot and stud connection with the trough to permit a sufficient play to clear said lug, and a locking pin to engage a hole in said lever to lock the lever in raised position.

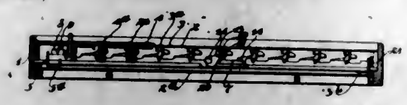
3. In a stock trough, in combination, spaced supports, a rod arranged therebetween, a trough on said rod, a lever for said trough, said lever having a notch engaging over the rod, and a lug on one of the supports coöperating with said notch to prevent the raising of the trough by an animal.

4. In a stock trough, in combination, spaced supports, a rod therebetween, a stock trough on said rod, a lever for said trough, said lever having a slot and stud connection with the trough to permit a sufficient play thereof, and a lug on one of said supports disposed in the path of the lever to be cleared by said lever by reason of its lateral play.

5. In a stock trough, in combination, spaced supports, a rod journaled therein, a trough on said rod, a lever having a notch normally engaging over said rod, a lug on one of said supports, said lever having a slot and stud connection to permit a sufficient play to clear said lug, and a locking pin adapted to engage a hole in said lever to lock the same in raised position.

[Claims 6 to 13 not printed in the Gazette.]

1,063,662. RING-TRAY. WALTER B. DAHL, Minneapolis, Minn. Filed Nov. 4, 1912. Serial No. 729,302. (Cl. 41—28.)



1. A ring holding device having ring holding elements and coöperating lock mechanism therefor, normally permitting the rings to be removed, one at a time, but permitting the removal of a second ring until the removed ring has been replaced, and means for changing the relation of the said parts so that all of the rings will be locked.

2. A ring holding device having ring holding elements and coöperating lock mechanism therefor, normally permitting the rings to be removed, one at a time, but preventing the removal of a second ring until the removed ring has been replaced, and means for changing the relation of the said parts so that any one or all of the said rings may be removed.

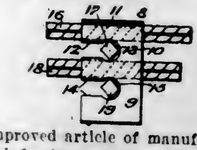
3. A ring holding device comprising a tray having ring seats, a frame mounted to slide on said tray, a plurality of ring locking elements and coöperating devices on said sliding frame, operative in the normal position of the said sliding frame to permit the removal of one ring at a time, but preventing the removal of another ring until the removed ring has been replaced, a movement of said sliding frame from normal position serving to throw all of the ring locking elements into inoperative positions, so that any one or all of the rings may be removed from the tray.

4. A ring holding tray provided with a plurality of ring seats, ring engaging lock hooks coöperating with said seats to hold rings therein, spring-pressed lock bars coöperating with said lock hooks and provided with lock lugs and abutments, said hooks being operative on said abutments when moved into releasing position, to force said bars into positions in which their lock lugs lock all of the other hooks in normal or operative positions, and means independent of the abutments on said lock hooks, for simultaneously moving all of said lock bars, to thereby set the same in position to lock all the rings in said tray.

5. A ring holding tray provided with a plurality of ring seats, ring engaging lock hooks coöperating with said seats to hold rings therein, spring-pressed lock bars coöperating with said lock hooks and provided with lock lugs and abutments, said hooks being operative on said abutments when moved into releasing position, to force said bars into positions in which their lock lugs lock all of the other hooks in normal or operative positions, and means independent of the abutments on said lock hooks, for simultaneously moving all of said lock bars, to thereby set the same in position to lock all of the rings in said tray, the said means comprising an oscillatory ball connecting said lock bars, and a finger operated member operative on said ball to set the latter in abnormal position.

[Claims 6 and 7 not printed in the Gazette.]

1,063,663. DEVICE FOR POSITIONING RODS IN CONCRETE STRUCTURE. ANTHONY ELTON DAVIS Philadelphia, Pa. Filed Mar. 16, 1912. Serial No 684,092. (Cl. 72—122.)



1. As an improved article of manufacture, a device for positioning reinforcing rods comprising a plurality of walls joined together by a looped portion, each wall having a recess therein terminating in an enlarged opening, in combination with a rod of rectangular cross section traversing said openings and having a diagonal dimension greater than the width of said recess, a second rod, between said looped portion and said first rod and having a diagonal dimension substantially equal to the distance between a corner of said first rod and said looped portion whereby said second rod is locked in operative position by wedging action created by a partial rotation of said first rod.

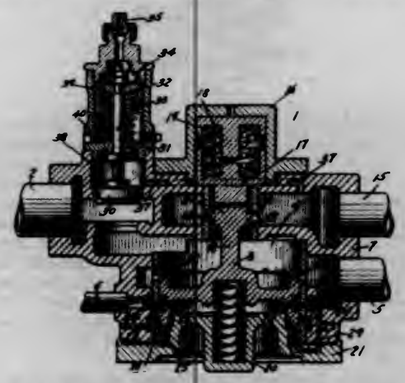
2. A device for positioning reinforcing rods, comprising a reinforcing bar, a stirrup adapted to straddle and seat on said reinforcing bar, diverging side walls forming a part of said stirrup, each of said walls having a keyhole slot therein, a transversely disposed reinforcing rod of rectangular cross section traversing said slots and having a diagonal dimension greater than the width of the narrow portion of said slot, said reinforcing bar having a diagonal dimension substantially equal to the distance between a corner of said transverse rod and said stirrup and said transverse rod being adapted to be partially rotated to engage a corner of said reinforcing bar thereby creating a wedging action to lock said bar and rod in operative position.

3. As an improved article of manufacture, a device for positioning reinforcing rods comprising a U-shaped member having substantially parallel upper walls and outwardly flaring lower terminals, a plurality of recesses 12 located in said upper walls, a plurality of recesses 14 located in said terminals, said recesses 12 and 14 each terminating in an enlarged opening, reinforcing rods 17 and 19 of rectangular cross section adapted to respectively traverse a pair of said openings, said rods being arranged in superposed relation and each having a diagonal dimension greater than the width of its respective recess, a pair of reinforcing rods 16 and 18 straddled by said U-shaped member, said rod 16 being located between said member and said rod 17 and in contact relation with said member and said rod 17, said rod 18 being located between said rods 17 and 19 and in contact relation with said rods 17 and 18, all of said rods being locked in operative position by partial rotation of said rods 17 and 19 to bring the same to diagonal position to create a wedging action.

4. As an improved article of manufacture, a device for positioning reinforcing rods comprising a U-shaped member having outwardly flaring lower terminals, a plurality of recesses 12 and 14 in each of said walls extending inwardly from the edges of said wall and terminating in an enlarged opening, polygonal reinforcing rods 17 and 19 arranged in parallel relation and respectively traversing said openings, said rods having a diagonal dimension greater than the width of the respective recess, a polygonal reinforcing rod 18 straddled by said device and having a diagonal dimension substantially equal to the distance between juxtaposed corners of said rods 17 and 19, and a polygonal rod 16 above said rod 17 and straddled by said device, said rod 16 having a diagonal dimension substantially equal to the distance between a corner of the rod 17

and said U-shaped member and said rods 17 and 19 being adapted to be partially rotated into engagement respectively with said rods 16 and 18, whereby all of said rods are locked in operative position by a wedging action created by the diagonal positioning of said rods 17 and 19.

1,063,664. STEAM-CONTROLLING APPARATUS. JOHN F. DEEMS, Burlington, Iowa, and WALTER V. TURNER, Edgewood, Pa., assignors to Economy Car Heating Company, Portland, Me., a Corporation of Maine. Filed May 16, 1912. Serial No. 697,709. (Cl. 50—14.)



1. In a steam controlling apparatus, the combination with a source of exhaust steam and a reservoir, of a piston subjected on one side to the flow of exhaust steam from said source for controlling the admission of exhaust steam to the reservoir and having ports for controlling the admision of steam from the reservoir to the opposite side of said piston.

2. In a steam controlling apparatus, the combination with a source of exhaust steam and a reservoir, of a piston subjected on one side to the flow of exhaust steam from said source for controlling ports through which exhaust steam is supplied to the reservoir, said piston having ports for admitting steam from the reservoir to the opposite side of the piston when the reservoir supply ports are open.

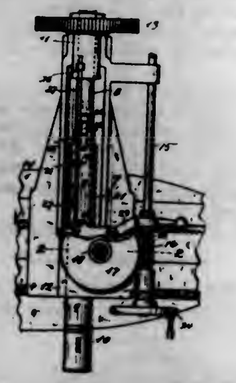
3. In a steam controlling apparatus, the combination with a source of exhaust steam and a reservoir, of a piston subjected on one side to the flow of exhaust steam from said source and having means adapted in one position of the piston to open communication for supplying exhaust steam to the reservoir and in another position to close said communication and open a communication to the usual exhaust, said piston having ports adapted in the first position to supply steam from the reservoir to the opposite side of said piston and in the second position to cut off said supply of steam.

4. In a steam controlling apparatus, the combination with a source of exhaust steam and a reservoir, of a piston subjected on one side to the flow of exhaust steam from said source for controlling the flow of exhaust steam to the reservoir, means for supplying steam from the reservoir to the chamber at the opposite side of said piston to operate said piston for cutting off the supply of exhaust steam to the reservoir upon a reduction in exhaust steam pressure, and ports for opening said chamber to the atmosphere upon movement of the piston to cut off the admission of steam to the reservoir.

5. In a steam controlling apparatus, the combination with a source of exhaust steam and a reservoir, of a piston subjected on one side to the flow of exhaust steam from said source for controlling the flow of exhaust steam to the reservoir and to the usual exhaust, ports for admitting steam from the reservoir to the chamber at the opposite side of the piston whereby it will move to cause a closing of the reservoir supply ports and to cause an opening of the usual exhaust upon a predetermined reduction in exhaust steam pressure, and whereby it can operate to cause an opening of other ports for venting said chamber to the atmosphere upon a further movement.

[Claims 6 to 19 not printed in the Gazette.]

1,063,665. AUTOMATIC TOOL-STOP. HENRY DRESES and EDWARD J. SPAETH, Cincinnati, Ohio, assignors to Dreses Machine Tool Co., a Firm consisting of Henry Dreses and William Gilbert, Cincinnati, Ohio. Filed May 22, 1912. Serial No. 698,985. (Cl. 77—33.)



1. In a machine-tool like a drill for instance, the combination of a head, a spindle mounted on it for rotation, a rack on the spindle to move this latter axially, a pinion to actuate the rack, means to operate the pinion, a clutch which controls this operation, a lever to manipulate the clutch and complementary members, one adjustably connected with said lever and the other permanently connected to the spindle and traveling with the same in the path of the former member and adapted to co-act therewith for the purpose of actuating the clutch-lever to terminate the movement of the spindle.

2. In a machine-tool like a drill for instance, the combination of a head, a spindle mounted on it for rotation, a rack on the spindle to move this latter axially, a pinion to actuate the rack, means to operate the pinion, a clutch which controls this operation, a lever to manipulate the clutch, complementary members, one connected so as to travel with the spindle, means connected with the lever mentioned upon which the other member is mounted in a manner so as to project in the path of the traveling member and to be adjustable with reference to said member, and a graduated gage connected to this adjustable member and serving for the purpose of positioning the same with reference to the traveling member so as to time contact and co-action therewith which effects actuation of the clutch-manipulating lever.

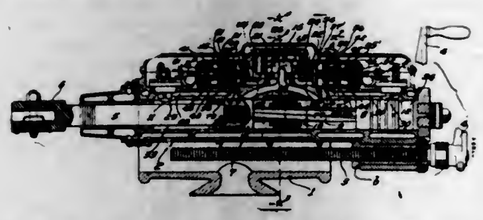
3. In a machine-tool like a drill for instance, the combination of a head, a spindle mounted on it for rotation, a rack on the spindle to move this latter axially, a pinion to actuate the rack, means to operate the pinion, a clutch which controls this operation, a lever to manipulate the clutch, a push-rod on this lever, a stop adjustably mounted on this rod, and a dog traveling with the spindle and adapted to co-act with the stop on the rod to actuate the clutch-lever for the purpose of terminating the movement of the spindle.

4. In a machine-tool like a drill for instance, the combination of a head, a spindle mounted on it for rotation, a rack on the spindle to move this latter axially, a pinion to actuate the rack, means to operate the pinion, a clutch which controls this operation, a lever to manipulate the clutch, a push-rod on this lever, a stop adjustably mounted on this rod, and a dog traveling with the spindle and adapted to co-act with the stop on the rod to actuate the clutch-lever for the purpose of terminating the movement of the spindle, said dog being pivotally mounted to permit adjustment of it to a position rendering it inoperative with reference to the stop.

5. In a machine-tool like a drill for instance, the combination of a head, a spindle mounted on it for rotation, a rack on the spindle to move this latter axially, a pinion to actuate the rack, means to operate the pinion, a clutch which controls this operation, a lever to manipulate the clutch, a push-rod on this lever, a stop adjustably mounted on this rod, a dog traveling with the spindle and adapted to co-act with the stop to actuate the clutch-lever for the purpose of terminating the movement of the spindle and a graduated gage adapted to be moved with the adjustable stop to determine its position with reference to the dog.

[Claim 6 not printed in the Gazette.]

1,063,666. INTERNAL-COMBUSTION TOOL. OTHO C. DURYEA and MORRIS C. WHITE, Los Angeles, Cal., assignors of one-tenth to James R. Townsend, Los Angeles, Cal. Filed Aug. 6, 1908, Serial No. 447,316. Renewed Nov. 4, 1912. Serial No. 729,468. (Cl. 123—7.)



1. In an internal-combustion power device, the combination of a supplier for explosive fluid under pressure, a piston-cylinder having an inlet port and a passage communicating with said port, means for directing explosive fluid from the supplier intermittently into said passage, and a regulator-valve governing said port and exposed to pressure from said supplier in said passage to move when the pressure against it exceeds a predetermined limit to close said port.

2. In an internal-combustion power device, the combination of a supplier for explosive fluid under pressure, a piston-cylinder having a port, a passage communicating with said port and an exhaust opening, means for directing explosive fluid from the supplier intermittently into said passage, and a regulator-valve normally closing said passage and opening communication between said port and exhaust and exposed to pressure from said supplier in said passage to be moved thereby to first close the exhaust and open said port to the supplier and then, by further movement, to close said port and trap the charge in the cylinder.

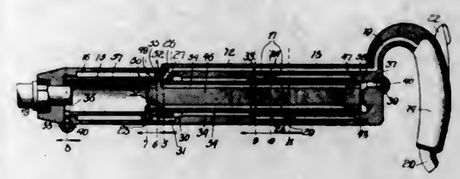
3. In an internal-combustion power device, the combination of a supplier for explosive fluid under pressure, a piston-cylinder having an inlet port and a passage communicating with said port, means for directing explosive fluid from the supplier intermittently into said passage, and a spring-pressed regulator-valve governing said port and exposed to pressure from said supplier in said passage to move when the pressure against it exceeds the resistance of its spring to close said port and trap the charge in the cylinder.

4. In an internal-combustion power device, the combination of a supplier for explosive fluid under pressure, a piston-cylinder having a port, a passage communicating with said port and an exhaust opening, means for directing explosive fluid from the supplier intermittently into said passage, and a spring-pressed regulator-valve normally closing said passage and opening communication between said port and exhaust, and exposed to pressure from said supplier in said passage to be moved thereby against the resistance of its spring to first close the exhaust and open said port to the supplier and then, by further movement, to close said port and trap the charge in the cylinder.

5. In an internal-combustion power device, the combination of a supplier for explosive fluid under pressure, a piston-cylinder having a port, a passage communicating with said port and an exhaust opening, means for directing explosive fluid from the supplier intermittently into said passage, and a spring-pressed regulator-valve normally closing said passage and opening communication between said port and exhaust and exposed to pressure from said supplier in said passage to be moved thereby to first close the exhaust and open said port to the supplier, and then, by further movement, to close said port and trap the charge in the cylinder, and means for changing the tension of said spring to vary the pressure of the explosive charge in the cylinder, for the purpose set forth.

[Claims 6 to 9 not printed in the Gazette.]

1,063,667. HAMMERING IMPLEMENT. OTHO C. DURYEA and MORRIS C. WHITE, Chicago, Ill. Filed Apr. 9, 1910, Serial No. 554,341. Renewed Nov. 4, 1912. Serial No. 729,469. (Cl. 123—7.)



1. In a hammering implement, a tool-carrying casing, a piston therein, means for reciprocating the piston by fluid under pressure, including an expansion chamber in which the fluid operates against the piston from one direction, an explosion chamber in the casing into which said fluid is exhausted from the expansion chamber and compressed by the piston, and means for causing an explosion in said last mentioned chamber while the fluid is under compression.

2. In a hammering implement, a tool-carrying casing, a piston therein, means for reciprocating the piston by an explosive fluid under pressure, including an expansion chamber in which the fluid operates against the piston from one direction, an explosion chamber in the casing into which said fluid is exhausted, from the expansion chamber, and compressed by the piston, and means for igniting, in said explosion chamber, the fluid thus compressed.

3. In a hammering implement, a tool-carrying casing, a piston therein, means for reciprocating the piston by an explosive fluid under pressure, including expansion chambers in which the fluid operates against the piston from opposite directions, explosion chambers in the casing into which said fluid is exhausted, from the expansion chambers, and compressed by the piston, and means for igniting, in said explosion chambers, the fluid thus compressed.

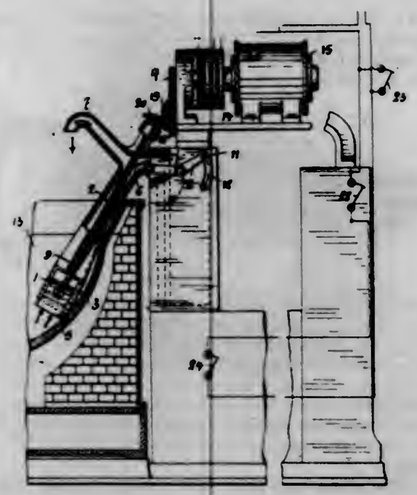
4. In a hammering implement, a tool-carrying casing provided with an inlet-passage for explosive fluid under pressure, an expansion chamber and an explosion chamber, ports in the casing for communication between the passage and expansion chamber, and between said chambers, an explosion-chamber exhaust-port, a piston in the casing movable under force of said fluid to open and close said ports and thereby open and close communication first between the said passage and expansion chamber and then between said chambers and open and close the exhaust, the piston operating to compress the fluid in the explosion chamber, and means for igniting, in said explosion chamber, the fluid thus compressed.

5. In a hammering implement, a tool-carrying casing provided with an inlet-passage for explosive fluid under pressure, expansion chambers and explosion chambers, ports in the casing for communication between the passage and expansion chambers and between the expansion and explosion chambers, explosion-chamber exhaust-ports, a piston in the casing movable under force of said fluid in the expansion chambers to open and close said ports and thereby open and close communication between the said passage and expansion chambers alternately and between said expansion chambers and explosion chambers alternately, and open and close the said exhausts, the piston operating to compress the fluid entering from the expan-

sion chambers into the explosion chambers, and means for igniting, in said explosion chambers, the fluid thus compressed.

[Claim 6 not printed in the Gazette.]

1,063,668. MACHINE FOR CASTING AND PREPARING CURVED STEREOTYPE-PLATES. ARNOLD EGLI, Plauen, Germany, assignor to Vogtländische Maschinen-Fabrik (vormals J. C. & H. Dietrich) Actiengesellschaft, Plauen, Germany. Filed Apr. 9, 1912. Serial No. 689,518. (Cl. 22—70.)



1. In an apparatus for casting curved stereotype printing plates, a melting tank, a mold, a feed-screw for delivering the molten metal from said tank to said mold, a source of power for operating said feed-screw, a clutch for operatively connecting said feed-screw with said source of power, means for actuating said clutch, a casing inclosing said feed-screw and having three openings, one communicating with the mold, one acting as an overflow and one for admitting the molten metal to the screw-casing.

2. In an apparatus for casting curved stereotype printing plates, a melting tank, a mold, a feed-screw for delivering the molten metal from said tank to said mold, a source of power for operating said feed-screw, a clutch for operatively connecting said feed-screw with said source of power, means for actuating said clutch, a casing inclosing said feed-screw and having three openings, one communicating with the mold, one acting as an overflow and one for admitting the molten metal to the screw-casing, a slide adapted to close said last mentioned opening, and means for operating said slide.

3. In an apparatus for casting curved stereotype-printing plates, a melting tank, a mold, a conveyer for delivering the molten metal from said tank to said mold, a source of power, an electric clutch for operatively connecting said conveyer with said source of power, an electric circuit including said clutch, a switch in said circuit for operating said clutch and an automatic switch in said circuit, normally open, and adapted to be closed only on the closing of said mold.

1,063,669. DOUBLE-ACTING DEEP-WELL PUMP. WILLIAM B. ERB, Chicago, Ill. Filed Jan. 7, 1911. Serial No. 601,276. (Cl. 103—70.)

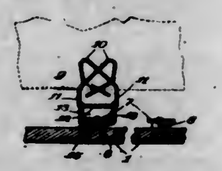
1. In a double-acting pump, the combination of a cylinder; a hollow piston mounted for travel therein; a hollow piston rod; the cylinder having supply ports above and below the range of travel of the piston; check valves controlling the supply through said ports respectively; the piston having a port for inlet from the interior of the cylinder below the piston, and a check valve for said port; a fitting interposed between the piston and the piston rod comprising an exterior shell; a conduit supported transversely within the shell, the shell having apertures communicating with the interior of the piston and the interior of the piston rod at its lower and upper ends respectively; the conduit having an upwardly opening port; and a check-valve controlling the same.



2. In a double-acting pump, a hollow piston-rod having a discharge opening, a guide for said rod comprising a spider having extended segmental arms, and having its hub apertured coincidently with the opening in the piston-rod.

3. In combination with a double-acting pump comprising a pump cylinder, a piston and an actuating pump rod, a stuffing box comprising an outer member secured to the pump cylinder, and having a conical bore, an inner member exteriorly tapered to fit said conical bore and interiorly bored to admit the pump rod, and at the said inner member having a circumferential groove in its tapered surface and a packing ring lodged in said groove.

1,063,670. FILING AND DISPLAY DEVICE. MAX S. ERSLER, Chicago, Ill. Filed July 17, 1911. Serial No. 638,819. (Cl. 40—102.)

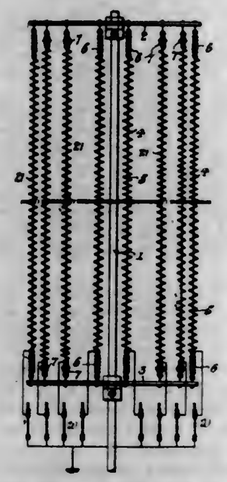


1. A holder for photographs or the like comprising a base portion, a flat bar attached to said base portion and spaced therefrom, links of wide U-form, the base of the U being straight, said links being slidably engaged with said bar, the arms of the U having eyes, and clips for supporting cards, said clips being pivoted to the eyes of said links.

2. A holder for photographs or the like, comprising a base portion, a bar immovably attached to said base portion and a plurality of independently movable devices, each consisting of a link loosely engaging with said bar for movement with relation thereto in a direction lengthwise of the bar, said link being adapted to extend at right angles to the bar and being further adapted to be tilted forwardly into a position at a small angle with said bar, and a clip adapted to receive and grip the edge of a card, said clip being pivoted to said link for swinging movement lengthwise of said bar, said clip being adapted to extend substantially at right angles to said bar and being also adapted to lie flat along the bar when said link is tilted forwardly.

3. A holder for photographs or the like, comprising a base and a plurality of independent devices permanently mounted on said base, each of said devices consisting of a link movably engaging at one end with said base, and a clip pivoted to the other end of said link and arranged to receive and grip the edge of a card, said link being movable with respect to said base in the same direction as that in which the clip moves with respect to said link, said clips being adapted to be swung into position at a small angle with said base and said links assuming different positions from one at a small angle with the base to one approximately at right angles to the base, whereby said links will permit the cards in said clip to lie flat one upon the other when the cards are tilted forward.

1,063,671. AERIAL FOR WIRELESS-TELEGRAPH SYSTEMS. HILBERT LOUIS FALK, New Orleans, La., assignor, by direct and mesne assignments, to Falk McMahon Wireless Telegraph and Telephone Company, Lmtd. of Louisiana, New Orleans, La., a Corporation of Louisiana. Filed Aug. 30, 1910, Serial No. 579,718. Renewed Aug. 1, 1912. Serial No. 712,780. (Cl. 250—13.)



1. An aerial for wireless telegraph and telephone systems consisting of a frame; elements for receiving or transmitting mounted on said frame and consisting of open coils of wire each having within it a substantially straight length of wire; means for grounding said straight lengths of wire; and means for connecting the wire coils to receiving or transmitting instruments.

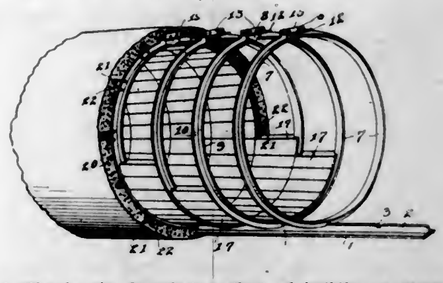
2. An aerial for wireless telegraph and telephone systems consisting of a frame; a receiving or transmitting element mounted on the frame and consisting of an open coil of wire having within it a substantially straight length of wire; the wire of said coil being bare and that of the straight length being insulated, means for grounding said straight length of wire at will; and means for connecting the wire coil to receiving or transmitting instruments.

3. An aerial for wireless telegraph and telephone systems consisting of a frame; a plurality of receiving and transmitting members thereon; each member consisting of an open coil of wire having a straight length of wire extending axially within it; and means for connecting said interior wires with the ground.

4. An aerial for wireless telegraph and telephone systems consisting of a supporting frame including upper and lower supporting members; a plurality of pairs of receiving elements extending between said supporting members; a plurality of pairs of transmitting elements also extending between the supporting members and alternating with the receiving elements; and means for connecting said elements to receiving and transmitting instruments.

5. The combination of an aerial for wireless telegraph or telephone systems consisting of a plurality of receiving and transmitting elements; with means for connecting said elements respectively to receiving and transmitting instruments, said means including two sets of switches, the switches of one set each including a contact connected to the receiving elements and two blades of unequal length capable of engaging said contact; means for connecting the shorter of said blades to a receiving instrument; means for grounding the longer blade; the switches of the other set each having a contact connected to the transmitting elements and two blades of unequal length, both capable of engaging said contact, the shorter of the blades being electrically connected to a transmitting instrument and the longer blade being grounded.

1,063,672. PROCESS OF CONSTRUCTING SEWERS, AQUEDUCTS, &c. WILLIAM C. FLANNERY, Washington, D. C. Original application filed July 19, 1911, Serial No. 639,454. Divided and this application filed Mar. 12, 1912. Serial No. 683,317. (Cl. 25—154.)



1. The herein described method of building a sewer, aqueduct or like horizontal conduit, which consists in erecting a permanent skeleton framework of the prescribed cross-sectional contour along the established course, setting up and supporting by means of the framework a body of tiling, so as to close the openings in said framework, form a permanent lining for the completed structure, and produce a resultant rigid self-sustaining shell, and surrounding and embedding said shell in an outer wall of concrete.

2. The herein described method of building a sewer, aqueduct or like horizontal conduit, which consists in erecting a permanent skeleton framework of the prescribed cross-sectional contour along the established course, setting up and supporting by means of the framework a body of tiling, so as to close the openings in said framework, form a permanent lining for the completed structure, and produce a resultant rigid self-sustaining shell through which the outer surface of the tiling composing said lining is exposed, and then surrounding and embedding both the framework and tiling in an inclosing wall of concrete.

3. The herein described method of building a sewer, aqueduct or like horizontal conduit, which consists in erecting a permanent skeleton framework of longitudinally spaced vertically supported rigid rings or bands along the established course, setting up and supporting by means of the framework a body of tiling, so as to close the openings in said framework, form a permanent lining for the completed structure, and produce a resultant rigid self-sustaining shell, through which the outer surface of the tiling composing said lining is exposed, and then surrounding and embedding both the framework and tiling in an inclosing wall of concrete.

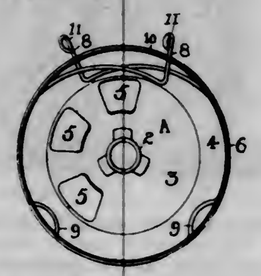
4. The herein described method of building a sewer, aqueduct or like horizontal conduit, which consists in extending a longitudinal frame element along the established course, supporting at determined intervals along said frame element relatively transverse, rigid vertical rings or bands, constituting therewith a framework of the prescribed cross-sectional contour, setting up and supporting by means of the framework a body of tiling, so as to close

the openings in said framework, form a permanent lining for the completed structure, and produce a resultant rigid self-sustaining shell, through which the outer surface of the tiling composing said lining is exposed, and then surrounding and embedding both the framework and tiling in an inclosing wall of concrete.

5. The herein described method of building a sewer, aqueduct or like horizontal conduit, which consists in extending a longitudinal girder along the base line of the prescribed course, supporting at determined intervals along said girder relatively transverse, rigid vertical rings or bands, constituting therewith a framework of the prescribed cross-sectional contour, setting up and supporting by means of the framework a body of tiling, so as to close the openings in said framework, form a permanent lining for the completed structure, and produce a resultant rigid self-sustaining shell, through which the outer surface of the tiling composing said lining is exposed, and then surrounding and embedding both the framework and tiling in an inclosing wall of concrete.

[Claim 6 not printed in the Gazette.]

1,063,673. GLOBE-HOLDER. EDWIN E. FREDERICK, Bridgeville, Pa. Filed Sept. 25, 1912. Serial No. 722,176. (Cl. 240—115.)

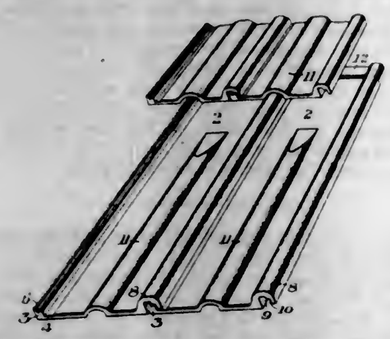


1. In a globe holder, a depending annular flange provided with an interior circumferential seat and a pair of adjacent slots, a length of wire bent up into an open annulus having its body held against flexing in said seat and provided with fixed inwardly extending teeth, and overlapping spring fingers formed of the end portions of wire extending inwardly and coöperating with said teeth to support the globe, the extreme ends of said wire extending through said slots to the exterior of said flange to form handles whereby said fingers may be expanded, for the purposes described.

2. In a globe holder, a depending annular flange provided with an interior circumferential seat and a pair of adjacent slots, a length of resilient wire bent up into an open annulus and sprung into said seat and held against flexing therein, said body being provided with fixed inwardly extending teeth, annular overlapping sprtug fingers formed of said wire at the ends of the body extending inwardly to coöperate with said teeth to support the globe and adapted to be expanded outwardly to release the globe, and handles for actuating said fingers extending through said slots to the exterior of said flange, for the purpose described.

3. In a globe holder having a depending flange provided with an interior circumferential depression and a pair of adjacent slots at one side of said flange, a globe clamping device formed by bending up a length of resilient wire in the form of an open annulus with overlapping ends, the body of said annulus being sprung into said depression and held immovably in said depression when said overlapping ends are compressed together, inwardly extending teeth formed by loops in the body of said annulus, the overlapping ends of said annulus being first bent to form inwardly extending spring fingers, adapted to coöperate with said teeth to grip the globe, and then bent sharply in an outward direction to pass through said slots to form operating handles, substantially as and for the purpose set forth.

1,063,674. ROOFING-TILE. JOSEPH FREUND, St. Louis, Mo., assignor to American Cement Tile Manufacturing Company, Wampum, Pa., a Corporation of Pennsylvania. Filed Apr. 19, 1910. Serial No. 556,391. (Cl. 108—10.)



1. A roofing tile having an upwardly extending rib along one of its longitudinal edges, there being a longitudinal cement recess in the upper face of the rib, a bead on the other longitudinal edge, there being a groove in the lower face of said bead, the depth of the groove being greater than the height of the rib on the other longitudinal edge, the groove being arranged to receive the rib of an adjacent tile; substantially as described.

2. A roofing tile having an upwardly extending stepped rib along one of its longitudinal edges, there being a longitudinal cement recess in one of said steps, the bottom of said recess being above the top face of the tile, a bead on the other longitudinal edge of the tile, there being a groove in the lower face of said bead, the depth of said groove being greater than the height of the rib and arranged to receive the rib on an adjacent tile; substantially as described.

3. A roofing tile having an upwardly extending stepped rib along one of its longitudinal edges, there being a longitudinal cement recess in one of the upper faces of the rib, the bottom of the recess being above the top of the tile, a bead on the other longitudinal edge, there being a stepped groove in the lower face of the bead, the deepest portion of the groove being greater than the height of the rib and arranged to receive the rib of an adjacent tile; substantially as described.

4. A roofing tile having an upwardly extending stepped rib along one of its longitudinal edges, there being a longitudinal cement recess in one of the upper faces of the rib, the bottom of said recess being above the top of the tile, a bead on the other longitudinal edge, there being a stepped groove in the lower face of the bead, the deepest portion of the groove being greater than the height of the rib and arranged to receive the rib of an adjacent tile, there being a cement recess in the step portion of said groove; substantially as described.

1,063,675. HAY RAKE AND LOADER. WILLIAM P. GANNON, Valeria, Iowa. Filed Feb. 2, 1911. Serial No. 606,269. (Cl. 193—14.)



1. In a loader of the class described, the combination of a supporting frame-work, a horizontal conveyer extending transversely of said frame-work, means for delivering the material to said horizontal conveyer, an elevating conveyer extending across said frame-work from one side thereof directly over said horizontal conveyer and adapted to operate in a direction opposite to said horizontal conveyer, and means carried by said frame-work for delivering the material from said horizontal conveyer to said elevating conveyer.

2. In a loader of the class described, the combination of a wheeled frame-work, a horizontal conveyer extending transversely across said frame-work, an elevating conveyer extending transversely across said frame-work directly over said horizontal conveyer, and means carried by said frame-work for delivering the material from said horizontal conveyer to said elevating conveyer, whereby the vehicle to be loaded from said conveyer can be driven at the side of said frame-work substantially as and for the purpose described.

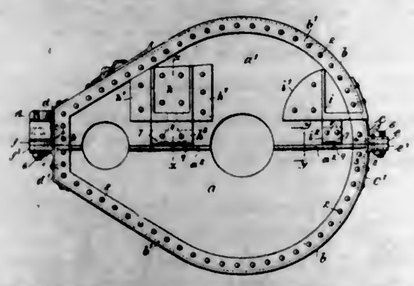
3. In a loader of the class described, the combination of a wheeled frame-work, a horizontal conveyer extending transversely of said frame-work, an elevating conveyer extending across said frame-work from one side thereof directly over said horizontal conveyer and adapted to operate in a direction opposite to said horizontal conveyer, and means for simultaneously operating both of said conveyers, and means carried by said frame-work for delivering the material from said horizontal conveyer to said elevating conveyer.

4. In a loader of the class described, the combination of a frame-work provided with a horizontal conveyer, an elevator conveyer arranged in vertical alinement, and supported in said frame-work so that the lower end of said elevator conveyer terminates at a point above and directly over said horizontal conveyer, means mounted on said frame-work for delivering the material from the horizontal conveyer to said elevating conveyer, and means for operating said conveyers in opposite directions, whereby the material to be loaded is carried to one side of the frame-work on the horizontal conveyer and delivered at the other side of the frame-work by the elevating conveyer.

5. In a loader of the class described, the combination of a frame-work, a horizontal conveyer extending transversely across said frame-work, an elevating conveyer extending transversely across said frame-work directly over said horizontal conveyer and adapted to operate in opposite directions to said horizontal conveyer, a toothed cylinder rotatably mounted on said frame and adapted to engage the material on the horizontal conveyer for delivering it to said elevating conveyer and means for operating said conveyers and cylinders.

[Claims 6 and 7 not printed in the Gazette.]

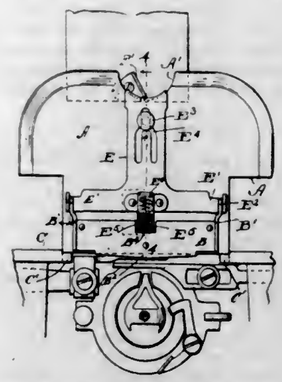
1,063,676. GEAR-CASE. JAMES GRADY, New York, N. Y., assignor to Columbia Machine Works & Malleable Iron Co., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 18, 1911. Serial No. 644,739. (Cl. 74—56.)



1. In a divided gear case, and in combination, side plate members and bracket plate ends, with grooves in the edges of the side plates of one member of the divided gear case adapted to receive the edges of the side plates of the other member of the divided gear case, and filling-blocks secured to and coming between the bracket plate ends of the gear case in which are formed ribs and grooves coacting with the closed edges of the side plate members in excluding dust and water from the gear case.

2. In a divided gear case, and in combination, side plate members with grooves in the edges of the side plates of one of the divided members of the gear case, support brackets having side and bottom flanges riveted to the side plates of the other member of the divided gear case, and the bottom flanges passing through edge notches in the side plates and returned and secured by rivets, and the lower edges of the said bottom flanges formed with ribs continuing the continuity and edge of the side plate and adapted equally to be received in the grooves of the other side plate member for excluding dust and water.

1,063,677. SEWING-MACHINE. WILLIAM GROTHE, Lakewood, and JOHN O. HUFFMAN, Cleveland, Ohio, assignors to The White Sewing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 2, 1908. Serial No. 460,582. (Cl. 112—29.)



1. A sewing machine comprising a base plate and a table, said plate and table having openings therein, said openings being adjacent to each other and affording access to parts of the machine beneath the said base plate, a single cover plate for the openings, an edge of the said openings in the base plate and table and an edge of the cover plate being in contact, the cover plate being fulcrumed on that part of the edge thereof which engages with the base plate, the cover plate being separable as an entirety from the base plate when the cover plate is raised slightly above its closed position.

2. A sewing machine comprising a base plate and a table, said plate and table having openings therein, said openings being adjacent to each other and affording access to parts of the machine beneath the said plate, a single cover plate for the openings, the rear edge of said cover plate being fulcrumed upon the rear edge of said openings, the plate being separable as an entirety from the base plate when the cover is raised slightly above its closed position, means for normally retaining the cover in closed position, and means for holding the cover in wide open position.

3. A sewing machine comprising a base plate and a table, said plate and table having openings therein adjacent to the needle plate and affording access to certain parts of the machine beneath the base plate, a single cover plate for said opening adapted to be swung upward on one edge and drawn outwardly away from the opening when swung upward, means retaining the cover against direct upward movement and means retaining it against lateral movement away from the opening when it is lying in horizontal position.

4. A sewing machine comprising a base plate and a table, said plate and table having openings therein, a cover plate adapted to close both openings, projecting lugs at each side of the opening in the base plate upon which the cover plate rests, with a cross strip rigidly secured to the cover plate extending slightly beyond its inner edge on the lower side and adapted to take under the base plate, a catch strip movably connected to the under side of the cover plate having lateral extensions adapted to engage the lugs on the base plate, and means for holding said catch strip in yielding engagement with

the lugs of the base plate, the catch strip being accessible to the operator so that it may be moved out of engagement with said lugs.

5. A sewing machine comprising a base plate and a table, said plate and table having openings therein, a cover plate adapted to close both openings, projecting lugs at each side of the opening in the base plate upon which the cover plate rests, with a cross strip rigidly secured to the cover plate extending slightly beyond its inner edge on the lower side and adapted to take under the base plate, said cross strip having depending and outwardly projecting ears at each end, a catch strip movably connected to the under side of the cover plate having lateral extensions, the extremities of which are supported by the ears of the cross strip and provided with hooked lugs adapted to take under the lugs on the base plate, with means for holding the hooked lugs of the catch strip in yielding engagement with the lugs of the base plate, and means whereby the catch strip may be pushed back and disengaged from said lugs to detach the cover.

[Claims 6 and 7 not printed in the Gazette.]

1,063,678. PROCESS OF BLEACHING VEGETABLE FIBER AND FABRICS. REINHOLD GRÜTER, Charlottenburg, Germany, assignor, by mesne assignments, to R. H. Comey Company, Camden, N. J., a Corporation of New Jersey. Filed June 3, 1911. Serial No. 631,113. (Cl. 8—2.)

1. The process herein described of bleaching vegetable fiber and fabrics, which consists in saturating the fiber or fabrics in a solution of hydrogen peroxid and then subjecting them to the action of ammonia-vapors.

2. The process herein described of bleaching vegetable fiber and fabrics, which consists in saturating the same in a solution of hydrogen peroxid to which a small quantity of a tin salt has been added, and then treating them with ammonia-vapors.

3. The process herein described of bleaching vegetable fiber and fabrics, which consists in saturating the fiber or fabric in a hot solution of hydrogen peroxid, and then subjecting them while in highly heated condition to the action of hot ammonia-vapors.

4. The herein described process of bleaching fibrous material, which consists in saturating the material with a solution of hydrogen peroxid which is free of decomposing matter, removing the excess of the solution from the material, and exposing the same to a gas or vapor adapted to cause decomposition of the hydrogen peroxid, which gas or vapor is contained in a chamber.

5. The herein described process of bleaching fibrous material, which consists in saturating the material with a solution of hydrogen peroxid which is free of decomposing matter, removing the excess of the solution from the material, and exposing the same to a vapor of ammonia, which vapor is contained in a chamber.

1,063,679. PROCESS OF PRODUCING STABLE HYDROGEN-PEROXID COMPOUNDS. MAX HARTMANN and ERNST JACOBY, Munich, Germany. Filed Jan. 27, 1913. Serial No. 744,317. (Cl. 23—10.)

1. The herein described process of producing stable hydrogen peroxid compounds, which process consists in introducing hexamethylentetramin into a hydrogen peroxid solution, and thereafter precipitating out the resulting double combination.

2. The herein described process of producing stable hydrogen peroxid compounds, which process consists in dissolving hexamethylentetramin in a hydrogen peroxid solution of low temperature, and thereafter precipitating out the resulting double combination, by means of a suitable organic solvent.

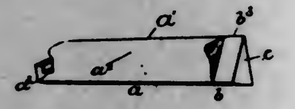
3. The herein described process of producing stable hydrogen peroxid compounds, which process consists in dissolving hexamethylentetramin in a hydrogen peroxid solution, thereafter precipitating out the resulting double combination, and finally adding to the double combination substances which are adapted to absorb the products of decomposition of said combination.

4. The herein described process of producing stable hydrogen peroxid compounds, which process consists in dissolving hexamethylentetramin in a hydrogen peroxid solution, thereafter precipitating out the resulting double combination, and finally adding to the said combination a small quantity of a substance adapted to absorb ammonia and a small quantity of a substance adapted to absorb formaldehyde.

5. The herein described process of producing stable hydrogen peroxid compounds, which process consists in dissolving hexamethylentetramin in a hydrogen peroxid solution, thereafter precipitating out the resulting double combination, and finally adding to said combination a small quantity of an acid anhydrid capable of absorbing ammonia and a small quantity of an albumin combination capable of absorbing formaldehyde.

[Claims 6 and 7 not printed in the Gazette.]

1,063,680. CUTTER FOR METAL-TURNING TOOLS. JAMES HARTNESS, Springfield, Vt. Filed Oct. 5, 1908. Serial No. 456,166. (Cl. 29—95.)



1. A cutter for a metal-cutting tool, comprising a bar or shank having at one end a cutting edge longitudinal of said bar, said bar or shank having a longitudinal corner connecting with said edge and an under side concentric with said corner.

2. A cutter for a metal-cutting tool, comprising a bar or shank having a transversely convex under side, and at its end two acutely-converging faces terminating at the cutting edge, said faces and said curved under side forming substantially a sector of a circle.

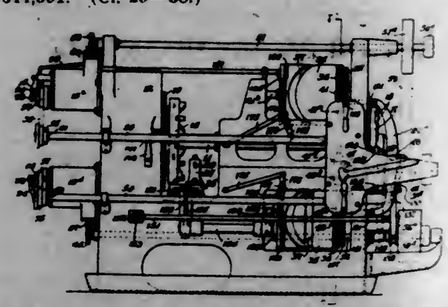
3. A cutter for a metal-cutting tool, comprising a bar or shank having adjacent one end an inner side face and a top slope at a wedging angle, said shank having on one side in the rear of said top slope two faces at an obtuse angle to each other.

4. A cutter for a metal-cutting tool, comprising a bar or shank having adjacent one end an inner face and a top slope at a wedging angle and terminating in a cutting edge, the outer side of said bar being formed with three faces lying in obtusely intersecting planes.

5. A cutter for a metal-cutting tool consisting of a bar having at one end two faces at an angle, to form a cutting edge which is downwardly inclined with respect to the top of the bar, but longitudinal of said bar.

[Claim 6 not printed in the Gazette.]

1,063,681. METAL-WORKING MACHINE. JAMES HARTNESS, Springfield, Vt. Filed Aug. 17, 1911. Serial No. 644,591. (Cl. 29—38.)



1. In a metal-working machine, a laterally movable work spindle, a series of tool slides, means for moving the spindle into operative relation with said slides one after another, and means for positioning each slide laterally with reference to the spindle registering therewith.

2. In a metal-working machine, a revoluble turret, a plurality of work spindles disposed about the axis of the turret, a tool slide, gibs for the side edges of said slide, means for revolving the turret step by step to move said spindles successively into coöperative relation with said slide, and automatic means for laterally positioning the slide relatively to its gibs independently for each of said spindles.

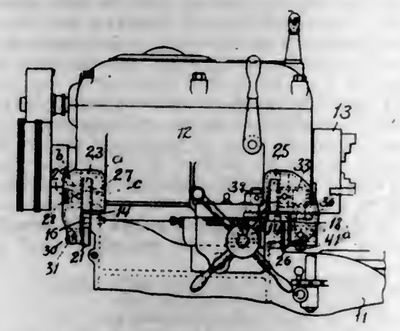
3. In a metal-working machine, a revoluble turret, a plurality of work spindles disposed about the axis of the turret, a plurality of tool slides arranged in coöperative relation with the respective spindles, means for revolving said turret step by step to cause said spindles to move successively into coöperative relation with the several tool slides, and automatic means for independently and laterally positioning the several slides for each of the work spindles.

4. In a metal-working machine, a laterally movable work spindle, a series of tool slides, means for moving said spindle into coöperative relation with each of said slides one after another, independent means for laterally adjusting each of said slides, and a gage movable with the work for operating each adjusting means.

5. In a metal-working machine, a revoluble turret, a series of work spindles arranged therein, a tool slide, means for turning the turret step by step to place said spindles successively in coöperative relation with said slide, means for operating said slide, means for laterally adjusting said slide, and a plurality of gages one for each spindle, said gages being movable with said spindles and adapted to operate said adjusting means to position laterally the slide for each piece of work.

[Claims 6 to 42 not printed in the Gazette.]

1,063,682. LATHE. JAMES HARTNESS, Springfield, Vt. Filed Sept. 6, 1911. Serial No. 647,873. (Cl. 82—28.)



1. In a lathe, the combination of a work support, a tool support, one of said supports being movable with respect to the other, a bed having parallel rails or guideways, and rolls journaled on said movable support and in constant rolling contact with said rails to control positively the path of movement of said support while the tool is operating upon the work.

2. In a lathe, the combination of a bed, parallel rails on said bed, a carriage, rolls journaled on said carriage and resting upon said rails, and coacting rolls journaled on said carriage and engaging the under sides of said rails, whereby said rolls and rails positively control the path of the carriage, substantially as set forth.

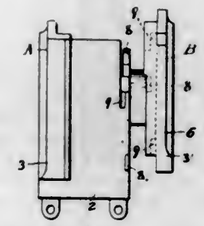
3. In a lathe, the combination of a bed, parallel rails on said bed, a carriage, carriage supporting rolls journaled on said carriage and resting upon said rails, coacting rolls journaled on said carriage and engaging the under sides of said rails, and means whereby said first-mentioned rolls and said second-mentioned rolls may be adjusted with reference to each other, substantially as set forth.

4. In a lathe, the combination of a bed, parallel rails on said bed, a carriage, rolls journaled on said carriage and constantly resting upon said rails, and opposed rolls constantly engaging the inner and outer sides of said rails, substantially as set forth.

5. In a lathe the combination of a bed, rails on said bed, a carriage, eccentric pins socketed in said carriage, and pairs of coacting rolls journaled on said pins and constantly and positively engaging opposite faces of said rails.

[Claims 6 to 8 not printed in the Gazette.]

1,063,683. LOCOMOTIVE DRIVING-BOX. HARRY HENRICKSEN, Erwin, Tenn. Filed May 17, 1911. Serial No. 627,871. (Cl. 64—10.)



1. A driving box composed of two separate parts having interengaging vertically disposed recesses and flanges, whereby said parts may be separably connected, one of said parts carrying a brass which projects at one end and the other part being provided with shoulders in the path of which the projecting end of the brass is located to limit the upward movement of said other part for the purpose of disconnecting it from said first mentioned part; the said parts being provided with flanges that cooperate to form standard receiving recesses, and said parts being adapted to mutually support a superimposed load, whereby said parts are maintained in interlocked relation.

2. The combination of an axle box, means in which the box is arranged and supported, keying means engaging the box and the means in which the box is arranged and supported for holding the box against inward endwise movement in said means, said keying means having a portion located against the outer end of the box and adapted to be opposed to and receive the lateral thrust of a drive-wheel, and means opposed to the keying means for preventing displacement thereof.

3. The combination of an axle box, means in which the box is arranged and supported, and keying means engaging the box and the means in which the box is arranged and supported for holding the box against inward endwise movement in said means; said keying means having a portion located against the outer end of the box and adapted to be opposed to and receive the lateral thrust of a drive-wheel.

4. The combination of an axle box flanged at its inner end, means in which the same is arranged and supported, and a U-shaped key engaged with the box to prevent inward movement thereof and having a portion opposed to the outer end of the box and the outer side of said means, and arranged to be opposed to and receive the lateral thrust of a drive-wheel.

5. The combination of an axle box flanged at its inner end, means in which the same is arranged and supported, a U-shaped key engaged with the box to prevent inward movement thereof and having a portion opposed to the outer end of the box and the outer side of said means, and arranged to be oposed to and receive the lateral thrust of a drive-wheel and means detachably connecting the box and key to hold the latter against disengagement from the box.

1,063,684. DISINFECTING DEVICE. OLGA M. HITCHCOCK, Dallas, Tex. Filed Oct. 6, 1911. Serial No. 653,284. (Cl. 167—3.)

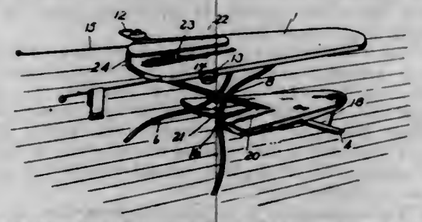
1. In a disinfecting device, the combination with a cup-shaped receptacle having its vertical wall perforated, of

an elongated strip vertically extending from the rim of said receptacle, horizontal annular segments hinged to the upper extremity of said strip, a locking device attached to the free ends of the annular segments, a ring surrounding the cup-shaped receptacle adjacent to the rim of the latter and extending somewhat above it, and a lug on the inner side of one of the annular segments.



2. In a disinfecting device, the combination with a cup-shaped receptacle having its vertical wall perforated, of an elongated strip vertically extending from the rim of said receptacle, horizontal annular segments hinged to the upper extremity of said strip, an upright cylindrical vessel resting on the rim of the cup-shaped receptacle, and held in position by the annular segments, a lug provided on the inner side of one of the annular segments, said lug adapted to project into an indenture provided in the upright cylindrical vessel, and a frame which is composed of horizontal and vertical members, contained in the cup-shaped receptacle, said frame supporting an absorbent fabric which is given a zig-zag form by the horizontal members of said frame.

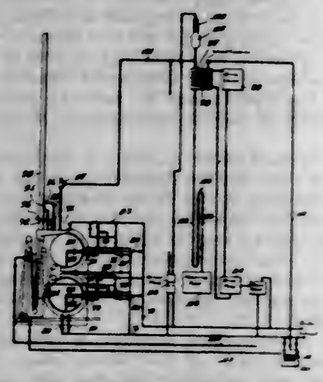
1,063,685. IRONING-BOARD. FRED G. HOFFINE, Kansas City, Mo., assignor to Home Ironing Board Company, Kansas City, Mo., a Corporation of Missouri. Filed Aug. 6, 1912. Serial No. 713,514. (Cl. 68—10.)



An ironing board comprising a body member, a main leg pivotally connected with the body member, a bifurcated leg pivotally connected with the main leg and adapted for engaging the body member, said bifurcated leg having laterally opening apertures, a leg having an upwardly opening aperture, a tray frame comprising a wire having ends adapted for projection into the laterally opening apertures, and a post pivotally connected with the frame and adapted for projection into the upwardly opening aperture, substantially as and for the purpose set forth.

1,063,686. APPARATUS FOR RECOVERING VOLATILE SOLVENTS. CHARLES F. HOPEWELL, Newton, Mass. Filed Apr. 17, 1911. Serial No. 621,576. (Cl. 34—3.)

1. An apparatus of the character described comprising a closed vaporizing box provided with an opening for the admission and exit of the fabric, a vertical liquid chamber surrounding the said opening to seal the opening against the passage of air or vapor, means for guiding the fabric back and forth through said opening, a condenser and a connection from the box to the condenser to allow the passage of vapor from the former to the latter.



2. An apparatus of the character described comprising a closed vaporizing box, means for permitting the continuous passage of a strip of fabric into and out of said box sealed against the passage of air or vapor, an air relief passage opening from said box, and a thermostatic air relief valve in said passage.

3. An apparatus of the character described comprising a closed vaporizing box, means for permitting the continuous passage of a strip of fabric into and out of said box sealed against the pasage of air or vapor, means for admitting steam to said box to drive the initially inclosed air out, and a valve controlled exit passage from said box to allow the escape of the air.

4. An apparatus of the character described comprising a closed vaporizing box, means for permitting the continuous passage of a strip of fabric into and out of said box sealed against the pasage of air or vapor, means for admitting steam to said box to drive the initially inclosed air out, a valve controlled exit passage from said box to allow the escape of the air, an air relief passage opening from said box, and a thermostatic air relief valve in said passage.

5. An apparatus of the character described comprising a closed vaporizing box, means for permitting the continuous passage of a strip of fabric into and out of said box sealed against the passage of air or vapor, heating means within said box, a condenser, a connection from the box to the condenser to allow the passage of vapor from the former to the latter, means for automatically eliminating air from the said apparatus while in operation.

[Claims 6 to 33 not printed in the Gazette.]

1,063,687. MILK PRODUCT. GEORGE JOHNSON HUESTIS, Halifax, Nova Scotia, Canada. Filed Jan. 5, 1912. Serial No. 669,594. (Cl. 99—11.)

1. A milk product consisting of concentrated milk in the form of a cake, containing an amount of honey, glucose, and sugar.

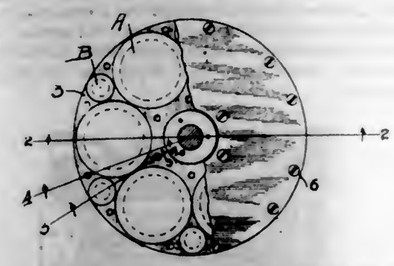
2. The herein described milk cake containing milk, to which sugar, glucose, and honey have been added.

3. The method herein described of producing a milk cake which consists in reducing the volume of milk, adding sugar thereto and graining the milk, and allowing the mass to cool in suitable molds.

4. The method described method of producing a milk cake which consists in reducing the volume of the milk by evaporation, adding thereto some sugar and salt, and graining the mixture, and then allowing it to cool, whereby a grained product resembling the structure of fudge of candy making is obtained.

5. The herein described method of producing a milk cake, which consists in reducing the volume of the milk by evaporation, heating the reduced mass, and adding sugar and salt thereto, whereby the mass becomes grained.

1,063,688. ABRASIVE WHEEL. ABRAHAM L. HULL, Valparaiso, Ind. Filed Feb. 19, 1912. Serial No. 678,671. (Cl. 51—1.)

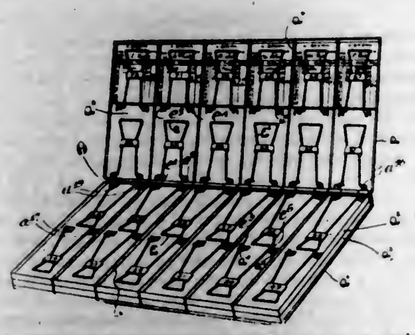


1. A device of the class described embracing a metallic plate or web having apertures, some closely arranged therethrough intersecting the periphery thereof and others spaced within the periphery and shaped to wedgingly engage material molded therein, and abrasive material molded on said plate and filling said apertures and affording a raised peripheral rim on one or both sides said plate.

2. A device of the class described embracing a circular metallic flat web or plate having a central shaft aperture therethrough, and provided with apertures arranged around and opening through the periphery thereof, said opening through the periphery having less length than the diameter of the apertures, said plate countersunk on one or both sides at each aperture to rigidly engage material bonded therein, and an abrasive rim molded on said plate or web on one or both sides thereof and extending beyond and covering the periphery of said plate or web.

3. A device of the class described embracing a flat plate or web apertured for centering upon a shaft, and apertured adjacent the center to receive screws for engaging the same upon a collar secured on such shaft, closely arranged, flat outwardly flaring pins integral with said plate at its periphery and affording therebetween notches or recesses wider between the teeth approximately at their middle than at the outer ends of the teeth, and a rim of abrasive material molded around and on the periphery of said web and bonded in said notches and on said pins.

1,063,689. ACCOUNT-REGISTER. WILLIAM JAMES, Columbus, Ohio. Filed Aug. 2, 1911. Serial No. 641,949. (Cl. 129—34.)



1. A frame for an account register having a series of bill-holding compartments and a marginal flange, said frame consisting of a sheet of metal bent at intervals into transverse ribs which divide the sheet into the bill-holding compartments, and having its side and its top edges each bent into a loop.

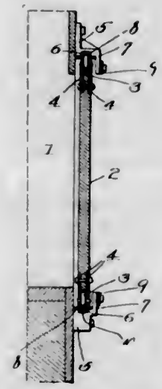
2. A casing for an account register consisting of a series of frames hinged together, each frame consisting of a sheet of metal bent at intervals into transverse ribs which form bill-holding compartments upon the sheet, and having at its edge integral journal loops adapted to receive a journal rod.

3. A frame for an account register having a series of bill-holding compartments and a marginal flange, said frame consisting of a sheet of metal bent at intervals into transverse ribs which divide the sheet into bill-holding compartments, and having its side and its top edges each bent into a loop, and a stiffening strip incased in the loop formed along the top edge.

4. A frame for an account register comprising a sheet of metal bent at intervals into loops which form transverse ribs on both sides of the sheet and divide both faces of the sheet into bill-holding compartments, and having its side and top edges bent into loops forming marginal flanges projecting at right angles to each side of the sheet, and a stiffening strip incased in the loop formed along the top edge of the sheet.

5. A frame for an account register consisting of a sheet of metal bent at intervals into loops, which form transverse ribs on both sides of the sheet and divide both faces of the sheet into bill-holding compartments and having its side and top edges bent into loops forming marginal flanges projecting at right angles to each side of the sheet and having integrally formed lugs along its remaining edge, said lugs being rolled at their ends to form journal lugs and some being turned in one direction, relatively to the sheet, and others in the opposite direction.

1,063,690. ATTACHMENT FOR FREIGHT-CAR DOORS. JOHN B. JOHNSON and JAMES T. VANCE, Bowling Green, Ky. Filed Dec. 23, 1911. Serial No. 667,547. (Cl. 16—7.)



1. A device of the kind described comprising angled brackets having horizontal portions, said portions being transversely grooved, a U-shaped trackway, fitting in said grooves, said trackway being supported by said brackets, a door adapted to move parallel with said trackway and rollers carried by the door and engaging said trackway.

2. The combination with a car and door having rollers adapted to project above the upper edge of the door, of angled brackets secured to the sides of the car and having an outwardly extending portion, and a depending portion spaced from the car, the outwardly extending portion of each bracket being transversely grooved upon its underside, a track-way having a central U-shaped portion, the said U-shaped portion fitting in the grooves of the brackets, the rollers of the car door traveling in said track-way, and a bar parallel to the door face, said bar being carried by the depending portions of the brackets, rollers carried at the bottom of the door, and a track engaged by said last mentioned rollers.

1,063,691. ELECTRIC SIGNAL FOR RAILWAYS. HELENA J. JONES and FRANK T. JONES, Baltimore, Md., assignors to The Jones Safety Train Control System Company, Baltimore, Md., a Corporation of Maryland. Filed June 17, 1909. Serial No. 502,698. (Cl. 246—27.)

1. The combination with a vehicle having an air-brake valve, of an electro-magnet for controlling the valve; two

an elongated strip vertically extending from the rim of said receptacle, horizontal annular segments hinged to the upper extremity of said strip, a locking device attached to the free ends of the annular segments, a ring surrounding the cup-shaped receptacle adjacent to the rim of the latter and extending somewhat above it, and a lug on the inner side of one of the annular segments.



2. In a disinfecting device, the combination with a cup-shaped receptacle having its vertical wall perforated, of an elongated strip vertically extending from the rim of said receptacle, horizontal annular segments hinged to the upper extremity of said strip, an upright cylindrical vessel resting on the rim of the cup-shaped receptacle, and held in position by the annular segments, a lug provided on the inner side of one of the annular segments, said lug adapted to project into an indenture provided in the upright cylindrical vessel, and a frame which is composed of horizontal and vertical members, contained in the cup-shaped receptacle, said frame supporting an absorbent fabric which is given a zig-zag form by the horizontal members of said frame.

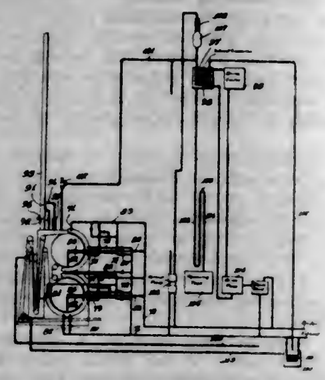
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An ironing board comprising a body member, a main leg pivotally connected with the body member, a bifurcated leg pivotally connected with the main leg and adapted for engaging the body member, said bifurcated leg having laterally opening apertures, a leg having an upwardly opening aperture, a tray frame comprising a wire having ends adapted for projection into the laterally opening apertures, and a post pivotally connected with the frame and adapted for projection into the upwardly opening aperture, substantially as and for the purpose set forth.

1,063,686. APPARATUS FOR RECOVERING VOLATILE SOLVENTS. CHARLES F. HOPEWELL, Newton, Mass. Filed Apr. 17, 1911. Serial No. 621,576. (Cl. 34—3.)

1. An apparatus of the character described comprising a closed vaporizing box provided with an opening for the admission and exit of the fabric, a vertical liquid chamber surrounding the said opening to seal the opening against the passage of air or vapor, means for guiding the fabric back and forth through said opening, a condenser and a connection from the box to the condenser to allow the passage of vapor from the former to the latter.



2. An apparatus of the character described comprising a closed vaporizing box, means for permitting the continuous passage of a strip of fabric into and out of said box sealed against the passage of air or vapor, an air relief passage opening from said box, and a thermostatic air relief valve in said passage.

3. An apparatus of the character described comprising a closed vaporizing box, means for permitting the continuous passage of a strip of fabric into and out of said box sealed against the pasage of air or vapor, means for admitting steam to said box to drive the initially inclosed air out, and a valve controlled exit passage from said box to allow the escape of the air.

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5. An apparatus of the character described comprising a closed vaporizing box, means for permitting the continuous passage of a strip of fabric into and out of said box sealed against the passage of air or vapor, heating means within said box, a condenser, a connection from the box to the condenser to allow the passage of vapor from the former to the latter, means for automatically eliminating air from the said apparatus while in operation.

[Claims 6 to 33 not printed in the Gazette.]

1,063,687. MILK PRODUCT. GEORGE JOHNSON HUESTIS, Halifax, Nova Scotia, Canada. Filed Jan. 5, 1912. Serial No. 669,594. (Cl. 99—11.)

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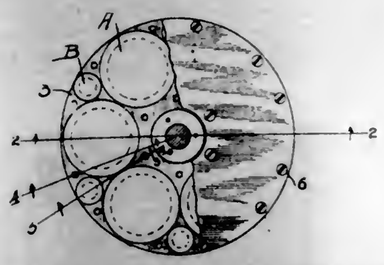
2. The herein described milk cake containing milk, to which sugar, glucose, and honey have been added.

3. The method herein described of producing a milk cake which consists in reducing the volume of milk, adding sugar thereto and graining the milk, and allowing the mass to cool in suitable molds.

4. The method described method of producing a milk cake which consists in reducing the volume of the milk by evaporation, adding thereto some sugar and salt, and graining the mixture, and then allowing it to cool, whereby a grained product resembling the structure of fudge of candy making is obtained.

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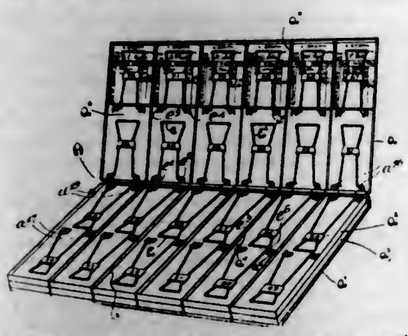


1. A device of the class described embracing a metallic plate or web having apertures, some closely arranged therethrough intersecting the periphery thereof and others spaced within the periphery and shaped to wedgingly engage material molded therein, and abrasive material molded on said plate and filling said apertures and affording a raised peripheral rim on one or both sides said plate.

2. A device of the class described embracing a circular metallic flat web or plate having a central shaft aperture therethrough, and provided with apertures arranged around and opening through the periphery thereof, said opening through the periphery having less length than the diameter of the apertures, said plate countersunk on one or both sides at each aperture to rigidly engage material bonded therein, and an abrasive rim molded on said plate or web on one or both sides thereof and extending beyond and covering the periphery of said plate or web.

3. A device of the class described embracing a flat plate or web apertured for centering upon a shaft, and apertured adjacent the center to receive screws for engaging the same upon a collar secured on such shaft, closely arranged, flat outwardly flaring pins integral with said plate at its periphery and affording therebetween notches or recesses wider between the teeth approximately at their middle than at the outer ends of the teeth, and a rim of abrasive material molded around and on the periphery of said web and bonded in said notches and on said pins.

1,063,689. ACCOUNT-REGISTER. WILLIAM JAMES, Columbus, Ohio. Filed Aug. 2, 1911. Serial No. 641,949. (Cl. 129—34.)



1. A frame for an account register having a series of bill-holding compartments and a marginal flange, said frame consisting of a sheet of metal bent at intervals into transverse ribs which divide the sheet into the bill-holding compartments, and having its side and its top edges each bent into a loop.

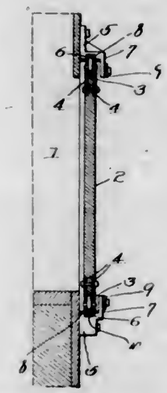
2. A casing for an account register consisting of a series of frames hinged together, each frame consisting of a sheet of metal bent at intervals into transverse ribs which form bill-holding compartments upon the sheet, and having at its edge integral journal loops adapted to receive a journal rod.

3. A frame for an account register having a series of bill-holding compartments and a marginal flange, said frame consisting of a sheet of metal bent at intervals into transverse ribs which divide the sheet into bill-holding compartments, and having its side and its top edges each bent into a loop, and a stiffening strip incased in the loop formed along the top edge.

4. A frame for an account register comprising a sheet of metal bent at intervals into loops which form transverse ribs on both sides of the sheet and divide both faces of the sheet into bill-holding compartments, and having its side and top edges bent into loops forming marginal flanges projecting at right angles to each side of the sheet, and a stiffening strip incased in the loop formed along the top edge of the sheet.

5. A frame for an account register consisting of a sheet of metal bent at intervals into loops, which form transverse ribs on both sides of the sheet and divide both faces of the sheet into bill-holding compartments and having its side and top edges bent into loops forming marginal flanges projecting at right angles to each side of the sheet and having integrally formed lugs along its remaining edge, said lugs being rolled at their ends to form journal lugs and some being turned in one direction, relatively to the sheet, and others in the opposite direction.

1,063,690. ATTACHMENT FOR FREIGHT-CAR DOORS. JOHN B. JOHNSON and JAMES T. VANCE, Bowling Green, Ky. Filed Dec. 23, 1911. Serial No. 667,547. (Cl. 16—7.)



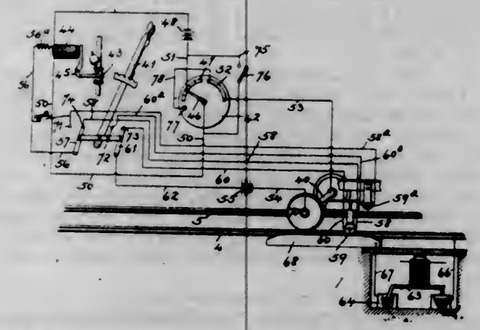
1. A device of the kind described comprising angled brackets having horizontal portions, said portions being transversely grooved, a U-shaped trackway, fitting in said grooves, said trackway being supported by said brackets, a door adapted to move parallel with said trackway and rollers carried by the door and engaging said trackway.

2. The combination with a car and door having rollers adapted to project above the upper edge of the door, of angled brackets secured to the sides of the car and having an outwardly extending portion, and a depending portion spaced from the car, the outwardly extending portion of each bracket being transversely grooved upon its underside, a track-way having a central U-shaped portion, the said U-shaped portion fitting in the grooves of the brackets, the rollers of the car door traveling in said track-way, and a bar parallel to the door face, said bar being carried by the depending portions of the brackets, rollers carried at the bottom of the door, and a track engaged by said last mentioned rollers.

1,063,691. ELECTRIC SIGNAL FOR RAILWAYS. HELENA J. JONES and FRANK T. JONES, Baltimore, Md., assignors to The Jones Safety Train Control System Company, Baltimore, Md., a Corporation of Maryland. Filed June 17, 1909. Serial No. 502,698. (Cl. 246—27.)

1. The combination with a vehicle having an air-brake valve, of an electro-magnet for controlling the valve; two

contact plates also on the vehicle; a circuit including one of said contact plates and said magnet while the vehicle is moving at a low speed; a second circuit including the other contact plate and said magnet while the vehicle is moving at a greater speed; a switch-arm and means whereby it is movable from one contact plate to the other according to the speed of the vehicle for closing one or the other of said circuits and means coöperating with elements in said second or high speed circuit for short circuiting the said valve magnet and releasing the air-brake valve.



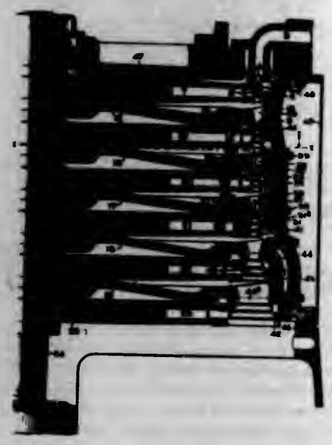
2. The combination with a vehicle having an air-brake valve; of an electro-magnet for controlling the same; two contact plates on the vehicle; a switch arm and means whereby it is automatically movable from one contact plate to the other acording to the speed of the vehicle; a circuit normally including one of said contact plates the switch arm and said magnet; another circuit to include said other contact plate said magnet and the switch arm when the latter is automatically moved from one contact to the other, and means coöperating with the last named circuit for effecting a deënergization of said electro-magnet to release the valve controller.

3. The combination with a vehicle having an air-brake valve and a magnetic controller therefor; of a low-speed contact plate; a high speed contact plate; a switch arm and means whereby it is automatically movable from one plate to the other according to the speed of the vehicle; a battery and connections to maintain a closed circuit through the low speed contact plate, the switch arm and valve controller during the travel of the vehicle at a low speed; a battery and connections to maintain a closed circuit through the high speed contact plate, switch arm and valve controller during the travel of the vehicle at a higher rate of speed; and two contacts on the vehicle and in the high speed circuit,—one contact being between a pole of the battery and one side of the controller and the other between the other pole of the battery and the other side of said controller.

4. The combination of a vehicle having an air-brake valve and magnetic controller therefor; two contact plates on said vehicle; a movable switch arm; a circuit including a battery, one of said contact plates, the switch arm and the valve controller,—said circuit being maintained while the arm is in contact with said plate; a side contact at each side of the vehicle; a reversing lever on the vehicle; switching means operated by the said reversing lever; a second circuit including the other of the first named two contact plates, a second battery, the said valve controller, movable switch arm, the said switching means and one of the said side contacts, and connections between the switching means and the other of said two side contacts whereby the latter side contact may be included in said second circuit.

1,063,692. ELASTIC-FLUID TURBINE. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 27, 1912. Serial No. 673,887. (Cl. 121—58.)

1. In a turbine, the combination of wheels having buckets on their peripheries, diaphragms arranged between the wheels, the diameter of the diaphragms being less than the diameter of the adjacent bucket bases, a casing within which the wheels and diaphragms are located, said casing being divided into segments and having an inwardly extending shoulder, an inner cylindrical supporting member that rests on said shoulder and in turn engages the periphery of the diaphragms and supports them, and intermediate buckets coöperating with a wheel that are carried by said member.



2. In a turbine, the combination of bucket wheels, a diaphragm arranged between adjacent wheels, a casing within which the wheels and diaphragm are located, said casing being divided into segments and provided with an internal shoulder, a segmental cylindrical member that rests against the shoulder and engages the periphery of the diaphragm to hold it in position, nozzles carried by said member, and intermediate buckets carried by said member and arranged in segments having joints that register with those in the member, said intermediate buckets extending between rows of wheel buckets.

3. In a turbine, the combination of bucket wheels, diaphragms arranged between the wheels, a casing within which the wheels and diaphragms are located, said casing being divided into segments, and a segmental annular member that is mounted on the inner wall of the casing and is provided with a plurality of inwardly extending projections that engage the periphery of the diaphragms and support them.

4. In a turbine, the combination of bucket wheels, diaphragms arranged between the wheels and having grooves in their peripheries, a casing within which the wheels and diaphragms are located, said casing being divided into segments, and a segmental annular member that is mounted on the inner wall of the casing and is provided with a plurality of inwardly extending projections having tongues that engage the grooves in the diaphragms and support them.

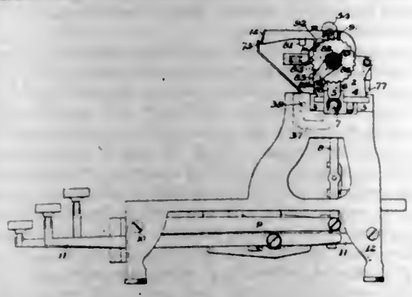
5. In a turbine, the combination of bucket wheels, diaphragms arranged between the wheels, a casing within which the wheels and diaphragms are located, said casing being divided into segments and provided with an internal shoulder, a segmental annular member that rests against the shoulder and is provided with a plurality of inwardly extending projections that engage the periphery of the diaphragms, and nozzles carried by said projections.

[Claims 6 to 12 not printed in the Gazette.]

1,063,693. TYPE-WRITING MACHINE. WILLIAM J. KAUFFMAN, Cleveland, Ohio. Original application filed Mar. 16, 1903, Serial No. 147,967. Divided and this application filed July 20, 1906. Serial No. 326,967. (Cl. 197—179.)

1. A typewriter, having a combined paper guide and marginal stop secured to a rock shaft, and arranged to guide a sheet, means to rock said shaft, and means to release the stop for adjusting the same lengthwise of the platen when the shaft is rocked; substantially as described.

2. A typewriter, having two combined paper guides and marginal stops secured to a rock shaft and arranged to guide both sides of a sheet, means to rock said shaft, and means to release the stops for adjusting the same lengthwise of the platen when the shaft is rocked; substantially as described.



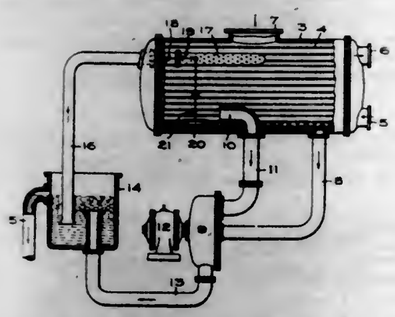
3. In a typewriting machine, a marginal stop secured to a rock shaft and arranged to move endwise with a platen, means to rock the shaft, and means to release the stop for adjusting the platen endwise in either direction relatively to said stop; substantially as described.

4. In a typewriting machine, a carriage having a marginal stop secured to a rock shaft arranged to move endwise with the carriage and platen, means to rock said shaft, and means to release the stop therefrom and for holding the stop stationary and permit the platen to be moved endwise in either direction relative to said stop; substantially as described.

5. In a typewriting machine, a carriage having a longitudinal rock bar or shaft, a marginal stop adjustably secured to the bar, means to rock the bar and means to release the stop therefrom and for holding the stop while adjusting the bar endwise in either direction relatively thereto; substantially as described.

[Claims 6 to 11 not printed in the Gazette.]

1,063,694. SURFACE CONDENSER. HULDREICH KELLER, Zurich, Switzerland, assignor to General Electric Company, a Corporation of New York. Filed July 15, 1909. Serial No. 507,683. (Cl. 62—26.)



1. In a condenser system, the combination of a surface condenser having a casing in which a high degree of partial vacuum is to be maintained, a centrifugal throwing pump for simultaneously removing air and water of condensation from the condenser, a conduit conveying air to the pump from the casing, a conduit conveying water of condensation to the pump from the casing to assist in the removal of the air, means for conveying water of condensation from the discharge side of the pump back into the steam space of the casing where it mingles with the steam, absorbs heat therefrom and gives it up to the cooling surfaces of the condenser, and means for conveying away the excess water of condensation.

2. In a condenser system, the combination of a surface condenser having water-cooled surfaces and a casing in which a high degree of partial vacuum is to be maintained, a centrifugal throwing pump, a conduit conveying water of condensation from the lower portion of the casing to the inlet side of the pump, a conduit conveying air and uncondensed gases from the casing to the pump to be acted upon by the throwing water, an open receptacle that receives the discharge from the pump and in which the air separates from the throwing water, and a conduit that conveys water of condensation from the receptacle back to the casing under the suction effect due to the vacuum therein to assist in the condensing operation and to afford a water supply for the throwing pump.

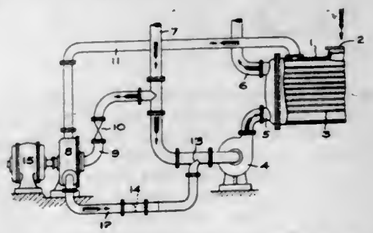
3. In a condenser system, the combination of a surface condenser having cooling surfaces and a casing in which a high degree of partial vacuum is to be maintained, means for cooling said surface, a centrifugal throwing pump that withdraws air and water of condensation from the condenser and increases its pressure, a receptacle that receives said air and water, a conduit one end of which is submerged in the water in the receptacle and the other end enters the casing to return water of condensation thereto under the suction effect of the low pressure in the casing, and a spraying device in the steam space of the casing which is connected with the discharge end of the conduit.

4. In a condenser system, the combination of a surface condenser having cooling surfaces and a casing in which a high degree of partial vacuum is to be maintained, means for cooling said surfaces, a centrifugal throwing pump that withdraws air and water of condensation from the condenser and increases its pressure, a receptacle that receives said air and water, a conduit, one end of which is submerged in the water in the receptacle and the other end enters the casing to return water of condensation thereto under the suction effect due to the partial vacuum in the casing, a spraying device arranged in the steam space of the casing which is connected to the discharge end of the conduit, a valve located in the conduit between the receptacle and said device, and means for operating the valve.

5. In a condenser system, the combination of a surface condenser having cooling surfaces and a casing in which a high degree of partial vacuum is to be maintained, means for cooling said surfaces, a centrifugal pump that withdraws water of condensation from the condenser and increases its pressure, a receptacle that receives said water, a conduit, one end of which is submerged in the water in the receptacle and the other end enters the casing to return water of condensation thereto, a spraying device connected with the discharge end of the conduit, a valve in the conduit situated within the casing for controlling the reëntrance of water of condensation thereto, and a float which actuates the valve and whose position is determined by the level of said water in the casing.

[Claims 6 and 7 not printed in the Gazette.]

1,063,695. SURFACE CONDENSING APPARATUS. HULDREICH KELLER, Zurich, Switzerland, assignor to General Electric Company, a Corporation of New York. Filed July 15, 1909. Serial No. 507,684. (Cl. 62—26.)



1. In a condensing system, the combination of a surface condenser having tubes and a steam inlet, a conduit and a pump for circulating a fluid through said tubes for condensing the vapor within the condenser, and an air pump

of throwing type for removing air from the vapor space of the condenser, both of said pumps receiving fluid from the same source, and fluid discharged from both pumps passing through the said tubes.

2. In a condensing system, the combination of a surface condenser having tubes and a steam inlet, a pump for circulating a condensing fluid through the tubes, a centrifugal throwing pump for removing air from the vapor space of the condenser, a conduit that is common to and supplies fluid to both pumps, and a conduit that receives fluid from both pumps and discharges it into the tubes to condense the vapor in said condenser.

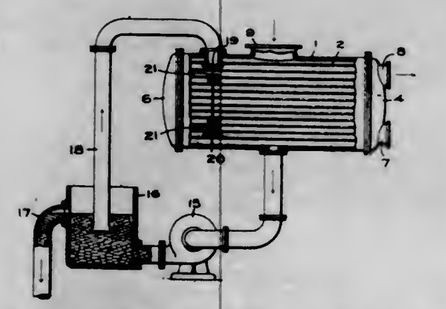
3. In a condensing system, the combination of a condenser, a conduit system including a pump for circulating water through the condenser, a centrifugal throwing pump for extracting air from the vapor space of the condenser, the throwing pump receiving its fluid supply from the same source as the circulating pump, and discharging it into the conduit system on the suction side of said circulating pump.

4. In a condensing system, the combination of a surface condenser, a pump for circulating condensing water through the condenser, a centrifugal throwing pump which is piped to the vapor space of the condenser to remove air therefrom, means supplying water to the throwing pump from the source of supply of the circulating pump, and means for conveying fluid discharged from the throwing pump to the suction side of the circulating pump, the throwing pump being connected in parallel with the supply to the circulating pump as regards the passage of water therethrough.

5. In a condenser system, the combination of a surface condenser, a pump for circulating condensing water through it, a centrifugal throwing pump which is piped to the vapor space of the condenser to remove air therefrom, means for supplying water to the throwing pump from the source of supply of the circulating pump, means for conveying fluid discharged from the throwing pump to the suction side of the circulating pump, the throwing pump being connected in parallel with the supply to the circulating pump as regards the passage of water therethrough, and means for regulating the passage of fluid through the pumps.

[Claim 6 not printed in the Gazette.]

1,063,696. SURFACE CONDENSER. HULDREICH KELLER, Zurich, Switzerland, assignor to General Electric Company, a Corporation of New York. Filed July 20, 1909. Serial No. 508,657. (Cl. 62—26.)



1. In a condensing system, a surface condenser having tubes whose outer surfaces are in contact with the steam to be condensed, in combination with means for passing water through the tubes to cool them, the water of condensation and cooling water being separately maintained, a casing for the condenser, means for maintaining a quantity of condensation water in the lower portion of the casing in contact with some of said tubes, and means which receives condensation water from said portion of the casing and discharges it over the tubes to convey heat from the gas contained in the condenser to the exterior surfaces of the cooling tubes.

2. In a condensing system, a surface condenser having tubes, a casing, and a steam inlet, in combination with means for passing cooling water unmixed with steam through the tubes, means arranged to receive condensation water from the bottom of the condenser and discharge a portion of it into said casing and in such manner as to permit it to mix with the steam and flow over said tubes to transmit heat to the outer walls thereof, said means including a pump and conduit means for carrying off the excess condensation water.

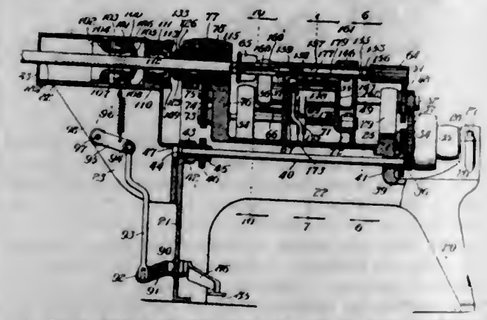
3. In a condensing system, a surface condenser having a steam inlet and cooling tubes, in combination with a conduit admitting exhaust steam thereto, means for circulating cooling water through the tubes and maintaining it entirely separate from the steam, said water entering the lower tubes and flowing toward the top of the condenser, means for accumulating a limited quantity of condensation water in the lower part of the casing in which some of said lower and cooler tubes are submerged, means which receives condensation water unmixed with cooling water from the lower part of the casing and returns it to the upper part thereof to mingle with the gas contained therein so as to convey heat from said gas to the outer cooling surfaces of the tubes, and a device for carrying off the excess water of condensation.

4. In a condensing system, the combination of a surface condenser having a casing in which a high degree of partial vacuum is to be maintained and tubes having cooling surfaces, means conveying water through the tubes to cool said surfaces which water is maintained separate from the steam to be condensed, a pump which receives water of condensation from the casing at condenser pressure and raises its pressure to that of the atmosphere, a receptacle receiving said water from the pump and in which air is freed from the water, and a means for conveying condensation water from the receptacle back to the condenser casing where it mixes with the gas therein, absorbs heat and gives it up to the cooling surfaces.

5. In a condensing system, the combination of a surface condenser having a casing in which a high degree of partial vacuum is to be maintained, a steam inlet and tubes having cooling surfaces, means conveying water through the tubes to cool said surfaces, said water being maintained separate from the steam to be condensed, a pump which receives water of condensation only directly from the condenser casing and raises its pressure to that of the atmosphere, a receptacle receiving said water from the pump, a means for conveying condensation water from the receptacle back into the condenser casing under the suction action of the vacuum therein where said water mixes with the gas therein, absorbs heat and gives it up to the cooling surfaces, and a regulator for controlling the passage of water from the receptacle back to the condenser.

[Claims 6 to 10 not printed in the Gazette.]

1,063,697. MACHINE FOR MAKING PLUGS FOR RAILWAY-TIES. JOHN W. KENDRICK, Chicago, Ill. Filed Apr. 22, 1909. Serial No. 491,485. (Cl. 144—46.)



1. In a device of the class described, a main frame, a secondary frame rotatably and slidably mounted thereon and carrying a cutter, means on the main frame to hold a piece of stock in position to be operated upon by the cutter, a curved track-plate mounted on the main frame, the arc of the curve being struck from the axis of the secondary frame, a longitudinally extending tongue projecting from the track plate, and a projection from the secondary frame adapted to travel around on the sides and ends of said tongue.

2. In a device of the class described, a main frame, means to hold a piece of stock, a frame rotatably and slidably mounted on the main frame, a cam carrying plate having a curved form concentric with the axis of rotation of said second frame for guiding it in its rotary and sliding movements, said second frame carrying a cutter, and means to rotate the cutter and simultaneously rotate the stock.

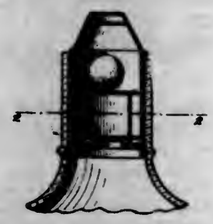
3. In a device of the class described, a main frame, means to hold a piece of stock, a shaft extending parallel to the stock, a rectangular frame having one side journaled on said shaft and free to slide on said shaft, the opposite side carrying a shaft with a cutter thereon, intermeshing gears on the two shafts, one of said gears being extended in length so as to keep the gears in engagement when the rectangular frame slides on its shaft, means to drive said gears to rotate the cutter, and a cam carrying plate having a curved form concentric with the axis of rotation of said rectangular frame for guiding said frame in its rotary and sliding movements.

4. In a device of the class described, a frame, means to hold and rotate a piece of stock, a secondary frame rotatably and slidably mounted on the main frame, a revolving cutter carried by the secondary frame, interacting guiding elements concentrically disposed with relation to the axis of said secondary frame and attached to the main frame and the secondary frame whereby the cutter can move longitudinally only when adjacent to the stock or widely removed therefrom.

5. In a device of the class described, a main frame, a secondary frame slidably and rotatably mounted thereon, means to hold a piece of stock, a cam carrying plate having a curved form concentric with the axis of rotation of said secondary frame to constrain the movement of the secondary frame in its relation to the stock.

[Claims 6 to 11 not printed in the Gazette.]

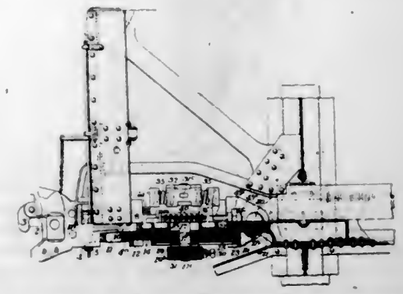
1,063,698. NON-REFILLABLE BOTTLE. MICHAEL KOVAC, Passaic, N. J. Filed Apr. 26, 1912. Serial No. 693,440. (Cl. 215—62.)



1. In a device of the character described, the combination of a bottle provided with a neck having an internal groove therein, an annular spring catch 19 seated in said groove, a casing 4 secured to the annular spring catch 19, a valve seat 5 in said casing having a central port 13 formed therein, a wall 6 surorunding the port 13 and forming a seat 7 surrounding the port 13, a packing in said seat 7, a valve of tubular form in the casing 4, plane disks 10 and 11 forming the end section of the said valve, an annular lip 12 on the under side of said valve and normally resting on the packing in the said valve seat, a ball intermediate said valve and the outer end section of the said casing and means for retaining the ball in the said casing, substantially as shown and described.

2. In a device of the character described, the combination of a casing, an annular valve seat therein and provided with a central port, a wall surrounding the said port, a valve of tubular cylindrical form in said casing, plane disks forming the end sections of said valve, an annular lip projecting downwardly from the under side of the said valve and normally resting in the said valve seat between the wall surrounding the port and the casing, and a ball on the said valve whereby the valve is seated against the downward passage of liquid, substantially as shown and described.

1,063,699. COUPLING-BRAKE OR DRAFT-RIGGING. HARRY T. KRAKAU, Cleveland, Ohio, assignor to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 6, 1911. Serial No. 631,621. (Cl. 213—64.)



1. In apparatus of the character described, interlapping friction elements, and means for producing frictional pressure between said elements, said means comprising an operatively associated wedge and lever; substantially as described.

2. In apparatus of the character described, interlapping friction elements, and means for producing frictional pressure between said elements, said means comprising an operatively associated wedge and lever, together with spring means engaging said lever to actuate the same; substantially as described.

3. In apparatus of the character described, interlapping friction elements, and means for producing frictional pressure between said elements, said means comprising an operatively associated wedge and lever device, means for actuating said device under buffing movements, and other wedge and lever means actuated by pulling movements; substantially as described.

4. The combination with a coupler having a shank extension, of a plurality of interlapping friction members, a screw shaft, levers mounted on said shaft and arranged to exert a clamping action on the friction members, and springs engaged with the levers and with the shank extension to actuate the levers in pulling and buffing movements respectively; substantially as described.

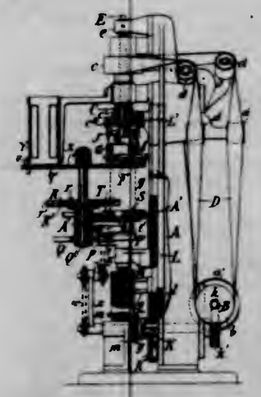
5. The combination with a coupler having a shaft extension, of a plurality of interlapping friction members, a screw shaft, levers mounted on said shaft and arranged to exert a clamping action on the friction members, and springs engaged with the levers and with the shank extension to actuate the levers in pulling and buffing movements, one of said levers operating under buffing stresses and the other under pulling stresses; substantially as described.

[Claims 6 to 18 not printed in the Gazette.]

1,063,700. MACHINE FOR SEAMING CAN-TOPS. PETER KRUSE, New York, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Mar. 24, 1911. Serial No. 616,717. Renewed Sept. 24, 1912. Serial No. 722,123. (Cl. 113—24.)

1. A can seaming machine comprising a revolving seamer head, upright oscillatory seamer spindles carried thereby having lower arms carrying seamers and upper controlling arms, an operating shell engaging said upper arms, said shell free to rotate with said arms, and means for advancing said shell during the seaming operation to force the seamers in against the can while they revolve

around it, and for subsequently retracting said shell to permit the seamers to move outward and free the seamed can.



2. A can seaming machine comprising a revolving seamer head, upright oscillatory seamer spindles carried thereby having lower arms carrying seamers and upper controlling arms, a shell internally engaging said upper arms, free to rotate with said arms, and having a cam portion adapted to displace said arms inward to force the seamers in against the can while revolving around it, and a portion beyond said active portion adapted to permit the seamers to move idly, and means for advancing and retracting said shell.

3. A can seaming machine comprising a revolving seamer head, upright oscillatory seamer spindles carried thereby having lower arms carrying respectively primary and secondary seamers, and upper controlling arms, an operating shell engaging said upper arms, and means for advancing and retracting said shell, said controlling arms engaging the shell at different levels, and the shell and arms relatively arranged and adapted whereby during the advance of said shell it forces first the primary seamers and afterward the secondary seamers in against the can, and during the retraction of said shell the seamers are released in reverse order to free the seamed can.

4. A can seaming machine comprising a revolving seamer head, upright oscillatory seamer spindles carried thereby having lower arms carrying seamers and upper controlling arms carrying shoes, an operating shell engaging said upper arms rotatably mounted so that it may turn with said head, and means for advancing said shell during the seaming operation to force the seamers in against the can while they revolve around it, and for subsequently retracting said shell to permit the seamers to move outward and free the seamed can.

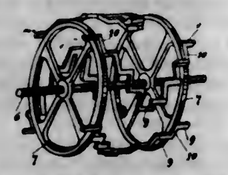
5. A can seaming machine comprising a revolving seamer head, seamer spindles carried thereby having lower arms carrying seamers and upper controlling arms carrying shoes, a rotatably-mounted shell engaging said upper arms having an internal cam surface in contact with said shoes, and means for advancing said shell during the seaming operation to force the seamers in against the can while they revolve around it, and for subsequently retracting said shell to permit the seamers to move outward and free the seamed can.

[Claims 6 to 14 not printed in the Gazette.]

1,063,701. THRESHING-MACHINE. STANISLAW KULESZA, Skorzew, near Busk, Russia. Filed Jan. 2, 1912. Serial No. 668,939. (Cl. 130—27.)

1. In a threshing machine, the combination of a drum comprising spaced circular heads, an axis common to said heads, strips connecting the peripheral portions of the heads and secured thereto, each strip consisting of a plurality of beaters arranged parallel with the axis, and inoperative intermediate members connecting said beaters.

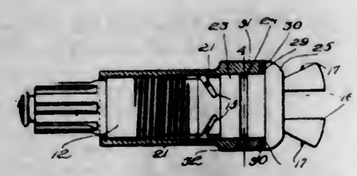
2. In a threshing machine, the combination of a drum comprising spaced circular heads, an axis common to said heads, strips connecting the peripheral portions of the heads and secured thereto, each strip consisting of a plurality of beaters arranged parallel with the axis, and inoperative intermediate members arranged transversely of the axis and connecting the beaters aforesaid.



3. In a threshing machine, the combination of a drum comprising spaced circular heads, an axis common to said heads, a plurality of strips carried by said heads and each strip consisting of portions extending from an intermediate point outwardly to the heads in the form of opposed steps, each step portion consisting of a number of beaters arranged along the axis aforesaid and of other portions arranged transversely of the axis, said last mentioned portions connecting said beaters.

4. In a threshing machine, the combination of a drum comprising spaced circular heads, an axis common to said heads, a plurality of strips carried by said heads and each strip consisting of portions extending from an intermediate point outwardly to the heads in the form of opposed steps, each step portion consisting of a number of beaters arranged along the axis aforesaid and of other portions arranged transversely of the axis, said last mentioned portions connecting said beaters, said beaters being so arranged that in a determined plane passing through the axis of the drum only one of the same is operative at a given time.

1,063,702. CHUCK. JOHN A. LELAND, Montague, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Nov. 8, 1911. Serial No. 659,141. (Cl. 145—93.)



1. A chuck having a head provided with a transverse opening, the portions at the sides of said opening having inclined slots, jaws mounted in said opening and provided with flaring faces at their outer ends and having pins projecting from their inner ends extending into said inclined slots, a spring connecting said jaws, and a longitudinally movable sleeve engaging the flaring ends of the jaws for actuating said jaws.

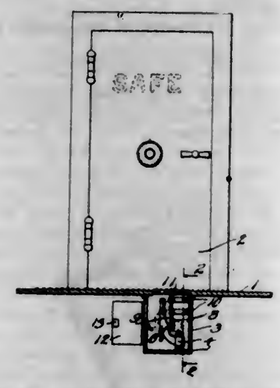
2. A chuck having a head provided with a transverse opening, the portions of the head at the sides of the opening having inclined slots, a pair of jaws having pins, the ends of which project into said inclined slots, a spring connecting the jaws and bearing against the bottom of said transverse opening, a thrust ring for collapsing the jaws, and means for actuating said ring.

3. A chuck having jaws provided with inclined outer faces, a thrust ring having an opening through which said jaws pass and provided with a rearwardly facing ball race adjacent its end which actuates the jaws, a sleeve inclosing a portion of said thrust ring, means whereby rotation of the sleeve will cause it to shift longitudinally, and balls interposed between said ball race and the outer end of the sleeve.

4. A chuck having jaws provided with inclined outer faces, a thrust ring having an opening through which said jaws pass and provided with a rearwardly facing ball race adjacent its end which actuates the jaws, said ring having an external annular groove, a sleeve inclosing a portion of said ring, means projecting from said sleeve into the annular groove of the thrust ring, and balls interposed between said ball race and the outer end of the sleeve.

5. A chuck having jaws provided with inclined outer faces, a thrust ring having an opening through which said jaws pass, said thrust ring having a thickened rim, said rim having a rearwardly facing annular radially concave ball race, a sleeve inclosing a portion of said thrust ring, balls inserted between the outer end of said sleeve and the raceway of the thrust ring, and means whereby rotation of the sleeve will cause it to shift longitudinally.

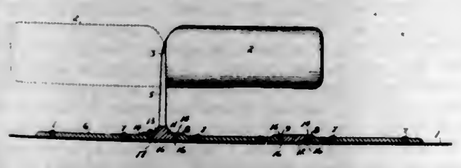
1,063,703. ALARM-SIGNAL. AMUND LEVORSEN, Lightfoot, Va. Filed Jan. 27, 1913. Serial No. 744,569. (Cl. 116—42.)



1. In a device of the class described, the combination with a relatively rigidly mounted fire-arm, of a depressible plate adapted to control the discharge thereof, and a rod swiveled to the plate and having a portion extending across the trigger of the fire-arm for discharging the same when the plate is depressed, the said rod being adapted to be moved pivotally to a position out of engagement with the trigger.

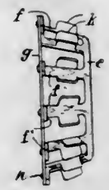
2. In a device of the class described, the combination with a relatively rigidly mounted fire-arm, of a depressible plate disposed adjacent the same, and a rod having a swiveled connection with the plate and extending to the trigger of the fire-arm, the said rod being formed with a loop extending at one side of the rod and adapted to be swung by rotation of the rod to and from a position engaging and surrounding the trigger of the fire-arm.

1,063,704. PLASTERER'S TROWEL. ROBERT W. LINVILLE, San Francisco, Cal., assignor, by direct and mesne assignments, of one-fourth to Joseph Graef and one-fourth to Mary Graef, San Francisco, Cal. Filed July 23, 1912. Serial No. 711,067. (Cl. 72—136.)



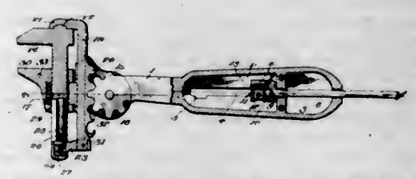
A trowel comprising a blade, a longitudinal strip of metal riveted to the blade, and having therein two threaded sockets substantially equi-distant from the ends of the blade, and a handle having a stem, the lower end of which is formed with a threaded foot adapted to be screwed into either socket, the edge of each socket and said foot being formed, one with a single hole and the other with two holes, either of which is adapted to register with the single hole, and a tapering pin in the holes so registering, the blade being formed with suitably located holes to receive the lower end of the pin.

1,063,705. SHEET-METAL CAGE FOR ROLLER-BEARINGS. CHARLES S. LOCKWOOD, Newark, N. J., assignor to Hyatt Roller Bearing Company, Harrison, N. J., a Corporation of New Jersey. Filed Jan. 2, 1912. Serial No. 668,833. (Cl. 64—62.)



In a roller bearing, the combination, with a conical hub having a tapering roll-seat and shoulders *d*, *d'* at its ends, of a series of tapering rolls fitted to the roll-seat, a sheet-metal cage having a flat ring at one end, a series of integral prongs extended therefrom between the rolls, lips upon the prongs embracing the outer sides of the rolls, lugs bent upon the free ends of the prongs parallel with the plane of the integral flat ring, a separate flat sheet-metal ring riveted to the flat lugs at the free ends of the prongs, and both rings fitted to ride upon the hub adjacent to the said shoulders.

1,063,706. COMPOUND TOOL. WILLIAM T. LONG, Sumner, Wash. Filed Feb. 21, 1912. Serial No. 679,158. (Cl. 81—127.)



1. The combination of a rack bar, a housing slidably fitted thereon, a jaw supported by the rack bar and held against movement longitudinally of the same, a jaw engaged by the housing, and a handle pivotally mounted within the housing and engaging the rack bar whereby movement of the handle will effect movement of the jaws relative to each other.

2. The combination of a base bar, a jaw having a stem swiveled upon the said bar, a second jaw slidably mounted upon said stem, and means engaging the base bar and the said jaw to effect relative movement of the jaws.

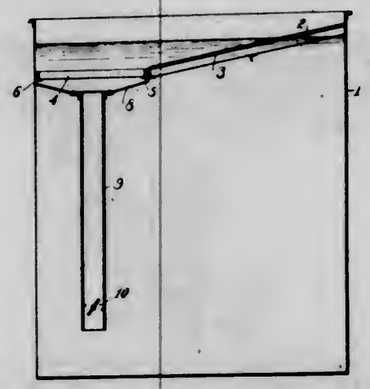
3. The combination of a base bar having an upturned end, an arm at the opposite end of said bar, a wrench jaw having a stem swiveled in the said upturned end and in the said arm, a spring housed within the said arm and resting against the end of the stem, a jaw slidably mounted on the said stem, and means for moving said slidable jaw to and from the first-mentioned jaw.

4. The combination of a rack bar, a pair of wrench jaws mounted thereon, a housing slidably fitted on the rack bar and engaging one of the jaws, a handle pivotally mounted within the housing and having its end formed into a gear engaging the rack bar, and a beveled tooth on the rack bar, the housing being provided in one edge with notches adapted to coöperate with said beveled tooth.

5. A tool comprising a handle, a jaw support, jaws swiveled thereon, a handle arranged to oscillate in the longitudinal plane of the jaw support, and means whereby movement of the handle will cause one of the jaws to approach or recede from the other jaw.

[Claim 6 not printed in the Gazette.]

1,063,707. DISSOLVING-TANK. WALTER E. LUMMUS, Lynn, Mass. Filed June 29, 1908. Serial No. 440,841. (Cl. 23—3.)



1. A dissolving tank having, in combination, a tank proper, a support for the substance to be dissolved having openings therein, said support being located near but below the normal level of the solvent in the tank, and an inclined floor, with openings, extending from the support to the side of the tank at a point above the normal level of the solvent, substantially as described.

2. A dissolving tank having, in combination, a tank proper, provided with a support for the substance to be dissolved located near the normal level of the liquid adapted to be contained therein, said support covering the entire area of the tank and provided with openings for the upward flow of liquid and the downward flow of solution, substantially as described.

3. A dissolving apparatus having, in combination, a container for the liquid, a support in said container for the substance to be dissolved, a conduit receiving the solution produced at the support and discharging it at a distance therefrom, and means for regulating the opening in the conduit, substantially as described.

4. A dissolving tank having, in combination, a tank proper, a hopper near the top of the tank having means for supporting the substance to be dissolved and having a conduit extending to a point near the bottom of the tank, and a floor across the top of the tank sloping downwardly to the hopper and having holes for the upward flow of liquid through the floor whereby a continuous circulation of liquid is maintained upwardly through said holes, over the substance to be dissolved and downwardly through the conduit to the bottom of the tank, substantially as described.

5. A dissolving tank having, in combination, a tank proper, a support in the upper part of the tank for holding the substance to be dissolved, a conduit leading from the support to a point near the bottom of the tank for conducting the solution produced at the support to the bottom of the tank, a floor covering the upper part of the tank which is not occupied by the support, and means for leading liquid from the upper part of the tank to the support whereby a continuous circulation of liquid over the substance to be dissolved and down through the conduit is maintained.

1,063,708. PROCESS OF REFINING BROWN SUGAR. UNO LUNDGREN and GUILLAUME GIELING, Brussels, Belgium. Filed Jan. 18, 1911. Serial No. 603,368. (Cl. 127—7.)

1. In the art of refining sugar, the process which consists in bleaching a cold solution of sugar of a density of substantially 20° Baumé by subjecting it to the action of ozone or ozonized air.

2. In the art of refining sugar, the process which consists in bleaching a solution of sugar by ozone, utilising a portion of the solution thus bleached for washing raw sugar crystals, and utilising another portion of said bleached solution for dissolving sugar crystals free from syrup.

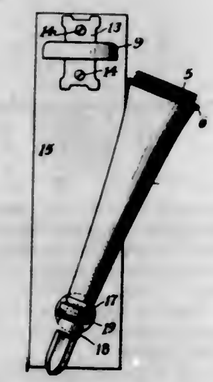
3. In the art of refining sugar, the process which consists in bleaching a cold solution of sugar of a density of substantially 20° Baumé by subjecting it to the action of ozone or ozonized air, and using a portion of the solution thus bleached for washing raw sugar.

4. In the art of refining sugar, the process which consists in bleaching a cold solution of sugar of a density of substantially 20° Baumé by subjecting it to the action of ozone or ozonized air, using a portion of the solution thus bleached for washing raw sugar, and using a further portion of the said solution for dissolving sugar crystals free from syrup.

5. The continuous process of refining sugar which consists in removing adhering syrup from a batch of raw sugar, bleaching said syrup, washing a further batch of raw sugar by a part of the solution thus bleached, and dissolving sugar free from syrup in another portion of the said bleached solution.

[Claims 6 and 7 not printed in the Gazette.]

1,063,709. VASE FOR VEHICLES. JOHN E. MARSDEN, Philadelphia, Pa. Filed Aug. 14, 1912. Serial No. 714,964. (Cl. 248—20.)



1. The combination with a vase member, of a supporting bracket therefor, a ring carried by said bracket and having a lip extending over the edge and into said vase and disposed at a distance from the inner wall of said vase, and a ring member secured to said vase registering with said first named ring.

2. The combination with a vase, of a bracket, a screw threaded ring supported by said bracket, a screw threaded ring secured to said vase and adapted to be screwed into said first named ring, and a lip integral with said first named ring extending across the top edge of said vase and having its inner end forming a ring of diameter less than the internal diameter of said vase.

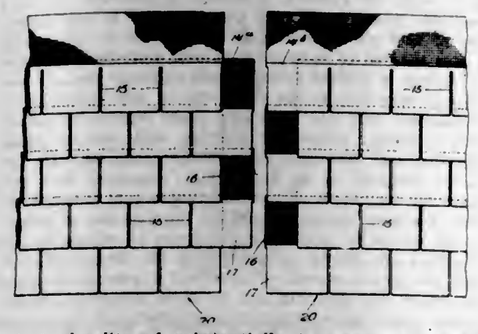
3. The combination with a vase, of a circumferential rib thereon, a ring member having a projection engaging beneath said rib, a second ring member screw threaded to said first named ring member, a bracket to which said second ring member is secured, and an annular lip on said second ring member extending across the top of and downwardly toward said vase and separate therefrom.

4. The combination with a vase member, a movable support for the lower end thereof, a ring engaged by the upper end thereof, and a lip on said ring extending over the edge of said vase member and disposed at a distance from the inner wall thereof.

5. The combination with a vase, of a support therefor, a ring pivoted to said support, and a ferrule on said vase disposed within said ring.

[Claims 6 to 8 not printed in the Gazette.]

1,063,710. MULTISTRIP KERFED-EDGE ROOFING. WILLIAM F. MCKAY, La Grange, Ill. Filed Aug. 28, 1911. Serial No. 646,526. (Cl. 108—7.)



1. A plurality of substantially homogeneous overlapping strips each having two distinct zones, a thicker zone having its upper surface suitably treated and a thinner zone divided from the thicker zone by a shoulder near the longitudinal central line of the strip, said thicker zone being suitably kerfed from its edge to points near said shoulder; the thinner zone constituting an adhesive-receiving surface for connection of the strip to the strip next above it, the thicker or exposed zone of said upper strip to extend from the adhesive-receiving zone of the lower strip a suitable distance beyond the shoulder freely to overlie the upper unkerfed portion of the exposed strip.

2. A prepared roofing strip kerfed at intervals from one edge inwardly, the kerfed portion constituting the exposed portion of said strip when in use on the roof, and the remaining portion constituting the overlain portion thereof, said overlain portion of the strip being reduced along a line above the ends of said kerfs, the upper surface of said exposed portion and the non-reduced overlain portion being suitably treated for purposes described.

3. An article of manufacture comprising a roofing sheet having from edge to edge thereof a homogeneous impervious body and an upper surface having overlapping shingle-imitating members, the portion of each member which overlies the subjacent member lying freely thereabove and the remaining portion of said overlying member constituting a homogeneous portion of said body of the sheet.

4. An article of manufacture comprising a roofing sheet having from edge to edge thereof an impervious homogeneous body and an upper surface having overlapping shingle-imitating members, a portion of each member freely overlying the subjacent member and the remaining portion of said overlying member being homogeneous with said body of the sheet, the line at which each said member extends from homogeneity with the impervious body to overlie the subjacent member lying uniformly spaced from the extreme edge of said overlying member throughout the length of said sheet.

5. A unit prepared-roofing-sheet formed of a plurality of connected strips, each strip comprising a longitudinal exposed zone, suitably treated to simulate a roofing of shingle construction and partially overlain by the exposed zone of the strip next above it, and a second longitudinal zone wholly overlaid by the exposed zone of the strip next above it, the upper surface of said second zone being depressed below that of the first, and an adhesive material in the space above said depressed surface.

[Claims 6 and 7 not printed in the Gazette.]

1,063,711. [WITHDRAWN.]

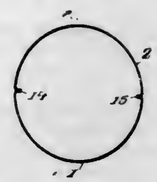
1,063,712. FIREARM-SIGHT. DAVID H. MASTERS and ARTHUR L. CLARK, Gila, N. Mex. Filed Aug. 28, 1912. Serial No. 717,627. (Cl. 42—80.)

As an article of manufacture, a firearm sight, comprising a transversely continuous barrel embracing sleeve, a muzzle sight lip projecting from the forward end of the sleeve body, a spring tongue forming an integral extension of the sleeve and extending backwardly therefrom in the plane of the sleeve wall, a notched sight at the rear extremity of said spring tongue, all of said parts



being integral, and a sight adjusting and clamping screw passing through a threaded opening in said spring tongue and adapted to press directly against the barrel of the firearm, said screw serving to vertically adjust the notched sight and also acting as a binding screw to fasten the device as a whole on the barrel.

1,063,713. METHOD OF MAKING SAUSAGE-CASINGS. SOLOMON MAY, Chicago, Ill. Filed Sept. 3, 1912. Serial No. 718,347. (Cl. 99—8.)



1. The herein described method of making sausage casings consisting in placing the distended surfaces of two sections of intestines in contact, drying said sections until adjacent surfaces adhere, cutting the sections and securing the superposed edges of the section along each longitudinal edge and separating the adjacent faces of the two intestines.

2. The herein described method of making sausage casings, consisting in placing one section of intestine within another, distending the sections until the adjacent surfaces are in contact, drying until said sections adhere, cutting the sections longitudinally and securing the superposed edges of the sections along each longitudinal edge, and separating the adjacent faces of the two sections of intestines.

3. The herein described method of making sausage casings, consisting in placing one section of intestines within another, distending the sections until the adjacent surfaces are in contact, drying until such sections adhere, cutting the sections longitudinally, stitching the superposed sections together along each longitudinal edge, and separating the adjacent faces of the two sections of intestines and turning the casing so as to bring the stitched edges inside the casing.

1,063,714. SAUSAGE-CASING AND METHOD OF MAKING THE SAME. SOLOMON MAY, Chicago, Ill. Filed Sept. 21, 1912. Serial No. 721,570. (Cl. 99—88.)



1. The herein described method of making sausage casings, consisting in placing three or more sections of in-

testines one within another, distending the sections until the surfaces are in contact, drying said sections until the same adhere, cutting the sections longitudinally, securing the superposed edges of the sections along each longitudinal edge, and separating the adjacent faces of two of the sections.

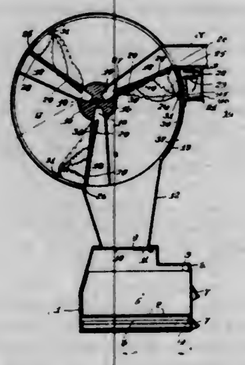
2. The herein described method of making sausage casings, consisting in placing three or more sections of intestines one within another, distending the sections until the surfaces are in contact, drying said sections until the same adhere, cutting the sections longitudinally, stitching the superposed edges of the sections along each longitudinal edge, and separating the adjacent faces of two of the sections and turning the casing so as to bring the stitched edges inside the casing.

3. The herein described method of making sausage casings, consisting in placing four sections of intestines one within another with the natural inner faces of the two inner sections on the outside thereof, and with the natural inner faces of the two outer sections on the inside thereof, distending the sections until the adjacent surfaces are in contact, drying until said sections adhere, cutting the sections longitudinally and stitching along each longitudinal edge, separating the two inner sections from the two outer sections, and turning the casing so that the natural inner faces of the intestines form the outer face of said casing.

4. A sausage casing comprising a plurality of sections of intestines stitched together at each longitudinal edge, certain of said sections being formed by two or more layers of the intestines.

5. A sausage casing comprising a plurality of complete sections of intestines split longitudinally and stitched together along each longitudinal edge, the natural inner faces of said intestines forming the outer face of said casing.

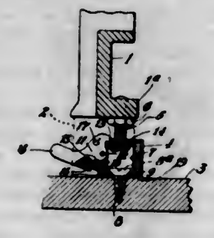
1,063,715. TRAP. EDWARD GEORGE MCCUE, Sharpsburg, Pa. Filed Apr. 8, 1911. Serial No. 619,764. (Cl. 43—34.)



1. In an electric trap, a rotatable conveyer having a pocket, a stationary runway, a stop for normally positioning the conveyer with the pocket in substantial alinement with the runway, a source of electrical energy, a shiftable and a stationary plate carried by said pocket, one of said plates connected to one side of said source, means adapted to be engaged by said shiftable plate when the latter is shifted whereby said shiftable plate is electrically connected to the other side of said source and in connection with said stationary plate forming an electrocuting circuit, means for shifting said stop to release said conveyer, electrical connections connected with said means and adapted to be electrically connected with said plates for forming a circuit to actuate said means to release the stop, and means for making the duration of activity of the circuit for operating the means to release the stop less than the length of activity of the electrocuting circuit.

2. In an electric trap, a rotatable conveyer having a pocket, a stationary runway, a stop for normally positioning the conveyer with the pocket in substantial alinement with the runway, a source of electrical energy, a shiftable and a stationary plate carried by said pocket, one of said plates connected to one side of said source, means adapted to be engaged by said shiftable plate when the latter is shifted whereby said shiftable plate is electrically connected to the other side of said source and in connection with said stationary plate forming an electrocuting circuit, means for shifting said stop to release said conveyer, electrical connections connected with said means adapted to be electrically connected with said plate for forming a circuit to actuate said means to release the stop, means for making the duration of activity of the circuit for operating the means to release the stop less than the length of activity of the electrocuting circuit, and means whereby that circuit to actuate the means to release the stop will act to short circuit the electrocuting circuit during the period of activity of the tripping circuit.

1,063,716. DESK-CLAMP FOR TYPE-WRITING MACHINES. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Sept. 10, 1910. Serial No. 581,374. (Cl. 45—52.)



1. The combination with a typewriting machine, of a base for supporting said machine, angularly adjustable sockets on said base, catches on said machine coöperating to center said machine on said base and to prevent relative transverse movement therebetween, latches on said sockets to engage said catches to lock said machine against vertical movement relative to said base, finger-pieces for releasing said latches, and means for securing said sockets to said base, said sockets having means to maintain the adjustment of said finger-pieces with respect to said base and said machine, so that said finger pieces may be kept projecting outwardly beyond the sides of said machine to a readily accessible position.

2. The combination with a typewriting machine, of a base for supporting said machine, angularly adjustable sockets on said base, means for centrally holding said sockets in place, catches on said machine coöperating to center said machine on said base and to prevent relative transverse movement therebetween, latches on said sockets to engage said catches to lock said machine against vertical movement relative to said base, finger-pieces for releasing said latches, and a single concealed member for securing each of said sockets to said base, said sockets having serrations on the bottom thereof to take into the base and to maintain the adjustment of said sockets, so as to keep the position of said finger pieces such that they will project upwardly beyond the side of said machine.

1,063,717. VALVE-GRINDING TOOL. HOWARD METCALF, Tampico, Ill. Filed Nov. 18, 1911. Serial No. 661,003. (Cl. 81—3.)

The combination with a flat support adapted to be received in a chuck of an attachment therefor comprising a casing, slidably mounted blocks arranged in the casing and having hole engaging fingers, means to adjust the relative position of said blocks, and springs carried by



the support for frictionally engaging the casing to hold the same against accidental disengagement.

1,063,718. BURIAL-CASKET. LEVI H. MONTROSS and FREDERICK L. MONTROSS, Camden, N. J. Filed May 31, 1911. Serial No. 630,441. (Cl. 27—3.)



1. In a burial casket, a rotatable member and a clamp, the former having the latter connected eccentrically therewith, and said member having its mounting in the body of the casket, and said clamp having its head engageable with the lid of the body whereby the rotation of said member causes a crank action of said clamp to effect the tight closure of the lid and body.

2. In a burial casket, a body having a recess therein, shoulders in said recess, a rotatable member mounted in said recess and having projections adapted to engage said shoulders as stops, and a clamp adapted to engage the lid of said body and provided with means for eccentrically connecting it with said member.

3. In a burial casket, a rotatable member mounted in the body thereof, a clamp engageable with the lid of said body, and a foot piece on said clamp adapted to be eccentrically connected with said member in an opening therein, said piece having a lip which is adapted to overhang said opening.

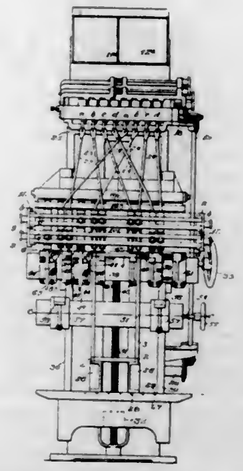
4. In a burial casket, a body formed of an exterior casing of wood, and an interior struck-up lining of metal, the ends of said lining being rounded and portions of the same being set in from the angular corners of said exterior casing.

5. In a burial casket, a body formed of an exterior casing of wood and an interior struck-up lining of metal, said lining having at the top a laterally extending angular rim of differential widths, said rim being integral with said lining and adapted to be seated in the top of the several sides of said body respectively, the ends of said lining being rounded and set in from the corners of said body.

[Claim 6 not printed in the Gazette.]

1,063,719. NAILING-MACHINE. HENRY W. MORGAN, Rochester, N. Y. Filed May 13, 1909. Serial No. 495,816. (Cl. 1—10.)

1. The combination with a nail driving mechanism, of a pair of work supports adapted to be used alternately without changing their position, one of said work supports being in a plane above the other work support when they are in operative position and embodying a pair of anvils spaced apart in order that the work may engage the other support.



2. The combination with a nail driving mechanism, of a pair of work supports adapted to be used alternately without changing their position, one of said work supports being in a plane above the other work support when they are in operative position and embodying a pair of anvils spaced apart and adjustable toward and from each other.

3. The combination with a nail driving mechanism, of a pair of work supports, a rotary screw for operating one of said supports, a nut carried by the other support and coöperating with the screw, and mechanism for rotating the nut.

4. The combination with a frame having a guide thereon, and a nailing mechanism on the frame, of a pair of work supports movable on the guide toward and from the nailing mechanism, a screw connected to one of the supports, mechanism for rotating the screw to move said support, a nut carried by the other support and working on the screw, and mechanism for rotating the nut.

5. The combination with a frame having a vertically disposed guide thereon, and a nailing mechanism on the frame, of a pair of work supports independently movable on the guide toward and from the nailing mechanism and each comprising a pair of anvils, and mechanisms for moving the supports.

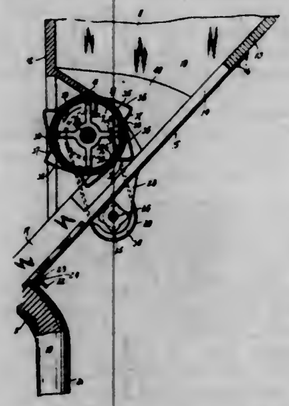
[Claims 6 to 19 not printed in the Gazette.]

1,063,720. FEEDING ATTACHMENT FOR CROWN-CORK-MAKING MACHINES. BERTHOLD NAGY, New York, N. Y. Filed Jan. 11, 1913. Serial No. 741,490. (Cl. 113—113.)

1. In a device of the character described, the combination with a hopper adapted to receive a mass of sealing disks of cork or the like having a discharge opening and an inclined passage leading to said opening, of a chute communicating with said passage, the bottom of said passage and said chute being formed by a movable plate, means for imparting a shaking motion to said plate, a drum mounted above and in alinement with said passage, and a plurality of springs on said drum, said springs serving to permit only those disks to enter said chute which slide on one of their faces in said passage toward said chute and at the same time to agitate the mass of disks in said hopper.

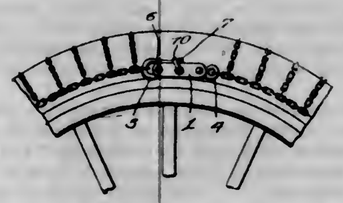
2. In a device of the character described, the combination with a hopper adapted to receive a mass of sealing disks of cork or the like having a discharge opening and an inclined passage leading to said opening, of a chute

communicating with said passage, the bottom of said passage and said chute being formed by a movable plate, means for imparting a shaking motion to said plate, a drum mounted above and in alinement with said passage,



and a plurality of springs on said drum, each spring when in its nearest position relative to the upper face of said movable plate being arranged at a distance so as to permit only such disks to enter said chute which slide on one of their faces in said passage toward said chute.

1,063,721. TIGHTENER. CHARLES B. NELSON, Lindsborg, Kans. Filed Mar. 23, 1912. Serial No. 685,792. (Cl. 24—69.)

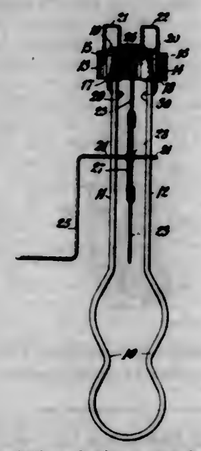


A tightener of the character described embodying laterally spaced plates, end rivets and an intermediate rivet connecting said plates together, a link and a curved latch pivotally mounted on the opposite end rivets, said link and latch being mounted between the plates, thereby spacing them, said latch having a free end formed at its extremity with a lug, said intermediate rivet extending beyond the opposite sides of the tightener, and a substantially U-shaped bail, the opposite ends of said bail extending over the outer sides of said plates and engaging the opposite ends of the intermediate rivet, the free end of the latch being of a length to occupy a position in proximity to the bail, whereby the extremity of said latch and its lug may be engaged with the intermediate portion of said bail between the plates.

1,063,722. STRAND-TWISTING DEVICE. MONTAGUE PALMER, New York, N. Y., assignor to Hugo Rosenstein, Brooklyn, N. Y. Filed Feb. 9, 1912. Serial No. 676,507. (Cl. 244—2.)

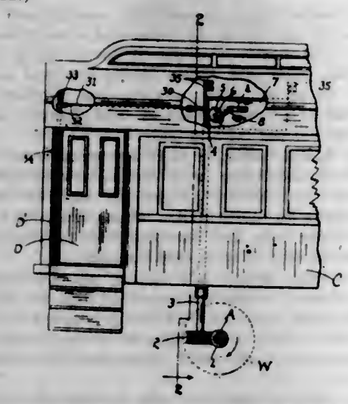
1. A strand-twisting device, comprising a handle, arms extending therefrom, a driving-wheel mounted between said arms, a crank connected with said driving-wheel, and oppositely arranged rotatable twisting-heads mounted on said arms and spring-actuated into contact with said wheel.

2. A strand-twisting device, comprising a flexible handle, arms extending therefrom and movable toward and from each other, a driving-wheel mounted between said arms, a manually-operable crank connected with said driving-wheel, and oppositely-arranged rotatable twisting-heads mounted on said arms and movable therewith into and out of contact with said driving-wheel by flexure of said handle



3. A strand-twisting device comprising a handle, arms extending therefrom, a driving-wheel mounted between said arms, a crank connected with said driving-wheel, twisting-heads mounted rotatably on said arms and adapted to frictionally engage the driving-wheel at opposite sides of the same, and a spring connected detachably with the arms adjacent said twisting-heads and actuating the same toward said driving-wheel.

1,063,723. REGISTER. REUBEN P. PALMER, St. Louis, Mo. Filed May 24, 1912. Serial No. 699,505. (Cl. 234—12.)

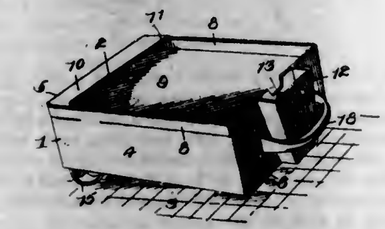


1. In combination with a pair of rolls connected by a web adapted to wind on, and unwind from, the respective rolls, a ratchet disk disposed about the axis of one of the rolls, a second ratchet interposed between the rolls, a stylus carrying member actuated by said second ratchet to and from the web, the stylus being adapted to impinge against the web upon release of the member from a tooth of said ratchet, and suitable devices interposed between the ratchets for successively actuating the ratchets and advancing the same in opposite directions.

2. In combination with a pair of rolls connected by a web winding over one and unwinding from the opposite roll, a ratchet disk secured about the axis of the winding roll, a second ratchet disposed between the rolls on a shaft parallel to the axes of the rolls, an arm having a fixed end, and having its free end riding over the teeth of the second ratchet, a stylus on said arm positioned over the web, a pair of pawls pointing in opposite directions and cooperating with the respective ratchets, and means for imparting reciprocation to the pawls whereby the ratchets are successively advanced in opposite directions, the release of the spring arm from a tooth of the second ratchet causing the stylus to impinge on the web during the period of rest of said web.

3. In combination with a pair of rolls connected by a web winding over one and unwinding from the opposite roll, a ratchet disk secured about the axis of the winding roll, a second ratchet disposed between the rolls adjacent the web and rotating about a shaft parallel to the axes of the rolls, a spring arm having a fixed end, and having a free end riding over the teeth of the second ratchet, a stylus on said arm positioned opposite the web, a pair of pawls pointing in opposite directions and coöperating with the respective ratchets, a crank-disk, a connecting rod connecting the disk to the pawls for imparting reciprocation to the pawls with the rotation of the crank-disk, and means for rotating said crank-disk, the parts operating substantially as, and for the purpose set forth.

1,063,724. REFRIGERATOR DRIP-PAN. RANDALL M. PATTERSON, Waco, Tex. Filed Oct. 9, 1911. Serial No. 653,616. (Cl. 62—10.)

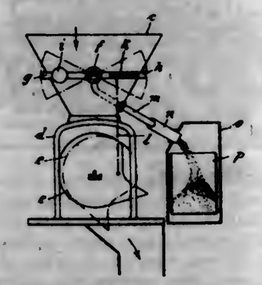


1. A closed drip pan, comprising a top formed with vertical flanges, a trough formed on said top adapted to retain water on said top when carried in a vertical position, a spout formed on one end of said pan, and means to convey the water from said top through the spout and into the pan.

2. A closed drip pan, comprising a top, vertical double flanges formed on said top, a trough formed on said top adapted to retain the water on the top when the pan is carried vertically, a spout formed on one end of said pan, said spout being closed at the bottom and open at the top, and means for conveying the water from the top of the pan into the closed portion thereof.

3. A closed drip pan, a top having double vertical flanges formed at the sides thereof, said top secured into the pan slightly below the top edges thereof, a spout formed on one end of said pan, a notch formed in the upper end of said pan adjacent the spout, an aperture formed in said pan at the front end thereof and a tube secured in said spout, said tube extending nearly the length of the pan.

1,063,725. APPARATUS FOR TAKING SAMPLES FROM GRAIN AND THE LIKE. GEORG PETERSEN, Nicolaieff, Russia. Filed June 11, 1912. Serial No. 703,016. (Cl. 73—21.)



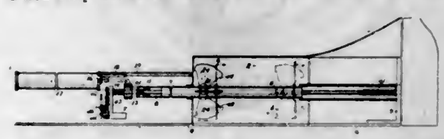
1. In an apparatus for taking samples from a continuous or intermittent current or rushes of wholesale quantities of grain or the like, the combination with a portion of the grain-conduit, of a tube extending into the path of the grain inside said portion; a plurality of lateral apertures in said tube adapted to intercept sample quantities from said grain; a vessel adapted to receive and collect all said sample-quantities, a connection or connections between said apertures and said vessels; and means for automatically closing and opening the said apertures.

2. In an apparatus for taking samples from a continuous or intermittent current of rushes of wholesale quantities of grain or the like, the combination with a portion of the grain-conduit, of a tube extending into the path of the grain inside said portion; a plurality of lateral apertures in said tube adapted to intercept sample quantities from said grain; a vessel adapted to receive and collect all said sample quantities, a tube or tubes leading from said apertures to said vessel, and automatic means for alternately establishing and interrupting the connection between the said apertures and said tube or tubes.

3. In an apparatus for taking samples from a continuous or intermittent current or rushes of wholesale quantities of grain or the like, the combination with a portion of the grain-conduit, of a horizontal tube extending crosswise into and through said portion; a plurality of apertures in the upper and lower wall portion of said tube; means located inside said tube and adapted to establish and interrupt alternately and automatically the connection between the upper and the lower apertures; a vessel adapted to receive and collect the sample-quantities taken by the opened upper apertures; and connections between the lower apertures and said vessel.

4. In an apparatus for taking samples from a continuous or intermittent current or rushes of wholesale quantities of grain or the like, the combination with a portion of the grain-conduit, of a horizontal tube extending crosswise into and through said portion; a plurality of apertures in the upper and lower wall portion of said tube; a shaft inside of said tube; cross-bores in said shaft adapted to coincide with said apertures; means for automatically turning said shaft; a vessel adapted to receive and collect the sample-quantities taken by the opened upper apertures; and connections between the lower apertures and said vessel.

1,063,726. PROPELLER. OLOF PETERSON, Alameda, Cal. Filed July 29, 1912. Serial No. 712,001. (Cl. 115—33.)



1. The combination of a guide having parallel grooves and oblique grooves connecting the parallel grooves at their ends, a sleeve movable longitudinally on said guide, and having a pin engaging said groove, a tube around said sleeve, means for preventing the rotation of said tube, radially extending shafts, in said tube, bevel gears on the inner ends of said shafts, a bevel gear on an end of said sleeve meshing with the aforesaid bevel gears, blades carried by said shafts, and means for reciprocating said tube.

2. The combination of a guide having parallel grooves and oblique grooves connecting the parallel grooves at their ends, a sleeve movable longitudinally on said guide, and having a pin engaging said grooves, a tube around said sleeve, means for preventing the rotation of said tube, said tube extending beyond the ends of the grooves, heads therefor at said extended ends, radially extending shafts in said tube, bevel gears on the inner ends of said shafts, a bevel gear on an end of said sleeve meshing with the aforesaid bevel gears, blades carried by said shafts, and means for reciprocating said tube.

3. The combination of a guide having parallel grooves, and oblique grooves connecting the parallel grooves at their ends, each groove having at one end thereof means for preventing return movement therethrough and for guiding the pin into the other groove, a sleeve movable longi-

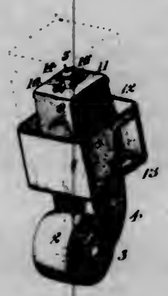
tudinally on said guide, and having a pin engaging said grooves, a tube around said sleeve, means for preventing the rotation of said tube, radially extending shafts in said tube, bevel gears on the inner ends of said shafts, a bevel gear on an end of said sleeve meshing with the aforesaid bevel gears, blades carried by said shafts, and means for reciprocating said tube.

4. The combination of a guide having parallel grooves and oblique grooves connecting the parallel grooves at their ends, a sleeve movable longitudinally on said guide, and having a pin engaging said groove, a tube around said sleeve, means for preventing the rotation of said tube, radially extending shafts in said tube, bevel gears on the inner ends of said shafts, a bevel gear on an end of said sleeve meshing with the aforesaid bevel gears, blades carried by said shafts, means at the edges of the blade for supporting said blades upon one another, and means for reciprocating said tube.

5. The combination of a guide having parallel grooves, and oblique grooves connecting the parallel grooves at their ends, a sleeve movable longitudinally on said guide, and having a pin engaging said grooves, a tube around said sleeve, means for preventing the rotation of said tube, radially extending shafts in said tube, bevel gears on the inner ends of said shafts, a bevel gear on an end of said sleeve meshing with the aforesaid bevel gears, blades carried by said shafts, means for turning said guide through a part of a revolution to reverse the action of said blades, and means for reciprocating said tube.

[Claims 6 to 8 not printed in the Gazette.]

1,063,727. BED-CASTER. WILLIAM J. PIERCE, Eureka, Cal. Filed July 31, 1912. Serial No. 712,463. (Cl. 16—4.)

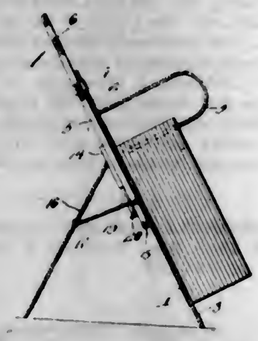


In a caster of the character described, a rectangular casing adapted to inclose the lower end of a square post, which has a square inwardly tapering opening in its lower end, a central cup fitting said opening and having a central perforation at the top, the rectangular sides of which cup are flanged outwardly at the bottom to fit within the casing, and upon which flange the bottom of the post rests, and is clamped between the interior cup and the casing, said casing having a hole in the bottom registering with that in the top of the cup, and adapted to receive the spindle of a roller caster.

1,063,728. PICTURE-SUPPORT. PAXTON POLLARD, Norfolk, Va. Filed May 23, 1911. Serial No. 629,022. (Cl. 40—146.)

1. A picture holding device comprising a plate having a standard rising centrally therefrom, a binding member extending around said plate and below the lower edge thereof and formed to provide supporting legs, the free ends of said binding member being vertically disposed and bearing against said standard, a ring slidably mounted on said standard and said free ends of the binding member, card holding means supported by said plate, and means for holding the device in inclined position.

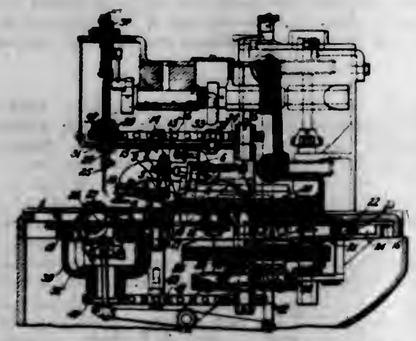
2. A picture holding device comprising a plate having an opening therein and a standard rising therefrom above said opening, a substantially U-shaped card holding member having one end extended through said opening and pivotally secured to said plate and having its free end bent upwardly and bearing against said standard, a ring slidable on said standard and said free end of the card holding member to hold said member in position, and means for holding the device in inclined position.



3. A picture holding device comprising a plate provided with a transverse slot in the rear face thereof, a U-shaped supporting member having oppositely disposed angular portions seated within said slot, a holding plate extending across the back of said first mentioned plate and closing said slot and provided with entrance openings for said angular portions of said member, and card holding means supported by said plate.

4. A picture holding device comprising a plate having its rear face provided with a transverse slot a U-shaped supporting member pivotally mounted on said plate above said slot, a U-shaped strut having angular portions journaled in the legs of said supporting member and having its yoke portion seated within said slot, a latch member pivoted to said plate and depending across said slot, a clip secured to said plate below said slot and adapted to receive said latch member, and card holding means supported by said plate.

1,063,729. BUTTONHOLE-SEWING MACHINE. EUGENE J. RAY, Beverly, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 28, 1912. Serial No. 717,466. (Cl. 112—4.)



1. A buttonhole sewing machine, having, in combination, stitch forming and work holding mechanisms, mechanism for relatively rotating the work holding and stitch forming mechanisms to sew about a buttonhole comprising a rotary driven member, a rotary driving member, continuous connections between the members, and means acting on the connections to vary the movement transmitted to the driven member.

2. A buttonhole sewing machine, having, in combination, stitch forming and work holding mechanisms, mechanism for relatively rotating the work holding and stitch forming mechanisms to sew about a buttonhole comprising a rotary driven member, a uniformly rotating concentric driving member, connections continuously connecting the driving and driven members, and a concentric cam acting on the connections to vary the motions transmitted to the driven member.

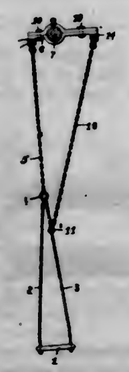
3. A buttonhole sewing machine, having, in combination, stitch forming and work holding mechanisms, mechanism for relatively rotating the work holding and stitch forming mechanisms to sew about a buttonhole comprising a rotary driven member, a uniformly rotating driving member, connections continuously connecting the driving and driven members, and means acting on the connections to accelerate the motion transmitted by the driven member during the sewing about the ends of the buttonhole, and for retarding the motion transmitted to the driven member while sewing along the sides of the buttonhole.

4. A buttonhole sewing machine, having, in combination, stitch forming and work holding mechanisms, mechanism for relatively rotating the work holding and stitch forming mechanisms to sew about a buttonhole comprising a rotary driven member, a uniformly driven rotary driving member, connections between the driving and driven members, and a stationary cam acting on the connections to transmit a variable movement to the driven member.

5. A buttonhole sewing machine, having, in combination, upper and under thread handling mechanisms, rotary supports for said mechanisms, a shaft connected to rotate the supports, a driving member, continuous connections between the shaft and driving member, and means acting on the connections to vary the movement transmitted to the supports during the rotation of the driving member.

[Claims 6 to 8 not printed in the Gazette.]

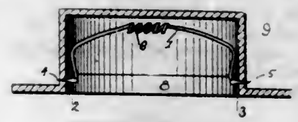
1,063,730. SWING. ROBERT REACH, Philadelphia, Pa. Filed Apr. 25, 1911. Serial No 623,242. (Cl. 155—35.)



1. In combination in an exercising swing, a seat, a suspending connection at each side of the seat, propelling connections and a cross bar attached to the propelling connections, and slidably mounted on the suspending connections to move up and down along the same, substantially as described.

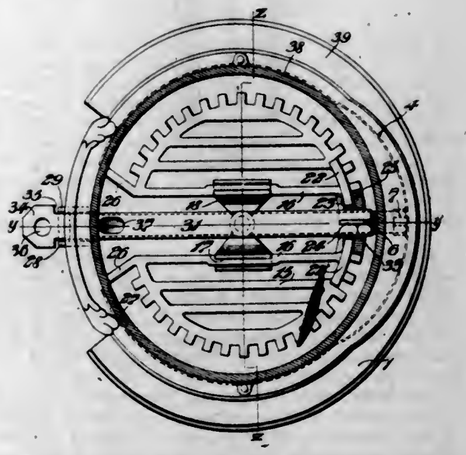
2. In combination in an exercising swing, a seat, a rigid frame attached to the seat at each side thereof and composed of downwardly diverging bars, suspending connections attached to the upper ends of said frames, a cross bar slidably mounted on the front inclined bars, and flexible impelling connections extending from the cross bar upwardly at an angle to the suspending connections, said cross bar spacing the propelling connections apart to prevent entangling of said connections and extending beyond the rigid frame at each side to form hand holds, substantially as described.

1,063,731. HAT-FASTENING DEVICE. IRA LOUIS REEVES, Allerton, Mass. Filed Oct. 10, 1910. Serial No. 586,235. (Cl. 132—25.)



A hat fastening consisting of a continuous piece of wire in bowed form, provided with an integral coiled spring substantially centrally between the ends thereof, the coils of said spring being separated to prevent the same catching in the hair, said ends being turned outward at an angle to the body of the wire and constituting pivots and being adapted to penetrate the band of a hat, whereby said bowed wire can be swung down to engage back of the head or up into the hat, said bowed wire when in the hat being adapted by its resiliency to be held in said hat.

1,063,732. STOVE. SAMUEL V. REEVES, Haddonfield, N. J. Filed Feb. 27, 1912. Serial No. 680,371. (Cl. 126—172.)



1. The combination with a stove base, of a rest bar carried thereby and provided on opposite sides with lateral flanges, a journal rotatably carried by said rest bar, a grate adapted to interlock with said journal and provided with bearing lugs adapted to travel on the flanges of the rest bar, said grate having a portion thereof extending exterior of the base, and a draw bar having means for interlocking with said grate.

2. The combination with a stove base, of a grate rotatably mounted thereon, and a draw bar adapted to extend across said grate and interlock therewith, and having an aperture near its forward end to prevent ashes traveling along said grate exterior of the stove.

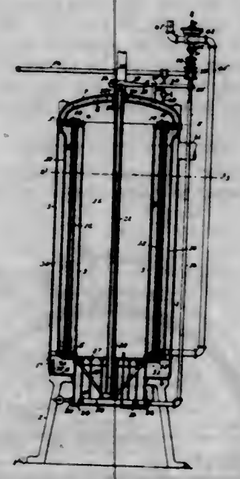
3. In a stove, a base provided with a rib forming a support, a rest bar having one end interlocking with said support, and the other end with the opposite side of said base, said rest bar having guides extending from opposite sides thereof, a journal rotatably mounted on said rest bar and having spaced grooves therein, and a grate having members adapted to interlock with said grooves.

4. In a stove, a base, a rest bar carried thereby, a journal carried by said base and provided with grooves on opposite sides thereof, a grate having members interlocking with said grooves to prevent distortion of said members, said rest bar having a lateral extension on each side thereof coöperating with the grate to cause the latter to travel in a substantially horizontal plane, and actuating means for said grate.

5. In a stove, a base, a rest bar carried thereby having curved tracks, said base being provided with flanges at its front portion, a grate having on both its top and bottom, at its front and rear portions, bearing lugs, said bearing lugs adapted to coöperate with the flanges of said base and said tracks respectively, and a draw bar adapted to pass between said grate bearing lugs and interlock with said grate.

[Claims 6 to 15 not printed in the Gazette.]

1,063,733. WATER-HEATER. JOHN P. REINECKE, Crafton, Pa. Filed Sept. 2, 1911. Serial No. 647,345. (Cl. 126—351.)



1. A water heater comprising a thermostatic casing, an annular water chamber having a combustion chamber formed therein, a burner in said combustion chamber, means for causing the products of combustion to pass through said water chamber and thence in contact with said casing, and means for controlling the flow of fuel to said burner and under control of said casing.

2. A water heater comprising a thermostatic casing, an annular water chamber having a combustion chamber formed therein, a burner in said combustion chamber, tubes for causing the products of combustion to pass from said combustion chamber through said water chamber and thence in contact with said casing, and means for controlling the flow of fuel to said burner and under control of said casing.

3. A water heater comprising a thermostatic casing having a water chamber therein, a burner in said casing, a water valve connected to said chamber, a normally closed fuel valve operated by said water valve and adapted to supply fuel to said burner, means for causing the products of combustion to pass through said water chamber and thence in contact with said casing, and means connected to said fuel valve for regulating the admission of fuel to said burner to correspond to the variations of the temperature in said casing.

4. A water heater comprising a thermostatic casing having a water chamber therein, a burner in said casing, a water actuated valve connected to said chamber, a normally closed fuel valve operated by said water valve and adapted to supply fuel to said burner, means for causing the products of combustion to pass through said water chamber and thence in contact with said casing, means connected to said fuel valve and supported by said casing, and means engaging with said first named means for regulating the admission of fuel to said burner to correspond to the variations of the temperature in said casing.

5. A water heater comprising a thermostatic casing having a water chamber therein, a burner in said casing, a water actuated valve connected to said chamber, a normally closed fuel valve operated by said water valve and adapted to supply fuel to said burner, means for causing the products of combustion to pass through said water chamber and thence in contact with said casing, levers connected to said fuel valve and supported by said casing, and means engaging with said levers for regulating the admission of fuel to said burner to correspond to the variations of temperature in said casing.

[Claims 6 and 7 not printed in the Gazette.]

1,063,734. FILLER-FORM FOR EMBROIDERY. GUSTAV REIS, Fürth, Bavaria, Germany. Filed June 4, 1912. Serial No. 701,490. (Cl. 2—147.)

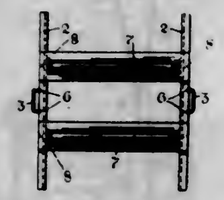


1. A washable filler form embodying an embroidery design adapted to be completely covered by embroidery threads and comprising a flexible form layer of unwoven fibrous or cellulosic material united with a protecting layer of textile fabric.

2. A washable filler form embodying an embroidery design adapted to be covered by the embroidery threads and comprising a comparatively stiff, flexible, transversely arched layer of unwoven fibrous or cellulosic material and a textile fabric layer united to the convex surface of the unwoven layer.

3. A washable filler form embodying an embroidery design adapted to be completely covered by the embroidery threads and comprising a transverse arched non-woven layer of fibrous or cellulosic material, a relatively thin sheet of textile fabric covering the convex surface of said layer, and a binding agent uniting said layer and sheet.

1,063,735. REEL. ADOLPH F. RIETZEL, Charlestown, R. I., assignor to Wallace H. Rowe, Pittsburgh, Pa. Filed Mar. 14, 1910. Serial No. 549,206. (Cl. 242—77.)



1. A metal reel comprising a reel arm consisting of ridged strips spaced apart and united by transverse plates or strips and a reel body secured to said arms.

2. In a metal reel, a reel arm consisting of ridged parallel strips or plates spaced apart and united together and a reel body welded to the ridges of said plates or strips.

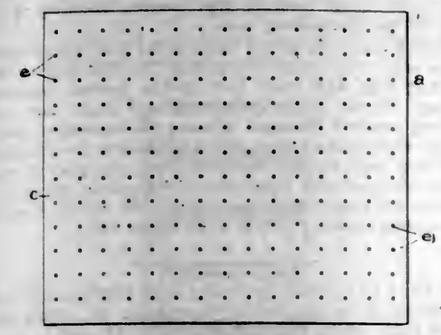
3. In a metal reel, a reel arm consisting of parallel flanged plates or strips spaced apart, transverse flanged plates welded by the flanges to the flanges of said parallel strips and a reel body welded to the flanges of said parallel strips.

4. In a metal reel, a reel arm consisting of parallel metal plates or strips spaced apart, means connecting said strips and a reel body comprising longitudinally flanged strips welded to said arm by said flanges.

5. In a metal reel, a reel arm consisting of ridged metal plates or strips spaced apart, means welded to and connecting said strips and a reel body comprising strips provided with flanges and welded to the ridges of said arms.

[Claims 6 and 7 not printed in the Gazette.]

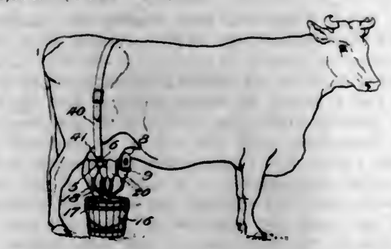
1,063,736. COMPOSITE BOARD. EDWARD C. ROBERTS, Saltville, Va. Filed Mar. 5, 1910. Serial No. 547,538. (Cl. 20—13.)



1. A composite board, consisting of wooden veneer layers having a hard waterproof homogeneous chemically-neutral cement connection between and permeating the same, and an exterior coating of thick hard homogeneous chemically-neutral waterproof cement, said coating having fine sand embedded below the surface thereof in a distributed manner.

2. A composite board, consisting of wooden veneer layers having a hard waterproof homogeneous chemically-neutral coal tar cement connection between and permeating the same, and an exterior coating of thick hard chemically-neutral waterproof gelatin cement having potassium chromate as an ingredient, said coating having fine sand embedded below the surface thereof in a distributed manner.

1,063,737. MILKING-MACHINE. REUBEN D. ROTH, Gettysburg, Pa. Filed Nov. 21, 1911. Serial No. 661,594. (Cl. 31—96.)



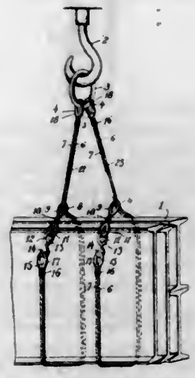
1. A milking machine comprising a plate, cups mounted thereon, movable blades located in the cups, means for operating the blades, and a cruciform plate supported from the first mentioned plate and having its branches disposed above and between the cups.

2. A milking machine comprising a plate, cups mounted thereon, movable blades located in the cups, means for operating the blades, a cruciform plate supported from the first mentioned plate and having its branches disposed above and between the cups and means for moving said plates with relation to each other.

3. A milking machine comprising a plate, cups mounted thereon, movable blades located in the cups, a shaft journaled upon the plate, and resilient means operatively connecting the cups with the shaft.

1,063,738. WIRE HOISTING-BRIDLE. MARTIN V. B. RULAND, Brooklyn, N. Y. Filed Dec. 9, 1912. Serial No. 735,596. (Cl. 57—11.)

1. The hoisting bridle comprising a rigid ring support, two wire rope gromet slings permanently connected to said support by integral loops formed in said slings, reinforcing thimbles in said loops and provided with gripping lugs engaging the adjacent wire of the loops, a running connection loosely mounted on each of said slings and comprising a wire rope gromet looped around said sling and provided with a soft metal reinforcing thimble and a fastening device coöperating with said running connection and with the free end of said sling and comprising a hook permanently secured to said running connection to have its hooked end upstanding and coöperate with a terminal fastening loop on the sling provided with a reinforcing thimble.



2. The hoisting bridle comprising a ring support, two wire rope gromet slings permanently connected to said support by integral loops formed in said slings, a running connection loosely mounted on each of said slings and comprising a wire rope gromet looped around said sling and a fastening device coöperating with said running connection and with the free end of said sling and comprising a hook permanently secured to said running connection to have its hooked end upstanding and coöperate with a terminal fastening loop on the sling provided with a reinforcing thimble.

3. The hoisting bridle comprising a support, two wire rope gromet slings permanently connected to said support by integral loops formed in said slings, a running connection loosely mounted on each of said slings and comprising a wire rope gromet looped around said sling and a fastening device coöperating with said running connection and with the free end of said sling and comprising a hook permanently secured to said running connection to have its hooked end coöperate with a fastening on the sling.

4. The hoisting bridle comprising a support, two wire rope gromet slings permanently connected to said support by integral loops formed in said slings, a running connection loosely mounted on each of said slings and a fastening device coöperating with said running connection and with said sling and permanently secured to said running connection.

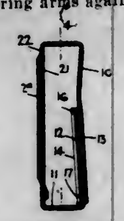
5. The hoisting bridle comprising a support, a plurality of wire rope gromet slings permanently connected to said support by integral loops formed in said slings, a wire rope running connection loosely mounted on each of said slings and comprising a gromet looped around said sling and provided with a thimble and a fastening device coöperating with said running connection and with the free end of said sling and comprising a hook permanently secured to said running connection to have its hooked end upstanding and coöperate with a terminal fastening loop on the sling.

[Claims 6 to 16 not printed in the Gazette.]

1,063,739. STRAP-LOOP. LOUIS SANDERS, New York, N. Y. Filed May 21, 1912. Serial No. 698,775. (Cl. 24—182.)

1. A strap loop, comprising two opposed U-shaped members slidably connected, one of said members having a spring arm normally tending to spring outward and movable into engagement with the adjacent arm of the other member when in the closed position, to hold the spring arm in the inner position.

2. A strap loop, comprising two opposed U-shaped members slidably connected together, one of said members having spring arms normally tending to spring apart and engaging the arms of the other member when in closed position to restrain the spring arms against springing apart.



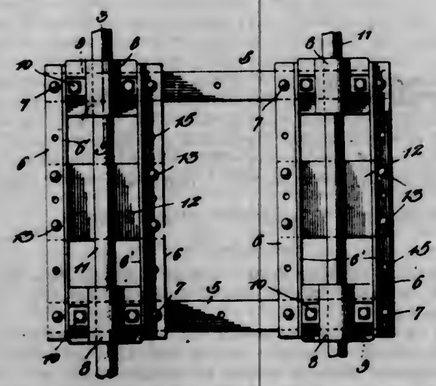
3. A strap loop, comprising two opposed U-shaped members, one of the members presenting a longer and a shorter arm, the longer arm sliding on the inner face of an arm on the opposed U-shaped member, said arm of the opposed member having interior flanges guiding the mentioned longer arm of the opposed member.

4. A strap loop, comprising a U-shaped member having arms tending to spring apart, one of said arms having a depressed front portion and an opening in the rear of said depressed portion, and the other arm of said member having a guideway on its inner face, and a second U-shaped member oppositely disposed to the first, said second member having a longer and a shorter arm, the longer arm engaging the mentioned guideway of the first member, and the shorter arm being movable over the depressed portion of the opposed arm of the other member and through the mentioned opening in said arm.

5. A strap loop, comprising a U-shaped member presenting two arms, one of said arms being offset outwardly and having flanges at the interior extending toward each other and spaced from the inner face of the opposite portion, and the other arm of said member having an opening near the front thereof, leading to the interior of the loop, and a second U-shaped member oppositely disposed to the first member and presenting longer and shorter arms, the longer arm having a sliding connection with an adjacent arm of the opposed U-shaped member and beneath the mentioned flanges and formed with an inwardly extending projection, the offset arm of the opposed member having a stud near its outer end against which said projection is movable, the shorter arm of the second U-shaped member being movable into the opposed arm of the other U-shaped member to the inner side of the said arm.

[Claim 6 not printed in the Gazette.]

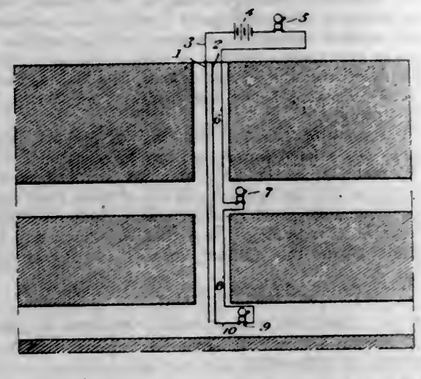
1,063,740. CAR-TRUCK. WILBERT C. SCHADE, Cherry Tree, Pa. Filed Mar. 30, 1912. Serial No. 687,470. Renewed Nov. 1, 1912. Serial No. 729,130. (Cl. 105—32.)



1. In a car truck, parallel longitudinal bars, spaced transverse angle bars arranged at each end of the longitudinal bars and beneath the same and rigidly secured to said longitudinal bars, bracing plates connecting said angle bars, the vertical depending flanges of said angle bars being opposed, axle bearing members arranged between the opposed flanges of the angle bars at opposite ends thereof, and bolts rigidly securing said bearing members to the ends of the longitudinal bars.

2. In a car truck, spaced longitudinal bars, spaced transverse angle bars rigidly connecting the longitudinal bars at their ends, said angle bars having opposed depending flanges, bracing plates connecting said angle bars, axle bearing members arranged between the depending flanges of the angle bars at their ends and beneath the longitudinal bars, said bearing members being provided in their upper surfaces with longitudinally extending channels to receive the longitudinal bars, and bolts rigidly securing the bearing members to said longitudinal bars.

1,063,741. ELECTRIC SAFETY SIGNAL DEVICE. JOSEPH A. SCHELLENGER, Harrisburg, Ill. Filed May 26, 1911. Serial No. 629,642. (Cl. 177—336.)

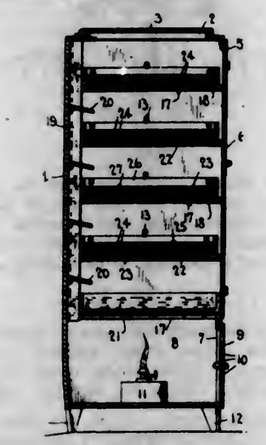


In a signal system for mine shafts, the combination with the shaft and a cage slidable therein, of a pair of rigid conductors secured to one wall of the shaft adjacent the path of travel of the cage and spaced apart, an electric circuit and a source of energy therein, said rigid conductors forming overlapped terminals of the circuit and having connections with the circuit at relatively opposite ends, a plurality of signal devices connected in series in the circuit and adapted to be arranged at the various levels in the mine and adjacent the cage hoist, means carried by said cage and operable to bridge the said rigid conductors in the movement of the cage whereby the signal devices may be operated, and means for holding the last-named means out of contact with the rigid conductors.

1,063,742. SEED-SPROUTER. HERMAN SCHULTZ, Parkersburg, Iowa. Filed Sept. 23, 1912. Serial No. 721,911. (Cl. 47—30.)

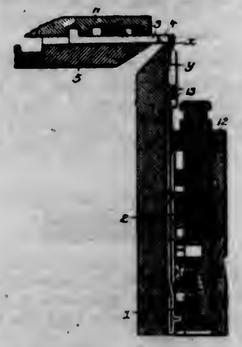
1. A seed sprouter comprising a casing having therein top and side openings and ventilating openings, a ventilated cover to close said top opening, doors to close said side opening, one of said doors having ventilating openings, a heating compartment in the lower portion of said casing, a heat supplying medium arranged in said compartment, damper plates arranged over the ventilating openings in the casing, whereby the size of the said openings is regulated, series of tray supporting cleats, arranged in the casing, seed supporting trays engaged with said cleats, a spacing strip arranged between the rear wall of the casing and the trays, and vapor deflecting plates arranged between the trays.

2. A seed sprouter comprising a casing, a series of tray supporting cleats arranged therein and having their outer edges inclined downwardly, downwardly inclined vapor deflecting plates secured to the rear wall of the casing between said tray supporting cleats, a water tray arranged on the lower cleats of the casing, seed supporting trays on the cleats in the upper portion of the casing above said water tray, said seed supporting trays having perforated bottoms, absorbent pads adapted to be placed in the trays over the perforated bottoms thereof, space forming screens arranged over said pads, and clamps detachably secured to the ends of the trays to removably secure said screens and pads therein.



3. In a seed sprouter, a seed sprouting tray having a perforated bottom, an absorbent pad engaged with said bottom, a spacing screen arranged over said pad, and clamping plates secured to the ends of the tray to engage said screen and thereby hold the same and said pad in position in the tray.

1,063,743. KNITTING-MACHINE. ROBERT W. SCOTT, Leeds Point, N. J., assignor to Scott & Williams, Incorporated, Camden, N. J., a Corporation of New Jersey. Filed June 28, 1911. Serial No. 635,880. (Cl. 66—21.)

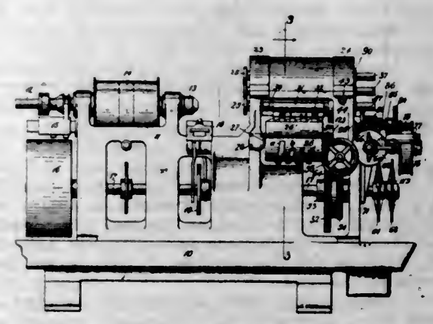


1. A knitting machine having two sets of needles alternately disposed, means for knitting upon said needles, means for causing needles of one set to knock over their stitches in advance of preceding needles of the other set, and means for displacing said preceding needles in a direction transverse to that of their reciprocation so as to cause the stitches upon them to draw upon the stitches knocked over by the other needles.

2. A knitting machine having two sets of needles alternately disposed, means for knitting upon said needles, means for causing needles of one set to knock over their stitches in advance of preceding needles of the other set, and reciprocating jacks acting upon said preceding needles so as to cause the stitches upon them to draw upon the stitches knocked over on the other needles.

3. A knitting machine having two sets of needles alternately disposed, means for knitting upon said needles, means for causing needles of one set to knock over their stitches in advance of preceding needles of the other set, a jack bed having therein reciprocating jacks for acting upon the upper portions of the needles and displacing them from their normal position in the needle cylinder, and a cam carrier having cams for actuating said jacks in alternation.

1,063,744. METAL-WORKING MACHINE. ERNEST R. SEWARD, Hartford, Conn., assignor to The Hartford Machine Screw Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 8, 1908. Serial No. 425,961. (Cl. 29—41.)



1. A work spindle with means for operating it, a turret bearing tools, means for rotating the turret, a cam drum, means for driving the drum at a constant rate of tool working speed, tool operating cams of different pitches separately arranged and spaced apart on the drum, and means whereby, without change of cams, any cam may be made to operate successively on any plural number of tools.

2. A work spindle with means for operating it, a turret bearing tools, means for rotating the turret, a cam drum, means for driving the drum at a constant rate of tool working speed, tool operating cams of different pitches separately arranged and spaced apart on the drum, and means whereby, without change of cams, any plural number of cams may be made to operate successively on any tool to produce different feeding speeds of said tools.

3. A work spindle with means for operating it, a tool spindle with means for operating it, a cam drum, means for driving the drum at a constant rate of tool working speed, cams spaced apart on the drum each to wholly operate one of said spindles at a different speed from that imparted by another of said cams, connections between said tool and cams separately adjustable and including a member adjustable independently of the cam to adapt all of the cams to the operation of said tool, and connections to impart a complete rotation to the drum at every tool movement.

4. A work spindle with means for operating it, a turret bearing tools, means for rotating the turret, mechanisms for performing different operations, a cam drum mounted independently of other moving parts, a shaft to drive said drum and directly connected therewith, said connection being interrupted to permit periodical rest of the drum during operation of said mechanisms, and means for operating said shaft.

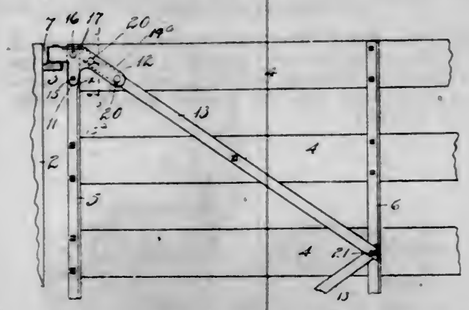
5. A work spindle with means for operating it, a turret bearing tools, means for rotating the turret, mechanisms for performing different operations, a cam drum for placing the tools in the turret in operative position, a driving shaft for said drum directly connected therewith, said connection being interrupted to permit periodical rest of said drum during operation of said mechanisms, and means for driving the cam shaft at a different rate of speed during such disconnection.

[Claims 6 to 52 not printed in the Gazette.]

1,063,745. GATE-HINGE. DAVID SHERMAN, Galesburg, Ill. Filed Jan. 2, 1913. Serial No. 739,714. (Cl. 16—40.)

1. A hinge having a pintle-receiving portion and a body portion extended to form a leaf, the body portion provided

with a rectangular, vertically arranged channel adapted to receive a gate standard and to lock it from forward, rearward, and outward movement, the front and rear portions of said channel being afforded by abutments.



2. A hinge member having a pintle-receiving portion and a body portion extended diagonally to form a leaf, there being a vertical projection provided with a rectangular channel which is coextensive with said body portion, the front and rear portions of said channel being afforded by abutments.

3. A hinge member having a pintle-receiving heel and having both a vertically and a diagonally arranged arm each of which is provided with a channel, each of said channels afforded by thickening the upper and lower edges of said arms.

4. A hinge structure comprising a casting having a heel portion provided with a pintle-receiving aperture and having a vertically extended midlength projection provided with abutments 9, 9, and 9^a, 9^a, the forward portion being extended diagonally to provide a leaf, said leaf provided with inturned edges 14^a to provide a channel 14.

1,063,746. PROCESS OF PREPARING HYDROGENIZED PRODUCTS FROM UNSATURATED COMPOUNDS. ALADAR SKITA, Karlsruhe, Germany, assignor to C. F. Boehringer & Soehne, Mannheim-Waldhof, Germany, a Firm. Filed Sept. 4, 1912. Serial No. 718,566. (Cl. 87—12.)

1. A process for hydrogenating substances having multiple linkage comprising allowing hydrogen to act upon such a substance in the presence of small amounts of a dissolved compound of a platinum group metal.

2. A process for hydrogenating substances having multiple linkage comprising allowing hydrogen to act upon such a substance in the presence of small amounts of a dissolved palladium salt.

3. A process for hydrogenating substances having multiple linkage comprising allowing hydrogen to act upon such a substance in the presence of small amounts of dissolved palladium chlorid.

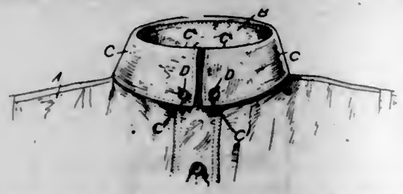
4. A process for hydrogenating substances having multiple linkage comprising allowing hydrogen to act upon such a substance in the presence of small amounts of a dissolved compound of a platinum group metal, the hydrogen being used under a greater pressure than that of the atmosphere.

5. A process for hydrogenating substances having multiple linkage comprising allowing hydrogen to act upon such a substance in the presence of small amounts of a dissolved palladium salt, the hydrogen being used under a greater pressure than that of the atmosphere.

[Claims 6 to 14 not printed in the Gazette.]

1,063,747. COLLAR FOR SHIRTS. BENJAMIN SUNSHINE, New York, N. Y. Filed Oct. 9, 1912. Serial No. 724,721. (Cl. 2—41.)

A convertible soft collar having a neckband and a turned down portion extending over and normally projecting substantially below said neckband, said neckband having fastening members spaced sidewise between the front ends or points of the turned down portion, and said turned down portion having reinforcements in its said ends or points, the upper edges of which reinforcements are spaced from the neckband whereby to leave the soft portions of the collar exposed when the parts are in turned down position, and the said upper edges of the reinforcements coinciding



with the upper edge of the collar when the parts are in upright military position, and said ends or points of said turned down portion being also provided with means whereby to engage the fastening members of the neckband for the purpose of supporting the parts in an upright military position.

1,063,748. MUSHROOMING BULLET. HENRY W. STARKWEATHER, New Haven, Conn., assignor to Winchester Repeating Arms Co., New Haven, Conn., a Corporation. Filed Feb. 6, 1913. Serial No. 746,524. (Cl. 102—28.)



In a mushrooming bullet, the combination with a soft-metal slug having a concentric cavity in its outer end, of a jacket constructed in length with respect to the length of the slug so as to leave a concentric annular portion of the nose of the slug exposed, and a cap inserted into the cavity in the slug and surrounded by the said exposed annular portion of the slug.

1,063,749. MOLD FOR ELECTROTYPING PROCESSES. ARTHUR JAMES TIZLEY, New York, N. Y., assignor to Edward F. Caldwell and Victor J. Von Lossberg, constituting the firm of E. F. Caldwell & Co., New York, N. Y. Filed Mar. 6, 1912. Serial No. 681,915. (Cl. 204—8.)



1. A mold for the purpose described, comprising a series of superposed celluloid foils, and a reinforcing element embodied between said foils near the face where the impression is to be formed.

2. A mold for the purpose described, comprising a series of superposed celluloid foils, and a metallic fabric embodied between said foils near the face where the impression is formed, said fabric being caused to follow substantially the sinuous shape of the impression and help to retain the shape of same in the mold.

1,063,750. OBSTETRICAL INSTRUMENT. ABRAHAM LINCOLN TOWNSEND, Iola, Kans. Filed Apr. 15, 1913. Serial No. 761,376. (Cl. 128—27.)

1. An instrument of the class described including a tube, a rod slidable in the tube and provided with a screw forming a spiral tip and adapted to be projected beyond the tube, and foldable engaging means connected with the rod and foldable against the tube by the outward movement of the rod and adapted to be distended by the inward movement of the rod.

2. An instrument of the class described including a tube provided at its outer end with a cutting edge, and a rod slidable in the tube and provided with a screw arranged to be projected beyond the cutting edge of the tube, whereby the latter will cut the screw loose when the rod is moved inwardly.



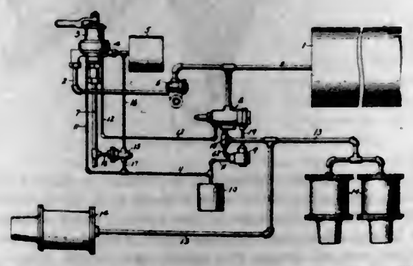
3. An instrument of the class described including a tube provided with a slot or opening, a rod slidable in the tube, and a foldable engaging member extending through the slot or opening of the tube and pivotally connected to the rod and actuated by the latter to engage it with the end walls of the slot or opening, whereby the engaging member is positively moved to a folded position at the exterior of the tube and is carried therefrom to an extended engaging position.

4. An instrument of the class described including a tube provided with opposite slots, a rod slidable in the tube and having a slot, and a pair of hooks or gaffs extending through the slots of the tube and pivoted at their inner ends in the slot of the rod and carried into and out of engagement with the walls of the slots of the tube to fold them against the latter and to extend them therefrom.

5. An instrument of the class described including a tube, a rod slidable in the tube, and a hook or gaff actuated by the rod to fold it against the tube and to extend it therefrom, said hook or gaff being provided with an outer approximately spoon-shaped head presenting when folded an inner concave face and an outer convex face.

[Claim 6 not printed in the Gazette.]

1,063,751. FLUID-PRESSURE BRAKE. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 5, 1904. Serial No. 227,222. (Cl. 188—1.)



1. In a fluid pressure brake, the combination with a main reservoir, engineer's brake valve, and train pipe, of a valve device for controlling the supply of fluid under pressure from the source of pressure to the brake cylinder in service applications, and means operated by the movement of the brake valve in applying brakes to supply fluid to said valve device.

2. In a fluid pressure brake, the combination with a main reservoir, engineer's brake valve, and train pipe, of a valve device for controlling the supply of air from the main reservoir to the brake cylinder, and means for supplying fluid discharged in making reductions for applying the brakes, to said valve device.

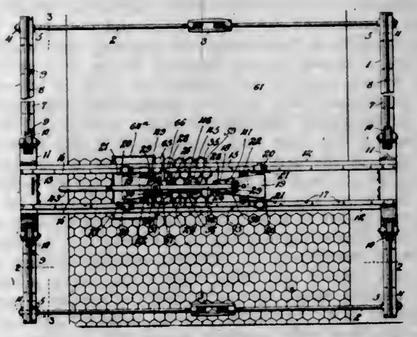
3. In a fluid pressure brake, the combination with a main reservoir, engineer's brake valve, and train pipe, of a valve device for controlling the supply of air from the main reservoir to the brake cylinder, and means operated by the movement of the engineer's brake valve for supplying to said valve device air discharged in making reductions for applying the train brakes.

4. In a fluid pressure brake, the combination with a main reservoir, engineer's brake valve, and train pipe, of a valve device for supplying fluid under pressure from the source of pressure to the brake cylinder and controlled by fluid discharged from the system in making a reduction for applying the train brakes.

5. In a fluid pressure brake, the combination with a main reservoir, and engineer's brake valve having an equalizing reservoir, of a valve device operated by the discharge from the equalizing reservoir for supplying air to the brake cylinder.

[Claims 6 to 37 not printed in the Gazette.]

1,063,752. MACHINE FOR MAKING IMITATION-TILE FLOORING. WILLIAM FRED WALLING, Los Angeles, Cal. Filed Oct. 25, 1911. Serial No. 656,787. (Cl. 94—6.)



1. A machine for producing an imitation tile surface upon impressionable material comprising a carrying means and support therefor adapted to be placed in operative relation to the surface to be impressed, a form or pattern adapted to be supported by the carrying means and constituting a fractional portion of the complete pattern to be produced by successive impressions made by the fractional pattern, and manipulating means on the carrying means for the fractional pattern or form having a predetermined range of movement to cause successive impressions of sensibily even depth in the surface to be treated.

2. A machine for treating surface to produce an imitation tile finish thereon comprising a frame composed of sills, each with a track member thereon, adjustable connectors between the sills, a carrier adapted to the tracks on the sills, coacting positioning means on the carrier and form for locating the carrier at predetermined points on the frame, tracks on the carrier extending therealong in a direction differing from the direction of extension of the tracks on the frame, a carriage adapted to the tracks on the carrier, coacting positioning means on the carriage and carrier for locating the carriage at predetermined points on the carrier, a pattern support on the carriage, and means for the manipulation of the pattern carrier to move the pattern carried thereby into

impressing relation to the surface to be treated when the machine is in operative relation to such surface.

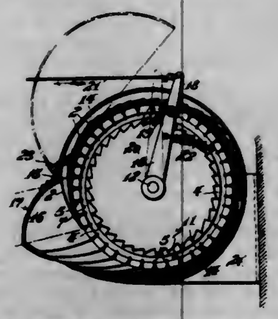
3. A machine for treating impressionable surfaces to finish such surfaces in imitation of tiling comprising a frame consisting of spaced sills each carrying a track, connecting rods for the sills each provided with a turnbuckle for adjustment, a carrier having trucks at opposite ends adapted to the tracks on the sills, said carrier including bars connecting the trucks with each bar provided with a track, coacting positioning means on the carrier and supporting frame for locating the carrier at different points along the supporting frame, a carriage having wheels adapted to the tracks on the bars of the carrier, coacting means on the carriage and carrier for positioning the carriage at different points along the carrier, a pattern supported on the carriage, and means on the carriage for the manipulation of the pattern support to move a pattern carried thereby into impressing relation to the surface to be treated.

4. A machine for treating surfaces to finish the same in imitation of tiling comprising a supporting frame composed of sills each carrying a track and connecting rods each including a turn-buckle for adjusting the length of the rods, a carrier having terminal trucks each provided with wheels adapted to a respective track on the sills, and connecting bars for the trucks each composed of two parts joined together for ready separation, tracks carried by the bars and conforming to the separable structure of the bars, a carriage adapted to the tracks on the bars, a form or pattern supported on the carriage, and means on the carriage for the manipulation of the pattern support to move a pattern carried by such support into impressing relation to the surface to be treated when the machine is in operative relation to such surface.

5. A machine for treating surfaces to finish the same in imitation of tiling comprising a supporting frame composed of sills each carrying a track and connecting rods each including a turn-buckle for adjusting the length of the rod, a carrier having terminal trucks each provided with wheels adapted to a respective track on the sills, and connecting bars for the trucks each composed of two parts joined together for ready separation, tracks carried by the bars and conforming to the separable structure of the bars, a carriage adapted to the tracks on the bars, a form or pattern supported on the carriage, and means on the carriage for the manipulation of the pattern support to move the pattern carried by such support into impressing relation to the surface to be treated when the machine is in operative relation to such surface, the carrier and supporting frame being provided with coacting means for positioning the carrier at different points along the frame and the carriage and carrier being provided with coacting means for positioning the carriage at different points along the carrier.

[Claims 6 to 14 not printed in the Gazette.]

1,063,753. STREET-CAR INDICATOR. DAVID H. WARD, Vancouver, British Columbia, Canada. Filed Dec. 27, 1912. Serial No. 738,782. (Cl. 40—73.)



1. A display mechanism, comprising in combination, a flanged reel each flange having a circumferential groove on its outer surface and a series of display cards, a tape secured to each card, wire pivots carried by said tapes and removably secured across the circumferential grooves of the flanges.

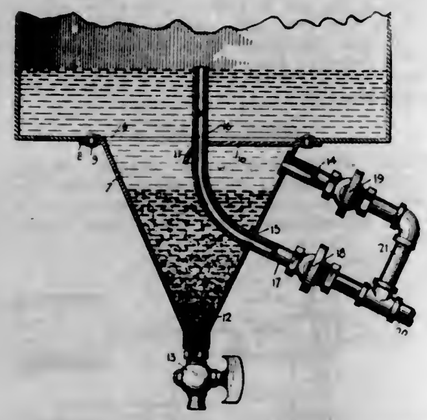
2. A display mechanism, comprising in combination, a casing, a shaft rotatably mounted within said casing said shaft having flanges at intervals, each flange having a circumferential groove on its outer surface with a groove on each side a short distance from its outer edge, a series of spring wire loops the inwardly turned ends of which are sprung into the lateral groove of the flange, a series of display cards, and tape loops connecting said cards to the spring wire loops of the flanges.

3. A display mechanism, comprising in combination, a casing, a flanged reel rotatably mounted within said casing, said casing having a display aperture across its front, a series of pivot loops made of thin resilient wire bent to engage the sides of the reel flange and extend across the thickness of the flange, said wire at the center of the flange thickness being bent outward to form a spring, means for connecting a card to the horizontal portion of the loop where it extends across the flange and means for rotating the reel.

4. A display mechanism, comprising in combination, a casing, card connecting loops having inwardly turned ends, a reel rotatably mounted within said casing said reel having flanges at intervals, each flange having a circumferential groove in its outer surface with cross grooves at intervals for the reception of said card connecting loops and a lateral groove on each side for the reception of the inwardly turned ends of such loops, a series of display cards, tape loops connecting said cards to the said card connecting loops, and means for rotating the reel.

5. In a display mechanism, a rotatable reel having side disks each provided with a peripheral groove to form peripheral flanges, said disks having said grooves, display cards, connecting members joined to said display cards and including portions for clipping over said disks with their ends projected into the side grooves of the disks, said disks having provisions for preventing creeping of said connecting members to maintain said connecting members spaced apart, substantially as shown and described.

1,063,754. GASOLENE-SEPARATOR. CLARK S. WEISS, Belleville, N. J. Filed Feb. 7, 1913. Serial No. 746,792. (Cl. 210—5.)



1. In a gasolene separator, a funnel, a segmental diaphragm projecting from one side of said funnel substantially normal to the axis of the funnel, three alining outlets from said funnel substantially central with said diaphragm and all below the same, and valves for each of said outlets, the intermediate of said outlets having an interior tubular portion leading through and above said diaphragm, and said higher outlet being connected to said intermediate outlet at the exterior of said funnel.

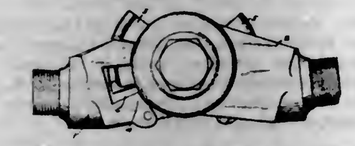
2. In a gasolene separator, a funnel having a flange at the largest portion thereof and a segmental diaphragm lying in the same plane with said flange and extending past the axis of said funnel, said diaphragm having its free end turned toward the converging portion of the funnel, a valve-controlled outlet in the lower portion of said funnel, a valve-controlled outlet directly under said diaphragm substantially central with said diaphragm, and a valve-controlled outlet intermediate said outlets having a tubular portion in said funnel projecting through the curved end of said diaphragm and above the same and lying substantially in the axis of the funnel, said outlet under said diaphragm and said intermediate outlet being connected with each other.

3. In a gasolene separator, a funnel having a segmental diaphragm projecting from one side of the funnel and substantially normal to the axis of the funnel, and a plurality of valve-controlled outlets from said funnel, all below said diaphragm and all at different levels one of said outlets having a tubular extension projecting above said diaphragm.

4. In a gasolene separator, a funnel, a substantially semi-circular diaphragm in said funnel normal to the axis of the funnel, a plurality of outlets from said funnel, each at a different level and all below said diaphragm, and valves for controlling each of said outlets, and one of said outlets having an interior tubular extension projecting through said diaphragm and above the same.

5. In a gasolene separator, a funnel having a segmental diaphragm projecting from one side substantially normal to the axis and having its straight edge curved toward the converging portion of the funnel, a plurality of outlets from said funnel, each at a different level, all in alinement and substantially normal to the said edge of said diaphragm and all below the same, and a valve for controlling each of said outlets, one of said outlets having a tubular portion within said funnel leading through said curved edge of said diaphragm and above the same, said outlet having the said tubular portion being connected to the outlet above, exterior of the funnel and of their valves.

1,063,755. PIPE-COUPLING DEVICE. GEORGE WESTINGHOUSE, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed May 19, 1908. Serial No. 433,684. (Cl. 137—89.)



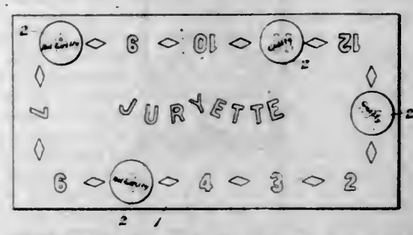
1. A coupling head for pipe couplings comprising a half section having a lateral port opening and flanges adapted to interlock with similar flanges of a counterpart coupling head upon relative rotative movement of the heads, said flanges being provided with lateral through openings through which portions of the flanges of the counterpart head are adapted to pass in one position of rotation.

2. A coupling head for pipe couplings comprising a half section having a lateral port opening and flanges adapted to interlock with similar flanges of a counterpart coupling head upon relative rotative movement of the heads, and lateral through openings in said flanges for permitting lateral movement therethrough of portions of the flanges in a relative rotative position of the heads.

3. A coupling head for pipe couplings comprising a half section having a lateral port opening and flanges adapted to interlock with similar flanges of a counterpart coupling head upon relative rotative movement of the heads, said flanges having lateral openings therethrough to permit coupling with a counterpart head by relative lateral and then rotative movement of the heads.

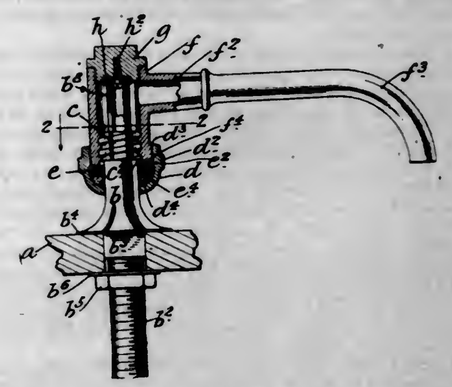
4. A coupling head for pipe couplings comprising a half section having a lateral port opening provided with a gasket and flanges adapted to interlock with similar flanges of a counterpart head upon relative rotative movement of the heads and lateral openings through said flanges to permit the lateral passage of flange portions of the counterpart head and thereby the lateral engagement of the gaskets of the two heads at a position in rotation intermediate the usual coupling and uncoupling positions.

1,063,756. GAME APPARATUS. CHARLES S. WHEATLEY, Needham Heights, Mass. Filed Apr. 11, 1911. Serial No. 620,494. (Cl. 46—63.)



A game apparatus consisting of a board provided with consecutively arranged numbers from 1 to 12 inclusive designating jurymen, and a plurality of checks having indicia of "Yes" on one side and indicia of "No" on the opposite side and adapted to be placed in position on the board to cover the numerals thereon with either side in uppermost position to have positive and negative verdict indicating values.

1,063,757. FAUCET. WALTER WILCOX, New York, N. Y. Filed Aug. 28, 1912. Serial No. 717,493. (Cl. 137—4.)

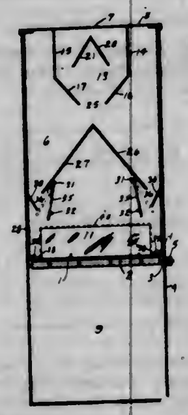


In a device of the class described, a faucet tube provided with a nut which is rigidly secured thereto and a reduced extension, a cap movable on said tube and provided with a packing and a lock washer which bears on said packing, a rotatable nozzle sleeve screwed onto said nut and onto one end of which said cap is screwed so as to force said lock washer into engagement with the said end of the sleeve, means whereby the lock washer and the sleeve are locked together, and means whereby said nut will engage said lock washer when the sleeve is turned in one direction, the other end of said sleeve being provided with a closure device having a valve washer adapted to bear on the reduced extension of the faucet tube.

1,063,758. SAFETY FARE-BOX FOR STREET-CARS. FREDRIC W. YEO and ALFRED J. BOHL, Milwaukee, Wis. Filed Sept. 13, 1911. Serial No. 649,207. (Cl. 232—62.)

1. A fare box consisting of the combination with a till, having an upper wall partially composed of a swinging lid, a receiving compartment mounted upon the till and provided with a slot in its upper wall, two sets of out-

wardly and inwardly deflecting baffles located in the receiving compartment, and swinging fingers pivotally supported underneath the lower outwardly deflecting baffles in a position to swing by gravity into engagement with the lower inwardly deflecting baffles, substantially as described.



2. A fare box consisting of the combination with a till, having an upper wall partially composed of a swinging lid a receiving compartment mounted upon the till and provided with a slot in its upper wall, two sets of outwardly and inwardly deflecting baffles located in the receiving compartment, and swinging fingers pivotally supported underneath the lower outwardly deflecting baffles in a position to swing by gravity into engagement with the lower inwardly deflecting baffles, substantially as described, together with stop rods limiting the inwardly swinging movement of the fingers.

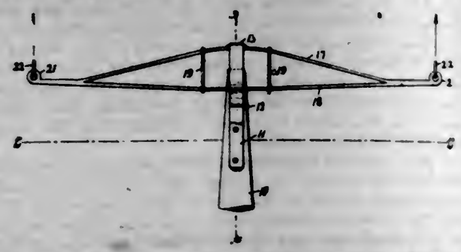
3. The combination with a till, of a flare receiving compartment mounted thereon and provided with a slot in its upper wall, a fare receiving chamber having its walls suspended from the upper wall of said compartment and having a partially closed bottom composed of downwardly and angularly inclined baffle walls, a two way baffle in said receiving chamber located underneath said slot and provided with downwardly and outwardly inclined walls, a second two way baffle in the lower portion of said compartment underneath the opening in the bottom of the receiving chamber, and a set of retaining fingers pivotally supported underneath said last mentioned baffle and adapted to prevent the return of fares from the lower portion of the compartment to a position above such baffle, and manually operated means for discharging fares from the lower portion of said compartment into the till.

4. The combination with a fare receiving till having its top composed in part of a swinging lid, of a fare receiving compartment provided with an open bottom and detachably mounted upon said till, said receiving compartment having a slot in its upper wall, means for securing the upper compartment to the till from within the till, a sight glass mounted in slide bearings in the upper compartment and movable into engagement with said bearings from the open lower end thereof, said sight glass being retained in position by the till when the receiving compartment is secured thereto.

1,063,759. NECK-YOKE. GUST YOUNG, Mora, Minn. Filed Sept. 5, 1912. Serial No. 718,661. (Cl. 21—77.)

1. A device of the class described, comprising a plurality of longitudinal members centrally spaced and integrally joined at their extremities, said members forming a triangle in cross section, and substantially triangular transverse reinforcing members arranged in the middle of the device engaging said longitudinal members, and forming a loop with two of said longitudinal members.

2. A device of the class described, comprising three longitudinal members centrally spaced and integrally joined at their extremities, said members forming a triangle in cross section, and substantially triangular transverse reinforcing plates having means at each corner adapted to engage said longitudinal members and maintain said longitudinal members in a predetermined position, and a loop formed by two of said longitudinal members and the said reinforcing plates.

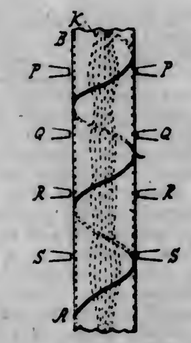


3. A device of the class described, comprising three longitudinal bars centrally spaced and joined integrally at their ends, two of said bars spaced apart substantially vertical and the third of said bars being normal to the two said bars and in front of them, two transverse centrally disposed plates near the middle of said bars engaging and reinforcing the same, and a loop formed by the said two substantially vertical bars and the said transverse plates to engage the tongue of a wagon, whereby only a limited side motion of the neck yoke is permitted.

4. The combination of a tongue cap having a reëntrant formed portion and shoulders, and a neck yoke consisting of a plurality of longitudinal members centrally spaced and joined near their ends, said members being arranged to engage respectively said shoulders and reëntrant portion.

5. The combination of a tongue cap having a reëntrant formed portion provided with means to normally close said reëntrant portion, and two shoulders positioned above and below the tongue, and a neck yoke consisting of three longitudinal bars centrally spaced and joined at their ends, one of said longitudinal bars engaging said reëntrant portion and the other two engaging the upper and lower shoulder of said cap and bearing against same, and two transversely triangular plates centrally disposed near each side of said cap and in engagement with said bars, thereby reinforcing the said bars.

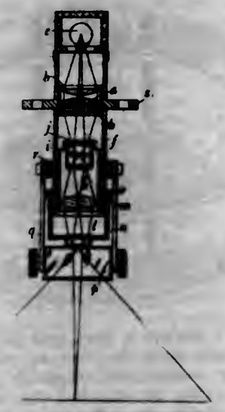
1,063,760. PRODUCTION OF LONG STABLE ELECTRIC ARCS. JONATHAN ZENNECK, Danzig-Langfuhr, and KARL VOLLMER, Jena, Germany, assignors to Norsk Hydro Elektrisk Kvaelstofaktieselskab, Christiania, Norway, a Corporation of Norway. Filed May 13, 1912. Serial No. 696,974. (Cl. 204—31.)



1. The improvement in the production of long stable electric arcs by means of an enveloping current of gas possessing a whirling motion which consists in subjecting the said arc to the action of magnetic fields.

2. The improvement in the electric production of endothermic reactions in gases which consists in maintaining a current of the gas possessing a whirling motion around an electric arc which is subjected to the action of a magnetic field.

1,063,761. LEVEL AND THE LIKE. ARTHUR CYRIL WEBB ALDIS, Birmingham, England. Filed June 7, 1911. Serial No. 631,714. (Cl. 73—70.)



1. In levels and the like, an optical system consisting in part of a bubble arranged to act as a lens and means whereby movements of an image due to displacement of the bubble can be viewed, substantially as described.

2. In levels and the like, the combination comprising a bubble arranged to act as a lens and means whereby movements of an image due to displacement of the bubble can be viewed, substantially as described.

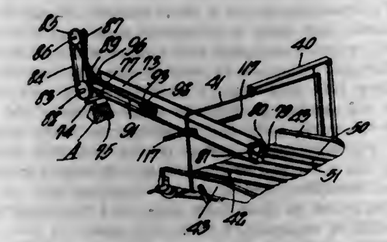
3. In levels and the like, the combination comprising a pair of lenses formed with an intermediate cavity containing fluid and a bubble, and means whereby movements of an image due to displacement of the bubble can be viewed, substantially as described.

4. In levels and the like, the combination of an optical system consisting in part of a bubble arranged to act as a lens; means for directing light through the bubble, and means whereby movements of an image due to displacements of the bubble can be viewed, substantially as described.

5. In levels and the like, the combination of an optical system consisting in part of a bubble arranged to act as a lens; a lamp situated on one side of the bubble, a condenser on the other side of the bubble, and a screen for receiving an image produced by the bubble, substantially as described.

[Claim 6 not printed in the Gazette.]

1,063,762. FRUIT-DISTRIBUTING TROUGH. GEORGE W. ALLEN, Selma, Cal. Original application filed Oct. 11, 1911, Serial No. 654,168. Divided and this application filed Feb. 8, 1912. Serial No. 676,374. (Cl. 193—4.)



1. The combination with a feed box, of an inclined trough discharging thereinto, and means within the trough for positioning pieces of cut fruit with their cut or flat faces uppermost.

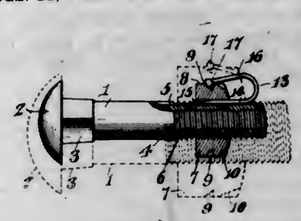
2. The combination with a feed box, of a distributing element discharging into the feed box and including an inclined trough, means for swinging the trough laterally from side to side of the feed box, and means within the trough for positioning pieces of cut fruit with their flat or cut faces uppermost.

3. The combination with a feed box, of fruit distributing means including a trough discharging onto the feed box, a blade projecting into one side of the trough and mounted for rotation, and means for actuating the blade to engage pieces of fruit to position them in the trough with their cut or flat faces uppermost.

4. The combination with a feed box, of a distributing element discharging thereunto and including a trough, means for swinging the discharge end of the trough from one side to the other of the feed box, a revoluble element connected to the trough for positioning pieces of fruit with their cut or flat faces uppermost, and a yielding element supported within the trough for engaging the fruits to position them with their flat faces uppermost.

5. The combination with a feed box, of fruit distributing means discharging into the feed box and including a trough inclined downwardly toward the feed box, said trough being pivotally mounted at its upper end, means for oscillating the trough laterally about said pivot to discharge fruit into the feed box from one side to the other of the box, means for conveying fruit downwardly within the trough to the outlet end thereof, and means within the trough for positioning pieces of cut fruit with their flat or cut faces uppermost.

1,063,763. NUT-LOCK. RAY ALTOP, Columbus, Mont., assignor of one-half to Harry L. Raiff, Columbus, Mont. Filed Jan. 11, 1912. Serial No. 670,679. (Cl. 151—8.)

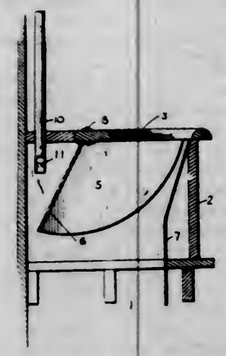


In a nut lock, the combination of a polygonal nut having its facets provided with recesses and its threaded bore provided with a plurality of longitudinal grooves corresponding radially with the recesses, said nut being also provided at its front edges with notches arranged in line with the recesses and forming inclined guiding faces, a bolt arranged to receive the nut and provided in its threaded portion with a longitudinal groove with which the grooves of the nut are adapted to register, and a locking pin fitting in registering grooves of the nut and the bolt and curved outwardly from the latter in a direction transversely thereof in advance of the nut and extended backwardly in a direction longitudinally of the bolt to form an outer leg, the latter being provided with a terminal head to engage a recess of the nut and the locking pin being resilient to enable it to be applied to nuts of different sizes, and the said notches being adapted to receive the outer leg when the locking pin is applied to a relatively large nut.

1,063,764. CLOSET. ELIHU M. ANDERSON, Hugoton, Kans. Filed June 5, 1912. Serial No. 701,773. (Cl. 4—20.)

1. In a closet of the character described, a casing having on its inner face at the front a downwardly and inwardly inclined plate, and an apertured seat hinged to the casing and having on its under side a closure for the casing when the seat is in its normal raised position, said closure comprising downwardly extending side mem-

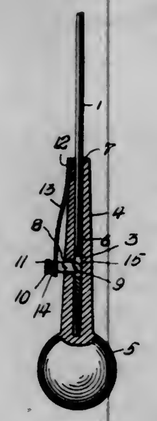
bers having curved edges and a downwardly and rearwardly inclined rear member secured to the side members and engaging the inclined plate of the casing when the seat is raised.



2. In a closet of the character described, a casing, an apertured and hinged seat, and means for holding the seat normally raised, said seat being provided on its under side with depending and connected side and rear flanges forming a closure for the casing, when the seat is raised by their engagement with the front of the casing.

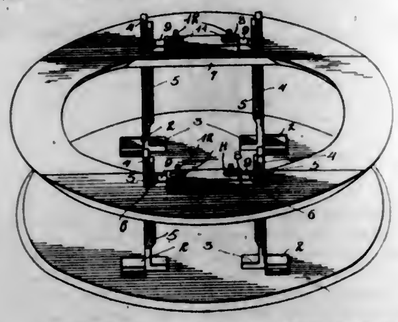
3. In a closet of the character described, a casing, an apertured and hinged seat, and means for holding the seat normally raised, said seat being provided on its under side with means which serves as a closure for the casing when the seat is raised and affords an unobstructed passage when the seat is lowered.

1,063,765. HAT-PIN-POINT PROTECTOR. JOHN W. BAXTER, Wellsville, Ohio, and RICHARD DAVIS, St. Marys, Pa. Filed Mar. 19, 1912. Serial No. 684,840. (Cl. 24—155.)



The combination with a hat pin having its shank formed with a rectangular slot in proximity to its pointed end, of a sleeve having its outer end provided with a head and further formed intermediate its ends with a rectangular opening of less length than the length of the slot and communicating with the bore of the sleeve, a flat tooth having a beveled end, said tooth of less width than the length of said slot and extending through said opening and adapted to have its inner end engaging in said slot for maintaining the pin coupled to the sleeve, an outwardly curved leaf spring having its inner end detachably secured to the inner end of the periphery of the sleeve, said spring of a length as to project beyond said opening, a cylindrical threaded stem projecting outwardly from said tooth and extending through the free end of said spring, and a button secured upon said stem for detachably coupling the tooth to the spring.

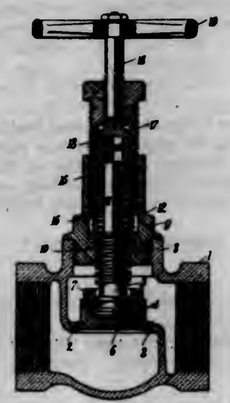
1,063,766. FOLDING SKIRT-MARKER. LYDA BECKER, Indianapolis, Ind. Filed June 25, 1912. Serial No. 705,791. (Cl. 73—48.)



1. In a skirt marker, a base, rack faced standards extending vertically from the base, an indicator ring having apertures to receive said standards, and sliding bolts carried by the ring for engaging the rack faces of the standards to support the indicator ring in adjusted position thereon.

2. A skirt marker comprising a base, keeper members mounted thereon, rack faced standards having feet to removably engage said keeper members, an indicator ring slidably mounted upon the standards, a casing carried by the indicator ring, bolts slidably mounted in the casing, and a spring for projecting said bolts in opposite directions into engagement with the rack faces of the standards.

1,063,767. VALVE. EDWARD BISHOP, Excelsior, Ark. Filed Oct. 13, 1911. Serial No. 654,470. (Cl. 137—4.)



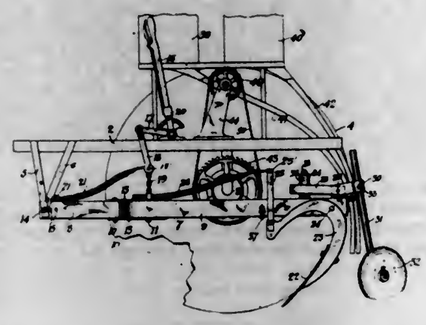
1. The combination of a valve bonnet, a valve stem in said bonnet and being of polygonal cross-section at its inner end, a gland engaging said bonnet and having a bore therethrough, an operating stem received by said bore and extending into said bonnet, said operating stem having a bore corresponding with the cross-section of the inner end of the valve stem and receiving the same, and having a circumferential collar having one side abutting against the inner end of the gland, said bonnet having an internal shoulder, and a spring engaging said shoulder and said collar to hold said collar and the inner end of said gland in engagement with each other.

2. The combination of a valve bonnet, a valve stem entering the same, a gland engaging said bonnet and having a bore, an operating stem received in said bore and extending into said bonnet, the inner ends of the valve stem and the operating stem being shaped to have slidable engagement with each other and to move in unison when the operating stem is turned, the said gland having a conical surface, and the operating stem having a circumferential collar having a beveled surface fitting against the conical surface on the gland, said bonnet having an internal shoulder, and a spring engaging said shoulder and the said collar to hold the beveled surface of the collar and the end of the gland in engagement with each other.

3. The combination of a valve bonnet having a bore therein, a valve stem entering said bore, a gland engaging said bonnet and having a bore therethrough, an operating stem received in said bore, the inner end of said valve stem and said operating stem being shaped to have sliding engagement with each other and to move in unison when the operating stem is turned, the operating stem having a collar to engage the inner end of the gland, said bonnet having an internal shoulder, and a spring engaging said shoulder and said collar to hold the collar and the end of the gland in engagement with each other.

4. The combination of a valve bonnet having a bore therein, a valve stem entering the bonnet and having a portion which is polygonal in cross-section adjacent its inner end, a gland engaging the bonnet having a bore therein, an operating stem passing through said bore and having a bore in its inner end shaped to correspond with the cross-section of the inner end of the valve stem to enable the valve stem and the operating stem to have sliding engagement with each other and to rotate together when the operating stem is turned, the operating stem having a circumferential collar having one side beveled, the said gland having a correspondingly-formed surface to receive said side, said bonnet having an internal shoulder, and a spring engaging said shoulder and said collar to hold the collar and the gland in engagement with each other.

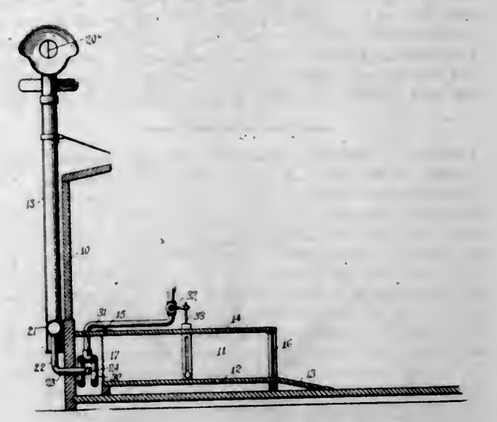
1,063,768. PLANTER ATTACHMENT. WILLIAM OSCAR BOSTROM, Rising Fawn, Ga. Filed May 22, 1912. Serial No. 698,976. (Cl. 11—6.)



1. In combination with a wheeled implement, of a drag beam carried thereby and adapted to swing in a vertical plane, a lever carried by said implement, flexible means having one end connected with said drag beam, mechanism operatively connecting said lever with the other end of said flexible means to impart movement of the former to the latter for controlling the position of said drag beam and to pendently support the same, a spring adapted to tension said flexible means, and a soil working element carried by said beam, substantially as and for the purpose set forth.

2. In combination with a wheeled implement, of a drag beam carried thereby, adapted to swing in a vertical plane and articulated to swing laterally, flexible means for retaining said beam in a predetermined adjusted position laterally with respect to said implement, a lever carried by said implement, flexible means having one end connected with said drag beam, mechanism operatively connecting said lever and the other end of said second mentioned flexible means to impart movement of the former to the latter for controlling the position of said beam in an upright plane and for pendently supporting the same, a spring adapted to tension said second mentioned flexible means, and a soil working element carried by said beam, substantially as and for the purpose set forth.

1,063,769. VENTILATOR FOR BROODER-HOUSES. CHARLES W. BRICK, Crosswicks, N. J. Filed July 9, 1912. Serial No. 708,429. (Cl. 98—27.)



1. The combination with a brooder house and other structure, of an exterior inlet pipe forming an air supply, a header pipe connection between its ends with the inlet pipe, a safety valve arranged at the end of the inlet pipe, and a series of branch pipes tapping the header pipe and extending into the house, to the interior.

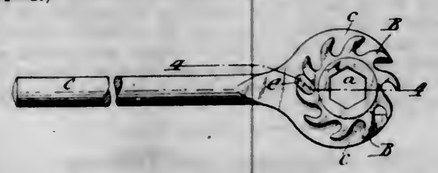
2. A ventilating means for brooder houses and other structures, comprising an exterior standpipe, one end of which constitutes an inlet, the opposite end of the standpipe having an opening, a safety valve commanding said opening, the safety valve being in the form of a disk, a spindle on said disk within the standpipe, a spring on the spindle, a header pipe communicating with the standpipe above the safety valve, and a series of branch distributing pipes extending from the header within the structure to be ventilated.

3. A ventilator for a brooder house and other structures, comprising a supply pipe having an inlet, a safety outlet, and a safety valve commanding said outlet, the said supply pipe having a second outlet between the safety outlet and the inlet, said second outlet being in communication with the interior of the brooder house or other structure.

4. A ventilator for brooder houses and other structures, comprising an exterior supply pipe having an inlet subject to wind pressure, a header connected with said supply pipe, a series of distributing pipes tapping the header and communicating with the interior of the brooder house or other structure, the supply pipe having a safety outlet, and a safety valve commanding said safety outlet.

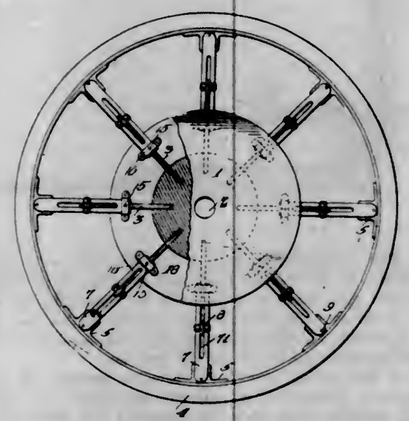
5. A ventilator for brooder houses and other structures, comprising an exterior supply pipe having at one end an air inlet subject to wind pressure, a safety air outlet at the opposite end, an air delivery outlet, between the ends of the supply pipe communicating with the interior of the brooder house or other structure, and a safety valve commanding the mentioned safety outlet and consisting of a closure disk, a stem extending axially within the supply pipe, and a spring on said stem tending to maintain the disk in the closed position.

1,063,770. RATCHET. THOMAS BROCKLEBANK, Buffalo, N. Y. Filed Jan. 16, 1911. Serial No. 602,832. (Cl. 74—1.)



A ratchet comprising a hub provided with an annular row of teeth each of which is of hook form and provided with a convex front side and an undercut or concave rear side, and a handle having a fork the prongs of which straddle said hub and also having a laterally projecting pin which is adapted to engage successively with the convex and concave sides of each of said teeth upon oscillating said handle and pressing the same toward said hub.

1,063,771. WHEEL. SUMMERS BROWN, London, England. Filed Jan. 12, 1912. Serial No. 670,781. (Cl. 152—28.)



1. A resilient wheel, comprising a hub, a rim concentrically disposed relative to said hub and movable relatively thereto, a series of hub springs extending radially from said hub toward said rim, and a pair of spaced apart rim springs carried by said rim for each hub spring, said rim springs disposed on opposite sides of said hub springs and in frictional engagement therewith.

2. A resilient wheel, comprising a hub, a rim concentrically disposed relatively to said hub, telescopic spokes connecting said hub with said rim the members of said telescopic spokes consisting of spring plates, and means carried by said spokes adapted to permit a longitudinal movement of the telescoping parts of the same.

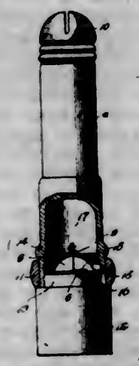
3. A resilient wheel comprising two members, one a hub, and the other, a rim, concentrically disposed relative to said hub, and telescoping spoke connections between said hub and rim, said telescoping connections comprising a flat spring plate disposed transversely of the plane of the wheel, projecting from one of said members and slidably in engagement with a pair of parallelly-disposed flat spring plates projecting from the other of said members.

4. A resilient wheel, comprising a hub member and a rim member, a flat spring spoke connecting said members, said spoke comprising a set of flat springs projecting inwardly from said rim member, a co-acting spring projecting outwardly from said hub member, and clamping means maintaining said springs in position.

5. In combination, a hub, a rim, spokes connecting said hub with said rim and each comprising two spaced members free at one end and a third member adapted to move between the spaced members, plates disposed on opposite edges of the spaced members and with which the said third member has a sliding engagement, a clamp carried by said plates at the free ends of said spaced members and adapted to prevent the said free ends of the members from spreading, and guard plates disposed on opposite sides of said hub and extending at opposite sides of the spokes to maintain said spokes in alinement.

[Claims 6 to 10 not printed in the Gazette.]

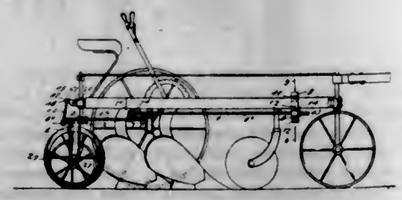
1,063,772. GAS-BURNER. HARRY A. CHIPPENDALE, Wethersfield, Conn., and MABEL KIMMELL, Providence, R. I. Filed Nov. 15, 1911. Serial No. 660,488. (Cl. 67—115.)



1. A gas burner including a burner tube having a closing plate formed with gas passages therein, a valve pivotally mounted on the closing plate and having sections adapted for closing the gas passages, oppositely disposed lips carried by the valve and adapted when the valve is in open position to be impinged by the fluid stream passing through the passages to hold the valve open, and means for returning the valve to closing position upon the cessation of such fluid stream.

2. A gas burner including a burner tube having a closing plate formed with gas passages therein, a valve pivotally mounted on the closing plate and having sections adapted for closing the gas passages, oppositely disposed lips carried by the valve and adapted when the valve is in open position to be impinged by the fluid stream passing through the passages to hold the valve open, means for returning the valve to closing position upon the cessation of such fluid stream, a ring rotatably mounted exterior of the burner tube and a connection between said ring and valve plate.

1,063,773. PACKER ATTACHMENT FOR PLOWS. CHRISTIAN CHRISTIANSEN, Kenmare, N. D. Filed May 29, 1912. Serial No. 700,463. (Cl. 97—44.)



1. In a packer attachment for plows, a roller supporting frame, a supporting plate secured thereto and having in its rear end a series of bolt holes, an upwardly projecting apertured guide lug on the forward end of said plate, a draft rod loosely engaged with said apertured guide lug and having its rear end turned downwardly and threaded for engagement with one of the bolt holes in the rear end of said plate, a retaining nut arranged on the downwardly turned end of said rod, a bracket secured to the plow frame, an eye bolt having an adjustable connection with said bracket and adapted to receive the forward end of said draft rod, a clip adjustably secured to said rod and having an operative engagement with said bolt whereby the rod is adjustably secured thereto, a spacing rod to secure said roller supporting frame to the rear end of the plow, and packing rollers revolubly mounted in said supporting frame.

2. In a packer attachment for plows, a roller supporting frame, a supporting plate secured thereto and having in its rear end a series of bolt holes, an upwardly projecting apertured guide lug on the forward end of said plate, a draft rod comprising forward and rear loosely connected sections, said rear section having its outer end pivotally connected with said attaching plate and having its inner end turned up and threaded, a connecting plate having its rear end turned downwardly and slotted to receive the forward end of the rear section of the rod, said rear section having its threaded inner end loosely engaged with the plate and provided with a retaining nut, said plate having its forward end turned upwardly and provided with an aperture to receive the inner end of the forward section of the rod, a clip to secure said end of the rod to the plate, stop nuts arranged on said end of the rod on opposite sides of said clip, and means to adjustably connect the outer end of the forward section of the rod to the plow frame.

3. In an attachment for plows or the like, the combination of an implement frame, a triangular shaped supporting plate centrally arranged thereon, said plate having in the rear end thereof a series of openings, an upwardly projecting guide lug formed on the forward end of the plate and having a longitudinal recess extending therethrough, a draft rod loosely engaged by said lug and having its rear end turned downwardly and threaded for engagement with one of the openings in the rear end of said plate, a retaining nut arranged on said downwardly turned end, a bracket secured to the forward portion of the plow frame and adapted to adjustably secure the outer end of the draft rod to said frame, and a spacing rod securing said frame to the rear portion of the plow.

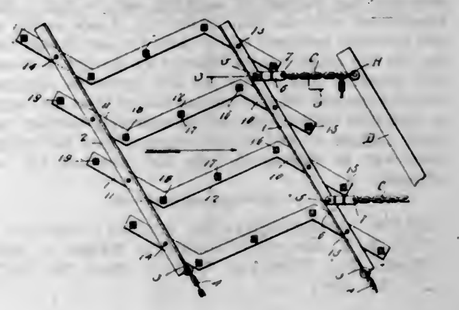
4. In an attachment for plows or the like, the combination of an implement frame, a spacing bar securing said frame to the rear portion of the plow, a draft bar composed of two independent front and rear sections, said rear section having its rear end connected to said frame and its front end upturned and threaded, a triangular shaped connecting plate having the rear end thereof turned downwardly and slotted longitudinally to loosely receive the forward portion of said rear section, the plate having near its front end an opening to receive the end of said rear section, a retaining nut adapted to hold said threaded end in engaged position on the plate, an upwardly projecting lug formed on the forward end of said plate and having thereon an aperture adapted to receive the rear end of said front section, a clip mounted on the rear portion of the plate in which the rear end of the front section is pivoted, stop nuts arranged on said front section on opposite sides of the clip, and a bracket mounted on the forward portion of the plow frame and connected to the front end of the front section of said rod.

1,063,774. HARROW. CHRISTIAN CHRISTIANSEN, Kenmare, N. D. Filed May 29, 1912. Serial No. 700,464. (Cl. 55—3.)

1. The herein described harrow comprising a pair of cross bars, a pair of links connected with the forward bar and to which the draft appliances are attached, a set of tooth bars parallel with each other and zig zag in plan view, pivots between each tooth bar and the cross bars, and teeth carried by said tooth bars.

2. The herein described harrow comprising cross bars, a pair of links pivotally connected therewith and to which the draft appliances are attached, a set of zig zag tooth bars parallel with each other and their front and rear ends passing said front and rear bars respectively, pivots connecting each cross bar with each tooth bar at every point of crossing, and teeth carried by each tooth bar.

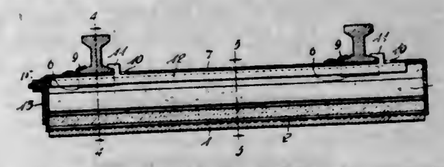
3. The herein described harrow comprising a pair of cross bars, a pair of links pivotally connected therewith and to which the draft appliances are attached, tooth bars each zig zag in plan view with its front arm crossing the forward cross bar, its rear arm crossing the rearward cross bar and its oblique arm disposed between said bars, pivots between each tooth bar and the cross bars where they cross each other, and teeth carried by said tooth bars.



4. The herein described harrow comprising a pair of cross bars, a pair of links pivotally connected therewith and to which the draft appliances are attached, tooth bars each zig zag in plan view with its front arm crossing the forward cross bar, its rear arm crossing the rearward cross bar and its oblique arm disposed between said bars, pivots between each tooth bar and the cross bars where they cross each other, and teeth carried by said tooth bars, one forward of its front pivot, one rearward of its rear pivot, and others between its two pivots.

5. The herein described harrow comprising a front cross bar of angle iron, a rear cross bar parallel therewith and also of angle iron, means for connecting draft appliances to the front cross bar, a set of metallic tooth bars each of which is zig zag in plan view with its front arm lying below the forward cross bar and its rear arm below the rearward cross bar, pivots loosely connecting each tooth bar with the front and rear cross bars where its arms cross them, and teeth secured to and depending upon the various arms of each tooth bar, one of the teeth being forward of the front cross bar and another rearward of the rear cross bar, for the purpose set forth.

1,063,775. RAILWAY-TIE AND RAIL-FASTENING DEVICE. GEORGE J. CLARK, Defiance, Ohio, assignor of one-half to George A. Rigrish, Defiance, Ohio. Filed Feb. 6, 1913. Serial No. 746,605. (Cl. 238—3.)

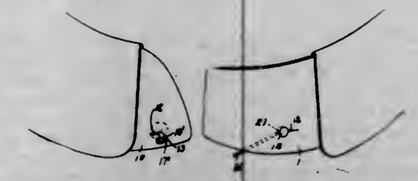


1. A railway tie comprising a reinforced concrete inner member, an outer hollow member or casing adapted to be engaged with said inner member, wooden cushioning strips arranged on the upper side of said inner member between the same and the top of the outer member, resilient cushioning blocks arranged in said strips below the portion of the outer member engaged by the rails, rail fastening clips secured to the outer member of the tie and adapted to engage one side of the rails and removable rail fastening devices arranged in said outer member and adapted to be engaged with the opposite side of the rails from that with which said clips are engaged whereby the rails are fastened to the ties and held against spreading or upsetting.

2. A railway tie comprising a reinforced concrete inner member having therein a longitudinal groove, an outer

metal member or casing adapted to be engaged with said inner member, said outer member having in one end and in its upper side longitudinal slots, rail engaging clips secured to the outer side of said casing member and adapted to engage the inner side of one rail and the outer side of the other rail, a rail fastening bar arranged in said outer casing member and having a threaded outer end projecting through the slot in one end of said casing member, rail engaging lugs formed on said bar and having a sliding engagement with the slots in the top of said casing member, and nuts arranged on the threaded end of said fastening bar and adapted to be screwed up thereon to draw the rail fastening lugs of the bar into operative engagement with the opposite sides of the rail flanges from that engaged by said clips whereby the rails are securely fastened to the outer member of the tie and whereby said fastening devices may be disengaged from the rails and the latter released.

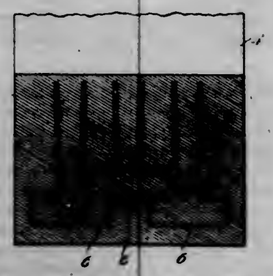
1,063,776. COLLAR-BUTTON. WALTER COCKCROFT, New York, N. Y., assignor of one-half to William J. Murray, Bristol, Pa. Filed Aug. 7, 1912. Serial No. 713,753. (Cl. 24—104.)



1. The herein described collar button comprising two parts adapted to be connected to the corresponding ends of a collar, one of said parts comprising a base, a shank, and a tubular head extending laterally from said shank at an angle to the axis thereof, and the other part comprising a head, a shank, and a bar extending at an angle from the said shank and adapted to cooperate with said tubular head, the axes of said shanks being eccentric to each other when in assembled position, substantially as set forth.

2. The herein described collar button comprising two parts, one part having a base, a shank, a shoulder at the outer end of said shank, and a tubular head extending laterally from said shank at an angle and forming a socket adjacent said shoulder, and the other part comprising a head a shank, and a bar extending at an angle from said shank and adapted to pass through the aforesaid tubular head, bringing the shank of the second part into registry with the aforesaid socket, substantially as set forth.

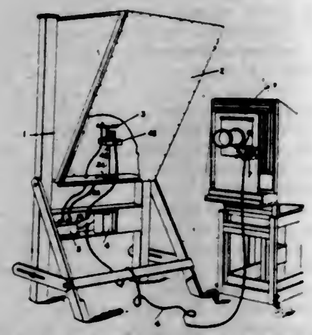
1,063,777. REINFORCED BRAKE-SHOE. JUDSON COOK, Philadelphia, Pa. Filed Feb. 19, 1912. Serial No. 678,452. (Cl. 188—27.)



1. A brake shoe comprising a body portion, inserts embedded therein said inserts being in the form of an open T and having their cross arms overlapping.

2. A brake-shoe comprising a cast metal body portion, inserts embedded therein comprising strips of expanded metal bent to form an open T said inserts being arranged with the cross arms of the T adjacent the back of the shoe in such a way that the ones nearer the sides of the shoe have their cross arms overlapping the central one and a lug carried by said shoe and adapted to secure the same to the brake head.

1,063,778. PHOTOGRAPHER'S FLASH-LIGHT. JAMES LOGAN COURSON, Barberton, Ohio. Filed May 25, 1912. Serial No. 699,826. (Cl. 67—28.)



1. In a device of the character described, a holder formed with a plurality of radiating arms, an insulating and fire-resisting cup arranged on each of said arms, a metallic clamp extending through each of said cups into said receiving arms whereby the cups are rigidly clamped in position, and an electrical conductor is provided through the cups, means for rotating said cups step by step, and means for causing an electrical spark to jump into said cups and make connection with said clamping means whereby powder in said cups will be ignited.

2. In a device of the character described, a plurality of powder receiving receptacles, a supporting arm for each of said receptacles, a rotating shaft secured to said arms, a plate formed with a plurality of stops rigidly secured to said shaft and rotated thereby, means for engaging said stops for preventing a rotary movement of said plate, electrically operated means for intermittently moving said last mentioned means out of the way of said stops whereby said powder receiving receptacles are intermittently rotated, and means for causing an electrical spark to jump into one of said receptacles substantially at the time said receptacles begin their rotary movement.

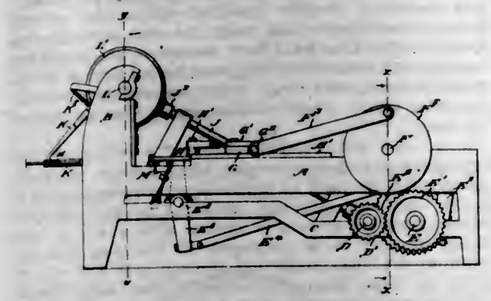
3. In a device of the character described, a plurality of powder receiving receptacles, means for causing a rotation of said powder receiving receptacles, said means including a rotary disk having a plurality of stops arranged thereon, a pivotally mounted pawl arranged in the path of movement of said stops, an electro-magnet for moving said pawl out of the path of said stops, a stationary terminal, a movable terminal arranged in each of said powder receiving receptacles, and means for simultaneously causing current to pass from said stationary terminal to each of said movable terminals as the receptacles come opposite said stationary terminal and to energize said magnet whereby the powder in said receptacles will be successively ignited and said magnet will cause said pawl to be intermittently raised for permitting a rotation of said powder receiving receptacles in order that the various receiving receptacles may be successively positioned adjacent said stationary terminal.

4. In a device of the character described, a plurality of intermittently rotatable powder receiving receptacles, means for rotating said powder receiving receptacles, a stop for each of said receptacles connected with said means, a magnet for limiting the movement of said stops, a circuit for said magnet including the primary of an induction coil, a source of current, and an electrical switch, means for closing said switch, a stationary terminal arranged adjacent the path of movement of said receptacles, coacting terminal arranged in each of said receptacles, and means for connecting the secondary of said induction coil to said terminals whereby when said switch is closed said magnet will be energized and a spark will pass into the powder receiving receptacle positioned opposite said stationary terminal.

5. In a device of the character described, a stationary terminal, a plurality of rotating cups arranged to successively pass said stationary terminal, a second terminal arranged in each of said cups, means for supplying current to said terminals and means for rotating said cups step by step whereby as the cups successively pass said stationary terminal the spark will jump into said cups.

[Claims 6 to 8 not printed in the Gazette.]

1,063,779. HORSESHOE-FORMING MACHINE. STANLEY MARTIN CRONE, Fullerton, Pa. Filed Mar. 4, 1911. Serial No. 612,282. (Cl. 59—50.)



1. In a horseshoe forming machine, the combination of a die for receiving the blank after being bent into horseshoe form, mechanism for bending a billet into horseshoe shape, the same including a former arranged to move the blank and deposit the same upon the beforementioned die, a push bar arranged to move the horseshoe into proper position after being received upon the said die, and a movable die provided with means for forming nail grooves and nail openings in the horseshoe.

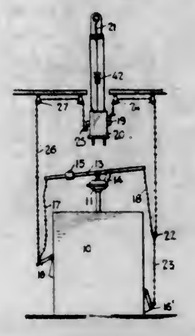
2. In a horseshoe forming machine, the combination of a die for receiving the blank after being bent into horseshoe form, mechanism for bending a billet into horseshoe shape, the same including a former arranged to move the blank and deposit the same upon the beforementioned die, a movable die provided with means for forming nail grooves and nail openings in the horseshoe, a push bar arranged to move the horseshoe into proper position after being received upon the said die, a lever for operating the push bar, and a spring interposed between said lever and push bar.

3. In a horseshoe forming machine, the combination of a die adapted to receive the blank after being bent into horseshoe form, mechanism for bending the billet into the shape of a horseshoe including a former arranged to deposit the horseshoe upon the beforementioned die, means for moving the horseshoe into proper position upon the die, a second die for completing the finish of the horseshoe, and means for removing the finished horseshoe from the die, the same including a reciprocatory pivoted latch which rides over the horseshoe and engages therewith so as to remove the horseshoe from the machine upon movement of the latch in the opposite direction.

1,063,780. HEAT-CONTROLLING SYSTEM. EDWARD P. CULVER, Schenectady, N. Y. Filed Jan. 17, 1913. Serial No. 742,612. (Cl. 236—6.)

1. In a heat controlling system, a combination of a boiler having a cooling damper and a draft damper; a diaphragm actuated by the pressure of the steam within said boiler; an operative connection between said diaphragm and said cooling damper; a thermostat having an operative connection to said cooling damper; a connection between said thermostat and said diaphragm; and an operative connection from said draft damper to said connection between said diaphragm and said thermostat.

2. In a heat controlling system, a combination of a boiler having a cooling damper and a draft damper; a diaphragm actuated by the pressure of the steam within said boiler; an operative connection between said diaphragm and said cooling damper; a thermostat having an operative connection to said cooling damper; a flexible connection between said thermostat and said diaphragm; and an operative connection from said draft damper to said connection between said diaphragm and said thermostat.



3. In a heat controlling system, a combination of a boiler having a cooling damper and a draft damper; a diaphragm actuated by the pressure of the steam within said boiler; said diaphragm being connected to said cooling damper for opening the latter when the diaphragm is actuated in one direction; a thermostat connected to said cooling damper for opening the same independently of said diaphragm; and means controlled by said thermostat and said diaphragm connected with said draft damper for operating the same.

4. In a heat controlling system, a combination of a boiler having a cooling damper and a draft damper; a diaphragm actuated by the pressure of the steam within said boiler, said diaphragm being connected to said cooling damper for opening the latter when the diaphragm is actuated in one direction; a thermostat connected to said cooling damper for opening the same independently of said diaphragm; a flexible connection from said thermostat to said diaphragm; and another flexible connection from said flexible connection to said draft damper for operating the same.

5. In a heat controlling system, a combination of a boiler having a cooling damper and a draft damper; a diaphragm actuated by the pressure of the steam within said boiler, a lever associated with the diaphragm and controlled by the same; a flexible connection from one end of said lever to said cooling damper; a shaft having a pair of oppositely directed cranks; a thermostat for operating said shaft; a flexible connection from one of said cranks to said cooling damper; another flexible connection from an opposite crank to the end of said lever opposite the one connected to said cooling damper; and means connecting said draft damper with said flexible connection between said lever and said crank.

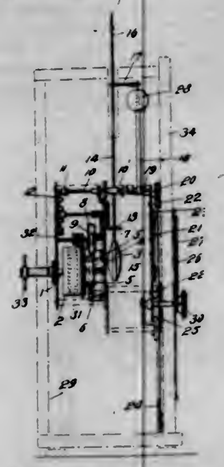
[Claims 6 to 8 not printed in the Gazette.]

1,063,781. MEANS FOR MAINTAINING UNIFORMITY OF MOTION OF SPRING-DRIVEN MECHANISM. HENRY SAVIN DECASTIAU, deceased, Levallois-Perret, France, by Berthe Alphonsine Armandine Guerton vve. Decastiau, residuary legatee, Paris, France. Filed Apr. 22, 1912. Serial No. 692,516. (Cl. 58—48.)

1. In a spring motor the combination of a clockwork mechanism comprising an actuating spring, a brake acting on said clockwork and means controlled by the actuating spring for actuating said brake in accordance with the tension of said spring.

2. In a spring motor the combination of a clockwork mechanism, a spring actuated shaft having a screwed end, a member engaging said screwed end and adapted to

move along said end as the shaft rotates, a brake acting on said clockwork and means actuated by said member for controlling said brake.



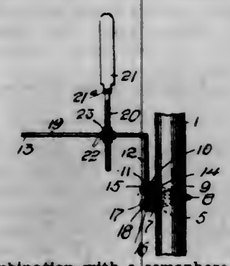
3. In a spring motor the combination of a spring actuated shaft having a screwed end, a member engaging said screwed end and adapted to move along said end as the shaft rotates, a disk actuated by said shaft, a brake block engaging said disk and means actuated by said member to control the action of said brake block.

4. In a spring motor the combination of a shaft having a screwed end, a spring actuating said shaft, a member engaging said screwed end and adapted to move along said end as the shaft rotates, a disk actuated by said shaft, a brake block engaging said disk and means actuated by said member to control the action of said brake block according to the tension of said spring.

5. In a spring motor the combination of a shaft having a screwed end, a spring actuating said shaft, a member engaging said screwed end and adapted to move along said end as the shaft rotates, a disk rotated by said shaft, a brake block engaging said disk, a spring acting on said brake block, an arm carrying said spring, said arm being adapted to be acted on by the member on said screwed shaft to vary the pressure exerted by said spring on said brake block according to the tension of the motor spring.

[Claims 6 to 8 not printed in the Gazette.]

1,063,782. LAMP-BRACKET FOR SEMAPHORE-SIGNALS. GEORGE OTTO DICKEY, Pittock, and CHARLES AUGUSTUS DICKEY, New Sheffield, Pa. Filed Nov. 6, 1912. Serial No. 729,873. (Cl. 248—30.)



1. The combination with a semaphore post, of a clamping member adjustably connected thereto and having an offset portion, an angle bracket pivotally connected to the offset portion of said clamping member, a lamp holder having a stem adjustable laterally, vertically and longitudinally of said bracket, and means carried by the offset portion of said clamping member for holding said bracket in adjusted position.

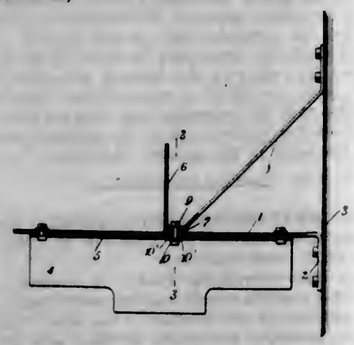
2. A bracket for the purpose set forth comprising a clamping member adapted to be adjustably connected to a semaphore post and having an offset portion, an angle-shaped supporting member pivotally connected to said offset portion, means for fixing said supporting member from movement with respect to the clamping member, said supporting member provided with a slot, a lamp holder extending through said slot and vertically and longitudinally adjustable with respect to the supporting member, and means for fixing said lamp holder in its adjusted position.

3. A bracket for the purpose set forth comprising a clamping member adapted to be adjustably connected to a semaphore post and having an offset portion, an angle-shaped supporting member pivotally connected to said offset portion, means for fixing said supporting member from movement with respect to the clamping member, said supporting member provided with a slot, a lamp holder extending through said slot and vertically and longitudinally adjustable with respect to the supporting member, and means for fixing said lamp holder in its adjusted position, said lamp holder comprising a laterally extending means constituting a support for the base of the lamp.

4. A lamp supporting bracket for a semaphore post comprising a clamping member adapted to be adjustably connected to the post, an angle-shaped supporting member having one arm pivotally connected to said clamping member and its other arm formed with a slot, a lamp holder adapted to be connected to the lamp and provided with a stem projecting through said slot and capable of being laterally, vertically and longitudinally adjusted with respect to said supporting member, means for fixedly securing said holder in its adjusted position, and means for fixedly securing said supporting member in an adjusted position with respect to said supporting member.

5. A lamp supporting bracket for a semaphore post comprising a clamping member adapted to be adjustably connected to the post, an angle-shaped supporting member having one arm pivotally connected to said clamping member and its other arm formed with a slot, a lamp holder adapted to be connected to the lamp and provided with a stem projecting through said slot and capable of being laterally, vertically and longitudinally adjusted with respect to said supporting member, means for fixedly securing said holder in its adjusted position, and means for fixedly securing said supporting member in an adjusted position with respect to said supporting member, said lamp holder further provided intermediate its ends with laterally projecting means constituting a support for the base of the lamp.

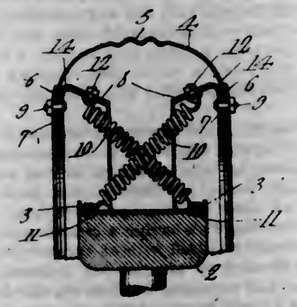
1,063,783. STREET-SIGN. JAMES DONOVAN, Port Chester, N. Y. Filed June 5, 1911. Serial No. 631,211. (Cl. 40—125.)



1. A street sign comprising a horizontal bar having one end bent to adapt the same to be fastened to a suitable support, a sign plate having a laterally-extending flange at its upper edge secured to the lower side of said bar, a second sign plate having a laterally-extending flange along its lower edge secured to the upper side of said bar, said second sign plate being at an angle to said first-named sign plate, a brace, and a fastening bolt passing through the lower end of said brace, the flange on the lower edge of the upper plate, the horizontal bar and the flange on the upper edge of the lower plate, to secure said parts in position, there being slots formed in the flange on the lower sign plate and in the horizontal bar, through which said locking bolt passes to permit the parts to be adjusted relatively to each other when the sign is mounted.

2. A street sign comprising a horizontal bar having one end bent to adapt the same to be fastened to a suitable support, a sign plate having a laterally-extending flange at its upper edge secured to the lower side of said bar, a second sign plate having a laterally-extending flange along its lower edge secured to the upper side of said bar, said second sign plate being at an angle to said first-named sign plate, a brace, and a fastening bolt passing through the lower end of said arm or brace, the flange on the lower edge of the upper plate, the horizontal bar and the flange on the upper edge of the lower plate, to secure said parts in position.

1,063,784. SPRING-WHEEL. SAM R. DWIGGINS and LAWRENCE E. KELLEY, Leonard, Tex. Filed June 15, 1912. Serial No. 703,968. (Cl. 152—29.)



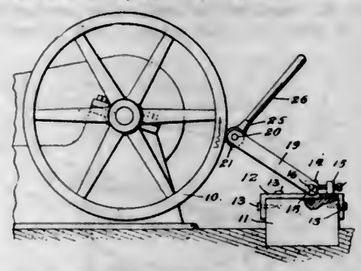
1. In a device of the class described, a rim; an arched tread; spaced angle members, each having a flange secured to the tread and a flange overhanging the rim; and springs connected with the last specified flanges of the angle members and with the rim, said flanges overhanging the springs and being interposed between the springs and the tread, whereby when the tread is flattened, said flanges will protect the springs against contact with the tread.

2. In a device of the class described, a rim; an arched tread; spaced angle members, each having a flange secured to the tread and a flange overhanging the rim; and springs secured to the rim and to the overhanging flanges, the overhanging flanges slanting toward the median plane of the rim to permit a depression of the tread adjacent its median plane and upon both sides thereof, independently of the overhanging flanges.

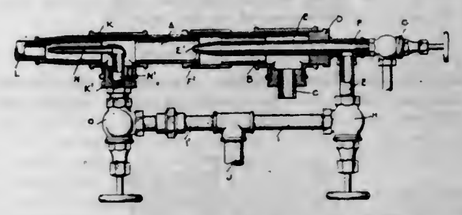
3. In a device of the class described, a rim; an arched tread; spaced angle members, each having a flange secured to the tread and a flange overhanging the rim; springs secured to the rim; and devices securing the springs to the overhanging flanges, the overhanging flanges slanting toward the rim, whereby the apices of the angle members will project beyond the securing devices and prevent the tread from coming into contact with the securing devices when the tread is depressed and flexed across the apices of the angle members.

1,063,785. MECHANICAL MOVEMENT. WILLIAM EBERLE, Jersey City, N. J. Filed Nov. 27, 1912. Serial No. 733,893. (Cl. 105—132.)

In a mechanical movement, the combination of a wheel, a fixed anchor spaced therefrom, an adjustable fulcrum carried by said anchor, links removably secured to said fulcrum, rollers carried by said links, a serrated section between said rollers and an operating lever for imparting movement to said serrated section.



1,063,786. OIL-BURNER. RICHARD H. ECKHARDT, Yorktown, Tex. Filed July 3, 1912. Serial No. 707,486. (Cl. 158—74.)



1. An oil burner comprising a mixing chamber, an air inlet connected with the rear end of the mixing chamber, a spraying device connected with an oil supply and with a source for supplying fluid under pressure and discharging into the rear end of the said mixing chamber, a suction chamber, a nozzle projecting into the suction chamber in front of the said mixing chamber and connected with the said source of fluid under pressure, and a burner pipe extending from the said suction chamber.

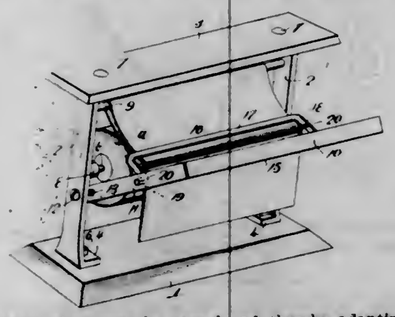
2. An oil burner comprising a mixing chamber, an air inlet connected with the rear end of the said mixing chamber, an oil supply pipe, a pipe for supplying fluid under pressure surrounding the said oil pipe and forming with the latter a spraying device discharging into the rear end of the said mixing chamber, a suction chamber connected with the front end of the said mixing chamber, a suction nozzle extending forwardly in the said suction chamber, a pipe for supplying fluid under pressure connected with the said nozzle, and a burner pipe extending forwardly from said suction chamber.

3. An oil burner comprising a mixing chamber, an air inlet connected with the rear end of the said mixing chamber, an oil supply pipe, a pipe for supplying fluid under pressure surrounding the said oil pipe and forming with the latter a spraying device discharging into the rear end of the said mixing chamber, a suction chamber connected with the front end of the said mixing chamber, a suction nozzle extending forwardly in the said suction chamber, a pipe for supplying fluid under pressure connected with the said nozzle, a burner pipe extending forwardly from the said suction chamber, a pipe connected with a source of fluid under pressure and with the said fluid under pressure pipes, and valves in the said fluid under pressure pipes.

1,063,787. ROLL-PAPER HOLDER AND CUTTER. RICHARD V. EVANS, Elizabeth, Ill. Filed June 28, 1912. Serial No. 706,484. (Cl. 211—32.)

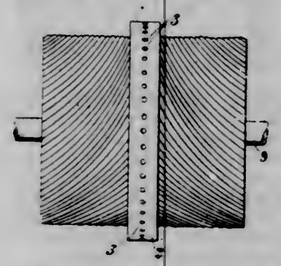
The herein described roll paper holder and cutter comprising a support, a direction roller carried by the support, means for mounting a paper roll on the support below the said direction roller, a cutter bar having arms se-

cured to the support and spaced from one side of the paper roll, and a guide and brake element pivotally connected to the arms of the cutter bar adapted to bear against the paper roll, and having a slot through which



the paper sheet may be passed and thereby adapting the paper from the roll to be passed through the slot, then around the direction roller and then back through the slot so as to form a free end of the paper roll after a piece of the sheet has been cut off by the bar.

1,063,788. STEAM-TURBINE. ALEXANDER H. FIREY, Cananea, Mexico. Filed Sept. 24, 1912. Serial No. 722,106. (Cl. 121—57.)



1. In a steam turbine, a rotor comprising a cylindrical body, an annular flange extending circumferentially around the body intermediate the ends thereof and provided with steam inlet ports in its peripheral face, and steam tubes communicating with said ports and extending therefrom around the end portions of the body in a substantially spiral direction.

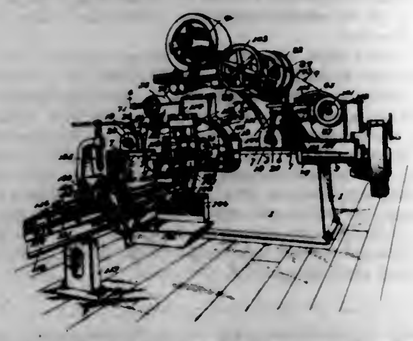
2. In a steam turbine, a rotor comprising a cylindrical body, an annular flange extending circumferentially around the body and provided with steam inlet ports in its peripheral face, and steam tubes communicating with said ports and extending therefrom around the body in a substantially spiral direction.

3. In a steam turbine, a rotor comprising a cylindrical body, an annular flange extending circumferentially around the body intermediate the ends thereof and provided with steam inlet ports in its peripheral face, a steam ring encircling said flange and provided with an inlet port, and steam tubes communicating with said ports and extending therefrom around the end portions of the body in a substantially spiral direction.

4. In a steam turbine, a rotor comprising a cylindrical body, an annular flange extending circumferentially around the body intermediate the ends thereof and provided with steam inlet ports in its peripheral face, a steam ring encircling said flange and provided with an inlet port, steam tubes communicating with said ports and extending therefrom around the end portions of the body in a substantially spiral direction, and a casing inclosing the rotor and provided with steam inlet and exhaust ports.

5. In a steam turbine, a rotor comprising a cylindrical body, an annular flange extending circumferentially around the body and provided with steam inlet ports in its peripheral face, steam tubes communicating with said ports and extending therefrom around the body in a substantially spiral direction, and a stationary steam ring encircling said flange and provided with an inlet port.

1,063,789. METAL-CUTTING-OFF MACHINE. GEORGE GORTON, Racine, Wis. Filed Aug. 28, 1909. Serial No. 515,023. (Cl. 29—71.)



1. In a cutting-off machine, in combination, a feed carriage comprising an annular box forming an oil well and having contracted opposite side openings, a hollow rotary drum extending through said box and occupying said openings, and provided with an exterior drive gear inclosed in said box, and rotating through said oil well, a driving pinion for said gear, and a cutter disk spanning said drum and fixed thereto and provided with a central work receiving opening.

2. In combination, in a cutting-off machine, a base having vertically disposed side walls, a feed carriage provided with feed mechanism, and supported by and arranged between said side walls, a rotary hollow drum arranged transversely of said carriage and provided with and spanned by a cutting disk having a central work receiving opening, said drum provided with an exterior driving gear, said carriage forming an annular box inclosing said gear and supporting and providing bearings for said drum at the opposite faces of said gear, gear-driving means carried by said box, and a work clamp arranged in front of said disk.

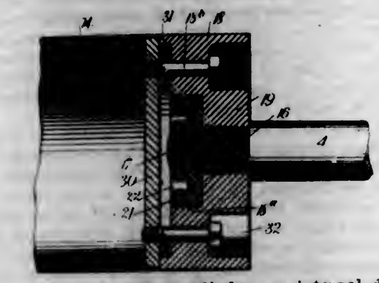
3. In a cutting-off machine, in combination, a base, a feed carriage supported thereby and composed of a vertically disposed annular box having contracted central openings, a horizontal hollow rotary drum extending centrally through and rotating in and carried by said box and provided with an exterior driving gear arranged on the drum intermediate its ends and inclosed by said box, and a cutter disk having a central work receiving opening, said disk spanning and fixed to said drum, said box providing bearings for said drum at opposite sides of said gear, the end walls of said box fitting around the circumferential end portions of said drum.

4. In a cutting off machine, in combination, a base, a feed carriage, actuating means therefor, a hollow rotary drum mounted in said carriage and having an exterior concentric driving gear rigid therewith, a driving pinion for said gear, actuating means for said pinion, and a cutter disk spanning said drum and removably secured around its outer edge portion against said drum, and having a central transverse work receiving opening, and provided with cutters arranged around said opening and projecting thereinto, said carriage comprising a casing inclosing said gear and pinion and providing bearings for said drum at opposite sides of said gear.

5. In a cutting off machine, in combination, a base having vertically disposed side walls, a feed carriage supported by said base and extending down between said side walls, feed mechanism for said carriage, a rotary hollow drum arranged transversely of and extending through said carriage, a saw blade secured to and spanning said drum and provided with a central work-receiving opening and cutters, and means for rotating said drum comprising a gear rigid with said drum and a driving pinion therefor, said carriage forming a casing inclosing said gear and providing bearings for said drum at the opposite sides of said gear.

[Claims 6 to 82 not printed in the Gazette.]

1,063,790. CENTER-SHAFT HEAD. WALTER ANTHONY GREAVES, Stafford Springs, Conn. Filed June 26, 1911. Serial No. 635,292. (Cl. 64—13.)



The combination with a cylinder, an internal disk secured flush with the cylinder end, a center shaft, a head threaded on the shaft end which is adapted to abut the cylinder end and its disk, means to removably lock the shaft head to the said cylinder disk, and a rotatable member also threaded upon the shaft for rigidly locking the said head upon the said shaft end.

1,063,791. COMPOSITION FOR IMPRESSION-SHEETS. ALFRED W. HANINGTON, ALFRED ROSENSTEIN, and ROBERT A. SOUTHWARD, New York, N. Y., assignors, by direct and mesne assignments, to The Friction Transfer Pattern Co., a Corporation of New York. Filed Feb. 18, 1911. Serial No. 609,290. (Cl. 134—36.)

1. The herein-described composition of matter for use as a multiple transferring ink on impression sheets, comprising a mixture of turpentine, one pint; pulverized rosin, one pound; petroleum jelly, one and one-half pints, and a pigment in oil, one-half pint.

2. The herein described composition of matter for use as a multiple transfer ink on impression sheets, comprising a mixture of turpentine, pulverized rosin, petroleum jelly, and an oil ground pigment.

3. The process of forming a multiple transfer impression ink, comprising the dissolving of cold pulverized rosin in turpentine, the adding of refined petroleum jelly to the dissolved rosin, and the adding of a pigment ground in oil, in the order enumerated.

1,063,792. COMPOSITION OF MATTER. ARTHUR G. HARRIS, Lancaster county, Nebr. Filed Nov. 29, 1910. Serial No. 594,634. (Cl. 106—24.)

1. The herein described composition of matter which consists of cement, lumps of hydrous magnesium silicate capable of giving up its water to the cement when the latter is setting, and having a relatively small coefficient of expansion, and a filler.

2. The herein described composition of matter which consists of cement, lumps of an infusible hydrous rock capable of giving up its water to the cement when the latter is setting, and having a relatively small coefficient of expansion, and a filler.

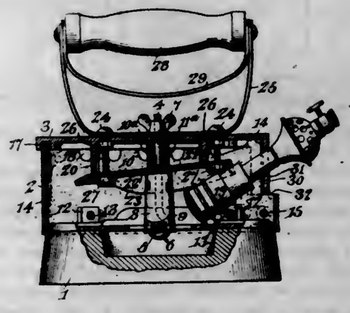
3. The herein described composition of matter which consists of cement, and lumps of hydrous serpentine capable of giving up its water to the cement when the latter is setting, all the corners of said lumps being sharp.

4. The herein described composition of matter which consists of cement, and lumps of hydrous magnesium silicate capable of giving up its water to the cement when the latter is setting, all the corners of said lumps being sharp.

5. The herein described composition of matter which consists of cement, lumps of infusible hydrous magnesium silicate capable of giving up its water to the cement when the latter is setting and having relatively small coefficient of expansion.

[Claim 6 not printed in the Gazette.]

1,063,793. SELF-HEATING ATTACHMENT FOR SAD-IRONS. CHARLES WESTERMAN HARRIS, Beaver Falls, Pa., assignor, by mesne assignments, of one-half to John W. Young, New Brighton, Pa. Filed Apr. 22, 1912. Serial No. 692,463. (Cl. 158—23.1.)



1. The combination with a sad iron, of a self heating attachment including a casing comprising side walls conforming to the configuration of and embracing the exterior of the upper portion of the sad iron, and a top wall, means for securing the casing to the sad iron, heating means carried by the casing, and a handle connected with the casing.

2. The combination with a sad iron, of a self heating attachment including a casing comprising side walls conforming to the configuration of the sad iron and embracing the exterior of the sad iron and expansible to fit sad irons of different sizes, and a top wall, a fastening device connected with the top of the casing and provided with means for engaging the sad iron for securing the casing to the same, a handle connected with the top of the casing, and heating means carried by the casing.

3. A self heating attachment for sad irons including a casing comprising side walls adapted to conform to the configuration of the upper portion of a sad iron and consisting of a flexible strip having its terminals adjustably connected at one end of the sad iron, and a top wall fitted on the upper edges of the side walls, means for securing the casing to a sad iron, a handle connected with the casing, and heating means carried by the casing.

4. The combination with a sad iron, of a self heating attachment including a casing open at the bottom and comprising side walls conforming to the configuration of the upper portion of the sad iron and adapted to fit the same, means for detachably securing the casing to the sad iron, a burner extending through the back of the casing to the open bottom of the same and carried by the said casing, an inclined deflector also carried by the casing and spaced from the top thereof and located above the end of the burner, and a handle connected with the casing.

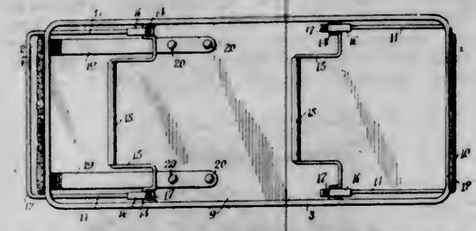
5. A self heating attachment for sad irons including a casing comprising side walls adapted to fit the top of a sad iron, and a top wall, a hook bolt extending through the top of the casing and provided at its lower end with a hook for engaging a sad iron, a sleeve arranged on the bolt and receiving the bill of the hook, heating means carried by the casing, and a handle connected with the latter.

[Claims 6 to 11 not printed in the Gazette.]

1,063,794. BATH ACCESSORY. FRANK HESS, Kalispell, Mont., assignor of one-half to John Joseph Lebert, Kalispell, Mont. Filed Mar. 6, 1913. Serial No. 752,331. (Cl. 4—2.)

1. A bath accessory comprising a frame; a plurality of U-shaped loop members slidably mounted in said frame;

a plurality of crank sections pivotally connected with said loop members to draw the loops toward said frame; and means for rotating said sections, said means being disposed within the plane of said frame when in service position.



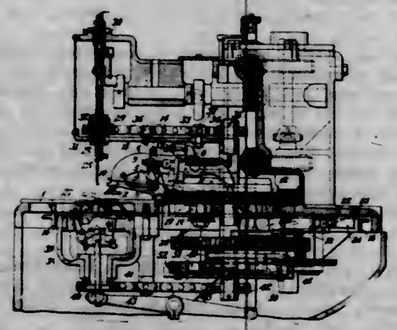
2. A bath accessory comprising a frame; a plurality of U-shaped loop members slidably mounted in said frame; a plurality of crank sections pivotally connected with said loop members to draw the loops toward said frame; and a bail handle operatively connecting said crank sections to operate the same, said bail handle being disposed above the lower edge of said frame when in service position.

3. A bath accessory comprising a hollow frame; a fixed cover therefor, a plurality of U-shaped loops slidably mounted in said frame; a purality of bail handles pivotally mounted in said frame and provided with relatively short crank sections; and means for uniting the ends of said loops and said crank sections.

4. A bath accessory comprising a hollow metal frame, the ends whereof are externally grooved; a plurality of bail handles pivotally mounted in the sides of said frame and having relatively short crank sections; a plurality of bent wire loops slidably mounted in said frame to form a gripping section with the outer surface of the ends thereof, said loops coinciding with the grooves in said ends; and means for connecting the ends of said loops and said crank sections.

5. A bath accessory, comprising a hollow metal frame, the ends whereof are externally grooved; a plurality of bail handles pivotally mounted in the sides of said frame and having relatively short crank sections; a plurality of bent wire loops slidably mounted in said frame to form a gripping section with the outer surface of the ends thereof, said loops coinciding with the grooves in said ends; means for connecting the ends of said loops and said crank sections; and a mounting for said bail handles in the sides of said frame to permit the juncture of said loops and crank sections to pass within the pivotal axis of said bail handles.

1,063,795. BUTTONHOLE-SEWING MACHINE. GEORGE S. HILL, Strafford, N. H., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 12, 1912. Serial No. 730,865. (Cl. 112—4.)



1. A buttonhole sewing machine, having, in combination, stitch forming and work holding mechanisms, mechanism for relatively rotating the work holding and stitch forming mechanisms to sew about a buttonhole comprising a rotary driving member, an arm pivoted to the driving member, a driven shaft provided with an arm, a sliding connection between the arms, and a cam acting on the pivoted arm to vary the motion transmitted to the shaft.

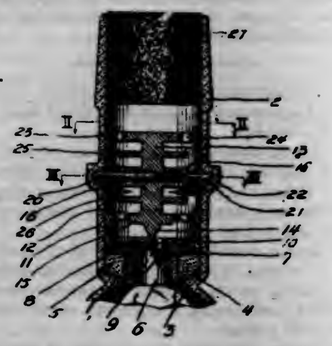
2. A buttonhole sewing machine, having, in combination, stitch forming and work holding mechanisms, mechanism for relatively rotating the work holding and stitch forming mechanisms to sew about a buttonhole comprising a driven shaft, a rotary driving member, an arm secured to the shaft, an arm pivoted to the driving member, a radial slot in one of the arms, a stud on the other arm engaging the slot, and a cam acting on the pivoted arm to vary the motion transmitted to the shaft.

3. A buttonhole sewing machine, having, in combination, stitch forming and work holding mechanisms, mechanism for relatively rotating the work holding and stitch forming mechanisms to sew about a buttonhole comprising a driven shaft, an arm secured to the shaft, a concentric rotary driving member, an arm pivoted to the driving member, a radial slot in the pivoted arm, a stud on the other arm carrying a pivot block sliding in the slot, a roll carried by the pivoted arm, and a stationary cam along which the roll travels for varying the motion transmitted through the connected arms.

4. A buttonhole sewing machine, having, in combination, upper and under thread handling mechanism, rotary supports for said mechanism, a shaft connected to rotate the supports, a rotating driving member, an arm pivoted on the driving member, an arm secured to the shaft, a sliding connection between the arms, and a cam acting on the pivoted arm for varying the motion transmitted to the supports.

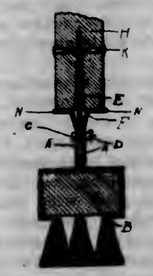
5. A buttonhole sewing machine, having, in combination, stitch forming and work holding mechanisms, mechanism for relatively rotating the work holding and stitch forming mechanisms to sew about a buttonhole comprising a shaft, an arm secured to the shaft, a rotary driver, an arm pivoted to the driver, a sliding connection between the arms, a roll on the pivoted arm arranged at the rear of the pivot, and a stationary cam along which the roll travels for varying the motion transmitted to the shaft.

1,063,796. ANTIREFILLABLE BOTTLE. JACOB M. HOLLER, Jr., and WILLIAM F. EVERHART, Pittsburgh, Pa. Filed Feb. 1, 1911. Serial No. 606,011. (Cl. 215—65.)



In an anti-refillable bottle, a valve seat forming member adapted to be arranged within the neck of a bottle, a shiftable valve mounted upon said seat, a housing mounted against and projecting from said member and having its top formed with openings, a depending valve guiding means integral with said top, a stem projecting upwardly from said top and provided intermediate its ends with a rectangular annularly disposed enlargement, oppositely disposed spring controlled pins mounted in said enlargement and adapted to engage in the neck of a bottle for connecting the stem thereto, a perforated head integral with the upper end of the stem and of a diameter to engage the inner face of the bottle neck, and circular deflectors integral with the stem, one of said deflectors interposed between the enlargement and the head and the other between the enlargement and the housing, said deflectors of less diameter than the head.

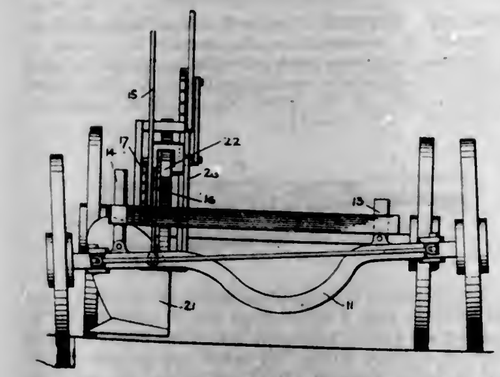
1,063,797. BROOM. WILLIAM JAMES HOPE, Tunica, Miss. Filed Dec. 16, 1912. Serial No. 737,055. (Cl. 15—24.)



1. A brush holding device comprising clamping members and means for holding the same in clamping relation with the brush, a resilient plate fastened to said members, a handle provided with a slot having tapering walls in which slot said plate is fastened, and means for holding the handle for engaging said clamping plates, as set forth.

2. A brush holding device comprising clamping members and means for holding the same in clamping relation with the brush, a resilient plate fastened to said members, a handle provided with a slot having tapering walls in which slot said plate is fastened, the inner ends of said clamping members being bent at right angles thereto, forming abutment means engaged by the adjacent end of the handle, as set forth.

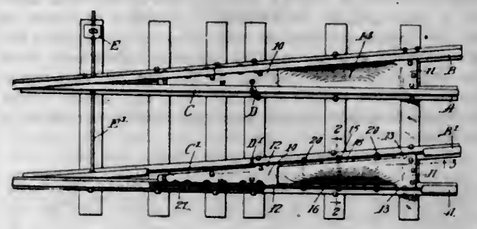
1,063,798. MOTOR-PLOW. FRED B. HOUDEK, Cuba, Kans. Filed May 4, 1912. Serial No. 695,181. (Cl. 97—30.)



In a motor plow, the combination with front and rear axles, and supporting wheels therefor, of a rectangular frame, a pair of short vertical posts at one side of the frame and clamped thereto, a set of posts on the right side of the frame, a pair of socket pieces slidably connecting the latter posts to the frame, said posts being pivoted to the respective axles, and means to elevate the frame with respect to the axles.

1,063,799. RERAILING DEVICE. HINCHEY P. HUGHES, Greenwood, S. C. Filed Aug. 1, 1912. Serial No. 712,802. (Cl. 104—78.)

1. A rerailing device adapted to be associated with a switch on a railway track, said device being formed from sheet metal and comprising means whereby the device may be secured to a part of the track structure and including a portion which is formed to fit between the switch point and adjacent rail, and a curved section intermediate the ends of the device adapted to rerail a derailed wheel.



2. A one-piece rerailing device adapted to be set between rails adjacent a switch on a railroad track, said device comprising means at one of its ends for permanently anchoring the device to a tie, a section intermediate the ends having a curved upper surface inclined toward the ends and one rail, the apex of the curved surface being located adjacent the other rail, and bracing means extending from the edge adjacent the apex adapted to support the curved section at its highest point.

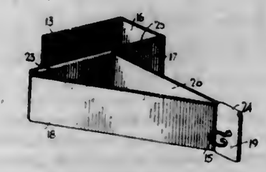
3. A trapezoidal-shaped one-piece rerailing device adapted to be set between rails adjacent a switch on a railroad track, the non-parallel edges being disposed alongside the rails, said device comprising flat portions at its ends adapted to rest on and be permanently secured to ties, a section intermediate the ends having a curved upper surface and being curved in cross-section in all directions, the said curved surface being inclined to the ends and to one rail, the apex of the curved surface being disposed adjacent the other rail and at a level with the top thereof, and means engaging the foot and web of each rail to brace said curved section transversely.

4. A rerailing device adapted to be permanently set between rails adjacent a switch on a railroad track, said device comprising means at its opposite ends whereby the device may rest on and be secured to railroad ties, said device having a narrow part at one end adapted to fit between the switch point and adjacent rail, a curved section intermediate the ends adapted to rerail a derailed wheel, and means adapted to engage the rails and brace said curved section.

5. A rerailing device adapted to be permanently set between rails adjacent a switch on a railroad track, said device being formed from a single sheet of suitable metal and comprising anchor portions at its ends whereby the device may rest on and be secured to ties, one of the anchor portions being constructed to extend between the movable switch point and the adjacent rail, a curved section intermediate the ends adapted to rerail a derailed wheel, and means adapted to brace said curved section.

[Claim 6 not printed in the Gazette.]

1,063,800. LACE-CURTAIN HANGER. JAMES G. HUGHES, Newark, Ohio. Filed Feb. 21, 1913. Serial No. 749,857. (Cl. 156—23.)



1. In a device of the character set forth, the combination of a pair of brackets and a resilient extensible curtain support extending from one bracket to the other and serving to hold the brackets in operative position, each bracket comprising a hook portion, a reinforced base por-

tion, and a braced front portion, all formed from a single flank, and a fastener for the curtain support secured to the front end of the braced portion aforesaid.

2. The herein described bracket for a curtain hanged, the same comprising a hook portion including a tongue member, a base portion spaced from and parallel to the tongue member, a member perpendicular to the base member, a foot member constituting an angular extension of the last mentioned member and lying snugly against the base member, a brace member extending diagonally from the end of the base member to the end of the penpendicular member remote from the base, and means rigidly securing the adjacent portions of the bracket permanently together.

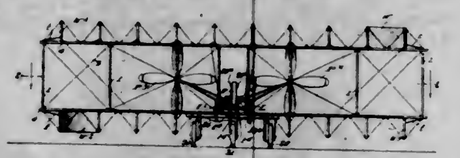
1,063,801. CLOTHES-LINE PROP. HUGH W. IVEY, Bloomsburg, Pa. Filed Aug. 29, 1912. Serial No. 717,772. (Cl. 68—12.)



1. A clothes prop comprising a pole having a plurality of transverse slots in one of its faces, said slots inclined downwardly from the face of said pole, a rod slidably mounted on the pole and adapted to close the entrance to said slots, said rod having its lower end formed with a laterally extending loop, and means associated with said pole to engage said loop to hold the rod in locking position.

2. A clothes line prop comprising a pole having a plurality of transverse slots in one of its faces, said slots inclined downwardly from the face of said pole, a rod slidably mounted on the pole and adapted to close the entrance to said slots, said rod having its lower end formed with a laterally extending loop, and the pole provided with a transverse notch adapted to engage said loop to hold the rod in the position to close said slots.

1,063,802. AEROPLANE. GREENHOW JOHNSTON, Richmond, Va., assignor to Virginia Aerial Manufacturing Company, Incorporated, Richmond, Va. Filed Jan. 17, 1911. Serial No. 604,489. (Cl. 244—29.)



1. In an aeroplane, a main sustaining plane, a series of guide wings pivotally supported on axes perpendicular to the main sustaining plane above said main sustaining plane, a similar series of pivoted guide wings below said main sustaining plane, and means for turning certain wings of each series independently.

2. In an aeroplane, a main sustaining plane, a series of guide wings disposed above said main sustaining plane, a series of guide wings disposed below said main sustaining plane, each of said guide wings being pivoted at its forward edge on an axis perpendicular to said main sustaining plane, means for simultaneously turning the upper and lower guide wings on one side of the center of the aeroplane, and independent means for simultaneously turning the guide wings on the opposite sides.

3. In an aeroplane, a main sustaining plane, a series of guide wings pivoted at their forward edges above said main sustaining plane, a similar series of guide wings pivoted below said main sustaining plane, the normal position of said guide wings being parallel with the longitudinal axis of the aeroplane, and means for simultaneously turning an end guide wing above the main sustaining plane on one side of the center of the aeroplane, and the end guide wing below the sustaining plane on the opposite side of the center.

4. In an aeroplane, a main sustaining plane, a series of guide wings pivoted at their forward edges above said main sustaining plane, a similar series of guide wings pivoted below said main sustaining plane, the normal position of said guide wings being parallel with the longitudinal axis of the aeroplane, and means for simultaneously turning an end guide wing above the main sustaining plane on one side of the center of the aeroplane and the end guide wing below the sustaining plane on the opposite side of the center, said means comprising a seat having a universal movement, and a series of flexible connections between said seat and each of said upper and lower end guide planes.

5. In an aeroplane, a main sustaining plane, a series of guide wings pivoted at their forward edges above said main sustaining plane, a similar series of guide wings pivoted below said main sustaining plane, the normal position of said guide wings being parallel with the longitudinal axis of the aeroplane, and means for simultaneously turning an end guide wing above the main sustaining plane on one side of the center of the aeroplane and the end guide wing below the sustaining plane on the opposite side of the center, said means comprising a seat having a universal movement and a series of flexible connections between said seat and each of said upper and lower end guide planes, a steering post and a second set of flexible connections from said steering post to said end guide planes.

[Claims 6 to 9 not printed in the Gazette.]

1,063,803. TOY GUN. OSCAR S. JONES, Utica, N. Y., assignor of seventeen one-hundredths to Charles K. Getchell, seventeen one-hundredths to Charles D. Getchell, and seventeen one-hundredths to C. Field Frank, Schenectady, N. Y. Filed Dec. 11, 1912. Serial No. 736,191. (Cl. 124—12.)



1. A device of the character described, including a barrel provided with a longitudinal slot, a longitudinally extending rod axially supported within the barrel, a sliding member mounted within the barrel and movable on said rod, a spring mounted within the barrel and operatively connected to said sliding member to move the same toward the muzzle end of the barrel, a projectile above the barrel and having a portion extended through the barrel slot and engaged with the sliding member, and releasable means for holding the projectile and sliding member in a predetermined position with the spring under tension.

2. A device of the character described, including a barrel formed with a longitudinal slot, a sliding member mounted within the barrel, a spring also mounted within the barrel and operatively connected to the sliding member to move the same toward the muzzle end of the barrel, a projectile movable along the barrrel and provided with a portion accommodated in said slot and adapted to engage the sliding member, the projectile being formed with an opening, a latch extending through the barrrel and adapted to engage in said opening to hold the projectile and the sliding member with the spring under tension, and means connected to the latch for retracting the same.

3. A device of the character described, including a barrel formed with a longitudinal slot, a rod disposed axially in the barrel and formed at its rear end with a slot, a latch movable in the slot of said rod and adapted to protrude from the barrel, a sliding member movable in the barrel and on said rod, a spring mounted within the barrel and operatively connected to said sliding member to move the latter toward the muzzle end of the barrel, a projectile movable along the barrel and having a depending lug extending into the barrel through said slot and engageable with the sliding member, the latch being adapted to engage the projectile to hold the latter and the sliding member in a predetermined position with the spring under tension, and means connected to the latch for disengaging it from the projectile.

4. A device of the character described, including a barrel provided with a longitudinal slot, a rod disposed axially in said barrel, a sliding member mounted within the barrel and movable on said rod, a spring mounted within the barrel and operatively connected to the sliding member to move the same toward the muzzle end of the barrel, the sliding member being formed with a recess, a projectile movable along the barrel and having a lug extending into the barrel and movable in said slot, the lug being formed with a rearwardly projecting nib engageable with the recess of the sliding member, a latch mounted within the barrel and engageable with the projectile to hold it in a predetermined position with the spring under tension, and means connected to the latch for disengaging it from the projectile.

5. A device of the character described, including a barrel formed with a longitudinally extending slot, a sliding member mounted within the barrel and formed in its front face with an annular recess, a spring mounted within the barrel and operatively connected to the sliding member to move the same toward the muzzle end of the barrel, a projectile movable along the barrel and having a depending lug adapted to extend through the slot into the barrel, the lug being formed with a rearwardly projecting nib engageable in said annular recess, and releasable means adapted to engage the projectile to hold the latter in a predetermined position with the spring under tension.

[Claims 6 to 9 not printed in the Gazette.]

1,063,804. MEANS FOR CLEANING SHIPS' HULLS. GUSTAV JULIUS KINDERMANN, Wayville, South Australia, Australia. Filed Apr. 13, 1912. Serial No. 690,504. (Cl. 114—222.)



1. A device for cleaning ships' hulls, comprising two spaced electric motors each inclosed in a casing, each casing being provided with an eye at the end, a pair of eyes on each side, and a spring buffer between each pair of eyes, a shaft between the motors and coupled thereto, a cleaning member mounted on the shaft to turn therewith, and cables attached to the eyes of each of the motors for securing the device to a ship's hull.

2. A device for cleaning ships' hulls, comprising two spaced casings, each having an eye at the end and a pair of eyes on each side, said eyes being adapted to receive cables by which the device is secured to a ship's hull, a shaft mounted between the casings, a brush on the shaft, and a motor in one casing and operating said shaft.

1,063,805. AEROPLANE. ROBERT KRAUSE, Cologne, Germany. Filed May 21, 1909, Serial No. 497,509. Renewed Oct. 30, 1912. Serial No. 728,730. (Cl. 244—12.)

1. An aeroplane comprising a body having downwardly disposed side portions, a pointed downwardly disposed fore end and an upwardly disposed rear end; and a centrally closed body constructed to support the propelling equipment.



2. An aeroplane comprising a body having downwardly disposed side portions providing vanes, a downwardly disposed rear end and an upwardly disposed fore end; a centrally disposed body having conical ends disposed lengthwise and intermediate thereof providing vanes and adapted to direct the air with pressure against the vanes and effect to lift the projectile.

3. An aeroplane comprising a body having downwardly disposed side portions providing vanes, a centrally disposed and closed body disposed lengthwise and intermediate of said body, said body having conical ends and adapted to direct the air with pressure against the vanes and effect to lift the projectile; and a pair of tubular members having variable cross sectional area secured to the under side of the plane body for the purpose set forth.

4. An aeroplane comprising a body having downwardly disposed side portions with the edges thereof turned inwardly and against the under surface of the body, one end of said body being pointed and turned downwardly and the other end thereof being constructed with a dove-tailed section and disposed upwardly, a closed and elongated chamber secured to the underside of the body and having conical ends; and a pair of semi-circular and open ended tubes secured to the body intermediate the chamber and the vanes.

1,063,806. SPRAYING DEVICE. AUGUST J. KUEHL, Watervliet, Mich. Filed Apr. 25, 1912. Serial No. 693,189. (Cl. 137—86.)



1. A spraying device comprising a head having a chamber, a supply pipe opening into said chamber, a cover for said head having an outlet opening, a sliding valve having an opening with enlarged and reduced diameters for controlling the area of said outlet opening and means for sliding said valve.

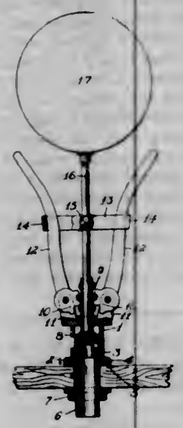
2. The combination with a chambered head, and a cover therefor having a groove, and an outlet opening therein, of a valve movable transversely of said cover, and having a lug fitted in said groove, said valve having an opening with enlarged and reduced diameters for controlling the area of said outlet opening and means mounted on the head for sliding said valve.

3. The combination with a head having a chamber, and a supply pipe opening into said chamber, of a disk in said

chamber having a central opening and obliquely arranged upwardly extending side openings, a valve for controlling said central opening, a rod for manipulating said valve paralleling said pipe, a cover for said head having a central outlet and a valve for varying said outlet.

4. The combination with a head having a chamber, and a supply pipe opening into said chamber, of a disk in said chamber having a central opening and obliquely arranged side openings, a valve for controlling said central opening, a rod for manipulating said valve paralleling said pipe, a cover for said head having a central outlet, a valve slidable transversely of said head for varying said outlet, and a rod mounted in said head for actuating said valve, said rod also paralleling said pipe.

1,063,807. FLOAT-CONTROLLED VALVE. WILLIAM F. KULLBERG, Washington, D. C. Filed Mar. 14, 1912. Serial No. 683,860. (Cl. 137—104.)



1. In combination a valve casing, a valve slidable in the said casing, and having a toothed stem, a pair of segments mounted on the valve casing pivotally for coöperation with the toothed stem, and having arms of cam shape, a float and a float stem and a member on the float stem slidably engaging the cam shaped arms to move them toward each other as the float rises and thus move the valve to its seat, substantially as described.

2. In combination a valve casing, a valve therein slidably mounted, and having a stem, a float having a stem guided in the valve stem, a pair of cam arms pivotally mounted and connected with the valve stem for moving said stem, and means carried by the float stem and slidably engaging the said arms to operate the valve, substantially as described.

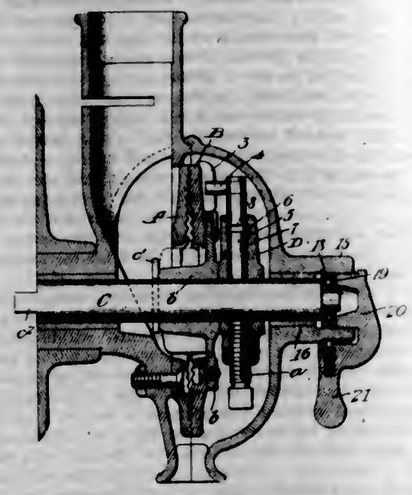
3. In combination, a valve casing, a valve therein, a pair of arms connected with the valve for operating the valve and pivotally mounted at one end and diverging from their pivot points, a float, a stem therefor, and a cross bar adjustably mounted on the stem and slidably engaging the arms, substantially as described.

4. In combination, a valve casing, a valve therein, a pair of arms pivotally mounted and connected with the valve, a float and a connection between the float and arms adjustable along the arms to change the leverage exerted, said arms and connection having a cam engagement substantially as described.

5. In combination a valve casing, a valve therein, a pair of arms pivotally mounted and connected to the valve, a float and a connection between the float and the arms adjustable along the arms to vary the leverage and adjustable also in relation to the float, said arms and connection having a cam engagement substantially as described.

[Claim 6 not printed in the Gazette.]

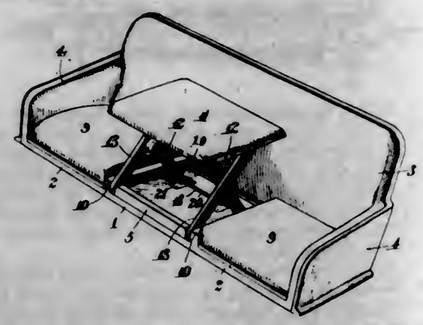
1,063,808. YIELDING DRIVING CONNECTION. GEORGE LANE, Poughkeepsie, N. Y., assignor to Lane Brothers Company, a Corporation of New York. Filed Apr. 24, 1912. Serial No. 692,979. (Cl. 64—13.)



1. In apparatus of the class described a rotary member to be driven, a shaft on which said member is loosely mounted, a driving dog engaging the rotary member, said dog having a rotatable shank, a yielding member bearing on the shank to hold it frictionally against turning, a carrier for the said shank and yielding member, said carrier consisting of an arm fitted to the exterior of the shaft and extending radially, with the dog at its outer end, and means for attaching the same at the desired point on the shaft, substantially as described.

2. In apparatus of the class described a rotary member to be driven, a shaft on which said rotary member is loosely mounted, a driving dog for the rotary member, said dog having a rotatable shank, a yielding member bearing on the shank to hold it against turning, a carrier for the said shank and yielding member consisting of an arm fitted to the exterior of the shaft, means for securing the arm to the shaft, and means for adjusting the tension of the yielding member also mounted on the carrier, substantially as described.

1,063,809. VEHICLE-SEAT. OLOF F. LAWSON, New Sharon, Iowa. Filed Oct. 11, 1912. Serial No. 725,237. (Cl. 21—42.)



1. A device of the character described provided with permanent seat sections including a base member, a supplemental seat adjustable whereby to lie at one time above the plane of the permanent seat sections and at another time to lie in the same general plane therewith, companion inner and outer pairs of legs supporting the supplemental seat from the main body member, a bar connecting the inner legs together, and means carried by

the main body member and including portions defining retaining spaces for the bar, so as to hold the supplemental seat extended, certain of said portions being yieldable whereby to permit the bar to be withdrawn from the spaces when it is desired to fold the supplemental seat between the main seat sections.

2. A main seat having spaced cushion supporting portions, a cleat secured to the main seat and terminally spaced from the adjacent edge of the cushion supporting portions thereof and provided with pintles terminally lying in initial contact with the adjacent sides of said portions, a folding seat adjustable between the spaced portions and having portions pivotally connected with said pintles, and means for holding the folded seat in an adjusted position.

1,063,810. GRINDING-MILL. FRED M. LYON, Pontiac, Ill. Filed May 6, 1912. Serial No. 695,456. (Cl. 83—6.)



1. In a grinding mill, a central shaft, a shear mechanism comprising engaging members, means to rotate one of said members, means to retain the other of said members against rotation, means to adjust the tension of one shear on the other, and means permitting the removal of the shear structure without interfering with such adjustment.

2. In a grinding mill, a housing, a central driving shaft journaled in the housing, a shear member engaging the housing to prevent such member from rotating, a second shear member carried by and rotating with the shaft, means to exert tension of one shear upon the other, and means permitting the removal of both shears from the housing without disturbing the tension.

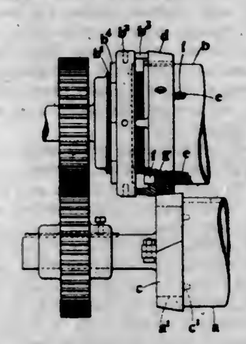
3. In a grinding mill, a housing, a power shaft journaled centrally within the housing, a force ring carried by the shaft, a shear member disposed upon the force ring, means carried by the housing for engaging the shear member to prevent its rotating, a second shear member disposed upon the first mentioned shear member, means carried by the force ring for exerting tension upon the second mentioned shear member to adjust the said shear member relative to the first mentioned shear member, and means whereby the force ring and the two shear members may be removed from the housing without varying the tension of the shear members.

4. In a grinding mill, a housing, a shaft journaled to rotate vertically within the housing, a cap removably carried upon the upper extremity of the shaft, a shear member embracing the cap and held against rotary motion, a second shear member carried by and rotating with the cap, means to exert tension between the shear members, and means to remove the cap from the shaft without varying the tension between the shear members.

5. In a grinding mill, a housing, a shaft journaled vertically within the housing, a body hinged upon the housing, a shear member rigidly carried by the body and held against rotation, a cap mounted to rotate within the shear member and provided with means for engaging with and being rotated by the shaft, a second shear member carried and rotated by the cap, and means to vary the tension between the shear members.

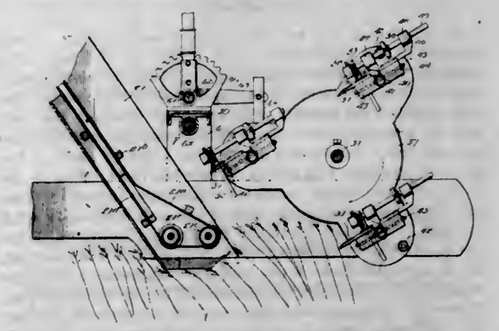
[Claims 6 to 9 not printed in the Gazette.]

1,063,811. ADJUSTABLE BEARING FOR ROTARY-CYLINDER MACHINES. GEORGE WILLIAM MABCORD, Barnes, London, England. Filed Sept. 13, 1912. Serial No. 720,260. (Cl. 64—52.)



The combination with the rotary cylinders of a conical bearing member at the extremity of one cylinder, a conical bearing member slidably mounted at the extremity of a second or adjacent cylinder, said conical members having their conical surfaces oppositely disposed and contacting with one another, the second cylinder having recesses, a reduced screw-threaded portion on the second cylinder and projecting beyond the conical member mounted thereon, lugs on the conical member of the second cylinder projecting into the said recesses, springs in said recesses bearing upon said lugs and pressing the conical member toward the extremity, projections on said conical member, a nut screwing on the screwed portion and bearing against the projections substantially as described.

1,063,812. BLUE-GRASS-SEED HARVESTER. SAMUEL E. MCCORMICK, Winchester, Ky. Filed Oct. 5, 1912. Serial No. 724,052. (Cl. 56—2.)



1. In a device for stripping grass seed, a main frame, rotatable stripper heads carried thereby, a plurality of frames carried by said stripper heads and rotatable with respect thereto, a comb carried by each of said frames, and means for maintaining all of the frames parallel with a fixed plane.

2. In a device for stripping grass seed, a main frame, rotatable stripper heads carried thereby, a plurality of frames carried by said stripper heads and rotatable with respect thereto, a comb carried by each of said frames, means for maintaining all of the frames parallel with a fixed plane, and means carried by each frame for scraping the seed off from the comb.

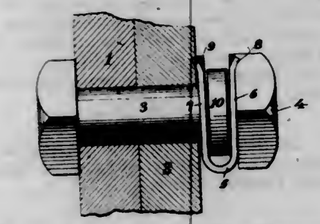
3. In a device for stripping grass seed, a main frame, rotatable stripper heads carried thereby, a plurality of frames carried by said stripper heads and rotatable with respect thereto, a stripping comb carried on the upper part of each of said frames, means for maintaining the planes of said frames parallel with each other, and means carried by each frame and slidable with respect to the comb for scraping seed off from the comb.

4. In a device for stripping grass seed, a main frame, rotatable stripper heads carried thereby, a plurality of frames carried by said stripper heads and rotatable with respect thereto, a stripping comb carried on the upper part of each of said frames, means for maintaining the planes of said frames parallel with each other, means carried by each frame and slidable with respect to the comb for scraping seed off from the comb, said scraping means comprising a spring pressed plate arranged to engage the upper surface of the comb, and means for reciprocating the plate.

5. In a device for stripping grass seed, a main frame, rotatable stripper heads carried thereby, a plurality of frames carried by said stripper heads and rotatable with respect thereto, a stripping comb carried on the upper part of each of said frames, means for maintaining the planes of said frames parallel with each other, means carried by each frame and slidable with respect to the comb for scraping seed off from the comb, said scraping means comprising a spring pressed plate arranged to engage the upper surface of the comb, a bracket carried by said plate, a slidable shaft in said bracket, a bar carried by said shaft, and guide means secured to said plate and arranged to slide on said bar.

[Claims 6 to 9 not printed in the Gazette.]

1,063,813. NUT-LOCK. ALEXANDER MCGINN, Williamsport, Pa. Filed Oct. 25, 1911. Serial No. 656,661. (Cl. 151—50.)



In a lock nut, the combination of a substructure, a bolt secured to the substructure and a nut for the bolt, of a resilient lock member comprising an element substantially U-shaped in side elevation and having flat faces, the said faces being formed with openings whereby the lock may be arranged upon the bolt between the substructure and the nut, the corners of the free edges of each of the faces of the lock being bent to provide teeth, each of the pairs of teeth being extended outwardly therefrom, and the teeth upon the outer face of the lock contacting with the nut to provide a ratchet for the said nut, until the nut is sufficiently threaded upon the bolt to force the teeth of the opposite face of the lock into engagement with the substructure, and to then permit of the first named pair of teeth to engage with the sides of the nut to prevent the accidental removal of the nut from the bolt.

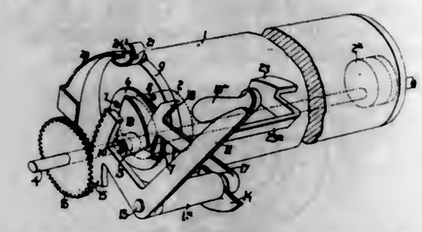
1,063,814. CALENDAR. MICHAEL MCGOVERN, Moline, Ill. Filed July 3, 1912. Serial No. 707,724. (Cl. 40—108.)



1. A perpetual calendar, comprising a cylindrical body bearing on its outer face rows of numerals representing the days of the month, an endless circular indicator band rotatably surrounding the body and provided with concealed internal notches in the inner face thereof, an internal bearing flange on said band resting against the body, and a spring catch on the body extending parallel to said flange at one side thereof adapted to engage said notches.

2. A perpetual calendar, comprising a cylindrical body bearing on its outer face rows of numerals representing the days of the month, a circular indicator band rotatably surrounding the body and provided with parallel internal flanges spaced apart and bearing upon the body, and means for holding said band at different points in the rotation thereof, consisting of a spring catch carried by the body and working between said parallel flanges.

1,063,815. TYPE-WRITING MACHINE. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 24, 1910. Serial No. 588,592. (Cl. 197—127.)



1. In a typewriting machine, the combination of a paper guide, a platen shaft, an eccentric fixed to revolve with the shaft but shiftable longitudinally of the shaft, a platen supported on the eccentric, means for locking the platen to the eccentric when the latter is in one position on the shaft so that the platen may be revolved with the shaft, and means for shifting the eccentric longitudinally on the shaft to unlock the eccentric and platen so that the eccentric may then be revolved relatively to the platen to cause the platen to be shifted with respect to the paper guide.

2. In a typewriting machine, the combination of a paper guide, a platen shaft, an eccentric fixed to revolve with the shaft but shiftable longitudinally of the shaft, a platen supported on the eccentric, means for locking the platen to the eccentric when the latter is in one position on the shaft so that the platen may be revolved with the shaft, and a cam for shifting the eccentric longitudinally on the shaft to unlock the eccentric and platen so that the eccentric may then be revolved relatively to the platen to cause the platen to be shifted with respect to the paper guide.

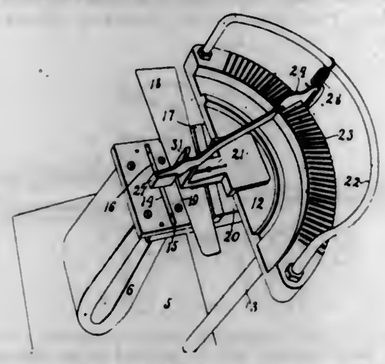
3. In a typewriting machine, the combination of a paper guide, a platen shaft, an eccentric fixed to revolve with the shaft but shiftable longitudinally of the shaft, a platen supported on the eccentric, a pin carried by the eccentric engaging a hole in the end face of the platen for locking the platen to the eccentric when the latter is in one position on the shaft so that the platen may be revolved with the shaft, and means for shifting the eccentric longitudinally on the shaft to withdraw the pin carried by the eccentric from the hole in the platen so that the eccentric may then be revolved relatively to the platen to cause the platen to be shifted with respect to the paper guide.

4. In a typewriting machine, the combination of a paper guide, a platen shaft, an eccentric fixed to revolve with the shaft but shiftable longitudinally of the shaft, a platen supported on the eccentric, means for locking the platen to the eccentric when the latter is in one position on the shaft so that the platen may be revolved with the shaft, means for shifting the eccentric longitudinally on the shaft to unlock the eccentric and platen so that the eccentric may then be revolved relatively to the platen to cause the platen to be shifted with respect to the paper guide, and a toothed pinion for turning the eccentric.

5. In a typewriting machine, the combination of a paper guide, a platen shaft, an eccentric fixed to revolve with the shaft but shiftable longitudinally of the shaft, a platen supported on the eccentric, means for locking the platen to the eccentric when the latter is in one position on the shaft so that the platen may be revolved with the shaft, means for shifting the eccentric longitudinally on the shaft to unlock the eccentric and platen so that the eccentric may then be revolved relatively to the platen to cause the platen to be shifted with respect to the paper guide, a pinion fast to the shaft, a rack meshing with the pinion, and means for moving the rack to turn the eccentric.

[Claims 6 to 63 not printed in the Gazette.]

1,063,816. SOLDERING-CLAMP. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Jan 12, 1911. Serial No. 602,162. (Cl. 113—59.)



1. In a soldering gage, the combination of a permanent magnet having two adjacent poles adapted to support the type in an upright position, and means for supporting a type bar adjacent to the poles of said magnet and extending transversely with respect to the same.

2. In a soldering gage, the combination of a magnet presenting two poles, a surface plate of magnetic material divided between said poles and adjacent thereto for supporting a type when being soldered, and means for supporting a type bar in a transverse position with respect to said surface-plate, and with its head adjacent to said surface plate.

3. A soldering gage comprising the combination of a magnet presenting two poles, a surface plate disposed over said poles and having a gap dividing said plate between said poles, said surface plate being inductively magnetized by said magnet and adapted to support the type in an upright position resting on the type-face, and a gage plate coöperating with said surface plate to aline the type in soldering the same to the said type bar.

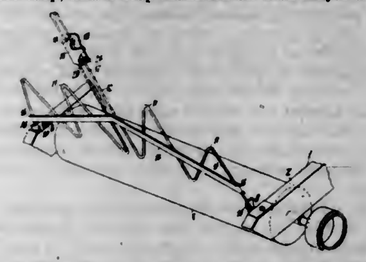
4. A soldering gage comprising a magnet with two adjacent poles, a surface plate mounted over said poles and having a transverse gap disposed between said poles and substantially dividing said plate into sections corresponding to the poles of said magnet, and means for supporting a type bar with its head projecting across said slot and adjacent to said surface plate.

5. A soldering gage comprising a magnet with adjacent poles, a surface plate disposed adjacent to the poles of said magnet for supporting a type, a gage plate having an edge adapted to engage the type to aline the same, and means for supporting a type bar with its head projecting over said surface plate and adjacent thereto.

[Claims 6 to 20 not printed in the Gazette.]

1,063,817. TYPE-WRITING MACHINE. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 6, 1912. Serial No. 688,849. (Cl. 197—189.)

1. A combined paper support and paper depth gage comprising a single strip of wire bent to form a plurality of minor loops and a major loop of greater magnitude than said minor loop, and a stop mounted on said major loop.



2. A combined paper support and paper depth gage comprising a single strip of wire bent intermediate its ends to form an elongated loop, and bent on each side of said elongated loop to form a plurality of smaller loops extending in the same plane as said elongated loop, and a stop adjustably mounted on said elongated loop.

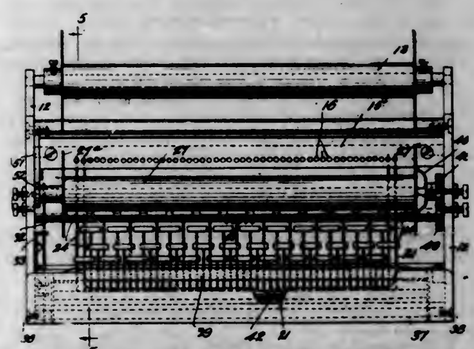
3. A combined paper support and paper depth gage comprising a single strip of wire bent to form a plurality of minor loops and a major loop of greater linear magnitude than said minor loops, a brace securing said loops together to form a rigid structure, and a stop adjustably mounted on said major loop.

4. A combined paper support and paper depth gage comprising a single strip of wire bent to form a plurality of loops, one of said loops having the reaches thereon extending parallel to each other to form a standard, and the reaches of the others of said loops extending at angles to each other to form a spread supporting surface, and an adjustable stop mounted on said standard.

5. A combined paper support and paper depth gage comprising a single strip of wire bent to form a plurality of loops, one of said loops having the reaches thereon extending parallel to each other to form a standard, and the reaches of the others of said loops extending at angles to each other to form a spread supporting surface, an adjustable stop mounted on said standard, and a brace connecting all of said loops together to form a firm structure.

[Claims 6 to 10 not printed in the Gazette.]

1,063,818. MACHINE FOR PERFORATING MASTER-SHEETS FOR OPERATING TYPE-WRITERS, &c. JOHN MCTAMMANY, Stamford, Conn. Filed Feb. 7, 1912. Serial No. 676,145. (Cl. 164—112.)



1. A manually operated perforating machine comprising a supply roll, a receiving roll, an intermediate feed roll having projections to engage a sheet to positively advance the latter, sheet perforating means between the supply roll and the feed roll, including a series of punches, means for operating the receiving roll to keep the sheet under tension, manually operated key levers engaged with the punches, and mechanism operated by the depression of either of said levers for successively moving the feed roll to feed the sheet, and forcing the corresponding punch through the sheet.

2. A manually operated perforating machine comprising a supply roll, a receiving roll, an intermediate feed roll, sheet perforating means between the supply roll and the feed roll, including a series of punches, manually operated key levers engaged with the punches, an oscillatory arm mounted on the feed roll, and carrying a pawl engaged with a ratchet on the feed roll, a vertically movable rod bearing against one side of said arm, and connections between said rod and key levers, whereby the depression of either lever causes an endwise upward movement of the rod, the pawl-carrying arm being normally inclined over the rod.

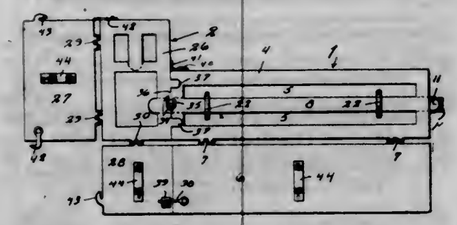
3. A manually operated perforating machine comprising a supply roll, a receiving roll, an intermediate feed roll having projections to engage a sheet to positively advance the latter, sheet perforating means between the supply roll and the feed roll, including a series of punches, means for operating the receiving roll to keep the sheet under tension, manually operated key levers engaged with the punches, and mechanism operated by the depression of either of said levers for successively moving the feed roll to feed the sheet, and forcing the corresponding punch through the sheet, said mechanism being operable independently of the key levers to move the sheet without perforating it.

4. A manually operated perforating machine comprising a supply roll, a receiving roll, an intermediate feed roll, sheet perforating means between the supply roll and the feed roll, including a series of punches, manually operated key levers engaged with the punches, an oscillatory arm mounted on the feed roll, and carrying a pawl engaged with a ratchet on the feed roll, a vertically movable rod bearing against one side of said arm, and an oscillatory frame engaged with said rod and with the key levers, said frame being movable by the depression of either key lever to cause an endwise upward movement of the rod.

5. A manually operated perforating machine comprising a supply roll, a receiving roll, an intermediate feed roll, sheet perforating means between the supply roll and the feed roll, including a series of punches, manually operated key levers engaged with the punches, an oscillatory arm mounted on the feed roll, and carrying a pawl engaged with a ratchet on the feed roll, a vertically movable rod bearing against one side of said arm, and an oscillatory frame engaged with said rod and with the key levers, said frame being movable by the depression of either key lever to cause an endwise upward movement of the rod, and being also movable independently of the key levers to cause the feeding of the sheet without perforating it.

[Claim 6 not printed in the Gazette.]

1,063,819. CEMENT-WALL MOLD. HENRY MELCHER, Logan, Ohio. Filed May 27, 1912. Serial No. 699,926. (Cl. 25—121.)

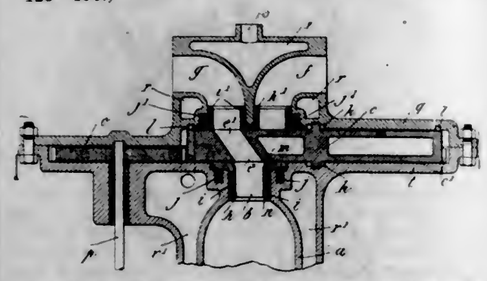


1. In a mold for hollow cement walls, comprising an inverted trough like structure having end closing plates and a core extending within said mold, openings in said core for receiving tying means, angular plates vertically movable within said core and hand operated means for raising or lowering said angular plates to partially close said openings.

2. In a cement wall mold for hollow walls, a trough shaped structure comprising fixed rear and top plates, a swinging front plate and a core extending longitudinally through said mold and projecting therebeyond, end closing means comprising a plate apertured to receive said core, a strip on said plate to engage said core, a bracket on said core to engage said plate, and ears on said plate to engage the front and rear plates of the mold.

3. In a cement wall mold, a straight wall mold comprising relatively fixed rear and apertured top plates, a swinging front plate, a detachable end plate, a core extending through said mold, tie receiving means in said core, and a corner mold coöperating therewith and detachably secured thereto, said corner mold comprising relatively stationary rear, end and apertured top plates, end and front plates connected with said plate, cores extending partly through said corner mold, and means to lock said swinging plates together.

1,063,820. DISTRIBUTER FOR INTERNAL-COMBUSTION ENGINES. EUGÈNE LOUIS LÉON MÉNAGÉ, Paris, France. Filed June 13, 1912. Serial No. 703,445. (Cl. 123—190.)



1. An internal combustion engine comprising, a cylinder; a single central port at one end of the cylinder; a plane disk mounted on this end; an admission port and an exhaust port formed in this disk; means for rotating the disk at a speed proportional to that of the engine and to cause the two ports in the disk to communicate with the central port of the cylinder; and admission and exhaust pipes opening above the disk and with which the two ports in the latter respectively communicate during its rotation.

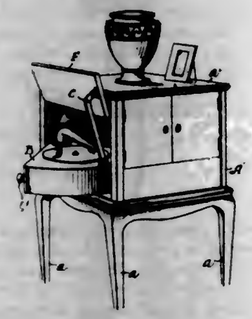
2. An internal combustion engine comprising; a cylinder; a single central port at one end of the cylinder; a plane disk mounted on this end; an admission port and an exhaust port formed in this disk; means for rotating the disk at a speed proportional to that of the engine and to cause the two ports in the disk to communicate with the central port of the cylinder: admission and exhaust pipes opening above the disk and with which the two ports in the latter respectively communicate during its rotation; a movable flanged socket mounted in the central port of the cylinder; segmental rings inserted in the external surface of the said socket; and springs pressing the flanges of the socket against the lower face of the disk.

3. An internal combustion engine comprising; a cylinder, a single central port at one end of the cylinder; a plane disk mounted on this end; an admission port and an exhaust port formed in this disk, means for rotating the disk at a speed proportional to that of the engine and to cause the two ports in the disk to communicate with the central port of the cylinder; admission and exhanst pipes opening above the disk and with which the two ports in the latter respectively communicate during its rotation; a movable flanged socket mounted in the central port of the cylinder; segmental rings inserted in the external surface of the said socket, and springs pressing the flanges of the socket against the lower face of the disk, a similar double flanged socket, provided with segmental rings and situated in the openings of the admission and exhaust pipes; and springs pressing the flange of the said double socket against the upper face of the disk.

4. An internal combustion engine comprising; a cylinder, a single central port at one end of the cylinder; a plane disk mounted on this end; an admission port and an exhaust port formed in this disk; means for rotating the disk at a speed proportional to that of the engine and to cause the two ports in the disk to communicate with the central port of the cylinder; admission and exhaust

pipes opening above the disk and with which the two ports in the latter respectively communicate during its rotation; a movable flanged socket mounted in the central port of the cylinder; segmental rings inserted in the external surface of the said socket; and springs pressing the flanges of the socket against the lower face of the disk, and a beveled edge at the inner part of the flange to reduce the pressure of the gas on the distributing disk.

1,063,821. CABINET FOR TALKING-MACHINES. OSCAR E. MERTZ, Philadelphia, Pa., assignor, by direct and mesne assignments, of one-half to American Graphophone Company, Bridgeport, Conn., a Corporation of West Virginia, and one-half to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Apr. 8, 1910. Serial No. 554,110. (Cl. 181—3.)



1. The combination, in a talking machine mount, of a casing, a pivot therefor, a record carried thereby, reproducing means in engagement with said record, a horn connected with said reproducing means, and a pivotal connection for said horn in line with the pivot of said casing whereby movement of the mount upon its pivot may be made without affecting the delivery of sound waves to said horn.

2. The combination, in a talking machine mount, of a main casing, a supplemental casing movable with respect to the main casing, a pivot for said supplemental casing, a record carried thereby, reproducing means in engagement with said record, a horn connected with said reproducing means, and a pivotal connection for said horn in line with the pivot of said supplemental casing whereby movement of the latter upon its pivot may be made without affecting the delivery of sound waves to said horn.

3. The combination, in a talking machine mount, of a main casing having a permanent top, a supplemental casing movable into and out of the main casing and pivoted at one side of the same, a record carried thereby, reproducing means in engagement with said record, a horn connected to said reproducing means, pivotal connections for said horn in line with the pivot of said supplemental casing whereby movement of the mount upon its pivot may be made without affecting the delivery of sound waves to said horn, a movable side section hinged to the main casing above said supplemental casing, and means connecting said side section with the supplemental casing whereby said side section may be operated when the supplemental casing is moved on its pivot.

4. The combination, in a talking machine mount, of a main casing having a permanent top, a supplemental casing movable into and out of the main casing and pivoted at one side of the same, a record carried thereby, reproducing means in engagement with said record, a horn connected to said reproducing means, pivotal connections for said horn in line with the pivot of said supplemental casing whereby movement of the mount upon its pivot may be made without affecting the delivery of sound waves to said horn, a movable side section hinged to the main casing above said supplemental casing, and a rod pivotally connected to said side section and the supplemental casing whereby said side section may be operated when the supplemental casing is moved on its pivot.

1,063,822. DISPLAY-RACK. ANDREW E. MILLER, Baltimore, Md., assignor to Solomon Himmel, Baltimore, Md. Filed Aug. 5, 1911. Serial No. 642,525. (Cl. 211—16.)



1. A display rack comprising spaced apart rockers, a garment supporting rod carried by said rockers, a spring acting against the under face of one of said rockers, and an overhanging lock adapted to engage the upper surface of one of said rockers to hold the same against the tension of said spring.

2. A display rack comprising spaced apart supporting rockers having curved bottom faces upon which said rockers rest, uprights carried by said rockers and free at their upper ends, a supporting rod carried by said uprights, and means directly acting on said rockers for maintaining the uprights in a normally vertical position.

3. The combination with a case, of an upright supporting member, means for pivotally supporting the lower end of said member near the bottom of the case, and means acting on the lower end of said member for automatically returning the upper end thereof after the same has been moved to a forward position.

4. The combination with a case provided with a door, of a garment supporting member pivotally mounted in said case, means for automatically moving said supporting member to a forward position when the door is opened, means for automatically locking said supporting member in its forward position, and means for automatically returning said supporting member to a rearward position when released from said locking means.

5. The combination with a case provided with a door, of a garment supporting member mounted to swing within said case, and means for automatically moving said garment supporting member to a forward position within said case when the door is opened.

[Claims 6 to 10 not printed in the Gazette.]

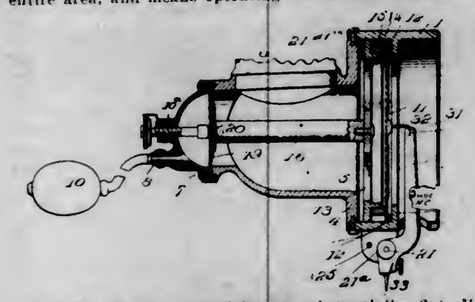
1,063,823. SOUND-BOX. HENRY C. MILLER, Waterford, N. Y. Filed June 2, 1906, Serial No. 319,934. Renewed Oct. 4, 1912. Serial No. 723,998. (Cl. 181—11.)

1. A sound box provided with a substantially flat diaphragm, and means bearing near its edges for dishing the diaphragm throughout its entire area to alter its pitch.

2. A sound box comprising a casing having an annular flange, a normally flat diaphragm within the casing and seated on the annular flange, and means acting on an annular line within the margin of the annular flange on the casing to dish said diaphragm in concavo-convex form throughout its entire area to alter the pitch of the sound transmitted by said diaphragm.

3. A sound box comprising a diaphragm, a washer on which the diaphragm is seated, a washer acting on an

annular line on the opposite side of the diaphragm to dish the latter in concavo-convex form throughout its entire area, and means operating the latter washer.

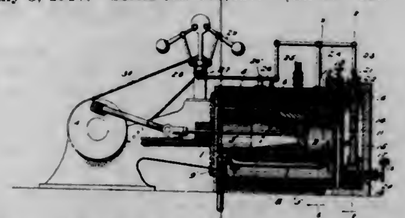


4. A sound box comprising a substantially flat diaphragm, a flange on which the outer edge of one surface of the diaphragm rests, means acting near the edge of the diaphragm to dish the diaphragm throughout its entire area, and means for operating the latter means.

5. A sound box comprising a diaphragm, means for dishing the same, and a pneumatic device which may be operated during the operation of the machine without interference therewith for operating said means.

[Claims 6 to 30 not printed in the Gazette.]

1,063,824. ELECTRIC HEAT-ENGINE. REUBEN A. MITCHELL and FRANK A. EMERICK, Oil City, Pa. Filed July 5, 1910. Serial No. 570,417. (Cl. 60—39.)



1. In combination, a cylinder, a piston arranged therein, the cylinder being formed with a plurality of ports, an air reservoir surrounding said cylinder and communicating therewith by one of said ports, a heating chamber arranged in proximity to said cylinder and communicating therewith through one of said ports, and means for intermittently heating air in said heating chamber and expanding the same into said cylinder.

2. In combination, a cylinder, a reciprocating piston arranged therein, an air chamber surrounding said cylinder and communicating therewith substantially centrally thereof, a cooling chamber surrounding said air chamber, a heating chamber in communication with one end of said cylinder, and electrical heating means for heating the air in said heating chamber, and means for intermittently causing said electrical heating means to heat the air in said heating chamber.

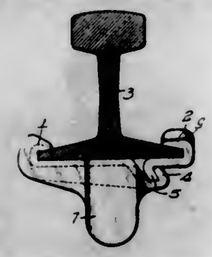
3. In combination, a cylinder, a piston arranged in said cylinder, an air chamber surrounding said cylinder and in communication therewith, a cooling chamber surrounding said air chamber, a heating chamber, a pair of electrodes arranged in said heating chamber, means for intermittently causing said electrodes to heat the air in said heating chamber, and regulating means for varying the distance between said electrodes for controlling the heat generated thereby.

4. In combination, a cylinder, a piston adapted to reciprocate in said cylinder, an air chamber surrounding said cylinder and in communication therewith, a plurality of valves adapted to permit the establishing of an equilibrium in said cylinder on both sides of said piston when the piston is at one end of said cylinder, means for heating the air in one end of said cylinder for expanding the same, and a cooling chamber surrounding said air chamber.

5. In combination, a cylinder, a reciprocating piston arranged therein, an air chamber surrounding said cylinder and communicating therewith substantially centrally thereof, a cooling chamber surrounding said air chamber, a heating chamber in communication with one end of said cylinder, means for creating an arc for heating air in said heating chamber, and a governor actuated by the piston and connected for varying the length of said arc relative to the speed of the piston.

[Claim 6 not printed in the Gazette.]

1,063,825. INTERLOCKING RAIL-ANCHOR. PHILIP W. MOORE, Evanston, Ill., assignor to The P. & M. Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 5, 1911. Serial No. 619,080. (Cl. 238—4.)



1. A rail anchor comprising two members each provided with a jaw adapted to grip one side of a rail base and each provided with a diagonally disposed wall adapted to cooperate with the corresponding wall of the other member to effect a wedging engagement of said members beneath the rail base, the wall of one of said members being extended beyond the main body-portion of said member to guide said other member into normal coöperating position when said parts are being assembled on the rail.

2. A rail anchor comprising two jaw-carrying members having walls which normally engage beneath the rail base to prevent separation of said members along a line substantially transverse to the length of the rail, said walls being arranged at a slight angle with respect to the length of said rail, whereby relative sliding motion of one member with respect to the other will cause said jaws to grip the opposite sides of the rail base more firmly between them, one of said walls being extended to guide said members into proper wedging engagement with each other.

3. A rail anchor comprising two members having sliding engagement beneath the base of a rail along a line slightly diagonal with respect to the length of said rail, one of said members having a projecting portion adapted to guide the other member into proper wedging engagement with said first member and adapted to prevent the return of said other member and consequent loosening of said wedging engagement.

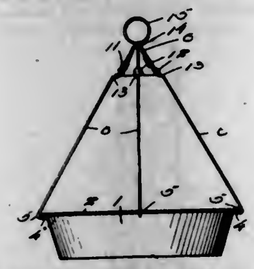
4. A rail anchor comprising a clip member and a mate having engaging walls diagonally disposed beneath a rail base adjacent one side of said base, said clip member having a rearwardly extending projection adapted to guide the engaging wall of said mate into proper engagement with the corresponding wall of said clip member, said projection being further adapted to prevent the withdrawal of said mate.

5. A rail anchor comprising a clip and a mate having interlocking wedging engagement beneath a rail base, said clip having a jaw for engaging the rail base and having a downwardly extending portion adapted to bear against the side of a tie, and having also a rearwardly extending locking projection adapted to coöperate with said mate.

[Claims 6 to 12 not printed in the Gazette.]

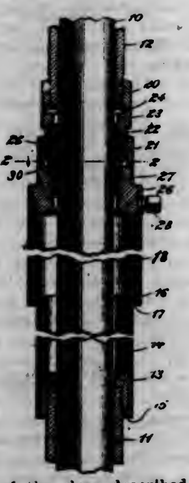
1,063,826. PAN-LIFTER. SAMUEL MOYER, Columbiana, Ohio. Filed June 20, 1911. Serial No. 634,333. (Cl. 65—32.)

A pan lifter, comprising a conical shaped metal member having offsets formed in its lower portion, slots formed in said member above the offsets, members passing over said cone and down through the slots, said members having outwardly bent portions engaging the lower edge of the off-sets to secure the conical member upon said members



and having reversely bent lower ends to provide jaws for engaging the rim of a pan, the upper ends of said members being twisted together, a recess formed in the apex of the cone to receive the twists of said members.

1,063,827. FEEDER-SUPPORT. COLMAN J. MULLIN, New York, N. Y. Filed Mar. 31, 1906. Serial No. 309,140. (Cl. 247—10.)



1. In a device of the class described, the combination with a sectional conduit, a pull box, and a conductor extending therethrough, of a gripping device incasing a part of the conductor and engaging frictionally therewith, said gripping device being positioned between a section of the conduit and the pull box and operating to connect the same together.

2. In a device of the class described, the combination with a sectional conduit, a pull box, and a conductor extending therethrough, of a gripping device positioned between the adjacent ends of the pull box and one section of the conduit, said gripping device incasing the conductor for a part of its length and engaged directly therewith for supporting the weight of said conductor within the conduit.

3. The combination of a conduit, a conductor grip supported by the side walls of said conduit, a conductor incased within the conduit and frictionally engaged with said gripping device whereby the weight of the conductor is imposed upon the side walls of said conduit.

4. In a device of the class described, the combination with members composing a conduit, a conductor incased therein, and a pull box, of gripping mechanism positioned between adjacent ends of one conduit member and the pull box and operatively connecting the same together, said gripping mechanism embodying coöperating members rotative with respect to each other and a compressible member which incases the conductor and is retained in frictional contact therewith by said coöperating members.

5. In a device of the class described, the combination with members composing a conduit, a conductor incased therein, and a pull box, of gripping mechanism positioned between adjacent ends of one conduit member and the pull box and operatively connecting the same together, said gripping mechanism embodying screw threaded members coupled to each other for relative rotative movement and a compressible member positioned within the screw threaded members and incasing a part of the conductor, said compressible member being held in frictional engagement with the conductor by the operation of said screw threaded members.

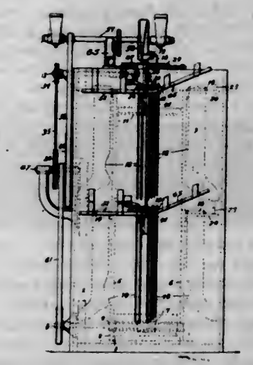
[Claims 6 to 34 not printed in the Gazette.]

1,063,828. HACKSAW-FRAME. DAVID L. MURCHEY, Detroit, Mich. Filed Dec. 29, 1911. Serial No. 668,409. (Cl. 145—33.)



The combination with a frame, and a saw holder carried thereby and having in its side face a recess, of a disk having a hub entering said recess and journaled therein, means for holding said disk against the holder, a saw having notches in its opposite marginal edges, and a pair of devices projecting from the side of said disk at diametrically-opposite points of the disk-axis and engaging said notches, respectively.

1,063,829. AUTOMATIC STOCKING-DRIER. BERTRAND A. PARKES, Philadelphia, Pa., assignor to The Philadelphia Drying Machinery Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 30, 1909. Serial No. 493,115. (Cl. 34—12.)



1. In a machine of the class described, a casing, means within the casing for supporting the articles to be dried, means for feeding the articles to said supporting means, means for removing the articles from said supporting means after they have been dried, and means controlled by said supporting means for actuating the feeding and removing means.

2. In a machine of the class described, a casing, means within the casing for supporting the articles to be dried, means associated with said casing and movable relatively thereto for feeding the articles to said supporting means and for removing the articles from said supporting means after they have been dried, and means controlled by said supporting means for actuating the feeding and removing means.

3. In a machine of the class described, a casing, a rotatable carrier within the casing, supports associated with said carrier upon which the articles to be dried are sustained, means for feeding the articles to said supports, and means for removing the articles from said supports after they have been dried, and means controlled by said carrier for actuating the feeding and removing means.

4. In a machine of the class described, a casing, a rotatable carrier within the casing, supports associated with said carrier and upon which the articles to be dried are sustained, means associated with said casing and movable relatively thereto for feeding the articles to said supports and for removing the articles from said supports after they have been dried, and means controlled by said carrier for actuating the feeding and removing means.

5. In a machine of the class described, a casing, a continuously-operating carrier within the casing having means for sustaining the articles to be dried, means for feeding the articles to said carrier, means for removing the articles from said carrier after they have been dried, and means controlled by said carrier for actuating the feeding and removing means.

[Claims 6 to 17 not printed in the Gazette.]

1,063,830. CURTAIN-FIXTURE. AUGUST C. RADER, Upper Montclair, N. J. Filed May 18, 1912. Serial No. 698,265. (Cl. 156—26.)



1. A holding fixture for spring actuated shades, including a rod, casing engaging shoes, members connecting said shoes and said rod, said members being movable longitudinally of the rod, said shoes having a pivotal connection with said members, and spring means carried by each member for normally engaging a shoe at opposite sides of its pivot to maintain the shoe at right angles to its member.

2. A holding fixture for spring actuated shades, including a rod, casing engaging shoes, members connecting said shoes and said rod, said members being movable longitudinally of the rod, said shoes having a pivotal connection with said members, and a plurality of springs secured to said members and contacting with said shoes to normally maintain the same at right angles to the members.

3. A holding fixture for spring actuated shades, including a hollow rod, the terminals of said rod being interiorly screw threaded, a screw threaded barrel disposed within each of the terminals of said rod, a plunger disposed for movement within said barrel, a plug forming a closure for one end of said barrel, a coiled spring interposed between said plug and the inner terminal of said plunger, a shoe, said shoe being formed with spaced ears, a pivot pin passing through said ears at their outer edges, said pin passing through the outer terminal of said plunger, an extension carried by the shoe, and springs carried by said plunger, said springs contacting with the extension of the shoe to maintain the shoe at right angles to the said plunger.

4. A holding fixture for spring actuated shades including a hollow rod, a barrel adjustably arranged within either end of said rod, a plunger mounted for a restricted sliding movement within said barrel, resilient means for normally maintaining said plunger at the limit of its outward movement, a shoe pivotally connected to said plunger, and a resilient connection between said plunger and said shoe, whereby the shoe is normally maintained at right angles to the plunger.

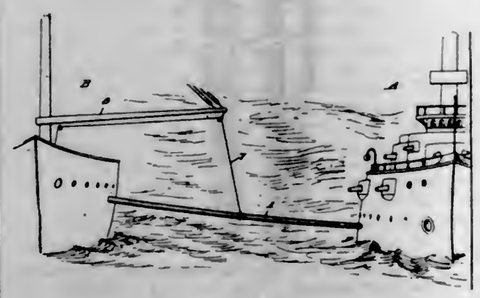
1,063,831. LADDER. GEORGE W. REED, Holcomb, N. Y. Filed June 26, 1912. Serial No. 706,124. (Cl. 228—5.)

A ladder comprising side rails having grooves extended about opposite sides and ends thereof, cross rungs connecting the side rails and a wire trained throughout the extent of the groove in each side rail and having its ends twisted together and located at one end of the side rail to project outwardly therefrom, and staples secured in the side rails and engaging the wire to sustain the same seated in the grooves, the said twisted ends of the wire being



adapted to form anchoring projections extended beyond the lower bearing ends of the side rails whereby the said twisted ends will bite into the foundation to prevent the slipping of the ladder.

1,063,832. MEANS FOR LOADING SHIPS. BERNARD REIVER, Philadelphia, Pa. Filed Mar. 21, 1911. Serial No. 615,839. (Cl. 214—1.)

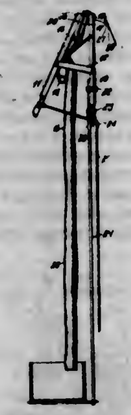


1. In means for loading and unloading vessels, a tube connecting two vessels, a lashing cable for connecting the two vessels passing through the tube, and a second tube arranged within the first mentioned tube and adapted to have the load passed therethrough.

2. In means for loading and unloading vessels, a tube connecting two vessels, a lashing cable for connecting the two vessels passing through the tube, and a second tube arranged within the first mentioned tube and adapted to have the load passed therethrough, said second tube being supported within the first mentioned tube by means of the lashing cable.

1,063,833. FRUIT-PICKER. LILLIE M. RICHARDSON, Farmville, Va. Filed July 2, 1912. Serial No. 707,320. (Cl. 56—99.)

1. A fruit picker comprising a handle, an arm connected to one end of said handle, a pair of links having corresponding ends pivotally connected to said arm on opposite sides of the latter respectively, a second arm pivotally mounted between the other end of said links, spring means constantly tending to force the ends of the arms remote from the handle toward each other, a flexible tubular member provided with a mouth disposed between said arms and having opposite sides thereof secured to the ends of the arms remote from the handle respectively whereby the movement of said ends of the arms toward and away from each other will close and open said mouth, and means for moving said ends of the arms away from each other against the influence of said spring means.

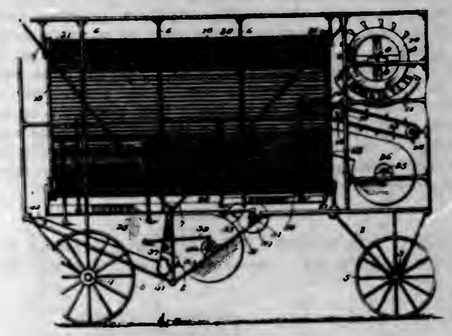


2. A fruit picker comprising a handle, an arm connected to one end of said handle, a pair of links having corresponding ends pivotally connected to said arm on opposite sides of the latter respectively, a second arm pivotally mounted between the other ends of said links, spring means constantly tending to force the ends of the arms remote from the handle toward each other, a flexible tubular member provided with a mouth disposed between said arms and having opposite sides thereof secured to the ends of the arms remote from the handle respectively whereby the movement of said ends of the arms toward and away from each other will close and open said mouth, a pair of pivoted jaws mounted in the mouth of the member and constituting the lips of said mouth, inwardly directed flanges on said jaws adapted to cooperate with each other when closed upon the stem of a fruit to sever said stem and means for moving the ends of the arms remote from the handle away from each other against the influence of said spring means.

3. A fruit picker comprising a handle, an arm connected to one end of said handle, a pair of links having corresponding ends pivotally connected to said arm on opposite sides of the latter respectively, a second arm pivotally mounted between the other ends of said links, spring means constantly tending to force the ends of the arms remote from the handle toward each other, a flexible tubular member provided with a mouth disposed between said arms and having opposite sides of its mouth secured to the ends of the arms remote from the handle respectively whereby the movement of said ends of the arms toward and away from each other will close and open said mouth, an extension on the inner end of said member having a relatively small diameter, and means for moving the ends of the arms remote from the handle away from each other against the influence of said spring means.

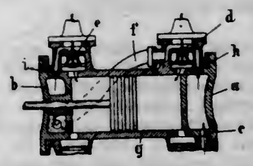
1,063,834. THRESHING-MACHINE. ALBERT M. SCHESSER, deceased, Prairie View, Kans., by Louisa Schesser, administratrix, Prairie View, Kans. Filed Feb. 19, 1912. Serial No. 678,574. (Cl. 130—16.)

In a device of the class described, the combination with a frame; of a separating drum rotatably mounted therein and comprising a pair of end bands, said bands being angular in cross section, a plurality of spaced longitudinal rods secured to the horizontal faces of said end bands to form the wall of said drum, and a pair of crossed diagonal rods connected at their ends to the last mentioned faces of said end bands to brace the latter and also provide an agitating means for the contents of the drum, the laterally extending faces of the angular bands



affording a means for rotatably supporting the drum in the frame.

1,063,835. CYLINDER FOR STEAM-ENGINES AND THE LIKE. MAX SCHMIDT, Hirschberg, Germany. Filed Sept. 23, 1912. Serial No. 721,840. (Cl. 121—45.)



In a cylinder for steam engines and the like, the combination with the cylinder having two steam chests or valve casings, of a front head and a back head, and means to successively pass the pressure fluid through the back head, one of the steam chests, the front head, and the second one of the steam chests.

1,063,836. LOOSE-LEAF BINDER. FREDERICK E. SEXAUER, Brooklyn, N. Y. Filed May 3, 1912. Serial No. 694,796. (Cl. 129—13.)

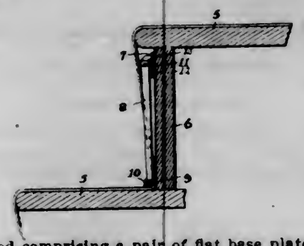


1. In a loose leaf binder, the combination of a pair of cross sectionally L-shaped binding members arranged with their outer webs in overlapping relation, the opposing webs of the binding members being respectively provided with telescopically related tubes, one tube of each pair having a series of adjusting slots, the other binding member being provided with a catch arranged in its tube and adapted to engage the slots of the slotted tube to detachably secure the binding members together, each catch having an operating arm or lever at an angle thereto arranged on the outer side of the binding member to which said catch is connected, and a spring on the outer side of the last mentioned binding member and bearing on the said arm of the catch to normally hold the catch in engaged position.

2. In a loose leaf binder, the combination of a pair of cross sectionally L shaped binding members arranged with their outer webs in overlapping relation, the opposing webs of the binding members being respectively provided with telescopically related tubes, one tube of each

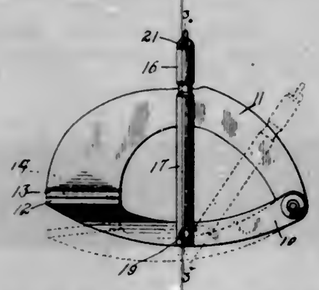
pair having a series of adjusting slots, the other binding member being provided with a catch arranged in its tube and adapted to engage the slots of the slotted tube to detachably secure the binding members together, each catch having an operating arm or lever at an angle thereto arranged on the outer side of the binding member to which said catch is connected, a spring on the outer side of the last-mentioned binding member and bearing on the said arm of the catch to normally hold the catch in engaged position, and a cover for the operating arms and springs of the catches, said cover being provided with openings displaying and affording access to the operating arms of the catches.

1,063,837. STAIR-ROD. HUGH J. SHARPE, Lansford, Pa. Filed Sept. 12, 1911. Serial No. 648,893. (Cl. 16—26.)



A stair rod comprising a pair of flat base plates, swinging arms hinged to said plates, flat springs having their lower ends integral with the lower edges of said base plates and extended forwardly therefrom and provided with upper, free ends adapted to engage the inner extremities of said swinging arms when the latter are in raised or lowered positions, said base plates being provided with openings adapted to receive the free ends of said springs, and a clamping bar carried by the free ends of said arms.

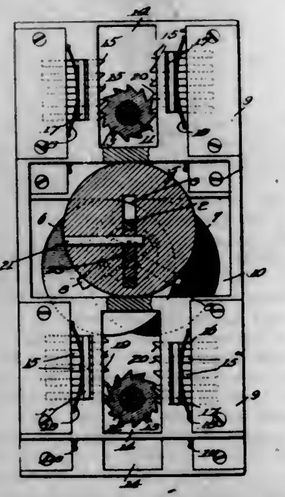
1,063,838. TIRE-PATCHING TOOL. WILLIAM O. SHAW, St. Paul, Minn. Filed Jan. 22, 1913. Serial No. 743,690. (Cl. 152—27.)



A tool of the class described comprising a pair of arms pivotally connected at one end and terminating at their other ends in coöperating clamping plates, a yoke pivotally connected to one of said arms and embracing the other arm, the outer edge of the embracing arm having its forward and rear portions disposed in the curves of circles whose centers are between the pivot of the yoke and the inner and outer ends of said arm respectively whereby a depression is formed at the center of the outer edge of the embraced arm, and a set screw carried by the yoke and coöperating with the last named arm to force and lock said clamping plates in clamping position.

1,063,839. MECHANISM FOR CONVERTING RECIPROCATING INTO ROTARY MOTION. ROBERT W. J. SMITH, Huntsville, Tex. Filed July 8, 1912. Serial No. 708,202. (Cl. 74—54.)

1. In combination, a driving shaft, a driven shaft on each side thereof, the driving shaft having a plurality of substantially rectangular guide frames interposed in its length, each frame having its long axis in the axis of the shaft and its narrow axis transverse to the shaft, a block slidable in each frame longitudinally of the shaft, a cam wheel for each frame, each wheel having a slot for receiving the frame, the slot being of greater length than the width of the frame, a pin arranged transversely of the slot of each cam and passing through the slot of the block in the adjacent frame, a connection between the frames, the driving shaft being hollow, and said connection being in the hollow of the shaft, a rod connected to one end frame and extending out of the shaft, a lever pivoted intermediate its ends and having one end rotatably connected to the rod, a yoke plate for each cam, each plate having a central rectangular opening for receiving the cam, and end openings for receiving the driven shafts, the cam engaging opposite sides of the central opening of the yoke to reciprocate said yoke toward and from the driven shafts, and a driving connection between each yoke and the driven shafts for continuously rotating the said shafts in one direction when the yoke is reciprocated.



2. In combination, a driving shaft, a driven shaft on each side thereof, the driving shaft having a plurality of substantially rectangular guide frames interposed in its length, each frame having its long axis in the axis of the shaft and its narrow axis transverse to the shaft, a block slidable in each frame longitudinally of the shaft, a cam wheel for each frame, each wheel having a slot for receiving the frame, the slot being of greater length than the width of the frame, a pin arranged transversely of the slot of each cam and passing through the slot of the block in the adjacent frame, means for simultaneously moving the blocks, a yoke for each cam, each yoke having an opening for the cam, the cam engaging opposite sides of the opening, and being reciprocated by the rotation of the cam, and a driving connection between each yoke and the driven shafts for continuously rotating said shafts in one direction when the yokes are reciprocated.

3. In combination, a driving shaft, said shaft having three rectangular guides extending longitudinally of the shaft, a block movable in each guide longitudinally of the shaft, each block having a slot inclined to the shaft, a cam for each guide, each cam having a slot for the guide of greater length than the width of the guide, each cam having a pin extending through the slot of the adjacent block, means for simultaneously moving the blocks, a driven shaft on each side of the driving shaft, and means operated by the rotation of the cams for continuously rotating the driven shafts in one direction, said means comprising a plate for each cam, each plate having an opening for the cam and an opening for each driven shaft, the cam engaging the sides of the opening adjacent

to the driven shafts, a ratchet wheel on each driven shaft in the opening of the plate, a series of teeth slidable in the plate on each side of each ratchet wheel, and springs compressing each series toward the ratchet wheel, the teeth of one series being beveled at their inner ends on the side adjacent to the driven shaft, and the teeth of the other series being beveled at their inner ends on the side remote from the driving shaft.

4. In combination, a driving shaft, said shaft having three rectangular guides extending longitudinally of the shaft, a block movable in each guide longitudinally of the shaft, each block having a slot inclined to the shaft, a cam for each guide, each cam having a slot for the guide of greater length than the width of the guide, each cam having a pin extending through the slot of the adjacent block, means for simultaneously moving the blocks, a driven shaft on each side of the driving shaft, and means operated by the rotation of the cams for continuously rotating the driven shafts in one direction, said means comprising a ratchet wheel on each of the driven shafts, a yoke plate connected with each cam and reciprocated toward and from the driven shafts by the cam, a series of teeth slidable on the plate on each side of each ratchet wheel, one of the said series having their inner ends beveled on one side, and the other series having their inner ends beveled on the opposite side.

5. In combination, a driving shaft, said shaft having three rectangular guides extending longitudinally of the shaft, a block movable in each guide longitudinally of the shaft, each block having a slot inclined to the shaft, a cam for each guide, each cam having a slot for the guide of greater length than the width of the guide, each cam having a pin extending through the slot of the adjacent block, means for simultaneously moving the blocks, a driven shaft on each side of the driving shaft, and means operated by the rotation of the cams for continuously rotating the driven shafts in one direction.

[Claims 6 to 10 not printed in the Gazette.]

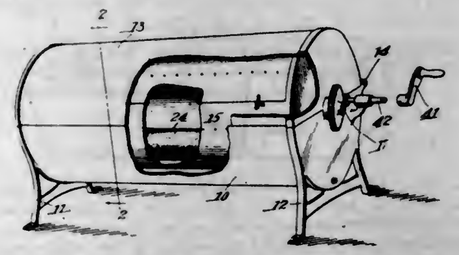
1,063,840. HAT-PIN-POINT PROTECTOR. IDA A. SOULE, San Francisco, Cal. Filed June 1, 1911. Serial No. 630,604. (Cl. 24—155.)



As a new article of manufacture, a pin protector comprising a tapered casing open at both ends, one of said ends being inclined inward, the casing providing a tapered bore extending substantially the length thereof, a cap for one end of the casing, a tapered spring mounted within the bore and prevented from moving longitudinally in one direction by the inwardly inclined end of the casing and in the other direction by the tapered walls of the bore, said spring being so bent as to provide a looped member, the remaining portions of the spring being bowed toward each other to normally contact, the ends of the spring being flared outwardly and the contacting portions of the spring being moved away from each other by the action of the pin pushed therebetween.

1,063,841. DRY-CLEANING MACHINE FOR GLOVES. FRANCIS STELTER, Long Island City, N. Y., assignor to Volvox Machine Company, Inc., New York, N. Y., a Corporation of New York. Filed Sept. 28, 1912. Serial No. 722,901. (Cl. 8—8.)

1. In a cleaning machine of the class described, the combination of a rotatable perforate receptacle built up of spaced members, certain of said spaced members having brushing means on their inner surfaces and, with the inner surfaces of the other members, forming a contiuous cylindrical surface, and a cylindrical element loosely mounted in the receptacle and having brushing means on its outer surface, substantially as and for the purpose described.



2. In a cleaning machine of the class described, the combination of a rotatable receptacle having a uniform curved interior surface and brushing elements arranged on said surface, a curved member contained in the receptacle having brushing elements on its entire convex surface, said member being freely movable in the receptacle, the brushing elements thereon coöperating with the brushing elements of the receptacle to clean articles introduced into the receptacle.

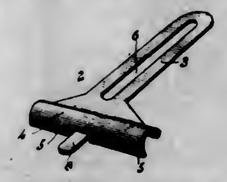
3. In a cleaning machine for gloves and the like, the combination of a receptacle having a continuous curved interior surface provided with brushing means, and a member loosely mounted in the receptacle and having brushing means on its exterior surface, substantially as described.

4. In a cleaning machine for gloves, the combination of a cylindrical receptacle having brushing means on its interior surface, a cylindrical member loosely mounted in the receptacle, said member being nearly the length of the interior of the receptacle and having brushing means on its entire exterior surface, including the ends, substantially as described.

5. In a dry cleaning machine for gloves, the combination of a movable receptacle having brushing elements on its interior surface, a member loosely carried in said receptacle and having brushing means on its exterior surface, and another member having a smooth exterior surface and also being loosely mounted in the receptacle, said members coöperating with each other and the receptacle when the latter is moved, substantially as and for the purposes described.

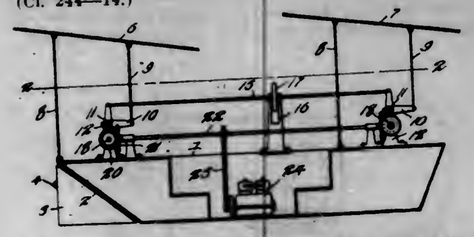
[Claims 6 to 11 not printed in the Gazette.]

1,063,842. CLOTH-GUIDE FOR SEWING-MACHINES. ROSA D. STOCKER, Colorado City, Colo. Filed Dec. 2, 1911. Serial No. 663,537. (Cl. 112—9.)



A cloth guide constructed of a single sheet of metal and comprising a slotted adjustable shank, an upwardly bowed head formed on the end of said shank and extending at right-angles thereto in opposite directions from the shank, said head having the edge of its guiding side in a plane with the bottom surface of the shank and a longitudinal extension struck up from the guiding side in the middle of the head and raised above the plane of the shank, said extension being longitudinally alined with the shank and adapted to prevent the cloth from riding up upon the head.

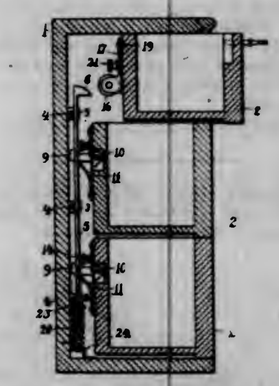
1,063,843. AEROPLANE. ALBERT SUGDEN, Stratford, Ontario, Canada. Filed May 25, 1910, Serial No. 563,340. Renewed Dec. 27, 1912. Serial No. 738,968. (Cl. 244—14.)



1. In a flying machine comprising a frame, front and rear inclined planes tiltably mounted on the frame, front and rear transverse rock shafts, connections between the planes and shafts whereby a rocking of the shafts will tilt said planes, transverse drive shafts, longitudinally extending propeller shafts journaled upon the ends of the drive shafts and in gear with said drive shafts, propellers carried by said propeller shafts, connections between the rock shafts and propeller shafts, a rod connecting the rock shafts, whereby the latter may be actuated to tilt the planes and propellers through said connections in unison, and an operating device for shifting the said rod.

2. A flying machine comprising a frame, front and rear inclined planes tiltably mounted on the frame, transverse rock shafts arranged below said planes, connections between the planes and the rock shafts, whereby upon the rocking of the latter the planes may be tilted, yokes upon the ends of the rock shafts, propeller shafts journaled in said yokes, transverse drive shafts, gearing between said drive shafts and the propeller shafts, propellers mounted upon the respective propeller shafts, an operating rod connecting the rock shafts, whereby the latter may be actuated to tilt the planes and propellers in unison, and an operating device having a threaded engagement with said rod.

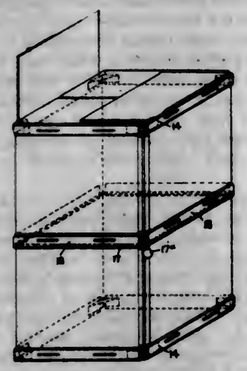
1,063,844. DRAWER-LOCK. JOHN V. SWANSON, Boston, Mass. Filed May 23, 1912. Serial No. 699,223. (Cl. 45—94.)



1. A case having a plurality of drawers slidable therein, in combination with a locking device carried by each of the lower drawers, a vertically slidable locking bar adapted when depressed to engage said locking devices, a plate pivoted to the rear of the topmost drawer to swing in a transverse vertical plane, an anti-friction roll carried by said plate and adapted, when the plate is hanging in its normal position, to engage the upper end of said bar and depress the same when the topmost drawer is pushed back into place, and means for locking said plate both in the herein described position and also in a position wherein it has been swung to one side for avoiding said bar and thereby leaving the lower drawers unlocked.

2. A case having a plurality of drawers slidable therein, in combination with a vertical slidable bar resiliently supported and having vertical slots corresponding to said drawers, hooks pivotally carried by said drawers and resiliently pressed upward into engagement with the upper ends of said slots, a slotted plate being provided for each hook, and each hook having a lug adapted by engagement with its associated plate to keep the hook from rising too high to enter its slot, and a detent pivoted to each plate above its hook for locking the latter out of engagement with its slot.

1,063,845. COLLAPSIBLE OR KNOCKDOWN BOX. JOSEPH W. WEISS, Baltimore, Md. Filed Oct. 16, 1912. Serial No. 726,003. (Cl. 229—37.)



1. A collapsible box of fibrous material having sides, an end flap for each side, and reinforcing folds at the edges of the box between the flaps and sides, said folds and flaps formed integral with the sides of the box and forming projecting strengthening ridges at the edges so as to space the sides from the supporting surface upon which the box may rest and means for attaching said folds to said sides.

2. A collapsible box having sides and end flaps, folds formed integral with said sides and flaps, said folds forming a projecting ridge about the ends of the box, and stiff angle pieces located within said folds at the corners, said angle pieces being partially concealed by the flaps.

3. A collapsible box having sides, an end flap extending from each side, folds formed between said flaps and sides, said folds and flaps being integral with the sides, and a reinforcing member extending within said folds and concealed by the flaps.

4. A collapsible box having sides, an end flap extending from each side, and a fold between said flaps and sides at the exterior of the box at the end thereof, said fold forming a reinforcing ridge extending around the box and spacing the same from the surface on which the box is supported and means for permanently fastening said folds to the sides.

5. A collapsible box having sides and end flaps, folds formed integral with said sides and flaps, said folds forming a projecting ridge about the ends of the box, stiff angle pieces located within said folds at the corners, said angle pieces comprising angularly disposed arms and a stiffening portion embracing said arms located on one side thereof.

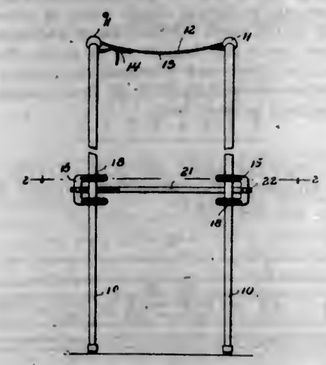
[Claims 6 to 13 not printed in Gazette.]

1,063,846. CRUTCH. HENRY WINTHERS, Hampton, Iowa. Filed Sept. 10, 1912. Serial No. 719,610. (Cl. 3—4.)

1. In a crutch, the combination with independent crutch members, of a supporting member connecting the crutch members, and a bar connecting the crutch members for relatively adjusting the same.

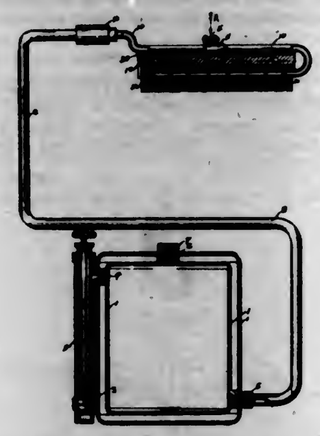
2. In a crutch, the combination with independent crutch members, of a supporting strap connecting the same, plates adjustably mounted on the said crutch members, and a bar having adjustable connection with the said plates.

3. In a crutch, the combination with independent crutch members, of plates movable vertically and horizontally



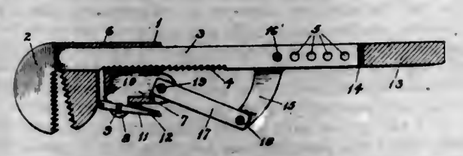
thereon, a supporting strap connecting the crutch members, and a bar having adjustable connection with the said plates.

1,063,847. CLEANING-BRUSH. CURTIS BENTON, San Francisco, Cal. Filed May 8, 1912. Serial No. 695,836. (Cl. 15—51.)



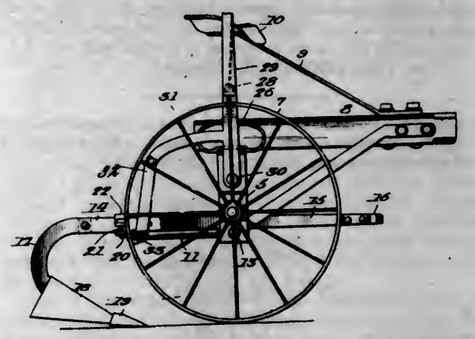
In combination with a scrubbing brush, a distributing member of elongated U-shape, one part being supported on the back of the brush and the other extending through the bristles and having perforations, substantially as described.

1,063,848. WRENCH. WALTER W. BOWEN, Chicago, Ill. Filed May 7, 1912. Serial No. 695,658. (Cl. 81—88.)



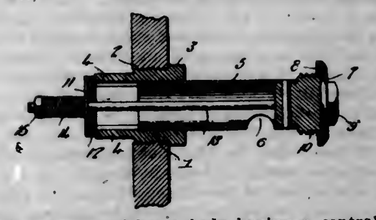
The herein described construction of wrenches embodying a jaw having an angularly arranged shank which has its lower edge provided with teeth, and which is provided with a plurality of transversely arranged perforations adjacent its end, a lever or handle having a slotted end which is provided with downturned side arms adapted to be arranged upon the shank, the longitudinal arms of the slotted lever being provided with an opening, a pin passing through the openings and through one of the perforations of the shank, a slidable jaw arranged for longitudinal movement upon the shank of the stationary jaw, the said movable jaw having spaced ears, a spring-pressed lever pivotally connected between the ears, a pawl loosely connected with the lever and adapted to engage with the teeth of the shank of the stationary jaw, and a link connection between the ends of the downturned arms of the operating lever and the movable jaw.

1,063,849. FARMING IMPLEMENT. IRA BRINKERHOFF, Huntington, Utah. Filed July 19, 1911. Serial No. 639,368. (Cl. 97—35.)



A clamp for cultivators comprising plates adapted to embrace the drag beams and bail of the cultivator, said plates being provided with seats adapted to receive the drag beam and bail respectively, one of the said plates being provided with notches in opposite ends thereof adapted to receive lugs when engaged in the said bail, and bolt members passed through the plates for securing the same together.

1,063,850. FAUCET. GEORGE W. BURR, West Duluth, Minn. Filed Dec. 6, 1912. Serial No. 735,321. (Cl. 137—27.)



1. A faucet, comprising a body having a central bore, a tubular spout slidable through the body and provided with an outlet in the side thereof, said spout being closed at its outer end and open at its inner end, a spring seated valve normally closing the inner end of the spout, and means brought into action by the outward sliding movement of the spout for unseating said valve.

2. A faucet, comprising an externally threaded body having a central bore, a tubular spout slidable through the body and provided with an outlet in the side thereof, said spout being closed at its outer end and open at its inner end, a spring seated valve normally closing the inner end of the spout, and means on the body for unseating said valve during the outward sliding movement of the spout is slid outward.

3. A faucet, comprising a body having a central bore, a tubular spout slidable through the body and provided with an outlet in the side thereof, said spout being closed at its outer end and open at its inner end, a spring seated valve normally closing the inner end of the spout, and a projection on the body acting to unseat said valve as the spout is slid outward.

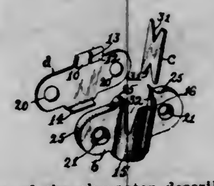
4. A faucet, comprising a body having a central bore, a tubular spout slidable through the body and provided with an outlet in the side thereof, said spout being closed at its outer end and open at its inner end, a spring seated

valve normally closing the inner end of the spout, means on the body for unseating said valve during the outward sliding movement of the spout, a sealing flange at the outer end of the spout adapted to rest in contact with the body when the spout is moved inward, and screw threads on the spout adapted to engage internal threads in the body and hold said flange against the body.

5. A faucet, comprising a body having a central bore, a tubular spout slidable through the body and provided with an outlet in the side thereof arranged to be closed by the body as the spout is slid inward, said spout being closed at its outer end and open at its inner end, a spring seated valve normally closing the inner end of the spout, and means brought into action by the outward sliding movement of the spout operating to unseat said valve.

[Claim 6 not printed in the Gazette.]

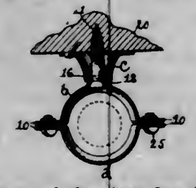
1,063,851. TWINE-CUTTER. LEWIS A. CARPENTER and RICHARD MIDDLETON, Revere, Mass. Filed Feb. 21, 1911. Serial No. 609,970. (Cl. 30—14.)



1. In a device of the character described, in combination, a knife holder comprising two members secured together, one of said members having fingers separated to form a slot, and provided with a flange extended transversely of the plane of said slot, and the other member having a curved portion provided with a substantially central channel or groove extended but partially the width of said member to leave an end wall for said channel or groove, and provided with slots in its opposite side walls, and a knife blade slidable between said fingers and in said channel and coöperating with said end wall and flange, substantially as described.

2. In a device of the character described, in combination, a knife holder comprising sheet metal members secured together and separated to form a chamber open at its opposite ends, means on one of said members extended laterally between the open ends of said chamber to permit the holder to be secured in a fixed position, a knife inserted into the said chamber at one end thereof with its side edges in frictional engagement with said members and capable of being pushed out of said chamber by means inserted into the opposite end of said chamber, and means within the chamber for guiding the knife, substantially as described.

1,063,852. PIPE-HANGER. LEWIS A. CARPENTER and RICHARD MIDDLETON, Revere, Mass. Filed Apr. 26, 1912. Serial No. 693,304. (Cl. 248—31.)



1. A pipe hanger of the class described, comprising a sheet metal bell having a head provided with an opening, a sheet metal pipe engaging member having a concaved substantially semi-circular pipe engaging portion having an opening whose walls are extended outwardly to form a nipple which is extended through the opening in the head of the bell and expanded to engage said head and lock said member to said bell, and a second sheet metal pipe engaging member coöperating with the first mentioned member, substantially as described.

2. A pipe hanger of the class described, comprising a sheet metal bell, a sheet metal pipe-engaging member, one of said parts having an opening whose walls are extended outwardly to form a nipple which is extended into an opening in the other of said parts and expanded to lock the two parts together so as to enable them to be handled as one piece, and a second sheet metal pipe-engaging member coöperating with the first-mentioned member, substantially as described.

1,063,853. NUT-LOCKING DEVICE. SAMUEL W. CARPENTER, Pittsburgh, Pa. Filed Oct. 2, 1911. Serial No. 652,285. (Cl. 151—54.)



Means for locking a plurality of nuts disposed in the same plane, comprising a base plate provided with bolt openings and having an open ended keeper located midway the ends of the plate and projecting from the outer face of the latter, combined with a pair of nut-securing plates disposed in the same plane and provided at their adjacent ends with tongues extending into the open ended keeper from opposite directions and in overlapping relation, and nut-housings on the outer faces of said securing plates.

1,063,854. PUSH-BUTTON SWITCH. CHARLES A. CLARK, Hartford, Conn., assignor to Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Nov. 21, 1911. Serial No. 661,610. (Cl. 175—293.)

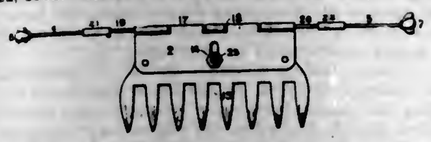


1. A push button switch embodying a supporting plate with a slot and a lug constituting a guide for a stop and releasing member appurtenant thereto, an oscillatory carrier for the movable contacts, a reciprocatory stop and releasing member geared with and positively operated from the push buttons, and arranged to bear against the aforesaid lug and also having a projecting part that enters the aforesaid slot, whereby it is guided in its movements, and a tension device acting upon the said oscillatory carrier.

2. A two button snap switch embodying an actuator bar with which the push buttons are connected, a pinion rotated thereby, an oscillatory carrier for the movable contacts, a reciprocatory stop and releasing member controlling the movements of the said carrier, formed with a rack with which the said pinion engages and by which it is moved, and a tension device acting upon the said oscillatory carrier.

3. A two button snap switch embodying a reciprocating plate bearing a stop and having a toothed rack upon one edge and a pinion in mesh therewith, said rack and pinion being connected with the actuator bar of the switch.

1,063,855. HAT-FASTENER. ALAN BOUTCHER CLINGELEFFER, Stewart Island, New Zealand. Filed May 22, 1912. Serial No. 698,947. (Cl. 132—25.)

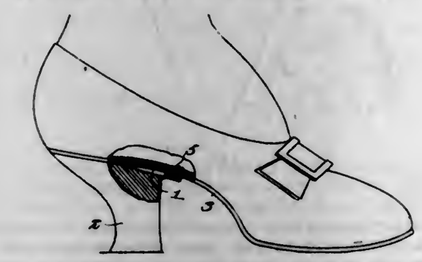


1. In a hat fastener, the combination of jaws adapted to engage the hair, a pin having screw threaded ends pivotally connecting said jaws together, two internally threaded elements, one for each inserted end of said pin, and two extension pieces each having a screw threaded end and adapted to extend through the crown of the hat and screwed into the said internally threaded elements of said pin, substantially as and for the purpose set forth.

2. In a hat fastener, the combination of two jaws adapted to swing toward or from each other, tubular nuts, one carried by each jaw, a contractor spring intermediate said jaws and having its ends secured thereto by said nuts, and pins, each having a screw threaded end adapted to be passed through the crown of the hat and inserted into one of said tubular nuts, substantially as and for the purpose set forth.

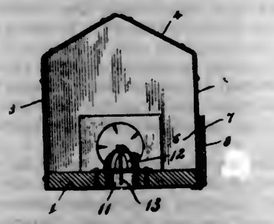
3. In a hat fastener, the combination of a jaw, a second jaw adapted to move toward or from said first mentioned jaw, a tubular nut carried by said second mentioned jaw, a contraction spring having one end operatively connected with said second mentioned jaw by said nut, means for connecting the other end of said spring with said first mentioned jaw, and a pin having a screw threaded end adapted to be passed through the crown of the hat and inserted into said tubular nut, substantially as and for the purpose set forth.

1,063,856. COMBINED HEEL-LEVELER AND SHANK-STIFFENER. JOHN A. COLLING, Missoula, Mont. Filed Jan. 24, 1912. Serial No. 673,059. (Cl. 36—76.)



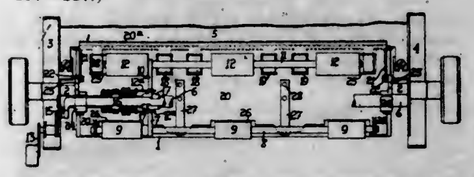
In a shoe of the type provided with a heel, a wedge shaped body of oblong form tapering in width and thickness and having its upper face longitudinally and transversely curved, said body having its pointed end driven between the heel and sole of the shoe and having its butt portion projecting a short distance in front of the heel to come beneath the shank portion of the sole to which it is secured.

1,063,857. TRAP. BYRON G. COOK, Covington, Tenn. Filed Nov. 26, 1912. Serial No. 733,661. (Cl. 43—24.)



A trap of the class described having a bottom provided with a bait opening, a cage in the trap secured on and extending around and over the said opening, and a bait holding pin extending downwardly from the top of the bait cage and into the center of the opening.

1,063,858. TYPE-WRITING MACHINE. FRANK A. COOK, Hartford, Conn., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of New Jersey. Filed Feb. 24, 1910. Serial No. 545,567. (Cl. 197—127.)



1. In a typewriting machine, the combination with a platen, feed roll shafts carrying feed rolls and a release key to cast off the rolls, of a paper deflector beneath the platen, and having a hinged connection with the platen frame, a yielding support to press the deflector against the platen, and a device on the paper deflector catching over one of the roll carrying shafts to be moved thereby when the rolls are cast off, to release the deflector from the platen.

2. In a typewriting machine, the combination with a platen frame, and paper feed roll devices, of a paper deflector extending along the platen, arms journaled upon the platen frame and pivotally connected to the deflector, a yielding device to press the deflector against the platen, and a releasable pressure roll having a shaft which supports said yielding device.

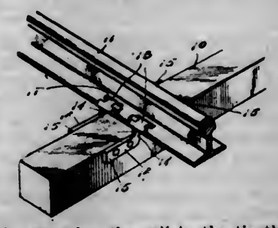
3. In a typewriting machine, the combination with a cylindrical platen and a platen frame, of a paper guide or deflector curving around the under side of the platen and extending substantially from end to end thereof, independently movable arms pivoted upon the platen frame, said deflector pivoted at its ends to said arms, so that either end of the deflector may yield, a releasable pressure roll shaft, and yielding devices supported by said shaft for independently pressing the ends of the deflector against the platen.

4. In a typewriting machine, the combination of a cylindrical platen and a platen frame, a paper shelf having its lower edge adjacent to the said platen, a curved deflector, pivotal supports for said deflector adjacent the lower edge of said paper shelf, a spring normally tending to press said deflector against said platen, feed rollers normally engaging said platen and connected with said deflector so as to hold said deflector normally against said platen, and means for casting off said rollers and said deflector and holding them removed from said platen.

5. In a typewriting machine, the combination of a platen, a platen frame, a pair of pivoted arms arranged transversely under said platen, a deflector pivotally attached to said arms, roller arms also mounted transversely under said platen, feed rollers mounted on said roller arms, a spring for pressing said deflector against said platen when said rollers are pressed against said platen, and means for casting off said rollers and said deflector.

[Claims 6 to 9 not printed in the Gazette.]

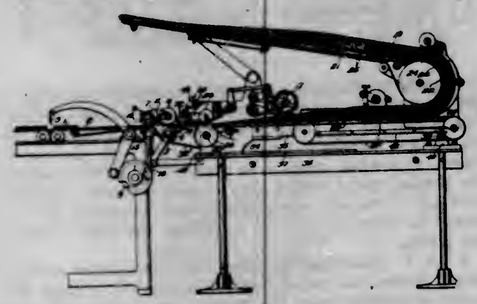
1,063,859. RAIL-CLIP. HENRY T. CORY, Dexter, N. Y. Filed Nov. 12, 1912. Serial No. 730,943. (Cl. 238—4.)



A rail clip for securing the rail to the tie thereof, comprising a single piece of material bent to form a head pro-

vided with recesses adapted to receive spikes therethrough for securing the head to the rail and securing the rail on the tie, a reduced shank formed at the inner end of the head and projecting downwardly therefrom, and a plate projecting rearwardly and laterally from the said shank and provided with transversely extending apertures adapted to receive bolts therethrough for rigidly securing the clip to the tie.

1,063,860. PAPER-FOLDING MACHINE. FRANK L. CROSS, Wollaston, Mass., assignor to Cross Paper Feeder Company, a Corporation of Maine. Filed July 18, 1908. Serial No. 444,154. (Cl. 101—36.)



1. A paper folding machine, having, in combination, sheet folding devices, feed rolls and tapes for feeding sheets to the folding devices, mechanism for separating sheets from a bank and delivering them in succession between the feed rolls, and means for moving the separating mechanism into position for delivering sheets between the feed rolls or into position to permit a feed board to be positioned at the feed rolls for feeding the sheets by hand, and a feed board positioned at the feed rolls when the separating mechanism is out of position and removed from position at the feed rolls when the separating mechanism is in position, substantially as described.

2. A paper folding machine, having, in combination, sheet folding mechanism, devices for feeding sheets to the folding mechanism, mechanism for separating sheets from a sheet supply and delivering them in succesion to the feeding devices, means for moving the separating mechanism into or out of position for delivering sheets to the feeding devices, and means for supporting a feed table in position for the presenting of sheets to the feeding devices by hand when the separating mechanism is out of active position and a feed table which is removed from position for presenting sheets to the feeding devices when the separating mechanism is in position, substantially as described.

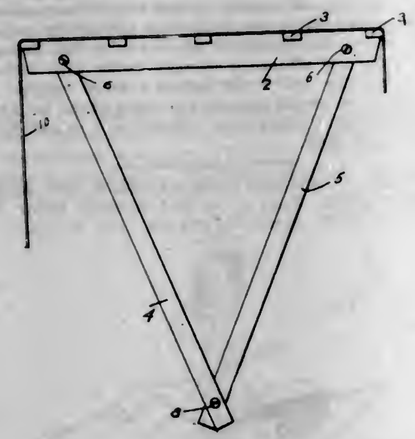
3. A paper folding machine, having, in combination, sheet folding mechanism, devices for feeding sheets to the folding mechanism, mechanism for separating sheets from a sheet supply and delivering them in succession to the feeding devices, mechanism for presenting a sheet supply to the sheet separating mechanism, a frame carrying the supply presenting and sheet separating mechanisms, and means for retracting the frame to permit a feed board to be placed in position for feeding sheets to the sheet feeding devices by hand, and for advancing it into position for the automatic delivery of sheets to the sheet feeding devices when the feed board is removed, substantially as described.

4. A paper folding machine, having, in combination, sheet folding mechanism, devices for feeding sheets to the folding mechanism, a feed table, a supply table arranged above the feed table, means for feeding a feathered bank of sheets from the supply table on to the feed table, devices for separating individual sheets from the sheet supply on the feed table and delivering them in succession to the feeding devices, a frame carrying the feed and supply tables and sheet separating mechanism, means for retracting the frame to permit sheets to be delivered manually to the sheet feeding devices and for advancing it into position for the automatic delivery of sheets to the sheet feeding devices and a feed board positioned at the feeding devices when the frame is retracted and removed from position at the feeding devices when the frame is advanced for delivering sheets automatically to the feeding devices, substantially as described.

5. A paper folding machine, having, in combination, sheet folding mechanism, devices for feeding sheets to the folding mechanism, front gages for positioning sheets at the feed devices, mechanism for separating sheets from a bank of sheets and delivering them in succession to the feeding devices, means for moving the separating mechanism into or out of position for delivering sheets to the feeding devices, means for throwing the front gages out of action when the separating mechanism is in position for delivering sheets to the feeding devices, and throwing them into action when the separating mechanism is out of position for delivering sheets to the feeding devices, and means for removably supporting a feed table in position for the presenting of sheets to the front gages by hand when the separating mechanism is out of active position, substantially as described.

[Claims 6 to 13 not printed in the Gazette.]

1,063,861. PAPER-HANGING DEVICE. AMOS A. CUSHMAN, Butler, Ohio. Filed Dec. 26, 1912. Serial No. 738,685. (Cl. 216—4.)

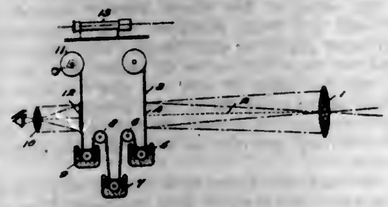


A paper hanging device comprising a pair of palallel bars, a plurality of parallel cross pieces secured within notches formed in the upper edges of said bars, the cross pieces extending a considerable distance beyond the outer sides of the parallel bars, a pair of converging arms, means for securing the inner end of each arm to both parallel bars, and means for connecting the outer ends of said arms to each other, the arms forming handles whereby the head may be supported.

1,063,862. APPARATUS FOR DETERMINING RANGES. CLELAND DAVIS, U. S. Navy. Filed Mar. 22, 1911. Serial No. 616,271. (Cl. 88—3.)

1. In a distance instrument, the combination of a camera adapted when located at a known distance above the plane of the horizon to make a picture of said horizon and an object having an unknown height; and a plurality of scales graduated in accordance with said distance and height adapted to determine by the aid of said picture the real distance and height of said object, substantially as described.

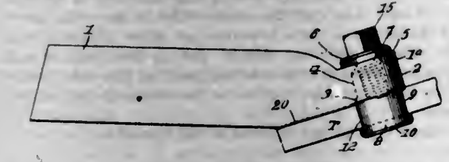
2. In a distance instrument, the combination of a camera adapted to make a photograph of an object and the horizon from a position at a known distance above the horizon; a scale graduated to said distance adapted to measure in terms of the real range the distance between said object and horizon on said picture; and means for magnifying said scale and picture, substantially as described.



3. In a distance instrument, the combination of a camera adapted when located at a known distance above the plane of the horizon to make a picture of said horizon and an object having an unknown height; a plurality of scales graduated in accordance with said distance and height adapted to determine by the aid of said picture the real distance and height of said object; and means for magnifying said scales and picture, substantially as described.

4. In a distance instrument, the combination of a camera adapted when located at a known distance above the plane of the horizon to make a picture of said horizon and an object having an unknown height; means for immediately developing and fixing said picture associated with said camera; and a plurality of scales graduated in accordance with said distance and height adapted to determine by the aid of said picture the real distance and height of said object, substantially as described.

1,063,863. COMBINATION TOOL-HOLDER. WILLIAM D. DUCKETT, Detroit, Mich. Filed June 24, 1911. Serial No. 635,106. (Cl. 29—98.)

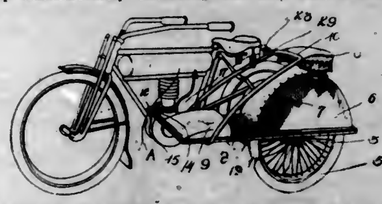


A tool holder comprising a body portion terminating in an inclined member having a bore extending therethrough, the bore having a relatively wide flared end merging into a small cylindrical portion and having a tapered wall reduced and apertured, a tool carrying head formed with a transversely extending passage for the tool, and a shank extending from the head and of a configuration conforming to the contour of the bore in the inclined member and provided with a threaded socket alining with the aperture in said inclined member, and a headed bolt having a flange contiguous the head thereof and passed through said aperture in the socket of the said tool carrying head to hold the latter within the bore, said flange contacting wih the adjacent end wall of the bore.

1,063,864. SIDE CAR FOR MOTOR-CYCLES. FENDALL C. EDWARDS and CHARLES J. HUNTER, Newport News, Va. Filed July 2, 1912. Serial No. 707,274. (Cl. 208—45.)

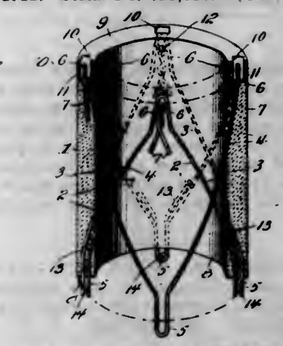
1. A side car adapted for attachment to a motorcycle and comprising a base having a slot therein adjacent to one end thereof, bearings depending from said base at the opposite sides of the slot therein, an axle journaled in said bearings, a wheel on the axle and within the slot, semi-circular plates secured to the upper surface of said base at the opposite sides of the slot therein and spaced apart, a segmental strip secured to the peripheral edges of said plates, a seat upon said plate at the center thereof, and a foot rest formed at the free end of said base.

2. The combination with a motorcycle, of a side car adapted for attachment thereto, and connections between said motorcycle and said car, said connections including a strap substantially inclosing the side car, a universal



joint between the strap and the motorcycle, a Y-shaped yoke, hinge connections between said yoke and side car, a universal joint connecting the yoke to the motorcycle, a connecting bar, and universal joints between the connecting bar and the side car and the bar and the motorcycle.

1,063,865. TILE. ERNEST A. EULER, Blair, Kans. Filed Aug. 3, 1912. Serial No. 713,087. (Cl. 72—53.)



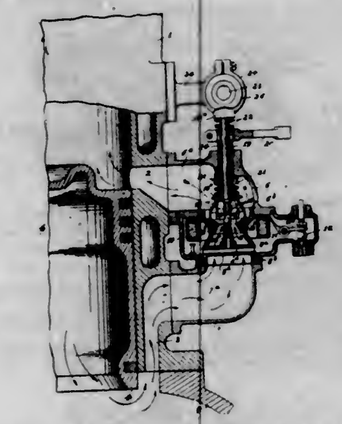
A tile comprising a tubular body having an annular series of spaced recesses in one of its end edges and transverse openings adjacent to such end edge and in alinement with said recesses, and reinforcing elements embedded in said tile, said reinforcing elements comprising an annular series of independent V-shaped wires, said wires having their diverging arms arranged in crossing relation throughout the series of wires, each wire having free hooked ends arranged in spaced and lapping relation to the similar ends of adjacent wires, the hooked ends of the wires extending in pairs into said recesses, and in line with said transverse openings at one end of the tile, and the apex portions of the wires being formed with loops projecting beyond the opposite end of the tile.

1,063,866. FUEL-FEED REGULATOR FOR EXPLOSIVE-ENGINES. SEAMAN D. FILSON, Grove City, Pa. Filed Feb. 16, 1912. Serial No. 678,067. (Cl. 123—29.)

1. A carbureter, comprising a mixing chamber provided with a bridge member and a centrally located liquid fuel nozzle, an annular liquid fuel chamber surrounding said mixing chamber, a float and float valve adapted to maintain the liquid fuel at a predetermined height in said liquid fuel chamber, a vertically movable compensating valve having a constricted air passage surrounding said liquid fuel nozzle, a ball valve seated at the mouth of said nozze, means for intermittently and positively closing said ball valve, and means for positively raising said vertically movable compensating valve.

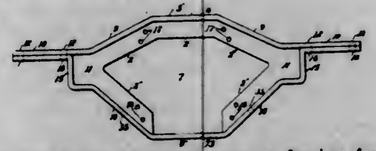
2. A carbureter, comprising a mixing chamber provided with a liquid fuel nozzle, a liquid fuel chamber communicating with said nozzle, a ball valve at the mouth of the latter, a compensating valve having a constricted air passage surrounding the mouth of said liquid fuel nozzle, means for regulating the movements of said ball valve and for positively closing the same at intervals, means for resiliently maintaining said compensating valve in

seated position, and means for positively moving said compensating valve whereby to vary the area of said air passage about said fuel nozzle.



3. In an internal combustion engine, a charge forming and regulating device, comprising a cam shaft and cam, a power cylinder provided with a charge inlet port, a carbureter including a fuel nozzle, a ball-valve normally closing the latter, a spring resisted valve stem adapted to be operated by said cam and to intermittently hold said ball-valve in a closed position, and means for shifting said cam for the two or four cycle operation of said engine.

1,063,867. FORGED CAR-TRUCK SIDE FRAME. WILLIAM D. FORSYTH, Youngstown, Ohio, assignor to Alexander M. Neeper, Pittsburgh, Pa. Filed July 31, 1912. Serial No. 712,434. (Cl. 105—243.)



1. A new article of manufacture, a forging for a car truck side frame made from a single piece of metal, having a web integral with two parallel flanges of different lengths and shorter than both flanges, said web having an opening therein formed by cutting away a part of the same about midway between the ends of the longer flange and substantially along its top surface and under and along a line about midway between said flanges; said web being expanded in direction substantially at right angles to said flanges, said longer flange being bent at both ends so as to contact with and conform to the free edges of said web and the under sides of the ends of the short flange.

2. A new article of manufacture, a forging for a car truck side frame made from a single piece of metal, having a web integral with two parallel flanges of different lengths and shorter than both flanges, said web having an opening therein formed by cutting away a part of the same about midway between the ends of the longer flange and substantially along its top surface and under and along a line about midway between said flanges; said web being expanded in direction substantially at right angles to said flanges; said longer flange being bent at both ends so as to contact with and conform to the free edges of said web and the under sides of the ends of the short flange; and two brackets or arms affixed to one of said flanges, one at each end of said forging formed and extended so that the ends thereof are substantially parallel to the extended ends of said flanges.

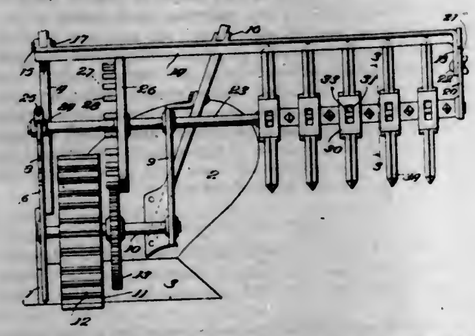
3. A car truck side frame made from a single piece of metal, having a web integral with two parallel flanges of different lengths and shorter than both flanges, said web having an opening therein formed by cutting away a part of the same about midway between the ends of the longer flange and substantially along its top surface and under and along a line about midway between said flanges; said web being expanded in direction substantially at right angles to said flanges; said longer flange being bent at both ends so as to contact with and conform to the free edges of said web and the under sides of the ends of the short flange; and means for the reception and retention of a bolster affixed to said web in substantially vertical position so as to provide guides for said bolster.

4. A car truck side frame made from a single piece of metal, having a web integral with two parallel flanges of different lengths and shorter than both flanges, said web having an opening therein formed by cutting away a part of the same about midway between the ends of the longer flange and substantially along its top surface and under and along a line about midway between said flanges; said web being expanded in direction substantially at right angles to said flanges, said longer flange being bent at both ends so as to contact with and conform to the free edges of said web and the under sides of the ends of the short flange; means for the reception and retention of a bolster affixed to said web in substantially vertical position so as to provide guides for said bolster; and means at each end of said frame for affixing journal boxes thereto.

5. A new article of manufacture, a forging for a car truck side frame made from a single piece of metal, having a web integral with two parallel flanges of different lengths and shorter than both flanges, said web having an opening therein formed by cutting away a part of the same about midway between the ends of the longer flange and substantially along its top surface and under and along a line about midway between said flanges; said web being expanded in direction substantially at right angles to said flanges, said longer flange being bent at both ends so as to contact with and conform to the free edges of said web and the under sides of the ends of the short flange; and two brackets or arms affixed to the under side of the long flange, one at each end of said forging and formed and extended so that the ends thereof shall be substantially parallel to the extended ends of said flanges.

[Claims 6 to 13 not printed in the Gazette.]

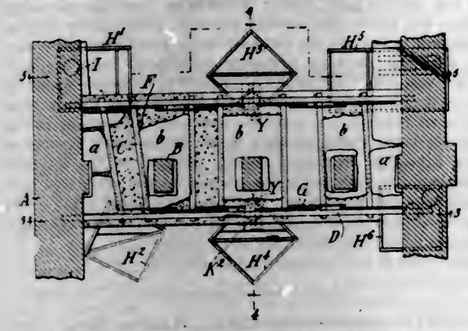
1,063,868. HARROW ATTACHMENT FOR PLOWS. ALFRED L. GARLOUGH, St. Paul, Minn. Filed Jan. 9, 1912. Serial No. 670,270. (Cl. 97—44.)



1. The combination with a turning plow comprising a land-side and a mold-board, of vertically disposed supporting plates secured to the land-side and the mold-board, a bar supported above said plates and extending laterally beyond the mold-board, a shaft journaled in the said plates and having its outer end supported by the said bar, soil-engaging implements carried by said shaft laterally beyond the mold-board, a traction wheel mounted between the said plates, and gearing between said traction wheel and said shaft whereby the shaft and the ground-treating implements thereon will be rotated in a direction contrary to the rotation of the traction wheel.

2. The combination with a turning plow comprising a land-side, a mold-board and handles projecting rearwardly therefrom, of supporting plates secured to the land-side and the mold-board in rear of the same, a bar secured to the handles and extending laterally beyond the same and the mold-board, a plate adjustably secured to the outer end of the said bar, a shaft having one end journaled in the said plate and equipped with bearings adjustably mounted in the plates secured to the mold-board and the land-side respectively, a driving shaft journaled in the lower portions of said plates, a traction wheel on said shaft, a gear wheel on said shaft, and a crown wheel on the first-mentioned shaft meshing directly with the said gear wheel.

1,063,869. METHOD OF UNDERPINNING BUILDINGS, &c. JOHN B. GOLDSBOROUGH, Croton, N. Y. Filed Aug. 26, 1912. Serial No. 717,154. (Cl. 72—77.)



1. The method of underpinning the wall of a building or other structure supported on columns, which consists in locating supporting beams each with a portion thereof in engagement with a part of one of said columns, in then locating lower ends of said columns whereby said columns are braced against relative movement, in then forming a bed of concrete or the like upon the ground about the said columns, and embedding a portion of said supporting beams and the said braces in said concrete.

2. The method of underpinning the wall of a building or other structure supported on separated columns, which consists in locating supporting beams each with a portion thereof underlying a part of the base portion of one of said columns, in then connecting the said beams by longitudinal connecting members whereby the several columns are bonded together, in then forming a bed of concrete or the like upon the ground about the base portions of the said columns, and embedding said supporting beams and said connecting members in said concrete.

3. The method of underpinning the wall of a building or other structure supported on separated columns, which consists in locating supporting beams each with a portion thereof underlying a part of the base portion of one of said columns, in then connecting the said beams by longitudinal connecting members whereby the several columns are bonded together, in then forming a bed of concrete or the like upon the ground around the base portions of the said columns, and embedding said supporting beams and said connecting members in said concrete, and in then constructing pits under said concrete footing, installing foundation elements in said pits and connecting said deeper foundation elements to said concrete footing.

4. The method of underpinning the wall of a building or other structure supported on columns, which consists in locating I beams with their flanges in engagement with the base portions of the columns, in then forming a bed of concrete or the like around the base portions of said columns and embedding said I beams therein.

5. The method of underpinning the wall of a building or other structure supported on columns, which consists in locating I beams with their flanges in engagement with the base portions of the columns, in then locating longitudinal beams and connecting them to said I beams therein, in then forming a bed of concrete or the like around the base portions of said columns and embedding said I beams and said longitudinal beams therein.

[Claims 6 to 17 not printed in the Gazette.]

1,063,870. PROCESS FOR MAKING A VISCOUS, STRINGY, ADHESIVE SUBSTANCE. JANNY GÖPPER and OTTO GEIGER, Oberturkheim, Germany. Filed May 21, 1912. Serial No. 698,675. (Cl. 134—1.)

1. The herein described process for making a viscous, sticky or adhesive stringy substance from resinous substances for use in the asphalt industry and the like, which consists in heating the resinous substances with sulfuric acid and then adding thereto a substance for neutralizing the acid excess.

2. The herein described process for making a viscous, sticky or adhesive stringy substance from resinous substances for use in the asphalt industry and the like, which consists in heating the resinous substances with sulfuric acid to about 200° C. for a suitable time, then cooling and then adding thereto a suitable quantity of soda lye to neutralize the acid in excess.

1,063,871. DIEING-OUT MACHINE. GEORGE B. GROVER, Lynn, Mass., assignor to W. J. Young Machinery Company, Lynn, Mass., a Corporation of Massachusetts. Filed Apr. 1, 1912. Serial No. 687,797. (Cl. 164—25.)

1. A machine for cutting articles from sheet material comprising a cutting block, an edged die mounted with its cutting edge directed toward the block and located beneath the latter so that scraps of the material left after cutting may fall away therefrom, a die carriage, mechanism for reciprocating said carriage and die toward and from the under side of the block, and feeding means located at the side of the block from which the material acted upon advances arranged to cause such material to travel in a path below and close to the under face of the block.

2. In a machine of the character described, a die consisting of a tubular member having a cutting edge on one end, a holder consisting of a plate upon which the end of the die opposite to its cutting edge bears, and clamping means for securing the die thereto; a carriage having a top plate upon which said die holder rests, and having guiding ribs or flanges, guide ways in which said ribs are slidably contained, mechanism for moving said carriage, and a cutting block toward and against which the die is forced in its operative movements, the die holder and the plate of the carriage having apertures in line with the material of the die to permit escape of the pieces cut by the die.

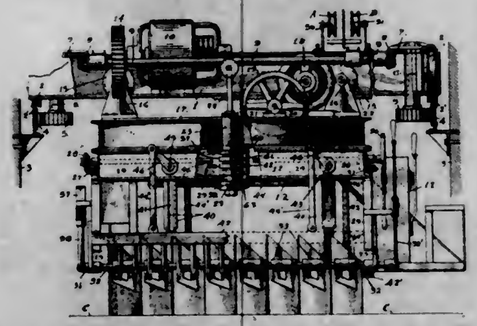
3. A dieing out machine, comprising in combination, a cutting die and a block against which the die acts, a feeding means for the material acted upon comprising a guide for directing the material between the die and block, a feeding finger movably mounted at the side of the die from which the material advances, projecting toward the die from its point of support, and arranged to travel toward and from the die, and means for reciprocating said finger across the face of the block substantially up to the point at which the die strikes the block, the finger being arranged to engage the stock.

4. A machine for cutting strips of sheet material into pieces of which one of the dimensions is approximately equal to the width of the strips, comprising in combination, a cutting die, a block arranged to support the strip against the thrust of the die, means for moving the die toward and from one face of the block, a table for supporting the strip, a plate extending from said table partly across and close to the said face of the block, a feeding finger having a point, located at the opposite side of the strip from said plate with its point extending toward the die, and means for moving said finger toward and from the line of the die and causing its point to enter the stock and push the same across the die.

5. In a machine for the purpose stated, in combination with a die having a cutting edge at its upper end, a cutting block located above said die with its under surface arranged to sustain the material acted upon against the thrust of the die, a plate for guiding the material acted upon extending partly across and close to the acting face of said block, a rock shaft, an arm secured to said rock shaft and oscillated thereby, and a feed finger pivotally connected to said arm beneath said plate and having a portion extending from its pivot connection toward the plate and toward the die arranged to engage and propel the material when the finger is moved by the arm in one direction.

[Claims 6 to 23 not printed in the Gazette.]

1,063,872. MALT TURNING, AERATING, AND GATHERING MACHINE. JOHN GUEHRING, San Francisco, Cal. Filed Apr. 15, 1912. Serial No. 691,030. (Cl. 34—43.)



1. In a malt turning and aerating machine, the combination of a traveling crane; a movable carriage suspended from the crane; a rotatable carriage pivotally secured to the movably suspended carriage; and means secured to the rotatable carriage for turning and aerating the malt.

2. In a malt turning and aerating machine, the combination of a traveling crane; a movable carriage suspended from the crane; a rotatable carriage pivotally secured to the movably suspended carriage; a plurality of plow blades pivotally secured to the rotatable carriage adapted to engage and turn a layer of malt directly under the machine; and means for introducing a blast of air under the layer of malt after it has been turned.

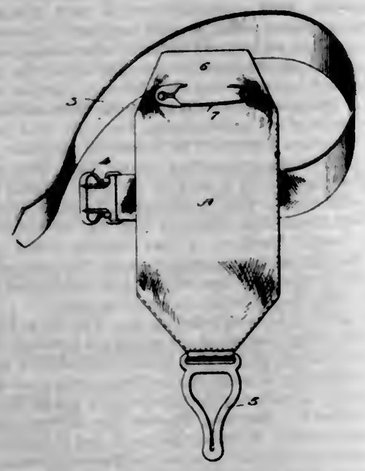
3. In a malt turning and aerating machine, the combination of a traveling crane; a movable carriage suspended from the crane; a rotatable carriage pivotally secured to the movably suspended carriage; a plurality of reversible plow blades horizontally pivoted to the rotatable carriage and adapted to engage and turn a layer of malt directly under the machine into furrows and means secured to the reversible plow blades for directing a blast of air under each furrow of malt after it has been turned by the said plow blades.

4. In a malt turning and aerating machine, the combination of a traveling crane; a movable carriage suspended from the crane; a rotatable carriage pivotally secured to the movably suspended carriage; a plurality of reversible plow blades horizontally pivoted to the rotatable carriage adapted to engage and turn a layer of malt directly under the machine into furrows; means secured to the reversible plow blades for introducing a blast of air under each furrow of malt after it has been turned; and a vertically adjustable rake secured to each end of the rotatable carriage.

5. In a malt turning and aerating machine, the combination of a traveling crane having suitable motor-driven gearing for propelling the crane and toothed racks secured to the said crane; a movable carriage suspended from the crane and having suitable motor-driven pinions adapted to engage the toothed racks secured to the crane; a rotatable carriage pivotally suspended from the movably suspended carriage; a plurality of double-ended reversible plow blades adapted to engage and turn a layer of malt beneath the machine and each plow blade having two or more V-shaped blow pipes, horizontally pivoted on the rotatable carriage; means secured to the rotatable carriage for controlling the motors on the crane and movably suspended carriage; and a vertically adjustable rake secured to each end of the said rotatably suspended carriage and parallel with the plow blades.

[Claims 6 to 9 not printed in the Gazette.]

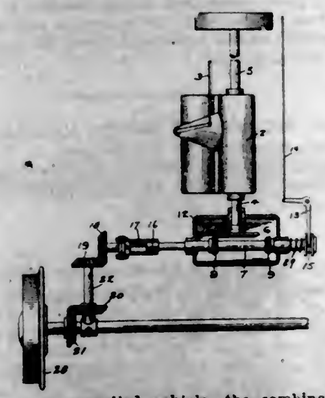
1,063,873. HOSE-SUPPORTER. SAMUEL HAGAN, Newark, Ohio. Filed May 23, 1912. Serial No. 699,174. (Cl. 241—6.)



In a hose supporter, the combination with a pad of greater thickness at the center and tapering from the center toward the sides and ends, of means connected to the sides of the pad for connecting the pad to the limb of the wearer, and fastening means connected to one end of the pad for connecting the pad to the hose.

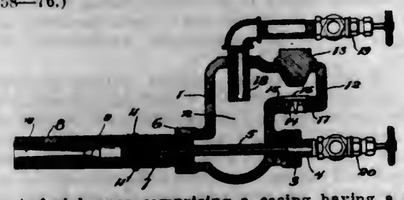
1,063,874. TRANSMISSION MECHANISM. ELBERT J. HALL, West Berkeley, Cal. Filed Apr. 22, 1911. Serial No. 622,643. (Cl. 74—58.)

1. In a power propelled vehicle, a driven shaft, a casing, a longitudinally arranged drive shaft journaled in said casing, a bevel gear on the drive shaft within said casing, a transverse shaft parallel to said driven shaft journaled in the casing and slidable therein, oppositely arranged bevel gears mounted on said transverse shaft within the casing, means for moving said transverse shaft to bring either of said gears into mesh with the first mentioned gear, and means connecting said transverse shaft with the driven shaft.



2. In a power propelled vehicle, the combination of a driven shaft, a casing, a longitudinally arranged shaft bearing in said casing, a bevel gear on said shaft within the casing, a transverse shaft bearing in the casing and slidable therein, oppositely arranged bevel gears on said transverse shaft adapted to singly engage the first mentioned gear on opposite sides thereof, means for longitudinally moving said transverse shaft, connections between said transverse shaft and the driven shaft and a slip joint between said shaft and said connections.

1,063,875. LIQUID-FUEL BURNER. ROBERT L. HANNAH and HOMER R. HANNAH, Waco, Tex., assignors of one-half to William W. Seley and Albert H. Bell, Waco, Tex. Filed Feb. 2, 1912. Serial No. 674,900. (Cl. 158—76.)

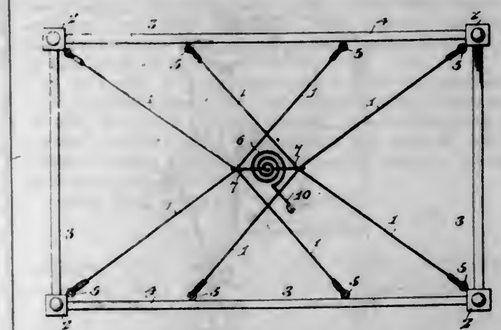


1. A fuel burner comprising a casing having a mixing chamber therein, a discharge pipe secured to the casing and having a nozzle, a steam pipe passing through the mixing chamber and entering the discharge pipe, means for controlling the feed of steam to the discharge pipe, an oil feed tube entering the casing and discharging into the mixing chamber, said casing having openings, a valve operatively mounted in one of said openings and a plug seated in the other opening and adapted to limit the movement of the valve.

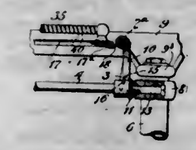
2. A fuel burner comprising a casing having a mixing chamber therein, fuel and steam inlet pipes leading into the casing, an offset head formed on the casing having opposite threaded openings, a valve operatively mounted in one of said openings and a closing plug for the opposite opening extending into the head and adapted to limit the movement of the valve.

1,063,876. BED-BRACE. WILLIAM ISAAC HARP, Galax, Va., assignor of one-half to William L. Harkey, Lexington, N. C. Filed Mar. 19, 1913. Serial No. 755,400. (Cl. 5—3.)

A bed brace comprising a plurality of crossed braces, links connected with the braces at their points of crossing, and a stretching or tightening device consisting of a horizontally coiled portion connected at diametrically opposite points with the said links, and a handle extending from the outer end of the coiled portion and provided at its inner portion with offsetting bends adapted to arrange the said handle beyond the plane of the said braces.



1,063,877. STAND FOR TYPE-WRITING MACHINES, &c. FREDERICK A. HART, Hartford, Conn., assignor to John T. Underwood, Brooklyn, N. Y. Filed June 3, 1910. Serial No. 564,838. (Cl. 45—47.)



1. The combination with a support comprising legs and a top to carry a machine, of a leaf hinged to the legs of the support and shiftable in a direction transversely of its swing, a latch to sustain the leaf in raised position, a catch releasably engaged by the latch, means to shift the leaf bodily to effect the operative engagement of the latch and catch, and a stop on the latch to arrest the lateral shift of the leaf when the latch and catch are brought into alinement.

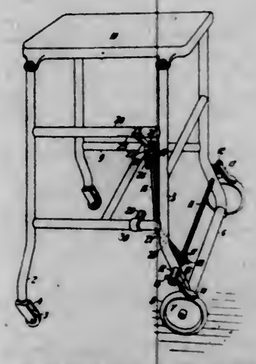
2. The combination with a stand comprising legs, and a top having inwardly projecting brackets connected to the legs, of collars having bearings and removably mounted on the legs beneath the brackets, a rock shaft in the bearings, arms projecting from the rock shaft, and a leaf supported by the arms on a plane about on a level with the top.

3. The combination with a support having legs and comprising a top, of a hinge on said support, a leaf slidably mounted on said hinge, so that when released it lies close to a leg of said support, a spring urging said leaf toward one end of said hinge, an arm on said leaf arranged to be intercepted by an abutment on said support to arrest the lateral shift of the leaf when said spring moves said leaf in its horizontal position, and an extension on said arm holding said leaf against sliding unless further raised.

1,063,878. STAND FOR TYPE-WRITING MACHINES. FREDERICK A. HART, Hartford, Conn., assignor to John T. Underwood, Brooklyn, N. Y. Filed Jan. 25, 1911. Serial No. 604,507. (Cl. 21—65.)

1. A braced four-legged table, a shaft carrying wheels passing through a pair of said legs near their bottom, another shaft carrying brakes and a brake-lever, mounted above and near to said wheel-carrying shaft, the brake-lever being parallel to and near to one of the legs of said pair, said lever being so arranged as to normally hold, by its weight, the brakes off the wheels, and terminating at its upper end, near a table brace, a ratchet on the under side of said brace and a spring-pressed pawl on the end

of said lever for engagement with said ratchet, whereby to press the brakes against the wheels, substantially as described.



2. A braced four-legged table, a shaft carrying wheels passing through a pair of legs near their bottom, another shaft carrying brakes and a brake-lever, mounted in said legs parallel and near to said wheel-carrying shaft, the brake-lever being parallel to and near to one of the legs of said pair, said lever being so arranged as to hold normally by its weight, the brakes off the wheels, and terminating at its upper end, near a table-brace, said brace being arranged substantially at right angles to the plane of the wheel and brake-shafts, a ratchet on the under-side of said brace and a spring-pressed pawl on the side of said lever away from the brakes, for engagement with said ratchet, substantially as described.

1,063,879. RACK-TENDER FOR LOCOMOTIVES. GEORGE R. HENDERSON, Philadelphia, Pa., assignor to The Baldwin Locomotive Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 11, 1912. Serial No. 719,808. (Cl. 105—228.)



1. The combination in a locomotive and tender, of traction driving mechanism on the locomotive; and independent rack mechanism on the tender.

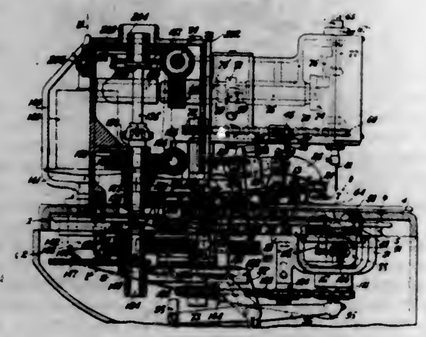
2. The combination in the tender of a locomotive, of the tender frame; a truck thereunder; cylinders carried by the tender frame; gearing driven by steam admitted to the cylinders; said gearing being arranged to mesh with a rack of a track; with a pipe leading from the cylinders to the boiler of the locomotive; and means for controlling the steam from the boiler.

3. The combination in a locomotive tender, of a frame; a swing truck at one end of the frame; a truck yieldingly supporting tender at the opposite end thereof; but held against swiveling action; cylinders on the tender frame; pistons in the cylinders connected to the crank shaft; with a gear wheel adapted to a rack on the track and driven by the crank shaft.

4. The combination in a tender of a locomotive, of a tender frame; a truck located under the frame; two axles mounted in the truck; traction wheels on said axles; a hollow shaft mounted on each axle; a gear wheel on each hollow shaft; a crank shaft having a gear wheel meshing with the gear wheel on the hollow shaft; and driving mechanism connected to the said cranks of the crank shaft.

5. The combination in a tender, of a frame; a truck mounted under said frame; pedestals on the tender frame and adapted to hold the truck against swiveling motion; springs mounted between the truck and the tender frame at the pedestals; two axles mounted in the truck frame; traction wheels on the axles; two hollow shafts, one mounted on each axle and arranged to turn independently thereof; a pair of gear wheels on each hollow shaft; gear rings located on the hollow shaft between the gear wheels and arranged to mesh with the rack located on the track; with a crank shaft mounted in bearings on the truck frame and having two gear wheels meshing with the wheels on the hollow shafts; a crank at each end of said crank shaft; a cylinder mounted at each side of the tender frame and having a piston connected to the cranks; a steam pipe leading from the boiler of the locomotive and connected to the cylinders; and a valve controlling the flow of steam through the said pipe.

1,063,880. BUTTONHOLE-SEWING MACHINE. GEORGE S. HILL, Strafford, N. H., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 10, 1912. Serial No. 676,767. (Cl. 112—4.)



1. A buttonhole sewing machine, having, in combination, upper and under needles, a shaft connected to reciprocate the upper needle, a driving shaft out of axial alinement therewith, and differential crank mechanism connecting the shafts and arranged to impart a comparatively slow movement to the needle during the first part of its downward movement and a rapid movement during the lower part of its reciprocation, substantially as described.

2. A buttonhole sewing machine, having, in combination, upper and under needles, a shaft connected to reciprocate the upper needle, a driving shaft out of axial alinement therewith, and a crank carried by one shaft and having a radially sliding connection with the other shaft, the crank and sliding connection being arranged to rotate the driven shaft one revolution for each revolution of the driving shaft and at a slow speed during the first part of the downward movement of the needle and at a high speed during the lower part of the reciprocation of the needle, substantially as described.

3. A buttonhole sewing machine, having, in combination, upper and under needles, a vertically reciprocating needle bar carrying the upper needle, a crank shaft provided with a crank connected to the needle bar, a driving shaft out of axial alinement with the crank shaft, and a differential crank connection for driving the crank shaft through a revolution for each revolution of the driving shaft comprising a crank pin on the end of one shaft and an arm on the other shaft provided with a radial slot engaged by the crank pin, substantially as described.

4. A buttonhole sewing machine, having, in combination, a straight upper needle, a curved under needle, mechanism for reciprocating and dipping the under needle, mechanism for advancing the upper needle to a position to enter the loop formed by dipping the under needle while the under needle is being advanced from its retracted position and dipped, and for completing the advance and return movement of the upper needle while the under needle is returning to its retracted position, substantially as described.

5. A buttonhole sewing machine, having, in combination, a straight upper needle, a curved under needle, and mechanism for reciprocating the needles to form over-edge stitches and for bringing them simultaneously to their retracted positions to set the stitches, substantially as described.

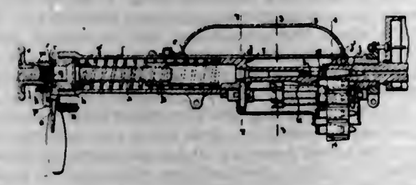
[Claims 6 to 46 not printed in the Gazette.]

1,063,881. VEHICLE-WHEEL. FRANK HOLDMAN, St. Johns, Oreg. Filed Apr. 22, 1911. Serial No. 622,840. (Cl. 152—44.)



In a vehicle, the combination of an axle and wheels mounted on the ends thereof, such wheels comprising a circular disk or hub mounted on the ends of the axle; an inner ring mounted on such hub, a larger ring encircling the inner ring, radially arranged coil-springs interposed between said outer and inner rings; spokes projecting outward of the outer ring, and a rim affixed on such spokes; side plates fastened to both sides of said outer ring and inclosing the space interior thereof; one of said side plates made with a central opening and having an exterior flange encircling such opening; a cap mounted on said central flange of one of said side plates; said cap comprising a ring and a perforated head, and a flexible strip connecting these parts, the axle-end projecting through the perforated head; and the head piece of the cap being fastened to the axle end, and the ring of the cap rotating on said central flange of the side plate.

1,063,882. GUN. EDWARD JONES, Perry-Bar, England, assignor to Kynoch Limited, Witton, near Birmingham, England. Filed May 27, 1910. Serial No. 563,769. (Cl. 89—3.)



1. A gun having a member reciprocated by the recoil, an energy storing mass, bolt and nut means converting reciprocation of the aforesaid reciprocating member into rotation of the energy storing mass, and spring elements absorbing the energy stored by said mass, and adapted to return the same for effecting operation of the gun; as set forth.

2. An automatic gun comprising in combination a recoil-operated bolt; resilient means absorbing energy from said bolt on recoil; rotatable means and means for operating the same from said bolt, said rotatable means also absorbing energy from said bolt on recoil, and means including said operating means for transferring energy absorbed by said rotatable means to said resilient means, as set forth.

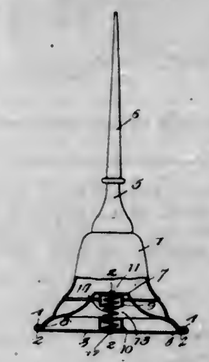
3. An automatic gun comprising in combination a recoil-operated bolt; resilient means absorbing energy from said bolt on recoil movement thereof; rotatable energy-storing means rotated by recoil movement of said bolt, continued rotation of said rotatable means by virtue of its stored energy acting to move said bolt farther than its recoil movement.

4. A feeding mechanism for guns having a rotatable cartridge belt feeding element a carrier shaft, cam surfaces upon a part of the gun reciprocated by a recoil said cam surface coöperating with said carrier shaft, and a manually retractable notched spring element, coacting with said carrier shaft to insure uni-directional rotation of said shaft, as set forth.

5. In a gun, a reciprocable breech block, an extractor claw mounted thereon, an ejector finger loosely mounted on said block, and a spring pressed element presenting a surface parallel and in proximity to the path of reciprocation of said breech block, said ejector finger co-acting with said surface, as set forth.

[Claim 6 not printed in the Gazette.]

1,063,883. CAN. JESSIE L. JONES, Maricopa, Cal. Filed Dec. 12, 1912. Serial No. 736,324. (Cl. 221—48.)



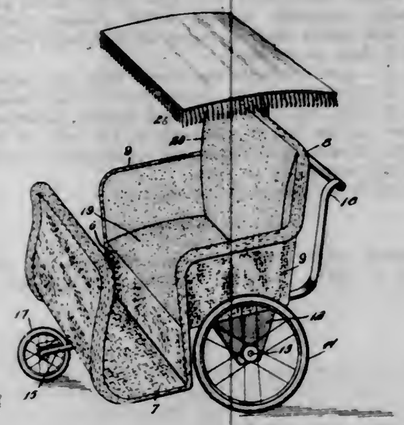
1. In a can comprising a body and a resilient bottom secured to the lower end of the body, a strip of metal arranged transversely of the bottom within the can, the central portion of the strip being spaced apart from the inner surface of the bottom and the ends of the strip being secured to the can between the bottom and the body, a pair of oppositely arranged cups arranged coaxially of the can, one of the cups having its bottom secured to the center of the strip and the other having its bottom secured to the center of the bottom of the can, and a coil spring having its ends seated in the cups and normally pressing the bottom away from the strip.

2. In a can comprising a body and a resilient bottom secured to the lower end of the body, a strip of metal arranged transversely of the bottom within the can, the central portion of the strip being spaced apart from the inner surface of the bottom and the ends of the strip being secured to the can between the bottom and the body, a coil spring arranged between the bottom and the center of the strip, and means secured to the strip and to the bottom of the can for engaging the end of the spring to hold the spring in place.

1,063,884. NOVELTY ROLLING CHAIR FOR DOLLS AND INFANTS. LOUISE R. KERN, Atlantic City, N. J., assignor to Mercantile Advertising Company, New York, N. Y., a Copartnership. Filed Aug. 23, 1911. Serial No. 645,470. Renewed Nov. 19, 1912. Serial No. 732,345. (Cl. 21—12.)

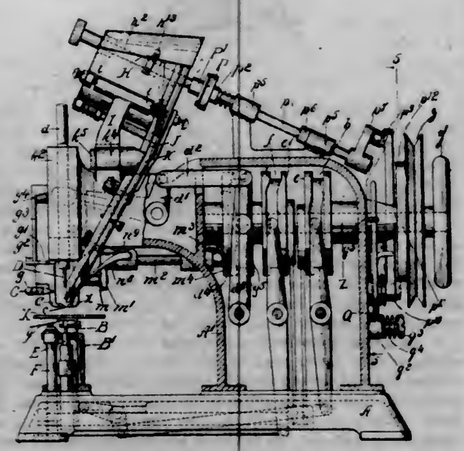
A novelty rolling chair for dolls and infants, comprising a body including seat, side and back sections, and also a forwardly extending foot-rest having an upturned dash-board, a supporting base, a handle integral with the base and projecting rearwardly therefrom, forwardly converging fork arms projecting downwardly from the front

of the base and outwardly beyond the dash-board, a front wheel journaled in the arms, a rear axle journaled in the



base, rear wheels fixed to said axle, and a top fixed to the body.

1,063,885. BUTTON-ATTACHING MACHINE. JOHN KIEWICZ, Hyde Park, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Oct. 14, 1911. Serial No. 654,760. (Cl. 112—32.)



1. A button attaching machine comprising in combination, a horizontal work plate, a button reservoir having a stationary button outlet, a vibratable slotted feed chute for conducting shank-eyed buttons downwardly from said outlet to the attaching mechanism and shaped to conduct the foremost button's eye into an exposed horizontal position over the work on said work plate, a vertically reciprocating needle mounted above the work plate, mechanism for actuating the needle in the attachment of each button, mechanism for feeding the work rearwardly over said work plate, and means for mounting and actuating said feed chute to vibrate relatively to the reservoir, needle and work plate first rearwardly to bring the foremost button to attaching position between the needle and the work and afterward forwardly to disengage the button and enable a thread loop to be passed over its head, said means comprising a horizontal lateral bearing or pivot located above the attaching position and in line with the point of union of said outlet and chute whereby the chute terminus has its motion in a plane parallel with both the direction of work feed and the direction of needle reciprocation.

2. A button attaching machine comprising in combination, a horizontal work plate, a button reservoir having a stationary button outlet, a vibratable slotted feed chute for conducting shank-eyed buttons downwardly from said outlet to the attaching mechanism and shaped to conduct the foremost button's eye into an exposed horizontal position over the work on said work plate, a vertically reciprocating needle mounted above the work plate, mechanism for actuating the needle to descend and rise twice in the attachment of each button for forming first a loop through the button eye and second a loop outside the button eye and through the first loop, mechanism for feeding the work rearwardly over said work plate between the attachment of two successive buttons and for giving the work a short movement between the formation of the first and second loops for each button, and means for mounting and actuating said feed chute to vibrate relatively to the reservoir, needle and work plate first rearwardly to bring the foremost button to attaching position between the needle and the work, then with the work in the aforesaid short movement thereof between loops, and afterward forwardly to disengage the button and enable the second thread loop to be passed over its head, said means comprising a horizontal lateral bearing or pivot located above the attaching position and in line with the point of union of said outlet and chute whereby the chute terminus has its motion in a plane parallel with both the direction of work feed and the direction of needle reciprocation.

3. A button attaching machine comprising in combination a button reservoir, a feed chute for conducting the buttons from said reservoir to the attaching mechanism, said chute comprising two members with a button passage between them, means for adjusting one member toward or from the other to accommodate varying buttons, and a gage for indicating the adjustment thereof, said gage comprising a revolving pointer mounted on one of said members, and means whereby said pointer is actuated from the other member.

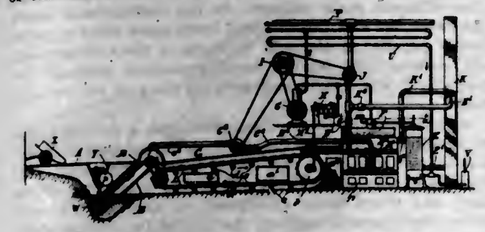
4. A button attaching machine comprising in combination a button reservoir, a feed chute for conducting buttons from said reservoir to the attaching mechanism, said chute comprising two members with a button passage between them, means for adjusting one member toward or from the other to accommodate varying buttons, and a gage for indicating the adjustment thereof, said gage consisting of a spring pressed pointer on one member actuated by the other member.

5. A button attaching machine comprising in combination, a button reservoir, a feed chute for conducting the buttons from said reservoir to the attaching mechanism, said chute comprising two members with a button passage between them, means for adjusting one member toward or from the other to accommodate varying buttons, and a gage for indicating the adjustment thereof, said gage comprising an index mounted on one of said members, and a contrivance for actuating said index from the other member to move said index with an adjustment-indicating motion which is a multiplied motion as compared with the adjusting motion between said members.

[Claims 6 to 18 not printed in the Gazette.]

1,063,886. APPARATUS FOR TREATING REFUSE MATERIAL. JOSEPH MOSES WARD KITCHEN, East Orange, N. J. Filed Mar. 1, 1910. Serial No. 546,585. (Cl. 99—2.)

1. The combination of (1) means comprising a furnace for heating a heating and sterilizing gas and for forcing a blast of said heating gas, (2) means for comminuting the material commonly known as garbage, (3) means comprising a casing having an inlet and an outlet and also a conveyer for conveying garbage from said inlet to said outlet, said casing being constructed for securing the travel of the blast of heating gas from said furnace through said outlet to said inlet in intimate contact with said garbage and in counter direction to the travel of the garbage, and (4) means for controlling the temperature of the blast of heating gas.



2. The combination of (1) means for separating water from garbage and for facilitating the separation from the garbage of solid material foreign to the garbage, (2) a furnace for heating a drying and sterilizing gas, (3) a drier comprising a casing having an inlet to admit said garbage and a traveling conveyer for conveying said garbage in one direction from said inlet toward said furnace, and (4) means for forcing a flow of the heated gas from said furnace in contact with said garbage and in counter direction to the travel of said garbage, said drier being connected with an exhaust stack exhausting burned gases and fumes at a high level above said drier, whereby the exhaust gases are highly diluted with air at said high level.

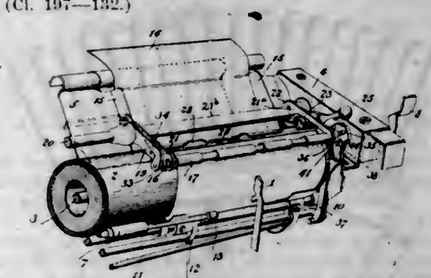
3. The combination of (1) a sorting and water separating platform on which to dump refuse material, (2) a drier for drying said material, (3) means for conveying said material from said platform to said drier, said drier comprising a traveling water percolating perforated web-sustainer for the material, moving horizontally in a direction away from the platform, and which also comprises a casing adapted to bring hot gases in close contact with said material disposed in a thin horizontally laid stratum on said web, and (4) means for generating and injectively inducing a blast of hot gases through said drier in contact with said material and in a direction counter to the direction in which the material is conveyed.

4. The combination of (1) means for separating fluid from refuse, (2) a comminutor for comminuting the refuse, (3) a pit for receiving the comminuted refuse, said pit comprising means for maintaining a definite water level in the pit for preventing undesired emergence of gases and fumes from said pit, said pit being connected with a drier, (4) said drier for drying and sterilizing said refuse, the said drier comprising a traveling conveyer and also comprising an incasement for the conveyer impervious to gases except at the end of the incasement farthest from the end in which the refuse enters the drier and except at an exit for the drying gases exhausted from the drier, (5) means for conveying the refuse from said pit to said conveyer, (6) means for giving a horizontally traveling motion to said conveyer and for controlling the rate of motion of the conveyer, (7) a furnace for burning refuse and heating gases, (8) means for injecting currents of said heating gases over and in contact with the refuse, and (9) blower and exhausting fans and connecting conduits for forcing the heated gases through said drier and for exhausting the gases from the drier and conveying the gases through a zone of intense heat, whereby constituent organic matter in the exhaust gases is decomposed and deodorized.

5. The combination of (1) an endless conveyer for conveying, drying and highly heating organic refuse, (2) means comprising an air blower, an exhaust stack and an injection device in said stack for producing a flow of hot gases over and in contact with refuse on the conveyer, (3) means for generating heat for heating said hot gases, and (4) means for uniting the hot gases and fumes from the highly heated refuse and for conveying the heated gases and fumes to said injection device, and other means for forcing a controlled amount of said hot gases into contact with said refuse through the operation of said last named means.

[Claims 6 to 13 not printed in the Gazette.]

1,063,887. TYPE-WRITING MACHINE. ALFRED G. F. KUROWSKI, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Jan. 27, 1910. Serial No. 540,315. (Cl. 197—132.)



1. In a typewriting machine, the combination with a platen, feed rolls pressed against the platen and coöperating with the platen to feed a sheet of paper, of a tally sheet feeding mechanism including a feeding couple of rolls located at one end of the platen just above the printing line for feeding tally sheets around the platen independently of the platen feed rolls, and lever-actuated mechanism to turn the feeding couple to feed the tally sheet and to simultaneously cast off the platen feed rolls.

2. In a typewriting machine, the combination with a platen and pressure rolls therefor, of a sheet feeding mechanism including a feeding couple of rolls by which the sheet is gripped and between which it passes, means for moving said rolls into and out of engagement with each other, a gage immediately beyond said rolls, means for projecting the gage into the path of movement of the sheet at the same time that the feeding couple is moved out of engagement, said gage serving to register the ruled lines of the sheet with the printing line, and line-space mechanism for feeding the sheet between the feeding couple.

3. In a typewriting machine, the combination with a platen and pressure rolls therefor, of a sheet feeding mechanism including a feeding couple of rolls by which the sheet is gripped, and between which it passes, means for moving said rolls into and out of gripping position, a gage normally idle immediately beyond said rolls, projectable by the roller moving means into the path of the sheet to register its ruled lines with the printing line, and a finger piece effecive to separate the rolls of the feeding couple and to throw the gage into and out of operative position.

4. In a typewriting machine, the combination with a platen and pressure rolls therefor, of a mechanism to feed tally sheets around the platen independently of the platen pressure rolls, and including a couple of rolls, one of which is pressed against the other, one of said rolls being yieldingly mounted, a normally idle gage with which the leading edge of the sheet is alined, and a lever-operated cam to release and restore the yieldingly mounted roll, and effective to move the gage into and out of the path of the sheet.

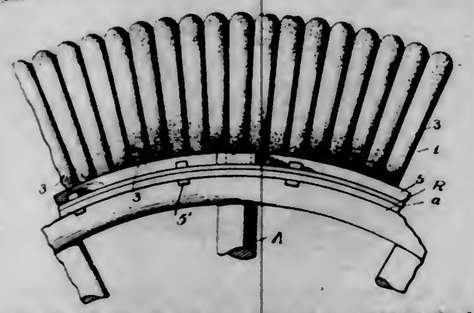
5. In a typewriting machine, the combination with a platen and pressure rolls therefor, of a tally sheet-feeding mechanism to feed tally sheets around the platen independently of the platen pressure rolls, and including a feeding couple of rolls, a gage immediately beyond said rolls with which the leading edge of the sheet is alined, and a finger piece for throwing the gage into and out of the path of the sheet.

[Claims 6 to 21 not printed in the Gazette.]

1,063,888. TIRE. VICTOR LINDHOLM, Hoquiam, Wash. Filed Mar. 30, 1912. Serial No. 687,488. (Cl. 152—8.)

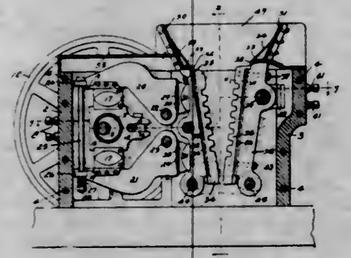
1. The combination with a wheel rim including a fixed flange and an adjustable flange having an entrance opening therein and a closure for said opening, of a plurality of members each comprising a section of material curved longitudinally, a tube receiving the free ends of said material and adapted to be slid through the entrance open-

ing in said flange, and outwardly extending lugs at each end of said tube adapted to engage said flanges whereby the members may be disposed about the rim in tire formation.



2. The combination with a wheel rim including a fixed flange and an adjustable flange having an entrance opening therein and a closure for said opening, of a plurality of members each comprising a section of material curved longitudinally, a tube receiving the free ends of said material and adapted to be slid through the entrance opening in said flange, wedge blocks within said tube and adapted to grip the ends of said material, and outwardly extending lugs at each end of said tube adapted to engage said flanges whereby the members may be disposed about the rim in tire formation.

1,063,889. ROCK-CRUSHER. CHARLES O. MICHAELSEN, Omaha, Nebr. Filed Feb. 1, 1913. Serial No. 745,726. (Cl. 83—53.)



1. In a machine of the class described, a rocking-beam pivoted near its central part on a horizontal axis, a swinging-beam pivoted near its upper end on an axis parallel to the axis of the rocking-beam, the lower ends of the beams being disposed adjacent to each other, means pivotally connecting the lower ends of the beams to each other, means for actuating the rocking-beam about its axis, means for varying the position of the swinging-beam axis to change the angular relation of the beams, jaw-plates secured on the adjacent faces of the beams, and means for directing materials into the space between the jaw-plates.

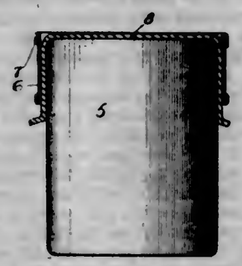
2. In a machine of the class described, a rocking-beam pivoted near its central part on a horizontal axis, a swinging-beam pivoted near its upper end on an axis parallel to the first, means pivotally connecting the lower ends of the beams to each other, means for varying the length of said connecting means, means for varying the position of the swinging-beam axis toward and away from the rocking-beam, and actuating means engaging the rocking-beam on opposite sides of the axis thereof.

3. In a machine of the class described, a horizontal driving-shaft, an eccentric carried thereon, a tilting body disposed around the eccentric, two levers having horizontal portions extending respectively above and below the tilting body, the levers being fulcrumed on axes near a horizontal plane passing through the axis of the driving-shaft, sliding and rocking bearing members disposed between the adjacent faces of the levers and the tilting body, a rocking beam pivoted at its central part on an axis disposed near the lever fulcrums, the levers having plane-surfaced parts adjacent to the rocking-beam above and below the axis thereof, said lever parts being approximately parallel to the said portions of the rocking-beam, and rocking and sliding bearing-members disposed between said lever parts and said portions of the rocking-beam.

4. In a machine of the class described, a driving shaft, an eccentric carried by the shaft, a tilting body disposed around the eccentric, two levers having horizontal portions extending respectively above and below the tilting body, the levers being fulcrumed on axes near a horizontal plane passing through the axis of the driving shaft, sliding and rocking bearing-members disposed between the adjacent faces of the levers and the tilting body, a rocking-beam pivoted at its central part on an axis disposed near the lever fulcrums, rocking and sliding bearing-members disposed between the levers and the adjacent parts of the rocking-beam above and below the axis thereof, and means for varying the position of the driving shaft toward and away from the lever-fulcrums to change the throw of the levers caused by the eccentric and tilting body.

5. In a machine of the class described, a frame, beams mounted to oscillate between the sides of the frame, jaw-members on the adjacent faces of the beams, lining-plates secured on the inner sides of the frame and slidably engaged by the lateral edges of the jaw-members, said plates inclosing the sides of a vertical throat between the jaw-members, and means forming channels in the edges of the jaw-members adjacent to the lining-plates and extending parallel to the adjacent faces of the jaw-members.

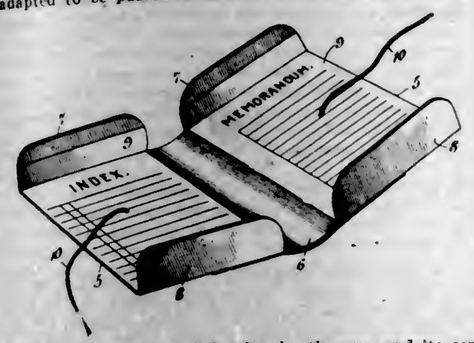
1,063,890. PIE-CRUST FORMING AND TRIMMING DEVICE. GEORGE BAKER MORRISON, Salt Lake City, Utah. Filed Feb. 24, 1912. Serial No. 679,547. (Cl. 107—49.)



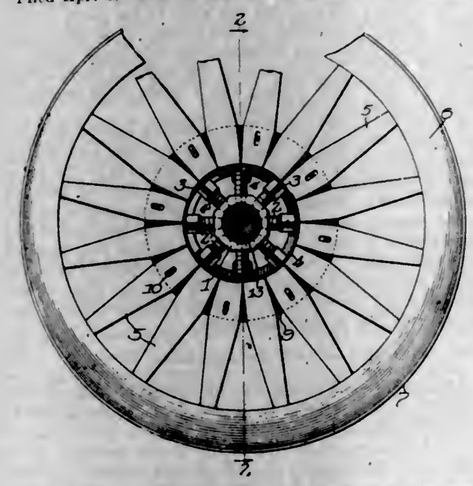
In a device of the character described, the combination with a free cylindrical former, of a free ring-like member sufficiently larger in diameter than said former to permit a thickness of dough to lie between said former and said ring-like member to thereby form the dough into a cup-like form when the ring-like member is passed over said former, said ring-member having one of its edges formed to cut off the crust dough when the former is rolled thereover, said former being of such length as to span said ring-like member to thereby adapt it to be rolled over said ring-like member, and to coact with said ring-like member in cutting off the crust dough.

1,063,891. POSTAL-CARD CASE. MILDRED E. PALMER, Pueblo, Colo. Filed Sept. 10, 1912. Serial No. 719,577. (Cl. 129—43.)

A filing case comprising spaced-apart, oppositely-disposed sides or covers connected by a back, inwardly-extending top and bottom flaps of a width substantially that of the back and carried by said sides or covers, the top and bottom flaps of each side being adapted to overlap, the free longitudinal edge of the inner flap of each set bearing against the inner face of the opposite side to maintain the sides properly spaced, and a fastening cord or tape extending from the inner face of each side and adapted to be passed around the outer edges of the contents of the case and tied, whereby the case and its contents will be held in a closed position.



1,063,892. VEHICLE-WHEEL. TONY POSS, Aurora, Ill. Filed Apr. 8, 1912. Serial No. 689,295. (Cl. 21—31.)



1. In a vehicle wheel the combination of a rim member, radiating compression spokes connected therewith, a tubular hub member, means interposed between said hub member and spokes for adjusting said spokes, an expansion member having overlapping sections interposed between said spokes and means and surrounding said means, a tubular journal box comprising two axially alined parts fitting within said hub member and abutting endwise against each other, and end caps inclosing said journal box and hub member and adapted to secure said journal box and hub member against relative rotation.

2. In a vehicle wheel the combination of a rim member, radiating compression spokes connected therewith, an internally threaded hub member, means interposed between said hub member and spokes for adjusting said spokes, an expansion member having overlapping sections interposed between said spokes and means and surrounding said means, a tubular journal box having threaded engagement with said hub member, and end caps inclosing said journal box and hub member and adapted to secure said journal box and hub member against relative rotation.

3. A vehicle wheel having a tire, rim, spokes, and hub, said hub comprising a tubular hub member, a split ring having a plurality of channel-shaped overlapping sections interposed between said spokes and said hub member and surrounding said hub member, and means bearing between said ring and said hub member and adapted to expand said ring and adjust the compression of said spokes; a pair of hub flanges, a pair of axially alined journal box parts each having threaded engagement with said hub member and adapted to abut within said member, end caps inclosing said journal box parts, and means connecting said end caps for rigidly locking together the various parts of the wheel.

4. In a vehicle wheel, the combination of a tire; rim; spokes; and hub; said hub comprising a tubular hub member, a pair of journal box parts adapted to fit within said hub member, one from each side thereof; an expanding ring comprising a plurality of overlapping sections surrounding said hub member and bearing against the inner ends of said spokes; and means mounted on said hub member and bearing between said hub member and said expanding ring for forcing them apart and compressing said spokes between said rim and said ring.

5. In a vehicle wheel, the combination of a tire; rim; spokes; and hub; said hub comprising an internally threaded tubular hub member; an expanding ring comprising a plurality of overlapping sections surrounding said hub member and bearing against the inner ends of said spokes; means bearing between said hub member and said expanding ring for compressing said spokes between said rim and said ring; a pair of hub flanges; a pair of axially alined journal box parts, each having threaded engagement with said hub member and adapted to abut within said member; end caps inclosing said journal box parts; and means connecting one of each of said end caps, hub flanges, and journal box parts for rigidly locking them together in sets, one of said sets being adapted to be removed from said hub without completely dismantling said hub.

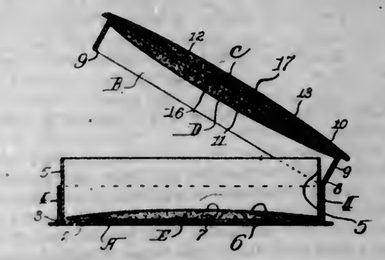
[Claim 6 not printed in the Gazette.]

1,063,893. PROCESS FOR MAGNETIC SEPARATION OF ORES OUT OF SLIMES. BOTHO SCHWERIN, Frankfort-on-the-Main, Germany, assignor to Gesellschaft für Elektro-Osmose M. B. H., Frankfort-on-the-Main, Germany, a Corporation. Filed Mar. 12, 1913. Serial No. 753,857. (Cl. 83—71.)

1. A process for magnetic separation of ores out of slimes consisting in bringing the slimes to be treated into colloidal state and subjecting them to magnetic separation.

2. A process for magnetic separation of ores out of slimes consisting in adding to the slimes an electrolyte of an electrical character which is the opposite of the character of the ore to be separated and subjecting the slimes to magnetic separation.

1,063,894. CANDY-BOX. JOSHUA GEORGE SMITH, St. Paul, Minn. Filed Nov. 27, 1911. Serial No. 662,656. (Cl. 229—8.)

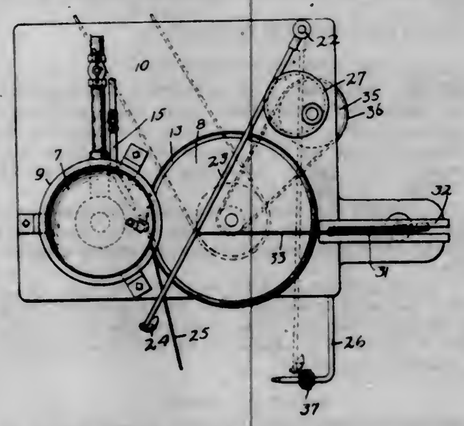


1. A device of the class set forth, comprising, in combination, a box container formed of similar upper and lower trays invertedly hinged together so that their edges coincide when said box is closed, an inclosing continuous flange equal in height to the depth of both trays and secured in said lower tray, a cushion covering the entire bottom of the inside of the lower tray, and an enveloping sheet drawn tightly over said cushion and secured between said inclosing flange and the walls of said lower tray to securely hold said cushion in place.

2. A device of the class set forth, comprising, in combination, a box container formed of similar upper and lower trays invertedly hinged together so that their edges coincide when said box is closed, an inclosing continuous flange equal in height to the depth of both trays and secured in said lower tray, a cushion covering the entire bottom of the inside of the lower tray, an enveloping sheet drawn tightly over said cushion and secured between said inclosing flange and the walls of said lower tray to securely hold said cushion in place, and a bottom for said box formed of a projecting plate secured to the outside of said lower tray as described.

3. A device of the class set forth, comprising, in combination, a box container formed of similar upper and lower trays invertedly hinged together so that their edges coincide when said box is closed, a cushion secured to the inside of said upper tray by an envelop the edges of which pass around the downturned rim of said tray to protect the same from wear and a projecting plate secured to the outside of said upper tray having a cushion secured thereto by an envelop the edges of which are embedded between said plate and upper tray to securely hold said cushion.

1,063,895. METAL-STRAND MACHINE. WILLARD G. STAPLES, Newburyport, Mass., assignor to Federal Metallic Packing Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 10, 1911. Serial No. 653,948. (Cl. 207—1.)



1. In apparatus of the character described, the combination with means for forming and delivering a continuous metal strand of an oscillating member for laying said strand over a suitable support in loops of suitable length.

2. In apparatus of the character described, the combination with means for forming and delivering a continuous metal strand of an oscillating member provided with means for engaging said strand and means for oscillating said member to lay said strand over a support in loops of suitable length.

3. In apparatus of the character described, the combination with means for forming and delivering a continuous metal strand of an oscillating member provided with a curved end for engaging and carrying said strand, a support and means for oscillating said member to lay said strand over said support to form loops of suitable length.

4. The combination with a strand forming mechanism of a rod pivotally mounted and having a hook on its free end for catching said strand as it is formed, means for oscillating said rod between the path of said strand and a support in order alternately to catch and to deposit said strand in loops upon said support.

5. The combination with a strand forming mechanism of an oscillating member, an eccentric engaging said member and means for rotating said eccentric to oscillate said member.

[Claims 6 to 8 not printed in the Gazette.]

1,063,896. TWINE-CUTTER. FLOYD B. STOBER, Byers, Colo. Filed Aug. 23, 1912. Serial No. 716,741. (Cl. 30—14.)

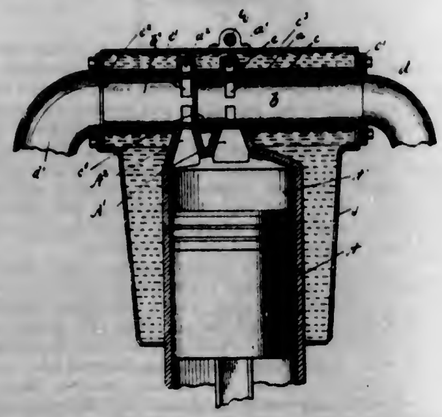


1. A twine cutter comprising a casing formed of an integral piece of material, finger grips formed on the said casing, guard plates formed on the casing adjacent the inner ends of the finger grips, a blade holder formed of a single piece of material and mounted to swing in the said casing, a blade mounted on the blade holder, a guide plate formed on the free end of the blade holder, and a spring secured to the said casing and engaging the said blade holder to normally retain the said blade within the casing.

2. A twine cutter comprising a casing, means formed on the said casing for securing the same to the hand, a blade holder mounted to swing on the casing, a spring secured in the said casing and engaging the said blade holder to normally retain the same within the casing, a blade mounted on the said blade holder, and a guide plate formed on the free end of the blade holder.

3. A twine cutter comprising a casing formed of a single piece of material, finger grips on the said casing, guard plates on the casing adjacent the ends of the finger grips, a blade holder formed of a single piece of material and mounted to swing in the said casing, a blade carried by the blade holder, a guide plate on the free end of the blade holder, a spring secured to the casing and engaging the blade holder to normally retain the blade within the casing, and a notched plate formed with the piece of material forming the casing and adapted to constitute a seat for the free end of the blade holder.

1,063,897. ENGINE VALVE MECHANISM. OSCAR TREIER, New York, N. Y. Filed Mar. 23, 1912. Serial No. 685,866. (Cl. 123—188.)



1. In a valve mechanism for engines, the combination with an engine cylinder, of a valve casing comprising two compartments tightly closed against one another and serving for the passage of the motive agent to and from said cylinder and a hollow valve slidably arranged in said casing and surrounding one of the said compartments to alternately establish communication between one of the compartments and the cylinder and the other compartment and the cylinder.

2. In a valve mechanism for engines, the combination with an engine cylinder having admission and exhaust passages arranged adjacent to one another, of a valve casing comprising two compartments tightly closed against one another and serving for the passage of the motive agent to and from said cylinder and a hollow valve slidably arranged in said casing and surrounding one of said compartments and adapted to alternately establish communication between one of said compartments and the admission chamber and the other compartment and the exhaust chamber of the said cylinder.

3. In a valve mechanism for engines, the combination with an engine cylinder having admission and exhaust passages arranged adjacent to one another, of a valve casing comprising two concentrically interposed compartments tightly closed against one another and serving for the passage of the motive agent to and from said cylinder, a hollow valve slidably arranged in said casing and surrounding one of said two compartments and adapted to alternately establish communication between one of said compartments and the admission chamber and the other compartment and the exhaust chamber of the said cylinder.

4. In a valve mechanism for engines, the combination with an engine cylinder having admission and exhaust passages arranged adjacent to one another, of a valve casing comprising two compartments tightly closed against one another, one of said compartments serving for the passage of the motive power to the said cylinder and having openings in alinement with the admission chamber of the latter, and a hollow valve slidably arranged in said casing and surrounding one of said compartments and having openings adapted to alternately communicate with the said first named openings of the inner compartment and the outer compartment, to alternately establish communication between one of said compartments and the admission chamber and the other compartment and the exhaust chamber of said cylinder.

5. In an engine, the combination with an engine cylinder having an admission and an exhaust passage arranged adjacent to one another at one end of the working chamber of the said cylinder, of a valve casing extending transversely to said cylinder and said cylinder chambers, said valve casing comprising two compartments tightly closed against one another and serving for the passage of the motive agent to and from the said cylinder and a hollow valve extending longitudinally of and slidably arranged in said casing and surrounding one of said compartments, said valve being adapted to alternately establish communication between one of the said compartments and said admission chamber and the other compartment and said exhaust chamber of the cylinder.

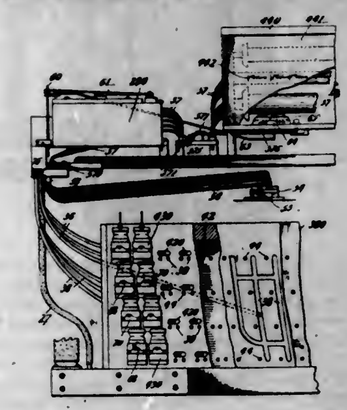
[Claims 6 and 7 not printed in the Gazette.]

1,063,898. PNEUMATICALLY-CONTROLLED MUSIC-PLAYING DEVICE. PETER WELIN, Newcastle, Ind., assignor, by mesne assignments, to The Krell Auto-Grand Piano Co. of America, Connersville, Ind., a Corporation of Indiana. Filed Feb. 5, 1907. Serial No. 355,863. (Cl. 84—168.)

1. In a music playing device, the combination of means for playing a musical composition, a plurality of means for modulating or softening series of notes, means for controlling said playing means to accent all the notes while the softening means remain in operative condition, and means independent of the softening means for operating said controlling means individually.

2. In a music playing device, the combination of means for playing a musical composition, a plurality of means for modulating or softening series of notes, means for controlling said playing means to accent the notes of all of said series while said softening means remain in operative condition, manually controlled means for simultaneously operating all the controlling means, a tracker, and means operative from channels of the tracker for operating each of said controlling means independently of the rest and of the softening means.

3. In a music playing device, the combination of a tracker-bar, means controlled from the tracker-bar or the like for operating a striking pneumatic for each note, throttle valves, manually controlled means for setting a series of said throttle valves to soften their respective notes when operated from the tracker-bar, means coöperating with said setting means for operating the throttle valves to accent a note while parts of the manually operated means remain in position for modulating all the notes of the series, means operative from channels of the tracker-bar of the device for controlling said accenting means, and means for rendering the last named means inoperative, whereby the device can be used with music sheets not cut for that purpose.



4. In a music playing device, the combination of a suction chamber, a plurality of series of throttle valves, pneumatics therefor, a modulating valve for each of said series adapted to connect the throttle valve pneumatics of its series with the suction chamber or the outside air, a plurality of switch-valves, one for each series simultaneuoisy operative to connect all of the throttle valve pneumatics with the suction chamber independently of the position of the modulating valves, and independent means for operating any one of said switch valves independently of the others to connect the corresponding throttle valve pneumatics with the suction chamber.

5. In a music playing device, the combination of a switch valve box having a plurality of independent passages each having an opening to the outer air, a manually operated valve adapted to close or open all of said passages simultaneously, a tube extending from each of said passages, a modulating valve box having suction chambers one connected with each of said tubes, a pneumatic in each suction chamber, a switch valve for each of said pneumatics, a second set of tubes each of which connects with one of said suction chambers, and a tracker-bar having channels individually connected with the second set of tubes.

[Claims 6 to 9 not printed in the Gazette.]

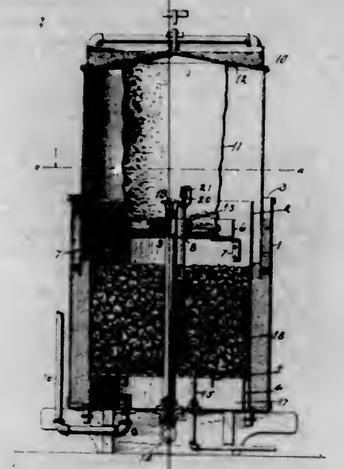
1,063,899. PROCESS OF FORMING CEMENT BLOCKS. CHRIST WESTERGARD, Everett, Wash. Filed July 29, 1911. Serial No. 641,223. (Cl. 106—44.)

1. The process of producing building articles which consists in mixing heated sand with asphaltum, adding cement and sulfur, mixing water with the compound in sufficient quantities to make a plastic mass, pressing the mass into molds to form the article, curing the molded article by sprinkling and submerging in water, treating the article to steam for a predetermined time and increasing the pressure, and intermittently sprinkling the same after steaming.

2. The process of producing building articles which consists in mixing heated sand with asphaltum, adding cement and sulfur, mixing water with the compound in sufficient quantities to make a plastic mass, pressing the mass into molds to form the article, curing the molded article by sprinkling and submerging in water, treating the article to steam for a predetermined time and increasing the

pressure, intermittently sprinkling the same after steaming, and finally rapidly subjecting the articles to the action of a high temperature.

1,063,900. CARBURETER. JAMES E. WHITACRE, Rockford, Ill. Filed Mar. 11, 1912. Serial No. 683,074. (Cl. 48—158.)



1. A carbureter comprising an outer casing, an inner wall, a dome movable between the casing and wall, a pan supported within the inner wall, an air supply-pipe and gasolene supply-pipe extending through said pan, a fabric partition having one end secured to the dome and the other end located in the pan and forming an inclosure for said supply-pipes, and a carbureted air delivery pipe communicating with the chamber formed by the inner wall.

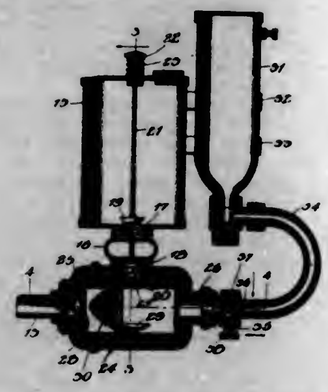
2. A carbureter comprising an outer and inner casing, forming a circumferential chamber, adapted to contain a liquid, a dome movable in said chamber, a pan supported within the inner casing, air and gasolene supply-pipes extending through said pan, a fabric partition having one end secured to the dome and the other end located in the pan, forming an inclosure for the supply-pipes and adapted to conform to the elevating and lowering of said movable dome, and a carbureted air delivery pipe communicating with the inner casing.

3. A carbureter comprising a casing forming a filtering receptacle, a liquid containing chamber surrounding said receptacle, a dome movable in said chamber, an inclosure formed of fabric sides having a support fixed to said receptacle and having its upper end attached to said dome, the inclosure adapted to conform to the movement of said dome, air and gasolene intake-pipes adapted to discharge within said inclosure, and a carbureted-air discharge pipe communicating with said filtering receptacle.

4. A carbureter comprising a filtering receptacle, a gas accumulating chamber beneath said receptacle, a liquid containing chamber surrounding said receptacle, a dome movable in said chamber, a pan supported by said filtering receptacle, a tube formed of fabric having one end secured to the dome and its other end located in said pan, air and gasolene intake pipes adapted to discharge within said tube, and a carbureted-air discharge pipe communicating with the carbureted air accumulating chamber.

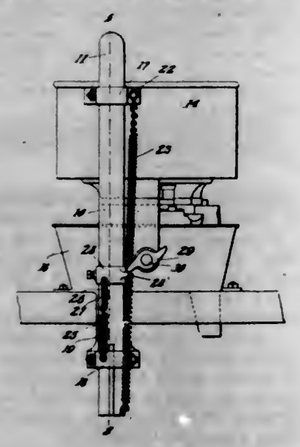
1,063,901. GAS-ENGINE STARTER. ELWOOD C. ALLISON, Brooklyn, N. Y. Filed Aug. 2, 1912. Serial No. 712,067. (Cl. 123—180.)

1. A gas engine starter including a fuel reservoir, a measuring tank communicating therewith, and having an outlet port, a carbureter communicating with said outlet port and having a mixture outlet port and an air intake port on opposite sides of said measuring tank outlet port, a compressed air reservoir communicating with said air intake port, means for manually establishing communication between said measuring chamber and said carbureter, and other means for manually establishing communication between said air reservoir and said carbureter.



2. A gas engine starter including a fuel reservoir, a measuring tank having an inlet port opening through the bottom of said reservoir and having an outlet port in vertical alinement with said inlet port, a carbureter communicating with said outlet port, valves in said inlet and outlet ports, a common manually controlled stem connecting said valves and serving to hold one of said valves closed and the other of said valves open, said carbureter having a mixture outlet port and an air intake port on opposite sides of said measuring chamber outlet port, a compressed air reservoir connected with said air intake port, and means for manually controlling communication between said reservoir and said air intake port.

1,063,902. GRAIN-TRANSFER MECHANISM FOR PLANTERS. JOHN ALBERT ANDERSON, Geneseo, Ill. Filed Aug. 21, 1911. Serial No. 645,121. (Cl. 193—11.)



1. In a conveying mechanism, a plurality of hoppers arranged one above the other, a tube one end of which is closed supported for vertical movement by said hoppers and means for vibrating said tube to transfer material from one hopper to the other, said means imparting a more rapid movement to the tube in one direction than in the other.

2. In a conveying mechanism, a tube one end of which is closed supported for vertical movement, said tube being in communication with a plurality of hoppers and means for causing said tube to vibrate to transfer the material from one of said hoppers to the other, said means imparting a more rapid movement to the tube in one direction than in the other.

3. In a conveying mechanism, a plurality of hoppers arranged one above the other, a tube one end of which is closed supported for vertical movement by said hoppers, a resilient connection between the upper hopper and the lower end of said tube, a resilient connection between said tube and the lower hopper and means for imparting vertical movement to said tube.

4. In a conveying mechanism, a plurality of hoppers arranged one above the other, a sleeve secured to each of said hoppers, a tube one end of which is closed supported for movement by said sleeves, a collar secured to said tube, a projection on said collar, a shaft, a cam mounted on said shaft and a resilient connection between said tube and said hoppers.

5. In a conveying mechanism, a plurality of hoppers arranged one above the other, sleeves supported by said hoppers, a tube one end of which is closed supported for movement by said sleeves, a resilient connection between the upper hopper and the lower end of said tube, a resilient connection between the lower hopper and said means for imparting movement to said sleeve, said last mentioned connection being active only during the movement of the sleeve in one direction.

[Claims 6 to 8 not printed in the Gazette.]

1,063,903. TOOL-HOLDER FOR LATHES. VICTOR H. ANDERSON, Chicago, Ill. Filed Aug. 23, 1912. Serial No. 716,725. (Cl. 29—98.)

1. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, and manually operated means for clamping and releasing said head.

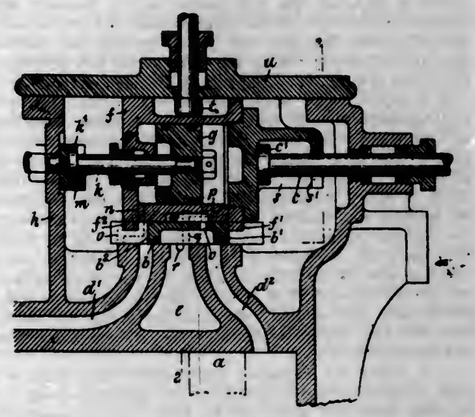
2. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, and manually operated means for clamping and releasing said head, embodying a lever, and coöperating cam faces on said lever and bracket.

3. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, manually operated means for clamping and releasing said head, embodying a lever, and coöperating cam faces on said lever and bracket, and an adjusting screw connecting the lever and head and extending axially of the head.

4. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, manually operated means for clamping and releasing said head, and steps on the head and bracket for accurately positioning the tools carried by the head.

5. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, manually operated means for clamping and releasing said head, steps on the head and bracket for accurately positioning the tools carried by the head, and a guard embracing the bracket and head and inclosing said steps.

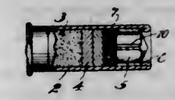
1,063,904. DIRECT-ACTING FLUID-ENGINE. WYNNARD ANTHONY, Colchester, England. Filed Mar. 29, 1913. Serial No. 757,543. (Cl. 136—10.)



1. In a reciprocating engine, a cylinder, a valve casing having inlet and exhaust ports for passage of motive fluid to and from the cylinder, a main slide valve in said valve casing movable across said ports, and having passages therein, a movable cylinder in said valve casing in contact with said valve and having a limited amount of movement in relation to said valve, said movable cylinder having passages adapted to coöperate with the passages in the slide valve, means having a lost motion connection with the cylinder for imparting initial movement thereto, and a stationary piston in said cylinder.

2. In a reciprocating engine, a cylinder, a valve casing having inlet and exhaust ports for passage of motive fluid to and from the cylinder, a main slide valve in said valve casing movable across said ports and having passages therein whose communication with the valve casing is controlled by the movement of the valve, a movable cylinder in the valve casing in contact with the valve and having a lost motion connection therewith, a fluid passage to said chamber, said movable cylinder having passages coöperating with the passages in the main valve, means operated from a moving part of the engine having a lost motion connection with said cylinder for moving the same, and manually controllable means for operating said movable cylinder.

1,063,905. SOLID BULLET FOR SHOTGUN-SHELLS. JOHN BECKMANN, Oakland, Cal. Filed Nov. 16, 1912. Serial No. 731,755. (Cl. 102—26.)

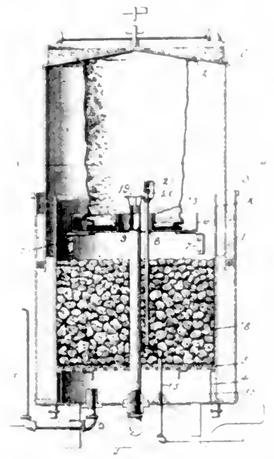


1. A bullet for shot-gun shells, said bullet having a solid cylindrical body portion of less diameter from end to end than the shell to be fitted, circumferentially spaced projections on the body portion, the inscribing circle of which projections is greater than the barrel-bore for guiding and holding the bullet centrally in the shell, the annular chamber about the bullet allowing an escape of gases while the bullet is escaping the gun barrel, and a follower wad immovably attached to the inner or near end of the bullet and of greater diameter than the cylindrical body thereof and approximately fitting the barrel-bore for deriving a maximum safe bullet impulse from the shell charge.

2. A bullet for shot-gun shells, said bullet having a solid cylindrical body portion of less diameter from end to end than the shell to be fitted, circumferentially spaced ribs extending the length of the cylinder on the body portion, the inscribing circle of which projections

pressure, intermittently sprinkling the same after steaming, and finally rapidly subjecting the articles to the action of a high temperature.

1,063,900. CARBURETER. JAMES E. WHITACRE, Rockford, Ill. Filed Mar. 11, 1912. Serial No. 683,074. (Cl. 48—158.)



1. A carbureter comprising an outer casing, an inner wall, a dome movable between the casing and wall, a pan supported within the inner wall, an air supply-pipe and gasolene supply-pipe extending through said pan, a fabric partition having one end secured to the dome and the other end located in the pan and forming an inclosure for said supply-pipes, and a carbureted air delivery pipe communicating with the chamber formed by the inner wall.

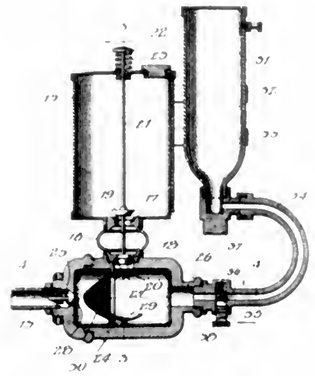
2. A carbureter comprising an outer and inner casing, forming a circumferential chamber, adapted to contain a liquid, a dome movable in said chamber, a pan supported within the inner casing, air and gasolene supply-pipes extending through said pan, a fabric partition having one end secured to the dome and the other end located in the pan, forming an inclosure for the supply-pipes and adapted to conform to the elevating and lowering of said movable dome, and a carbureted air delivery pipe communicating with the inner casing.

3. A carbureter comprising a casing forming a filtering receptacle, a liquid containing chamber surrounding said receptacle, a dome movable in said chamber, an inclosure formed of fabric sides having a support fixed to said receptacle and having its upper end attached to said dome, the inclosure adapted to conform to the movement of said dome, air and gasolene intake-pipes adapted to discharge within said inclosure, and a carbureted-air discharge pipe communicating with said filtering receptacle.

4. A carbureter comprising a filtering receptacle, a gas accumulating chamber beneath said receptacle, a liquid containing chamber surrounding said receptacle, a dome movable in said chamber, a pan supported by said filtering receptacle, a tube formed of fabric having one end secured to the dome and its other end located in said pan, air and gasolene intake pipes adapted to discharge within said tube, and a carbureted-air discharge pipe communicating with the carbureted air accumulating chamber.

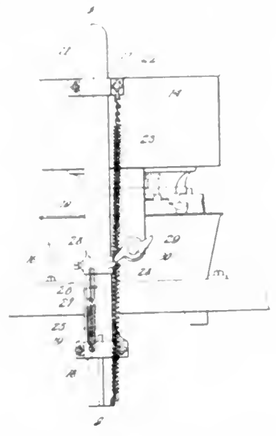
1,063,901. GAS-ENGINE STARTER. ELWOOD C. ALLISON, Brooklyn, N. Y. Filed Aug. 2, 1912. Serial No. 712,957. (Cl. 123—180.)

1. A gas engine starter including a fuel reservoir, a measuring tank communicating therewith, and having an outlet port, a carbureter communicating with said outlet port and having a mixture outlet port and an air intake port on opposite sides of said measuring tank outlet port, a compressed air reservoir communicating with said air intake port, means for manually establishing communication between said measuring chamber and said carbureter, and other means for manually establishing communication between said air reservoir and said carbureter.



2. A gas engine starter including a fuel reservoir, a measuring tank having an inlet port opening through the bottom of said reservoir and having an outlet port in vertical alinement with said inlet port, a carbureter communicating with said outlet port, valves in said inlet and outlet ports, a common manually controlled stem connecting said valves and serving to hold one of said valves closed and the other of said valves open, said carbureter having a mixture outlet port and an air intake port on opposite sides of said measuring chamber outlet port, a compressed air reservoir connected with said air intake port, and means for manually controlling communication between said reservoir and said air intake port.

1,063,902. GRAIN-TRANSFER MECHANISM FOR PLANTERS. JOHN ALBERT ANDERSON, Genesco, Ill. Filed Aug. 21, 1911. Serial No. 645,121. (Cl. 193—11.)



1. In a conveying mechanism, a plurality of hoppers arranged one above the other, a tube one end of which is closed supported for vertical movement by said hoppers and means for vibrating said tube to transfer material from one hopper to the other, said means imparting a more rapid movement to the tube in one direction than in the other.

2. In a conveying mechanism, a tube one end of which is closed supported for vertical movement, said tube being in communication with a plurality of hoppers and means for causing said tube to vibrate to transfer the material from one of said hoppers to the other, said means imparting a more rapid movement to the tube in one direction than in the other.

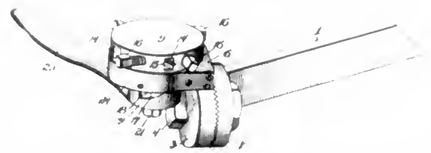
3. In a conveying mechanism, a plurality of hoppers arranged one above the other, a tube one end of which is closed supported for vertical movement by said hoppers, a resilient connection between the upper hopper and the lower end of said tube, a resilient connection between said tube and the lower hopper and means for imparting vertical movement to said tube.

4. In a conveying mechanism, a plurality of hoppers arranged one above the other, a sleeve secured to each of said hoppers, a tube one end of which is closed supported for movement by said sleeves, a collar secured to said tube, a projection on said collar, a shaft, a cam mounted on said shaft and a resilient connection between said tube and said hoppers.

5. In a conveying mechanism, a plurality of hoppers arranged one above the other, sleeves supported by said hoppers, a tube one end of which is closed supported for movement by said sleeves, a resilient connection between the upper hopper and the lower end of said tube, a resilient connection between the lower hopper and said means for imparting movement to said sleeve, said last mentioned connection being active only during the movement of the sleeve in one direction.

(Claims 6 to 8 not printed in the Gazette.)

1,063,903. TOOL-HOLDER FOR LATHES. VICTOR H. ANDERSON, Chicago, Ill. Filed Aug. 23, 1912. Serial No. 716,725. (Cl. 29—98.)



1. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, and manually operated means for clamping and releasing said head.

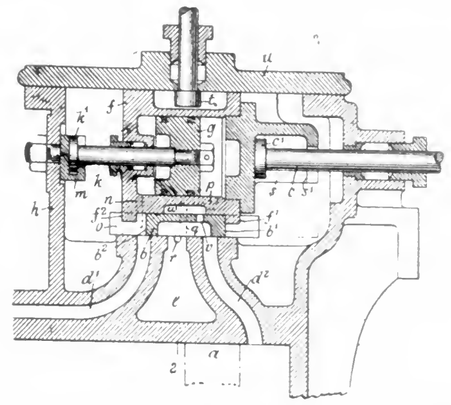
2. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, and manually operated means for clamping and releasing said head, embodying a lever, and coöperating cam faces on said lever and bracket.

3. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, manually operated means for clamping and releasing said head, embodying a lever, and coöperating cam faces on said lever and bracket, and an adjusting screw connecting the lever and head and extending axially of the head.

4. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, manually operated means for clamping and releasing said head, and steps on the head and bracket for accurately positioning the tools carried by the head.

5. A tool holder for lathes, comprising a supporting arm adapted to be held by the tool post of a lathe, a bracket having a pivoted and adjustable connection with said arm, a revoluble tool carrying head journaled on said bracket, manually operated means for clamping and releasing said head, steps on the head and bracket for accurately positioning the tools carried by the head, and a guard embracing the bracket and head and inclosing said steps.

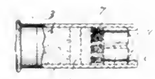
1,063,904. DIRECT ACTING FLUID-ENGINE. WYNNARD ANTHONY, Colchester, England. Filed Mar. 29, 1913. Serial No. 757,543. (Cl. 136—10.)



1. In a reciprocating engine, a cylinder, a valve casing having inlet and exhaust ports for passage of motive fluid to and from the cylinder, a main slide valve in said valve casing movable across said ports, and having passages therein, a movable cylinder in said valve casing in contact with said valve and having a limited amount of movement in relation to said valve, said movable cylinder having passages adapted to coöperate with the passages in the slide valve, means having a lost motion connection with the cylinder for imparting initial movement thereto, and a stationary piston in said cylinder.

2. In a reciprocating engine, a cylinder, a valve casing having inlet and exhaust ports for passage of motive fluid to and from the cylinder, a main slide valve in said valve casing movable across said ports and having passages therein whose communication with the valve casing is controlled by the movement of the valve, a movable cylinder in the valve casing in contact with the valve and having a lost motion connection therewith, a fluid passage to said chamber, said movable cylinder having passages cooperating with the passages in the main valve, means operated from a moving part of the engine having a lost motion connection with said cylinder for moving the same, and manually controllable means for operating said movable cylinder.

1,063,905. SOLID BULLET FOR SHOT-GUN SHELLS. JOHN BECKMANN, Oakland, Cal. Filed Nov. 16, 1912. Serial No. 731,755. (Cl. 102—26.)



1. A bullet for shot gun shells, said bullet having a solid cylindrical body portion of less diameter from end to end than the shell to be fitted, circumferentially spaced projections on the body portion, the inscribing circle of which projections is greater than the barrel-bore for guiding and holding the bullet centrally in the shell, the annular chamber about the bullet allowing an escape of gases while the bullet is escaping the gun barrel, and a follower wad immovably attached to the inner or near end of the bullet and of greater diameter than the cylindrical body thereof and approximately fitting the barrel-bore for deriving a maximum safe bullet impulse from the shell charge.

2. A bullet for shot-gun shells, said bullet having a solid cylindrical body portion of less diameter from end to end than the shell to be fitted, circumferentially spaced ribs extending the length of the cylinder on the body portion, the inscribing circle of which projections

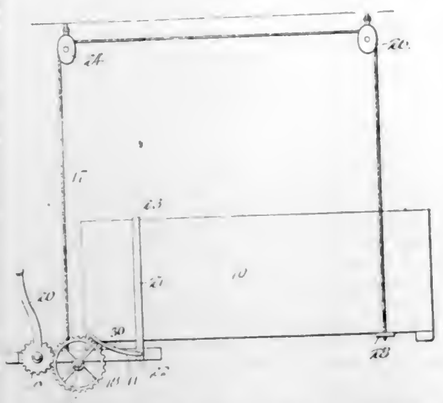
is greater than the barrel-bore for guiding and holding the bullet centrally in the shell, the annular chamber about the bullet allowing an escape of gases while the bullet is escaping the gun barrel, and a follower wad immovably attached to the inner or near end of the bullet and of greater diameter than the cylindrical body thereof and approximately fitting the barrel-bore for deriving a maximum safe bullet impulse from the shell charge.

3. A bullet for shot-gun shells, said bullet having a solid cylindrical body portion of less diameter from end to end than the shell to be fitted, circumferentially spaced ribs of a length equal, approximately, to the diameter of the cylinder on the body portion, the inscribing circle of which projections is greater than the barrel-bore for guiding and holding the bullet centrally in the shell, the annular chamber about the bullet allowing an escape of gases while the bullet is escaping the gun barrel, and a follower wad immovably attached to the inner or near end of the bullet and of greater diameter than the cylindrical body thereof and approximately fitting the barrel-bore for deriving a maximum safe bullet impulse from the shell charge.

4. A bullet for shot-gun shells, said bullet having a solid cylindrical body portion of less diameter from end to end than the shell to be fitted, circumferentially spaced ribs of a length equal, approximately, to the diameter of the cylinder on the body portion, the inscribing circle of which projections is greater than the barrel-bore for guiding and holding the bullet centrally in the shell, the annular chamber about the bullet allowing an escape of gases while the bullet is escaping the gun barrel, and a fibrous follower wad immovably attached to the inner or rear end of the bullet and of greater diameter than the cylindrical body thereof and approximately fitting the barrel-bore for deriving a maximum safe bullet impulse from the shell charge.

5. A bullet for shot-gun shells, said bullet having a solid cylindrical body portion of less diameter from end to end than the shell to be fitted, circumferentially spaced projections on the body portion, the inscribing circle of which projections is greater than the barrel-bore for guiding and holding the bullet centrally in the shell, the annular chamber about the bullet allowing an escape of gases while the bullet is escaping the gun barrel, and a follower wad attached to the inner or near end of the bullet and of greater diameter than the cylindrical body thereof and approximately fitting the barrel-bore for deriving a maximum safe bullet impulse from the shell charge.

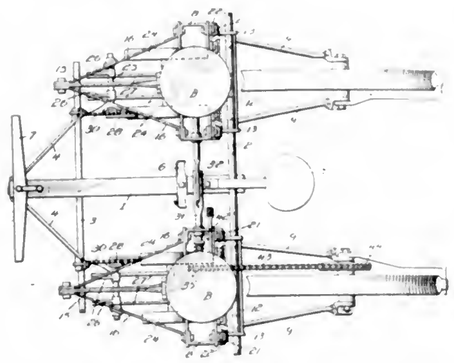
1,063,906. WAGON-BED HOIST. BERT BENNETT, Kokomo, Ind. Filed July 5, 1912. Serial No. 707,839. (Cl. 57—84.)



A wagon bed lifting device comprising a substantially horizontal frame, said frame having journaled thereon a transversely arranged shaft, drums upon the shaft for receiving the free ends of a cable, a toothed wheel upon the shaft, a second toothed wheel journaled upon and at a point adjacent one end of the frame and meshing with the first named toothed wheel, a handle upon this second toothed wheel, a pin locking member for the toothed wheels and the drums, vertically extending straps disposed on the side faces of the frame at a point adjacent the opposite end thereof, and each of said straps having its extremity bent to provide a hook which is adapted to engage with the upper edge of the sides of a wagon bed

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1,063,907. SEED-PLANTER. WILSON E. BIGGERSTAFF, Malvern, Iowa. Filed Oct. 25, 1912. Serial No. 727,772. (Cl. 111—6.)



1. In a machine of the class described, a supporting frame including a cross bar, a seed planting element including a frame and a ground wheel carrying yoke hingedly connected therewith, a bracket member on said yoke slidably engaging the cross bar, arms supported movably with respect to the frame of the seed planting element, gage wheels carried by said arms, and means for adjusting said arms to regulate the position of the gage wheels.

2. In a machine of the class described, a supporting frame, a seed planting element including a frame and a ground wheel supporting yoke hingedly connected therewith, means for connecting the yoke slidably with the supporting frame, a seed duct and runner connected with the frame of the seed planting element, a shaft also supported by said frame, arms pivoted on said shaft, gage wheels carried by the arms, and means for adjusting the arms to regulate the position of the gage wheels.

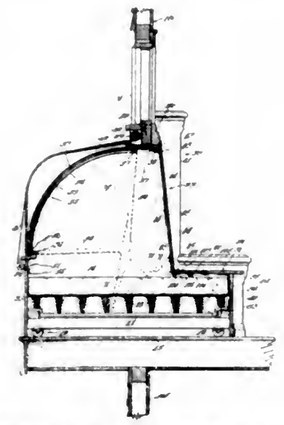
3. In a machine of the class described, a supporting frame, a seed planting element including a frame and a ground wheel carrying yoke hingedly connected therewith, a bracket on the yoke slidably engaging the supporting frame, a seed duct and runner connected with the frame of the seed planting element, forwardly converging arms also connected with said frame and with the nose of the runner, a shaft supported by said frame, gage wheel carrying arms pivoted on the shaft, a rock shaft supported on the converging arms and having radial arms, links connecting said arms with the gage wheel carrying arms, and means for manipulating the rock shaft and for securing it at various adjustments.

4. A supporting frame including front and rear cross bars, a seed planting element including a frame and a ground wheel carrying yoke hingedly connected therewith, a bracket member on the yoke slidably engaging the rear cross bar of the supporting frame, a seed duct and runner connected with the frame of the seed planting element, forwardly converging arms extending from said frame and connected with the nose of the runner, and an apertured plate at the junction of said arms with the nose of the runner slidably engaging the front cross bar of the supporting frame.

5. In a machine of the character described, a supporting frame including front and rear cross bars, seed planting elements supported slidably on said front and rear

cross bars and each including an operating shaft, said operating shafts having bifurcated interchanging ends slidably connected, and each of said seed planting elements including also a ground wheel supported for rotation, and means including a clutch for transmitting rotary motion from the ground wheel to the operating shaft of one of the seed planting elements.

1,063,908. ADJUSTABLE COMBINED SEAT AND COVERING FOR BEDS. NORMAN D. BISHOP, Los Angeles, Cal. Filed July 22, 1912. Serial No. 710,982. (Cl. 20—1.11.)



1. In a combined seat and covering for a bed, the combination of sills, castings on the sills, said castings formed to provide bearings and projections adapted to extend beyond the sides of the sills, double end walls including uprights secured to the sills and abutting against said projections, a cross piece between the upper part of the end walls, a foldable seat comprising a back portion hingedly connected with the cross-piece and a front portion detachable from the back portion and hingedly connected with the bed, shafts mounted on said bearings, an arc-shaped plate extending through the inner of the end walls and movably mounted on the shafts, devices mounted on the shafts and operatively connected with the foldable back portion of the seat and adapted to counterbalance the same when it is raised or lowered and to hold it in adjusted position, and devices adapted to counterbalance and thereby facilitate raising and lowering the foldable forward portion of the seat.

2. In a combined seat and covering for a bed, the combination of double end walls, a crosspiece between the upper part of the end walls, a seat with a foldable back portion having the upper end thereof hingedly connected with the crosspiece, and with a foldable forward portion having the lower end thereof connected with the bed, pivotally mounted devices arranged in the space between the double end walls and operatively connected with the foldable back portion of the seat and adapted to facilitate raising and lowering the same and holding it in adjusted position, and devices arranged between the double end walls and adapted to facilitate raising and lowering the foldable forward portion of the seat.

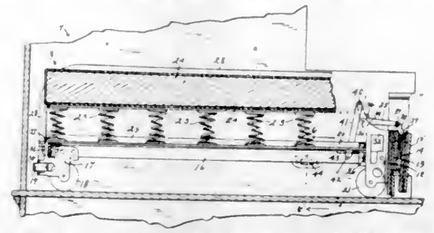
3. In a combined seat and covering for a bed, the combination of sills, castings on the sills, said castings formed to provide bearings and projections adapted to extend beyond the sides of the sills, double end walls including uprights secured to the sills and abutting against said projections, a crosspiece between the upper part of the end walls, a foldable seat hingedly connected with the crosspiece and with the bed, shafts mounted in said bearings, an arc-shaped plate extending through the inner of the end walls and movably mounted on the shafts, counterbalancing devices mounted on the shafts and operatively connected with the foldable back portion of the seat to facilitate raising and lowering the same and holding it in adjusted position, counterbalancing devices adapted to facilitate raising and lowering the foldable forward portion of the seat, and means adapted to tie the forward portion of the seat to the back portion of the seat.

4. In a combined seat and covering for a bed, the combination of sills, castings on the sills, said castings formed to provide bearings and projections adapted to extend beyond the sides of the sills, double end walls including uprights secured to the sills and abutting against said projections, a crosspiece between the upper part of the end walls, a foldable seat hingedly connected with the crosspiece and with the bed, shafts mounted in said bearings, an arc-shaped plate extending through the inner of the end walls and movably mounted on the shafts, counterbalancing devices mounted on the shafts and operatively connected with the foldable back portion of the seat to facilitate raising and lowering the same and holding it in adjusted position, counterbalancing devices adapted to facilitate raising and lowering the foldable forward portion of the seat, means adapted to tie the forward portion of the seat to the back portion of the seat, and means adapted to tie the forward portion of the seat to the end walls of said seat.

5. In a combined seat and covering for a bed, the combination of double end walls, a crosspiece arranged between the upper part of the end walls, a second crosspiece arranged between the end walls below and to the rear of the first crosspiece, curved strips of sheet metal fitted on the top end of the double end walls between the first and second crosspiece, said strips provided with channels therein, a curved metallic strip arranged intermediate of said strips and provided with channels in the plane of the channels of said strips, and screens having one end portion thereof disposed in the channels of the strips on the double end walls and the other end portion thereof disposed in the channels of the curved metallic strip.

[Claims 6 and 7 not printed in the Gazette.]

1,063,909. MECHANISM FOR RAISING OR LOWERING BEDS. NORMAN D. BISHOP, Los Angeles, Cal. Filed Feb. 19, 1913. Serial No. 749,545. (Cl. 5—18.)



1. The combination of a bed support, a foldable seat including sections hinged together, a pivotally mounted lever connected with one of the sections, and a link pivotally connected with the lever and with the bed support, substantially as and for the purpose set forth.

2. The combination of side bars, caster brackets on the rear end portion of the side bars, a bed support resting movably on said caster brackets, a foldable seat including sections hinged together, a mounted lever pivotally connected with one of the sections, and a link connected with the lever and with the bed support, substantially as and for the purpose set forth.

3. The combination of a foldable seat including a front section and hinged sections connected with the front section, plates on one of the hinged sections, side bars, caster brackets on the front end portion of the side bars, said caster brackets secured to said front section, extensions on the caster brackets, levers pivotally mounted on said extensions and pivotally connected with said plates, a bed support, and links pivotally connected with the levers and with the bed support, substantially as and for the purpose set forth.

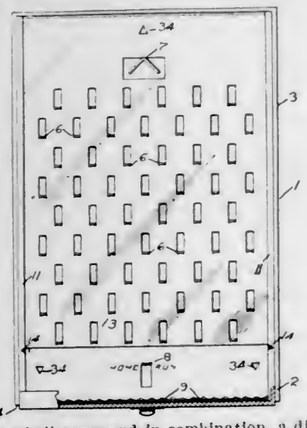
4. The combination of side bars, caster brackets on the rear end portion of the side bars, a bed support resting movably on said caster brackets, caster brackets on the

front end portion of the side bars, a foldable seat including sections hinged together, plates on one of the sections, levers pivotally mounted on the last mentioned caster brackets and pivotally connected with said plates, and links pivotally connected with the levers and with the bed support, substantially as and for the purpose set forth.

5. The combination of side bars, caster brackets on the rear end portion of the side bars, a bed support resting movably on said caster brackets, caster brackets on the front end portion of the side bars, extensions on the last mentioned caster brackets, a foldable seat including a front section secured to the last mentioned caster brackets and hinged sections connected with the front section, plates on one of said hinged sections, angular levers pivotally mounted on said extensions and pivotally connected with said plates, and links pivotally connected with said levers and with said bed support, substantially as and for the purpose set forth.

[Claim 6 not printed in the Gazette.]

1,063,910. BASE-BALL GAME. LOUIS BORKHEIM, Berkeley, Cal. Filed Aug. 26, 1912. Serial No. 717,172. (Cl. 46—56.)



1. In a baseball game and in combination, a divided box, an opening in the upper end of said box, a deflecting block below the opening, projections suitably arranged below said block, a transparency covering said projections, a ball, a plurality of pockets with labeled decisions to receive said ball, a diamond and means for representing players on the respective bases of the diamond, substantially as described.

2. In a baseball game and in combination, a divided box, an opening in the end of the upper half of said box, a deflecting block below the opening, projections suitably arranged below said block, a transparency covering said projections, a ball, a plurality of pockets to receive said ball, labeled decisions on said pockets, a flexible joint for recovering the ball and closing said box halves together, a diamond and means for representing players on the respective bases of the diamond, substantially as described.

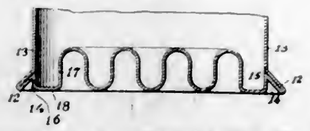
3. In a baseball game and in combination, a divided box, an opening in the end of the upper half of said box, a deflecting block below the opening, staggered projections arranged below said block, a transparency covering said staggered projections, a ball, a plurality of pockets with labeled decisions, a "home run" pocket, a flexible joint, a diamond and means for representing players at the several bases of the diamond, substantially as described.

4. In a baseball game and in combination, a divided box, an opening in the end of the upper half of said box, a deflecting block, staggered projections arranged below said block, a transparency covering said staggered projections, a ball, a plurality of pockets with labeled decisions, a "home run" pocket, a flexible joint, a diamond, means for representing players at the several bases of the diamond and separate means for registering the umpire's decision, substantially as described.

5. In a baseball game, the combination of a box with a lid therefor, an opening in the end of said lid, staggered tongues or projections suitably arranged below the opening and so disposed as to deflect the passage of a ball through the same, tabulated receiving channels in the lower end of said lid, a miniature baseball diamond displayed on the bottom of said box, a means for indicating the plays on the bases of said diamond, a means for recording the umpire's decision on said plays, and a ball for playing the game, substantially as described.

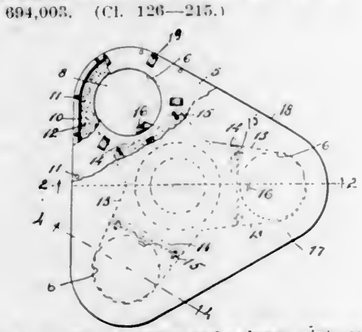
[Claims 6 to 9 not printed in the Gazette.]

1,063,911. UTENSIL. ROBERT WILLIAM CHADWICK, Davisville, Ontario, Canada. Filed Nov. 21, 1911. Serial No. 661,619. (Cl. 53—9.)



A utensil having a corrugated bottom, the walls of the corrugated portions defining concentric relatively deep concavities beneath the utensil and relatively deep concentric wall portions within the utensil, a flat supporting surface formed on the outermost portion of the bottom and a downwardly and outwardly flared thickened portion formed integral with the side walls of the receptacle, said flared portion being disposed outwardly of the outermost corrugated portion of the bottom and concentric therewith, substantially as and for the purpose specified.

1,063,912. HEATER AND FUEL-ECONOMIZER. CHARLES C. COOPER, Los Angeles, and HERMAN F. RICHTER, Pasadena, Cal. Filed Apr. 29, 1912. Serial No. 694,003. (Cl. 126—215.)



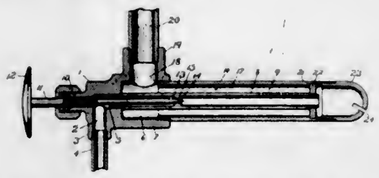
1. In a heater, an upper and a lower plate secured together by means of rivets, and a marginal rim, the upper plate having a plurality of openings for cooking vessels, and the lower plate having a central opening for the burner, side walls of heat-retaining material, conduits from the central opening in the lower plate to the openings in the upper plate formed by said plates and by side walls of heat retaining material, and dampers in said conduit, each damper having an arm which projects up into the adjacent opening and is adapted to open the damper when a vessel is placed on said opening.

2. In a heater, a top plate having openings for cooking vessels, a lower plate with a central opening for a burner, side walls of heat retaining material, conduits between the plates from the central opening of the lower plate to the openings of the top plate formed by said plates and side walls of heat retaining material, and a cover slightly elevated above the top plate, with a down-turned marginal flange adapted to fit snugly over the heater body.

3. In a heater, a top plate having openings for cooking vessels, a lower plate with a central opening for a burner, side walls of heat retaining material, conduits between the central opening of the lower plate and the openings of the top plate, formed by said plates and the side walls of heat retaining material, a damper in each conduit with an arm projecting upwardly therefrom through the adjacent opening and adapted to be engaged and the damper opened when a vessel is placed on the opening, and a removable cover the same size as the top plate, with a down-turned marginal flange, adapted to be placed over the top plate to engage the damper arms and swing the dampers open so the products of combustion may flow from the conduits into the space between the top plate and cover.

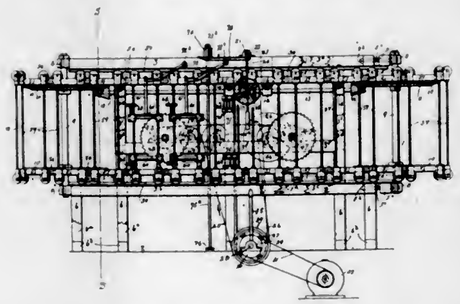
4. In a heater, a top plate having openings for the reception of cooking vessels, a bottom plate with a central opening to receive a burner, a marginal lining of heat conserving material around the heater and between the top and bottom plate, said heater having conduits from the central opening in the bottom plate to the openings in the top plate, a damper in each conduit provided with an arm which normally projects up through the adjacent opening in the top plate, said top plate having raised loops or projections, and a cover with a marginal flange which fits around the heater body, and depresses the arms of the said dampers.

1,063,913. OIL-BURNER. BENJAMIN L. CORNELIUS, Hutchinson, Kans. Filed Feb. 12, 1912. Serial No. 677,214. (Cl. 158—75.)



An oil burner comprising a head having separate oil and atomizing agent conduits, a drum communicating with the atomizing agent conduit and extending from said head, a diaphragm in the end of said drum, a tube communicating with the oil supply conduit and extending into said drum and through said diaphragm, said tube having imperforate bottom and side portions and having ports in its upper portion in the rear of the diaphragm, and having a valve near the head for controlling flow of oil from the supply source to the apertured portion thereof and a removable tip on the outer end of said drum into which fuel is delivered from said inner tube, substantially as set forth.

1,063,914. SHINGLE-CUTTING MACHINE. AUGUST GUSTAF DEHLIN, Seattle, Wash., assignor of one-third to Albertus Allen Hilton, Tacoma, Wash. Filed Dec. 16, 1911. Serial No. 666,305. (Cl. 143—10.)



1. In a shingle cutting machine the combination of a main frame, endless roll feed block conveying means around said frame, saws in the path of blocks carried by said conveying means, pinion wheels carried by said conveying means and coöperating directly with sets of pins of variable number upon said frame, whereby one of the ends of said blocks is fed a predetermined distance into the plane of said saws and the opposite ends thereof fed a greater distance in the same direction.

2. In a shingle cutting machine the combination of a main frame, endless roll feed block conveying means around said frame, saws in the path of blocks carried by said conveying means, upper and lower pinions carried by said conveying means and coöperating with corresponding sets of removable pins upon said frame, thereby one of the ends of said blocks are fed a predetermined distance into the plane of said saws and the opposite ends thereof fed a greater distance in the same direction.

3. The combination in a shingle cutting machine of its fixed frame, vertical circular saw, roll feed block carriers and endless conveying means therefor, of removable pins vertically mounted on said frame and pinions on said block carriers adapted to engage said pins whereby the blocks are fed to the saw.

4. The combination in a shingle cutting machine of its fixed frame, vertical circular saws, roll feed block carriers and endless conveying means therefor, of pinions on said block carriers, horizontal brackets on said frame, headed pins removably and vertically mounted in said brackets and spaced apart to conform to the pitch of said pinions and adapted to be engaged by said pinions whereby said blocks are fed to the saw.

5. The combination in a shingle cutting machine of its fixed frame, vertical circular saws, roll feed block carriers and endless conveying means therefor, of sets of upper and lower horizontal brackets fixed to said frame, pins vertically and removably mounted in said brackets and equidistant from each other, and upper and lower pinions on said block carriers adapted to engage said pins, whereby the ends of the blocks may be fed to the saw in varying degrees out of the perpendicular.

1,063,915. NAVIGATION SYSTEM. GEORGE W. ELDRIDGE, Vineyard Haven, Mass. Filed May 20, 1912. Serial No. 698,618. (Cl. 116—18.)



1. An aid to navigation comprising a series of differentiated position-identifying devices respectively placed with no necessary reference to individual dangers but predeterminately placed relative to and within "picking up" distances from each other to constitute a system and projected as such across the desired lines of travel of vessels.

2. An aid to navigation comprising a series of visually differentiated position-identifying devices respectively placed with no necessary reference to individual dangers but predeterminately placed relative to and within "picking up" distances from each other to constitute a system and projected as such across the desired lines of travel of vessels.

3. An aid to navigation comprising a series of audibly differentiated position-identifying devices respectively placed with no necessary reference to individual dangers but predeterminately placed relative to and within "picking up" distances from each other to constitute a system and projected as such across the desired lines of travel of vessels.

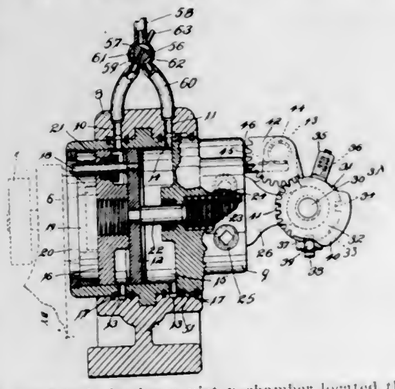
4. An aid to navigation comprising a series of both visually and audibly differentiated position-identifying de-

vices respectively placed with no necessary reference to individual dangers but predeterminately placed relative to and within "picking up" distances from each other to constitute a system and projected as such across the desired lines of travel of vessels.

5. An aid to navigation comprising a series of equally spaced, differentiated position-identifying devices respectively placed with no necessary reference to individual dangers but predeterminately placed relative to and within "picking-up" distances from each other to constitute a system and projected as such across desired lines of travel of vessels.

[Claim 6 not printed in the Gazette.]

1,063,916. CHUCK. FREDERIC P. GATES, Newington, Conn., assignor to The Union Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Jan. 17, 1911. Serial No. 603,095. (Cl. 29—107.5.)



1. A chuck body having a piston chamber located therein, means for supplying air to said chamber to control the movements of a piston, the piston located within said chamber, clamping members located on the chuck body, feed screws for said clamping members, a rack secured to the piston and in engagement with said feed screws, a plate adapted to be secured to a spindle and forming one wall of the chamber in the chuck, and means for securing the chuck body to rotate with said plate.

2. A chuck body having a piston chamber, means for supplying air to said chamber to control the movements of a piston, the piston located within said chamber, clamp devices mounted on the chuck body, feed screws to operate said clamp devices, a rack secured to the piston and connected with the feed screws to rotate independently thereof, a plate forming one wall of the chamber in the chuck body and adapted to be secured to a spindle, a clutch ring, and means for operating the ring to connect the chuck body and plate.

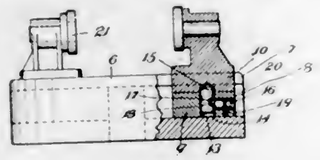
3. A chuck body having a piston chamber located therein, means for supplying air to said chamber to control the movements of a piston, the piston located in said chamber and adapted to rotate therein, a feed rack secured to said piston, feed screws operatively connected with said rack, clamp devices operated by said feed screws, a plate adapted to be secured to a spindle and forming one wall of the chamber in the chuck body, a clutch operating pin secured to the piston, and a clutch ring mounted for operation by said pin and adapted to clutch said plate and chuck body together.

4. A casing, a chuck body to rotate in said casing and having a chamber, air passages located at the meeting surfaces between the casing and chuck body for a flow of air to control the movements of a piston, the piston located in said chamber, a rack secured to said piston, feed screws operatively connected with said rack, clamp devices operatively connected with the feed screws, a plate forming one wall of the chamber in the chuck body, and means controlled by the movement of the piston to connect the chuck body and plate to rotate together.

5. A casing, a chuck body projecting through the casing and having a chamber, air passages located at the meeting surfaces of the chuck body and casing for flow of air to control the movements of a piston, the piston located in said chamber, a feed rack secured to said piston, feed screws connected with said feed rack, clamp devices connected to be operated by said feed screws, a plate forming one wall of the chamber in the chuck body and adapted to be secured to a spindle, a clamp ring, and a pin secured to the piston and engaging said clamp ring to clutch and unclutch the chuck body and plate.

[Claims 6 to 14 not printed in the Gazette.]

1,063,917. CHUCK. FREDERIC P. GATES, Newington, Conn., assignor to The Union Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 6, 1911. Serial No. 619,276. (Cl. 29—147.)



1. A chuck body having a recess and a slot of less width opening to the face of the jaw, a feeding jaw section located within the recess, means for feeding said section to clamp and hold a piece of work, a jaw section having a T-shaped part fitting said slot and recess and with a jaw located outside of the face of the chuck, means for removably securing said feeding section and said jaw section together, and means for releasing said sections to permit removal of the jaw section independently of the feeding section.

2. A chuck body, a sectional chuck jaw including a feeding section supported by the body, means for feeding said section, a jaw bearing section, a locking bolt to lock the two sections together, an actuating pin in engagement with said bolt to actuate it, and a jaw secured to said jaw bearing section.

3. A chuck body, a sectional chuck jaw supported by the body and including a feeding section, means for feeding said section, a jaw bearing section, a sliding bolt to lock said sections together, a rotating actuating pin having a stud eccentrically mounted and engaging said bolt to operate it, and a jaw secured to said jaw bearing section.

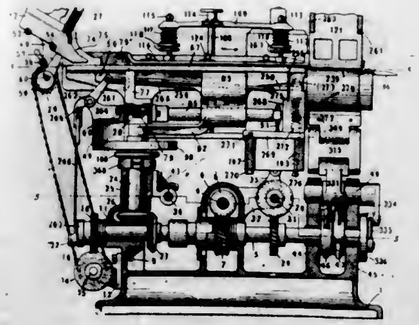
4. A chuck body having a recess with a narrower slot opening therefrom to the face of the body, a sectional chuck jaw including a feeding section located in said recess, means for feeding said section, a jaw bearing section having an enlarged part located in said recess and a narrower part extending through said slot with a jaw located outside of the face plate of the chuck, a locking bolt to lock said sections together and an actuating pin in engagement with said bolt to operate it.

5. A chuck body having a recess with a narrower slot opening to the face of the body, a sectional chuck jaw including a feeding section located in said recess and a jaw bearing section having a part located in said recess and a narrower part located in said slot, with a jaw located outside said body, a locking bolt borne by the feeding section and adapted to enter a recess in the jaw bearing section, and an actuating pin borne by the feeding section in engagement with said bolt to operate it.

[Claims 6 and 7 not printed in the Gazette.]

1,063,918. CAN-BODY-FORMING MACHINE. CHARLES W. GRAHAM, Rome, N. Y. Filed Jan. 28, 1910. Serial No. 540,569. (Cl. 113—11.)

1. In a lock and lap seam can body forming machine, in combination, an integrally formed base portion provided with a plurality of vertically extending integral supports, bearings formed in said supports, a shaft in said bearings, means for feeding, notching and edging can blanks and means for forming them into lock and lap seam can bodies and operative connections between said means and said shaft.



2. In a lock and lap seam can body forming machine, in combination, blank feeding means, means for treating a blank and forming the same into a can body, and electromechanical means for disconnecting the entire operative elements of the machine from the driving means whose operation is occasioned by a characteristic of the blanks being fed through the machine.

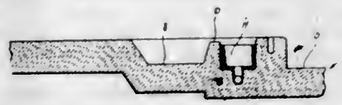
3. In a device of the class described, in combination, blank advancing means, a horn, a blank bending means, a bed, a pressure shoe located above the bed, and a pressure block secured to the shoe and spring-pressed to extend beyond the surface thereof.

4. In a machine of the class described, in combination, blank advancing means, a horn, a blank bending means, a bed, a pressure shoe located above the bed, and a plurality of pressure blocks secured to the shoe and spring pressed to extend beyond the surface thereof.

5. In a machine of the class described, in combination, a bed, a plurality of can treating means disposed along the bed, a pressure shoe secured above the bed, and a plurality of pressure blocks secured to the shoe and spring-pressed to extend beyond the surface thereof, said blocks being arranged in accordance with the disposition of the can treating means along the bed, respectively.

[Claims 6 to 73 not printed in the Gazette.]

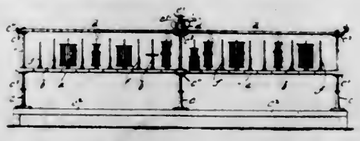
1,063,919. MANGER. POWELL M. GRANT, Bloomville, N. Y. Filed Jan. 13, 1910. Serial No. 537,868. (Cl. 119—72.)



1. In a manger, a standing floor for the animal, a wall rising therefrom and having a plurality of spaced stanchion receiving recesses in its top face, a second vertical wall rising from said flooring and of a height less than the first named wall, the said latter wall having depressions on opposite sides thereof to provide a water trough between the first and second walls, a floor in front of the manger providing a feed trough between it and the second wall and ends for the troughs having their top edges located on a line with the first named wall and second named flooring.

2. A manger construction embodying a one-piece concrete standing flooring having an alley flooring located spaced therefrom and on a plane thereabove, the intermediate space being provided with a pair of spaced troughs having closed ends to provide a front stanchion attaching wall and an intermediate wall, a drain for one of said troughs and a drain box disposed therein with its top edge located below the top edges of the wall, to prevent overflow thereof, the intermediate wall also having its top edge located below the top of the aforesaid portion whereby overflow from the first named trough will flow into the second named trough.

1,063,920. SPOOL-RACK. SAMUEL HAAS, New York, N. Y. Original application filed Aug. 31, 1911, Serial No. 646,993. Divided and this application filed Nov. 20, 1912. Serial No. 732,399. (Cl. 242—139.)



1. A spool-rack, comprising upright standards, a spool-supporting plate supported thereon, spindles supported on said plate, thread-guiding plates above the spindles, pivoted to the standards at their outer ends, said plates being provided at their inner ends with a semicircular recess having a rim, and clamping means inclosing the rims on the inner ends for clamping the thread-guiding plates in position.

2. A spool-rack, comprising supporting standards, a spool-supporting plate, spindles supported on the same, thread-guiding plates pivoted at their outer ends to the upper ends of the standards, collars on said standards for supporting the spool-supporting and thread-guiding plates, said thread-guiding plates having rimmed semicircular recesses at their inner ends, and clamping means inclosing said rimmed ends for retaining the thread-guiding plates in position.

3. A spool-rack, comprising supporting standards arranged in line with each other and provided with collars, a spool-supporting plate supported on the lower collars of the standards, thread-guiding plates supported at the upper ends of said standards, said thread-guiding plates being provided with openings for the threads and pivoted at their outer ends to the outer standards and provided at their inner ends with rimmed semicircular recesses, and a clamping screw-nut binding on the rimmed inner ends of said thread-guiding plates, said screw-nut being adjusted on the threaded portion of the middle standard.

4. A spool-rack, comprising upright supporting standards having collars at different points of their height, a spool-supporting plate supported on the lower flanges of the standards, spindles supported on said plate, thread-guiding plates supported on the upper flanges of the standards and pivoted at their outer ends to the same, the inner ends of said thread-guiding plates being provided with rimmed semicircular recesses fitting around the middle standard, a thumb-screw turning on the upper threaded end of the middle standard and provided with a downward extension for binding on the rimmed inner ends of the thread-guiding plates, and a stop-pin at the upper end of the middle standard for preventing the detaching of the thumb-screw.

1,063,921. SAFETY-GUN. BEALL HEMPSTEAD, New York, N. Y. Filed Nov. 11, 1908. Serial No. 462,039. (Cl. 42—70.)



1. In a gun of the character herein described the combination with the triggers of a pivoted locking lever therefor, constituting the trigger guard, and forming a part of the handle of the gun with grip end of the lever movable within the stock and having a central inward projecting

arm for actuating said trigger locking lever and moving inward for that purpose—substantially as shown and described.

2. In a gun of the character herein described the combination with the triggers, of a pivoted lever constituting the trigger guard, and forming a part of the handle of the gun, with grip end of the lever movable within the stock, and having a central inward projecting arm for operating trigger locking mechanism, consisting of a lever pivoted to a lug or extension of the trigger plate and impinging against the trigger ends, the said lever operating in a vertical plane to lock the trigger by gravity in case of breakage of the operating spring—substantially as shown and described.

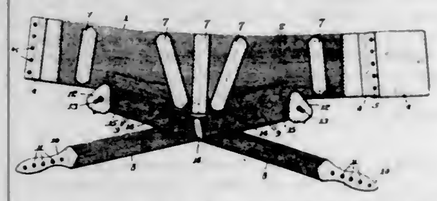
3. In a gun of the character herein described the combination with the trigger of a pivoted lever constituting the trigger guard and forming a part of the handle of the gun, with grip end of the lever movable within the stock, and having a central inward projecting arm for operating said trigger locking lever, which is pivoted to a lug or extension on the trigger plate, the said plate having lugs for attachment of the trigger guard grip lever, the triggers, trigger locking lever and operating spring and having a cavity for the inward movement of the trigger guard—substantially as shown and described.

4. In a gun of the character herein described the combination with the triggers and a pivoted locking lever therefor, constituting the trigger guard and forming a part of the handle of the gun, with grip end of the lever movable within the stock and having a central inward projecting arm for operating said trigger locking lever and acting in combination with a notched trigger locking rod, slotted spring, rubber pad with screw disk adjustment to the rod, the said rod acting upon the trigger locking lever—substantially as shown and described.

5. In a gun of the character herein described the combination with the triggers of a continuous guard grip lever with movable end passing within the stock of the gun, a vertical acting trigger locking lever, an actuating spring, a trigger plate with lugs for the trigger guard, grip lever, triggers, trigger locking lever and actuating spring in combination with notched trigger locking rod, slotted spring and rubber pad, and having disk adjustment with the rod the said rod moving to unlock by pivoted shoulder section of the butt of the gun—substantially as shown and described.

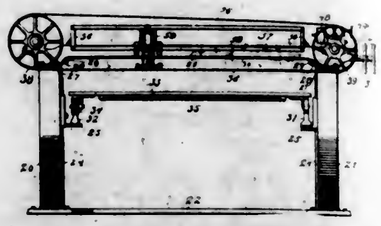
[Claims 6 and 7 not printed in the Gazette.]

1,063,922. ABDOMINAL BELT OR SUPPORTER. ARTHUR B. KENDRICK, East Orange, N. J., assignor to James R. Kendrick Co., Inc., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Apr. 29, 1911. Serial No. 624,214. (Cl. 2—188.)



An abdominal belt or supporter comprising a body belt portion provided with longitudinally-extending elastic threads interwoven with binder threads rendering said portion longitudinally elastic, said portion being shirred and having the lower elastic threads of its sides converging downwardly at an angle with relation to its upper threads, means for securing the ends of said portion together, thigh straps attached to the bottoms of the sides of said portion and being provided with longitudinally-extending elastic threads interwoven with binder threads and rendering said straps longitudinally elastic, the elastic threads of each strap extending substantially parallel to the adjacent elastic threads of said portion, and means for securing the ends of said straps together.

1,063,923. SANDING-MACHINE. LOUIS LUCAS, Jamestown, N. Y., assignor to Curtis Machine Corporation, Jamestown, N. Y., a Corporation of New York. Filed Jan. 12, 1912. Serial No. 670,735. (Cl. 51—



1. In an abrading machine, a frame, spaced arms on said frame, a journal pivotally mounted in one of said arms, a second journal slidably mounted in the other of said arms and a screw attached thereto to adjust the same, a swing frame mounted in said journals, a pulley on said swing frame, a second pulley on said frame in line with said swing pulley, and an abrading belt on said pulleys.

2. In an abrading machine, a belt, a block to press said belt to its work, a guide bar, a carriage for said block movable on said guide bar, a lever mounted in said carriage to press said block on said belt and move said carriage on said bar, and a fulcrum on said carriage for the rear end of said lever.

3. In a sanding machine having an abrading member, a two-part carriage having a head to engage said member, both of said parts movable in controlling said member and one of said parts of the carriage being movable at right angles to the other part.

4. In a sanding machine having an abrading member, a duplex carriage of movable parts one part of which is movably mounted on the other part in a plane at right angles to the movement of said other part, and means connecting the two parts of the carriage so that they may be moved together in the same direction.

5. In an abrading machine, a belt, a block to press said belt to its work, a fixed guide bar, a carriage for said block horizontally movable on said guide bar, a portion of said carriage vertically movable, and a lever in said vertically movable portion of said carriage and fulcrumed on the remainder of said carriage to manually move it horizontally or vertically.

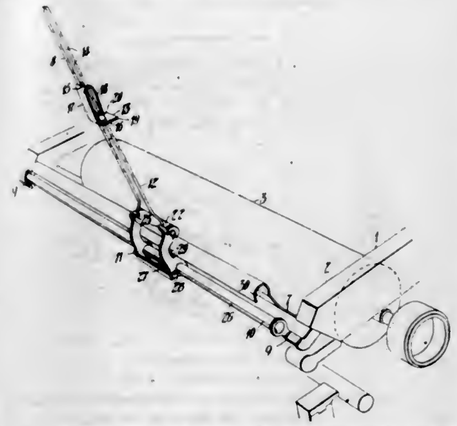
[Claims 6 to 11 not printed in the Gazette.]

1,063,924. TYPE-WRITING MACHINE. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 3, 1912. Serial No. 688,331. (Cl. 197—189.)

1. A paper depth gage comprising a standard formed from a strip of wire bent intermediate its ends to form an elongated loop, said wire being provided with a graduated series of notches, and a stop adjustably mounted on said loop, said stop being formed of spring metal and adapted to grip said standard at said notches to hold itself in its various positions of adjustment along said standard.

2. A paper depth gage comprising a standard having a series of notches formed therein at intervals, and a stop arranged circumjacent said standard and adjustable lengthwise thereof, said stop being formed of a strip of sheet metal having a plurality of spaced openings through which said standard passes, and being bent on itself, so that portions of said sheet metal on opposite sides of said openings will extend on opposite sides of said standard, the margin of one of said openings being arranged to engage said notches to lock said stop in several positions of adjustment.

3. A paper depth gage comprising a standard formed of a strip of wire bent intermediate its ends to form an elongated loop, the reaches of the loop extending parallel to each other, and a stop, having arms curled about said reaches, adjustable along said standard.

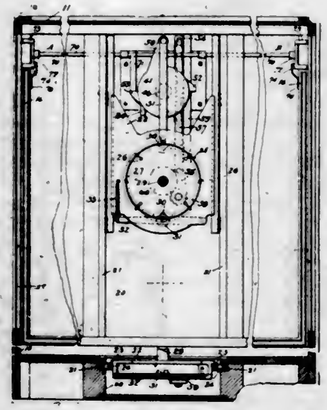


4. A paper depth gage comprising a standard formed of a strip of wire bent intermediate its ends to form an elongated loop, the reaches of the loop extending parallel to each other, and a stop, having arms curled about said reaches, adjustable along said standard, said stop having means for locking itself in its various positions of adjustment along said standard.

5. The combination with a typewriter, of a paper depth gage connected to said typewriter normally extending in a projecting position when in use, said gage being constructed to swing temporarily to a non-projecting position; means being provided to retain said gage in a semi-permanent inoperative position.

[Claims 6 to 18 not printed in the Gazette.]

1,063,925. DISPLAY-RACK. ANDREW E. MILLER, Baltimore, Md., assignor to Solomon Himmel, Baltimore, Md. Filed May 15, 1911. Serial No. 627,331. (Cl. 211—16.)



1. A display rack comprising a rack supporting member, actuating means for moving said rack supporting member to forward and rearward positions in said case, and means for controlling said actuating means.

2. A display rack comprising a rack-supporting member, a motor for imparting reciprocatory movements to said member, and means intermittently operated for controlling said motor.

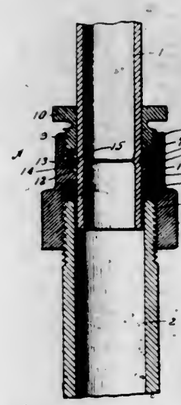
3. A display rack comprising a rack supporting member, a motor for imparting reciprocatory movements thereto, a rock shaft provided with means for controlling the operation of said motor, and means for intermittently actuating said rock shaft.

4. A display rack comprising a rack supporting member, a motor for imparting reciprocatory movements thereto, means for controlling the operation of said motor, and means for intermittently actuating said controlling means.

5. A display rack comprising a rack supporting member, actuating means for moving said rack supporting member to forward and rearward positions in said case, means for controlling said actuating means, and means for intermittently operating said controlling means.

[Claims 6 to 36 not printed in the Gazette.]

1,063,926. SLIP-JOINT-COUPLING NUT. ANTON C. SCHUERMANN, Decatur, Ill., assignor to H. Mueller Mfg. Co., Decatur, Ill., a Corporation of Illinois. Filed Oct. 26, 1911. Serial No. 656,910. (Cl. 137—28.)



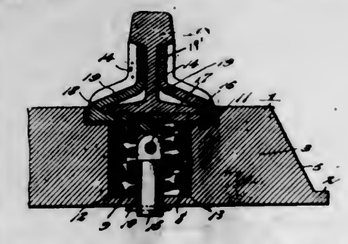
1. In a slip joint coupling, the combination with a pipe having external threads upon its end and a second pipe of reduced diameter telescoping into said first pipe, and having an exterior smooth surface, of a coupling member threaded upon the first pipe and having an inwardly extending flange with a flat face opposed to the end of the externally threaded pipe and adapted for snug engagement against said telescoping pipe, a packing carried in said member against said flat face and adapted to become pressed against said threaded pipe upon the screwing of said member upon the pipe, said member also having an integral threaded extension surrounding the telescoping pipe, said flange having an inclined wall facing outward through the extension, a split ring formed with an annular biting edge and arranged in the extension against the inclined face and a gland nut embracing said telescoping pipe and bearing against said ring, whereby to compress the latter against the inclined face and force said biting edge into frictional contact with the telescoping pipe to securely lock the same against longitudinal movement.

2. In a slip joint coupling and in combination, an outer pipe, a pipe telescoping into said outer pipe, a coupling member secured to the outer pipe and having a straight shoulder facing the end thereof, a packing between the end of the outer pipe and said shoulder and adapted to be compressed against said end by the coupling member, said coupling member also having an inwardly inclined shoulder, a locking member formed with a biting edge and bearing on the inclined shoulder, and a nut on the coupling member engaging the locking member and compressing the same against the inclined shoulder whereby to force said biting edge into frictional contact with said telescoping pipe thereafter and securely lock the same against movement.

3. In a slip-joint coupling and in combination, an outer pipe, a pipe telescoping into said outer pipe, a coupling member secured to the outer pipe and having a straight

shoulder facing the end thereof, a packing between the end of the outer pipe and said shoulder adapted to be compressed against said end by the coupling member, said coupling member also having an inwardly inclined shoulder, a locking member formed with a biting edge bearing on the inclined shoulder, and a nut on the coupling member engaging the locking member and compressing the same against the inclined shoulder to force said biting edge into intimate contact with said telescoping pipe whereby to distort the pipe and render the same incapable of longitudinal displacement.

1,063,927. STEEL RAILROAD-TIE. HARRY R. VENSEL, Creekside, Pa. Filed Mar. 8, 1913. Serial No. 753,049. (Cl. 238—5.)

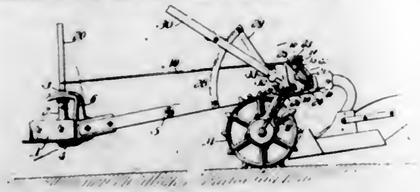


1. A metallic tie having its upper portion adjacent its ends provided with a transverse depression forming a seat for a rail, the tie having a shoulder portion arranged below the said seat and being further provided with a depression which is surrounded by the shoulder, expansible elements within the depression and extending above the shoulder, rail clamps, each of said rail clamps including a stem and pivoted headed members provided with integrally formed rail flange-engaging lips, and the stem of the said engaging member as well as the shanks of the head portions of the said members adapted to be received within the compressible members and to have their heads rest upon the said compressible members, substantially as and for the purpose set forth.

2. A metallic tie having its end provided with a reduced portion forming a rail seat, the said rail being formed with an annular depressed portion disposed below its seat, a pair of helical spring members one engaging the other and one of a greater strength than the other disposed within the annular depression and projecting thereabove, a clamping member for the tie, said clamping member embodying a rounded stem which is provided with an upper reduced portion, rail engaging elements including heads provided with lips and being provided with depending stems which are pivotally connected with the reduced portion of the stem, the said lips and heads adapted to engage with the base flanges of a rail, and the stem of the clamping member as well as the stems of the heads adapted to be received within the inner spring to compress the same against the outer spring and to force the outer spring into engagement with the wall of the annular depression of the tie.

3. The herein described construction of ties and rail clamps associated with the ties, including a tie member having an opening, a recess communicating with the opening and a perforation in the lower wall of the recessed portion of the tie, a clamp embodying a stem passing through the perforation, a stop pin for the stem, said stem having a central reduced extension, a pair of rail clamps each including a headed portion having an angular rail-engaging lip and an extension adapted to contact with the web of the rail when the rail is seated upon the heads of the clamp, the heads of the clamp being provided with downturned stems which have their outer faces rounded, the stems adapted to be arranged upon the opposite sides of the projection of the first mentioned stem, a pivot connecting the clamp stems with the reduced portion of the main stem, a spring surrounding the stems and adapted to exert a tension upon the pivoted stems to force the clamp members toward each other, a second spring of a greater strength arranged within the depression and surrounding the first mentioned spring and bearing between the lower wall of the depression and the heads of the clamp.

1,063,928. PLOW. LEWIS E. WATERMAN, Rockford, Ill., assignor to Emerson-Brantingham Company, Rockford, Ill., a Corporation of Illinois. Filed Oct. 12, 1912. Serial No. 725,520. (Cl. 97—69.)

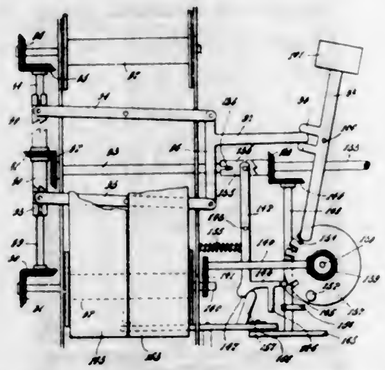


1. A plow, comprising a frame, a plow beam pivotally connected to the frame and capable of a vertical movement, a wheel for the plow beam, a support for the wheel pivoted to the beam, a lug on said support adapted to contact with a projection carried by the beam when said beam is in its raised position, and means for raising and lowering the plow beam.

2. A plow, comprising a frame, a plow beam pivotally connected to the frame and capable of a vertical movement, a wheel for the plow beam, a support for the wheel pivoted to the beam, a lug on said support located below the pivotal support of the said wheel-support and adapted to contact with a projection carried by the beam when said beam is in its raised position, and means for raising and lowering the plow beam.

3. A plow, comprising a frame, a plow beam pivotally connected to the frame and capable of a vertical movement, a wheel for the plow beam, a support for the wheel pivoted to the beam, a lug formed with said support, a hand lever, a toothed-segment for the hand lever, and a movable stop carried by said hand lever and adapted to engage said lug.

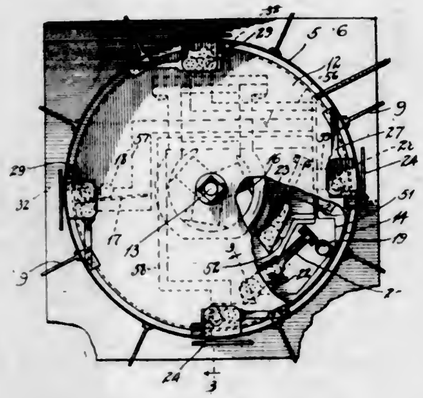
1,063,929. ADVERTISING APPARATUS. ARTHUR HARRY WRIGHT, Sydney, New South Wales, Australia. Filed Feb. 11, 1913. Serial No. 747,745. (Cl. 40—93.)



1. In an apparatus for the purpose described, the combination of a casing having a display opening, a pair of rollers mounted in said casing, a band carried by said rollers for alternate winding from one to the other of said rollers, an intermittent driving means, means for connecting said driving means alternately to each of said rollers to wind said band from roller to roller in front of said display opening, shutters for closing said display opening when the rollers are being actuated, spreading mechanism connected to said shutters for separating them to clear said opening when the rollers are stopped, spring means for actuating said spreading means, a catch for holding said shutters in closed position, a rotary element driven by said driving means, and means controlled by said rotary element for releasing said catch.

2. In an apparatus for the purpose described, the combination of a casing having a display opening, a pair of rollers mounted in said casing, a band carried by said rollers for alternate winding from one to the other of said rollers, an intermittent driving means, means for connecting said driving means alternately to each of said rollers to wind said band from roller to roller in front of said display opening, shutters for closing said display opening when the rollers are being actuated, spreading mechanism connected to said shutters for separating them to clear said opening when the rollers are stopped, spring means for actuating said spreading means, a catch for holding said shutters in closed position, a recessed rotary element driven by said driving means, and means controlled by said rotary element for releasing said catch and for controlling said intermittent driving means, said means engaging the recesses in said disk at intervals to stop the band and release said catch.

1,063,930. AUTOMATIC ALARM AND SIGNAL DEVICE. CLARENCE R. BAILEY and WILLIAM O. WARREN, Los Angeles, Cal., assignors of sixty one-hundredths to C. W. Holden and forty one-hundredths to William P. Ecton, Los Angeles, Cal. Filed July 3, 1911. Serial No. 636,628. (Cl. 40—53.)



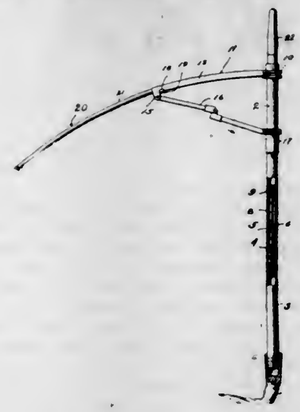
1. A crossing signal device, comprising a rotating drum having sign carrying apertures formed in its walls, a light stationed within said drum and adapted to show through said apertures, a motor capable of turning said drum about the light, a plurality of stops to limit the rotation of said drum, means for controlling the direction in which said drum turns, and electrically operated stops under the control of an operator for stopping the drum intermediate of said limiting stops, all of said stops operating to expose the desired combination of signs to view at a street crossing.

2. A signaling device for street crossings, comprising a rotating signal drum, a light coöperating therewith, a housing inclosing said drum and having a plurality of apertures through which the signals of the drum may be displayed, a plurality of limiting stops, means for turning the drum through a limited path defined by said limiting stops to bring different combinations of signals opposite the openings, and magnetically controlled stops for holding the drum in positions intermediate of the limiting stops.

3. A traffic controlling signal mechanism for street-crossings, comprising a housing having apertures opposite the streets at the crossing, baffle plates projecting from said housing to prevent the openings from being seen except at the street opposite which it is located, a rotating signal drum within said housing, a plurality of stops on the casing, a stop on the drum adapted to engage said casing stops, electrical means for controlling the movement between said casing stops, and a stationary light mounted within the drum and adapted to illuminate the signals of the drum at night time.

4. A traffic signal for crossings, comprising a revoluble signal drum carrying signals adapted to be discernible in day or night time, a stop on said drum, stops on the casing registering with said drum stops, a light within said drum adapted to illuminate the said signals at night, an electric motor capable of rotating the drum about the light in either direction limited by said stops, armatures adapted to stop the drum at intermediate points between said limit stops, and electro-magnets adapted to control said armatures in accordance with the desired combination of signals to be exposed by the movement of the drum.

1,063,931. FOLDING UMBRELLA. DOMENIC A. CAVALLAR, Clarksburg, W. Va. Filed June 8, 1912. Serial No. 702,379. (Cl. 135—26.)

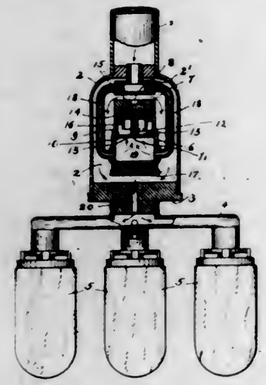


An umbrella of the class described, comprising a sectional stick, a notch carried by the upper end of one of the sections, a runner adapted for travel upon the sections, main ribs pivotally connected to the notch, stay ribs connected to the runner at their inner ends, said ribs consisting of channel metal and having sides, said sides being formed with inwardly bent flanges to form guideways, the outer ends of said sides having ears formed integral therewith for pivotally connecting the folding stay ribs at their outer ends, a bridge piece formed integral with one of the sides and serving as a stop, ribs slidable in said main ribs, and consisting of sides adapted to engage the guideways, said guideways being convergingly arranged at their inner ends and decreasing in depth for frictionally engaging the upper edges of the sides of the sliding ribs when the same are moved inwardly, and a hook carried by the inner ends of the sliding ribs to engage said stop to prevent accidental withdrawal of the sliding ribs when moved outwardly.

1,063,932. GAS-PRESSURE REGULATOR. PETER KELLER, Chicago, Ill. Filed June 10, 1912. Serial No. 702,716. (Cl. 67—119.)

1. In a gas pressure regulator; a casing, a valve chest inclosed in the casing and adapted to discharge therelnto, a transverse partition in the valve chest forming a gas chamber at the end remote from the discharge having a plurality of perforations and a central duct, a foraminous plate or screen spaced from said partition, a valve slidable on said duct and adapted alternatively to engage with said partition and said plate, and means for conducting a flow of gas from a service pipe into said gas chamber.

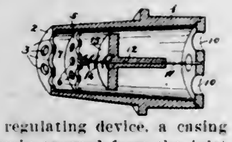
2. In a gas pressure regulator; a casing, a valve chest inclosed in the casing and adapted to discharge thereinto, a transverse partition in the valve chest forming a gas chamber at the end remote from the discharge having a plurality of perforations and a central duct, a foraminous plate or screen spaced from said partition, a cup-shaped valve slidable on said duct and adapted alternatively to engage with said partition and said plate, and means for conducting a flow of gas from a service pipe into said gas chamber.



3. In a gas pressure regulator; a casing, a valve chest inclosed in the casing and adapted to discharge thereinto, a transverse partition in the valve chest forming a gas chamber at the end remote from the discharge having a plurality of perforations and a central duct, a packing of steel shavings between said plate or screen and the discharge end, a valve slidable on said duct and adapted alternatively to engage with said partition and said plate, and means for conducting a flow of gas from a service pipe into said gas chamber.

4. In a gas pressure regulator; a valve chest, a transverse perforated partition provided with a central duct and placed in the valve chest to form a gas chamber at the inlet end, a foraminous plate or screen spaced from said partition, and a valve slidable on said duct and adapted alternatively to engage with said partition and said plate.

1,063,933. GAS-REGULATING DEVICE. PETER KELLER, Chicago, Ill. Filed June 14, 1912. Serial No. 703,643. (Cl. 67—119.)



1. In a gas regulating device, a casing having a valve chamber uniformly tapered from the inlet end to the outlet end, a guide rod secured longitudinally of said chamber, a valve within the chamber slidable on said rod, and means for resisting the motion of said valve toward the outlet end of the casing.

2. In a gas regulating device, a casing having a valve chamber uniformly tapered from the inlet end to the outlet end, a guide rod secured in the longitudinal axis of said chamber, a valve within the chamber slidable on said rod, and means for resisting the motion of said valve toward the outlet end of the casing.

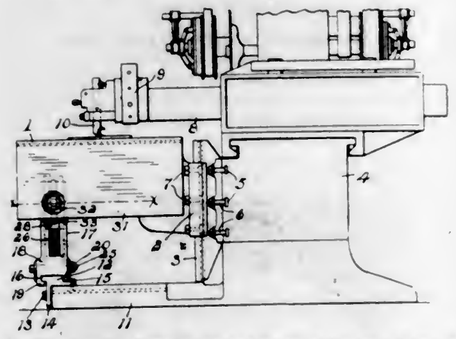
3. In a gas regulating device, a casing having a valve chamber uniformly tapered from the inlet end to the outlet end, a perforated partition placed transversely of said chamber, a guide rod placed longitudinally in said chamber and supported at one end on said partition, means for supporting said rod at the inlet end of said chamber, a valve slidably mounted on said rod, and a spring interposed between said valve and said transverse partition.

4. In a gas regulating device, a casing having a valve chamber uniformly tapered from the inlet end to the outlet end, a perforated partition placed transversely of said chamber, a perforated plate at the inlet end, a guide rod secured between said plates in the longitudinal axis of the casing, a valve slidable on said guide rod, and elastic means for causing said valve to seek inlet end of the casing.

5. In a gas regulating device, a casing having a chamber uniformly decreasing in size in the direction of the gas flow, a valve head placed transversely of said chamber, a stationary guideway upon which said valve head is slidably mounted, and means for causing said member normally to seek the inlet opening.

[Claim 6 not printed in the Gazette.]

1,063,934. SHAPER-TABLE SUPPORT. HENRY L. MORTON, Muskegon, Mich. Filed Jan. 19, 1912. Serial No. 672,198. Renewed Apr. 12, 1913. Serial No. 760,817. (Cl. 90—58.)



1. The combination with a shaper table and a bed extending beneath said table, of a track secured to the bed having a longitudinally extending projection, a supporting post adjustably attached to the table, a member on the post engaging beneath the projection on the track, a member engaging the upper side of the track, to raise the post and bring the member thereon into engagement with the projection on the track to clamp the post to the track, and means for adjusting said member engaging the track.

2. The combination with a shaper table and a bed extending beneath said table, of a track secured to the bed and having a laterally extending rib, a post adjustably attached to the table and having a flange engaging beneath the rib on the track, a roller for supporting the post upon the track, eccentric bearing members on the post for the roller, and means for adjusting the bearing members.

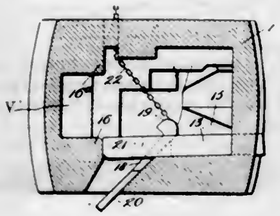
3. The combination of a shaper table having a downwardly extending flange provided with a vertical groove, a supporting post with its upper end beneath the table and having a vertical slot, an extension slide beneath the table having a slot and engaging the slot in the post and the groove in the table flange, means for adjustably securing the slide in the slot of the post, and a bolt extending through the table flange and engaging the slot in the slide to adjustably secure the slide to the table.

4. The combination with a shaper table, of a supporting post beneath the table having a vertical T-slot and a cut extending inward from the bottom of said slot, a slide within said slot, bolts extending through the post for drawing its sides toward each other to clamp the slide within the slot, a downwardly extending flange on the table having a groove to receive the slide, said slide being provided with a longitudinal slot, a member in the slot of the post, and a bolt extending through the flange on the table and the slot in the slide and having screwthreaded engagement with said member.

5. The combination with a shaper table and a bed extending beneath the table, of a track bar secured to the bed, a supporting post beneath the table having engagement with the track bar, a roller journaled upon the post

to support the same upon the track bar, a slide adjustable vertically upon the post and provided with a longitudinal slot and a groove in one side, a flange on the table having a vertical groove to receive the slide, a plate in the groove of the slide adjustable longitudinally therein and having a screwthreaded opening, and a bolt extending through the flange and the slot in the slide and engaging the screwthreaded opening in the plate.

1,063,935. CAR-COUPLING. EDWARD LEASON NORRIS, Georgiana, Ala. Filed July 17, 1912. Serial No. 709,938. (Cl. 213—10.)

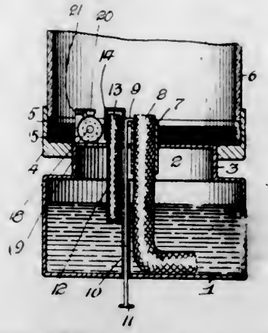


1. In a car coupler, the combination of a draw-head having a recess therein; a shoulder located in the recess; a knuckle pivoted in said draw-head having a tail-piece adapted to project within the recess; a slotted bolt disposed in the recess and adapted to engage with the tail-piece to lock said knuckle, said bolt having a tongue adapted to engage with the tail-piece to open said knuckle; a headed key having a reduced intermediate shank engaging loosely through the slot in said bolt, said key adapted to assume a slanting position through the slot in said bolt when the latter is in locking position engaging against said shoulder; and means for actuating said key to first draw the same upwardly thereby raising said bolt to clear said shoulder and release said knuckle, and secondly to cause the key to assume a vertical position whereby said bolt is moved transversely to open said knuckle.

2. In a car coupler, the combination of a draw-head having a recess therein; a shoulder located in the recess; a knuckle pivoted in said draw-head and having a tail-piece adapted to project into the recess; a slotted knuckle-locking bolt disposed in the recess and engaging against said shoulder when in locking position, said bolt having a tongue for engaging with the tail-piece to open said knuckle; a key for operating said bolt comprising a shank engaging loosely through the slot in said bolt, a head formed at the upper end of said shank, and flanges on said key below said shank and adapted to engage with the under side of said bolt to raise the same vertically when said key is actuated to release the knuckle, said key also adapted to engage against the end wall of the slot in said bolt to slide said bolt horizontally when the latter has cleared the shoulder in the recess to open said knuckle, and means for actuating said key.

3. In a car coupler, the combination of a draw-head having a recess therein and an opening in the top of said draw-head communicating with the recess; a shoulder in the recess; a knuckle pivoted in said draw-head and having a tail-piece adapted to project into the recess; a slotted bolt disposed in the recess and adapted to engage against said shoulder to lock said knuckle, said bolt having a tongue for engaging with the tail-piece to open the knuckle; a key for operating said bolt comprising a shank engaging loosely through the slot in said bolt, a head formed at the upper end of the shank, and flanges on said key below the shank and adapted to assume a slanting position through the slot in said bolt when the latter is in a locking position; and means engaging with the head of said key and passing through the opening in the top of said draw-head to draw said key up into a vertical position whereby said bolt may be raised to clear said shoulder and moved horizontally to open said knuckle.

1,063,936. LAMP-LIGHTING DEVICE. ALBERT L. SCHNEIDER, Braddock, Pa. Filed Aug. 1, 1912. Serial No. 712,753. (Cl. 67—9.)

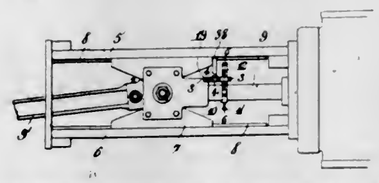


1. In a lamp lighting device, the combination with a lamp having an oil reservoir, a main wick, and an adjustable rod for moving said wick, of an auxiliary wick tube supported within said reservoir, an auxiliary wick arranged within said tube, a snuffing cap carried by said rod and adapted to fit over said tube, a revoluble roughened wheel arranged in proximity to said auxiliary wick, a spark producing material engaged by said wheel for producing sparks at the upper end of said auxiliary wick, and means including a revoluble shaft for imparting rotary movement to said wheel.

2. In a lamp lighting device, the combination with a lamp having an oil reservoir, a chimney holder detachably supported thereby, and a main wick extending into said oil reservoir, of an auxiliary wick located adjacent to said main wick, a bearing carried by the top of said reservoir, a shaft journaled in said bearing and extending out of said chimney holder, a roughened wheel mounted upon said shaft, a spark producing material supported by said bearing and engaged by said wheel for producing sparks at the upper end of said auxiliary wick, and means for simultaneously adjusting said main wick and snuffing said auxiliary wick.

3. In a lamp lighting device, the combination with a lamp having an oil reservoir, a chimney holder detachably connected thereto, a main wick extending into said oil reservoir, and a rod in connection with said main wick for adjusting said wick, of an auxiliary wick located adjacent to said main wick, a snuffing cap carried by said rod and adapted to extend over said auxiliary wick, a revoluble wheel supported adjacent to said auxiliary wick, a spark producing material engaged by said wheel for producing sparks at the upper end of said auxiliary wick, and means extending out of said chimney holder to facilitate revolving said wheel.

1,063,937. ANGLE-TOOL. ESPY D. SHERRILL, Hickory, N. C. Filed Aug. 28, 1912. Serial No. 717,577. (Cl. 90—24.)



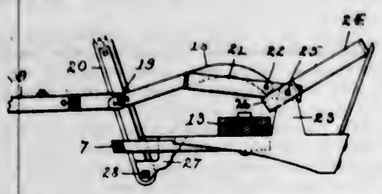
1. In a device of the class described, a clamping member, an arm section adjustably connected to the clamping member, adjusting means extending longitudinally in said section, a second arm section at right angles to the first arm section and slidably connected with the latter, means surrounding the adjusting screw and connected with the second arm section for moving the same on the turning of

the screw and a tool holder adjustably mounted on the second arm section.

2. In a device of the class described, a clamping member, an arm section adjustably connected to the clamping member, an adjusting screw extending longitudinally in said section, a second arm section at right angles to the first arm section and slidably connected with the latter, means surrounding the adjusting screw and connected with the second arm section for moving the same on the turning of the screw, a tool holder adjustably mounted on the second arm section, and an adjusting screw extending longitudinally in said second arm section and engaged with the tool holder.

3. In a device of the class described, a clamping member, an arm section adjustably connected to the clamping member, an adjusting screw extending longitudinally in said section, a second arm section at right angles to the first arm section and slidably connected with the latter, means surrounding the adjusting screw and connected with the second arm section for moving the same on the turning of the screw, a tool holder adjustably mounted on the second arm section, an adjusting screw extending longitudinally in said second section and engaged with the tool holder, and knurled heads on the screws and disposed exteriorly of the arm sections.

1,063,938. PUSH HAY-RAKE. JOHN H. ANDERSON, St. Paul, Minn. Filed Apr. 12, 1910. Serial No. 554,922. (Cl. 56—96.)



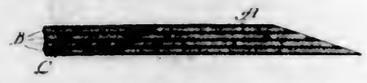
1. In a locking device for a push rake, tilting bars pivotally connected to said rake, a foot lever, locking bars pivoted on said tilting bars and connected to said foot lever, said lever being adapted to carry the attached ends of the bars in its movement beyond a line connecting the pivot points of the lever and bars in either the raised or lowered position of said rake, thereby locking said rake against movement out of these positions, a tripping lever pivoted at the same point as said foot lever and adapted to engage said foot lever to unlock said rake, and separate means directly connected to said tilting bars to raise and lower said rake.

2. A device of the class set forth, comprising, in combination, a tilting rake, a carrier frame on which said rake is mounted, tilting bars connected to said rake to tilt the latter, locking bars connected to said tilting bars, a foot lever attached to said locking bars and mounted on said frame, said foot lever being adapted to carry said locking bars into locking position, a tripping lever mounted on said frame in position to engage said foot lever to release the locking bars, a bell crank pivoted on said frame and connected at one end by a link to said tilting bars, and a draft attachment connected to the other end of said bell crank; whereby draft may be utilized to operate the tilting bars to raise said rake and said tilting bars may be locked by said foot lever to hold the rake in its raised or lowered position.

3. A device of the class set forth, comprising, in combination, a rake formed of forwardly extending and substantially parallel teeth, supporting wheels, a shaft carried by said wheels and upon which said rake is journaled, a backwardly extending reach frame journaled on said shaft, wheels upon which the rear end of said reach frame is mounted, a cross frame carried by the rear end of said reach frame, tilting bars connected to said rake for tilting the same upon said shaft, a hand operated lever pivoted on said frame and connected to said tilting bars to operate the same, draft means connected to said bars independent of said hand operated lever for operating the same to tilt said rake up, locking bars attached to said tilting bars to lock the same when said rake is in raised or lowered position and a foot lever for tripping said locking bars out of locking position and permitting the action of said draft means to be directly applied to said bars.

4. In an operating device for push rakes, tilting bars attached to said rake, to raise and lower it, a hand operated lever journaled on said rake and connected to said tilting bars to operate the same, power means directly connected with said tilting bars independent of said hand operated lever to raise said rake, locking bars pivoted to said tilting bars and a lever connected with said locking bars adapted to carry said bars into locking position in the raised and lowered positions of said rake.

1,063,939. LAMINATED FIREPROOF MATERIAL. GEORGE E. BEHRENS, Ivoryton, Conn., and JOSEF VEIT, New York, N. Y. Filed Dec. 28, 1911. Serial No. 668,355. (Cl. 154—44.)



1. As a new product, a rigid sheet comprising superposed and compacted sheets of asbestos paper with intermediate layers of a fireproof binder comprising silicon-oxygen compounds of zinc and an alkaline-earth metal.

2. As a new product, a rigid sheet comprising superposed and compacted sheets of asbestos paper with intermediate layers of a fireproof binder comprising oxysilicates of zinc and an alkaline-earth metal.

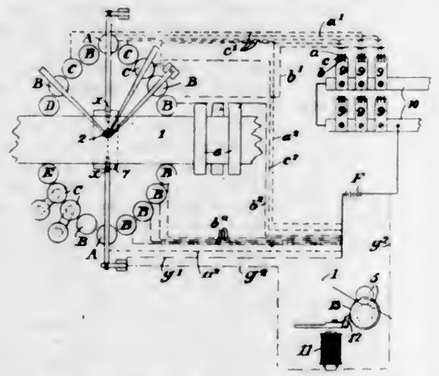
3. As a new product, superposed sheets of asbestos paper with intermediate layers of a fireproof binder comprising oxysilicates of zinc and calcium and sodium fluorid.

4. As a new product, superposed sheets of asbestos paper with intermediate layers of a fireproof binder comprising the reaction-products of zinc oxid, an alkaline-earth metal fluorid, and an alkali-metal silicate.

5. As a new product, superposed sheets of asbestos paper with intermediate layers of a fireproof binder comprising the reaction-products of zinc oxid, calcium fluorid and sodium silicate.

[Claims 6 to 13 not printed in the Gazette.]

1,063,940. PERFORATING APPARATUS FOR TELEGRAPHIC STRIPS. EDOUARD BELIN, Paris, France. Original application filed Apr. 25, 1911, Serial No. 623,328. Divided and this application filed Dec. 20, 1911. Serial No. 666,915. (Cl. 164—113.)



1. In a tape perforating machine the combination of a plurality of punches, a plurality of signaling electro-magnets in operative connection therewith, electrical tape feeding means, a source of electrical energy, a circuit including said tape and feeding means and said source, and a contact in said circuit adapted to be closed by the armature of one of the signaling electro-magnets after each perforating operation.

2. In a tape perforating machine, the combination of a plurality of characters, electro-magnets, character punches operated by said electro-magnets, and having their ends arranged in a straight line at right-angles to the edge of the tape, a keyboard, character keys thereon, circuits in connection with said keys and electro-magnets, so that each key closes a plurality of said circuits, two special electro-magnets, two special punches operated thereby and adapted to make perforations distinct from each other and from those of the character punches, circuits in connection with said special electro-magnets and two keys on said keyboard each adapted to close the circuit of one of said special electro-magnets alone.

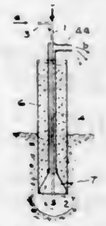
3. In a tape perforating machine, the combination of a plurality of signaling electro-magnets, a plurality of punches in operative connection therewith, a plurality of keys each adapted to energize three of said electro-magnets, a tape feeding electro-magnet and a contact in the circuit of said tape feeding electro-magnet and adapted to be closed by the armature of one of the three electro-magnets energized upon each depression of one of said keys.

1,063,941. COMPOSITE WOOD-PULP SHEET. JAMES P. LEWIS, Beaver Falls, N. Y.; Harry S. Lewis administrator of said James P. Lewis, deceased. Filed Nov. 19, 1906. Serial No. 343,968. (Cl. 154—46.)

1. A composite wood pulp sheet consisting of separate outer and inner sheets cemented together, the outer sheets being formed from wood pulp having a long tough fiber, and the inner sheet being formed from wood pulp having a short hard fiber, substantially as set forth.

2. A composite wood pulp sheet consisting of separate outer and inner sheets cemented together, the outer sheets being formed from spruce pulp having a long tough fiber, and the inner sheet being formed from poplar pulp having a short hard fiber, substantially as set forth.

1,063,942. CONCRETE-PILE-FORMING MEANS. WILLIAM R. PHILLIPS, Portland, Oreg. Filed Mar. 17, 1911. Serial No. 615,165. (Cl. 61—41.)

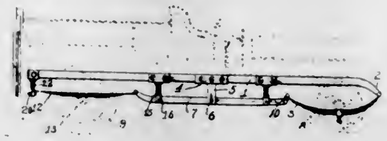


1. Concrete pile forming means comprising a tubular shell formed of a plurality of sections, a flaring bottom affixed in one section of said shell, said bottom being formed with a neck, and a tube formed of a plurality of sections and having the lower of such sections connected with said neck, and said tube having a diameter sufficient to permit the insertion of a hydraulic pipe.

2. Concrete pile forming means comprising a tubular shell formed of a plurality of sections, a flaring bottom affixed in one section of said shell, said bottom being formed with a neck, and a tube comprising a plurality of sections and connected with said neck, one of said tube sections being provided with a lateral discharge spout, said tube having a diameter sufficient to permit the insertion of a hydraulic pipe having its bottom end provided with a lateral nozzle.

3. Concrete pile forming means comprising a tubular form made of outer and inner shells spaced apart, said shells made in sections, and means for providing a scouring space in the lower end of that section of the form bearing on the ground, the inner shell having a diameter sufficient to permit the insertion of a hydraulic pipe and also to provide an outlet.

1,063,943. SPRING SUSPENSION. JOHN HENRY PTACEK-BIRD, Chicago, Ill. Filed Nov. 16, 1911. Serial No. 660,661. (Cl. 21—101.)

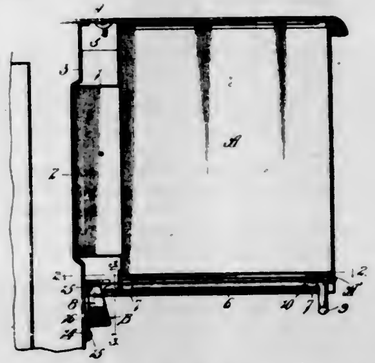


1. The combination with the wheels and axles of a vehicle, of longitudinally extending springs supported on each axle at each side of the vehicle, an equalizing bar connecting the front and rear springs at each side the vehicle, an equalizing bar yieldingly connecting the rear ends of the rear springs, a vehicle body, springs supporting the body upon the equalizing bars, and arms secured to the body and having slotted engagement with the lateral equalizing bars.

2. In a vehicle the wheels, and axles, a spring frame supported upon the axles, and comprising longitudinally extending side springs and equalizing bars yieldingly connecting the same, springs supporting the body yieldingly upon the equalizing bars, and arms secured to the sills of the body and having slotted engagement with the equalizing bars.

3. An automobile suspension embracing the wheels, axles and body, longitudinally extending front and rear springs secured on said axles, an equalizing bar swingingly engaged at the rear end of each front spring and pivotally engaged at the front end of each rear spring, an equalizing bar connected with the rear ends of the rear springs, springs supporting the body upon the equalizing bars, pivotal connections between the front ends of the front springs and the body and between the rear end of the body and the rear equalizing bar, and guides engaged on the body and having a slotted engagement with pins on the lateral equalizing bars.

1,063,944. WATER-RESERVOIR FOR RANGES. LOYD SCRUGGS, St. Louis, Mo., assignor to Copper Clad Malleable Range Company, St. Louis, Mo., a Corporation of Nebraska. Filed Dec. 30, 1911. Serial No. 668,623. (Cl. 126—31.)



1. A range provided with a water reservoir, an operating shaft arranged on the under side of the reservoir and provided at its inner end with a crank arm, and a member on the range provided with a plurality of cams with which said crank arm coöperates so as to move the reservoir into and out of engagement with the wall of the range that heats the reservoir.

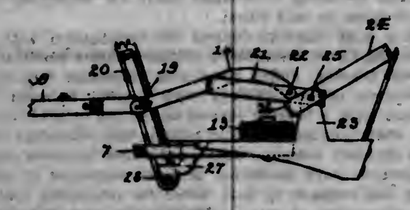
2. A range provided with a reservoir, an operating shaft on the under side of the reservoir provided with a handle that is located adjacent the front of the reservoir, a crank arm on the rear end of said shaft, and a member on the range provided with a pair of cams that coöperate with said crank arm and which are so designed that the

the screw and a tool holder adjustably mounted on the second arm section.

2. In a device of the class described, a clamping member, an arm section adjustably connected to the clamping member, an adjusting screw extending longitudinally in said section, a second arm section at right angles to the first arm section and slidably connected with the latter, means surrounding the adjusting screw and connected with the second arm section for moving the same on the turning of the screw, a tool holder adjustably mounted on the second arm section, and an adjusting screw extending longitudinally in said second arm section and engaged with the tool holder.

3. In a device of the class described, a clamping member, an arm section adjustably connected to the clamping member, an adjusting screw extending longitudinally in said section, a second arm section at right angles to the first arm section and slidably connected with the latter, means surrounding the adjusting screw and connected with the second arm section for moving the same on the turning of the screw, a tool holder adjustably mounted on the second arm section, an adjusting screw extending longitudinally in said second section and engaged with the tool holder, and knurled heads on the screws and disposed exteriorly of the arm sections.

1,063,938. PUSH HAY-RAKE. JOHN H. ANDERSON, St. Paul, Minn. Filed Apr. 12, 1910. Serial No. 554,922. (Cl. 56—66.)



1. In a locking device for a push rake, tilting bars pivotally connected to said rake, a foot lever, locking bars pivoted on said tilting bars and connected to said foot lever, said lever being adapted to carry the attached ends of the bars in its movement beyond a line connecting the pivot points of the lever and bars in either the raised or lowered position of said rake, thereby locking said rake against movement out of these positions, a tripping lever pivoted at the same point as said foot lever and adapted to engage said foot lever to unlock said rake, and separate means directly connected to said tilting bars to raise and lower said rake.

2. A device of the class set forth, comprising, in combination, a tilting rake, a carrier frame on which said rake is mounted, tilting bars connected to said rake to tilt the latter, locking bars connected to said tilting bars, a foot lever attached to said locking bars and mounted on said frame, said foot lever being adapted to carry said locking bars into locking position, a tripping lever mounted on said frame in position to engage said foot lever to release the locking bars, a bell crank pivoted on said frame and connected at one end by a link to said tilting bars, and a draft attachment connected to the other end of said bell crank; whereby draft may be utilized to operate the tilting bars to raise said rake and said tilting bars may be locked by said foot lever to hold the rake in its raised or lowered position.

3. A device of the class set forth, comprising, in combination, a rake formed of forwardly extending and substantially parallel teeth, supporting wheels, a shaft carried by said wheels and upon which said rake is journaled, a backwardly extending reach frame journaled on said shaft, wheels upon which the rear end of said reach frame is mounted, a cross frame carried by the rear end of said reach frame, tilting bars connected to said rake for tilting the same upon said shaft, a hand operated lever pivoted on said frame and connected to said tilting bars to operate the same, draft means connected to said bars independent of said hand operated lever for operating the same to tilt said rake up, locking bars attached to said tilting bars to lock the same when said rake is in raised or lowered position and a foot lever for tripping said locking bars out of locking position and permitting the action of said draft means to be directly applied to said bars.

4. In an operating device for push rakes, tilting bars attached to said rake, to raise and lower it, a hand operated lever journaled on said rake and connected to said tilting bars to operate the same, power means directly connected with said tilting bars independent of said hand operated lever to raise said rake, locking bars pivoted to said tilting bars and a lever connected with said locking bars adapted to carry said bars into locking position in the raised and lowered positions of said rake.

1,063,939. LAMINATED FIREPROOF MATERIAL. GEORGE E. BEHRENS, Ivoryton, Conn., and JOSEF VEIT, New York, N. Y. Filed Dec. 28, 1911. Serial No. 668,355. (Cl. 154—44.)



1. As a new product, a rigid sheet comprising superposed and compacted sheets of asbestos paper with intermediate layers of a fireproof binder comprising silicon-oxygen compounds of zinc and an alkaline-earth metal.

2. As a new product, a rigid sheet comprising superposed and compacted sheets of asbestos paper with intermediate layers of a fireproof binder comprising oxysilicates of zinc and an alkaline-earth metal.

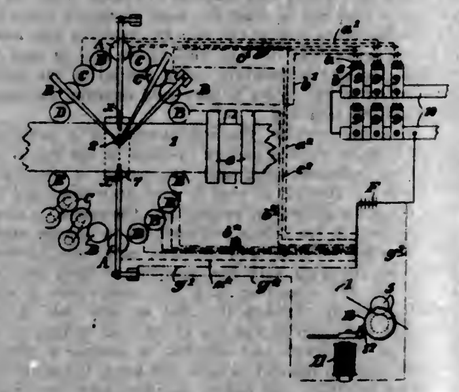
3. As a new product, superposed sheets of asbestos paper with intermediate layers of a fireproof binder comprising oxysilicates of zinc and calcium and sodium fluorid.

4. As a new product, superposed sheets of asbestos paper with intermediate layers of a fireproof binder comprising the reaction-products of zinc oxid, an alkaline-earth metal fluorid, and an alkali-metal silicate.

5. As a new product, superposed sheets of asbestos paper with intermediate layers of a fireproof binder comprising the reaction-products of zinc oxid, calcium fluorid and sodium silicate.

[Claims 6 to 13 not printed in the Gazette.]

1,063,940. PERFORATING APPARATUS FOR TELEGRAPHIC STRIPS. EDOUARD BELIN, Paris, France. Original application filed Apr. 25, 1911, Serial No. 623,328. Divided and this application filed Dec. 20, 1911. Serial No. 666,915. (Cl. 164—113.)



1. In a tape perforating machine the combination of a plurality of punches, a plurality of signaling electro-magnets in operative connection therewith, electrical tape feeding means, a source of electrical energy, a circuit including said tape and feeding means and said source, and a contact in said circuit adapted to be closed by the armature of one of the signaling electro-magnets after each perforating operation.

2. In a tape perforating machine, the combination of a plurality of characters, electro-magnets, character punches operated by said electro-magnets, and having their ends arranged in a straight line at right-angles to the edge of the tape, a keyboard, character keys thereon, circuits in connection with said keys and electro-magnets, so that each key closes a plurality of said circuits, two special electro-magnets, two special punches operated thereby and adapted to make perforations distinct from each other and from those of the character punches, circuits in connection with said special electro-magnets and two keys on said keyboard each adapted to close the circuit of one of said special electro-magnets alone.

3. In a tape perforating machine, the combination of a plurality of signaling electro-magnets, a plurality of punches in operative connection therewith, a plurality of keys each adapted to energise three of said electro-magnets, a tape feeding electro-magnet and a contact in the circuit of said tape feeding electro-magnet and adapted to be closed by the armature of one of the three electro-magnets energised upon each depression of one of said keys.

1,063,941. COMPOSITE WOOD-PULP SHEET. JAMES P. LEWIS, Beaver Falls, N. Y.; Harry S. Lewis administrator of said James P. Lewis, deceased. Filed Nov. 19, 1906. Serial No. 343,968. (Cl. 154—46.)

1. A composite wood pulp sheet consisting of separate outer and inner sheets cemented together, the outer sheets being formed from wood pulp having a long tough fiber, and the inner sheet being formed from wood pulp having a short hard fiber, substantially as set forth.

2. A composite wood pulp sheet consisting of separate outer and inner sheets cemented together, the outer sheets being formed from spruce pulp having a long tough fiber, and the inner sheet being formed from poplar pulp having a short hard fiber, substantially as set forth.

1,063,942. CONCRETE-PILE-FORMING MEANS. WILLIAM R. PHILLIPS, Portland, Oreg. Filed Mar. 17, 1911. Serial No. 615,165. (Cl. 61—41.)

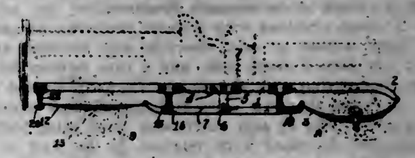


1. Concrete pile forming means comprising a tubular shell formed of a plurality of sections, a flaring bottom affixed in one section of said shell, said bottom being formed with a neck, and a tube formed of a plurality of sections and having the lower of such sections connected with said neck, and said tube having a diameter sufficient to permit the insertion of a hydraulic pipe.

2. Concrete pile forming means comprising a tubular shell formed of a plurality of sections, a flaring bottom affixed in one section of said shell, said bottom being formed with a neck, and a tube comprising a plurality of sections and connected with said neck, one of said tube sections being provided with a lateral discharge spout, said tube having a diameter sufficient to permit the insertion of a hydraulic pipe having its bottom end provided with a lateral nozzle.

3. Concrete pile forming means comprising a tubular form made of outer and inner shells spaced apart, said shells made in sections, and means for providing a scouring space in the lower end of that section of the form bearing on the ground, the inner shell having a diameter sufficient to permit the insertion of a hydraulic pipe and also to provide an outlet.

1,063,943. SPRING SUSPENSION. JOHN HENRY PTACEK-BIRD, Chicago, Ill. Filed Nov. 16, 1911. Serial No. 660,661. (Cl. 21—101.)

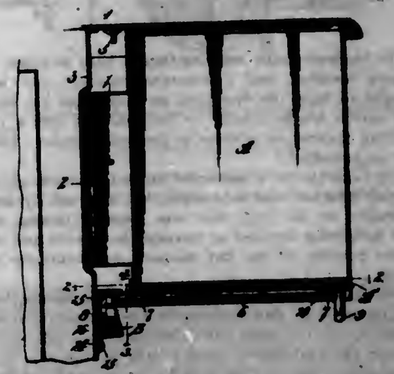


1. The combination with the wheels and axles of a vehicle, of longitudinally extending springs supported on each axle at each side of the vehicle, an equalising bar connecting the front and rear springs at each side the vehicle, an equalising bar yieldingly connecting the rear ends of the rear springs, a vehicle body, springs supporting the body upon the equalising bars, and arms secured to the body and having slotted engagement with the lateral equalising bars.

2. In a vehicle the wheels, and axles, a spring frame supported upon the axles, and comprising longitudinally extending side springs and equalising bars yieldingly connecting the same, springs supporting the body yieldingly upon the equalising bars, and arms secured to the sills of the body and having slotted engagement with the equalizing bars.

3. An automobile suspension embracing the wheels, axles and body, longitudinally extending front and rear springs secured on said axles, an equalizing bar swingingly engaged at the rear end of each front spring and pivotally engaged at the front end of each rear spring, an equalising bar connected with the rear ends of the rear springs, springs supporting the body upon the equalising bars, pivotal connections between the front ends of the front springs and the body and between the rear end of the body and the rear equalising bar, and guides engaged on the body and having a slotted engagement with pins on the lateral equalising bars.

1,063,944. WATER-RESERVOIR FOR RANGES. LOYD SCRUGGS, St. Louis, Mo., assignor to Copper Clad Malleable Range Company, St. Louis, Mo., a Corporation of Nebraska. Filed Dec. 30, 1911. Serial No. 668,623. (Cl. 126—31.)



1. A range provided with a water reservoir, an operating shaft arranged on the under side of the reservoir and provided at its inner end with a crank arm, and a member on the range provided with a plurality of cams with which said crank arm coöperates so as to move the reservoir into and out of engagement with the wall of the range that heats the reservoir.

2. A range provided with a reservoir, an operating shaft on the under side of the reservoir provided with a handle that is located adjacent the front of the reservoir, a crank arm on the rear end of said shaft, and a member on the range provided with a pair of cams that coöperate with said crank arm and which are so designed that the

reservoir will be moved into snug engagement with one wall of the range when the shaft is turned in one direction and out of engagement with said wall when the shaft is turned in the opposite direction.

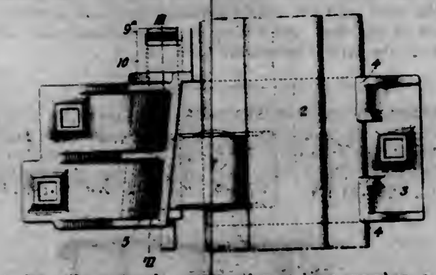
3. A range provided with a water reservoir, an operating shaft carried by said reservoir and provided at its inner end with a crank arm, and a cam member on the range coöperating with said crank arm and provided with two vertically disposed segmental-shaped cams arranged on opposite sides of said shaft, said cams being inclined in opposite directions with relation to the wall of the range that heats the reservoir.

4. A range provided with a water reservoir, an operating shaft journaled on the under side of the reservoir and provided at its rear end with a crank arm, and a cam member on the range provided with a semiring-shaped flange that has two oppositely inclined segmental-shaped cams with which said crank arm coöperates.

5. A range provided with a water reservoir, an operating shaft journaled on the under side of the reservoir and provided at its rear end with a crank arm, a cam member on the range provided with a semiring-shaped flange that has two oppositely inclined segmental-shaped cams with which said crank arm coöperates, and a stop on said member that coöperates with said crank arm to limit the movement of said shaft in one direction.

REISSUES.

13,570. TRACK-FASTENING. JOHN W. STEPHENSON, Toledo, Ohio, assignor to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 29, 1913. Serial No. 764,416. Original No. 1,010,971, dated Dec. 5, 1911, Serial No. 600,507. (Cl. 238—2.)



1. In railway track construction, a base member, a rail engaging member, and a separate bendable key member arranged to hold the engaging member, said key member being driven longitudinally of the rail and into a curved deflecting channel or passage in the base member; substantially as described.

2. In railway track construction, a base member, a rail engaging member, and a bendable key member, driven longitudinally of the rail, the base member having an inclined deflecting channel or passage to receive and deflect the end portion of the key member, substantially as described.

3. In railway track construction, a base member, a rail engaging member, and a bendable key member, driven longitudinally of the rail, the said base and rail engaging members having between them a seat for the key, and the base member also having a deflector to engage and bend the entire end portion of the key member; substantially as described.

4. In railway track construction, a base member, a rail engaging member, and a bendable key member, driven longitudinally of the rail and into an inclined deflecting channel or passage in the base member, said key having a tapered portion; substantially as described.

5. In railway track construction, a base member having an abutment, a rail engaging member between the abutment and the rail, and a bendable key member driven longitudinally, the base member having a curved deflecting opening or passage at one end portion of the abutment; substantially as described.

6. In railway track construction, a base member, a rail engaging member, and a bendable key member driven longitudinally of the rail and into a curved deflecting channel or passage in the base member; substantially as described.

7. In railway track construction, a base member, a rail engaging member, and a bendable key member driven longitudinally of the rail and into a curved deflecting channel or passage in the base member provided with clearance enlargements; substantially as described.

8. In railway track construction, a base member, a rail engaging member, and a bendable key member, driven longitudinally of the rail, and into an inclined deflecting channel or passage formed in the base member and open at both its ends; substantially as described.

9. In railway track construction, a base member, a rail engaging member, and a bendable key member, driven longitudinally of the rail, and into an inclined deflecting channel or passage in the base member, said key member being of broad flat form and having a driving head; substantially as described.

10. In a track fastening, a plurality of wedging members adapted to be driven longitudinally of the rail relatively to each other into clamping engagement with the rail, and automatically bendable locking means adapted to be driven into a curved deflecting channel on one of said members for locking said members in wedging engagement.

11. In a track fastening, a plurality of members adapted to be moved relatively to each other longitudinally of the rail into wedging engagement with each other to clamp the rail, and a separate key having a shoulder and a bendable portion, said key being adapted when driven up to its shoulder against one of said members to be automatically bent and locked to hold said members in wedging engagement.

12. In a track fastening, a plurality of wedging members adapted to be driven longitudinally of the rail relatively to each other into clamping engagement with the rail, and automatically bendable locking means adapted to be driven into a curved deflecting channel provided with clearance enlargements, on one of said members, for locking said members in wedging engagement.

13. In railway track construction, a base member, a wedge member adapted to be driven longitudinally of the rail toward a curved deflecting channel fixed relatively to the base member to clamp the base member to the rail, and a separate bendable key member arranged to be driven longitudinally of the rail and bent in the curved deflecting channel to hold the wedge member in wedging position.

DESIGNS.

44,121. TRAY. JOHN H. ASTRUCK, New York, N. Y. Filed Mar. 29, 1913. Serial No. 757,705. Term of patent 7 years.



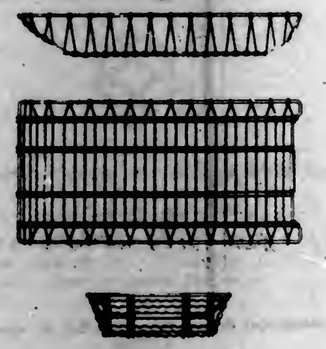
The ornamental design for a tray, as shown.

44,122. TRAY. JOHN H. ASTRUCK, New York, N. Y. Filed Mar. 29, 1913. Serial No. 757,706. Term of patent 7 years.



The ornamental design for a tray, as shown.

44,123. BASKET. GEORGE E. CHATILLON, New York, N. Y. Filed Aug. 8, 1912. Serial No. 714,138. Term of patent 14 years.



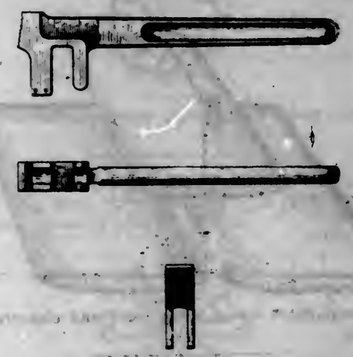
The ornamental design for a basket, as shown.

44,124. ENVELOP, WRITING-PAPER, CARD, OR SIMILAR ARTICLE OF STATIONERY. CHARLES CLEMENTS, Boston, Mass. Filed Feb. 7, 1913. Serial No. 746,966. Term of patent 14 years.



The ornamental design for an envelop, writing paper, card or similar article of stationery as shown.

44,125. WRENCH-BAR. HARRY C. EARLE, Boston, Mass., assignor to Walworth Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 29, 1913. Serial No. 745,492. Term of patent 14 years.



The ornamental design for a wrench-bar, as shown.

44,126. GUARD FOR BAND-SAWS. ELMER HARROLD, Leetonia, Ohio, assignor to The Crescent Machine Company, Leetonia, Ohio, a Corporation of Ohio. Filed Jan. 3, 1913. Serial No. 740,036. Term of patent 7 years.



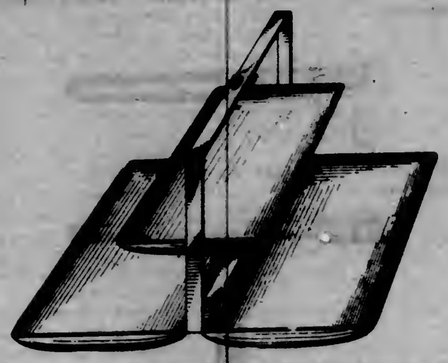
The ornamental design for a guard for band saws as shown.

44,127. WALL-COVERING. GILBERT A. HASLUP, Laurel, Md. Filed Feb. 16, 1911. Serial No. 609,074. Term of patent 14 years.



The ornamental design for a wall covering, as shown.

44,128. CIGAR AND CIGARETTE CASE. GUSTAVE A. HENCKEL, South Orange, N. J. Filed Mar. 29, 1913. Serial No. 757,711. Term of patent 14 years.



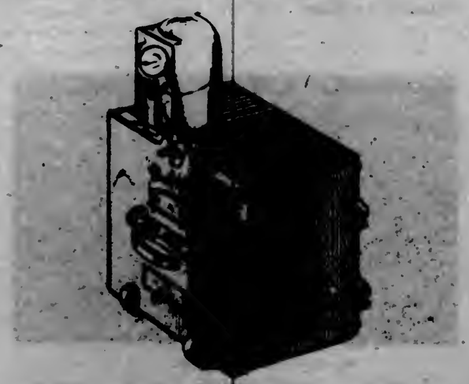
The ornamental design for a cigar and cigarette case, as shown.

44,129. RADIATOR-AIR-VALVE CASING. CHARLES D. HOFFMAN, Pasadena, Cal., assignor to Hoffman Specialty Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 29, 1913. Serial No. 757,701. Term of patent 14 years.



The ornamental design for a radiator air valve casing as shown.

44,130. ELECTRICAL-SWITCH CASING. BRYSON D. HORTON, Detroit, Mich. Filed Mar. 18, 1913. Serial No. 755,253. Term of patent 7 years.



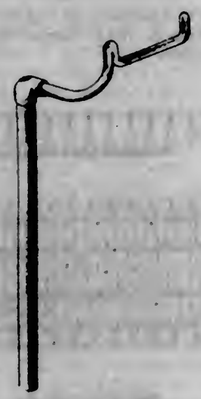
The ornamental design for an electrical switch casing as shown.

44,131. CAN, JAR, OR SIMILAR ARTICLE. WILLIAM A. LORENZ, Hartford, Conn. Filed Feb. 11, 1911. Serial No. 608,131. Term of patent 14 years.



The ornamental design for a can, jar, or similar article, as shown.

44,132. BRACKET. CHARLES METCALF, Streator, Ill. Filed Apr. 2, 1913. Serial No. 758,479. Term of patent 7 years.



The ornamental design for a bracket as shown.

44,133. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,932. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,134. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,933. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,135. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,934. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,136. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,935. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,137. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,936. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,138. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,937. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,139. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,940. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,140. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,941. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,141. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,942. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,142. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,943. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,143. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,944. Term of patent 3½ years



The ornamental design for an embroidery foundation as shown.

44,144. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,945. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,145. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,946. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,146. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,947. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,147. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,948. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,148. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,949. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,149. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,951. Term of patent 3½ years.



The ornamental design for an embroidery foundation as shown.

44,150. EMBROIDERY FOUNDATION. JULIUS M. REIS, New York, N. Y. Filed Apr. 4, 1913. Serial No. 758,952. Term of patent 3½ years.



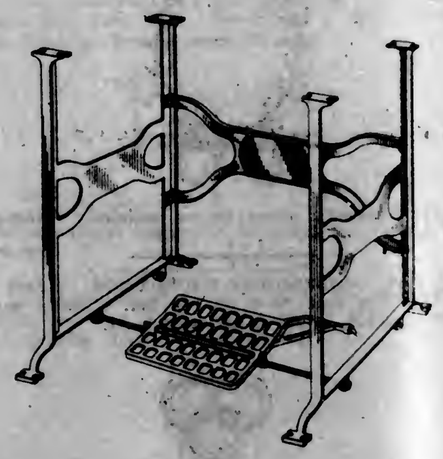
The ornamental design for an embroidery foundation as shown.

44,151. HOPPER DISK OR HEAD. ALONZO E. RHOADES, Hopedale, Mass., assignor to Draper Company, Hopedale, Mass., a Corporation of Maine. Filed Jan. 29, 1913. Serial No. 745,[illegible]16. Term of patent 14 years.



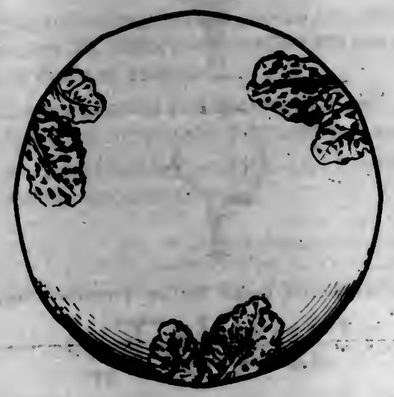
The ornamental design for a hopper disk or head, as shown.

44,152. MACHINE-STAND. MAX TAIGMAN, New York, N. Y. Filed Mar. 24, 1913. Serial No. 756,599. Term of patent 7 years.



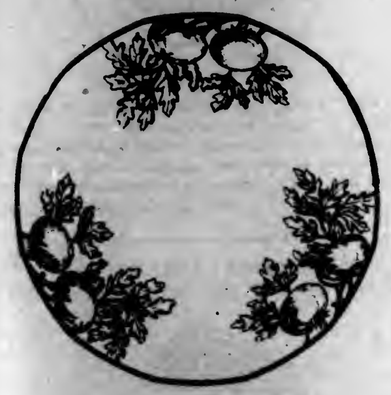
The ornamental design for a machine stand, as shown.

44,153. PLATE. EDWARD R. THIELER, Hoboken, N. J. Filed Apr. 1, 1913. Serial No. 758,270. Term of patent 7 years.



The ornamental design for a plate as shown.

44,154. PLATE. EDWARD R. THIELER, Hoboken, N. J. Filed Apr. 1, 1913. Serial No. 758,271. Term of patent 7 years.



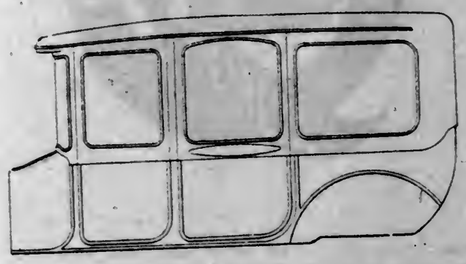
The ornamental design for a plate as shown.

44,155. ELECTRIC-SWITCH TERMINAL. MILTON TIBBETTS, Detroit, Mich., assignor, by mesne assignments, to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 30, 1909. Serial No. 475,302. Term of patent 7 years.



The ornamental design for an electric switch terminal, as shown and described.

44,156. AUTOMOBILE-BODY. GEORGE R. WADSWORTH, Cleveland, Ohio, assignor to The Peerless Motor Car Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 31, 1913. Serial No. 758,044. Term of patent 7 years.



The ornamental design for an automobile body, as shown.

44,157. AUTOMOBILE-BODY. GEORGE R. WADSWORTH, Cleveland, Ohio, assignor to The Peerless Motor Car Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 31, 1913. Serial No. 758,045. Term of patent 7 years.



The ornamental design for an automobile body, as shown.

44,158. AUTOMOBILE-LAMP. GEORGE R. WADSWORTH, Cleveland, Ohio, assignor to The Peerless Motor Car Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 31, 1913. Serial No. 758,047. Term of patent 7 years.



The ornamental design for an automobile lamp, as shown.

44,159. AUTOMOBILE-LAMP. GEORGE R. WADSWORTH, Cleveland, Ohio, assignor to The Peerless Motor Car Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 31, 1913. Serial No. 758,049. Term of patent 7 years.



The ornamental design for an automobile lamp, as shown.

TRADE-MARKS

PUBLISHED JUNE 3, 1913.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 35,871. (CLASS 12. CONSTRUCTION MATERIALS.) WURTT. TEKTON-WERKE, G. M. B. H., IN LIQUIDATION, Stuttgart, Germany. Filed June 30, 1908.

„Tekton"

Particular description of goods.—Artificial Wood.
Claims use since 1907.

Ser. No. 38,257. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BLODGETT ELEVATOR & GRAIN CO., Blodgett, Mo. Filed Oct. 26, 1908.



No claim is made for the words "Brand" and "Standard Meal." The diamond-shaped figure is divided into four small diamond-shaped figures, two of which are colored red and the remaining two colored blue.

Particular description of goods.—Corn and Oat Meal.
Claims use since Oct. 1, 1907.

Ser. No. 52,442. (CLASS 2. RECEPTACLES.) GEORGE C. LYNCH COMPANY, New York, N. Y. Filed Oct. 25, 1910.



Particular description of goods.—Jardinières, Wood-Boxes, Vases, and Ferneries.
Claims use since the month of September, 1910.

Ser. No. 54,972. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) KRETTEK BROS., Council Bluffs, Iowa. Filed Mar. 10, 1911.



No claim being made to the words "Quality," "Quick Delivery," "Quantity," "Krettek for Klean Koal and Korrect Weight," or the representation of the lump of coal.

Particular description of goods.—Hay and Coal.
Claims use since Oct. 1, 1910.

Ser. No. 56,486. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KARL HERSCHEL, Halle a. Saale, Germany. Filed May 17, 1911.

Aestivan

Particular description of goods.—Remedy for Running of the Nose.
Claims use since Apr. 1, 1911.

Ser. No. 56,550. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CACAO- EN CHOCOLADEFABRIEK UNION, Schoten, near Haarlem, Netherlands. Filed May 23, 1911.



No exclusive claim being made to the word "Mellor."
Particular description of goods.—Cocoa, Cocoa Powder, Chocolate, and Milk-Chocolate.
Claims use since November, 1909.

Ser. No. 56,600. Renewal. (CLASS 15. OILS AND GREASES.) STANDARD OIL CO. OF NEW YORK, New York, N. Y. Filed May 26, 1911.

CHAMPION

Particular description of goods.—Illuminating-Oils.
Claims use since the year 1869.

Ser. No. 56,922. (CLASS 39. CLOTHING.) STUDD & MILLINGTON, London, England. Filed June 9, 1911.



No claim being made to the exclusive right to the use of the words "Toga Virilis" and "The Gown of Manhood."
Particular description of goods.—Overcoats, Golfing and Sporting Coats, Hats and Caps, Coats, Trousers, Vests.
Claims use since November, 1910.

Ser. No. 59,148. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM HARRISON PLUNKETT, Chicago, Ill. Filed Oct. 14, 1911.

Hydro-Clean

No claim being made to the word "Clean."
Particular description of goods.—A Solvent for Removing Deposits from Marble, Porcelain, Cement, Slate, Tile, Terra-Cotta, and Metals.
Claims use since July 1, 1908.

Ser. No. 59,825. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) BENZINWERKE RHENANIA, G. M. B. H., Düsseldorf-Reisholz, Germany. Filed Nov. 21, 1911.

Terapin

Particular description of goods.—Oil of Turpentine and Turpentine Compositions.
Claims use since March, 1910.

Ser. No. 60,048. (CLASS 46. FOODS AND INGREDIENTS OF FOODS. UNGERMACH A. G. ELSASSISCHE CONSERVEN-FABRIK UND IMPORT GESELLSCHAFT, Strassburg, Germany. Filed Dec. 2, 1911.



The diagonal band being printed red.
Particular description of goods.—Milk Food-Caramels.
Claims use since August, 1910.

Ser. No. 60,620. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ATLANTIC MACARONI CO., Long Island City, N. Y. Filed Jan. 4, 1912. Under ten-year proviso.

RONZONI

Particular description of goods.—Macaroni.
Claims use since about July 20, 1894.

Ser. No. 62,002. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) NITEDALS TÆNDSTIKFABRIK, Grönvold, near Christiania, Norway. Filed Mar. 7, 1912.



The word "Nitedals" being printed in black on a yellow background, all other matter, except the two intermediate medals, being disclaimed.
Particular description of goods.—Matches.
Claims use since 1905.

Ser. No. 62,322. Renewal. (CLASS 17. TOBACCO PRODUCTS.) HABANA CIGAR & TOBACCO FACTORIES, LT'D., New York, N. Y., and Habana, Cuba. Filed Mar. 21, 1912.

LA CORONA

Particular description of goods.—Cigars.
Claims use since about the year 1854.

Ser. No. 62,387. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) FREDERIC T. WAGNER, Chicago, Ill. Filed Mar. 23, 1912.

WAGNOCO

Particular description of goods.—Precious-Metal Collar-Buttons, Cuff-Buttons, Shirt-Studs, Tie-Retainers, and Buckles for Elastic Hose-Supporters.
Claims use since Mar. 1, 1912.

Ser. No. 63,214. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN LOUIS NEEDHAM, Nacogdoches, Tex. Filed Apr. 30, 1912.

MARVEL

Particular description of goods.—A Liquid Remedy for Dandruff.
Claims use since Oct. 16, 1911.

Ser. No. 63,238. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GOODRICH DRUG CO., Omaha, Nebr. Filed May 1, 1912.



Particular description of goods.—Resorcin Hair-Tonic, Perfumed Pomade, Perfumed Ammonia, Rolling Massage-Cream, Perfumes, Toilet Waters, Sachet-Powders, Food-Colors, and Lice and Mite Powder.
Claims use on resorcin hair-tonic, perfumed pomade, food-colors, and perfumed ammonia since Nov. 1, 1903; on perfumes, toilet waters, sachet-powders, and lice and mite powder since Jan. 1, 1906, and on rolling massage-cream since Jan. 1, 1908.

Ser. No. 63,332. (CLASS 38. PRINTS AND PUBLICATIONS.) NEW YORK ATHLETIC CLUB, New York, N. Y. Filed May 4, 1912.

The Winged Foot

Particular description of goods.—The Official Organ, a Monthly Publication Embracing Athletic and other News.
Claims use since the early part of 1891.

Ser. No. 63,413. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CRAIG RIDGWAY & SON COMPANY, Coatesville, Pa. Filed May 8, 1912. Under ten-year proviso.

STEAM—HYDRAULIC

Particular description of goods.—Elevators and Cranes.
Claims use since the year 1883.

Ser. No. 63,461. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE A. I. ROOT COMPANY, Medina, Ohio. Filed May 10, 1912.



Particular description of goods.—Honey in the Comb, Extracted Honey, and Granulated Honey.
Claims use since Nov. 3, 1911.

Ser. No. 63,706. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) JAEGER'S ASBESTOS FLAT IRON WAXER CO., New York, N. Y. Filed May 21, 1912.

Jaeger's

The same being a facsimile of the handwriting of Andrew P. Jaeger.
Particular description of goods.—Sad-Iron-Waxing Pads.
Claims use since on or about Apr. 9, 1912.

Ser. No. 63,782. (CLASS 48. MALT EXTRACTS AND LIQUORS.) THE CHRISTIAN MOERLEIN BREWING CO., Cincinnati, Ohio. Filed May 24, 1912. Under ten-year proviso.

NATIONAL EXPORT

Particular description of goods.—Beer.
Claims use since about 1892.

Ser. No. 63,857. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) THE AMERICAN COTTON HULL & FIBRE CO., Memphis, Tenn. Filed May 28, 1912.

C
A Co H
& F

Particular description of goods.—Cotton-Seed-Hull Fiber, Paper-Pulp, and Half-Stuff.
Claims use since Feb. 20, 1911.

Ser. No. 64,878. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KLAUBER, WANGENHEIM Co., San Diego, Cal. Filed July 23, 1912.



The word "Bradt's" being printed in facsimile of the handwriting of Horace Bradt.

Particular description of goods.—Blended Coffee, Tea, Flavoring Extracts for Foods, Spices, and Cocoa.

Claims use since Jan. 1, 1908.

Ser. No. 65,230. (CLASS 24. MEASURING AND SCIENTIFIC APPLIANCES.) SOCIETE FRANCAISE DES FILMS ET CINEMATOGRAPHES ECLAIR, New York, N. Y. Filed Aug. 13, 1912.



Particular description of goods.—Moving-Picture Films.

Claims use since May 1, 1912.

Ser. No. 65,302. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LANDERS, FRARY & CLARK, New Britain, Conn. Filed Aug. 17, 1912.



Particular description of goods.—Pocket-Knives, Carving, Table, Orange, Fruit, Butter, Hunting, Fish, Scraping, Grape-Fruit, Slicing, Oyster, Factory, Banana, Slold, One-Arm-Man, Pie, Butcher, Cheese, Oil-Cloth, Bread, Skinning, Cigar, Hacking, Broom-Corn, Paper-Hangers', Pruning, Lemon, Paring, Boning, Beet, Rubber, Children's, Steak, Tobacco, Clam, Ribbing, Cotton-Sampling, Splitting, Cake, Cooks', Palette, Hop, Pork, Bread-and-Butter, Putty, Shoe, Gliding, Medium and Dessert Knives Having Steel Blades, and Safety-Razors, Razors, Food-Choppers, Meat-Choppers, Lard-Presses, Travelers' Companions, Knife-Cleaning Machines, Nail-Pullers, Coffee-Mills, Ice-Chisels, Ice-Picks, Cleavers, Vegetable-Slicers, Knife Ink-Erasers, Market-Steels, Kitchen-Steels, Butter-Spades, and Butter-Trowels.

Claims use since June 15, 1912.

Ser. No. 65,721. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FRIED. KRUPP AKTIENGESELLSCHAFT, Essen, Germany. Filed Sept. 13, 1912. Under ten-year proviso.

KRUPP

Particular description of goods.—Machine-Shafts, Crank-Shafts, Straight Shafts, Machine-Plates.

Claims use since the year 1812.

Ser. No. 65,942. (CLASS 15. OILS AND GREASES.) MENDES H. HECHT, Baltimore, Md. Filed Sept. 23, 1912.

NO-DARN

Particular description of goods.—A Preparation of a Waxy Nature for Increasing the Wearing Properties of Fabrics by Rubbing Said Preparation Thereon.

Claims use since July 24, 1912.

Ser. No. 66,238. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HUBBARD & SMITH Co., Grandview, Tenn. Filed Oct. 11, 1912.



A A Hubbard

The signature being printed in facsimile of Dr. A. A. Hubbard's handwriting.

Particular description of goods.—A Remedy for Cancer.

Claims use since Sept. 1, 1912.

Ser. No. 66,246. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) KING BROS. COMPANY, Springfield, Mass. Filed Oct. 11, 1912.



Particular description of goods.—Candy.

Claims use since Oct. 2, 1912.

Ser. No. 66,403. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LASER GRAIN COMPANY, Clarksville, Ark. Filed Oct. 21, 1912.



Particular description of goods.—Cornmeal, Corn-Chops, Chicken Feed, Cotton-Seed Meal, and Wheat-Flour.

Claims use since March, 1912.

Ser. No. 67,260. (CLASS 17. TOBACCO PRODUCTS.) FRANK MUELLER, Newark, N. J. Filed Dec. 6, 1912.



Particular description of goods.—Cigars.

Claims use since December, 1904.

Ser. No. 67,278. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) A. KLIPSTEIN & COMPANY, East Orange, N. J., and New York, N. Y. Filed Dec. 7, 1912.

"ARASTI"

Particular description of goods.—Pigment-Colors.

Claims use since Sept. 8, 1909.

Ser. No. 67,709. (CLASS 39. CLOTHING.) WILLIAM H. CHILDREY, Haw River, N. C. Filed Jan. 4, 1913.



The words "Trade Mark," "Hosiery," "Satisfaction," and "Guaranteed" not being claimed.

Particular description of goods.—Hosiery.

Claims use since Nov. 1, 1912.

Ser. No. 67,782. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HANNAH E. KRIEL, Baltimore, Md. Filed Jan. 7, 1913.



The word "Brand" being disclaimed.

Particular description of goods.—Hams and Picnics.

Claims use since January, 1883.

Ser. No. 67,827. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) STANDARD WATER SYSTEMS Co., New York, N. Y. Filed Jan. 10, 1913.

TRIPURE



The word "Tripure" not being claimed.

Particular description of goods.—A Distilled Water for Drinking and other Purposes.

Claims use since January, 1910.

Ser. No. 67,901. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) NEW ENGLAND SELLING Co., New York, N. Y. Filed Jan. 13, 1913.



Particular description of goods.—Toothpicks.

Claims use since February, 1909.

Ser. No. 67,915. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) GIRTEN-MEYERS SUPPLY Co., Houston, Tex. Filed Jan. 14, 1913.

ALAMO

Particular description of goods.—Rubber Hose, Rubber Packing, and Rubber Valves.

Claims use since Feb. 1, 1912.

Ser. No. 67,918. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KALLE & Co. AKTIENGESELLSCHAFT, Biebrich-on-the-Rhine, Germany. Filed Jan. 14, 1913.

„Dimazon"

Particular description of goods.—A Preparation for the Treatment of Wounds.

Claims use since Apr. 1, 1911.

Ser. No. 68,073. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COLUMBIA COFFEE MILLS, LTD., New Orleans, La. Filed Jan. 23, 1913.

"SUM-MO"

Particular description of goods.—Cane-Syrup and Glucose.
Claims use since Feb. 1, 1906.

Ser. No. 68,084. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) STAMFORD FOUNDRY COMPANY, Stamford, Conn. Filed Jan. 23, 1913.

YACHT

Particular description of goods.—Cooking Stoves and Ranges.
Claims use since about 1879.

Ser. No. 68,116. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) EILERS MUSIC COMPANY, San Francisco, Cal. Filed Jan. 25, 1913.

Playautoma

Particular description of goods.—Pianos.
Claims use since Oct. 1, 1912.

Ser. No. 68,135. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) GEO. BORGFELDT & CO., New York, N. Y. Filed Jan. 27, 1913.

PRESTO

Particular description of goods.—Alcohol Lamps and Stoves.
Claims use since about Jan. 15, 1913.

Ser. No. 68,233. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.

POMMERY & GRENO

Particular description of goods.—Champagne and Sparkling Wines.
Claims use since the year 1856.

Ser. No. 68,235. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.

POMMERY & GRENO

Particular description of goods.—Champagne and Sparkling Wines.
Claims use since the year 1856.

Ser No. 68,241. (CLASS 47. WINES.) LSE. POMMERY, FILS & CIE., Reims, France. Filed Jan. 31, 1913. Under ten-year proviso.



Particular description of goods.—Champagne and Sparkling Wines.
Claims use since the year 1856.

Ser. No. 68,329. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRANK H. POSTON, Washington, D. C. Filed Feb. 5, 1913.



The picture shown being fanciful, and I hereby disclaim the words "A Variety of Delicious Hand-Dipped Chocolate Jets" and the words "The New Era Candy."
Particular description of goods.—Candy.
Claims use since Feb. 4, 1913.

Ser. No. 68,332. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) REZNOR MANUFACTURING COMPANY, Mercer, Pa. Filed Feb. 5, 1913.

REZNOR

No claim being made to the word "Reznor."
Particular description of goods.—Gas Heating Appliances—Namely, Gas Heating-Stoves and Gas Heating Fireplace-Heaters.
Claims use since Dec. 1, 1911.

Ser. No. 68,342. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) WILLIAM H. BROWN, Cleveland, Ohio. Filed Feb. 6, 1913.

TRAFILOG

Particular description of goods.—Appliances for Recording the Distance of Travel of Vehicles and the Times of Travel. Also for the Dial-Chart Used with Said Instruments.
Claims use since on or about Jan. 10, 1913.

Ser. No. 68,363. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE OVERBACKER COFFEE CO., Louisville, Ky. Filed Feb. 6, 1913.

WHITE PLUME



Particular description of goods.—Rice.
Claims use since Apr. 1, 1912.

Ser. No. 68,399. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HENRY W. BECK, St. Louis, Mo. Filed Feb. 8, 1913. Under ten-year proviso.

RECLEANED

Particular description of goods.—Oats for Foods, Feeding, and Milling Purposes.
Claims use since about May, 1885.

Ser. No. 68,447. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) SILVERBERG IMPORT CO., New York, N. Y. Filed Feb. 10, 1913.



Particular description of goods.—Hair-Nets.
Claims use since Oct. 1, 1912.

Ser. No. 68,573. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HAMMOND, STANDISH & CO., Detroit, Mich. Filed Feb. 17, 1913.

OLEARD

Particular description of goods.—A Lard Substitute Containing Cotton-Seed Oil, Vegetable Coloring, and Beef-Fat.
Claims use since Feb. 1, 1913.

Ser. No. 68,604. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ARTHUR HARTLEY, Emsworth, England. Filed Feb. 18, 1913.

PHOSTO

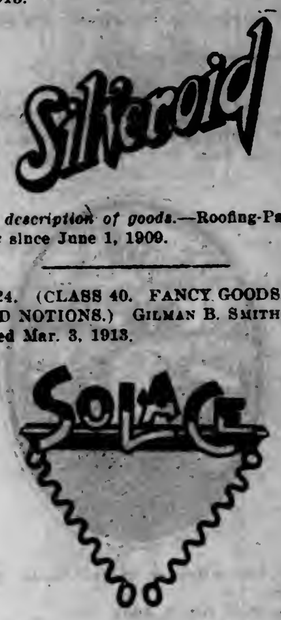
Particular description of goods.—Food for Dogs, Cattle, Horses, Pigs, Sheep, and Poultry.
Claims use since Feb. 1, 1911.

Ser. No. 68,700. (CLASS 12. CONSTRUCTION MATERIALS.) PIONEER PAPER CO., Los Angeles, Cal. Filed Feb. 24, 1913.

Silicroid

Particular description of goods.—Roofing-Paper.
Claims use since June 1, 1909.

Ser. No. 68,824. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) GILMAN B. SMITH, New York, N. Y. Filed Mar. 3, 1913.



Applicant does not claim as part of his trade-mark that portion of the device shown in the accompanying drawing, which constitutes a representation of a collar-supporter.
Particular description of goods.—Collar-Supporters.
Claims use since Feb. 7, 1913.

Ser. No. 69,009. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MEN'S DISPENSARY COMPANY, Chicago, Ill. Filed Mar. 13, 1913.

SYGO

Particular description of goods.—A Preparation for Men to be Used as a Preventive of Venereal Diseases.
Claims use since June 1, 1911.

Ser. No. 69,072. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CLAUDIUS ASH SONS AND COMPANY LIMITED, London, England. Filed Mar. 17, 1913.

DURCIL

Particular description of goods.—A Chemical Preparation for Hardening Molding Materials Used in Different Manufactures.
Claims use since Oct. 1, 1912.

Ser. No. 69,067. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) C. A. GAMBRILL MFG. CO., Baltimore, Md. Filed Mar. 17, 1913.



Particular description of goods.—Self-Rising Wheat-Flour.
Claims use since Feb. 15, 1913.

Ser. No. 69,158. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FINCK & HUTWELKER CO., Glen Cove and New York, N. Y. Filed Mar. 18, 1913.



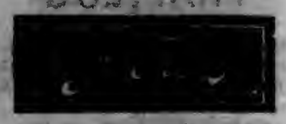
Particular description of goods.—Hams, Bacon, Lard, and Sausages.
Claims use since Oct. 1, 1904.

Ser. No. 69,159. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FINCK & HUTWELKER CO., Glen Cove and New York, N. Y. Filed Mar. 18, 1913.



Particular description of goods.—Hams, Bacon, Lard, and Sausages.
Claims use since Nov. 1, 1912.

Ser. No. 69,189. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NOVOCOL CHEMICAL MFG. CO., New York, N. Y. Filed Mar. 19, 1913.



Particular description of goods.—An Anesthetic.
Claims use since Mar. 1, 1913.

Ser. No. 69,220. (CLASS 39. CLOTHING.) EDWARDS MANUFACTURING COMPANY, Clinton, Iowa. Filed Mar. 21, 1913.

Czarina

Particular description of goods.—Ladies', Misses', and Junior and Children's Dresses, Aprons, Dressing-Sacks, Kimonos, Outside and Under Skirts, and Muslin Underwear, Including Drawers, Corset-Covers, Brassières, Princess-Slips, Combination-Suits, and Nightgowns.
Claims use since Jan. 6, 1913.

Ser. No. 69,227. (CLASS 12. CONSTRUCTION MATERIALS.) HUTCHISON SCOTT COMPANY, New York, N. Y. Filed Mar. 21, 1913.

Olax

Particular description of goods.—Paste and Liquid Waterproofing Compound or Composition for Applying to the Surface of or Incorporating in the Materials of Wood, Metal, Cement, Concrete, Brick, and Stone to Protect Same Against the Action of Water.
Claims use since May 1, 1911.

Ser. No. 69,243. (CLASS 2. RECEPTACLES.) GEO. BORGFELDT & CO., New York, N. Y. Filed Mar. 22, 1913.



Particular description of goods.—Vacuum-Bottles.
Claims use since Dec. 15, 1912.

Ser. No. 69,275. (CLASS 2. RECEPTACLES.) AMERICAN OPTICAL COMPANY, Southbridge, Mass. Filed Mar. 24, 1913.



Particular description of goods.—Cases for Eyeglasses, Spectacles, Lenses, Goggles, Reading Magnifying-Glasses, Trial Sets, Fitting Sets, Instruments, Measuring-Scales, Lens-Measures, Lorgnettes, Shipping-Cases, and Pocket Tool-Kits.
Claims use since Apr. 1, 1899.

Ser. No. 69,283. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) MAUDE DICKINSON, Brighton, England. Filed Mar. 24, 1913.

DONGOR

The trade-mark consists of the invented word "Dongor."
Particular description of goods.—Paper Disks Impregnated with Disinfecting Solutions and Metal Caps or Receiving Devices Which are Fitted to Telephone-Transmitters.
Claims use since about 1910.

Ser. No. 69,315. (CLASS 37. PAPER AND STATIONERY.) A. B. DICK COMPANY, Chicago, Ill. Filed Mar. 25, 1913.

UNDERM

Particular description of goods.—Paper for Use in Stencil Duplication, Particularly Backing-Sheets to be Used Back of or Under Stencil-Sheets to Support the Same During the Process of Cutting the Stencil.
Claims use since October, 1912.

Ser. No. 69,362. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE LIGNUM CHEMICAL WORKS, Brooklyn, N. Y. Filed Mar. 26, 1913.



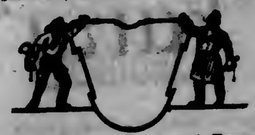
The expressions "Moth Preventative a Genuine Camphor and Compound," "Mothkill," and "For Furs, Woolens, Carpets, Etc.," are disclaimed.
Particular description of goods.—A Moth-Preventive.
Claims use since Mar. 1, 1913.

Ser. No. 69,376. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) FAIRY MANUFACTURING CO., Los Angeles, Cal. Filed Mar. 27, 1913.



The color is non-essential, and the descriptive words "Polish for Pianos, Furniture, and Automobiles" are not claimed.
Particular description of goods.—Polish for Pianos, Furniture, and Automobiles.
Claims use since Feb. 11, 1909.

Ser. No. 69,399. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JAMES B. TOTTEN, Newark, N. J. Filed Mar. 28, 1913.



Particular description of goods.—A Remedy for Coughs.
Claims use since Mar. 22, 1913.

Ser. No. 69,400. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHRISTIAN ULRICHSEN, Baltimore, Md. Filed Mar. 28, 1913.



Particular description of goods.—Canned Ingredients Composed of Pigs' Meat, Pigs' Liver, Sweet Milk, and Eggs for Sandwiches.
Claims use since Feb. 1, 1913.

Ser. No. 69,405. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) BERRY BROTHERS, Detroit, Mich. Filed Mar. 29, 1913.



Particular description of goods.—Shellac Gum.
Claims use since Feb. 1, 1899.

Ser. No. 69,426. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) WM. S. GRATZ IMPORT CO., New York, N. Y. Filed Mar. 29, 1913.

Sonato

Particular description of goods.—Violins, Violin Bridges and Bows, Violas, Viola Bridges and Bows, Cellos, Cello Bridges and Bows, Bass-Viol Bridges and Bows, Banjos, Guitars, Zithers, Mandolins, and Harps.
Claims use since Mar. 15, 1913.

Ser. No. 69,450. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) FRANK J. BUTZEL, New York, N. Y. Filed Mar. 31, 1913.

"Fairy"

Particular description of goods.—Garment-Hangers.
Claims use since Jan. 1, 1913.

Ser. No. 69,466. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WALTER R. KEMMER, Chicago, Ill. Filed Mar. 31, 1913.



Particular description of goods.—Bottled Milk.
Claims use since Mar. 27, 1913.

Ser. No. 69,481. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARION E. SALLANAE, Brooklyn, N. Y. Filed Mar. 31, 1913.

CREST



Particular description of goods.—A Medicinal Preparation for Rheumatism.
Claims use since Mar. 13, 1913.

Ser. No. 69,490. (CLASS 37. PAPER AND STATIONERY.) STONE-ORDMAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.

Nokomis

Particular description of goods.—Wrapping-Paper.
Claims use since about Jan. 1, 1904.

Ser. No. 69,530. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) GEORGE GRAY, Sisseton, S. D. Filed Apr. 2, 1913.

PIONEER

Particular description of goods.—Washing-Paste.
Claims use since about Jan. 1, 1913.

Ser. No. 69,538. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) PACIFIC NOVELTY COMPANY, New York, N. Y. Filed Apr. 2, 1913.



Particular description of goods.—Toilet-Combs, Pin-cushions, and Button-Hooks.
Claims use since on or about July 15, 1912.

Ser. No. 69,542. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BERT DURHAM TOLSON, Havre de Grace, Md. Filed Apr. 2, 1913.

SOLIRONCO

Particular description of goods.—A General Tonic and Blood-Purifier.
Claims use since Mar. 15, 1913.

Ser. No. 69,544. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE A & A MANUFACTURING COMPANY, Chicago, Ill. Filed Apr. 3, 1913.



Particular description of goods.—Hydrocarbon-Stoves, Lamps, Torches, and Heaters.
Claims use since Mar. 1, 1913.

Ser. No. 69,584. (CLASS 2. RECEPTACLES.) PACIFIC NOVELTY COMPANY, New York, N. Y. Filed Apr. 3, 1913.



Particular description of goods.—Pin-Trays, Puff and Powder Boxes, Vanity-Boxes, Salve-Boxes, Hat-Pin Holders, Tooth-Brush Holders, and Clock-Holders.
Claims use since on or about the 15th of July, 1912.

Ser. No. 69,589. (CLASS 37. PAPER AND STATIONERY.) THE BLUNDEN-LYON COMPANY, Chicago, Ill. Filed Apr. 4, 1913.

CRYSTAL

Particular description of goods.—Writing-Paper and Bond-Paper.
Claims use since Aug. 10, 1911.

Ser. No. 69,594. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) GLOCKER SANITARY JAR COMPANY, Wilmington, Del. Filed Apr. 4, 1913.

O. K.

Particular description of goods.—Fruit-Jar Rings.
Claims use since about January, 1913.

Ser. No. 69,618. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HARRY C. A. FUNK, Winchester, Va. Filed Apr. 5, 1913. Under ten-year proviso.

FRAGRANT
AMYL-KIJO



Particular description of goods.—Germicides, Disinfectants, and Deodorants.
Claims use since Aug. 1, 1894.

Ser. No. 69,652. (CLASS 15. OILS AND GREASES.) CORNPLANTER REFINING COMPANY, Warren, Pa. Filed Apr. 8, 1913.

GASENE

Particular description of goods.—A Motor-Fuel for Various Kinds of Machinery and Vehicles.
Claims use since on or about Nov. 1, 1912.

Ser. No. 69,656. (CLASS 39. CLOTHING.) FRANKLIN KNITTING MILLS, New York, N. Y. Filed Apr. 8, 1913.

FASHIONKNIT

Particular description of goods.—Collars, Sweaters, Coat-Sweaters, Mufflers, Knit Underwear, and Hosiery.
Claims use since Mar. 1, 1913.

Ser. No. 69,688. (CLASS 17. TOBACCO PRODUCTS.) G. W. VAN SLYKE & HORTON, Albany, N. Y. Filed Apr. 9, 1913. Under ten-year proviso.

UP-TO-UP

G. W. VAN SLYKE & HORTON.

Particular description of goods.—Cigars.
Claims use since June 1, 1877.

Ser. No. 69,689. (CLASS 17. TOBACCO PRODUCTS.) GERTRUDE K. WALTER, New York, N. Y. Filed Apr. 9, 1913.

Mona

Particular description of goods.—Cigarettes.
Claims use since Jan. 1, 1913.

Ser. No. 69,705. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DAN R. KINNEY & Co., Greeley, Colo. Filed Apr. 10, 1913.

KB

Particular description of goods.—Hair-Tonic.
Claims use since Jan. 8, 1913.

Ser. No. 69,793. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) COLGATE & Co., Jersey City, N. J., and New York, N. Y. Filed Apr. 15, 1913.

GLADIA

Particular description of goods.—Perfumes and Perfumed Toilet Waters and Powders.
Claims use since Apr. 11, 1913.

Ser. No. 69,794. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CAREY SALT COMPANY, Hutchinson, Kans. Filed Apr. 15, 1913.

BUFFALO



Dyco

Particular description of goods.—Salt.
Claims use since Dec. 15, 1912.

Ser. No. 69,822. (CLASS 43. THREAD AND YARN.) DEXTER YARN CO., Pawtucket, R. I. Filed Apr. 16, 1913.

Particular description of goods.—Yarns of Cotton, Worsted, Woolen, and Silk Used for Embroidering, Darning, Knitting, Crocheting, and Sewing.
Claims use since Mar. 27, 1913.

Ser. No. 69,855. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) HEATH & MILLIGAN MFG. CO., Chicago, Ill. Filed Apr. 17, 1913.

GRYLIGHT

No claim being made to the exclusive use of the words "Permanent Green."
Particular description of goods.—A Green Paste Paint.
Claims use since 1867.

Ser. No. 69,856. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) HEATH & MILLIGAN MFG. CO., Chicago, Ill. Filed Apr. 17, 1913.

PEARLY WHITE

Particular description of goods.—A White Paste Paint.
Claims use since June 3, 1901.

Ser. No. 69,870. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HORACE S. SMITH, West Olive, Mich. Filed Apr. 17, 1913.



The picture shown being a photograph of Horace S. Smith and the signature being a facsimile of the signature of said Horace S. Smith.
Particular description of goods.—A Remedy for Kidney Troubles.
Claims use since Feb. 26, 1913.

Ser. No. 69,913. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ANGLO-AMERICAN MILL CO., Owensboro, Ky. Filed Apr. 19, 1913.

"MIDGET" MARVEL

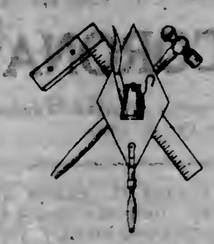
Particular description of goods.—Self-Contained Flour-Mills.
Claims use since about the 1st of January, 1911.

Ser. No. 69,948. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) JULIEN GIGUET, Lyon, France. Filed Apr. 21, 1913.



Particular description of goods.—Hair-Nets.
Claims use since February, 1913.

Ser. No. 70,014. (CLASS 17. TOBACCO PRODUCTS.) THE KRUMMEL TOBACCO COMPANY, Cincinnati, Ohio. Filed Apr. 23, 1913.



Particular description of goods.—Chewing and Smoking Tobaccos.
Claims use since on or about Apr. 17, 1913.

Ser. No. 70,033. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE JADS SALTS COMPANY, New York, N. Y. Filed Apr. 24, 1913.

Jad Salts

No claim being made to the words "Brand," "Salts," or "Registered Trade Mark."
Particular description of goods.—Granular Effervescent Salt.
Claims use since Dec. 30, 1912.

Ser. No. 70,052. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) CHAMPION SPARK PLUG COMPANY, Toledo, Ohio. Filed Apr. 25, 1913.



Particular description of goods.—Spark-Plugs.
Claims use since June, 1907.

Ser. No. 70,053. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) CHAMPION SPARK PLUG COMPANY, Toledo, Ohio. Filed Apr. 25, 1913.

CHAMPION

Particular description of goods.—Spark-Plugs.
Claims use since April, 1907.

Ser. No. 70,089. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE WILL & BAUMER COMPANY, Syracuse, N. Y. Filed Apr. 25, 1913.

CORONA

Particular description of goods.—Candle-Lamps.
Claims use since Dec. 5, 1905.

Ser. No. 70,161. (CLASS 37. PAPER AND STATIONERY.) "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna XIII, Austria. Filed May 1, 1913.

SEMPERIT

Particular description of goods.—Rubber Erasers, (Pencil and Ink Erasers.)
Claims use since about July 2, 1906.

Ser. No. 70,203. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) LAURA S. COONEY, New York, N. Y. Filed May 3, 1913.

SAMSON

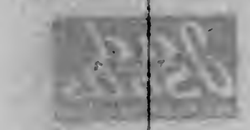
Particular description of goods.—Suspenders.
Claims use since July 1, 1896.

Ser. No. 70,214. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) M. & S. PELLER, New York, N. Y. Filed May 3, 1913.

"Duckend"

Particular description of goods.—Suspenders.
Claims use since about the 2d of January, 1913.

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TRADE-MARKS

REGISTERED JUNE 3, 1913.

91,829. LUBRICATING-OILS. ABRAHAM WALTER HARRIS, Providence, R. I.
Filed February 15, 1912. Serial No. 61,517. PUBLISHED APRIL 1, 1913.

91,830. VARNISH. ADAMS & ELTING COMPANY, Chicago, Ill.
Filed February 8, 1913. Serial No. 68,398. PUBLISHED APRIL 8, 1913.

91,831. CERTAIN NAMED FOODS. ALLEN BROTHERS COMPANY, Omaha, Nebr.
Filed August 10, 1912. Serial No. 65,187. PUBLISHED APRIL 1, 1913.

91,832. CLOCKS. THE ANSONIA CLOCK COMPANY, New York, N. Y.
Filed March 7, 1913. Serial No. 68,887. PUBLISHED APRIL 1, 1913.

91,833. WRITING-PAPER. ARTCRAFT LITHOGRAPHING COMPANY, Detroit, Mich.
Filed April 6, 1912. Serial No. 62,716. PUBLISHED APRIL 1, 1913.

91,834. FENCE, TELEGRAPH, AND TELEPHONE POLE ANCHORS. ASHLAND ANCHOR CO., Ashland, Ohio.
Filed February 6, 1913. Serial No. 68,338. PUBLISHED APRIL 8, 1913.

91,835. AUTOMOBILE JACKS AND TIRE-SAVERS. THE ASHLAND MANUFACTURING COMPANY, Ashland, Ohio.
Filed January 31, 1913. Serial No. 68,225. PUBLISHED APRIL 1, 1913.

91,836. COAL-TAR OILS. BARRETT MANUFACTURING COMPANY, New York, N. Y.
Filed February 24, 1913. Serial No. 68,675. PUBLISHED APRIL 1, 1913.

91,837. RUBBER BOOTS, SHOES, ARCTICS, OVERSHOES, SANDALS, INSOLES, SPATS, AND OVERGAITERS. THE BEACON FALLS RUBBER SHOE COMPANY, Beacon Falls, Conn.
Filed August 31, 1909. Serial No. 44,456. PUBLISHED APRIL 1, 1913.

91,838. WHITE PINE, PITCH-PINE, SPRUCE, HARD WOODS, REDWOOD, AND OREGON PINE, TIMBER AND LUMBER. GEORGE BELL & SONS, London, England.
Filed March 25, 1911. Serial No. 55,312. PUBLISHED APRIL 1, 1913.

91,839. AROMATIC DISINFECTANTS, GERMICIDE, AND DEODORIZER. BELLEVUE CHEMICAL COMPANY, Brooklyn, N. Y.
Filed April 23, 1910. Serial No. 49,264. PUBLISHED MAY 14, 1912.

91,840. CIGAR-LIGHTERS CONSISTING OF CANDLESTICKS WITH AND WITHOUT ASH-TRAYS. BERNDORF METAL WORKS ARTHUR KRUPP, Berndorf, Austria-Hungary.
Filed May 27, 1911. Serial No. 56,650. PUBLISHED APRIL 1, 1913.

91,841. CERTAIN NAMED SURGICAL APPLIANCES. GEO. BORGFELDT & Co., New York, N. Y.
Filed January 18, 1913. Serial No. 67,974. PUBLISHED APRIL 1, 1913.

91,842. CERTAIN NAMED SURGICAL APPLIANCES. GEO. BORGFELDT & Co., New York, N. Y.
Filed January 18, 1913. Serial No. 67,975. PUBLISHED APRIL 1, 1913.

91,843. ALUMINUM WARE, TINWARE, AND METAL TRAYS. GEO. BORGFELDT & Co., New York, N. Y.
Filed January 18, 1913. Serial No. 67,978. PUBLISHED APRIL 1, 1913.

91,844. METAL-POLISH. EMERY BOWSER, Kittanning, Pa.
Filed December 18, 1912. Serial No. 67,473. PUBLISHED APRIL 1, 1913.

91,845. CANNED VEGETABLES, CANNED PORK AND BEANS, AND CANNED SALMON. E. FRANKLIN BREWSTER, Rochester, N. Y.
Filed June 26, 1912. Serial No. 64,453. PUBLISHED APRIL 1, 1913.

91,846. GATE-VALVES. THE CHAPMAN VALVE MANUFACTURING COMPANY, Springfield, Mass.
Filed May 24, 1912. Serial No. 63,768. PUBLISHED APRIL 1, 1913.

91,847. CANDIES. CHICKASAW CANDY COMPANY, Memphis, Tenn.
Filed November 29, 1912. Serial No. 67,170. PUBLISHED APRIL 1, 1913.

91,848. SHEET-TIN, TIN PLATES, AND SHEET-TIN PLATES. CLARK-SMITH HARDWARE COMPANY, Peoria, Ill.
Filed July 10, 1912. Serial No. 64,652. PUBLISHED APRIL 1, 1913.

91,849. WIRE CHAIN IN COIL, PORCH-SWING CHAINS, HAMMOCK-CHAINS, AND PUMP-CHAINS. THE CLEVELAND GALVANIZING WORKS CO., Cleveland, Ohio.
Filed March 13, 1913. Serial No. 68,990. PUBLISHED APRIL 8, 1913.

91,850. WIRE CHAIN IN COIL, PORCH-SWING CHAINS, HAMMOCK-CHAINS, AND PUMP-CHAINS. THE CLEVELAND GALVANIZING WORKS CO., Cleveland, Ohio.
Filed March 13, 1913. Serial No. 68,991. PUBLISHED APRIL 8, 1913.

91,851. MEDICATED INHALER. COCKBURN & Co. LTD., Glasgow, Scotland.
Filed January 9, 1913. Serial No. 67,808. PUBLISHED APRIL 1, 1913.

91,852. CIGARS AND CIGARETTES. MARIA CRISTINA COMPAÑIA MANUFACTURERA DE TABACOS Y CIGARRILLOS, LD., Manila, Philippine Islands.
Filed June 22, 1910. Serial No. 50,493. PUBLISHED APRIL 1, 1913.

91,853. CIGARS AND CIGARETTES. MARIA CRISTINA COMPAÑIA MANUFACTURERA DE TABACOS Y CIGARRILLOS, LD., Manila, Philippine Islands.
Filed June 22, 1910. Serial No. 50,496. PUBLISHED APRIL 1, 1913.

91,854. TIRES OF ALL KINDS AND PARTS THEREOF. CONTINENTAL-CAOUTCHOUC- UND GUTTA-PERCHA-COMPAGNIE, Hanover, Germany.
Filed October 29, 1912. Serial No. 66,593. PUBLISHED APRIL 1, 1913.

91,855. CERTAIN NAMED MACHINERY CASTINGS AND FORGINGS. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed May 13, 1911. Serial No. 56,470. PUBLISHED APRIL 1, 1913.

91,856. CERTAIN METAL CASTINGS AND FORGINGS. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed November 28, 1911. Serial No. 59,980. PUBLISHED APRIL 8, 1913.

91,857. SEEDS FOR AGRICULTURAL AND HORTICULTURAL PURPOSES. DANSKE LANDBOFORENINGERS FRØFORSYNING, Roskilde, Denmark.
Filed December 9, 1912. Serial No. 67,312. PUBLISHED APRIL 1, 1913.

91,858. PREPARATION FOR REVIVING OR REPOLISHING ALL GLAZED SURFACES. WILLIAM J. DEDECK, St. Louis, Mo.
Filed March 23, 1912. Serial No. 62,369. PUBLISHED APRIL 8, 1913.

91,859. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. DEERE & COMPANY, Moline, Ill.
Filed April 8, 1911. Serial No. 55,628. PUBLISHED APRIL 1, 1913.

91,860. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. DEERE & COMPANY, Moline, Ill.
Filed April 8, 1911. Serial No. 55,629. PUBLISHED APRIL 1, 1913.

91,861. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. DEERE & COMPANY, Moline, Ill.
Filed May 1, 1911. Serial No. 56,098. PUBLISHED APRIL 1, 1913.

91,862. SHEET-STEEL. DETROIT STOVE WORKS, Detroit, Mich.
Filed February 11, 1913. Serial No. 68,496. PUBLISHED APRIL 8, 1913.

91,863. STOVE-IRON. DETROIT STOVE WORKS, Detroit, Mich.
Filed March 8, 1913. Serial No. 68,917. PUBLISHED APRIL 8, 1913.

91,864. GASKETS AND PACKINGS FOR PIPE-JOINTS OF CERTAIN NAMED MATERIALS. "FLEXITALLIC" GASKET COMPANY, Camden, N. J., and Philadelphia, Pa.
Filed August 23, 1912. Serial No. 65,402. PUBLISHED APRIL 1, 1913.

91,865. CRUCIBLE-STEEL, ELECTRIC STEEL, AND HIGH-SPEED STEEL. HALCOMB STEEL COMPANY, Syracuse, N. Y.
Filed February 24, 1913. Serial No. 68,689. PUBLISHED APRIL 8, 1913.

91,866. TANNING MATERIALS CONSISTING OF BARKS AND WOODS USED FOR TANNING LEATHER. THE HALLET-HAMMOND COMPANY, Jersey City, N. J., and New York, N. Y.
Filed January 15, 1913. Serial No. 67,932. PUBLISHED APRIL 1, 1913.

91,867. PERFORATED MUSIC-ROLLS. HALLET & DAVIS PIANO CO., Boston, Mass.
Filed February 1, 1913. Serial No. 68,260. PUBLISHED APRIL 1, 1913.

91,868. PUMPS. C. J. HARTLEY COMPANY, Decatur, Ill.
Filed June 14, 1912. Serial No. 64,193. PUBLISHED APRIL 8, 1913.

91,869. FURNACES. HAYNES-LANGENBERG MANUFACTURING COMPANY, St. Louis, Mo.
Filed December 16, 1912. Serial No. 67,485. PUBLISHED APRIL 1, 1913.

91,870. LAXATIVE TABLET. FRANK HEALY, New York, N. Y.
Filed December 4, 1912. Serial No. 67,224. PUBLISHED APRIL 1, 1913.

91,871. PREPARATION FOR THE PRODUCTION OF CERTAIN NAMED FOODS. WALTER H. HIPOLITE, St. Louis, Mo.
Filed January 25, 1913. Serial No. 68,117. PUBLISHED APRIL 1, 1913.

91,872. PORTABLE HOUSES. ERNEST F. HODGSON, Dover, Mass.
Filed June 3, 1905. Serial No. 7,342. PUBLISHED APRIL 1, 1913.

91,873. WHEAT-FLOUR. HOLT & COMPANY, New York, N. Y.
Filed July 27, 1912. Serial No. 64,975. PUBLISHED APRIL 1, 1913.

91,874. RUBBER BOOTS, SHOES, OVERSHOES, RUBBER-SOLED CANVAS BOOTS AND SHOES. HOOD RUBBER COMPANY, Boston, Mass.
Filed February 25, 1913. Serial No. 68,722. PUBLISHED APRIL 1, 1913.

91,875. HAIR-PINS. HUMP HAIR PIN COMPANY, Augusta, Me., and Chicago, Ill.
Filed January 21, 1909. Serial No. 40,071. PUBLISHED MAY 18, 1909.

91,876. TYPE CASTING, SETTING, AND COMPOSING MACHINES. INTERNATIONAL TYPESETTING MACHINE COMPANY, New York, N. Y.
Filed January 20, 1913. Serial No. 68,012. PUBLISHED APRIL 1, 1913.

91,877. LAGER-BEER. KAISERBRAUEREI BECK & CO. KOMMANDITGESELLSCHAFT AUF AKTIEN, Bremen, Germany.
Filed January 18, 1913. Serial No. 67,994. PUBLISHED APRIL 1, 1913.

91,878. PREPARATION TO BE USED IN THE TEXTILE INDUSTRY. KALLE & CO., AKTIENGESELLSCHAFT, Biebrich, Germany.
Filed January 25, 1913. Serial No. 68,119. PUBLISHED APRIL 1, 1913.

91,879. GOGGLES. JULIUS KING OPTICAL CO., New York, N. Y.
Filed February 4, 1913. Serial No. 68,310. PUBLISHED APRIL 1, 1913.

91,880. GENERATING GERMICIDAL VAPORS OR GASES FOR THERAPEUTICAL PURPOSES. KNOX TERPEZONE COMPANY OF AMERICA, New York, N. Y.
Filed November 13, 1911. Serial No. 59,704. PUBLISHED APRIL 1, 1913.

91,881. COFFEE. THE J. HENRY KOENIG CO., Cincinnati, Ohio.
Filed January 31, 1913. Serial No. 68,232. PUBLISHED APRIL 1, 1913.

91,882. CERTAIN KINDS OF PAPER AND STATIONERY. MAX KRAUSE, Berlin, Germany.
Filed August 1, 1911. Serial No. 57,974. PUBLISHED APRIL 1, 1913.

91,883. REMEDY FOR URETHRITIS. FREDERICK D. LA FAVAR, St. Paul, Minn.
Filed December 5, 1912. Serial No. 67,244. PUBLISHED APRIL 1, 1913.

91,884. SHOE-SOLE PRESERVER. LILLIE & LILLIE, Loma Linda, Cal.
Filed September 24, 1912. Serial No. 65,968. PUBLISHED APRIL 1, 1913.

91,885. BAR-STEEL AND STEEL CASTINGS. MAC-IT PARTS COMPANY, Lancaster, Pa.
Filed December 17, 1912. Serial No. 67,463. PUBLISHED APRIL 8, 1913.

91,886. SCREWS. MAC-IT PARTS COMPANY, Lancaster, Pa.
Filed December 17, 1912. Serial No. 67,464. PUBLISHED APRIL 8, 1913.

91,887. SMOKING-TOBACCO. GODFREY S. MAHN, New York, N. Y.
Filed July 16, 1912. Serial No. 64,764. PUBLISHED APRIL 1, 1913.

91,888. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS. MORGAN CONSTRUCTION COMPANY, Worcester, Mass.
Filed March 28, 1912. Serial No. 62,459. PUBLISHED APRIL 8, 1913.

91,889. VERMIFUGES. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,891. PUBLISHED APRIL 1, 1913.

91,890. OIL LINIMENT. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,893. PUBLISHED APRIL 1, 1913.

91,891. OIL LINIMENT. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,894. PUBLISHED APRIL 1, 1913.

91,892. PIPES, TUBES, AND CASINGS. NATIONAL TUBE COMPANY, Pittsburgh, Pa.
Filed March 1, 1912. Serial No. 61,843. PUBLISHED APRIL 1, 1913.

91,893. BATTERY-CELLS. THE NUNGESSER CARBON & BATTERY CO., Cleveland, Ohio.
Filed February 10, 1913. Serial No. 68,441. PUBLISHED APRIL 1, 1913.

91,894. CANNED SALMON. PACIFIC FISHERIES & PACKING COMPANY, Aberdeen, Wash.
Filed August 1, 1912. Serial No. 65,028. PUBLISHED APRIL 1, 1913.

91,895. PHARMACEUTICAL PREPARATION OF COD-LIVER OIL. PAYNE, SEAY & ANDERSON, Lynchburg, Va.
Filed June 10, 1912. Serial No. 64,104. PUBLISHED APRIL 1, 1913.

91,896. CANDY. POWELL'S, New York, N. Y.
Filed December 14, 1912. Serial No. 67,403. PUBLISHED APRIL 1, 1913.

91,897. STEEL AND IRON. PRATT & INMAN, Worcester, Mass.
Filed January 27, 1913. Serial No. 68,161. PUBLISHED APRIL 1, 1913.

91,898. METAL SYRINGES AND DENTAL NEEDLES. THE RANDALL-FAICHNEY COMPANY, Boston, Mass.
Filed February 6, 1913. Serial No. 68,371. PUBLISHED APRIL 1, 1913.

91,899. CERTAIN PHARMACEUTICAL PREPARATIONS. RELDA MANUFACTURING CO., Newark, N. J.
Filed January 23, 1913. Serial No. 68,080. PUBLISHED APRIL 1, 1913.

91,900. CERTAIN METALS AND METAL CASTINGS AND FORGINGS. RIVERSIDE METAL REFINING COMPANY, Connellsville, Pa.
Filed February 1, 1913. Serial No. 68,270. PUBLISHED APRIL 8, 1913.

91,901. FURNACES. W. S. ROCKWELL CO., New York, N. Y.
Filed February 4, 1913. Serial No. 68,318. PUBLISHED APRIL 1, 1913.

91,902. CANNED SALMON. GEORGE W. SANBORN & SON, Astoria, Oreg.
Filed February 3, 1913. Serial No. 68,293. PUBLISHED APRIL 1, 1913.

91,903. TOILET-PAPER. SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y.
Filed March 3, 1913. Serial No. 68,826. PUBLISHED APRIL 1, 1913.

91,904. TOILET-PAPER. SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y.
Filed March 3, 1913. Serial No. 68,827. PUBLISHED APRIL 1, 1913.

91,905. TOILET-PAPER. SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y.
Filed March 3, 1913. Serial No. 68,829. PUBLISHED APRIL 1, 1913.

91,906. TOILET-PAPER. SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y.
Filed March 3, 1913. Serial No. 68,830. PUBLISHED APRIL 1, 1913.

91,907. TOILET-PAPER. SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y.
Filed March 7, 1913. Serial No. 68,904. PUBLISHED APRIL 1, 1913.

91,908. SHERRY-WINE. ALEX. D. SHAW & CO., New York, N. Y.
Filed November 24, 1911. Serial No. 59,905. PUBLISHED APRIL 1, 1913.

91,909. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES. MORRIS SINGER, New York, N. Y.
Filed September 21, 1912. Serial No. 65,912. PUBLISHED APRIL 1, 1913.

91,910. SEWING-MACHINES, PARTS THEREOF, AND ATTACHMENTS THEREFOR. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J.
Filed January 4, 1913. Serial No. 67,724. PUBLISHED APRIL 8, 1913.

91,911. SEWING-MACHINES, PARTS THEREOF, AND ATTACHMENTS THEREFOR. THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J.
Filed January 4, 1913. Serial No. 67,725. PUBLISHED APRIL 8, 1913.

91,912. FOOT-ARCH SUPPORTS. JOSEPH H. SMITH, Lynn, Mass.
Filed January 24, 1913. Serial No. 68,100. PUBLISHED APRIL 1, 1913.

91,913. METAL RESEMBLING GOLD IN APPEARANCE. L. C. SMITH COMPANY, INC., New York, N. Y., and Bridgeport, Conn.
Filed February 8, 1913. Serial No. 68,412. PUBLISHED APRIL 8, 1913.

91,914. ESSENCES AND OILS FOR MAKING PERFUMERY AND TOOTH-SOAP. SOCIEDAD ANONIMA F. KRAUCH & CO., SOCIETE ANONYME, Antwerp, Belgium.
Filed June 26, 1912. Serial No. 64,392. PUBLISHED APRIL 1, 1913.

91,915. ZEPHYR GINGHAM. G. A. STAFFORD & COMPANY, New York, N. Y.
Filed June 7, 1912. Serial No. 64,037. PUBLISHED APRIL 1, 1913.

91,916. CERTAIN NAMED OILS AND GREASES. THE SUNFLOWER STATE OIL COMPANY, Coffeyville, Kans.
Filed February 3, 1913. Serial No. 68,290. PUBLISHED APRIL 1, 1913.

91,917. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. THOMY SPECIALTIES COMPANY, St. Louis, Mo.
Filed December 20, 1912. Serial No. 67,520. PUBLISHED APRIL 1, 1913.

91,918. DRESS-FORMS. CHARLES A. UFFORD, Boston, Mass.
Filed March 18, 1912. Serial No. 62,254. PUBLISHED OCTOBER 22, 1912.

91,919. COTTON-SEED OIL. UNION OIL COMPANY, Providence, R. I.
Filed January 30, 1913. Serial No. 68,221. PUBLISHED APRIL 1, 1913.

91,920. DRIVING-CHAIN GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,486. PUBLISHED APRIL 1, 1913.

91,921. DRIVING-CHAIN GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,487. PUBLISHED APRIL 1, 1913.

91,922. SNAP-BUTTONS USED AS GARMENT-FASTENERS. WALDES & CO., Prague-Wrschowitz, Austria-Hungary.
Filed April 1, 1912. Serial No. 62,578. PUBLISHED APRIL 1, 1913.

91,923. METAL-POLISH. THE WASHINGTON METAL POLISH CO., Washington, D. C.
Filed February 3, 1913. Serial No. 68,300. PUBLISHED APRIL 1, 1913.

91,924. MEN'S, YOUTHS', BOYS', AND CHILDREN'S OUTER SUITS AND OVERCOATS. M. WILE & Co., Buffalo, N. Y.
Filed August 30, 1912. Serial No. 65,502. PUBLISHED APRIL 1, 1913.

91,925. MEN'S, YOUTHS', BOYS', AND CHILDREN'S OUTER SUITS AND OVERCOATS. M. WILE & Co., Buffalo, N. Y.
Filed August 30, 1912. Serial No. 65,503. PUBLISHED APRIL 1, 1913.

TRADE-MARKS CANCELED.

87,720. HARVESTERS AND TRACTION-ENGINES. THE BEAT MANUFACTURING COMPANY, INC., San Leandro, Cal.
Registered August 6, 1912. Canceled May 3, 1913.

73,562. TOOTHPICKS. ALEXANDER HERZ, New York, N. Y.
Registered April 27, 1909. Canceled May 8, 1913.

LABELS

REGISTERED JUNE 3, 1913.

17,047.—*Title:* "CRYSTAL DOMINO CONFECTIONERS SUGAR." (For Confectioners' Sugar.) THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y. Filed May 19, 1913.

17,048.—*Title:* "CRYSTAL DOMINO POWDERED SUGAR." (For Powdered Sugar.) THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y. Filed May 19, 1913.

17,049.—*Title:* "THE GAME OF TRUMP-IT." (For Games.) LEHMAN S. BROWNING, Camden, N. J. Filed April 22, 1913.

17,050.—*Title:* "'SPEAR-ASEPT' SPEARMINT TOOTH-PASTE." (For Tooth-Paste.) FRATERS CHEMICAL Co., Chicago, Ill. Filed February 27, 1913.

17,051.—*Title:* "J-M ASBESTOS ROOFING." (For Asbestos Roofing.) H. W. JOHNS-MANVILLE COMPANY, New York, N. Y. Filed May 20, 1913.

17,052.—*Title:* "GLOSS OPAQUE." (For Paint.) OLIVER JOHNSON & Co., Providence, R. I. Filed May 17, 1913.

17,053.—*Title:* "FLAT OPAQUE." (For Paint.) OLIVER JOHNSON & Co., Providence, R. I. Filed May 17, 1913.

17,054.—*Title:* "KON-KRETE-KOTE." (For Paint.) OLIVER JOHNSON & Co., Providence, R. I. Filed May 17, 1913.

17,055.—*Title:* "MARSHEL'S BLUE SAFETY INK." (For Ink.) BLAINE M. MARSHEL, New Albany, Ind. Filed March 14, 1913.

17,056.—*Title:* "AURORA PURGATIVE WATER." (For a Purgative Water.) THE NEW YORK G. & R. LABORATORY, New York, N. Y. Filed May 14, 1913.

PRINTS

REGISTERED JUNE 3, 1913.

3,283.—*Title:* "'BUFF' PRECISE TRANSIT." (For Transits.) BUFF & BUFF MANUFACTURING Co., Boston, Mass. Filed May 3, 1913.

3,284.—*Title:* "CAMPBELL'S SOUP." (For Soups.) JOSEPH CAMPBELL COMPANY, Camden, N. J. Filed May 19, 1913.

3,285.—*Title:* "CAMPBELL'S SOUP." (For Soups.) JOSEPH CAMPBELL COMPANY, Camden, N. J. Filed May 19, 1913.

3,286.—*Title:* "CAMPBELL'S SOUP." (For Soups.) JOSEPH CAMPBELL COMPANY, Camden, N. J. Filed May 19, 1913.

3,287.—*Title:* "CAMPBELL'S SOUP." (For Soups.) JOSEPH CAMPBELL COMPANY, Camden, N. J. Filed May 19, 1913.

3,288.—*Title:* "CAMPBELL'S SOUP." (For Soups.) JOSEPH CAMPBELL COMPANY, Camden, N. J. Filed May 19, 1913.

3,289.—*Title:* "CAMPBELL'S SOUP." (For Soups.) JOSEPH CAMPBELL COMPANY, Camden, N. J. Filed May 19, 1913.

3,290.—*Title:* "PRINCE ALBERT—THE NATIONAL JOY SMOKE—MAKES A HIT WITH A PIPE." (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed April 16, 1913.

3,291.—*Title:* "TABLE-PRIDE." (For Bread.) CARL RUST, Frederick, Md. Filed May 17, 1913.

DECISIONS
OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

IMPERIAL SOAP AND OIL CO. *v.* BRANDLY.

Decided April 30, 1913.

TRADE-MARKS—APPLICANT AND REGISTRANT—PRIMA FACIE SHOWING OF ABANDONMENT—REBUTTING AFFIDAVITS.

Where in an interference involving an applicant and a registrant the applicant filed letters from the registrant stating that he did not make goods specified in the registration bearing a certain name which is shown in his registration and that he did not handle the goods specified, *Held* that a sufficient showing of abandonment had been made out to justify a requirement that the registrant present affidavits overcoming such showing before the case be set down for the taking of testimony.

ON PETITION.

TRADE-MARK FOR SOAP.

Messrs. Robb & Robb for Imperial Soap and Oil Co.

Mr. Thos. D. Stetson for Brandly.

MOORE, *Commissioner:*

This is a petition by the Imperial Soap and Oil Co. for the exercise of the Commissioner's supervisory authority to reverse a decision of the Examiner of Trade-Marks wherein he refused to require the registrant, Brandly, to submit sworn evidence of present use of the mark covered in his registration involved in the interference.

Prior to bringing the motion for this purpose before the Examiner of Interferences it appears that the petitioner corresponded with Brandly, with a view to ascertaining whether he was actually using the mark on which the registration had been granted. In reply to his inquiries it appears that he was informed by Brandly, first, in response to a request for quotations on "Aladdin's Soap," that he did not make soap bearing that name, and, second, when asked whether he was making soap of the "White Owl" brand, that he was not and did not handle soap. The letters are in the record, and the motion was accompanied by an affidavit on behalf of the Imperial Soap and Oil Co. setting forth the facts.

I am clearly of the opinion that this case is controlled by the practice recognized in The *Ozo Remedy Co.* v. *Carnrick & Co. Ltd.*, (146 O. G., 959.) The Examiner of Interferences was wrong in not requiring the registrant to present affidavits overcoming the *prima facie* case of abandonment made out against him before setting the case down for the taking of testimony. It would be of little avail to ask the registrant in such a case as this whether he was using the mark shown in his registration or owned or controlled it, since this would call largely for conclusions of law rather than facts and would doubtless almost uniformly elicit an affirmative answer, due, often, to ignorance of trade-mark law.

The petition is granted.

EX PARTE PORTER.

Decided April 30, 1913.

APPLICATION—PROSECUTION—REOPENING.

Where the Examiner stated that certain differences between applicant's device and those of the references were immaterial and insufficient upon which to base a patent and the Examiners-in-Chief on appeal stated that there was no coöperation or relationship between the details admittedly different from the references and the many other specific features to which the claims were limited, *Held* that the ground of rejection was in fact the same, only differently stated, and that there was no reason for reopening the case, especially as there had been twenty-one actions in the application prior to the appeal.

ON PETITION.

COLTER.

Messrs. R. S. & A. B. Lacey for the applicant.

MOORE, *Commissioner:*

This is a petition that the application be reopened before the Primary Examiner for admission and consideration of an amendment accompanying the petition or that it be remanded to the Examiners-in-Chief for decision upon the points of the appeal or for such recommendation as they may see fit to make.

The Examiners-in-Chief rendered a decision in this case on September 16, 1912, affirming the action of the Examiner rejecting the claims. The ground upon which this petition is urged is that the Examiners-in-Chief decided against the applicant for reasons different from those upon which the Primary Examiner rejected the claims. I have reviewed the record, however, and do not find that to be the case. The Examiner's position was stated as follows:

It is conceded that applicant shows some difference of construction from Roy and Chappel, but as has been here-

tofore stated, it is held that that difference is immaterial and insufficient upon which to base a patent over these said references and the claim is again rejected.

The Examiners-in-Chief stated their position as follows:

What these claims do set forth as the applicant's invention is a supposed coöperation or relationship of these things [the details admittedly different from the references] to the many other specific features to which these claims are limited. As we fail to see that there is any such relationship or coöperation in fact, it follows that the claims are not allowable.

These are two very usual ways of stating one and the same ground of rejection. There were twenty-one actions in this case prior to the appeal, and there is no reason for assuming that the applicant did not understand the nature of the claims he was attempting to have granted or the force and effect of the position taken by the Examiner in regard to them. I find no reason whatever for granting either of the prayers of this petition.

The petition is denied.

MOLYNEUX *v.* ONDERDONK.

Decided May 21, 1913.

INTERFERENCE—RULE 130—WHAT MAY BE ARGUED THEREUNDER.

Neither the question of the patentability of the issue nor the question whether the claims have different meanings as applied to the applications of the respective parties can be argued at final hearing under the provisions of Rule 130.

APPEAL on motion.

LOOPER MECHANISM FOR SEWING-MACHINES.

Mr. H. J. Miller for Molyneux.

Messrs. Sturtevant & Mason for Onderdonk.

BILLINGS, *First Assistant Commissioner:*

This is an appeal from the decision of the Examiner of Interferences denying the motion by Molyneux to set times for taking testimony and for final hearing upon the following points:

1. That the counts of the issue have different meanings as applied to the inventions disclosed by the parties hereto.
2. That the several counts of the issue are to be restricted to the construction described and shown in the Onderdonk application involved herein, and that if not so restricted but are of such breadth as to include the specifically different machines of both parties, that they are invalid in view of the prior art.

The record shows that Molyneux brought a motion to dissolve the interference on the grounds above set forth and that this motion was considered and denied by the Primary Examiner. The contention seems to be that Molyneux should now have a right not only to urge these matters at final hearing under Rule 130, but that he should be permitted to take testimony in support of his position in regard thereto. Rule 130, however, only gives a party the right to argue at final hearing the unpatentability of a claim to an opponent and then only when it is material to such party's right to a patent.

It will be seen that Molyneux has not even alleged that the claims in issue, or any of them, cannot be made by his opponent. In fact, he states that the claims are properly readable only upon his opponent's case. He also, it is true, urges that if the claims are construed broadly enough to apply to the structures of both parties they are unpatentable over the prior art; but such a question of patentability so far as it applies to Onderdonk is not "material to the right" of Molyneux to a patent, and it is so well settled that patentability of the issue over the prior art cannot be argued at final hearing that no citation of authority on this point is necessary here. It is also well settled that an alleged difference of meaning in the counts when applied to the inventions of the respective parties cannot be argued at final hearing, and the reasons are similar to those relating to patentability. Furthermore, it is to be observed that the determination of the questions presented could not be facilitated in any way by the taking of testimony. The question of difference of meaning in the counts is to be determined by consideration of the counts themselves and the disclosures of the respective parties, and the scope of the issue is to be determined by consideration of the same data and such prior art as may have a bearing upon the question. All of this evidence is before the Office, and the questions raised are such as must be determined by the Office and not from the opinions of witnesses in regard thereto.

The date of invention alleged by Molyneux in his preliminary statement is later than the filing date of Onderdonk, and Molyneux is therefore facing a judgment on the record against him. His object appears to be to avoid such judgment by obtaining a ruling that the claims are readable only upon Onderdonk's structure or that they are unpatentable over the prior art. It is obvious, therefore, that there is no reason for setting the case down for the taking of testimony. I may add, however, that I have gone into the question of the meaning of the counts sufficiently to be satisfied that there is no such error in the holding of the Primary Examiner on the motion to dissolve as to justify any exercise of the Commissioner's supervisory authority to summarily dissolve the interference or otherwise to alter the regular course of proceedings.

The decision of the Examiner of Interferences is affirmed.

EX PARTE HENRY THAYER & COMPANY.

Decided April 11, 1913.

1. TRADE-MARKS—"MARK"—MERE SURNAME—NOT REGISTRABLE.

The word "Mark" *Held* properly refused registration on the ground that it is a mere surname.

2. SAME—SAME—PUBLIC PROPERTY.

The word "Mark" *Held* properly refused registration on the ground that any one has a right to use this word on his goods in connection with the word "Trade" and that this word is therefore public property.

ON APPEAL.

TRADE-MARK FOR DYSPEPSIA-TABLETS, SULFUR AND CREAM-TARTAR LOZENGES, ETC.

Messrs. Macleod, Calver, Copeland & Dike for the applicant.

TENNANT, *Assistant Commissioner:*

This is an appeal from a decision of the Examiner of Trade-Marks refusing registration of the word "Mark" as an ordinary surname and also upon the ground that the applicant has not the exclusive right to the use of the word "Mark," in that this term is analogous to the word "Copyright," which

was refused registration in the case of *ex parte The Blish Milling Co.*, (165 O. G., 241.)

The Examiner states that—

it is common to refer to an arbitrary mark of origin or ownership as a *mark* and not to use the technical term "trade-mark" as applying to this "substitute for one's signature." This word "Mark" is therefore a word which the public generally has the right to use and by its use to designate an important instrumentality of commerce. To grant this applicant exclusive right to it would unduly restrict the rights of the public.

In my opinion the conclusion of the Examiner of Trade-Marks is well founded. The word "Mark" as used upon the specimens furnished by applicant, in which it appears as "Mark Medicines," would, in my opinion, lead the ordinary purchaser to believe that the medicines were prepared by an individual of the name of Mark and that the same was therefore merely used as a surname.

The Examiner's second objection is also, in my opinion, well founded. It is customary in the trade for parties using arbitrary symbols as trade-marks to indicate that such is their trade-mark by the use in connection therewith of the words "Trade-Mark," the word "Trade" being placed at one side and the word "Mark" at the other side of the mark—as, for example, the manner in which these words are used by this appellant in connection with the shield displayed in the specimens filed in this case—or with the word "Trade" superposed over the arbitrary feature and the word "Mark" beneath it. The term "Mark" is used in the statute to designate features which have been used to identify goods in commerce with foreign nations and Indian tribes, although such marks do not constitute strictly technical trade-marks. The section to which reference is made is the ten-year proviso of section 5, which provides—

* * * that nothing herein shall prevent the registration of any *mark* used by the applicant or his predecessors, or by these from whom title to the *mark* is derived, in commerce with foreign nations or among the several States, or with Indian tribes, which was in actual and exclusive use as a trade-mark of the applicant or his predecessors from whom he derived title for ten years next preceding February twentieth, nineteen hundred and five: [Italics mine.]

Also in section 20 it is stated:

* * * The term "trade-mark" includes any *mark* which is entitled to registration under the terms of this act, and whether registered or not, and a trade-mark shall be deemed to be "affixed" to an article when it is placed in any manner in or upon either the article itself or the receptacle or package or upon the envelop or other thing in, by, or with which the goods are packed or inclosed or otherwise prepared for sale or distribution. [Italics mine.]

It is obvious that this appellant has no right to the use of the word "Mark" on labels affixed to packages containing merchandise sold by him to the exclusion of others, and it would be improper to recognize and affirm by the registration of the word "Mark" the right of this appellant to prevent others from using the term in the manner in which it is customarily used to direct attention to their trade-marks.

I am therefore of the opinion that this appellant has no right to the exclusive use of the word "Mark" in connection with merchandise used in commerce with foreign nations or among the several States or with Indian tribes for reasons similar to those set forth in the decision of *ex parte The Blish Milling Co., supra.*

The decision of the Examiner of Trade-Marks is affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

MOORE, COMMISSIONER OF PATENTS, *v.* UNITED STATES, EX REL. COLBURN MACHINE GLASS CO.

Decided April 7, 1913.

1. INTERFERENCE—REISSUE APPLICATION—AMENDMENT TO CORRECT OBVIOUS MISTAKE IN THE DRAWING—NOT FORBIDDEN BY THE RULES OR THE STATUTE.

Where during the progress of an interference involving a reissue application it was discovered that the drawing showed a shaft extended across the path of the sheets of glass, but it was obvious from the description that the shaft was not intended to be so extended. *Held* that the correction of this mistake in the drawing was not an amendment in the sense of the rule prohibiting amendments of applications in interference or the statute and rule relating to reissue applications.

2. SAME—OBVIOUS MISTAKE IN THE DRAWING—MAY BE DISREGARDED.

Where during the progress of an interference it is discovered that through an error in the drawing the machine is apparently shown as inoperative and that it is obvious from the description that the machine was not intended to be so shown, *Held* that this manifest mistake should have been disregarded and the machine should have been treated as operative.

3. SAME—SAME—DISSOLUTION TO PERMIT CORRECTION OF AN OBVIOUS MISTAKE IN THE DRAWING—QUESTION OF PRIORITY NOT RES ADJUDICATA.

Where an interference was dissolved on the ground that as shown in the drawing the device of one of the parties was not operative and it appeared that this showing did not agree with the specification and amendment to the drawing was permitted, *Held* that the dissolution did not render the question of priority *res adjudicata* and that the Commissioner had authority to redeclare the interference.

4. MANDAMUS.

A mandamus directing the Commissioner to set aside the redeclaration of an interference *Held* improperly granted, since under the circumstances of the case the Commissioner had authority to so redeclare the interference.

Mr. Robert F. Whitehead for the Commissioner of Patents.

Mr. M. A. Christy, by leave of the court, filed brief as *amicus curiæ*.

Mr. S. T. Cameron, Mr. Reeve Lewis, and *Mr. W. B. Kerkam* for the appellee.

SHEPARD, *C. J.:*

The Commissioner of Patents appeals from a judgment ordering a writ of mandamus to issue compelling him to vacate certain proceedings in the Patent Office relating to the declaration of an interference, and to stay further proceedings.

The facts contained in the petition, return, and an agreed statement of facts are substantially these: The Colburn Machine Glass Co. is the assignee of a joint application filed by Colburn and Washburn, December 28, 1904, for a patent for a "process and apparatus for the continuous production of sheet glass." August 23, 1905, Halbert A. Hitchcock filed an application for "improvements in the manufacture of glass plates or sheets." May 8, 1906, an interference, No. 26,006, was declared between the aforesaid applications, the issue containing six counts. July 19, 1906, said interference was dissolved, on motion of Colburn and Washburn, as to

five counts, leaving count 3 in interference. No appeal was taken from this order. October 6, 1906, the Primary Examiner, of his own motion, further dissolved said interference—

for the purpose of substituting for the application of Hitchcock a reissue application of that applicant, in a second interference with a greater number of issues.

No appeal was taken from said order. The purpose of the order was that the entire matter might be decided in one interference. The reissue application of Hitchcock had been filed June 18, 1906, for reissue of a patent, dated November 21, 1905, for "improvement in the manufacture of sheet glass." No model had been filed with the original application for said patent, and none was filed with the reissue application. December 11, 1906, interference No. 26,866, was declared between this reissue application and the original application of Colburn and Washburn. The issue embraced several counts, count 1 of which was the same in substance as count 3 of interference No. 26,006, previously dissolved. March 29, 1907, on motion of Colburn and Washburn, the Primary Examiner dissolved interference 26,866 as to count 1 on the ground that there was no interference in fact in said count because as applied to the respective applications said count had different meanings. Hitchcock moved to re-form said count which was denied April 29, 1907. Hitchcock appealed therefrom to the Examiners-in-Chief, who dismissed the same for lack of jurisdiction June 19, 1907. On July 26, 1907, the Primary Examiner requested jurisdiction of said interference 26,866—

for the consideration of the operativeness or inoperativeness of at least one of the parties.

Having been granted the power he gave notice that an *inter partes* hearing would be had to determine the operativeness of Hitchcock's device in the following respect:

The shaft 8 extends from side to side of the machine Fig. 2. The grips, it is stated in lines 10, 11, page 7, are carried around the wheel 6, with the several sections (of glass) suspended therefrom. It is not seen how these sections can pass shaft 8.

Prior to this notice of hearing Hitchcock had filed an affidavit admitting that the shaft 8 in Fig. 2 of his drawing lay in the path of the glass, but stating that it was incorrectly shown, and showing how it should be changed. The Primary Examiner ruled that this was, in fact, an amendment and could not, under the rules of the Office, be allowed pending an interference.

October 25th, 1907, the interference was dissolved on the inoperativeness of the device by reason of shaft 8 as shown in the drawing. From this Hitchcock did not appeal. Thereafter, on *ex parte* application of Hitchcock to amend, the Primary Examiner permitted the same as to shaft 8. Thereafter, patent was issued to Colburn and Washburn, January 7, 1908, on their original application, there being no longer an interference. Hitchcock continued to prosecute his reissue application *ex parte*, and the same having been allowed finally, interference was again declared between the said reissue application and the Colburn and Washburn patent, in two counts identical with counts 2 and 3 of the former interference No. 26,866. On the same day, March 18, 1909, interference was declared between Hitchcock's application, that had been embraced in No. 26,006; and the patent, on the same issue in that interference which had been dissolved by the Primary Examiner, of his own motion, in order to bring that issue and the issue of the interference with the reissue application into one proceeding. Colburn and Washburn moved to dissolve the redeclared interference on the ground, among others, that the subject-matter was *res adjudicata* by reason of the decision dissolving the former interference for the inoperativeness of Hitchcock's device, from which the latter had not appealed. The Primary Examiner and the Examiners-in-Chief, in turn, sustained this view and dissolved the interference; but the Commissioner reversed the decision, and issued notice for the taking of testimony. On the ground that the question had been finally determined on the former motion to dissolve, and that the Commissioner was without power to entertain the second interference, the petition prayed that he be compelled to vacate said orders, and to stay all further proceedings.

It is obvious that shaft 8 of Hitchcock's original drawing, if intended to be constructed as indicated by the dotted line, would extend directly across the passage through which the suspended sheets of glass must necessarily pass, and thus prevent the operation of the machine. But it is alike obvious from the description that shaft 8 was not intended to be so extended. Its center section would have to be, and clearly could be removed from the drawing without interfering with any other contemplated action of the machine, and the same would be completely operative. This obvious error in the drawing had escaped the observation of the applicant, the officers of the Patent Office, and of Colburn and Washburn who before had moved to dissolve upon other grounds. Hitchcock's motion to amend, accompanied by an affidavit to show that the dotted line had been drawn through mistake or inadvertence of the draftsman who prepared the drawing, and has escaped observation, was scarcely needed; and the allowance of the correction of the mistake was not an amendment in the sense of the rule prohibiting amendments of applications in interference, or of the statute and rule relating to reissue applications. Without amendment this manifest mistake should have been disregarded and the machine should have been treated as operative. (*Arbetter* v. *Lewis*, 34 App. D. C., 491–500; *Hobbs* v. *Beach*, 180 U. S., 383–394.) Hitchcock could not, of course, deny that with the shaft projected across the path of the glass, unless disregarded as a patent error of the draftsman, his device was utterly inoperative. Accepting the Examiner's conclusion that the correction of this error required an amendment which, under the Office practice could not be allowed in an interference proceeding, and that the interference should be dissolved, Hitchcock did not undertake to appeal therefrom, but proceeded to make the amendment or correction *ex parte*, which was permitted.

The contention upon which the judgment ordering the issue of the writ of mandamus rests, is that this decision dissolving the interference on the ground of inoperativeness was a conclusive adjudication of the merits of the controversy and a bar to any further proceedings in interference between the respective applications. The proposition is that as the interference involved the question of priority to which the right to make the claim is ancillary, the decision that Hitchcock's device was inoperative was equivalent to a decision that he had no right to make the claims. If the proposition be sound the order dissolving the interference was final and conclusive. (*U. S., ex rel. Newcomb Motor Co.*, v. *Moore*, 30 App. D. C., 464.) In that case the motion to dissolve was upon the ground that the parties opposing the Newcomb Motor Co. had no right to make the claims of the issue which had been copied from its patent. The parties took no appeal. Thereafter they prosecuted their applications *ex parte*, and secured a decision upholding their right to make the claims; whereupon a second interference was declared with the Newcomb Motor Co. The latter moved to dissolve on the ground that the question of the right to make the claims had been adjudicated in the former interference proceeding, and, no appeal having been taken, was *res adjudicata*. The court sustained this view because the question of the right to make the claims is inseparably connected with that of priority. Unless, therefore, the judgment be regarded as final the question of priority might be litigated interminably. (*Gold* v. *Gold*, 34 App. D. C., 229–237.)

The contention on the other hand is that the operativeness of a device the claims for which are in interference, does not raise the question of the right to make the claims but one of patentability; wherefore, the dissolution of an interference on the ground of the inoperativeness of the device is not equivalent to a determination of priority, final if not reversed on appeal, but an interlocutory order from which no *inter partes* appeal lies, and which does not involve priority. (*Gold* v. *Gold*, 34 App. D. C., 229, 236.) If, as held in that case, the question of patentability of a claim is decided it is not conclusive of the issue of priority but the applicant may go back for a second rejection on that ground and appeal therefrom, *ex parte*. Attention is there called to Rule 126 which permits the Examiner of Interferences and the Examiners-in-Chief to direct the attention of the Commissioner to any matter not relating to priority, which is the only question that they can decide; and also to the authority of the Commissioner, without such direction, and of his own motion, to raise the question of patentability and send the application back for rejection without deciding the question of priority.

Whether a determination of the inoperativeness of a device, on motion to dissolve, is equivalent to a determination of the patentability merely of a claim, or to a decision that the party has no right to make the claim, is a question that has not been directly decided. The question was suggested, but passed by in *Allen* v. *Lowry*, (26 App. D. C., 8–27.) In delivering the opinion in that case, Mr. Justice Duell, whose learning and whose former experience as Commissioner entitle his opinions to great respect, said:

It is not necessary to "pass upon the question whether the lack of a right of the party to an interference to make a claim by reason of the inoperativeness of the invention disclosed in his application, does or does not relate to the question of priority as referred to in said rule."

But he added the following words:

However, this may be, it would seem that it might in many cases be quite difficult to decide the question of priority where the evidence showed that the device disclosed in the application was not operative.

When questioned, the right of a party to make the claims depends upon the disclosure of his application. If it be found that his application does not warrant the claims then he is not an inventor of the issue and there is no foundation for the claim of his opponent's invention. Each is entitled to the invention that he has in fact made and may receive his patent thereto only. Having been defeated on the issue involved he cannot go back and amend his specifications so as to embrace his opponent's invention, or file a new application for the purpose of interference. He is concluded by the former decision. But the situation is different where it is discovered, as in this case, that through a draftsman's patent mistake, the device, otherwise completely described and patentable, is rendered inoperative. If this mistake had been discovered before the allowance of the application, it would have been readily corrected, and the interference thereafter declared would have gone to trial on the question of priority in fact, and this question would not have arisen. If an interference be dissolved because the issue is held unpatentable, each party may pursue his application *ex parte*, and if by amendment an allowance of patentability shall be finally obtained by each, the interference may be again declared for the determination of priority. The first step to an interference is the allowance of the application for patent. Until allowed there is no invention the priority of which can be contested. If a device, though claimed as described in the application, is, through its model or drawing, shown to be inoperative, it is not patentable and the application is rejected. Unless reversed on *ex parte* appeal, after a second rejection, the decision of the Primary Examiner is conclusive; there is an end of the application. Operativeness of an invention, whether an inseparable part of patentability or not, is when regularly allowed in the Office, as much a finality as the allowance of patentability. As before intimated the proper course would have been, when the mistake in the drawing had been observed, to permit the correction of the manifest error, without dissolving the interference. Failing that, it seems that the Commissioner might have dissolved the interference temporarily, and, expressly, without prejudice to its renewal when the drawing should be regularly corrected in due course. Whatever may have been the strict legal operation of the dissolution, without express reservation, it is apparent from the subsequent action of the Primary

Examiner in permitting the correction of the drawing and redeclaring the interference, that he did not then understand that he had determined the question of priority.

Though the question is not free from all doubt, we are not prepared to say that the dissolution of the interference without reservation, on the ground that the machine was inoperative, is entitled to force and effect as an award of priority, within the rule of *Newcomb Motor Co.* v. *Moore*, *supra*. As suggested by Mr. Justice Duell in the excerpt before made—

> it might in many cases be quite difficult to decide the question of priority where the evidence showed that the device disclosed in the application was not operative.

The present case is an apt example of that difficulty. The application described the invention; the claims made for patent accurately embodied the invention disclosed; and as such were allowed for patent. Interference was then declared with another application. Before testimony was ordered to be taken, the Examiner discovered the mistake of the draftsman who by projecting the line of a shaft across the path of the sheets of glass, where it was not intended by the inventor to go, rendered the device inoperative. This did not involve the right to make the claims of the issue, but the allowability of the application as an entirety. Had the error not been thus early discovered, and the interference had been prosecuted to a final award in favor of Hitchcock, the Commissioner upon its discovery might have refused the patent for inoperativeness, unless the mistake should be corrected; and the same might have been done after an affirmance by this court. (*Sobey* v. *Holsclaw*, 28 App. D. C., 65–82; *Dodge* v. *Fowler*, 11 App. D. C., 592–600.) The conditions here shown are to some extent similar to those *in re Fullagar*, (82 App. D. C., 222–228.) Fullagar was also an applicant for the reissue of a patent. On this he was thrown in interference with Emmett who had an original application. Motions to dissolve were made by each party. Fullagar was overruled and two of Emmett's grounds sustained by the Primary Examiner. The Examiners-in-Chief reversed as to one ground, and affirmed the ground that Fullagar's showing of inadvertence, accident, or mistake was insufficient, and failed to overcome the lapse of time barring reissue. Emmett's appeal was dismissed by the Commissioner as without foundation, and the decision against Fullagar was affirmed. As said in the opinion:

> He also stated, it is true, that Fullagar had no right to make the claims; but this remark is evidently as a result of the conclusion that Fullagar had failed to show that he had come within the requirements of reissue. Had he held that Fullagar had made a sufficient showing for reissue, and then decided that he had no right to make the claims of the interference, because not disclosed in his application, he would necessarily have awarded priority to Emmett. (*U. S., ex rel. Newcomb Motor Co.*, v. *Moore*, 30 App. D. C., 464.) The latter's application having been allowed, and Fullagar having been put out of the case, there would remain nothing else to do. * * * If the Commissioner had decided that Fullagar was not entitled to make the claims under his application, and had, in consequence, awarded priority to Emmett, Fullagar would have the right to appeal, bringing Emmett up for final adjudication of the question of priority in this court. Instead of so deciding, the effect of his decision was to set aside the allowance of Fullagar's application as an entirety and dissolve the interference. No award of priority was made in favor of Emmett. He was not declared entitled to the patent, nor was his application rejected. He had nothing from which he could appeal. * * * As there was no final decision in Emmett's favor, it follows that Fullagar could not bring him before this court on appeal.

Fullagar's appeal was dismissed because it was an *ex parte* appeal from the rejection of his reissue application, and, by statute, a second rejection is required before the right of appeal in such a case accrues.

The reasoning of that case is applicable to this. The point decided here was that Hitchcock's device, as shown in his original patent drawings, was inoperative, and his reissue could not be allowed for that reason. The effect was to set aside the allowance of his reissue application as an entirety; the interference was dissolved without any award of priority claimed or made. On account of the special facts we are of the opinion that the case falls under the rule governing *Gold* v. *Gold*, and *in re Fullagar*, rather than under that governing *Newcomb Motor Co.* v. *Moore*. The question of priority was not *res adjudicata*, and the Commissioner of Patents had not lost jurisdiction in the premises. It follows that the judgment must be reversed with costs, and the case remanded with direction to dismiss the petition.

Reversed.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 22, 1913.

Nevada Milling Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of The Ansted & Burk Co., of Springfield, Ohio, for registration of a trade-mark and trade-mark registered February 11, 1906, No. 67,569, to the Nevada Milling Co., of Nevada, Mo., and a notice of such declaration sent by registered mail to said Nevada Milling Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Nevada Milling Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.
Washington, D. C., May 14, 1913.

Hansen-Schmitt Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frings Bros. Co., 3134 Market street, Philadelphia, Pa., for registration of a trade-mark and trade-mark registration No. 54,445, dated June 26, 1906, issued to Hansen-Schmitt Co., 334–336 East Water street, Milwaukee, Wis., and a notice of such declaration sent by registered mail to said Hansen-Schmitt Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Hansen-Schmitt Co., its assigns or legal representatives, shall within thirty days from the first publication of this order enter an appearance therein the interference will proceed as though by default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

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Designs	29—No.	44,160 to No. 44,188, inclusive.
Trade-Marks	100—No.	91,926 to No. 92,025, inclusive.
Labels	1—No.	17,057.
Prints	None.	
Reissues	6—No.	13,571 to No. 13,576, inclusive.
Total	938	

TO RESIDENTS OF THE UNITED STATES.

States.	Patents and Designs.	Trade-Marks, Labels, and Prints.	States.	Patents and Designs.	Trade-Marks, Labels, and Prints.
Alabama	2	.....	North Carolina	2	.....
Arizona	2	.....	North Dakota	5	.....
Arkansas	2	.....	Ohio	36	4
California	57	1	Oklahoma	7	.....
Colorado	9	1	Oregon	2	.....
Connecticut	18	.....	Pennsylvania	73	2
Delaware	2	.....	Rhode Island	5	3
Florida	3	.....	South Carolina	2	.....
Georgia	6	.....	South Dakota	1	.....
Idaho	1	.....	Tennessee	6	.....
Illinois	79	6	Texas	12	1
Indiana	18	.....	Utah	4	1
Iowa	13	.....	Vermont	2	.....
Kansas	11	.....	Virginia	7	1
Kentucky	4	1	Washington	11	.....
Louisiana	11	.....	West Virginia	3	1
Maine	1	2	Wisconsin	12	1
Maryland	8	.....	Wyoming	1	.....
Massachusetts	40	15			
Michigan	21	1	Alaska, District of	.....	.....
Minnesota	11	2	Canal Zone	.....	.....
Mississippi	1	.....	District of Columbia	6	1
Missouri	23	11	Hawaii Territory	.....	.....
Montana	1	.....	Philippine Islands	1	.....
Nebraska	3	.....	Porto Rico	.....	.....
Nevada	1	.....	U. S. Army	.....	.....
New Hampshire	1	.....	U. S. Navy	.....	.....
New Jersey	39	3			
New Mexico	1	.....	Total to residents of the United States	699	79
New York	114	21			

TO RESIDENTS OF FOREIGN COUNTRIES.

Countries.	Patents and Designs.	Trade-Marks.	Countries.	Patents and Designs.	Trade-Marks.
Argentina	.....	.....	Netherlands	.....	.....
Austria-Hungary	2	3	Newfoundland	1	.....
Belgium	1	2	New South Wales	1	.....
Bermuda	.....	.....	New Zealand	.....	.....
Brazil	.....	.....	Norway	.....	6
British West Indies	.....	.....	Queensland	.....	.....
Canada	12	.....	Roumania	.....	.....
Cape Colony	.....	.....	Russia	.....	.....
Chile	.....	.....	Scotland	1	.....
China	.....	.....	South Australia	.....	.....
Costa Rica	.....	.....	Spain	.....	.....
Cuba	1	.....	Sweden	2	.....
Denmark	1	.....	Switzerland	4	.....
Ecuador	.....	.....	Transvaal, South Africa	.....	.....
England	23	3	Venezuela	1	.....
France	5	1	Victoria	2	.....
Germany	22	6	Western Australia	.....	.....
Ireland	.....	.....			
Italy	.....	1	Total to residents of foreign countries	80	22
Japan	.....	.....			
Mexico	1	.....			

Changes in Classification.

(ORDER No. 2,055.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 4, 1913.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In Division I, class 39, Fences, Gates, abolish subclasses—

Fences—
Wire—
Stretchers—
Compensators—
Springs—
114. Compression,
116. Tension,

most of the patents formerly contained therein having been placed in class 256, Fences.

In Division XXXII, class 221, Dispensing Cans, abolish subclasses—

Filling cans—
Jackets—
10. Corrugated,
87. Wire,
29. Wooden—
88. Closures,

the patents formerly contained therein having been placed in classes 215, Bottles and Jars; 217, Wooden Receptacles; 220, Metallic Shipping and Storing Vessels and 221, Dispensing Cans.

EDWARD B. MOORE,
Commissioner.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business June 7, 1913.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
313	1. Fences; Harrows and Diggers; Plows; Seeders and Planters; Trees, Plants, and Flowers.	Apr. 1	Apr. 3	704
126	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Printing and Paper Hanging; Paper Files and Binders; Pneumatic Despatch; Pneumatics; Presses; Store-Service; Tobacco.	Feb. 26	Apr. 3	699
175	3. Annealing and Tempering; Electric Heating and Electrolysis; Electrochemistry; Metal-Working; Metallurgy; Plastic Metal Working.	May 10	May 26	234
223	4. Bridges; Conveyors; Excavating; Hoisting; Hydraulic Engineering; Loading and Unloading; Metallic Building Structures; Traversing Hoists.	Mar. 1	Apr. 19	657
167	5. Bookbinding; Harvesters; Jewelry; Music.	Mar. 15	Mar. 25	561
315	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Medicines; Preserving; Sugar and Salt; Substance Preparation.	Feb. 18	Apr. 5	736
312	7. Educational Appliances; Chuteher; Games and Toys; Mechanical Movers; Optics; Velocipedes.	Jan. 25	Mar. 26	906
134	8. Beds; Chairs; Furniture; Kitchen and Table Articles; Stove Furniture; Supports.	Feb. 14	May 19	613
142	9. Air and Gas Pumps; Fluid-Pressure Regulators; Hydraulic Motors; Meters, Fluid; Motors, Fluid-Current; Pumps; Wind-Wheels.	Feb. 3	May 5	634
235	10. Carriages and Wagons.....	Jan. 27	Mar. 31	1223
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Buttons, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Welting and Stapling; Whips and Whip Apparatus.	Apr. 17	Apr. 18	283
223	12. Elevators; Journal-Boxes; Pulleys, and Shafting; Lubrication; Machine Elements.	Mar. 13	Apr. 1	1180
220	13. Arms, Projectiles, and Explosive Charges, Making; Bolt, Nail, Nut, Rivet, and Screw Making; Boring and Drilling; Button Making; Chain, Implement and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 12	Apr. 1	667
207	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Metal-Ornamenting; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 12	May 8	645
203	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Aggregate Manufactures; Liquid Coating Compositions; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastic Compositions; Plastics.	Jan. 2	Apr. 5	1236
109	16. Radiant Energy; Telegraphy; Telephony.	Jan. 21	Mar. 20	548
208	17. Matrix-Making; Paper Manufactures; Printing; Type-Bar Making.	Apr. 16	May 7	267
237	18. Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 29	Apr. 18	249
236	19. Dampers, Automatic; Furnaces; Heat-Distributing Systems; Stoves and Furnaces.	Feb. 27	Apr. 10	518
179	20. Artificial Limbs; Builders' Hardware; Dentistry; Locks and Latches; Safes; Undertaking.	Mar. 24	May 12	183

Applications Under Examination—Continued.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
112	21. Brakes and Gins; Carding; Cloth-Finishing; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 7	Mar. 11	617
249	22. Aeronautics; Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Firearms; Marine Propulsion; Ordnance; Ships.	Feb. 13	Apr. 30	366
279	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Time-Controlling Mechanism.	Mar. 6	Mar. 2	536
144	24. Apparel; Apparel Apparatus; Sewing-Machines.	Mar. 31	May 1	504
215	25. Butchering; Mills; Threshing; Vegetable Cutters and Crushers.	May 1	May 14	231
108	26. Electricity, Generation; Motive Power.	Jan. 3	Mar. 8	620
272	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 12	Apr. 14	537
65	28. Internal-Combustion Engines.	Jan. 22	Jan. 27	1148
147	29. Coopering; Fire-Escapes; Ladders; Reels; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking-Tools.	Dec. 16	Apr. 8	798
153	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Mar. 10	May 15	434
173	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Gums.	Mar. 1	Mar. 3	508
273	32. Carbonating Beverages; Dispensing Beverages; Dispensing-Cans; Ornamentation; Packaging Liquids; Refrigeration.	Mar. 7	Mar. 15	378
71	33. Cutlery; Domestic Cooking Vessels; Masonry and Concrete Structures; Paving; Tents, Canopies, Umbrellas, and Canes.	Jan. 6	Apr. 7	442
294	34. Railways; Railway-Brakes; Railway Rails and Joints; Railway Rolling-Stock; Railway Ties and Fasteners.	Apr. 22	Apr. 11	448
244	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Garment-Supporters; Toilet.	Mar. 13	May 7	878
264	36. Drafting; Driers; Engraving; Measuring Instruments; Photography.	Apr. 2	Apr. 1	877
197	37. Electric Lamps; Electricity, Conductors; Electricity, Conduits; Electricity, General Applications.	Nov. 18	Feb. 11	1020
278	38. Animal Husbandry; Artesian and Oil Wells; Fishing and Trapping; Stationery; Stone-Working.	Feb. 10	Apr. 1	815
221	39. Water Distribution.....	Mar. 17	May 5	455
220	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 12	Mar. 24	912
126	41. Railway Draft Appliances; Resilient Tires and Wheels.	Apr. 21	Apr. 21	547
279	42. Electric Railways; Electric Signaling; Railway Signaling; Signals.	Mar. 1	Mar. 1	810
262	43. Baths and Closets; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 10	Apr. 14	287

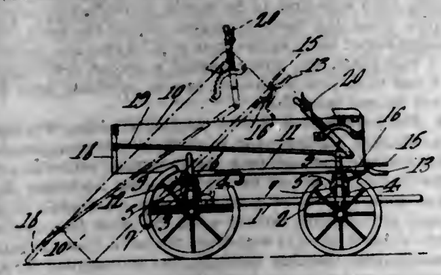
Oldest new case, Nov. 15; oldest amended, Jan. 27.
Total number of applications awaiting action..... 27,160

161	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.			
	Trade-Marks.....	Apr. 2	May 16	887
	Designs.....	Apr. 17	May 15	274
	Labels and Prints.....	May 26	May 27	61

PATENTS

GRANTED JUNE 10, 1913.

1,063,945. DUMP-WAGON. ARTHUR F. ABIGT, Evansville, Ind. Filed Sept. 9, 1911. Serial No. 648,470. (Cl. 21—20.)



A dumping wagon including bolsters, brackets hingedly connected to the bolsters and adapted to rest on and straddle the same, rollers journaled in the brackets, axles connecting the rollers and parallel with the bolsters, said brackets and rollers being movable to inverted positions in front of and below the bolsters, when not in use, and a wagon body movably mounted on the rollers when in active position to hold said brackets against displacement and being mounted on the bolsters when the brackets and rollers are in inactive positions.

1,063,946. APPARATUS FOR TESTING AIR OR OTHER GASES. MAX ARNDT, Aix-la-Chapelle, Germany. Filed Jan. 4, 1910. Serial No. 536,887. (Cl. 73—51.)



1. In apparatus for testing air and other gases in which the admixture of a gas is determined by the decolorization of a liquid reagent, the combination with movable means for absorbing a reagent, of reagent delivering means to guide said absorbing means during its passage therethrough and to change its direction of movement, and means to supply liquid reagent to the delivering means maintained under a substantially constant hydraulic head.

2. In apparatus for testing air and other gases, in which the admixture of a gas is determined by the decolorization of a body prepared with a liquid reagent, the combination with a receptacle, of a reservoir for the liquid reagent in open relation therewith, a thread passing through said receptacle, and a scale arranged in operative relation with respect to said thread.

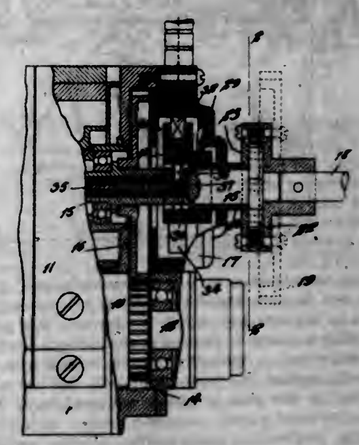
3. In apparatus for testing air and other gases, in which the admixture of a gas is determined by the decolorization of a body prepared with a liquid reagent, the combination with a receptacle, of a reservoir for the liquid reagent in open relation therewith, an inverted vessel containing a supply of the reagent and opening into said reservoir, a thread passing through said receptacle, and a mechanically driven roller carrying said thread.

4. In apparatus for testing air and other gases, in which the admixture of a gas is determined by the decolorization of a body prepared with a liquid reagent, the combination with a receptacle, of a reservoir for the liquid reagent in open relation therewith, an inverted vessel containing a supply of the reagent and opening into said reservoir, a mechanically driven roller, a second roller, and a thread passing over the former roller, through said receptacle, upwardly to said second roller and downwardly.

5. In apparatus for testing gases, the combination with a filamentous absorbing body; of a U-shaped guide therefor, means to supply liquid reagent to said guide under substantially a constant hydraulic pressure, said guide and means in open relation to one another.

[Claims 6 to 9 not printed in the Gazette.]

1,063,947. MAGNETO. HARRY ADELSOHN, Brooklyn, N. Y. Filed Apr. 16, 1910. Serial No. 555,881. (Cl. 123—184.)



1. The combination, with a magneto and a distributer with a rotary element, of a magneto shaft geared to said distributer, a driving element carrying the rotary element of said distributer, means for independently rotating the armature shaft, and a clutch for releasing said rotary element from positive connection with said driving element when said armature shaft is independently rotated.

2. In combination, with a magneto and a distributer with a rotary element geared thereto, of a driving means

for positively actuating the rotary member of said distributer, means for independently actuating the armature shaft of said magneto, and means interposed between said rotary member and said driving means whereby the former may be driven in proper time without action of said driving means.

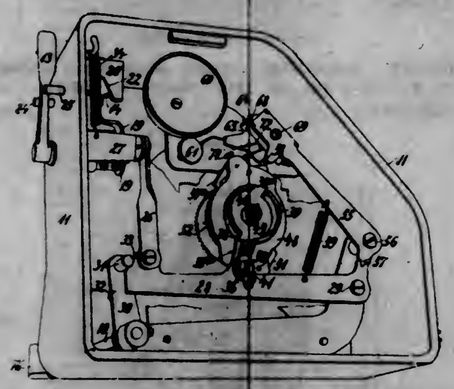
3. The combination of a magneto, a shaft geared therewith and carrying a part in circuit with the magneto, a distributer with which said parts is also in circuit, means connecting the distributer with the source of driving motion, a clutch connecting the shaft and said means when the latter is turned in one direction, and means for independently rotating the magneto armature.

4. The combination with a magneto, of a shaft geared therewith, a distributer, a part carried by the shaft, said part being in circuit with the magneto and in electrical connection with the distributer, a housing loosely mounted on the shaft and adapted to receive the driving motion, a clutch connecting the housing and shaft when the former revolves in one direction, and a sleeve carried by the housing and loosely surrounding the shaft, the sleeve carrying the moving part of the distributer.

5. The combination with a magneto, of a shaft geared therewith, a distributer, a part carried by the shaft, said part being in circuit with the magneto and in electrical connection with the distributer, a housing loosely mounted on the shaft and adapted to receive the driving motion, a clutch connecting the housing and shaft when the former revolves in one direction, a sleeve carried by the housing and loosely surrounding the shaft, the sleeve carrying the moving part of the distributer, and means for imparting a manual rotation to the magneto armature.

[Claim 6 not printed in the Gazette.]

1,063,948. COIN AND TIME CONTROLLED TYPEWRITING MACHINE, &c. HARRY BATES, Albany, N. Y., assignor to Underwood Automatic Typewriter Pay Station Company, New York, N. Y., a Corporation of New York. Filed Sept. 2, 1908. Serial No. 451,391. (Cl. 161—1.)



1. The combination with a clockwork having a ratchet, of a wheel to turn about the axis of the ratchet, a pawl pivoted on the wheel to engage the ratchet, said wheel provided with a notch, a pivoted arm having a tooth to ride upon said wheel, a spring connected to said arm to press the tooth against the wheel and into the notch, a part connected to the arm to swing the pawl away from the ratchet, a manipulable machine, and a movable device normally preventing manipulation of the machine and having a connection with said arm to be moved to ineffective position thereby when the tooth is drawn out of the notch.

2. The combination with a clockwork having a ratchet, of a wheel to turn about the axis of the ratchet, a pawl pivoted on the wheel to engage the ratchet, said wheel provided with a notch, a pivoted arm having a tooth to ride upon said wheel, a spring connected to said arm to press the tooth against the wheel and into the notch, a part connected to the arm to swing the pawl away from the ratchet, a manipulable machine, and a movable device normally preventing manipulation of the machine and having a connection with said arm to be moved to ineffective position thereby when the tooth is drawn out of the notch; said movable device being in the form of a locking arm mounted on a rock-shaft, the latter having a second arm engaged by a cam upon said latch-arm.

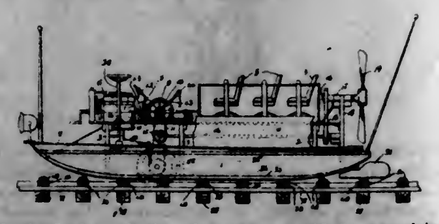
3. The combination with a clockwork having a ratchet, of a wheel to turn about the axis of the ratchet, a pawl pivoted on the wheel to engage the ratchet, said wheel provided with a notch, a pivoted arm having a tooth to ride upon said wheel, a spring connected to said arm to press the tooth against the wheel and into the notch, a part connected to the arm to swing the pawl away from the ratchet, a manipulable machine, a movable device normally preventing manipulation of the machine and having a connection with said arm to be moved to ineffective position thereby when the tooth is drawn out of the notch, said movable device being in the form of a locking arm mounted on a rock-shaft, the latter having a second arm engaged by a cam upon said latch-arm, and an operating lever connected to said latch-arm.

4. The combination with a clockwork having a ratchet, of a wheel, a pivoted pawl to connect said wheel to said ratchet, a latch pressed by a spring against said wheel, the latter having a notch into which said latch may fall, means connected to said latch to turn said pawl to disconnect it from said ratchet when the latch falls into the notch, a finger-piece to withdraw the latch from the notch, a manipulable machine normally out of condition for manipulation, and a device controlled by said finger piece and movable at the operation thereof to abnormal position, to put said machine into condition for manipulation, means being under the control of said latch both to hold said movable device in abnormal position while the latch is held out of said notch, and also to restore said device to normal position when the latch falls into the notch.

5. The combination with a clockwork having a ratchet, of a wheel, a pivoted pawl to connect said wheel to said ratchet, a latch pressed by a spring against said wheel, the latter having a notch into which said latch may fall, means connected to said latch to turn said pawl to disconnect it from said ratchet when the latch falls into the notch, a finger-piece to withdraw the latch from the notch, a manipulable machine normally out of condition for manipulation, and a device controlled by said finger piece and movable at the operation thereof to abnormal position, to put said machine into condition for manipulation, means being under the control of said latch both to hold said movable device in abnormal position while the latch is held out of said notch, and also to restore said device to normal position when the latch falls into the notch; said pawl mounted to rotate with said wheel, and said latch having a part to engage said pawl to swing it out of engagement with said ratchet.

[Claims 6 to 16 not printed in the Gazette.]

1,063,949. AMUSEMENT DEVICE. CLARENCE E. BEDIENT, Pleasant Ridge, Ohio. Filed Nov. 20, 1911. Serial No. 661,444. (Cl. 104—111.)



1. A device of the character specified comprising a track composed of rollers, a hull, said hull being adapted to navigate upon water and to travel upon said track, and an air propeller to propel said hull.

2. A device of the character specified comprising a track composed of rollers, a hull, said hull being adapted to navigate upon water and to travel upon said track, an air propeller to propel said hull when upon the water, and means to propel said hull on said track.

3. A device of the character specified comprising a track composed of rollers, a hull, said hull being adapted to navigate upon water and to travel upon said track, an air propeller to propel said hull when upon the water, a slip to guide said hull from the water onto said track, and means to propel said hull from the water onto said track.

4. A device of the character specified comprising a hull adapted to navigate upon water and to travel upon a track, a traction wheel mounted in said hull intermediate its two sides to propel said hull on said track, and means to support the sides of said hull.

5. A device of the character specified comprising a hull adapted to navigate upon water and to travel upon a track, a traction wheel mounted in said hull intermediate its two sides to propel said hull on said track, means to propel said hull when upon the water, and means to support the sides of said hull when on said track.

1,063,950. ELECTRIC-CURRENT-CONTROLLING DEVICE. ALBERT E. BEADON, La Fayette, Ind., assignor to Esterline Company, La Fayette, Ind., a Corporation of Indiana. Filed July 5, 1910. Serial No. 570,239. (Cl. 171—314.)



1. An electric current controlling device and an electric circuit controlled thereby, said device including a magnet of unchanging polarity; a movable hollow pressure coil subject to the pressure of the controlled circuit and surrounding a pole of said magnet whereby said coil is moved by the coöperation of the magnetic fields produced by the magnet and coil when the coil is energized; a switching device for opening and closing the controlled circuit; and means for restoring the coil to normal position when the coil is deënergized, said pressure coil and magnet coöperating to operate upon the switching device to close said electric circuit at a predetermined minimum value of electromotive force impressed on said pressure coil.

2. An electric current controlling device and an electric circuit controlled thereby, said device including a magnet of unchanging polarity; a movable current coil receiving the current in the controlled circuit and in coöperative relation with said magnet to enable the magnetic fields produced by said magnet and the current flowing in said coil to effect movement of said coil; a switching device for opening and closing the controlled circuit; and means for restoring the coil to normal position when the coil is deënergized, said coil and magnet coöperating to operate upon the switching device to open said electric circuit at a predetermined maximum value of current flowing in said current coil.

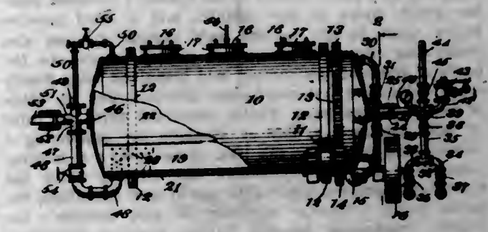
3. An electric current controlling device and an electric circuit controlled thereby, said device including a magnet; a movable hollow pressure coil subject to the pressure of the controlled circuit and surrounding a pole of said magnet whereby said coil is moved by the coöperation of the magnetic fields produced by the magnet and coil when the coil is energized; a switching device for modifying the controlled circuit; and means for restoring the coil to normal position when the coil is deënergized, said pressure coil and magnet coöperating to operate upon the switching device to alter said electric circuit at a predetermined minimum value of electromotive force impressed on said pressure coil.

4. An electric current controlling device and an electric circuit controlled thereby, said device including a magnet; a movable current coil receiving the current in the controlled circuit and in coöperative relation with said magnet to enable the magnetic fields produced by the said magnet and the current flowing in said coil to effect movement of said coil; a switching device for modifying the controlled circuit; and means for restoring the coil to normal position when the coil is deënergized, said current coil and magnet coöperating to operate upon the switching device to alter said electric circuit at a predetermined maximum value of current flowing in said current coil.

5. An electric current controlling device, and an electric circuit controlled thereby, said device including a magnet, a current coil receiving current of the controlled circuit and movable with relation to said magnet, and a switching device operable by the current coil in coöperation with the magnet to increase the resistance of said electric circuit when the current in said current coil has increased to a predetermined maximum value.

[Claims 6 to 11 not printed in the Gazette.]

1,063,951. PERCOLATOR. IRVING BLOUNT, New York, N. Y. Filed Aug. 3, 1911. Serial No. 642,063. (Cl. 87—6.)



1. An apparatus of the kind set forth comprising a rotatably mounted closed container having therein a longitudinal conduit extending partway around the same, near the wall thereof, said conduit having a perforated wall through which it has communication with the treating chamber of the container; and means for delivering fluid to said container and for conducting fluid away from the same, comprising hollow trunnions which are fixedly connected to opposite ends of the container, a plurality of valve-controlled pipes having connection with one of said trunnions and respectively open to said conduit and to the treating chamber of the container; valve-controlled pipes having communication with said trunnion and respectively arranged for the conduct of a solvent and steam or the like, the trunnion being rotatable relatively to the latter pipes, a valve-controlled steam exhaust pipe having connection with the conduit and with the other of said trunnions, and means for conducting fluid away from the latter trunnion, the trunnion being rotatable relatively to said means.

2. An apparatus of the kind set forth comprising a rotatably mounted closed container having therein a longitudinal conduit extending partway around the same, near the wall thereof, said conduit having a perforated wall through which it has communication with the treating chamber of the container; and means for delivering fluid

to said container and for conducting fluid away from the same; a pair of conducting pipes for a solvent and steam or the like, respectively; a pipe common to said conducting pipes and communicating with said trunnion, the trunnion being rotatable relatively to the latter pipe; separate branches leading from the solvent-conducting pipe, means whereby the flow of the solvent through either of said branches and the flow of the steam or the like, through its pipe are controlled a valve-controlled outflow pipe leading from the conduit to the other of said trunnions; and a pipe having communication with the latter trunnion for conducting fluid away from the latter, said trunnion being rotatable relatively to the last-named pipe.

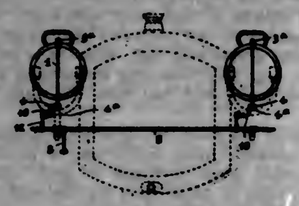
3. An apparatus of the kind set forth comprising a rotatably mounted container provided with heads and with openings through which it is supplied with material to be treated and through which the treated material is drawn, means for closing said openings; a perforated wall arranged inside the container in such relation to the wall of the latter as to provide a conduit extending longitudinally of the container and only partway around the same; and means for delivering fluid to the container and for conducting fluid away from the same, comprising a system of valve-controlled pipes having a member which opens into the container at a place outside of the conduit; a second member which opens to the conduit; and a third member which opens to the conduit.

4. An apparatus of the kind set forth comprising a rotatably mounted container provided with heads and with openings through which it is supplied with material to be treated and through which the treated material is drawn, means for closing said openings; a perforated wall arranged inside the container in such relation to the wall of the latter as to provide a conduit opposite said openings, said conduit extending longitudinally of the container and only partway around the same; and means for delivering fluid to the container and for conducting fluid away from the same, comprising a system of valve-controlled pipes having a member which opens into the container at a place outside of the conduit; a second member which opens to the conduit; and a third member which opens to the conduit, said system of pipes also comprising trunnions which are fixedly secured to the heads of the container, one of said trunnions being fixedly connected to the first and second members, and the other of the trunnions being fixedly connected with the third of said members; a pair of members for conducting a solvent and steam or the like, respectively; a member common to the latter members and through which the same have communication with one of said trunnions, the latter being rotatable relatively to said member; the solvent-conducting member having separate branches; means whereby the flow through either of said branches and the flow of steam or the like through its pipe are controlled; and means whereby fluid is conducted away from the trunnion which is connected to said third member, the latter trunnion being rotatable relatively to said means.

5. An apparatus of the kind set forth comprising a rotatably mounted container provided with heads and with openings through which it is supplied with material to be treated and through which the treated material is drawn, means for closing said openings, a perforated wall arranged inside the container in such relation to the wall of the latter as to provide a conduit extending longitudinally of the container and only part way around the same means for delivering fluid to the container and for conduciting fluid away from the same, comprising a system of valve-controlled pipes having a member which opens into the container at a place outside of the conduit, a second member which opens to the conduit, and a third member which opens to the conduit, said system of pipes also comprising trunnions which are fixedly secured to the heads of the container, one of said trunnions being fixedly connected to the first and second members, and the other of the trunnions being fixedly connected with the third of said members.

[Claim 6 not printed in the Gazette.]

1,063,902. HEADLIGHT. CHARLES C. BRUFF, Coalport, England. Filed Sept. 20, 1912. Serial No. 721,365. (Cl. 240—46.)

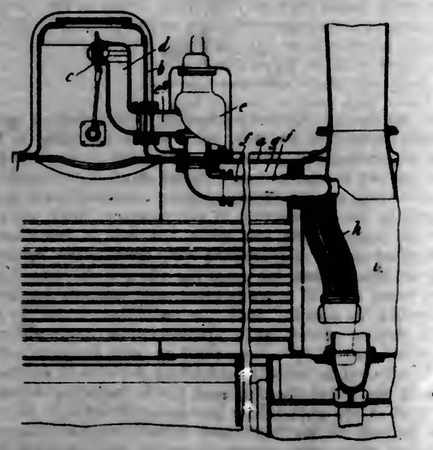


1. In or in connection with the head lamps of automobiles or the like, vertical reflectors rotatably mounted in front of such lamps, and means for automatically and simultaneously rotating said reflectors in accordance with the turning of the vehicle, whereby the beam of light from each lamp is divided so that an area is illuminated which extends both directly in front of the vehicle and in the direction in which it is being turned.

2. In or in connection with the head lamps of automobiles or the like a rotatable vertical reflector detachably mounted forwardly of each lamp, a member secured in relation to the chassis of the vehicle and automatically operated for rotating the reflector in accordance with the change in direction of the vehicle, and connections detachably engaged with said member for transmitting motion to said reflector, which connections and reflector are detachcable as a unit.

3. In or in connection with the head lamps of an automobile or the like, a rotatable vertical reflector detachably mounted forwardly of each lamp, a rocking shaft secured to the vehicle, means for rocking the shaft from the steering gear, and means connecting and transmitting motion from the rocking shaft to the reflector, which means are detachable from the rocking shaft.

1,063,953. PROCESS AND CONTRIVANCE FOR SUPERHEATING STEAM TAKEN FROM A GENERATOR. CHARLES CAILLE, Leperreux, France. Filed Feb. 7, 1912. Serial No. 676,045. (Cl. 127—463.)



1. In combination, a boiler, a collector, and an expansion chamber adapted to receive steam from the boiler and communicating with said collector, whereby said collector will receive the expanded steam, said collector being exposed to the steam from the boiler.

2. In combination, a boiler provided with a steam space, a steam collector and means adapted to receive steam from the steam space and deliver it into said collecter, said means being responsive to the difference in pressure between the steam in the steam space and the pressure in the collector thereby maintaining constant the difference between the pressure in the steam space and the pressure in the collector.

3. In combination, a boiler, a collector, a chamber communicating with said collector, said chamber having a port to permit steam from the boiler to enter said chamber, a valve controlling said port and means controlled by the difference in pressure between the steam in the boiler and the steam in the collector to control the movement of said valve.

1,063,954. KEY-SLIP. CHARLES E. CAMERON, East Orange, N. J. Filed May 2, 1912. Serial No. 694,640. (Cl. 84—159.)

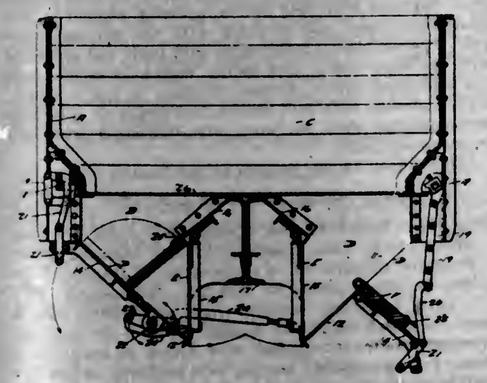


1. A keyslip for player pianos having a pocket in the front face thereof adapted to contain the expression and control elements of the piano, a horisontally slidable cover adapted in one position to close said pocket, a second pocket to one side of said first mentioned pocket and adapted to contain said cover when said first mentioned pocket is opened, means maintaining said cover continuously in the plane of the front face of the keyslip, and means closing said second mentioned pocket when said cover is closing said first mentioned pocket.

2. A keyslip having two pockets in the front face thereof, a sliding cover adapted to face either of said pockets and a supplemental cover movable into the plane of said sliding cover to cover one of said pockets when the same is uncovered by said sliding cover.

3. A keyslip for player pianos having a pocket in the front face thereof adapted to contain the expression controlling elements and having a second pocket disposed adjacent the first mentioned pocket, a sliding cover adapted in one position to cover said first mentioned pocket, a facing board for said second mentioned pocket, a spring tending to maintain said board in the plane of said cover, said cover adapted to engage the board to force the same into the second mentioned pocket.

1,063,955. DIVERTIBLE-HOPPER DUMP-CAR. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed June 17, 1912. Serial No. 704,088. (Cl. 105—185.)



1. In a car of the class described, the combination of a car body having a hopper located below the floor level of the car and provided with door openings arranged on opposite sides thereof, hinged doors for closing said openings and a hinged false door located within the hopper and adapted to close one of the openings to thereby cause the material to pass out of the other door opening, substantially as specified.

2. In a car of the class described, the combination of a car body having door openings and doors for center dumping and door openings and doors for side dumping and arranged to form a longitudinal series of hoppers along each side of the longitudinal center of the car, and auxiliary doors pivotally mounted and movable from one position to another into line with the bottoms of the hoppers, substantially as specified.

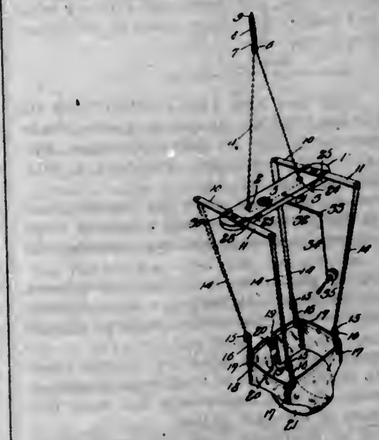
3. In a car of the class described, the combination of a car body provided with door openings and having doors for side and center dumping, movable false doors used to cover portions of the hoppers when the car is arranged for side dumping, whereby a continuous incline is formed from points adjacent the top of the longitudinal center of the car to the outer edges of the side dumping doors when the latter are opened, substantially as specified.

4. In a car of the class described, the combination of a car body having longitudinally arranged hoppers on each side of the longitudinal center line of the car, each hopper having a side dumping door hinged at its bottom to a hopper bottom sheet inclined downwardly toward the center of the car and a center dumping door abutting the said hopper bottom sheet at its lower edge, substantially as specified.

5. In a car of the class described, the combination of a car body having hoppers provided with door openings and doors for side dumping and door openings and doors for central dumping, inclined hopper sheets between the side and center doors in each hopper, and movable members for directing the flow of material through either the side or center openings of the hopper and adapted to form continuous inclines with the center longitudinal hopper sheets, substantially as specified.

[Claim 6 not printed in the Gazette.]

1,063,956. BABY-JUMPER. CARRIE E. CARLEY, Winchester, Kans. Filed Sept. 30, 1912. Serial No. 723,173. (Cl. 155—44.)



1. In a device of the class described, a bar; oppositely extended, individually movable arms disposed in pairs adjacent the ends of the bar and having their inner ends pivoted to the bar; latch mechanisms engaging the arms to hold the arms of each pair in alined relation and in outstanding relation with respect to the bar; the free ends of all of the arms being movable toward a common point to house all portions of the arms within the periphery of the bar; and a seat connected with the arms.

2. In a device of the class described, a support; arms pivoted to the support; latches pivoted to the support, each latch including a body adapted to lie along one edge of the support, an extension projecting from the body, an arm projecting from the extension and disposed at an angle to the body, and a resilient finger projecting from the arm; each pivotally mounted arm being adapted to register between the arm of the latch and the body of the latch and

to abut against the extension; the finger being adapted to overhang one edge of the pivotally mounted arm; a seat; and connections between the seat and the pivotally mounted arms.

1,063,957. ARMOR-PLATE. PIERRE DE CATERS, Berchem-les-Antwerp, Belgium. Filed Apr. 8, 1912. Serial No. 689,384. (Cl. 89—36.)



1. In an armor plate, a steel plate, and a covering or mattress of fabric impregnated with a mixture of strong glue, colophony, tar, and a substance rich in active oxygen.

2. In an armor plate, a steel plate, and a covering or mattress of strips of cloth alternated with layers of a mixture of strong glue, colophony, tar, and borax.

3. In an armor plate, a steel plate, and a covering or mattress of strips of cloth alternated with layers of a mixture of strong glue, colophony, tar, and borax, said covering being sewn up in a bag conforming to the shape of the armor plate and enveloping the same.

4. In an armor plate, a steel plate, and a covering or mattress of cotton wool impregnated with a mixture of strong glue, colophony, tar, and borax.

5. In an armor plate, a steel plate, and a covering or mattress of cotton wool impregnated with a mixture of strong glue, colophony, tar, and borax, said covering being sewn up in a bag conforming to the shape of the armor plate and enveloping the same.

1,063,958. PROCESS FOR THE PRODUCTION OF LEATHER-BOARD STOCK. ALBERT L. CLAPP, Braintree, Mass., assignor to Hide-ite Leather Company, Boston, Mass., a Corporation of Maine. Filed Jan. 4, 1911. Serial No. 600,724. (Cl. 92—1.)

1. The process of producing stock for leather-board, which consists in distributing throughout a mass of shredded leather, an absorptive granular substance charged with oil.

2. The process of producing stock for leather-board, which consists in distributing throughout a mass of shredded leather, a mass of finely-comminuted material charged with oil.

3. The process of producing stock for leather-board, which consists in mixing a mass of finely-comminuted material with heated oil, and intermixing the mass thus formed with a mass of shredded leather.

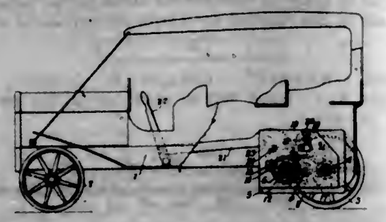
4. The process of producing stock for leather-board, which consists in saturating a mass of wood flour with oil, and mixing such saturated mass with a mass of shredded leather.

5. The process of producing stock for leather-board, which consists in treating wood flour with oil until a granular mass is produced, and finally intermixing the mass with a mass of shredded leather.

[Claims 6 to 11 not printed in the Gazette.]

1,063,959. SPRING-ACTUATED TOY. DAVID P. CLARK, Dayton, Ohio. Filed Dec. 7, 1911. Serial No. 664,811. (Cl. 46—47.)

1. In a toy, an axle, a spring to propel said toy, a pair of gears connected respectively with the opposite ends of said spring, gearing connecting said pair of gears with said axle and comprising a pair of intermediate gears having their axes between the axes of the first-mentioned pair of gears and the axis of said axle, and means to connect both said intermediate gears with said axle to enable them to receive motion simultaneously from said axle when it is rotated in a forward direction, or to connect only one of said intermediate gears with said axle to enable the gear so connected to transmit forward motion from said spring to said axle.



2. In a toy, an axle, a pinion mounted thereon, a shaft, two gears mounted to rotate about the axis of said shaft, a spring coiled about said shaft and connected at its opposite ends with the respective gears, intermediate gears connected with the first-mentioned gears, one of said intermediate gears being also connected with said pinion, and means to cause said intermediate gears to rotate in unison or permit one of said intermediate gears to have movement independently of the other of said intermediate gears.

3. In a toy, an axle, a pinion mounted thereon, a spring, a connection between said pinion and said spring comprising two gears rotatable about a common axis and connected respectively with the opposite ends of said spring, means to connect said gears one to the other to cause them to rotate simultaneously in the same direction, and means to hold one of said gears against movement in one direction when the two gears are disconnected.

4. In a toy, the combination, with an axle, and a pinion mounted on said axle, of a spring to propel said toy, two gears of different diameters connected respectively with the opposite ends of said spring, an intermediate gear interposed between the larger of the first-mentioned gears and said pinion, a second intermediate gear connected with the smaller of the first-mentioned gears, means for holding said smaller gear against rotation in one direction, and means to connect said intermediate gears one with the other to cause the same to rotate simultaneously.

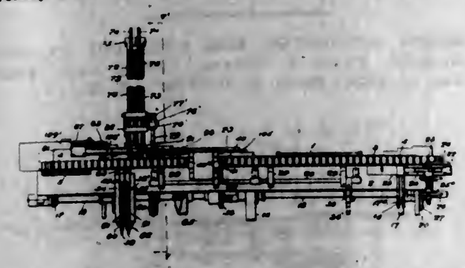
5. In a toy, the combination, with an axle, a rotatable shaft, and a spring mounted on said shaft and having one end secured thereto, of a pinion rigidly secured to said axle, a gear rigidly secured to said shaft, an intermediate gear connected with said pinion, a pinion secured to said intermediate gear and meshing with the first-mentioned gear, a pinion loosely mounted on said shaft and connected with the other end of said spring, means for holding said last-mentioned pinion against rotation in one direction, a gear meshing with said pinion, and means to cause said last-mentioned gear to rotate simultaneously with said intermediate gear.

[Claims 6 to 15 not printed in the Gazette.]

1,063,960. BOX-FILLING MACHINE. JOHN W. DENMEAD, Akron, Ohio, assignor to The Diamond Match Company, Chicago, Ill., a Corporation of Illinois. Filed May 29, 1909. Serial No. 499,252. (Cl. 93—6.)

1. In a box-filling machine, the combination with a source of match supply, an endless conveyer for box-trays arranged to travel adjacent said source of supply, and means for continuously moving said conveyer, of continuously-operating means for yieldingly feeding trays laterally of said conveyer to a point in advance of the source of supply, a stop acting in opposition to the tray-feeding means to check the movement of the leading tray laterally of the conveyer, and means to engage said tray and push it to the conveyer transversely thereof.

2. In a box-filling machine, the combination with a source of match supply, an endless conveyer for box-trays arranged to travel adjacent said source of supply, and means for continuously moving said conveyer, of a chute or guide-way for box-trays, a continuously-rotating tray-feeding wheel adjacent said chute or way provided with a series of elastic fingers extending outwardly and rearwardly from the path of rotation of said wheel, and adapted yieldingly to engage and advance the trays consecutively, means for rotating said wheel, a stop acting in opposition to the tray-feeding means to check the movement of the leading tray laterally of the conveyer, a plunger for engaging said tray and pushing it to the conveyer transversely thereof, and means for actuating said plunger.



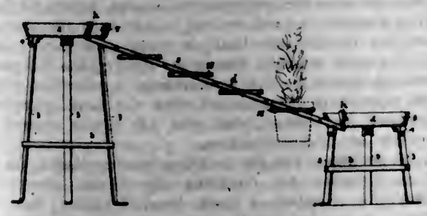
3. In a box-filling machine, the combination with a source of match supply, an endless conveyer for box-trays arranged to travel adjacent said source of supply, and means for continuously moving said conveyer, of a chute or guide-way for box-trays, a continuously-rotating tray-feeding wheel adjacent said chute or way provided on its periphery with a series of light curved springs constituting fingers which extend outwardly and rearwardly from the path of rotation of the wheel, and adapted yieldingly to engage and advance the trays consecutively, means for rotating said wheel, a stop acting in opposition to the action of said fingers to check the movement of the leading tray laterally of the conveyer, a plunger for engaging said tray and pushing it to the conveyer transversely thereof, and means for actuating said plunger.

4. In a box filling machine, the combination with an endless conveyer for box-trays, of a rock-shaft adjacent said conveyer, a series of tappet members arranged at intervals along said shaft and extended in proximity to the conveyer, and means for oscillating said shaft, whereby the said members are simultaneously agitated and a vertical jarring action imparted to the conveyer at various points of its travel.

5. In a box filling machine, the combination with an endless conveyer for box-trays, of a rock-shaft adjacent said conveyer, a series of tappet members arranged at intervals along said shaft and extended in proximity to the conveyer, means for adjusting said members about the axis of the shaft, and means for oscillating said shaft, whereby the said members are simultaneously actuated and a variable vertical jarring action imparted to the conveyer during its progress.

[Claims 6 to 27 not printed in the Gazette.]

1,063,961. DISPLAY-STAND FOR FLOWERS. HENRY G. DREYER, Cleveland, Ohio. Filed July 25, 1912. Serial No. 711,385. (Cl. 211—14.)



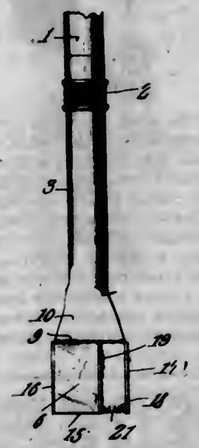
1. In flower stands, a rack having side bars set edgewise and extending beyond the body of the rack at both ends, the said ends being bent outward and having swinging hooks with the hook portions on the inside and inclined to each other, thereby adapting said hooks to engage on a circular support.

2. A display rack for flower pots comprising a frame having pivoted rings for the pots and swiveled hooks to support the frame in an inclined plane in combination with stands of different elevations having rims over which said hooks are engaged.

3. A display rack for flower pots comprising a frame, a series of rings independently pivoted within said frame and a pair of hook members oppositely on each end of said frame to support the rack.

4. A display rack for flower-pots and the like consisting of a rigid frame having hook supports at its ends, rigid cross-bars at intervals and rings between said bars pivotally mounted in the sides of said frame.

1,063,962. PEN. JACOB W. DUNHAM, Wichita, Kans. Filed Aug. 5, 1911. Serial No. 642,516. (Cl. 120—43.)



A pen comprising converging blades and a partition extending transversely of the blades to define separate compartments, the marking edges of the blades being unbroken upon one side of the partition, adjacent one compartment, and being provided with a series of teeth upon the other side of the partition, adjacent the other compartment, the unbroken edges serving to spread the link lightly from the first compartment, and the teeth serving to spread the ink thickly from the other compartment, an intermediate tooth of the series being broader than the other teeth, and the other teeth serving to draw the ink from the broad tooth, whereby the latter will leave a blank line in the more thickly spread portion of the ink.

1,063,963. INDICATOR. THOMAS GEORGE FORTUNE and WILLIAM LOTRIDGE, New York, N. Y. Filed Jan. 12, 1911. Serial No. 602,147. (Cl. 116—31.)

1. A device of the class described, comprising a casing, a movable signal arm within said casing and adapted to be projected at each side thereof, said signal arm being normally concealed within said casing, a light within said casing, said casing having openings through which said light can illumine said arm in either one of its projected positions, shutters normally closing said openings, means for operating said signal arm to project the same in either direction, and an operative connection between said last-mentioned means and said shutters.

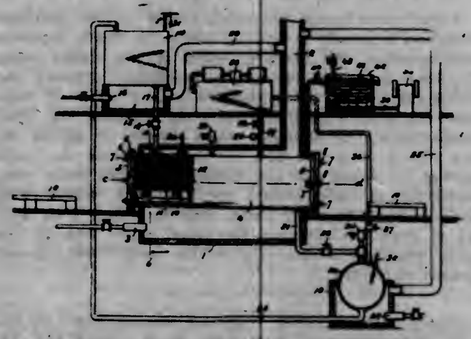
2. A device of the class described, comprising a casing, a movable signal arm within said casing and adapted to be projected at each side thereof, said signal arm being normally concealed within said casing, a light within said casing, said casing having openings through which said light can illumine said signal arm in either one of its

projected positions, shutters normally closing said openings, an operating member movably mounted within said casing, means for operatively connecting said shutters and said signal arm, and means for operatively connecting said operating member and a movable member of the controlling mechanism of a motor vehicle.



3. A device of the class described, comprising a casing, a signal arm pivoted within said casing and adapted to be projected at each side thereof, said signal arm being normally concealed within said casing, a light within said casing, said casing having openings through which said light can illumine said signal arm in either one of its projected positions, slidable shutters normally closing said openings, a pivoted operating member within said casing, links connecting said operating member and said signal arm, a lever operatively connected with said shutters, an operative connection between said lever and said operating member, and means for actuating said operating member.

1,063,964. PROCESS FOR TREATING PAVING-BLOCKS. CLAUD E. FULLER, Buffalo, Kans. Filed Jan. 30, 1912. Serial No. 674,260. (Cl. 99—12.)



1. The method consisting in forcing by pressure greater than atmospheric into the pores of a porous paving block a substance liquefied by heat and which solidifies at ordinary temperatures, then permitting the block to cool until the liquid substance becomes solidified, the pressure being retained until the filling substance has solidified.

2. The method of treating a porous paving block, consisting in forcing liquid bitumen under pressure greater than atmospheric into the pores of the block and then, while retaining the pressure permitting the bitumen to solidify.

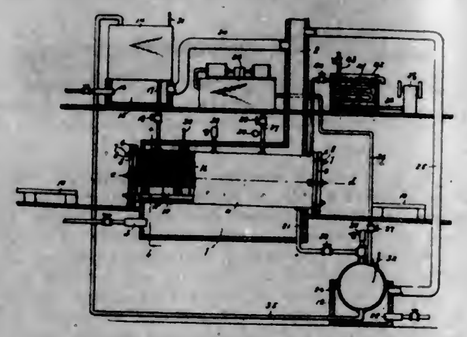
3. The method of treating a porous paving block, consisting in forcing liquid asphalt under pressure greater than atmospheric into the pores of the block, and while retaining the pressure permitting the asphalt to solidify.

4. The method of treating a porous paving block, consisting in exhausting the air from the pores, then forcing into the pores by pressure greater than atmospheric, a substance liquefied by heat and which solidifies at ordinary temperatures, and while retaining the pressure, permitting the block to cool until the liquid substance becomes solidified.

5. The method of treating a porous paving block, consisting in exhausting the air from the pores, then forcing liquid bitumen into the pores of the block under pressure greater than atmospheric, and then permitting the bitumen to solidify while retaining the pressure.

[Claims 6 to 9 not printed in the Gazette.]

1,063,965. APPARATUS FOR TREATING PAVING-BLOCKS. CLAUD E. FULLER, Buffalo, Kans. Filed Jan. 30, 1912. Serial No. 674,261. (Cl. 99—12.)



1. In an apparatus for treating paving blocks, an immersing chamber, a supply tank disposed higher than the chamber, a conductor connecting the tank and chamber, a drain receptacle disposed lower than the chamber, a conductor connecting the chamber and the said receptacle, an air compressor, a conductor connecting the compressor and the chamber, shut off valves located in said conductors respectively, a conductor connecting the compressor and the receptacle, and a conductor connecting the receptacle and the tank.

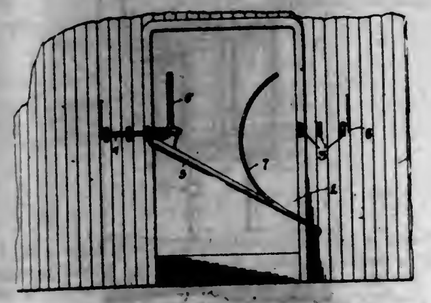
2. In an apparatus for treating paving blocks, an immersing chamber for receiving the blocks, a supply tank and a drain receptacle disposed respectively higher and lower than the chamber, two conductors respectively connecting the chamber with the tank and receptacle, a vacuum pump, an air compressor, two conductors respectively connecting the chamber with the compressor and the pump, and shut off valves located respectively in said conductors.

3. In an apparatus for treating paving blocks, an immersing chamber for receiving the blocks, means for heating the chamber, a tank located higher than the chamber, means for heating the tank, a drain receptacle located lower than the chamber, means for heating the receptacle, two conductors respectively connecting the chamber with said tank and receptacle, a vacuum pump, a conductor connecting the pump and chamber, and shut off valves located respectively in said conductors.

4. In an apparatus for treating paving blocks, an immersing chamber for receiving the blocks, means for heating the chamber, a tank located higher than the chamber, means for heating the tank, a drain receptacle located lower than the chamber, means for heating the receptacle, a vacuum pump, an air compressor, conductors respectively connecting the chamber with the tank, receptacle, compressor and pump, and shut off valves located respectively in said conductors.

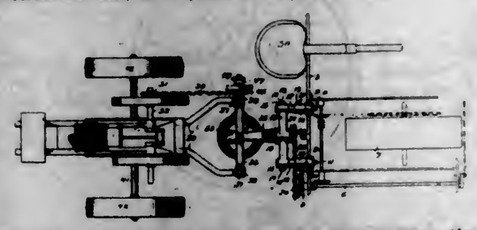
5. In an apparatus for treating paving blocks, an immersing chamber for receiving the blocks, means for heating the chamber, a tank located higher than the chamber, means for heating the tank, a drain receptacle located lower than the chamber, means for heating the receptacle, a vacuum pump, an air compressor, conductors respectively connecting the chamber with the tank, receptacle, compressor and pump, shut off valves located respectively in said conductors, and two conductors respectively connecting the receptacle with the compressor and tank.

1,063,966. MAIL-CATCHER. WILLIAM F. GAMBILL and AMOS R. MCCANN, Datto, Ark. Filed Sept. 17, 1912. Serial No. 720,836. (Cl. 105—230.)



The combination with a mail bag receiving arm which is provided with a handle and which is hingedly and removably connected to the side of the car adjacent the door opening thereof and the said arm being arranged at an inclination with relation to the car, of a spring member which has one of its ends connected with the arm at the point of contacting of the arm with a mail pouch, and the opposite end of the spring being disposed within the doorway of the car and at a distance from the remainder of the arm and from the handle thereof.

1,063,967. HARVESTER. JOHN E. GILSON, Port Washington, Wis., assignor to Gilson Manufacturing Company, Port Washington, Wis. Filed Sept. 24, 1909. Serial No. 519,337. (Cl. 56—33.)



1. A harvester, a truck, a universal-joint in connection with the truck and adjustably connected to the harvester, a motor carried by the truck, and clutch-controlled gearing connecting the motor with the harvester machinery through said joint by which compensation is had for irregularities of surface over which said harvester and truck are traveled and cramp in said gearing avoided.

2. A harvester, clips embracing a sill of same, stems in connection with the clips, a bar fast on the stems, a truck, a universal-joint connecting the truck and said bar, a motor carried by the truck, and clutch-controlled gearing connecting the motor with the harvester machinery through said joint by which compensation is had for irregularities of surface over which said harvester and truck are traveled and cramp in said gearing avoided.

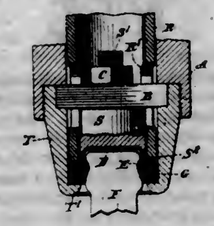
3. A harvester, clips embracing a sill of same and having thimble-extensions, stems fast in the thimbles, a bar fast on the stems, a truck, a universal-joint connecting the truck and said bar, a motor carried by the truck, and clutch-controlled gearing connecting the motor with the harvester machinery through said joint by which compensation is had for irregularities of surface over which said harvester and truck are traveled and cramp in said gearing avoided.

4. A harvester, clips embracing a sill of same, stems in connection with the clips, a bar adjustably secured on the stems, a truck, a universal-joint connecting the truck and said bar, a motor carried by the truck, and clutch-controlled gearing connecting the motor with the harvester machinery through said joint by which compensation is had for irregularities of surface over which said harvester and truck are traveled and cramp in said gearing avoided.

5. A harvester, a bar supported in connection with a sill of the harvester-frame, a vertically disposed bow having a central horizontal shank for which the bar is provided with a bearing, a frame in axial play connection with the bow to therewith constitute a universal-joint, a truck with which the frame has trunnion connection, a motor carried by the truck, and clutch-controlled gearing connecting the motor with the harvester-machinery through said joint by which compensation is had for irregularities in the surface over which said harvester and truck are traveled and cramping in said gearing avoided.

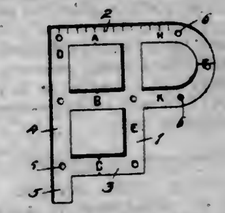
[Claim 6 not printed in the Gazette.]

1,063,968. APPARATUS FOR APPLYING CAPS TO RECEPTACLES. EWALD GOLTSTEIN, Cologne, Germany, assignor to American Goldy Stopper Company, San Francisco, Cal., a Corporation of California. Filed Apr. 27, 1909. Serial No. 492,522. (Cl. 113—3.)



In an apparatus for applying caps to receptacles, in which a yielding presser is employed, a block, against which the receptacle is pressed in the sealing operation, said block having a flange for inclosing and protecting a portion of the cap from side pressure and being adapted to be raised or lowered so as to bring the receptacle in the most effective sealing position in relation to the presser.

1,063,969. LETTER AND NUMERAL OUTLINER. SIDNEY HACKES, Mount Vernon, N. Y. Filed Feb. 12, 1913. Serial No. 747,861. (Cl. 33—8.)



1. An alphabet outliner substantially in the form of the letter "H" with the spaces between the ends of the arms thereof closed by horisontal members and with a loop member connected thereto.

2. An alphabet outliner substantially in the form of the letter "H" with the spaces between the ends of the arms thereof closed by horisontal members and with a loop member connected thereto, said loop member extending outwardly from the right-hand vertical arm of the "H" member.

3. An alphabet outliner substantially in the form of the letter "H" with the spaces between the ends of the arms thereof closed by horisontal members and with a loop member connected thereto, said loop member extending horisontally from the upper portion of the right-hand arm of the "H" member.

4. An alphabet outliner substantially in the form of the letter "H" with the spaces between the ends of the arms

thereof closed by horizontal members and with a loop member connected thereto, all of the arms of said members being of uniform width.

5. An alphabet outliner substantially in the form of the letter "H" with the spaces between the ends of the arms thereof closed by horizontal members and with a loop member connected thereto, all of the arms of said members being of uniform width, the horizontal and vertical dimensions of the openings in the loop member and in the "H" member being equal.

[Claim 6 not printed in the Gazette.]

1,063,970. CLAMP. CLAUDE L. HAGEN, New York, N. Y. Filed May 28, 1910. Serial No. 563,893. (Cl. 24—250.)



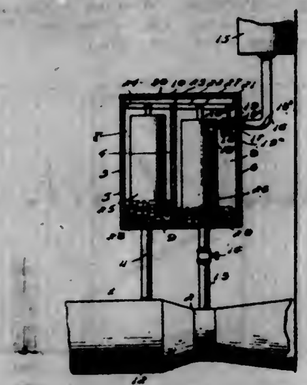
1. The herein described clamp, comprising two members, pivoted relatively to each other, said members being provided with inturned ends, and sides, substantially parallel one with the other when the members are in a closed position, whereby a space is provided between said members and above the inturned ends thereof, a ratchet carried by one of said clamp members and located adjacent the pivoted end thereof, a pawl carried by the other of said clamp members adjacent the pivoted end thereof adapted to engage said ratchet, a handle carried by said pawl extending into the space between said clamp members, and a guard for said handle.

2. The herein described clamp comprising two members pivotally connected at one end thereof, a tubular hub carried by one of said members, ratchet teeth carried by said hub, the other of said members being provided with a tubular bifurcated end adapted to straddle the hub on the member first named, a pawl carried by the last named member adapted to engage the ratchet on said hub, the free end of each of said clamp members being inturned and adapted to meet a handle for said pawl entering the space between said members, a guard for said handle carried by the clamp member having the hub thereon, said guard and said pawl being located sufficiently remote from the inturned ends of said clamp members to provide a space for the reception of a member to be inclosed and a bushing adapted to hold said clamp members together at their pivotally connected ends.

1,063,971. CHEMICAL-FEED DEVICE. RALPH HILSCHER, Urbana, Ill. Filed Sept. 11, 1912. Serial No. 719,794. (Cl. 210—19.)

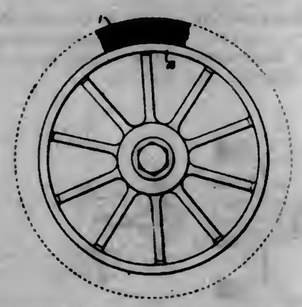
1. In a device of the class described, the combination with a water main having a reduced section, of a casing disposed above the water main and including two compartments, means for establishing open communication between one of said compartments and the full section of the main in advance of the reduced section, a valved connection between the reduced section of the main and the other compartment, a source of fluid under pressure, a pipe connection between said source and the second compartment, a valve in said pipe connection, a pivoted lever mounted within the said casing, and a float disposed within each compartment and connected to the adjacent arm of the lever, said lever being operatively associated with the valve.

2. In a device of the class described, the combination with a water main having a reduced section, of a casing disposed above the water main and including two compartments, means for establishing open communication between one of said compartments and the full section of the main in advance of the reduced section, a valve connection between the reduced section of the main and the other compartment, a source of fluid under pressure, a pipe



connection between said source and the second compartment, a balanced valve in said pipe connection, a lever pivoted within said casing and operatively associated with said valve, and a float disposed within each compartment and connected to the adjacent lever arm.

1,063,972. VEHICLE-TIRE. JOHN C. HOLLINGS, Boston, Mass., assignor to Flora S. Alden, Boston, Mass. Filed May 8, 1912. Serial No. 695,873. (Cl. 152—16.)



1. A vehicle tire having a shoe formed of an interwoven wire fabric member, the fabric of the shoe being held under longitudinal compression to abnormally contract the dimension of the fabric lengthwise the tread and expand it transversely the tread.

2. A vehicle tire having a fabric member composed of interwoven wire, the fabric being held under longitudinal compression to abnormally crowd the wires together.

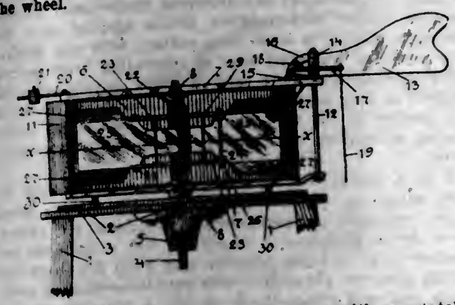
3. A vehicle tire having a fabric member composed of interwoven resilient filaments and means for holding the fabric member on the rim of the vehicle wheel under longitudinal compression whereby the dimension of the fabric lengthwise the tread is contracted and its transverse dimension expanded.

4. A vehicle tire having a tire fabric member composed of loosely interwoven wire, the fabric being held under longitudinal compression to abnormally crown the wires together.

1,063,973. WINDMILL. JOHN J. HOUSTON, Wylie, Tex. Filed Sept. 16, 1911. Serial No. 649,612. (Cl. 170—15.)

1. The combination in a wind wheel, of a casing mounted to rotate, a tail vane mounted on the casing, a counter balance opposed to the tail vane, said casing having a peripheral opening, a wheel mounted to rotate in the casing and comprising a plurality of blades, each blade of the wheel being pivoted and comprising a broad

outer portion having laterally inclined portions at its top and bottom separated by a vertical web and also provided with a reduced inner portion, said wheel having vertical stops in the path of the reduced portions of the blades, and a shaft extending centrally through the casing and the wheel.



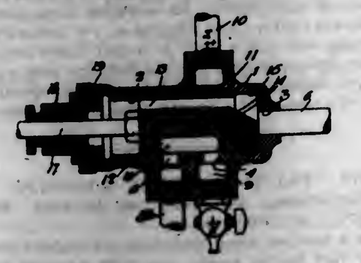
2. In a wind wheel, the combination with a rotatably supported casing having a wind admitting opening in its side, a vertical shaft passing centrally through the casing, a pair of superposed rings fixed on the shaft in the casing, vertical pivot rods between the rings, blades mounted on the rods having reduced portions projecting between the rings and enlarged portions projecting outwardly from the rings, and vertical stop bars connecting the rings and disposed in the path of the reduced portions of the blades.

1,063,974. COATING COMPOSITION. MENE R. ISAACS, Philadelphia, Pa. Filed May 14, 1912. Serial No. 697,256. (Cl. 134—50.)

1. A coating composition consisting of casein, an alkali, a salt of a sulfonic acid of an aromatic hydrocarbon and water.

2. A coating composition consisting of casein, an alkali, sodium naphthalene sulfonate and water.

1,063,975. CONTROLLING-VALVE. CHARLES B. KING and CLARENCE B. WESTON, Marion, Ohio, assignors to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Filed Sept. 24, 1910. Serial No. 583,646. (Cl. 137—5.)



1. The combination, with a casing having a valve chamber, said valve chamber having an inlet port at one end, having the other end closed and also having a single outlet port and an exhaust port, of a valve member mounted in said valve chamber, said valve member being of less length than said chamber, and being adapted to move longitudinally thereto to connect said outlet port with said inlet port or said exhaust port, and a conduit connecting that end of said valve chamber adjacent said inlet with the opposite end of said chamber.

2. The combination, with a casing having a valve chamber, said valve chamber having an inlet port at one end thereof and also having an outlet port and an exhaust port, of a piston-valve member mounted in said valve chamber, said valve member being of less length than said valve chamber, having its opposite ends substantially equal in area and having a conduit communicating with said valve chamber at both ends of said valve member, and means for moving said valve member longitudinally to said valve chamber.

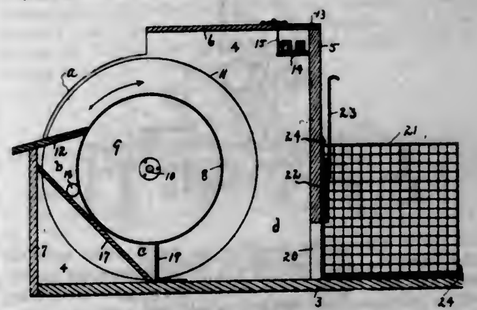
3. The combination, with a casing having a valve chamber, said valve chamber having inlet, outlet and exhaust ports, of a valve member slidably mounted in said valve chamber and having a conduit communicating with said chamber at both ends of said valve member and with said inlet port, and means for moving said valve member from one position to another, said valve member having passages arranged to connect said outlet port alternately with said inlet port and said exhaust port.

4. The combination, with a casing having a valve chamber, said valve chamber having inlet, outlet and exhaust ports, of a valve member slidably mounted in said valve chamber and having a conduit communicating with said chamber at both ends of said valve member and with said inlet port, and means for moving said valve member from one position to another, said valve member having a transverse passage to connect said inlet port with said outlet port when said valve member is in one position and having a longitudinal passage to connect said exhaust port with said outlet port when said valve member is in another position.

5. The combination, with a casing having a valve chamber, said valve chamber having an inlet port in one end thereof and having an outlet port and an exhaust port in one side thereof, of a valve member slidably mounted in said valve chamber and having a longitudinal conduit communicating with said chamber at both ends of said valve member and with said inlet port, said valve member also having a second longitudinal conduit arranged to connect said outlet port with said exhaust port when said valve member is in one position, and a transverse conduit arranged to connect said outlet port with said inlet port when said valve member is in another position, and means for moving said valve member from one position to another.

[Claims 6 and 7 not printed in the Gazette.]

1,063,976. ANIMAL-TRAP. ISAAC B. KISSELL, Council Bluffs, Iowa. Filed Sept. 30, 1912. Serial No. 723,096. (Cl. 43—24.)



1. An animal trap, comprising, in combination with a box formed with an open entrance way; a platform supported by and projecting inwardly of the box to provide a part of the floor of the entrance way; a drum mounted for rotation within the box, said drum being disposed with a part of its periphery adjacent to and with its axis substantially parallel with said platform; an inclinedly-disposed partition arranged below the platform to form, in conjunction with the periphery of the drum, an upwardly-divergent compartment; and a roller-member disposed loosely within said upwardly-divergent compartment to prevent a rotatable movement of said drum in one direction.

2. An animal trap, comprising, in combination with a box formed with an open entrance way; a drum mounted for rotation within the box; a platform having a straight edge disposed parallel with the axis, adjacent to and above the periphery of the drum, said platform projecting

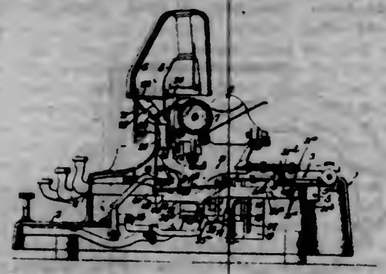
outwardly of the box to form, in conjunction with the periphery of the drum, a floor for said entrance way; an inclinedly disposed partition below the platform to form, in conjunction with the periphery of the drum, an upwardly-convergent compartment; and a roller-member disposed loosely within said upwardly-convergent compartment to prevent a rotatable movement of the drum in one direction.

3. An animal trap, comprising, in combination with a rectangular casing formed with an entrance way between its upright ends; a drum formed with terminal, annular flanges projecting outwardly of its periphery, said drum being disposed within the casing with its flanges disposed adjacent to the upright ends of the casing, the periphery of said drum providing a movable floor for said entrance way.

4. An animal trap, comprising, in combination with a rectangular casing formed with an entrance way between its upright ends; a drum formed with terminal, annular flanges projecting outwardly of its periphery, said drum being mounted rotatably within the casing with its flanges disposed adjacent to the upright ends of the casing to provide a floor for said entrance way; and means to prevent a rotatable movement, in one direction, of said drum.

5. An animal trap, comprising, in combination with a rectangular casing formed with an entrance way between its upright ends; a drum adapted to be rotated in one direction and provided with terminal, annular flanges projecting outwardly from its periphery, said drum being disposed within the casing with its terminal flanges parallel with and adjacent to the upright ends of the casing; a platform disposed between the flanges of the drum while supported by the casing, the periphery of the drum in conjunction with the platform forming a floor for said entrance way.

1,063,977. DEAD-KEY MECHANISM FOR TYPEWRITING MACHINES. THERON L. KNAPP, Woodstock, Ill., assignor to The Oliver Typewriter Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 2, 1910. Serial No. 575,054. (Cl. 197—33.)



1. In a typewriting machine, in combination with the type bars, the main-key levers, the letter-spacing mechanism and the ribbon-throw device including a connecting rod, a universal bar located below and arranged transversely of said main-key levers and having operative connection with the letter-spacing mechanism and the ribbon-throw device, said main-key levers adapted upon the operation thereof to come into contact with and operate said universal bar, a plurality of dead-key levers, each connected with one of the type bars, an auxiliary universal bar located below and arranged transversely of said dead-key levers, said dead-key levers adapted upon operation thereof to come into contact with and operate said auxiliary universal bar, and a lever arranged transversely of said dead-key levers, pivoted intermediate its ends and having operative connection at one end with said connecting rod and at the other end with said auxiliary universal bar; said dead-key levers acting only on the auxiliary universal bar and said main-key levers having no action on said auxiliary universal bar.

2. In a typewriting machine, in combination with the main key-levers, the shift-frame, the letter-spacing mechanism and the ribbon-throw device, a universal bar arranged transversely of said main key-levers and having operative connection with the letter-spacing mechanism and the ribbon-throw device, said main key-levers adapted upon the operation thereof to come into contact with and operate said universal bar, a plurality of dead-key levers, an auxiliary universal bar arranged transversely of said dead-key levers, said dead-key levers adapted upon the operation thereof to come into contact with and operate said auxiliary universal bar, an operating lever having operative connection with said auxiliary universal bar and adapted to give movement to the ribbon-throw device in any position of the shift-frame and to operate the letter-spacing mechanism in certain positions only of the shift-frame.

3. In a typewriting machine, in combination with the main key-levers, the shift-frame, the letter-spacing mechanism including an escapement lever, and the ribbon-throw device including a connecting rod, a universal bar adapted to be operated upon by said main key-levers and having operative connection with said letter-spacing mechanism and said ribbon-throw device, a plurality of dead key-levers, an auxiliary universal bar adapted to be operated upon by each of said dead key levers, an operating lever having operative connection with said auxiliary universal bar and adapted to act upwardly on said connecting rod, a member upon the rising and falling end of said operating lever spaced laterally from the portion of said operating lever which engages the connecting rod, said member being provided with two lugs and with an upwardly opening recess therebetween, and a plate secured to said escapement lever, provided with a finger which, in one position of said shift-frame, is above the recess in said member but which, in the other positions of said shift-frame, is adapted to engage the lugs of said member; said operating lever comprising two parts, and means affording a rigid and adjustable connection between the parts of said operating lever, permitting longitudinal movement of one part with respect to the other part whereby the recess in said member may be adjusted to its proper position relatively to said finger.

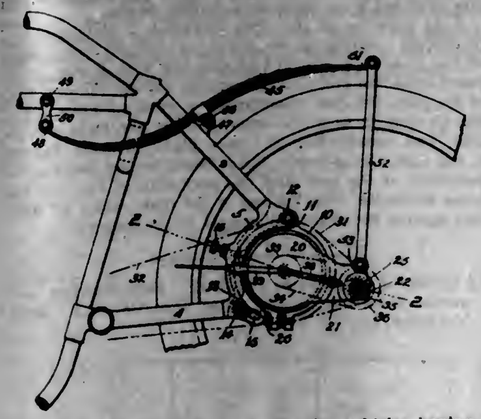
4. In a typewriting machine, in combination with the type-bars, the main-key levers, the letter-spacing mechanism and the ribbon-throw device including a connecting rod, a universal bar adapted to be operated upon by said main-key levers and having operative connection with the letter-spacing mechanism and the ribbon-throw device, a plurality of dead-key levers, an auxiliary universal bar arranged transversely of said dead-key levers and adapted to be operated upon thereby, an operating lever parallel with said dead-key levers and adapted to act upwardly on said connecting rod, and a lever arranged transversely of said dead-key levers, pivoted intermediate its ends and having operative connection at one end with said operating lever and at the other end with said auxiliary universal bar.

1,063,978. TRACTION-WHEEL MOUNTING. ALFRED KUEHN, Chicago, Ill. Filed July 19, 1912. Serial No. 710,379. (Cl. 208—101.)

1. In a traction wheel mounting for vehicles comprising a frame fork having spring controlled swinging wheel carriers pivotally connected thereto and a traction wheel axle eccentrically mounted in said carriers, a terminal pivot ring for each of said carriers pivotally connected to said frame fork and means for adjustably fixing said ring to the latter.

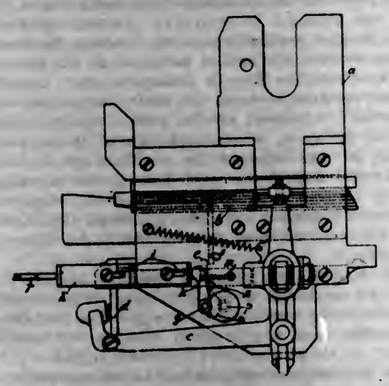
2. In a traction wheel mounting for vehicles, a frame fork having rigid segmental terminals, adjustable terminal rings having pivotal and adjusting connections to said rigid terminals, and spring controlled swinging wheel carriers pivotally mounted in said rings and provided with a concentric drive-wheel shaft and eccentrically arranged traction-wheel axle supports.

3. In a traction wheel mounting for vehicles having a forked frame, swinging wheel carriers pivotally connected thereto, and a traction wheel axle eccentrically mounted in said carriers, a longitudinally arranged plate spring pivotally connected intermediately and at an end to said frame and having a link connection at the other end to said swinging carriers.



4. In a traction wheel mounting for vehicles having a forked frame, spring controlled swinging wheel carriers pivotally connected to said frame fork, a traction wheel axle eccentrically mounted in said carriers, a drive wheel shaft concentric with said pivotal connection of the wheel carriers, and a clutch controlled operating gear connecting said drive wheel shaft and axle.

1,063,979. TYPOGRAPHICAL MACHINE. GUSTAV LAEMMER, Gebweiler, Germany, assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Jan. 7, 1913. Serial No. 740,603. (Cl. 199—7.)



1. In a typographical machine, the combination of distributer stop mechanism and means for actuating the same when matrices of improper font are presented for distribution.

2. In a typographical machine, the combination of means for permitting the distribution of matrices of one font and for preventing the distribution of those of a different font, and distributer stop mechanism adapted to be operated by said means.

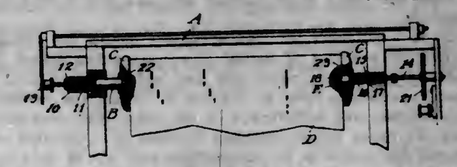
3. In a typographical machine, the combination of a font distinguisher to permit the distribution of but one font of matrices at a time, and distributer stop mechanism adapted to be actuated by the font distinguisher in the event that a matrix of improper font is presented for distribution.

4. In a typographical machine, the combination of a font-distinguishing device to arrest a matrix of improper font prior to its distribution, and distributer stop mechanism actuated thereby.

5. In a typographical machine comprising traveling matrices, the combination of means arranged to permit the passage of matrices of like form and to arrest a matrix of unlike form, and distributer stop mechanism adapted to be actuated when a matrix is so arrested.

[Claims 6 to 13 not printed in the Gazette.]

1,063,980. SPINDLE FOR HOLDING MUSIC-SPOOLS. HERBERT J. LA JOIE, Orange, N. J., assignor to Auto Pneumatic Action Company, a Corporation of New York. Filed Nov. 1, 1911. Serial No. 657,997. (Cl. 242—68.)



1. A spindle for a music spool having in the end thereof a socket and a mortise, comprising a bushing for engaging into the socket to center the spindle and guide it into proper position with respect to the spool, and a spring-pressed axially moving tenon housed in said bushing.

2. In a spindle for a music spool having a socket and a mortise extending inwardly from the end of the socket comprising a shaft having a bushing on its end for engaging into and fitting the socket, and a spring pressed axially moving tenon housed in said bushing and adapted to be projected beyond it into the mortise.

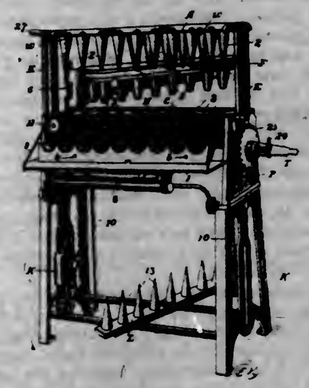
3. A spindle for a music spool having a socket and a mortise, comprising a bushing for engaging into the socket and having an oblong opening, a tenon projecting through said opening, and a spring for pressing the tenon normally outwardly.

4. A spindle for a music spool having a socket and a mortise, comprising a shaft, a bushing secured on the end thereof for fitting into said socket and having an oblong opening, a tenon projecting through said opening and having a collar, and a spring housed in said bushing and tending normally to force the tenon outwardly.

5. A spindle for a music spool having a socket and a mortise, comprising a spring-pressed spindle for engaging one end of the music spool and a bushing for engaging into the socket at the other end of the spool carrying a spring-pressed tenon for engaging into the mortise, the spring acting on the spindle having a heavier tension than the spring acting on the tenon.

[Claim 6 not printed in the Gazette.]

1,063,981. APPARATUS FOR AND METHOD OF MAKING PASTRY SHELLS. EDWARD H. LANIER, Cincinnati, Ohio. Filed Mar. 21, 1908. Serial No. 422,516. (Cl. 107—66.)



1. In a machine for making pastry shells, the combination of a series of molds, a corresponding series of cones, and a pastry receptacle constructed to permit the

vertical introduction and withdrawal of the cones, the cones and receptacle being relatively movable to a position to permit the cones to be moved into and out of the receptacle.

2. In a machine for making pastry shells, the combination of a series of molds, a corresponding series of cones supported to move into and out of the molds, and a pastry receptacle open at the top to permit the vertical introduction and withdrawal of the cones, the receptacle and the cones being relatively movable to a position to permit the cones to be carried into and out of said receptacle.

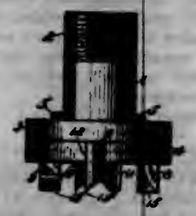
3. In a machine for making pastry shells, the combination of a series of molds, a corresponding series of cones supported to move into and out of the molds, a pastry receptacle open at the top to permit the vertical introduction and withdrawal of the cones, the receptacle and the cones being relatively movable to a position to permit the cones to be carried into and out of said receptacle, and means for heating the molds.

4. In a machine for making pastry shells, the combination of a series of molds, a corresponding series of cones, supported to move into and out of the molds, a pastry receptacle open at the top to permit the vertical introduction and withdrawal of the cones, the receptacle and the cones being relatively movbale to a position to permit the cones to be carried into and out of said receptacle, an oven or casing receiving the molds, and means for heating the oven.

5. In a machine for making pastry shells, the combination of a series of molds, a corresponding series of cones supported to move to and from the molds, and a pastry receptacle pivotally supported to swing to and from a position beneath the cones and open at the top to permit the introduction and withdrawal of the cones.

[Claims 6 to 37 not printed in the Gazette.]

1,063,982. BORING-BIT. JOHN B. LARNCE, Beaumont, Tex., assignor of one-half to S. L. Townsend and Aubrey R. Keith, Beaumont, Tex. Filed June 14, 1912. Serial No. 703,724. (Cl. 166—3.)

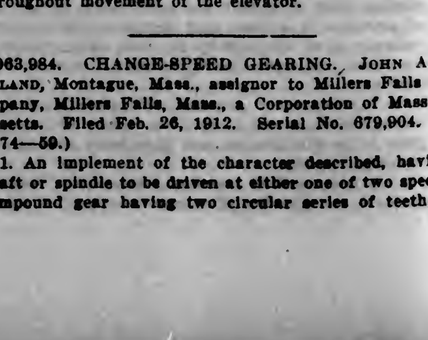


1. In a boring drill, a post, adapted to be connected to a source of power, and having its lower end formed into a disk of uniform thickness; a corresponding registering plate of approximately the same thickness secured to said disk; nut and bolt connections securing the plate to said disk; said plate being provided with three series of cutting bits, one of said series having vertically disposed cutting edges which fall beyond the outer periphery of said plate; another series of cutting bits falling within the path traversed by the first mentioned bits, the third series of bits falling within the path traversed by said second mentioned bits, said bits being thus so arranged in relation to each other that the cutting edges of each series of bits will come into contact with a different part of the bottom of the hole being drilled, except at the immediate center thereof.

2. In a boring drill, a post adapted to be connected to a source of power, and having its lower end formed into a disk of uniform thickness; a corresponding registering plate of approximately the same thickness secured to said disk; nut and bolt connections securing the plate to said disk; said plate being provided with cutting bits arranged in series, one series having vertically disposed cutting edges extended beyond the outer periphery of said plate, two other series arranged within the first mentioned series, the cuting edges of which come in contact with a different part of the bottom of the hole being drilled, except at the immediate center thereof, all of said bits provided with horizontal cutting edges.

3. In a device of the class described, a plate having a transverse opening in its periphery; a post independent of the plate and provided at one end with a disk superposed upon the plate and projecting beyond the periphery of the post, the disk constituting a closure for one end of the opening; a securing device uniting the plate and the disk, and constituting the sole plate engaging element in the disk, the securing device being located between the periphery of the post and the periphery of the disk and being accessible from the top of the disk; and a bit abutting against the plate and located in the opening.

1,063,983. AUTOMATIC PIN-BOY. FRED NEWTON LAWRENCE, Brimfield, Mass. Filed Jan. 19, 1912. Serial No. 672,077. (Cl. 46—54.)



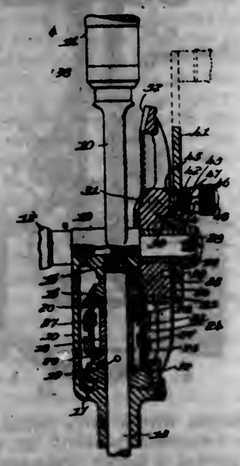
1. A device of the class described, comprising a bowling floor, spot passages therethrough, ten-pins thereover, an anchor member vertically movable beneath the floor, connections between the anchor member and the pins, a ball race-way above the floor, a transverse shaft beneath the floor, connections between the shaft and anchor member for vertical movement of the anchor member upon rotation of the shaft, a bell-crank carried by the shaft, an elevator member adjacent the rear end of the raceway and movable from below said floor to the raceway, connections between said bell-crank and the elevator, and operative connections with the bell-crank for rotation of the shaft and movement of the elevator, for the purposes described.

2. In a device of the class described, a pin erecting device, an operating mechanism therefor, a ball delivery device including a ball raceway, a pit floor rearwardly of the bowling floor and inclined downwardly toward the raceway, an elevator guideway at the rear end of the raceway an elevator member movable therein and comprising a gate board, a cradle device pivoted thereover for movement from a position below said inclined floor into registry with the raceway at times, means to engage and incline the cradle toward the raceway when at the upper limit of its movement, means to return the cradle to initial position when in normal position, and connections between the elevator and said operating mechanism for raising of the elevator coincident with erection of pins, said gate board being arranged and adapted to close access to the space beneath the elevator from the inclined floor throughout movement of the elevator.

1,063,984. CHANGE-SPEED GEARING. JOHN A. LELAND, Montague, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Feb. 26, 1912. Serial No. 679,904. (Cl. 74—59.)

1. An implement of the character described, having a shaft or spindle to be driven at either one of two speeds, a compound gear having two circular series of teeth, two

pinions loosely mounted on said spindle and engaging the two series of teeth of the gear at the same side of the axis thereof, a hub directly secured to the spindle between said two pinions, independently movable spring-projected bolts carried by said hub to selectively engage the pistons, and means for selectively rendering said bolts alternately operative and inoperative in relation to said pinions.



2. An implement of the character described, having a shaft or spindle to be driven at either one of two speeds, two pinions loosely mounted on said spindle, a hub secured to the spindle between the pinions and bolts therein adapted to operatively engage the pinions, a compound gear engaging both pinions, and means for shifting said bolts to alternately engage them with said pinions, or to simultaneously engage them with both pinions to lock the gearing.

3. An implement of the character described, having a shaft or spindle to be driven at either one of two speeds, two pinions loosely mounted on said spindle, a hub secured to the spindle between the pinions and independent spring actuated bolts therein adapted to operatively engage the pinions, a compound gear engaging both pinions, and a longitudinally adjustable sleeve for shifting said bolts to alternately render them operative and inoperative in relation to said pinions.

4. In change speed gearing, the combination with a shaft or spindle, of two pinions loose thereon, a hub secured to the spindle and a plurality of independently movable devices therein to engage the pinions, a compound gear engaging both pinions, and a longitudinally adjustable sleeve having lost motion connection with said movable devices to shift the latter to cause the hub to be locked to either pinion.

5. In change speed gearing, the combination with a shaft or spindle, of two pinions loose thereon, a hub secured to the spindle between the pinions and having a plurality of longitudinal sockets, spring actuated bolts in said sockets, a compound gear meshing with both pinions, and a longitudinally adjustable sleeve having lost motion connections with said bolts.

[Claims 6 to 14 not printed in the Gazette.]

1,063,985. COTTON-GIN. SOLOMON K. LICHTENSTEIN and GEORGE LISPENARD, New York, N. Y., assignors to Solomon K. Lichtenstein, trustee, New York, N. Y. Filed Mar. 4, 1912. Serial No. 681,541. (Cl. 13—14.)

1. A ginning cylinder for cotton gins, comprising a substantially circular revoluble member having its periphery grooved circumferentially and spirally to form a raised spiral thread said thread being wider at the base than at the top, said cylinder having substantially longitudinal slots cut in its periphery, and extending through the said thread and intersecting said groove, said slots forming ginning teeth in said thread, the said slots being defined by parallel side walls.

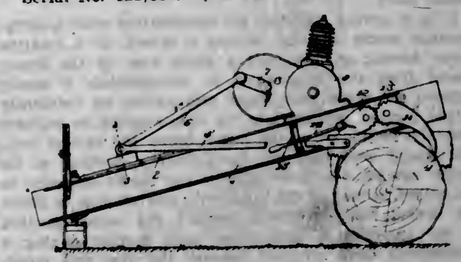
2. A ginning cylinder for cotton gins comprising a substantially circular revoluble member having its periphery grooved circumferentially and spirally to form a raised spiral thread substantially at right angles to the longitudinal axis of the cylinder, said thread being wider at the base and gradually decreasing in width toward the top, said cylinder having substantially longitudinal slots in its periphery and extending through the said thread and intersecting said groove, said slots forming pointed ginning teeth having their points coextensive with the periphery of the thread, the said slots being defined by straight parallel side walls whereby the said slots will be of uniform width substantially throughout their depth and having an inclined bottom 46, whereby the said teeth will have their greatest material at their bases.



3. A ginning cylinder for cotton gins, comprising a substantially circular member having its periphery grooved circumferentially by a spiral groove to form a raised thread substantially at right angles and spirally to the longitudinal axis of the cylinder, said thread being wider at the base and regularly decreasing in width toward the top, said cylinder having substantially longitudinal slots in its periphery, extending through the said thread and intersecting said groove, said slots extending inwardly from the periphery of the cylinder at an angle to the radial planes of said cylinder, said slots forming pointed teeth in said thread coextensive with the periphery of the cylinder, said slots being defined by straight, parallel, side walls.

4. In a cotton gin, an opposing bar and a ginning cylinder coöperating therewith to gin cotton, said cylinder comprising a revoluble substantially round member, grooved circumferentially to form a spiral thread extending from its periphery substantially at right angle to the longitudinal axis of the cylinder, said cylinder having slots arranged lengthwise thereof, cutting the said thread to form picking teeth and intersecting said groove, said slots being arranged to cross a line parallel with the longitudinal axis of the cylinder whereby the rows of teeth will be arranged diagonally of the cylinder.

1,063,986. SAWING-MACHINE. THOMAS LOWE and THOMAS L. KING, Garfield, Wash. Filed Apr. 21, 1911. Serial No. 622,614. (Cl. 143—68.)



A sawing machine comprising an inclined arm adapted at its higher end to rest upon the work and provided at its lower end with a longitudinal slot, a cross beam beneath the lower end of the arm, a yoke pivoted to and extending over said cross beam, a pin rising from the yoke and extending through the longitudinal slot in the lower end of the inclined arm, a standard secured to and rising from said arm, and a brace pivoted to the cross beam and adjustably connected to said standard.

1,063,987. SEWING-MACHINE. WILLIAM A. MACK, Cleveland, Ohio, assignor to The Standard Sewing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 21, 1906. Serial No. 331,428. (Cl. 112—38.)



1. In a sewing machine, a rotative looper having a curved arm extending in the direction of movement of the looper, said arm having an intermediate portion arched outwardly from the curved plane of the arm and adapted for registration with a needle upon its initial forward movement to form a thread loop whereby the loop is bulged beneath the arched portion, said arm further having an underlying loop-seizing hook the bill of which is located immediately beneath said arched portion and adapted to enter the thread loop.

2. In a sewing machine, a rotative looper having an arm curved in the direction of movement of the looper and provided with an intermediate portion arched upwardly from the curved plane of the arm and adapted for location at one side of a needle as it moves upwardly to loop a thread, said arm also having an underlying loop-seizing hook the bill of which terminates immediately beneath said arched portion whereby to enter the thread loop, and a guard arm lying in the curved plane of the looper arm and being spaced therefrom to receive the end of the needle between the arms, said guard arm having the portion of its edge adjacent the needle during the upward movement of the needle lying in a single vertical plane and adapted to bear against the needle whereby to direct said thread loop beneath the arched portion of the looper arm and into the path of said loop-seizing hook.

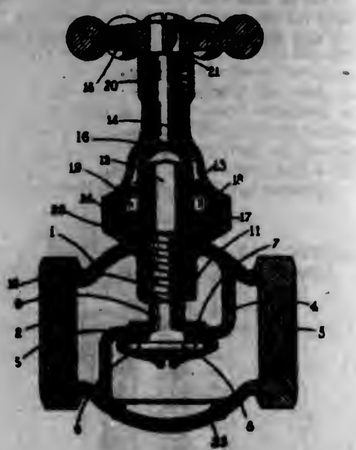
3. In a sewing machine, the combination with a reciprocating thread looping needle, of a rotative looper having an arm curved in the direction of movement of the looper and provided with an underlying loop-seizing hook, a guard arm located in the plane of the looper arm and being spaced slightly therefrom to accommodate the end of the needle between the arms, said looper arm having a portion thereof arched outwardly from the curved plane of the looper arm and adapted to register with the needle upon its initial upward movement to form the thread loop, said guard arm engaging at its inner edge throughout a portion of its length against the inner side of the needle whereby to direct the thread loop outwardly beneath the arched portion of the looper arm, and into the path of said loop-seizing hook.

4. In a sewing machine, the combination with a reciprocating needle adapted to loop a thread, of a rotative looper having an arm, and a guard arm on the looper spaced from the looper arm to accommodate a needle between the arms, said looper arm having an outwardly bulged portion intermediate its ends adapted to register with the needle when the latter forms the thread loop, said guard arm engaging throughout a portion of its length against the inner side of the needle opposite to the bulged portion of the looper arm and adapted to direct the thread loop outwardly beneath the bulged portion of the looper arm, said looper arm further having a loop-seizing hook returned beneath the arm and terminating immediately beneath the bulged portion for engagement in the thread loop.

5. In a sewing machine, the combination with the needle and the bobbin, of a rotative looper having an arm carrying an under-hanging loop-seizing hook and a guard, the latter being operative to project the loop-thread into position for engagement by the loop-seizing hook and to engage the bobbin-thread and pull it from the bobbin.

[Claims 6 to 24 not printed in the Gazette.]

1,063,988. VALVE. JAMES W. MASTIN, San Diego, Cal., assignor of one-third to Bryant H. Howard, San Diego, Cal. Filed Dec. 3, 1912. Serial No. 734,765. (Cl. 137—4.)



The combination with a valve casing, of a valve stem having screw connection therewith, the upper end of said stem being flattened, a bonnet connected to the upper end of said casing, an upper valve stem carried by said bonnet, said upper stem having a socket to engage with said flattened end of the lower valve stem, said upper valve stem having a cone joint arranged at the lower part of the socket end and forming a connection with said bonnet, said bonnet being provided with an undercut groove, and a gasket arranged in said groove between said bonnet and casing and fitted around the socketed portion of said upper valve stem to prevent leakage when said valve stems are actuated, substantially as set forth.

1,063,989. AUTOMATIC FOLDING UMBRELLA. BERNARD J. MCCABE, Detroit, Mich. Filed Dec. 18, 1911. Serial No. 666,405. (Cl. 135—22.)



1. An umbrella, including a tubular stick, opening and closing springs mounted in said stick, a runner to which said springs are connected, ribs, spreaders connected to said ribs and to the runner, a plunger tip section carrying said springs, means for holding the opening spring under tension, means for releasing said holding means whereby to permit said spring to act to move the runner in a direction to open the ribs, and means for releasing the plunger, whereby to permit the other spring to act to close the ribs.

2. An umbrella, including a tubular stick, ribs pivotally connected thereto, spreaders connected to the ribs, a runner mounted on said stick and connected to the spreaders, a plunger tip section, opening and closing springs carried thereby, means for holding the plunger tip section retracted in the stick with the opening spring under tension, the opening spring being stronger than the closing spring and both springs connected to the runner, means for releasing the opening spring so as to draw the runner down on the stick and place the closing spring under tension, and means for subsequently releasing the tip section so as to permit the closing springs to act to move the section outwardly and also move the runner in a direction to close the ribs.

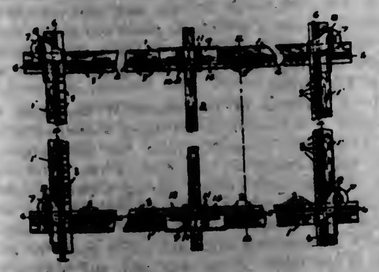
3. An umbrella, including a tubular stick embodying an extensible plunger tip, opening and closing springs housed in said tip, means for holding said tip retracted in the stick with the opening spring under tension, a runner mounted on the stick and connected to both springs, ribs pivotally connected to the stick, spreaders connected to the ribs and to the runner, and means initially movable to release the opening spring to permit the same to contract and subsequently movable to release the plunger section so as to permit the closing spring to act.

4. An umbrella, including a tubular stick, a plunger tip section embodied therein, opening and closing contractile springs housed in said plunger tip section in longitudinal alinement with each other, the outer end of the closing spring being secured to the stick and the lower end of the opening spring being secured to the plunger tip, ribs pivotally connected to the stick, spreaders connected to the ribs, a runner mounted on the stick and connected to the spreaders, the adjoining ends of said springs being connected to the runner, means for holding the opening spring extended and the plunger tip retracted in the stick, and means for releasing said holding means to permit the opening spring to contract and for subsequently releasing the plunger tip to permit the closing spring to act and extend the plunger tip from the stick, for the purpose specified.

5. An umbrella, including a tubular stick embodying a plunger tip section, opening and closing springs housed within said section, ribs pivotally connected to the stick, spreaders connected to said ribs, a runner movable on the stick and connected to said springs and to the spreaders, the runner being provided with a bar, the plunger tip being provided with a catch, latches carried by the stick and automatically movable into engagement with said bar and catch to hold the opening spring extended under tension and the plunger tip retracted in the stick, and means for releasing said latches, for the purpose specified.

[Claims 6 and 7 not printed in the Gazette.]

1,063,990. CURTAIN-STRETCHER. THOMAS R. MCCLOSKEY, Salt Lake City, Utah. Filed Apr. 12, 1912. Serial No. 690,452. (Cl. 45—24.)

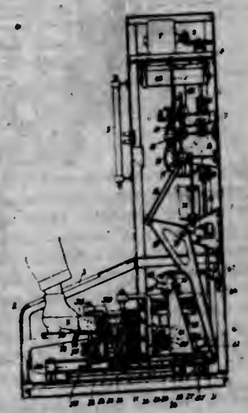


1. In a stretcher or drier, in combination with frame members, the middle clamp having two longitudinal slots toward the middle portion of the said clamp, through each of which a thumb screw having an elongated head passes, a clamp for securing the central frame member having on each side thereof a slot identical with the slots in the said first mentioned clamp, and through which the said thumb screw passes, having its elongated head on the same side of the frame as the central frame member; the said slots being of such length as to permit the ends of each half of the longitudinal frame members to abut and yet to slide apart sufficiently to turn inwardly on the said screw, and the length of the said elongated head being such as to prevent the said thumb screw from turning on account of said head bringing up against the middle portion of said last mentioned clamp.

2. In a stretcher or drier of the character described in combination with slats forming the four sides of the frame and a central frame member, the central frame member being secured to the middle portion of the sides of the said frame by a clamp containing a longitudinal slot in each end of the same, and on each side of the loop through which the middle member of the said frame passes the reinforcing clamp housing the middle ends of the side slats, a thumb screw passing through the said slot in the said first mentioned clamp, and through two identical slots located toward the center of the middle portion of the reinforcing clamp, and on each side of the central member of the said frame, a thumb screw having an elongated head abutting against the said middle frame member and passing through the slots in both of the said clamps.

3. In a stretcher or drier, the combination of side bars 1, 1, having their inner ends abutting, the clamp 9, embracing the two said ends and bridging the abutting joints of the said ends of the said clamp, having longitudinal slots 10, 10, on each side of the central frame member 2, the said middle member 2 passing through the clamp 13, the said clamp 13 being attached to the said frame and secured thereto and to the clamp 9 by thumb screws 11, having elongated heads and passing through the longitudinal slots 14, 14; the said slots 14, and 10 being of such length as to permit the folding inwardly upon themselves of the members 1, 1, when turned upon the thumb screws 11, 11, and the elongated heads of the said thumb screws being of such length as to prevent the turning around of the said head when the thumb screws are screwed upon it.

1,063,991. SHOE-SHINING MACHINE. ROBERT R. MCELHANY, Pittsburgh, Pa., assignor to National Electric Shoe Shining Machine Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Sept. 19, 1911. Serial No. 650,249. (Cl. 15—61.)



1. In a shoe polishing machine, the combination of a horizontally movable carriage, means for imparting a reciprocatory movement thereto, a toe-polishing brush, a pair of side brushes and a pair of heel-brushes each rotatably mounted upon said carriage upon a vertical axis, means for rotating said brushes, and means for raising the toe-polishing brush to maintain the same out of contact with

the work, and means for moving the heel and side brushes out of contact with the work at certain periods in the reciprocation of the carriage.

2. In a shoe polishing machine, the combination of a longitudinally reciprocatory carriage, a motor and interposed operating mechanism, a set of rotary brushes movably mounted upon vertical axes upon said carriage, gearing between said brushes and said motor, and means for automatically moving said brushes transversely with reference to the work at a certain period in the reciprocation of the carriage.

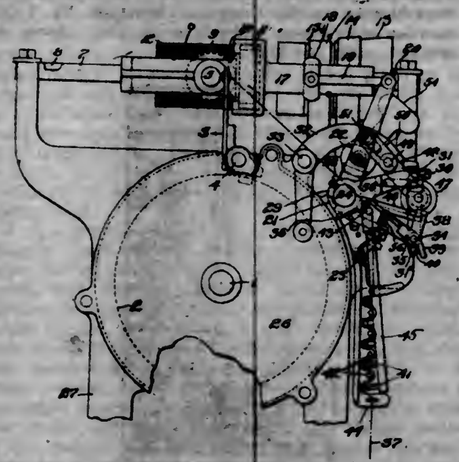
3. In a shoe polishing machine, the combination with a reciprocatory carriage, a motor and interposed operating mechanism, a toe-polishing brush, a pair of side brushes and a pair of heel-brushes, gearing for continuously rotating said brushes during movement of the carriage, means for moving the heel-brushes toward each other and means for moving the toe-polishing brush vertically as the carriage moves to its rearward position.

4. In a shoe polishing machine, the combination of a frame, a foot rest mounted thereon, a reciprocatory carriage mounted on the frame, swinging yokes on the carriage, brushes on the yokes, and codperating means on the yokes and frame for moving the brushes into and out of engagement with the work at each reciprocation of the carriage, a rotatable polishing brush movably mounted on the carriage and yieldingly held against the work, and means for moving the polishing brush out of engagement with the work during different reciprocations of the carriage.

5. In a shoe polishing machine, the combination of a frame, a foot rest mounted thereon, a reciprocatory carriage mounted on the frame, a pair of heel-brushes movably mounted thereon, springs connected to the heel-brushes and arranged to cause them to move toward said foot rest, abutments at the rear end of the frame, and rods connected with said brushes and arranged to engage with said abutments to move the heel-brushes away from the foot rest, as the carriage moves rearwardly.

[Claims 6 to 14 not printed in the Gazette.]

1,063,992. WINDING-MACHINE. JOHN O. MCKEAN, Westfield, Mass., assignor to Foster Machine Company, Westfield, Mass., a Corporation of Maine. Filed Dec. 27, 1911. Serial No. 668,138. (Cl. 242—45.)

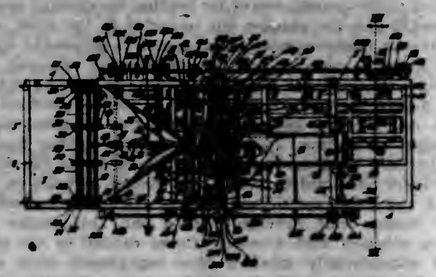


1. In a winding machine of the character described, in combination, a thread guide; a winding spindle yieldingly held toward the thread guide and movable away from the latter as the cop grows in size; a pivotally supported tension lever provided with a set of thread engaging pins; a stationarily supported set of thread engaging pins cooperating with the pins of the tension lever; a weight adjustably mounted on the tension lever; and means connecting the weight with the winding spindle through which movement of the spindle away from the thread guide shifts the weight on the tension lever in a direction relatively to the fulcrum of said lever so as to decrease the effective force of the weight as the cop grows in diameter.

2. In a tension device for winding machines, a pair of tension members pivotally mounted with relation to each other; each member having a multiplicity of pins mounted upon a common support and each arranged with relation to the other, so that pins of each member will pass between the pins of the other member to form a sinuous, angular path for the thread; a lever connected at the pivoted end of a moving member of the pair and extending in the plane of movement; a movable weight mounted upon that lever and connections between the weight and a part of the winding machine moved by the growth of the cop, to shift the weight as the cop grows, to diminish the tension on the thread.

3. In a winding machine of the character described, in combination, a thread guide, a winding spindle yieldingly held toward the thread guide and removable away from the latter as the cop grows in size, a tension member, made up of two comb-like parts, one pivoted to the other at its upper end and movable in a vertical plane; a lever at the upper end of the moving member of the tension device extending horizontally in the plane of movement; a movable weight upon this lever; and means connecting the weight with the winding spindle, through which movement of the spindle away from the thread guide shifts the weight on the lever in a direction to decrease the effective force of the weight as the cop grows in diameter.

1,063,993. PAPER-FOLDING MACHINE. WILBUR B. MCNAMARA, Kansas City, Mo. Filed Apr. 26, 1909. Serial No. 492,408. (Cl. 101—44.)



1. In a machine of the character described, a folder comprising a horizontally-arranged V-shaped bottom and walls projecting upwardly from the side edges of said bottom and forming at the apex of the latter, a vertical slot or opening, said bottom having a pair of openings in the plane of its longitudinal center, a traveling belt below the folder and forming a bottom for said openings, means to feed a horizontally arranged sheet upon the horizontal bottom of the folder at its base end, and toward its apex, and alined creasing wheels to press the paper sheet down upon said underlying belt where the same forms a bottom for said openings to crease said paper in line with the apex of the folder.

2. In a machine of the character described, a folder comprising a horizontally arranged V-shaped bottom and walls projecting upwardly from the side edges of said bottom and forming at the apex of the latter a vertical slot or opening, said bottom having a pair of openings in the plane of its longitudinal center, a traveling belt below the folder and forming a bottom for said openings, means to feed a horizontally arranged sheet upon the horizontal bottom of the folder at its base end, and toward its apex, alined creasing wheels to press the paper sheet down upon said underlying belt where the same forms a bottom for said openings to crease the paper in line with the apex of the folder, and a guideway comprising a U-shaped portion to receive the folded edge of the sheet as the latter leaves

the folder, and an inverted-U shaped portion to receive the upwardly disposed edges of the sheet at the same time.

3. In a machine of the character described, a folder comprising a horizontally arranged V-shaped bottom and walls projecting upwardly from the side edges of said bottom and forming at the apex of the latter a vertical slot or opening, said bottom having a pair of openings in the plane of its longitudinal center, a traveling belt below the folder and forming a bottom for said openings, means to feed a horizontally arranged sheet upon the horizontal bottom of the folder at its base end and toward its apex, alined creasing wheels to press the paper sheet down upon said underlying belt where the same forms a bottom for said openings to crease the paper in line with the apex of the folder, a guideway comprising a U-shaped portion to receive the folded edge of the sheet as the latter leaves the folder, and an inverted-U portion above and spaced from the said U-shaped portion to receive the upwardly disposed edges of the sheet at the same time, traveling conveyers to engage opposite sides of the folded sheet between said guideways to conduct such folded sheet through the latter, a curved guideway underlying the delivery end of the U-shaped guideway, means for forcing the folded sheet downwardly out of said first-named guideway and into the curved guideway, a horizontally arranged folding plate in the plane of the upper side of the curved guideway, endless conveyers extending through the curved guideway and below said folding plate to convey the folded sheet along the bottom of the latter, means for producing a pair of parallel creases in the sheet in substantially the vertical plane of the side edges of said folding plate, and means to force the portions of the sheet outward of said creases upwardly and over upon the folding plate and one upon the other.

[Claim 6 not printed in the Gazette.]

1,063,994. WATER-HEATER. LOUIS R. MENDELSON, Cleveland, Ohio. Filed June 4, 1912. Serial No. 701,682. (Cl. 122—165.)



1. A water heater section comprising hollow hubs, upper and lower series of hollow arms extending outwardly from said hubs, the outer ends of said series of arms broadened and overlapping at their edges, each arm of each series communicating with two arms of the other series.

2. In a water heater, a heating element, comprising spaced hubs, upper and lower series of hollow arms said arms having their outer extremities laterally extended, each arm of the lower series of arms communicating with the two arms of the upper series of arms at their edges.

3. In a water heater, a heating element comprising upper and lower tubes spaced apart on a common axis and closed at their approximated ends, a series of radially and downwardly extended hollow arms communicating with the upper hub, a similar series of radially and upwardly extending hollow arms communicating with the lower hub, said lower arms alternating in position with said upper arms, each lower arm communicating with two upper arms at its outer extremity.

1,063,995. TOOL FOR MAKING SPHERICAL-VALVE SEATS. MIKE MINTZ, Rock Island, Ill., assignor to Gearless Automatic Pump Company, Rock Island, Ill., a Corporation of Illinois. Filed Sept. 18, 1911. Serial No. 649,968. (Cl. 77—72.)

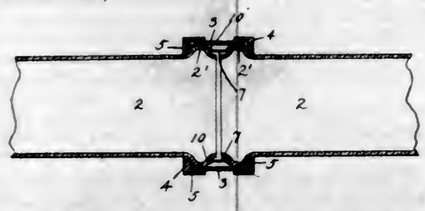


1. A tool of the class described, comprising a shank, a spherical cutting member integral therewith, a segmental portion being cut away from said member forming a surface in said cutting member and providing cutting edges coincident with a portion of the surface of said member.

2. A tool of the class described, comprising a shank, a spherical cutting member rigidly mounted therein, a segmental portion having a convex base, being cut away from said member, forming a concave surface in said cutting member and providing cutting edges coincident to a portion of the surface of said member, a second portion being cut away from said member, the base of which intersects the concave section thereof.

3. A tool of the class described, comprising a shank, a spherical cutting member integral therewith, a segmental portion being cut away from said member forming a surface in said cutting member and providing cutting edges coincident with a portion of the surface of said member, a second segment being cut away from said member, the base of which intersects said surface.

1,063,996. MECHANICAL JOINT FOR VACUUM-TUBES. DANIEL MCFARLAN MOORE, Newark, N. J., assignor to General Electric Company, a Corporation of New York. Filed Apr. 16, 1908. Serial No. 427,366. (Cl. 137—28.)



1. In a joint for glass tubing, the combination of circumferentially shouldered tube sections, a skeleton coupler adapted to receive and support the ends of the tubes in alinement and compression devices carried by said coupler and adapted to force the tube sections toward one another.

2. In a joint for glass tubing, the combination of circumferentially shouldered tube sections, a skeleton coupler adapted to receive and support the ends of the tubes in alinement and compression nuts carried by said coupler and adapted to force the tube sections toward one another.

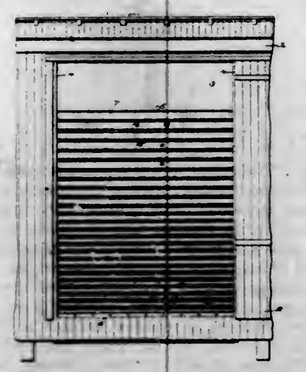
3. In a joint or coupling for glass tubing, the combination of circumferentially shouldered tube sections, a skeleton coupler adapted to receive the ends of the tube sections, a sealing ring engaged at its edges by said sections, and means for forcing said sections against the rings.

4. In a joint or coupling for glass tubing, the combination of circumferentially shouldered tube sections, a skeleton coupler adapted to receive the ends of the tube sections, a sealing ring engaged at its edges by said sections, and compression nuts carried by the skeleton coupler and engaging the shoulders.

5. In a joint or coupling for glass tubing, the combination of circumferentially shouldered tube sections, a skeleton coupler adapted to receive the ends of the tube sections, a sealing ring engaged at its edges by said shoulders, and compression nuts carried by the skeleton coupler and engaging the shoulders.

[Claims 6 and 7 not printed in the Gazette.]

1,063,997. GRAIN-DOOR FOR RAILWAY-CARS. JOHN MORAVEC, Detroit, Mich. Filed Apr. 3, 1909. Serial No. 487,753. (Cl. 20—22.)



1. The combination, with a car having a door opening, and provided with a slot in the floor substantially in the plane of the opening, of a reel mounted beneath the car floor, a flexible door composed of channeled metal members of gradually varying width hinged together, one of the narrowest members forming one end of the door secured to the reel and the other members arranged to pass to and fro through the slot to control the door opening, and a guiding connection between the flexible door and the sides of the door opening.

2. The combination, with a car having a door opening, and provided with a slot in the floor substantially in the plane of the opening, of a reel mounted beneath the car floor, a flexible door composed of channeled metal members of gradually varying width hinged together, one of the narrowest members forming one end of the door secured to the reel and the other members arranged to pass to and fro through the slot to control the door opening, a guiding connection between the flexible door and the sides of the door opening, and a bar secured to the free end of the door and arranged to bridge the slot when the door is withdrawn beneath the floor.

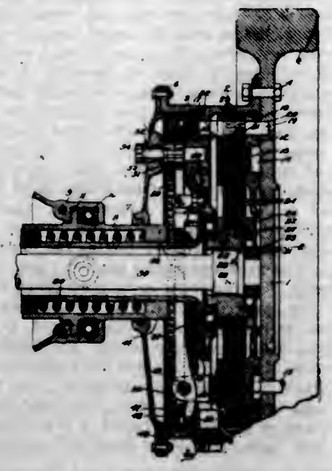
3. The combination, with a door frame providing an opening, ways arranged transversely of the plane of the door opening, cross heads sliding on the ways, a reel journaled in the cross heads at one side of the plane of the door opening, a flexible door wound upon the reel and arranged to cover the opening, and means actuated by the movement of the reel to progressively shift the reel on the ways to maintain the periphery of the reeled door substantially in the plane of the door opening.

4. The combination, with a door frame providing an opening, ways arranged transversely of the plane of the door opening, cross heads sliding on the ways, a reel journaled in the cross heads at one side of the plane of the door opening, a flexible door wound upon the reel and arranged to cover the opening, a threaded connection between the cross heads and a fixed portion of the structure, gears connecting the reel and said connection, and means to rotate the reel to wind and unwind the door and simultaneously to shift the same laterally on the ways to maintain the periphery of the reeled door substantially in the plane of the door opening.

5. The combination, with a door frame providing an opening, ways arranged transversely of the plane of the door opening, cross heads sliding on the ways, a reel journaled in the cross heads at one side of the plane of the door opening, a flexible door wound upon the reel and arranged to cover the opening, screw spindles extending from the cross heads at right angles to the reel axis into threaded engagement with fixed supports, gears connecting the reel with the screw spindles, and means to drive the reel and spindles to wind and unwind the door and simultaneously to shift the same laterally on the ways to maintain the periphery of the reeled door substantially in the plane of the door opening.

[Claims 6 to 15 not printed in the Gazette.]

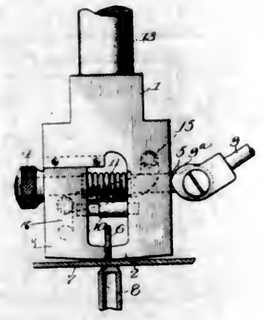
1,063,998. CLUTCH. ALFRED B. MORSE, South Easton, Mass. Filed Feb. 21. 1912. Serial No. 679,150. (Cl. 192—10.)



1. A clutch, comprising a plurality of alternately arranged larger and smaller plate members concentrically mounted for frictional power transmitting engagement, the larger members being in annular form and having spaced apart slots extending from its central opening outward approximately to the circumference of the smaller overlapping members.

2. A clutch, comprising a closed, rotatably mounted casing and coöperative clutch members housed therein, said casing having provision for introducing lubricant, consisting in an opening with a removable closure and an inwardly extending collar formed around said opening for the purpose stated.

1,063,999. APPARATUS FOR ELECTRIC WELDING. CHARLES R. MURRAY, LEWIS R. BRINK, and WALTER K. MALMSTROM, Chicago, Ill., assignors to Barnhart Bros. & Spindler, Chicago, Ill., a Corporation of Illinois. Filed Apr. 15, 1912. Serial No. 691,018. (Cl. 219—4.)



1. In a device of the class described in combination, a lower electrode provided with a small bearing surface, a die having means for firmly clamping material therein, and means for forcing said die toward said electrode.

2. A welding die comprising an integral fixed jaw, a movable jaw having sliding engagement with said fixed jaw, each of said jaws being provided with water ducts, a tube connecting the ducts in the two jaws, means for pressing said jaws together, and a pin for guiding said movable jaw.

3. In a device of the class described in combination, an electrode, a clamping die and means for forcing said die toward said electrode, said electrode having a smooth exterior surface.

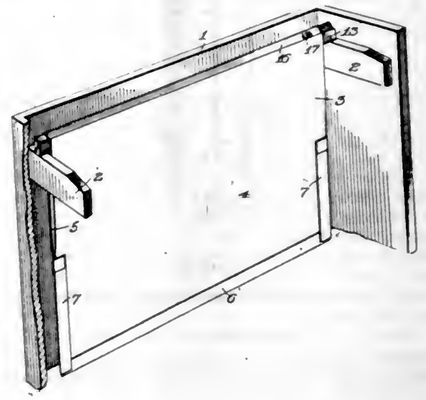
4. A molding die comprising in combination vertically disposed portions having their lower ends provided with projections extending toward one another to form narrow meeting faces, a bolt passing through said vertical portions and having one end provided with screw threads and a threaded head thereon, and having the other end provided with a pivotally mounted cam lever having a cam arranged to act against the outer side of the adjacent vertical portion, a pin extended between the vertical portions of the die said vertical portions being provided with horizontal apertures for said pin, and an electric terminal connected to said vertical portions.

5. In a device of the class described in combination, an integral electrode, a clamping die having its clamping faces lying substantially at right angles to the working face of said integral electrode, and means for moving said clamping die in a direction parallel to its clamping faces.

[Claims 6 to 10 not printed in the Gazette.]

1,064,000. FILING-POCKET. HERBERT B. NEFF, Rochester, N. Y., assignor to Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 28, 1911. Serial No. 646,433. (Cl. 129—16.)

1. The combination with a flat pocket having parallel front and rear walls, of a pair of parallel supporting rods therefor connected to the edges of the respective walls at the mouth of the pocket with their ends extending beyond the sides of the latter, one rod being wider than the other to project above the same and an index character on such projection portion of said rod.



2. The combination with a flat pocket having parallel front and rear walls of substantially equal height, of a pair of parallel supporting rods therefor respectively connected to the edges of the respective walls at the mouth of the pocket with their ends extending beyond the sides of the latter, the adjacent faces of said rods being adapted to contact throughout their length and being so formed as to extend at an angle to their respective outer faces.

3. The combination with a flat pocket having parallel front and rear walls of substantially equal height, of a pair of parallel supporting rods therefor respectively connected to the edges of the respective walls at the mouth of the pocket with their ends extending beyond the sides of the latter and their outer faces in the planes of the said walls, the adjacent faces of the rods being formed to extend at an angle to both of their respective outer faces.

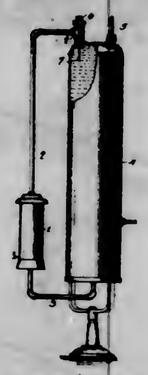
4. The combination with a flat pocket having parallel front and rear walls, of a pair of parallel supporting rods therefor connected to the edges of the respective walls, at the mouth of the pocket with their ends extending beyond the sides of the latter, one rod being wider than the other to project above the same and being provided with an inclined face on such projecting portion, and an index character on said face.

5. The combination with a flat pocket having parallel front and rear walls, of a pair of parallel supporting rods therefor connected to the edges of the respective walls at the mouth of the pocket with their ends extending beyond the side of the latter, said rods being each triangular in cross section so that their outer faces are parallel when their inner faces are in contact and one of the faces of one rod being arranged to extend at an incline to said outer faces and laterally beyond the adjacent edge of the other rod.

1,064,001. WATER-HEATER. HENRY W. O'DOWD, Peekskill, N. Y., assignor to William M. Crane Company, a Corporation of New York. Filed Sept. 23, 1908. Serial No. 454,434. (Cl. 126—362.)

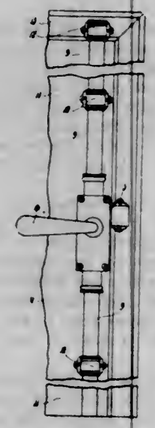
A water heater including in combination a heating member, a boiler, communicating pipes between said heating member and boiler, and a delivery pipe for the heated water, said boiler having formed therein an opening, the delivery pipe and the pipe communicating between the heater and the boiler communicating with the boiler through said opening, and means for preventing direct

communication between said pipes, whereby the heated water is caused to enter the boiler and be commingled



with the water therein before passing into the delivery pipe.

1,064,002. LOCK. SAMUEL ROWLAND PARKES, Willenhall, England. Filed Nov. 1, 1912. Serial No. 729,027. (Cl. 70—74.)

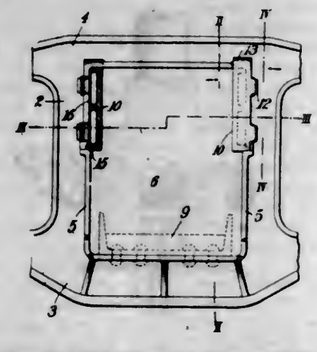


1. In a fastening device for doors, windows and the like, the combination of a spindle; a handle carried by said spindle; a spring advanced latch bolt; a roll back carried by said spindle and engaging said latch bolt whereby the latch bolt is retracted when the handle is moved in a suitable direction; a pair of sliding bolts each having a projecting member; a disk carried by said spindle and having notches which engage with said projections on the bolts; a radially projecting member carried by the spindle engaging an annular slot or opening in the disk whereby said disk will move with the spindle after a limited independent movement thereof.

2. In a fastening device for doors, windows and the like, the combination of a spindle; a handle carried by said spindle; a spring advanced latch bolt; a roll back carried by said spindle and engaging said latch bolt whereby the latch bolt is retracted when the handle is moved in a suitable direction; a pair of sliding bolts each having a projecting member; a disk carried by said spindle and having notches which engage with said projections on the bolts; a radially projecting member carried by the spindle engaging an annular slot or opening in the disk whereby said disk will move with the spindle after a limited independent movement of said spindle; and a key actuated locking device for retaining said sliding bolts and spring latch bolt in their advanced positions.

3. In a fastening device for doors, windows and the like, the combination of a spindle; a handle carried by said spindle; a spring advanced latch bolt; a roll back carried by said spindle and engaging said latch bolt whereby the latch bolt is retracted when the handle is moved in a suitable direction; a pair of sliding bolts each having a projecting member; a disk carried by said spindle and having notches which engage with said projections on the bolts; a radially projecting member carried by the spindle engaging an annular slot or opening in the disk whereby said disk will move with the spindle after a limited independent movement of said spindle; and a key actuated lock bolt arranged to advance and engage with the aforementioned roll back to prevent retraction of the spring latch bolt and the sliding bolts.

1,064,003. TRUCK SIDE FRAME. HENRY F. POPE, Cleveland, Ohio, assignor to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 23, 1912. Serial No. 685,809. (Cl. 105—105.)



1. In an integral side frame, an opening therein for the reception of a bolster, said opening having flanges thereabout, bearing plates positioned in the upper part of said opening and having lugs to clamp about said flanges, and being adapted to provide a bearing surface for the bolster and to protect the said frame against injury.

2. In a truck side frame, having therein an opening for a bolster, columns at the sides of said openings, bearing plates for the bolster in the upper part of said opening adapted to be detachably secured to said frame by bendable means.

3. In a truck side frame, an opening for a bolster having an enlarged upper portion and a lower portion of sufficient cross-sectional area to admit the bolster in horizontal position, columns at the sides of said opening having recessed upper portions to provide bearing seats, and bearing plates adapted to be detachably secured to said columns on said bearing seats by bendable locking means.

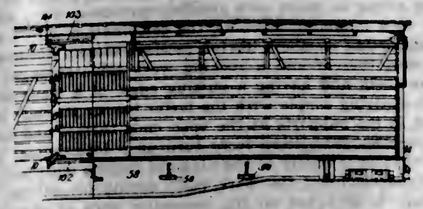
4. In a truck side frame, an opening for a bolster having an enlarged upper portion, and a lower portion of sufficient cross-sectional area to admit the bolster in horizontal position, columns at the sides of said opening having recessed upper portions, a shim plate adapted to be seated in one of said recessed upper portions, and bearing plates for the bolster adapted to be detachably secured to said upper recessed portion of the columns, one of said bearing plates being adapted to take about said shim plate.

5. A truck side frame, having integral columns and compression and tension members, a bolster opening therebetween, and bearing plates for the bolster adapted to be clamped to the upper portions of the columns by bendable means.

[Claims 6 to 9 not printed in the Gazette.]

1,064,004. RAILWAY-CAR. EDWARD POSSON, Chicago, Ill., assignor to National Dump Car Company, Chicago, Ill., a Corporation of Maine. Filed Mar. 9, 1907. Serial No. 361,581. (Cl. 105—14.)

1. In a car, a roof door, carlines, and longitudinal roof members surrounding the door opening, said carlines and longitudinal members being formed with grooves beneath the edges of the door, the groove in the longitudinal members sloping toward the carlines.



2. In a car, a dump door provided with a projection on its under surface adapted to co-act with the door operating mechanism, and a metal casing embracing the edge of the door and said projection.

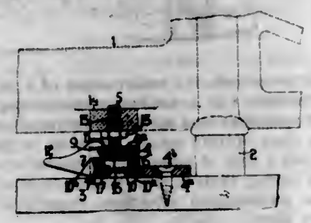
3. In a car, a dump door provided with an incline on its under surface, and an integral metal casing embracing the edge of the door and said incline.

4. In a dump car, a door operating shaft, a radially projecting latch pivotally mounted thereon, and means for securing the latch to the side sills.

5. In a dump car, a staple upon a stationary part of the car, a door operating shaft, and a member pivoted thereon having a slot adapted to be passed over said staple.

[Claims 6 to 18 not printed in the Gazette.]

1,064,005. DESK-CLAMP FOR TYPE-WRITING MACHINES. LORENZ L. PRITZL, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 16, 1910. Serial No. 555,816. (Cl. 45—52.)



1. The combination with a base-board, of a type-writing machine frame, a catch extending downwardly from lugs on the sides of the base of said frame, a socket on said base-board located to receive said catch within the same and closely embracing said catch so as to determine the position of said machine frame, a latch having two flat edges arranged at an angle to each other pivotally mounted on one side of said socket and projecting into the interior thereof to engage said catch ears, for securing said socket to said base-board, located solely on the opposite side of said socket from said latch, leaving said latch free to move into stopping engagement with said base-board, and a single spring located within said socket and engaging said latch to hold it in both its locked and unlocked positions with one or the other of its flat edges in engagement with the base board.

2. The combination with a base-board, of a type-writing machine frame, a catch extending downwardly from lugs on the sides of the base of said frame, a socket on said base-board located to receive said catch within the same and closely embracing said catch so as to determine the position of said machine frame, a latch pivotally mounted on one side of said socket and projecting into the interior thereof to engage said catch, and ears, for securing said socket to said base-board, located solely on the opposite side of said socket from said latch, leaving said latch free to move into stopping engagement with said base-board; said catch having a dished head, and said latch having an under-cut hook to prevent accidental mutual disengagement.

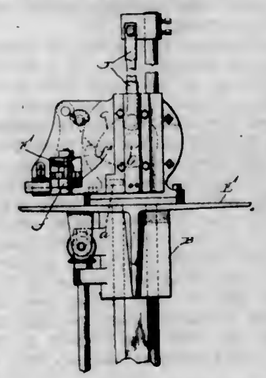
1,064,006. RULE. GUSTAVO A. QUIRÓS, Sancti Spiritus, Cuba. Filed May 25, 1912. Serial No. 699,756. (Cl. 33—19.)



1. A rule comprising a body, spaced rollers mounted in said body, a ratchet wheel mounted adjacent the outer end of each of said rollers, pawls carried by said body and adapted to engage said ratchet wheels, and means rotatably mounted in each end of said body for moving the adjacent pawl out of engagement with its ratchet wheel.

2. A rule comprising a body having a longitudinal recess in one surface thereof, end and intermediate bearings in said recess, a shaft rotatably mounted in said bearings, spaced rollers carried by said shaft, a ratchet wheel carried by said shaft adjacent the outer end of each of said rollers, pawls carried transversely of said body and adapted to engage said ratchet wheels, and means rotatably mounted in each end of said body for moving the adjacent pawl out of engagement with its ratchet wheel.

1,064,007. MACHINE FOR MAKING AND DRIVING CORRUGATED SHEET-METAL FASTENERS. WILLIAM H. RAY, St. Joseph, Mich., assignor, by mesne assignments, to Saranac Machine Co., St. Joseph, Mich., a Corporation of Michigan. Filed Aug. 8, 1907. Serial No. 387,602. (Cl. 1—9.)



1. A machine for making and driving corrugated sheet metal fasteners, comprising means for feeding the strip or ribbon of metal in an uncorrugated condition, means for cutting off a length of said strip or ribbon of metal, means for then forming the compound curves therein, and mechanism for then driving the fastener thus formed.

2. A machine for making and driving corrugated sheet metal fasteners, comprising means for feeding the strip or ribbon of metal in an uncorrugated condition, suitable instrumentalities for forming the corrugations in the metal after it has been fed into position for driving, and mechanism for then driving the fastener thus formed, and means for cutting off a length of the strip.

3. In a machine of the class described, the combination of means for feeding the strip or ribbon of metal in an uncorrugated condition, cutting and driving devices, and means for forming the corrugations in the fastener after the metal has been fed into position for driving.

4. In a machine of the class specified, the combination of feed mechanism for feeding the strip or ribbon of metal in an uncorrugated condition, cutting and driving instrumentalities to which the strip or ribbon of metal is fed, and means for forming the corrugations in the fastener after the metal has been fed into position for cutting and driving.

5. In a machine of the class specified, suitable means for feeding the strip or ribbon of sheet metal, cutting and driving instrumentalities to which the metal is fed in suitable condition, and means moving simultaneously with the cutting device for forming compound curves in the fastener after the metal is fed into position for cutting and driving.

[Claims 6 to 16 not printed in the Gazette.]

1,064,008. HAT-PIN ATTACHMENT. FRANCIS READ, Ireland Island, La Poile, Newfoundland. Filed June 5, 1912. Serial No. 701,781. (Cl. 24—155.)



1. The combination with a hat pin provided near its free end with an annular groove, of a detachable holding element, comprising a substantially circular sheet-metal body portion formed curved in cross-section and provided substantially centrally thereof with an opening, oppositely arranged spring strips carried by the body portion, said spring strips being bent between their ends forming normally approximately parallel portions, the spring strips being adapted to enter the annular groove at their points of bending, the free ends of the outer portions terminating near the body portion, a protecting sleeve to receive the pointed end of the pin, and means to connect the protecting sleeve with the body portion and retain the same spaced therefrom.

2. The combination with a hat pin provided near its free end with an annular groove, of a detachable holding device comprising an apertured body portion stamped from a section of sheet metal and having two diametrically arranged pairs of extensions, an ornamental element spaced from the body portion and connected with the extensions in one pair, a protecting casing carried by the ornamental element to receive the pointed end of the pin, the extensions in the other pair being bent upon themselves between their ends for forming converging clamping elements, the inner ends of said clamping elements adapted to enter within the annular groove, each clamping element being formed of inner and outer spaced spring arms, and the outer spring arm extending outwardly beyond the inner spring arm and being bent inwardly about the same and adapted to disengage the inner ends of said clamping elements from said annular groove.

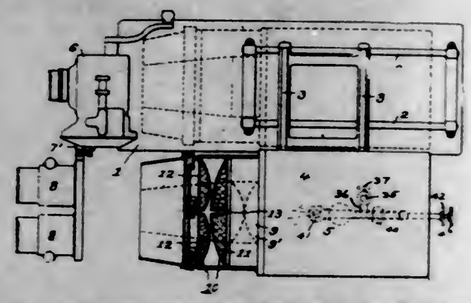
1,064,009. TRIMMING-MACHINE. JOHN A. ROBERTSON and GARSHOM A. RIGGS, Rochester, N. Y., assignors to Eastman Kodak Co., Rochester, N. Y., a Corporation of New York. Filed Nov. 7, 1910. Serial No. 591,044. (Cl. 164—43.)



1. In a trimming machine, the combination with a pair of supporting members having recesses therein opening at the ends thereof and a rocking work table arranged between them and having a cutting edge, of a blade forming a shearing couple with the latter having its ends journaled in the supports at the open ends of the latter and at points above the table permitting it to turn on a longitudinal axis and to yield laterally of the plane of cutting movement by the engagement of the work table during the cutting operation, downward extensions at the ends of the blade in alinement with the recesses of the support and coil springs housed in the recesses of the supports and connected to the extensions at the respective ends of the blade acting to resist such yielding movement of the latter.

2. In a trimming machine, the combination with a pair of supporting members having recesses therein opening at the ends thereof and a rocking work table arranged between them and having a cutting edge, of a blade forming a shearing couple with the latter having its ends journaled in the supports at the open ends thereof and above the recesses permitting it to turn on a longitudinal axis and to yield laterally of the plane of cutting movement by the engagement of the work table during the cutting operation, draw heads on the respective ends of the blade and coil springs connected to the draw heads and housed within the recesses of the supports, said springs acting to resist the yielding movement of the blade.

1,064,010. OPTICAL PROJECTING APPARATUS. ALVAH C. ROEBUCK, Chicago, Ill., assignor to The Enterprise Optical Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1909. Serial No. 477,436. Cl. 88—24.)



1. In a stereopticon, the combination of a pair of stereopticon objectives and a condenser comprising a pair of inner plano-spherical lens members arranged side by side and having their optical centers adjacent to their adjoining edges, and a pair of outer lens members arranged side by side and having their optical centers in alinement with those of the stereopticon objectives respectively, substantially as set forth.

2. In a stereopticon, the combination of a pair of stereopticon objectives and a condenser comprising a pair of inner plano-spherical lens members arranged side by side and separated by a diametric gap and having their optical centers adjacent to their adjoining edges, and a pair of outer lens members arranged side by side and having their optical centers in alinement with those of the stereopticon objectives respectively, substantially as set forth.

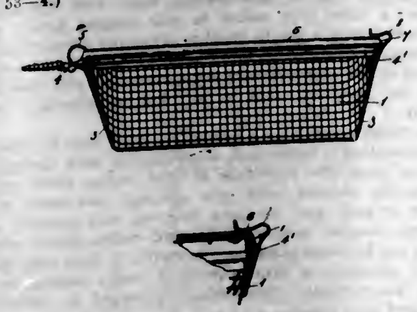
3. In a stereopticon, the combination of a pair of stereopticon objectives and a condenser comprising a pair of inner plano-spherical lens members arranged side by side and having their optical centers adjacent to their adjoining edges, and a pair of outer plano-spherical lens members arranged side by side and having their optical centers in alinement with those of the stereopticon objectives, substantially as set forth.

4. In a stereopticon, the combination of a pair of stereopticon objectives and a condenser comprising a pair of inner plano-spherical lens members arranged side by side and separated by a diametric gap and having their optical centers adjacent to their adjoining edges, and a pair of outer plano-spherical lens members arranged side by side and having their optical centers in alinement with those of the stereopticon objectives respectively, substantially as set forth.

5. In a stereopticon, the combination of a plurality of stereopticon objectives, and a condenser comprising a plurality of inner plano-spherical lens members arranged side by side and having their optical centers adjacent to their adjoining edges, and a plurality of outer lens members having their optical centers in alinement with those of the stereopticon objectives respectively, substantially as set forth.

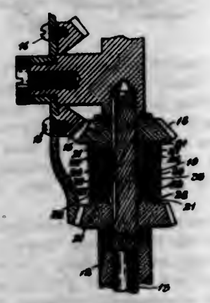
[Claims 6 to 16 not printed in the Gazette.]

1,064,011. CORN-POPPER. OSCAR S. RYERSON, Worcester, Mass. Filed Mar. 20, 1912. Serial No. 684,983. (Cl. 53—4.)



A corn popper having a dish-shaped body portion formed of wire mesh, a flat cover hinged thereto, a binding for the upper edges of the body portion comprising a strip of sheet metal folded over upon itself and compressed on the wire mesh, said folded strip being fluted or corrugated in a direction parallel with its length and provided above such corrugation with an upstanding rim, and the cover having a sheet metal binding similarly secured to the edges thereof, said last mentioned binding having a groove into which the upper edge of said rim fits, and also being provided with a peripheral, downwardly extending flange adapted to overlap and snugly embrace said rim, whereby the rigidity of the structure is increased.

1,064,012. CHANGE-SPEED GEARING. HENRY A. RYTHER, Montague, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed July 1, 1912. Serial No. 706,863. (Cl. 74—59.)



1. In change speed gearing, the combination with a spindle, of two pinions loose thereon, a compound gear having large and small series of teeth meshing respectively with said two pinions, and mechanism connected with the spindle intermediate said pinions and including sliding pawls having beveled ends for connecting the pinions to the spindle for either fast or slow movement in either or both directions.

2. In change speed gearing, the combination with a spindle, of two pinions loose thereon, a compound gear having large and small series of teeth meshing respectively with said two pinions, a barrel secured to the spindle between said two pinions, and pawls and controlling devices carried by said barrel for controlling both the speed and the character of the motion imparted to said spindle.

3. In change speed gearing, the combination with a spindle, of a compound gear having two series of teeth, two pinions loose on the spindle and in mesh with the two series of teeth at the same side of the axis of said compound gear whereby rotation of said gear will rotate both pinions simultaneously in the same direction, the opposing faces of the pinions having ratchet teeth, a barrel secured to the spindle between said pinions, a pair of oppositely beveled pawls for each pinion carried by said barrel, and means for selectively rendering said pawls active or inactive.

4. In change speed gearing, the combination with a spindle, of two pinions loose thereon, a compound gear having large and small series of teeth meshing respectively with said two pinions, a barrel secured to the spindle between said two pinions, two pairs of pawls mounted to slide longitudinally of said barrel, and a rotatable cam ring for controlling said pawls.

5. In change speed gearing, the combination with a spindle, of two pinions loose thereon, a compound gear having large and small series of teeth meshing respectively with said two pinions, a barrel secured to the spindle between said two pinions, two pairs of pawls mounted to slide longitudinally of said barrel, one pair of pawls being adapted to be projected from one end of the barrel and the other pair from the other end of said barrel, and a rotatable cam ring for controlling said pawls.

[Claim 6 not printed in the Gazette.]

1,064,013. DRAW-CLASP. CHARLES E. SACKETT, Danbury, Conn. Filed June 8, 1912. Serial No. 702,633. (Cl. 24—120.)



1. In a draw clasp, the combination of two body plates hinged and clasped together to form a space between them open at the ends providing a passage between them, an intermediate plate arranged midway between said body plates pivotally supported at their hinged side, sharp projections affixed to the upper side of said intermediate plate inclined toward one open end of said passage, and bearing flexibly at their sharp ends against the under side of one of the body plates, corresponding sharp projections affixed to the other side of said intermediate plate inclined toward the opposite open end of said passage and bearing flexibly at their sharp ends against the under side of the other body plate, said projections being arranged in reverse relation to each other.

2. In a draw clasp, the combination of two body plates hinged together at one edge and with a separable clasp connection at the other edge, the plates being formed to provide a space therebetween, said space being open at the ends providing a passage through said clasp parallel with said body plates and their hinge pivot, a swinging intermediate plate arranged between said body plates pivotally supported at their hinge side and parallel with them, said intermediate plate dividing said passage into two compartments through which may be drawn cords, tapes, shoe laces, ribbons and the like, in separated and contrary directions, and longitudinal flexible members arranged in said compartments, one end of said members bearing against said clasp body plates, the other end against said intermediate plate, one end of said longitudinal members being fixed, the other end being detached flexible and pointed.

3. In a draw clasp, the combination of two body plates hinged together at one edge and with a separable clasp connection at the other edge, the plates being formed to provide a space between them, a swinging intermediate plate arranged in said space parallel with said body plates and pivotally supported between them, said intermediate plate dividing said space into two compartments, means arranged in said compartments to automatically engage and compress any materials passing through either of them

5. In a machine of the class specified, suitable means for feeding the strip or ribbon of sheet metal, cutting and driving instrumentalities to which the metal is fed in suitable condition, and means moving simultaneously with the cutting device for forming compound curves in the fastener after the metal is fed into position for cutting and driving.

[Claims 6 to 16 not printed in the Gazette.]

1,064,008. HAT-PIN ATTACHMENT. FRANCIS READ, Ireland Island, La Poile, Newfoundland. Filed June 5, 1912. Serial No. 701,781. (Cl. 24—155.)



1. The combination with a hat pin provided near its free end with an annular groove, of a detachable holding element, comprising a substantially circular sheet-metal body portion formed curved in cross-section and provided substantially centrally thereof with an opening, oppositely arranged spring strips carried by the body portion, said spring strips being bent between their ends forming normally approximately parallel portions, the spring strips being adapted to enter the annular groove at their points of bending, the free ends of the outer portions terminating near the body portion, a protecting sleeve to receive the pointed end of the pin, and means to connect the protecting sleeve with the body portion and retain the same spaced therefrom.

2. The combination with a hat pin provided near its free end with an annular groove, of a detachable holding device comprising an apertured body portion stamped from a section of sheet metal and having two diametrically arranged pairs of extensions, an ornamental element spaced from the body portion and connected with the extensions in one pair, a protecting casing carried by the ornamental element to receive the pointed end of the pin, the extensions in the other pair being bent upon themselves between their ends for forming converging clamping elements, the inner ends of said clamping elements adapted to enter within the annular groove, each clamping element being formed of inner and outer spaced spring arms, and the outer spring arm extending outwardly beyond the inner spring arm and being bent inwardly about the same and adapted to disengage the inner ends of said clamping elements from said annular groove.

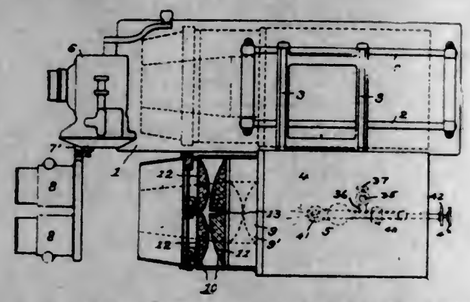
1,064,009. TRIMMING-MACHINE. JOHN A. ROBERTSON and GARSHOM A. RIGGS, Rochester, N. Y., assignors to Eastman Kodak Co., Rochester, N. Y., a Corporation of New York. Filed Nov. 7, 1910. Serial No. 591,044. (Cl. 164—43.)



1. In a trimming machine, the combination with a pair of supporting members having recesses therein opening at the ends thereof and a rocking work table arranged between them and having a cutting edge, of a blade forming a shearing couple with the latter having its ends journaled in the supports at the open ends of the latter and at points above the table permitting it to turn on a longitudinal axis and to yield laterally of the plane of cutting movement by the engagement of the work table during the cutting operation, downward extensions at the ends of the blade in alinement with the recesses of the support and coil springs housed in the recesses of the supports and connected to the extensions at the respective ends of the blade acting to resist such yielding movement of the latter.

2. In a trimming machine, the combination with a pair of supporting members having recesses therein opening at the ends thereof and a rocking work table arranged between them and having a cutting edge, of a blade forming a shearing couple with the latter having its ends journaled in the supports at the open ends thereof and above the recesses permitting it to turn on a longitudinal axis and to yield laterally of the plane of cutting movement by the engagement of the work table during the cutting operation, draw heads on the respective ends of the blade and coil springs connected to the draw heads and housed within the recesses of the supports, said springs acting to resist the yielding movement of the blade.

1,064,010. OPTICAL PROJECTING APPARATUS. ALVAH C. ROEBUCK, Chicago, Ill., assignor to The Enterprise Optical Mfg. Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 11, 1909. Serial No. 477,436. Cl. 88—24.)



1. In a stereopticon, the combination of a pair of stereopticon objectives and a condenser comprising a pair of inner plano-spherical lens members arranged side by side and having their optical centers adjacent to their adjoining edges, and a pair of outer lens members arranged side by side and having their optical centers in alinement with those of the stereopticon objectives respectively, substantially as set forth.

2. In a stereopticon, the combination of a pair of stereopticon objectives and a condenser comprising a pair of inner plano-spherical lens members arranged side by side and separated by a diametric gap and having their optical centers adjacent to their adjoining edges, and a pair of outer lens members arranged side by side and having their optical centers in alinement with those of the stereopticon objectives respectively, substantially as set forth.

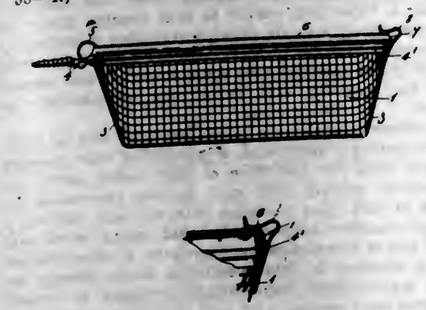
3. In a stereopticon, the combination of a pair of stereopticon objectives and a condenser comprising a pair of inner plano-spherical lens members arranged side by side and having their optical centers adjacent to their adjoining edges, and a pair of outer plano-spherical lens members arranged side by side and having their optical centers in alinement with those of the stereopticon objectives, substantially as set forth.

4. In a stereopticon, the combination of a pair of stereopticon objectives and a condenser comprising a pair of inner plano-spherical lens members arranged side by side and separated by a diametric gap and having their optical centers adjacent to their adjoining edges, and a pair of outer plano-spherical lens members arranged side by side and having their optical centers in alinement with those of the stereopticon objectives respectively, substantially as set forth.

5. In a stereopticon, the combination of a plurality of stereopticon objectives, and a condenser comprising a plurality of inner plano-spherical lens members arranged side by side and having their optical centers adjacent to their adjoining edges, and a plurality of outer lens members having their optical centers in alinement with those of the stereopticon objectives respectively, substantially as set forth.

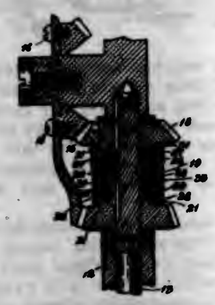
[Claims 6 to 16 not printed in the Gazette.]

1,064,011. CORN-POPPER. OSCAR S. RYERSON, Worcester, Mass. Filed Mar. 20, 1912. Serial No. 684,983. (Cl. 53—4.)



A corn popper having a dish-shaped body portion formed of wire mesh, a flat cover hinged thereto, a binding for the upper edges of the body portion comprising a strip of sheet metal folded over upon itself and compressed on the wire mesh, said folded strip being fluted or corrugated in a direction parallel with its length and provided above such corrugation with an upstanding rim, and the cover having a sheet metal binding similarly secured to the edges thereof, said last mentioned binding having a groove into which the upper edge of said rim fits, and also being provided with a peripheral, downwardly extending flange adapted to overlap and snugly embrace said rim, whereby the rigidity of the structure is increased.

1,064,012. CHANGE-SPEED GEARING. HENRY A. RYTHER, Montague, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed July 1, 1912. Serial No. 706,863. (Cl. 74—59.)



1. In change speed gearing, the combination with a spindle, of two pinions loose thereon, a compound gear having large and small series of teeth meshing respectively with said two pinions, and mechanism connected with the spindle intermediate said pinions and including sliding pawls having beveled ends for connecting the pinions to the spindle for either fast or slow movement in either or both directions.

2. In change speed gearing, the combination with a spindle, of two pinions loose thereon, a compound gear having large and small series of teeth meshing respectively with said two pinions, a barrel secured to the spindle between said two pinions, and pawls and controlling devices carried by said barrel for controlling both the speed and the character of the motion imparted to said spindle.

3. In change speed gearing, the combination with a spindle, of a compound gear having two series of teeth, two pinions loose on the spindle and in mesh with the two series of teeth at the same side of the axis of said compound gear whereby rotation of said gear will rotate both pinions simultaneously in the same direction, the opposing faces of the pinions having ratchet teeth, a barrel secured to the spindle between said pinions, a pair of oppositely beveled pawls for each pinion carried by said barrel, and means for selectively rendering said pawls active or inactive.

4. In change speed gearing, the combination with a spindle, of two pinions loose thereon, a compound gear having large and small series of teeth meshing respectively with said two pinions, a barrel secured to the spindle between said two pinions, two pairs of pawls mounted to slide longitudinally of said barrel, and a rotatable cam ring for controlling said pawls.

5. In change speed gearing, the combination with a spindle, of two pinions loose thereon, a compound gear having large and small series of teeth meshing respectively with said two pinions, a barrel secured to the spindle between said two pinions, two pairs of pawls mounted to slide longitudinally of said barrel, one pair of pawls being adapted to be projected from one end of the barrel and the other pair from the other end of said barrel, and a rotatable cam ring for controlling said pawls.

[Claim 6 not printed in the Gazette.]

1,064,013. DRAW-CLASP. CHARLES E. SACKETT, Danbury, Conn. Filed June 8, 1912. Serial No. 702,638. (Cl. 24—120.)



1. In a draw clasp, the combination of two body plates hinged and clasped together to form a space between them open at the ends providing a passage between them, an intermediate plate arranged midway between said body plates pivotally supported at their hinged side, sharp projections affixed to the upper side of said intermediate plate inclined toward one open end of said passage, and bearing flexibly at their sharp ends against the under side of one of the body plates, corresponding sharp projections affixed to the other side of said intermediate plate inclined toward the opposite open end of said passage and bearing flexibly at their sharp ends against the under side of the other body plate, said projections being arranged in reverse relation to each other.

2. In a draw clasp, the combination of two body plates hinged together at one edge and with a separable clasp connection at the other edge, the plates being formed to provide a space therebetween, said space being open at the ends providing a passage through said clasp parallel with said body plates and their hinge pivot, a swinging intermediate plate arranged between said body plates pivotally supported at their hinge side and parallel with them, said intermediate plate dividing said passage into two compartments through which may be drawn cords, tapes, shoe laces, ribbons and the like, in separated and contrary directions, and longitudinal flexible members arranged in said compartments, one end of said members bearing against said clasp body plates, the other end against said intermediate plate, one end of said longitudinal members being fixed, the other end being detached flexible and pointed.

3. In a draw clasp, the combination of two body plates hinged together at one edge and with a separable clasp connection at the other edge, the plates being formed to provide a space between them, a swinging intermediate plate arranged in said space parallel with said body plates and pivotally supported between them, said intermediate plate dividing said space into two compartments, means arranged in said compartments to automatically engage and compress any materials passing through either of them

independently or together, and means arranged on one of said clasp body plates for attaching said clasps to any fixed object.

1,064,014. FAUCET. DANIEL SCANLAN, St. Louis, Mo., assignor of one-third to Harry E. Harder, St. Louis, Mo. Filed Feb. 28, 1912. Serial No. 680,426. (Cl. 137—26.)



1. A faucet comprising, in combination, a casing arranged to be mounted in a permanent support and having a horizontal opening therethrough, a number of substantially horizontal inlet passages which extend from the rear face of said casing substantially parallel with said opening, extensions of said inlet passages entering said opening and disposed radially with respect to the opening, a chamber supported by said casing, a number of radial discharge passages leading from said opening in said casing to said chamber, a valve plug in said opening in said casing, a single passage extending radially through said valve plug, whereby liquid may be conducted from any one of said inlet passage extensions to a corresponding outlet passage, and means for operating said valve plug, substantially as specified.

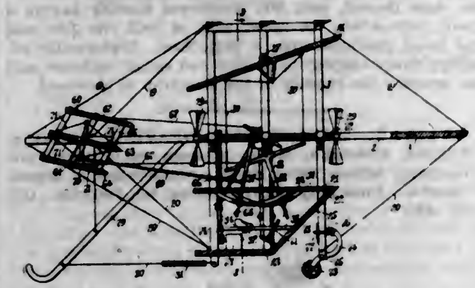
2. A faucet comprising a valve casing arranged to be mounted in a permanent support and having a horizontal tapering opening therethrough, a number of inlet passages extending from the rear of said casing substantially parallel with said opening, extensions of said inlet passages entering said opening and disposed radially with respect thereto, a common discharge chamber supported by said casing, a valve plug operatively mounted in said opening, a single passage extending diametrically therethrough, whereby liquid may be conducted from any one of said inlet passage extensions to said common discharge chamber, a hand wheel attached to said valve plug for manipulating the same, a dial attached to the front face of said valve casing; and a coöperating pointer carried by said hand wheel for indicating the position of said valve plug, substantially as specified.

3. A faucet comprising a casing having an opening therein arranged to receive a valve plug, a series of L-shaped inlet passages arranged in the upper part of said casing and extending from the back of said casing forwardly and downwardly into said opening, a plurality of outlet passages leading from said opening in diametrical alinement with the portions of said inlet passages entering said opening, respectively, a chamber formed in said valve casing arranged to receive liquids discharged from all of said outlet passages, a single discharge outlet from said chamber, a valve plug operatively mounted in said opening in said casing, a single passage diametrically through said valve plug arranged to communicate with said inlet and outlet passages, a handle for rotating said valve plug, and a dial indicator coöperating with the handle for indicating the various positions of the valve, substantially as specified.

4. A faucet comprising a valve casing provided with a substantially horizontal opening therethrough, a series of L-shaped passages arranged in the upper part of said casing and extending from the back of said casing, forwardly and downwardly into said opening, a series of outlet passages extending downwardly from the opening formed in said casing, a common discharge chamber in communication with the lower ends of said outlet passages, a discharge outlet leading downwardly from said discharge chamber, a valve plug seated in said opening formed in said valve casing, a single passage extending diametrically therethrough arranged to bring selected ones of said inlet and said outlet passages into communication, and manual means for revolving said valve plug, substantially as specified.

5. A faucet comprising a casing provided with an opening constituting a valve seat, a number of inlet passages extending from the rear face of said casing above and substantially parallel with said opening, downward extensions of said inlet passages entering said opening, a discharge chamber supported by said casing below said opening and in communication therewith, a valve plug operatively mounted in said opening, a single passage extending diametrically therethrough arranged to connect any desired inlet passage with said discharge chamber, and means for operating said valve plug, substantially as specified.

1,064,015. FLYING-MACHINE. FRED LOUIS SCHAUFLER, Mattoon, Ill., assignor to National Aerial Navigation & Equipment Co., Cullman, Ala., a Corporation. Filed Nov. 15, 1910. Serial No. 592,425. (Cl. 244—14.)



1. In a flying machine, the combination with a frame, of a supporting plane on said frame, having an opening therein, an elevating plane pivotally mounted in vertical alinement with said opening, propelling means mounted on said frame, means for manipulating said elevating plane, a rudder movably mounted in said opening, and planes pivotally mounted on said frame on each side of said supporting plane.

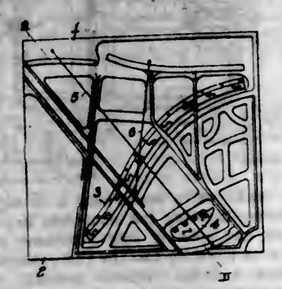
2. In a flying machine, the combination of a main supporting plane having an opening therein, a rudder operable in said opening, an elevational plane mounted above the main plane and in alinement with its said opening, and equilibrium planes mounted at the sides of the main plane and on a level therewith.

3. The combination of a main supporting plane having an opening therein, a rudder operable in said opening, an elevational plane mounted above the main plane and in alinement with its said opening, equilibrium planes mounted at the sides of the main plane and on a level therewith, a cabin supported by the machine below said main supporting plane, and connections for operating said rudder, said elevational plane and said equilibrium planes from the said cabin.

4. In a flying machine, the combination of a main horizontal supporting plane which is substantially U-shaped and which has a central uncovered portion open at its rear end, a rudder mounted within the rear end of said opening, an elevational plane mounted above the main plane at a substantially central point and alined bove its said uncovered portion or opening, and propellers mounted in the said uncovered portion or opening of the said main plane below the elevational plane and forwardly of the rudder.

1,064,016. [WITHDRAWN.]

1,064,017. PIANO-BRIDGE. GEORGE SCHROEDER, Pittsburgh, Pa. Filed Oct. 30, 1912. Serial No. 728,711. (Cl. 84—139.)



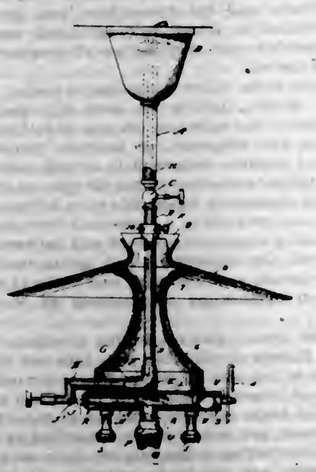
1. The combination of a piano sounding board, and a bridge secured directly to said board, said bridge being constructed of hollow curved vibratory metal.

2. The combination of a piano sounding board, a bridge constructed of hollow-vibratory metal of sheet form, and means for securing said bridge to said sounding board, one edge of said bridge remaining unconnected to any surrounding structure and free to vibrate.

3. The combination of a piano sounding board, and a metal bridge secured to said board, said bridge being of bell form in cross section having its open end facing the sounding board and having one side free to vibrate.

4. The combination of a piano sounding board, a hollow bridge constructed of vibratory metal, and a single line of securing members attaching said bridge to said board, one side of said bridge being free to vibrate.

1,064,018. VAPOR-LAMP. EDWARD SEITZ, Peoria, Ill. Filed Sept. 12, 1910. Serial No. 581,716. (Cl. 67—50.)



1. In a vapor lamp, the combination of a conduit provided with a series of burners, a vapor discharge nozzle for introducing vapor to the conduit, a pipe connected to the nozzle and having a part cast with the said conduit, a generator burner suspended beneath the said part and having a position adjacent to the burners of the said series for lighting the same, a valve in control of the vapor discharge from the nozzle, and a valve in control of the said series of burners and situated in said conduit between the said series and the generator burner.

2. In a vapor lamp, the combination of a substantially ring-shaped conduit having a series of burners spaced apart upon the same, a conduit extending across the ring and having communication at one end with the ring and opening through the latter at its other end and open at that end outside the ring but closed from said ring, a vapor pipe having a discharge orifice opposite the open end of the second named conduit, a generator-burner carried by the latter and communicating therewith, and having the vapor-pipe above the same for receiving heat therefrom, and a single valve in the ring for interrupting communication of its passage with the said series of burners and controlling all of the latter.

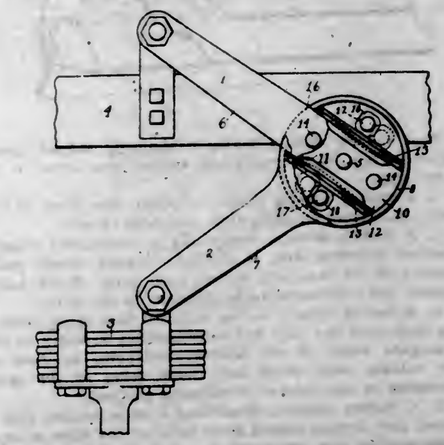
3. In a vapor lamp, the combination of a substantially ring-shaped conduit having a series of burners mounted thereon, a vapor conduit extending across and through the passage of the ring at one side but closed therefrom and having an open outer end outside the ring, the said vapor conduit communicating with the ring at its opposite side, a burner in communication with the said vapor conduit, and a valve between the said burner and the outlet from the latter to the ring.

4. In a vapor lamp, a suspended fuel pipe, a conduit for vapor lying in substantially a horizontal position and having an integral extension suspended from the fuel pipe, a vapor discharge nozzle as a part of the pipe and adapted to discharge into the conduit, a burner suspended beneath the vapor conduit and adapted for heating both it and the fuel pipe, a second vapor pipe connected with the first and provided with a series of burners, and a valve located in one of the conduits between the first said burner and the series of burners.

5. In a vapor lamp, the combination of a fuel supply pipe, a hollow ring supported by it and provided with an opening at one side, a vapor supply pipe communicating with the opening and the ring, a valve within the ring to govern the flow of vapor from the pipe into the said ring, a burner communicating with the ring, and a generator connected with the fuel supply pipe and including an orifice lying opposite and discharging vapor into the said vapor pipe.

[Claims 6 to 9 not printed in the Gazette.]

1,064,019. SHOCK-ABSORBER. GEORGE E. SHIPPEY, Pittsfield, Mass. Filed May 13, 1912. Serial No. 697,034. (Cl. 21—105.)



1. In a device of the class described, two arms arranged convergently and pivotally secured together at their converging ends, a fixed member carried by one of the arms,

and a resilient member interposed between the fixed member and the pivotal point of the arms and carried by the other of the arms for yieldingly opposing the fixed member when the arms are moved relatively to each other.

2. In a device of the class described, two arms arranged convergently and pivotally secured together at a point near their converging ends, fixed members carried by one of the arms on opposite sides of the point of pivot, and springs interposed between the fixed members and carried by the other of the arms for yieldingly opposing the fixed members when the arms are moved relatively to each other.

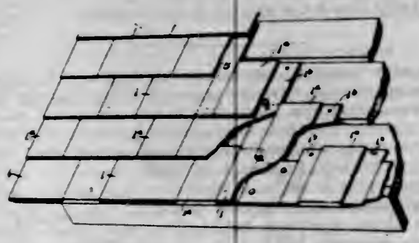
3. A device of the class described comprising levers pivotally secured together in convergent relation, a thrust carried by one of the levers, and a spring carried by the other of the levers and disposed between the thrust and the pivotal point of the levers, said thrust being arranged to flex the spring when the levers are moved relatively to each other, the stress thus exerted by the thrust upon the spring being gradually increased to the extreme limit of movement of the levers.

4. In a device of the class described, an arm carrying fixed spaced stops, and a separate arm pivotally secured to said other arm at a point intermediate said stops and carrying resilient elements interposed between the stops and the point of pivot of the arms for yielding opposing the stops when the arms are moved relatively to each other.

5. In a device of the class described, a casing, leaf-springs within the casing and disposed in parallel spaced relation, compression members for engaging the springs, a radial arm projecting from the casing and arranged to actuate the springs toward the compression members, and a separate radial arm projecting from the casing at an angle to said other arm and arranged to actuate the compression members toward the springs, when the arms are moved relatively to each other.

[Claims 6 and 7 not printed in the Gazette.]

1,064,020. ROOFING-SHINGLE. CHARLES W. R. SMITH, Medina, Ohio. Filed July 29, 1912. Serial No. 711,946. (Cl. 108—10.)



1. A roofing shingle having a similarly shaped raised panel portion of like thickness spaced from three of its sides only.

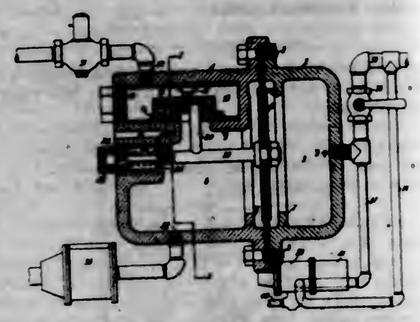
2. A roofing shingle having a raised face panel of the same thickness extending from one edge thereof.

3. A roofing shingle, comprising a rectangular shingle member provided with a similarly shaped raised panel portion on its face side spaced from three of the edges thereof and corresponding in thickness to the latter.

4. A roofing shingle having a raised face panel extending flush with one edge and corresponding in width to the aggregate width of the lateral overlapping portions of the shingle, said raised face panel being of the same thickness as said lateral overlapping portions.

5. A roofing shingle, comprising a main section and a raised face section spaced from three of the sides of said main section and extending flush with one of its sides, each of the lateral marginal portions of said main section corresponding in width to half the width of said raised face section and being of the same thickness as the latter.

1,064,021. ENGINE-BRAKE APPLICATION AND MAINTENANCE VALVE. JACOB RUSH SNYDER, Pittsburgh, Pa., assignor to Percy E. Donner, Pittsburgh, Pa. Filed July 11, 1912. Serial No. 708,914. (Cl. 188—1.)



1. An air brake valve comprising a casing, a movable abutment therein dividing the same into two chambers, a connection to one side of said abutment arranged for the admission of pressure thereto and exhaustion of pressure therefrom, a brake cylinder normally open to the other side of said abutment, and a single valve controlled by said abutment and controlling communication between a source of fluid pressure and the brake cylinder and between the brake cylinder and the atmosphere.

2. An air brake valve comprising a casing, a movable abutment therein dividing the same into two chambers, a connection to the casing on one side of said abutment arranged for the admission of pressure thereto and exhaustion of pressure therefrom to actuate said abutment, a brake cylinder normally open to the chamber on the opposite side of said abutment, and a single slide valve actuated from said abutment and controlling a connection between the brake cylinder and a source of pressure and between the brake cylinder and the atmosphere.

3. An air brake valve comprising a casing, a movable abutment therein dividing the same into two chambers, a connection to one side of said abutment arranged for the admission of pressure thereto and exhaustion of pressure therefrom, a brake cylinder connected to the other side of said abutment, a single valve controlled by said abutment and controlling communication between a source of fluid pressure and the brake cylinder and between the brake cylinder and the atmosphere, and spring mechanism arranged to return said abutment and valve to neutral position upon equilization of pressures on opposite sides thereof.

4. An air brake valve comprising a casing, a movable abutment therein dividing the same into two chambers, a connection to the casing on one side of said abutment arranged for the admission of pressure thereto and exhaustion of pressure therefrom to actuate said abutment, a brake cylinder connected to the chamber on the opposite side of said abutment, a single slide valve actuated from said abutment and controlling a connection between the brake cylinder and a source of pressure and between the brake cylinder and the atmosphere, and spring mechanism arranged to return said abutment and valve to neutral position upon equalization of pressures on opposite sides thereof.

5. An air brake valve comprising a casing, a movable abutment therein dividing the same into two chambers, a connection to one side of said abutment arranged for the admission of pressure thereto and exhaustion of pressure therefrom, a brake cylinder connected to the other side of said abutment, and a single valve controlled by said abutment and controlling communication between a source of fluid pressure and the brake cylinder and between the brake cylinder and the atmosphere, said valve being arranged to blank the connection between the brake cylinder and source of fluid pressure and between the brake cylinder and the atmosphere upon equalization of pressures on opposite sides of said abutment.

[Claim 6 not printed in the Gazette.]

1,064,022. PACKING. WALTER W. SPADONE, New York, N. Y., assignor to Gutta Percha & Rubber Manufacturing Company, New York, N. Y., a Corporation of New York. Filed May 10, 1911. Serial No. 626,295. (Cl. 121—107.)

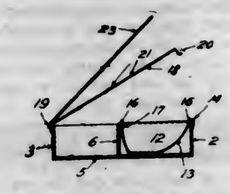


As a new article of manufacture, a packing comprising outside layers of rubber vulcanized to a relatively soft state, and an intermediate layer connected therewith and composed of rubber vulcanized to a relatively hard state.

1,064,023. METHOD OF MAKING LEAD ARSENIATE. CLARENCE B. SPRAGUE, Salt Lake City, Utah, assignor to United States Smelting, Refining & Mining Company, Portland, Me., a Corporation of Maine. Filed Nov. 11, 1909. Serial No. 527,535. (Cl. 23—13.)

The method of making lead arseniate which consists in roasting at a moderate red heat with access of air materials containing lead and arsenic, dissolving the lead arseniate in a solution of caustic alkali, and precipitating the lead arseniate from the solution by neutralization, substantially as described.

1,064,024. CASH-BOX. BRANSON C. STIMMEL, Philadelphia, Pa., assignor to George L. Stimmel, New York, N. Y. Filed June 9, 1910, Serial No. 566,009. Renewed Oct. 25, 1912. Serial No. 727,787. (Cl. 133—11.)



1. A cabinet comprising a case arranged to be open at the top when in use, open-top basin-shaped trays or receptacles in said case arranged to be tipped forwardly and upwardly out of normal position to dump the contents, and means for restraining said trays or receptacles against accidental displacement when the case is in use.

2. A cabinet comprising a case arranged to be open at the top when in use, and open-top basin-shaped trays or receptacles normally resting within said case, said trays or receptacles being hinged to said case at their front edges, whereby they can be tipped forwardly and partly turned over.

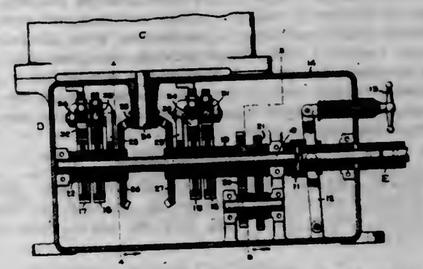
3. A cabinet comprising a case arranged to be open at the top when in use, open-top receptacles or trays with sloping front walls and hinged to said case and arranged to be partly turned over to dump the contents.

4. A cabinet comprising a case arranged to be open at the top when in use, members dividing said case into a plurality of divisions, and open-top receptacles or trays with sloping front walls located in said divisions separately movable out of normal position to dump the contents, said receptacles or trays having edged flanges resting on the upper edges of said dividing members.

5. A cabinet comprising a case arranged to be open at the top when in use, open-top receptacles or trays provided with sloping front walls and hinged to said case to permit them being partly turned over to dump the contents, and a skeleton frame fitting over said receptacles or trays and arranged to hold them from accidental displacement.

[Claims 6 to 8 not printed in the Gazette.]

1,064,025. MOTOR-CONTROLLER. FRED L. STONE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 30, 1911. Serial No. 668,660. (Cl. 172—179.)



1. In combination, an electric motor, a manually operated controller therefor, and stop mechanism driven by the motor and interposed in the path of said controller for causing the rate of movement of the controller to depend upon the rate of rotation of the motor.

2. In combination, an electric motor, a manually operated controller therefor, and means whereby the movement of the controller in either direction is limited to a rate which is proportional to the rate of rotation of the motor.

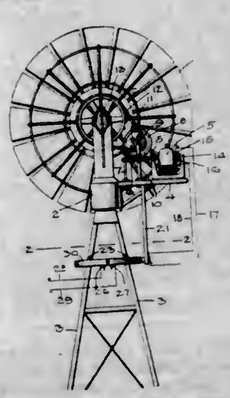
3. In combination, an electric motor, a controller therefor, a stop mechanism for preventing the movement of the controller, and means whereby said mechanism is moved by the motor in advance of the controller so as to permit the latter to follow the movement of the motor.

4. In combination, an electric motor, a controller therefor, and a pawl and ratchet mechanism one member of which is moved by the controller while the other member is moved by the motor in advance of its coöperating member so as to permit the controller to follow the movement of the motor.

5. In combination, an electric motor, a controller therefor movable in two directons to accelerate and retard the motor respectively, and a pair of pawl and ratchet mechanisms one for each direction of movement of the controller, one member of each of said mechanisms being moved by the controller while the other member is moved by the motor in advance of its coöperating member so as to permit the controller to follow the movement of the motor.

[Claims 6 to 9 not printed in the Gazette.]

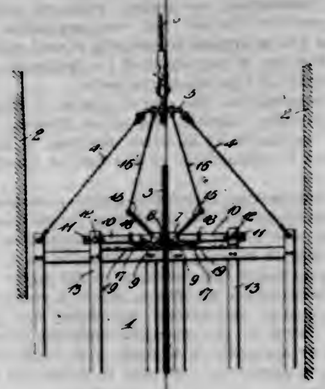
1,064,026. ELECTRICAL GENERATOR. THOMAS K. STRAND, Rolette, N. D. Filed Apr. 3, 1911. Serial No. 618,593. (Cl. 171—315.)



The combination with a windwheel and its rotatable head, of means for supporting the head, a bracket shelf projecting from the head, a downwardly extending arm projecting from the bracket shelf, a generator carried by

the shelf, gearing supported by said shelf and connected with the wind wheel to drive the generator, a hoop encircling the head supporting means, said hoop being formed of insulating material, said hoop having circumferential grooves, contact rings within said grooves, brushes carried by the lower end of the arm and engaged with the contact rings, conducting wires leading from the contact rings, electrical connections between the generator and the brushes whereby when the head is rotated the circuit remains closed, and a movable casing carried by the brushes and engaged over the periphery of the hoop to protect the contact rings.

1,064,027. SAFETY-CATCH FOR ELEVATORS. JAMES TARRO, Cherry, Ill., assignor of one-half to Walter Waite, Cherry, Ill. Filed July 29, 1912. Serial No. 712,145. (Cl. 187—86.)

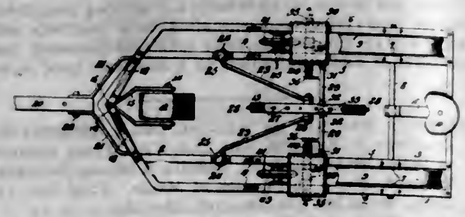


1. A safety catch for elevators comprising a sliding and pivotally mounted rail gripping member, a hoisting cable, a releasing shaft mounted on the cage of the elevator, a crank arm on one end of said shaft, a loop forming the end of said arm and having an operative connection with said gripping member, means to connect the opposite end of said shaft with the hoisting cable of the elevator cage, whereby the shaft is rocked and the gripping member thereby held out of locking engagement with the guide track of the elevator, and means to elevate and operatively engage said gripping member with the guide track when the hoisting mechanism of the elevator cage is broken.

2. In an elevator having a shaft provided with vertically-disposed guide tracks, a cage adapted to travel on said tracks, safety catches comprising track gripping blocks having in one side track engaging notches, adapted to engage the opposite edges of the tracks, block attaching bars connected with said gripping blocks and having a pivotal sliding connection with a portion of the elevator cage, rock shafts operatively mounted on the cage and having on their outer ends crank arms, loops forming the ends of the latter, operatively connected to and embracing the attaching bars of the gripping blocks, crank arms on the inner ends of said shafts, a hoisting cable, chains to connect said crank arms with the hoisting cable of the elevator, whereby while the cable is intact, the rock shafts and crank arms will be actuated to hold said gripping blocks in an inoperative position, and springs engaged with the outer crank arms whereby the shafts and said blocks are actuated to grip the tracks of the elevator should said hoisting cable become broken.

1,064,028. CHECK-ROW CORN-PLANTER. MARTIN E. THOMAS, Bowling Green, Ky., assignor of one-fourth to Elmer Carter, one-fourth to William O. Rodes, and one-fourth to Milt Taylor, Bowling Green, Ky. Filed Mar. 9, 1911. Serial No. 613,338. (Cl. 111—6.)

1. A planter comprising a frame composed of front and rear sections hinged together and arranged to break at a point intermediate of the ends of the frame, a furrow opener carried by the rear section of the frame, seed dropping mechanism arranged in rear of the furrow opener and also carried by the said rear sections, and wheels supporting the sections of the frame and including an axle connected with the rear section of the frame at a point intermediate of the ends thereof and forming a fulcrum for the rear section, which is adapted to be tilted by the weight of the operator to lift the furrow opener and the seed dropping mechanism clear of the ground.



2. A planter comprising a frame composed of front and rear sections hinged together and arranged to break at a point intermediate of the ends of the frame, a furrow opener carried by the rear section of the frame, seed dropping mechanism arranged in the rear of the furrow opener and also carried by the said rear sections, wheels supporting the front and rear sections of the frame and including an axle mounted on the rear section of the frame and forming a fulcrum or pivot for the same, and a seat having a standard secured to the axle, said seat being arranged in rear of the axle and permitting the operator to shift his weight rearwardly for tilting the rear section of the frame to raise the furrow opener and the seed dropping mechanism clear of the ground.

3. A planter comprising a frame composed of front and rear sections hinged together and arranged to break at the center, an axle secured to the rear section, wheels located at opposite sides of the frame and secured to the axle and supporting the rear section, a caster wheel arranged centrally of the front portion of the frame and supporting the front section, a seat arranged at the rear portion of the frame in position to permit the operator to shift his weight for tilting the rear section, furrow openers on the rear section of the frame and located in advance of the rear wheels, and seed dropping mechanism.

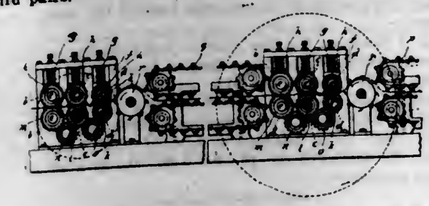
4. A planter comprising a frame composed of front and rear sections hinged together, an axle mounted on the rear section of the frame and forming a fulcrum for the same, covering wheels arranged on the ends of the axle at opposite sides of the frame, furrow openers carried by the rear section of the frame and located in advance of the covering wheels, seed dropping mechanism arranged in rear of the furrow openers, a caster wheel supporting the front section of the frame and having a flat periphery arranged to roll a smooth path or track, and a combined hill marking and operating wheel located in rear of the caster wheel and arranged to actuate the seed dropping mechanism and having hill marking devices operating in the said smooth path or track.

5. A planter including a frame, a combined roller and caster wheel supporting the front of the frame and having a broad periphery arranged to roll a smooth track or path, and a marker wheel arranged in rear of the caster wheel and having hill marking devices operating on the smooth track or path made by the caster wheel.

[Claims 6 to 8 not printed in the Gazette.]

1,064,029. DECORTICATING-MACHINE. THOMAS HANSEN TOMBELL, Montreal, Quebec, Canada. Filed July 27, 1908. Serial No. 445,661. (Cl. 13—16.)

1. In a decorticating machine the combination with a pair of drawing webs and a series of pairs of fluted rollers, of a hackling roller located between the said drawing webs and fluted rollers, said hackling roller being adapted to receive the flax directly from the drawing webs and deliver it to the fluted rollers, of means for rotating the pair of fluted rollers first receiving the flax at a greater speed than the second pair of fluted rollers and for rotating the third pair of fluted rollers at a lesser speed than the said second pair the difference in speed between the first and the second pairs of fluted rollers being greater than the difference of speed between the second and third pairs.



2. In a decorticating apparatus in combination a pair of drawing webs, a series of pairs of fluted rollers, a hackling roller located between the drawing webs and the fluted rollers and adapted to receive the flax from the drawing webs and to deliver it to the fluted rollers, means for imparting a greater speed to the hackling roller than to the drawing webs and a greater speed to the fluted rollers than to the hackling roller, and means for rotating the second pair of fluted rollers at a lesser speed than the first pair and also for rotating the third pair of the said fluted rollers at a lesser speed than the second pair, the difference in the speed between the first and the second pairs of said fluted rollers being greater than the difference in speed between the second and third pairs.

1,064,030. TELESCOPIC FISHING-ROD. CHARLES A. TREDWELL, Bristol, Conn., assignor to The Horton Manufacturing Company, Bristol, Conn., a Corporation of Connecticut. Filed Aug. 24, 1911. Serial No. 645,716. (Cl. 43—16.)



1. A fishing rod embodying a plurality of tubular metal sections telescoping one within the other, one end of the external tube being split and provided with inclined faces diverging toward the end of the tube, stops for limiting the outward movement of the internal section, and a sliding sleeve surrounding the said split end and adapted to cooperate with said inclines to clamp the split end upon the internal section, lock the sections against relative movement and prevent the spreading of the split end when the rod is flexed.

2. A fishing rod embodying a plurality of tubular metal sections telescoping one within the other, one end of the external tube being split and of reduced diameter, and provided with inclined outer faces diverging toward the end of the tube, an enlargement on the internal section for coöperation with the reduced end of the external section to limit relative movement of the sections in one direction and a sliding sleeve surrounding the said split end and adapted to coöperate with the inclines to clamp the split end upon the internal section, lock the sections against relative movement and prevent the spreading of the split end when the rod is flexed.

3. A fishing rod embodying a plurality of tubular metal sections telescoping one within the other, the outer end of the external section being split, and having external inclined faces diverging toward the end of the section, and the inner end of the internal section being provided with a radially yielding friction member engaging the inside of the external section, and a sliding sleeve surrounding the split end of the external section and cooperating with the inclined faces to clamp the split end on the internal section.

4. A fishing rod embodying a plurality of tubular metal sections telescoping one within the other, the outer end of the external section being split, a ferrule having one end split permanently affixed on the split end of the external section and having its split end formed with inclines, and a sliding sleeve mounted on said ferrule and coöperating with the inclines to clamp the split end of the external section on the internal section.

5. A fishing rod embodying a plurality of tubular metal sections telescoping one within the other, the outer end of the external section being reduced in diameter and split, a ferrule permanently affixed on said split end, and having its end split to correspond with the split end of the section, said ferrule being of greater length than the split in the section and having inclines formed thereon, a sleeve slidably mounted on the ferrule and coöperating with the inclines to clamp the split end on the internal section.

[Claim 6 not printed in the Gazette.]

1,064,031. TOE-WEIGHT FOR HORSES. CHARLES B. TUTTLE, Detroit, Mich., assignor to Tuttle & Clark, Detroit, Mich., a Corporation of Michigan. Filed Sept. 1, 1911. Serial No. 647,228. (Cl. 168—25.)



1. The combination with a toe-weight, of a securing device therefor comprising a struck-up sheet metal blank having a tapering shank portion, ears projecting from opposite sides thereof, and turned-in edges for embedding in the hoof, said edges serving as securing means and to reinforce the outer edges of the ears.

2. The combination with a toe-weight and a securing member therefor comprising a struck-up sheet metal blank having a hollow tapering shank portion, and oppositely projecting ears with turned-in sharpened marginal flanges for embedding in the hoof, said marginal flanges serving as securing means and to reinforce the outer edges of the ears.

3. The combination with a toe-weight, of a securing member therefor comprising a struck-up sheet metal blank having a hollow tapering shank portion, oppositely extending ears with in-turned marginal flanges, and screw apertures having in-turned marginal portions, said marginal flanges serving to relieve the stress from the securing screws and to reinforce the outer edges of the ears.

4. The combination with a toe-weight, of a securing device comprising a struck up sheet metal blank having a hollow tapering shank portion longitudinally split whereby said portion is resilient, said toe weight having a correspondingly tapering recess having a frictional engagement with the resilient shank.

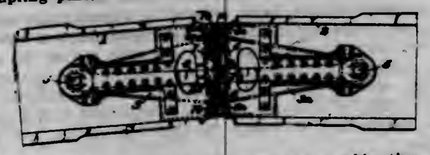
5. The combination of a toe-weight provided with a tapering recess of circular section, and a securing member therefor comprising a struck-up sheet metal blank having a correspondingly tapering hollow resilient shank portion of circular cross section for engaging said tapering recess, oppositely extending ears with in-turned marginal flanges, and screw apertures having in-turned marginal portions for the purpose described.

[Claim 6 not printed in the Gazette.]

1,064,032. FRAME CONNECTION FOR ARTICULATED LOCOMOTIVES. HENRY H. VAUGHAN, Montreal, Quebec, Canada. Filed Dec. 5, 1912. Serial No. 735,044. (Cl. 105—17.)

1. In an articulated locomotive, the combination of a front frame, a rear frame, driving wheels independently

supporting said frames, connecting members interposed between and secured to the side members of said frames and having convexly curved bearing faces on their outer ends, a bumper block interposed between said bearing faces and having opposite concavely curved bearing faces abutting thereon, coupling pins fitted in the longitudinal central planes of the connecting members and spaced farther apart than the adjoining ends of the front and rear frames, and a draw bar pivotally connected to said coupling pins.



2. In an articulated locomotive, the combination of a front frame, a rear frame, driving wheels independently supporting said frames, a draw bar pivotally connected to said frames or axes located in their longitudinal central planes and at a greater distance apart than the adjoining ends of said frames, and a pivotal connection coupling said frames intermediate of the pivotal connections of the draw bar thereto.

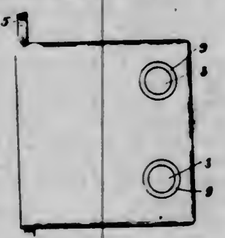
3. In an articulated locomotive, the combination of a front frame, a rear frame, driving wheels independently supporting said frames, a draw bar pivotally connected to said frames on axes located in their longitudinal central planes and at a greater distance apart than the adjoining ends of said frames, a pivotal connection coupling said frames intermediate of the pivotal connections of the draw bar, and means for preventing independent lateral movement of the frames relatively to said pivotal connection.

4. In an articulated locomotive, the combination of a front frame, a rear frame, driving wheels independently supporting said frames, a draw bar pivotally connected to said frames on axes located in their longitudinal central planes and at a greater distance apart than the adjoining ends of said frames, a vertical pivot fixed to one of said frames at its end adjoining the other frame, and links coupled to the other frame and bearing, at their opposite ends, on said pivot.

5. In an articulated locomotive, the combination of a front frame, a rear frame, driving wheels independently supporting said frames, means for transmitting strains of draft and buffing from either of said frames to the other, and means actuated by movements of said frames, for effecting reciprocal transfer of weight and pressure from one of them to the other.

[Claims 6 and 7 not printed in the Gazette.]

1,064,033. JUNCTION-BOX. JOSEPH F. WAGNER, South Bend, Ind., assignor to Arnold-Wagner Electric Co., South Bend, Ind., a Corporation of Indiana. Filed Aug. 23, 1911. Serial No. 645,525. (Cl. 247—5.)



1. A junction box for electric wires having one or more knockout portions formed by grooves cut in the walls thereof, the outer edge of the groove being cut to the greatest depth.

2. A junction box for electric wires having a series of circular knockout portions formed in the walls thereof by grooves cut therein, the bottom of the grooves tapering so as to form the weakest portion of the wall at the outer edge of the grooves.

3. A junction box for electric wires having a plurality of annular grooves in its side walls forming knock-out portions, the side walls of the grooves being substantially perpendicular to the walls of the box and with the bottom walls of the grooves decreasing in thickness from the inner peripheries of the grooves toward the outer peripheries.

4. A junction box for electric wires having a series of circular knock-out portions formed in the walls thereof by grooves cut therein, the side walls of the grooves being perpendicular to the walls of the box and with the bottoms of the grooves sloping downwardly and outwardly from their inner peripheries toward their outer peripheries, the depths of the grooves being the greatest at their outer peripheries.

1,064,034. METHOD OF TREATING ARMOR-PLATE. SAMUEL S. WALES, Munhall, Pa., assignor to Carnegie Steel Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 11, 1907. Serial No. 401,702. (Cl. 148—37.)

1. In the manufacture of face-hardened armor plate, the step consisting of heating to a hardening temperature that face of the plate which is to be hardened and simultaneously maintaining the back face of the plate below 400 degrees centigrade by artificially cooling the same; substantially as described.

2. In the manufacture of face-hardened armor plate, the steps consisting of heating to a hardening temperature that face of the plate which is to be hardened while maintaining the opposite face below a water annealing temperature by applying a cooling fluid thereto and then quenching the plate to harden its face; substantially as described.

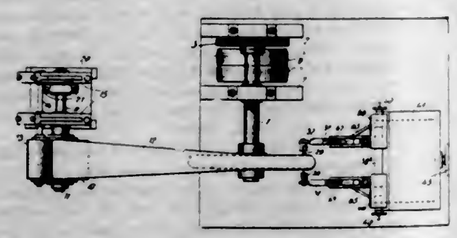
3. In the manufacture of armor plate, the steps consisting in heating one face of the plate to between 850 degrees to 950 degrees centigrade, simultaneously maintaining another face of the plate below 400 degrees centigrade and then quenching the plate; substantially as described.

4. In the manufacture of armor plate, the steps consisting in covering and thereby protecting the edges of a plate, applying heat to one face thereof and simultaneously and positively cooling the opposite face thereof by forcing a cooling liquid against it and then quenching the plate; substantially as described.

5. In the manufacture of armor plate the steps consisting in covering and thereby protecting the edges of the plate, applying heat to one face thereof, simultaneously and positively cooling the opposite face thereof by forcing a cooling liquid against it and then quenching the plate; substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

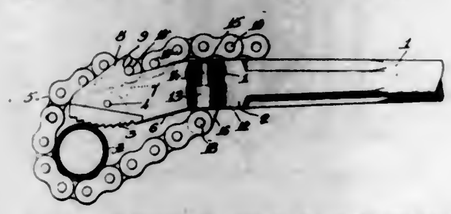
1,064,035. TIRE-MAKING MACHINE. THOMAS J. WHALEN, New Brunswick, N. J., assignor, by mesne assignments, to Harry M. Marble, Newark, N. J. Filed Oct. 6, 1910. Serial No. 585,623. Renewed Oct. 26, 1912. Serial No. 727,968. (Cl. 154—10.)



1. A tire forming machine comprising in combination a rotatable core, upon which the tire may be formed, a tool-arm support arranged to move laterally with respect to said core, a tool-arm hinged to said support, and a brace adapted to engage both said arm and said support and thereby to hold the arm rigid with respect to its support.

2. A tire forming machine comprising in combination a rotatable core, upon which the tire may be formed, a tool-arm support arranged to move laterally with respect to said core, a tool-arm hinged to said support, and a brace hinged to one of said hinge-connected members and adapted to engage one or more notches in the other of said hinge-connected members, and thereby to hold the arm rigid with respect to its support.

1,064,036. CHAIN WRENCH. ARTHUR J. WHITFIELD, Boston, Mass., assignor to Trimont Manufacturing Company, Roxbury, Mass., a Corporation of Maine. Filed Sept. 5, 1912. Serial No. 718,615. (Cl. 81—68.)



1. In a chain wrench, a handle having a head an attached jaw, a chain, an eccentric swivel connection between one end of the chain and the wrench, and means on the wrench to detachably engage the free end of the chain when passed around the head and jaw.

2. In a chain wrench having a head and a convexed jaw, and a coöperating chain, in combination, an eccentric swivel connection between the head and one end of the chain, at the rear of the jaw, and means on the head to engage detachably the free end of a bight of the chain passed around the jaw.

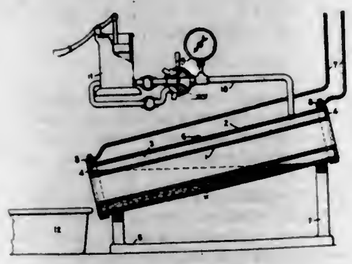
3. In a chain wrench having a jaw, a coöperating chain, a stud rotatably mounted in the head of the wrench, and an eccentric, pivotal connection between one end of the chain and said stud.

4. In a chain wrench having a head provided on one side with a bifurcated abutment having a concave rear face, a chain, a permanent eccentric swivel connection between one end thereof and the opposite side of the head, and lateral projections on the chain to engage detachably the concave faces of the abutment.

5. In a chain wrench, in combination, a head having a jaw, a stud rotatably mounted in the head at the rear of the jaw, a chain, a transverse pivotal connection between one end thereof and said stud, eccentric to the axis thereof, and means on the head to engage detachably the free end of a bight of the chain passed around the jaw.

[Claims 6 and 7 not printed in the Gazette.]

1,064,037. MEANS FOR PROVIDING CONSTANT AND KNOWN HIGH TEMPERATURES. WILLIS R. WHITNEY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 7, 1907. Serial No. 387,499. (Cl. 148—13.)



1. A heating device, consisting of the combination of a closed chamber, a vaporizable substance therein, means for heating said substance, and a pump for establishing at any desired value the gaseous pressure in said chamber and thereby fixing at will the vaporizing point of said substance.

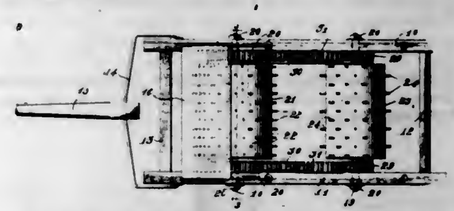
2. The combination of a closed chamber surrounding an open heating space and containing a vaporizable substance, means for heating said substance and mechanically actuated means for establishing the gaseous pressure in said chamber at a substantially constant value corresponding to the boiling point desired for said substance.

3. In a tempering furnace, a closed double walled jacket surrounding an open space, a fusible solid partially filling said jacket, means for heating said solid to the boiling point, and a pump for varying at will the gaseous pressure in said jacket above or below atmospheric pressure.

4. An oven for heating articles of steel and the like, consisting of an inclined iron tube, an iron jacket surrounding it, a fusible substance in the closed chamber between said tube and jacket, means for heating said oven to the boiling point of said substance, and a pump for varying the vapor tension in said chamber.

5. The process which consists in supplying enough heat to a vaporizable material to boil the same, exhausting or compressing a fixed gas in contact with said material in an inclosed space to a desired constant value to fix the boiling point, condensing the distilled vapor as fast as it is formed, and subjecting an accessible zone to heat radiation from said substance, to maintain a constant predetermined temperature in said zone.

1,064,038. HARROW. ANDREW D. WILLOCK, Mason City, Ill. Filed June 22, 1912. Serial No. 705,275. (Cl. 55—85.)



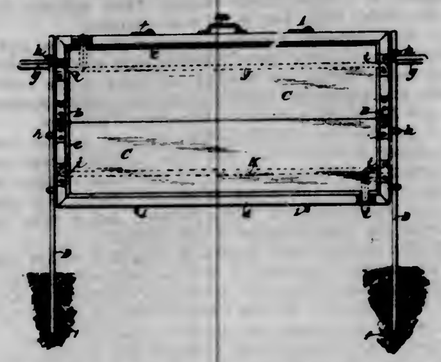
1. In a harrow, a frame, axles carried by said frame, cutting rollers mounted upon said axles, gear wheels mounted upon said axles, bearing strips mounted upon said axles, and other gear wheels mounted between the sides of said frame and said bearing strips, and connecting said first mentioned gear wheels whereby rotation of one of said rollers will transmit rotary motion to the other of said rollers.

2. A harrow comprising a frame having side bars, axles carried by said side bars and passing transversely through said frame, cutting rollers rigidly mounted upon said axles, gear wheels rigidly mounted upon said axles, bearing strips connected with said axles and having their ends positioned between said rollers and said gear wheels and provided with cut-out portions in which said axles fit, and other gear wheels rotatably mounted between said bearing strips and said side bars and meshing with the first mentioned gear wheels.

1,064,039. PORTABLE ADVERTISING DEVICE. FRANK K. WISE, Crawfordsville, Ind. Filed July 26, 1912. Serial No. 711,755. (Cl. 40—125.)

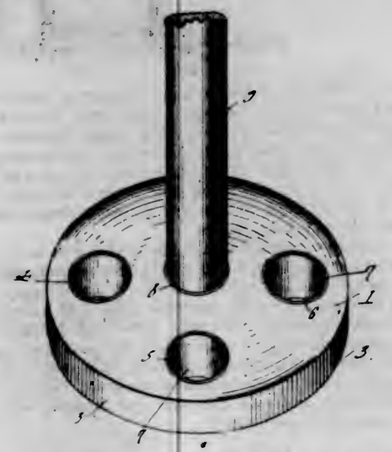
1. A portable advertising device comprising a pair of hinged rectangular frames having a pair of display backs securely mounted therein, forming an inclosed carrying receptacle when the frames are folded together, retaining grooves suitably formed in the sides of the frames, detachable standards adapted to lie within the grooves and to be contained in said receptacle when the frames are folded together, and means on the outside of the frames for detachably connecting the standards thereto to support the frames when in open position.

2. In a portable advertising device, the combination of a pair of hinged rectangular frames having a pair of display backs securely mounted within the hinged frames for the purpose of displaying such advertising matter as may be placed thereon, outstanding screw eyelets rigidly mounted at approved intervals on the outside of the end strips of the hinged rectangular frames and a pair of detachable supporting standards adapted to be detachably



held by said screw eyelets provided with pointed lower ends for freely penetrating the ground and with laterally bent and buckled upper portions for manually working the detachable standards into or out of the ground and for securely upholding the hinged rectangular frames in open position above the ground for displaying such advertising matter as may be placed thereon, substantially as described.

1,064,040. DASHER FOR CHURNS. EDMUND L. WOOD, Lindale, Tex. Filed Dec. 16, 1912. Serial No. 737,040. (Cl. 31—37.)

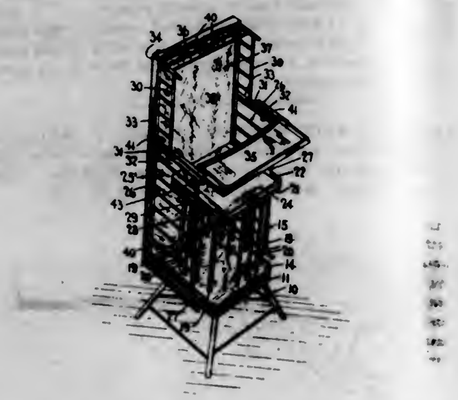


1. A churn dasher comprising a hollow liquid-tight vessel, with tubes extending therethrough.

2. A churn dasher comprising a hollow cylindrical buoyant vessel with tubes extending therethrough, the upper surface of said vessel slightly spherical.

3. A churn dasher comprising a spherical upper metallic plate provided with openings therein, a flat circular metallic plate, cylindrical side walls extending between said plates, said flat plate provided with openings registering with the spherical plate, cylindrical tubes extending between and within said openings and defining an air containing vessel, one of said cylindrical tubes being disposed centrally of said plate to provide suitable engaging means for a churn dasher handle.

1,064,041. COMBINATION HIGH CHAIR, CRIB, AND BABY-WALKER. VINCENT ZIOLKOWSKI, San Diego, Cal. Filed Feb. 27, 1912. Serial No. 680,216. (Cl. 155—6.)



1. A device of the class described comprising an elevated seat portion, a back element having sides projecting forwardly beside the seat and extending above and below the seat, a supporting portion for the seat, said back element being hinged thereto below the seat and adapted to be lowered to horizontal position at times, whereby the back element will form a bed bottom and sides, a table element connected movably to the back element and adapted to lie in front thereof when elevated, and arranged to be moved rearwardly and releasably secured to form an outer support element for the back when lowered.

2. A device of the class described comprising a baby pen element having a displaceable seat cover, a back element hinged intermediately thereto and adapted to extend upwardly at times to form a back for the seat and having sides projecting forwardly beside the seat, means to hold the back in elevated position releasably, said back being adapted to be lowered to horizontal position and having folding outer support means adapted to be held releasably in position to support the back in horizontal position, whereby to form a crib bed and whereby the pen element will form a head for the bed conveniently for emplacement of a baby therein during dressing of the crib.

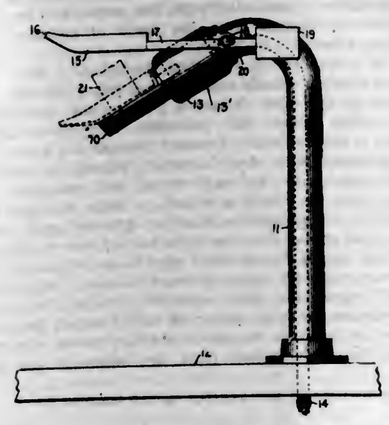
3. In a device of the class described, a seat element, a bed element hinged at one side thereof and movable to lie in horizontal or vertical position, releasable means to secure the bed in vertical position, curved arms pivoted at their inner ends to the sides of the bed element movable to lie when at one limit of their movement with their outer ends approximately horizontal before the elevated bed element, means to secure them releasably in such position, a table element carried thereby, said arms being constructed to lie when at the opposite limit of their movement with their outer portions projecting abruptly downward from the horizontal bed element to form an outer support therefor, and means to secure them releasably in the last named position.

1,064,042. ELECTRIC HEATER FOR SEALING-WAX AND THE LIKE. HENRY PRICE BALL, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 10, 1911. Serial No. 626,243. (Cl. 219—21.)

1. A heater for sealing wax or the like comprising an electrically heated element and a pivoted heating pan biased to assume a horizontal position out of engagement with said element and arranged to be moved into an inclined position engaging the element.

2. In a heater for sealing wax or the like, a heating element, a pan mounted adjacent said heating element so

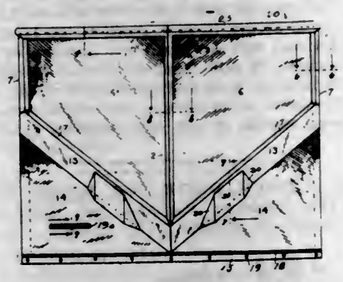
that it may be pressed into good thermal relation therewith and automatic means for moving said pan away from said heating means upon removal of such pressure.



3. A device for melting sealing wax or the like comprising a mass of good heat conductivity, heating means for the same, a pan uncovered throughout its extent mounted adjacent to said mass so that it may be pressed against the same and means whereby the said pan is automatically moved away from said mass upon removal of the aforesaid pressure.

4. In a device for melting sealing wax or the like, a downwardly inclined mass of metal, an electrical heating unit adapted to heat the same and a pan mounted adjacent said mass of metal so that it may be pressed against the same, said pan having means at one end thereof for guiding the overflow of the melted material therefrom.

1,064,043. WIND-SHIELD. EDWARD J. BESEMAN, Los Angeles, Cal. Filed Apr. 25, 1912. Serial No. 693,216. (Cl. 21—81.)



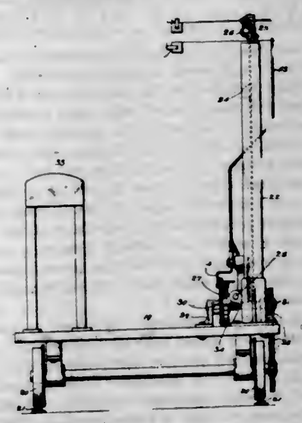
1. A wind shield comprising a vertical central post and side posts having channels thereon, lower side portions consisting of sheet metal formed to provide plane vertical surfaces having channels thereon and of substantially uniform height from the inner end to the outer end thereof and extending rearwardly and upwardly from the central post to the side posts and plane surfaces extending forwardly and downwardly from the vertical surfaces to the lower end portion of the wind shield, transparent panels provided with an angular lower end portion and arranged in said channels and forwardly projecting devices arranged at the top of said panels, said devices provided with channels on the under side thereof and adapted to intercept and conduct dust to the outer edge of the sides of the wind shield.

2. The combination of a wind shield having a central post and side portions connected with the post and extending outwardly and rearwardly from the post, forwardly projecting devices arranged at the top of said side portions, said devices provided with channels on the underside thereof and adapted to intercept and conduct dust to the outer edge of the sides of the wind shield.

3. A wind shield comprising a vertical central post and side posts of sheet metal formed to provide longitudinally therein a chamber for the purpose set forth, channels on the central and side posts, lower side portions consisting of sheet metal formed to provide plane vertical surfaces having channels thereon and of substantially uniform height from the inner end to the outer end thereof and extending rearwardly and upwardly from the central post to the side post and plane surfaces extending forwardly and downwardly from the vertical surfaces to the lower end of the wind shield, forwardly projecting devices arranged at the top of the wind shield and provided with a channel on the underside thereof for the purpose set forth, channels carried by said devices, and transparent panels provided with an angular lower end portion and arranged in said channels, substantially as described.

4. A wind shield comprising a vertical central post and side posts, lower side portions consisting of sheet metal formed to provide vertical surfaces of substantially uniform height from the inner end to the outer end thereof and extending rearwardly and upwardly from the central post to the side posts and plane surfaces extending forwardly and downwardly from the vertical surfaces, transparent panels provided with an angular lower end portion and carried by said vertical surfaces and the central and side posts, openings in said vertical surfaces, plates at said openings formed with converging substantially triangular side portions and an inclined portion therebetween and adapted to have the upper end of the plates in contact with said vertical surfaces and the lower end of the plate in contact with said plane surfaces to close said openings, pivot mountings at the ends of said side portions, shafts rotatably mounted near the lower end of said openings and having handwheels and worms thereon, shafts having wheels thereon in mesh with said worms, arms fast on the last mentioned shafts, and links pivotally connected between said arms and the upper end portion of said plates, substantially as described.

1,064,044. MACHINE FOR OPERATING UPON WARPS. THOMAS E. BINGHAM, Manchester, England, assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business as Barber-Colman Company, Rockford, Ill. Filed Sept. 28, 1910. Serial No. 584,209. (Cl. 139—95.)



1. In a warp-uniting apparatus, the combination of warp-uniting mechanism, a carriage for supporting the warp-uniting mechanism and the operator; means arranged to be actuated by the operator for actuating said mechanism and propelling said carriage; and means for controlling the rate of traverse of said carriage to suit the position of the threads being united.

2. In a warp-uniting apparatus, the combination of warp-uniting mechanism; a carriage for supporting the warp-uniting mechanism and the operator; a foot-operated lever on said carriage for actuating said mechanism and propelling said carriage; and means operated by the threads about to be united for controlling the rate of traverse of the carriage.

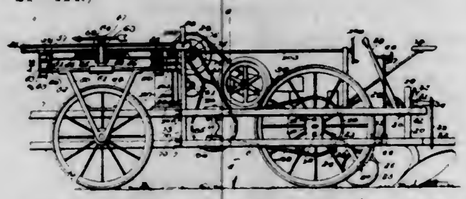
3. A warp-tying apparatus comprising stationary means for supporting the work; a knot-tying mechanism; a carriage for supporting the knot-tying mechanism and the operator; mechanism for intermittently operating the knotter; and carriage-moving means, said knotter-actuating means and carriage-moving means being located upon the carriage and being arranged for actuation by the operator.

4. In a machine for operating upon warps, stationary means for supporting the work; operating mechanism; a carriage for supporting the operating mechanism and the operator; a pedal on said carriage; a driving connection between said pedal and the operating mechanism; and carriage-moving means arranged to be driven by said pedal.

5. In a machine for operating upon warps, stationary means for supporting the work; operating mechanism; a carriage for supporting the operating mechanism and the operator, and arranged for movement transversely of the work; a foot lever pivoted between its ends upon said carriage; a lever pivoted between its ends upon said carriage, one end of the second mentioned lever being arranged to be engaged by one end of said foot lever; a link connecting the other end of the second mentioned lever with said operating mechanism, said foot lever being arranged to move said link in one direction; and means for moving said link in the opposite direction.

[Claims 6 to 9 not printed in the Gazette.]

1,064,045. AGRICULTURAL IMPLEMENT. HENRY H. BOENKER, St. Charles, Mo. Original application filed Dec. 8, 1910, Serial No. 596,303. Divided and this application filed Mar. 7, 1911. Serial No. 612,847. (Cl. 21—114.)



1. In a machine of the class described, a main frame comprising inner and outer sets of longitudinal side bars, traction wheels mounted on the main frame, a yoke interposed between the inner set of side bars, a draw bar carried by the yoke, a second yoke spaced from the first mentioned yoke, a motor, and means for transmitting motion from the motor to the traction wheels.

2. In a machine of the class described, a main frame including inner and outer sets of longitudinal side bars, spacing members secured to the side bars of each set and provided with a series of vertical openings, stud axles seated in said openings, and traction wheels mounted for rotation on the stub axles and adjustable vertically of the main frame.

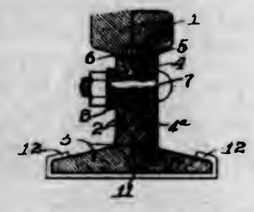
3. In a machine of the class described, a main frame comprising inner and outer sets of longitudinal side bars, bearing blocks secured to the side bars of each set and having vertical rows of openings formed therein, stub axles seated in said openings, traction wheels loosely mounted on the stub axles, a yoke interposed between the inner set of side bars, a draw bar carried by the yoke, a second yoke spaced from the first mentioned yoke, a motor, and means for transmitting motion from the motor to the traction wheels.

4. In a machine of the class described, a main frame including inner and outer sets of longitudinal side bars, a vertical frame secured to the side bars, a substantially U-shaped horizontally disposed frame secured to the vertical frame, a draw bar arranged at the rear of the main frame, traction wheels mounted on the main frame, a motor, a train of gearing mounted on the vertical frame and operatively connected with the motor, and means for transmitting motion from the train of gearing to the traction wheels.

5. In a machine of the class described, a main frame having traction wheels mounted thereon, a vertical frame secured to the main frame, a power shaft journaled in the vertical frame and provided with loose sprocket wheels, a counter shaft disposed beneath the power shaft and provided with fixed sprocket wheels, a transverse shaft mounted on the main frame and operatively connected with the traction wheels, a large sprocket wheel secured to the transverse shaft, a sprocket chain extending around one of the loose sprocket wheels on the power shaft and one of the sprocket wheels on the counter shaft and engaging said large sprocket wheel, a clutch interposed between the loose sprocket wheels and movable into engagement with either of said sprocket wheels for keying the latter to the power shaft, a motor, and means for transmitting motion from the motor to the power shaft.

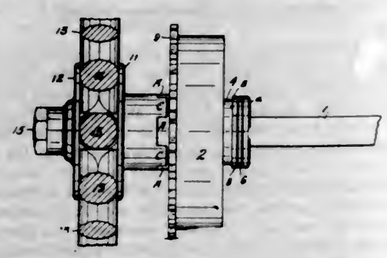
[Claims 6 to 11 not printed in the Gazette.]

1,064,046. CONTINUOUS RAILWAY-RAIL. ALEXANDER BOURRASSA, Chicago Heights, Ill. Filed Oct. 12, 1911. Serial No. 654,212. (Cl. 239—16.)



A continuous railway rail constructed in half sections lapped together face to face with the joints on one side of the rail disposed intermediate the joints on the other side of said rail, splice bars disposed in channels afforded between the webs at each joint, said bars each having a wire receiving groove therein abutting the inner face of one of said half rail sections only, a filling of non-conducting material in said channels between the splice bars adapted to invest a wire, and splice bolts rigidly engaging the parts together as an unitary and continuous structure and disposed outside of said wire receiving grooves.

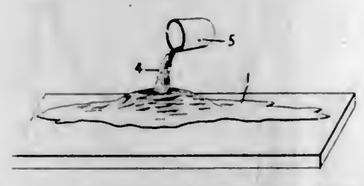
1,064,047. CLUTCH-DRIVE FOR MOTOR-WHEELS. LEWIS BRANDENBURG, Portland, Ind. Filed Sept. 5, 1911. Serial No. 647,607. (Cl. 21—90.)



1. In a clutch drive for motor vehicles, the combination with a non-rotatable axle having a spindle end and a flange spaced inwardly from said spindle end; of a drum rotatably mounted on the axle inwardly of the spindle end, said drum having a hub portion provided with an outwardly extending flange having clutch teeth, antifriction means between said hub and the axle and between the hub and the flange, a wheel journaled on the spindle spaced from the drum and having a reduced inwardly extending portion provided with clutch teeth to coöperate with the clutch teeth of the hub flange, means on the spindle to limit the inward displacement of the wheel independent of the drum and means for simultaneously holding the wheel and bearings from outward displacement.

2. A clutch drive for motor vehicles embracing the combination with an axle thereof having a reduced outer end and an integral flange inwardly of and spaced from said reduced portion; of a drive sprocket rotatably mounted on the axle inwardly of the reduced portion and having a clutch head projecting outwardly, anti-friction means between said sprocket and flange and including a loose collar, a plate between said collar and flange and having a plurality of apertures and balls mounted in said apertures, a wheel spaced from said sprocket and having a hub rotatably journaled on the reduced portion of the axle, said hub having a clutch head coacting with the first named clutch head, and including a removable outer plate engaged on the sleeve thereof anti-friction means between the hub and axle, said means being held against inward displacement and means locking the wheel against outward displacement on the bearings said means engaging the sleeve and bearing against the plate.

1,064,048. LEATHER PRODUCT AND PROCESS OF MANUFACTURING THE SAME. CARL BRANDT, Norwood, Mass., assignor to Brandt Leather Company, Norwood, Mass., a Corporation of Massachusetts. Filed Jan. 12, 1911. Serial No. 602,341. (Cl. 149—7.)

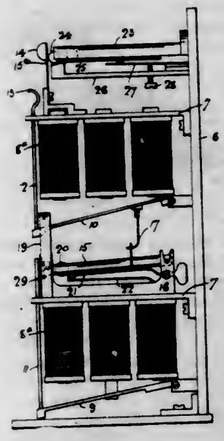


The process of treating tanned leather which consists in wet-wheeling the flesh side of the skin after it has been tanned, folding or puckering said skin while wet, in such a way that portions only of the flesh side thereof will be exposed, and then subjecting the exposed portions of the flesh side to the action of a dye while the skin is in its folded puckered condition, unfolding and drying the skin and subsequently sueding the flesh side thereof thereby to produce a sueded leather having a mottled or variegated appearance.

1,064,049. APPARATUS FOR RECORDING CALLS MADE BY TELEPHONE. EDWARD HILL BRIDGE, Spotswood, Victoria, Australia. Filed Oct. 25, 1911. Serial No. 656,580. (Cl. 179—10.)

1. In a telephone call recording apparatus, the combination of two sets of electromagnets in each of which is a relatively high-resistance split wound coil; a movable armature for each set of coils; recording means controlled by each armature; electrical means adapted to conduct current to said set of coils, when a calling and an answering subscriber are connected to the cord circuit, whereby said sets are energized; and means for maintaining current in the high-resistance coils until the subscribers' plugs are removed.

2. In a telephone call recording apparatus, the combination of two sets of electromagnetic coils placed one above the other; electrical means for automatically supplying current to said sets respectively when a calling and an answering subscriber are connected to the cord circuit, whereby said sets are energized; hinged armatures adapted at times to be attracted and moved by the said respective sets of coils; recording means adapted at times to be controlled by the movements of the respective armatures; and an operative connection between the armatures for causing one of the armatures to be moved nearer its set of coils by means for the movement of the other armature.



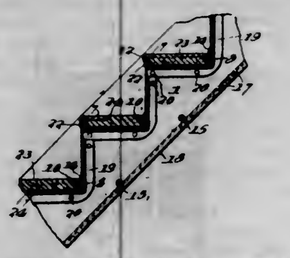
3. In a telephone call recording apparatus, the combination of two sets of electromagnetic coils placed one set above the other; means for automatically energizing the upper set when an answering subscriber is connected to the cord circuit; a hinged armature adapted to be attracted by the upper set, when energized, when the armature is brought within the field thereof; means for automatically energizing the lower set when a calling subscriber is connected to the cord circuit; an armature adapted to be attracted by the lower set, when energized; a means operated by the lower armature for pushing the upper armature near its set of coils; means controlled by the upper armature for registering effective calls.

4. In a telephone call recording apparatus, the combination of an upper and a lower set of electromagnetic coils; an upper and a lower armature for said sets respectively; means for automatically energizing the upper set when an answering subscriber is connected to the cord circuit; means for automatically energizing the lower set when a calling subscriber is connected to the cord circuit, whereby the lower armature is raised; an ineffective-call meter controlling means adapted to be moved to an abnormal position by the lifting of the lower armature, said operating being adapted to return, after the release of the lower armature, with one kind of movement if the upper set be not energized; means connected with the upper armature for causing the operating means to return with a second kind of movement if the upper set be energized; an ineffective-call meter; and means for causing the same to be operated and adapted to be operated by said operating means only when the operating means returns to position with said first named movement.

5. In a telephone call recording apparatus, the combination of an upper and a lower set of electromagnetic coils; an upper and a lower armature for said sets respectively; means for automatically energizing the upper set when an answering subscriber is connected to the cord circuit; means for automatically energizing the lower set when a calling subscriber is connected to the cord circuit; an open race having an upper and a lower end and adapted to be raised at either end; a ball normally resting in the lower end of the race; a counter-weighted lever below said race and adapted to be contacted by the ball when running down the race when both ends are in lowest position; means connected with the upper armature for raising the upper end of the race; means connected with the lower armature for raising the lower end of the race; and means operated by said lever for registering ineffective calls.

[Claims 6 and 7 not printed in the Gazette.]

1,064,050. FIREPROOF STAIR. GEORGE W. BROOKS, Topeka, Kans. Filed Aug. 10, 1912. Serial No. 714,394. (Cl. 72—98.)



1. In fireproof stairs, a tread having a projecting tongue, and a riser independent of the tread and having at its lower end a flange for coöperation with said tongue and an offset portion adjacent said flange, the lower edge of the riser being engaged by said tongue.

2. In fireproof stairs, a tread having a flange and an inwardly bent tongue stamped therefrom, and a riser independent of the tread and having at its lower edge a flange held between said tongue and flange of the tread for cooperation with said tongue.

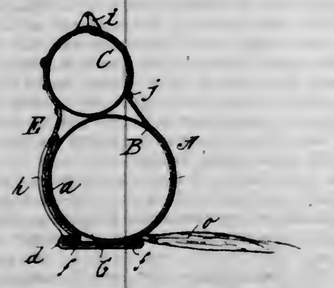
3. In fireproof stairs, a tread having a flange and a tongue stamped therefrom, a riser independent of the tread and having at its lower edge a flange for coöperation with said tongue, and an offset portion adjacent said flange the lower edge of said riser being received between the tongue and flange of the tread.

4. In fireproof stairs, a tread having a flange and a tongue stamped therefrom, a riser independent of the tread and having at its lower edge a flange for coöperation with said tongue, and an offset portion adjacent said flange the lower edge of said riser being received between the tongue and flange of the tread, said tread having a flange at its front edge provided with vertical slots.

5. In fireproof stairs, a tread, and a riser independent thereof, the lower edge of said riser and the rear edge of the tread being provided with integral interlocking tongue and flange said tongue projecting upward and forming a projecting lock for the concrete.

[Claims 6 and 7 not printed in the Gazette.]

1,064,051. TOY EFFIGY. MARY M. BUCKLER, Springfield, Mass. Filed Oct. 31, 1912. Serial No. 728,806. (Cl. 46—40.)



1. A toy effigy consisting of a hollow resilient ball to form the body, a member superimposed on the body to constitute a head form, a cover of flexible material inclosing the body and head forming members and fashioned and decorated to give feature to the figure.

2. A toy effigy consisting of a hollow resilient ball to form the body, another resilient ball of smaller size resting on the first ball to constitute a head form, a cover of flexible material enveloping the body and head forming members and closed by stitching,—said covering being fashioned and decorated to give feature to the figure.

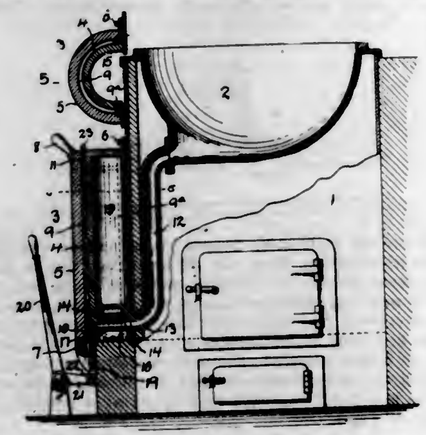
3. A toy animal consisting of a hollow resilient ball for the body, another resilient ball of smaller size resting on the first ball to constitute a head form, a cover of flexible material enveloping the body and head forming members and closed by stitching, said covering being fashioned and decorated to impart feature to the figure and the device having inclosed in the lower portion thereof a plate of suitably rigid material to form a base or stand.

4. A toy animal of a hollow resilient ball making a form for the body, another but smaller resilient ball lying against the first named ball and making a form for the head, a cover of flexible material enveloping the body and head forming balls, closed by stitching and having a layer of padding material within the front portion of the covering,—such front portion with the layer therewithin being fashioned to give the semblance of forelegs to the figure and the said covering being otherwise fashioned and decorated to impart feature to the article.

5. A toy animal consisting of a hollow resilient ball for the body, another resilient ball on the first ball to constitute a head form, a cover of flexible material enveloping the body and head forming members and closed by stitching, and fashioned and decorated to impart feature to the figure and provided with a tail member at the lower rear portion thereof.

[Claim 6 not printed in the Gazette.]

1,064,052. METHOD OF PRODUCING STEREOTYPE PRINTING-PLATES. ARTHUR L. CASE, Plainfield, N. J. Filed Dec. 27, 1907. Serial No. 408,232. (Cl. 22—200.)

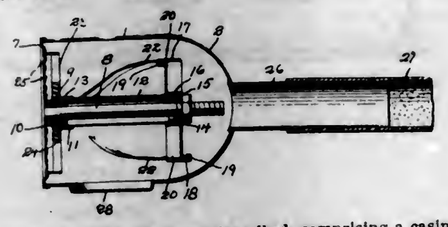


1. The method of producing a stereotype printing plate or other article which is initially devoid of overcast, consisting in flowing molten metal into a casting chamber of the proper size and contour of the plate to be cast, allowing the air to escape from the casting chamber as it is displaced by the metal entering the chamber, and finally, when the casting chamber is completely filled with molten metal, closing and sealing off the casting chamber both at the point of entrance of metal and the point of exit of air.

2. The method of producing a stereotype printing plate initially devoid of overcast, which consists in flowing by gravity molten metal into a casting chamber of the proper size and contour of the plate to be cast, allowing the air to escape from the casting chamber as it is displaced by the metal entering the chamber, and finally, when the casting chamber is completely filled with molten metal, closing and sealing off the casting chamber both at the point of entrance of metal and the point of exit of air.

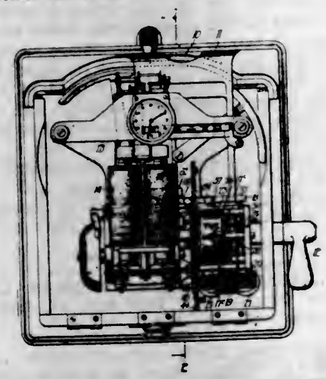
3. The process of producing a stereotype printing plate originally free of overcast, which consists in flowing molten metal into the lower end of a substantially upright casting chamber, permitting the air to escape from the upper portion of the chamber as it is displaced by the entering molten metal, closing off the air outlet as the chamber becomes completely filled with metal, and, after the chamber has been completely filled with metal, closing off the inlet in the bottom portion of the chamber at the point of entry into the chamber, whereby the molten metal completely filling a closed casting chamber of the required dimensions, will produce a perfect printing plate devoid of overcast.

1,064,053. HAIR-CUTTING APPARATUS. ALFRED R. COYLE, Jr., Trafford, Pa. Filed Feb. 2, 1911. Serial No. 606,238. (Cl. 30—12.)



A device of the character described, comprising a casing, a bottom provided with a series of openings and detachably secured to said casing, a spindle carried by the said bottom and projecting into the casing, a sleeve rotatably mounted upon said spindle, means for reducing friction upon the rotation of the sleeve, collars carried by the said sleeve, arms formed upon said collars and means provided by said arms for securing blades spirally upon the sleeves, a slotted rib formed upon one side of the casing, a tubular extension formed upon one end of said casing for engagement with a vacuum-creating mechanism, a cutter bar supported by said rib adjacent to the slot thereby for engagement with the blades, and vanes carried by said sleeve adjacent the bottom of the casing, for the purpose of rotating the blades, substantially as and for the purposes described.

1,064,054. CARD-ELEVATING MECHANISM FOR TIME-RECORDERS. CHARLES MADISON CROOK, Chicago, Ill., assignor to Stromberg Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 20, 1911. Serial No. 634,304. (Cl. 234—43.)

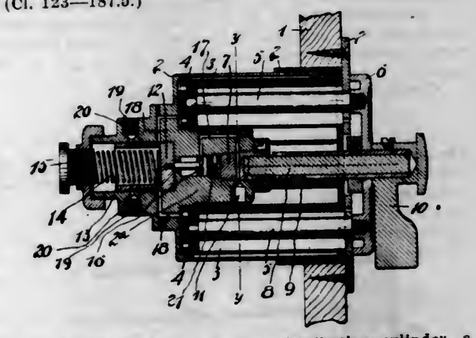


1. In a time recorder, the combination with a card-holder, of card-elevating mechanism associated therewith, electrically operated means for periodically raising said elevating mechanism a predetermined distance, and means for returning said mechanism to its initial position after it has reached a predetermined point, said means comprising a plurality of connecting gear and ratchet wheels, an electro-magnet, an armature, an arm adapted to be swung by the movement of said armature, and a dog mounted on said arm and adapted to engage the first of said ratchet wheels.

2. In a time recorder, the combination with a card-holder, of card-elevating mechanism associated therewith, electrically operated means for periodically raising said elevating mechanism a predetermined distance, means for returning said mechanism to its initial position after it has reached a predetermined point, said means comprising a plurality of connecting gear and ratchet wheels, an electro-magnet, an armature, an arm adapted to be swung by the movement of said armature, and a dog mounted on said arm and adapted to engage the first of said ratchet wheels, and means for breaking the mechanical engagement between said gear and ratchet wheels at a predetermined time.

3. In a time recorder, the combination of a card holder, of card elevating mechanism including a rack, electrically operated means for moving said mechanism comprising a magnet, an armature, a shaft, a ratchet mounted on said shaft, means for transmitting the movement of said armature to said ratchet, said means including a notched disk rigid on said shaft, and means for permitting said rack to resume its initial position after a predetermined number of upward movements.

1,064,055. GAS-ENGINE STARTER. CHARLES H. CUNO, Meriden, Conn. Filed Apr. 5, 1912. Serial No. 688,586. (Cl. 123—187.5.)



1. In a gas engine starter, a distributing cylinder, a movable piston therein arranged for manual operation in one direction, a valved gas inlet passage leading to the distributing cylinder, and an automatic pressure-controlled means in said passage arranged to close said passage when the pressure of gas in said passage exceeds the resistance of said means, said distributing cylinder having a distributing passage for delivering the gas contained therein to a gas engine cylinder, and a manually-controllable valve for the gas inlet arranged in the passage between the automatic pressure-controlled means and the source of gas supply.

2. In a gas engine starter, a distributing cylinder, a movable piston therein arranged for manual operation in one direction, a valved gas inlet passage leading to the distributing cylinder, and an automatic pressure-controlled means in said passage arranged to close said passage when the pressure of gas in said passage exceeds the resistance of said means, said distributing cylinder having a distributing passage for delivering the gas contained therein to a gas engine cylinder, said distributing passage being also controlled by said automatic pressure-controlled means.

3. In a gas engine starter, a distributing cylinder, a movable piston therein arranged for manual operation in one direction, a valved gas inlet passage leading to the distributing cylinder, an automatic pressure-controlled means in said passage arranged to close said passage when the pressure of gas in said passage exceeds the resistance of said means, said distributing cylinder having a distributing passage for delivering the gas contained therein to a gas engine cylinder, and means for varying the effective pressure of said automatic pressure-controlled valve, and a manually-controllable valve for the gas inlet arranged in the passage between the automatic pressure-controlled means and the source of gas supply.

4. In a gas engine starter, a distributing cylinder having a gas inlet passage leading into one end of the same, a manually movable piston in said distributing cylinder, a

manually controllable valve in said passage, an automatic valve for said passage in addition to said manually controllable valve, means for normally moving the automatic valve in a direction to open said passage comprising a piston, a cylinder containing said piston, and means operating against said piston to press it into the valve opening position, the pressure of gas moving the piston and its valve in a direction to close said valve and closing said valve when said pressure exceeds the pressure on the piston tending to open the same, said distributing cylinder having a distributing passage for delivering the gas to a gas engine, said distributing passage being controlled by the last mentioned piston, whereby said passage will be open when said piston is in one position and closed when said piston is in another position.

5. In a gas engine starter, a distributing cylinder, a movable piston arranged for manual operation in one direction, a valved gas inlet passage leading to said distributing cylinder, a normally open automatic pressure-controlled means for said passage arranged to close said passage when the pressure of gas therein exceeds the resistance of said means, said distributing cylinder having a distributing passage for delivering gas contained therein to a gas engine cylinder, and a manually controllable valve for the gas inlet arranged in the passage between the automatic pressure-controlled means and the source of gas supply.

[Claims 6 to 9 not printed in the Gazette.]

1,064,056. CONCRETE CONSTRUCTION. ALEXIS DE REHBINDER, Los Angeles, Cal. Filed Mar. 5, 1912. Serial No. 681,699. (Cl. 72—46.)

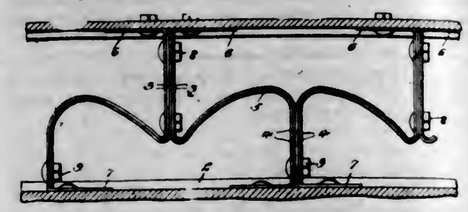


1. A concrete building construction, comprising beams and studs of cementitious material having longitudinal securing strips near their surfaces and reinforcements arranged within the cementitious materal and passing around outside the securing strips, said beams and studs with their securing strips being spaced in certain definite relation, and other cementitious members having securing pieces therein spaced in relation to each other corresponding to the relative spacing of the securing strips of the beams and studs adapted to register with and be secured to the securing strips of the beams and studs.

2. A concrete building construction, comprising beams and studs of cementitious material having longitudinal wooden securing strips united therewith near their surfaces, said beams and studs with their securing strips being spaced in certain definite relation, and cementitious wall slabs having wooden securing blocks therein spaced in relation to each other corresponding to the relative spacing of the securing strips of the beams and studs, and means for securing said blocks directly to said strips.

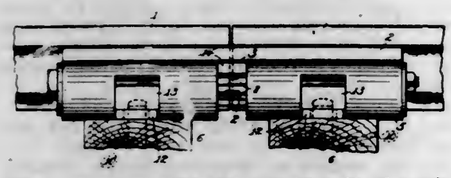
3. A concrete building construction, comprising beams and studs of cementitious material having longitudinal wooden securing strips united therewith near their surfaces, said beams and studs with their securing strips being spaced in certain definite relation, and cementitious wall slabs having wooden securing blocks therein spaced in relation to each other corresponding to the relative spacing of the securing strips of the beams and studs, said blocks being set in each wall slab flush with one face thereof but terminating within the slab beneath the opposite face thereof ,and means for securing said blocks directly to said strips.

1,064,057. SPRING FOR VEHICLES. ESPY L. DEVORE, Aurelia, Iowa. Filed June 8, 1911. Serial No. 632,067. (Cl. 74—68.)



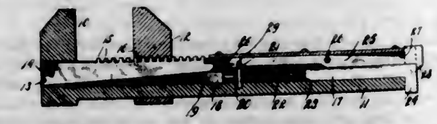
The combination with upper and lower spaced members to be cushioned, of a series of springs arranged between the same and comprising leaves having intermediate portions of cyma form and terminal straight portions forming oppositely projecting stems, the straight portions of adjacent springs being secured together, the extremities of the straight portions of some of the leaves being extended laterally and secured respectively to the upper and lower spaced members and the straight portions of the other leaves terminating short of said laterally extended extremities.

1,064,058. RAIL-JOINT. FRIEND E. DILLON, Wheeling, W. Va., assignor of one-fifth to Charles H. Copp, one-fifth to Hal Speidel, one-fifth to G. O. Nagle, and one-eighth to William M. Clemens, Wheeling, W. Va. Filed June 23, 1911. Serial No. 634,957. (Cl. 239—6.)



The combination with adjacent rail ends, of a pair of splice-bars, an integral longitudinal rib formed on the outer face of each bar, the outer face of said rib being inclined inward toward opposite ends from a substantially median point, a pair of adjustable clamps mounted in opposing relation, one at each side of the meeting point of the rail ends, each clamp being formed of a resilient metal plate of even thickness throughout and comprising a chair portion and integral opposing arcuately curved joint-cushioning portions, the terminal edges of the latter being inclined to correspond with the inclination of the rib-faces and being in bearing engagement with said faces, and apertured lugs struck up from said clamp intermediate its ends and lying in the plane of the chair portion.

1,064,059. MONKEY-WRENCH. THEODORE C. DOREDANT, New Orleans, La. Filed Sept. 10, 1912. Serial No. 719,568. (Cl. 81—138.)



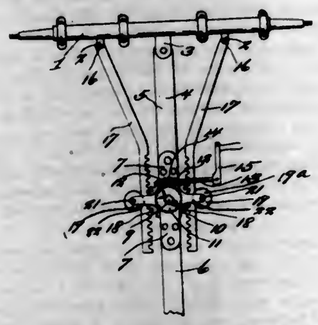
1. A wrench, comprising jaws, one of which is movable toward and from the other, a locking device for the movable jaw, an actuating member for the locking device, a latch for the actuating member, and a spring on the latch for engagement with the locking device for throwing the latch.

2. A wrench, comprising jaws, one of which is movable toward and from the other, a locking device for the movable jaw, means for moving the locking device into engagement with the movable jaw, a latch for holding the parts in adjusted position, and spring means normally tending to move the locking device out of locking position and to move the latch into the latching position.

3. A wrench, comprising jaws, one of which is movable toward and from the other, a locking device, means for moving the locking device out of engagement with the movable jaw, and latching means operable by the locking device to hold the parts in the adjusted position.

4. A wrench, comprising a handle having a fixed jaw, a second jaw slidable on the handle, a locking bar pivotally mounted within the handle to rock toward and from the movable jaw, said movable jaw and said locking bar having teeth adapted for inter-engagement, a slide movable in the handle, said slide having a head at the rear end, a compression spring surrounding the slide intermediate its ends, a guide piece in the handle through which the slide extends and against which the spring abuts at one end, said spring abutting its opposite end against the slide, a latch bar ranging alongside the slide within the handle, and pivoted to rock, said latch having a projection at its rear end to engage the head of the slide, the latch bar furthermore having a notch to accommodate the mentioned guide piece, and a plate spring carried by the forward end of the latch bar and bearing against the rear end of the locking bar.

1,064,060. STEERING DEVICE FOR TONGUES. JOSEPH A. DRURY, Wykoff, Minn. Filed Oct. 19, 1912. Serial No. 726,754. (Cl. 21—137.)



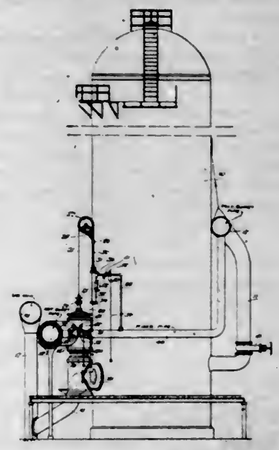
In combination, an axle, a tongue pivoted centrally to the axle, the tongue comprising two sections, a pair of plates connecting the sections, one above and one below, a shaft journaled in said plates and provided with a gear wheel on its lower portion between the adjacent ends of the sections and between the plates, a worm wheel on the upper portion of said shaft, the plates having lateral extensions, racks meshing with the gear, one upon each side of the tongue, each rack having pivotal connections with one end of the axle, rollers journaled between the lateral extensions, one upon each side of the tongue, for holding the racks in mesh with the gear, and means mounted in bearings of one of said plates for rotating the worm wheel.

1,064,061. SAFETY APPLIANCE FOR HOT-BLAST STOVES. JULIUS A. DYBLIE, Joliet, Ill., assignor of one-half to James I. Larimer, Joliet, Ill. Filed Apr. 14, 1911. Serial No. 621,062. (Cl. 75—5.)

1. In combination, a hot blast main, a hot blast stove having a discharge pipe opening into said main, a safety check valve in said discharge pipe between said main and said stove, and a fluid pressure motor controlled by the pressure of the air blast for opening said valve.

2. In combination, a hot blast stove, a discharge pipe for the hot blast, a safety valve for said discharge pipe, a fluid pressure motor controlled by the pressure of the air blast for actuating said valve, and means for controlling said motor to effect the opening and closing of said valve at will.

3. In combination, a hot blast main, a hot blast stove having a discharge pipe opening into said main, a self closing, safety check valve in said discharge pipe between said stove and said main, a fluid pressure device controlled by the compressed air of the blast for opening and holding open said valve, and means for controlling said motor to effect the opening and closing of the valve at will.



4. In combination, a hot blast stove, a discharge pipe for the hot blast, a self-closing, safety check-valve in said discharge pipe, a fluid pressure device controlled by the compressed air of the blast for opening and holding open said safety valve, and a manually operable valve for controlling the admission and exhaust of compressed air to and from said fluid pressure device to control the opening and closing of the valve at will.

5. In combination, a hot blast stove, a discharge pipe for the hot blast, a safety cut-off valve for said discharge pipe arranged above and on the discharge side of its seat and vertically movable to and from its seat, a motor cylinder and piston for shifting said cut-off valve, a pipe for conducting the compressed air of the blast to one end of said cylinder and valve mechanism for cutting off the supply through said pipe and connecting said cylinder to the atmosphere.

[Claims 6 to 22 not printed in the Gazette.]

1,064,062. SOUND-BOX FOR TALKING-MACHINES. JOHN C. ENGLISH, Camden, N. J., assignor to Victor Talking Machine Company, a Corporation of New Jersey. Filed Oct. 31, 1910. Serial No. 589,845. (Cl. 181—11.)



1. In a sound box, the combination with a substantially inflexible conical diaphragm, of a yielding gasket supporting said diaphragm, said gasket being held under an initial pressure forcing said gasket against the peripheral edge of said diaphragm.

2. In a sound box, the combination with a circular diaphragm, of a yielding gasket supporting the same, said gasket comprising an annular base portion greater in internal diameter than the diameter of said diaphragm and surrounding said diaphragm in the plane of the marginal

edge thereof, and comprising a relatively thin annular portion between said base portion and said diaphragm.

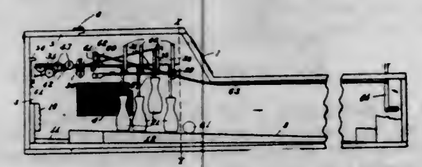
3. A gasket for a sound box comprising an annular base portion, and a relatively thin normally flat annular portion carried by said base portion and projecting toward the center of said base portion from the internal surface of said base portion.

4. A yielding gasket for a sound box, comprising a base portion, a relatively thin portion inclosed by and projecting inwardly from said base portion, and a holder extending inwardly from said relatively thin portion, and adapted to support the marginal portion of a diaphragm.

5. An annular yielding gasket for a sound box, comprising a base portion, a relatively thin portion projecting inwardly from said base portion, and a grooved holder extending inwardly from said relatively thin portion, and adapted to support the marginal portion of a diaphragm.

[Claims 6 to 30 not printed in the Gazette.]

1,064,063. TENPIN GAME. ALBERT FEARLAND, Lawrence, Mass. Filed Jan. 3, 1913. Serial No. 739,961. (Cl. 46—54.)



1. In a game apparatus, the combination of a fixed shaft, a plurality of lifting rods of varying lengths pivoted thereon each having a tail at its back end and a loop at its front end, and weights adjustable on said tails, with pin hangers supported by said loops each having a notch, pins carried by said hangers, and locking bars in operative relation with said notches, together with means for depressing the lifting rods collectively until the notches engage the locking bars as described.

2. In a game apparatus, the combination of a fixed shaft, a plurality of lifting rods of varying lengths coiled around said shaft each having a tail at its back end and a loop near its front end and a guide member, and weights adjustable on said tails, with pin hangers each having a notch supported by said loops, pins carried by said hangers, locking bars in operative relation with said notches, and U shaped guides attached to the locking bars for the guide members of the lifting rods, together with means for depressing the lifting rods collectively until the notches engage the locking bars as described.

3. In a game apparatus, the combination of a fixed shaft, a plurality of lifting rods of varying lengths coiled around said shaft each having a tail at its back end and a loop near its front end and a guide member, and weights adjustable on said tails, with pin hangers each having a notch supported by said loops, pins carried by said hangers, locking bars in operative relation with said notches, and U shaped guides attached to the locking bars for the guide members of the lifting rods, together with means for depressing the lifting rods collectively comprising a setting bar carried by pivoted side arms having an arm connected with a setting rod and a hand lever as described.

4. In a game apparatus, the combination of a fixed shaft, a plurality of lifting rods of varying lengths coiled around said shaft each having a tail at its back end and a loop near its front end and a guide member, and weights adjustable on said tails, with pin hangers each having a notch supported by said loops, pins carried by said hangers, locking bars in operative relation with said notches, and U shaped guides attached to the locking bars for the guide members of the lifting rods, together with means for depressing the lifting rods collectively comprising a setting bar carried by pivoted side arms having an arm connected with a setting rod and a hand lever, and a tail locking member comprising slidable slotted side members, a cross bar carried thereby above the ends of the tails and adjusting bolts and nuts for the side members.

1,064,064. METHOD AND APPARATUS FOR PRODUCING A GASEOUS REACTION BY A SILENT DISCHARGE. MILTON W. FRANKLIN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 21, 1911. Serial No. 656,003. (Cl. 204—32.)



1. The method of producing a gas having a different chemical composition from the initial gas which consists in causing the gas to flow at a substantially uniform rate through a series of discharge passages, subjecting the gas to a series of silent discharges and in mixing with the gas in its changed condition after each such discharge other gas having the same composition as the initial gas.

2. The method of producing ozone, which consists in causing air to flow at a substantially uniform rate through a series of discharge passages, subjecting the air to a series of silent discharges and in successively mixing air in its unchanged condition with the air thus treated between the successive silent discharges.

3. In an apparatus for producing a gaseous reaction by a silent discharge, a pair of electrodes between which a silent discharge is adapted to take place, one of said electrodes being made in sections and so arranged as to permit gas to pass between the successive sections, a gas passage disposed adjacent one of the electrodes on the opposite side thereof from its coöperating electrode, and means for successively deflecting the gas in said passage to the spaces between said coöperating electrode and the successive sections of the other electrode.

4. In an apparatus for producing a gaseous reaction by a silent discharge, an outer electrode and an inner electrode spaced therefrom and composed of a series of sections so arranged as to permit gas to pass throughout the electrode and between the successive sections, and means for successively deflecting the gas as it passes through said passage to the spaces between the one electrode and the successive sections of the other.

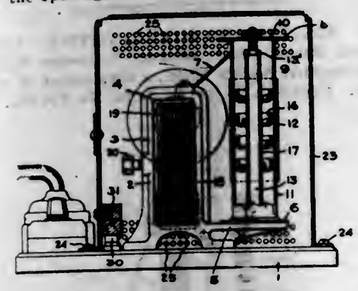
5. In an apparatus for producing a gaseous reaction by a silent discharge, a pair of concentric electrodes suitably spaced apart between which a silent discharge is adapted to take place, the inner electrode being composed of a series of sections arranged as to permit gas to pass throughout the electrode and between the successive sections, and means for successively deflecting the gas in said passage to the spaces between the outer electrode and the successive sections of the inner electrode.

[Claims 6 to 8 not printed in the Gazette.]

1,064,065. OZONATOR. MILTON W. FRANKLIN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 31, 1912. Serial No. 728,810. (Cl. 204—32.)

1. In a device for producing a gaseous reaction by a static discharge, a base, a frame mounted thereon provided with one or more openings, one or more arms extending longitudinally from said frame, a plate mounted upon said arms and having openings, hollow units comprising electrodes for producing a gaseous reaction by a static discharge mounted upon said plate and registering with said openings, and means for producing a difference of potential between the electrodes in said units comprising a transformer whose core is mounted in the openings in said frame.

2. In a device for producing a gaseous reaction by a static discharge, a base, a frame mounted thereon comprising two similar members having openings, arms extending longitudinally from said members, a plate provided with openings mounted upon said arms, hollow units comprising electrodes for producing a gaseous reaction by a static discharge mounted upon said plate and registering with the openings therein, and means for creating a difference of potential between the electrodes of said units comprising a transformer whose core is mounted in the openings of said frame.



3. In a device for producing a gaseous reaction by a static discharge, a base, a frame mounted thereon comprising two similar members having openings, arms extending longitudinally from the top and the bottom of said members, plates provided with openings mounted upon the top and bottom arms, hollow units for producing a gaseous reaction by a static discharge mounted between said plates and registering with the openings therein, and means for creating a difference of potential between the electrodes of said units comprising a transformer whose core is mounted in the openings of said frame.

1,064,066. VEHICLE WHEEL-RIM. RICHARD W. FUNK, Weehawken, N. J., assignor to R. W. Funk, Incorporated, New York, N. Y., a Corporation of New York. Filed Jan. 18, 1913. Serial No. 742,767. (Cl. 152—21.)



1. In a vehicle wheel, a fixed rim comprising a channel section and a plurality of flanges for supporting a rim-engaging member, said flanges extending from and being angularly disposed to the legs of said channel and being oppositely inclined to the plane of the wheel.

2. In a vehicle wheel, a fixed rim comprising a channel section and a plurality of opposed flanges for supporting a rim-engaging member, said flanges being disposed in pairs angularly spaced about the periphery of the legs of said channel, each of said flanges extending inwardly from and being angularly disposed to a leg of said channel.

3. In a vehicle wheel, a fixed rim comprising a channel section, and means for supporting a rim-engaging member including a flange extending from one leg of said channel and inclined in the direction of the other leg, and a second flange extending from the other leg of the channel and inclined toward the first-named leg.

4. In a vehicle wheel, a fixed rim comprising a channel section and a plurality of flanges integral with the legs of and angularly spaced about, said channel, each of said flanges consisting of a section partially severed from said member and bent away from the same.

5. In a vehicle wheel, a fixed rim comprising a channel section and a plurality of flanges integral with and angularly spaced about said channel, each of said flanges consisting of a section partially severed from one leg of the channel and bent away from the same.

[Claims 6 to 11 not printed in the Gazette.]

1,064,067. AUTOMATIC CAR-STOP AND CAGING APPARATUS FOR MINES. JOHN E. GABLE, Cambridge, and IRA A. GABLE, Byesville, Ohio. Filed Aug. 18, 1911. Serial No. 644,838. (Cl. 214—12.)



1. The combination with an elevating cage of an inclined track leading thereto, a bumper pivotally supported between the rails of said track for arresting cars in their passage to said cage, a toggle-lever for elevating and depressing the operative end of said bumper, a tripper member adapted to be actuated by a passing cage, connections between said tripper member and said toggle-lever whereby the latter is automatically depressed to inoperative position, and a trip-mechanism adapted to be operated by the passage of a car to said cage for raising said toggle lever and bumper into operative position.

2. The combination with an elevating cage, of an inclined track leading thereto, means for stopping cars in their passage over said track to said cage, means arranged and adapted to be automatically actuated by the movement of said cage for operating said stopping means, and means also automatically actuated by the descending cage for imparting an initial movement to each individual car after its release from the stopping means aforesaid.

3. The combination with an elevating cage, of an inclined track leading thereto, means for stopping the cars in their passage over said track to said cage, means arranged and adapted to be automatically actuated by the movement of said cage for operating said stopping means, and a flexible cable crossing the shaft sump in a position to be engaged by a descending cage and provided with spurs for engaging and imparting an initial movement to each individual car after its release from the stopping means aforesaid.

4. The combination with an elevating cage, of an inclined track leading thereto, means for stopping cars in their passage over said track to said cage, means arranged and adapted to be automatically actuated by the movement of said cage for operating said stopping means, and a flexible cable crossing the shaft sump in a position to be engaged by a descending cage provided with folding and spring-cushioned spurs for engaging and imparting an initial movement to each individual car after its release from the stopping means aforesaid.

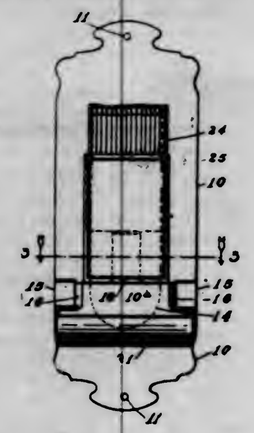
5. The combination with an elevating cage, of an inclined track leading thereto, means automatically actuated by passage of the said cage for stopping cars in their passage over said track, means also automatically actuated by the descending cage for imparting an initial movement to each individual car after its release from the stopping mechanism aforesaid, and a system of levers and intermediate connections adapted to be automatically actuated by a car in its passage to the cage for resetting the aforesaid stopping means.

[Claims 6 to 11 not printed in the Gazette.]

1,064,068. MATCH-BOX HOLDER. JOHN L. GAFFNEY, Chicago, Ill. Filed Sept. 18, 1912. Serial No. 720,958. (Cl. 206—31.)

A match box holder consisting of a main supporting member provided with a tongue extended forwardly and downwardly in substantial parallelism with said member and having its lower end free, a projection on the supporting member at each side of the lower portion of said tongue, each of said projections being extended forwardly and upwardly in substantial parallelism with the supporting member and secured thereto at their lower ends, another member having a horizontally disposed receptacle and at each of its sides a lateral projection to engage the first named projections, said last named member also having between its sides an upwardly extended tongue

provided at its free end with a deflected part to rest against the bottom of the match box and to sustain it



with one end thereof extended through the casing of the box.

1,064,069. APPARATUS FOR STRAIGHTENING FLAT OR OTHER GOODS BEFORE IRONING. ROBERT GARDNER, Toronto, Ontario, Canada. Filed June 23, 1911. Serial No. 634,866. (Cl. 68—9.)



1. In a device for straightening wash goods the combination of a table having a substantially horizontal rear portion, the table curving sharply downwardly and forwardly from the rear portion; suitable supports for the table; a substantially vertically movable clamp adapted to coöperate with the rear portion of the upper surface of the table to engage and clamp one edge of each piece of goods; and means extending to a position adjacent the front of the table for operating said clamp.

2. In a device for straightening wash goods the combination of a table; suitable supports therefor; a vertically movable clamp adapted to coöperate with the upper surface of the table to engage and clamp one edge of each piece of goods; rocking means from which said clamp is supported; a treadle pivoted beneath the table with its foot engageable end adjacent the front of the table; a connecting rod operatively connecting said treadle with said rocking means; means for locking the treadle in any one of a series of predetermined positions; and spring accommodation means between the locking point and the clamping point.

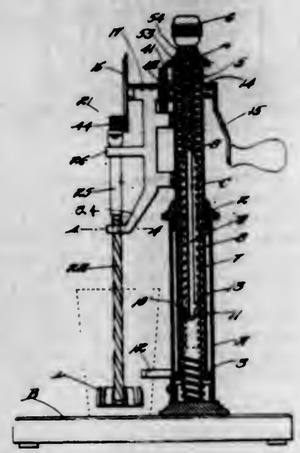
3. In a device for straightening wash goods the combination of a table; a clamp bar adapted to coöperate with the upper surface of the table; a pair of rock arms; a bar connecting said arms from which the clamp bar is pivotally hung; a treadle pivoted beneath the table; and a connecting rod operatively connecting said treadle with said rock arms.

4. In a device for straightening wash goods the combination of a table; a clamp bar; a pair of rock arms; a bar connecting said arms; bearings on said bar; yielding connections between said bearings and the clamp bar; a treadle pivoted beneath the table; and a connecting rod operatively connecting said treadle with said rock arms.

5. In a device for straightening wash goods the combination of a table; suitable supports therefor; a vertically movable clamp adapted to coöperate with the upper surface of the table to engage and clamp one edge of each piece of goods; rocking means from which said clamp is swingingly supported; a treadle pivoted beneath the table with its foot engageable end adjacent the front of the table; and a connecting rod operatively connecting said treadle with said rocking means.

[Claim 6 not printed in the Gazette.]

1,064,070. BEATING AND MIXING DEVICE. HOWARD W. GIBBS, Boston, Mass., assignor to Dorsey Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 24, 1913. Serial No. 750,052. (Cl. 31—63.)



1. A beater comprising a hollow standard, a hollow plunger slidable with relation to said standard, a spring for sliding said plunger, a rod in said plunger secured thereto, a member within said standard and secured thereto, and releasable engaging means to cause one of said members to engage the other.

2. A beater comprising a hollow standard, a hollow plunger slidable with relation to said standard, a spring for sliding said plunger, a rod in said plunger secured thereto, a member within the said standard and secured thereto, one of said members being provided with a notch and the other being provided with a projection to engage said notch.

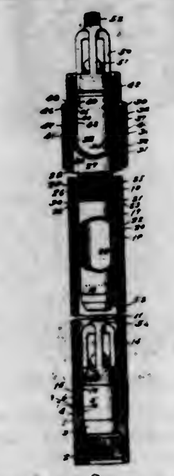
3. A beater comprising a hollow standard, a hollow plunger slidable with relation to said standard, a spring for sliding said plunger, an oscillatable rod secured in said plunger, a tubular upwardly extending member within said standard and secured thereto, said tubular member having a longitudinal slot with a notch in the side thereof and a pin in said rod slidable in said slot to engage the said notch.

4. A beater comprising a hollow standard, a tubular upwardly extending member within said standard and secured thereto, a hollow plunger slidable in said standard, a rod within said hollow plunger and secured thereto, a helical spring in said hollow plunger and surrounding said rod and tubular member, said tubular member having a longitudinal slot therein with a notch in the side thereof and a projection on said rod to engage said notch.

5. A beater comprising a hollow standard, a hollow plunger slidable with relation to said standard, a spring for sliding said plunger, an oscillatable rod secured to said plunger, said rod projecting above the top of said plunger and having a knob thereon by means of which the rod may be turned, a tubular upwardly extending member within said standard and secured thereto, said tubular member having a longitudinal slot with a notch in the side thereof and a pin in said rod slidable in said slot to engage the said notch.

[Claims 6 to 8 not printed in the Gazette.]

1,064,071. DEEP-WELL LINER-PUMP. EDWIN A. HARDISON, Bakersfield, and ROBERT W. GUNN and WILLSIE A. S. THOMPSON, Los Angeles, Cal. Filed Apr. 12, 1910. Serial No. 555,088. (Cl. 103—80.)



1. A pump comprising a pump base and working barrel case connected therewith, a working barrel in the case, a standing valve in the base and working barrel, means to connect the working barrel with the working barrel case, a wear collar at the upper end of and adjustable laterally relative to the working barrel, a cap to hold the wear collar in fixed relation to the working barrel and a plunger inside the working barrel and fitting the wear collar.

2. A pump comprising a pump base, a working barrel case connected therewith, a working barrel in the case, a standing valve in the base, means to connect the working barrel with the working barrel case, a loose wear collar at the upper end of the working barrel, a plunger inside the working barrel and fitting the wear collar, and means to hold the wear collar against axial movement, the plunger being of greater length than the distance between the top of the standing valve and the top of the working barrel.

3. A pump comprising a working barrel, a wear collar means fastened to the upper end of the working barrel to hold the collar against movement relative to the barrel, and a plunger fitting the working barrel and the wear collar.

4. A pump comprising a working barrel, a loose wear collar means fastened to one end of the working barrel to hold the wear collar in fixed relation to the working barrel, and a plunger fitting the working barrel and the wear collar.

5. A pump comprising a working barrel, a loose wear collar means fastened to the working barrel to hold the wear collar in fixed relation to the working barrel and a plunger fitting the working barrel and the wear collar.

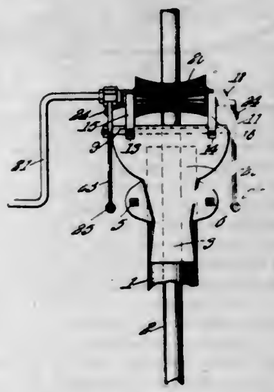
[Claims 6 to 22 not printed in the Gazette.]

1,064,072. TROUSERS-PATTERN WITH HEM AND CUFF EXTENSION. FRANK T. HARRINGTON, Chicago, Ill. Filed Oct. 17, 1911. Serial No. 655,130. (Cl. 223—1.)

A non-shrinkable pattern of fiber board or the like for trousers provided with a transverse line indicating the actual inseam of the trousers leg, and beyond said line with an integral hem and cuff extension pattern having parallel side margins, said extension pattern being provided with spaced, transverse scale lines to indicate the proper allowance of goods for different width hems and cuffs.



1,064,073. ROD-PULLER. JAMES H. HOOKER, Silverton, Tex. Filed Jan. 4, 1913. Serial No. 740,244. (Cl. 57—15.)



1. In an apparatus of the class described, a sleeve adapted to engage a cylindrical support, linked arms pivotally secured to the upper portion of said sleeve, rollers journaled within said arms, one of said rollers provided with a serrated surface, means for rotating said serrated roller, resilient means adapted to hold said rollers against the surface of a rod.

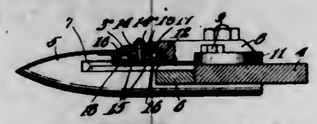
2. In an apparatus of the class described, a split sleeve the upper extremities of which are bent into a vertical plane, means for holding said split sleeve to a circular support, arms pivotally secured to the upper extremities of said sleeves and provided with shafts journaled at the upper extremities thereof, concaved rollers mounted upon said shafts, one of said rollers provided with a serrated surface and adapted to be rotated by said shafts, cross arms secured to said shafts and provided with a resilient spring adapted to force said rollers into contact with a cylindrical rod.

3. A rod puller comprising a split sleeve, the upper extremity of which is bent into a vertical plane, ears provided upon said split sleeve sections and provided with bolts extending therebtween adapted to hold said sleeve sections to a circular support, arms pivotally mounted to the upper portion of said sleeve and provided with shafts extending therebetween, a smooth concaved roller loosely mounted upon one of said shafts, a serrated roller secured to the other of said shafts and adapted to be rotated

thereby, cross arms secured to the extremities of each of said shafts, a pivotal joint between said cross arms, a tension spring secured to the lower extremity of said cross arms and adapted to force said rollers into frictional engagement with a rod, means for preventing said serrated roller from turning in a reverse direction.

4. A rod puller comprising a split sleeve having bolts extended therebetween adapted to rigidly engage a circular casing, arms pivotally secured within slots provided at the upper extremities of said sleeve, shafts rotatably mounted within bearings at the upper ends of said arms, a concaved roller provided with a smooth continuous surface rotatably mounted upon one of said shafts, a serrated roller fixedly secured to the other of said shafts and adapted to be rotated thereby, a ratchet and pawl secured to said shafts and to said sleeves adapted to prevent a reversing of said serrated roller, cross arms journaled to the extremities of said shafts and provided with a pivotal joint therebetween, said cross arms extending downward from said pivotal joint and provided with a resilient helical spring secured to the extremities of said arms said springs adapted to force said rollers into active and frictional engagement with a cylindrical rod.

1,064,074. ANTIFRICTIONAL BEARING FOR MOWING-MACHINES. JOHN S. HOWK, Reno, Nev. Filed Sept. 13, 1912. Serial No. 720,284. (Cl. 56—44.)



1. A clip attachable to the finger bar of a mowing machine and having a tongue to overhang the sickle, and a member pivoted to the tongue to rotate in an inclined plane relative to the sickle and to contact at its lower portion with the face of the sickle.

2. A clip attachable to the finger bar of a mowing machine and having a tongue to overhang the sickle, a member pivoted to the bottom of the tongue to rotate in an inclined plane relative to the sickle and to contact at its lower portion with the face of the sickle, and an annular series of anti-frictional members disposed between the tongue and the said member.

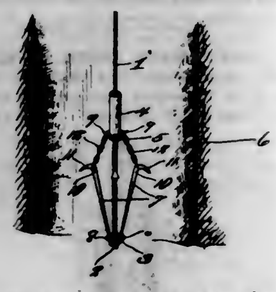
3. A clip attachable to the finger bar of a mowing machine having a tongue to overhang the sickle, the tongue having a lower recess with the bottom of the recess inclined, a pair of complementing ball bearing cups, one cup being seated in the recess so that the other cup may rotate in an inclined plane relative to the sickle and contact at its lower portion with the face of the sickle, ball bearings between the cups, and a member pivoting the cups to the tongue.

4. A clip attachable to the finger bar of a mowing machine and having a tongue to overhang the sickle, the tongue having a lower recess therein with the bottom of the recess inclined, a pair of interchangeable complementing ball bearing cups, one cup being seated in the recess so that the other cup may rotate in an inclined plane relative to the sickle and contact at its lower portion with the face of the sickle, ball bearings between the cups, and a removable member detachably pivoting the cups to the tongue.

5. A clip attachable to the finger bar of a mowing machine and having a tongue to overhang the sickle, the tongue having a lower recess therein with the bottom of the recess inclined, a pair of complementing ball bearing cups, each cup comprising a disk provided with an annular groove around its margin and a central aperture, one cup being seated in the recess so that the other cup may rotate in an inclined plane relative to the sickle and contact at its lower portion with the face of the sickle, ball bearing between the grooves of the cups, and a securing member passed through the aperture of the cups and engaging the tongue to support the cups.

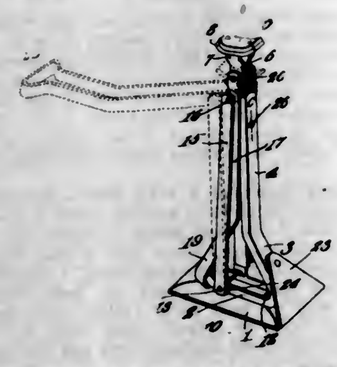
[Claims 6 and 7 not printed in the Gazette.]

1,064,075. GRAB-HOOK. LEE PERKINS KING, St. Joseph, Mo. Filed Nov. 30, 1912. Serial No. 734,266. (Cl. 57—9.)



In combination, a rope having a knot at its extreme end and provided with a second knot spaced from the first knot, a ring on the rope supported by the first knot, a series of hooked bars pivotally swung on the ring, a sleeve arranged telescopically on the rope and supported by the second knot and provided with a series of prongs, and chains connected to the hooked ends of said bars and having their upper end portions loosely connected to said prongs, so as to become disengaged when the ring contacts with the bottom of a well.

1,064,076. LIFTING-JACK. HERMAN W. LAMPMAN, Lagrange, Ind. Filed Feb. 28, 1912. Serial No. 680,541. (Cl. 57—101.)



1. A jack including a base, a standard thereon formed in a single length of channeled material, said standard having upstanding spaced portions with their channels innermost, a slide formed in a single length of metal folded to form parallel spaced members mounted within the channels in said standard, a tie connecting the channeled members of the standard and extending between the members of the slide, and means for shifting the slide longitudinally relative to the standard.

2. A jack including a base, a channeled strip secured on the base and having upstanding portions forming a standard, the channel being formed in the inner faces of said portions, a tie connecting said portions, a slide mounted within the channels in the upstanding portions and consisting of a single length of metal folded upon itself to form opposed parallel portions, the tie being extended between said parallel portions, and means for shifting the slide longitudinally relative to the standard.

3. A jack including a base, a channeled strip secured on the base and having upstanding portions forming a standard, the channel being formed in the inner faces of said portions, a tie connecting said portions, a slide mounted within the channels in the upstanding portions and consisting of a single length of metal folded upon itself to form opposed parallel portions, the tie being extended between said parallel portions, means for shifting the slide longitudinally relative to the standard, a link pivotally connected to the lower portion of the standard, a lever pivotally connected to the slide, and a pivotal connection between the lever and link.

4. A jack including a base, a channeled strip secured on the base and having upstanding portions forming a standard, the channel being formed in the inner faces of said portions, a tie connecting said portions, a slide mounted within the channels in the upstanding portions and consisting of a single length of metal folded upon itself to form opposed parallel portions, the tie being extended between said parallel portions, means for shifting the slide longitudinally relative to the standard, a link pivotally connected to the lower portion of the standard, a lever pivotally connected to the slide, and a pivotal connection between the lever and link, said connection being shiftable past the lever and slide to lock the slide in elevated position.

5. The combination with a base, of a standard formed in a single length of channeled material and including upwardly extending portions having the channel in the inner faces thereof and forming a guide, a slide within said guide and formed in a single length of metal folded on itself, a lever straddling the slide and standard and pivotally and adjustably connected to the slide, and links connecting said lever and the base portion of the standard, the points of connection between the links and the lever being shiftable past the dead center to lock the slide in elevated position.

[Claims 6 to 8 not printed in the Gazette.]

1,064,077. BOOK-STAND. ARTHUR LEWYT, Brooklyn, N. Y., assignor to International Tailoring Co., New York, N. Y., a Corporation of New York. Filed Dec. 28, 1911. Serial No. 668,205. (Cl. 45—85.)

1. In a book stand, a base, a stem, a support, hinged sides upon said support to support the sides of a book, said hinged sides being limited in movement by said support, and having means for retaining a book in position thereupon, each of said hinged sides comprising an L-shaped strip and two straight strips fastened together in parallel arrangement, a transverse strip connecting the free ends of said first mentioned strips and terminating in an offset to retain one side of a book; and the bottom of said L-shaped strip also terminating in an offset to retain the same side of said book.

2. In a book stand, a base, a stem, a support, hinged sides upon said support to support the sides of a book, said hinged sides being limited in movement by said support, and having means for retaining a book in position thereupon, each of said hinged sides comprising an L-shaped strip and two straight strips fastened together in parallel arrangement, a transverse strip connecting the free ends of said first mentioned strips and terminating in an offset to retain one side of a book, and the bottom of said L-shaped strip also terminating in an offset to retain the same side of said book, and fastening means between the offsets of said L-shaped strips of said hinged sides.

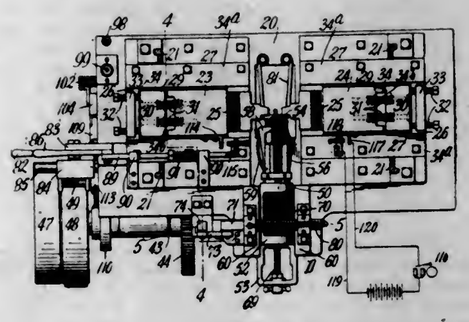
longitudinally relative to the standard, a link pivotally connected to the lower portion of the standard, a lever pivotally connected to the slide, and a pivotal connection between the lever and link.

4. A jack including a base, a channeled strip secured on the base and having upstanding portions forming a standard, the channel being formed in the inner faces of said portions, a tie connecting said portions, a slide mounted within the channels in the upstanding portions and consisting of a single length of metal folded upon itself to form opposed parallel portions, the tie being extended between said parallel portions, means for shifting the slide longitudinally relative to the standard, a link pivotally connected to the lower portion of the standard, a lever pivotally connected to the slide, and a pivotal connection between the lever and link, said connection being shiftable past the lever and slide to lock the slide in elevated position.

5. The combination with a base, of a standard formed in a single length of channeled material and including upwardly extending portions having the channel in the inner faces thereof and forming a guide, a slide within said guide and formed in a single length of metal folded on itself, a lever straddling the slide and standard and pivotally and adjustably connected to the slide, and links connecting said lever and the base portion of the standard, the points of connection between the links and the lever being shiftable past the dead center to lock the slide in elevated position.

[Claims 6 to 8 not printed in the Gazette.]

1,064,078. ELECTRIC WELDING-MACHINE. LACHLAN E. MCKINNON and ALBERT W. SOUTHALL, Buffalo, N. Y., assignors, by mesne assignments, to McKinnon Chain Company, Buffalo, N. Y., a Corporation. Filed June 17, 1908, Serial No. 439,040. Renewed Oct. 28, 1912. Serial No. 728,266. (Cl. 219—5.)



1. In an electric welding machine, the combination of two electrodes which are movable toward and from each other, movable carriages on which said electrodes are yieldingly and also adjustably mounted, and mechanical means for moving the carriages toward each other and applying pressure to the electrodes for holding the same against opposite sides of the article to be welded, substantially as set forth.

2. In an electric welding machine, the combination of an electrode, a carriage for the same which is movable toward and from the welding position, a seat block which is secured to the carriage and lengthwise adjustable thereon, and a yielding connection between the seat block and the electrode, substantially as set forth.

3. In an electric welding machine, the combination of a table, a carriage movable thereon toward and from the welding position, a seat block lengthwise movable on said carriage and secured thereto by an adjusting device, an electrode lengthwise movable on the seat block, and a spring interposed between the seat block and the electrode and pressing the latter forwardly on the seat block, substantially as set forth.

4. In an electric welding machine, the combination of a carriage movable toward and from the welding position, a seat block which is lengthwise adjustable on said carriage, an electrode movable lengthwise on said block, a spring pressing the electrode inwardly on the block, and a slack connection between the electrode and the block for moving the electrode outwardly with the block and carriage, substantially as set forth.

5. In an electric welding machine, the combination of two carriages which are movable toward and from each other, positive means for actuating said carriages, electrodes movably mounted on said carriages, and yielding and also adjustable connections between the carriages and the electrodes, substantially as set forth.

[Claims 6 to 20 not printed in the Gazette.]

1,064,079. ELECTRIC WELDING-MACHINE. LACHLAN E. MCKINNON, Buffalo, N. Y., assignor to McKinnon Chain Company, Buffalo, N. Y. Filed June 17, 1908, Serial No. 439,039. Renewed Oct. 28, 1912. Serial No. 728,267. (Cl. 219—4.)

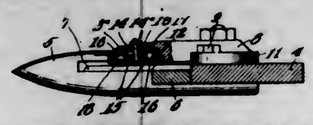
1. The combination with welding electrodes and the circuit in which the same are arranged, of a make and break mechanism whereby the circuit is periodically opened and closed, while the welding electrodes are in welding relation to the work to produce an intermittent welding current, substantially as set forth.

2. The combination with welding electrodes and the circuit in which the same are arranged, of a make and break mechanism whereby the circuit is periodically opened and closed while the electrodes are in welding relation to

thereby, cross arms secured to the extremities of each of said shafts, a pivotal joint between said cross arms, a tension spring secured to the lower extremity of said cross arms and adapted to force said rollers into frictional engagement with a rod, means for preventing said serrated roller from turning in a reverse direction.

4. A rod puller comprising a split sleeve having bolts extended therebetween adapted to rigidly engage a circular casing, arms pivotally secured within slots provided at the upper extremities of said sleeve, shafts rotatably mounted within bearings at the upper ends of said arms, a concaved roller provided with a smooth continuous surface rotatably mounted upon one of said shafts, a serrated roller fixedly secured to the other of said shafts and adapted to be rotated thereby, a ratchet and pawl secured to said shafts and to said sleeves adapted to prevent a reversing of said serrated roller, cross arms journaled to the extremities of said shafts and provided with a pivotal joint therebetween, said cross arms extending downward from said pivotal joint and provided with a resilient helical spring secured to the extremities of said arms said springs adapted to force said rollers into active and frictional engagement with a cylindrical rod.

1,064,074. ANTIFRICTIONAL BEARING FOR MOWING-MACHINES. JOHN S. HOWK, Reno, Nev. Filed Sept. 13, 1912. Serial No. 720,284. (Cl. 56—44.)



1. A clip attachable to the finger bar of a mowing machine and having a tongue to overhang the sickle, and a member pivoted to the tongue to rotate in an inclined plane relative to the sickle and to contact at its lower portion with the face of the sickle.

2. A clip attachable to the finger bar of a mowing machine and having a tongue to overhang the sickle, a member pivoted to the bottom of the tongue to rotate in an inclined plane relative to the sickle and to contact at its lower portion with the face of the sickle, and an annular series of anti-frictional members disposed between the tongue and the said member.

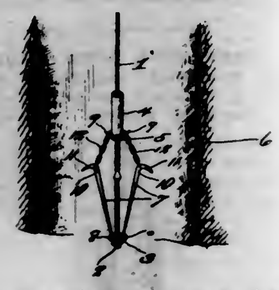
3. A clip attachable to the finger bar of a mowing machine having a tongue to overhang the sickle, the tongue having a lower recess with the bottom of the recess inclined, a pair of complementing ball bearing cups, one cup being seated in the recess so that the other cup may rotate in an inclined plane relative to the sickle and contact at its lower portion with the face of the sickle, ball bearings between the cups, and a member pivoting the cups to the tongue.

4. A clip attachable to the finger bar of a mowing machine and having a tongue to overhang the sickle, the tongue having a lower recess therein with the bottom of the recess inclined, a pair of interchangeable complementing ball bearing cups, one cup being seated in the recess so that the other cup may rotate in an inclined plane relative to the sickle and contact at its lower portion with the face of the sickle, ball bearings between the cups, and a removable member detachably pivoting the cups to the tongue.

5. A clip attachable to the finger bar of a mowing machine and having a tongue to overhang the sickle, the tongue having a lower recess therein with the bottom of the recess inclined, a pair of complementing ball bearing cups, each cup comprising a disk provided with an annular groove around its margin and a central aperture, one cup being seated in the recess so that the other cup may rotate in an inclined plane relative to the sickle and contact at its lower portion with the face of the sickle, ball bearing between the grooves of the cups, and a securing member passed through the aperture of the cups and engaging the tongue to support the cups.

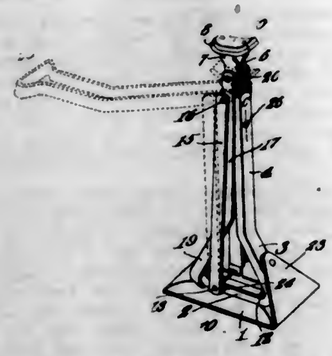
[Claims 6 and 7 not printed in the Gazette.]

1,064,075. GRAB-HOOK. LEE PERKINS KING, St. Joseph, Mo. Filed Nov. 30, 1912. Serial No. 734,266. (Cl. 57—9.)



In combination, a rope having a knot at its extreme end and provided with a second knot spaced from the first knot, a ring on the rope supported by the first knot, a series of hooked bars pivotally swung on the ring, a sleeve arranged telescopically on the rope and supported by the second knot and provided with a series of prongs, and chains connected to the hooked ends of said bars and having their upper end portions loosely connected to said prongs, so as to become disengaged when the ring contacts with the bottom of a well.

1,064,076. LIFTING-JACK. HERMAN W. LAMPMAN, Lagrange, Ind. Filed Feb. 28, 1912. Serial No. 680,541. (Cl. 57—101.)



1. A jack including a base, a standard thereon formed in a single length of channeled material, said standard having upstanding spaced portions with their channels innermost, a slide formed in a single length of metal folded to form parallel spaced members mounted within the channels in said standard, a tie connecting the channeled members of the standard and extending between the members of the slide, and means for shifting the slide longitudinally relative to the standard.

2. A jack including a base, a channeled strip secured on the base and having upstanding portions forming a standard, the channel being formed in the inner faces of said portions, a tie connecting said portions, a slide mounted within the channels in the upstanding portions and consisting of a single length of metal folded upon itself to form opposed parallel portions, the tie being extended between said parallel portions, and means for shifting the slide longitudinally relative to the standard.

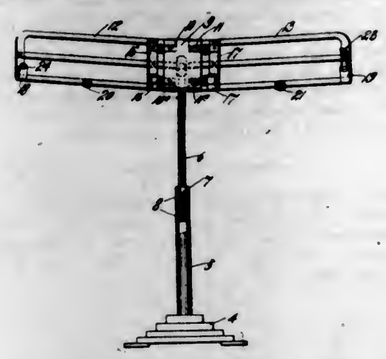
3. A jack including a base, a channeled strip secured on the base and having upstanding portions forming a standard, the channel being formed in the inner faces of said portions, a tie connecting said portions, a slide mounted within the channels in the upstanding portions and consisting of a single length of metal folded upon itself to form opposed parallel portions, the tie being extended between said parallel portions, means for shifting the slide longitudinally relative to the standard, a link pivotally connected to the lower portion of the standard, a lever pivotally connected to the slide, and a pivotal connection between the lever and link.

4. A jack including a base, a channeled strip secured on the base and having upstanding portions forming a standard, the channel being formed in the inner faces of said portions, a tie connecting said portions, a slide mounted within the channels in the upstanding portions and consisting of a single length of metal folded upon itself to form opposed parallel portions, the tie being extended between said parallel portions, means for shifting the slide longitudinally relative to the standard, a link pivotally connected to the lower portion of the standard, a lever pivotally connected to the slide, and a pivotal connection between the lever and link, said connection being shiftable past the lever and slide to lock the slide in elevated position.

5. The combination with a base, of a standard formed in a single length of channeled material and including upwardly extending portions having the channel in the inner faces thereof and forming a guide, a slide within said guide and formed in a single length of metal folded on itself, a lever straddling the slide and standard and pivotally and adjustably connected to the slide, and links connecting said lever and the base portion of the standard, the points of connection between the links and the lever being shiftable past the dead center to lock the slide in elevated position.

[Claims 6 to 8 not printed in the Gazette.]

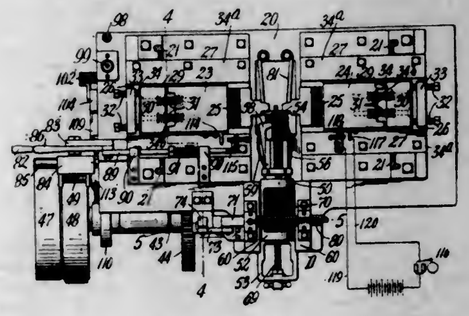
1,064,077. BOOK-STAND. ARTHUR LEWYT, Brooklyn, N. Y., assignor to International Tailoring Co., New York, N. Y., a Corporation of New York. Filed Dec. 28, 1911. Serial No. 668,205. (Cl. 45—85.)



1. In a book stand, a base, a stem, a support, hinged sides upon said support to support the sides of a book, said hinged sides being limited in movement by said support, and having means for retaining a book in position thereupon, each of said hinged sides comprising an L-shaped strip and two straight strips fastened together in parallel arrangement, a transverse strip connecting the free ends of said first mentioned strips and terminating in an offset to retain one side of a book, and the bottom of said L-shaped strip also terminating in an offset to retain the same side of said book.

2. In a book stand, a base, a stem, a support, hinged sides upon said support to support the sides of a book, said hinged sides being limited in movement by said support, and having means for retaining a book in position thereupon, each of said hinged sides comprising an L-shaped strip and two straight strips fastened together in parallel arrangement, a transverse strip connecting the free ends of said first mentioned strips and terminating in an offset to retain one side of a book, and the bottom of said L-shaped strip also terminating in an offset to retain the same side of said book, and fastening means between the offsets of said L-shaped strips of said hinged sides.

1,064,078. ELECTRIC WELDING-MACHINE. LACHLAN E. MCKINNON and ALBERT W. SOUTHALL, Buffalo, N. Y., assignors, by mesne assignments, to McKinnon Chain Company, Buffalo, N. Y., a Corporation. Filed June 17, 1908, Serial No. 439,040. Renewed Oct. 28, 1912. Serial No. 728,266. (Cl. 219—5.)



1. In an electric welding machine, the combination of two electrodes which are movable toward and from each other, movable carriages on which said electrodes are yieldingly and also adjustably mounted, and mechanical means for moving the carriages toward each other and applying pressure to the electrodes for holding the same against opposite sides of the article to be welded, substantially as set forth.

2. In an electric welding machine, the combination of an electrode, a carriage for the same which is movable toward and from the welding position, a seat block which is secured to the carriage and lengthwise adjustable thereon, and a yielding connection between the seat block and the electrode, substantially as set forth.

3. In an electric welding machine, the combination of a table, a carriage movable thereon toward and from the welding position, a seat block lengthwise movable on said carriage and secured thereto by an adjusting device, an electrode lengthwise movable on the seat block, and a spring interposed between the seat block and the electrode and pressing the latter forwardly on the seat block, substantially as set forth.

4. In an electric welding machine, the combination of a carriage movable toward and from the welding position, a seat block which is lengthwise adjustable on said carriage, an electrode movable lengthwise on said block, a spring pressing the electrode inwardly on the block, and a slack connection between the electrode and the block for moving the electrode outwardly with the block and carriage, substantially as set forth.

5. In an electric welding machine, the combination of two carriages which are movable toward and from each other, positive means for actuating said carriages, electrodes movably mounted on said carriages, and yielding and also adjustable connections between the carriages and the electrodes, substantially as set forth.

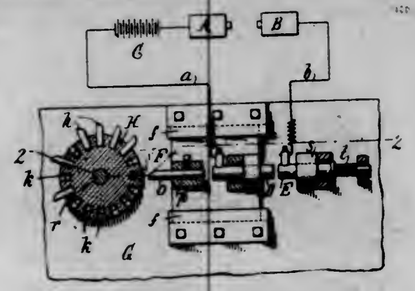
[Claims 6 to 20 not printed in the Gazette.]

1,064,079. ELECTRIC WELDING-MACHINE. LACHLAN E. MCKINNON, Buffalo, N. Y., assignor to McKinnon Chain Company, Buffalo, N. Y. Filed June 17, 1908, Serial No. 439,039. Renewed Oct. 28, 1912. Serial No. 728,267. (Cl. 219—4.)

1. The combination with welding electrodes and the circuit in which the same are arranged, of a make and break mechanism whereby the circuit is periodically opened and closed, while the welding electrodes are in welding relation to the work to produce an intermittent welding current, substantially as set forth.

2. The combination with welding electrodes and the circuit in which the same are arranged, of a make and break mechanism whereby the circuit is periodically opened and closed while the electrodes are in welding relation to

the work to produce an intermittent welding current, and means whereby the frequency of the contact periods can be regulated, substantially as set forth.



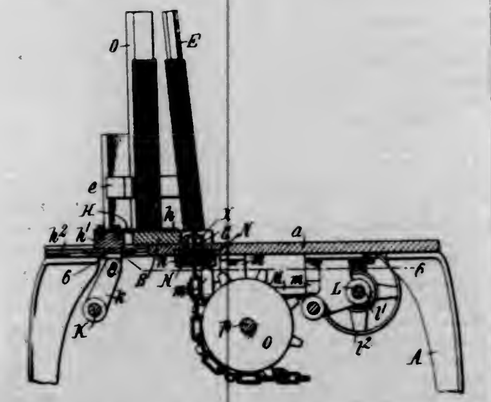
3. The combination with welding electrodes and the circuit in which the same are arranged, of a make and break mechanism by which the circuit is periodically opened and closed while the electrodes are in welding relation to the work to produce an intermittent welding current, and means whereby the frequency of the contact periods can be varied and the circuit can be opened and closed at regular or irregular intervals, substantially as set forth.

4. The combination with welding electrodes and the circuit in which the same are arranged, of a make and break mechanism whereby the circuit is periodically opened and closed while the electrodes are in welding relation to the work to produce an intermittent welding current, and which comprises a rotary toothed wheel, the arrangement of the teeth of which is adapted to be changed for regulating the frequency of the contact periods, substantially as set forth.

5. The combination with welding electrodes and the circuit in which the same are arranged, of a make and break mechanism whereby the circuit is periodically opened and closed while the electrodes are in welding relation to the work to produce an intermittent welding current and which comprises a rotary wheel provided with removable teeth, and a movable contact actuated by said teeth, substantially as set forth.

[Claim 6 not printed in the Gazette.]

1,064,080. MACHINE FOR MAKING CHAINS. LACHLAN E. MCKINNON, Buffalo, N. Y., assignor to McKinnon Chain Company, Buffalo, N. Y. Filed June 17, 1908. Serial No. 439,037. Renewed Nov. 18, 1912. Serial No. 732,133. (Cl. 59—1.)



1. In a machine for interlocking and closing chain links which are closed at one end and open at the other, the combination of means for feeding the links successively and alternately in intersecting planes with the closed end of one link between the separated ends of the next preceding link, and closing means past which the links advance and which close the links in succession, substantially as set forth.

2. In a machine for interlocking and closing chain links which are closed at one end and open at the other, the combination of means for feeding the links alternately from different directions at an angle to each other with the closed end of each link between the separated ends of the next preceding link and in a plane at right angles thereto, and means for closing the interlocked links in succession, substantially as set forth.

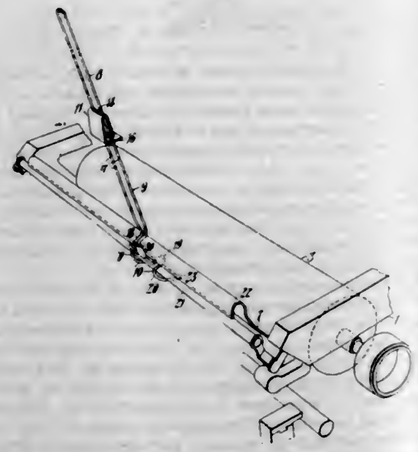
3. In a machine for interlocking and closing chain links which are closed at one end and open at the other, the combination of means for feeding the links successively and alternately in intersecting planes with the closed end of one link between the separated ends of the next preceding link, means for advancing the links with a straight progressive movement, and closing means past which the links are advanced and which occupy a fixed position relative to the feeding means, said closing means operating alternately upon successive links, substantially as set forth.

4. In a machine for interlocking and closing chain links which are closed at one end and open at the other, the combination of link closing means having parts arranged in intersecting planes for closing alternate links, means for feeding the links to said closing means with the closed forward end of one link between the separated rear ends of the link in advance thereof and alternately in the planes of the parts of said closing means which operate alternately upon said links, and means for advancing the links past said closing means, substantially as set forth.

5. In a machine for interlocking and closing chain links which are closed at one end and open at the other, the combination of link closing means, and means for feeding the links alternately from different directions at an angle to each other to said link closing means with the closed end of each link between the separated ends of the next link and in a plane at an angle to the plane of said next link, and means for advancing the links in succession past said link closing means, substantially as set forth.

[Claims 6 to 14 not printed in the Gazette.]

1,064,081. TYPE-WRITING MACHINE. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 5, 1912. Serial No. 688,594. (Cl. 197—189.)



1. The combination with a typewriter having a paper shelf and a rail, of a paper depth gage for said typewriter secured to said typewriter, by having a portion thereof sprung in between said rail and said shelf.

2. A paper depth gage comprising a standard and a stop, said standard comprising a pair of parallel reaches with notches on the facing sides, and said stop having means to engage said notches to lock said stop against movement along said standard.

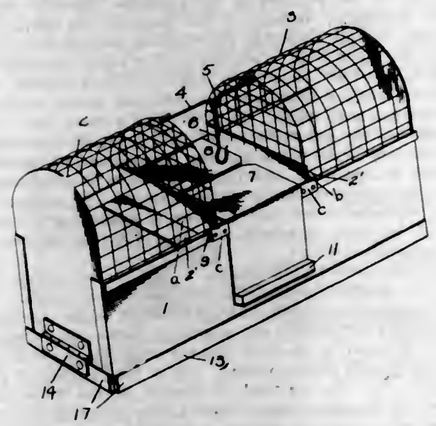
3. A paper depth gage comprising a standard and a stop adjustable along said standard, said standard being formed of a single strip of wire bent intermediate its ends to form an elongated loop, and with its ends bent to form a plurality of attaching loops.

4. A paper depth gage comprising a standard and a stop adjustable along said standard, said standard being formed of a single strip of wire bent intermediate its ends to form an elongated loop, and with its ends bent to form a plurality of attaching loops in planes extending at angles to the plane of said first mentioned loop.

5. A paper depth gage comprising a standard, a stop and attaching means, said standard and said attaching means being constructed of a single strip of wire bent into form.

[Claims 6 to 12 not printed in the Gazette.]

1,064,082. TRAP. ALFRED H. MCWHINNEY, Macomb, Ill. Filed Feb. 18, 1908. Serial No. 416,453. (Cl. 43—24.)

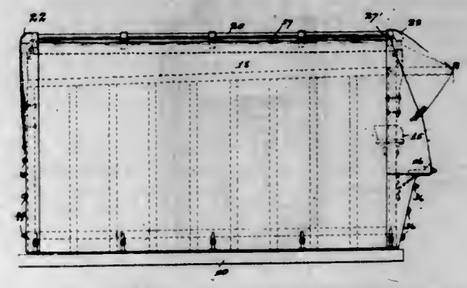


In a trap of the kind described, the casing composed of a bottom, side walls and end walls, said end walls projecting upward above the top of casing, mesh work arches secured to said side and end walls and provided with spaced inner mesh work ends, L-shaped supports arranged to hold the lower edges of the mesh work arch ends, said supports furthermore serving to permit trapped animals to rest thereon whereby they may be seen from the outside of the trap, bait holding means suspended centrally between said mesh work ends, and downwardly opening trap doors closing the space of the top of the casing between said supports.

1,064,083. WAGON-COVER. NICOLA NICOLAI, Chicago, Ill., assignor to Joseph H. Nicolai, Chicago, Ill. Filed June 23, 1911. Serial No. 634,861. (Cl. 21—62.)

1. In a vehicle, the combination with the vehicle sides and a seat and foot-rest at the front end thereof, of slide rods mounted along the tops at the opposite sides of the vehicle, cross bars having elongated loops at their ends for receiving said slide rods, a main cover supported on said cross rods to extend over the top and along the sides of the vehicle, forward extensions from the front ends of the sides of the main cover and adapted to be brought forwardly in front of the seat and foot-rest and to be there secured, a canopy secured to the front end of the vehicle over the seat, an extension from the front end of the top part of the main cover adapted to be secured over the canopy and to extend in front of said seat to partially surround said seat, and securing means fastened at intermediate points of said canopy covering extension for holding intermediate folds of said extension to cause said extension to more securely fit about said canopy and seat.

2. In a vehicle, the combination with the vehicle sides and a seat and foot rest between the front ends thereof, of slide rods mounted along the top of the opposite sides of the vehicle, cross bars slidable on said slide rods, a main cover supported on said cross rods over the top of the



vehicle and along the sides thereof to the vehicle floor, the front ends of the sides of said cover extending a distance beyond the vehicle side ends and secured together across the front of the vehicle, upper edges of said extensions being cut away to expose the seat, a canopy secured to the front end of the vehicle over the seat, a supplemental cover secured to the vehicle front end over the canopy to extend in front of the seat to partially surround the latter, and means for holding the ends of said supplemental cover together in front of said seat.

1,064,084. HAIR-CURLER. NANCY L. OZMUN, Cleveland, Ohio. Filed Feb. 17, 1913. Serial No. 748,779. (Cl. 132—18.)



1. A hair curler formed of a single piece of rubber and comprising a hollow collapsible core portion and a thin elongated flap portion forming a continuation of one surface of said core portion at one end thereof, the free extremities of said portions being provided with complementary fastening contrivances.

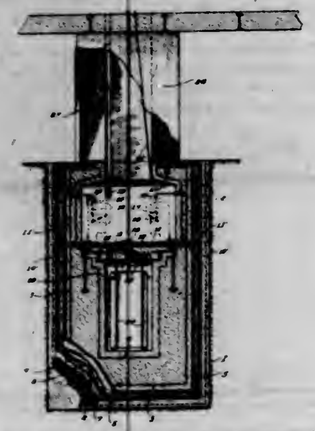
2. A hair curler formed of a single piece of rubber and comprising a tubular core portion having one extremity closed, and a flap consisting of a thin strip of arcuate cross-section extending from the opposite end of the tube and adapted to be wound about the same.

3. A hair curler comprising a hollow core member, said core member being flexible, and an elastic flap member of arcuate cross-section and forming a continuation of said core member, and means for fastening extremities of said portions to each other.

4. A hair curler comprising a flexible tube, and an elongated flap of arcuate cross-section adapted to be wound about said tube, the concave surface of said flap being nearest the axis of said tube, the free extremities of said tube and flap being provided with complementary fastening contrivances.

5. A hair curler comprising an elastic tube, one end of said tube being closed to form a knob; and an elastic flap extending from the open end of said tube and adapted to be wound around the same, said flap being of arcuate cross-section throughout its entire length, the free extremity of said flap being provided with a plurality of eyelets adapted to coöperate with said knob.

1,064,085. DISAPPEARING SAFE AND VAULT THEREFOR. ALFRED PLANTE and GUSTAVE STALPORT, Montreal, Quebec, Canada. Filed June 3, 1912. Serial No. 701,316. (Cl. 109—1.)



1. In combination, a safe vault, doors mounted therein, a safe adapted to be lowered into said vault, means carried by said doors and adapted to support said safe, and means for holding said doors in open position.

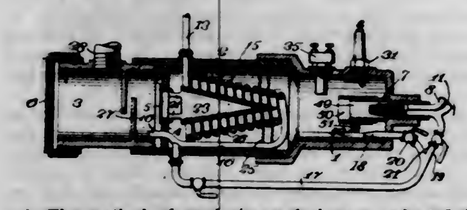
2. In combination, a safe vault, doors mounted therein, a safe adapted to be lowered into said vault, means carried by said doors and adapted to support said safe, means for holding said doors in open position, and means for automatically releasing said holding means.

3. In combination, a safe vault, a well leading thereto, a door leading to said well, a safe, means for raising and lowering said safe in said well and vault, means for supporting said safe at a point adjacent said door, and connections between said door and said supporting means for automatically moving said supporting means to operative position.

4. In combination, a safe vault, a well leading thereto, a door leading to said well, a safe, means for raising and lowering said safe in said well and vault, means for supporting said safe at a point adjacent said door, connections between said door and said supporting means for automatically moving said supporting means to operative position, and means for automatically returning said supporting means to inoperative position.

5. In combination, a safe vault, a well leading thereto, a door leading to said well, a safe, means for raising and lowering said safe in said well and vault; spring pressed means for normally holding said door closed; and means for automatically releasing said holding means as the safe is raised, comprising a spring pressed bolt, a lug secured thereto and a pivotally mounted link secured in the side of the safe so as to engage the said lug and thus lift the bolt.

1,064,086. METHOD OF PRODUCING A FUEL VAPOR. ALEXANDER T. PORTER and HERBERT E. RIDER, New York, N. Y., assignors to Oil Utilities Company, a Corporation of New York. Filed Apr. 17, 1912. Serial No. 691,200. (Cl. 48—211.)



1. The method of producing a fuel vapor adapted for use in internal combustion engines, which consists in (1) providing a substantially continuous supply of finely subdivided fuel liquid, (2) producing a flame and subjecting such liquid in its finely divided condition to the direct action of said flame for a length of time sufficient to effect only a vaporization of the liquid, (3) extinguishing the flame at a point in the progress of the vaporized material before any substantial amount of the material has been consumed, and (4) collecting the resulting product for use.

2. The method of producing a fuel vapor adapted for use in internal combustion engines, which consists in (1) providing a substantially continuous supply of finely subdivided fuel liquid, (2) producing a flame fed by a comparatively small portion of such finely divided liquid to vaporize only the remaining larger quantity of such liquid by means of and in the presence of such flame, (3) extinguishing the flame before any substantial amount of the material has been consumed, and (4) collecting the resulting product for use.

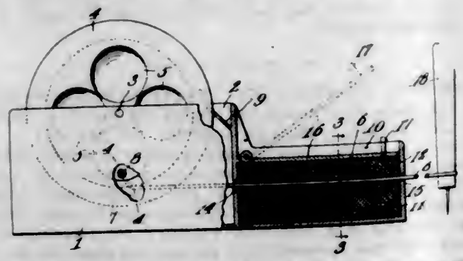
3. The method of producing a fuel vapor adapted for use in internal combustion engines, which consists in (1) providing a substantially continuous supply of finely subdivided fuel liquid, (2) producing a flame and subjecting such liquid in its finely divided condition to the direct action of said flame for a length of time sufficient to effect only a vaporization of the liquid, (3) permitting expansion of the material, (4) extinguishing the flame at a point in the progress of the vaporized material before any substantial amount of the material has been consumed, and (5) collecting the resulting product for use.

4. The method of producing a fuel vapor adapted for use in internal combustion engines, which consists in (1) providing a substantially continuous supply of finely subdivided fuel liquid, (2) producing a flame fed by a comparatively small portion of such finely divided liquid to vaporize only the remaining larger quantity of such liquid by means of and in the presence of such flame, (3) permitting expansion of the material, (4) extinguishing the flame before any substantial amount of the material has been consumed, and (5) collecting the resulting product for use.

5. The method of producing a fuel vapor adapted for use in internal combustion engines, which consists in (1) providing a substantially continuous supply of finely subdivided fuel liquid, (2) producing a flame and subjecting such liquid in its finely divided condition to the direct action of said flame to effect only a vaporization of the liquid while the material is present in the flame and traveling therein at high velocity, (3) extinguishing the flame at a point in the progress of the vaporized material before any substantial amount of the material has been consumed, and (4) collecting the resulting product for use.

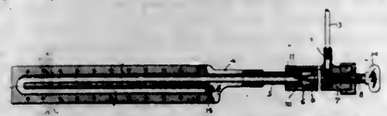
[Claims 6 to 9 not printed in the Gazette.]

1,064,087. LINE-MARKING DEVICE. LUCIEN J. PRESCOTT, Belmont, N. Y. Filed May 21, 1912. Serial No. 698,804. (Cl. 145—23.)



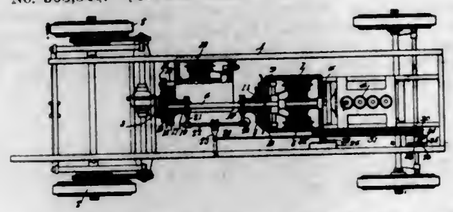
A device of the class specified embodying an elongated receptacle having a partition intermediate its ends forming two compartments, a reel journaled in one compartment with a substantial portion thereof exposed, a line connected to the reel and passing outwardly through the partition and the end of the other compartment, a marking agent in the latter compartment surrounding the line for coating same, and a cover hinged within the latter compartment to permit the marking agent to be pressed against the line, the whole being so proportioned as to be graspable in one hand with the first thumb phalange on the hinged cover and the ball of the thumb at the side face of the reel to control both the coating and the uncoiling of the line.

1,064,088. OIL-BURNER. JOSEPH P. PRICE, Cleveland, Tex. Filed Mar. 25, 1912. Serial No. 686,011. (Cl. 158—53.)



An oil burner of the class described comprising a vaporizing chamber having a reduced neck, said chamber including a plurality of parallel channels, one of said channels being an interior supplying means, and the other of said channels being an outlet pipe, an exterior supplying means, a pipe 5 connecting the exterior supplying means to the neck of said vaporizing chamber, said exterior supplying means comprising a casing, a filler in said casing, the outer end of said pipe 5 engaging in said filler, a valve seat on the outer end of said pipe 5, and a threaded rod having a winged finger piece and a pointed end adapted to engage said valve seat to control the inflow of oil.

1,064,089. MOTOR-VEHICLE. WILLIAM PEARCE RAYNER, Philadelphia, Pa. Filed June 23, 1910. Serial No. 568,540. (Cl. 171—315.)



1. In a motor driven vehicle, the combination, with driving wheels, gearing to transmit motion to said wheels, and an engine, of an electric generator operatively connected with said engine, an electric motor arranged to receive its current from said generator, and means for simultaneously connecting said engine with said transmission gearing and disconnecting said motor therefrom.

2. In a motor driving vehicle, the combination, with driving wheels, gearing to transmit motion to said wheels, and an engine, of an electric generator operatively connected with said engine, an electric motor arranged to receive its current from said generator, means for connecting said engine directly with said gearing, means for connecting said motor with said gearing, and means for preventing said motor and said engine from being connected with said gearing at the same time.

3. In a motor vehicle, the combination, with driving wheels, gearing to transmit motion to said driving wheels, an engine, a shaft to directly connect said engine to said transmission gearing, and means to interrupt said connection, of an electrical generator operatively connected with said engine, an electric motor arranged to receive current from said generator and having its shaft substantially parallel with the first-mentioned shaft and operatively connected with said transmission gearing, and means to interrupt said last-mentioned connection.

4. In a motor driven vehicle, the combination, with driving wheels, gearing to transmit motion to said driving wheels, an engine, a shaft to directly connect said engine to said transmission gearing, and means to interrupt said connection, of an electrical generator having its armature mounted on said shaft, an electric motor arranged adjacent to said shaft, supported independently thereof and adapted to receive current from said generator, and means to operatively connect said motor with said transmission gearing.

5. In a motor driven vehicle, the combination, with driving wheels, gearing to transmit motion to said wheels, an engine, a two part driving shaft having its two parts arranged in alinement and having one part connected to said engine and the other part connected to said transmission gearing, and clutch mechanism to connect and disconnect the two parts of said shaft, of an electrical generator operatively connected to that part of said shaft which is connected to said engine, an electric motor arranged to receive current from said generator, and gearing to connect said motor to that part of said shaft which is connected to said transmission gearing.

[Claims 6 to 9 not printed in the Gazette.]

1,064,090. ANTISLIPPING ATTACHMENT FOR HORSESHOES. WILLIAM G. ROBERTSON, Jr., Washington, D. C. Filed June 11, 1912. Serial No. 702,981. (Cl. 168—30.)



1. An attachment for horseshoes comprising two pivoted bars with means for locking them in different angular positions, said bars having holes through their outer ends, bolts arranged in said holes and formed with heads on their upper ends projecting in all directions around their shanks and insertible into the bar from the upper side and adapted to have the heads overlap and engage the shoe in all rotary adjustments, each of said bolts having adjusting means for adjusting its head down to shoes of varying thickness and the head being formed with a sharp tapering edge all around to enter the space between the horseshoe and hoof.

2. An attachment for horseshoes comprising two pivoted bars with means for locking them in different angular positions, said bars having interiorly screw threaded holes, bolts in said holes, each having a head on its upper end projecting in all directions around the shank and having a screw threaded middle portion and a smaller lower end of angular cross section to receive the socket of a turning tool and the head of the bolt being formed with a sharp tapering edge all around to enter the space between the horseshoe and hoof.

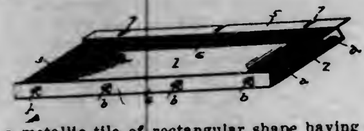
3. An attachment for horseshoes comprising a supporting frame bearing calks and made in two connected bars adjustable in relation to each other, means for locking them to their adjustment and holding means for connecting the bars to the shoe comprising bolts with concentric heads at their upper ends arranged in the outer ends of the bars and formed with tapering edges, said bolts having adjusting means at their lower ends for drawing down their heads to varying thicknesses of shoes.

4. An anti-slipping attachment for horseshoes, comprising bars bearing calks with holes beside them, concentrically headed holding bolts insertible through the holes in the bars from the upper side and screw threaded into the bars and provided with means for turning them from their lower ends, said bars being formed with downwardly projecting guards around the lower ends of the bolts and also a reinforced backing for the bolts on the upper side of the bare made of less height than the minimum thickness of shoe.

1,064,091. METALLIC TILE. JOHN LEONHARD SCHEU, San Francisco, Cal. Filed July 7, 1909, Serial No. 506,426. Renewed Dec. 9, 1912. Serial No. 735,844. (Cl. 189—86.)

1. The herein described metallic tile having on one of its longer sides a depending rim and a nailing flange ex-

tending from the same in a plane generally parallel with the face of the tile, and on the other of its longer sides a depending rim of substantially the same height provided with a plurality of spurs extending therefrom beyond the edge of the tile and provided on one end with a similar depending rim and on the other with a similar depending rim provided with spurs, the length of the spurs being such that the faces of the tiles are spaced apart when the spurs on the tile contact with the rim of the adjacent tile.

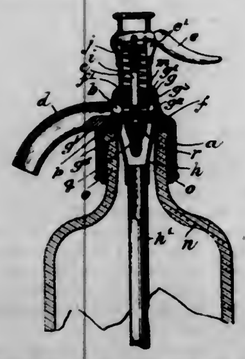


2. In a metallic tile of rectangular shape having downwardly extending sides and ends, the combination of spurs on one side projecting therefrom below the face of the tile and beyond the edge, and an inwardly inclined rim on the opposite side adapted to produce an overhanging edge, said parts being arranged to reciprocally engage with corresponding inclined rims and projecting spurs on other tiles of like construction to space the tiles apart and provide a groove adapted to receive cement to form the joint between the tiles.

3. A metallic tile comprising a rectangular face plate and depending rim, of substantially the same height at the ends and sides, the rim on one end and side being bent inwardly beneath the face plate so that it will overhang the depending rim, and the rim on the other end and side being provided with spurs above their lower edges extending beyond the edge of the face plate such a distance as to engage the inwardly bent rim of an adjacent plate and space the adjacent face plates apart.

4. A metallic tile comprising a rectangular face plate and depending rim, of substantially the same height at the ends and sides, the rim on one end and side being bent inwardly beneath the face plate so that it will overhang the depending rim, and the rim on the other end and side being provided with spurs cut from the material of said rim above their lower edges extending beyond the edge of the face plate such a distance as to engage the inwardly bent rim of an adjacent plate and space the adjacent face plates apart, said inwardly bent rim on one side being provided at its lower edge with a nailing flange parallel with said face plate.

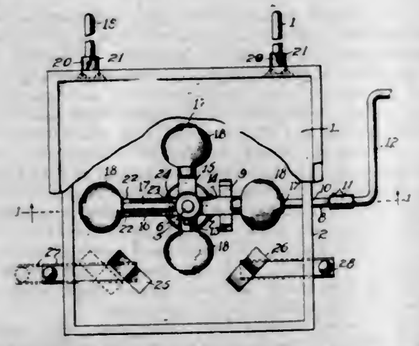
1,064,092. SIPHON-HEAD. JOHN A. SCHULTZ, Jr., Newark, N. J., assignor to New York Bottlers' Supplies Mfg. Co., Hoboken, N. J., a Corporation of New Jersey. Filed Jan. 12, 1910. Serial No. 537,786. (Cl. 215—115.)



1. In a siphon head, the combination of an outer integral casting having therein a downwardly presented spring chamber opening into a downwardly presented valve seat block chamber, and a spout communicating with said last named chamber, with a valve seat block adapted to be seated in said last named chamber, a valve spindle mounted in said spring chamber and passing through a vertical bore in said block, a valve block adjustably mounted upon said spindle, an enlarged head fixed upon said spindle, a spring acting between said valve seat block and said enlarged head to normally close said valve, an oscillatory lever handle pivoted in the wall of said spring chamber and acting upon said enlarged head for said spindle, means simultaneously packing the upper portion of said valve seat block and said spindle, coöperating means carried by said valve seat block and said head casting whereby said block may be detachably connected with said head casting to permit the assembling of said casting and said valve mechanism prior to its application to a bottle and said valve mechanism in its entirety may be adjusted toward and from said lever handle, and means packing the lower edge of said valve seat block.

2. In a siphon head, the combination of an outer integral casting having therein a downwardly presented spring chamber opening into a downwardly presented valve seat block chamber, said casting having a downwardly presented shoulder at the top of said valve seat block chamber, and a spout communicating with said last named chamber, with a valve seat block adapted to be seated in said last named chamber, a valve spindle mounted in said spring chamber and passing through a vertical bore in said block, a valve block adjustably mounted upon said spindle, an enlarged head fixed upon said spindle, a spring acting between said valve seat block and said enlarged head to normally close said valve, an oscillatory lever handle pivoted in the wall of said spring chamber and acting upon said enlarged head for said spindle, means simultaneously packing the upper portion of said valve seat block and said spindle, said valve seat block and said head casting being provided with coöperating screw threads whereby said block may be detachably connected with said head casting to permit the assembling of said casting and said valve mechanism prior to its application to a bottle and said valve mechanism in its entirety may be adjusted toward and from said lever handle, and means packing the lower edge of said valve seat block.

1,064,093. ABDOMINAL EXERCISER. WILLIAM C. SCHULZE, Chicago, Ill. Filed July 25, 1910. Serial No. 573,664. (Cl. 128—16.)



1. In an abdominal exerciser, a mechanism comprising a plurality of rotatably mounted balls and unsupported therebetween, a diaphragm stretched over said balls, said diaphragm being adapted to transmit to the abdomen an irregular wave motion actuated by said balls, and non-reversible means operative to actuate said mechanism.

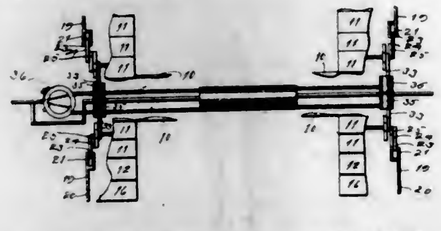
2. A device of the class described, comprising a casing, means for suspending said casing, a diaphragm member for said casing, a mechanism housed in said casing and rotating on an axis perpendicular to said diaphragm, pressing parts of said mechanism rotatably mounted on axes substantially parallel to said diaphragm, means connected to said device and operative to actuate said mechanism, and manually controlled means for relatively increasing the action of one or more of the pressing parts at predetermined points.

3. In an abdominal exerciser, a mechanism comprising a plurality of surfaces movable in concentric paths, a flexible medium stretched over said surfaces in a manner to cause stress lines therein between the points of contact with said surfaces, and means for moving said surfaces to cause a progressive movement of said stress lines.

4. In an abdominal exerciser, a mechanism comprising a plurality of surfaces movable in concentric paths, a flexible medium stretched over said surfaces in a manner to cause stress lines therein between the points of contact with said surfaces, means for moving said surfaces to cause a progressive movement of said stress lines, and means for increasing the stress upon said medium at certain desired points.

5. In an abdominal exerciser, a mechanism comprising a plurality of bodies having rounded surfaces movable in concentric paths, means for actuating said bodies, and means for causing at will one or more of said bodies to depart from the normal plane of rotation at predetermined points.

1,064,094. FOLDING CAR-STEP. JOSEPH SCHWERTNER, Ottoville, Ohio. Filed Sept. 28, 1911. Serial No. 651,872. (Cl. 105—87.)



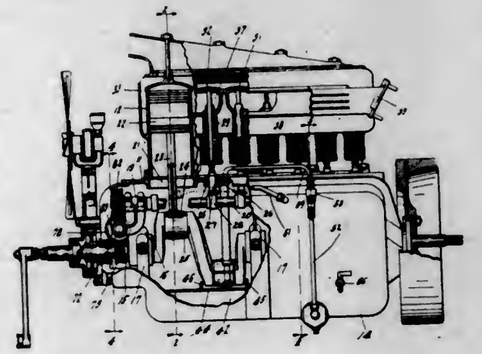
1. A system of auxiliary steps for railway trains consisting of risers and treads hinged together and to the bottom steps, a driving shaft and a driven shaft arranged beneath the steps, means on the driving shaft to cause the rotation of the driven shaft, connections between the driven shaft and the tread, cylinders arranged adjacent the shafts a piston in the cylinder, connections between the driving shaft and the piston, connections between a cylinder and the compressed air supply, and means for controlling the flow of air to said cylinders whereby said shafts will be rotated to fold or extend said risers and treads.

2. The combination with the steps of a railway train, of auxiliary steps mounted at the bottom of said steps, a compressed air supply, air cylinders adjacent the steps, pistons in the cylinders, connections between the pistons and the auxiliary steps, valves for controlling the flow of air from the compressed air supply to the cylinders to hold the auxiliary steps in elevated position, at times, and to exhaust the air from the cylinders to lower the steps at times.

1,064,095. ENGINE. LOUIS SCHWITZER, Indianapolis, Ind., assignor, by mesne assignments, to Lyons Atlas Company, Indianapolis, Ind., a Corporation of Indiana. Filed Apr. 17, 1911. Serial No. 621,652. (Cl. 123—195.)

1. In an engine, the combination of a main base casing member having a cylinder-opening in its upper side and having an open lower side diagonally arranged relative to the upper side and extending substantially from top to bottom and side to side of the casing and passing substantially through the axes of the crank shaft and cam shaft, a crank shaft and a cam shaft mounted in said main casing member and wholly supported thereby, a cylinder mounted over the cylinder-opening on the main casing member, a piston therein, connections between the piston and crank shaft, and a complementary casing member detachably coacting with the open lower face of the main casing member and forming an oil-retaining basin independent of the main member.

2. In an engine, the combination of a main base casing member having a cylinder-opening in its upper side and having an open lower side passing substantially through the axes of the crank shaft and cam shaft, a crank shaft and a cam shaft mounted in said main casing member and wholly supported thereby, a cylinder mounted over the cylinder-opening on the main casing member, a piston therein, connections between the piston and crank shaft, and a complementary casing member detachably coacting with the open lower face of the main casing member and forming an oil-retaining basin independent of the main member.



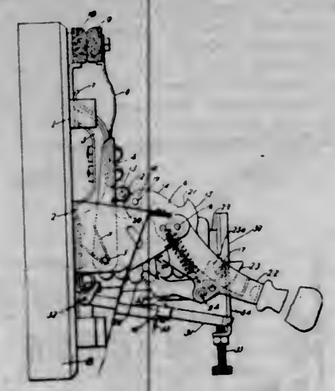
3. In an engine, the combination of a main base casing member having a cylinder opening in its upper side and having an open lower side diagonally arranged relative to the upper side and extending substantially from top to bottom and side to side of the casing and passing substantially through the axes of the crank shaft and cam shaft, a crank shaft and a cam shaft mounted in said main casing member and wholly supported thereby, a cylinder mounted over the cylinder-opening on the main casing member, a piston therein, connections between the piston and crank shaft, a complementary casing member detachably coacting with the open lower face of the main casing member and forming an oil-retaining basin independent of the main casing, oil-circulating pipes carried entirely by said complementary casing member, and an oil-circulating pump communicating with said pipes and carried entirely by said complementary casing member.

4. In an engine, the combination of a main base casing member having a cylinder-opening in its upper side and having an open lower side passing substantially through the axes of the crank shaft and cam shaft, a crank shaft and a cam shaft mounted in said main casing member and wholly supported thereby, a cylinder mounted over the cylinder-opening on the main casing member, a piston therein, connections between the piston and crank shaft, a complementary casing member detachably coacting with the open lower face of the main casing member and forming an oil-retaining basin independent of the main member, oil-circulating pipes carried entirely by said complementary casing member, and an oil-circulating pump communicating with said pipes and carried entirely by said complementary casing member.

5. In an engine, the combination, with a main base casing member, of a complementary base casing member forming an oil retaining basin independent of the main casing member and detachably connected to the main casing member, an oil-retaining shelf arranged in said complementary member above the bottom thereof, oil-circulating piping carried by said complementary casing member and extending from a point below the shelf to a point above the shelf, and a pump carried by the complementary casing member and communicating with said piping.

[Claims 6 to 17 not printed in the Gazette.]

1,064,096. ELECTRICAL SWITCH. WILLIAM M. SCOTT. Philadelphia, Pa., assignor to The Cutter Electrical and Manufacturing Company, a Corporation of New Jersey. Filed Mar. 12, 1906. Serial No. 305,590. (Cl. 175—267.)



1. In an electrical switch, a movable contact member, a cam member, a roller on said contact member engaging the cam surface, a depression at one end of said cam surface, a roller on said cam member approximate said depression, and means for actuating said cam member, whereby said roller on said contact member will travel along said cam surface over said roller on said cam member and into said depression.

2. In an electrical switch, a movable contact member, a cam member for actuating the same, an actuator, a latch pivoted to said actuator for locking the same to said cam member, and a spring connected to said cam member and through said latch to said actuator.

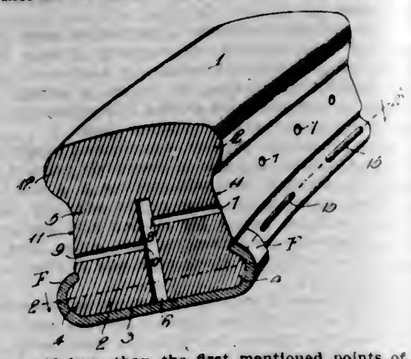
3. In an electrical switch, a movable contact member, a cam member having a depression approximate one end of the cam surface, a roller on said contact member engaging said cam surface, a roller on said cam member approximate said depression, an actuator, means for locking said cam member and actuntor together whereby said actuator operates said cam member to cause said roller on said contact member to travel over said roller on said cam member and into said depression.

4. In an electrical switch, a movable contact member, a pivoted cam member for operating said contact member and having a depression approximate one end of the cam surface, a member movable with said contact member engaging said cam surface and in said depression, an actuator pivoted concentrically with said cam member, a latch connecting said actuator and said cam member, and a spring connecting said cam member and said actuator, said latch and said means engaging in said depression serving to lock said movable contact member in normal position.

5. In an electrical switch, a movable contact member, a cam member, an actuator, said cam member and actuator being concentrically pivoted and movable with respect to each other, and a latch for connecting said cam member and actuator, said contact member when in normal position engaged by said cam member at a point of the cam surface such that said cam member latched to said actuator restrains said contact member in normal position.

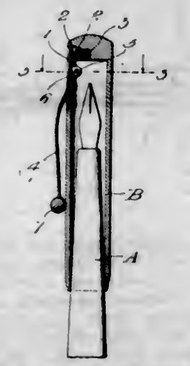
1,064,097. CUSHION-TIRE. MICHEL J. SELZER, Akron, Ohio. Filed June 10, 1912. Serial No. 702,789. (Cl. 152—1.)

The herein described cushion tire formed with a series of ventilation openings extending from the inner face of its base in a substantially radial direction toward but not through its tread, a series of transverse openings connecting one side face of the tire at about the center of its width with said radial openings near their outer ends, and a second series of transverse openings connecting the other side face of the tire with said radial openings at points



nearer said base than the first mentioned points of connection, all as and for the purpose set forth.

1,064,098. FOUNTAIN-PEN RETAINER. WALTER A. SHEAFFER, Fort Madison, Iowa. Filed Mar. 21, 1912. Serial No. 685,274. (Cl. 24—11.)



In combination with a cap for fountain pens having a longitudinal slot and a socket formed in rear thereof, of a retainer forming a part of the cap and comprising a lever pivotally secured to the same with its upper end located in the longitudinal slot of the cap and normally closing the same, a stop shoulder formed in the upper wall of the socket against which the upper end of the lever is adapted to contact, and a spring located in said socket and bearing against the confined upper end of the lever, the lower long end of the latter projecting outwardly from its pivotal connection with the cap for the purposes described.

1,064,099. BUCKET-BAIL. THOMAS SILK, Martins Ferry, Ohio, assignor to Wheeling Corrugating Company, a Corporation of West Virginia. Filed July 3, 1912. Serial No. 707,491. (Cl. 220—32.)

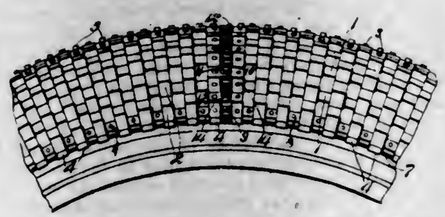


1. The combination with a vessel having ears with eye portions which stand at substantially right angles to the vessel, of a bail having its ends bent to form loops which are linked through said eye portions, the loop terminals being directed across and beyond the bail body to form stops adapted to abut against said eye portions when the bail assumes a substantially horizontal position.

2. The combination with a vessel having ears with eye portions which stand at substantially right angles to the vessel, of a bail having its opposite ends bent to form reversely disposed loops which are linked through said eye portions, the loop terminals being directed across and beyond the bail body to form reversely disposed stops adapted to assume substantially vertical bail-supporting engagement with said eye portions when the bail assumes either of two predetermined positions.

3. The combination with a vessel having ears with loop-like eye-portions disposed at right angles thereto, of a bail having its ends linked in said eye-portions, each of said ends being bent to form a loop and terminating in a member which crosses the bail body at substantially right angles, said member being adapted to assume substantially vertical position against the contiguous eye portion for supporting the bail body in predetermined position.

1,064,100. TIRE-PROTECTOR. CLIFTON A. SMITH, New Orleans, La. Filed Jan. 15, 1912. Serial No. 671,184. (Cl. 152—16.)



A tire-protector consisting of longitudinal and transverse strips closely interwoven, the transverse strips tapering toward their free ends and alternate ones only of the transverse strips terminating in outstanding, binder-receiving elements, the longitudinal strips which lie at the extreme lateral edges of the protector being disposed beneath the ends of the said alternate transverse strips to receive the thrust of the binder.

1,064,101. RAZOR. MORRIS FORD-SMITH, Philadelphia, Pa. Filed July 6, 1911. Serial No. 637,186. (Cl. 30—12.)



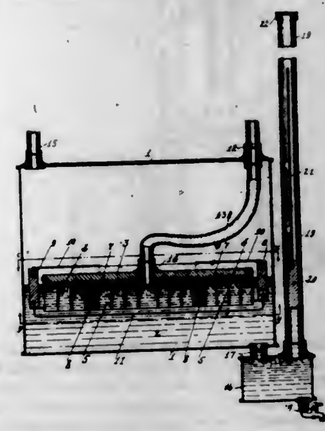
1. A shaving and stropping tool comprising a double edged razor blade, a holder, a handle and a detachable guard; said handle having a sleeve part and an inner rod with a protruding head and threads at its opposite end, said rod constructed to have a limited axial movement in said sleeve; said holder consisting of two separable halves having a recess for said blade on their inner side, studs in said holder for preventing displacement of the blade and holding the outer end of said halves together; the inner end of the two halves forming a boss constructed to fit snugly in said sleeve part and threads in said boss adapted to engage with said rod threads, whereby said blade, holder and handle are securely held together.

2. A shaving and stropping tool comprising a double edged razor blade, a holder, a handle and a detachable guard; said handle having a sleeve part and an inner rod with a protruding head and threads at its opposite end, said rod constructed to have a limited axial movement in said sleeve; said holder consisting of two separable halves having a recess for said blade on their inner side, studs in said holder for preventing displacement of the blade and holding the outer end of said halves together; the inner end of the two halves forming a boss constructed to fit snugly in said sleeve part and threads in said boss adapted to engage with said rod threads, whereby said blade, holder and handle are securely held together; said guard having a sliding connection with either side of said holder selectively and a spring latch to secure it in place, whereby said guard may be readily detached from said tool preparatory to the stropping operation and without taking the tool apart.

3. A shaving and stropping tool comprising a double edged razor blade, a pair of holding pieces adapted to grip the blade between them and a hollow handle; projections on the inner ends of said holding pieces, said projections forming a cylindrical shank which fits snugly in the hollow part of said handle, flanges on said projections abutting against the end of the handle, a screw spindle mounted to turn into the handle and having an external head and internal shoulder permitting a limited longitudinal movement of said spindle relative to said handle, and screw threads for said spindle in said shank, whereby said spindle is able to rigidly secure said holding pieces and handle together.

4. A shaving and stropping tool comprising a double edged razor blade, a pair of holding pieces adapted to grip the blade between them, a hollow handle and a guard extending from the handle to the end of said holding pieces; a flanged stud in the one and a flanged open slot in the other of said holding pieces, said stud and slot coöperating to lock the outer ends of said holding pieces together; said holding pieces having beveled edges, a central longitudinal recess in said guard having its sides beveled to engage with said beveled edges and said recess conforming to the shape of the holding pieces and covering said stud when in position.

1,064,102. CARBURETER. STEPHEN P. SMITH, Berkeley, and CHARLES W. KEIVER, Oakland, Cal. Filed Sept. 30, 1912. Serial No. 723,084. (Cl. 48—160.)



1. A carbureter comprising a container for the liquid hydrocarbon, said container having a delivery outlet for the carbureted air; a float supported by the hydrocarbon contents of said container; a second float surrounding but independent of the first float and having suitable stops for limiting the tilting movement of the first float; and means for delivering the air to be carbureted directly upon the surface of the hydrocarbon under the first float.

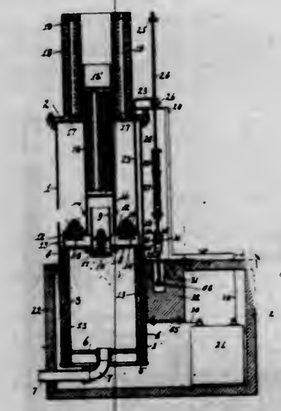
2. A carbureter comprising a container for the liquid hydrocarbon, said container having a delivery outlet for the carbureted air; a float supported by the hydrocarbon contents of said container; partition walls depending from the under side of the float arranged to form an extensive continuous carbureting channel, one end of which is open to the container interior; a second float surrounding but independent of the first float and having suitable stops for limiting the tilting movement of the first float; and

means for delivering the air to be carbureted to the other end of said channel directly upon the surface of the hydrocarbon under the first float.

3. A carbureter comprising a container for the liquid hydrocarbon, said container having a delivery outlet for the carbureted air; a float supported by the hydrocarbon contents of said container; a second float surrounding but independent of the first float; rods secured to said second float lying above and below the first float, to form stops for limiting the tilting movement of said first float; and means for delivering the air to be carbureted directly upon the surface of the hydrocarbon under the first float.

4. A carbureter comprising a container for the liquid hydrocarbon, said container having a delivery outlet for the carbureted air; a float supported by the hydrocarbon contents of said container; partition walls depending from the under side of the float arranged to form an extensive continuous carbureting channel, one end of which is open to the container interior; a second float surrounding but independent of the first float; rods secured to the upper side of the second float and lying above the first float to form upper stops therefor; other rods secured to the under side of the second float and crossing under the lower edges of the partition walls of the first float to form lower stops for said first float; and means for delivering the air to be carbureted to the other end of said channel directly upon the surface of the hydrocarbon under the first float.

1,064,103. ELECTRIC AIR-COMPRESSOR. STEPHEN P. SMITH, Berkeley, and CHARLES W. KEIVER, Oakland, Cal. Filed Sept. 30, 1912. Serial No. 723,085. (Cl. 230—17.)



1. In an air compressor, the combination of an outer shell or barrel having at its top an apertured head for the admission of air, an inner shell in the lower portion of the barrel and separated therefrom to leave a circumscribing space containing a liquid seal closed at the bottom, and open at the top to the interior of the barrel, said inner shell having an outlet from its base, and a downwardly opening valve in its top; a piston disposed for reciprocative movement in the upper portion of the barrel above the inner shell, said piston having downwardly opening valves; an extension flange secured to the piston and depending therefrom into and working within the liquid seal; a solenoid magnet carried by the head of the outer shell or barrel; an electric circuit to operate the magnet; a rod constituting the armature of said solenoid magnet and connected with the piston under the weight of which said piston effects its down-stroke, said rod having a chamber in its top for the reception of additional weights; and means operated by the piston for closing and opening the electric circuit for lifting the rod and releasing it to permit the down-stroke of the piston by gravity.

2. In an air compressor, the combination of an outer shell or barrel having at its top an apertured head for the admission of air, an inner shell in the lower portion of the barrel and separated therefrom to leave a circumscribing space containing a liquid seal closed at the bottom, and open at the top to the interior of the barrel, said inner shell having an outlet from its base, and a downwardly opening valve in its top; a piston disposed for reciprocative movement in the upper portion of the barrel above the inner shell, said piston having downwardly opening valves; an extension flange secured to the piston and depending therefrom into and working within the liquid seal; a solenoid magnet carried by the head of the outer shell or barrel; an electric circuit for operating the magnet, a bumper arm secured to the piston and extending to the exterior of the outer shell or barrel, and an electric switch in said circuit operated by the movement of the piston bumper arm to close and open said circuit.

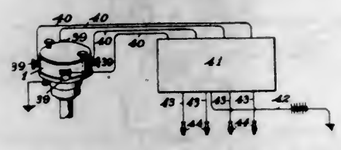
3. In an air compressor, the combination of an outer shell or barrel having at its top an apertured head for the admission of air, an inner shell in the lower portion of the barrel and separated therefrom to leave a circumscribing space containing a liquid seal closed at the bottom, and open at the top to the interior of the barrel, said inner shell having an outlet from its base, and a downwardly opening valve in its top; a piston disposed for reciprocative movement in the upper portion of the barrel above the inner shell, said piston having downwardly opening valves; an extension flange secured to the piston and depending therefrom into and working within the liquid seal; a rod connected with the piston under the weight of which said piston effects its down-stroke; and electrically operated means for lifting the rod and releasing it to permit the down-stroke of the piston by gravity, comprising a solenoid magnet carried by the head of the other shell or barrel of which said magnet the piston rod forms the armature, an electric circuit for operating the magnet, a bumper arm secured to the piston and extending to the exterior of the outer shell or barrel, and an electric switch in said circuit operated by the movement of the piston bumper arm to close and open said circuit.

4. In an air compressor, the combination of an outer shell or barrel having at its top an apertured head for the admission of air, an inner shell in the lower portion of the barrel and separated therefrom to leave a circumscribing space containing a liquid seal closed at the bottom, and open at the top to the interior of the barrel, said inner shell having an outlet from its base, and a downwardly opening valve in its top; a piston disposed for reciprocative movement in the upper portion of the barrel above the inner shell, said piston having downwardly opening valves; an extension flange secured to the piston and depending therefrom into and working within the liquid seal; a rod connected with the piston under the weight of which said piston effects its down-stroke; and electrically operated means for lifting the rod and releasing it to permit the down-stroke of the piston by gravity, comprising a solenoid magnet of which the piston rod forms the armature, said magnet having a longitudinal passage through it communicating with the apertures in the head of the barrel, an electric circuit for operating the magnet, and an electric switch in said circuit operated by the movement of the piston.

5. In an air compressor, the combination of an outer shell or barrel having at its top an apertured head for the admission of air, an inner shell in the lower portion of the barrel and separated therefrom to leave a circumscribing space containing a liquid seal closed at the bottom, and open at the top to the interior of the barrel, said inner shell having an outlet from its base, and a downwardly opening valve in its top; a piston disposed for reciprocative movement in the upper portion of the barrel above the inner shell, said piston having downwardly opening valves; an extension flange secured to the piston and depending therefrom into and working within the liquid seal; a rod connected with the piston under the weight of which said piston effects its down-stroke; and electrically operated means for lifting the rod and releasing it to permit the down-stroke of the piston by gravity, comprising a solenoid magnet of which the piston rod forms the armature, an electric circuit for operating the magnet, and an electric switch in said circuit operated by the movement of the piston, comprising poles, one of which is movable to and from the other, a bumper arm on the piston, a slidable rod with bumpers between which the bumper arm plays, and connections between said slidable rod and the movable pole of the switch.

[Claim 6 not printed in the Gazette.]

1,064,104. ELECTRIC TIMER FOR EXPLOSIVE-ENGINES. WILLIAM M. STEELE, Worcester, Mass. Filed Apr. 15, 1910. Serial No. 555,761. (Cl. 123—167.)



1. In a timer for explosive engines, the combination with a ring of insulating material provided with a series of spaced mortises, of a series of contact terminals held in the mortises of said ring, each of said terminals comprising a flanged sheet metal holder having its flange bearing against the inner wall of said ring, a metal contact block held in said holder, and means for crowding the flange of said holder against said ring.

2. In a timer for explosive engines, an insulating ring having a series of spaced mortises, a series of contact terminals held in said mortises, each consisting of a flanged sheet metal holder, with its flange bearing against the inner wall of said ring, means for pressing said flange against the ring, a contact block held in said holder, a screw held in said holder, and a nut carried by said screw.

3. In a timer for explosive engines, a ring of insulating material having a series of mortises at stated intervals, a series of contact terminals inserted through said mortises, each contact terminal consisting of a sheet metal holder inclosing a block of electric conducting material and provided with a flange bearing against the inner surface of said ring, with the outer side of said block arranged to be expanded in order to draw said flange firmly against said inner surface.

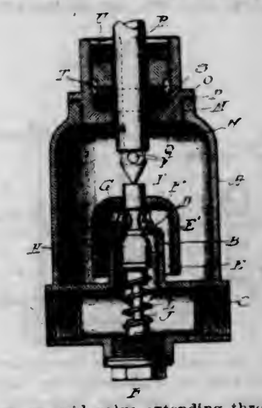
4. In a timer for explosive engines, a ring of insulating material, a series of contact terminals held at stated distances in said ring, each of said terminals comprising a sheet metal clamp inclosing a block of electric conducting material, and provided with a flange bearing against the inner surface of said ring, a binding post held outside said ring, and means for bringing said terminals successively into an electric circuit.

5. In a timer for explosive engines, a rotating spindle, a series of spaced contact terminals concentric with said spindle, a disk attached to the upper end of said spindle having an integral tongue cut from the disk and bent upwardly and then parallel with said disk to form a guideway, a U-shaped frame slidable in said guideway, a contact roll carried by said frame, and means for rotating said spindle.

[Claim 6 not printed in the Gazette.]

1,064,105. BEER-PIPE CLEANSER. JOHN L. STEITZ, Chicago, Ill. Filed July 29, 1912. Serial No. 712,045. (Cl. 225—12.)

A device of the kind specified, comprising a casing adapted to be connected with a water service pipe and having a chamber therein adapted to receive a chemical in solid form soluble in water, a cylindrical inlet for admitting water to said chamber, a bell of larger diameter than said inlet covering the latter, a hollow stem connecting the same with said inlet and having lateral openings through which water is adapted to pass into an annular space between said bell and said inlet and through which water is discharged upon the bottom of said chamber, a valve seat at the lower end of said hollow stem, a valve seating thereon, a spring maintaining said valve normally closed,



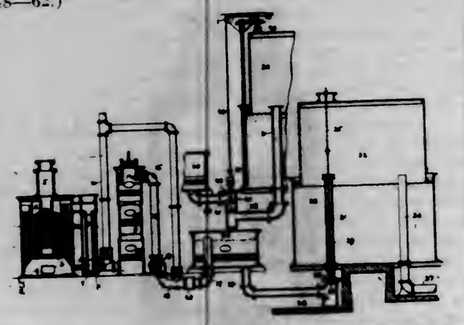
a projection on said valve extending through said hollow stem and adapted to be depressed by means inserted through said discharge opening for unseating said valve.

1,064,106. AUXILIARY-AIR-SUPPLY MEANS FOR INTERNAL-COMBUSTION ENGINES. ALFRED C. STEWART, Los Angeles, Cal. Filed July 25, 1912. Serial No. 711,579. (Cl. 48—180.)

1. An auxiliary air supply means for internal combustion engines, comprising in combination with the intake pipe of the engine, a valve tube connected to said intake pipe, and provided with a plurality of openings, a valve plug sliding in said tube and adapted to successively open said openings, and with an air inlet chamber communicating with an opening in the valve which is first opened by the auxiliary valve plug, the opening in said valve tube which is last opened being open to the outer air, and means for supplying heated air to said chamber.

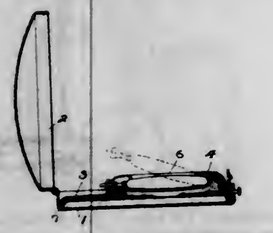
2. An auxiliary air supply means for internal combustion engines, comprising in combination with the intake pipe of the engine, a valve tube connected to said intake pipe, and provided with a plurality of openings, a valve plug sliding in said tube and adapted to successively open said openings, and with an air inlet chamber communicating with openings in the valve which are first opened by the auxiliary valve plug, the openings in said valve tube which are last opened being open to the outer air, means for supplying heated air to said chamber, comprising a pipe extending within the exhaust means of the engine and open to the outer air, and a pipe extending into and connecting with the last named pipe and connected to the air inlet chamber.

1,064,107. GAS PLANT. CONSTANTINE LEE STRAUB, Milwaukee, Wis., assignor to Power and Mining Machinery Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 16, 1906. Serial No. 330,854. (Cl. 48—62.)



In a gas plant, the combination of the generator or producer, the initial scrubber mechanism, the supplementary scrubber mechanism, the conduits connecting in series the three mentioned mechanisms, a propeller fan located in the conduit between the initial and supplementary scrubber mechanisms, the variable capacity holder having a movable element, a conduit connecting the supplementary scrubber mechanism and the holder, and the cut-off valve in the connection between the supplementary scrubber and the holder actuated by the movable element of the holder, substantially as set forth, the said fan drawing the gas by suction from the generator into the initial scrubber mechanism and then forcing it under pressure through the supplementary scrubber and into the holder when the automatic valve is open, said fan being inoperative when the valve is closed.

1,064,108. JEWELRY-BOX PAD. JOHN R. SUNDEE, Buffalo, N. Y., assignor to Warner Jewelry Case Company, Buffalo, N. Y., a Corporation of New York. Filed Feb. 5, 1912. Serial No. 675,446. (Cl. 211—28.)



A pad or cushion for a jewelry-box comprising a sheet of flexible material containing a well-aperture, and a covering extending into said aperture, the covered aperture being somewhat smaller than the watch to be received thereby.

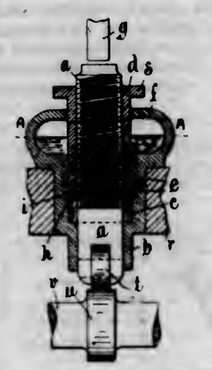
1,064,109. EXPLOSION-MOTOR. CARL TECKLENBURG, Dessau, Germany. Filed Nov. 11, 1912. Serial No. 730,683. (Cl. 121—97.)

1. The combination of a valve spindle; a tappet for said spindle; a cam controlling said tappet and a fluid brake acting on said tappet.

2. The combination of a valve spindle; a tappet for said spindle; a cam controlling said tappet, and a fluid brake the plunger of which is connected to said tappet.

3. The combination of a valve spindle; a tappet for said spindle; a guide for said tappet, a cam controlling said tappet, a fluid brake the plunger of which is connected to said tappet, the brake cylinder being formed in the guide of the tappet.

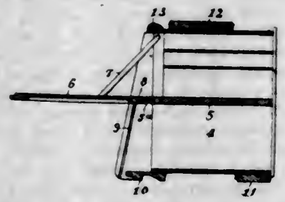
4. The combination of a valve spindle; a tappet for said spindle; a guide for said tappet, a cam controlling said tappet, a fluid brake comprising a plunger mounted on the tappet and a cylinder formed in the guide of the tappet, said plunger and cylinder being adjustable in respect to one another.



5. The combination of a valve spindle; a tappet for said spindle; a guide for said tappet, a cam controlling said tappet, a fluid brake comprising a plunger mounted on the tappet and a cylinder formed in the guide of the tappet, said guide being adjustably mounted on a support.

[Claims 6 to 20 not printed in the Gazette.]

1,064,110. DESK-SECTION FOR SECTIONAL BOOK-CASES. FRED W. TOREY, Grand Rapids, Mich. Filed Sept. 8, 1911. Serial No. 648,279. (Cl. 45—91.)

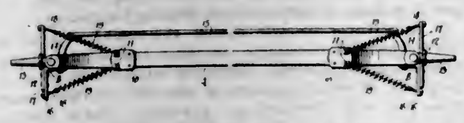


1. A desk section for sectional book cases, comprising a desk section adapted to be used in connection with book case sections and provided with opposite grooves, one groove in each end, a horizontal partition in the section near the middle thereof, the upper ends of said grooves terminating adjacent the outer edge of said partition, a front or lid having pins near the lower inner corners which traverse said grooves, and supporting rods for the front or lid connected at their ends on fixed pivots to the lid and to the front part of the ends of the desk section above said partition whereby said lid may be slipped upwardly at its bottom and swung outwardly and downwardly at its top to the plane of said partition and supported in such position.

2. A desk section for book cases comprising a desk section, a horizontal partition near the middle of the section, a front or lid for the section adapted to swing to the same horizontal position as the partition with its inner edge overlapping the outer edge of the partition.

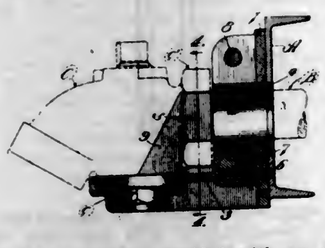
3. A desk section for book cases comprising a desk section adapted to be used in connection with book case sections and having forwardly projecting ends at its front, the forwardly projecting ends having grooves near the outer edges thereof, which grooves extend inwardly at their upper ends, a horizontal partition in the case near the middle thereof, with its front edge terminating short of the outer edges of said projecting end portions of the case and rabbeted on its front under edge, the upper ends of said grooves terminating adjacent the front edge of said partition, a front or lid having pins in its ends adjacent its lower corners which traverse said grooves, the lower edge of the cover or lid being rabbeted on its lower edge, and bars pivoted to the lid or cover and to said section above said partition whereby the pins of the lid or cover may slide upwardly in said grooves and inwardly into the inwardly directed portion of said grooves and the lid or cover swung outwardly to a horizontal position midway of the top and bottom of the section and supported in such position with the aforesaid rabbeted edges of the lid or cover and partition in overlapping relation.

1,064,111. ATTACHMENT FOR STEERING-GEAR OF AUTOMOBILES. JUSTUS D. TOWER, Jr., Mendota, Ill. Filed Mar. 21, 1912. Serial No. 685,318. (Cl. 21—200.)



An automatic safety attachment for steering knuckles for automobiles, comprising an angle iron having one portion thereof provided with an opening adjacent its end, and adapted to be secured to the side of the knuckle by the stem of the steering arm, upon which the apertured portion of the angle iron is engaged and clamped, the other portion of the angle iron extending forwardly, a plate carried by the forwardly extending portion and extending rearwardly and adapted to lie against the spindle of the knuckle, and springs having their ends attached to the forwardly and rearwardly extending portions of the irons adjacent their outer ends, the other ends of the springs being adapted for attachment to the securing bolts of the supporting springs of the automobile.

1,064,112. ANGLE-COCK HOLDER. HENRY A. WAHLERT, St. Louis, Mo., assignor to Acme Pipe Clamp Company, St. Louis, Mo., a Corporation of Illinois. Filed May 27, 1912. Serial No. 700,046. (Cl. 188—8.)



1. An angle-cock-holder provided with an angle-cock-supporting portion that extends under the body part of the angle-cock and a portion that bears against the head of the cock.

2. An angle-cock-holder provided with an angle-cock-supporting portion that extends under the body part of the angle-cock, and removable means for preventing the angle-cock from turning or rotating.

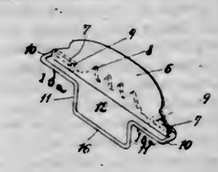
3. An angle-cock-holder provided with an angle-cock-supporting portion that extends under the body part of the angle-cock, said portion being so designed that it receives the longitudinal strains to which the cock is subjected, and a portion for engaging the head of the cock.

4. An angle-cock-holder provided with an angle-cock-supporting portion that extends under the body part of the angle-cock, said portion being so designed that it receives the longitudinal strains to which the cock is subjected, and adjustable means for holding the cock in operative position in said supporting portion.

5. An angle-cock-holder provided with means that engages the body part of an angle-cock so as to prevent longitudinal movement of the cock, and means that engages the head of the cock so as to prevent the cock from turning or rotating.

[Claims 6 to 14 not printed in the Gazette.]

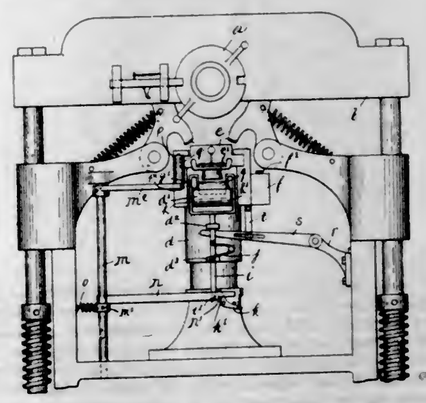
1,064,113. BUCKLE. DE VER H. WARNER, Bridgeport, Conn., assignor to Warner Brothers Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 14, 1910. Serial No. 597,196. (Cl. 24—191.)



1. In a buckle, a frame comprising a front bar, space bars and back bars lying in substantially the same horizontal plane and forming an open loop at each end of the frame, drop bars at the inner ends of the back bars spaced from each other and extending substantially at right angles to said back bars and to the plane of said loops and a bottom bar parallel to the plane of said loops and connected to the lower ends of said drop bars, and a lever pivoted to said front bar and comprising a lever arm and a clamping edge extending at an acute angle thereto and of less length than the space between the drop bars.

2. The combination of a buckle including a frame comprising a front bar, space bars and back bars lying in substantially the same horizontal plane and forming an open loop at each end of the frame, drop bars at the inner ends of the back bars spaced from each other and extending substantially at right angles to said back bars and to the plane of said loops and a bottom bar parallel to the plane of said loops and connected to the lower ends of said drop bars, and a lever pivoted to said front bar and comprising a lever arm and a clamping edge extending at an acute angle thereto and of less length than the space between the drop bars, with a webbing having one end passed over the back bars, drop bars and bottom bar and the other end passed upward through the loops and between said first named webbing end and the clamping edge of the lever.

1,064,114. CEMENTING ATTACHMENT FOR HEEL-NAILING MACHINES. EDWIN A. WEBSTER and CHARLES R. TOWLE, Haverhill, Mass., assignors, by direct and mesne assignments, to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed July 18, 1905. Serial No. 270,297. (Cl. 1—32.)



1. In combination with a heeling machine, a jack, a turret located above the jack, and a heel carrier movable independently of the turret toward and away from a position between the jack and the turret, a cementing device and means for moving said device into engagement with the heel as it is carried toward the jack by said carrier at a predetermined point in its travel, substantially as described.

2. In combination with a heeling machine, a jack and a heel carrier movable toward and away from the jack, a cementing device actuated to move transversely of the path of said carrier into engagement with the heel as it is carried thereby, means for locking said device at one side of said path, and means for releasing the same, operated by the carrier when it reaches a predetermined point in its travel toward the jack, substantially as described.

3. In combination with a heeling machine, a jack, and a heel carrier movable toward and away from the jack, a cementing roll mounted to rotate about an axis at right angles to the path of the carrier, and means for bodily moving said roll in a rectilinear path transversely of the path of the carrier into engagement with the heel as it is carried thereby toward the jack, and means for withdrawing said roll to one side of said path, and for supplying it with cement at the end of each operation, substantially as described.

4. A machine of the class described, having in combination, means for sustaining a heel-blank in inverted position with its heel seat surface exposed, a cement carrying device, means for applying cement to said device having provision for varying the extent of surface upon said device covered with cement by said means, and mechanism for bringing said device into contact with the heel-blank.

5. In a heeling machine, a jack, a heel carrier horizontally movable toward and away from the jack, and having means for supporting a heel on its under side, a cementing roll supported beneath the carrier and means for moving said roll vertically into engagement with the under side of the heel arranged to operate automatically when the latter is in a predetermined position, substantially as described.

[Claims 6 to 34 not printed in the Gazette.]

1,064,115. VAPOR ELECTRIC DEVICE. EZECHIEL WEINTRAUB, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 13, 1910. Serial No. 597,012. (Cl. 176—50.)



1. In a vapor electric device, the combination of an evacuated container, an envelop consisting of material more refractory than glass located within said container, rigid sealing means for closing the inner container to permit the accumulation of pressure therein during the operation of said vapor device, electrodes in said inner envelop one of which consists of easily vaporizable material, and current-carrying conductors connected to said electrodes.

2. In a vapor electric device, the combination of an evacuated glass envelop, an evacuated envelop supported therein consisting of material more refractory than glass, electrodes in said envelop at least one of which consists of easily vaporizable metal, leading-in conductors therefor, and a solid plug operable by pressure in said inner envelop to render the envelop vapor-tight during the operation of the device.

3. In a vapor electric device, the combination of an outer receptacle, an inner envelop supported therein, electrodes, at least one of which consists of vaporizable material, in said inner envelop, current connections, and means operated by vapor pressure within said inner envelop for closing the same.

4. In a vapor electric device, the combination of an outer receptacle, an inner envelop supported therein, electrodes, at least one of which consists of vaporizable material, in said inner envelop, and a conical closure for one end of said inner envelop adapted to be lifted by vapor pressure in said inner envelop into engagement with the mouth of said envelop, thereby sealing the same.

5. In a vapor electric device, the combination of an outer exhausted receptacle, an inner exhausted silica envelop supported therein, electrodes within said silica envelop one of which consists of mercury, current connections for said electrode, an automatic means operable upon the starting of said lamp for sealing the silica envelop from the evacuated space surrounding the same.

[Claim 6 not printed in the Gazette.]

1,064,116. VAPOR ELECTRIC DEVICE. EZECHIEL WEINTRAUB, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 12, 1911. Serial No. 643,670. (Cl. 176—42.)



1. In a vapor electric device, an outer envelop and inner envelop communicating with each other through a contracted passage, electrodes in the inner envelop one of which is a vaporizable liquid, and means operable by pressure in the space outside the inner envelop to permit the return of vaporizable material to the inner envelop.

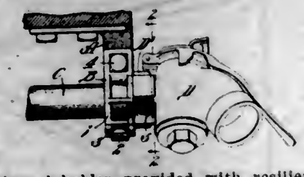
2. In a vapor electric device, coöperating electrodes at least one of which is mercury, a double walled envelop, the space within the inner wall being in communication with the space outside said wall through a passage of capillary dimensions and a valve permitting the accumulation of pressure within said space but permitting a return of vaporized mercury to said space when the pressure is lowest.

3. In a vapor electric device, coöperating electrodes at least one of which consists of mercury, an outer inclosing envelop, an inner envelop containing said electrodes, the space within said inner envelop communicating with the space intervening between said envelops by a constricted passage, and a valve in said inner envelop for equalizing the mercury level within and without the inner envelop.

4. In a vapor electric device, coöperating electrodes at least one of which consists of mercury, an outer inclosing glass envelop, an inner quartz envelop containing said electrodes, said quartz envelop being contracted into the form of a constricted tube at one end through which the stem of one of said electrodes passes, and a valve at the other end of said quartz tube to enable the level of mercury inside and outside the tube to equalize.

5. In a mercury vapor lamp, the combination of a transparent envelop, an envelop of fused silica therein communicating with the outer envelop through a tube of capillary dimensions, a mercury cathode and a coöperating solid anode for said silica envelop, a leading-in conductor for said anode passing loosely through the communicating tube, and means permitting the return of vaporized mercury to the quartz envelop when its pressure in the space external thereto is in excess of the pressure within.

1,064,117. COMBINED PIPE-CLAMP AND ANGLE-COCK HOLDER. EDWARD L. ADREON, Jr., St. Louis, Mo., assignor to Acme Pipe Clamp Company, St. Louis, Mo., a Corporation of Illinois. Filed May 21, 1912. Serial No. 698,677. (Cl. 188—8.)



1. An angle-cock-holder provided with resilient means which exerts sufficient frictional pressure on the angle-cock to prevent it from moving longitudinally out of said holder.

2. A combined pipe clamp and angle cock holder having means for clamping a train pipe, and a resilient portion for engaging an angle cock mounted on said pipe.

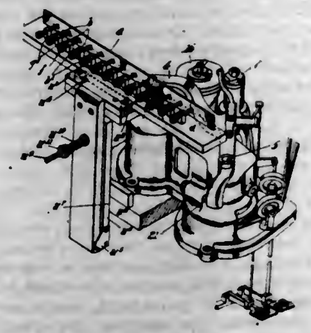
3. A device of the character described provided with means for attaching it to a car, and a resilient portion for exerting frictional pressure on an angle cock so as to prevent it from moving longitudinally.

4. A combined pipe clamp and angle cock holder comprising coöperating members that are adapted to support a train pipe, and resilient means that is adapted to bear upon an angle cock mounted on said pipe so as to prevent said cock from moving relatively to said pipe.

5. A combined pipe clamp and angle cock holder comprising a pipe clamp and angle-cock-engaging portions which are so designed that the angle-cock-engaging portion will bear upon the angle cock with which it coöperates prior to the engagement of said pipe-clamp-engaging portion with its coöperating pipe.

[Claims 6 to 19 not printed in the Gazette.]

1,064,118. PATTERN-GENERATING MECHANISM. JOHN V. ALLEN, Weymouth, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 11, 1909. Serial No. 522,101. (Cl. 144—144.5.)



1. The combination with a pattern generating machine having a rotatable support for pattern-blanks, a model follower, and pattern-generating mechanism constructed and arranged to generate radially irregular pattern disks; of an abutment device comprising a plurality of parts independently adjustable to form a pattern edge; and means to support said abutment device movably in position to traverse said model follower operatively.

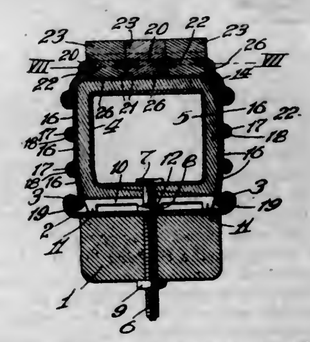
2. A holder for abutment devices of the class described; said holder comprising a swinging upright having a ledge provided with anti-friction means to be engaged with said abutment device and permit free traverse of the same while held; and means to maintain said swinging upright yieldingly toward the mechanism to be traversed operatively by said abutment device.

3. The combination with a pattern generating machine having mechanism constructed and arranged to generate radially irregular pattern disks and a model follower, of an abutment device comprising a plurality of parts independently adjustable to form a pattern edge for movable engagement with said follower; a holder upon which said abutment device is supported movably to traverse said follower operatively; and means to permit said abutment device to traverse said follower inoperatively.

4. The combination with a pattern generating machine having pattern-generating mechanism, a rotatable support for disk-pattern-blanks, and a model follower; of an abutment device comprising a base, a plurality of independently adjustable supporting members mounted on said base, and a flexible abutment strip carried by, and conformable with, said members; and means to support said abutment device movably in position to traverse said model follower operatively, said abutment device being removable with its base, supporting members and flexible strip, as a unitary structure, from said machine.

5. An abutment device for pattern-generating machines; said device comprising a base, a plurality of independently adjustable supporting members mounted on said base, and a flexible abutment strip carried by, and conformable with, said members, said base, supporting members and strip constituting a unitary structure implacable as such in any of a series of said pattern-generating machines.

1,064,119. VEHICLE-TIRE. WILLIAM E. ANDERSON, St. Louis, Mo. Filed Oct. 14, 1911. Serial No. 654,650. (Cl. 152—16.)



1. A pneumatic tire provided with laterally abutting straps extending around the periphery of said tire, said straps having apertures therein, resilient tread units mounted in said apertures and provided with flanges on both sides of said straps, the outside flanges being in close abutment throughout the periphery of the wheel, and metallic sockets incasing the inner flanges, said sockets being in abutment throughout the periphery of the wheel, and in interlocking abutment with shoulders formed on said straps to support said inner flanges.

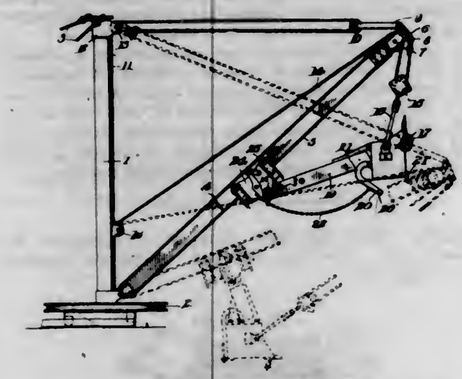
2. A pneumatic tire provided with an impenetrable tread comprising a plurality of straps arranged in lateral abutment throughout the periphery of the tire and provided with apertures, each of said straps being provided with a raised lug along its rear edge, and resilient tread

units mounted in said apertures and provided with recesses fitting said lugs, said tread units being thereby supported against peripheral displacement.

3. A pneumatic tire provided with an impenetrable tread comprising a plurality of metallic sockets mounted on and closely arranged transversely around the outer periphery of said tire, a plurality of straps arranged transversely of said tire adjacent said metallic sockets, the side edges of said straps abutting each other, openings formed in said straps, said openings being adjacent a like number of metallic sockets, a plurality of resilient tread units mounted in said openings, each of said tread units having an inner and an outer head, said inner heads being seated in said metallic sockets, said outer heads resting on the periphery of said straps forming a tread, and said inner heads forming locking flanges.

4. A pneumatic tire provided with an impenetrable tread comprising a plurality of straps arranged transversely of the tire, and provided with apertures, resilient tread units mounted in said apertures and provided with flanges interlocking beneath said straps, and metallic sockets incasing said flanges and interlocking with said straps, said sockets being in abutment transversely and longitudinally of the tire to provide an impenetrable shield.

1,064,120. EXCAVATOR. ADOLPH GUSTAV BANSMER, Brooklyn, N. Y. Filed Mar. 7, 1912. Serial No. 682,210. (Cl. 37—16.)



1. In an excavator, the combination of a boom having spaced longitudinal flanges, a carriage traveling on said flanges, a dipper arm pivotally hung on said carriage, a bucket carried by said arm, means for actuating the boom, means for operating the dipper arm and to effect movement of the carriage along the boom, and means controlled by the dipper arm for locking the carriage to the flanges on the boom.

2. In an excavator, the combination of a boom having spaced longitudinal flanges, a carriage traveling on said flanges, a dipper arm pivotally hung on said carriage, a bucket carried by said arm, means for actuating the boom, means for operating the dipper arm and to effect movement of the carriage along the boom, means controlled by the dipper arm for locking the carriage to the flanges of the boom, and means controlled by the dipper arm to discharge the contents of the bucket.

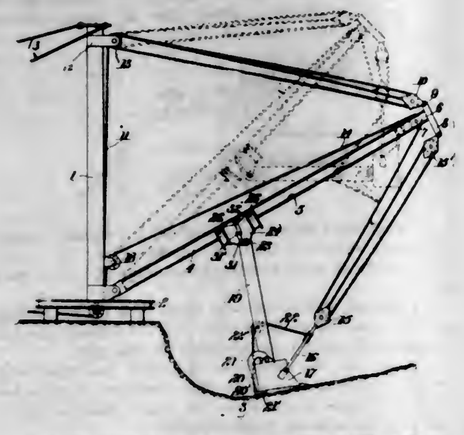
3. In an excavator, the combination of a boom, a carriage mounted to travel thereon, a dipper arm hung on the carriage, a bucket carried by said arm, means for actuating said arm, a closure for the bucket, a trip consisting of an angle lever mounted on the support for the dipper arm, a connection between one arm of said lever and the closure, and a stop on the carriage in the path of the other arm of the lever.

4. In an excavator, the combination of a boom, a carriage movable therealong, a brake lever fulcrumed on the carriage, a brake shoe connected with said lever and arranged to engage the boom, a dipper arm hung on the carriage, and means movable with the dipper arm and bearing on the brake lever to actuate the same.

5. In an excavator, the combination of a boom, a carriage mounted to travel thereon, a brake lever on the carriage, a brake shoe connected to the upper end of the brake lever and adapted to engage the boom, a rock shaft journaled in the carriage, a dipper arm secured to said rock shaft, and a cam on said shaft bearing against the lower end of the brake lever.

[Claim 6 not printed in the Gazette.]

1,064,121. EXCAVATOR. ADOLPH G. BANSMER, Brooklyn, N. Y. Filed Nov. 8, 1912. Serial No. 730,229. (Cl. 37—16.).



1. In an excavator, the combination with a boom, of a dipper arm adapted to swing toward and away from the boom, a bucket carried by the arm, means pivotally attached to the bucket for swinging the arm toward the boom, and means connected to said arm swinging means for dumping the bucket as it approaches the boom.

2. In an excavator, the combination with a boom, of a dipper arm adapted to swing toward and away from the boom, a bucket carried by the arm, a ball pivoted to the bucket, means attached to said ball for swinging the arm toward the boom, and means connected to said ball for dumping the bucket as it approaches the boom.

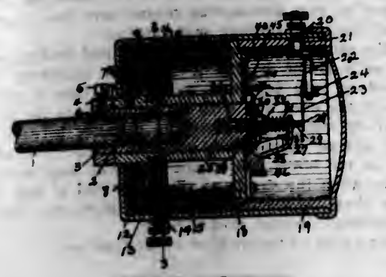
3. In an excavator, the combination with a boom, of a dipper arm adapted to swing toward and away from the boom, a bucket carried by the arm, a closure for the bucket, means to normally lock said closure, means pivotally attached to the bucket for swinging the arm toward the boom, and means of connection between the locking means and arm swinging means, whereby the bucket is automatically dumped as it approaches the boom.

4. In an excavator, the combination with a boom, of a dipper arm adapted to swing toward and away from the boom, a bucket carried by the arm, a closure for the bucket, means to normally lock said closure, means pivotally attached to the bucket for swinging the arm toward the boom, a sheave on the arm, and flexible connecting means extending between said locking means and arm swinging means and passed over said sheave, whereby the bucket is automatically dumped as it approaches the boom.

5. In an excavator, the combination with a boom, of a carriage, mounted to travel thereon, a dipper arm hung from the carriage, a bucket carried by said arm, means for automatically locking the carriage to the boom during the scraping action of the bucket, means pivotally attached to the bucket for swinging the arm toward the boom, and means connected to said arm swinging means for dumping the bucket as it approaches the boom.

[Claims 6 to 8 not printed in the Gazette.]

1,064,122. TIMER FOR IGNITION SYSTEMS. WILLIAM N. BARRETT, Meadville, Pa. Filed Dec. 8, 1911. Serial No. 664,527. (Cl. 123—168.)



1. In a timer for ignition systems the combination of two contact points, one of which is movable into and out of contact, and one of which is movable relatively to the other while in contact; an actuator; and devices operated by the actuator and when operated throwing the points into contact moving one of the points relatively to the other during contact and independent of the actuator throwing the points out of contact.

2. In a timer for ignition systems, the combination of two contact points, one of which is movable into and out of contact and one of which is rotatable while the points are in contact; an actuator; and devices operated by the actuator and when operated throwing the points into contact, rotating one of the points during contact and independent of a movement of the actuator throwing the points out of contact.

3. In a timer for ignition systems, the combination of two contact points, one of which is movable into and out of contact and one of which is movable relatively to the other while in contact; an actuator; devices actuated by the actuator in one direction; and means independent of the actuator operating with said devices to return said devices and on the return movement throwing said contact points into contact, moving one of said points relatively to the other and throwing said points out of contact independently of a continued movement of the actuator.

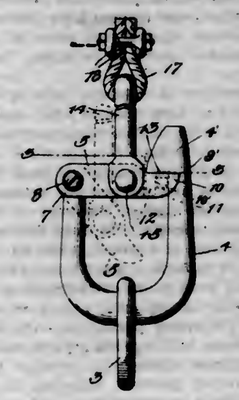
4. In a timer for ignition systems, the combination of two contact points, one of which is movable into and out of contact and one of which is movable relatively to the other while in contact; a rotary actuator; devices actuated by the actuator in one direction; and means independent of the actuator operating with said devices to return said devices and on the return movement throwing said contact points into contact, moving one of said points relatively to the other and throwing said points out of contact independently of a continued movement of the actuator.

5. In a timer for ignition systems, the combination of two contact points one of which is movable axially and rotatively; means for moving one of said points into contact and rotating the same while in contact; devices for actuating said means; and a power driven mechanism for actuating said devices in one direction, said devices being adapted to be released and to operate independently of said mechanism in throwing said contact points into and out of contact.

[Claims 6 to 9 not printed in the Gazette.]

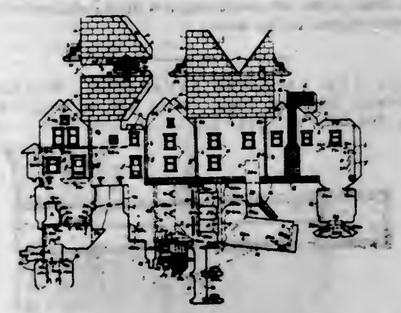
1,064,123. BUCKET-GRIP. NICHOLAS BAYUK, McKinley, Minn. Filed May 8, 1912. Serial No. 696,040. (Cl. 24—242.)

In a device of the character described, a substantially U-shaped member, an elongated inwardly extending and tapering head formed on one of the shank portions, a depending lug formed on said head arranged in spaced and parallel relation to said shank portion, a link member having its one end pivoted to the end of the opposite shank portion of said U-shaped member and its other end bifurcated so as to form spaced parallel arms and a transverse



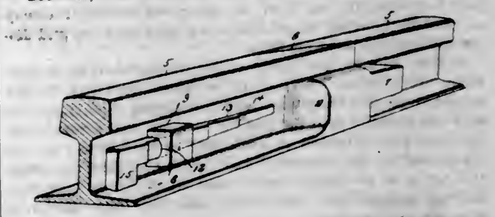
bar arranged approximately midway the length of the bifurcation, as and for the purpose specified.

1,064,124. CARDBOARD STRUCTURE. CLIFFORD BEAUMONT, Canton, Ohio. Filed May 3, 1909. Serial No. 493,473. (Cl. 46—37.)



A sheet blank for making a miniature house or the like, composed of a body portion having windows, doors and like features indicated thereon, and lateral extensions having roofs, railings, columns and like features indicated thereon, there being interior portions designated to be cut out to form open spaces in the blank and certain of the lateral extensions having the corresponding features indicated on the opposite side from the indications on the body portion, whereby the blank can be cut out and folded upon itself to form the indicated feature.

1,064,125. RAIL-JOINT. GEORGE S. BREMER, Meeker, Colo. Filed Apr. 7, 1913. Serial No. 759,445. (Cl. 239—8.)



1. The combination of adjoining rails having their abutting ends beveled to form a scarf joint, and the rail ends

having apertured webs, hooks extending from the rail ends, said hooks passing through the apertures and projecting therefrom, the projecting portion of each hook having a transverse aperture, and tapered keys driven through said transverse apertures against the webs of the rails, said keys having notched portions engaging the edge of the apertures.

2. The combination of adjoining rails having their abutting ends beveled to form a scarf joint, and the rail ends having apertured webs, hooks extending from the rail ends, said hooks passing through the apertures and projecting therefrom, the projecting portion of each hook having a transverse aperture, and tapered key driven through said transverse apertures against the webs of the rails, said keys having beads engaging the base flanges of the rails.

3. The combination of adjoining rails having their abutting ends beveled to form a scarf joint, and the rail ends having apertured webs, hooks extending from the rail ends, said hooks passing through the apertures and projecting therefrom, the projecting portion of each hook having a transverse aperture, and tapered keys driven through said transverse apertures against the webs of the rails, said keys having notched portions engaging the edge of the apertures, and a head engaging the base flanges of the rails.

4. The combination of adjoining rails having their abutting ends beveled to form a scarf joint, and the rail ends having apertured webs, tongues extending from the rail ends, and terminating in lateral portions passing through the apertures and projecting therefrom, the projecting lateral portions having transverse apertures, tapered keys driven through the apertures against the webs of the rails, the rail webs at the ends of the rail being halved and the inner sides of the aforesaid tongues fitting against the said halved portions of the webs.

1,064,126. LOADING APPARATUS. WILLIAM W. BROWER, Belmond, Iowa. Filed Apr. 8, 1912. Serial No. 689,388. (Cl. 214—8.)



1. The combination, in an elevating and loading mechanism, of a frame having an inclined trackway, a car mounted on said trackway, said car having a platform top with an opening into the body of the car, and an inclined way attached to each side of said frame at the lower end of the trackway and leading to said top when the car is at the lower end of said trackway so that dirt-moving means may pass upon said top and discharge through said opening.

2. The combination, in an elevating and loading mechanism, of a frame having an inclined trackway, a car mounted on said trackway, said car having a platform top with an opening into the body of the car and a drop bottom, and an inclined way attached to each side of said frame at the lower end of the trackway and leading to said top when the car is at the lower end of said trackway so that dirt-moving means may pass upon said top and discharge through said opening.

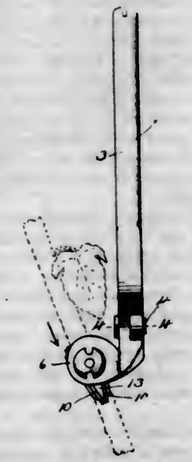
3. The combination, in an elevating and loading mechanism, of a frame having an inclined trackway, a car mounted on said trackway, said car having a platform top with an opening into the body of the car, and a removable inclined way attached to each side of said frame at the lower end of the trackway and leading to said top when the car is at the lower end of said trackway so that dirt-moving means may pass upon said top and discharge through said opening.

4. The combination, in an elevating and loading mechanism, of a frame having an inclined trackway, a car mounted on said trackway, said car having a platform top with an opening into the body of the car and a drop bottom, and a removable inclined way attached to each side of said frame at the lower end of the trackway and leading to said top when the car is at the lower end of said trackway so that dirt-moving means may pass upon said top and discharge through said opening.

5. The combination, in an elevating and loading mechanism, of a frame having an inclined trackway, a car mounted on said trackway, said car having a top with guides at the ends and with an opening into the body of the car of less length than the distance between such guides, and an inclined way attached to each side of said frame at the lower end of the trackway and leading to said top when the car is at the lower end of said trackway so that dirt-moving means may pass upon said top and discharge through said opening.

[Claims 6 to 12 not printed in the Gazette.]

1,064,127. GRAFTING IMPLEMENT. LORENZO BRUNO, Washington, D. C. Filed Oct. 17, 1910, Serial No. 587,580. Renewed Nov. 18, 1912. Serial No. 732,132. (Cl. 47—6.)

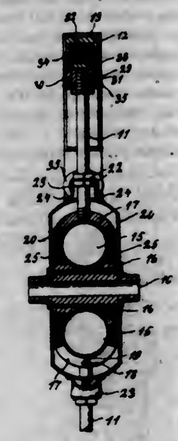


1. A grafting implement comprising a pair of pivoted handles, a suitable spring for holding said handles apart, jaws on the implement, said jaws being arranged to one side of the longitudinal axis of the handles, a knife bed on one of said jaws, said knife bed being provided with channels, a pair of cutting knives arranged in said channels, said knives forming a V, the points of which meet each other, a V-shaped knife carried on one of said jaws, said V-shaped knife being adapted to pass between the first mentioned knives, the cutting edges on said V-shaped knife being adapted to co-act with the cutting edges on the first mentioned knives, and a spring arranged between the first mentioned knives to force the vine from between the first mentioned knives, substantially as described.

2. A grafting implement comprising a pair of pivoted handles, a pair of jawa, said jaws being formed on one side of the longitudinal axis of the handles, a pair of knives arranged in V-shape on one of the jaws, a V-shaped knife arranged on the other jaw, said knives being provided with cutting edges and adapted to co-act with each other, and means arranged between the first mentioned knives to force the vine from the same, substantially as described.

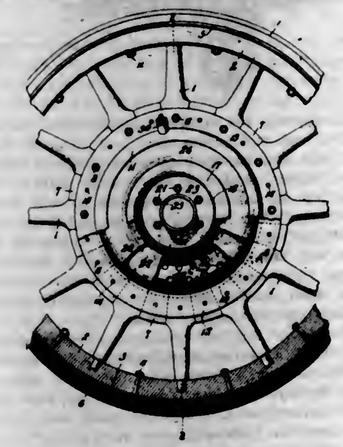
1,064,128. VEHICLE-WHEEL. JOHN CALLAN, Ray, Ariz. Filed Dec. 28, 1911. Serial No. 668,260. (Cl. 152—28.)

A wheel comprising a hub, a cushion encircling the hub, a rim, spokes carried by the rim, shoes carried by the inner ends of the spokes, said shoes engaging the cushion and projecting from the sides thereof, said projecting side portions of the shoes having recesses in their inner ends, and auxiliary cushion rings on opposite sides of the aforesaid cushion between the hub and the projecting portions



of the shoes, said hub and inner periphery of the rings having interlocking portions, and the outer periphery of the rings having teeth which seat in the aforesaid recesses of the shoes.

1,064,129. RESILIENT WHEEL. WILLIAM L. CHRYSLER, Eugene, Oreg., assignor, by direct and mesne assignments, to Portland Automobile Wheel Company, Portland, Oreg., a Corporation of Oregon. Filed June 8, 1911. Serial No. 632,034. (Cl. 152—46.)



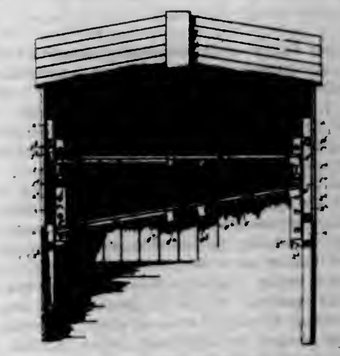
1. A wheel of the class described comprising an outer portion including spokes, a felly, and a tire, a vertical plate secured to the outer portion of the wheel at one side of the spokes, an outer channeled ring composed of sections divided in the median plane of the ring and having abutting radially extending flanges, said ring being mounted on the outer portion of the wheel at the opposite side of the spokes, an inner portion having a hub and provided with spaced members forming a guide slidably receiving the vertical plate of the outer portion of the wheel, an inner channeled ring mounted on the inner portion of the wheel, and an annular cushion interposed between the inner and outer channeled rings.

2. A wheel of the class described comprising an outer portion having spokes, a hub, an annular cushion, an inner channeled ring concaved to fit the cushion and forming an inner support for the same and having its inner side enlarged and extended and constituting one wall of a guide, a separate plate spaced from the said inner side of the channeled ring and forming the other wall of the guide, means for securing the ring and the plate to the hub, a flat plate secured to the spokes and working in the guide, and an outer channeled ring secured to the other side of the spokes and concaved to fit the outer side of the cushion, said outer ring being divided longitudinally into two parts, one part fitting between the inner ends of the spokes and the cushion and the other part fitting against the cushion and the outer side thereof.

3. A wheel of the class described comprising an outer portion including spokes, a felly, and a tire, an inner portion composed of inner and outer hub sections provided with outstanding attaching flanges, an inner vertical plate secured between the attaching flanges of the hub sections, an inner ring having a flange also secured between the said attaching flanges and spaced from the inner vertical plate to form a guide, an outer vertical plate secured to the outer portion of the wheel at one side of the spokes and slidable in the said guide, an outer ring secured to the outer portion of the wheel at the opposite side of the spokes, and a cushion interposed between the inner and outer rings.

4. A wheel of the class described comprising an outer portion including spokes, a felly, and a tire, an inner portion having a hub, an outer vertical plate secured to the spokes at one side thereof, an outer sectional ring divided upon a medial plane, the sections being provided with abutting flanges, which are connected with the spokes at the opposite side from the plate, an inner vertical plate mounted on the inner portion of the wheel, an inner supporting ring secured to the inner portion of the wheel and spaced from the inner vertical plate to form a guide for the outer vertical plate, and a cushion interposed between the inner and outer rings.

1,064,130. BRACE. JOHN JAMES CONLIN, Cleveland, Ohio. Filed Mar. 10, 1913. Serial No. 753,328. (Cl. 105—15.)



1. In a device for the purposes described the combination of two brace members, the shank of one being adapted to slide longitudinally within the shank of the other; pins depending from the outer ends of said brace members; brackets adapted to be attached to supports; and a series of holes in said brackets to receive the pins.

2. In a device for the purposes described the combination of two brace members, the shank of one having a sliding longitudinal adjustment within the shank of the other; means for locking said members to each other; pins depending from the outer ends of said brace members; brackets adapted to be attached to supports, each of said brackets consisting of two members having a longitudinal sliding adjustment relative to each other; and a series of holes in said brackets to receive the pins on the brace members.

3. In a device for the purposes described the combination of two brace members, the shank of one having a sliding longitudinal adjustment within the shank of the other;

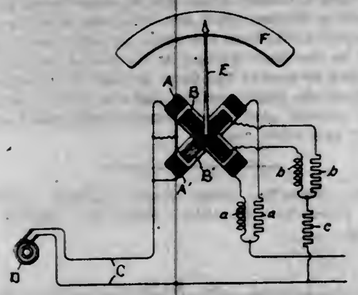
pins depending from the free ends of the brace members; brackets provided with a series of holes adapted to receive the brace member pins; each of said brackets consisting of two members having a longitudinal adjustment relative to each other; and means for locking said bracket members to each other.

4. In a device for the purposes described the combination of longitudinally intersliding brace members; pins attached to the free ends of said members; longitudinally adjustable brackets adapted to support the brace members; a series of openings in said brackets adapted to receive the pins on the brace members, whereby said brace members may be adjusted at various angles relative to the brackets.

5. In a device for the purposes described the combination of longitudinally adjustable brackets; supporting clips adapted to be attached to said brackets; longitudinally adjustable brace members; and means for connecting said brace members with the brackets at various angles relative thereto.

[Claim 6 not printed in the Gazette.]

1,064,131. POWER-FACTOR INDICATOR. JAMES R. CRAIGHEAD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 7, 1911. Serial No. 653,389. (Cl. 172—245.)



1. A power factor meter comprising relatively movable elements, each including a plurality of mechanically displaced windings, phase splitting means in circuit with the windings of each element, the circuits for each element having the same time constants as those for the other element, and indicating means actuated by the movable element of the meter.

2. A power factor meter comprising relatively movable elements, each including a plurality of mechanically displaced windings connected in parallel, impedances of different time constants included in series with the different windings of each element in the parallel circuits and producing phase displacements of the currents therein, the time constant of the circuit of each impedance and the winding of one element in series therewith being the same as that of an impedance and a winding of the other element, and indicating means actuated by the movable element of the meter.

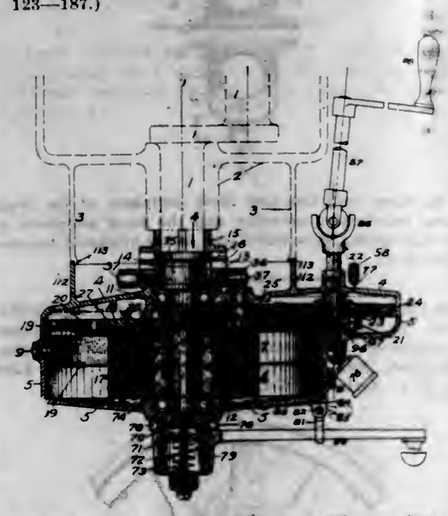
3. A power factor meter comprising relatively movable elements, each including a plurality of mechanically displaced windings, impedances in circuit with the windings of each element, the impedances in circuit with the different windings of either element having different time constants and producing phase displacement of the currents in the windings of that element but each circuit for one element having the same time constant as a corresponding circuit for the other element, and indicating means actuated by the movable element of the meter.

4. A power factor meter comprising relatively movable elements, each including a plurality of mechanically displaced windings connected in parallel circuits, the parallel circuits for the different windings of either element having different time constants but each circuit for one element having the same time constant as a corresponding circuit for the other element, and indicating means actuated by the movable element of the meter.

5. A power factor meter comprising relatively movable elements, each including a plurality of mechanically displaced windings, phase splitting means in circuit with the windings of each element, the circuits for each element having the same time constants as the corresponding circuits of the other element and the amount of the impedance of the inductive circuit of each element being approximately equal to the resistance of the non-inductive circuit of the same element at the rated frequency of the instrument, and indicating means actuated by the movable element of the meter.

[Claim 6 not printed in the Gazette.]

1,064,132. STARTING MECHANISM FOR INTERNAL-COMBUSTION ENGINES. ARTHUR R. CURTIS, Denver, Colo. Filed Oct. 12, 1908. Serial No. 457,236. (Cl. 123—187.)



1. In a starter for internal combustion engines, the combination with the engine shaft and a starter shaft normally, wholly disconnected from the engine shaft, of a device journaled co-axially with said starter shaft, a spring having one extremity attached to said device, the other extremity being fixed, a gear fixedly attached to the movable device, a ratchet and pawl connection between said gear and the starter shaft whereby the movement of the gear in response to the tension in the spring actuates the shaft, and an operative connection between the starter shaft and the engine shaft.

2. A starter for internal combustion engines comprising a starter shaft, a spring center journaled co-axially with said shaft, the said center being provided with a gear forming a rigid part of said spring center, and a ratchet and pawl connection between the gear and the starter shaft whereby the power of the spring may be exerted to rotate the shaft.

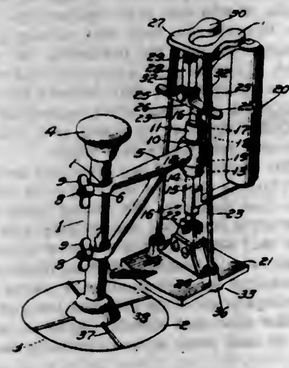
3. A starter for internal combustion engines comprising a starter shaft, a spring, a spring center journaled co-axially with said shaft and provided with a gear, means engaging the teeth of said gear for normally locking the spring-actuated parts against movement, and means acting on said gear teeth whereby the latter are utilized to transmit power for winding the spring.

4. A starter of the class described comprising a shaft, a spring center loose on the shaft, said center being provided with a gear, a ratchet and pawl connection between the gear and the shaft whereby the power of the spring may be exerted to rotate the shaft, a winding pinion meshing with the said gear, means acting directly on the pinion for normally locking the spring-actuated parts against movement, and a gearing connection between the winding pinion and the shaft, including a reversing idler, whereby the rotation of the shaft may be utilized to wind the spring.

5. A starter of the class described comprising a starter shaft, a spring center loose on the shaft, said center being provided with a gear, a pinion fast on the starter shaft, a ratchet and pawl connection between the gear and the shaft, whereby the power of the spring may be exerted to rotate the shaft, a winding pinion meshing with the said gear, means engaging the pinion for normally locking the spring-actuated parts against movement, and a gearing connection between the winding pinion and the shaft pinion including a reversing idler whereby the rotation of the shaft may be utilized to wind the spring, and means for breaking the gearing connection between the two pinions to permit the power of the spring to act to turn the shaft.

[Claims 6 to 26 not printed in the Gazette.]

1,064,133. CEMENT-FINISHING TOOL. MEHO DERVOZ, Los Angeles, Cal. Filed Apr. 22, 1912. Serial No. 692,522. (Cl. 94—6.)



1. A cement marker comprising an axis; an end plate fixed on the axis at right angles thereto and having a supporting face; a handle on the axis; a revoluble support journaled on the axis; and a marker on the support; said marker being adapted to extend to the produced plane of said supporting face.

2. A cement marker comprising an axis; an end plate fixed on the axis having a supporting face transverse to the axis; a revoluble support journaled on the axis; and a marker mounted on the support and movable toward and from the produced plane of said supporting face.

3. A cement marker comprising an axis; an end plate fixed at right angles to the axis and having a supporting face; a revoluble support journaled on the axis; a marker on the support; and resilient means on said support to carry the marker.

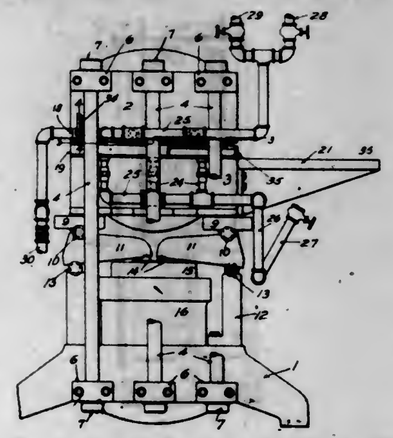
4. A cement marker comprising an axis; a plate on the axis and provided with a supporting face transverse to said axis; a revoluble support on said axis; said support being provided with a box having a vertical bore, and the lower end of said bore being provided with an internal shoulder; a tool-carrying rod slidable in the bore and provided with a shoulder; a spring between the shoulder of the bore and the shoulder of the rod, to support the rod; a handle on the rod, and a tool at the lower end of the rod.

5. A cement marker comprising an axis; a plate on said axis provided with a supporting face transverse to said axis, a support revolubly mounted on the axis, a rod, a marking tool pivotally mounted on the rod, means to move the rod in parallelism with the axis and means to tilt the tool on the rod.

[Claims 6 to 15 not printed in the Gazette.]

1,064,134. METHOD OF MAKING PRINTING-PLATES. MICHAEL A. DROITCOUR, Oak Park, Ill. Filed May 26, 1910. Serial No. 563,617. (Cl. 101—178.)

1. The method of making printing plates from substances which can be rendered plastic, consisting in inclosing the plate forming material and matrix in a sealed space, exhausting air from said space, and while exhausting air from said space forcing the plate forming material into the matrix by means of rigid pressure surfaces contacting directly with the matrix and plate forming material and having movement of approximation in perfect parallelism.



2. The method of making printing plates from celluloid consisting in inclosing a sheet of celluloid and a matrix in a sealed space, exhausting air from said space, applying heat to soften the celluloid, while exhausting air from the space forcing the celluloid sheet into the matrix by means of rigid pressure surfaces contacting directly with the matrix and celluloid sheet and by pressure acting normal to the matrix face, and then cooling the plate to set the same.

3. The method of making printing plates from plastic substances, consisting in pressing the plastic substance into the matrix by direct contact of rigid pressure surfaces having movement of approximation in perfect parallelism, and simultaneously therewith holding the same under partial vacuum to remove the air and gases from between the plastic substance, the matrix, and the pressure elements.

4. The method of making printing plates from substances which can be rendered plastic, consisting in pressing the plastic substance into a matrix by direct contact of rigid pressure surfaces acting normal to the matrix face and having movement of approximation in perfect parallelism, and simultaneously therewith holding the same under partial vacuum to remove air from between the celluloid sheet and the pressure element.

5. The method of making printing plates consisting in taking a celluloid sheet, simultaneously heating the same and pressing the same into the matrix by means of direct contact of rigid pressure surfaces acting normal to the matrix face and having movement of approximation in perfect parallelism, and simultaneously therewith holding the same under partial vacuum to remove the air from between the celluloid sheet and the pressure element.

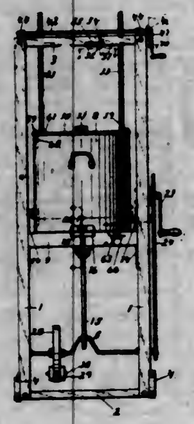
[Claims 6 to 14 not printed in the Gazette.]

1,064,135. DISH-WASHING MACHINE. DAVID A. DRUMMOND, Grand Rapids, Mich. Filed Aug. 5, 1912. Serial No. 713,382. (Cl. 141—9.)

1. In a washing machine, the combination with the frame provided with vertical ways, of a crank shaft; a cross head provided with slides arranged in said ways; a pitman connecting said cross head to said crank shaft; driving means for said crank shaft; a tank or receptacle carried by said cross head; a basket; supporting rods for said basket provided with racks; and means for raising and lowering said rods.

2. In a washing machine, the combination with the frame provided with vertical ways, of a crank shaft; a

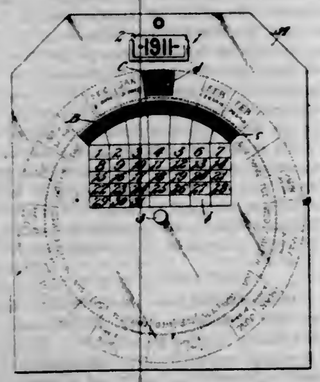
cross head provided with slides arranged in said ways; a pitman connecting said cross head to said crank shaft; driving means for said crank shaft; a tank or receptacle carried by said cross head; a basket; supporting rods for said basket, said basket being adjustably and removably secured to said supporting rods; and means for raising and lowering said rods.



3. In a washing machine, the combination with the frame; a reciprocating member; a tank or receptacle carried by said reciprocating member; a basket; supporting rods for said basket; members on said basket adapted to receive said rods; and catches on said basket members, said rods being provided with openings adapted to receive said catches.

4. In a washing machine, the combination with the frame provided with vertical ways, of a member reciprocating in said ways, means for actuating said reciprocating member, a tank or receptacle carried by said reciprocating member, a basket, a receptacle cover, means extending through said cover for supporting said basket within said receptacle, and means for securing said cover to said receptacle.

1,064,136. PERPETUAL CALENDAR. HENRY F. EILS, St. Louis, Mo., assignor to St. Louis University, St. Louis, Mo., a Corporation of Missouri. Filed Dec. 18, 1911. Serial No. 666,429. (Cl. 40—115.)



1. A calendar consisting of a supporting member, a movable century member on said supporting member provided with separate sets of symbols and with separate sets of complete numbers that designate the closing years of the old style and the new style centuries, respectively, a coöperating movable year member on said supporting member provided with numbers that designate the years of a century and with symbols which coöperate with the symbols on said century member to indicate the day of the week on which a year begins, numbers on said supporting member arranged in seven columns so as to form a monthly calendar, symbols on one of said movable members which designate the days of the week and thus form headings for the seven columns of numbers on the supporting member, and symbols on the other movable member that designate the months of the year.

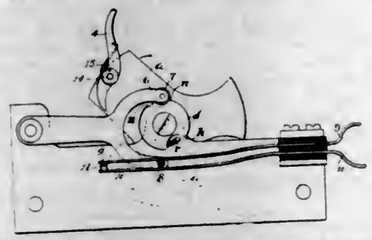
2. A calendar consisting of a plate provided on its front face with numerals that are arranged to form a monthly calendar, said plate having openings, a disk rotatably mounted on the rear side of said plate and provided on one side with symbols designating the days of the week that can be seen through one of said openings, a rotatable ring surrounding said disk and provided on one side with symbols designating the months of the year that can be seen through the other opening in the plate, separate sets of complete numbers on the reverse side of said ring that designate the closing years of the old style and new style centuries, respectively, groups of numbers on the reverse side of said disk that designate the years of a century, key numbers on said disk arranged with the group of numbers thereon for indicating the day of the week on which a year begins, a separate and distinct set of key numbers on said disk that indicate the days of a week, and means on said ring which coöperates with said last-mentioned key numbers to enable said disk and ring to be set in proper relation to each other.

3. A calendar consisting of two relatively movable members, one of which is provided with separate sets of complete numbers that designate the closing years of the old style and new style centuries, respectively, and the other with numbers that designate the years of a century, and symbols on one of said members that indicate the number of days in excess of an even number of weeks that have elapsed at the expiration of the different years of a century and which show how said members have to be adjusted with relation to each other so as to indicate the first day of any year.

4. A calendar consisting of a rotatable century member having two sections, one of said sections having seven radially-disposed columns or a multiple of seven in which numbers designating the closing years of the old style centuries are arranged, the other of said sections having seven radially disposed columns or a multiple of seven in which numbers designating the closing years of the new-style centuries are arranged, the numbers designating years which end on the same day being grouped together, a coöperating rotatable year member provided with seven radially-disposed columns or a multiple of seven in which numbers designating the years of a century are arranged, the numbers that designate years which end on the same day being grouped together, symbols in the columns on said year member which indicate the number of days over an even number of weeks that have elapsed at the expiration of a year, and complete key numbers arranged on said year member in the form of an arc and consisting of the numerals 0 to 6, inclusive, which are adapted to coöperate with the columns on said century member to enable said century member and year member to be set in proper position with relation to each other.

5. A calendar composed of a supporting member provided with openings, a century member mounted on same and having two separate and distinct sections, one of which comprises seven or a multiple of seven radially-disposed columns in which are arranged numbers that designate the closing years of the old style centuries and the other of which comprises seven or a multiple of seven radially disposed columns in which are arranged numbers that designate the closing years of the new-style or Gregorian centuries, the numbers designating the centurial years that end on the same day being grouped together, a coöperating year member mounted on said supporting member and provided with seven or a multiple of seven radially-disposed columns in which are arranged numbers that designate the years of a century, the numbers that designate years which end on the same day being grouped together, coöperating week-day names and month names on the reverse side of said century member and year member that can be seen through the openings in said supporting member, symbols in the columns on said year member that indicate the days of the week on which the years indicated in said columns terminate, seven key numbers or symbols or a multiple of seven on said year member which are adapted to be brought into registration with one or another of the radial columns on said century member so as to bring the coöperating week day names and month names on the reverse side of said members in proper relation with each other, said key numbers having a certain relation to the radial columns on said year member, and numerals arranged on said supporting member to form a monthly calendar.

1,064,137. ELECTRIC CLOCK. JOHN F. ENGLE, Cleveland, Ohio, assignor to Lee M. Parker, Cleveland, Ohio. Filed May 13, 1912. Serial No. 696,859. (Cl. 58—41.)



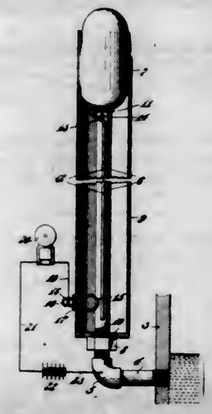
1. An electrically operated clock comprising a main spring, a shaft actuated thereby and an armature fixed on said shaft, in combination with two spring conducting members having contact points at their ends, a pivoted yoke having one arm provided with a lateral projection permanently engaged between the said springs and adapted to separate the same and break the circuit, and a device mounted to rotate loosely on said shaft supporting the other arm of said yoke and adapted to raise and lower said yoke and thus make and break circuit at said contact points, the said disk having cavities in its periphery over which said arm is adapted to pass.

2. An electrically operated clock mechanism comprising a shaft and an armature and a main spring fixed on the said shaft, a disk independently mounted on said shaft and said armature provided with a lateral projection adapted to engage and rotate the said disk, in combination with a pair of direct acting contact springs having contacts at their ends and a pivotally mounted yoke having one arm operatively engaging the periphery of said disk and the other arm provided with a lateral projection extending between said springs inward from the contact points on the ends thereof.

3. In an electrically wound clock, a main shaft and a main spring and an armature on said shaft, a yoke having a supporting stem on which it is pivoted and provided with two arms, a disk adjustably mounted on said shaft having two cavities and a projection between the same, a pair of parallel spring contact members having contact points at their otherwise free ends, and one of said arms having a lateral projection engaged between the said spring contact members and the other of said arms engaging said disk and adapted to ride from one of said cavities into the other over said projection between said cavities and a lateral projection on said armature adapted to engage and rotate the said disk.

4. In an electrically operated clock, a mechanism comprising an arbor and a main spring and an armature thereon, a pair of spring contact members having contact points at their ends, a disk independently rotatable on said arbor and having two cavities of different depths on its periphery and a projection between said cavities and a single cavity in said disk substantially opposite the said two cavities, a lateral projection on said armature adapted to engage the edge of said single cavity and rotate said disk, and a pivoted yoke having an arm with a roller adapted to ride from one cavity into the other over said projection, and another arm having a lateral projection extending permanently between the contact members and the ends thereof and adapted to open the same and break the circuit.

1,064,138. LOW-WATER ALARM. CLARENCE W. FORD, Pittsburgh, Pa. Filed June 19, 1912. Serial No. 704,487. (Cl. 177—317.)



1. In a device of the character described, in combination with a boiler, an expansion tube in communication therewith, a contact element carried by said expansion tube comprising an elongated finger fixedly secured at one end to said expansion tube, a shoulder on said finger adjacent the fixed end thereof, a housing, a projection carried by said housing engaging said shoulder, and a stationary contact member supported adjacent the free end of said finger.

2. In a device of the character described, in combination with a boiler, an expansion tube in communication therewith, a contact member fixedly secured at one end to said expansion tube and comprising an elongated finger having an offset portion forming a shoulder adjacent the fixed end of said finger, a pipe forming a housing surrounding said expansion tube, a pin mounted in said housing engaging the offset portion of the finger, and a stationary contact member supported by the housing adjacent the free end of said finger.

3. In a device of the character described, in combination with a boiler, an expansion tube in communication therewith, means controlled by said tube for establishing an electric circuit, and an enlarged portion constituting a chamber at the end of said tube.

4. In a device of the character described, in combination with a boiler, an expansion tube in communication therewith, an enlarged portion constituting a chamber at the end of said tube, a contact element fixedly secured at one end to said expansion tube and comprising an elongated finger, a stationary contact member supported adjacent the free end of said contact finger, and means for deflecting said finger when said tube is expanded.

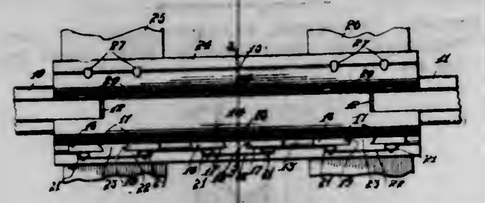
5. In a device of the character described, in combination with a boiler, an expansion tube in communication with the boiler, an enlarged portion constituting a chamber at the end of said tube, a contact element fixedly secured at one end to said expansion tube and comprising an elongated finger, a stationary contact member supported adjacent the free end of said contact finger, and means for deflecting said finger when said tube is expanded comprising a shoulder on said finger adjacent the fixed end thereof, a housing, and a projection carried by said housing engaging said shoulder.

[Claims 6 to 8 not printed in the Gazette.]

1,064,139. RAIL-JOINT. WILLIAM C. FULGHAM, Utica, Miss. Filed Aug. 5, 1912. Serial No. 713,481. (Cl. 151—44.)

In a nut lock, the combination with spaced bolts and nuts thereon, of an abutment plate having spaced openings

receiving said bolts, and having a dovetail slot in the top edge between said openings, and a locking plate on the



outer face of said abutment plate bearing with the end edges against said nuts and having a dove-tail knob on the inner top edge portion fitting in said slot.

1,064,140. MEANS FOR EXCLUDING FLIES FROM BUILDINGS. CHARLES B. GILLESPIE, Grand Forks, N. D. Filed Oct. 10, 1912. Serial No. 724,919. (Cl. 230—1.)



1. In means for excluding flies from buildings, the combination with an entrance way of a downwardly directed rotary fan and its motor, located outside and above said entrance way, a casing surrounding and supporting said fan and motor and constructed with fly-proof top and side members, and means for supporting said casing in said location.

2. In means for excluding flies from a building, an electric-fan structure comprising a casing having fly-proof top and side members constructed respectively of sheet metal or like weather-proof material and of air-admitting screen, together with a fan and its motor depending within said casing, and means for supporting the same outside an entrance.

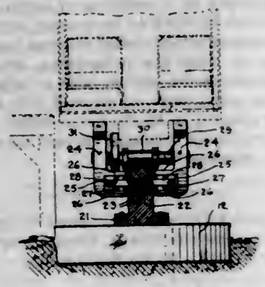
3. In means for excluding flies from buildings, the combination with an entrance way of an electric-fan structure comprising a casing having fly-proof top and side members, partly of fly excluding screen, the top member being arched in the shape of a low dome, and a bottom member of coarse screen or the like for safety, together with a downwardly directed fan and its motor depending from said top member and above said bottom member within said casing, and means for supporting said fan structure outside and above said entrance way.

4. In means for excluding flies from buildings, the combination with an entrance way of an electric-fan structure comprising a casing having fly-excluding top and side members, a movable bottom member of coarse screen or the like for safety, and means for holding said movable member in place, together with a fan and its motor depending above said bottom member within said casing, and means for supporting said structure outside and above said entrance way.

5. In means for excluding flies from buildings, the combination with an entrance door way of an electric-fan structure comprising a casing having fly-proof top and side members together with a fan and its motor depending within said casing, and means for supporting said fan structure outside and above said door way, said supporting means including vertical brackets bolted to the door posts, a horizontal member connecting said brackets, and connecting devices in the plane of said horizontal member.

[Claims 6 and 7 not printed in the Gazette.]

1,064,141. SINGLE-TRACK STREET-CAR. MATHEW W. GORHAM, Winnfield, La. Filed June 24, 1912. Serial No. 705,593. (Cl. 105—234.)



The combination of a rail provided with longitudinally extending grooves in the sides thereof, depending arms carried by the truck of a car, a supporting wheel rotatably mounted between said arms and resting upon the upper edge of said rail, and wheels rotatably connected with the ends of said arms and contacting with said rail above and below the groove formed therein, and provided with thickened center portions contacting with the inner walls of said grooves.

1,064,142. SAFETY DEVICE FOR RAILROAD-TRAINS. WILLIAM F. GREENE, Huntingdon, Pa. Filed Aug. 16, 1912. Serial No. 715,481. (Cl. 246—28.)



In a safety device for railway trains the combination of a car, trucks supporting said car and including arch bars at each side, a train pipe extending beneath the car between the latter and said trucks, batteries supported beneath the car between the trucks, a wire for conducting the current of said batteries, said wire extending contiguous with and beneath the arch bars of the truck whereby the breaking of any of said arch bars will sever said wire, a magnet included in the circuit of said batteries, a branch pipe leading from said train pipe for conducting air to sound a signal, a valve in said branch pipe, a handle on said valve constituting the armature of said magnet and arranged to close the valve when said handle is attracted by the magnet, and spring means for automatically moving the valve to open position when said magnet is deënergized.

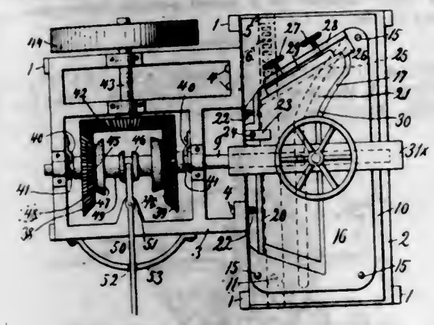
1,064,143. SHOE-LACE HOLDER. JOHN H. HESS, Caledonia, Mo. Filed Mar. 8, 1912. Serial No. 682,480. (Cl. 24—129.)



A shoe-lace holder consisting of a pair of plates having their upper edges hingedly connected, one of said plates being provided with side bars to produce a rectangular opening, spurs carried by the side bars, a catch carried by the other plate, and consisting of a vertical web spaced from the plate, aimed guides formed upon the first named plate, a rod slidably mounted in the guides, a head formed upon the inner end of the rod, said head being adapted to

engage the space between the web and plate when the same is swung against its coacting plate and the knot of a shoe-lace is positioned in the rectangular opening of the first named plate and is engaged by said spurs.

1,064,144. PLOWSHARE-SHARPENER. CLARENCE E. HOFF and JOHN V. FIELDER, Rock Lake, N. D. Filed Aug. 1, 1912. Serial No. 712,708. (Cl. 29—83.)



1. In a machine of the kind described, the combination with a main frame of an anvil mounted to slide in the frame, means for holding a plow share secured upon the anvil, an adjustable roller mounted in the frame and arranged to press upon the edge of the plow share, means for reciprocating the anvil and means for guiding the anvil according to the curvature of the edge of the plow share.

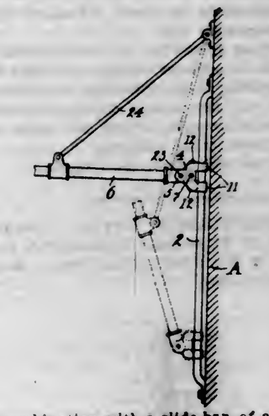
2. In a machine of the kind described, the combination with a main frame of an anvil mounted to slide in the frame, means for holding a plow share secured upon the anvil, an adjustable roller mounted in the frame and arranged to press upon the edge of the plow share, means for reciprocating the anvil, and means for guiding the anvil according to the curvature of the edge of the plow share, said guiding means for the anvil consisting of a stud fixed in the main frame, a plate detachably bolted to the underside of the anvil and having a curved groove in which the stud engages, said plate being pivotally connected with the means for reciprocation.

3. In a machine of the kind described the combination with a frame having a bed plate with a groove in it and an aperture at the middle of the groove, and a stud near the groove, of a rack slidable in the groove, a plate pivotally connected with the rack and resting upon the bed plate, an anvil removably secured upon the pivoted plate, and means for holding a plow share upon the anvil; said pivoted plate having in its under side a curved groove engaged by the stud, a driven shaft journaled in the frame, a gear wheel fixed on the shaft and projecting through the aperture so as to engage the rack.

4. In a machine of the kind described, a slidable anvil having a top surface adapted to support a plow share, means for reciprocating the anvil, a roller and means for pressing the roller down upon the edge portion of the plow share; said anvil having a groove for the landside of the share, clamping screws projecting into the groove and a removable strip to be pressed by the screws against the landside of the share; said anvil also having at its highest point a rib along the rear edge of the share, screws in said rib arranged to resist the rear edge of the share and clamping means adjacent thereto for clamping the share tightly down upon the anvil.

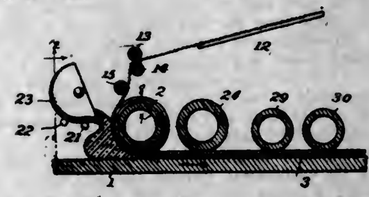
5. In a machine of the kind described, the combination with a frame, of supporting rollers mounted therein, a plate supported by the rollers, an anvil secured upon the plate, means for guiding and means for reciprocating the plate, means for holding a plow share in place on the anvil, a roller mounted in a portion of the frame above the anvil, and means for pressing said roller downward upon the plow share near the front edge thereof.

1,064,145. JAW-SLIDE. WILLIS K. JACOBS, St. Paul, Minn. Filed May 23, 1910. Serial No. 563,035. (Cl. 156—42.)



The combination with a slide bar, of a jaw slide comprising two separable jaws having inturned interlocking arms at the rear of the slide bar, rollers journaled between said jaws at the front of the slide bar, and an interiorly threaded spacing lug carried by one of the jaws near said rollers, said lug forming an abutment for the other jaw and being adapted to receive a fastening bolt in its aperture, said arms and rollers embracing the slide bar between them.

1,064,146. APPARATUS FOR MAKING WIRE-GLASS. CLEMENT J. JUNGERS, Streator, Ill. Original application filed May 27, 1909, Serial No. 498,647. Divided and this application filed Sept. 24, 1909. Serial No. 519,406. (Cl. 49—32.)



1. In a wire glass rolling apparatus, the combination of a casting bed, means for spreading a sheet of glass and introducing a sheet of metallic netting thereto, and a roll coöperating with said bed to roll-press the glass after the wire has been introduced, one of said latter elements being made normally concave as to its sheet-forming surface to compensate for the expansion of the metal under the action of the hot glass and to effectively roll-press the surface of the sheet throughout its full width without effecting a redistribution of the mass of the body of the sheet.

2. In a wire glass-rolling apparatus, the combination with a casting table, of a combined sheet-spreading and embedding roll, provided with circumferential parallel flanges of succeeding smaller diameter from each end of the roll toward the center thereof, so that the periphery of the roll, as defined by the peripheries of the flanges, is concave.

3. In a wire glass rolling apparatus, the combination with means for spreading and forming a sheet of glass and introducing a sheet of wire netting thereto, said means comprising an embedding roll provided with embedding flanges, the peripheries of which define a cylinder slightly concave in axial section, of a coöperating smoothing roll, having a similarly concaved periphery.

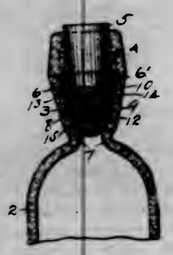
4. In a wire glass rolling apparatus, the combination with a casting table and means for spreading and forming a sheet of glass thereon and introducing a sheet of wire netting thereto, of an embedding roll provided with em-

bedding flanges and having its periphery as defined by the peripheries of said flanges made slightly concave in axial section, a coöperating smoothing roll likewise having a concave periphery, and a riding roll having a concave periphery of substantially the same degree of concavity as that of said smoothing roll.

5. In a glass-rolling apparatus, the combination with a spreading roll and an opposed coöperating sheet-forming member, of a supporting frame extending alongside of but spread away from the front of said forming roll and constituting a ladle-support upon which the ladle may be shifted back and forth while pouring.

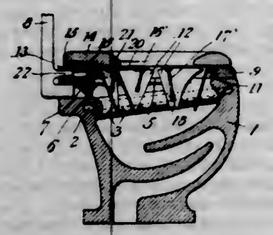
[Claims 6 to 10 not printed in the Gazette.]

1,064,147. NON-REFILLABLE BOTTLE. JOSEPH A. LAURY, Syracuse, N. Y., assignor of one-half to Frank J. Cregg, Syracuse, N. Y. Filed July 20, 1912. Serial No. 710,643. (Cl. 215—60.)



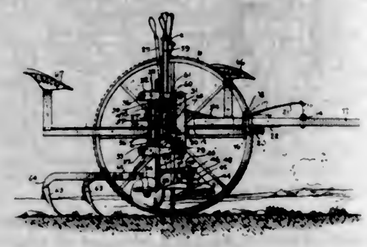
In a non-refilling bottle, the combination with the body of a bottle, having a neck provided with a tapering enlargement arranged between the body and the mouth of the neck, of a cone-shaped valve comprising a rubber shell having one closed and one open end, the open end of said shell having openings arranged circumferentially, and the closed end of said valve adapted to be seated at the intersection of the neck and the body for preventing the passage of the liquid from the body into the neck, a compressible and expansible core partially filling said shell, said core disposed below said openings and adapted to hold said shell in normal shape conforming to the shape of said enlargement, said valve having a greater diameter than the mouth of said neck, and capable of being compressed when forced through said neck, and adapted to expand after entering said enlargement to its normal size for preventing its withdrawal through the said mouth, said valve having a length less than the length of said enlargement, and adapted to gravitate from the smaller to the larger end of said enlargement for permitting the withdrawal of the liquid from the bottle, and a stopper for closing the mouth of the neck and for holding said valve tightly in the smaller end of said enlargement for preventing the withdrawal or leakage of the liquid during shipment and storage.

1,064,148. CLOSET-SEAT. MATTI LEHTONEN, Duluth, Minn. Filed Sept. 16, 1912. Serial No. 720,657. (Cl. 4—20.)



A closet seat of the character described comprising a lower member having a service opening and a ventilating passage, an upper member hinged to said lower member and having therein a service opening, a series of plates hinged to the edge of the service opening in said lower seat opening and adapted to close the latter, a series of links graduated in length and having a loose connection at one end to said plates and at their opposite ends with the upper seat member whereby when the latter is depressed said plates will be swung to an open position and when said member is raised the plates will be swung to a closed position and means to raise and yieldingly hold said upper member in a raised position when the seat is not in use.

1,064,149. COMBINED WEEDER AND CULTIVATOR. ROBERT J. MANDERFIELD, Houghton, Mich. Filed Nov. 1, 1912. Serial No. 729,178. (Cl. 97—37.)



1. In a machine of the character described, a rock shaft, arms loosely mounted upon said rock shaft, weeding disks to travel upon opposite sides of a plant row, means for mounting the disks upon said arms, and means carried by the shaft to engage said arms when the shaft is rocked to elevate the disks and support the same in an inoperative position.

2. In a machine of the character described, a rock shaft, arms loosely mounted upon said rock shaft, hanger bars suspended from said arms, spaced weeding disks to travel upon opposite sides of a plant row, means for removably mounting said disks upon the hanger bars, said arms having limited oscillatory movement upon the rock shaft whereby the disks may move independently of each other in a vertical plane, and means carried by the shaft to engage said arms and elevate the disks when the shaft is rocked and support the same in an inoperative position.

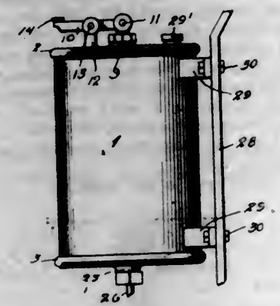
3. In a machine of the character described, a rock shaft, bearings therefor, arms loosely mounted upon the rock shaft, and having limited oscillatory movement thereon, similar arms pivotally connected at one of their ends to the shaft bearings, members connecting the arms at opposite ends of the shafts, spaced weeding disks, means for detachably mounting said disks upon the connecting members, and means carried by the rock shaft to engage the arms thereon whereby the disks are elevated when the shaft is rocked and supported in an inoperative position.

4. In a machine of the character described, a rock shaft, arms loosely mounted upon said rock shaft and having limited oscillatory movement with respect thereto, cultivating disks, weeding disks and plows arranged in spaced groups for movement upon opposite sides of a plant row, means for removably securing each of said groups to one of the oscillatory arms whereby the same may move in a vertical plane with respect to the other group, and means carried by the rock shaft to simultaneously engage said arms and elevate the groups of implements.

5. In a machine of the character described, a rock shaft, bearings therefor, arms loosely mounted upon opposite ends of said shaft and having limited oscillatory movement with respect thereto, similar arms pivotally connected at one of their ends to the shaft bearings, members connecting the free ends of said arms, spaced groups of cultivating and weeding implements adapted to travel upon opposite sides of a plant row, means for detachably securing each group of implements to one of the connecting members between said arms whereby the groups of implements upon opposite sides of the row may move as a unit in vertical planes with respect to each other, and means carried by the rock shaft to simultaneously engage said arms and elevate the implement groups to support the same in an inoperative position.

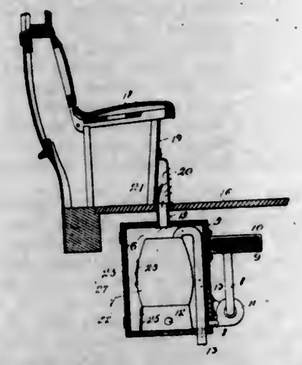
[Claims 6 to 10 not printed in the Gazette.]

1,064,150. PRIMING DEVICE FOR EXPLOSIVE-ENGINES. PETER MCDANIEL and WILLIAM F. KERNODLE, Frankfort, Ind.; said McDaniel assignor to Benjamin F. Jones, Frankfort, Ind. Filed Apr. 24, 1912. Serial No. 692,958. (Cl. 73—159.)



In a priming device of the character described, a main shell, heads closing the upper and lower ends of the shell, the lower head being provided with a discharge opening having a conical portion serving as a valve seat, a horizontal partition plate vertically adjustably mounted within said main shell and provided with a substantially hemispherical central opening, a reciprocatory rod extending longitudinally within said main shell and provided near its lower end with screw threads, a ball-valve rotatably mounted upon the screw-threaded portion of the rod, a conical valve connected with the lower end of the rod and adapted for movement into and out of engagement with the conical valve seat, a coiled spring surrounding the reciprocatory rod and engaging the upper head, and a manually operated lever pivotally mounted upon the upper head and connected with the reciprocatory rod.

1,064,151. CAR-HEATING APPARATUS. JOHN S. MCWHIRTER, New York, N. Y., assignor to Consolidated Car Heating Company, a Corporation of West Virginia. Filed Feb. 10, 1911. Serial No. 607,746. (Cl. 237—3.)

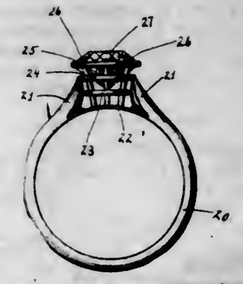


1. The combination with a car, of a closed chamber located beneath the floor of said car, a heating stove within said chamber and receiving its air supply from said chamber, a draft pipe leading from the top of said stove downwardly through the bottom of said chamber, a register in said car, a pipe for conducting heated air from said chamber to said register, means for delivering air into said chamber, and means for maintaining a higher air pressure in said chamber than in said stove.

2. The combination with a car, of a closed chamber located beneath the floor of said car, a heating stove within said chamber and receiving its air supply from said chamber, a draft pipe leading from the top of said stove downwardly through the bottom of said chamber, a register in said car, a pipe leading from the top of said chamber to said register, means for delivering air into the lower part of said chamber, and means for maintaining a higher air pressure in said chamber than in said stove.

3. The combination with a car, of a closed chamber located beneath the floor of the car, a stove located within said chamber and receiving its air supply from said chamber, a register in said car, a pipe for conducting heated air from the top of said chamber to said register, and means for delivering air to said chamber and also to said stove, a draft pipe extending from the top of said stove through the bottom of the chamber, said pipe being arranged in a spiral coil around said stove, and means for maintaining a higher air pressure in said chamber than in said stove.

1,064,152. GEM-SETTING. MAX C. MEYER, New York, N. Y. Filed Oct. 23, 1909. Serial No. 524,221. (Cl. 63—27.)



1. A gem setting comprising an article of jewelry constituting a supporting base, and an open framework mounted and attached to the base, consisting of a plurality of posts adapted to engage and hold a gem at their upper ends, and a plurality of horizontal bands closely encircling and fastened to the posts.

2. A gem setting comprising an article of jewelry constituting a supporting base, and attached thereto an open framework composed of a plurality of posts spaced equidistantly apart and adapted to engage and hold a gem at their upper ends, and a plurality of horizontal circular bands closely encircling and fastened to the posts.

1,064,153. BUNSEN BURNER. ROBERT MICHL, Steglitz-Berlin, Germany. Filed Sept. 26, 1910. Serial No. 583,850. (Cl. 67—96.)



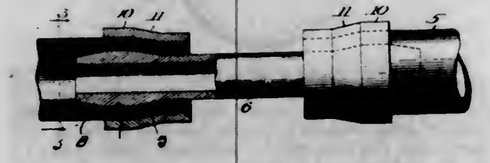
1. In a Bunsen burner the combination of the mixing tube for the combustible and air mixture, with a burner

head piece with a ring-shaped conducting section at the mouth, the inside diameter of which is not smaller than half the outside diameter and having moreover passages for the supply of the combustible and air mixture the apertures of which are situated in the ring shaped issuing section, leaving intervening space for the passage of additional air, as described.

2. In a Bunsen burner the combination of the mixing tube for the combustible and air mixture, and a burner head piece with a ring-shaped conducting section at the mouth the inside diameter of which is not smaller than half the outside diameter and having moreover passages for the supply of the combustible and air mixture the apertures of which are situated side by side in a single circular row in the ring shaped issuing section, leaving space for the passage of additional air which extend from the outer circumference to the inner circumference of the ring shaped issuing section.

3. In a Bunsen burner the combination of the mixing tube for the combustible and air mixture, with a burner head piece with a ring-shaped issuing section at the mouth the inside diameter of which is not smaller than half the outside diameter and which has passages for the supply of the combustible and air mixture which extend from the outer to the inner circumference of said ring-shaped issuing section, additional air passages between and alternating with the passages for the combustible mixture, the combustible mixture and additional air passages being the inner and outer grooves respectively formed by fluting the outside wall of the burner head piece.

1,064,154. HOSE-COUPLING. JOSEPH MILLER, Chicago, Ill. Filed May 15, 1911. Serial No. 627,180. (Cl. 137—28.)



1. A hose coupling comprising a tube having an enlarged tapered portion and a cylindrical portion on each side of said tapered portion adapted to be inserted into the end of a hose, and an integral sleeve adapted to be slipped over the end of the hose, said sleeve having cylindrical ends of different internal diameters, said ends being connected by a tapered portion, the tapered portions of the sleeve and the tube being substantially parallel and serving to compress the walls of the hose therebetween.

2. A hose coupling comprising a tube having an enlarged tapered portion and a cylindrical portion on each side of said tapered portion adapted to be inserted into the end of a hose, and a sleeve adapted to be slipped over the end of the hose, said sleeve having cylindrical ends of different internal diameters connected by a tapered portion, the said tapered portions of the sleeve and tube having substantially the same inclination and being divided by an interspace less than the thickness of the hose and having substantially parallel walls adapted to compress the walls of the hose therebetween.

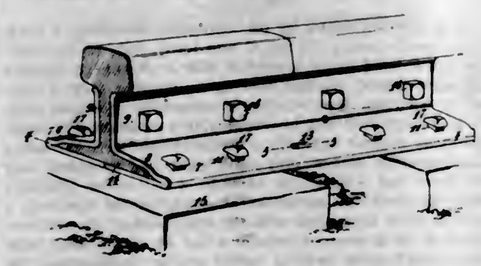
3. A hose coupling comprising a tube having an enlarged tapered portion and a cylindrical portion at each side of said tapered portion adapted to fit snugly within an end of the hose, and a sleeve adapted to be slipped over the end of the hose, said sleeve having a tapered portion adapted to compress the end of the hose and having cylindrical portions co-acting with the cylindrical portions of the tube to aid in securing the hose to the coupling, the tapered portions of the sleeve and tube serving to compress the walls of the hose therebetween without stretching the said walls.

4. The combination of a hose section and a hose coupling comprising a tube having an enlarged cylindrical portion of diameter equal substantially to the diameter of the bore of the hose, a tapered portion connected with said cylindrical portion, and a sleeve having a tapered portion and a cylindrical portion co-acting with the tapered portion and cylindrical portion of the tube to secure the section of the hose to the coupling, the tapered portions of the sleeve and tube serving to compress the walls of the hose and to clamp the same therebetween.

5. A hose coupling comprising a tube having an enlarged head adapted to be inserted in the end of a hose and having an external centrally disposed cylindrical surface, a frusto-conical surface extending from one side of said cylindrical surface to the end of the tube and a frusto-conical surface extending from the other side of the said cylindrical surface inwardly of the tube to the end of the enlarged head, and a sleeve adapted to be slipped over the end of the hose embracing the head and having cylindrical ends of different diameters connected by a tapered portion and being provided with internal surfaces parallel to the centrally disposed cylindrical surface of the head, the inner frusto-conical surface and the outer wall of the tube.

[Claim 6 not printed in the Gazette.]

1,064,155. RAIL-JOINT CHAIR. FRANK W. MORSE, Los Angeles, Cal. Filed Sept. 20, 1912. Serial No. 721,381. (Cl. 239—6.)



1. A rail joint chair, comprising two like sections, each consisting of a base portion having an obliquely projecting tongue and a corresponding slot adjacent said tongue, the tongue of one section adapted to lie in the slot of the other section, each of said sections including rail base engaging members, and removable means passing through said members for "locking" said members together.

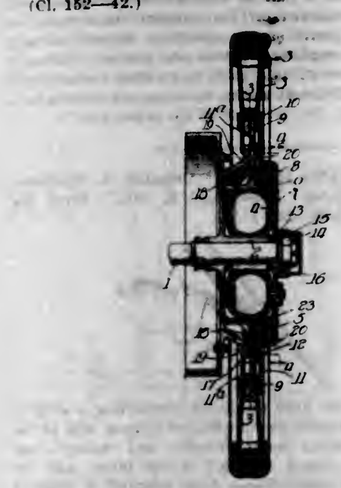
2. A rail joint chair, comprising two like sections, each consisting of a base portion having an obliquely projecting tongue and a corresponding slot adjacent said tongue, the tongue of one section adapted to lie in the slot of the other section, each of said sections including rail base engaging members, and removable means passing through said members for "locking" said members together, and an auxiliary locking means for locking said members together, said auxiliary locking means including a bendable element on one member for engaging a notch on the tongue of the other member to prevent movement of the tongues in their slots.

3. A rail joint chair comprising two oppositely disposed rail engaging members, each having base portions, each of said base portions including projections and projection receiving slots extending obliquely fully across and beyond the base flange of the rail, said projections having spike receiving recesses, each of said members having spike holes, certain of the spike holes of one section coöperating with the spike receiving recess of the projection of the other section, substantially as shown and described.

4. A joint chair comprising two oppositely disposed engaging members, each including a base plate section, each base plate section including an obliquely extending tongue and an adjacent slot of the same configuration as the tongue and arranged reversely thereto, whereby the tongue of one section will enter and fit the slot of the opposite section, each of said tongues having a spike notch, each of said members including upper portions having spike holes alining with said spike notches when the parts are assembled, substantially as shown and described.

5. A joint chair comprising two oppositely disposed engaging members, each including a base plate section, each base plate section including an obliquely extended tongue and an adjacent slot of the same configuration as the tongue and arranged reversely thereto, whereby the tongue of one section will enter and fit the slot of the opposite section, each of said tongues having a spike notch, each of said members including upper portions having spike holes alining with said spike notches when the parts are assembled, said tongues including locking element receiving notches, each of said members having locking elements, the locking element of one member adapted to be bent to engage in the notch of the tongue of the opposite member when the parts are assembled to hold the two members from separation.

1,064,156. WHEEL. JOHN ERHARDT MUHLFELD, Baltimore, Md. Filed Sept. 23, 1910. Serial No. 583,387. (Cl. 152—42.)



1. In a wheel, the combination with a hub member, of a rim member movable in respect thereto, and inner and outer resilient members interposed between said hub and rim members, said hub and rim members simultaneously compressing said resilient members on opposite sides of the wheel center, and interengaging stops to limit the radial movement of said hub and rim members in respect to each other, said stops comprising circular ribs, substantially as specified.

2. In a wheel, the combination with a hub member, of a rim member movable in respect thereto, and inner and outer resilient members interposed between said hub and rim members, said hub and rim members simultaneously compressing said resilient members on opposite sides of the wheel center, and interengaging stops to limit the radial movement of said hub and rim members in respect to each other, and connecting means to cause said hub and rim members to rotate together in the same direction and also permit a limiting turning movement of the one in respect to the other, said means comprising interengaging wedge shaped members, substantially as specified.

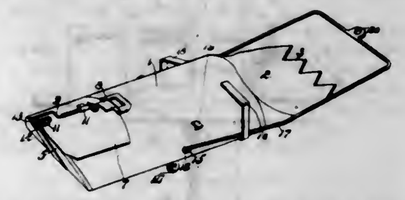
3. In a wheel, the combination with a hub member, of a rim member movable in respect thereto, said hub and rim members having engaging faces, and inner and outer resilient members interposed between said hub and rim members, said hub and rim members simultaneously compressing said resilient members on opposite sides of the wheel center, and interengaging stops to limit the radial movement of said hub and rim members in respect to each other, and gear teeth on the meeting peripheries of said hub and rim members to cause them to rotate together in the same direction and also permit a limited turning movement of the one in respect to the other.

4. In a wheel, the combination with a hub member, of a relatively movable rim member, and two cushioning devices interposed between said members and simultaneously compressed, one on one side of the wheel center and the other on the opposite side thereof, said hub and rim members having at their meeting peripheries interengaging teeth to cause them to rotate together, substantially as specified.

5. In a wheel, the combination with a hub member, of a rim member movable in respect thereto, and inner and outer resilient members interposed between said hub and rim members, said hub and rim members simultaneously compressing said resilient members on opposite sides of the wheel center, and interengaging stops to limit the radial movement of said hub and rim members in respect to each other, and connecting means to cause said hub and rim members to rotate together in the same direction and also permit a limiting turning movement of the one in respect to the other, said connecting means having provision to cause the propelling power to act to centralize said hub and rim members in respect to each other, substantially as specified.

[Claims 6 to 9 not printed in the Gazette.]

1,064,157. APPARATUS FOR LOADING AND UNLOADING VESSELS. JOHN MURPHY, Louisburg, Cape Breton, Nova Scotia, Canada. Filed Apr. 20, 1912. Serial No. 692,139. (Cl. 37—54.)



1. A device of the class described including a receptacle having a flattened face, an open top and an inclined closed bottom, there being an outlet in one wall of the receptacle and at the bottom thereof, a bail connected to the receptacle and extending beyond the open end thereof, a closure for the outlet, a locking element for automatically securing the closure when shut, and means depending from said element for engagement with a structure to unlock the closure when the receptacle is lowered.

2. A device of the class described including a receptacle having a flat face, said receptacle being open at one end and closed at the other end, a blade extending beyond the open end of the receptacle and from the flat face thereof, and reinforcing ribs formed longitudinally upon said flat face and the blade.

3. A device of the class described including a receptacle having a flat face, said receptacle being open at one end and closed at the other end, a blade extending beyond the open end of the receptacle and from the flat face thereof, and reinforcing ribs formed longitudinally upon said flat face and the blade, there being teeth upon the free end of the blade, said receptacle having an outlet in one wall thereof and close to the bottom, and a closure for the outlet.

4. A structure of the class described including a receptacle having a flat face, said receptacle being open at one end and closed at its other end, a collecting blade outstanding from the open end of the receptacle and having terminal teeth, a bail extending from the receptacle and beyond the toothed blade, there being an outlet in one wall of the receptacle and close to the closed end thereof, a closure for the receptacle, and means for automatically securing the closure when shut.

5. The combination with a receptacle having an open end and a closed end, and an outlet adjacent the closed end, of a closure for the outlet, means for automatically securing the closure when shut, and means carried by said securing means for engaging a structure to unlock the closure when the receptacle is lowered.

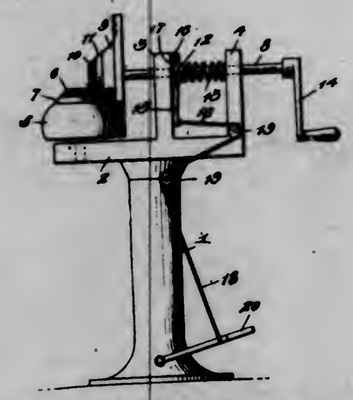
[Claims 6 to 9 not printed in the Gazette.]

1,064,158. HAT-PIN SHIELD. EDWIN R. MURRAY, Alameda, Cal. Filed May 29, 1911. Serial No. 630,118. (Cl. 24—155.)



A hat pin guard comprising an outer tube, an inner pin receiving tube positioned within said outer tube, said tubes being provided with alined openings, a U-shaped spring secured to said outer tube and passing through said openings with its free inner end portion positioned in said inner tube, teeth formed upon the inner face of the inner portion of said spring, an ear extending from said spring, and an operating pin secured to said ear and extending through said tubes.

1,064,159. LEATHER-MOLDING MACHINE. DON O. NATION, Oklahoma, Okla. Filed June 24, 1912. Serial No. 705,611. (Cl. 69—1.)



1. A leather molding machine comprising a supporting member, a roll rotatably mounted on a vertical axis thereon, a horizontal shaft rotatably and slidably mounted on said supporting member, an additional roll carried on one end of said shaft, bevel gears formed on the outer faces of said rolls, means for normally retaining the last mentioned roll in yielding contact with the first mentioned roll to correspondingly retain said gears in mesh with one another, means for rotating said shaft, and means for sliding said shaft to correspondingly disengage the rolls.

2. A leather molding machine comprising a supporting member, a roll rotatably mounted on a vertical axis thereon, a horizontal shaft slidably mounted on said supporting member, an additional roll carried on the one end of said shaft, bevel gears formed on the outer faces of said rolls, spring means cooperating with said shaft and supporting member to normally force the one roll in contact with the other and correspondingly cause said gears to be meshed, shoulders formed on said rolls intermediate the body portions thereof and gears thereon, said shoulders being adapted for engagement with one another, means for manually rotating said shaft with the roll thereon, and means for withdrawing the one roll from contact with the other.

3. A leather molding machine comprising a supporting member, a roll rotatably mounted on a vertical axis thereon, a horizontal shaft rotatably and slidably mounted on said supporting member, an additional roll carried on one end of said shaft, means to normally retain the additional roll in yielding contact with the first mentioned roll, shoulders formed on said rolls adjacent the outer ends thereof and adapted for engagement with one another, means to rotate said horizontal shaft, and means also formed on said rolls to cause the first mentioned roll to be rotated upon the rotation of the additional roll.

4. In a leather molding machine, the combination with a base having a pair of spaced vertical arms formed thereon; of a roll rotatably mounted on a vertical axis on said base, a horizontal shaft rotatably and slidably mounted on said vertical arms, an additional roll carried on the one end of said shaft, a collar carried on said shaft between the aforesaid vertical arms, spring means encircling said shaft between said collar and one of said arms to normally force the additional roll in contact with the first mentioned roll, a lever pivotally carried on the other of said arms and adapted for engagement with the collar on said shaft, means to swing said lever whereby said shaft and additional roll will be withdrawn from their normal positions, means to manually rotate said horizontal shaft, and means to cause the first mentioned roll to be rotated upon the rotation of the additional roll.

5. In a device of the class described, the combination with a support; of a pair of substantially frusto-conical rolls rotatably mounted on the support respectively on vertical and horizontal axes, shoulders formed on said rolls adapted for engagement with one another, means to normally retain one of said rolls in yielding contact with the other, and additional means to cause one of said rolls to be rotated upon the rotation of the other roll.

1,064,160. WRITING DEVICE. CHARLES A. NEISWENDER, Topeka, Kans. Filed June 6, 1912. Serial No. 702,022. (Cl. 120—103.)



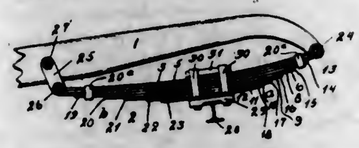
1. A device of the kind described comprising a strip of bendable metal adapted to fit along the inner side of the thumb, one end being bent inwardly and enlarged and adapted to bear against the ball of the thumb and the other end being formed into a loop adapted to grasp a penholder between the ends of the thumb and fore-finger, said strip being formed with a clip at its middle portion adapted to embrace the back of the thumb between the first and second joints.

2. A device of the kind described comprising a strip formed to fit lengthwise along the inner side of the thumb, one end being bent inwardly to bear against the ball of the thumb and the other end being formed into a loop to grasp a penholder between the ends of the thumb and forefinger, said strip being formed with a clip at its middle portion to embrace the back of the thumb between the first and second joints.

3. A device of the kind described comprising a strip formed to fit lengthwise along the inner side of the thumb with one end bearing against the ball of the thumb and the other end bearing against the end of the thumb, said strip being formed with a clip at its middle portion to embrace the back of the thumb between the first and second joints, and being also formed with a means for rigidly grasping a penholder.

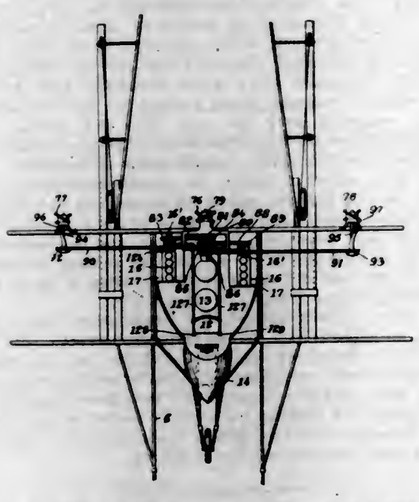
1,064,161. SPRING. JOHN J. NEWKIRK, Chihuahua, Mexico. Filed Jan. 14, 1911. Serial No. 602,683. (Cl. 21—50.)

In combination, a leaf-spring comprising, a plurality of superposed spring-leaves which decrease in length downwardly and more prominently at corresponding ends thereof, whereby the leaf-spring will have short and long arms which are respectively stiff and resilient, the uppermost spring-leaf being foreshortened so that the free ends of the second spring-leaf from the top may extend thereby and be bent upwardly to form eyes, the third spring-leaf from the top having its ends bent upwardly to form curved portions for receiving the eyes to reinforce and stiffen them, sleeves surrounding only the first four spring-



leaves from the top to properly bind them together, flat plates disposed above and below the leaf-spring at the enlarged portion thereof, U-shaped bolts connecting the plates, and an axle rigidly connected with the lower plate.

1,064,162. PROPELLING MECHANISM FOR FLYING-MACHINES. AXEL R. NORDSTROM, West Lynn, Mass., assignor of one-fourth to Gustaf F. Hellstrom, Sr., and Gustaf F. Hellstrom, Jr., West Lynn, Mass., three-sixteenths to Martin Bowman, Rockport, Mass., and one-sixth to Carin E. Norwall, West Lynn, Mass. Original application filed Dec. 27, 1911, Serial No. 668,046. Divided and this application filed June 4, 1912. Serial No. 701,577. (Cl. 244—25.)



1. In a flying machine, a pair of separate and independent motors, a central propeller, a pair of side propellers, means for directly driving the central propeller from one of said motors, a gear element on the shaft of the central propeller, means for driving the same from the other motor, and means for driving the side propellers from said gear element.

2. In a flying machine, a pair of separate and independent motors, a central propeller, a pair of side propellers, a multiple sprocket gear on the shaft of the central propeller, means for directly driving said central propeller from one of said motors, means for driving said multiple sprocket gear from the other motor, and means for driving the side propellers from said multiple sprocket gear.

3. In a flying machine, a central propeller, a pair of side propellers, a pair of separate and independent motors, gearing for directly driving the central propeller from one of said motors, a gear element loosely mounted on the shaft of the central propeller, gearing for driving said gear element from the other motor, gears for driving the said propellers from said gear element, and means for throwing the sets of gearing for driving the propellers from the respective motors into and out of action without stopping said motors.

1,064,163. RAILROAD-TIE. EDWARD S. PEMENT and PHILEMON PEMENT, Chicago, Ill. Filed July 20, 1912. Serial No. 710,713. (Cl. 238—3.)



1. A railroad tie composed of sheet metal bent to form, having separated opposing longitudinal edges in combination with means secured in the face of the tie adjacent to and locking said edges against lateral movement.

2. A railroad tie composed of sheet metal bent to form, having separated opposing lateral edges and provided with perforations adjacent said edges, in combination with means projecting through said perforations adapted to maintain and lock said edges from lateral movement.

3. A railroad tie composed of sheet metal bent to form, having separated opposing lateral edges extending on the arc of a circle, provided with perforations adjacent said edges, in combination with a plurality of locking devices differing in length projecting through said perforations, whereby said edges are maintained throughout their length against spreading apart.

4. A railroad tie composed of sheet metal bent to form with the opposing longitudinal edges separated from each other, the edges of one side or face of which tie extend in parallel lines, and the other in reversely curved lines, and means locking and maintaining the opposing curved side edges thereof from expanding.

5. A railroad tie constructed from bent flexible sheet metal having on one face separated opposing longitudinal edges, a contractible filler therein, and means in the face of the tie adjacent said edges for forcing the walls of the tie against and locking them in contact with the filler, following the contraction thereof from said walls.

[Claims 6 to 9 not printed in the Gazette.]

1,064,164. PROCESS OF MANUFACTURING CEREAL FOOD. HENRY D. PERKY, Glencoe, Md.; Laban Sparks, administrator of said Perky, deceased, assignor, by mesne assignments, to The Shredded Wheat Company, Niagara Falls, N. Y. Filed Jan. 19, 1906. Serial No. 296,872. (Cl. 99—11.)



A process of reducing corn, which consists in cooking ground corn mixed with a limited amount of water, and cooling the resultant to a set or caked condition, pressing the material of the cake by a movement of reciprocation through a perforated plate and thereby forming separate light filaments thereof, drying these filaments in separated condition by causing them to fall or gravitate through a hot-air flue, and finally collecting the product.

1,064,165. DOFFER. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed July 13, 1910. Serial No. 571,689. (Cl. 118—13.)

1. In a doffer, a bobbin magazine having means forming spaces for the tips of bobbins and opposite compartments for the butts of bobbins, the width of the tip-spaces being substantially equal to the diameter of the tips, and the width of the butt-compartments being substantially twice the diameter of the butts, there being an equal number of tip-spaces and butt-compartments, the butt-compartments being of uniform width from top to bottom.

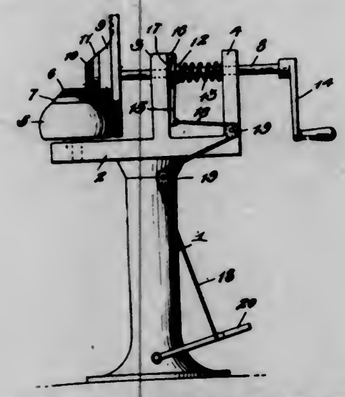
2. In a doffer, a bobbin magazine having means forming a space therein for the tips of bobbins and an opposite compartment for the butts of bobbins, the width of

1,064,158. HAT-PIN SHIELD. EDWIN R. MURRAY, Alameda, Cal. Filed May 29, 1911. Serial No. 630,118. (Cl. 24—155.)



A hat pin guard comprising an outer tube, an inner pin receiving tube positioned within said outer tube, said tubes being provided with alined openings, a U-shaped spring secured to said outer tube and passing through said openings with its free inner end portion positioned in said inner tube, teeth formed upon the inner face of the inner portion of said spring, an ear extending from said spring, and an operating pin secured to said ear and extending through said tubes.

1,064,159. LEATHER-MOLDING MACHINE. DON O. NATION, Oklahoma, Okla. Filed June 24, 1912. Serial No. 705,611. (Cl. 69—1.)



1. A leather molding machine comprising a supporting member, a roll rotatably mounted on a vertical axis thereon, a horizontal shaft rotatably and slidably mounted on said supporting member, an additional roll carried on one end of said shaft, bevel gears formed on the outer faces of said rolls, means for normally retaining the last mentioned roll in yielding contact with the first mentioned roll to correspondingly retain said gears in mesh with one another, means for rotating said shaft, and means for sliding said shaft to correspondingly disengage the rolls.

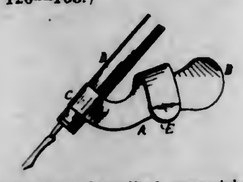
2. A leather molding machine comprising a supporting member, a roll rotatably mounted on a vertical axis thereon, a horizontal shaft slidably mounted on said supporting member, an additional roll carried on the one end of said shaft, bevel gears formed on the outer faces of said rolls, spring means cooperating with said shaft and supporting member to normally force the one roll in contact with the other and correspondingly cause said gears to be meshed, shoulders formed on said rolls intermediate the body portions thereof and gears thereon, said shoulders being adapted for engagement with one another, means for manually rotating said shaft with the roll thereon, and means for withdrawing the one roll from contact with the other.

3. A leather molding machine comprising a supporting member, a roll rotatably mounted on a vertical axis thereon, a horizontal shaft rotatably and slidably mounted on said supporting member, an additional roll carried on one end of said shaft, means to normally retain the additional roll in yielding contact with the first mentioned roll, shoulders formed on said rolls adjacent the outer ends thereof and adapted for engagement with one another, means to rotate said horizontal shaft, and means also formed on said rolls to cause the first mentioned roll to be rotated upon the rotation of the additional roll.

4. In a leather molding machine, the combination with a base having a pair of spaced vertical arms formed thereon; of a roll rotatably mounted on a vertical axis on said base, a horizontal shaft rotatably and slidably mounted on said vertical arms, an additional roll carried on the one end of said shaft, a collar carried on said shaft between the aforesaid vertical arms, spring means encircling said shaft between said collar and one of said arms to normally force the additional roll in contact with the first mentioned roll, a lever pivotally carried on the other of said arms and adapted for engagement with the collar on said shaft, means to swing said lever whereby said shaft and additional roll will be withdrawn from their normal positions, means to manually rotate said horizontal shaft, and means to cause the first mentioned roll to be rotated upon the rotation of the additional roll.

5. In a device of the class described, the combination with a support; of a pair of substantially frusto-conical rolls rotatably mounted on the support respectively on vertical and horizontal axes, shoulders formed on said rolls adapted for engagement with one another, means to normally retain one of said rolls in yielding contact with the other, and additional means to cause one of said rolls to be rotated upon the rotation of the other roll.

1,064,160. WRITING DEVICE. CHARLES A. NEISWENDER, Topeka, Kans. Filed June 6, 1912. Serial No. 702,022. (Cl. 120—103.)



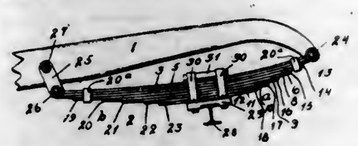
1. A device of the kind described comprising a strip of bendable metal adapted to fit along the inner side of the thumb, one end being bent inwardly and enlarged and adapted to bear against the ball of the thumb and the other end being formed into a loop adapted to grasp a penholder between the ends of the thumb and fore-finger, said strip being formed with a clip at its middle portion adapted to embrace the back of the thumb between the first and second joints.

2. A device of the kind described comprising a strip formed to fit lengthwise along the inner side of the thumb, one end being bent inwardly to bear against the ball of the thumb and the other end being formed into a loop to grasp a penholder between the ends of the thumb and forefinger, said strip being formed with a clip at its middle portion to embrace the back of the thumb between the first and second joints.

3. A device of the kind described comprising a strip formed to fit lengthwise along the inner side of the thumb with one end bearing against the ball of the thumb and the other end bearing against the end of the thumb, said strip being formed with a clip at its middle portion to embrace the back of the thumb between the first and second joints, and being also formed with a means for rigidly grasping a penholder.

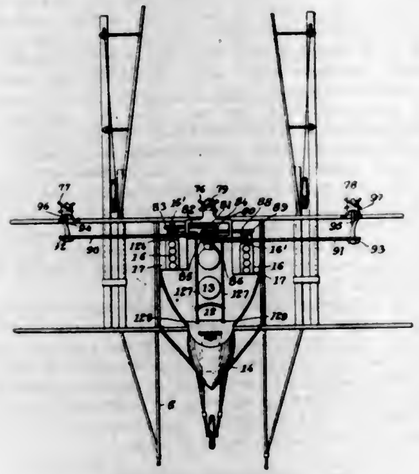
1,064,161. SPRING. JOHN J. NEWKIRK, Chihuahua, Mexico. Filed Jan. 14, 1911. Serial No. 602,683. (Cl. 21—50.)

In combination, a leaf-spring comprising, a plurality of superposed spring-leaves which decrease in length downwardly and more prominently at corresponding ends thereof, whereby the leaf-spring will have short and long arms which are respectively stiff and resilient, the uppermost spring-leaf being foreshortened so that the free ends of the second spring-leaf from the top may extend thereby and be bent upwardly to form eyes, the third spring-leaf from the top having its ends bent upwardly to form curved portions for receiving the eyes to reinforce and stiffen them, sleeves surrounding only the first four spring-



leaves from the top to properly bind them together, flat plates disposed above and below the leaf-spring at the enlarged portion thereof, U-shaped bolts connecting the plates, and an axle rigidly connected with the lower plate.

1,064,162. PROPELLING MECHANISM FOR FLYING-MACHINES. AXEL R. NORDSTROM, West Lynn, Mass., assignor of one-fourth to Gustaf F. Hellstrom, Sr., and Gustaf F. Hellstrom, Jr., West Lynn, Mass., three-sixteenths to Martin Bowman, Rockport, Mass., and one-sixth to Carin E. Norwall, West Lynn, Mass. Original application filed Dec. 27, 1911, Serial No. 668,046. Divided and this application filed June 4, 1912. Serial No. 701,577. (Cl. 244—25.)



1. In a flying machine, a pair of separate and independent motors, a central propeller, a pair of side propellers, means for directly driving the central propeller from one of said motors, a gear element on the shaft of the central propeller, means for driving the same from the other motor, and means for driving the side propellers from said gear element.

2. In a flying machine, a pair of separate and independent motors, a central propeller, a pair of side propellers, a multiple sprocket gear on the shaft of the central propeller, means for directly driving said central propeller from one of said motors, means for driving said multiple sprocket gear from the other motor, and means for driving the side propellers from said multiple sprocket gear.

3. In a flying machine, a central propeller, a pair of side propellers, a pair of separate and independent motors, gearing for directly driving the central propeller from one of said motors, a gear element loosely mounted on the shaft of the central propeller, gearing for driving said gear element from the other motor, gears for driving the said propellers from said gear element, and means for throwing the sets of gearing for driving the propellers from the respective motors into and out of action without stopping said motors.

1,064,163. RAILROAD-TIE. EDWARD S. PEMENT and PHILEMON PEMENT, Chicago, Ill. Filed July 20, 1912. Serial No. 710,713. (Cl. 238—3.)



1. A railroad tie composed of sheet metal bent to form, having separated opposing longitudinal edges in combination with means secured in the face of the tie adjacent to and locking said edges against lateral movement.

2. A railroad tie composed of sheet metal bent to form, having separated opposing lateral edges and provided with perforations adjacent said edges, in combination with means projecting through said perforations adapted to maintain and lock said edges from lateral movement.

3. A railroad tie composed of sheet metal bent to form, having separated opposing lateral edges extending on the arc of a circle, provided with perforations adjacent said edges, in combination with a plurality of locking devices differing in length projecting through said perforations, whereby said edges are maintained throughout their length against spreading apart.

4. A railroad tie composed of sheet metal bent to form with the opposing longitudinal edges separated from each other, the edges of one side or face of which tie extend in parallel lines, and the other in reversely curved lines, and means locking and maintaining the opposing curved side edges thereof from expanding.

5. A railroad tie constructed from bent flexible sheet metal having on one face separated opposing longitudinal edges, a contractible filler therein, and means in the face of the tie adjacent said edges for forcing the walls of the tie against and locking them in contact with the filler, following the contraction thereof from said walls.

[Claims 6 to 9 not printed in the Gazette.]

1,064,164. PROCESS OF MANUFACTURING CEREAL FOOD. HENRY D. PERKY, Glencoe, Md.; Laban Sparks, administrator of said Perky, deceased, assignor, by mesne assignments, to The Shredded Wheat Company, Niagara Falls, N. Y. Filed Jan. 19, 1906. Serial No. 296,872. (Cl. 99—11.)



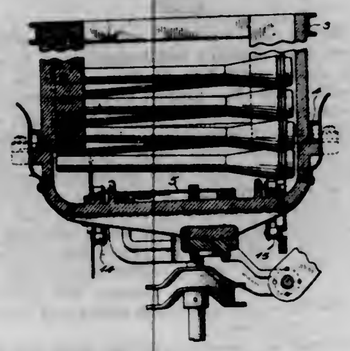
A process of reducing corn, which consists in cooking ground corn mixed with a limited amount of water, and cooling the resultant to a set or caked condition, pressing the material of the cake by a movement of reciprocation through a perforated plate and thereby forming separate light filaments thereof, drying these filaments in separated condition by causing them to fall or gravitate through a hot-air flue, and finally collecting the product.

1,064,165. DOFFER. BURT A. PETERSON, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners doing business at Rockford, Ill., as Barber-Colman Company. Filed July 13, 1910. Serial No. 571,689. (Cl. 118—13.)

1. In a doffer, a bobbin magazine having means forming spaces for the tips of bobbins and opposite compartments for the butts of bobbins, the width of the tip-spaces being substantially equal to the diameter of the tips, and the width of the butt-compartments being substantially twice the diameter of the butts, there being an equal number of tip-spaces and butt-compartments, the butt-compartments being of uniform width from top to bottom.

2. In a doffer, a bobbin magazine having means forming a space therein for the tips of bobbins and an opposite compartment for the butts of bobbins, the width of

the tip-space being substantially equal to the diameter of the tips, and the width of the butt-compartment being substantially twice the diameter of the butts, whereby the butts of the bobbins may lie side by side in pairs, with the tip of the left-hand bobbin of each pair below the tip of the right-hand bobbin of each pair, an endless conveyer



below the magazine, the upper side of said conveyer traveling toward the left, said conveyer comprising a chain having butt-receiving recesses and a chain having tip-receiving recesses, the butt-receiving recesses being a little less in depth than one-half the diameter of a bobbin butt, for the purpose described.

1,064,166. PROCESS FOR THE PRODUCTION OF STENCILS OF WIRE-NETTING. ALEXANDER PINDIKOWSKY, London, England. Filed Jan. 13, 1911. Serial No. 602,518. (Cl. 101—131.)

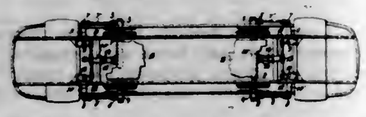
1. A process for the production of stencils of wire netting consisting in coating the wire netting with a sensitive solution, said sensitive solution covering and filling the meshes of the wire netting, reproducing a photograph on the sensitive layer thus formed, removing the soluble parts of the sensitive layer after the production of the photograph, coating the wire netting with solder at the parts from which the sensitive layer has been removed, and then removing the insoluble portion of the sensitive layer from the wire netting.

2. A process for the production of stencils of wire netting consisting in coating the wire netting with a sensitive solution, said sensitive solution covering and filling the meshes of the wire netting, reproducing a photograph on the sensitive layer thus formed, removing the soluble parts of the sensitive layer after the production of the photograph, treating the parts of the wire netting from which the soluble parts of the sensitive layer have been removed with a solution of zinc chlorid, coating the wire netting with solder at the parts from which the sensitive layer has been removed, and then removing the insoluble portion of the sensitive layer from the wire netting.

3. A process for the production of stencils of wire netting consisting in coating the wire netting with a sensitive solution, said sensitive solution covering and filling the meshes of the wire netting, reproducing a photograph on the sensitive layer thus formed, removing the soluble parts of the sensitive layer after the production of photograph, coating the wire netting with solder at the parts from which the sensitive layer has been removed, and then removing the insoluble portion of the sensitive layer from the wire netting by means of a reagent.

4. A process for the production of stencils of wire netting consisting in coating the wire netting with a sensitive solution, said sensitive solution covering and filling the meshes of the wire netting, reproducing a photograph on the sensitive layer thus formed, removing the soluble parts of the sensitive layer after the production of the photograph, treating the parts of the wire netting from which the soluble parts of the sensitive layer have been removed with a solution of zinc chlorid, coating the wire netting with solder at the parts from which the sensitive layer has been removed, and then removing the insoluble portion of the sensitive layer from the wire netting by means of a reagent.

1,064,167. MEANS FOR FACILITATING THE PASSAGE OF CARS THROUGH CURVED RAILWAY-LINES. LUDVIK PINTSER, Prague, Austria-Hungary. Filed Aug. 21, 1912. Serial No. 716,281. (Cl. 105—137.)



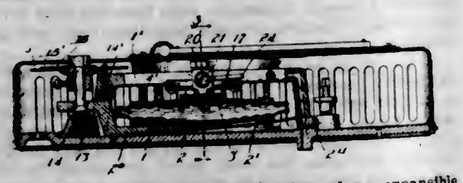
1. In a railway vehicle, the combination with a car body, front and rear axles, levers pivoted to the car body and connected with the axle and adapted to be shifted by endwise movement of the axles with respect to the car body when entering a track curve, and link mechanisms adapted for actuation by said levers for shifting the radially outermost ends of the foremost axle forwardly and shifting the radially innermost end of the foremost axle rearwardly, substantially as described.

2. In a railway vehicle, the combination with a car body, front and rear axles therefor, front and rear levers pivoted to the front and rear axles and the car body each lever being adapted to be shifted by endwise movement of its respective axle upon entering a track curve, link mechanism connected with the front lever for shifting the radially outermost front wheel forwardly and shifting the radially innermost wheel rearwardly, and link mechanism connected with the rear lever for shifting the radially outermost wheel rearwardly and the radially innermost wheel forwardly, substantially as described.

3. In a railway vehicle, the combination with a car body, an axle therefor, means connected with and adapted for actuation by endwise movement of the axle relative to the car body when rounding a curve, and mechanism operated by said means for shifting the radially outermost end of the axle forwardly while rounding a curve, substantially as described.

4. In a railway vehicle, the combination with a car body, an axle therefor, means movably connected with the body and operatively connected with the axle for actuation by endwise movement of the axle relative to the car body when rounding a curve, and mechanism operated by said means for shifting the radially outermost end of the axle forwardly and the radially innermost end of the axle rearwardly, substantially as described.

1,064,168. THERMOSTAT. FRED W. POWERS, Chicago, Ill., assignor to The Powers Regulator Company, Chicago, Ill., a Corporation of Illinois. Filed July 5, 1910. Serial No. 570,359. (Cl. 236—8.)

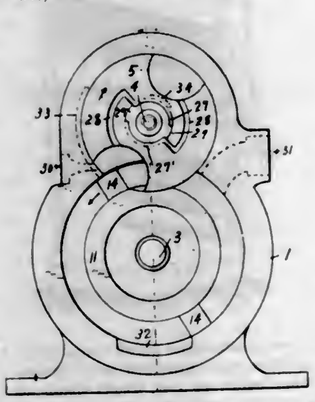


1. In a thermostat, the combination of an expansible element operable by heat, a valve under the control of said element and itself controlling the fluid pressure passage extending through the thermostat, regulating appliances whereby said thermostat may be variably set for action upon the valve at selected temperatures, a scale and coöperating indicator associated with said regulating appliances, and cut-out mechanism arranged to act upon said valve independently of the expansible element, whereby the thermostat may be cut out of commission, or restored to commission, by the actuation of said cut-out mechanism, without operating or disturbing the adjustment of said regulating appliances.

2. In a thermostat, the combination of an expansible element operable by heat, a valve under the control of said element and itself controlling the fluid pressure passage extending through the thermostat, regulating appliances whereby said thermostat may be variably set for action upon the valve at selected temperatures, a scale and coöperating indicator associated with said regulating appliances and cut-out mechanism arranged to act upon said valve independently of the expansible element, whereby the thermostat may be cut out of commission, or restored to commission, by the actuation of said cut-out mechanism, without operating or disturbing the adjustment of said regulating appliances, said cut-out mechanism comprising a lever interposed between the expanding element and the valve, manually operable mechanism for actuating said lever, and an indicator and associated legend for determining the condition of said cut-out mechanism.

3. In a thermostat, the combination with the main frame thereof, of an expanding disk mounted in said main frame, a valve mounted in the frame and arranged to control a fluid pressure passage, operative connections between said valve and one side of the expanding disk, an adjusting lever movably supporting the opposite side of said disk, adjusting mechanism and associated indicating mechanism for adjusting one end of said adjusting lever, a cut-out lever arranged to extend between said valve and the proximate side of the expanding disk, means pivotally supporting one end of said cut-out lever, an eccentric mechanism connecting the opposite end of said lever with a rock shaft, and a thumb lever mounted upon said rock shaft.

1,064,169. ROTARY ENGINE. EDGAR F. PRALL, Saranac Lake, N. Y. Filed Sept. 8, 1911. Serial No. 648,261. (Cl. 121—51.)



1. A rotary engine comprising a casing, an annular piston chamber, a plurality of pistons therein, an abutment valve, means for balancing said valve comprising a plurality of pressure chambers in which pressure acts on the valve alternately in a direction opposite to the driving pressure of the engine.

2. A rotary engine comprising a casing, an annular piston chamber, a plurality of pistons therein, a rotary abutment valve and shaft, the valve having recesses for passage of the pistons, an inlet for pressure to said recesses alternately, a balancing chamber between the abutment valve and the casing on the opposite side of said shaft from the recess of the valve in connection with the pressure, there being a passage from each recess to one of said chambers.

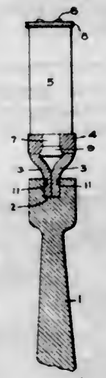
3. A rotary engine comprising a casing, an annular piston chamber, pistons movable therein, a rotary abutment valve having recesses for passage of the pistons, said valve closing the feeding end of the piston chamber after entrance of a piston therein, a balance chamber substantially equal in area to the surface of the valve subject to pressure when it has thus closed the annular chamber, and a connection between said balance chamber and the piston chamber.

4. A rotary engine comprising an annular piston chamber, pistons therein, an abutment valve having recesses for passage of the pistons, said valve being adapted to close and open the piston chamber at its feeding end and having hub extensions, means for balancing the pressure contained in the recess on the feeding side, and means for balancing the pressure on the abutment valve when the latter has closed the feeding end of the piston chamber.

5. A rotary engine comprising an annular piston chamber, pistons therein, the pistons carried by ends having oppositely extending rims, and a casing the ends of which carry interior ring extensions around which the outer extending edges of said rims fit and revolve.

[Claims 6 to 17 not printed in the Gazette.]

1,064,170. MOUNTING TURBINE-BUCKETS. WALTER F. RICE, Quincy, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 4, 1913. Serial No. 740,145. (Cl. 121—57.)



1. In an elastic fluid turbine, the combination with a support having a single groove, of a bucket, a base mechanically attached to said bucket and provided with flanges pressed together and received in said groove, and means for securing said flanges in place in said groove.

2. In an elastic fluid turbine, the combination with a support having a groove, of a bucket, a base to which said bucket is riveted, parallel flanges on said base pressed together and received in said groove, and means for securing said flanges in said groove.

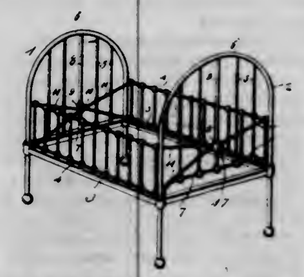
3. In an elastic fluid turbine, the combination with a support having a groove, of a bucket-carrying base provided with parallel flanges pressed together and received in said groove and provided with shallow grooves on their outer faces, the support being staked into said shallow grooves.

4. In an elastic fluid turbine, the combination with a narrow support having a single circumferential groove, of a channel bar base, buckets secured in the web of said bar, the flanges of said bar being pressed together and inserted in said groove, and means for securing them therein.

1,064,171. INFANT'S CRIB. CHARLES P. ROBERTS, Macon, Ga. Filed May 23, 1912. Serial No. 699,199. (Cl. 45—58.)

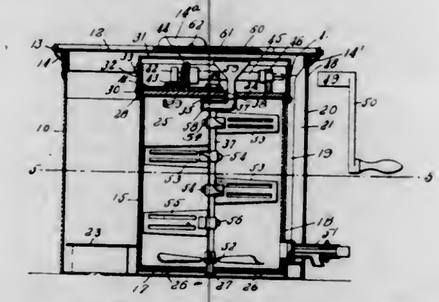
1. A crib having head and foot sections, said sections comprising frames having a series of spaced rods, side guards arranged between said head and foot sections, attaching members carried by the ends of said guards, and attaching bolts secured to the rods of said head and foot sections whereby the attaching members of said side

guards are pivotally secured to said sections to permit the guards to be swung over from one side to the other of the crib.



2. A crib having head and foot sections comprising frames having therein spaced rods, an attaching bolt having a squared portion engaged with one of said rods and having a cylindrical portion projecting from the rod, a thumb nut arranged on said bolt, side guards arranged between said head and foot sections, attaching members carried by said guards and having a pivotal connection at their inner ends to the cylindrical portions of said attaching bolt whereby the guards are pivotally connected to the head and foot sections to permit the guards to be swung over from one side to the other of the crib.

1,064,172. DEVICE FOR MIXING SALAD-DRESSING. ANDREW E. ROSEN, Washington, D. C. Filed Mar. 12, 1912. Serial No. 683,400. (Cl. 107—36.)



1. A mixing device including a propeller adapted for positioning in the bottom of a receptacle whereby the liquid in the receptacle is raised from the bottom, paddles in the upper part of the receptacle adapted to force the liquid down toward the bottom, and a centrifugal paddle between said first paddles and the propeller and adapted to force the liquid against the wall of the receptacle.

2. In a liquid mixing device, a container, a lower cover section fitting over the container, a dasher mounted for rotation in the container and extending up through the lower cover section, a train of gears mounted upon the lower cover section and having connection with said dasher, an operating shaft journaled upon said lower cover, an upper cover engaging over said lower cover and housing said gears, and means externally of the cover adapted for connection therewith to rotate said dasher.

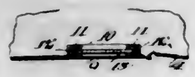
3. In a liquid mixing device, a vertical shaft, a propeller on the lower end of the shaft adapted to create an upward current, paddles on the upper end of the shaft adapted to create a downward current, an intermediate paddle on the shaft adapted to break the currents and throw the liquid centrifugally from the dasher, and operating means associated with said shaft for turning the same.

4. A mixing device comprising a propeller adapted for positioning in the bottom of a receptacle to raise the liquid therein, paddles in the upper part of the receptacle adapted to force the liquid down toward the bottom, a centrifugal paddle between said first paddles and the propeller and adapted to force the liquid toward the wall of the receptacle, a single shaft common to all of said paddles and said propeller, and means for turning said shaft.

5. A mixing device comprising a shaft, means for turning the shaft, and blades outstanding at various angles from the shaft, said blades being arranged in vertical spaced planes, whereby to create fluid currents in opposite directions.

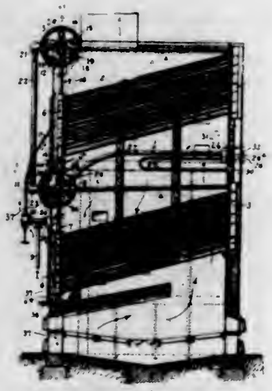
[Claims 6 and 7 not printed in the Gazette.]

1,064,173. RECEPTACLE. JOHN SCHÜHLE, Highland, N. Y. Filed Mar. 8, 1912. Serial No. 682,368. (Cl. 220—91.)



A container comprising a body portion having a vertical slot formed in one side thereof, but terminating short of the top and bottom of the container, the material forming the side walls of the slot being bent backward and inward, thence laterally, thence outward, and then backward again to form flanges having vertical alining grooves, and a flat transparent strip seated in said grooves and retained by the flanges.

1,064,174. STEAM-BOILER. MINOTT W. SEWALL, Roselle, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed June 6, 1907. Serial No. 377,503. (Cl. 122—297.)

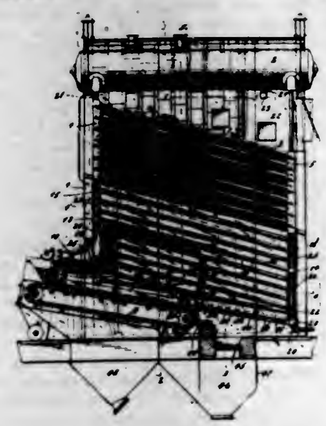


1. In a steam generating plant comprising a series of superposed boilers each provided with steam and water drums, a weir inside of the steam drum of the upper boiler, having a free opening to the outlet connection, the said weir placed at the required water level, all for the purposes described.

2. In a steam generating plant comprising a series of superposed boilers, each provided with steam and water drums, a weir placed in the steam drum of the upper boiler at an upper position, a weir placed at a relatively lower position, the two weirs being connected to a water downcomer, the upper one by a free opening and the lower one by a valved connection, said water downcomer having its termination in the steam space of the drum of the lower boiler.

1,064,175. BOILER-FURNACE. MINOTT W. SEWALL, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed May 27, 1912. Serial No. 699,860. (Cl. 122—9.)

1. A boiler furnace having water tubes in the side walls, front and rear manifolds into which said tubes are expanded, said manifolds being connected to the boiler circulation, a cross box at the rear of the grate, pipes connecting said rear manifolds with the cross box, and an outlet connection from the said box to the front manifolds.



2. A boiler furnace having inclined water tubes in the side walls and extending from the front to the rear wall and from approximately the grate surface upwardly, front and rear manifolds into which the side tubes are expanded, said manifolds being connected to the boiler circulation, a cross box at the rear of the grate, pipes connecting said cross box with said rear manifolds, and an outlet connection from said box to the front manifolds.

3. A boiler furnace having water tubes in the side walls, front and rear manifolds into which said tubes are expanded, said manifolds being connected to the boiler circulation, a cross box at the rear of the grate, pipes connecting said rear manifolds with the cross box, an outlet connection from the said box to the front manifolds, side boxes extending longitudinally of the furnace, each side box being connected to the cross box at one end and to an outlet connection with the boiler circulation at its other end.

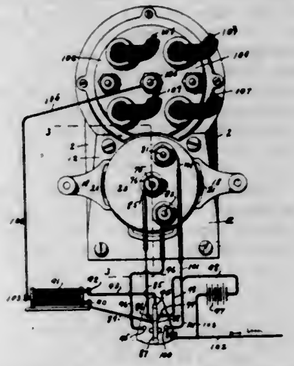
4. A boiler furnace having water tubes in the side walls, front and rear manifolds into which said tubes are expanded, said manifolds being connected with the boiler drums, a cross box at the rear of the grate, pipes connecting the rear manifolds with said box, a second cross box nippled to said first named cross box, and pipes connecting the said second box with the front manifolds.

5. A boiler furnace having water tubes in the side walls, front and rear manifolds into which said tubes are expanded, said manifolds being connected with the boiler drums, a cross box at the rear of the grate, pipes connecting the rear manifolds with said box, a second cross box nippled to said first named cross box, pipes connecting the said second box with the front manifolds, side boxes extending longitudinally of the furnace, each side box having an inlet connection with said first named cross box, and an outlet connection.

[Claims 6 to 17 not printed in the Gazette.]

1,064,176. INTERRUPTER DEVICE FOR IGNITION SYSTEMS. JAMES M. SMITH, Philadelphia, Pa., assignor of one-half to Charles Adsit Magruder, Bryn Mawr, Pa. Filed May 25, 1910. Serial No. 563,238. (Cl. 123—165.)

1. The combination with a magneto generator of interrupter devices for controlling the current in two circuits, one circuit being a magneto or normally closed circuit, the other circuit being a battery or normally open circuit, comprising an adjustable contact point insulated from ground, a pivotally mounted interrupter arm electrically connected to ground, adapted to normally contact with said adjustable contact-point, a second adjustable contact-point insulated from ground, a pivotally mounted interrupter arm electrically connected to ground, adapted to be normally disengaged from said second adjustable contact-point, means for operating respectively said interrupter arms to cause the same to respectively break and make contact with their respective contact-points, comprising an operating cam-member for each interrupter arm and means connected with said cam-members for establishing adjustable interlocking relation between the same, substantially as and for the purposes set forth.



2. The combination with a magneto generator of interrupter devices for controlling the current in two generating circuits, comprising two interrupter arms and two adjustable contact-points to be engaged thereby, the said interrupter arms being respectively of opposite electrical action, and revolving cam-members of opposite mechanical action for operating the respective interrupter arms and means connected with said cam-members for establishing interlocked adjustable relation between the same, substantially as and for the purposes set forth.

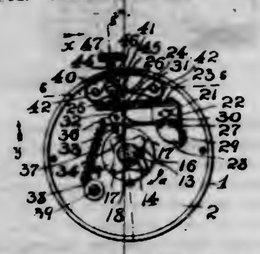
3. The combination with a magneto generator of interrupter devices for controlling a magneto or normally closed circuit and a battery or normally open circuit, comprising a contact means in said magneto circuit, another contact means in said battery circuit, a pivotally mounted magneto circuit interrupter arm provided with a cam-projection, a contact-point carried upon the free end of said magneto circuit interrupter arm normally engaging said contact means in said magneto circuit, a revolving cam-member having cam-portions adapted to engage said cam-projection of said magneto circuit interrupter arm to oscillate the same, a pivotally mounted battery circuit interrupter-member having a pair of projecting arms, one of said arms carrying a roller, the other of said arms carrying a contact-point normally disengaged from said contact means in said battery circuit, a revolving cam-member having depressions adapted to be followed by said roller on one of said projecting arms to oscillate said battery circuit interrupter-member, and means connected with said cam-members for establishing interlocked adjustable relation between the same, substantially as and for the purposes set forth.

4. The combination, with a magneto-generator, of interrupter devices and contact means therefor for respectively making and breaking a magneto circuit and a battery circuit, means connected with one end of said magneto-generator for supporting said interrupter devices and said contact means therefor, a rotating spindle connected with the armature of said magneto-generator, cam-portions on said spindle for operating respectively said interrupter devices, and means for adjustably interlocking said cam-members with relation to each other, and upon said rotating spindle.

5. The combination, with a magneto-generator, of interrupter devices and contact means therefor for respectively making and breaking a magneto circuit and a battery circuit, means connected with one end of said magneto-generator for supporting said interrupter devices and said contact means therefor, a rotating spindle connected with the armature of said magneto-generator, cam-portions on

said spindle for operating respectively said interrupter devices, and means for adjustably interlocking said cam-members with relation to each other, and upon said rotating spindle, comprising a coupling-member secured upon said spindle, a plurality of radiating serrations upon the face of said coupling-member, hub-portions connected with one of said cam-members, the faces of said hub-portions being provided with a plurality of radiating serrations, the serrations of one hub-portion being adapted to engage the serrations of said coupling member, hub-portions connected with the other of said cam-members, the face of one of said hub-portions being provided with serrations adapted to adjustably engage the serrations of one of the hub-portions of said first-mentioned cam-portion, and a nut adapted to screw upon the free end of said spindle to bind said cam-members and said coupling member in their interlocked relation one with the other.

1,064,177. CURRENT DISTRIBUTER AND TIMER. JAMES M. SMITH, Philadelphia, Pa., assignor of one-half to Charles Adsit Magruder, Bryn Mawr, Pa. Filed May 17, 1912. Serial No. 697,879. (Cl. 123—166.)



1. In a device of the kind described, a stationary contact device, a movable contact device, a lever-arm connected with said movable contact device, a pawl-member pivotally connected with said lever-arm, said pawl-member being yieldable in one direction, and means adapted to intermittently engage said pawl-member to operate said movable contact device.

2. In a device of the kind described, a stationary contact device, a movable contact device comprising a fulcrum post, a supporting block pivotally mounted upon said fulcrum-post, a yieldable contact device secured to said supporting block, a lever-arm secured to said supporting block, a pawl-member pivotally mounted at the end of said lever-arm, means upon said pawl-member for engaging said lever-arm when said pawl-member is pressed in one direction, said pawl-member being yieldable when pressed in the opposite direction, and a rotating cam-member adapted to engage said pawl-member.

3. In a device of the kind described, a casing, a spindle rotatably arranged in said casing, a cam-member secured to said spindle, said cam-member having cam-points, a fulcrum-post mounted within said casing, a movable contact making and breaking device, means for supporting said contact making and breaking device upon said fulcrum-post, a lever-arm connected with said supporting means, a pawl-member pivotally arranged in the end of said lever-arm, said pawl-member being provided with shoulders in engagement with said lever-arm, a perforated lug connected with said pawl-member, a coiled spring connected with said lug, means for anchoring said spring within said casing, a cam-nosing connected with said pawl-member adapted to be engaged by the cam-points of said cam-member to oscillate said lever-arm and said contact making and breaking device when said cam-member is rotated in a normal direction, said pawl-member yielding to said cam-points when said cam-member is rotated in an abnormal direction, and means insulated from said casing for receiving the contact of said movable contact making and breaking device.

4. In a device of the kind described, a casing, a spindle rotatably arranged in said casing, a cam-member secured to said spindle, said cam-member having cam-points, a fulcrum-post mounted within said casing, a movable contact making and breaking device, means for supporting said contact making and breaking device upon said fulcrum-post, a lever-arm connected with said supporting means, a pawl-member pivotally arranged in the end of said lever-arm, said pawl-member being provided with shoulders in engagement with said lever-arm, a perforated lug connected with said pawl-member, a coiled spring connected with said lug, means for anchoring said spring within said casing, a cam-nosing connected with said pawl-member adapted to be engaged by the cam-points of said cam-member to oscillate said lever-arm and said contact making and breaking device when said cam-member is rotated in a normal direction, said pawl-member yielding to said cam-points when said cam-member is rotated in an abnormal direction, means insulated from said casing for receiving the contact of said movable contact making and breaking device, comprising a base-plate provided with a carrying post secured upon and within said casing, but electrically insulated therefrom, a contact-screw adjustably supported by said carrying-post, and a binding-post connected with said base-plate for connecting said contact-screw in a primary electrical circuit.

5. In a device of the kind described, a casing, a spindle rotatably arranged in said casing, a cam-member secured to said spindle, said cam-member having cam-points, a fulcrum-post mounted within said casing, a movable contact making and breaking device, means for supporting said contact making and breaking device upon said fulcrum-post, a lever-arm connected with said supporting means, a pawl-member pivotally arranged in the end of said lever-arm, said pawl-member being provided with shoulders in engagement with said lever-arm, a perforated lug connected with said pawl-member, a coiled spring connected with said lug, means for anchoring said spring within said casing, a cam-nosing connected with said pawl-member adapted to be engaged by the cam-points of said cam-member to oscillate said lever-arm and said contact making and breaking device when said cam-member is rotated in a normal direction, said pawl-member yielding to said cam-points when said cam-member is rotated in an abnormal direction, means insulated from said casing for receiving the contact of said movable contact making and breaking device, comprising a base-plate provided with a carrying-post secured upon and within said casing, but electrically insulated therefrom, a contact-screw adjustably supported by said carrying-post, and a binding-post connected with said base-plate for connecting said contact-screw in a primary electrical circuit, and means co-acting with said make and break mechanism for distributing a secondary electrical circuit to the sparking-terminals of an internal combustion engine.

1,064,178. METHOD OF UTILIZING ENERGY DERIVED FROM RAPID COMBUSTION. WILLIAM H. SMYTH, Berkeley, Cal., assignor to Humphrey Gas Pump Company, a Corporation of New York. Filed Oct. 13, 1902. Serial No. 127,172. (Cl. 160—1.)

1. The method of utilizing energy derived from explosions which consists in sustaining a column of material directly upon an explosive, reducing the specific gravity of the sustained material and rendering it resilient, and expanding said explosive by ignition after the specific gravity of sustained material has been reduced.

2. The method of utilizing energy derived from explosions which consists in sustaining a column of liquid directly upon a resilient explosive, reducing the specific gravity of the sustained liquid and rendering it resilient and expanding said explosive by ignition after the specific gravity of sustained liquid has been reduced.

3. The herein described process of inducing the flow of liquid from a well which consists in aerating a column of liquid and applying explosive energy to the bottom of the aerated portion of the column of liquid after aerating.

4. The method of utilizing energy derived from explosions which consists in raising water by supporting the water to be raised directly upon an explosive gas, introducing a volume of air into the supported water and igniting the gas.

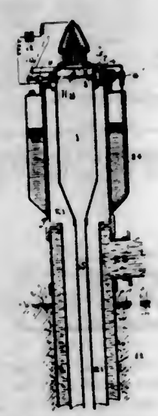
5. The method of utilizing energy derived from explosions which consists in raising water by supporting the column to be raised directly upon an explosive gas in an



inclosed chamber, reducing the gravity of the supported column before ignition by the introduction of an elastic fluid of less specific gravity thereinto and igniting the gas.

[Claims 6 to 36 not printed in the Gazette.]

1,064,179. APPARATUS FOR UTILIZING ENERGY DERIVED FROM EXPLOSIONS. WILLIAM H. SMYTH, Berkeley, Cal., assignor to Humphrey Gas Pump Company, a Corporation of New York. Filed Oct. 13, 1902. Serial No. 127,173. (Cl. 160—1.)



1. In an apparatus for raising or propelling liquid, with means for applying energy derived from explosions to the forcing of a column of liquid in advance of the explosive charges, the combination of an explosion chamber, automatic means for forming an explosive mixture within the explosion chamber, means to permit the direct return of a portion of said liquid which remains in the column after each explosion, and means for introducing into said column an elastic fluid.

2. In an apparatus for raising or propelling liquid, with means for applying energy derived from explosions to the forcing of a column of liquid in advance of the explosive charges, the combination of an explosion chamber, automatic means for forming an explosive mixture within the explosion chamber, means to permit the direct return of a portion of said liquid which remains in the column after each explosion, and means for introducing into said column an elastic fluid of less specific gravity.

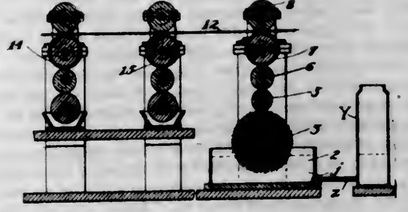
3. In an apparatus for applying energy derived from explosions, the combination with an explosion chamber of means for automatically forming and admitting an explosive charge thereinto, means for igniting said charge, means for admitting a body of liquid into a confined space in free communication with said chamber so that it shall be in contact with the products of combustion of said charge when explosion occurs, means for permitting the escape of said liquid from said space under the expansive force of the explosion and against the resistance to be overcome and permitting the direct return of a portion of it thereto, and means for commingling air or other gas with said body of liquid upon the discharge side of said chamber whereby it is rendered elastic.

4. In an apparatus for applying energy derived from explosions, the combination with an explosion chamber of automatic means for admitting air into said chamber upon reduction of pressure therein and preventing escape of air and other gas therefrom upon increase of pressure, means for admitting explosive fuel into said chamber, means for igniting said fuel, means for admitting liquid under pressure greater than atmospheric into a confined space in free communication with said chamber, whereby the air therein is compressed, and means for permitting the escape of said liquid under the expansive force of the explosion and against the resistance to be overcome and the direct return of a portion of said liquid thereto.

5. In an apparatus for applying energy derived from explosions, the combination with an explosion chamber of means for automatically forming an explosive charge within the explosion chamber, means for igniting said charge, means for admitting a body of material that is capable of flowing into a confined space in free communication with said chamber, means for permitting and directing the escape of said material in a discharge column under the expansive force of the explosion and the direct return of a portion of it to said space, and a resilient cushion in communication with said column.

[Claims 6 to 87 not printed in the Gazette.]

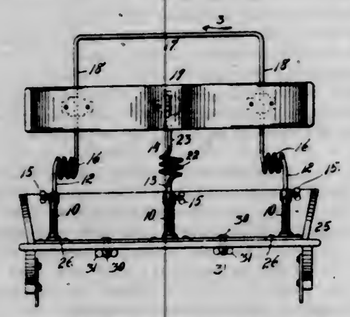
1,064,180. UMBRA PRINTING DEVICE. JACOB SULZBACH, New York, N. Y. Filed Feb. 10, 1912. Serial No. 676,902. (Cl. 101—90.)



1. An umbra printing machine comprising a plurality of color fountains and a series of successively co-acting revolubly-mounted rolls, said roll series comprising a plurality of fountain rolls, a blending roll, a transfer roll, a print roll and a presser roll, said rolls arranged substantially vertically and to contact in the above recited order, the fountain rolls adapted to severally revolve their lower limbs in said fountains, the blending roll adapted to be axially reciprocated, and means for revolving said rolls and axially reciprocating the blending roll.

2. An umbra printing machine comprising a plurality of color fountains, a like plurality of color reservoirs, and a series of successively co-acting revolubly-mounted rolls, said roll series comprising a plurality of fountain rolls, a blending roll, a transfer roll, a print roll and a presser roll, said rolls arranged substantially vertically and to contact in the above recited order, the fountain rolls adapted to severally revolve their lower limbs in said fountains, the blending roll adapted to be axially reciprocated, said color reservoirs severally connected with and adapted to maintain the supply of color in said fountains, and means for revolving said rolls and axially reciprocating the blending roll.

1,064,181. DETACHABLE SPRING-BACK FOR VEHICLE-SEATS. JOEL WHEELER TAFT, Denver, Colo. Filed Apr. 19, 1912. Serial No. 691,787. (Cl. 21—42.)



1. The combination with a support having a number of retaining clips applied to the front portion thereof, the said clips having struck-up parts which, when applied to the support, form sockets open in the rear, bars whose forward extremities are adapted to enter said sockets, the said bars having rearwardly extending flat portions, the flat parts of the bars being permanently connected by metal straps provided with openings adapted to receive fastening bolts, the support having registering openings also adapted to receive said bolts which are held in place by nuts applied to their lower extremities, and a spring back connected to said flat bars, substantially as described.

2. In combination with a seat, an inverted U-shaped rod member attached at its extremities to the seat, an upright rod member attached to the seat midway between the arms of the U-shaped member, a back-rest mounted upon said vertical member and the arms of said U-shaped member, said arms between the back-rest and seat being bent into spiral coils having a common horizontal axis and said vertical member between the back-rest and seat being bent into a coil having a substantially vertical axis.

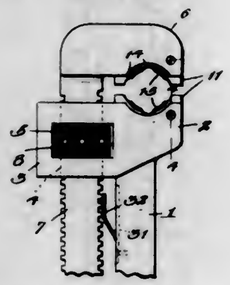
3. The combination with a seat, of hollow curved members secured thereto, spring rod members correspondingly curved at their lower extremities and adapted to slide within said hollow members, means for fastening said curved rod members in different positions and a back-rest vertically adjustable upon said spring rod members.

4. The combination with a seat, of three clips attached equi-distantly to the upper surface of said seat at its forward edge, said seat having holes therethrough at its rear edge midway between said clips, a single back-rest device having forwardly extending projections adapted to extend underneath two adjacent clips and having a hole adapted, when the back-rest is in the adjusted position, to register with one of the holes in the seat, a double back-rest device having three forwardly extending projections adapted to extend underneath the three clips and having two holes adapted, when the back-rest is in the adjusted position, to register with the two holes in the seat, and bolts adapted to extend through the registering holes for securing either of the devices to the seat.

1,064,182. PIPE-WRENCH. FRED THOMPSON, FREDERICK J. LUDLOW, and RANALD A. MCDONALD, Sidney Mines, Cape Breton, Nova Scotia, Canada. Filed July 22, 1912. Serial No. 711,005. (Cl. 81—180.)

1. A wrench comprising a stationary jaw and a movable jaw, each of said jaws having a recess formed therein, blocks having work engaging tools formed on their opposite faces detachably mounted within said recesses, longitudinally extending ribs formed upon said blocks, and means formed upon said jaws for engagement with the ribs on said blocks, whereby said blocks may be reversed so that either face thereof may project beyond said jaws, as and for the purpose described.

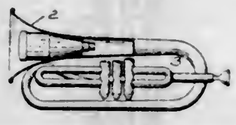
2. A wrench comprising a stationary jaw and a movable jaw, each of said jaws having a recess formed therein, blocks detachably mounted within said recesses, said blocks having work engaging tools formed on their opposite faces, inwardly extending flanges formed upon said jaws, and means formed on said blocks for engagement with said flanges, whereby said blocks may be reversed so that either face thereof may project beyond said jaws, as and for the purpose described.



3. A wrench comprising a stationary jaw and a movable jaw, each of said jaws having a recess formed therein, blocks having work engaging means formed on their opposite faces detachably mounted upon said recesses, inwardly extending flanges formed within said jaws, and longitudinally extending ribs formed upon said blocks, said ribs being adapted for engagement with said flanges, whereby the blocks may be reversed so that either face thereof may project beyond said jaws, as and for the purpose described.

4. A wrench comprising a stationary jaw and a movable jaw, each of said jaws having a recess formed therein, blocks detachably mounted within said recesses, a pair of longitudinally extending ribs formed upon the opposite faces of said blocks, said jaws having flanges extending within said recesses, said blocks adapted to be reversed, said ribs arranged within said recess below said flanges when one face of the blocks projects beyond said jaws, and said flanges adapted to rest between said ribs when the opposite faces of the blocks project beyond said jaws, as and for the purposes described.

1,064,183. CORNET-MUTE. AUGUST L. TILLEMAN, Bakersfield, Cal. Filed July 5, 1912. Serial No. 707,852. (Cl. 84—125.)



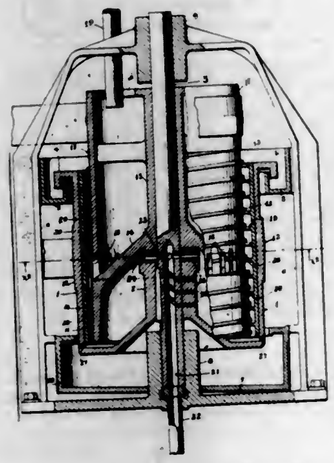
1. A cornet mute comprising in combination, a frusto-conical shell having an extension at its larger end, a tube telescopically carried by said shell at its smaller end, a cylindrical shell telescopically carried by said extension of said shell, and a cap telescopically carried by said cylindrical shell at its end opposite its engagement with the said extension of said shell, substantially as and for the purpose set forth.

2. A cornet mute comprising in combination, a frusto-conical shell having an extension at its larger end, frictional elements possessing a high coefficient of friction carried by said shell on the exterior thereof for engagement with the surface of the tone emitting conduit of the instrument, to retain said shell stationarily with said conduit, a tube telescopically carried by said shell at its smaller end, a cylindrical shell telescopically carried by said extension of said shell, and a cap telescopically carried by said cylindrical shell at its end opposite its engagement with said extension of said shell, substantially as and for the purpose set forth.

3. In a cornet mute, the combination of a frusto conical shell having an extension at its larger end, a tube telescopically carried by said shell at its smaller end, a cylindrical shell telescopically carried by said extension of said shell, a cap telescopically carried by said cylindrical shell at its end opposite its engagement with said extension of said shell, and a second tube telescopically carried by said first mentioned tube, substantially as and for the purpose set forth.

4. A cornet mute comprising in combination, a frusto conical shell having an extension at its larger end, frictional elements possessing a high coefficient of friction carried by said shell for engagement with the surface of the tone emitting conduit of the instrument, to retain said shell stationarily within said conduit, a tube telescopically carried by said shell at its smaller end, a cylindrical shell telescopically carried by said extension of said shell, a cap telescopically carried by said cylindrical shell at its end opposite its engagement with the said extension of said shell, and a second tube telescopically carried by said first mentioned tube, substantially as and for the purpose set forth.

1,064,184. CENTRIFUGAL CONCENTRATOR. PAUL OSCAR WELS, Los Angeles, Cal. Filed Sept. 16, 1911. Serial No. 649,747. (Cl. 83—87.)



1. In a centrifugal concentrator, a revoluble casing, a revoluble drum within the casing, means for introducing feed into the space between the drum and casing, means for introducing wash water into the space between the drum and casing, and means between the drum and casing for causing movement of the concentrates in a direction opposite to that of the tailings.

2. In a concentrator, an outer revoluble casing, means for introducing feed into said casing at the inner wall thereof, spiral means within the casing for causing a progression of the concentrates away from the tailings by the relative movement between the spiral means and concentrates said spiral means having perforations and recesses on the edges thereof.

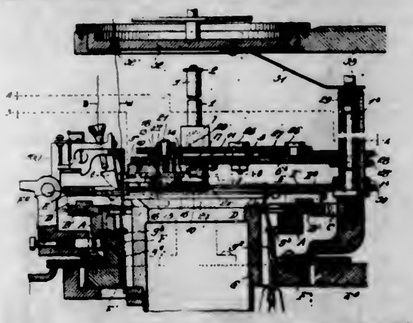
3. In a concentrator, a revoluble casing, spiral riffles on the inner wall of the casing, a revoluble drum within the casing, projections on said drum, means for introducing feed into the space between the drum and casing, and means for introducing wash water into the space between the drum and casing.

4. In a concentrator, a revoluble casing, spiral riffles on the inner wall of the casing, a revoluble drum within the casing, spiral ribs on said drum, and means for introducing feed into the space between the drum and casing.

5. In a concentrator, a revoluble casing, spiral riffles on the inner wall of the casing, a revoluble drum within the casing, spiral ribs on said drum, said spiral ribs having perforations, and means for introducing feed into the space between the drum and casing.

[Claims 6 to 12 not printed in the Gazette.]

1,064,185. ATTACHMENT FOR KNITTING-MACHINES. HARRY H. WEST, Plymouth, Pa. Filed May 13, 1912. Serial No. 696,950. (Cl. 66—12.)



1. A knitting machine attachment for producing plated work comprising supports adapted to be secured to the rotary member of a knitting head, a plate slidably engaged with said supports, means for locking said plate in adjusted position, reciprocatable jacks on said plate positioned to engage and move outward a needle when said jacks are reciprocated in one direction, and means for actuating said jacks.

2. A knitting machine attachment for producing plated work comprising supporting standards adapted to be secured to a rotary member of a knitting head, a plate slidably engaged with said standards, means for locking said plate in adjusted position, laterally reciprocable jacks on said plate positioned to engage and move outward a needle when said jacks are reciprocated in one direction, and means for actuating said jacks.

3. A knitting machine attachment for producing plated work comprising supporting standards adapted to be secured to a rotary member of a knitting head, a plate slidably engaged with said standards, means for locking said plate in adjusted position, a rotatable member depending from said plate and having a plurality of radial seats therein, jacks mounted to slide in said seats, a cam arranged to engage said jacks and move them outward at predetermined intervals and to withdraw them after projection.

4. In a knitting machine, the combination with laterally yieldable needles, their support, and plural thread feeds, of a revoluble plate or table arranged over said needles, a fixed casting depending from said table and having a cam element thereon, a rotatable member arranged in a plane below said casting and provided with a plurality of radially disposed seats, jacks mounted to slide in said seats and having means engaging the cam element of the casting, and means operable by the rotation of the knitting mechanism for rotating said jack carrying member whereby said jacks are projected at predetermined intervals to move certain of said needles laterally outward.

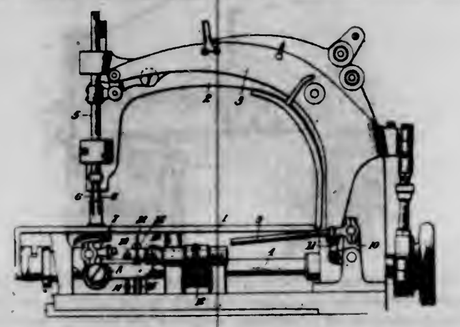
5. In a knitting machine, the combination of a stationary needle cylinder having laterally yieldable needles therein, a table supported above said cylinder and mounted to revolve relatively thereto, a cam member fixed to the lower face of said table and having a hub extending through the table, a spindle rotatably mounted in said hub and projecting through the lower end thereof, means controlled by the rotation of the knitting mechanism for rotating said spindle, a laterally extending member secured to said spindle in a plane below said cam member and provided with radial seats, and needle projecting jacks mounted to slide in said seats and engage with said cam member.

[Claims 6 to 9 not printed in the Gazette.]

1,064,186. TAKE-UP FOR SEWING-MACHINES. RUSSEL G. WOODWARD, Waukegan, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 23, 1907. Serial No. 385,186. (Cl. 112—26.)

1. The combination with a needle, and a thread carrying looper, of thread controlling mechanism therefor, in-

cluding a device for engaging the thread, thread guiding members coöperating with said thread engaging device, and means for moving said thread engaging device whereby the slack in front of the looper is taken up as the looper moves forward, said device releasing said thread as soon as the looper point is well into the needle loop.



2. The combination of a needle, a thread carrying looper, and thread controlling mechanism including a thread engaging device, thread guiding members coöperating with said thread engaging device, and means for moving said thread engaging device whereby the slack in front of the looper is pulled back through the eye of the looper and taken up as the looper moves forward and whereby the looper thread is pulled from the supply.

3. The combination of a needle, a thread carrying looper, of thread controlling mechanism therefor, including a device for engaging the thread, thread guiding members coöperating with said thread engaging device, and means for moving said thread engaging device whereby the slack in front of the looper is taken up as the looper moves forward, said device releasing said thread as soon as the looper point is well into the needle loop, said thread engaging device also operating to take up the looper thread as the looper moves backward.

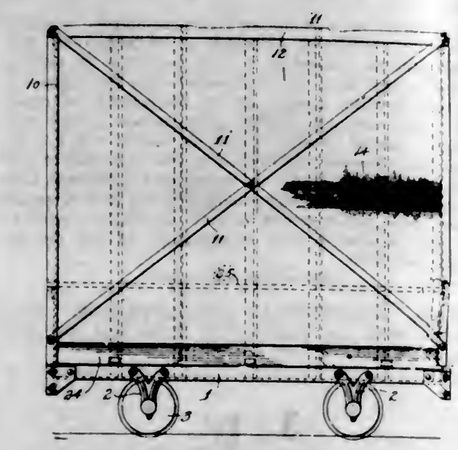
4. The combination of a needle, a thread carrying looper, and thread controlling mechanism including a thread engaging device, thread guiding members coöperating with said thread engaging device, and means for moving said thread engaging device, whereby the slack in front of the looper is pulled back through the eye of the looper, and taken up as the looper moves forward, and whereby the looper thread is pulled from the supply, said thread engaging device operating to take up the looper thread as the looper moves backward.

5. The combination of a needle, a thread carrying looper, and thread controlling mechanism for the looper including a device for engaging the looper thread, thread guiding members coöperating with said thread engaging device, and means for operating said thread engaging device, whereby the looper thread is drawn back through the eye of the looper and the slack in front of the looper taken up as the looper moves forward, said thread engaging device being constructed so as to release the looper thread as soon as the point of the looper is well into the needle loop, said thread engaging device operating to take up the looper thread as the looper moves backward, whereby the looper thread is properly positioned relative to the needle as it descends and said thread engaging device being constructed to release the looper thread after the needle point has passed below said looper thread.

[Claims 6 to 15 not printed in the Gazette.]

1,064,187. DRIER-CAR. SAMSON D. WRIGHT, Cleveland, Ohio. Filed May 25, 1911. Serial No. 629,291. (Cl. 34—34.)

1. In a drier car, a bed frame, supporting wheels, a body mounted on the frame and comprising sides and ends composed of foraminous material, vertical partitions of foraminous material mounted within the body and forming pockets arranged side by side, shedding plates extending over the space between some of the pockets and from one partition to the next partition to form alternate pockets for material and alternate chambers for air, and suitable opening and closing means for the bottom of the car.



2. In a drier car, a bed frame, supporting wheels, a body frame, sides and ends for said body frame and composed of foraminous material, vertical longitudinal partitions of foraminous material mounted within the body frame and forming longitudinal pockets, shedding plates extending over the space between some of the pockets and from one partition to the next adjacent to form alternate pockets for material and alternate chambers for air, means for discharging the material from the material pockets, means for opening and closing said doors, and suitable hoppers extending from the bed frame and adapted to collect the material sifting through the foraminous sides of the car body.

1,064,188. BROOM-BRIDLE. FRANK D. ARNOLD, Dublin, Pa. Filed Oct. 5, 1912. Serial No. 724,017. (Cl. 15—23.)

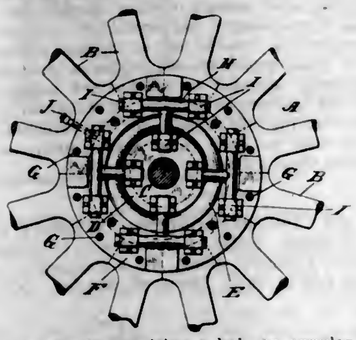


1. A broom bridle comprising two spring wire members mounted to slide one upon the other, and a coil on one member adapted to receive a straight portion of the wire of the other member and clamp the same between the convolutions of the coil, substantially as described.

2. A broom bridle comprising two spring wire members, each member having eyes at its ends sliding on the wire of the other member, and each member having a coil at one side adapted to receive and clamp the straight portion of the other member, substantially as described.

3. A broom bridle comprising two spring wire members, said members twisted intermediate their ends whereby inwardly projecting twisted lugs are formed at the ends of the bridle, said members mounted to slide one upon the other, each member having one of its ends coiled and the other end straight, whereby the coiled portions of the bridle are adapted to receive the straight portions thereof and lock the bridle members against movement, substantially as described.

1,064,189. VEHICLE-WHEEL. MICHELE BERARDINI, Philadelphia, Pa., and MICHELE GUGLIELMO DE SIMONE, New York, N. Y.; said de Simone assignor of one-third of his interest to said Berardini. Filed June 17, 1912. Serial No. 704,183. (Cl. 152—42.)

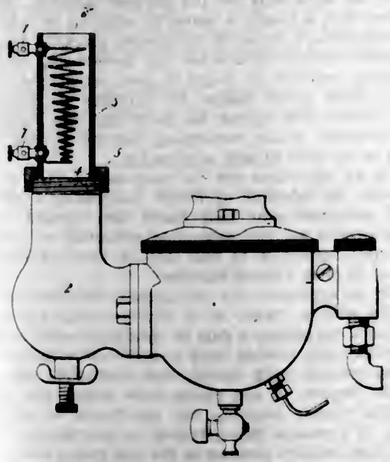


1. A vehicle wheel comprising a hub, an annular member surrounding said hub, a pneumatic tire between said hub and annular member, and a plurality of members engaging said annular member and hub, said members each having a radial arm and a fixed arm at right angles thereto, said radial arm having radial sliding movement and said other arm having tangential sliding movement with relation to the parts which they respectively engage.

2. A vehicle wheel comprising a hub, an annular member surrounding said hub, a pneumatic tire between said hub and annular member, and a plurality of integral T-shaped members engaging said annular member and hub, one arm of each of said T-shaped members having radial sliding movement and the other arm of each of said members having tangential sliding movement with relation to the parts with which they respectively engage.

3. A vehicle wheel comprising a hub, an annular member surrounding said hub, a pneumatic tire between said hub and annular member, and a plurality of members engaging said annular member and hub at each side thereof, said members each having a radial arm and a fixed arm at right angles thereto, said radial arm having radial sliding movement and said other arm having tangential sliding movement with relation to the parts which they respectively engage.

1,064,190. ELECTRIC AIR-HEATER. LESTER A. BILL, Cambridge, Mass., assignor to Joseph C. Kent, trustee, Cambridge, Mass. Filed Dec. 14, 1912. Serial No. 736,662. (Cl. 219—38.)



An electric air heater comprising a cylindrical tube of uniform diameter throughout, and having unrestricted open ends, said tube being adapted for attachment to an air intake pipe and forming a direct extension thereof, and an electric heating element comprising a wire coil freely supported inside of said tube, said coil being of conical shape, the large end thereof being substantially of the same diameter as said tube but out of contact with the walls thereof, whereby a straight free air passage through said tube is provided, and whereby the air currents throughout substantially the entire cross-section of said tube are brought into contact with the radiating surface of said coil.

1,064,191. JACK. JOSEPH DE HAVEN BUNN, York, Pa., assignor, by direct and mesne assignments, to Henry S. Wikel, York, Pa. Filed June 25, 1912. Serial No. 705,694. (Cl. 57—15.)



1. A frame consisting of top, bottom and end bars, the end bars having axle supporting fingers and the bottom bar a hook in combination, and another frame consisting of top, bottom and end bars, the end bars having axle supports and the bottom bar a pin in combination with a chain fastened to the hook and pin.

2. The combination of two frames, each consisting of top, bottom and end bars, and having on the end bars clamps and axle supporting fingers held to the end bars by the clamps, and one frame having a hook and the other a pin, with a chain fastened to the hook and pin.

3. A frame consisting of top, bottom and end bars, the end bars having axle supporting fingers and the bottom bar a hook in combination, and another frame consisting of top, bottom and end bars, the end bars having axle supports and the bottom bar a pin in combination with a chain fastened to the hook and pin, a jack support, a chain connecting the jack support with the bottom bar of one of said frames, and a jack connected to said last-mentioned frame and adapted to be positioned in the support, substantially as described.

4. The combination of two frames, each consisting of top, bottom and end bars, and having on the end bars clamps and axle supporting fingers held to the end bars by the clamps, and one frame having a hook and the other a pin, with a chain fastened to the hook and pin, a jack support, a chain connecting the jack support with the bottom bar of one of said frames, and a jack connected to said last-mentioned frame and adapted to be positioned in the support, substantially as described.

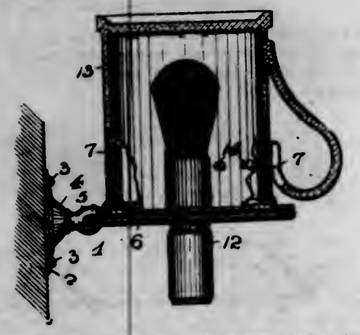
5. A frame consisting of top, bottom and end bars, the end bars having axle supporting fingers and the bottom bar a hook in combination, and another frame consisting of top, bottom and end bars, the end bars having axle supports and the bottom bar a pin in combination with a chain fastened to the hook and pin, a jack support, a chain connecting the jack support with the bottom bar of one of said frames, and a jack connected to said last-mentioned frame and adapted to be positioned in the support, said jack comprising two threaded members movable longitudinally with relation to each other, a ratchet wheel connected to one member, a lever constructed to oscillate on the other of said members, and a dog on the lever constructed to engage the toothed wheel, substantially as described.

[Claim 6 not printed in the Gazette.]

1,064,192. SUPPORT OR BRACKET FOR SHAVING-MUGS. THOMAS J. BUTLER, Harrison, N. J. Filed May 8, 1911. Serial No. 625,764. (Cl. 132—11.)

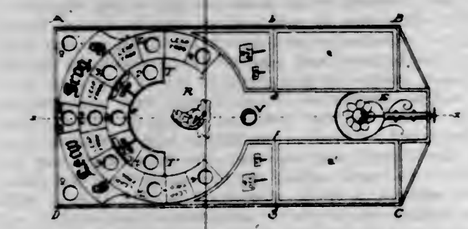
1. A support for the arrangement thereon of a shaving mug in its inverted relation for drainage, comprising a

supporting element, and a flexible pad thereon, said pad being of greater area than the open portion of the shaving mug, so that the marginal edge of the inverted mug as it rests upon said pad will provide an air-tight joint, said pad being provided with a receiving opening for the reception in its inverted relation to the pad of a shaving brush and being adapted to retain the brush in such relation, but permitting the brush to be drawn through said opening when desired for use, substantially as and for the purpose set forth.



2. The combination with a shaving mug, of a bracket upon which said mug is adapted to be removably supported in its inverted position, said bracket comprising a supporting element, a fastening means connected therewith, posts extending upwardly from the said supporting element, and a flexible pad upon said supporting element, said pad being provided with holes for removably arranging said pad over said posts, said pad being made of waterproof material and providing with the mug an air tight device.

1,064,193. GAME APPARATUS. JAMES HOWARD CALISCH, Yonkers, N. Y., assignor to Frogs' Novelty Company, New York, N. Y., a Corporation of New York. Filed Jan. 18, 1911. Serial No. 603,308. (Cl. 46—59.)



1. A game-apparatus, comprising a projecting device; an oblong projectile having an approximately hemispherical end, weighted in such a manner that when placed on a horizontal surface the projectile will invariably assume a vertical position, weighted end down; and a game-board provided with cavities into which the projectile, when properly propelled by the said projecting device, is adapted to fall; and further provided with an immovable pedestal and a wall-like hazard, substantially as described.

2. A game-apparatus, comprising a projecting device; a projectile weighted at one end, adapted to be propelled by the said projecting device; and a game-board provided with cavities, an immovable pedestal, and a wall-like hazard, substantially as described.

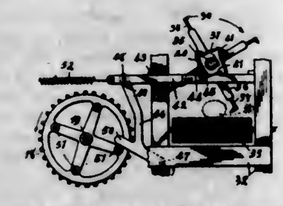
3. A game-apparatus, comprising a game-board provided with cavities, a projectile weighted at one end, a projecting device, and a non-adjustable inclined support, upon which the said projecting device is mounted, for the purpose of raising the said projectile to a suitable height, when propelled by the said projecting device.

4. A game-apparatus, comprising a projecting device, consisting of a plunger, a coil-spring and an immovable tube; the said tube being closed at each end by a cap or end-piece, each of which is provided with an elongated horizontal slit, for the purpose of allowing a change in the position of the plunger in a horizontal direction; while upon the plunger is mounted transversely a circular disk, small enough to allow the said free horizontal motion of the plunger, and serving the purpose of fastening thereto the forward end of the said coil-spring.

5. A game-apparatus, comprising a projecting device permanently mounted on an inclined support, the forward end whereof is rounded to a curved line out of center with the said support, for the purpose of diverting the eye from the exact center, substantially as described.

[Claim 6 not printed in the Gazette.]

1,064,194. DOUGH-PROOFING APPARATUS. PHILIP F. CARROLL, Joliet, Ill., assignor to Champion Machinery Company, Joliet, Ill., a Corporation of Illinois. Filed Nov. 21, 1910. Serial No. 593,308. (Cl. 107—57.)



1. In a dough-proofing apparatus, a conveyer comprising a plurality of receptacles having flexible fabric sides and bottom and flexible fabric covers hinged thereon, means for delivering portions of dough to said receptacles, means for closing said covers, means for removing said covers, and means for inverting said receptacles to discharge the contents thereof.

2. In an apparatus for the purpose specified, the combination with a frame, a conveyer mounted on said frame and comprising a pair of sprocket chains and sprockets supporting said chains, of a series of receptacles extending between said chains and pivotally suspended therefrom, flexible covers for said receptacles, a dough feeding device, means for intermittently operating said device synchronously with the conveyer movement, means for covering the receptacles, said covering means comprising a pair of oppositely arranged sprockets engaging the conveyer chains, arms on said sprockets adapted to lift the covers, a rock-shaft arranged above said sprockets, a finger on said shaft adapted to engage a cover when lifted by said arms, means for operating said rock-shaft, and means for emptying the receptacles.

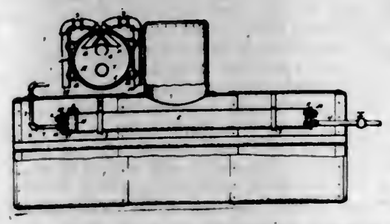
3. In an apparatus for the purpose specified, the combination with a frame, a conveyer mounted on said frame and comprising a series of receptacles pivotally suspended therefrom, flexible covers for the receptacles, means for depositing portions of dough in said receptacles as they pass a given point, means for covering the receptacles when loaded, and means for inverting said receptacles, said inverting means comprising detents secured to the frame in the path of said receptacles.

4. In an apparatus for the purpose specified, a receptacle for the portions of dough comprising a frame, a fabric stretched over said frame and secured thereto, and a closure for the receptacle consisting of a flap of said fabric attached to one side of the receptacle and adapted to form a cover therefor.

5. In an apparatus for the purpose specified, the combination with a frame, of a conveyer mounted on said frame and comprising a pair of sprocket chains, sprockets supporting said chains, and a series of receptacles extending between said chains, each receptacle comprising a frame formed of end pieces, bars connecting the end pieces, a canvas covering for the frame, a cover consisting of a canvas flap attached by one margin to said frame, and hangers secured to the end pieces and adapted to be pivotally attached to said chains.

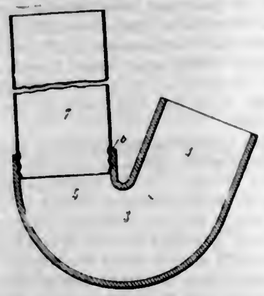
[Claims 6 to 8 not printed in the Gazette.]

1,064,195. FEED-WATER PURIFIER. CHARLES H. CORT, San Francisco, Cal. Filed Aug. 12, 1912. Serial No. 714,583. (Cl. 122—428.)



In a feed water purifier for boilers, an elongated feed-water vessel located in the upper portion of the boiler, a steam tube open at both ends extending longitudinally in the upper portion of the vessel and through both its ends, a feed-water pipe entering one end of said vessel, extending longitudinally in its lower portion, and opening at a point adjacent to its other end, and outlet pipes leading upwardly through the top of said vessel near its first-named end.

1,064,196. CLOSET-TRAP. HARRISON TAYLOR CRONK, New York, N. Y. Filed Jan. 30, 1912. Serial No. 674,237. (Cl. 182—12.)



1. A closet trap of a general J construction, comprising a metallic crotch section, and a destructible fabric portion, removably attached to said crotch portion.

2. A trap for closet bowls consisting of a plurality of parts, one part being a crotch portion and another part being a readily destructible and combustible rigid portion adapted to removably engage the outlet of the closet bowl.

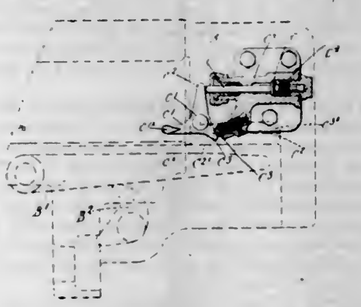
3. A trap for closet bowls, comprising a crotch portion having an outlet arm and an inlet arm arranged at a relatively sharp acute angle to each other, said arms having relatively wide throats, one of said throats being corrugated, and a flexible member adapted to engage said corrugated throat.

4. A closet trap comprising a permanent crotch section and a destructible fabric portion removably attached to said crotch portion.

1,064,197. BREECH-LOADING ORDNANCE. ARTHUR TREVOR DAWSON and GEORGE THOMAS BUCKHAM, Westminster, London, England, assignors, by mesne assignments, to Vickers, Limited, Westminster, England. Filed Feb. 27, 1911. Serial No. 611,250. (Cl. 89—1.)

1. In breech loading ordnance, the combination with a valve carried by the gun for controlling a supply of compressed fluid to the breech, of a device also carried by the gun and coöperating with said valve, a relatively stationary member with which said device coöperates to open the valve during the run out movement of the gun, and means for automatically closing the valve at substantially the completion of the run out movement of the gun.

2. In breech loading ordnance, the combination with a valve carried by the gun for controlling a supply of compressed fluid to the breech, of a device coöperating with said valve, a relatively stationary member with which said device coöperates to open the valve during the run out movement of the gun and to retain said valve open until just before the run out of the gun is completed, and means for automatically closing the valve at substantially the completion of the run out movement of the gun.



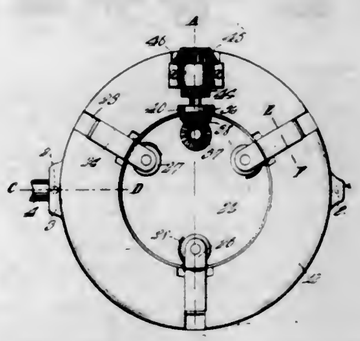
3. In breech loading ordnance, the combination with a valve carried by the gun for controlling a supply of compressed fluid to the breech, of a device also carried by the gun and coöperating with said valve, a relatively stationary member with which said device coöperates to open the valve during the run out movement of the gun and to retain said valve open until just before the run out of the gun is completed, and means for automatically closing the valve at substantially the completion of the run out movement of the gun.

4. In breech loading ordnance, the combination with a valve carried by the gun for controlling a supply of compressed fluid to the breech, of a device coöperating with said valve, a relatively stationary member with which said device coöperates to open the valve during the run out movement of the gun, and to retain said valve open until just before the run out of the gun is completed, and means for automatically closing the valve at substantially the completion of the run out movement of the gun.

5. In breech loading ordnance, the combination with a valve carried by the gun for controlling a supply of compressed fluid to the breech, of a device also carried by the gun and coöperating with said valve, a lateral projection on said device, a relatively stationary member with which said projection engages to open the valve during the run out movement of the gun, and means for automatically closing the valve at substantially the completion of the run out movement of the gun.

[Claims 6 to 8 not printed in the Gazette.]

1,064,198. MILLING-THREAD CUTTER. DOMINICK DREIER, Livingston, Mont. Filed July 19, 1912. Serial No. 710,519. (Cl. 10—87.)



1. In a device of the class described, the combination with a die holder, and revoluble dies mounted therein, of a revoluble milling tool mounted within the die holder, a

shaft, and separate means operated by the shaft for simultaneously rotating the die holder and the milling tool about respective axes.

2. A device of the class described including a die holder, revoluble dies therein and movable therewith, a milling tool within the die holder, a drive shaft, separate means operated by the drive shaft for simultaneously rotating the die holder and the milling tool about their individual axes, and means for simultaneously adjusting the milling tool and the revoluble die radially toward or from each other.

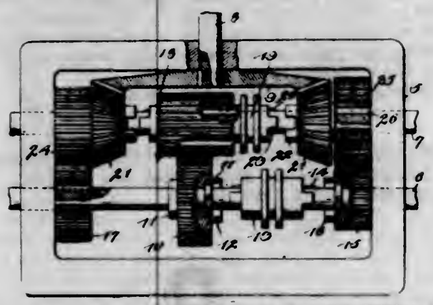
3. A device of the class described including a die holder, said holder having an annular groove, there being radial channels extending in the groove, slides mounted in the channels, revoluble dies carried by certain of the slides, a revoluble milling tool carried by the other slide, an adjusting ring mounted for rotation within the annular groove and having a spiral thread engaging the slide, a drive shaft, and separate means operated by said shaft for simultaneously rotating the die holder and the milling tool about their respective axes.

4. A device of the class described including a die holder, said holder having an annular groove, there being radial channels extending into the groove, slides mounted in the channels, revoluble dies carried by certain of the slides, a revoluble milling tool carried by the other slide, an adjusting ring mounted for rotation within the annular groove and having a spiral thread engaging the slide.

5. A device of the class described including a die holder, said holder having an annular groove, there being radial channels extending into the groove, slides mounted in the channels, revoluble dies carried by certain of the slides, a revoluble milling tool carried by the other slide, an adjusting ring mounted for rotation within the annular groove and having a spiral thread engaging the slide, a drive shaft, means operated thereby for rotating the die holder about its axis, and additional means operated by the shaft for rotating the milling tool about its axis, said means including an extensible shaft permitting the adjustment of the milling tool radially within the die holder.

[Claim 6 not printed in the Gazette.]

1,064,199. SPEED-CHANGING DEVICE. JAMES W. EDGAR, McLaughlin, S. D. Filed Mar. 9, 1912. Serial No. 682,637. (Cl. 74—59.)



1. In a speed changing mechanism, parallel driving and transmission shafts, a driven shaft, a beveled gear fixed to the driven shaft, beveled gears loose upon the driving shaft engaging with the beveled gear at diametrically opposite points, additional gears upon the driving shaft, and gears on the transmission shaft permanently engaged with the last named gears on the driving shaft, one of said latter gears being longitudinally movable and carrying clutch members to lock the beveled gears upon the drive shaft whereby rotation may be transmitted to the driven shaft in opposite directions.

2. In a speed changing mechanism, parallel driving and transmission shafts, a driven shaft, a beveled gear fixed thereto, gears loosely mounted on the drive shaft meshing with the beveled gear at diametrically opposite points, a gear slidably mounted on said drive shaft between the first named gears, said gears having co-acting clutches whereby said sliding gear may be moved into locking engagement with either of the first named gears, gears on the transmission shaft, gears arranged on said driving shaft permanently engaged with the latter gears, an additional gear on the transmission shaft permanently engaged with the sliding gear on said drive shaft and a clutch member on the transmission shaft to lock said latter gear thereon and transmit rotary movement to said transmission shaft.

3. A speed changing mechanism comprising parallel driving and transmission shafts, a driven shaft and a beveled gear fixed thereon, gears loosely mounted upon the drive shaft to mesh with said beveled gear, a gear slidably mounted on the drive shaft between the first named gears, clutch devices to connect the sliding gear to either of the loosely mounted gears, additional gears on said drive shaft of different diameters, gears on the transmission shaft to mesh with said latter gears, one of the gears on the transmission shaft being loosely mounted, another gear loosely mounted on the transmission shaft meshing with the sliding gear on the drive shaft, the gears on the transmission and driving shafts being permanently engaged, and a sliding clutch member on the transmission shaft to lock either of the loosely mounted gears thereon whereby power may be transmitted to the driven shaft at various speeds.

4. In a speed changing mechanism, driving and transmission shafts, a driven shaft, a gear on the latter shaft, a gear loose on the driving shaft meshing with the gear on the driven shaft, a sliding gear on the driving shaft, said loosely mounted gear and the sliding gear having clutch faces whereby the loose gear may be locked on the shaft, spaced pairs of fixed and loose intermeshing gears on the driving and transmission shafts, an additional gear loosely mounted upon the transmission shaft to permanently engage with said sliding gear, and a clutch member on the latter shaft coöperating with the loose gears thereon to lock the same upon the said shaft to transmit power to the driven shaft.

5. In a speed changing mechanism, a driven shaft, driving and transmission shafts, a gear on the driven shaft, a gear loosely mounted on the driving shaft to mesh with the gear on the driven shaft, a sliding gear on the driving shaft, said gears having co-acting clutches whereby the loose gear may be locked on the shaft, a gear fixed upon the driving shaft, spaced gears having different diameters loosely mounted upon the transmission shaft and meshing with the sliding and fixed gears upon the driving shaft, additional intermeshing loose and fixed gears on the driving and transmission shafts respectively, said latter gears differing in diameter from said first named gears, and a sliding clutch member arranged upon the transmission shaft to lock either of the loose gears thereon whereby power may be transmitted to the driven shaft at various speeds.

1,064,200. HITCHING-POST. ERIC ENGBLOM, Denver, Colo. Filed Apr. 12, 1912. Serial No. 690,398. (Cl. 119—124.)



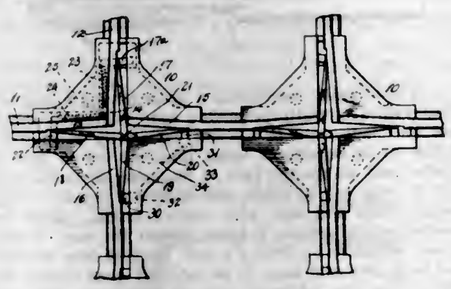
A hitching post having a body member equipped with a longitudinally disposed passage, and a laterally communicating passage near the upper end of the post, a cap plate applied to the post at the outer extremity of the lateral passage, said plate having an opening composed of a circular portion, a straight horizontal slot and a curved slot joining said circular portion and straight slot and extending from said straight slot at approximately a right angle; a weight slidable in the longitudinal passage, a chain attached to said weight and extending through said passages and the opening in said plate, the links of said chain being of a size to permit the chain to slide freely through the circular portion of the opening in the cap plate and to permit any one link to be guided through said curved slot into said straight slot, but at the same time preventing any accidental passage from the circular portion to the straight slot, or vice versa.

1,064,201. SHEET-METAL DOOR. SIMON E. FAGERSTROM, Chicago, Ill. Filed Oct. 9, 1911. Serial No. 653,498. (Cl. 189—46.)



A door composed of stiles and a single panel formed from a single piece of sheet metal, a second panel formed from a single piece of sheet metal having its edges in interlocking engagement with the edges of the stiles of the first member and channel bars having interlocking engagement with the first member and secured to the inner surface of the second member, adjacent the interlocked portions of said members.

1,064,202. RAILROAD-CROSSING. GEORGE E. FLETCHER, Anaheim, Cal. Filed Jan. 23, 1912. Serial No. 672,897. (Cl. 104—116.)



1. A railroad crossing frog comprising a base having laterally inclined rail points extending thereon affording offset recesses at the sides thereof, spring actuated crossing points adapted to fit against some of said rails, loosely connected pivoted points coöperating therewith and springs for normally forcing the points out of their seats, against the inclined portions of the rails.

2. A railroad crossing comprising a base adapted to receive the head portions of the rails meeting at the crossing, crossing points fitting against said rails, some of said points having transverse bars arranged below the heads of the rail, springs connected with said bars tending to force the points away from the rails, a pivot pin connecting the inner ends of said points, the said points also having dowel pins projecting therefrom, some of said points also having pivot projections and being provided at their inner ends with sockets for receiving said dowel pins.

3. In a railroad crossing, comprising rails forming a crossing, offsets in said rails at their junctions, a pair of movable rail points pivoted at their intersections and adapted to fit said offsets, and resilient means for operating said rail points.

1,064,203. FLUID-DASH-POT BUFFER DEVICE. FLOYD C. FURLOW, Montclair, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 28, 1907. Serial No. 359,883. (Cl. 74—69.)



1. The combination with a receptacle for containing liquid, of an expansion chamber connected at or near one end of said receptacle, a piston movable in said receptacle, a tube connected to said piston and having perforations affording passages between said expansion chamber and said receptacle through an opening in said piston, and means within said receptacle for variably restricting the flow of fluid through said opening in the piston.

2. The combination with a cylinder, of a tube of smaller diameter than the cylinder, fixed to one end thereof, and extending longitudinally into the cylinder, a rod of less diameter than the tube and within the same, having a portion thereof tapered toward the other end of the cylinder, means for preventing said rod from being forced out of said tube by fluid-pressure, a piston movable in said cylinder, said piston having an opening for receiving the tapered portion of said rod, an expansion chamber connected to said cylinder, a perforated tube connected to said piston at one side thereof, and projecting out of said expansion chamber, a spring acting on the other side of said piston to move the latter away from said rod, and a stop for limiting such movement.

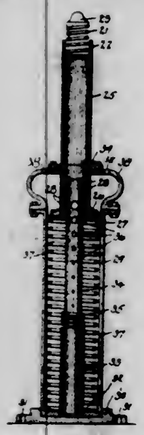
3. The combination with a receptacle for containing liquid, of an expansion chamber connected at or near one end of said receptacle, a piston movable in said receptacle, a tube connected to said piston and having perforations affording passages between said expansion chamber and said receptacle through an opening in said piston, and means within said receptacle for variably restricting the flow of fluid through said opening in the piston comprising a rod, loosely supported in the receptacle to allow a slight lateral play of the rod in the same.

1,064,204. FLUID BUFFER DEVICE FOR ELEVATORS. FLOYD C. FURLOW, Montclair, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Original application filed Oct. 9, 1907, Serial No. 396,553. Divided and this application filed Feb. 4, 1911. Serial No. 606,468. (Cl. 74—69.)

1. In an elevator buffer, the combination of a cylinder, a piston movable therein, a hollow piston rod, and a hollow member stationary with respect to the cylinder, extending through the piston and into the piston rod and formed to permit a gradually restricted passage of a fluid through said piston rod from one side of the piston to the other during the movement of the piston.

2. In an elevator buffer, the combination of a cylinder, a piston movable therein and provided with an opening, and a hollow member movable relative to the piston through

said opening and provided with an opening or openings in position to gradually restrict the passage of a liquid from one side of the piston to the other.



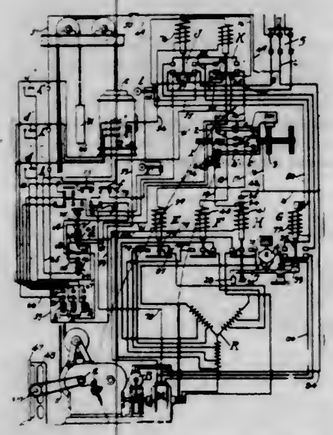
3. In an elevator buffer, the combination of a cylinder, a piston therein provided with an opening, and a hollow rod within the cylinder and extending through the said opening, said rod being formed with a series of lateral openings arranged to successively oppose the piston.

4. In an elevator buffer, the combination of a cylindrical casing, a cylindrical hollow rod within the casing and formed with a series of graduated lateral openings, a piston formed with an opening through which the said hollow rod extends, and a piston rod.

5. In an elevator buffer, the combination of a receptacle, a piston movable therein, a hollow piston rod connected to the piston, and a stationary hollow rod in the receptacle and extending through the piston into the piston rod, said stationary rod being formed with a series of lateral openings.

[Claims 6 to 12 not printed in the Gazette.]

1,064,205. MOTOR-ACCELERATING DEVICE. ERNEST L. GALE, Sr., Yonkers, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 9, 1909. Serial No. 527,096. (Cl. 172—152.)



1. The combination with an electric motor, of accelerating mechanism therefor comprising a contact drum, positive driving connections between said drum and the motor, circuits controlled by said drum and controlling the operation of the accelerating mechanism, and means for disconnecting the drum from the motor when the accelerating mechanism has operated to accelerate the motor.

2. The combination of an electric motor, accelerating mechanism comprising a contact carrying device controlling the accelerating mechanism, positive means for operating said device during the acceleration of the motor, and means for automatically disconnecting said device from the motor.

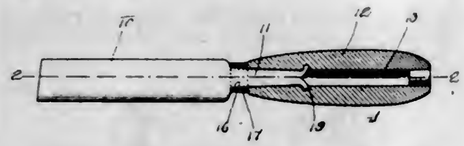
3. The combination of an electric motor, sectional starting resistance therefor, a contact device controlling short circuits for the sections of resistance, means for positively operating said device and effecting a short-circuiting of the resistance as the motor accelerates, and automatic means for disconnecting said device from the motor.

4. The combination of an electric motor, accelerating mechanism comprising a series of switches and a device for effecting the operation of the switches, gearing comprising a clutch between the said device and the motor, and means for automatically opening the clutch after the operation of the said switches.

5. The combination of an electric motor, sectional starting resistance, a rotatable drum, switches operated by the rotation of the drum and controlling the starting resistance, a clutch forming a positive driving connection between the drum and the motor, and means for automatically operating said clutch to disconnect the drum from the motor.

[Claims 6 to 48 not printed in the Gazette.]

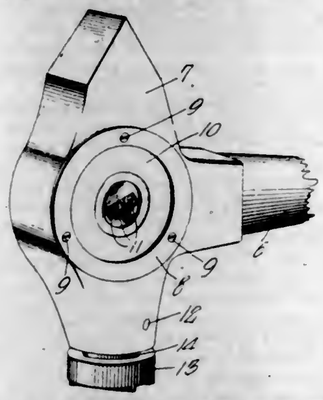
1,064,206. SHOE-KNIFE. GEORGE W. GOULD, New Durham, N. H., assignor to Arthur C. Lewis, George W. Gould, and Wallace C. Wright, Partners doing business under the firm-name of G. W. Gould Knife Manufacturing Company, Lynn, Mass. Filed July 19, 1912. Serial No. 710,439. (Cl. 30—9.)



1. A shoe knife, comprising a blade having a tang provided with a laterally projecting spur sufficiently stiff to hold the blade rigid in use but sufficiently yielding and flexible to be capable of being bent and driven into the handle from within the bore of the latter when the blade and its tang are in place, and a handle having a longitudinal bore, and said bore having a size, extent and location which provide a space around the tang, so positioned, sufficient to receive a tool inserted into said bore and to permit said spur to be laterally bent thereby and driven into the adjacent wall of said bore into rigid blade-holding position.

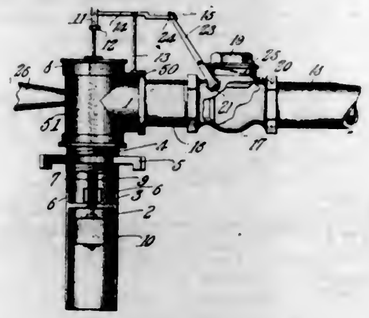
2. A shoe knife, comprising a handle having a longitudinal bore thereinto and flattened on one side so as to leave the wood relatively thin between the bore and said flat side and relatively thick about the remaining circumferential portion of said bore, and a blade provided with a flat tang in the same plane as the external portion of the blade, said bore being of such size as to allow the tang to be driven into it with a driving fit, the tang being positioned parallel to said flat side of the handle so as to have the tang-edges drive into the relatively thick portions of the handle, said tang also having a spur sufficiently stiff to maintain the blade immovable in the handle in use but being sufficiently bendable to be capable of being driven into the wall of the bore from within the latter in the manufacture of the handle, said spur extending into said relatively thick portion of the handle, and said bore opening freely at one end of the handle with a relatively large space from said end to the spur, said large space having a size and position capable of receiving a tool, when the tang is in place, for so bending and driving said spur into the adjacent thick wall of said bore.

1,064,207. STAMPING-HAMMER. PERRY GRAHAM and GEORGE W. SHAY, Blaine, Wash.; said Graham assignor to Charles W. Wright, Blaine, Wash. Filed Jan. 5, 1912. Serial No. 669,605. (Cl. 235—101.)



A hammer head provided with a recess in one side, an opening in the opposite side extending to and smaller than the recess, a socket in one end extending to the recess, and a slot at the inner end of the socket, counting mechanism embodying a case seated in the recess and including dials at one side exposed through the said opening, thumb pieces at the opposite side for setting the dials, and an actuating finger projecting into the socket and designed to pass through the said slot, a hollow cap screw threaded into the recess to close the recess and receiving the said thumb pieces, the cap contacting with the case around its margin, a branding die having a shank fitting into the socket so as to strike the said finger, and means for constraining the shank for limited reciprocatory movements within the socket.

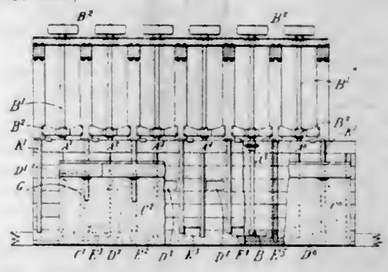
1,064,208. CUT-OFF FOR BARREL-FILLING DEVICES. WILLIAM A. HARDWICK, Memphis, Tenn., assignor of one-half to Richmond L. Graves, Memphis, Tenn. Filed Nov. 22, 1909. Serial No. 529,344. (Cl. 226—29.)



1. In a device of the class described, a float casing; a supply pipe; a connection uniting the float casing with the supply pipe; a float in the casing, there being a web in the casing constituting a stop for the float; a rod connected with the float and extended through the connection; a lever fulcrumed intermediate its ends upon the connection; a valve casing rotatable upon the supply pipe; a valve in the valve casing; an arm secured to the valve; there being interengaging elements upon the arm and the lever, the rotation of the valve casing serving to adjust the arm with respect to the lever to permit said elements to interengage; the lever being tiltable to break the engagement between said elements; a yoke pivoted to the lever, the rod being threaded into the yoke, for longitudinal adjustment therein, whereby, when the float is elevated into engagement with the web, the engagement between the interengaging elements of the arm and the lever will be broken.

2. In a device of the class described, a primary T and a secondary T, the shank of the secondary T being alined with the head of the primary T; a solid plug inserted into one end of the head of the primary T and into the shank of the secondary T; a pipe depending from the shank of the primary T and adapted to extend toward the bottom of the receptacle to be filled; a casing in one end of the head of the secondary T; a cap upon the other end of the head of the secondary T; there being a web extended across the valve casing; a pipe connecting the web with the cap; a rod slidable in the last specified pipe; a float connected with the rod and located below the web; a valve connected with the other end of the head of the primary T; and means connected with the rod for maintaining the valve releasably open when the float is depressed.

1,064,209. APPARATUS FOR ORE CONCENTRATION. JAMES HEBBARD, Broken Hill, New South Wales, Australia, assignor to Minerals Separation Limited, London, England. Filed Oct. 1, 1912. Serial No. 723,327. (Cl. 83—85.)



1. Apparatus for concentrating ores by gaseous flotation of certain mineral particles in liquid, comprising in combination two adjacent mixing vessels each containing a rotary agitator and a spitzkasten placed contiguous thereto having a high level orifice leading from the first mixing vessel to the spitzkasten and a low level orifice leading from the spitzkasten to the bottom of the second mixing vessel.

2. Apparatus for concentrating ores by gaseous flotation of certain mineral particles in liquid comprising in combination two adjacent mixing vessels each containing a rotary agitator, and a spitzkasten placed contiguous thereto and on the same level, having a high level orifice leading from the first mixing vessel to the spitzkasten and a low level orifice leading from the spitzkasten to the bottom of the second mixing vessel.

3. Apparatus for concentrating ores by gaseous flotation of certain mineral particles in liquid comprising in combination a number of mixing vessels, a number of spitzkasten contiguous thereto and on the same level, staggered in relation to the mixing vessels, having a high level outlet from each mixing vessel to the next spitzkasten and a low level outlet from that spitzkasten to the bottom of the next mixing vessel.

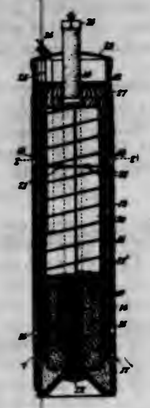
4. Apparatus for concentrating ores by gaseous flotation of certain mineral particles in liquid comprising in combination a number of mixing vessels, each containing a rotary agitator having blades shaped to give an upward circulation to the pulp, a number of spitzkasten contiguous thereto and on the same level, staggered in relation to the mixing vessels, having a high level outlet from each mixing vessel to the next spitzkasten, and a low level outlet from that spitzkasten to the bottom of the next mixing vessel.

5. Apparatus for concentrating ores by gaseous flotation of certain mineral particles in liquid comprising in combination a number of mixing vessels, each containing a rotary agitator having blades shaped to give an upward circulation to the pulp, a number of spitzkasten contigu-

ous thereto and on the same level, staggered in relation to the mixing vessels, having a high level outlet from each mixing vessel to the next spitzkasten, a low level outlet from that spitzkasten to the bottom of the next mixing vessel and a connection between the several spitzkasten to adjust the level of the liquid therein.

[Claim 6 not printed in the Gazette.]

1,064,210. GALVANIC CELL. ALBRECHT HEIL, Frankfort-on-the-Main, Germany, assignor to Conrad Hubert and Samuel Stern, New York, N. Y. Filed Sept. 22, 1910. Serial No. 583,163. (Cl. 204—38.)



1. In a galvanic cell, in combination, an electrode, a containing vessel and a plurality of centering projections on the inner face of the vessel disposed in a plurality of transverse planes and adapted to hold the electrode substantially concentrically of the vessel at a plurality, of separate small contact areas about the electrode and at a plurality of small contact areas along the length of the electrode.

2. In a galvanic cell, in combination, a cylindrical electrode, a containing vessel, a plurality of centering projections on the inner face of the vessel arranged to hold the electrode substantially concentrically of the vessel, and a relatively larger projection on the inner face of the vessel located below the centering projections, the cylindrical electrode being adapted to be supported with its bottom on the larger projection.

3. In a galvanic cell, in combination, a cylindrical electrode, a containing vessel, a plurality of centering projections on the inner face of the vessel arranged to hold the electrode substantially concentrically of the vessel, and a plurality of relatively larger projections on the inner face of the vessel, located in a plane substantially at right angles to the axis of the vessel and below the centering projections and arranged to support the electrode.

4. In a galvanic cell, in combination, a cylindrical electrode, a containing vessel and a plurality of centering projections on the inner face of the vessel arranged in an upper and lower series and providing a plurality of separate small areas of contact about the electrode in each series and adapted to hold the electrode substantially concentrically of the vessel.

5. In a galvanic cell, in combination with a containing vessel, having a central depression in its bottom, a hollow cylindrical positive electrode, a negative electrode adapted to be situated interiorly of the positive electrode and to rest with its lower end in the depression in the bottom of the vessel, and a plurality of projections on the inner face of the containing vessel arranged transversely of the axis of the vessel so as to provide a plurality of separate small areas of contact adapted to hold the positive electrode concentrically of the negative electrode.

[Claims 6 to 15 not printed in the Gazette.]

1,064,211. GALVANIC CELL. ALBRECHT HEIL, Frankfort-on-the-Main, Germany, assignor to Conrad Hubert and Samuel Stern, New York, N. Y. Filed May 2, 1912. Serial No. 694,733. (Cl. 204—38.)

1. The process of producing depolarizing electrodes consisting of saturating a body of porous carbon with a solution of manganese nitrate and then drying the carbon and then heating the carbon to such a temperature that the nitrate is decomposed.

2. The process of producing depolarizing electrodes consisting of immersing a body of porous carbon in a solution of manganese nitrate dissolved in alcohol and then drying the carbon and then heating it to a temperature sufficient to drive off the alcohol and the acid.

3. The process of producing depolarizing electrodes consisting of dissolving a manganese salt in nitric acid and then dissolving the crystals of manganese nitrate so formed in alcohol and then immersing a suitable porous carbon in this solution until the carbon is impregnated, and then drying the carbon and then heating it to a temperature sufficient to drive off the alcohol and the acid.

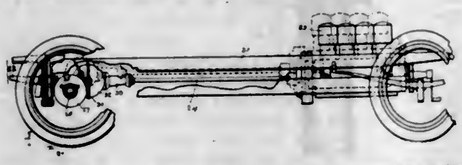
4. The process of producing depolarizing electrodes consisting of dissolving a manganese carbonate in nitric acid and then dissolving the crystals of manganese nitrate so formed in alcohol and then immersing a suitable porous carbon in this solution until the carbon is impregnated, and then drying the carbon and then heating it to a temperature sufficient to drive off the alcohol and the acid.

1,064,212. ATTACHING DEVICE FOR RUBBER HEELS. ALTON B. HEIMBACH, Duluth, Minn. Filed Sept. 18, 1911. Serial No. 649,783. (Cl. 36—36.)



The combination with a rubber heel having a cavity in the top thereof, said cavity having its side walls downwardly and outwardly inclined, and said heel having an entrance slot leading into said cavity, of an attaching plate adapted to fit within said cavity, said plate having its side walls downwardly and outwardly inclined to correspond with the side walls of said cavity, said plate having its rear inclined wall curved to correspond to the curvature of the rear end of the heel, and said plate having a relatively large centrally located aperture therethrough to reduce the weight of said plate.

1,064,213. SUPPORTING MEANS FOR TRANSMISSION MECHANISM. REINHOLD HERMAN, Crafton, Pa. Filed Jan. 9, 1911. Serial No. 601,754. (Cl. 21—90.)



1. In a motor vehicle, an internal combustion motor, a drive shaft adapted to be coupled thereto, a driven shaft, transmission mechanism for operatively connecting said shafts at will, and means for supporting the transmission mechanism on the driven shaft, said drive shaft extending into the supporting means, said transmission mechanism including a gear-carrying shaft having a member fixed thereto and permanently movable with the drive shaft, said member being out of axial alinement with both of said shafts, the axis of said member being spaced a constant distance from the axis of the driven shaft.

2. In a motor vehicle, an internal combustion motor, a drive shaft adapted to be coupled to said motor, a driven shaft, said shafts extending angularly to each other, change speed transmission mechanism for operatively connecting said shafts at will, and means for pivotally supporting the transmission mechanism on the driven shaft, said drive shaft extending into the supporting means, said transmission mechanism including a gear-carrying shaft having a member fixed thereto and permanently movable with the drive shaft, said member being out of axial alinement with both of said shafts, the axis of said member being spaced a constant distance from the axis of the driven shaft and constantly intersecting the axis of the drive shaft.

porting the transmission mechanism on the driven shaft, said drive shaft extending into the supporting means, said transmission mechanism including a gear-carrying shaft having a member fixed thereto and permanently movable with the drive shaft, said member being out of axial alinement with both of said shafts, the axis of said member being spaced a constant distance from the axis of the driven shaft.

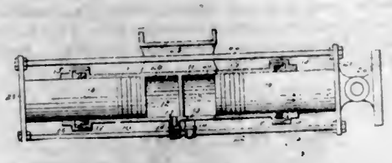
3. In a motor vehicle, an internal combustion motor, a drive shaft adapted to be coupled to said motor, a driven shaft, said shafts extending angularly to each other, change speed transmission mechanism for operatively connecting said shafts at will, and means for pivotally and adjustably supporting the transmission mechanism on the driven shaft, said drive shaft extending into the supporting means, said transmission mechanism including a gear-carrying shaft having a member fixed thereto and permanently movable with the drive shaft, said member being out of axial alinement with both of said shafts, the axis of said member being spaced a constant distance from the axis of the driven shaft.

4. In a motor vehicle, an internal combustion motor, a drive shaft adapted to be coupled to said motor, a driven shaft, said shafts extending angularly to each other, change speed transmission mechanism for operatively connecting said shafts at will, and means for pivotally supporting the transmission mechanism on the driven shaft, said means permitting variations in shaft line positions without affecting the normal operative relationship between the parts.

5. In a motor vehicle, an internal combustion motor, a drive shaft adapted to be coupled thereto, a driven shaft, transmission mechanism for operatively connecting said shafts at will, and means for supporting the transmission mechanism on the driven shaft, said drive shaft extending into the supporting means, said transmission mechanism including a gear-carrying shaft having a member fixed thereto and permanently movable with the drive shaft, said member being out of axial alinement with both of said shafts, the axis of said member being spaced a constant distance from the axis of the driven shaft and constantly intersecting the axis of the drive shaft.

[Claims 6 to 23 not printed in the Gazette.]

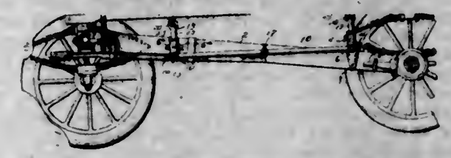
1,064,214. SHOCK-ABSORBING DEVICE. REINHOLD HERMAN, Crafton, Pa. Filed Apr. 25, 1911. Serial No. 623,287. (Cl. 213—2.)



1. In a fluid cushion shock absorber, a cylinder having an imperforate partition forming two opposing non-communicating chambers, an independent pressure controlling fluid inlet port for each chamber, a piston in each chamber, and means for connecting the pistons together externally to operate in unison, the movements of the pistons affecting the fluid pressures of the opposite chambers in unison to vary the pressure relation between them.

2. In a shock absorber, a casing having an imperforate partition forming two opposing axially alined chambers, a piston in each chamber, means for connecting the pistons externally to operate in unison in opposite directions relative to the partition, and an independent fluid pressure inlet port for each chamber to independently control the fluid pressure in each chamber, the movements of the pistons providing increasing and decreasing pressures respectively in the opposing chambers in unison, the pressure-decreased chamber forming a recoil cushion.

1,064,215. CUSHIONING APPARATUS FOR VEHICLE-FRAMES. REINHOLD HERMAN, Crafton, Pa. Filed Jan. 21, 1908, Serial No. 411,880. Renewed Dec. 10, 1912. Serial No. 736,045. (Cl. 21—90.)



1. In combination, a suspension frame embodying an upper member yieldingly-supported at both ends, a lower frame member yieldingly-supported at one end and non-yieldingly but pivotally supported at its other end, and cushioning means carried by the lower frame member and engaged by the upper frame member, said cushioning means constituting supplemental yielding supports for the upper frame member.

2. In combination, a suspension frame embodying an upper member yieldingly-supported at both ends, a lower frame member yieldingly-supported at one end and non-yieldingly but pivotally supported at its other end, and fluid cushioning means carried by the lower frame member, said fluid cushioning means constituting supplemental yielding supports for the upper frame member.

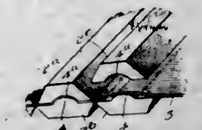
3. In combination, a suspension frame embodying an upper member, yieldingly-supported at both ends, a lower frame member yieldingly-supported at one end and non-yieldingly but pivotally supported at its other end, fluid cushioning cylinders arranged in pairs on the lower frame member, and plungers operating in said cylinders and engaged by the upper frame member, said fluid cushioning cylinders constituting supplemental yielding supports for each end of the upper frame member.

4. In combination, a suspension frame embodying an upper member yieldingly-supported at both ends, a lower frame member yieldingly-supported at one end and non-yieldingly but pivotally supported at its other end, fluid cushioning cylinders arranged in pairs on the lower frame member, plungers operating in said cylinders, connections between said pairs of cylinders, means connecting one pair of cylinders with the other pair, and means carried by the upper frame engaging said plungers, said cushioning cylinders constituting supplemental yielding supports for each end of the upper frame member.

5. In combination, a suspension frame embodying an upper member rigidly connected at its forward end and pivotally-connected at its rear end, a lower frame member pivotally-connected at its forward end and non-yieldingly but pivotally supported at its rear end, fluid cushioning cylinders arranged in pairs on the lower frame member, plungers operating in said cylinders, means establishing communication between the cylinders of each pair, means for closing said communication between the cylinders of each pair of cylinders, means for establishing communication between the pairs of cylinders, means for closing the last named communication, and means carried by the upper frame member engaging said plungers.

[Claim 6 not printed in the Gazette.]

1,064,216. CLOSING-CURTAIN. HARRY J. HICK, Alliance, Ohio, assignor to The McCaskey Register Company, Alliance, Ohio, a Corporation of Ohio. Filed Feb. 8, 1910. Serial No. 542,697. (Cl. 45—92.)



1. A curtain for a casing, comprising a flexible backing, and a series of bars each comprising a pair of strips hav-

ing oppositely inclined side walls and arranged back to back with the backing between them, alining devices for each pair of strips comprising a concave groove formed in the back of one strip and a convex rib carried by the back of the other strip snugly fitting said groove and arranged to press the backing therein and against its wall, the said alining devices operating to stretch the backing between the alining devices of adjoining bars whereby the adjoining strips on opposite sides of the backing are pressed together edge to edge and maintained parallel to each other, and preventing relative movement between the strips and the backing and also between adjoining bars in lateral directions, and the backing operating to connect said bars together and being arranged substantially midway between the opposite outer faces of the bars to form hinges between them whereby the curtain may roll in either direction, and means for rigidly securing the strips of each pair together back to back.

2. A curtain for a casing, comprising a flexible backing formed from fabric, and a series of bars each comprising a pair of strips having oppositely inclined side walls and arranged back to back with the backing between them, alining devices for each pair of strips comprising a concave groove formed in the back of one strip and a convex rib carried by the back of the other strip snugly fitting said groove and arranged to press the backing therein and against its wall, the said alining devices operating to stretch the backing between the alining devices of adjoining bars, whereby the adjoining strips on opposite sides of the backing are pressed together edge to edge and maintained parallel to each other, and preventing relative movement between the strips and the backing, also between adjoining bars in lateral directions; and the backing operating to hingedly connect the said bars together, and means for rigidly connecting the strips of each pair together back to back.

1,064,217. PROCESS FOR MANUFACTURING HEADERS FOR WATER-TUBE BOILERS. CAMPBELL P. HIGGINS, Roselle, N. J., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Mar. 23, 1908. Serial No. 422,595. (Cl. 153—69.)



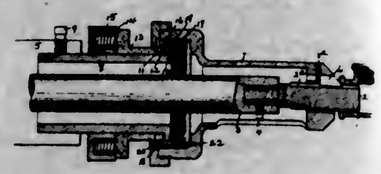
1. The process of forming a boiler header which consists in subjecting a wrought metal plate of substantially the thickness of the metal of the header to successive transformations of the flange from a substantial cylinder to a cone of less than 25°, and then to a cylinder, while at a red heat substantially below welding heat, whereby the metal is permitted adequate freedom of flow.

2. The process of forming a boiler header which consists in subjecting a wrought metal plate of substantially the thickness of the metal of the header to successive transformations of the flange while unconfined, from a substantial cylinder to a cone of less than 25°, and then to a cylinder, while at a red heat substantially below welding heat, whereby the metal is permitted adequate freedom of flow.

3. The process of forming a boiler header which consists in subjecting a wrought metal plate of substantially the thickness of the metal of the header to successive transformations of the flange from a substantial cylinder to a cone and then to a cylinder, in dies having a conical clearance and reduction space of not more than 25° angularity, while at a red heat below welding heat, whereby the metal is permitted adequate freedom of flow.

4. The process of forming a boiler header which consists in transforming a wrought metal plate by a series of substantially non-thinning operations into a closed end tube without seam or weld, heating the blank between each operation of the series, cooling the closed end while the blank is being operated upon, and finally shaping the blank into header form.

1,064,218. SCREW-CUTTING MACHINE. FRANK HIRSCH, Erie, Pa., assignor to Jarecki Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 3, 1910. Serial No. 564,821. (Cl. 10—87.)



1. In a screw cutting machine, the combination of a spindle; a face cutter rotated with the spindle; a screw cutter carried by the spindle; a feed screw; and means connecting the face cutter and feed screw to give to the face cutter through a part of its travel a feed movement directly following the feed movement of the screw.

2. In a screw cutting machine, the combination of a spindle; a face cutter rotated with the spindle; a screw cutter carried by the spindle; a feed screw; and means mounted concentric with the spindle connecting the face cutter and feed screw to give to the face cutter through a part of its travel a feed movement directly following the feed movement of the screw.

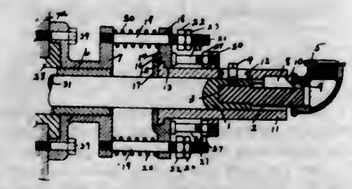
3. In a screw cutting machine, the combination of a spindle; a face cutter rotating with the spindle; a screw cutter carried by the spindle, said face cutter and screw cutter being movable relatively to each other in an axial direction; and feeding means concentric with the spindle for feeding axially said face cutter and screw cutter different distances.

4. In a screw cutting machine, the combination of a spindle; a face cutter rotating with the spindle; a screw cutter carried by the spindle; screw actuated means concentric with the spindle for feeding said face cutter and screw cutter and devices for varying the axial movement of the face cutter relatively to the screw cutter.

5. In a screw cutting machine, the combination of a spindle; a face cutter rotating with the spindle; a screw cutter carried by the spindle; means for feeding axially the face cutter with the screw cutter; and devices for arresting the feed movement of the face cutter independently of the screw cutter.

[Claims 6 to 14 not printed in the Gazette.]

1,064,219. SCREW-CUTTING MACHINE. FRANK HIRSCH and JOHN J. BEMER, Erie, Pa., assignors to Jarecki Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1911. Serial No. 661,258. (Cl. 10—128.)



1. In a screw cutting machine, the combination of a spindle; a face cutter rotated with the spindle; a screw cutter carried by the spindle; a feed screw operating on the spindle; a yielding pressure device exerting pressure on the face cutter to force it forward; means for actuating the face cutter to force it backward with the backward movement of the spindle and against the pressure device; and a stop for limiting the forward movement of the face cutter under the influence of the pressure device to less than the forward movement of the spindle.

2. In a screw cutting machine, the combination of a spindle; a face cutter rotated with the spindle; a screw cutter carried by the spindle; a feed screw operating on the spindle; a yielding pressure device for exerting pressure on the face cutter to force it forward into cutting position; and means actuated by the spindle for forcing the face cutter axially with the spindle to withdraw it.

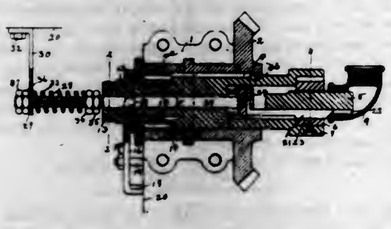
3. In a screw cutting machine, the combination of a spindle; a face cutter rotated with the spindle; a screw cutter carried by the spindle; a feed screw operating on the spindle; a yielding pressure device for exerting pressure on the face cutter to force it forward into cutting position; means actuated by the spindle for forcing the face cutter axially with the spindle to withdraw it; and a stop for limiting the feed movement of the face cutter independently of the movement of the screw cutter.

4. In a screw cutting machine, the combination of a spindle; a face cutter rotated with the spindle; a screw cutter carried by the spindle; a feed screw operating on the spindle; a spring exerting pressure on the face cutter to actuate it in one direction; and means actuated by the spindle for actuating the face cutter axially with the spindle and against the spring in the opposite direction.

5. In a screw cutting machine, the combination of a spindle; a face cutter rotated with the spindle; a screw cutter carried by the spindle; a feed screw operating on the spindle; a spring exerting pressure on the face cutter to actuate it in one direction; means actuated by the spindle for actuating the face cutter axially with the spindle and against the spring in the opposite direction; and a stop for limiting the forward movement of the cutter.

[Claims 6 to 11 not printed in the Gazette.]

1,064,220. SCREW-CUTTING MACHINE. FRANK HIRSCH, Erie, Pa., assignor to Jarecki Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed Nov. 20, 1911. Serial No. 661,347. (Cl. 10—128.)



1. In a screw cutting machine, the combination of a spindle; a face cutter rotated with the spindle; a screw cutter carried by the spindle; a feed screw operating on the spindle; a spring mounted concentrically with the spindle exerting pressure on the face cutter to actuate it in one direction; and means actuated by the spindle for actuating the face cutter axially with the spindle and against the spring in the opposite direction.

2. In a screw cutting machine, the combination of a screw cutter spindle; a face cutter actuated with said spindle; a screw cutter carried by said spindle; a feed screw operating on said spindle; a face cutter spindle extending from the face cutter within the screw cutter spindle; and devices independent of the spindle operating upon the rear end of the face cutter spindle for actuating the same to force the face cutter forward into feeding position and to withdraw the same.

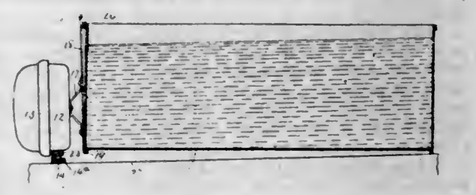
3. In a screw cutting machine, the combination of a screw cutter spindle; a face cutter actuated with said spindle; a screw cutter carried by said spindle; a feed screw operating on said spindle; a face cutter spindle extending from the face cutter within the screw cutter spindle; devices operating upon the rear end of the face cutter spindle for actuating the same to force the face cutter forward into feeding position and to withdraw the same; and means acting on the face cutter spindle for limiting its movement relatively to the movement of the screw cutter spindle.

4. In a screw cutting machine, the combination of a screw cutter spindle; a face cutter actuated with said spindle; a screw cutter carried by said spindle; a feed screw operating on said spindle; a face cutter spindle extending from the face cutter within the screw cutter spindle; devices operating upon the rear end of the face cutter spindle for actuating the same to force the face cutter forward into feeding position and to withdraw the same; means operating the rear end of the face cutter spindle for giving it a feed movement coincident to the feeding movement of the screw cutter spindle through a part of the travel of the screw cutter spindle; and a stop for limiting the movement of the feed cutter spindle to less than the movement of the screw cutter spindle.

5. In a screw cutting machine, the combination of a screw cutter spindle; a face cutter rotated with said spindle; a screw cutter carried by said spindle; a feed screw operating on said spindle; a face cutter spindle extending within the screw cutter spindle; a yielding pressure device operating upon the face cutter spindle for actuating it in one direction; and means for connecting the face cutter spindle with the screw cutter spindle for actuating the face cutter spindle against the pressure device in the opposite direction.

[Claims 6 to 8 not printed in the Gazette.]

1,064,221. DRIP-PAN ALARM. ALBERT H. HOLMES, Malden, Mass. Filed Sept. 5, 1912. Serial No. 718,707. (Cl. 116—15.)



1. A drip-pan alarm comprising a spring-operated bell having an actuating push-piece projecting from its periphery and constituting a yielding leg, and means for attaching the bell to a pan, said leg projecting below the attaching means, and being adapted to bear on a supporting base and yieldingly support the adjacent portion of the pan raised above said base, the raised portion of the pan being depressible by an accumulation of water therein, to cause the operation of the bell.

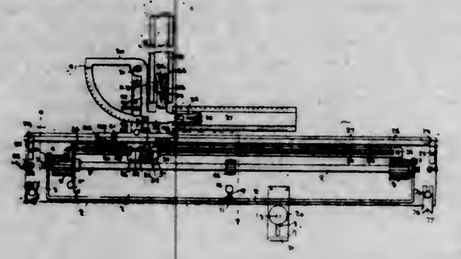
2. A drip-pan alarm comprising a spring-operated bell having an acuating push-button projecting from its periphery and constituting a yielding leg, and an attaching member secured rigidly to the bell casing, and having ears at its opposite ends adapted to engage the upper and lower edges of a pan, the said leg projecting below the lower ear.

3. A drip-pan alarm comprising a spring-operated bell having an actuating push-button projecting from its periphery and constituting a yielding leg, and an attaching member composed of a flexible metal strip secured rigidly to the bell casing, and having at its lower end an ear adapted to engage the lower edge of a pan, its opposite end being adapted to be bent to form an ear engaging the upper edge of the pan, the said leg projecting below the lower end of the strip.

4. A drip-pan alarm comprising a spring-operated bell having an actuating push-piece projecting from its periphery and constituting a yielding leg, means for attaching the bell to a pan, said leg projecting below the attaching means, and having means for varying its resistance to displacement by the weight of the pan and its contents.

5. A drip-pan alarm comprising a spring-operated bell having an actuating push-piece projecting from its periphery and constituting a yielding leg, means for attaching the bell to a pan, said leg projecting below the attaching means, and having an adjustable foot, and a spring interposed between said foot and the bell casing, and yieldingly resisting displacement of the leg by the weight of the pan and its contents, the force of said spring being variable by adjustments of said foot.

1,064,222. COMBINED PARALLEL RULER, SECTION-LINER, AND PROTRACTOR. EUGENE C. HOLMES, Jonesville, Va., assignor of one-half to Luther M. Carmical, Jonesville, Va. Filed June 10, 1912. Serial No. 702,799. (Cl. 33—19.)



1. In a drafting instrument, a roller having enlarged corrugated ends adapted to contact with a sheet of drawing paper, a straight edge associated with the roller and adapted to be moved thereby when the roller is rolled, a lever pivoted concentrically with the roller and carrying a pawl in operative relation with the corrugations of one end of the roller for intermittently rotating the roller on its axis when the lever is operated, and means for regulating the swing of the lever, whereby the straight edge may be moved an equal distance by each succeeding movement of the lever.

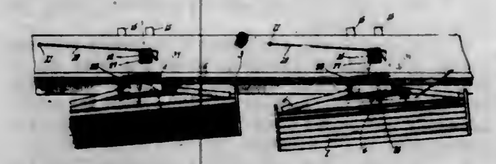
2. In a drafting instrument, a base, a roller rotatably connected with the base, a lifter-bar connected with the roller and with the base and adapted to co-act with the roller for lifting the base, a latch co-acting with the lifter bar for retaining the base in lifted position, and a guiding means for a pen or pencil associated with the base and roller.

3. In a drafting instrument, a base, a roller associated with the base, a lifting-bar having arms pivotally connected with the base and said roller being pivotally connected to the lifting-bar and thereby adapted to be raised or lowered relative to the base, and a spring-pressed latch for engaging the lifting-bar for the purpose specified.

4. In a drafting instrument, a base, a roller operatively connected with the base and adapted to be operated for moving the base across a sheet of drawing paper, said base having an adjustably mounted station-plate at each end, for the purpose specified.

5. In a drafting instrument, a base, a roller operatively connected with the base and adapted to be operated for moving the base across a sheet of drawing paper, said base having an adjustably mounted station-plate at each end, one of said station-plates having a V-shaped notch whereby the base may be repeatedly and accurately started from a given station.

1,064,223. APPARATUS FOR SEPARATING GOLD AND OTHER METALS FROM SAND, &c. EZRA S. HOTT, San Luis Obispo, Cal. Filed June 2, 1908. Serial No. 436,265. (Cl. 83—89.)



1. The combination with a riffle unit, of a distributing flume having a concave bottom with an opening therein, a screen at said opening, a gate beneath said screen controlling the flow through the screen, said gate being spaced from the screen, means for supplying water between the screen and gate, and means for conducting the material from the gate to the riffle unit.

2. The combination with a riffle unit, of a distributing flume having an opening in its bottom, a screen for said opening, a stationary plate extending under and separated from the screen, and having openings, a movable stationary plate having openings to register with those of the gate plate, and provided with manual operating means, means for supplying water between the screen and the gate plate, and means for conducting material from the openings in the stationary gate plate to the riffle unit.

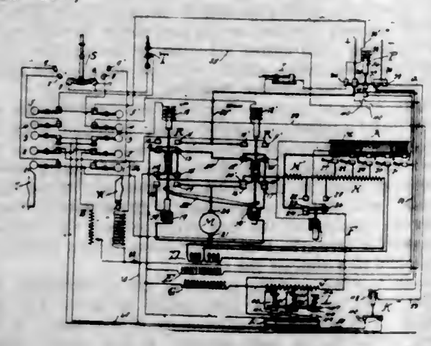
3. The combination with a riffle unit, of a distributing flume provided with an opening at the bottom, said flume being inclined from end to end, a horizontal screen at said opening, one end of the screen being substantially on a level with the bottom of the flume and the other end of the screen being above such bottom a distance corresponding to the drop of the flume in the length of the screen, forming an opening between said end of the screen and the bottom of the flume, a gate beneath said screen, means for conducting material from the gate to the riffle unit, and water supply means extending into the space between the screen and the gate at the end farthest removed from the aforesaid open space to deliver a current of water through said space.

4. The combination with an inclined flume, a horizontal perforated gate seat in the bottom thereof, a horizontal perforated gate plate sliding on said gate seat, a horizontal screen above the gate and separated therefrom, the space between the seat and gate opening at one end onto the bottom of the flume, and a water supply pipe opening into said space at the other end thereof to supply a current of water through said space.

5. The combination with a riffle unit, of a flume having a gate, said gate being adjustable to control the supply of material therethrough, means for conducting material from said gate to the riffle unit, a screen for the gate, said screen being above the gate and located in the bottom of the flume, a regulatable water supply connection from the flume at said gate discharging onto the riffle unit, and deflector means extending over said screen to confine the flow of water toward the screen and to control the supply of water from the flume to the water supply connection, said deflector being pivoted to the flume and extending from its pivotal point longitudinally over the screen and in a down-stream direction.

[Claims 6 to 11 not printed in the Gazette.]

1,064,224. MOTOR-CONTROLLING MECHANISM. JOHN D. IHLDER, New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Oct. 31, 1908. Serial No. 460,524. (Cl. 172—152.)



1. In a controlling system, the combination with an electric motor, of retarding mechanism therefor, automatic means for effecting the operation of said mechanism, and manually controlled means for effecting the operation of said mechanism with a different degree of power.

2. In a controlling system, the combination with an electric motor, of a retarding device therefor, automatic and manual means for effecting the operation of said device, and means for reducing the operative power of said device when controlled manually.

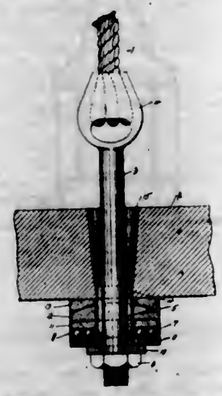
3. In a system of motor control, the combination of an electric motor, resistance in a circuit in parallel to the motor, an electroresponsive device for varying said resistance, and a plurality of means for effecting the operation of said device to an extent depending on which of said means is operated.

4. In a system of motor control, the combination with an electric motor, of resistance in a circuit in parallel to the motor, electromagnetic apparatus for varying said resistance, a plurality of circuits for said apparatus, and means for impeding the current in one of said circuits and thereby controlling the extent of operation of said electromagnetic apparatus.

5. In a system of motor control, the combination with an electric motor, of resistance in a circuit of the motor, an electro-responsive device for effecting a variation in said resistance, a plurality of circuits for said electro-responsive device each arranged to receive current proportional to the voltage of the motor armature, resistance in one of said last-named circuits, and devices for opening and closing the circuits.

[Claims 6 to 15 not printed in the Gazette.]

1,064,225. BALL-BEARING CONNECTING DEVICE FOR ROPES OR CABLES. GRIFFITH JOHN, Yonkers, N. Y. Filed Oct. 24, 1907. Serial No. 398,937. (Cl. 64—49.)



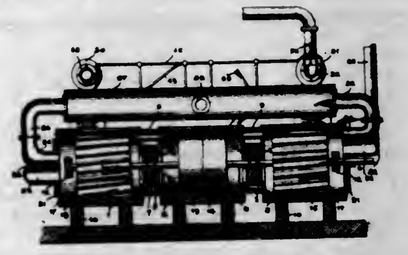
1. The combination with a supported member, of a rod extending through said member, a sleeve on the extended end of the rod, a flange formed on the outer end of the sleeve, bearing washers, bearing rollers between the washers, and equalizing washers, said bearing washers and equalizing washers being mounted on the rod between the flange and said supported member.

2. In a connecting device, the combination of a supported member, a thimble rod extending through said member, a sleeve mounted on the extended end of the rod and extending between the rod and said member, a flange formed on the outer end of the sleeve, a nut threaded onto the rod and engaging the flange, bearing washers mounted on the sleeve, bearing balls between the washers, and equalizing washers mounted on the sleeve between the supported member and the bearing washers.

3. The combination with a rod, of bearing washers mounted on the rod, bearing balls between the washers, a supported member, and equalizing washers mounted on the rod between the supported member and bearing washers.

1,064,226. ROTARY ENGINE. JOHN JOHNSON, North Shields, England. Filed Dec. 14, 1912. Serial No. 736,695. (Cl. 121—58.)

1 An engine of the character described, comprising a casing, a rotary element mounted to turn in the casing, said rotary element comprising a cylindrical body portion, and a circular series of inclined blades or vanes, said blades or vanes of an appreciably greater length than the length of the body portion and secured to the periphery of said body portion with the free ends of said blades projecting in circular series an appreciable distance beyond one end of said body portion, substantially as described.



2. An engine of the character described, comprising a casing, a rotary element mounted to turn in the casing, said rotary element comprising a cylindrical body portion, and a circular series of inclined blades or vanes, said blades or vanes of an appreciably greater length than the length of the body portion and secured to the periphery of said body portion with the free ends of said blades projecting in circular series an appreciable distance beyond one end of said body portion, and said body portion having a plurality of longitudinally and angularly positioned passages therethrough, substantially as described.

3. An engine of the character described, comprising a casing, a rotary element mounted to turn in the casing, said rotary element comprising a cylindrical body portion, and a circular series of inclined blades or vanes, said blades or vanes of an appreciably greater length than the length of the body portion and secured to the periphery of said body portion with the free ends of said blades projecting in circular series an appreciable distance beyond one end of said body portion, and means for directing steam tangentially against the blades, substantially as described.

4. An engine of the character described, comprising a casing, a rotary element mounted to turn in the casing, said rotary element comprising a body portion, a circular series of inclined blades or vanes secured to the body portion and projecting at one end beyond the same, said body portion having a plurality of longitudinally and angularly positioned passages therethrough, and means for directing steam tangentially against said blades, substantially as described.

5. An engine of the character described, comprising a casing, a rotary element mounted to turn in the casing, said rotary element comprising a body portion, a circular series of inclined blades or vanes secured to the body portion and projecting at one end beyond the same, means for directing steam tangentially against said blades or vanes, and means for directing steam longitudinally through said rotary element, substantially as described.

[Claims 6 to 14 not printed in the Gazette.]

1,064,227. SALT OF HEXAMETHYLENETETRAMIN AND PROCESS OF MAKING SAME. ADOLF KIRCHER, Sindlingen, near Höchst-on-the-Main, Germany, assignor to Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, a Corporation of Germany. Filed Sept. 18, 1912. Serial No. 721,027. (Cl. 23—24.)

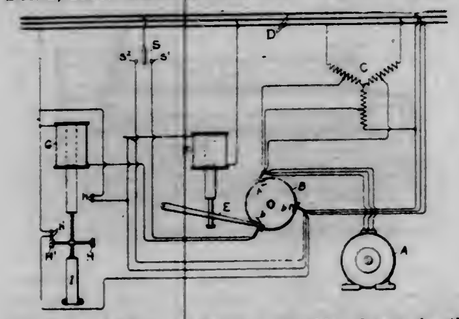
1. The process of preparing a new salt of hexamethylenetetramin, which consists in causing two molecules of hexamethylenetetramin to act upon one molecule of camphoric acid in the presence of an indifferent solvent.

2. As a new product, the hexamethylenetetramin camphorate of the formula:

$$C_8H_{14}\begin{matrix}COOH[(CH_2)_6N_4]\\COOH[(CH_2)_6N_4]\end{matrix}$$

being a white body, crystallizing from ethyl-acetate in well-formed needles, readily soluble in water, ethyl-alcohol and methyl-alcohol, more difficultly soluble in chloroform and benzene.

1,064,228. AUTOMATIC STARTING-SWITCH. CHARLES D. KNIGHT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 1, 1905. Serial No. 289,775. (Cl. 172—289.)



1. In combination, a switch rotatable always in the same direction and having an off-position and a plurality of operative positions, operating means adapted to move said switch step by step, controlling means adapted when actuated to energize said operating means automatically a predetermined number of times at predetermined intervals, and means for energizing said operating means independently of said controlling means.

2. In combination, a switch rotatable always in the same direction and having an off-position and a plurality of operative positions, an electromagnet for operating said switch, ratchet connections between said switch and said magnet, a controlling magnet, means controlled by said controlling magnet for closing and breaking the circuit of said operating magnet a predetermined number of times at predetermined intervals, and means for closing the circuit of the operating magnet independently of the controlling magnet.

3. In combination, a switch rotatable always in the same direction and having an off-position and a plurality of operative positions, an operating magnet, ratchet connections between said switch and said magnet, a controlling magnet, a switch actuated by said controlling magnet and adapted to close and break the circuit of said operating magnet a predetermined number of times, and means for retarding the movement of the last-mentioned switch.

4. In combination, a switch rotatable always in the same direction and having an off-position and a plurality of operative positions, an electromagnet for operating said switch, ratchet connections between said switch and said magnet, a controlling magnet, means controlled by said controlling magnet for closing and breaking the circuit of said operating magnet a predetermined number of times at predetermined intervals, means for closing the circuit of the operating magnet independently of the controlling magnet, and means controlled by the movement of said switch for breaking the circuit of said controlling magnet.

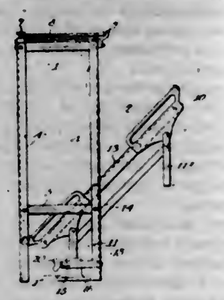
5. In combination, a switch rotatable always in the same direction and having an off-position and a plurality of operative positions, an electromagnet for operating said switch, ratchet connections between said switch and said magnet, a controlling magnet, means controlled by said controlling magnet for closing and breaking the circuit of said operating magnet a predetermined number of times at predetermined intervals, means for closing the circuit of the operating magnet independently of the controlling magnet, and switch contacts carried by said switch in circuit with said controlling magnet.

[Claims 6 to 13 not printed in the Gazette.]

1,064,229. FOLDING BED. SAMUEL KOHN, Pittsfield, Mass. Filed Oct. 21, 1912. Serial No. 727,008. (Cl. 5—18.)

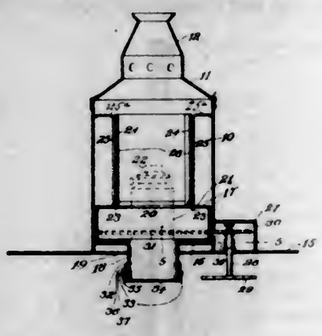
1. The combination of a bed having a foldable element, a housing comprising a plurality of jointed connected elements adapted to be folded together for transportation, and means for permanently but detachably securing an element of the housing to an element of the bed.

2. The combination with a bed comprising a bed frame having legs pivoted thereto, of a housing comprising a



top and end portions pivoted thereto, and means for permanently but detachably securing said end portions to legs of the bed.

1,064,230. SIGNAL-LAMP. NATHAN KRAUS, Indiana Harbor, and CLARENCE A. PHELPS, Hammond, Ind. Filed Aug. 19, 1912. Serial No. 715,815. (Cl. 240—23.)



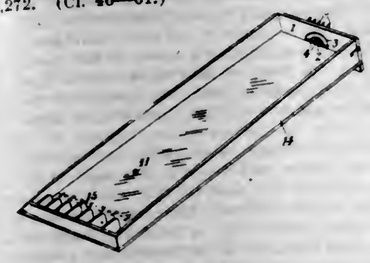
1. A lamp comprising a casing containing a burner and an annular shelf, and fitted with lenses, a rotatable carrier mounted in the casing, said carrier comprising a hollow drum supported on the shelf, and having a top opening and a depending bottom tube in line with said opening, a font mounted in said tube and opening, means for detachably fastening the font to the tube, colored slides on the carrier, and means for rotating the carrier.

2. A lamp comprising a casing containing a burner, and fitted with lenses, a rotatable carrier mounted in the casing, said carrier comprising a hollow drum having side apertures, and a top opening and a depending tube in line with said opening, a font mounted in said tube and opening, means for detachably fastening the font to the tube, colored slides on the carrier, a toothed wheel engageable with the side apertures of the drum, and means for operating the toothed wheel.

3. A lamp comprising a casing containing a burner, and fitted with lenses, a rotatable carrier mounted in the casing, said carrier comprising a hollow drum having side apertures, and a top opening and a depending tube in line with said opening, a font mounted in said tube and opening, means for detachably fastening the font to the tube, colored slides on the carrier, a toothed wheel engageable with the side apertures of the drum, means for operating the toothed wheel, and indicating devices on the font for the slides.

4. A lamp comprising a casing containing a burner, and fitted with lenses, a rotatable carrier mounted in the casing, colored slides on the carrier, a toothed wheel operatively engaging the carrier, a spindle carrying said wheel, said spindle having a squared portion, spring strips in engagement with opposite sides of the squared portion of the spindle to resist rotation thereof, and means for operating the spindle.

1,064,231. GAME APPARATUS. EDWARD A. LEFÈBRE, New York, N. Y. Filed June 18, 1912. Serial No. 704,272. (Cl. 46—61.)

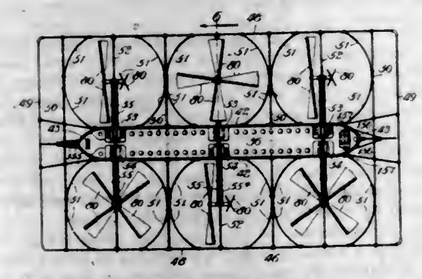


1. A game apparatus comprising a game board elevated at one end and having a plurality of receptacles at the opposite end, a target secured to the board at its elevated end, and provided with means for indicating when the target has been hit, and a projectile adapted to be propelled against the target and to be returned by gravity into one of the receptacles.

2. A game apparatus comprising a projectile, a target having a movable member adapted to be hit by the projectile, a marker movably secured to the back of the target and normally concealed from view by the face thereof, and means adapted to move the marker into exposed position upon the impact of the projectile against the movable member of the target.

3. A game apparatus comprising a projectile, a target having a movable member normally projecting beyond the face of the target, a marker movably secured to the back of the target and normally held in concealed position behind the face of the target by engagement with said movable member, means for releasing said marker from engagement with the movable member when the latter is hit by the projectile, and a spring secured to the marker and adapted to move it into exposed position when it is released from engagement with the movable member of the target.

1,064,232. AIRSHIP. HERMAN LEINEWEBER, South Chicago, Ill. Filed Nov. 13, 1909. Serial No. 527,784. (Cl. 244—14.)



1. In an air-ship, the combination of its superstructure, a car connected with and depending from said superstructure, a frame surrounding the car and extending in the same horizontal plane as the latter and formed of side and end members connected together and spaced from the car, cross-members connected with said side members and extending through said car, and curved members connected with said side, end and cross-members and forming circular openings in the frame at opposite sides of the said car, propellers supported on said cross-members in said openings and adapted to be turned about said cross-members for setting the propellers, and means for driving said propellers.

2. In an air-ship, the combination of a support carried by the ship, a propeller-device formed of two spaced members provided with blades carried by said support and diametrically opposed thereon, means for rotating said propeller-members disposed on opposite sides of said support and movable with said propellers about said support whereby the propeller members and driving means therefor are in balanced condition about said support, and means for moving said propellers and operating means therefor about said support, for the purpose set forth.

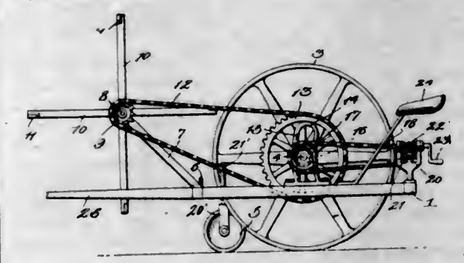
3. In an air-ship, the combination of a rotatably supported propeller, means for rotating said propeller, a motor for turning said propeller on its support to set it, a source of fluid-pressure supply, and a combined rotary and slide valve interposed between said motor and supply, for the purpose set forth.

4. In an air-ship, the combination of a rotatably supported propeller, means for rotating said propeller, a motor for turning said propeller on its support to set it, a source of fluid-pressure supply, a pair of valves, one of which is a combined rotary and slide valve, interposed between said motor and supply, and automatically-operated means actuated upon tilting of the ship for operating the other of said valves, for the purpose set forth.

5. In an air-ship, the combination of a plane, a car depending therefrom and extending centrally of the plane, propellers supported on the car at opposite sides thereof below the plane and adjacent to the lateral edges and ends thereof, said propellers being adapted to be turned on their supports to set them, means for rotating said propellers, and means operating automatically upon tilting of the ship for turning the propellers on their supports to right the ship.

[Claims 6 to 88 not printed in the Gazette.]

1,064,233. STALK-BREAKER. JAMES A. MARSHALL, Cordell, Okla. Filed Oct. 19, 1912. Serial No. 726,781. (Cl. 55—118.)



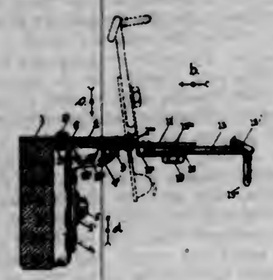
A stalk breaker comprising a frame, the forward bar of which constitutes a stalk gathering bar, supporting wheels for the frame, means to adjustably mount said frame on said wheels, a pair of forwardly inclined supporting arms carried on said frame, the free ends of which terminate in bearings in a plane forward of the vertical plane of said forward bar of the frame, and a reel rotatably mounted in the bearings of said supporting arms, the peripheral bar of said reel being adapted to extend in close proximity to said forward bar as the reel is rotated.

1,064,234. THREAD-GUIDE SUPPORT FOR SPINNING OR TWISTING MACHINES. RUFUS S. MATTESON, Providence, R. I. Filed Aug. 26, 1912. Serial No. 716,956. (Cl. 118—16.)

1. In a thread guide support for spinning or twisting machines, the combination with the stationary roller beam, of a metal thread board having slots or openings therein with a bar forming one member of a hinge joint, a metal strap, having a curved or hook shaped end, forming the other member of the hinge joint, and an adjustable block or plate for securing said strap to said stationary roller beam, and also forming a support for the thread board in its lowered position, and having a projection thereon, to be engaged by the thread board, to act as a stop to engage the inner edge of the thread board and limit the upward movement thereof.

2. In a thread guide support for spinning or twisting machines, the combination with the hinged thread board,

of a finger head hinged thereto, and means for automatically locking said finger head to said thread board, when the thread board is raised.

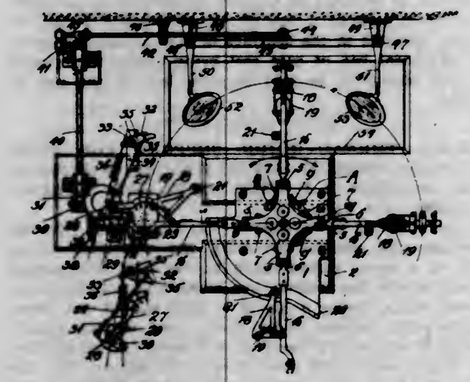


3. In a thread guide support for spinning or twisting machines, the combination with the hinged thread board, of a finger head hinged thereto, and free to be raised or lowered, when said thread board is in its normal lowered position, and automatically locked to the thread board, to be held rigid relative thereto, when said thread board is in its raised position, and means for automatically locking said finger head to said thread board, said means adapted to be manually operated to unlock said finger head from said thread board.

4. In a thread guide support for spinning or twisting machines, the combination with the hinged thread board, and a plate secured thereto, and having a curved or hook shaped outer edge, forming one member of a hinge joint, of a finger head having an opening therein, and a bar adapted to enter said curved or hook shaped edge, and form the second member of the hinge joint, between the thread board and the finger head, and a thread guide adjustably secured to said finger head.

5. In a thread guide support for spinning or twisting machines, the combination with the hinged thread board, and a plate adjustably secured thereto, and having a curved or hook shaped outer edge, forming one member of a hinge joint, of a finger head, having a bar thereon adapted to enter said curved or hook shaped edge, and form the second member of the hinge joint, between the thread board and the finger head, and means for locking said finger head to said thread board, when said thread board is raised, and a thread guide, adjustably secured to said finger head.

1,064,235. DIPPING APPARATUS. DAVID C. MCCAN, Los Angeles, Cal. Filed Aug. 19, 1912. Serial No. 715,949. (Cl. 91—46.)

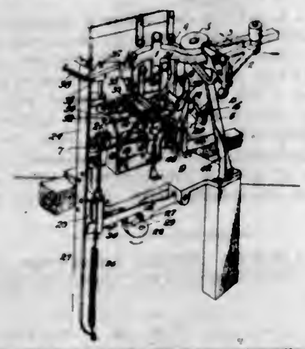


1. In a dipping machine, the combination with a plurality of trays containing a liquid binder, of a means to carry a plurality of blocks, means to move said trays to cause one end of the blocks to be dipped in said binder, means to axially rotate said arms to cause the other end of said blocks to be coated simultaneously with the coating of said first named block, and means to automatically release said blocks from said carrying means.

2. In a dipping machine, the combination with a revoluble head, of a plurality of arms journaled in said head, a table for supporting a block, means on said arms for clamping the block on said table, means to hold said arms in a fixed position during one portion of the revolution thereof, means to axially rotate said arms during another portion of the revolution thereof, a tank containing a liquid binder, a plurality of trays, means to periodically operate said trays to dip same in the liquid binder in said tank and raise them to coat the ends of said blocks, and means to release the blocks from said arms.

3. The combination with a revoluble head, of a plurality of arms journaled in said head, and provided with clamping means, a table on which a block is arranged to be delivered, a basket to support said block in a vertical position, a gate forming one side of said basket, means to cause said clamping means to clamp said block, means to move said gate when said block has been clamped, means to return said gate to normal position, and means to cause both ends of said block to be clamped, said means for causing said clamping means to clamp said block also serving to release said block from said arms after dipping.

1,064,236. BLOCK-DELIVERY MECHANISM. DAVID C. MCCAN, Los Angeles, Cal. Filed Sept. 18, 1912. Serial No. 721,068. (Cl. 193—24.)



1. In a mechanism of the character described, a carrier arm, means to hold a block in said carrier arm, means to release said block from said carrier arm, a frame for receiving the block from said carrier arm, means to clamp the block in said frame, means to hold said frame in a vertical position, means to release said frame, a conveyer, means to bring said frame to a horizontal position to cause said block to be delivered to said conveyer, means to release the block from said frame, and means to control all of said means in the order named.

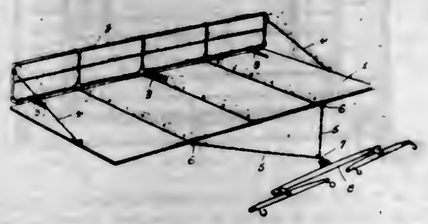
2. In a mechanism of the character described, a carrier arm for a block provided with means to hold a block, means to release the block from said carrier arm, a frame for receiving the block from said carrier arm in a vertical position, and provided with means to clamp the block therein, means to hold said frame in a vertical position, a conveyer, means actuable by said carrier arm to release said frame, means to bring said frame to a horizontal position to deposit the block upon said conveyer in a horizontal position, means to release the block from said frame, and means to control said means in the order named.

3. In a mechanism of the character described, a carrier arm provided with clamping means for a block, means to release the block from said carrier arm, a frame to receive the block from said carrier arm, means to clamp the block in said frame, means to retard the movement of said clamping means on said block, a conveyer, means to actuate said frame to deposit said block on said conveyer, and means to release said block from said frame.

4. In a block delivery mechanism, a receiving frame for a block, means to clamp the block in said frame, means to retard the movement of said clamping means on said block to prevent injury thereto, means to hold said frame in a vertical position, means to actuate said holding means to release said frame, a conveyer, means to bring said frame to a horizontal position to cause said block to be delivered to said conveyer, means to release said block from said frame, and means to control said means in the order named.

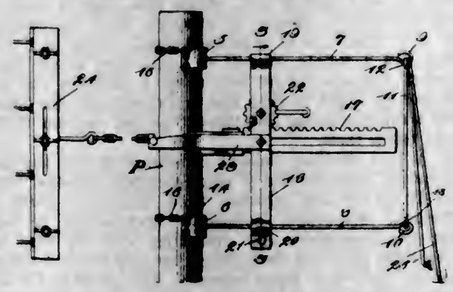
5. In a block delivery mechanism, a frame to receive a block in a vertical position, locking means for said frame, means to clamp said block in said frame, means to retard the movement of said clamping means on said block to prevent injury thereto, a conveyer, means to bring said frame to a horizontal position and deliver the block to said conveyer, means to raise said frame to normal vertical position, and means controllable by the raising of said frame to actuate said clamping means and release the block from said frame.

1,064,237. SKID. JOSEPH A. MCCLURE, Bemidji, Minn. Filed Dec. 1, 1911. Serial No. 663,411. (Cl. 21—48.)



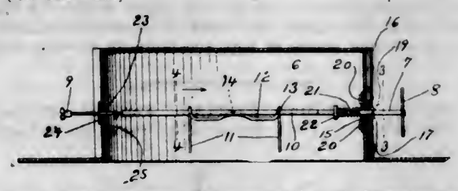
A device of the character described comprising an imperforate rectangular body made up of sheets overlapped and riveted together at their adjacent edges; a rectangular frame hingedly secured at the rear edge of said body; chains secured to said body and said frame preventing said frame from swinging on its hinged joint farther than in perpendicular relation with said body; and a connection at the front edge of said body by which the latter is dragged on the ground.

1,064,238. ANCHORING DEVICE FOR WIRE-STRETCHERS. PETER MCMILLAN, Monango, N. D. Filed Feb. 7, 1912. Serial No. 676,042. (Cl. 30—51.)



An anchoring device for wire stretchers comprising a pair of rods adapted to be arranged in parallel relation, a flat semicircularly curved plate fixed to one end of each of the rods and adapted for close engagement with the side of a fence post, chains fixed to one of the ends of said plates and adapted to be passed around the post and detachably engaged with the other ends of the plates, said plates frictionally engaging the posts and preventing longitudinal movement of the inner ends of the rods thereon, said rods being provided with eyes at their outer ends, a connecting rod loosely engaged at its ends in said eyes, and a pair of supporting rods provided with eyes on one of their ends loosely connected to the eye on the end of one of the parallel rods, said supporting rods having movement in all directions with relation to the parallel rods, and adapted to be embedded at their other ends in the ground to provide a firm support for the outer ends of said parallel rods.

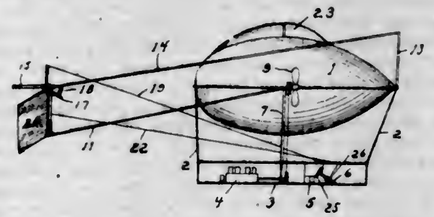
1,064,239. HAT-FASTENER. KONSTANTIN MERZIK, Detroit, Mich. Filed July 31, 1912. Serial No. 712,491. (Cl. 132—25.)



1. In a hat fastener, the combination of plates secured on opposite sides of the wall of the hat, one of said plates having a notch, a rod extending through the plates and having a projecting pin engageable in the notch to prevent rotation of the rod, teeth projecting from the rod, a friction washer on the rod, and a spring between the washer and the other of said plates, tending to hold the pin engaged in the notch, said rod being shiftable lengthwise against the tension of said spring to disengage the pin from the notch.

2. A hat fastener comprising a rod adapted to be turned in the hat, said rod having a flattened portion, a wire bent to form a pair of hooks and eyes through which the rod extends, and a connecting part between the eyes, said wire having an offset part engaging the flattened portion of the rod to prevent relative rotation of the hooks and rod.

1,064,240. COMBINED AEROPLANE AND DIRIGIBLE BALLOON. NORMAND W. MOHR, San Francisco, Cal. Filed Apr. 16, 1910. Serial No. 555,971. (Cl. 244—6.)



1. In a flying machine, a frame, a gas field adapted to support a portion of the weight of flying machine, aeroplanes the dimensions of which are greater transverse to the gas field than in the length of the machine secured to said frame and to said gas field above the center of the gas field and extending on both sides thereof, propellers adapted to drive said machine forward, a motor adapted to drive said propellers and secured to the frame, bars extending rearwardly from the said frame and gas field, a vertically extending plane carried by said bars at a distance from the gas field, means to move said plane about a vertical axis, a tail plane secured to said frame over the said vertically extending plane, and means to turn said tail plane about a horizontal axis, substantially as described.

2. In a flying machine, a frame, a gas field secured to said frame and adapted to support a portion of the weight thereof, an aeroplane secured to the frame and extending above and on both sides of the gas field, said gas field being longer than the dimension of the aeroplane parallel to the length of the machine, a propeller to drive the machine forward, a motor on the frame to drive the propeller, a rearwardly extending tail supporting frame, a vertically extending rudder plane and a plane over the rudder plane and pivoted on a substantially horizontal axis, said plane being at a distance from the gas field, substantially as described.

3. In a flying machine, a frame, a gas field secured to said frame and adapted to support a portion of the weight

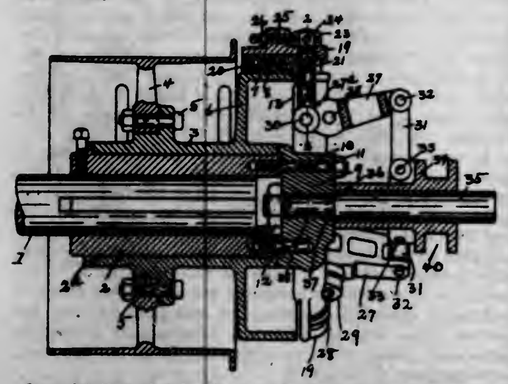
thereof, an aeroplane secured to the frame and extending outwardly on both sides of the gas field, said plane having a shorter dimension parallel to the length of the machine than the same dimension of the gas field, a propeller to drive the machine forward, a motor to drive the propeller, a rudder plane at the rear of the frame movable on a vertical axis, a plane above the rudder plane and movable on a horizontal axis, each of the tail planes being at a distance from the gas field, and means to move either or both of the steering planes at will, substantially as described.

1,064,241. PLUMBING-FITTING. FRED B. MORTON, Pasadena, Cal. Filed Nov. 9, 1910. Serial No. 591,444. (Cl. 4—21.)



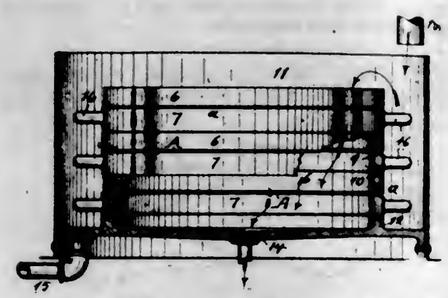
A soil pipe fitting comprising a section of pipe adapted to form a part of a line of soil pipe; a two-limbed branch formed integral with and opening out of said section of pipe, the inner limb of said branch extending upwardly and outwardly and the outer limb extending downwardly and having the outer end thereof closed, said outer limb having an inlet opening below the junction of the limbs when positioned for use, the point of junction between the limbs being above the opening of the inner limb into the body and a vent channel opening into the inner limb below the point of connection of the limbs when positioned for use, said vent channel being adapted for connection with the vent stack, and the point of connection between the vent channel and limb being at such point that the outer limb will be siphoned when a fixture is flushed.

1,064,242. FRICTION-CLUTCH. HARRY D. MURRAY, Grove City, Pa., assignor to The Bessemer Gas Engine Company, Grove City, Pa., a Corporation of Pennsylvania. Filed Oct. 4, 1911. Serial No. 652,813. (Cl. 192—11.)



In a friction clutch, the combination of an exterior annular friction surface; a friction shoe operating upon said surface, a part of said shoe overhanging said surface; a shoe carrier having parallel arms extending therefrom arranged at the side of said friction surface; parallel guide pins mounted in the arms and forming a sliding driving connection between the arms and the shoe, said pins being connected with the overhanging portion of said shoe; and mechanism extending between the arms for actuating the shoe, comprising a lever pivotally mounted on said arms and having its operating end extending between the arms and a connection between the lever and the shoe.

1,064,243. LARD-STRAINER. CHARLES NAEGELEN and AUGUST G. KLAWITTER, Cincinnati, Ohio, assignors to The Cincinnati Butchers' Supply Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 22, 1912. Serial No. 692,447. (Cl. 210—16.)



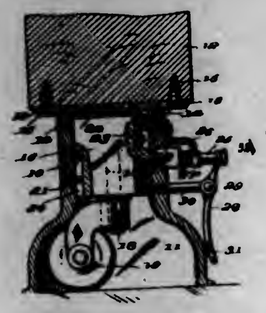
1. In a lard strainer, the combination of a cylindrical settling chamber, a series of superposed strainer-elements stacked therein and comprising annular frames and diaphragms with openings of graduated sizes, the element with the largest openings being uppermost but below the top of the settling chamber, the frames of the elements being smaller in diameter than the inside of the chamber and closely fitted to each other to produce an annular space around the elements, but closed against them, a supply conduit to admit lard to this space in which it rises and flows into the upper-most strainer-element, an outlet for the strained lard below the lower-most element and an independent outlet from the settling-chamber.

2. In a lard strainer, the combination of a cylindrical settling-chamber having an open top and an annular ridge on its bottom spaced from the side of the chamber, an outlet in said bottom and within this ridge, a stack of strainer-elements smaller in diameter than the chamber and with openings of graduated sizes resting upon this ridge, and a supply conduit to admit lard to the space between the outside of the strainer elements and the chamber in which it rises and flows over into the uppermost strainer-element and through all the elements to the outlet below them.

3. A lard strainer element consisting of two annular, superposed complementary frame-members provided with inter-fitting off-sets between their contiguous sides, a perforated diaphragm supported transversely between these frame-members and extending with its edge between them and over their inter-fitting off-sets and screws whereby the two frame-members are permanently secured to each other with the edge of the diaphragm clamped between their off-sets, to form the element complete.

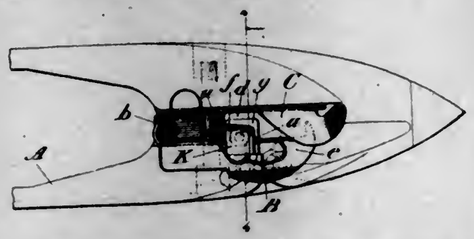
1,064,244. DISAPPEARING CASTER. KUNIBERT H. NEUGEBAUER, Hoboken, N. J. Filed June 10, 1912. Serial No. 702,921. (Cl. 16—165.)

1. A disappearing caster including a shell having an upper and a lower portion, said lower shell portion being provided with a floor engaging face, a plunger slidable in said upper shell portion, a caster mounted for rotation in said plunger and extending into said lower shell portion, a spring operating to maintain said plunger yieldably in projected position, and means for locking said plunger in withdrawn position against the resistance of said spring and above the floor engaging face of the lower shell portion.



2. A disappearing caster including a shell having an upper and a lower portion, said lower shell portion being provided with a floor engaging face, a plunger slidable in said upper shell portion and having a transverse socket, a caster mounted for rotation in said plunger and extending into said lower shell portion, a bolt operating through said upper shell portion and engaging in said socket to lock said plunger in withdrawn position and above the floor engaging face of the lower shell portion, and means for actuating said bolt.

1,064,245. LOOM-SHUTTLE. JOHN F. O'NEILL, Farnumsville, Mass., assignor to Draper Company, Hopedale, Mass., a Corporation of Maine. Filed Sept. 12, 1912. Serial No. 719,959. (Cl. 139—46.)



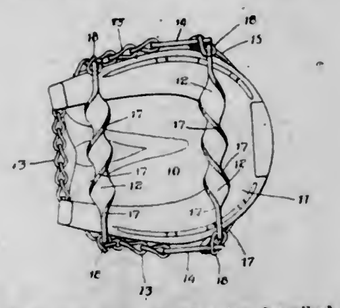
1. An automatically threading loom shuttle having the following characteristics, namely, a slotted eye; a sheet-metal threading device with a longitudinal thread passage and a slot in its wall on the eye side of the shuttle; independent hollow porcelain posts guarding the eye at front and back; a third hollow porcelain post at the juncture between the eye and the said longitudinal thread passage; the surfaces of all of said porcelain posts being exposed to the contact of the thread; all three posts being inserted through bores extending from the bottom of the shuttle and snugly held in such bores; a wooden block being in the bottom of each bore below the corresponding porcelain post; the wooden shuttle body being formed with sockets to receive the upper ends of the outer porcelain posts at the front and back of the slotted eye; and there being a holder for the top of the third and inner porcelain post, said holder being held in place within said slot in the wall of the threading device and being provided with top and bottom members socketed and apertured respectively to receive the inner post.

2. An automatically threading loom shuttle having the following characteristics, namely, a slotted eye; a threading device with a longitudinal thread passage; independent porcelain posts guarding the eye at front and back; a third porcelain post at the juncture between the eye and the said longitudinal thread passage; the surfaces of all of said porcelain posts being exposed to the contact of the thread; all three posts being inserted through bores extending from the bottom of the shuttle and snugly held in such bores; a wooden block in the bottom of each bore below the corresponding porcelain post; the wooden shuttle body being formed with sockets to receive the upper ends of the outer porcelain posts at the front end back of the slotted eye; and a wooden holder for the top of the third and inner porcelain post, said holder being provided with top and bottom flanges socketed and apertured respectively to receive the inner post.

3. An automatically threading loom shuttle having the following characteristics, namely, a slotted eye; a threading device with a longitudinal thread passage; independent porcelain posts guarding the eye at front and back; a third porcelain post at the juncture between the eye and the said longitudinal thread passage; the surfaces of all of said porcelain posts being exposed to the contact of the thread; all three posts being inserted through bores extending from the bottom of the shuttle and snugly held in such bores; a wooden block in the bottom of each bore below the corresponding porcelain post; the wooden shuttle body being formed with sockets to receive the upper ends of the outer porcelain posts at the front and back of the slotted eye; and a holder for the top of the third and inner porcelain post, said holder being provided with a top flange socketed to receive the inner post.

4. A loom shuttle having the following characteristics, namely, an eye; a threading device with a longitudinal thread passage; independent porcelain posts guarding the eye at front and back; a third porcelain post at the juncture between the eye and the said longitudinal thread passage; the surfaces of all of said porcelain posts being exposed to the contact of the thread; all three posts being inserted through bores extending from the bottom of the shuttle and snugly and fixedly held in such bores; a block in the bottom of each bore below the corresponding porcelain post; sockets to receive the upper ends of the outer porcelain posts at the front and back of the slotted eye; and a holder for the top of the third and inner porcelain post, said holder having a socket to receive the inner post.

1,064,246. NON-SLIPPING ATTACHMENT FOR HORSE-SHOES. MAURICE J. O'NEILL, Stamford, Conn., assignor of one-half to Robert H. Davis, Stamford, Conn. Filed Mar. 8, 1913. Serial No. 753,008. (Cl. 168—1.)



1. An attachment of the character described comprising transverse bars twisted in opposite directions and means for loosely securing said bars under a hoof so as to permit a rolling movement of the bars, whereby a firm engagement is secured.

2. An attachment of the character described comprising transverse bars twisted in opposite directions with their ends lying vertically, an attaching chain provided with eyes at its ends, a strap engaging the eyes, a link connecting the front bar with the eyes and links connecting the rear bar with the chain.

1,064,247. SPACEBAND-CHUTE. UMBERTO PIAGNERI, San Francisco, Cal. Filed May 31, 1912. Serial No. 700,595. (Cl. 199—7.)

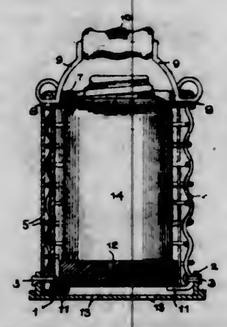
1. In a linotype machine, in combination with a chute for spacebands having a slotted long plate, an [illegible]ue buffer on the back or long plate of the chute to prevent the spacebands from transposing by delay in the chute, and a polishing pad suspended in the chute below and by the buffer and projecting into the path of the spaceband.

2. In a linotype machine, in combination with a chute for spacebands having a long plate, an oblique buffer on the long plate of the chute to prevent the spacebands from transposing, a polishing pad below said buffer on the chute, and a resilient controlling device opposed to the pad whereby the spacebands are deflected against the polishing device.



3. In a linotype machine, a longitudinally slotted vertically disposed spaceband guide-chute, with the lower wall of the slot beveled upwardly and outwardly so that the spaceband in dropping through the chute will not be transposed when assembled, due to checking engagement with the end of said slot, a yieldable deflector on the chute opposed to and lower than said beveled wall, and a yieldable polisher for spacebands, said deflector coöperating with the polisher to steady a spaceband traversing the chute.

1,064,248. PRESERVING-JAR BASKET. JENNIE POHLE, Lansdale, Pa. Filed Apr. 20, 1912. Serial No. 692,187. (Cl. 53—1.)



1. A preserving jar basket comprising a base, an upwardly projecting flange on the base, a wire mesh cylinder secured within the flange and having its lower end bent inwardly forming a support positioned above the bottom, a bail connected to the upper end of said cylinder, said bottom having openings therein, and a removable block of appreciably less diameter than the internal diameter of the cylinder, said block normally resting upon the inturned end of the cylinder and supported thereby above the bottom, substantially as described.

2. A preserving jar basket comprising a base, a wire mesh cylinder secured to the base and having an inwardly projecting lower end spaced from the base, a removable block of appreciably less diameter than the wire mesh cylinder, and supported on the inwardly bent end of the wire cylinder above the base, and said base having openings therein below the removable block, substantially as described.

1,064,249. BRAKE-RIGGING. WILLIAM GUNN PRICE, New Castle, Pa. Filed Mar. 2, 1910. Serial No. 548,844. (Cl. 188—70.)



1. In brake-rigging, the combination with a suitable truck-frame, and wheels, of a brake-beam supported thereby, brake-shoes, a brake-beam fulcrum connected to said brake-beam, vertically yielding pivotally mounted links supported by said truck-frame, and pivotally connected to said brake-beam fulcrum, friction producing means at said pivotal points, and brake operating mechanism.

2. In brake-rigging, the combination with suitable truck-frame and its wheels, of a brake-beam supported thereby, brake-shoes, a brake-beam fulcrum, a vertically yielding link supported by said truck-frame, pivotal bolts connecting said link to said truck frame and to said brake-beam fulcrum, frictional springs on said bolts, and brake operating mechanism.

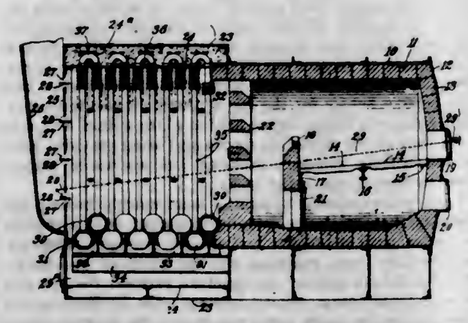
3. In brake-rigging for car trucks, the combination with suitable truck-frame and its wheels of a brake-beam supported thereby, brake-shoes, a brake-beam fulcrum, a link spring supported by said truck-frame, pivotal bolts connecting said link to said truck frame and to said brake-beam fulcrum, friction producing springs on said bolts, and brake operating mechanism.

4. In brake-rigging, the combination with a suitable truck-frame and its wheels, of a brake-beam supported thereby, brake-shoes, a brake-beam fulcrum, a yielding friction producing link connecting the brake-beam fulcrum to the truck-frame, a slack-adjuster, the yielding friction producing links acting with the slack-adjuster to take up the slack of the brake shoes.

5. In brake-rigging the combination with a suitable truck frame and its wheels, of a brake beam supported thereby, brake-shoes, a brake-beam fulcrum, a spring supported friction producing link connecting the brake-beam fulcrum to the truck frame, an automatic slack-adjuster, the spring supported friction producing link acting with the automatic slack-adjuster to take up the slack of the brake-shoes.

[Claim 6 not printed in the Gazette.]

1,064,250. MARINE SUPERHEATER. JOHN PRIMROSE, New York, and GODFREY HARTER, Dansville, N. Y., assignors to Power Specialty Company, New York, N. Y., a Corporation of New York. Filed May 15, 1911. Serial No. 627,100. (Cl. 122—169.)



1. In a marine superheater, the combination of a superheating chamber, a steam superheater therein, and a furnace for supplying hot gases of combustion to the chamber, perforated baffle between the furnace and superheating chamber for dividing the furnace gases into a plurality of currents, a stack, and regulable means between the chamber and the stack coöperating with the said perforated baffle and causing an equal distribution of the flow of gases through the superheating chamber.

2. In a steam superheater, the combination of a superheating chamber, a steam superheater therein, a furnace for supplying hot gases of combustion to the chamber, a brick checker wall between the furnace and the superheating chamber having a plurality of apertures to break up the furnace gases into a plurality of currents, and a wall between the chamber and the stack having a plurality apertures therein, dampers for said apertures, means to control said dampers independantly of one another, whereby an even flow of gases through the superheater may be obtained.

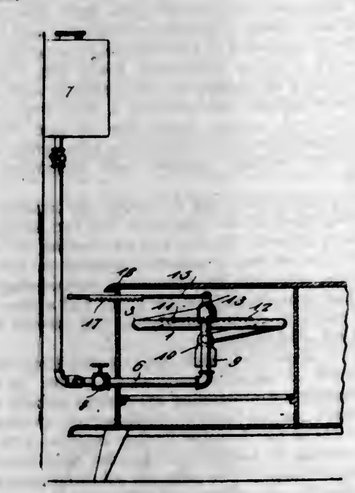
3. A stack in a marine superheater, the combination of a superheating chamber, a steam superheater therein, a furnace of cylindrical cross section having its rear end connected to the superheating chamber to discharge hot gases of combustion thereinto, a wall between the superheater and the stack having a plurality of apertures therein and means to close part or all of said apertures whereby a uniform flow of gases through the superheater may be obtained.

4. In a steam superheater, the combination with a source of heated gases, of a superheater in the path of said gases, comprising superheating elements spaced successively closer together in the direction of flow of the gases, whereby to equalize the absorption of heat throughout the superheater.

5. In a steam superheater, the combination with a source of heated gases, of a steam superheater comprising inlet and outlet headers transverse to the path of the gases through the superheater, and superheating tubes connecting the inlet and outlet headers and spaced successively closer together in the direction of flow of the gases, whereby to equalize the absorption of heat throughout the superheater.

[Claims 6 to 9 not printed in the Gazette.]

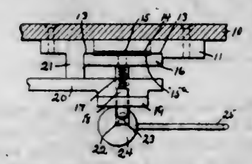
1,064,251. OIL-BURNER. JOHN R. PRING, Shawnee, Okla., assignor of one-half to William N. Hurt, Shawnee, Okla. Filed Aug. 1, 1912. Serial No. 712,710. (Cl. 158—63.)



1. An oil burner comprising a pipe bent to form a coil, said coil having upper and lower horizontally disposed tubes and laterally projecting side tubes connected therewith, a generating pan secured to and supported by said lower tube, a flame spreader pivotally secured to the upper tube, a spreader adjusting lever pivotally connected to the spreader, and means on said lever whereby the latter may be locked to hold the spreader in its adjusted position.

2. The combination with a stove having an opening of an oil burner comprising a pipe bent to form an oil heating and gas generating coil having upper and lower horizontally disposed tubes, and laterally projecting side tubes connected therewith, said lower tube having therein a burner opening, a flame spreader comprising a disk having thereon an apertured lug whereby the same is pivotally connected to said upper tube over the burner opening in the lower tube, a spreader adjusting rod pivotally connected at its inner end to said lug and adapted to project through said opening in the stove, and a rack arranged on the outer end of the rod adapted to engage one edge of the opening in the stove, whereby the rod is locked and the spreader held in its adjusted position.

1,064,252. FILM-GATE FOR MOVING-PICTURE MACHINES. BARTON A. PROCTOR, New York, N. Y., assignor to Picturegraph Company, New York, N. Y., a Corporation of New York. Filed Dec. 20, 1911. Serial No. 667,045. (Cl. 88—17.)



1. A moving picture machine having a way for a film, said way being apertured as usual and having the part above and below the aperture relieved and the sides left flat, a gate comprising a plate relieved in its central portion and moving bodily in and out in the said way, tension springs to press the gate into the way, and a handle mechanism arranged to move the gate bodily out of the way and against the tension of the springs.

2. In a moving picture machine having a way for a film, a spring pressed gate comprising a flat apertured plate moving bodily in and out of said way and having its side portions arranged to fit flatwise against the way at the sides of the aperture, and mechanism for moving out the gate against said spring tension.

3. In a moving picture machine having an apertured film way therein, a gate comprising an apertured plate having all its parts arranged to move simultaneously in and out of the said way, tension springs behind the said gate, and a handle cam mechanism for effecting the movement of the gate against the springs.

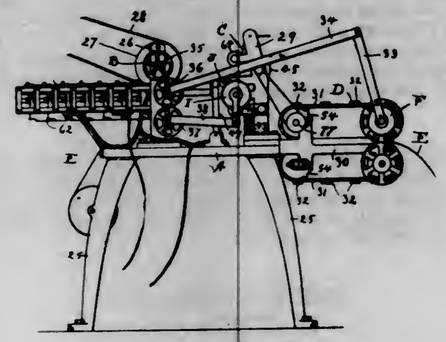
4. In a moving picture machine having a film way, a gate movable bodily in and out of said way, adjustable tension springs serving as a backing for the gate, cams provided with a handle and rotatably mounted behind the gate, and posts journaled eccentrically to the cams and connected to the gate, whereby the latter may be moved bodily against the tension of its springs.

5. In a moving picture machine having a film way, a gate movable bodily in and out of said way, adjustable tension springs serving as a backing for the gate, handled cams turning on a suitable abutment behind the gate, and an operative connection between the cams and the gate whereby the latter is moved against the tension of its springs.

1,064,253. MACHINE FOR MAKING PERFORATED SHEET-MUSIC. HARRY E. PROPSON, Plainville, Conn., assignor of one-fifth to Charles W. Hird and one-fifth to Frederick D. Hastings, Plainville, Conn., one-fifth to Henry O. Schmidt, New Britain, Conn., and one-fifth to Louis M. Schmidt, Hartford, Conn. Filed Nov. 21, 1910. Serial No. 593,301. (Cl. 164—115.)

1. In a machine for making perforated sheet music having means for feeding a master sheet and means for feeding a copy sheet, and punches suitable for perforating the said copy sheet, selector means for operating the said punches comprising a contact roll and a plurality of con-

tact fingers, and means for bringing the said fingers into contact position relatively to the said roll, the said contact roll being fixed and rigid during such movement of the contact fingers and provided with a single electrical contact coöperative with the said fingers, and means for bringing the said fingers into contact position bodily and by a relatively longitudinal movement thereof.



2. In a machine for making perforated sheet music having means for feeding a master sheet and means for feeding a copy sheet, punches for perforating said copy sheet and means for operating said punches responsive to perforations in the said master sheet comprising a stationary contact piece, selector contact fingers, and means for moving the said contact fingers relatively to the said master sheet, the said latter means comprising a radial arm, pivoted by one end and having means for supporting the said contact fingers at the other end.

3. In a machine for reproducing perforated sheet music from a master sheet, a stationary contact piece over which the master travels, a selector block having a reciprocal motion and penetrated by a set of holes, selector contact fingers fitting and passing through the said holes, each of the said fingers comprising a piece of straight wire, a spring, one end of the said spring being connected to one end of the said wire, the other end of the said spring being fixed to the said block and the body portion of the said spring being positioned in the same plane as the said wire.

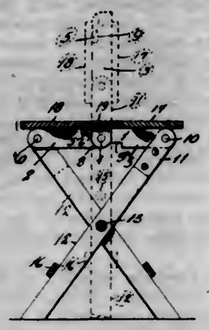
4. A machine for reproducing perforated sheet music comprising electrically operated selector mechanism having a stationary contact piece and selector contact fingers, a selector block supporting the said fingers and having a reciprocal motion relatively thereto, means for permitting the said fingers to remain stationary and in contact position during a portion of the motion of the said block relatively to the said contact piece.

5. A machine for making perforated sheet music having means for moving a copy sheet, punching mechanism comprising a punch, a punch extension flexibly connected therewith by one end and having the other end normally held out of alinement therewith, and means for operating the punch comprising a platen having reciprocal motion in alinement with the said punch and means for bringing the said other end of the extension in alinement with the said platen and punch, and the means for connecting the said punch and extension comprising a single coil spring.

[Claims 6 to 10 not printed in the Gazette.]

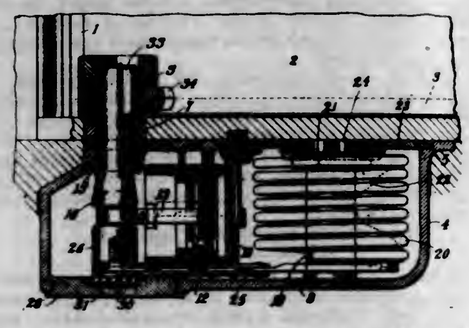
1,064,254. FOLDING TABLE. JOHN F. RICHARDSON, Edith, Tex. Filed Oct. 10, 1911. Serial No. 653,774. (Cl. 45—116.)

In a folding table, a pair of transverse top supports, each support comprising oppositely directed members arranged out of alinement and having their adjacent ends hinged together, one of said members having a flat end, a lug extending laterally from the side of the other member into the path of the flat end of the first member, table top sections secured to the transverse supports, and legs arranged in pivoted pairs and hinged to the supports, the second members of the supports having notches located to



receive the lugs of the first members whereby the legs and members may be folded in vertical parallel relation.

1,064,255. CLOSER AND CHECK FOR SINGLE-ACTING DOORS. OSCAR C. RIXSON, New York, N. Y. Filed Apr. 5, 1912. Serial No. 688,763. (Cl. 16—88.)



1. In a closer-and-check for doors, the combination of a casing adapted to be located in the floor, checking-mechanism in said casing, a spindle journaled in said casing and operatively connected to said checking-mechanism and provided with a hollow cylindrical lower end, a detachable plate covering an opening in the bottom of said casing beneath said spindle and carrying a stud that enters the hollow thereof, spring-mechanism in said casing, and jointed links operatively connecting said spring with said spindle and bearing against said cylindrical portion thereof.

2. In a closer-and-check for doors, the combination of a casing depressed at one end of its top and having a spindle-bearing adjacent thereto and an opening in its bottom beneath said bearing, a spindle journaled in said bearing and having eccentrics for connection to door-closing mechanism and door-checking mechanism, and a plate secured to said casing to cover said opening and provide a bottom-bearing for said spindle.

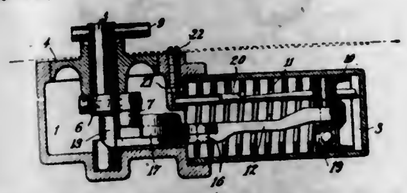
3. In a closer-and-check for single-acting doors, the combination of operating-mechanism seated in the floor and comprising a protruding cylindrical spindle having a longitudinal groove therein, a door-plate carried by the bottom edge of the door and having an offset with a cylindrical opening to receive said spindle, said opening having a longitudinal groove adjacent said first-named groove, a pin entering the concavity formed by the two grooves aforesaid, and means for causing said pin to vary the adjustment.

4. In a closer-and-check for single-acting doors, the combination of operating-mechanism seated in the floor and comprising a spindle whose upper end is cylindrical, a door-plate having a cylindrical bore adapted to receive said spindle, and adjustable means for rigidly securing together said spindle and plate.

5. In a closer-and-check for doors, the combination of operating-mechanism seated in the floor and comprising a protruding spindle, a door-plate adapted to rotate said spindle, and means for adjustably connecting said spindle and plate against relative movement both vertically and horizontally.

[Claims 6 to 11 not printed in the Gazette.]

1,064,256. DOOR-CLOSER. OSCAR C. RIXSON, New York, N. Y. Filed June 8, 1912. Serial No. 702,544. (Cl. 16—88.)



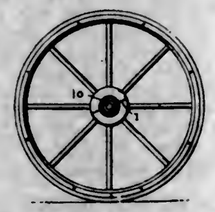
1. A door-closer and check, comprising a spindle rotatably mounted in the floor beneath the door and adapted to be rotated in either direction by the door, transverse arms carried by said spindle, a cylinder with a piston constituting a door-check, a bar connected to said piston and having transverse wings engaging the transverse arms aforesaid, and a double-pawl mounted upon said bar and co-acting with the arms aforesaid.

2. A door-closer and check, comprising a spindle adapted to be rotated by the door, transverse arms carried by said spindle and each provided with a roller, a slotted bar straddling said spindle and having a cross-head provided with wings extending adjacent said rollers, a double-pawl pivoted on said bar and having its arms extending adjacent said rollers, a cylinder provided with a piston connected to said bar, and a spring tending to force said piston home.

3. A door-closer and check, consisting of a spindle rotatable by the door and carrying transverse arms with bearing-surfaces, a cylinder and piston, a spring normally forcing said piston to the closed end of said cylinder, a bar connected at one end to said piston and slotted at the other end to straddle said spindle, a cross-head carried by said bar at the rear of said spindle and having a countersunk seat to receive either of said bearing-surfaces when the door is opened to a predetermined extent, and a double-pawl pivoted on said bar to be deflected by one of said bearing-surfaces when the door is opened so that one arm of said pawl will oppose the other bearing-surface while the door is closing.

4. In a door-closer, the combination of a casing seated beneath the floor, operating-mechanism located therein, a spindle connected with said mechanism and protruding from said casing, and a transverse-key through the upper end of said spindle, one of the arms of said key being longer than the other.

1,064,257. RESILIENT WHEEL. ADOLPH ROSEDALE, Alexandria, La., assignor of twenty-five one-hundredths to John N. P. Cramer, Harrington township, Bergen county, N. J., and one-half to Joseph M. Goldberg, Alexandria, La. Filed July 31, 1912. Serial No. 712,381. (Cl. 152—39.)



The combination, with an axle, of a two part hub having a bore, a boxing fitting loosely within said bore whereby an annular space is provided around the same, a plurality of cushioning springs operatively mounted in said annular space, caps secured over the ends of the hub to lock the parts together, the inner cap being apertured to loosely receive said axle and the wall of said aperture being grooved, and a flat ring formed of flexible material positioned within said groove to exclude dust from the interior of the hub.

1,064,258. ELECTRIC HEATER. GEORGE E. SHARPE, Steubenville, Ohio. Filed Oct. 30, 1912. Serial No. 728,615. (Cl. 219—34.)



1. The combination of a main frame having a central opening therethrough, a shelf disposed below the said opening and secured to the frame at the sides of the opening, a reflector having a bottom plate resting upon the ends of the shelf and supported thereby in spaced relation to the shelf, and a heating member secured upon the said shelf and projecting upwardly through said bottom plate in front of the reflector.

2. The combination of a main frame having a central opening therethrough and having upright side members, a reflector fitted to the frame and disposed in rear of the said opening, a support for the lower end of the reflector detachably secured to the main frame, and a drum inclosing the reflector and spaced from the same throughout its extent, said drum having its upper end secured to the rear face of the frame at the upper end thereof and its side walls bearing against the side members of the frame and provided with lateral extensions secured to said side members above the said support.

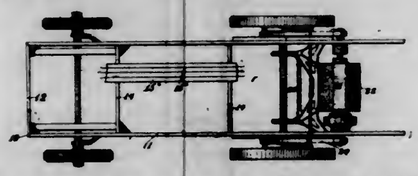
3. The combination of a main frame having a central opening therethrough, a shelf arranged in rear of the main frame and below the said central opening and provided with up-turned ends, legs rigid with said up-turned ends and secured to the rear side of the main frame, a reflector having a bottom plate extending between the ends of the shelf, a reinforcing plate secured to the bottom of the reflector and extending between and fitting over the up-turned ends of the shelf, and a heating member supported by the shelf and projecting upwardly through the bottom of the reflector and in front of the main portion of the same.

4. The combination of a frame having an opening therethrough and having upright side members, a shelf arranged in rear of the frame below the opening through the same, said shelf having upturned ends and provided at the front edges of its ends with legs bearing against the rear face of the side members of the frame and secured thereto, and a reflector in rear of and spaced from the frame and having a bottom plate resting on and fitting over the up-turned ends of the shelf, the front edges of the reflector and said bottom plate bearing against the rear face of the frame at the sides of and below the opening through the same.

5. The combination of a frame having an opening there-

through and having upright side members, a shelf arranged in rear of the frame below the opening through the same, said shelf having upturned ends and provided at the front edges of its ends with legs bearing against the rear faces of the side members of the frame and secured thereto, a reflector in rear of and spaced from the frame and having a bottom plate resting on and fitting over the upturned ends of the shelf, the front edges of the reflector and said bottom plate bearing against the rear face of the frame at the sides of and below the opening through the same, and a drum inclosing the reflector and spaced from the same throughout its extent, said drum having its upper end secured to the rear face of the frame at the upper end thereof and its side walls bearing against the side members of the frame and provided with lateral extensions secured to said side members above the said legs.

1,064,259. MOTOR-VEHICLE. PAUL SYNNESTVEDT, Pittsburgh, Pa. Filed Mar. 12, 1907, Serial No. 361,938. Renewed Oct. 24, 1912. Serial No. 727,621. (Cl. 21—90.)



1. In combination, a supporting body, a rear axle, a single motor to the rear of the axle rotatably secured on one side of the axis of such motor drive and spring supported from the body at the other side of such axis, a drive shaft extending through the motor and a chain drive from each end thereof direct to the rear wheels.

2. In combination, a motor casing, a supporting frame therefor comprising a T-shaped portion for engaging the motor casing and spread arms for journaling the ends of the motor axle.

3. In combination, a motor casing, a supporting frame therefor comprising a T-shaped portion for engaging the motor casing and spread arms for journaling the ends of the motor axle, and axle engaging arms provided with slots and extending at substantially a right angle to the T.

4. A supporting frame for a motor comprising an integral frame having arms for supporting the ends of the motor shaft and an intermediate portion adapted to be secured to the motor casing.

5. A supporting frame for a motor comprising an integral frame having arms for engaging the ends of the motor shaft, other arms for engaging the vehicle axle and an intermediate portion adapted to be secured to the motor casing.

[Claims 6 to 24 not printed in the Gazette.]

1,064,260. PROCESS FOR THE MANUFACTURE OF CELLULOSE SOLUTIONS. WILHELM TRAUBE, Berlin, Germany. Filed Jan. 23, 1912. Serial No. 672,939. (Cl. 106—40.)

A process for obtaining cellulose solutions, characterized by the fact that cellulose material is treated with solutions of cupric hydroxid in solutions of aliphatic diamins.

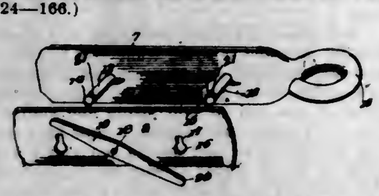
1,064,261. HAT. MINNIE S. TWOMBLY, New York, N. Y. Filed Dec. 4, 1911. Serial No. 663,820. (Cl. 2—108.)

1. A combination hat comprising a crown having a brim; a facing for the brim having a crown opening, said facing connected at all points of its outer edge around the edge of the brim; a hem extending around the edge of the crown opening; an elastic band in said hem to draw the crown opening together, whereby in ordinary use when the hat is placed on the head the edge of the crown opening will rest upon the head and the facing will be drawn taut over the face of the brim, or the facing may be pulled away from the brim to serve as a covering for the hair with the crown opening extending around the forehead, sides and back of the head and maintained in yielding engagement therewith by the elastic band; and a mask attached to the edge of the crown opening at the front of the hat adapted to engage over the face of the wearer, substantially as and for the purpose specified.



2. A combination hat comprising a crown having a brim; a facing for said brim consisting of a piece of fabric having a crown opening and conforming substantially to the shape of the brim, said fabric connected at its outer edge to the edge of the brim; and yielding shirring means to draw the edge of the crown opening together and thereby drawing the facing taut over the brim; said fabric adapted to be pulled away from the face of the brim and adjusted so that the crown opening will extend around the forehead, sides and back of the head, and maintained in yielding engagement therewith by the shirring means, substantially as and for the purpose specified.

1,064,262. HARNESS-BUCKLE. WILLIAM UTECH, Sanford, Fla. Filed Dec. 22, 1911. Serial No. 667,307. (Cl. 24—166.)

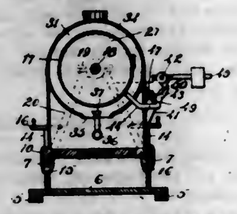


1. A device of the class described including coacting clamping members, one of which is provided with spaced slots extending in a straight line transversely of said member for the entire length of the slots and having contracted portions, pins projecting laterally from the other member and provided with means for engagement with the walls of the contracted portions of the overlying slots, and a longitudinally disposed spring locking device of greater length than the distance between the outer walls of the contracted portions of the slots, said locking device being mounted on the slotted member and having one longitudinal edge thereof adapted to abut against the same side of both pins for clamping said members in engagement with a strap.

2. A device of the class described including coacting clamping members, one of which is provided with spaced transversely disposed key-hole slots, pins extending laterally from the inner face of the mating member and having their free ends provided with reduced necks for engagement with the contracted portions of the overlying key-hole slots, and a spring locking bar extending longitudinally of the slotted member and having its intermediate portion pivoted on said slotted member at a point between the slots therein, and one longitudinal edge thereof at the opposite ends of the locking bar arranged to bear against the adjacent projecting ends of the pins for clamping said members in engagement with a strap.

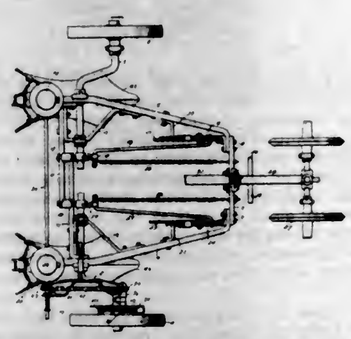
3. A device of the class described including coacting clamping members, one of which is provided with a reinforcing rib and the other with spaced transversely disposed key-hole slots, pins extending laterally from the inner face of the ribbed member and having their free ends provided with oppositely disposed notches defining reduced necks adapted to engage the contracted portions of the overlying key-hole slots, and a resilient locking member mounted for turning movement on the slotted member and having one longitudinal edge thereof arranged to simultaneously engage the same side of the projecting ends of both pins for clamping said members in engagement with a strap.

1,064,263. MECHANISM FOR BROWNING FLOUR. JOSEPH WALLOS, Los Angeles, Cal. Filed Sept. 3, 1912. Serial No. 718,288. (Cl. 34—6.)



In a machine for browning flour, a base having thereon a vertically adjustable base, a cylindrical shell mounted on said adjustable base, one end of said shell having inlet openings, and a funnel-shaped plate to direct the product into the shell, the other end of said shell having discharge openings with reticulated screens thereon, a stationary jacket around the revoluble shell, heating means between the shell and jacket carrying thereon knockers to contact with the revoluble shell, and a revoluble shaft operatively connected with the shaft of the revoluble shell having means for actuating said knockers.

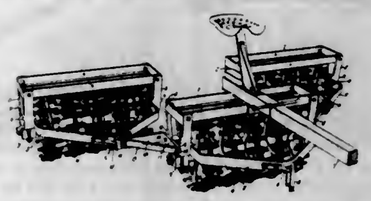
1,064,264. LISTER. LEWIS E. WATERMAN, Rockford, Ill., assignor to Emerson-Brantingham Company, Rockford, Ill., a Corporation of Illinois. Filed Oct. 12, 1911. Serial No. 654,402. (Cl. 111—6.)



1. In a machine of the character set forth, the combination with a frame comprising a front cross bar, longitudinal side bars adjustably connected at their front ends to the front cross bar, and inwardly extending rear bars carried by the longitudinal bars and adjustably overlapped, of means for connecting the overlapping portions of the rear cross bars, a truck located in front of the front cross bar and having a connection therewith, seed dropping mechanisms carried by the rear portions of the longitudinal bars and adjustable therewith, independent crank axles journaled on the longitudinal bars, means for raising and lowering the frame upon the said axles, wheels journaled on the axles, and means for driving the seed dropping mechanisms from one of said wheels.

2. In a machine of the character set forth, the combination with a frame, comprising side bars that are relatively adjustable toward and from each other, a front truck for both side bars, independent rear supporting wheels for the side bars, cranked axle mountings for the wheels journaled on the side bars, means for swinging the cranked axles, seeding mechanisms carried by the side bars, a gear connection between one of the rear wheels and the seeding mechanism, including sprocket chains, and means for maintaining the sprocket chains at substantially the same degree of tightness irrespective of the adjustment of the frame.

1,064,265. LAND-ROLLER. LEWIS E. WATERMAN, Rockford, Ill., assignor to Emerson-Brantingham Company, Rockford, Ill., a Corporation of Illinois. Filed Dec. 19, 1911. Serial No. 666,859. (Cl. 55—47.)



1. A land roller comprising a forward section and rear sections, said sections comprising a roller, a frame whose sides form a journal-bearing for the roller, lugs formed on each side of the side frame, bails held to the inner side of the side frame by the lugs, and detachable brackets held to the outer sides of the front side section by the lugs and having a connection with the bails of the rear sections.

2. A land roller comprising a forward section and two rear sections, each having a frame the sides of which are journaled to its roller, and a bail secured to the frame; and a detachable bracket secured to each of the ends of the forward section, said brackets having outstanding arms adapted to form a pivotal connection with the two bails of the rear sections.

3. A land roller comprising a forward section having draft means secured thereto, rear sections, each section comprising a frame the sides of which are journaled with its roller, and a bail connected to each frame; bracket securing means carried by the sides of the frames, and detachable brackets held in the bracket securing means of the forward section and extending beyond the ends of said section, said brackets adapted to form connections for the bails of the rear sections.

4. A land roller comprising a forward section having draft means attached thereto, rear sections, each section having a frame the sides of which are journaled with its roller, a bail connected to each of the rear frames, bracket securing means carried by the sides of the forward section, and detachable brackets held in the bracket securing means and forming connections for the bails of the rear sections.

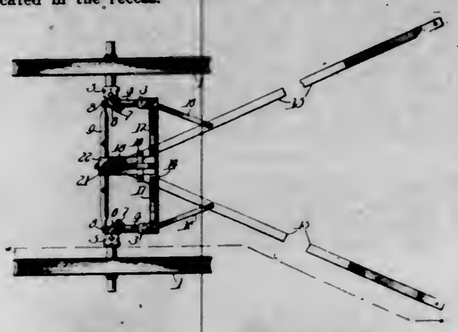
5. A land roller comprising a forward section having draft means secured thereto, rear sections, each section comprising a frame the sides of which are journaled with its roller, a bail for the frames of each of the rear sections and having connection with the sides of said frames, bracket securing means carried by the sides of the frames, and detachable brackets held in the bracket securing means of the forward section and forming connections for the bails of the rear sections.

[Claims 6 and 7 not printed in the Gazette.]

1,064,266. RIDING ATTACHMENT FOR HARROWS. LEWIS E. WATERMAN, Rockford, Ill., assignor to Emerson-Brantingham Company, Rockford, Ill., a Corporation of Illinois. Filed May 27, 1912. Serial No. 700,041. (Cl. 55—91.)

1. A riding attachment for harrows comprising a rectangular frame pivotally connected at its corners, carrying wheels for the ends of said frame, one of the side-bars formed with a recess, attaching-bars connected with the

other side of said frame, and means connected to the side-bar opposite said recess supporting a roller adapted to be located in the recess.



2. A riding attachment for harrows comprising a rectangular frame pivotally connected at its corners, carrying-wheels for the ends of the frame, one of the side bars of the frame formed with a recess in its upper face, attaching bars connected with the other side bar of the rectangular frame, a seat bar connected with the last mentioned side bar, and a holder supported by the seat bar and located in the recess.

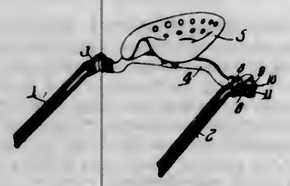
3. A riding attachment for harrows having a frame comprising end and side-bars, carrying wheels for said end-bars, one of said side-bars forming a pivotal support for the end-bars, draft bars connected with one of the side bars of the frame, the other side-bar forming a pivotal connection between the end-bars and having a recess formed therein, and a roller actuated through movement of said draft-bars and adapted to be located in the recess.

4. A riding attachment for harrows comprising a rectangular frame pivotally connected at its corners, carrying-wheels for the ends of the frame, draft means connected to one of the side-bars of the frame, a recess formed in the other side-bar, and a roller located therein and being actuated by said draft means.

5. A riding attachment for harrows comprising a rectangular frame pivotally connected at its corners, carrying wheels for ends of the frame, draft means connected to one of the side-bars of the frame, movable engaging means adapted to be actuated by movement of said side-bar, and said movable engaging means adapted to be held yieldingly in engagement with the other side-bar.

[Claims 6 to 8 not printed in the Gazette.]

1,064,267. SEAT-SUPPORT. LEWIS E. WATERMAN, Rockford, Ill., assignor to Emerson-Brantingham Company, Rockford, Ill., a Corporation of Illinois. Filed Aug. 6, 1912. Serial No. 713,591. (Cl. 155—22.)



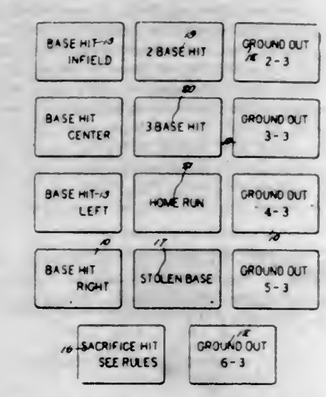
1. In a seat support, the combination of two supporting-bars, a cross-bar hinged to one of the supporting-bars, a seat supported by the cross-bar, a bracket having a yoked end and a rod vertically disposed between the yoke arms, a bracket secured to the cross-bar, and a catch supported thereon and adapted to engage said vertical bar.

2. In a seat support, the combination of two supporting-bars, a cross-bar hinged to one of the supporting-bars, a seat supported by the cross-bar, a bracket having a yoked end and a rod vertically disposed between the yoke arms, a bracket secured to the cross-bar whose end engages the vertical bar, a catch pivoted thereon and adapted to engage said vertical rod, and a spring adapted to hold the catch in a locked position.

3. In a seat support the combination of two supporting-bars, a cross-bar hinged to one of the supporting-bars, a seat carried thereby, a yoked bracket carried by the other supporting-bar and having a closed end, and a catch at the free end of the cross-bar, the free end of the cross-bar being adapted to engage the closed end of the yoked bracket and the catch adapted to extend into the crotch of the yoke and grip the closed end thereof on the side opposite to the engagement of the cross-bar therewith.

4. In a seat support the combination of two supporting-bars, a cross-bar hinged to one of the supporting-bars, a seat carried thereby, a cross-bolt carried at the end of the other supporting-bar, a bracket secured to the free end of the cross-bar and having a hooked end adapted to engage the cross-bolt on one side only, and a catch attached to said bracket and engaging the other side of the cross-bolt, thereby holding the bracket and cross-bolt in a locked position, the catch adapted to be yieldably disengaged from said locked position.

1,064,268. PLAYING-CARDS. EDWARD J. WHELAN, Washington, D. C. Filed Apr. 23, 1912. Serial No. 692,603. (Cl. 46—25.)



1. A pack of playing cards consisting of a single deck, having the individual cards provided with matter designating the character of play and having certain cards provided, in addition to the indicating matter, with other designating matter to give credit to the players of the game.

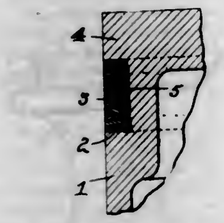
2. A pack of cards for playing base ball, having the individual cards provided with matter corresponding with the several plays incident to the standard game of base ball, and having certain cards provided, in addition to the indicating matter, with numerals from one to nine, whereby proper credit of a play may be given to the individual player.

3. A pack of cards for playing base ball, each of the cards being provided with matter corresponding to a play, certain cards bearing in addition to the indicating matter, numbers from one to nine to enable credit being given to the card representing the player making the same, and certain other cards bearing two sets of numbers, whereby proper credit may be given to the parties playing the game.

4. A pack of cards consisting of a single deck for playing base ball divided into a series of sets, the cards of certain of the sets indicating plays by the batter resulting in an "out" for his team, each of said cards being marked to indicate the player or players of the opposing team making the particular play indicated on the card with the result of an "out" for the batter.

5. A pack of cards consisting of a single deck for playing base ball divided into a series of sets, the cards of certain of the sets indicating plays by the batter resulting in an "out" for his team, each of said cards being marked to indicate the player or players of the opposing team making the particular play indicated on the card with the result of an "out" for the batter, other series of sets indicating "safe" plays by the batter.

1,064,269. PISTON-PACKING. CHARLES WHITE, Baltimore, Md. Filed June 5, 1912. Serial No. 701,819. (Cl. 121—108.)



1. A piston packing consisting of flat spring wire bent into ring form, with the width of the wire at right angles to the axis of the ring, presenting the edges of the wire inwardly and outwardly respectively, the wire at its inner edge being of a diameter to fit the piston and at its outer edge of a diameter to fit the cylinder, said wire being split, substantially as described.

2. A piston packing consisting of a split ring of flat bent spring wire having its outer edge flat, and of a diameter to fit the cylinder, and its inner edge substantially rounded and of a diameter to fit the piston, substantially as described.

3. A piston packing consisting of a plurality of split rings of flat bent spring wire presenting their edges inwardly and outwardly, and of a diameter to fit respectively the piston and the cylinder, substantially as described.

4. A piston packing consisting of a plurality of split rings of flat bent spring wire, each having its outer edge flat and its inner edge substantially rounded and of a diameter to fit respectively the cylinder and piston, substantially as described.

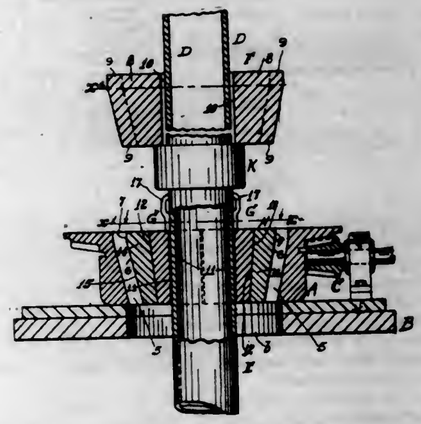
5. A piston packing consisting of flat spring wire bent into ring form, with the width of the wire at right angles to the axis of the ring, presenting the edges of the wire inwardly and outwardly respectively, the wire at its inner edge being of a diameter to fit the piston and at its outer edge of a diameter to fit the cylinder, said wire being split and tending normally to spring outwardly, substantially as described.

1,064,270. WELL-BORING APPARATUS. ARTHUR G. WILLARD, Los Angeles, and CHARLES E. WILCOX, Bakersfield, Cal. Filed Mar. 11, 1912. Serial No. 682,977. (Cl. 255—23.)

1. Improvements of the character disclosed comprising, in combination with a rotary table, a plurality of means of operative connection between the same and a string and each formed for separate application to the table in substitution for the other, there being inter-locking means effective between one of said means of operative connection and the table whereby the string may be rotated upon rotation of the table.

2. Improvements of the character disclosed comprising, in combination with a rotary table, a plurality of means of operative connection between the same and a string and each formed for separate application to the table in substitution for the other, there being inter-locking means effective between one of said means of operative connection and the table whereby the string may be rotated upon rotation of the table; the other of said means of operative connection being formed and adapted to co-act through the table and with slips to sustain the weight of the string.

3. Improvements of the character disclosed comprising, in combination with a rotary table and a well boring string, a plurality of means of operative connection between the same and a string and each formed for separate application to the table in substitution for the other, there being inter-locking means effective between one of said means of operative connection and the table whereby the string may be rotated upon rotation of the table; means being provided upon the string for engaging and elevating the rotation imparting means of operative connection upon the elevation of the string.

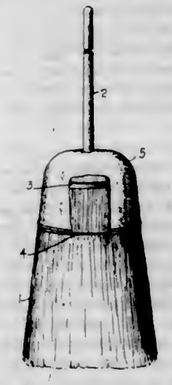


4. Improvements of the character disclosed, comprising, in combination with a rotary table; a plurality of bushings formed to fit within the table each in substitution for the other, there being inter-locking means effective between one of said bushings and the table for rotating the string, the other of said bushings being formed and adapted to co-act with slips to engage with the string and sustain the weight of the same.

5. Improvements of the character disclosed, comprising, in combination with a rotary table; a plurality of bushings formed to fit within the table each in substitution for the other, there being inter-locking means effective between one of said bushings and the table for rotating the string, the other of said bushings being formed and adapted to co-act with slips to engage with the string and sustain the weight of the same; and said slips detachably fitting said last-named bushing.

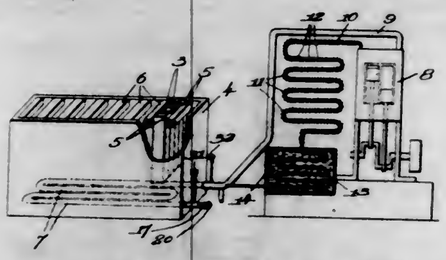
[Claims 6 to 9 not printed in the Gazette.]

1,064,271. BROOM. ERNEST A. WILLIAMSON and IRA W. WILLIAMSON, Greeneville, Tenn. Filed Mar. 3, 1913. Serial No. 751,950. (Cl. 15—20.)



A broom consisting of broom straws, a handle member disposed therethrough, a pair of clamping bands encircling said straws and having portions thereof engaged with the handle, a textile bonnet covering the upper portions of said straws and having the lower edges thereof engaged with the lower clamping band.

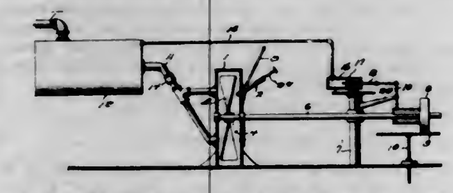
1,064,272. APPARATUS FOR MAKING ICE. LINUS WOLF, Zurich, Switzerland. Filed July 14, 1909. Serial No. 507,506. (Cl. 62—6.)



1. The combination with a compressor to highly compress a refrigerant, of means to air cool the compressed refrigerant, a water-cooling coil to receive the air-cooled refrigerant and further cool and thereby liquefy the same by water-cooling process, a refrigerating coil, means to admit the liquefied refrigerant to the refrigerating coil wherein it is expanded and thereby produces a refrigerating effect, and means to return the expanded refrigerant to the compressor.

2. In a refrigerating apparatus, the combination with a refrigerating coil, a pipe for delivering the compressed refrigerant thereto, said pipe extending through the refrigerating coil from one end to the other thereof, means at one end of said pipe to deliver refrigerant thereto, a valve at the other end of the pipe for controlling the delivery of the refrigerant to the interior of the refrigerating coil, and means exterior to said coil for operating the valve.

1,064,273. CARBURETING APPARATUS. RAYMOND B. WORTMAN, Okemah, Okla. Filed June 23, 1911. Serial No. 634,966. (Cl. 48—145.)

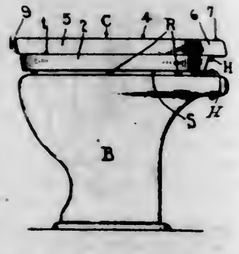


1. A carbureting apparatus including a blower casing having front and back walls, a blower in said casing, means for supplying fuel and air through diametrically disposed portions of the back wall, a mixture storage tank, outlet pipes leading from the front wall at points opposite the fuel and air intakes and leading to the tank, means for driving the blower, and means operable by the pressure in the tank for governing the rate at which the blower is driven.

2. A carbureting apparatus including a blower casing having front and back walls, a blower in said casing, means for supplying fuel through the back wall of the blower, said means including an intake pipe, the inner end of which is inclined toward the central portion of the blower casing, the back wall of the casing being further provided with an air intake at a point diametrically opposed to the fuel intake pipe, a mixture storage tank, outlet pipes leading from the front wall at points opposite the fuel and air intakes and leading to the tank, means for driving the blower, and means governed by the pressure in the tank for regulating the rate at which the blower is driven.

3. A carbureting apparatus including a blower casing having front and back walls, a blower in said casing, means for supplying fuel to the casing, means for supplying air to the casing, means for independently governing the supply of fuel and air, a mixture storage tank, a pipe communicating between said tank and the blower casing, means for driving the blower, and means operable by the pressure in the tank and independent of the means for regulating the supply of fuel and air for regulating the rate at which the blower is driven.

1,064,274. CLOSET-SEAT COVER. JOHN WEAT YOUNG, Hutchinson, Kans. Filed Sept. 5, 1912. Serial No. 718,729. (Cl. 4—18.)



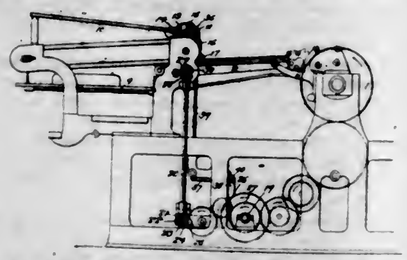
1. A metallic water closet seat-cover having a flat top and a peripheral depending flange forming a receptacle of inverted cup-shape, and a box-like extension at the rear of said cover, for the purpose set forth.

2. A metallic water closet seat cover having a peripheral depending flange, an extension at the rear of said cover, and a fastening device through said extension, for the purpose set forth.

3. A metallic water closet seat-cover having a flat top and a peripheral depending flange, an extension at the rear of said cover adapted to be hingedly connected with the seat, a fastening device through said extension, and a clasp at the front of the cover, for the purpose set forth.

4. The herein described water closet seat-cover consisting of a sheet of metal of a shape to conform with that of the seat and provided with a downwardly extending peripheral flange, the sheet of metal and its flange being continued at the rear into a box-like extension for the purposes set forth, and the sheet being further continued downward behind said extension and in under the same into a plate adapted to be connected with the seat-hinge.

1,064,275. SLIP-SHEET-FEEDING DEVICE FOR SHEET-DELIVERY MECHANISMS FOR PRINTING-MACHINES. HOWARD M. BARBER, Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., a Corporation of New Jersey. Filed July 29, 1910. Serial No. 574,487. (Cl. 101—112.)



1. An endless sheet delivery carrier, means for feeding printed sheets from one source and means for feeding slip sheets from another source to the under side of the delivery carrier at the same time whereby the printed and slip sheets are associated together thereby.

2. An endless sheet delivery carrier having sheet receiving grippers, means for feeding a printed sheet from one source and means for feeding a slip sheet from another source to the said grippers at the same time when they are on the under side of the delivery carrier whereby the printed and slip sheets are associated together by said delivery carrier.

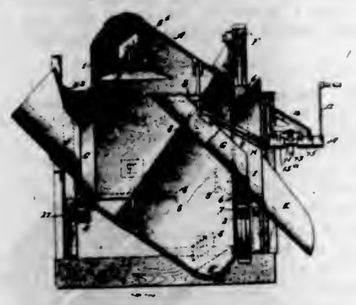
3. The combination with a sheet delivery mechanism for printing machines comprising an endless sheet delivery carrier and an endless tape carrier for feeding printed sheets to the under side of the delivery carrier, of a slip sheet feeding device arranged to feed slip sheets to the under side of the endless delivery carrier to be associated with the printed sheets.

4. An endless sheet delivery carrier, means for feeding printed sheets to the under side of the delivery carrier and a slip sheet feeding device arranged above the endless sheet delivery carrier, comprising a curved sheet guide extending to the under side of the endless delivery carrier for directing the slip sheets thereto and means for feeding the slip sheets along said curved guide to the under side of said delivery carrier to be associated with the printed sheets.

5. An endless sheet delivery carrier having sheet receiving grippers, means for feeding printed sheets to said grippers when they are on the under side of the carrier, and a slip sheet feeding device arranged above the endless sheet delivery carrier, comprising a curved sheet guide, extending to the under side of the delivery carrier for directing the slip sheets into the grippers at the time the grippers are receiving the printed sheets and means for feeding the slip sheets along said curved guide to said grippers.

[Claims 6 and 7 not printed in the Gazette.]

1,064,276. MIXING-MACHINE. CHARLES E. BATHRICK, Chicago, Ill., assignor to Frederick C. Austin, Chicago, Ill. Filed Sept. 24, 1908. Serial No. 454,665. (Cl. 83—73.)



1. In a mixing machine, the combination with a rotary mixing receptacle constructed for raising and dropping material therein and having a discharge opening substantially concentric with its axis of rotation, a chute obliquely arranged within said rotary mixing receptacle and having its outer end extending adjacent the wall of said discharge opening, and a rotary means whereon said chute is wholly supported, said chute being turned by said rotary means to place it in an operative position and in alternation therewith to place it in inoperative position.

2. In a mixing machine, the combination with a rotary mixing receptacle constructed for raising and dropping material therein and having a discharge opening substantially concentric with its axis of rotation, of a chute obliquely arranged within said rotary mixing receptacle and extending through said discharge opening, and a rotary means whereon said chute is wholly supported, said chute being rigidly fixed to said rotary means and shifting therewith to operative and inoperative positions.

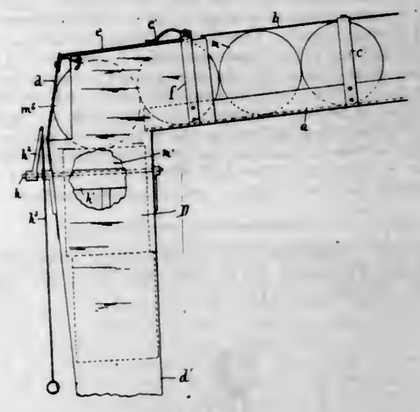
3. In a mixing machine, the combination with a rotary mixing receptacle constructed for raising and dropping material therein and having a discharge opening substantially concentric with its axis of rotation, of a rotary chute support revoluble independently of said mixing receptacle about an axis substantially coincident with the axis of rotation of the receptacle, and an inclined chute wholly sustained upon said rotary support.

4. In a mixing machine, the combination with a rotary mixing receptacle constructed for raising and dropping material therein and having a discharge opening substantially concentric with its axis of rotation, of a rotary chute support revoluble independently of said mixing receptacle about an axis substantially coincident with the axis of rotation of the receptacle, and an inclined chute rigidly fixed to said rotary support and shifting therewith to operative and inoperative positions.

5. The combination with a revoluble mixing drum constructed for raising and dropping material therein and having an open discharge end, of a supporting frame at the discharge end of said drum, arms extending from said supporting frame into said drum through its open discharge end, and a normally inclined, revoluble discharge chute mounted on said arms within said drum.

[Claims 6 to 15 not printed in the Gazette.]

1,064,277. APPARATUS FOR TILTING CANS. JAMES P. BAXTER, Jr., Portland, Me. Filed Dec. 11, 1912. Serial No. 736,081. (Cl. 57—37.)



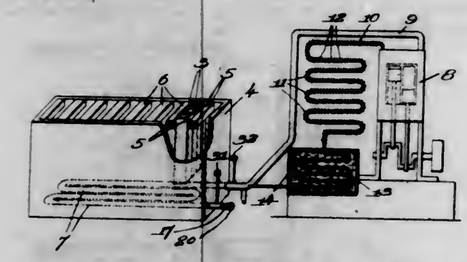
1. In an apparatus for righting cans, the combination of a vertical spout, a hopper at the upper end thereof, an inclined runway for discharging a line of rolling cans into the top of said hopper, a ledge on one side of said hopper for engaging one end of each can to tilt the same to an upright position and means for moving said ledge from its normal position to jar the tilting can.

2. In an apparatus for righting cans, the combination of a vertical spout, a hopper at the upper end of said spout, an inclined runway for discharging a line of rolling cans into the top of said hopper, a ledge on one side of said hopper for engaging one end of each can to tilt the same to an upright position and a yielding checking device opposite the lower end of the runway to retard the velocity of the rolling cans.

3. In an apparatus for righting cans, the combination of a vertical spout, a hopper at the upper end of said spout, an inclined runway for discharging a line of rolling cans into the top of said hopper, a shaft on one side of said hopper, a block on said shaft having a ledge adapted to engage the end of each can to tilt the same to an upright position, a handle for turning said shaft to disturb the position of a lodged can and a spring for returning the same to its normal position.

4. In an apparatus for righting cans, the combination of a vertical spout, a hopper at the upper end of said spout, an inclined runway for discharging a line of rolling cans into said hopper, a ledge in said hopper positioned to be struck by the end of each can as it falls into said hopper to turn the same to an upright position and a spring for pressing each can as it is righted against the inclined side of the hopper whereby its upper corner is made to support the next can above.

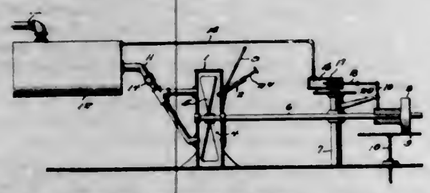
1,064,272. APPARATUS FOR MAKING ICE. LINUS WOLF, Zurich, Switzerland. Filed July 14, 1909. Serial No. 507,506. (Cl. 62—6.)



1. The combination with a compressor to highly compress a refrigerant, of means to air cool the compressed refrigerant, a water-cooling coil to receive the air-cooled refrigerant and further cool and thereby liquefy the same by water-cooling process, a refrigerating coil, means to admit the liquefied refrigerant to the refrigerating coil wherein it is expanded and thereby produces a refrigerating effect, and means to return the expanded refrigerant to the compressor.

2. In a refrigerating apparatus, the combination with a refrigerating coil, a pipe for delivering the compressed refrigerant thereto, said pipe extending through the refrigerating coil from one end to the other thereof, means at one end of said pipe to deliver refrigerant thereto, a valve at the other end of the pipe for controlling the delivery of the refrigerant to the interior of the refrigerating coil, and means exterior to said coil for operating the valve.

1,064,273. CARBURETING APPARATUS. RAYMOND B. WORTMAN, Okemah, Okla. Filed June 23, 1911. Serial No. 634,966. (Cl. 48—145.)

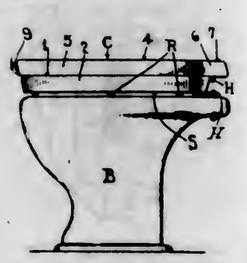


1. A carbureting apparatus including a blower casing having front and back walls, a blower in said casing, means for supplying fuel and air through diametrically disposed portions of the back wall, a mixture storage tank, outlet pipes leading from the front wall at points opposite the fuel and air intakes and leading to the tank, means for driving the blower, and means operable by the pressure in the tank for governing the rate at which the blower is driven.

2. A carbureting apparatus including a blower casing having front and back walls, a blower in said casing, means for supplying fuel through the back wall of the blower, said means including an intake pipe, the inner end of which is inclined toward the central portion of the blower casing, the back wall of the casing being further provided with an air intake at a point diametrically opposed to the fuel intake pipe, a mixture storage tank, outlet pipes leading from the front wall at points opposite the fuel and air intakes and leading to the tank, means for driving the blower, and means governed by the pressure in the tank for regulating the rate at which the blower is driven.

3. A carbureting apparatus including a blower casing having front and back walls, a blower in said casing, means for supplying fuel to the casing, means for supplying air to the casing, means for independently governing the supply of fuel and air, a mixture storage tank, a pipe communicating between said tank and the blower casing, means for driving the blower, and means operable by the pressure in the tank and independent of the means for regulating the supply of fuel and air for regulating the rate at which the blower is driven.

1,064,274. CLOSET-SEAT COVER. JOHN WRAY YOUNG, Hutchinson, Kans. Filed Sept. 5, 1912. Serial No. 718,729. (Cl. 4—18.)



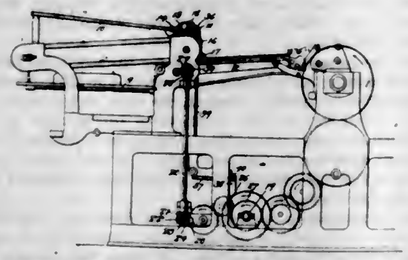
1. A metallic water closet seat-cover having a flat top and a peripheral depending flange forming a receptacle of inverted cup-shape, and a box-like extension at the rear of said cover, for the purpose set forth.

2. A metallic water closet seat cover having a peripheral depending flange, an extension at the rear of said cover, and a fastening device through said extension, for the purpose set forth.

3. A metallic water closet seat-cover having a flat top and a peripheral depending flange, an extension at the rear of said cover adapted to be hingedly connected with the seat, a fastening device through said extension, and a clasp at the front of the cover, for the purpose set forth.

4. The herein described water closet seat-cover consisting of a sheet of metal of a shape to conform with that of the seat and provided with a downwardly extending peripheral flange, the sheet of metal and its flange being continued at the rear into a box-like extension for the purposes set forth, and the sheet being further continued downward behind said extension and in under the same into a plate adapted to be connected with the seat-hinge.

1,064,275. SLIP-SHEET-FEEDING DEVICE FOR SHEET-DELIVERY MECHANISMS FOR PRINTING-MACHINES. HOWARD M. BARBER, Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., a Corporation of New Jersey. Filed July 29, 1910. Serial No. 574,487. (Cl. 101—112.)



1. An endless sheet delivery carrier, means for feeding printed sheets from one source and means for feeding slip sheets from another source to the under side of the delivery carrier at the same time whereby the printed and slip sheets are associated together thereby.

2. An endless sheet delivery carrier having sheet receiving grippers, means for feeding a printed sheet from one source and means for feeding a slip sheet from another source to the said grippers at the same time when they are on the under side of the delivery carrier whereby the printed and slip sheets are associated together by said delivery carrier.

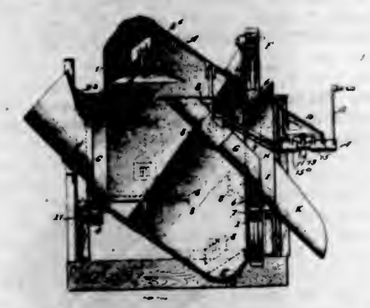
3. The combination with a sheet delivery mechanism for printing machines comprising an endless sheet delivery carrier and an endless tape carrier for feeding printed sheets to the under side of the delivery carrier, of a slip sheet feeding device arranged to feed slip sheets to the under side of the endless delivery carrier to be associated with the printed sheets.

4. An endless sheet delivery carrier, means for feeding printed sheets to the under side of the delivery carrier and a slip sheet feeding device arranged above the endless sheet delivery carrier, comprising a curved sheet guide extending to the under side of the endless delivery carrier for directing the slip sheets thereto and means for feeding the slip sheets along said curved guide to the under side of said delivery carrier to be associated with the printed sheets.

5. An endless sheet delivery carrier having sheet receiving grippers, means for feeding printed sheets to said grippers when they are on the under side of the carrier, and a slip sheet feeding device arranged above the endless sheet delivery carrier, comprising a curved sheet guide, extending to the under side of the delivery carrier for directing the slip sheets into the grippers at the time the grippers are receiving the printed sheets and means for feeding the slip sheets along said curved guide to said grippers.

[Claims 6 and 7 not printed in the Gazette.]

1,064,276. MIXING-MACHINE. CHARLES E. BATHRICK, Chicago, Ill., assignor to Frederick C. Austin, Chicago, Ill. Filed Sept. 24, 1908. Serial No. 454,665. (Cl. 83—73.)



1. In a mixing machine, the combination with a rotary mixing receptacle constructed for raising and dropping material therein and having a discharge opening substantially concentric with its axis of rotation, a chute obliquely arranged within said rotary mixing receptacle and having its outer end extending adjacent the wall of said discharge opening, and a rotary means whereon said chute is wholly supported, said chute being turned by said rotary means to place it in an operative position and in alternation therewith to place it in inoperative position.

2. In a mixing machine, the combination with a rotary mixing receptacle constructed for raising and dropping material therein and having a discharge opening substantially concentric with its axis of rotation, of a chute obliquely arranged within said rotary mixing receptacle and extending through said discharge opening, and a rotary means whereon said chute is wholly supported, said chute being rigidly fixed to said rotary means and shifting therewith to operative and inoperative positions.

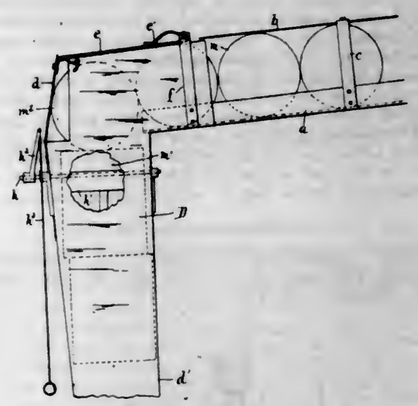
3. In a mixing machine, the combination with a rotary mixing receptacle constructed for raising and dropping material therein and having a discharge opening substantially concentric with its axis of rotation, of a rotary chute support revoluble independently of said mixing receptacle about an axis substantially coincident with the axis of rotation of the receptacle, and an inclined chute wholly sustained upon said rotary support.

4. In a mixing machine, the combination with a rotary mixing receptacle constructed for raising and dropping material therein and having a discharge opening substantially concentric with its axis of rotation, of a rotary chute support revoluble independently of said mixing receptacle about an axis substantially coincident with the axis of rotation of the receptacle, and an inclined chute rigidly fixed to said rotary support and shifting therewith to operative and inoperative positions.

5. The combination with a revoluble mixing drum constructed for raising and dropping material therein and having an open discharge end, of a supporting frame at the discharge end of said drum, arms extending from said supporting frame into said drum through its open discharge end, and a normally inclined, revoluble discharge chute mounted on said arms within said drum.

[Claims 6 to 15 not printed in the Gazette.]

1,064,277. APPARATUS FOR TILTING CANS. JAMES P. BAXTER, Jr., Portland, Me. Filed Dec. 11, 1912. Serial No. 736,081. (Cl. 57—37.)



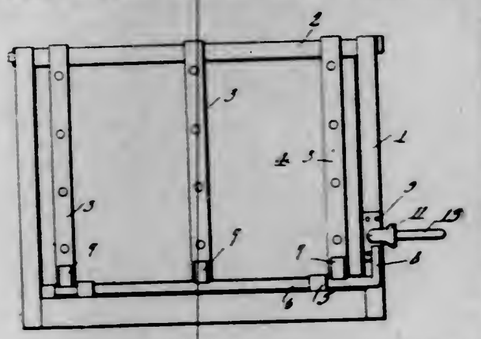
1. In an apparatus for righting cans, the combination of a vertical spout, a hopper at the upper end thereof, an inclined runway for discharging a line of rolling cans into the top of said hopper, a ledge on one side of said hopper for engaging one end of each can to tilt the same to an upright position and means for moving said ledge from its normal position to jar the tilting can.

2. In an apparatus for righting cans, the combination of a vertical spout, a hopper at the upper end of said spout, an inclined runway for discharging a line of rolling cans into the top of said hopper, a ledge on one side of said hopper for engaging one end of each can to tilt the same to an upright position and a yielding checking device opposite the lower end of the runway to retard the velocity of the rolling cans.

3. In an apparatus for righting cans, the combination of a vertical spout, a hopper at the upper end of said spout, an inclined runway for discharging a line of rolling cans into the top of said hopper, a shaft on one side of said hopper, a block on said shaft having a ledge adapted to engage the end of each can to tilt the same to an upright position, a handle for turning said shaft to disturb the position of a lodged can and a spring for returning the same to its normal position.

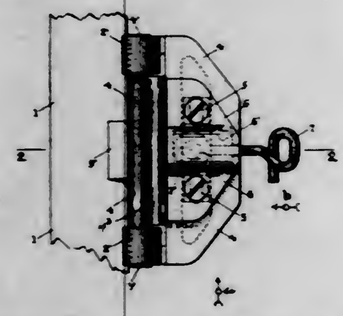
4. In an apparatus for righting cans, the combination of a vertical spout, a hopper at the upper end of said spout, an inclined runway for discharging a line of rolling cans into said hopper, a ledge in said hopper positioned to be struck by the end of each can as it falls into said hopper to turn the same to an upright position and a spring for pressing each can as it is righted against the inclined side of the hopper whereby its upper corner is made to support the next can above.

1,064,278. LATCH FOR END-GATES OF MINING-CARS AND THE LIKE. ISAAC K. BEAVER, Wilburton, Pa., assignor of one-half to Elmer E. Straub, Wilburton, Pa. Filed Oct. 7, 1912. Serial No. 724,399. (Cl. 21—21.)



The combination with an end gate mounted to swing, and a corner post, of a tumbler rod mounted for rotation and having retaining fingers for holding the gate against movement, an arm at one end of the tumbler rod, a bolt mounted for rotation in the corner posts, a button at one end of the bolt and having a spacing collar, said arm being adapted to be seated between the posts and the button, said button being flat and having a broad end adapted to extend across the arm to hold it against the post, and a lever at one end of the bolt for rotating said bolt and swinging the button into or out of holding position.

1,064,279. THREAD-GUIDE SUPPORT. HERBERT G. BEEDE, Pawtucket, R. I. Filed May 19, 1910. Serial No. 562,168. (Cl. 118—16.)



1. A thread guide support, for spinning and twisting machines, consisting of a stationary metal part adapted to be secured to the thread board or bar and having open bosses at its ends, a second or movable metal part having a rounded rear edge portion with cylindrical ends separated by openings from the body of said part, said rounded rear edge portion being connected with the body of the said movable part by a reduced portion or web of a thickness which is less than the width of the openings between said bosses and the body of said stationary part, and means for attaching a thread guide to said movable part, said means comprising a clamping plate or block and attaching screws, and the said movable part having slots through which said screws may pass, to afford a sidewise or lateral adjustment of the thread guide.

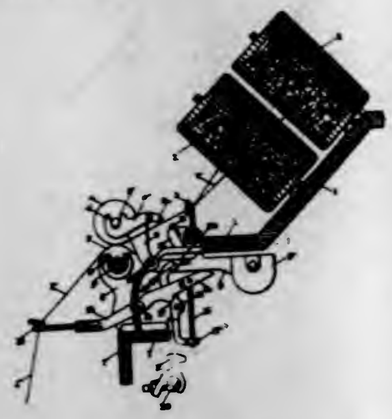
2. A thread guide support, for spinning and twisting machines comprising a pivoted part, as 4, having a longitudinal recess, as 4", on its under side, and slots, as 4"', and a clamping plate attached to said pivoted part by screws passing through said slots and provided with nuts fitting in said recess.

3. A thread guide support, for spinning and twisting machines, comprising a pivoted part, as 4, having a longitudinal recess, as 4", on its under side, and slots, as 4"', and a clamping plate attached to said pivoted part by screws passing through said slots and provided with nuts fitting in said recess, said clamping plate having a recess on its under side to loosely receive an eye on the thread-guide to permit an in and out adjustment of the said thread guide, and said slots permitting lateral adjustment of said clamping plate, carrying the said thread guide with it.

4. A thread guide support, for spinning and twisting machines, consisting of three main parts, to wit, a metal part adapted to be screwed to the thread board or bar, and having open bosses at its ends, a second or movable metal part having a rounded rear edge portion with cylindrical ends separated by openings from the body of said movable part, said rounded rear edge portion being connected with the body of said movable part by a web or portion of a thickness less than the width of the openings between the said bosses and the body of the said first-named part, and a third part or clamping plate, combined with a thread guide, and means for adjustably securing said third part or clamping plate to said second or movable part, said third part or clamping plate having a recess on its under side to permit an in and out adjustment of the thread guide, combined with a block or plate on the thread board or bar to engage said movable plate and hold it in raised position.

5. A thread guide support, for spinning or twisting machines, consisting of a stationary part to be attached to the thread board or bar, a movable part hinged to said stationary part, and means for attaching a thread guide to said movable part, said attaching means being constructed to permit the adjustment of the thread guide, both in and out and laterally, and comprising a clamping plate having a recess on its under side and which is mounted for lateral adjustment on said movable part.

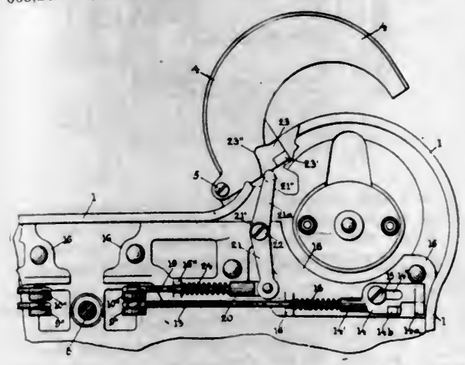
1,064,280. TWISTING-MACHINE. HERBERT G. BEEDE, Pawtucket, R. I. Filed Dec. 1, 1911. Serial No. 663,239. (Cl. 118—12.)



1. In a twisting machine, a pair of feed rolls, a pivotally mounted support for one of said rolls, said support having a projection thereon, a stationary plate or bar normally out of contact with said projection, and positively actuated automatic means, controlled by the thread, for moving said pivotally mounted roll away from the other roll and bringing the projection on the support of said roll into engagement with said stationary plate or bar.

2. In a twisting machine, the combination with a stationarily supported rotatable roll, of a movably supported rotatable roll, said roll supported in a pivotally mounted lever, having a pivotal movement in a vertical plane, and said lever, having a yoke shaped end for said roll, and a rigid extension extending rearwardly therefrom, adapted to be moved into the path of and engage a rigid plate or bar, on the upward movement of said roll, and said plate or bar, forming rigid surfaces to bind and hold the broken thread or threads.

1,064,281. SPINNING-FRAME. HERBERT G. BEEDE, Pawtucket, R. I. Filed Dec. 1, 1911. Serial No. 663,240. (Cl. 19—3.)



1. In a spinning frame, the combination with a head end door, of means for locking the same in a closed position, said means comprising a sliding block adapted to extend in the path of a device secured to said end door, to prevent the opening thereof, said block attached to a rod mounted in suitable bearings to have a sliding motion, and said rod, and a spring to move it and said block attached thereto, in one direction, a pivotally mounted lever attached to said rod, and extending in the path of and adapted to be engaged and operated by a cam shaped projection on an arm or plate, having one end secured to the shipper rod, and said arm or plate, and shipper rod.

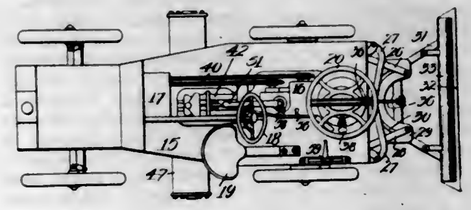
2. In a spinning frame, the combination with a head end door, of means for locking the same in a closed position, said means comprising a sliding block adapted to extend in the path of a device secured to said end door, to prevent the opening thereof, said block attached to a rod mounted in suitable bearings to have a sliding motion, and said rod, and a spring to move it and said block attached thereto in one direction, a pivotally mounted lever attached to said rod, and extending in the path of and adapted to be engaged and operated by a cam shaped projection on an arm or plate having one end secured to the shipper rod and said arm or plate, and shipper rod, and a sliding rod parallel to said shipper rod, on which sliding rod said cam shaped projection is secured.

3. In a spinning frame, the combination with a draft gearing bonnet, of means for locking the same in closed position, said means comprising a lever pivotally mounted intermediate its ends, and having a projection on one end adapted to extend in the path of a lug or projection on said bonnet, a rod having a sliding motion, and pivotally attached at one end to one end of said lever, a spring to move it in one direction, a lever pivotally attached to the other end of said rod, and extending in the path of and adapted to be engaged by a cam shaped projection on an arm or plate having one end secured to the shipper rod, and said arm or plate, and shipper rod.

4. In a spinning frame, the combination with a draft gearing bonnet, of means for locking the same in closed position, said means comprising a lever pivotally mounted intermediate its ends, and having a projection on one end adapted to extend in the path of a lug or projection on said bonnet, a rod having a sliding motion, and pivotally attached at one end to one end of said lever, a spring to move it in one direction, a lever pivotally attached to the other end of said rod, and extending in the path of and adapted to be engaged by a cam shaped projection on an arm or plate having one end secured to the shipper rod, and said arm or plate, and shipper rod, and a sliding rod parallel to said shipper rod, on which sliding rod said cam shaped projection is secured.

5. In a spinning frame, the combination with a draft gearing bonnet, of means for locking the same in closed position, and preventing the starting of the machine when said bonnet is not closed, said means comprising a lever pivotally mounted intermediate its ends, and having a projection on one end adapted to extend in the path of a lug or projection on said bonnet, a rod having a sliding motion, and pivotally attached at one end to one end of said lever, a spring on said rod to move it in one direction, a lever pivotally attached to the other end of said rod, and extending in the path of and adapted to be engaged by a cam shaped projection on an arm or plate having one end secured to the shipper rod, and said arm or plate, and shipper rod, and a sliding rod parallel to said shipper rod, on which sliding rod said cam shaped projection is secured.

1,064,282. SNOW-SCRAPER. LOUISA BLAKE, Worcester, Mass. Filed Jan. 11, 1912. Serial No. 670,590. (Cl. 37—35.)



1. In a snow scraper, the combination of a vehicle, a pivoted scraping blade projecting from the end thereof beyond the driving wheels, means for turning the blade from side to side, means for raising the blade relatively to the vehicle, a brush mounted between the front and rear wheels and adapted to operate on the same surface as the blade after the blade has passed, means for propelling the vehicle toward the scraping blade, and means connected with said propelling means for rotating the brush.

2. In a snow scraper, the combination of a vehicle, a scraping blade at the end thereof pivoted to swing on a vertical axis, means for turning the blade from side to side, means for raising the blade relatively to the vehicle, a brush mounted between the first and rear wheels behind said blade, means for propelling the vehicle, means connected with said propelling means for rotating the brush on a horizontal axis, and means for turning the brush on a vertical axis.

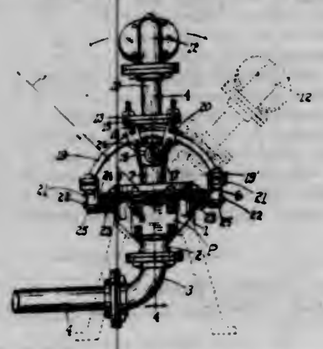
3. In a snow scraper, the combination of a vehicle, means thereon for propelling the vehicle, a steering wheel therefor, a seat on the vehicle arranged back to said propelling means, a scraping blade at the opposite end of the vehicle from the propelling means, means adjacent to the seat for controlling the scraping blade, a brush extending across the vehicle between the propelling means and blades, and means adjacent to the seat for controlling the brush.

4. In a snow scraper, the combination of a vehicle, a vertical shaft thereon, an arm on said shaft, a lever pivoted to the frame of the vehicle and connected on one side of its pivot with said arm, a horizontal plate on the vehicle connected with said lever and adapted to be moved thereby in its own plane, and a snow scraping blade fixed to said plate.

5. In a snow scraper, the combination of a vehicle, a vertical shaft thereon having a pair of arms, a pair of levers mounted on the frame of the vehicle, each connected with one of said arms to be operated thereby, a horizontal plate pivotally connected with both of said levers, a fixed guide for said plate, and a snow scraping blade fixed to the plate, whereby the turning of the shaft on its axis will swing the blade in either direction from a transverse position.

[Claims 6 to 9 not printed in the Gazette.]

1,064,283. FLEXIBLE HOLLOW JOINT. PETER J. BODE, St. Louis, Mo. Filed May 1, 1912. Serial No. 694,569. (Cl. 137—84.)



1. In combination with a casing having an opening, a flexible diaphragm spanning said opening, a tubular member communicating through the center of the diaphragm with the interior of the casing, means spaced from the tubular member and securing the diaphragm to the edge of the casing about the opening whereby a maximum oscillation is permitted to the tubular member about the center of the diaphragm, rocker members disposed on opposite sides of the tubular member and oscillating in a fixed plane, arcuate rails connecting said rocker members, and means for slidably connecting the tubular member to the rails.

2. In combination with a casing open at one end and provided with discharge means, a flexible diaphragm spanning the opening and secured along the edge of the casing, a pipe connected centrally to the diaphragm and communicating therethrough with the interior of the casing, rocker members pivotally and centrally mounted at points diametrically opposite one another to the casing wall, arcuate rails connecting the adjacent ends of the rockers and bowed away from the point of discharge from the casing, and slides connected to the pipe and traversing said rails, whereby the pipe may be oscillated about its point of connection with the diaphragm in two distinct intersecting planes.

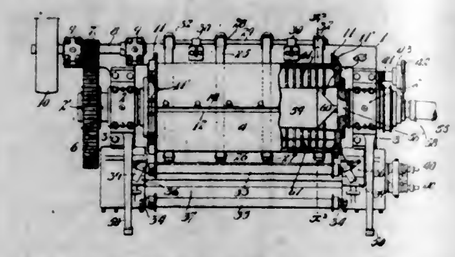
3. In combination with a casing open at one end and provided with discharge means, a flexible diaphragm spanning the opening and secured along the edge of the casing, a pipe connected centrally to the diaphragm and communicating therethrough with the interior of the casing, rocker members pivoted centrally at points diametrically opposite one another to the casing walls, arcuate rails connecting the adjacent ends of the rockers and bowed across the plane of the edge of the casing to which the diaphragm is secured, slides carried by the pipe and traversing said rails, and means for limiting the angle of oscillation of the pipe along the rails, and of the rockers about their pivots, respectively.

1,064,284. ZINC-SHAVING MACHINE. FREDERICK W. BRAUN and OSCAR C. BEACH, Los Angeles, Cal.; said Beach assignor to said Braun. Filed July 2, 1909. Serial No. 505,757. (Cl. 29—4.5.)

1. In a zinc shaving machine, a drum for supporting the sheets of zinc, cutting means, means for radiating the heat generated from cutting to the interior of the drum, and means for maintaining an air current through the drum to increase the heat radiation.

2. In a zinc shaving machine, a drum for supporting the sheets of zinc, cutting means, means for radiating the heat generated from cutting to the interior of the drum, means for maintaining an air current through the drum to increase the heat radiation, and means for deflecting the inflowing air toward the wall of the drum and around the projections to secure perfect circulation and heat elimination throughout the entire interior of the drum.

3. In a zinc shaving machine, a zinc supporting drum, cutting means, heat radiating means on the inner wall of the drum, and means for moistening the heat radiating means to increase the heat elimination.

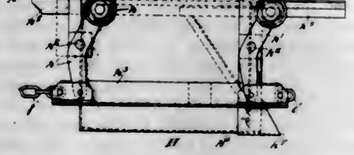


4. In a zinc shaving machine, a zinc supporting drum, cutting means, heat radiating means on the interior of the drum, and means for admitting air and water to promote the radiation of heat from the said heat radiating means.

5. In a zinc shaving machine comprising a rotary drum provided with means for binding sheet metal thereon, flexible retaining means extending under the drum to serve as a guide for the sheet metal, removable guiding means at each end of the drum, and means for removably supporting sheet metal in position for feeding to the drum.

[Claims 6 to 9 not printed in the Gazette.]

1,064,285. EXCAVATOR AND LEVEE-BUILDER. MORTON G. BUNNELL, Chicago, Ill., assignor to Frederick C. Austin, Chicago, Ill. Filed Mar. 22, 1909. Serial No. 485,066. (Cl. 37—39.)



1. In an excavator, a bucket or scoop, a runway therefor, means including clutch mechanism on the runway for expelling the load from the bucket by the backward motion thereof, and means on the bucket for releasing said mechanism.

2. In an excavator, a bucket or scoop, a runway therefor, a movable back therefor, means including clutch mechanism on the runway for operating said back to expel the load from the bucket by the backward motion thereof, and means on the bucket for releasing said mechanism.

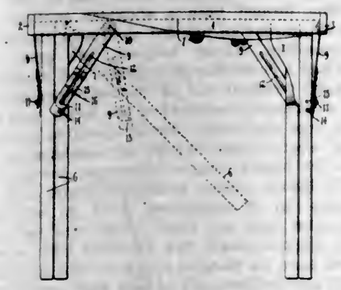
3. In an excavator, a bucket or scoop, a runway therefor, an ejector therefor, means including clutch mechanism on the runway for operating said ejector by the backward motion of the bucket, and means on the bucket for releasing said mechanism.

4. In an excavator, a bucket or scoop, a movable back therefor, a stationary hook for causing the back to stand still while the bucket moves backward, and means on the bucket for automatically releasing the said hook when the load is entirely discharged.

5. In an excavator, a runway provided with a hook, a bucket or scoop adapted to travel on said runway, a movable back for said bucket or scoop, means on the back adapted to be caught and held by the said hook, and means on the bucket for engaging said hook to release the same from the back.

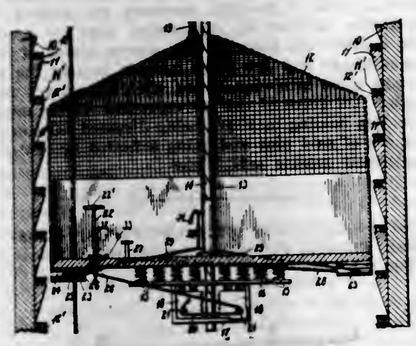
[Claims 6 to 17 not printed in the Gazette.]

1,064,286. FOLDING TABLE. JAMES W. CAMPBELL, deceased, by Susan E. Campbell, administratrix, Germantown, N. Y., assignor to Ferguson Brothers Mfg. Co., Hoboken, N. J., a Corporation of New Jersey. Filed Jan. 26, 1911. Serial No. 604,850. (Cl. 45—11.)



A table comprising a top, folding legs independent of one another and hinged to the top and leg braces pivoted to the top and slidably engaging the leg, a spring leaf secured to the brace, the said brace and spring leaf being provided with elongated slots through which the leg pivot extends and a stop on the leg with which the brace is forced into engagement by the said spring leaf and leg pivot.

1,064,287. ELEVATOR-BRAKE. WILLIAM CARMAN, Richmond, Va., assignor of one-half to Edward C. Jorgenson, Brattleboro, Vt. Filed June 8, 1912. Serial No. 702,425. (Cl. 187—92.)



1. A brake device for elevators comprising a cable extending centrally the length of the elevator shaft, a guide tube in the car to receive the cable slidably therethrough, a spring bumper plate on the bottom of the floor of the car, jaws slidably mounted on the bumper plate for engagement with said cable, a rotatable staff in the car and connections between the staff and the jaws for moving the jaws into engagement with the cable.

2. A brake device for elevators comprising a cable extending centrally the length of the elevator shaft, a guide tube in the car to receive the cable slidably therethrough, a spring bumper plate on the bottom of the floor of the car, jaws slidably mounted on the bumper plate for engagement with said cable, grooved pulleys on the jaws, a rotatable staff in the car, and a cable connected to the staff at one end and to one of the jaws at its opposite end and passing over said grooved pulleys.

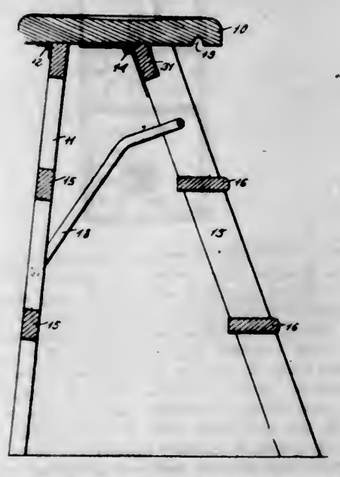
1,064,288. PENCIL. WILLIAM W. CASE, Raymond, Cal. Filed Aug. 1, 1911. Serial No. 641,841. (Cl. 120—21.)

1. A pencil comprising a barrel, a stem slidably mounted therein and having spring jaws adapted to engage the lead, a cap mounted upon the barrel and through which the said stem passes, said cap having a recess at the side of the opening through which the stem passes, said stem having outwardly disposed lugs arranged in planes at an angle with relation to each other and having their inner ends spaced apart in a direction longitudinal of the stem.



2. A pencil comprising a barrel, a stem slidably mounted therein and having spring jaws adapted to engage a lead, a cap carried by the barrel and slidably receiving the stem, said cap having a recess at the side of its opening which receives the stem, outwardly disposed lugs carried by the stem and disposed in planes at an angle to each other and adapted to enter the said recess, the said lugs having their adjacent ends spaced from each other in a direction longitudinally of the stem, the innermost lug being provided at its innermost end with laterally disposed shoulders.

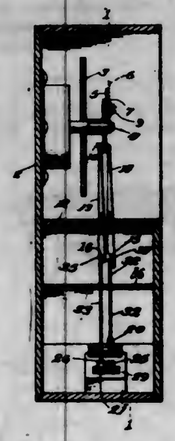
1,064,289. FOLDING STOOL. ALICE A. CASSIDY, Des Moines, Iowa. Filed Dec. 26, 1911. Serial No. 667,994. (Cl. 155—32.)



A portable folding step ladder and stool comprising a ladder member having two legs and a number of steps, a leg member having two legs connected by cross pieces, the top of the ladded member being beveled or inclined so that it will be in a horizontal position when the ladder member is inclined at the proper angle for forming a ladder, a combined seat, handle and lever hinged to the rear portion of the beveled or inclined top of the ladder member and a part of said combined seat, handle and lever being extended forwardly beyond the front of the ladder member, and this forwardly projecting part being formed with a handle, the said leg member being hingedly connected to the bottom of the combined seat, handle and lever near the rear thereof when the seat, handle and lever is in a horizontal position and two combined braces and levers pivoted at one end to the ladder member and extended downwardly and pivoted at the other end to the leg member, said parts being so arranged and proportioned that the lower ends of the ladder member may be placed on a floor and the upper end of the ladder may be used as a fulcrum and the front of the combined seat, handle and lever may be grasped and when moved downwardly it will serve as a lever to raise the leg member and move it rearwardly away from the ladder member until the combined seat, handle and lever rest flat upon the inclined beveled top of the ladder member and when the forward end of the combined seat, handle and lever is elevated the upper end of the leg member will be moved

thereby downwardly and to position substantially parallel and adjacent to the ladder member, the said combined braces and levers being so arranged that when the upper end of the leg member is moved upwardly and away from the ladder member the said braces will serve as levers and cause the lower end of the leg member to move away from the lower end of the ladder member, and when the said seat member is resting flat upon the top of the ladder member the said combined braces and levers will then serve as braces to prevent the lower ends of the ladder member and leg member from spreading.

1,064,290. TIME-ACTUATED ELECTRIC SWITCH. DEAN A. CATO, Springfield, Ill. Filed Jan. 6, 1912. Serial No. 669,815. (Cl. 161—27.)



1. An electric time switch including a pair of switch blades, contact members with which they electrically coact, means for urging one blade into and the other blade out of engagement with the corresponding contact member, a clock actuated disk provided with a series of perforations upon its margin, pins shiftable into any of said perforations, links extending upward from the switch blades, and pivoted members, one for each of said links engaging the said links when in one position to hold the blades in operative position against the force of the urging means, said pivoted members extending into the path of movement of the pins whereby the pivoted members may be shifted out of engagement with the links.

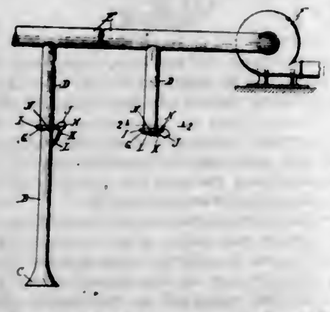
2. In an electric time switch, the combination with a pair of switch blades, contact members, one for each switch blade, means for yieldingly urging one of said switch blades out of engagement with its corresponding contact member and the other blade into such engagement, of a clock actuated disk provided with a series of perforations upon its margin, a pair of pins shiftable into any of said perforations, links pivotally connected to the respective switch blades and extending toward said disk, one of said links having a hook-shaped terminal end, and pivoted latches mounted above the links, the upper ends of the latches extending into the path of movement of the said pins, one of said latches being formed with a shoulder engaging the end of one of said links to prevent an upward movement thereof, the other latch being provided with a hook engaging the hook-shaped terminal end of the other link and preventing any downward movement thereof when so engaged.

3. In an electric time switch, the combination with a pair of switch blades, a pair of corresponding contact members and yielding means for urging one of said blades in engagement with its contact member and the other of said blades out of such engagement, of clock mechanism including a clock actuated disk provided with a series of perforations on its margin, a pair of pins shiftable into any of said perforations, one of said pins projecting from one side of the disk and the other pin projecting from the other side of the disk, links pivoted to the switch blades and extending upward therefrom, a guide for said links, latches pivoted intermediate their ends, the upper ends of the latches extending into the path of movement of the pins on the disk, the lower end of one of said latches being formed with a shoulder engaging one of said links to prevent an upward movement thereof and of the corresponding contact member, the other of said latches having a hook-shaped terminal end engaging with a hook-shaped terminal end on the corresponding link to prevent a downward movement of the latter, and a spring adapted to urge the latches out of operative position.

4. In an electric time switch, the combination with a pair of switch blades, contact members, one for each of said switch blades, means yieldingly urging one of said switch blades out of engagement with its corresponding contact member and the other blade into such engagement, of a clock-actuated disk provided with a series of perforations upon its margin, a pair of pins shiftable into any of said perforations, one of said pins projecting from one side of the disk and the other pin projecting from the other side of the disk, and means disposed in the path of the pins and releasable thereby for holding the first named blade out of engagement with its contact member, and the other of said blades in engagement with its contact member.

5. In an electric time switch the combination with a pair of switch blades, a pair of corresponding contact members and yielding means for urging one of said blades into engagement with its contact member and the other of said blades out of such engagement, of clock actuated mechanism including a disk provided with marginal perforations, pins mounted on the disk in any one of said perforations and projecting from opposite sides of the disk, a pair of yielding members for holding the switch blades, one out of engagement with its contact member against the force of the means urging it into such engagement and the other member holding the second named blade into engagement with its contact member against the force of the corresponding urging means, said yielding holding members being disposed each in the path of one of said pins and being actuated by said pins to successively release said blades.

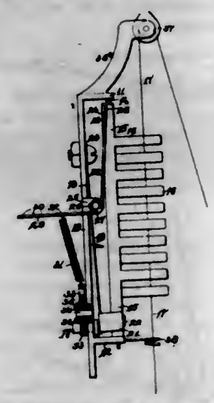
1,064,291. VALVE FOR EXHAUST-PIPES. HENRY G. CONRAD, Chicago, Ill. Filed Aug. 5, 1912. Serial No 713,365. (Cl. 193—10.)



1. A suction cleaning system for wood working tools and the like having a plurality of fixed conduits and intake ports therefor, removable suction pipes and automatic means for closing said ports when said pipes are withdrawn.

2. A suction cleaning system for wood working tools and the like, having a plurality of fixed conduits and intake ports therefor, removable suction pipes and automatic means for closing said ports when said pipes are withdrawn, said means comprising a valve disk held in the inoperative position by the removable pipe, but free to swing into register with the port when the pipe is withdrawn.

1,064,292. TENSION DEVICE. ANDREW CRAWFORD, Paterson, N. J., assignor to Thomas Smith, Paterson, N. J. Filed Apr. 24, 1912. Serial No. 692,789. (Cl. 242—154.)



1. A tension device comprising a pair of bars in swinging relation to each other and having separated arms adapted to pass, a pivoted bell-crank with one free end engaging a bar to swing it to its open position, a spring engaging the other free end to operate the bell-crank, and means for holding the spring at different points on said last-mentioned free end.

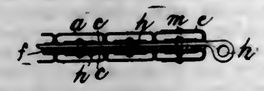
2. A tension device comprising a pair of bars in swinging relation, the bara having arms, the arms on each bar adapted to pass the arms on the other, a wire bent into a loop intermediate of its ends, the ends being substantially at right angles so as to form a bell-crank, a bell-crank being mounted opposite each bar, one end of each bell-crank engaging a bar to hold the bars normally apart, a spring attached to each free end of a bell-crank, and adjustable means for regulating the tension of the springs.

3. A tension device comprising a swinging bar having spaced arms, a bell-crank having a free end engaging the bar, the second free end of the bell-crank having notches therein, and a spring adapted to be placed in the notches to vary the tension on the bell-crank and the bar.

4. A tension device comprising a pair of swinging bars having arms thereon, each bar having a wing extending therefrom, bell-cranks mounted so that a free end of each bell-crank engages a wing of a bar to swing the bars to separate their arms, bearings, screws in the bearings, nuts on the screws, and springs secured to the screws and engaging the free ends of the bell-cranks, said free ends being notched at intervals to provide means for adjustably attaching the springs to the bell-cranks.

5. A tension device comprising a support, bars pivoted at the top and bottom in swinging relation to each other on the support, the bars having arms, a bell-crank mounted on each side of the support and in rear of the arms, each bell-crank having one end engaging a bar to normally pull the bar backward, the second end of each bell-crank projecting to the rear and having notches therein, and springs secured to the support, the springs being adapted to be placed in any of the notches whereby the tension to which the bell-cranks are subjected can be varied.

1,064,293. FIREPROOF DOOR AND THE LIKE. GEORGE CROSSLEY, Manchester, England. Filed Dec. 9, 1911. Serial No. 664,885. (Cl. 189—46.)

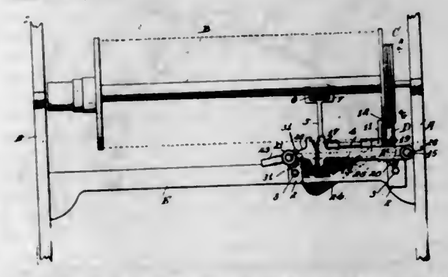


1. In a device of the character described, the combination, with a body-portion of fire-resisting material, of a series of hollow metallic facing-members arranged side by side and provided with flanges which rest on the said body-portion, washer-plates bearing on the said flanges, and fastening devices carried by the said body-portion and holding the washer-plates in position, said flanges being slidable under the said washer-plates as the metallic facing-members expand and contract.

2. In a device of the character described, the combination, with a body-portion of fire-resisting material, of two series of hollow metallic facing-members arranged side by side and upon each side of the said body-portion, said facing-members being provided with flanges which rest on the said body-portion, washer-plates bearing on the said flanges, and fastening devices, each carried by the said body-portion and engaging with two washer-plates, said flanges being slidable under the washer-plates.

3. In a device of the character described, the combination, with a body-portion of fire-resisting material, of two series of hollow metallic facing-members arranged side by side and upon each side of the said body-portion, the facing-members on one side being arranged crosswise of the facing-members on the other side, and the said facing-members being provided with flanges which rest on the said body-portion, washer-plates bearing on the said flanges, and fastening devices carried by the said body-portion and holding the washer-plates in position, said flanges being slidable under the said washer-plates.

1,064,294. AUTOMATIC FRICTION LET-OFF. OCTAVIEN DALPOND, Fall River, Mass., assignor to The Standard Equipment Company, a Corporation of Massachusetts. Filed Jan. 18, 1913. Serial No. 742,818. (Cl. 139—58.)



1. A friction let-off comprising a pivotally mounted lever, a transverse rock-shaft, means mounted on said shaft to turn therewith and engaging said lever to turn the same on its pivot, and a weight-arm mounted on said shaft to turn therewith, in combination with a longitudinal rock-shaft, a feeler-arm adjustably mounted thereon, a crank integral with the latter shaft and connections between said lever and said crank for transmitting the action of the weight-arm to the friction flange and to said feeler-arm.

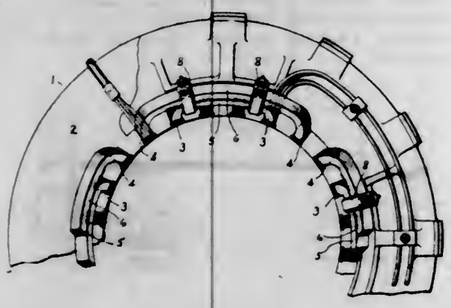
2. A friction let-off comprising a pivotally mounted lever having a gear segment on its free end, a transverse rock-shaft, a gear segment fixed to said shaft and meshing with the gear segment of the lever, and a weight-arm secured to said rock-shaft to move therewith, in combination with a longitudinal rock-shaft, a feeler-arm mounted on the latter shaft to move therewith, a crank integral with the latter shaft and a friction element connecting said lever and crank.

3. A friction let-off comprising a lever pivoted at one end and carrying a bolt-hook, a transverse rock-shaft, means carried on the end of said rock-shaft and turning therewith for engaging and moving said lever on its pivot, and a weight-arm secured to the other end of said rock-shaft to turn therewith in combination with another rock shaft, a feeler-arm mounted thereon to turn therewith and connections for turning the latter shaft to move said feeler-arm toward the warp as the diameter of the latter decreases and the weight-arm falls, said connections including a friction element.

4. A friction let-off comprising a bracket adapted to be mounted on a loom frame, a lever pivotally mounted on said bracket, a transverse rock-shaft mounted in the bracket, means mounted on the end of the shaft for transmitting the motion thereof to the lever and a weight-arm mounted on the shaft, in combination with another rock-shaft mounted in the bracket, a feeler-arm mounted thereon to move therewith, a friction element connected to said lever and connections between the friction element and the last mentioned rock-shaft.

5. A friction let-off comprising a bracket adapted to be secured to a loom frame, a lever pivoted to said bracket, a transverse rock-shaft mounted in the bracket, means mounted on the end of this shaft to transmit the motion of the same to the lever, and a weighted-arm mounted on said rock-shaft to move therewith, in combination with a longitudinal rock-shaft mounted in the bracket, a feeler-arm mounted on the latter shaft to move therewith, a crank connected to the latter shaft and a friction element passed around the friction flange and having its respective ends connected to the lever and the crank.

1,064,295. SUPPORT FOR END TURNS OR CONNECTIONS OF COILS FOR DYNAMO-ELECTRIC MACHINES. WILLIAM F. DAWSON, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Jan. 30, 1907. Serial No. 354,830. (Cl. 171—252.)



1. In a dynamo-electric machine, a frame member having projecting coil supporting portions, coils having end turns or connections arranged in groups, and means for securing said end turns or connections comprising independent clamping devices engaging the members of each group and said projecting portions of the frame member at one or more points and having jaws recessed to fit the conductors of the groups to which they are applied.

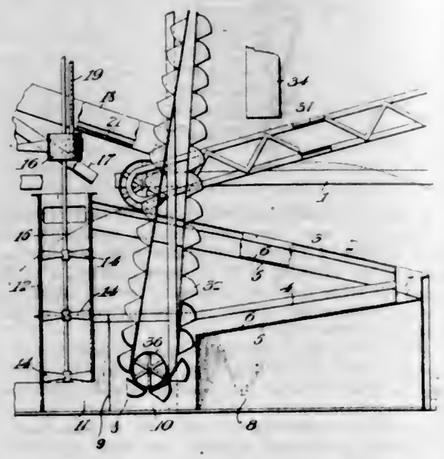
2. In a dynamo-electric machine, coils having end turns or connections, a frame member adjacent thereto, and clamping devices for securing said end turns or connections to said frame member, said clamping devices surrounding said frame member and said end turns and locking them rigidly together.

3. In a dynamo-electric machine, coils having end turns or connections arranged in groups, frame members, and means for securing said end turns or connections, said means consisting of a clamping device for each group forming with one of the frame members a pocket in which the conductors of the group are firmly locked.

4. In a dynamo-electric machine, coils having end turns or connections, a frame member, and a device for holding in place said end connections consisting of blocks having an aperture conforming to the cross-sectional shape of a bunch of said connections formed in them and a metallic strap for holding said blocks together so as to apply a uniform pressure to the surface of the connections, said metallic strap being fastened to said frame member.

5. In a dynamo-electric machine, a bracket rigidly attached to said machine, coils having end turns or connections, and a device for holding in place said end connections consisting of blocks having an aperture conforming to the cross-sectional shape of a bunch of said connections formed in thetm, and a metallic strap for holding said blocks together so as to apply a uniform pressure to the surface of the connections, said metallic strap being secured to said bracket.

1,064,296. PLACER-MINING MACHINE. CHARLES R. DENNISON, Youngstown, Ohio, assignor of one-third to J. B. Chambers and one-third to W. V. Burnett, Youngstown, Ohio. Filed Jan. 11, 1912. Serial No. 670,661. (Cl. 83—89.)

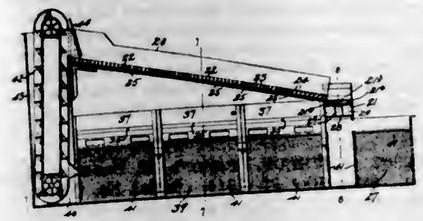


1. In a mining machine of the class described, the combination of a water tank, concentrating means including a pair of reversely inclined sluiceways which are arranged above and mounted upon the tank, perforate walls providing a tailings bin within the tank, said tailings bin being in communication with the discharge end of the lower sluiceway section, an upright circulating flume mounted upon the tank, the lower end of the circulating flume communicating with the tank upon the exterior of the tailings bin while the upper end of the circulating flume is adapted to discharge into the upper end of the upper inclined sluiceway, mechanical lifting and circulating means within the upright flume, and mechanical means for removing the tailings from the tailings bin.

2. A machine of the class described comprising a water tank provided at an intermediate point with a tailings bin, and with perforate walls for such bin, concentrating means supported on the tank and discharging into the tailings bin, an upright circulating flume also carried by the tank and disposed outside of the bin and at one side of one of the perforate walls of the bin, the lower end of said flume being in open communication with the reservoir within the tank, and the upper end of the flume having a discharge connection with the upper receiving end of the concentrating means, lifting and circulating devices within the flume, and discharging means operating within the said tailings bin of the tank.

3. In a mining machine of the class described, the combination of a water tank provided with a tailings bin, an inclined sluiceway mounted within the tank and having the lower end thereof constructed to discharge into the tailings bin, an upright circulating flume having the lower end thereof in connection with the water tank upon the exterior of the tailings bin, a lateral discharge spout at the upper end of the circulating flume, mechanical lifting means within the circulating flume, a curved water conduit at the upper end of the inclined sluiceway for receiving the water from the spout of the circulating flume, and mechanical means for removing the tailings from the tailings bin.

1,064,297. PLACER-MINING MACHINE. CHARLES R. DENNISON, Youngstown, Ohio. Filed Feb. 21, 1912. Serial No. 679,151. (Cl. 83—89.)



1. A placer mining machine including an inclined sluiceway provided with transversely disposed upright riffles which are arranged in a plurality of sets, the successive sets of transverse riffles from the top to the bottom of the sluiceway being vertical, inclined, and then curved, so as to present a progressively decreasing resistance to the passage of water through the sluiceway.

2. A placer mining machine including a riffled sluiceway formed with transversely disposed riffles, all of the riffles being of substantially the same height and being vertical at the upper end of the sluiceway, inclined at the intermediate portion thereof, and curved at the lower end of the sluiceway so as to offer a gradually decreasing resistance to the passage of the water through the sluiceway.

3. A placer mining machine including a sluiceway, and a series of riffle pans mounted within the sluiceway, the riffles of the various pans being all substantially of the same height and vertical at the upper end of the sluiceway, inclined at an intermediate portion thereof, and curved at the lower end of the sluiceway so as to offer a gradually decreasing resistance to the passage of the water through the sluiceway.

4. A concentrating unit for placer mining machines comprising a main riffled sluiceway, a transversely inclined grizzly arranged at the discharging end of the main sluiceway and having a plurality of screen sections, a separate inclined sluice arranged beneath the screen sections of the grizzly, a plurality of secondary riffles for final separation of the gold, and a series of circulating conduits respectively leading from beneath the separate screen sections of the grizzly to the respective secondary riffles.

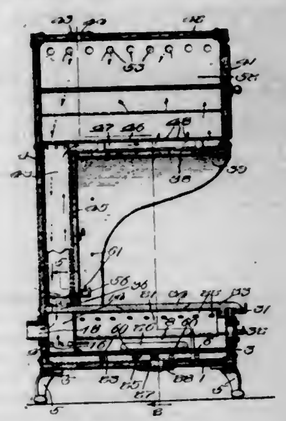
5. A concentrating unit for placer mining machines comprising a main riffled sluiceway, a transversely inclined grizzly arranged at the discharging end of the main sluiceway and having a plurality of screen sections, a separate inclined sluice arranged beneath the screen sections of the grizzly, a plurality of secondary riffles for final separation of the gold, a series of circulating conduits respectively leading from beneath the separate screen section of the grizzly to the respective secondary riffles, and means for regulating the flow through the said conduits.

[Claims 6 to 9 not printed in the Gazette.]

1,064,298. COOKING APPARATUS. FOREST V. DETWILER, Chicago, Ill. Filed Feb. 2, 1911. Serial No. 606,109. (Cl. 126—39.)

1. A cooking apparatus embodying a hollow base provided with a plurality of stove holes therein, a burner within the base beneath one of the holes, a pair of dampers one disposed on each side of the burner, and means for adjusting the dampers to direct the heated gases from the burner to circulate across one or more of the stove holes, said dampers being adapted to be projected across one of the stove holes and between said hole and said burner to shut off the heated gases from said hole.

2. A cooking apparatus embodying a hollow base having a plurality of stove holes, a burner therein, dampers within the base for directing the heated gases to one or more of the stove holes, a discharge outlet for the heated gases leading from the base, and means for causing the heated gases to circulate across one or more of the stove holes to the said discharge outlet, said dampers being provided with passages whereby a portion of the heated gases may pass therethrough, and said dampers being adapted to be projected across one of the stove holes for intercepting the heated gases.



3. A cooking apparatus embodying a base having stove holes therein, a heater for the stove holes, an oven spaced from the base, a hollow partition dividing the oven into separate chambers and provided with passages forming communication between the space in the partition and the respective chambers, a discharge outlet for the heater, a passage between said outlet and the space in said partition, passages for receiving the heated gases from the heater and conducting them to the respective chambers, and dampers in said passages.

4. A cooking apparatus having a top provided with a central and side openings, deflectors under the side openings inclining toward each other and away from the top and in a direction toward the central opening, and dampers for closing the respective spaces between the top and the deflectors, said dampers being disposed on opposite sides of the central opening and adapted to be projected across the said central opening.

5. A cooking apparatus having a top provided with a plurality of stove holes therein, means beneath one of the holes whereby heat may be supplied, a pair of dampers one disposed on each side of the said means, and means whereby said dampers may be adjusted to direct the heated air to circulate across one or more of the stove holes, said dampers being adapted to be projected across one of the stove holes and between the said hole and the first recited means to shut off the heated air from said hole.

[Claims 6 to 12 not printed in the Gazette.]

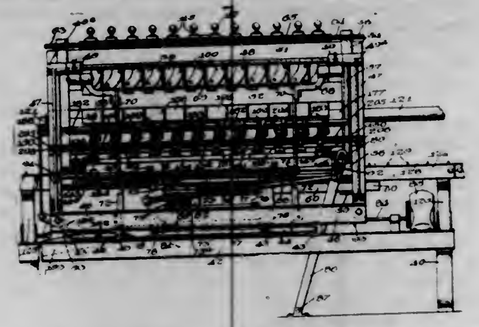
1,064,299. MACHINE FOR SOLDERING CANS. FRED G. DICKERSON and EDMUND A. SIMPSON, Chicago, Ill., assignors, by mesne assignments, to Chicago Solder Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 30, 1908. Serial No. 424,108. (Cl. 113—88.)

1. The combination of a conveyer for feeding the cans, a rotary soldering tool movable back and forth in the direction of movement of the cans, means for causing the tool to engage the can, and means for moving the tool with the can as the latter is moved through the machine.

2. The combination of a continuously moving conveyer for feeding the cans, a soldering tool movable back and forth in the direction of movement of the cans, means for causing the tool to engage the can, and mechanism for simultaneously rotating the tool and for moving it with the can as the latter is moved through the machine.

3. The combination of a conveyer for feeding the cans, a soldering tool movable back and forth in the direction of movement of the cans, means for causing the tool to en-

gage the can, means for moving the tool with the can as the latter is moved through the machine, and means for imparting an axial rotation to the tool.

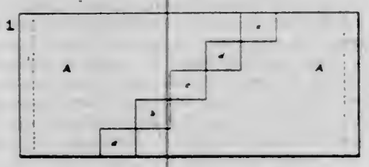


4. The combination of a conveyer for feeding the cans, a rotary soldering tool movable back and forth in the direction of movement of the cans, means for moving the tool into and out of engagement with the can, and means operatively related to the last said means for advancing the tool with the can while in engagement therewith as the latter moves through the machine and for moving the tool to meet the advancing can to be soldered.

5. The combination of a conveyer for feeding the cans, a soldering tool, can-controlled mechanism for supplying solder to said tool, means for moving the tool into and out of engagement with the can, means operatively related to the last said means for advancing the tool with the can while in engagement therewith and as the latter moves through the machine and for moving the tool when out of engagement with the can in a direction opposed to the direction of movement of the advancing can to be soldered and means for imparting a movement to the tool other than its bodily movement during its bodily movement in each direction.

[Claims 6 to 67 not printed in the Gazette.]

1,064,300. PISTON PACKING-RING. WILLIS G. DODD, San Francisco, Cal. Filed Sept. 3, 1912. Serial No. 718,339. (Cl. 121—108.)



1. A piston packing ring, consisting of one piece of material, having a plurality of integral lap-joints or abutments.

2. A resilient piston packing ring, consisting of one piece of material having a series of lap-joints or abutments formed integral with the ring itself.

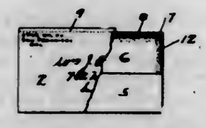
3. A piston packing ring, consisting of one piece of material provided with a plurality of integral lap-joints or abutments, in combination with a bull-ring as and for the purpose described.

1,064,301. BAG-CLOSURE. FRANK DONEGAN, Lynchburg, Va. Filed Feb. 8, 1912. Serial No. 676,407. (Cl. 24—30.5.)



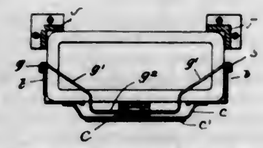
In combination with an article to be closed, a device of the class described comprising a band of bendable metal having a body portion provided with a plurality of introverted, piercing tongues and a slot, said slot being elongated and capable of receiving a single tongue therethrough, or a plurality of tongues therethrough at the same time to engage said article, said tongue thus functioning as means to prevent displacement of the band and means to maintain said band in continuous form, and said elongated slot providing means to receive a plurality of tongues as well as a single tongue so that the band may be used to close articles of different sizes.

1,064,302. ENVELOP. REBECCA M. DONOHUE, Oakland, Cal. Filed May 27, 1911. Serial No. 629,851. (Cl. 229—73.)



A return reply envelop consisting of a single sheet comprising a body portion, end flaps, a seal flap, a back flap of less height than the body portion, and a return reply flap comprising an extension of the back flap being not greater in height than the height of the back flap, and on the side removed from the body portion, said return reply flap folded upon itself along its longitudinal center line and being arranged within the envelop so that the free edge thereof lies adjacent the edge of the body portion from which the seal flap extends.

1,064,303. STENCIL-HOLDER. HARMON P. ELLIOTT, Newton, Mass. Filed Dec. 5, 1910. Serial No. 595,541. (Cl. 101—1.)



1. A holder for stencils having an outwardly extended back to provide a space between said back and the stencil-receiving part of the holder throughout its length, said space being in open communication with said stencil-receiving part of the holder, and a follower arranged in said holder, having its end portions extended across the stencil-receiving part of the holder and having a recess therebetween, which is in open communication with the stencil-receiving part of the holder and which is extended beyond the bottom thereof, thus to provide a space between the bottom of said recess and the stencil-receiving part of the holder, substantially as described.

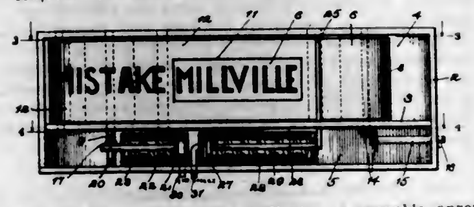
2. A holder for stencils having an outwardly extended back to provide a space between said back and the stencil-receiving part of the holder, and a follower extended transversely across the holder and connected thereto having downwardly inclined pile-engaging portions, and a downwardly extended portion between said pile-engaging portions, which projects into the outwardly extended back of the holder, to provide a space between the follower and the stencil-receiving part of the holder, substantially as described.

3. A holder for stencils having an outwardly extended back to provide a space between said back and the stencil-receiving part of the holder, and a follower extended transversely across the holder consisting of a strip of metal bent to form hooks at its ends which slidably engage the holder, and downwardly inclined pile-engaging portions, and a downwardly extended portion between said pile-engaging portions, which projects into the outwardly extended back of the holder, to provide a space between the follower and the stencil-receiving part of the holder, substantially as described.

4. A holder for stencils having an outwardly extended back to provide a space between said back and the stencil-receiving part of the holder throughout its length, said space being in open communication with said stencil-receiving part of the holder, and a follower arranged in said holder, having its end portions extended across the stencil-receiving part of the holder and having a recess therebetween, which is in open communication with the stencil-receiving part of the holder and which is extended beyond the bottom thereof, thus to provide a space between the bottom of said recess and the stencil-receiving part of the holder, said follower having means at its ends to slidably engage the sides of the holder, substantially as described.

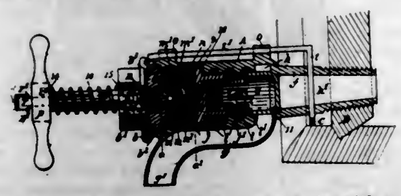
5. A holder for a stencil having side pieces made yielding in a direction toward each other and having an outwardly extended back to provide a space between said back and the stencil-receiving part of the holder, which extends from end to end of the holder, and a follower for the stencils in said holder, extended transversely with respect to the holder, having means at its ends to slidably engage the upper edges of said yielding side pieces, a portion of said follower crossing the stencil-receiving part of the holder and a portion extended downwardly and along the space between the back and the stencil-receiving part of the holder, which is arranged remote from the stencil-receiving part of the holder, to provide a space between the top of the follower and the stencil-receiving part of the holder, substantially as described.

1,064,304. STATION-INDICATOR. JOHN G. EVANS, Millville, N. J., assignor of one-third to Wadsworth Cresse, Pitman, N. J. Filed Apr. 25, 1912. Serial No. 693,096. (Cl. 40—38.)



In combination, a station indicator, a movable apron in the indicator containing the names of stations, an apron containing the word "Mistake" and adapted to be moved across the station name on the apron, cylinders, pistons in said cylinders controlling the movement of the apron and the curtain, springs in said cylinders normally holding the pistons in one position, an air supply pipe, a valve casing, pipes connecting the valve casing with the respective cylinders, a valve in said casing constructed to connect the supply pipe with either of the cylinder pipes, and exhaust ports in said valve normally registering with the cylinder pipes, substantially as described.

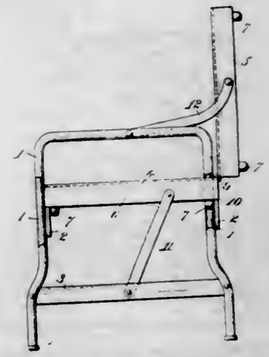
1,064,305. VALVE-SPIGOT. CHARLES E. FISHER, Verplanck, N. Y., assignor of one-half to William B. Jaycox, Peekskill, N. Y. Filed June 15, 1911. Serial No. 633,301. (Cl. 137—27.)



1. A valve spigot comprising a valve body with a screw threaded end, a valve chamber and locking device chamber in alinement with the spigot inlet, an elongated valve in the valve chamber to close the spigot inlet, an annular passage around the valve communicating with a stationary spout extended parallel with the body, lugs on the back of the valve, a screw thread in the valve chamber and removable knobs in the valve lugs to engage with said screw threads, a member in the locking chamber adapted to seat on the end of the valve chamber to close communication between said chambers and lugs on said member to engage with the lugs on the spigot valve, a spring to normally seat said member, a stem on said member and a handle on said stem, a slot longitudinally of the stem, a spring about the stem secured as a torsion spring tending to keep the valve closed, lugs on the stem within the locking chamber, combined lock tumblers and pawls rockable on said lugs, springs pressing on the said pawls, a spigot cap provided with a ratchet toothed inner face for engaging said pawls, the pawls provided with extensions into the slot in the stem, and a key adapted to be introduced into the slot in the stem for manipulating the pawls.

2. A valve spigot comprising a valve body with a screw threaded end, a valve chamber and locking device chamber in alinement with the spigot inlet, an elongated valve in the valve chamber to close the spigot inlet, an annular passage around the valve communicating with a stationary spout extended parallel with the body, lugs on the back of the valve, a screw thread in the valve chamber and removable knobs in the valve lugs to engage with said screw threads, a member in the locking chamber adapted to seat on the end of the valve chamber to close communication between said chambers and lugs on said member to engage with the lugs on the spigot valve, a spring to normally seat said member, a stem on said member and a handle on said stem, a slot longitudinally of the stem, a spring about the stem secured as a torsion spring tending to keep the valve closed, lugs on the stem within the locking chamber, combined lock tumblers and pawls rockable on said lugs, springs pressing on the pawls, a spigot cap provided with a ratched toothed inner face for engaging said pawls, the pawls provided with extensions into the slot in the stem, a key adapted to be introduced into the slot in the stem for manipulating the pawls, grooved elevations ou the top of the spigot body, a plate elongated laterally of the spigot body movable on the end of the spigot body with an extended arm slidable within the grooved elevations and normally held from outward movement by said cap, and a notch in the cap of the spigot adaptable to be brought into alinement with said arm to permit of its outward movement.

1,064,306. DAVENPORT. EDWARD C. FISHER, Lincoln, Ill. Filed Dec. 26, 1911. Serial No. 667,873. (Cl. 5—47.)



In a device of the class described, a main frame comprising end members and a pair of longitudinal members connecting the same, a seat portion comprising end members and a pair of bars connecting said end members, said bars being arched below the lower edges of said end members and adapted to fit between the longitudinal members of the main frame, and engage the inner faces of the same simultaneously when the seat end members are resting on

said longitudinal frame members, a back hinged to said seat portion and links connecting said seat and back portions respectively with the end members of the main frame, substantially as described.

1,064,307. SYRINGE. DAISY FLEMING, Sacramento, Cal., assignor of one-half to William T. Remington, Sacramento, Cal. Filed Aug. 28, 1912. Serial No. 717,454. (Cl. 128—25.)

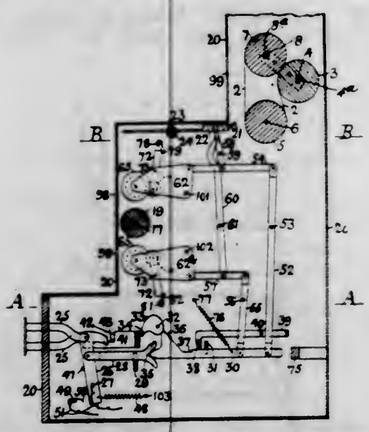


1. A syringe comprising a longitudinally divided body portion, a central fluid passage in said body portion, having a plurality of discharge openings communicating with said central passage, means for interlocking the longitudinally divided body portions, said means comprising dovetailed interlocking portions in the discharge end of the divided body portions, and segmental portions at the receiving end adapted to be inserted into a locking coupling.

2. A syringe comprising a longitudinally divided body portion, a central fluid passage in said body portion, having a plurality of discharge openings communicating with said central passage, means for interlocking the longitudinally divided body portions, said means comprising dovetailed interlocking portions in the discharge end of the divided body portions, and threaded segmental portions at the receiving end adapted to screw into a coupling.

3. A syringe comprising a longitudinally divided body portion, a central fluid passage in said body portion, having a plurality of discharge openings communicating with said central passage, means for interlocking the longitudinally divided body portions, said means comprising dovetailed interlocking portions in the discharge end of the divided body portions, threaded segmental portions at the receiving end adapted to screw into a coupling, and means for preventing side movement of the parts with relation to each other, said means comprising an interlocking pin and socket.

1,064,308. WORKMAN'S TIME-RECORDER. WILLIAM SHIELD FOGGIN, Newcastle-upon-Tyne, England. Filed June 22, 1911. Serial No. 634,736. (Cl. 234—53.)



1. In a workman's time recorder the combination of a work starting and ceasing record strip, a marker therefor, a total work period indicator, a manually operated push-member, means for moving said marker and indicator into operative position on one actuation of said push-member, means for automatically retaining said marker and indicator in such operative position, and means for subsequently returning said marker and indicator to normal position on a succeeding actuation of said push-member.

2. In a workman's time recorder the combination of a work starting and ceasing record strip, a marker therefor, a total work period indicator, a manually operated push-member, means for moving said marker and indicator into operative position on one actuation of said push-member, means for automatically retaining said marker and indicator in such operative position, means for subsequently returning said marker and indicator to normal position on a succeeding actuation of said push-member, a tell-tale or counter and means for operating same through a determined distance at each actuation of the push-member.

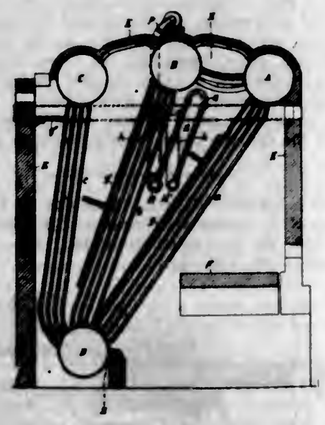
3. In a workman's time recorder the combination of a work starting and ceasing record strip, a plurality of markers therefor, a plurality of total work period indicators, a plurality of manually operated push-members, means for moving one of said markers and indicators into operative position on actuation of one of the push-members, means for automatically retaining said marker and indicator in such operative position, means for moving another marker and indicator into operation on actuation of a different push-member and means for subsequently returning the markers and indicators to normal position on a succeeding actuation of the respective push-member.

4. In a workman's time recorder the combination of a work starting and ceasing record strip, a marker therefor, a total work period indicator, a manually operated push-member, a bifurcated pivoted catch-bar actuated by the push-member, a locking-bar coacting with the bifurcation of said catch-bar, a retaining member coacting with said locking-bar and operative connections between the said locking-bar and the indicator and marker.

5. In a workman's time recorder the combination of a work starting and ceasing record strip, a marker therefor, a total work period indicator, a manually operated push-member, a bifurcated pivoted catch-bar actuated by the push-member, a locking-bar coacting with the bifurcation of said catch-bar, a retaining member coacting with said locking-bar, operative connections between the said locking-bar and the indicator and marker, a swinging dog coacting with the catch-bar to prevent engagement of the locking bar with the retaining member and means on said locking-bar for disengaging said dog from the catch-bar.

[Claims 6 to 9 not printed in the Gazette.]

1,064,309. STEAM-SUPERHEATER. ERNEST H. FOSTER, New York, N. Y. Filed May 15, 1907. Serial No. 373,755. (Cl. 122—478.)

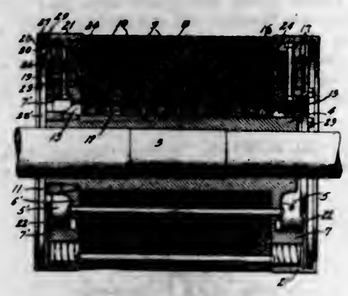


1. The combination with a water tube boiler of the vertical type, and the boiler setting including vertical walls, of metallic hangers embedded in said walls, oppositely disposed horizontal headers having end portions entering said walls and hung in said hangers, and vertically extending U-shaped superheater tubes connected to the respective headers and extending upwardly therefrom.

2. The combination with a water tube boiler of the vertical tube type, and the boiler setting including vertical walls, of metallic beams embedded in said walls, hangers depending from said beams, horizontal headers having end portions entering the walls and hung in said hangers, vertically extending U-shaped superheater tubes connected to the respective headers, and extending upwardly therefrom, said headers and tubes being directly in the path of the furnace gases.

3. The combination with a Stirling boiler as herein described, comprising upper drums A, B, and C, a lower drum D connected by water tubes arranged in a plurality of banks, and a setting E, of metal beams *i* in the walls of the setting and extending transversely to and immediately beneath the upper drums A and C of a superheater located within the boiler setting, comprising headers arranged horizontally and transversely in the path of the furnace gases, and upwardly extending superheating tubes connecting the headers, hangers depending from the said beams *i* and supporting the headers, and means for conveying steam from an upper drum to one of the headers.

1,064,310. DYNAMO-ELECTRIC MACHINE. WILLIAM J. FOSTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 13, 1905. Serial No. 282,550. (Cl. 171—252.)



1. In a dynamo-electric machine, a multi-polar field magnet comprising a core and a plurality of coils per pole contained in coil receiving slots formed in the magnet core and arranged parallel with the axis of the pole, the bottom of the slots for each pole terminating in the same plane.

2. In a dynamo-electric machine, a multi-polar field magnet comprising a core, a plurality of coils per pole contained in coil receiving slots formed in the magnet core, the bottoms of the slots for each pole terminating in the same plane, and an end member having coil supporting surfaces in the same plane with the bottoms of said slots.

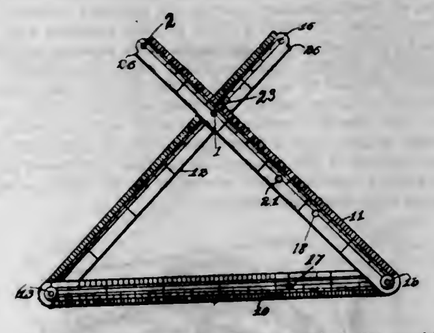
3. A field magnet for a dynamo-electric machine comprising a core and a plurality of coils per pole contained in coil receiving slots formed in the magnet core, the sides of the slots for each pole being parallel and their bottom walls terminating in the same plane.

4. A multipolar field magnet comprising a core, a plurality of coils per pole contained in coil receiving slots formed in said core, the sides of the slots for each pole being parallel and their bottom walls terminating in the same plane, and an end member having a supporting surface in the same plane with the bottom walls of the slots for each pole.

5. In the rotating member of a dynamo electric machine, a core, windings therefor, portions of which project beyond the ends of the core, a plurality of members engaging the outer surfaces of the portions of the winding projecting by one end of the core, means for independently forcing each of said members radially inward against the winding, and a shrink ring for permanently holding said members in place.

[Claims 6 to 16 not printed in the Gazette.]

1,064,311. COMBINED RULE, TRY-SQUARE, AND THE LIKE. WILLIAM C. FOX, San Francisco, Cal. Filed May 13, 1912. Serial No. 696,851. (Cl. 73—116.)



1. In an instrument of the class described, the combination of three rule sections pivoted together in series, the terminal sections being formed at their free ends, one with a spur, and the other with an aperture to receive said spur, said spur and aperture being spaced from the pivot of the corresponding terminal section a distance equal to the length of the mediate section between said pivots, one of said terminal sections having a second spur, and the other an aperture to receive said second spur, said latter spur and aperture being at such distance, less than the aforesaid distance, from the pivots of their respective sections that, when they engage with one another, the terminal sections are at right angles.

2. In an instrument of the class described, the combination of three rule sections pivoted together in series, the terminal sections being formed at their free ends, one with a spur, and the other with an aperture to receive said spur, said spur and aperture being spaced from the pivot of the corresponding terminal section a distance equal to the length of the mediate section between said pivots, one of said terminal sections having a second spur, and the other an aperture to receive said spur, said latter spur and aperture being at less distances than the aforesaid distance from the pivots of their respective sections.

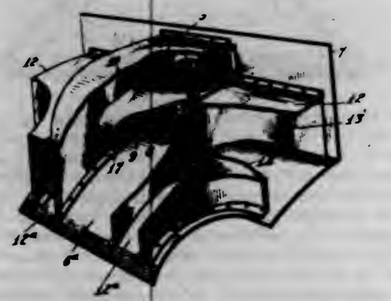
3. In an instrument of the class described, the combination of three rule sections pivoted together in series, the terminal sections being formed at their free ends, one with a spur, and the other with an aperture to receive said spur, said spur and aperture being spaced from the pivot of the corresponding terminal section a distance equal to the length of the mediate section between said pivots, one of said terminal sections having a second spur, and the other an aperture to receive said second spur, said latter spur and aperture being at such distances, less than the aforesaid distance, from the pivots of their respective sections that, when they engage with one another, the terminal sections are at right angles, all of said spurs and apertures being located in the central longitudinal line of the corresponding section.

4. In an instrument of the class described, the combination of three rule sections pivoted together in series, the terminal sections being formed at their free ends, one with a spur, and the other with an aperture to receive said spur, the pivot joining the latter-named section to the mediate section being tubular to receive the spur of the first-named section when the sections are folded together, and the other pivot being equally distant from the spur and the first-named pivot.

1,064,312. CAR-VENTILATING MEANS. THOMAS H. GARLAND, Chicago, Ill. Filed Feb. 12, 1912. Serial No. 677,074. (Cl. 98—22.)

1. In a device of the class described, the combination of a member arranged transversely of a car, communicating at one end with the car-interior and provided with a discharge orifice at the opposite end exposed to the exterior

cross-drafts induced by the travel of the car, said member being provided with several passages communicating with each other at the discharge end of the member, a baffle member located in one of said passages in advance of the point of communication between the passages whereby air rushing outwardly through one of said passages will induce an outward flow of air in the other passage, the first mentioned member being provided with an extension or conduit adapted to be located within the car and communicating with the passage provided with said baffle member, with means communicating with said extension or conduit whereby air is forced outwardly through said conduit and one of the passages in the first mentioned member and an eduction effect produced in the other passage of said first mentioned member.

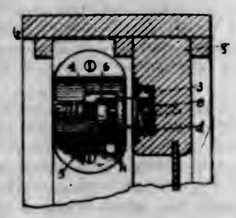


2. A device of the class described, comprising a channel portion communicating with a car interior, arranged transversely of the car and having an external discharge orifice, a baffle member extending longitudinally within said channel-portion whereby two passages in the channel-portion are provided having communication with each other at the discharge orifice of the channel-portion, and means located within the car and communicating with one of said passages whereby air will be exhausted from the car interior and an eduction effect produced at the opposite side of said baffle member.

3. A device of the class described, comprising a conductor portion communicating with a car interior and having a discharge orifice presented substantially at an angle to the longitudinal axis of the car and exposed to the cross drafts caused by the travel of the car, said conductor portion being provided with a baffle member intermediate of the top and bottom walls of said portion whereby two passages are provided which communicate with each other at the discharge orifice of the conductor portion, a conduit arranged within the car and communicating with one of said passages, means for inducing a draft in said conduit and said passage whereby an eduction effect is produced in the other passage, and air directing means having an intake end arranged parallel with the longitudinal axis of the car, with the discharge end arranged adjacent to and in the same horizontal plane with the discharge orifice of the conductor portion and presented at the same angle to the longitudinal axis of the car as the discharge orifice of said conductor portion.

4. A device of the class described, comprising a conducting member presented at an angle to the longitudinal axis of a car and communicating with the interior of the car while the opposite end thereof is exposed to the exterior cross-drafts, means extending longitudinally within said member providing a plurality of parallel passages communicating at the discharge end of said member, means for forcing air through some of the passages to induce an eduction effect in the other passage or passages, and a pair of independent conduits arranged at opposite sides of said member with the intake ends of the conduits arranged substantially perpendicular to said member and presented in a direction parallel with the longitudinal axis of the car, said conduits having their discharge ends presented in the same direction as the discharge orifice of the conducting member and arranged adjacent to and in the same horizontal plane therewith.

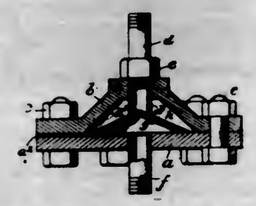
1,064,313. WINDOW-SASH LOCK. WILLIAM H. GARLOCK, Cleveland, Ohio. Filed Mar. 13, 1913. Serial No. 753,934. (Cl. 16—148.)



1. A lock for window sashes comprising a bolt and a casing therefor having a rounded back provided with a slot having transverse and longitudinal portions, said bolt having a handle adapted to run in said slot and a lip on its engaging end, a keeper of substantially bowl shape having a transverse inclined slot adapted to be engaged by said lip, and a spirally wound spring about a portion of said bolt and engaged at one end therewith and at the other with said casing and adapted to thrust said bolt forward and to rotate the same successively.

2. A lock for window sashes having a bolt adapted to be thrust lengthwise and provided with a lateral lip at its front end and a reduced spindle shaped outer end, and a spirally wound spring about said outer end arranged to rotate the bolt axially, in combination with a keeper having an elliptically shaped bowl provided with a slot having a laterally inclined inner edge adapted to be engaged by said lip on said bolt, said slot being in the top of said bowl.

1,064,314. OIL-BURNER. ALBERT GERMAN, Steelton, Pa. Filed Sept. 11, 1912. Serial No. 719,837. (Cl. 158—76.)



1. In an oil burner, a stationary shell consisting of a bottom plate, a hollow top arranged thereon and forming therewith a central chamber having a narrow peripheral radially directed aperture, an air supply pipe entering through an aperture in said bottom plate, an oil supply pipe projecting through a central aperture in the top, and a cone-shaped deflecting member having its apex centered in the end of the oil supply pipe and its periphery in the plane of said aperture.

2. In an oil burner, a shell consisting of a bottom plate, a hollow top arranged thereon and forming therewith a central chamber having a peripheral aperture, an air supply pipe entering through an aperture in said bottom plate, an oil supply pipe having apertures near its end and projecting through a central aperture in the top, and a hollow cone-shaped member having its end seated in the discharge end of the oil supply pipe.

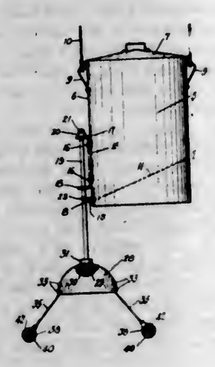
3. An oil burner comprising a circular bottom plate having a plurality of radial grooves formed in its upper face, a hollow member having a flange resting on the top face of the plate, an oil supply pipe having discharge apertures near its end and projecting through a central aperture in the top of the hollow member, a hollow conical member mounted on the top face of the bottom plate and having its apex projecting into the oil pipe, and an air supply pipe entering an aperture in the bottom plate.

4. An oil burner comprising a circular bottom plate having a central aperture and a plurality of radial grooves in its top face extending from said aperture to the periphery of the plate, a hollow member having a flange seated on the bottom plate and having a central aperture, an oil supply pipe having discharge apertures near its end and projecting through the aperture in the hollow member, a hollow conical deflecting member mounted on the top face of the plate and having the apex projecting into and closing the end of said pipe, and an air pipe mounted in the aperture of the bottom plate.

5. In combination, a casing comprising two members, one of which is a flat plate and the other member being conical and having a flange at its base, a narrow radially directed discharge passage between the plate and casing, supply pipes centrally secured in the members, a conical deflector, one of said pipes engaging the apex of the deflector and holding it against the flat plate and centrally of the conical member, the edge of said deflector lying in the plane of said discharge passage.

[Claim 6 not printed in the Gazette.]

1,064,315. POULTRY-FEEDER. GEORGE K. GILLETTE, Central Village, Conn., assignor of one-half to Fred W. Morse Company, a Corporation of Rhode Island. Filed Feb. 29, 1912. Serial No. 680,587. (Cl. 119—70.)



1. In a poultry feeder, the combination of a grain receptacle provided with an opening, bearings upon the receptacle, an operating shaft freely rotatably mounted in the bearings, and an arm upon the shaft extending into the opening.

2. In a poultry feeder, the combination of a grain receptacle provided with an opening, a bendable tongue governing the discharge of the grain mounted on the receptacle and intersecting the opening; bearings upon the receptacle, a rotatable operating shaft mounted in the bearings, and a horizontally disposed arm upon the shaft adapted to enter the opening, said shaft being disposed outside of said receptacle.

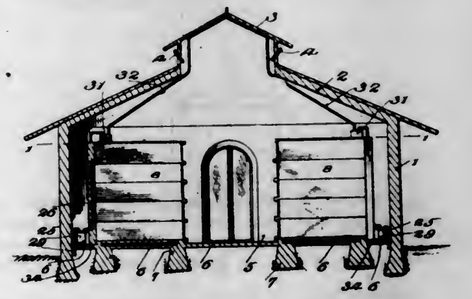
3. In a poultry feeder, the combination of a grain receptacle comprising a casing provided with an opening and a floor, a tongue upon the floor intersecting the opening and bendable to vary the discharge opening, bearings upon the casing, a rotatable operating shaft mounted in the bearings, and a horizontally disposed arm upon the shaft adapted to enter the opening, said shaft being disposed outside of said receptacle.

4. In a poultry feeder, the combination of a grain receptacle comprising a casing provided with an opening and an inclined floor, a bendable tongue upon the floor intersecting the opening, bearings upon the casing, a rotatable operating shaft mounted upon the bearings, and a horizontally disposed arm upon the shaft extending into the opening, said shaft being disposed outside of said receptacle.

5. In a poultry feeder, the combination of a grain receptacle comprising a casing provided with an opening and an inclined floor fixed to the casing, a bendable tongue integral with the floor and extending through the opening, bearings upon the wall, an operating shaft mounted in the bearings, and an arm upon the shaft adapted to enter the opening above the tongue.

[Claims 6 to 11 not printed in the Gazette.]

1,064,316. MAUSOLEUM. ALLEN B. GILLILAND and ADAM C. SHEETS, Van Wert, Ohio. Filed Aug. 10, 1911. Serial No. 643,305. (Cl. 72—7.)



1. In a structure of the class described, a wall, a pipe embedded in the wall and having branches opening through and projecting beyond one face of the wall, and a tier of crypts disposed at their rear ends against the walls, the said crypts having openings in said ends arranged to receive the projecting branches of the said pipe when the crypts are slid into place one upon the other.

2. In a structure of the class described, superposed crypts, the upper one of the crypts having its bottom wall extended beyond its forward end, the extended portion of the bottom wall of the crypt having its under side formed with shoulders, one located in advance of the other, the innermost one of the shoulders being of a depth less than the thickness of the upper wall of the crypt upon which the first mentioned crypts is disposed and abutting against the forward edge of the said top wall of the said crypt, the outer shoulder and the exposed portion of the edge of the top wall of the under crypt forming a groove, and a closure slab for the crypts, the closure slab for the under crypt seating at its upper edge in said groove.

3. A crypt comprising a casket receiving body having an open forward end, a slab for closing the said end of the body, the bottom of the crypt at its rear end being provided with a drain opening, and a stop arranged to limit the sliding movement of the casket into the crypt to such degree as to prevent closing of the drain opening by the said casket.

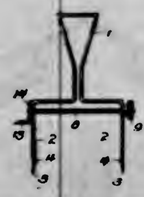
4. A crypt comprising a body having side walls, a top wall, a rear end wall, and a bottom wall, the said bottom wall projecting forwardly beyond the forward ends of the side and top walls, a slab disposed against the forward end of the crypt body and resting upon the projecting portion of the said bottom wall of the said body, a slab secured against the forward side of the projecting portion of the said bottom wall and projecting at its upper edge above the plane of the upper surface of the said bottom wall, and a slab disposed between the said projecting upper edge of the second mentioned slab and the lower edge of the first mentioned slab.

5. A crypt comprising a body having side walls, a top wall, a rear end wall and a bottom wall projecting forwardly beyond the forward ends of the side and top walls, the side walls at their forward ends being formed each with a rabbet, a slab fitted in the forward end of the crypt body and seating at its lateral edges in the said rabbets, a crypt disposed upon the first mentioned crypt and having its bottom wall formed with a rabbet, a slab disposed against the first mentioned slab and seating at its upper edge in the rabbet in the under side of the bottom wall of the second mentioned crypt, and a slab held upon the

upper side of the projecting portion of the bottom wall of the first mentioned crypt and confining the lower edge of the second mentioned slab.

[Claim 6 not printed in the Gazette.]

1,064,317. TOBACCO-PLUG EXTRACTOR. CLARENCE W. GILLHAM, Kansas City, Mo., and GEORGE B. SEIBERT, Keokuk, Iowa. Filed Mar. 8, 1911. Serial No. 613,164. (Cl. 131—59.)



1. A tobacco plug extractor comprising a handle and spring clamping jaws formed from a single piece of metal, said jaws being provided with projections on their inner face, a locking rod and nut for said jaws, and a fulcrum lever.

2. A tobacco plug extractor comprising a handle and spring clamping jaws formed from a single piece of metal, said jaws being provided with projections on their inner face, a locking rod and nut for said jaws and a fulcrum lever secured to one of said jaws and disposed at right angles thereto.

1,064,318. ELECTRICAL SWITCH. HENRY R. GILSON, Beaver, Pa., assignor to National Metal Molding Company, a Corporation of Pennsylvania. Filed Apr. 1, 1912. Serial No. 687,828. (Cl. 175—284.)



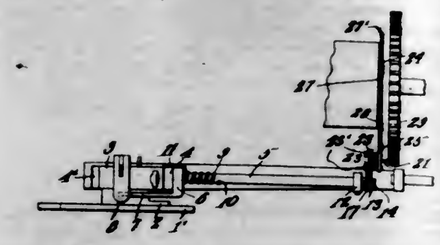
1. The combination with a fixed member of an electrical circuit, of a movable circuit-controller having a bent away from said fixed member, and a movable key-member provided with an independently movable dog adapted when the key-member is moved in one direction to force said circuit-controller into contact with said fixed member, and when the key-member is moved in the opposite direction to yield to said circuit-controller and permit the latter to automatically break the circuit.

2. The combination with a fixed member of an electrical circuit, of a spring-arm circuit-controller arranged adjacent to said fixed member, and a longitudinally movable key-shaft provided with a dog effective when the key-shaft is moved in one direction to force said circuit-controller into contact with the said fixed member, and when the key-shaft is moved in the opposite direction to yield to said circuit-controller and permit the latter to automatically break the circuit.

3. The combination with a fixed member of an electrical circuit, of a movable spring-arm circuit-controller arranged adjacent to said fixed member and in one position completing a circuit therethrough, and a longitudinally movable key-shaft provided with a dog effective when the key-shaft is moved in one direction to force said circuit-controller into one position with relation to said fixed member, and when the key-shaft is moved in the opposite direction to yield to said circuit-controller and permit the latter to automatically move to its opposite position with relation to said fixed member.

4. The combination with a fixed member of an electrical circuit, of a longitudinally movable key-shaft having a dog movably mounted thereon, and a resilient contact-arm arranged between the key-shaft and fixed member and in parallel relation with the key-shaft, and provided with an incline in operative relation with said dog.

1,064,319. MOUTHPIECE-WIPER FOR LINOTYPE-MACHINES. GROVER C. GLENN, Raleigh, N. C., assignor to General Manufacturing and Investment Co., Raleigh, N. C. Filed May 21, 1912. Serial No. 698,778. (Cl. 199—14.)



1. In a line casting machine, the combination with the main frame, a main shaft, and a mouth-piece, of an oscillatory shaft journaled upon the frame, a spring for imparting one movement to the oscillatory shaft, an arm carried by said oscillatory shaft and operably connected to the main shaft, and a wiper blade having a tension toward the mouth-piece and carried by said oscillatory shaft for reciprocation thereby.

2. In a line casting machine, the combination with the main frame, a main shaft, and a mouth-piece, of an oscillatory shaft journaled upon the frame, a spring for returning the oscillatory shaft, an arm carried by said oscillatory shaft and operably connected to the main shaft, a tensioned arm loosely connected to the outer end of said oscillatory shaft, and capable of a slight movement independently of the oscillatory shaft, a spring connected to the oscillatory shaft and arm to cushion the movement transmitted from the shaft to the arm, a wiper blade, and a resilient connection between the arm and blade and exerting a tension upon the wiper blade toward the mouth-piece.

3. In a line casting machine, the combination with the main frame, a main shaft, and a mouth-piece, of a wiper mechanism for the mouth-piece, comprising an oscillatory shaft journaled upon the frame, a cam mounted upon the main shaft, a finger carried by the oscillatory shaft and disposed within the path to be engaged by the cam, a spring upon the oscillatory shaft for moving the shaft in opposition to the cam, an arm loosely mounted upon the outer end of the oscillatory shaft, a spring connected to said arm and the oscillatory shaft to limit the movement of the arm relative to the oscillatory shaft, a wiper blade, and a resilient connection between the arm and blade for retaining the blade under tension toward the mouth piece.

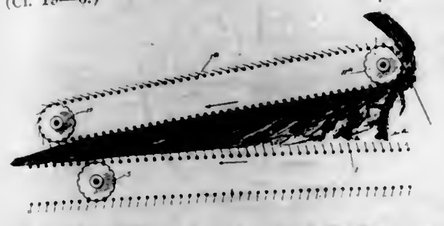
1,064,320. DOOR-SECURER. HERMANN GLINDKAMP, Chicago, Ill. Filed Oct. 4, 1912. Serial No. 723,589. (Cl. 16—8.)



A door check comprising a strip having means for attachment to the door, a sectional prop hinged to the strip,

said prop sections overlapping, and the overlapping portions thereof having interlocking serrations, one of the prop sections having a longitudinal slot and the other prop section having a threaded aperture, and a screw passing through the slot into the said aperture.

1,064,321. COMBING-MACHINE. JOHN GOOD, New York, N. Y. Filed Aug. 13, 1910. Serial No. 577,068. (Cl. 19—6.)



1. A combing machine for hemp and like fiber comprising a combing train, a feeding train opposed to said combing train and arranged to supply the fiber to said combing train from successive points along its own length.

2. In a combing machine for hemp or like fiber, a combing train, a series or train of inverted pins mounted above said combing train with its feeding stretch coextensive with a portion of the length of the latter in combination with means for introducing the fiber into the space between said opposed trains.

3. A combing machine for hemp or like fiber, comprising combing and feeding trains between which the fiber is combed, said feeding train being provided with means for supplying it with the fiber and adapted to advance the said fiber along or over said combing train independently of the action of the latter thereon.

4. A combing machine for hemp or like fiber comprising combing and feeding trains providing a longitudinally extending space between their opposed operating stretches in which the fiber is combed, means for supplying fiber to the end of said feeding train and means for driving said train to advance the fiber through said space during the combing operation.

5. A combing machine comprising a train of upright combing pins, a train of downwardly projecting feeding pins arranged above said combing pins and arranged to provide a combing space between the operative stretches of both said trains, in combination with means for driving said train of coming pins relatively to said train of feeding pins and means for feeding the fiber to said combing space.

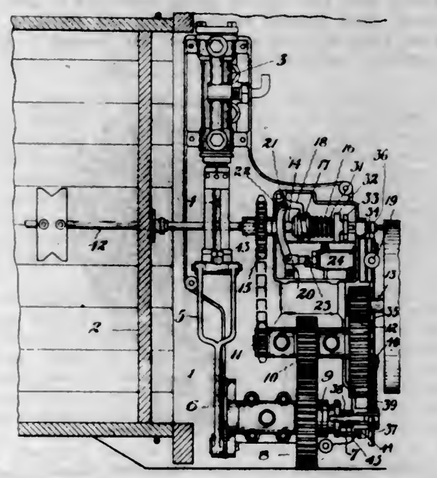
[Claims 6 to 17 not printed in the Gazette.]

1,064,322. SAFETY-CLUTCH FOR POWER-DRIVEN PUMPS. WILLIAM HENRY HEARD, London, Ontario, Canada. Filed Nov. 10, 1910. Serial No. 591,698. (Cl. 64—46.)

1. In a device of the class described the combination of a driving member; a driven member; a clutch whereby they may be put into and out of gear with one another; a slidable sleeve rotatable with the driving member and having a helical groove formed therein; a spring adapted to be tensioned by said sleeve to move the clutch out of gear; a shifter movably supported adjacent to the sleeve and adapted to engage the groove therein; and means for moving the shifter into engagement with the said groove.

2. In a device of the class described the combination of a driving member; a driven member; a clutch whereby they may be put into or out of gear with one another; a rock shaft; a rock arm on said shaft adapted to actuate the clutch; a second rock arm on said shaft; means normally inoperative, operable by said driving member to rock said second rock arm; and means for putting the rock arm actuating means in operable condition.

3. In a device of the class described the combination of a driving member; a driven member; a clutch whereby they may be put into or out of gear with one another; a rock shaft; a rock arm on said shaft adapted to actuate the clutch; a second rock arm on said shaft; means normally inoperative, operable by said driving member to rock said second rock arm; means for putting the rock arm actuating means in operable condition; a coil torsion spring tending to rock the rock shaft to put the clutch into gear; and means for adjusting the tension of said spring.



4. In a device of the class described the combination of a driving member; a driven member; a clutch whereby they may be put into or out of gear with one another; a rock shaft, a rock arm on said shaft adapted to actuate the clutch; a second rock arm on said shaft; means normally inoperative, operable by said driving member to rock said second rock arm; means for putting the rock arm actuating means in operable condition; a coil torsion spring tending to rock the rock shaft to put the clutch in gear; means for adjusting the tension of said spring; and a manually operable catch adapted to releasably hold said rock shaft in the position in which it holds the clutch out of gear.

5. In a device of the class described the combination of a hollow regulator shaft slotted near one end for the passage of a cross pin; a sliding sleeve rotatable with the regulator shaft and having a shoulder formed thereon and slotted at the end remote from the said shoulder; means whereby the rotation of the shaft may be utilized to shift the sleeve along the shaft; a cross pin passing through the slots in the sleeve and shaft; a coil spring bearing against the said pin and the shoulder on the sleeve; a stop on the sleeve limiting the movement of the pin under the influence of the spring; and a part adapted to enter the hollow end of the shaft and engage the pin so that it may be moved thereby.

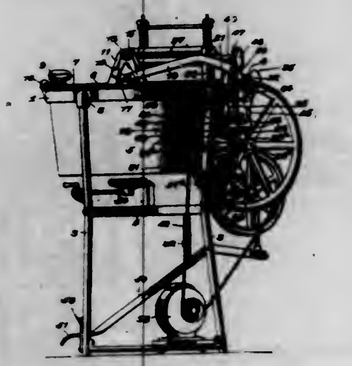
[Claim 6 not printed in the Gazette.]

1,064,323. GEARING FOR WASHING-MACHINES. THEODORE O. H. HERZOG, Rock Island, Ill. Filed Dec. 16, 1911. Serial No. 666,185. (Cl. 74—50.)

1. The combination with a stationary object and a support; of a bar secured to and extending diametrically across said support, means to hingedly mount said bar on said stationary object, a dasher shaft rotatably extending through said bar and support, means to rotate said dasher shaft upon the disposition of the support to a horizontal position, said means being ineffective when the support carrying the bar is raised, and means to limit the raised movement of said bar and forming a support for the latter.

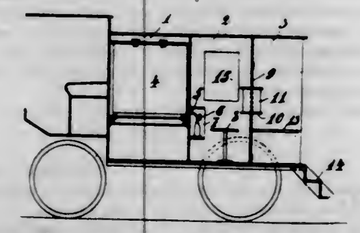
2. The combination with a stationary object, a support, a bar carried thereon, hingedly engaged with said stationary object, a dasher shaft extending through said bar and support, a pinion on the upper end of said dasher

shaft, a bracket formed on said bar, a segmental gear oscillatingly mounted on a horizontal axis on said bracket and engaged with the pinion on said dasher shaft, a bevel gear rotatably mounted on a horizontal axis at the hinged end of said bar, said latter gear being provided with a crank arm, and connecting means between said segmental gear and the crank arm on said bevel gear; of an additional shaft rotatably carried on the stationary object, and a bevel gear carried on the upper end of said additional shaft adapted to mesh with the aforesaid bevel gear when said bar and support are lowered to a substantially horizontal position.



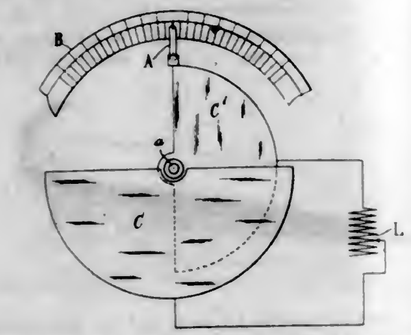
3. In a machine of the class described, the combination with a stationary object, a support, a bar extending diametrically and secured thereto, means to hingedly mount the one end of said bar on said stationary object, a dasher shaft extending through said bar and the support, a pinion carried on the upper end of said dasher shaft, an integral bracket formed on the bar and extending vertically thereof, a segmental gear oscillatingly mounted on a horizontal axis on said bracket and engaged with the pinion of said dasher shaft, a bevel gear rotatably mounted on said bar immediately adjacent the hinged end thereof, a crank arm formed on said bevel gear, and connecting means between said crank arm and said segmental gear; of means to engage said bevel gear and cause the same to be rotated upon the lowering of said bar to a horizontal position, and means formed on a stationary section of the hinged means between said bar and the stationary object to form a support for said bar when the latter is raised.

1,064,324. MILK-DISTRIBUTING CAR. KNUT WALDEMAR HEYMAN, Stockholm, Sweden. Filed Feb. 26, 1913. Serial No. 750,838. (Cl. 21—7.)



A milk distributing car, characterized by the combination of a chamber containing a milk reservoir (or reservoirs) and limited by the side walls of the car, this chamber being shut off from the atmosphere during the removal of the car as well as during the distribution of milk, another chamber, in which the tapping of the milk into small vessels takes place and which is likewise shut off from the atmosphere during the removal of the car and the distribution of the milk, and a device mounted in a wall or a door of the tapping chamber and permitting the delivery out of the car of filled vessels while simultaneously preventing the influx of air, carrying along with it dust and infectious matter, into the tapping chamber.

1,064,325. WAVE-METER. RICHARD HIRSCH, Berlin, Germany, assignor to Dr. Erich F. Huth, G. M. B. H., Berlin, Germany. Filed Mar. 17, 1911, Serial No. 615,012. Renewed Jan. 6, 1913. Serial No. 740,547. (Cl. 250—39.)



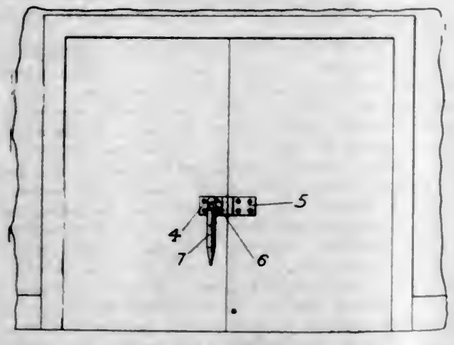
1. In a wave meter, the combination with an oscillating circuit variable periodically and continuously in its frequency, of an indicator electrically connected with said oscillating circuit and rotating in the period of the variation of the frequency, and means upon which indications given by said indicator may be read.

2. In a wave meter, the combination with a condenser having a rotary member provided with an indicator, of an inductance electrically connected with said indicator, means for rotating the rotary member of the condenser in relation to the fixed part thereof, and means upon which indications given by said indicator may be read.

3. In a wave meter, the combination with a condenser, including a fixed member and a rotary member provided with an indicator, of a motor upon the shaft of which the rotary condenser member is carried, an inductance electrically connected to said indicator, and a suitably calibrated scale upon which the indications given by said indicator may be read.

4. In a wave meter, the combination with a condenser having a rotary member provided with an indicator, of a motor upon the shaft of which the rotary condenser member is carried, contact members upon the motor shaft, an inductance, means by which the indicator is connected in parallel through said contact members with the inductance, and a scale upon which the indications given by said indicator may be read.

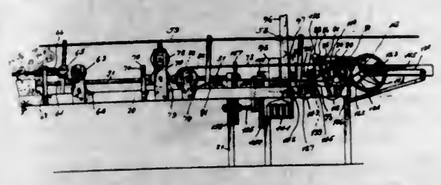
1,064,326. SLIDING-DOOR CATCH. CARL HITZL, Tarpey, Cal. Filed May 23, 1912. Serial No. 699,327. (Cl. 70—102.)



A catch for sliding doors comprising a pair of L shaped plates, each of which has openings whereby it may be screwed to a door or post and one of which has an opening for a bolt, a post projecting from the other plate and adapted to pass through the bolt opening in the first plate,

and a pivoted catch to prevent the plates from being separated, said catch extending above and below the post when turned transversely thereto, substantially as described.

1,064,327. RECEPTACLE-FORMING MACHINE. ARTHUR J. HODGE, Pasadena, Cal., assignor to Oscar W. Harris, Redlands, Cal. Filed Feb. 1, 1912. Serial No. 674,691. (Cl. 93—48.)



1. A paper receptacle forming machine, comprising mechanism for creasing a web of paper longitudinally, a guide for facilitating the doubling of the paper longitudinally, rollers for pressing the paper in doubled form, one edge of the paper being permitted to project beyond the other, an adhesive supplying mechanism adapted to place the adhesive upon the projecting edge portion, means for turning the edge portion over upon the doubled material, and mechanism for creasing the end portions of the folded blank thus formed, to facilitate the shaping and folding of the same into a receptacle.

2. A paper receptacle forming mechanism comprising means for holding and supplying a paper strip to the mechanism, a guide for directing the same to creasing and folding devices, a friction means adapted to engage the strip of material to keep the same in taut condition, rollers for forming longitudinal creases in the strip, a triangular shaping plate for guiding the strip into doubled position, folding rollers for pressing the strip in doubled form, one edge of the strip being allowed to project beyond the other, an adhesive applying roller adapted to spread an adhesive upon said edge, rollers for pressing the edge with its adhesive material, upon the adjacent edge of the folded material, means for crimping the end of the folded strip, and a knife operable transversely of the machine for cutting the strip in desired lengths.

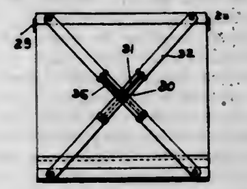
3. A paper flower pot forming mechanism, comprising means for longitudinally creasing and folding a strip of paper, means for placing an adhesive between the edges thereof to form an elongated inclosure, dies having creasing edges projecting therefrom adapted to make triangular creases at the ends of the folded paper, a revoluble knife adapted to cut off the folded paper in proper lengths for forming the flower pots, means for delivering the cut portions of the paper, with a quick movement from the machine, said means being also adapted to control the operation of a counting device, and a counting device associated with said mechanism.

4. A paper flower pot forming machine comprising means for folding and securing at the edges, a longitudinal strip of paper, means for creasing the ends to facilitate the folding of the bottom of a flower pot comprising a fixed die and a movable die mounted above the same, a rocker plate for moving the movable die, a cam for actuating the same, and means for cutting the material into flower pot lengths after the end portions have been crimped by said dies.

5. A flower pot forming mechanism, comprising means for longitudinally creasing and folding a strip of material, means for securing the edges of said material together, a counting device mounted upon the machine, a pitman for operating the same, a shaft for operating the said pitman, means for driving said shaft at the proper speed to secure the desired lengths of flower pots, a knife operated by said shaft to cut the pots off at the right length, and electrical means for preventing the operation of the counting devices when flower pots are not being fed through the mechanism.

[Claim 6 not printed in the Gazette.]

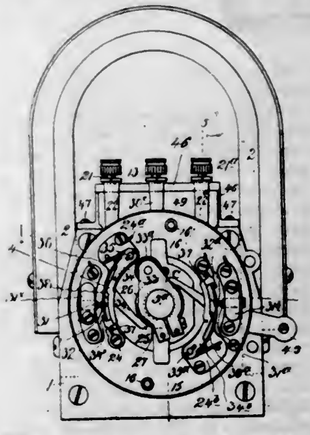
1,064,328. COLLAPSIBLE CRATE. AARON A. HOWELL, Petersburg, and EDGAR R. MARTIN, Altoona, Pa. Filed Apr. 30, 1912. Serial No. 694,161. (Cl. 217—47.)



1. A collapsible crate comprising a floor member, side sections hinged thereto, a top member, end panels hinged to the said top member, means for holding the said members in assembled position, collapsible telescoping crossed bars connecting the ends of the top and floor members, said bars being provided with slots at their middle portions, and means adapted to slide in the slots in the bars when the crate is knocked down and adapted to be tightened when the crate is set up to strengthen the assembled crate.

2. A collapsible crate comprising a floor member, inwardly swinging side sections hinged thereto, a top member, inwardly swinging end panels hinged to the said top member, clasps for holding the said members in an assembled position, collapsible telescoping crossed bars connecting the top and floor members at their ends, said bars being provided with registering slots at their middle portions, a clamping nut adapted to slide in the slots in the bars when the crate is knocked down and adapted to be tightened when the crate is set up to hold the bars in rigid crossed relation to strengthen the assembled crate.

1,064,329. IGNITION DEVICE. THEODORE HUBERT, Cranford, N. J., assignor, by mesne assignments, to American Circular Loom Company, Boston, Mass., a Corporation of Maine. Filed Mar. 23, 1909. Serial No. 485,252. (Cl. 123—149.)



1. Ignition devices comprising an armature, a transformer, a circuit from the armature to the transformer, and devices controlled by the armature to make and break said circuit during rotation of the armature, a short circuit for the transformer circuit and make and break devices for the short circuit arranged to be broken before the break in the transformer circuit.

2. Ignition devices comprising an armature, a transformer, a circuit from the armature to the transformer and devices controlled by the armature to make and break said circuit during rotation of the armature, a short circuit for the transformer circuit, and make and break devices for the short circuit arranged to be broken after the peak of the wave in the transformer circuit has

been passed and before the break in the transformer circuit.

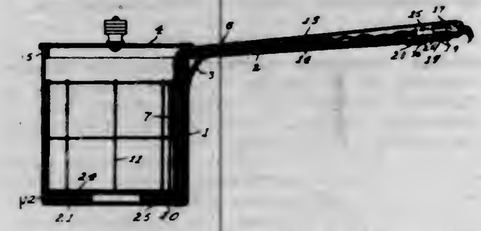
3. Ignition devices comprising an armature, a transformer, a circuit from the armature to the transformer, and devices controlled by the armature to make and break said circuit during rotation of the armature, a short circuit for the transformer circuit, and make and break devices for the short circuit arranged to be closed during the rise of the current in the armature and to be broken after the peak of the wave in the transformer circuit has been passed and before the break in the transformer circuit, and a condenser bridged across the make and break devices of the short circuit.

4. Ignition devices comprising an armature, a non-vibratory transformer circuit therefor from the armature, a plurality of spark plugs in the circuit of the secondary of the transformer, a short circuit for the transformer circuit, means to make and break the transformer circuit by and during rotation of the armature, and means to make and break the short circuit arranged to break the short circuit while the transformer circuit is closed.

5. Electric ignition devices comprising an armature, a plurality of transformers, separate circuits from the respective transformers to the armature, separate short circuits for the respective transformer circuits, and means to make and break said short circuits successively during different positions of the armature.

[Claims 6 to 16 not printed in the Gazette.]

1,064,330. ELECTRICAL HEATER. ANSEL C. HULBERT, San Francisco, Cal. Filed Apr. 22, 1912. Serial No. 692,404. (Cl. 219—44.)



1. In an electric heater, a flat annular case, an electric heating element in said case, a handle secured to one edge of the case and through which the lead wires to the heating element pass, a receptacle within which the heating element may be placed, a handle for said receptacle and along which the heater handle extends, and means carried by the handle for the heater to secure the same to the handle of the receptacle, as described.

2. An electric heater comprising an annular metallic case, an electric heating element within said case, a hollow handle at the outer edge of the case and through which the electric feed wires pass, a receptacle for the heater, a handle for the receptacle shaped to fit the heater handle and means to secure the heater handle to the receptacle handle, as described.

3. In an electric heater, a flat heating element, a handle therefor at the outer edge thereof, a handled receptacle in which heating element is adapted to be placed, a socket carrying electric feed wires and adapted to be inserted within the heater handle, and a slidable catch operated by the socket to secure the heater and receptacle together, as described.

4. In an electric heater, a flat heating element, a handle therefor at one edge thereof, electric feed wires passing through said handle, a handled receptacle within which the heater is adapted to be placed, means to secure the handle of the heater and the handle of the receptacle together, and a cage adapted to be placed within the receptacle upon the heating element, said cage having lugs to coact with the heating element to prevent it being displaced therefrom, as described.

5. In an electric heater, a flat annulus having an electric heating element therein, a handle at the edge thereof, electric feed wires passing therethrough, a receptacle within which the heater is adapted to be placed, a handle for said receptacle, a plug carrying electric feed wires and adapted to be inserted in the end of the heater handle, and a spring lock operated by the plug to lock the heater handle and the receptacle handle together when the plug is inserted in the heater handle, as described.

1,064,331. DENTAL SYRINGE-OBTUNDER. THOMAS NELSON IGLEHART, San Francisco, Cal. Filed Aug. 29, 1912. Serial No. 717,707. (Cl. 32—28.)



The combination in a dental syringe obtunder, of a hollow, flexible body portion adapted to slip over the end of the syringe nozzle, and having a tubular soft extension in line with the nozzle, and an exterior divergent cup-shaped portion surrounding the tubular center and extending beyond it.

1,064,332. RAZOR-STROPPING MACHINE. MARY ELIZABETH IRVING, New York, N. Y. Filed Apr. 10, 1912. Serial No. 689,772. (Cl. 51—16.)



A razor stropping machine, comprising a frame, an oscillatory razor blade holder, an upwardly projecting arm at one end thereof having its top edge concaved to form acute angled corners, a lug on the outer side of said arm, a two-armed spring secured to the frame and engaging said lug, a razor strop, a rocker pivotally mounted in the frame and comprising a pair of end yokes, one of which is provided with notches engaged by the acute angled corners of the arm on the holder, and spaced rods connecting said yokes at opposite sides of the axis of movement of the rocker over which the strop slides.

1,064,333. TRACK-MOVING DEVICE. CHARLES C. JACOBS, Amboy, Ill., assignor to Frederick C. Austin, Chicago, Ill. Filed Apr. 6, 1912. Serial No. 688,866. (Cl. 21—124.)



1. A track-shifting device comprising a section of track, a body supported to travel on said track, means for lowering the body to transfer the weight thereof from the track to the ground, and mechanism for shifting the track when thus relieved of the weight of the body.

2. A track-shifting device comprising a section of track, a body supported to travel on said track, means for lowering the body to transfer the weight thereof from the track to the ground, and mechanism for shifting the track when thus relieved of the weight of the body, said means including trucks movable longitudinally of said body.

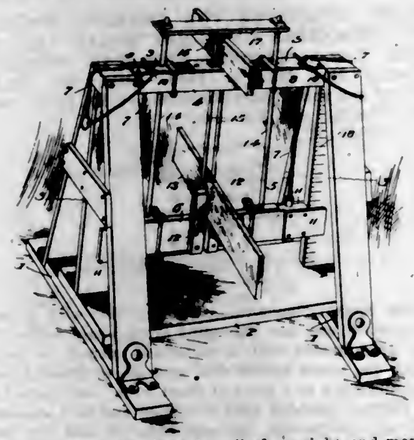
3. A track-shifting device comprising a section of track, a body supported to travel on said track, means for lowering the body to transfer the weight thereof from the track to the ground, and mechanism for shifting the track when thus relieved of the weight of the body, said means including trucks which remain on the track while the said body is resting on the ground.

4. A track-shifting device comprising a section of track, a body supported to travel on said track, means for lowering the body to transfer the weight thereof from the track to the ground, and mechanism for shifting the track when thus relieved of the weight of the body, said means including inclines facing downward on the said body, and trucks engaging said inclines.

5. A track-shifting device comprising a section of track, a body supported to travel on said track, means for lowering the body to transfer the weight thereof from the track to the ground, and mechanism for shifting the track when thus relieved of the weight of the body, said means including inclined ways on said body, trucks adapted to move along said inclined ways to lower the body, means for locking the trucks to the body, and means for automatically releasing the trucks when the body reaches the forward end of the track.

[Claims 6 to 12 not printed in the Gazette.]

1,064,334. ADJUSTABLE SCAFFOLD-TRESTLE. GEORGE W. JOHNSON, Atlantic, Iowa. Filed Oct. 14, 1911. Serial No. 654,740. (Cl. 20—83.)

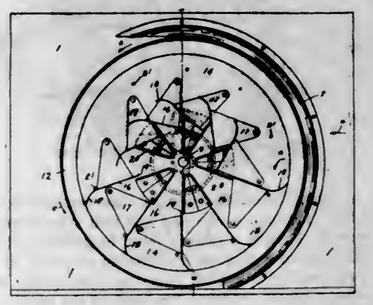


In a device of the class described, upright end members, braces therefor, a rigid top bar, a movable bar slidably mounted on said end members, rods fixed to said last named bar and slidably extended through said rigid top bar, a cross plate secured to said rods, above the top bar, means for securing said movable bar in any position of its movement, a pair of parallel upright rods secured to said movable bar and extending through said fixed bar and designed to guide and support the former and to hold a board resting on its edge on said movable bar.

1,064,335. DRUM-SCREEN FOR FISHWAYS. HARRY B. JOHNSTON, Salt Lake City, Utah, assignor to M. B. Johnston, Salt Lake City, Utah. Filed July 11, 1912. Serial No. 708,909. (Cl. 61—5.)

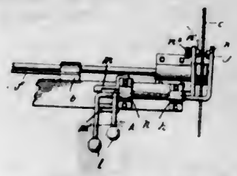
1. In a drum screen for fish ways the combination of a horizontal shaft; a power wheel secured on said shaft and rotating therewith consisting of two circular disks; cups horizontally secured between said disks; bracket shaped blades having their sides curved in opposed directions from the plane of the blade pivotally swung between said disks and adapted to partially enter said cups on the upper side of said wheel and to swing from out of said cups on the lower side of the wheel; a drum screen concentrically surrounding said power wheel, and mounted on said shaft; and intermeshing gears coacting to impart motion to said shaft in one direction and to said drum screen continuously in the opposite direction.

2. A revolving drum screen for fish ways consisting of a casing; a horizontal shaft mounted in said casing; a pinion thereon; an idler gear mounted on a stud shaft which is secured in said casing, the teeth of said idler gear mesh with the teeth of said pinion; a gear wheel mounted on another stud shaft the teeth of which gear mesh with the teeth of said idler gear; two gears mounted on said horizontal shaft, the teeth of one of which mesh with the teeth of the last mentioned gear; a circular disk secured to each of said last mentioned gears; a screen fastened on the peripheral edge of said disks; and a power wheel secured on said horizontal shaft and within said screen adapted to impart motion to said shaft in one direction and continuously through said gears therefrom to said drum screen in the reverse direction.



3. In a device of the class described the combination of a horizontal shaft; two circular disks mounted thereon; a screen secured on the peripheral edge of said disks; two other circular disks mounted rigidly on said shaft; cups having their ends riveted to said last mentioned disks; movable blades pivoted between said disks a portion of each of which may partially enter one of said cups.

1,064,336. ROTARY-SAW GUIDE. JOHN L. JOYCE, Townsville, N. C. Filed Oct. 12, 1912. Serial No. 725,456. (Cl. 143—160.)



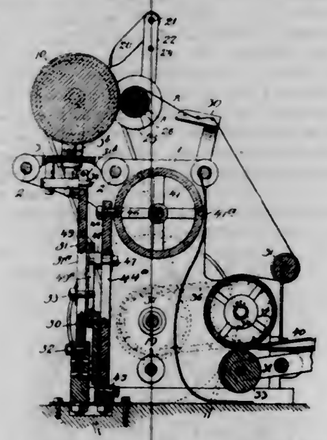
In combination with a circular saw, of a pair of depending saw guiding arms, horizontal rock shafts carrying these arms, and weighted arms attached to the shafts, these weighted arms being adapted to hold the guide arms in action and also out of action, said rock shafts having their axes obliquely arranged with reference to each other, for the purpose set forth.

1,064,337. FABRIC-WINDING MACHINE. OSCAR I. JUDELSHON, New York, N. Y. Filed Aug. 26, 1909. Serial No. 514,711. (Cl. 242—65.)

1. In a fabric winding machine the combination of a reciprocative carriage, a winding roll and spool supporting means carried thereby, a cam, a lever operated by the cam, a lever connected with the carriage, a lever interposed between the first named levers, and means operatively connecting said interposed lever with the first named levers.

2. In a fabric winding machine the combination of a reciprocative carriage, a winding roll and spool supporting means carried thereby, a cam, a lever operated by the cam, a lever connected with the carriage, a lever interposed between the first named levers, and means operatively connecting said interposed lever with the first

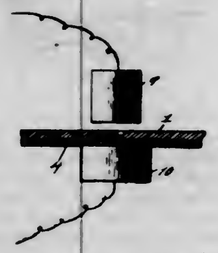
named levers, said means being adjustable to permit variation in the reciprocating movements of the carriage.



3. In a fabric winding machine the combination of a reciprocative carriage, a winding roll and spool supporting means carried thereby, a cam, a lever operated by the cam and provided with a slot, an adjustable screw in the slot, a lever provided with a slot receiving said screw, a third lever having a screw entering the head of the second lever, and means connecting the third lever operatively with the carriage.

4. In a fabric winding machine the combination of a reciprocative carriage, a winding roll and spool supporting means carried thereby, a cam, a lever operated by the cam and provided with a slot, an adjustable screw in the slot, a lever provided with a slot receiving said screw, a third lever provided with a slot and having an ajustable screw in said slot entering the slot of the second named lever, and means operatively connecting the third named lever with the carriage.

1,064,338. ELECTRIC WELDING PROCESS. EDWARD KATZINGER, Chicago, Ill. Filed May 9, 1910. Serial No. 560,101. (Cl. 219—4.)



1. The process of electrically welding two sheets of metal which consists in stamping one of said sheets between coöperating dies to form a plurality of uniform projecting portions with equal flat end facets, in applying said facets to the other sheet and in passing a welding current through said sheets and projections while pressing the sheets together.

2. The process of welding together two metal sheets, which consists in providing one of said sheets with protuberances having each the same cross-section throughout and equal flat end facets, in pressing the other sheet against said end facets, and finally in passing a welding current from one sheet to the other through said protuberances.

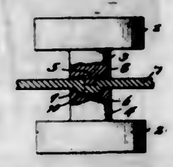
3. The process of welding together two metal sheets of different thicknesses which consists in providing the thicker sheet with equal flattened projections having substantially the same cross-sectional area, in pressing the thinner sheet against the flat surfaces of said projections, and finally in passing a welding current from one sheet to the other through said projections.

4. The process of welding together two sheets of different thicknesses which consists in providing the thicker sheet with flattened protuberances all having substantially the same cross-sectional area, in applying the thinner sheet to the flattened protuberances, and in pressing said sheets together between electrodes while passing a welding current through said electrodes and sheets, the electrode bearing against the thinner sheet being of relatively large area in comparison to the protuberance to diffuse the current through the thinner sheet around said protuberance.

5. The process of electrically spot welding metal sheets of different thicknesses which consists in forming the thicker sheets with projections of equal cross section, each having a flattened end, in placing the sheets one against the other with said projections spacing them apart, and in pressing the sheets together between electrodes while passing a welding current through said electrodes and sheets, the electrode bearing against the thinner sheet being of relatively large area in comparison to the cross-sectional area of the protuberance to equalize the current density of the welding current through the thinner sheet around the protuberance.

[Claim 6 not printed in the Gazette.]

1,064,339. APPARATUS FOR FORMING WELDING-PROTUBERANCES ON SHEET METAL AND THE LIKE. EDWARD KATZINGER, Chicago, Ill. Original application filed May 9, 1910, Serial No. 560,102. Divided and this application filed Oct. 19, 1910. Serial No. 587,812. (Cl. 113—49.)



1. The combination with a die provided with a recess and a concave end face extending around said recess, of a second die provided with a projection adapted to coöperate with the recess in the first said die to stamp a welding protuberance in a piece of sheet metal, said second die being further provided with a cupped end face extending around said projection, the end faces of said dies being adapted to coöperate to flatten the metal of said sheet around each protuberance after it has been bent out of shape by the first part of the stamping operation.

2. The combination of coöperating dies, one having a projection with an annular beveled recess at the bottom, and the other having a depression with an edge concaved to correspond with the said recess, the said dies being effective to cup a metal in opposite directions by a single stamping operation and to bend the metal whereby it will assume a flat position when released from the pressure of the dies.

3. In an apparatus of the class described, the combination of a die formed with a projection surrounded by a concavely arched recess inclined toward the base of the projection, and a coöperating die having a depression larger than said projection and with an annular rim convexly arched to correspond with the said concavely arched recess of the other die whereby a piece of metal is bent first in one direction and then in the other direction by the said arched portions during the formation of a welding protuberance whereby the piece, when released by the dies, will be in a flat condition.

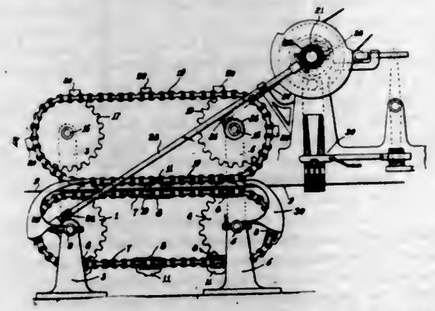
1,064,340. CASTER-HOLDER. EDWARD KATZINGER, Chicago, Ill. Filed Sept. 25, 1911. Serial No. 651,078. (Cl. 16—4.)

1. The combination of a base of tubular construction, and a caster holder having a threaded end for connection thereto and with a caster holding face disposed at an angle to the threaded end and provided with an opening to receive a vertical projection of a caster and with threaded openings to receive fastening screws, the caster projection fitting tightly in the said opening, and the screws aiding the securing function.



2. The combination with a truck of pipe construction of an L shaped caster holder having a threaded opening at one end to receive a pipe, and a flat face at the other end with a central opening and smaller threaded openings, and a caster having an upper fixed face plate with a central projection to fit the said central opening tightly, and other openings corresponding with the threaded openings, through which screws are inserted to secure the caster to the holder.

1,064,341. PAPER-FEED MECHANISM FOR PERFORATED MUSIC-SHEETS. GEORGE B. KELLY, Jamaica Plain, Mass., assignor to Aeolian Company, New York, N. Y., a Corporation of Connecticut. Filed Dec. 6, 1912. Serial No. 735,194. (Cl. 164—116.)

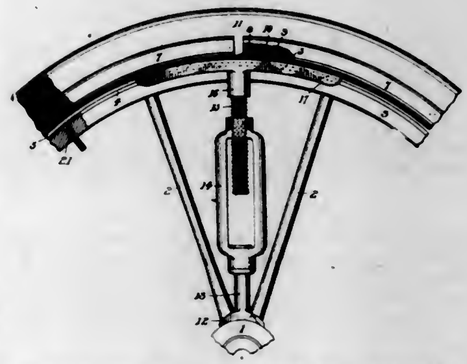


1. In a paper feed mechanism for paper perforating machines, the combination with two pairs of endless chains, sprocket wheels for each pair of chains and bars uniting the chains of each pair of chains, one pair of chains and its bars being superimposed above the other pair of chains and its bars, the chains of the lowest bar being substantially taut, and the bottom strand of each endless chain of the upper pair being slack so that it can hang down between its supporting sprocket wheels and of means for driving the two pairs of chains at the same uniform speed, clamping devices on the bars on the lower pair of chains for engaging the bars on the upper pair of chains and cams for alternately lifting the clamping devices off the upper bars and applying them upon the upper bars, substantially as set forth.

2. In a paper feed mechanism for perforating machines, the combination with two pairs of endless chains, bars uniting the endless chains of each pair, separate sprocket wheels for each pair of chains, one pair of chains being superimposed above the other, clamping means on the ends of the bars of one pair of sprocket chains, for clamping the bars on the other pair of sprocket chains, and means for alternately applying and disengaging the clamping means, and independent means for each pair of chains for driving both pairs of chains at the same speed, substantially as set forth.

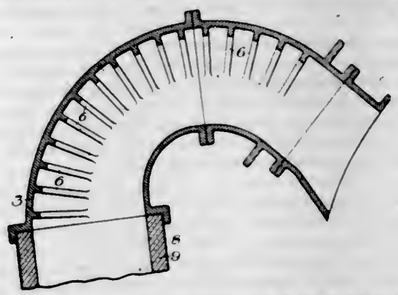
3. In a paper feed mechanism for paper perforating machines, the combination with a pair of endless chains, sprocket wheels over which the chains are passed, bars uniting the chains and secured between the chains, a series of bars located parallel to the bars on said chains and located above the same, chains connected with said upper bars, between the ends of these bars, locking means for locking the bars of the upper pair of chains on the bars of the lower pair of chains and means for alternately applying and disengaging these locking devices, substantially as set forth.

1,064,342. DEMOUNTABLE RIM. JOHN D. KENNEDY, New Kensington, Pa. Filed Feb. 3, 1912. Serial No. 675,308. (Cl. 152—7.)



A demountable rim comprising a split channel-shaped member having squared ends and adapted to receive a resilient tire and further adapted to be detachably positioned circumferentially with respect to a wheel rim, a tongue formed integral with and projecting from one end of the bottom of said member, said tongue offset outwardly with respect to the outer face of said bottom and adapted to project upon the outer face of the bottom of said member at the other end thereof, said tongue provided at its free end with a longitudinal slot, and an outwardly projecting headed stud carried by that end of the bottom of the free end of the tongue and extending through the slot for connecting the ends of the member together, one end wall of said slot limiting the movement of the ends of the member away from each other.

1,064,343. DOWNCOMER CONSTRUCTION FOR BLAST-FURNACES. JULIAN KENNEDY, Pittsburgh, Pa. Filed Oct. 11, 1911. Serial No. 654,083. (Cl. 137—34.)



1. A downcomer pipe for blast-furnaces, having a curved portion whose outer wall is provided on its inner surface with a plurality of ribs or projections, the spaces between said ribs forming pockets closed at their outer sides; substantially as described.

2. A downcomer pipe for blast-furnaces, having a curved portion whose outer wall is provided on its inner surface with a succession of transverse ribs, the spaces between which ribs forming pockets closed at their outer sides; substantially as described.

3. A downcomer pipe for blast-furnaces, having a curved portion whose outer wall is provided on its inner surface

with a succession of transverse radial ribs, said ribs and outer wall forming a series of gas-retaining pockets which act to protect said wall against the cutting action of the furnace gases; substantially as described.

1,064,344. SCREENING-MACHINE. DANIEL L. KIBLER, Grand Rapids, Mich., assignor to Acme Cement Plaster Co., St. Louis, Mo., a Corporation of Missouri. Filed Oct. 30, 1911. Serial No. 657,486. (Cl. 83—56.)



1. A screening machine, comprising an inclined case, inclined screens in the case pivotally attached at their upper ends to the sides of the case and arranged one above the other with the lower edge of each screen overlapping the upper edge of the screen below, shafts journaled in the case and extending beneath the lower edge of each screen, vibrator wheels on the shafts to support the lower ends of the screens, means for rotating the shafts, beaters beneath the screens, means for operating the beaters, and deflector boards beneath the lower edge of each superposed screen.

2. A screening machine, comprising a screen, a rock-shaft below the screen, beaters projecting laterally from the shaft to strike the screen and arranged normally in spaced relation to the screen and parallel therewith, a counterweight to swing the beaters against the screen, and means for periodically turning the rock-shaft to move the beaters away from the screen and for releasing the shaft to permit the beaters to strike the screen.

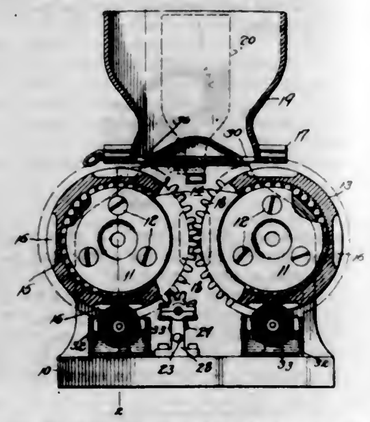
3. A screening machine, comprising a screen, a rock-shaft near the screen, beaters extending laterally from the shaft and normally near the screen, a counterbalance to swing the beaters against the screen, means for periodically raising the counterbalance and releasing the same, and a cushion spring to support the counterbalance and hold the beaters in normal position.

4. A screening machine, comprising a screen, a rock-shaft beneath the screen, beaters attached to the shaft and normally held thereby close to the screen and parallel therewith, an arm on the rock-shaft serving as a counterweight, means connected to the arm to periodically raise the arm and to release the same to first move the beaters away from the screen and then allow the same to strike the screen.

5. A screening machine, comprising a series of inclined screens, a rock-shaft beneath each screen, beaters extending laterally from each shaft, and disposed normally parallel with the screens, an arm on each shaft, a rod connecting the arms, said arms and rod serving to overbalance the beaters and swing them against the screens, and means for periodically raising the rod and arm and releasing the same, to swing the beaters against the screen.

[Claims 6 to 8 not printed in the Gazette.]

1,064,345. BAKING MACHINERY. OLIVER C. KNIPE, Palo Alto, Cal. Filed May 29, 1912. Serial No. 700,539. (Cl. 107—1.)



1. A baking machine comprising a pair of heated surfaces, means for supplying uncooked pastry to each, said surfaces being adapted to approach one another to unite the partially cooked pastry into a unitary product, and to recede after the cooking.

2. In a baking machine, the combination of two heated surfaces arranged to approach each other, means for supplying batter to each, heaters for partially baking the same, and means for feeding a confection between the partially cooked layers, said layers uniting to form a composite pastry product.

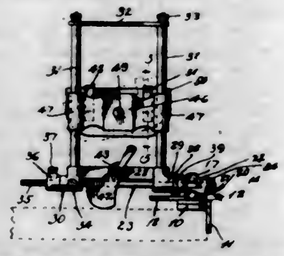
3. In a baking machine, a pair of rotatable rolls, means for heating the same, whereby they may be raised to a baking temperature as they rotate, and means for supplying batter to each roll at a point in advance of their nearest approach to permit the two portions of batter to unite into a unitary product.

4. In a machine of the character described, a pair of rotatable rolls parallel and spaced a short distance apart, means for maintaining the rolls hot, and means for supplying batter to the rolls through a plurality of discharge openings for supplying batter to the respective rolls, the space between the rolls being such that the layers of partially baked batter merge and unite into a unitary product.

5. A baking machine comprising a pair of heated surfaces, means for supplying uncooked pastry to each, said surfaces being adapted to approach one another to unite the partially cooked pastry into a unitary product, and to recede after the cooking, and means for discharging the cooked pastry.

[Claims 6 and 7 not printed in the Gazette.]

1,064,346. SAW-GUIDING INSTRUMENT. ADOLPH H. KOCH, Los Angeles, Cal. Filed Feb. 14, 1912. Serial No. 677,613. (Cl. 143—88.)



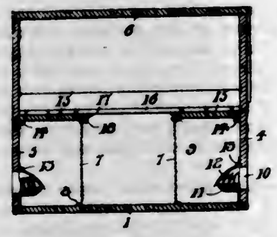
1. A saw guiding implement comprising a guiding base to engage the material, an adjustable plate pivoted at one of its ends to said guiding base, a segment plate pivoted to the opposite end of said adjustable plate, an adjustable saw guiding frame mounted on said segment plate, and means to clamp each of said parts in relation to each other.

2. A saw guiding implement comprising a guiding base provided with a flange, an adjustable plate pivoted at one of its ends to said guiding base, a segment plate pivoted to said opposite end of said adjustable plate, a lateral shaft carried by said segment plate and adjustably supported thereon, and a saw guiding frame carried by said shaft.

3. A saw guiding implement comprising a guiding base plate, an adjustable plate pivoted thereon, a head pivotally and adjustably mounted on said latter plate, a lateral shaft carried by said head, a saw guide frame mounted on said shaft, and means for clamping the parts at various angles with respect to each other.

4. A saw guiding implement comprising a work engaging base, a plate pivoted thereto and adapted to be clamped at different angles with respect to the same, a head also pivoted to said plate and adapted to be clamped at various angles with respect thereto, a shaft carried by the said head, a saw frame mounted thereon and adapted to be clamped in various inclined positions in a vertical position thereon, and a pivoted saw engaging guide member carried by said frame.

1,064,347. COMBINED COOP AND TRAP. FRANK KOVACS, Bedford, Ohio. Filed Jan. 9, 1912. Serial No. 670,265. (Cl. 119—21.)



A combined coop and trap comprising a receptacle including side and end walls, a closed bottom and an open top, transverse screens having their ends secured to said side walls and their lower edges secured to the bottom, said screens of less height than the height of said end walls and providing said receptacle with a pair of end and intermediate compartments, said end walls formed with entrance openings for said end compartments, doors carried by the inner faces of the end walls and associated with said openings, one of said side walls provided with an entrance opening for said intermediate compartment, transversely extending cleats secured to the inner faces of the end walls above the openings thereof and having their upper faces in alinement with the top edges of said screens, spaced plates mounted upon the top edges of the screens and cleats and forming the tops of said end compartments, longitudinally extending spaced rest bars mounted upon and having their end portions fixedly secured to the upper faces of said plates, eyes carried by the top of said screens, and hooks carried by said bars and engaging in said eyes for locking said bars and plates relatively to said screens.

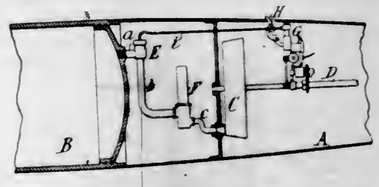
1,064,348. HAT-PIN-POINT PROTECTOR. ANDREW E. KYLLONEN, Monessen, Pa. Filed June 5, 1912. Serial No. 701,824. (Cl. 24—155.)

In a hat pin point protecting device a housing formed of a single piece of material bent to provide front and rear walls, one side wall and an open side, inwardly projecting prongs at the end of said walls bent together to form an end closure for said housing, an apertured tongue at the opposite end of said housing bent to provide an end wall for the housing and positioned between the front and rear walls, said apertured tongue adapted to receive a hat pin therethrough, and a clamping member trunnioned between said front and rear walls and having a pronged end to



engage the hat pin within the housing, said member acting as a cam to bind the hat pin in said apertured tongue.

1,064,349. STARTING AND STOPPING MECHANISM FOR AUTOMOBILE TORPEDOES. FRANK M. LEAVITT, Smithtown, N. Y., assignor to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Mar. 13, 1912. Serial No. 683,446. (Cl. 114—20.)



1. In a torpedo, the combination of a starting valve, a controlling valve therefor, means for opening said controlling valve, means for holding said valve open, and means for closing said controlling valve comprising a movable part driven from the engine adapted to withdraw said holding means.

2. In a torpedo, the combination of a pressure-controlled starting valve, a controlling valve therefor, means for opening said controlling valve, a spring-pressed detent moving into the path of a part of said valve for holding it open, and means for closing said valve comprising a movable part driven from the engine adapted to encounter and withdraw said detent.

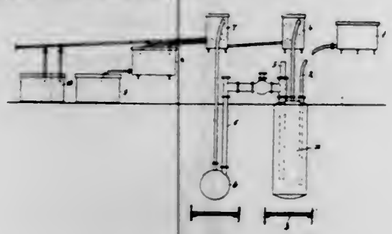
3. In a torpedo, the combination of a pressure-controlled starting valve, a controlling valve therefor, means for opening said controlling valve, a spring-pressed detent moving into the path of a part of said valve for holding it open, and means for closing it at the end of a determined run of the torpedo, comprising a cam adapted to encounter and withdraw said detent, and gearing for driving said cam from the engine.

4. In a torpedo, the combination of a pressure-controlled starting valve, a controlling valve therefor, means for opening said controlling valve, a spring-pressed detent moving into the path of a part of said valve for holding it open, and means for closing it at the end of a determined run of the torpedo, comprising a movable part adapted to encounter and withdraw said detent, gearing for driving said part from the engine, and means for varying the travel of said part whereby it may be set to move a greater or less time before withdrawing said detent.

5. In a torpedo, the combination of a pressure-controlled starting valve, a controlling valve therefor, means for opening said valve to open the starting valve and start the engine, and means comprising a centrifugal device for closing said controlling valve upon the engine exceeding a prescribed speed.

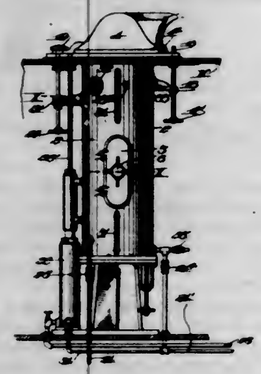
[Claims 6 and 7 not printed in the Gazette.]

1,064,350. PROCESS FOR THE PRODUCTION OF COKE FROM WOOD-TAR. FRIEDRICH WILHELM LEFELMANN, Aue, Germany. Filed Oct. 1, 1912. Serial No. 723,366. (Cl. 202—8.)



Process for producing coke from wood tar, in particular from tar made of the wood of deciduous trees, consisting in the tar being distilled to the passing over of the easily volatile distillation products and the heavy oils, then being heated to a higher temperature until the tar rises by itself from the distillation vessel into a closed coking retort, said coking retort being previously heated to the coking temperature.

1,064,351. LIFE-SAVING ATTACHMENT FOR SUBMARINES. HERMAN C. E. LINDTKE, Emeryville, Cal. Filed Oct. 14, 1912. Serial No. 725,646. (Cl. 114—16.6.)



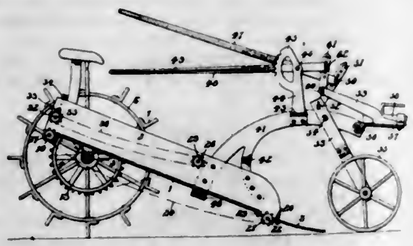
1. The combination with a vessel adapted to be submerged, of a compartment within the vessel having an opening thereinto and an opening outside the vessel, closures for said openings, locks operable from either the inside or the outside of said compartment controlling the closure of the opening communicating with the interior of the vessel, a locking means operable from the interior of the vessel for locking or unlocking the exterior cover, means operable from the exterior of the chamber for flooding the chamber to equalize exterior and interior pressures, means operable from the interior of the chamber for flooding the chamber, an automatic means within the chamber for opening the exterior closure, a secondary means within the chamber for forcing the exterior closure open, and means operable from the interior of the vessel to close said cover.

2. The combination with a vessel adapted to be submerged, of a compartment within the vessel having an opening thereinto and an opening outside the vessel, closures for said openings, locks operable from either the inside or the outside of said compartment controlling the closure of the opening communicating with the interior of the vessel, a locking means operable from the interior of the vessel for locking or unlocking the exterior cover, means operable from the exterior of the chamber for flooding the chamber to equalize exterior and interior pressures, means operable from the interior of the chamber for flooding the chamber, an automatic means within the chamber for opening the exterior closure, a secondary means within the chamber for forcing the exterior closure open, and means operable from the interior of the vessel to close said cover, said means comprising a vertically disposed rod suitably journaled on the inside of the chamber so positioned as to have one end engageable with the inner edge of the outer closure and the other end projecting through the lower portion of the chamber, a spring surrounding said rod, a collar secured to the rod against which the spring acts, threads formed on the lower end of the rod and a nut for controlling the position of the rod, and means operable from the interior of the vessel to close said cover.

3. The combination with a vessel adapted to be submerged, of a compartment within the vessel having an opening thereinto and an opening outside the vessel, closures for said openings, locks operable from either the inside or the outside of said compartment controlling the closure of the opening communicating with the interior of the vessel, a locking means operable from the interior of the vessel for locking or unlocking the exterior cover, means operable from the exterior of the chamber for flooding the chamber to equalize exterior and interior pressures, means operable from the interior of the chamber for flooding the chamber, an automatic means within the chamber for opening the exterior closure, a secondary means within the chamber for forcing the exterior closure open, said means comprising a vertically disposed rod suitably journaled on the inside of the chamber so positioned as to have one end engageable with the inner edge of the outer closure and the other end projecting through the lower portion of the chamber, a spring surrounding said rod, a collar secured to the rod against which the spring acts, threads formed on the lower end of the rod and a nut for controlling the position of the rod, means operable from the interior of the vessel to close said cover, said means comprising a cam formed on the outer closure, a rod engageable with said cam, and means for operating said rod.

4. The combination with a vessel adapted to be submerged, of a compartment within the vessel having an opening thereinto and an opening outside the vessel, closures for said openings, locks operable from either the inside or outside of said compartment controlling the closure of the opening communicating with the interior of the vessel, means operable from the exterior of the chamber for flooding the chamber to equalize exterior and interior pressures, means operable from the interior of the chamber for flooding the chamber, an automatic means within the chamber for opening the exterior closure, a secondary means within the chamber for forcing the exterior closure open, and a hand-controlled fluid-actuated means within the chamber for forcing the outer closure into open position.

1,064,352. SOIL-PULVERIZER. DANIEL F. LINOLE, Conneautville, Pa. Filed June 8, 1912. Serial No. 702,498. (Cl. 55—138.)



1. An implement for the purpose set forth comprising an inclined bottom plate having its forward end provided with a scoop, a main conveyer including a carrier in the form of a pair of spaced cog chains movable lengthwise and traveling upon the upper face of said bottom plate and further traveling below the bottom plate, flat strips connecting the opposing links of the chain together, sprocket wheels for driving said carrier, a yieldable crushing conveyer including a carrier in the form of a pair of spaced cog chains, flat crushing strips connecting the opposing links of the chains of the yieldable conveyer together and capable of being positioned in close proximity to the strips of the other conveyer, wheels supporting the rear end of said bottom plate, means actuated by one of said supporting wheels for imparting movement to said sprocket wheels, and means actuated by the other of said supporting wheels for imparting the movement of said crushing conveyer.

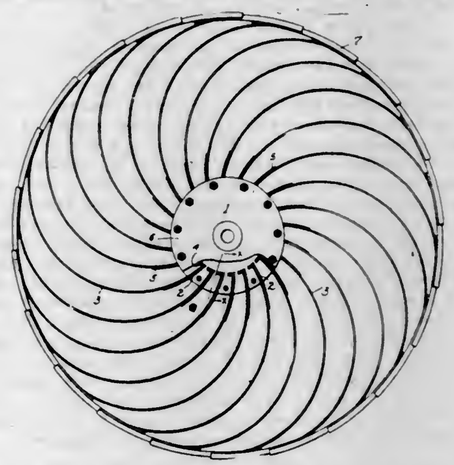
2. An implement for the purpose set forth comprising an inclined bottom plate having its forward end provided with a scoop, a main conveyer including a carrier in the form of a pair of spaced cog chains movable lengthwise and traveling upon the upper face of said bottom plate and further traveling below the bottom plate, flat strips connecting the opposing links of the chain together, sprocket wheels for driving said carrier, a yieldable crushing conveyer including a carrier in the form of a pair of spaced cog chains, flat crushing strips connecting the opposing links of the chains of the yieldable conveyer together and capable of being positioned in close proximity to the strips of the other conveyer, wheels supporting the rear end of said bottom plate, means actuated by one of said supporting wheels for imparting movement to said sprocket wheels, and means actuated by the other of said supporting wheels for imparting the movement of said crushing conveyer, side walls connected to the bottom plate and adjustable yieldable supporting means for said yieldable conveyer, said yieldable supporting means carried by said side walls.

3. An implement for the purpose set forth comprising an inclined bottom plate having a scoop at its forward end, means for supporting the plate at its forward end, a pair of wheels for supporting the plate at the rear end thereof, a main conveyer movable lengthwise and traveling upon the upper face of said bottom plate and including transversely extending flat strips, side walls attached to said plate, a crushing conveyer supported by said side walls and including transversely extending strips movable during the traveling of said conveyer in close proximity to the crushing strips of said main conveyer, detachable means mounted in said side walls for yieldingly supporting said crushing conveyer, means actuated from one of said wheels for operating said main conveyer, and means actuated from the other of said wheels for imparting movement to the crushing conveyer.

4. An implement for the purpose set forth comprising an inclined bottom plate having a scoop at its forward end, means for supporting the plate at its forward end, a pair of wheels for supporting the plate at the rear end thereof, a main conveyer movable lengthwise and traveling upon the upper face of said bottom plate and including transversely extending flat strips, side walls attached to said plate, a crushing conveyer supported by said side walls and including transversely extending strips movable during the traveling of said conveyer in close proximity to the crushing strips of said main conveyer, detachable means mounted in said side walls for yieldingly supporting said crushing conveyer, means actuated from one of said wheels for operating said main conveyer, means actuated from the other of said wheels for imparting movement to the crushing conveyer, and means for controlling the operation of said conveyer.

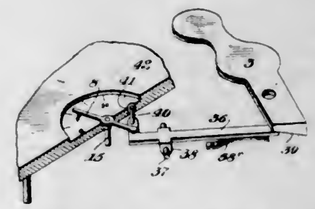
1,064,353. RESILIENT WHEEL. WILLIAM LUPTON, Lodi, Cal. Filed Nov. 14, 1911. Serial No. 660,260. (Cl. 152—29.)

A device of the character described comprising a hub, a plurality of curved spring spokes secured in said hub, a hood member on the outer end of each spoke, said hood member comprising a hood member proper, a solid portion on said hood member, such solid portion being provided with a slot adapted to receive the end of said spoke, rivets projecting through the solid member and the spoke,



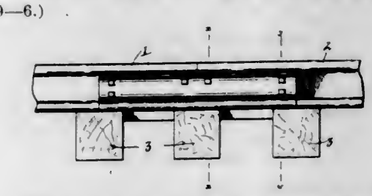
each of said hood members overlapping its adjacent hood member, as described.

1,064,354. SETTING DEVICE. CLARENCE L. MATHEWS, Colton, Cal. Filed June 19, 1911, Serial No. 634,136. Renewed Oct. 23, 1912. Serial No. 727,453. Cl. 58—67.)



The combination with time indicating mechanism including a dial plate, a seconds hand, and a yoke, of stationary ears, a pivot bearing in said ears, a spring, a lever mounted on said pivot and arranged to be automatically operated by the yoke when the latter is actuated, said lever having one end thereof pressed by said spring into engagement with a beveled portion on the underside of the yoke, and a pin at the other end of said lever, said pin adapted to move through an opening in the dial plate and be disposed in the path of movement of the seconds hand when the lever is operated by the yoke, substantially as described.

1,064,355. RAIL-JOINT. ARTHUR L. MAUBERT, Gretna, La. Filed Oct. 24, 1911. Serial No. 656,462. (Cl. 239—6.)



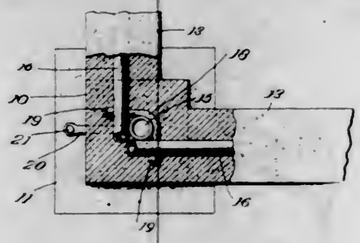
1. In a device of the character described, the combination with a pair of rails, of side pieces in engagement with the adjacent ends thereof, pins extending through said side pieces and said rails, said pins being disposed near the upper edge of said side pieces, other pins disposed through said side pieces and said rails, one end of said

last mentioned pins engaging the corresponding end of the other of said pins within one of said side members, as and for the purpose set forth and described.

2. In a device of the character described, the combination with a pair of rails, of side members disposed in engagement with the adjacent ends thereof, pins connecting said side pieces and extending through said rails, other pins connecting said sides pieces and extending through said rails, the ends of said first and second mentioned pins being spaced apart on one side of the rails, the other ends of said second mentioned pins engaging the corresponding ends of said first mentioned pins within one of said side members, as and for the purpose set forth and described.

3. In a device of the character described, the combination with a pair of rails, of side members disposed in connection with the adjacent ends thereof, means connecting said side members and extending beneath said rails, pins connecting said side members near their upper ends and extending through said rails, said pins provided with a notch near one end thereof, and within one of said side members, other pins connecting said side members and extending through said rails, the heads of said members being spaced apart, the other ends of said second mentioned pins engaging said notches in said first mentioned pins, as and for the purpose set forth and described.

1,064,356. CONCRETE POST. THOMAS A. MCQUIRK, Tonkawa, Okla. Filed Feb. 19, 1912. Serial No. 678,742. (Cl. 72—83.)

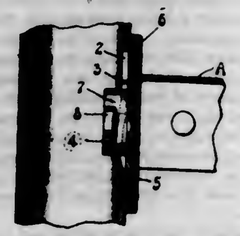


1. A post including a vertical core, a pair of diagonal brace members bearing by their upper ends against the core, an L-shaped tie bolt bearing about the upper end of the core with its ends passed through the upper ends of the braces, nuts threaded upon the ends of said tie bolt, and an integrally formed envelop of concrete surrounding the core and braces.

2. A post including a vertical core L-shaped in section, a pair of diagonal brace members also L-shaped in section and bearing against the outer faces of the core and extending outwardly and downwardly from the angular edge thereof, a tie bolt bearing transversely across the core and extending over the edges of its angularly disposed sides, the ends of the tie bolt being angularly directed and passed through those sides of the brace members bearing against the sides of the core, said angularly directed ends bearing against the edges of the core, nuts threaded upon the ends of said tie bolt and bearing against the inner faces of those sides of the brace members through which the tie bolt passes, and an integrally formed envelop of concrete surrounding the core and braces.

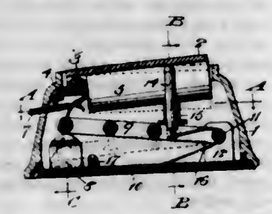
1,064,357. CORNER-FASTENING FOR BEDSTEADS. GEORGE A. MELLON, St. Louis, Mo., assignor to Link-Fabric Company of America, St. Louis, Mo., a Corporation. Filed Dec. 14, 1912. Serial No. 736,696. (Cl. 5—55.)

In a bedstead, a hollow corner post having a slot therein, the post being indented to provide internal, downwardly inclined faces alongside said slot, and a side rail having a fastening piece provided with a lug having a



terminal head engaging said inclined faces to draw the side rail toward said post.

1,064,358. ELECTRIC STOVE. CASPAR METTLER, New Haven, Conn., assignor of one-third to Henry W. Leete and one-third to George C. Moore, New Haven, Conn. Filed Feb. 11, 1913. Serial No. 747,673. (Cl. 219—43.)



1. In an electric stove, a heating element, and a movable platform adapted to be controlled by the weight of a separate utensil for making and breaking the circuit through said heating element.

2. In an electric stove, a heating element, and a movable platform carrying the same, adapted to be controlled by the weight of a separate utensil for making and breaking the circuit through said heating element.

3. In an electric stove, a suitable base, a movable platform carried thereby, a heating element, a cut-out switch, a connection between the movable member of the switch and the platform for transmitting motion one to the other and a spring normally holding the switch open and the platform raised, said platform being adapted to be depressed by the weight of a separate utensil for closing said switch to make the circuit through said heating element.

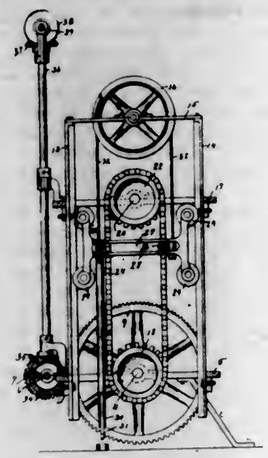
4. In an electric stove, a suitable base, a platform hinged thereto, a heating element carried by the platform, a cut-out switch carried by the base, a mechanical connection between the switch and platform whereby the movement of one controls the movement of the other and a spring for normally holding the switch open and the platform raised, said platform being adapted to be depressed by the weight of a separate utensil for closing the switch to make the circuit through said heating element.

1,064,359. PUMP-HEAD. FRANCIS M. MIDDENDORF, Los Angeles, Cal., assignor to Thomas H. Oulsnam, Los Angeles, Cal. Filed June 24, 1912. Serial No. 705,485. (Cl. 103—62.)

1. In a pump head, a plunger frame, means to raise and lower said frame; a guide for said frame; in combination with a hollow plunger rod, and a solid rod operable through the hollow rod both being connected to and operable by said plunger frame, said rods being so connected and arranged that the downward movement of said frame raises the solid rod and the upward movement raises the hollow rod.

2. In a pump head, a bottom frame; a top frame; guide beams secured to said frames, said beams forming the

support of the top frame; a pulley frame secured to the top of said guide beams; a pulley mounted in said frame; a driven shaft; pinions mounted on said shaft; stub axles mounted on the bottom frame; gears on said stub axles meshing with the pinions on the driven shaft; stub axles mounted on the top frame; sprocket wheels mounted on the stub axles of the top and bottom frames there being two sprocket wheels on each side; sprocket chains connecting the sprocket wheels of each side; a slotted ver-



tically movable plunger frame mounted between the guide beams, and guided in its movement thereby; an operating bar connected to said chains and extending through the slot in the plunger frame; a hollow plunger rod connected to said plunger frame near one end thereof; a second plunger rod workable in and through said hollow rod; and a cable secured to said second rod and passing over the pulley in the pulley frame and secured to said plunger frame near the other end of the slot in said frame.

1,064,360. AUXILIARY AIR-INLET VALVE. JOHN A. MILLER, Los Angeles, Cal., assignor to Motor Car Equipment Repairs Company, Inc., Los Angeles, Cal. Filed July 16, 1912. Serial No. 709,746. (Cl. 137—26.)



1. In a device of the character described, an auxiliary air valve comprising a cylinder open at one end and mounted upon an engine intake pipe, there being a port leading from the interior of the cylinder to the interior of the intake pipe, said port being relatively long in a direction parallel to the axis of the cylinder and being relatively narrow in a direction transverse to the axis of the cylinder, a screen over the open end of the cylinder, a piston slidable in said cylinder and adapted to cover and uncover the said port therein, and manually operable means to move said piston longitudinally of the cylinder.

2. In a device of the character described, an auxiliary air valve comprising a cylinder open at one end and mounted upon an engine intake pipe, there being a port leading from the interior of the cylinder near its open end to the interior of the intake pipe, a dust screen over the open end of the cylinder, a piston in the cylinder movable to the end thereof opposite the screened end to uncover the port and open the space in the cylinder directly between the screened end and the port, and means for reciprocating the piston, all substantially as described.

1,064,361. WRENCH. HERBERT W. MOAK, Oneonta, N. Y. Filed Sept. 9, 1912. Serial No. 719,409. (Cl. 81—140.)



1. A wrench comprising a shank provided with a stationary jaw on one end and a handle on the other end thereof, a movable jaw mounted upon the shank and provided with rack bars, a collar being formed with recesses mounted upon the shank, and spring pressed pawls disposed in the recesses in said collar and adapted to engage said rack bars to hold the movable jaw in adjusted position.

2. A wrench comprising a shank formed with a stationary jaw on one end and a handle on the opposite end, a movable jaw mounted thereon, rack bars carried by said jaw, a collar mounted upon the shank, means carried by the collar adapted to engage said rack bars to hold the movable jaw in an adjusted position, and means disposed on said shank inwardly of said collar for adjusting said collar longitudinally of the shank to secure additional adjustment of the movable jaw.

3. A wrench comprising a shank provided one one end with a stationary jaw and a handle upon the opposite end, a movable jaw mounted on the shank, rack bars carried by the movable jaw, a collar mounted upon the shank, means carried by the collar adapted to engage said rack bars, and an adjusting ferrule mounted upon the shank inward of said collar.

4. A wrench comprising a shank provided at one end with a stationary jaw, and a handle at the opposite end, a movable jaw mounted upon the shank, rack bars carried by the movable jaw, the teeth of one rack bar being smaller than those of the other, a collar carried by the shank, and pawls carried by the collar for engagement with said rack bars.

5. A wrench comprising a shank having a stationary jaw at one end and a handle at the opposite end, said shank being provided in its opposite side faces with longitudinal grooves, a movable jaw arranged upon the shank, rack bars secured to the movable jaw and disposed in said grooves for sliding movement, the teeth of one rack bar being smaller than those of the other, a collar arranged upon the shank, and pawls carried by said collar and adapted to engage said rack bars.

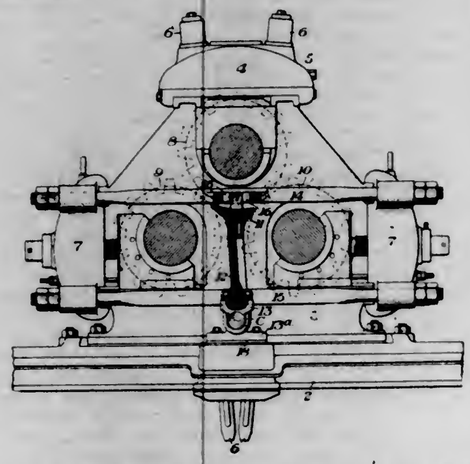
[Claims 6 and 7 not printed in the Gazette.]

1,064,362. CANE-GRINDING MILL. FRANK A. MONROE, Jr., and NICOLAS A. HELMER, Cleveland, Ohio, assignors to The Dyer Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 17, 1912. Serial No. 715,666. (Cl. 100—47.)

1. In a crushing mill, the combination of a base, a roll frame or housing mounted thereon and having side caps, a turn plate support, and transverse tie bolts for the side caps, said bolts engaging the turn plate support; substantially as described.

2. In a crushing mill, a mill frame housing having side caps, transverse bolts securing the side caps, and a turn

plate support having projections engaged by some of said bolts, the latter forming means for actuating and holding the turn plate support and turn plate; substantially as described.



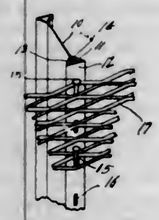
3. In a crushing mill, the combination of a roll frame having side caps, transverse bolts securing said caps, some of said bolts having lateral projections, and a pivotal turn plate support engaged by said projections; substantially as described.

4. In a crushing mill, the combination with a base and roll frame supported thereby, of gudgeon or trunnion members mounted on the base, a turn plate supporting beam carried by the trunnion or gudgeon plates, and tranverse tie bolts engaging the turn plate support and forming means for adjusting the same; substantially as described.

5. In a crushing mill, the combination with a base and roll frame supported thereby, of gudgeon or trunnion members mounted on the base, a turn plate supporting beam carried by the trunnion or gudgeon plates, and transverse tie bolts engaging the turn plate support and forming means for adjusting the same; together with means for effecting a vertical adjustment of the turn plate support and turn plate; substantially as described.

[Claim 6 not printed in the Gazette.]

1,064,363. STRUCTURAL MEMBER. WINFIELD SCOTT MOORE, Indianapolis, Ind., assignor of two-thirds to himself and one-third to Arthur Sanford, a Copartnership composed of Winfield Scott Moore and Arthur Sanford. Filed Mar. 11, 1912. Serial No. 683,132. (Cl. 72—115.)

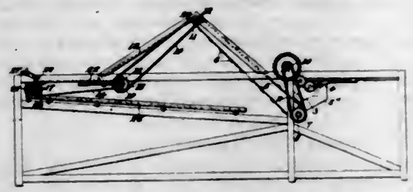


1. A structural member comprising a sheet metal strip having one edge turned and returned relative to the main body and overlapping a part of the strip farther back from the edge to form a completely closed, pin-retaining longitudinal channel the outer wall of which is perforated by a plurality of independent nail-receiving perforations and the inner wall of which is more closely adjacent the edge of the sheet and is opposite and spaced from the outer perforated wall, whereby material applied to the outer face of the perforated wall may be attached thereto by a fastening pin driven through the material and a perforation and the inner end of the pin engaged and canted longitudinally of the channel by the inner wall thereof.

2. In a building the combination of a structural member comprising a sheet metal strip having one edge turned and returned relative to the main body to form a longitudinal channel the outer wall of which is perforated by a plurality of independent nail-receiving perforations and the inner wall of which is arranged adjacent but spaced from the outer perforated wall, a member applied to and extending laterally from the outer perforated wall of the structural member and designed for the support of another body, a fastening pin driven in an inclined direction through the said first mentioned body and a perforation of the perforated wall of the structural member and the inner end of said fastening pin projected into an engagement with the inner wall of the structural member and by it held in a canted or inclined relation relative to the perforated wall of the structural member.

3. A structural member comprising a sheet metal strip having one edge first displaced angularly relative to the main body, thence carried substantially at right angles to the main body, thence back angularly toward the main body, and thence outwardly and angularly against the first angularly displaced portion to form a closed, pin-retaining, longitudinal channel having the wall, which is substantially at right angles to the main body of the sheet, perforated by a plurality of independent nail-receiving perforations, whereby material applied to the outer face of the perforated wall may be attached thereto by a fastening pin driven through the material and a perforation and the inner end of the pin engaged and canted longitudinally of the channel by another wall thereof.

1,064,364. CONVEYING AND SPREADING APPARATUS. ARTHUR L. MORTON, Mountain View, Cal. Filed Apr. 15, 1912. Serial No. 690,954. (Cl. 193—4.)

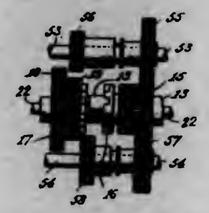


1. In a fruit conveying and spreading apparatus, the combination with feeding mechanism and a conveyer upon which the material is delivered, of a removable tray positioned below and proximate the delivery end of the conveyer, a hood forming a guide through which the fruit is transferred from the conveyer, and placed upon the tray in a reversed position, said hood entering the tray between the sides thereof and delivering the pieces of fruit directly upon the body in successive order, and means for elevating the outer end of the conveyer and the hood out of the tray to permit the conveyer and hood to clear the side walls of the tray.

2. In a fruit conveying and spreading apparatus, the combination with feeding mechanism and a conveyer upon which the material is delivered, of a removable tray positioned below and proximate the delivery end of the conveyer, and a hood forming a guide through which the fruit is transferred from the conveyer, and placed upon the tray in a reversed position, said hood entering the tray between the sides thereof and delivering the pieces of fruit directly upon the body in successive order, and means for elevating the conveyer and hood to permit of the removal of the tray with its assembled fruit sections.

3. In a fruit conveying and spreading apparatus, the combination with feeding mechanism and a conveyer upon which the material is delivered, of a removable tray positioned below and proximate the delivery end of the conveyer, and a hood forming a guide through which the fruit is transferred from the conveyer, and placed upon the tray in a reversed position, said hood entering the tray between the sides thereof and delivering pieces of fruit directly upon the body in successive order, and means connecting with the conveyer for elevating the discharge end of the same and the hood to permit of the removal of the tray and its assembled fruit sections.

1,064,365. SPEED-CHANGING MECHANISM. GEORGE D. MUNSING, New York, N. Y. Original application filed May 17, 1911, Serial No. 627,864. Divided and this application filed July 27, 1912. Serial No. 711,898. (Cl. 74—58.)



1. A speed change mechanism comprising a driving member, a pinion slidable thereon, a driven shaft, a double gear wheel on the latter, shafts parallel to the pinion, a gear wheel on each parallel shaft to mesh with the double gear, and a second gear wheel on each parallel shaft from which the first gear wheel thereon is driven and in constant mesh with and slidable longitudinally of the pinion.

2. A speed change mechanism comprising a driving member, a pinion having a clutch face and slidable, but not rotatable on the driving member, a driven shaft, a double gear thereon, shafts parallel to the pinion, a pair of gears slidable on the parallel shafts, one gear of each pair capable of meshing with the double gear and the other capable of meshing with the pinion and a slide to actuate each of the pairs of gears and the pinion.

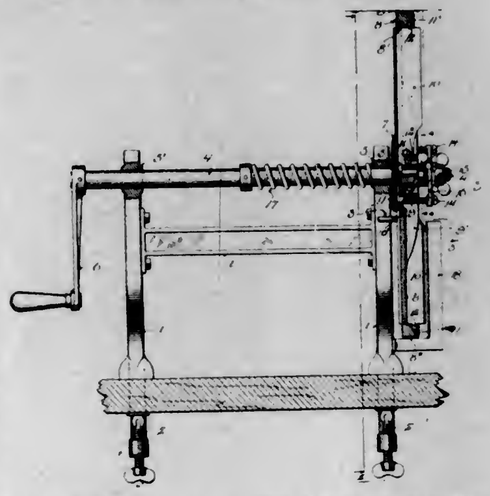
3. A speed change mechanism comprising a driving member, a pinion having a clutch face and slidable, but not rotatable on the driving member, a driven shaft, a double gear thereon, shafts parallel to the pinion, a pair of gears slidable on the parallel shafts, one gear of each pair capable of meshing with the double gear and the other capable of meshing with the pinion, a slide to actuate each of the pairs of gears and the pinion, a latch for each slide, and a lever to actuate the slide.

4. A speed change mechanism comprising a driving shaft, a pinion having a clutch face and slidable but not rotatable on the shaft, a driven shaft, a double gear thereon, shafts parallel to the pinion, a pair of gears slidable on the parallel shafts, one gear of each pair capable of meshing with the double gear and the other capable of meshing with the pinion, a slide to actuate each of the pairs of gears and the pinion, said slides having recesses in normal alinement, a latch for each slide, and a lever movable transversely of the slides and adapted to engage the recesses to actuate the slides.

5. A speed change mechanism comprising a driving shaft, a pinion having a clutch face and slidable, but not rotatable on the shaft, a driven shaft, a double gear thereon having a clutch face to engage the face of the pinion, shafts parallel to the driving shafts, a pair of gears slidable on the parallel shafts, one gear of each pair capable of meshing with the double gear, the other gear of each pair capable of meshing with the pinion, one of the last named gears arranged to mesh with said pinion in advance of the other when they are moved into engagement with the pinion, and a slide to actuate each of the pairs of gears and the pinion.

1,064,366. SLICING-MACHINE. GABRIEL MURL, Milwaukee, Wis. Filed Apr. 1, 1913. Serial No. 758,164. (Cl. 146—11.)

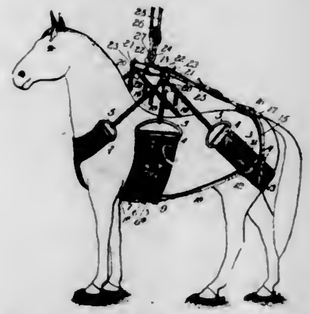
1. A slicing machine comprising a fixed bearing, a spindle mounted therein, a spider carried upon the spindle upon one side of its bearing, tangentially disposed cutter-blades in pivotal union with the spider, a collar fitted between the spider and bearing about the spindle, the collar having lateral play, adjusting means in connection with the spindle for causing engagement of the blades and collar, and means for adjusting the pivotal blades in opposition to the spindle adjusting means.



2. A slicing machine comprising a fixed bearing, a spindle mounted therein, a spider carried by the spindle upon one side of its bearing, blades in pivotal union with the spider, a longitudinally movable collar fitted between the spider and bearing about the spindle, a head-block in slidable union with said spindle, plugs carried by the head-block for engagement with the blades, means for adjusting the head-block longitudinally of the spindle, a collar carried by the aforesaid spindle upon the opposite side of the bearing, and a spring fitted between the collar and bearing.

3. A slicing machine comprising a fixed bearing, a spindle mounted therein, a spider carried by the spindle upon one side of its bearing, blades in pivotal union with the spider, a longitudinally movable collar fitted between said spider and bearing, an adjustable head-block revoluble with the spider, adjustable plugs carried by the head-block for engagement with ends of the cutter-blades, means for locking the head-block in its adjusted position, and a spring adapted to hold the blades in engagement with the collar.

1,064,367. HORSE-SLING. GEORGE W. MUSSELMAN, Denver, Ind., assignor to Sharp & Smith, Chicago, Ill., a Corporation of Illinois. Filed Sept. 9, 1912. Serial No. 719,324. (Cl. 119—102.)



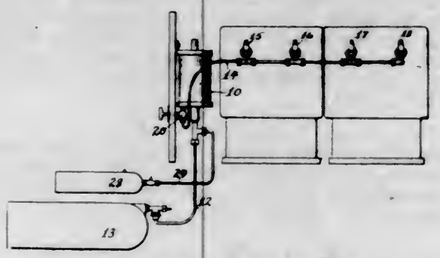
1. A sling of the character described, comprising, in combination, a neck-band to extend in front of and between the forelegs of the animal, a breast-band connected therewith to be located in the rear of the forelegs of the animal and extend rearwardly over the animal's breast and short of the abdominal region, and a breech-band hav-

ing strap-connections with the breast-band, a suspension tree, chains connecting said bands with the ends of said tree, and suspension-means on said tree between its ends, all of said bands being arranged to support the weight of the animal wholly on the bony structure of its body, for the purpose set forth.

2. A sling of the character described, comprising, in combination, a neck-band to extend in front of and between the forelegs of the animal, a breast-band connected therewith to be located in the rear of the forelegs of the animal and extend rearwardly over the animal's breast and short of the abdominal region, and a breech-band having strap connections with the breast-band, a rump-strap connected at its ends with the breech-band, a suspension tree, chains connecting said bands with the ends of said tree, and suspension means on said tree between its ends, and a strap-connection between said rump-strap and tree, all of said bands being so arranged to support the weight of the animal wholly on the bony structure of its body, for the purpose set forth.

3. A sling of the character described, comprising, in combination, a neck-band to extend in front of the animal and having a tongue-section extending between the forelegs of the animal, a breast-band connected with said tongue-section and located in the rear of the forelegs of the animal and extending rearwardly over the animal's breast and short of the abdominal region, a breech-band having strap-connection with the breast-band, said bands having loops on their ends, and rings in the loop, a rump-strap connected at its ends with the breech-band, a suspension tree, chains separably connecting said band-rings with the ends of said tree, suspension-means on said tree between its ends, and a strap separably connecting the rump-strap midway between its ends centrally with said tree, said neck, breast and breech bands being arranged to support the weight of the animal wholly on the bony structure of its body, for the purpose set forth.

1,064,368. MEANS FOR CHARGING THE CYLINDERS OF AN INTERNAL-COMBUSTION ENGINE WITH EXPLOSIVE GAS. OWEN M. NACKER, Flint, Mich., assignor of one-half to Alanson P. Brush, Detroit, Mich. Filed June 19, 1912. Serial No. 704,474. (Cl. 123—187.5.)



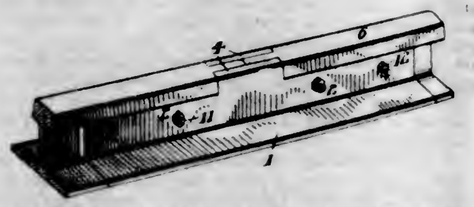
1. In means for charging the cylinders of an internal combustion engine with explosive gas, the combination of an auxiliary gas tank having a gas inlet adapted for connection with a source of combustible gas under pressure, and a gas distributing pipe which is connected with said auxiliary tank and is constructed to discharge into the several cylinders of the engine, a normally open valve in the inlet to said auxiliary air tank, means operable by the pressure in said auxiliary tank for closing said inlet valve, and a valve operable at will controlling the flow of gas from said auxiliary tank through said gas distributing pipe.

2. The combination with a main tank adapted to contain a combustible gas under pressure, and an internal combustion engine, of an auxiliary tank having an inlet which is connected with the main gas tank, a gas distributing pipe leading from said auxiliary tank and discharging into the several cylinders of the engine, a valve controlling the flow of gas from said auxiliary tank through said gas distributing pipe, a valve controlling the admission of gas to said auxiliary tank, a diaphragm in said tank and adapted to be moved by the gas pressure therein, and a rod connecting said valve and diaphragm, the rod being of such length that the valve will be held open when the diaphragm is in its normal position.

3. The combination with a main tank adapted to contain a combustible gas under pressure, and an internal combustion engine, of an auxiliary tank having an inlet which is connected with the main gas tank, a gas distributing pipe leading from said auxiliary tank and discharging into the several cylinders of the engine, a valve controlling the flow of gas from said auxiliary tank through said gas distributing pipe, a valve controlling the admission of gas to said auxiliary tank, a diaphragm in said tank and adapted to be moved by the gas pressure therein, and a rod connecting said valve and diaphragm, the rod being of such length that the valve will be held open when the diaphragm is in its normal position, an auxiliary spring opposing that movement of the diaphragm which will be produced by gas pressure in the auxiliary tank, and means for varying the tension of said spring.

4. The combination with a main tank adapted to contain a combustible gas under pressure and an internal combustion engine, of an auxiliary tank having an inlet which is connected with the main gas tank, a gas distributing pipe leading from said auxiliary tank and discharging into the several cylinders of the engine, a valve controlling the flow of gas from said auxiliary tank through said gas distributing pipe, a valve controlling the admission of gas to said auxiliary tank, a diaphragm in said tank and adapted to be moved by the gas pressure therein, and a crooked rod connecting said valve and diaphragm, the rod being of such length that the valve will be held open when the diaphragm is in its normal position.

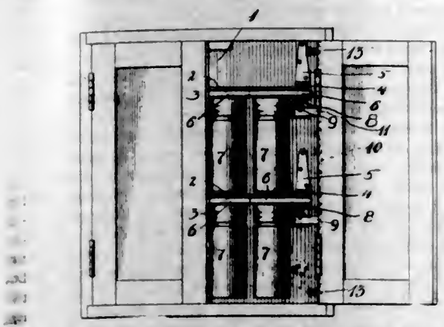
1,064,369. RAIL-JOINT. EDWIN R. ORBIN, Duquesne, Pa. Filed May 18, 1912. Serial No. 698,354. (Cl. 239—3.)



A rail joint comprising the combination with a pair of rails, each having the base at one end cut away to the lower terminus of the web and its head at the same end cut away at each side to provide that portion of the head of the same thickness as that of the web, the cut away portion of the head being of less length than the cut away portion of the base, the cut away end of one rail opposing the cut away end of the other rail, a chair including a base plate of the same contour as the base of a rail, said base plate interposed between and flush with the bases of said rail and further forming a continuation of said bases, said chair further including vertically disposed spaced integral splice bars providing in connection with said plate a pocket having its bottom extending in the same longitudinal plane throughout and against which abut the bottom termini of the webs of the rails at the cut away ends thereof, filling members carried centrally of said splice bars extending in the cut away portions of the heads and flush with and forming continuations of these latter, and means extending through said splice bars and webs of the rails for securing the chair in position.

1,064,370. MULTIPLE-SERVICE-BATTERY CABINET. GEORGE LEWIS PATTERSON, New York, N. Y., assignor to Alice C. Patterson, New York, N. Y. Filed Aug. 21, 1912. Serial No. 716,184. (Cl. 204—53.)

1. In a device of the character described, a container, a plurality of supports movably mounted therein, a series of connected battery units carried by each support and provided with series terminals, means whereby said supports are normally held in a position to inter-connect said series terminals and service terminal connections for the plurality of series.



2. In a device of the character described, a container, a plurality of supports movably mounted therein, a series of connected battery units carried by each support and provided with series terminals, means whereby said supports are normally held in a position to interconnect said series terminals and means whereby said parts may be moved to disconnect said terminals, and service terminal connections for the plurality of series.

3. In a device of the character described, a container, a plurality of frames movably supported therein, a series of connected battery units carried by each frame and provided with series terminals, means adapted to interconnect said series terminals when said frames are in normal position, and service terminal connections for the plurality of series.

4. In a device of the character described, a container, a plurality of independently movable frames supported therein, a series of connected battery units carried by each of said frames and provided with series terminals, means for interconnecting said series terminals, said means including a bus bar common to the plurality of series terminals, and service terminal connections for the plurality of series.

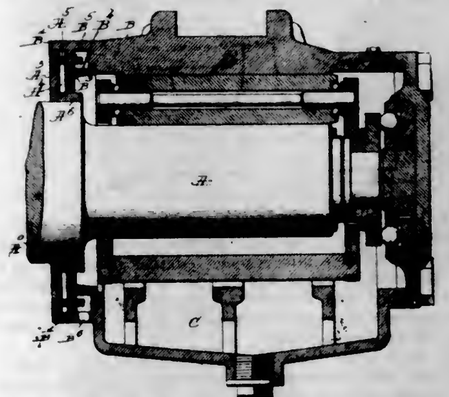
5. In a device of the character described, a container, a plurality of frames movably supported therein, a series of connected battery units carried by each of said frames and provided with series terminals, normally closed connections between the terminals of said plurality of series, said connections including a bus bar common to the plurality of series and contact members making connection therewith in the normal position of the battery carrying frame, and service terminal connections for the plurality of series.

[Claims 6 to 8 not printed in the Gazette.]

1,064,371. DUST-GUARD. JULIUS A. PERKINS, Omaha, Nebr., assignor, by mesne assignments, to United States Roller Bearing Company, Jersey City, N. J., a Corporation of New Jersey. Original application filed Aug. 14, 1903, Serial No. 169,500. Divided and this application filed Mar. 22, 1906. Serial No. 307,522. (Cl. 64—22.)

1. In a roller bearing, a collar having two inturned and concentric flanges to present an annular space between them, a box having an annular flange surrounding and approaching closely the periphery of said collar, and a ring fixedly mounted on the box concentric with the collar and having a flange in a plane at right angles to the axis of the ring and entering the annular space between the flanges of the collar, said ring and the surrounding flange on the box presenting between them a space into which enters the exterior flange of the collar and substantially closes the same.

2. A bearing comprising a box having at its inner end a projecting annular flange and a fixed ring overlapped by said flange, the ring having a flange in a plane at right angles to the axis of the journal, a journal within said box, a collar surrounding and rotating with said journal and having two inturned concentric flanges forming between them an annular space at the side of the collar facing the box, the collar substantially closing the opening between the flange of the box and the journal, the flanged end of the ring entering and substantially closing the annular space of the collar but being disengaged from the latter, and the outer flange of the collar entering freely the space between the flange of the box and the outer circumference of the ring.



3. In a bearing, an axle, a collar thereon presenting at the side next the end of the journal a flange surrounding a space, a box having at its inner end a flange nearly touching the collar and provided with an outlet and inside said flange a flanged ring, the periphery of the ring being grooved for a waterway, the flange of the collar entering the space between the flange and ring of the box whereby water entering the space between the flange of the box and the collar may flow from the outer end of the flange of the collar into the waterway and thence escape through the outlet in the box.

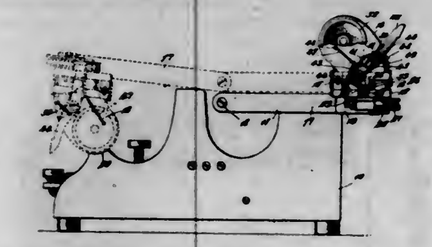
4. In a bearing, an axle having a journal, a collar on said axle near an end of said journal, presenting at its side next the journal a flange surrounding a space, a box having at its end a flange provided with an outlet and inside said flange a flanged ring, the periphery of the ring and the inner side of the flange of the box being each grooved to constitute a waterway, the flange of the collar entering the space between the flange and ring of the box whereby water entering the space between the flange of the box and the collar may flow from the flange of the collar into the waterway and thence escape through the outlet of the box.

5. In a bearing, an axle having a journal, a chambered collar on said axle near said journal, a box having at its bottom a residuum-chamber to contain oil, and a flanged ring fixed to and extended from the end of said box and adapted to enter and move freely in the chamber of said collar, the flange of said ring being inturned toward the axle for a distance to prevent oil in said residuum-chamber from escaping from the end of the box sustaining said ring.

1,064,372. TYPE-WRITING MACHINE. OTTO PETERMANN, Groton, N. Y., assignor to Standard Typewriter Company, a Corporation of New York. Filed Apr. 3, 1911. Serial No. 618,654. (Cl. 197—94.)

1. In a typewriting machine, the combination with a support, of a carriage adapted to travel along the support and shiftable into compact relation to another part of the machine when not in use, an escapement mechanism, a movable device adapted to release the escapement mechanism to permit the carriage to move freely along its support, and a device adapted to engage the movable device and position the carriage on said support.

2. In a typewriting machine, the combination with a support, of a carriage adapted to move along the support and shiftable into compact relation to another part of the machine when not in use, an escapement mechanism, propelling mechanism, a pivotally held device adapted to release the escapement mechanism to permit the carriage to move freely along its support, and an independent pivoted device adapted to engage and move the escapement releasing device and to lock the carriage against action of the propelling mechanism.



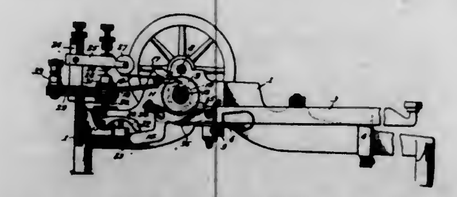
3. In a typewriting machine, the combination with a carriage bed, of a carriage adapted to move along said bed and shiftable into compact relation to another part of the machine when not in use, propelling means for the carriage, and a device adapted to hold and position the carriage to register with said bed in a position ready for its compact movement.

4. In a typewriting machine, the combination with a carriage bed having a slot at one end, of a carriage movable along said bed, propelling means tending normally to force the carriage along the bed, and a device pivoted at one end of the carriage adapted to enter the slot in the bed and lock the carriage against the action of the propelling means.

5. In a typewriting machine, the combination with a frame, of a foldable support, a carriage bed mounted on said support, a carriage having a base and adapted to move along the bed and foldable into compact relation to another part of the machine, an escapement mechanism, propelling means, a releasing device pivotally held to the carriage and having a bar-like portion extending under the carriage base over the bed and provided with a finger part whereby said device may be moved to release a part of the escapement from engagement with the carriage, a spring normally forcing the device in one direction, said bed having an engaging part, and a device pivotally mounted on the end of the carriage and having a part adapted to engage the engaging part of the carriage bed to limit the travel of the carriage and to position the same to adapt the carriage to be folded.

[Claims 6 to 27 not printed in the Gazette.]

1,064,373. TELEGRAPH-TRANSMITTER. ELWOOD C. PHILLIPS and THOMAS RHODUS, Chicago, Ill., assignors to Phillips Telegraph Instrument Company, Phoenix, Ariz., a Corporation of Arizona. Filed Feb. 17, 1912, Serial No. 678,383. Renewed Nov. 4, 1912. Serial No. 729,474. (Cl. 178—69.)



1. A telegraph transmitter comprising in combination, a primary driving wheel adapted for constant rotation, a circuit make and break mechanism, a series of character devices, each character device comprising a driven wheel provided with a journal bore and means for imparting intermittent action to the circuit make and break mechanism, a stationary shaft forming a bearing in common for the series of character devices, the stationary shaft and journal bore of each character device being provided with means for holding said character device during rotation in operative engagement with the primary driving wheel, and individual means for moving each character device into operative engagement with the primary driving wheel, substantially as set forth.

2. A telegraph transmitter comprising in combination, a primary driving wheel adapted for constant rotation, a circuit make and break mechanism, a series of character devices, each character device comprising a driven wheel provided with a journal bore and means for imparting intermittent action to the circuit make and break mechanism, a stationary shaft forming a bearing in common for the series of character devices, the stationary shaft and journal bore of each character device being provided with means for holding said character device during rotation in operative engagement with the primary driving wheel, means for permitting said character device to move out of operative engagement with the primary driving wheel and for normally locking said character device against rotation, and individual means for moving each character device into operative engagement with the primary driving wheel, substantially as set forth.

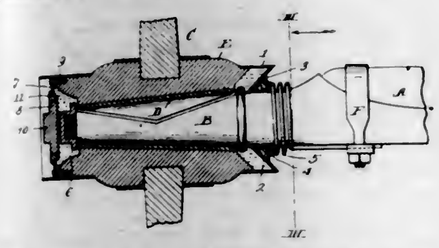
3. A telegraph transmitter comprising in combination, a primary driving wheel adapted for constant rotation, a circuit make and break mechanism, an intermediate mechanism for operating the circuit make and break mechanism, a series of character devices, each character device comprising a driven wheel provided with a journal bore and means for imparting intermittent action to said intermediate mechanism, a stationary shaft forming a bearing in common for the series of character devices, the stationary shaft and journal bore of each character device being provided with means for holding said character device during rotation in operative engagement with the primary driving wheel, and individual means for moving each character device into operative engagement with the primary driving wheel, substantially as set forth.

4. A telegraph transmitter comprising in combination, a primary driving wheel adapted for constant rotation, a circuit make and break mechanism, an intermediate mechanism for operating the circuit make and break mechanism, a series of character devices, each character device comprising a driven wheel provided with a journal bore and means for imparting intermittent action to said intermediate mechanism, a stationary shaft forming a bearing in common for the series of character devices, the stationary shaft and journal bore of each character device being provided with means for holding said character device during rotation in operative engagement with the primary driving wheel, means for permitting said character device to move out of operative engagement with the primary driving wheel and for normally locking said character device against rotation, and individual means for moving each character device into operative engagement with the primary driving wheel, substantially as set forth.

5. A telegraph transmitter comprising in combination, a driving wheel adapted for constant rotation, a series of character devices, each comprising a driven wheel and a character disk connected together and provided with a journal bore, a stationary shaft forming a bearing in common for the aforesaid series of wheels and disks, the shaft and journal bore of each connected wheel and disk being provided with engaging means for normally locking said character devices against rotation, a circuit make and break mechanism, a series of selective levers controlling the circuit make and break mechanism, and individual means for moving each character device into operative engagement with the primary driving wheel, substantially as set forth.

[Claims 6 to 24 not printed in the Gazette.]

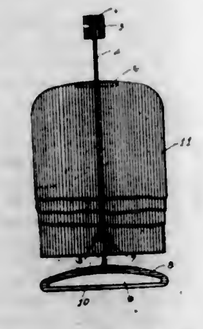
1,064,374. AUTOMATIC LUBRICATOR. JOHN H. PIBURN, Randolph, Mo. Filed July 8, 1912. Serial No. 708,190. (Cl. 64—26.)



1. In combination with a hub and an axle, a cup having its free front end portion engaged over the hub periphery and having its opposite end provided with a wall which is inclined inwardly toward the axle, a sealing element having an inclined inner face which conformably engages the inclined wall of the cup, and an outer face which is at substantially right angles to the axles, a washer abutting the outer face of the sealing element, a coil spring surrounding the axle and abutting the washer, and a clip on the axle secured to the outer terminal of the spring.

2. In combination with a hub and an axle, a cup having its free front end portion engaged over the hub periphery and having its opposite end provided with a wall which is inclined inwardly toward the axle, a sealing element having an inclined inner face which conformably engages the inclined wall of the cup, and spring means to normally force the sealing element into engagement with said inclined rear wall of the cup.

1,064,375. SUIT-BAG HOLDER. FRANK POMPONIO, Stockton, Cal., assignor to Sanitary Garment Bag Company, Stockton, Cal., a Corporation. Filed June 20, 1912. Serial No. 704,765. (Cl. 93—2.)

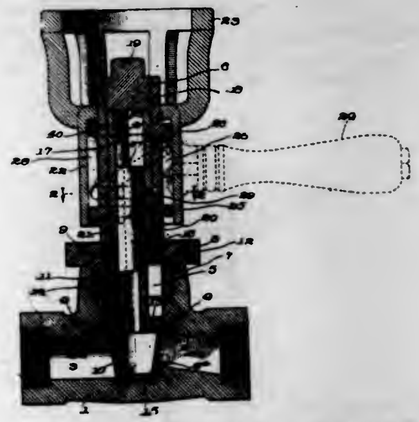


A device of the character described comprising a rod, a member disposed transversely on said rod and projecting on each side thereof, the upper edge of said member being sharpened, said sharpened member being adapted to hold suit bags and normally project against the bottom inner edge of said bags, as described.

1,064,376. VALVE. NICHOLAS W. RACE, Chicago, Ill. Filed June 17, 1912. Serial No. 704,061. (Cl. 137—4.)

1. In a valve, in combination, a valve casing provided with a valve seat and fluid passages, a valve member for said seat, a valve stem attached to said valve member, a pin extending through said valve stem and projecting from each side thereof, said valve casing having two straight slots through which the opposite end portions of said pin extend, an operating cam sleeve rotatably mounted on the valve casing and provided with cam slots into which the end portions of said pin extend, and means for preventing longitudinal displacement of said cam sleeve.

2. In a valve, in combination, a valve casing provided with a valve seat and fluid passages; a valve member for said seat; a valve stem attached to said valve member; a pin extending through said valve stem and projecting from each side thereof, said valve casing having two straight slots through which the opposite end portions of said pin extend; an operating cam sleeve rotatably mounted on the valve casing and provided with cam slots into which the end portions of said pin extend; two flanges on the valve casing, one of the said flanges being arcuate; and a portion on said cam sleeve adapted to lie between said flanges to prevent longitudinal displacement of said cam sleeve.



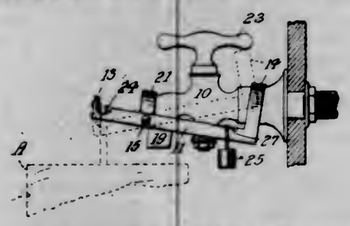
3. In a valve, in combination, a valve casing having fluid passages, a valve seat and a tubular portion; a valve member adapted to said seat; a stem attached to said valve member and extending into said tubular portion; a pin attached to said stem, said tubular portion having a slot therein through which said pin extends for preventing rotation of said valve stem; a circular flange and an arcuate flange upon the periphery of said tubular portion and spaced apart; and a cam sleeve rotatably mounted on said flanges and having an interior curved portion of a length substantially equal to the distance between said flanges, said curved portion being of such dimensions as to pass the arcuate flange when the cam sleeve is moved longitudinally of said tubular portion, said interior curved portion being adapted to lie between said flanges to prevent longitudinal displacement of the cam sleeve, said sleeve having cam means adapted to engage said pin to move the latter in the rotation of the cam sleeve.

4. In a valve, a valve casing having two fluid passages and a valve seat between said passages; a frusto-conical valve member having a smaller end wall, said seat comprising two portions arranged to be in contact with opposite portions of the tapering surface of said valve member, a portion arranged to be in contact with the smaller end wall of said valve member, and a portion extending between the first mentioned two portions and the second mentioned portion and across the direction of flow of the fluid and arranged to be in contact with a portion of the tapering surface of the valve member, the portion of the seat against which the smaller end wall of the valve member bears being in the same plane as the bottom of one of said passages, whereby sediment is prevented from collecting on said seat; and means for moving said valve member.

1,064,377. DISPENSING DEVICE FOR BEER AND OTHER LIQUIDS. HENRY RAMME, Flushing, N. Y. Filed Aug. 16, 1912. Serial No. 715,317. (Cl. 73—3.)

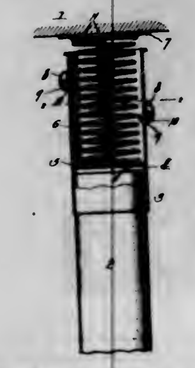
A dispensing device comprising a pair of side bars, weights slidable thereon, means for suspending a recep-

tacle from the front of the side bars, a yoke connecting the rear ends of said side bars, a pivot on which the side bars



are oscillable, and a pair of jaws and a ball mounted on the pivot.

1,064,378. PROTECTIVE DEVICE FOR MINES. JOHN WILSON REED, Cedar Grove, W. Va. Filed Sept. 18, 1912. Serial No. 721,058. (Cl. 116—1.)



1. A device of the kind described comprising a suitable support, a vertically arranged and normally extended coil spring carried by said support, roof engaging means carried by the upper end of the said spring, and alarm sounding devices arranged adjacent said spring and adapted to be engaged and actuated by closing movement of the coils of said spring.

2. A device of the kind described comprising a post, a sleeve carried by the upper end of the post, a coil spring loosely arranged in the sleeve, and projecting above the sleeve, a plate carried by the top of the spring and normally in engagement with a roof, and alarm bells carried by the sleeve, the bell clappers extending inwardly between the coils of the spring.

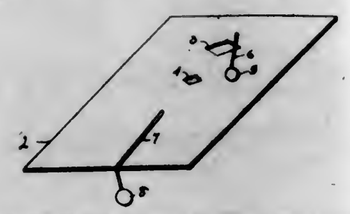
3. An alarm device of the kind described comprising a vertically arranged post, a sleeve adapted to fit over the upper end of the post, an interior bead carried by the sleeve and limiting movement of the sleeve upon the post, a plate loosely arranged in said sleeve and resting upon said bead, a coil spring mounted upon said plate and projecting above the sleeve, a second plate carried by the projecting end of the spring and adapted to engage a roof, and bells carried by the sleeve, the bell clappers extending inwardly in position to be engaged by the coils of the spring when the same are compressed.

1,064,379. TONING-BATH FOR PHOTOGRAPHIC SILVER-PRINTS. PAUL RENLÄNDER, Charlottenburg, Germany, assignor to Chemische Fabrik auf Actien (vorm. E. Schering), Berlin, Germany. Filed Feb. 12, 1913. Serial No. 747,949. (Cl. 95—88.)

1. A toning bath for photographic silver prints, containing a salt of an acid which contains selenium, substantially as described.

2. A toning bath for photographic silver prints, containing a salt of seleno sulfuric acid, substantially as described.

1,064,380. TOY. WILLIAM H. REIFF, Philadelphia, Pa., assignor to Max Zeitler, Philadelphia, Pa. Filed Aug. 23, 1912. Serial No. 716,587. (Cl. 46—50.)



1. As a new article of manufacture, a base element having cavities therein, a captive ball adapted to rest in one of said cavities, a rubber band secured to the base element and a projectile ball carried by the free end of the rubber band.

2. In a toy, a base element having cavities therein, a string attached to the base element, a captive ball carried by the free end of said string, a rubber band secured to the base element and a projectile ball adapted to be propelled by the rubber band against the captive ball in an endeavor to force said ball into one of the cavities.

3. A toy and puzzle consisting of a base element having perforations therein, a captive ball, means attached to the base element in alinement with the centers of the perforations for holding said ball captive, a projectile ball, and resilient means attached to the base element in alinement with the center of the perforations, said means adapted to propel the projectile ball against the captive ball in an endeavor to force said captive ball into one of said perforations.

4. A toy comprising, a base element having a plurality of cavities, a captive ball attached to the base element at a point equi-distant from the cavities, an elastic band having one end secured to the base element and a projectile ball secured to the free end of said elastic band adapted to be used in an endeavor to force the captive ball from one cavity into one of the other cavities.

1,064,381. RESILIENT TIRE. MARSHALL C. ROGERS, Williams, Cal. Filed Feb. 15, 1912. Serial No. 677,848. (Cl. 152—36.)



1. In a vehicle tire, the combination with a central wheel structure and a clencher ring, of a plurality of upper and lower socket members, resilient buffers interposed between said members, said lower socket-members each being of cup-shape and having one side edge formed with a downwardly hanging flange adapted to be pressed into engagement with the adjacent edge of the clencher ring, and having at the opposite side edge means engaging said ring and holding the socket-member against circumferential movement.

2. In a vehicle tire, the combination with a central wheel structure, and a clencher ring, of a plurality of upper and lower socket members, resilient buffers interposed between said members, said lower socket members each being of cup-shape and having one side edge formed with a downwardly hanging flange adapted to be pressed into engagement with the adjacent edge of the clencher ring and having at the opposite side edge a projection adapted to fit a socket or depression in the clencher ring, whereby said lower socket member is held against circumferential movement.

3. In a vehicle tire, the combination with a central wheel structure, a clencher ring, and a wheel rim having a tread portion, of a plurality of upper and lower socket members, resilient buffers interposed between said members, said lower members being held to the clencher ring against circumferential movement and said upper socket members being formed of two parts one threaded on the other, one of said parts having a projection, and said wheel rim having a perforation to receive said projection.

4. An improved vehicle tire, comprising a central wheel structure, a clencher ring, a wheel rim having a tread portion, a series of lower socket members seated on the clencher ring, and means between said members and the ring for holding the members against circumferential movement, a series of upper socket members formed of two parts one of which is externally threaded and the other is internally threaded and fashioned as a nut and having means interlocking with the wheel rim, buffers interposed between the upper and lower socket members, and side curtains of flexible material provided with expansible rings adapted to engage the wheel rim and lower socket members respectively.

1,064,382. COMPRESSOR FOR FILE-DRAWERS. ERIC G. SAMPSON, Jamestown, N. Y., assignor to Art Metal Construction Company, Jamestown, N. Y., a Corporation of New York. Filed Dec. 2, 1911. Serial No. 663,620. (Cl. 129—27.)



1. The combination in a file drawer of a compressor, channels formed in the sides of said drawer, rack bars supported in said channels, a shaft mounted in said compressor having gears on each end thereof engaging with said rack bars, a gear wheel keyed to said shaft intermediate the ends thereof, a button supported in said compressor and projecting through the top of said compressor having a latch thereon with which said gear wheel is adapted to engage and be locked thereby when the button is in its elevated position, and from which said gear wheel is disengaged and left free to rotate when said button is in its depressed position.

2. The combination in a file drawer of a compressor, channels formed in the sides of said drawer, rack bars supported in said channels, a shaft mounted in said compressor having gears on each end thereof engaging with said rack bars, a gear wheel keyed to said shaft intermediate the ends thereof, a button supported in said compressor and projecting through the top of said compressor, having a latch thereon with which said gear wheel is adapted to engage and be locked thereby when the button is in its elevated position, and from which said gear wheel is disengaged and left free to rotate when said button is in its depressed position, a spring for holding said button and said latch in their raised position.

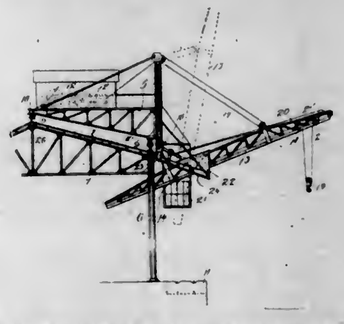
3. In a file drawer the combination of a compressor, a shaft mounted to rotate therein, gears on said shaft, racks mounted in the file drawer adjacent said compressor, said gears meshing with said racks, a gear wheel on said shaft, a latch moving transversely of said gear wheel and adapted to lock said gear wheel against rotation in either direction or release said gear wheel.

4. In a file drawer the combination of a compressor, a shaft mounted to rotate therein, gears on said shaft, racks mounted in the file drawer adjacent said compressor, said gears meshing with said racks, a gear wheel on said shaft, a latch moving transversely of said gear wheel and adapted to lock said gear wheel against rotation in either direction or release said gear wheel, a spring engaging said latch to hold it in locking position, a push button mounted on said latch and projecting through the compressor, by which said latch may be moved to unlocking position.

5. In a file drawer, the combination of a compressor, a shaft and gear wheel mounted to rotate therein, a latch having a button thereon extending up through the top of the compressor and having a slotted plate at the bottom thereof extending horizontally under the gear wheel, a spring for holding up said latch with said slotted plate in engagement with said gear wheel, a gear on each end of said shaft, racks mounted in the file drawer adjacent said compressor, said gears meshing with said racks and turning said shaft on the movement of the compressor.

[Claims 6 and 7 not printed in the Gazette.]

1,064,383. CRANE FOR HANDLING FREIGHT. HARRY SAWYER, Muskegon, Mich. Filed July 14, 1911. Serial No. 638,425. (Cl. 212—10.)



1. In an apparatus for handling cargoes, an elevated supporting structure, a crane structure wholly supported upon the top of said supporting structure, a swinging boom pivotally suspended intermediate its ends from the crane structure, said boom when in substantially horizontal position for use having its inner end extending inwardly underneath the supporting structure, and a truck or carrier operating lengthwise of said boom from end to end thereof.

2. In an apparatus for handling cargoes, an elevated supporting structure having a roof, a crane structure wholly supported by said supporting structure and above said roof, a vertically swinging boom pivotally suspended intermediate its ends from the crane structure adjacent the edge of the roof, whereby when said boom is in substantially horizontal position for use its inner end extends inwardly underneath the roof, and a truck or carrier operating lengthwise of said boom from end to end thereof.

3. In an apparatus for handling cargoes, an elevated structure, a roof therefor, track rails carried above said roof, a crane structure operating along said track rails, a boom pivotally suspended from the crane structure and arranged when in operating position to project at one end underneath the roof, and transferring devices operating along said boom.

4. In an apparatus for handling cargoes, a crane structure, an elevated supporting frame work therefor, a roof carried by said framework, a boom pivotally suspended from the crane structure and an auxiliary roof section carried by the boom.

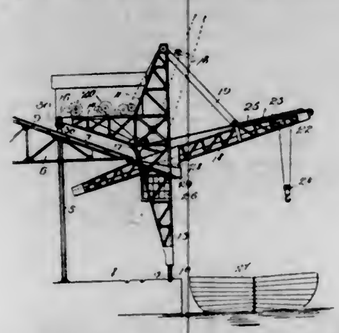
5. In an apparatus for handling cargoes, an elevated supporting structure, a roof therefor, a crane structure supported above said roof for movement thereon, a boom pivotally suspended from the crane structure, and an auxiliary roof section carried by the crane structure.

[Claims 6 to 10 not printed in the Gazette.]

1,064,384. CARGO-HANDLING APPARATUS. HARRY SAWYER, Muskegon, Mich. Filed July 14, 1911. Serial No. 638,427. (Cl. 212—10.)

1. In an apparatus for handling freight, a floor, an elevated structure erected thereon, a roof carried thereby,

track rails respectively carried by said floor and above said roof, a crane structure having wheels respectively operative along said rails, a boom pivotally suspended intermediate its ends from said crane structure at a point adjacent the edge of said roof, said boom when in position for use extending inwardly at its inner end underneath the roof, and a truck or carrier arranged to travel lengthwise of the boom from end to end thereof.



2. A floor, an elevated structure erected thereon, a roof carried by said elevated structure, track rails respectively carried by the floor and above the roof, a crane structure having portions respectively resting upon and operating along said track rails, and a roof section carried by said crane structure.

3. In a cargo handling apparatus, a floor, an elevated structure erected thereon, a roof carried by said structure, track rails respectively carried by the floor and above the roof, a crane structure having an elevated portion resting upon and operating along the elevated rail, and a tower portion resting upon and operating upon the floor rail, a boom pivotally suspended upon the crane structure, and a roof section carried by the crane structure and arranged over said boom.

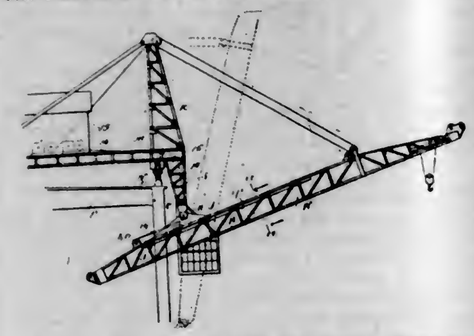
4. In a cargo handling apparatus, a floor, an elevated structure erected thereon, a roof carried by said structure, track rails respectively carried by the floor and above the roof, a crane structure having an elevated horizontal portion resting upon and operating along the elevated rail, and vertical tower legs resting upon and operating along the floor rail, a boom pivotally suspended between the tower legs, a roof section arranged over said boom, and an additional roof section carried by the crane structure and extending laterally to one side of the boom.

5. In an apparatus for handling freight, a floor, supports erected thereon, an elevated structure carried by said supports, said structure including a roof arranged to overhang said supports, track rails respectively carried by said floor and above said roof, a crane structure having wheels respectively operating along said rails, a boom carried by the crane structure the inner end of said boom when the latter is in position for use, extending underneath the overhanging portion of the roof but terminating outside of the elevated structure supports and a truck or carrier arranged to travel lengthwise of the boom from end to end thereof.

1,064,385. APPARATUS FOR HANDLING FREIGHT. HARRY SAWYER, Muskegon, Mich. Filed June 24, 1912. Serial No. 705,422. (Cl. 212—17.)

1. In an apparatus for handling freight, the combination with a traveling crane, of a boom pivotally mounted thereon and suspended therefrom and below the same, the inner end of the boom when in horizontal position for use extending inwardly inside of the crane structure, and means for shifting the boom endwise with reference to its pivotal connection to the crane and without interfering with its rocking or swinging movement.

2. In an apparatus for handling freight, a crane structure, an elevated support therefor, a boom pivotally supported upon the crane structure adjacent the edge of the elevated structure, the inner end of the boom extending inwardly underneath the elevated support when the boom is in substantially horizontal position for use, and means for bodily shifting the boom endwise relative to its pivotal connection to the crane structure.



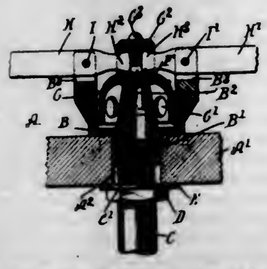
3. In an apparatus for handling freight, a crane structure, a carrier pivotally suspended from and depending below the crane structure, a boom mounted in said carrier frame for bodily endwise shifting movement therein, and means for longitudinally and bodily shifting said boom within said depending carrier frame.

4. In an apparatus for handling freight, a crane structure, an overhead support therefor, a carrier frame pivotally suspended from and depending below the crane structure adjacent the outer edge of the overhead supporting structure, a boom mounted in said carrier frame and means for bodily shifting said boom endwise in said carrier frame.

5. In an apparatus for handling freight, a crane structure, a boom having channel ways, or tracks, a carrier having wheels operating in said channel ways, said carrier being pivotally suspended from the crane structure, cable connections for controlling the endwise movement of the boom with reference to said carrier, and means for controlling said cable connections.

[Claim 6 not printed in the Gazette.]

1,064,386. FLOAT-VALVE. FRANK SCHUH, Albany, N. Y., assignor of one-half to John R. Williams, New York, N. Y. Filed Apr. 6, 1912. Serial No. 688,939. (Cl. 137—104.)



1. A float valve for flushing tanks and the like, comprising a cup-shaped body having a valve seat rising centrally in the body for the passage of the water into the tank, a bell-shaped valve extending into the said body and surrounding the said valve seat, the under side of the said valve being adapted to be seated on the upper end of the said valve seat, levers extending in opposite directions and fulcrumed on the said body, the said levers being connected with the top of the said valve and the levers having upwardly-extending arms terminating in threaded ends provided with nuts, and a float provided at its ends with brackets engaging the said nuts.

2. A float valve for flushing tanks and the like, comprising a cup-shaped body having a valve seat rising centrally in the body for the passage of the water into the tank, a bell-shaped valve extending into the said body and surrounding the said valve seat, the under side of the said valve being provided with a washer adapted to be seated on the upper end of the said valve seat, the top of the said valve being provided with an apertured boss, levers extending in opposite directions and fulcrumed on the said body, the inner ends of the said levers engaging the said apertured bosses and the outer ends of the levers having upwardly-extending arms, and a float between the said arms and provided at its ends with brackets engaging the said arms to impart a simultaneous swinging motion to the said levers on the float rising and falling with the water in the tank.

3. A float valve for flushing tanks and the like, comprising a cup-shaped body having a valve seat rising centrally in the body for the passage of the water into the tank, a bell-shaped valve extending into the said body and surrounding the said valve seat, the under side of the said valve being provided with a washer adapted to be seated on the upper end of the said valve seat, the top of the said valve being provided with an apertured boss, levers extending in opposite directions and fulcrumed on the said body, the inner ends of the said levers engaging the said apertured boss and the outer ends of the levers having upwardly extending arms terminating in threaded ends provided with nuts, and a float between the said arms and provided at its ends with brackets engaging the said nuts.

4. A float valve for flushing tanks and the like, comprising a valve controlling the inflow of the water into the tank, levers extending in opposite directions and connected at one end with the said valve, the levers having upwardly-extending arms terminating in threaded ends, nuts screwing on the said threaded ends, a float, and brackets on the ends of the float, each bracket having a horizontal top member and an outwardly and upwardly inclined bottom member, the said top and bottom members of the brackets being adapted to be engaged by the said nuts.

5. A float valve for flushing tanks and the like, comprising a valve controlling the inflow of the water into the tank, levers extending in opposite directions and connected at one end with the said valve, the levers having upwardly-extending arms terminating in threaded ends, nuts screwing on the said threaded ends, a float, and brackets on the ends of the float, each bracket having a horizontal top member and an outwardly and upwardly inclined bottom member, the said top and bottom members of the brackets being adapted to be engaged by the said nuts, the top and bottom faces of the said nuts being rounded off.

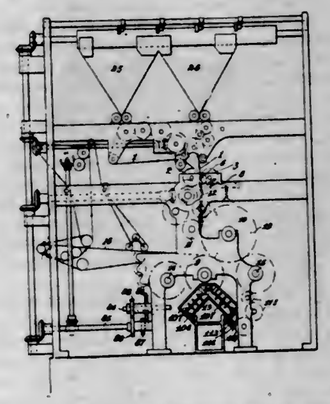
[Claim 6 not printed in the Gazette.]

1,064,387. FOLDING AND STITCHING MACHINE. DAVID J. SCOTT, Plainfield, N. J. Original application filed July 22, 1910, Serial No. 573,168. Divided and this application filed Sept. 23, 1911. Serial No. 650,987. (Cl. 101—124.)

1. The combination with the form and impression members of a web press, of web associating means, a sheet path extending substantially parallel to the direction of movement of the web, cylinders for cutting the web into sheets and conveying them to the sheet path arranged with their axes parallel to the sheet path, and a stitcher adapted to act on the sheets conveyed by the sheet path.

2. The combination with the form and impression members of a web press, of web associating means, a sheet path extending substantially parallel to the direction of movement of the web, cylinders for cutting and folding the web into sheets interposed between the web associating means and the sheet path and arranged with their axes parallel to the sheet path, and a stitcher adapted to act upon the sheets conveyed by the sheet path.

3. The combination with the form and impression members of a web press, of web associating means, a sheet path extending substantially parallel to the direction of movement of the web, means for cutting the web into sheets, means for folding the sheets without closing them up, interposed between the web associating means and the sheet path, a stitcher adapted to act upon the sheets fed by the sheet path, and means for closing up the sheets after stitching.



4. The combination with the form and impression members of a web printing machine in which the columns are arranged lengthwise of the cylinders and transversely of the movement of the web, of web associating means, a sheet path extending substantially parallel to the movement of the web, cylinders interposed between the web associating means and the sheet path and arranged with their axes parallel to the sheet path for severing the webs transversely into sheets and for delivering the sheets to the sheet path with their printed columns parallel to the direction of movement of the web, and a stitcher adapted to act upon the sheets conveyed by the sheet path.

5. The combination with the form and impression members of a web printing machine in which the columns are arranged lengthwise of the cylinders and transversely of the movement of the web, of web associating means, means for severing the web transversely into sheets, means for folding the sheets, a sheet path extending substantially parallel with the movement of the web, means for delivering the folded sheets to the sheet path with their printed columns parallel to the direction of the movement of the web, and means for stitching the sheets adapted to act upon the sheets fed by the sheet path.

[Claims 6 to 9 not printed in the Gazette.]

1,064,388. CONCEALED-HINGE STOVE-DOOR. LOYD SCRUGGS, St. Louis, Mo., assignor to Copper Clad Malleable Range Company, St. Louis, Mo., a Corporation of Nebraska. Filed Dec. 30, 1911. Serial No. 668,620. (Cl. 126—94.)



1. In a stove, a door frame provided with openings and with hinge members that are located adjacent said openings, a door that operates in a vertical plane and which completely hides said openings from view when it is closed, and coöperating hinge members projecting inwardly from said door through said openings and having curved surfaces which are concentric with the axis about which the door revolves when it is being opened or closed, the hinge members on the door traveling on the hinge members on the door frame and each hinge member on the door being provided with a stop that strikes against the door frame and thus limits the outward movement of the door and also with means separate and distinct from said stop for

preventing the lower edge of the door from moving outwardly away from the door frame in case the door is pulled outwardly and upwardly during the operation of moving it from its open to its closed position.

2. In a structure of the character described, a door frame provided with openings and with hinge members adjacent said openings that have arc-shaped surfaces, a door that operates in a vertical plane and which completely conceals said openings from view when the door is closed, curved arms on the lower edge portion of the door projecting inwardly through said openings and having coöperating arc-shaped surfaces, said curved arms being provided at their inner ends with stops which are so designed that they lap over the hinge members on the door frame and project downwardly below the lower edges of the openings in the door frame when the door is in its open position, thereby preventing the lower edge of the door from pulling away from the frame.

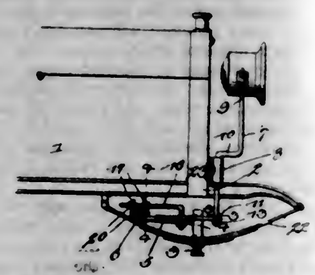
3. In a stove, a door frame provided with openings and with hinge members adjacent said openings that have arc-shaped surfaces, a door that swings in a vertical plane and which completely conceals said openings from view when the door is closed, hinge members on the lower edge of the door provided with coöperating arc-shaped surfaces arranged in sliding engagement with the hinge members on the frame, the hinge members on the door projecting inwardly through the openings in said door frame and provided at their inner ends with stops which strike against the door frame and thus limit the outward movement of the door, and a locking device on the door frame arranged at one side of one of the hinge members on the door so as to prevent the door frome shifting laterally or sidewise far enough to carry the hinge members thereon out of engagement with the coöperating hinge members on the frame.

4. In a stove, a door frame provided with openings having reduced portions, a downwardly swinging door that completely conceals said openings from view when it is closed, curved hinge members projecting inwardly from the lower edge of the door and normally lying in the reduced portions of the openings in the door frame, and a locking device on the door frame that coöperates with one of the hinge members on the door to hold said members in the reduced portions of the openings in the door frame.

5. In a stove, a door frame provided with openings and with integral shoulders, said frame also having hinge members located adjacent said openings, a door that completely hides said openings from view when it is closed, curved hinge members projecting inwardly from the door through said openings and provided with stops that strike against the integral shoulders on the door frame and thus limit the outward movement of the door, and a locking device on the door frame arranged alongside of one of the hinge members on the door and projecting into the opening in the frame through which said member passes so as to prevent the door from shifting relatively to the door frame, the hinge members on the door being provided at their rear ends with stops which lap over the hinge members on the door frame and project downwardly below the lower edges of the openings in the door frame when the door is in its open position.

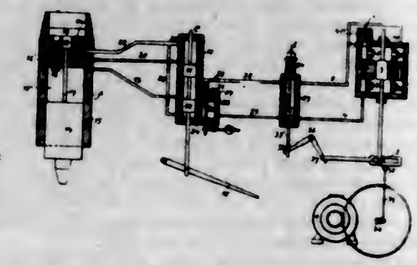
1,064,389. DIRIGIBLE LIGHT. RALPH DE SLAZO SMITH, Cordell, Okla. Filed June 8, 1912. Serial No. 702,611. (Cl. 240—62.)

A dirigible head light for automobiles comprising an arm mounted to turn about a vertical axis, a bracket for supporting said arm, the arm being formed with a downwardly extending portion which engages the top of said bracket, a connecting bar formed with a circular opening in its forward end through which the arm passes, means for securing the connecting bar against rotational movement relative to the arm, a shifting rod positioned in longitudinal alinement with the connecting bar having its forward end bent downwardly and disposed within a longitudinal slot formed in said connecting bar, a U-shaped fastener connected to the steering rod, the arms of said fastener being provided with alined openings through which the rear end of the shifting rod passes, and means



for holding said shifting rod against rotational and longitudinal movement.

1,064,390. HYDRAULIC-POWER PLANT. HEINRICH SPILLMANN, Zurich, Switzerland. Filed Feb. 19, 1912. Serial No. 678,685. (Cl. 138—10.)



1. In a hydraulic power plant, the combination with a closed hydraulic system filled with liquid, shut off from the influence of the atmosphere and comprising a suction chamber, a delivery chamber, and a double-acting piston pump connected with said chambers, of a cylinder containing a pressure-chamber, and having a second chamber adapted to be connected with said suction chamber, a press-plunger movable in said pressure-chamber, a member rigidly connected with the press-plunger and movable in said second chamber, and distributing means for connecting the said pressure chamber either with the said delivery chamber or with the said suction chamber, the volumetric displacement of the liquid caused during two or more strokes of the double-acting piston-pump by the motion of the said member being equal to that caused by the motion of the press-plunger.

2. In a hydraulic power plant, the combination with a closed hydraulic system filled with liquid, shut off from the influence of the atmosphere and comprising a suction chamber, a delivery chamber, and a double-acting piston pump connected with said chambers, of a cylinder containing a pressure-chamber and a balancing chamber, a press-plunger movable in said pressure-chamber, a balancing piston rigidly connected with the press-plunger and movable in said balancing chamber, and distributing means for connecting the said pressure chamber either with the said delivery chamber or with the said suction chamber, and the said balancing chamber either with the said suction chamber or with the said delivery chamber; the volumetric displacement of the liquid caused during two or more strokes of the double-acting piston pump by the motion of the said balancing piston being equal to that caused by the motion of the press-plunger.

3. In a hydraulic power plant, the combination with a closed hydraulic system filled with liquid, shut off from the influence of the atmosphere and comprising a suction chamber, a delivery chamber, and a double-acting piston-pump connected with said chambers, of a cylinder containing a pressure-chamber and a balancing chamber, a press-plunger movable in said pressure chamber, a balancing

piston rigidly connected with the press-plunger and movable in said balancing chamber, distributing means for connecting the said pressure chamber either with the said delivery chamber or with the said suction chamber, and the said balancing chamber either with the said suction chamber or with the said delivery chamber, and means in the balancing chamber coacting with the said piston for automatically connecting the delivery chamber with the suction chamber in the outer end position of the press-plunger, the volumetric displacement of the liquid caused during two or more strokes of the double-acting piston-pump by the motion of the said balancing piston being equal to that caused by the motion of the press-plunger.

4. In a hydraulic power plant, the combination with a closed hydraulic system filled with liquid, shut off from the influence of the atmosphere and comprising a suction chamber, a delivery chamber, and a double-acting piston-pump connected with said chambers, of a cylinder containing a pressure-chamber and a balancing chamber, a press-plunger movable in said pressure-chamber, a balancing piston comprising a larger and a smaller piston rigidly connected with the press-plunger and movable in the said balancing chamber, and a wall or guide in said balancing chamber dividing the same into a smaller and a larger chamber, the said larger piston being movable only in the said larger chamber and the said smaller piston being movable in both the smaller and larger chambers, a pipe connected to said pressure chamber, a suction pipe connected to said larger chamber, a pipe connected to said smaller chamber, and a distributing device connecting said suction pipe to said suction chamber, and adapted to connect the former and latter pipes to said delivery and suction chambers, respectively and reversely, the volumetric displacement of the liquid caused during two or more strokes of the double-acting piston-pump by the motion of the said balancing piston being equal to that caused by the motion of the press-plunger.

5. In a hydraulic power plant, the combination with a closed hydraulic system filled with liquid, shut off from the influence of the atmosphere and comprising a suction chamber, a delivery chamber, and a double-acting piston-pump connected with said chambers, of a cylinder containing a pressure-chamber and a balancing chamber, a press-plunger movable in said pressure-chamber, a balancing piston comprising a larger and a smaller piston rigidly connected with the press-plunger and movable in the said balancing chamber, and a wall or guide in said balancing chamber dividing the same into a smaller and a larger chamber, the said larger piston being movable only in the larger chamber, and the smaller piston being movable in both the smaller and larger chambers, a pipe connected to said pressure chamber, a suction pipe connected to said larger chamber, a pipe connected to said smaller chamber and a distributing device connecting said suction pipe to said suction chamber, and adapted to connect the former and latter pipes to said delivery and suction chambers, respectively, and reversely, a connection being between the two latter pipes in said balancing chamber when the smaller piston leaves said guide, for the purpose specified.

[Claims 6 to 11 not printed in the Gazette.]

1,064,391. PNEUMATIC TIRE. ENOS STANLEY, Des Moines, Iowa. Filed Nov. 11, 1910. Serial No. 591,768. (Cl. 152—13.)

1. The combination with a pneumatic tire, of a composition on the interior of tire containing a solvent for the material used in thickening the pneumatic tire and also acting to prevent thickening and hardening of the compound, and a gummy substance contained in said compound capable of mixing with the inner portion of the tire and rendering the same soft and highly elastic.

2. The combination with a pneumatic tire, containing rubber and an element for thickening the rubber, of a composition comprising a solvent for said thickening material, a gum to enter the interstices formed by the dissolving of the rubber thickening material to render the inner layer of the rubber softer and more elastic than the outer layer.

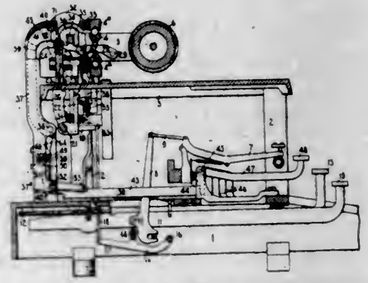


3. The combination with a pneumatic tire, of a compound contained within the tire and comprising a solvent for sulfur, pumice-stone or the like, and a gum capable of being maintained in liquid form by said solvent.

4. The combination with a pneumatic tire, of a compound contained within the tire and comprising a solvent for sulfur, pumice-stone or the like, and a gum capable of being maintained in liquid form by said solvent, the compound thus formed being also capable of uniting or mixing with the inner layer of the tire to render it soft and highly elastic.

5. The combination of a pneumatic tire, of a composition contained within the tire and comprising alcohol, a gum and carbon disulfid.

1,064,392. TYPE-WRITING MACHINE. HERBERT H. STEELE, Marcellus, N. Y., assignor to The Monarch Typewriter Company, Syracuse, N. Y., a Corporation of New York. Filed Jan. 16, 1913. Serial No. 742,341. (Cl. 197—178.)



1. In a typewriting machine, the combination of a carriage; and tabulating mechanism comprising means by which an arrest of the carriage at the same letter space position may be effected whether the carriage be moved from left to right or from right to left, said means including coöperative stops which are held on their supports against lateral play and which coöperate with each other on opposite sides to effect an arrest of the carriage.

2. In a typewriting machine, the combination of a carriage; and tabulating mechanism comprising means by which an arrest of the carriage at the same letter space position may be effected whether the carriage be moved from left to right or from right to left, said means including a column stop carried by the carriage and held against lateral movement thereon, and a coöperative key controlled stop carried by the frame of the machine and held against lateral movement thereon.

3. In a typewriting machine, the combination of a carriage; and tabulating mechanism comprising means by which an arrest of the carriage at the same letter space position may be effected whether the carriage be moved from left to right or from right to left, said means including coöperative stops, and means by which a drop of the carriage is afforded for a distance corresponding substantially to the thickness of one of said stops after the arrest of the carriage by said stops in the movement of the carriage from right to left.

4. In a typewriting machine, the combination of a carriage; escapement mechanism therefor; and tabulating

mechanism comprising means by which an arrest of the carriage at the same letter space position may be effected whether the carriage be moved from left to right or from right to left, said means including coöperative stops, means for effecting a release of the carriage from control of the escapement mechanism when the stops are brought into coöperative relation, and means by which a drop of the carriage is afforded for a distance corresponding substantially to the thickness of one of said stops after the arrest of the carriage by said stops in the movement of the carriage from right to left and by the restoration of the carriage to the control of the escapement mechanism.

5. In a typewriting machine, the combination of a carriage; escapement mechanism therefor; and tabulating mechanism comprising means for releasing the carriage from control of the escapement mechanism when the tabulating mechanism is actuated, means by which an arrest of the carriage at the same letter space position may be effected whether the carriage be moved from left to right or from right to left, said last mentioned means including coöperative stops which coöperate with each other on opposite sides to effect an arrest of the carriage, and means for holding the carriage against movement in the direction of its feed when the stops are engaged to arrest the carriage in its movement from left to right and until the carriage has been restored to control of the escapement mechanism.

[Claims 6 to 35 not printed in the Gazette.]

1,064,393. ART OF DYEING. BERTRAND S. SUMMERS, Port Huron, Mich., assignor to Summers Linen Company, a Corporation of Maine. Filed Nov. 7, 1910. Serial No. 591,010. (Cl. 8—5.)

1. The method of dyeing with non-sulfurized vat dyes, which consists in dissolving the dye in a solution containing a soluble sulfid and a reducing agent, and then treating the material to be dyed with said solution.

2. The method of dyeing with non-sulfurized vat dyes, which consists in dissolving the dye in a solution containing sulfid of sodium and a reducing agent, and then treating the material to be dyed with said solution.

3. The method of dyeing with non-sulfurized vat dyes, which consists in dissolving the dye in a solution containing sulfid of sodium and hydrosulfite of soda, and then treating the material to be dyed with said solution.

4. A bath for dyeing with non-sulfurized vat dyes consisting of a solution of a soluble sulfid, a reducing agent and a vat dye.

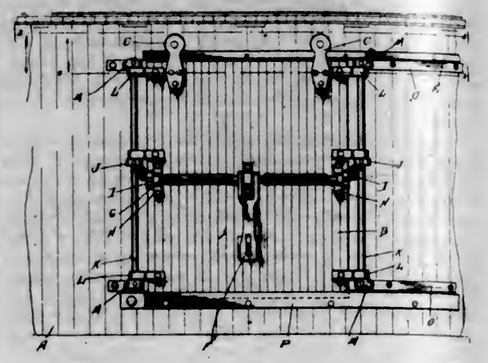
5. A bath for dyeing consisting of a solution of sulfid of soda, a reducing agent and a non-sulfurized vat dye.

[Claim 6 not printed in the Gazette.]

1,064,394. FREIGHT-CAR DOOR. WILLIAM H. SUTER, Chicago, Ill. Filed Apr. 24, 1912. Serial No. 692,966. (Cl. 20—23.)

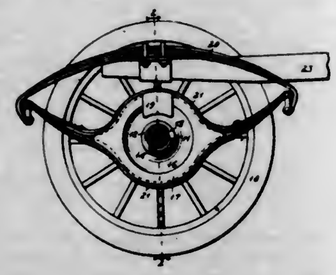
1. A door fixture including a track; a sliding door suspended from a plurality of rollers bearing upon the track; a guard-rail against which the lower portion of the door may impinge when the door is in any position of its travel; and spring-actuated mechanism for moving the door transversely to the plane of its face; the said mechanism serving to draw the door tightly against the car when the door is in the closing position, and to swing the door outward against the guard-rail when the door is in any other position.

2. A car door fixture including a track; a sliding door suspended from a plurality of rollers bearing upon the track; and mechanism for moving the door transversely of the track; each of the rollers having a substantially cylindrical portion greater in length than the face of the track, and an adjoining portion tapering to a smaller diameter at the end nearest the car body; the tapering part aiding to slide the door away from the car when the door is moved to an open position, and the cylindrical portion permitting the door to be drawn horizontally against the car when the door is in its closing position; and a guard rail against which the lower part of the door may impinge if swung outwardly while the rollers are slid transversely of the track away from the car body; and mechanism for sliding the supporting rollers of the door outwardly upon the track and simultaneously swinging the lower part of the door against the guard rail.



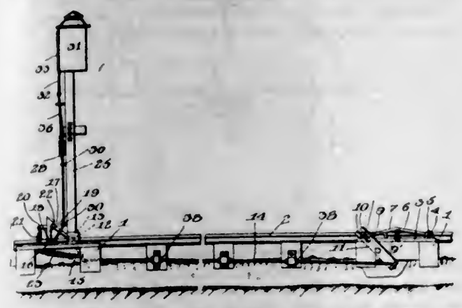
3. A car door fixture including a track; a sliding door suspended from a plurality of rollers bearing upon the track; and mechanism for moving the door transversely of the track; each of the rollers having a substantially cylindrical portion greater in length than the face of the track and an adjoining portion tapering to a smaller diameter at the end nearest the car body; the tapering part aiding to slide the door away from the car when the door is moved to an open position, and the cylindrical portion permitting the door to be drawn horizontally against the car when the door is in its closing position; a guard rail against which the lower part of the door may impinge if swung outwardly while the rollers are slid transversely of the track away from the car body; and mechanism for sliding the supporting rollers outwardly from the car and simultaneously swinging the lower end of the door outwardly when the door is not in its closing position; the said mechanism serving to draw the supporting rollers toward the car and simultaneously to swing the door tightly against the car when the mechanism is actuated while the door is in its closing position.

1,064,395. PNEUMATIC CUSHIONING DEVICE FOR VEHICLES. CHARLES L. SUTTON, Oakland, Iowa. Filed Aug. 26, 1911. Serial No. 646,106. (Cl. 21—50.)



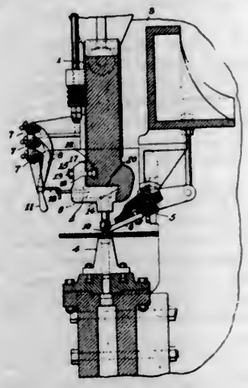
In a device of the class described, the combination of an axle, a casing therefor, a rim mounted on said casing, a pneumatic tube on said rim, an outer rim mounted on said tube, provided with a groove, a leaf spring having its upper and lower leaves separated to receive the outer rim between them, the leaves being received in the groove in said outer rim, said spring being designed to be mounted on the body of a vehicle.

1,064,396. AUTOMATIC RAILROAD-SIGNAL. DANIEL J. TAYLOR and WILLIAM R. PRUITT, Tallassee, Ala. Filed July 24, 1911. Serial No. 640,176. (Cl. 246—45.)



A signaling system, comprising a supporting base, bearings carried by said base, a plural armed crank shaft journaled in said bearings, an upright supported by said base, a lamp container supported on the upper end of the upright, a shutter slidably mounted on the lamp container, spring means constantly tending to move said shutter to closed position, a counterbalanced semaphore arm pivoted on the upright, a connection between the shutter and said arm whereby the spring closing means of the shutter will normally hold said semaphore arm in non-signaling position, connections between one arm of the crank shaft and the semaphore arm, means actuated by the passing of a train to turn said crank shaft and move the semaphore arm to signaling position and said shutter to open position, a standard pivoted to the base and provided with a catch adapted to engage one arm of the crank shaft when the latter has been oscillated to dispose the semaphore arm in signaling position and further adapted to be thrown out of engagement with the crank shaft by a passing train, a lateral arm on said standard, a spring coacting between said arm and the base to normally hold the standard in active position and means for counter-turning the crank shaft when said catch is released.

1,064,397. PUNCHING MACHINERY. GEORGE PAUL THOMAS, Pittsburgh, Pa. Filed Oct. 17, 1911. Serial No. 655,222. (Cl. 164—104.)



1. In a tool-operating machine, the combination with a tool-carrying member, of a tool-provided tool-holder attachable to and removable from said member at one side thereof and in a line at right angles to the line of action of the said tool, means located on the said attachment-side of the said member for securing said holder to said member, said holder provided with detents at each side of the line of action of said tool, and said holder further provided with a bearing surface transversely to and extending across the line of action of the said tool, substantially as described.

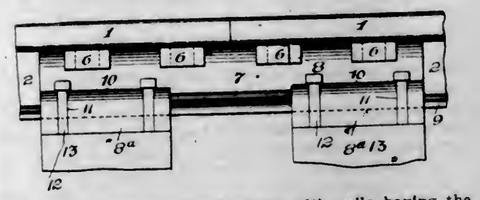
2. In a punching-machine, the combination of a movable head provided with an adjustable punch-holder, a frame provided with a die-holder, a securing bolt and a punch mounted in said punch-holder, said head having a longitudinal recess enlarged at its inner end to receive and sustain the said securing bolt, and with a second recess to receive a tongue extension of the said punch-holder, said punch-holder and movable head provided with coöperating thrust and bearing surfaces, substantially as described.

3. In a tool operating machine, the combination with a tool-carrying member, of a removable tool holder laterally applicable to said member, two pairs of thrust surfaces formed one upon said member and the other upon said holder, each of the said surfaces facing in the direction of lateral applicability and transversely thereto, the relative positions of said pairs of surfaces being on opposite sides of the line of strain and offset or staggered relative to one another, and clamping means effective in the direction of assembling.

4. In a tool operating machine, the combination with a tool-carrying member, of a removable tool holder laterally applicable to said member, detents formed upon said holder, coöperating recesses formed upon said member and effective to engage said detents, said detents being disposed on each side of the line of action of said tool and effective to resist the strain upon said tool in said line of action thereof, and clamping means effective in the direction of applicability of said tool holder.

5. In a punching machine the combination of a reciprocating head provided with two series of laterally adjustable punch-holders and a second member provided with two series of oppositely disposed laterally adjustable die-holders, a stripper disposed between said two series, said adjustable punch-holders and die-holders each secured to their sustaining members by securing bolts disposed in their outwardly extending portions, the said punch-holders and die-holders having thrust and bearing surfaces coöperating with the securing bolts to hold the said holders in operative position, substantially as described.

1,064,398. RAIL-JOINT. CHARLES A. THOMPSON, Union City, Pa. Filed Dec. 18, 1912. Serial No. 737,468. (Cl. 239—9.)

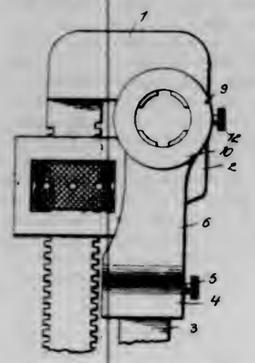


In a rail joint, the combination with rails having the webs thereof provided with oblong openings, of a splice bar bracing said rails, H-shaped tongues carried by said splice bar and adapted to extend through the openings of said rails and present T-shaped heads at the opposite sides of said rails, a notched splice bar extending behind the T-shaped heads of said tongues, rail chairs slidably mounted upon the ends of said splice bars and having overhanging flanges engaging said bars, and spikes adapted to secure said chairs to ties.

1,064,399. ATTACHMENT FOR WRENCHES. FRED THOMPSON, FREDERICK J. LUDLOW, and RANALD A. MCDONALD, Sydney Mines, Cape Breton, Nova Scotia, Canada. Original application filed July 22, 1912, Serial No. 711,005. Divided and this application filed Dec. 7, 1912. Serial No. 735,550. (Cl. 81—180.)

1. In a device of the character described, the combination with a wrench having a handle, a stationary jaw mounted thereupon, a movable jaw adjustably mounted

thereupon, a support comprising a sleeve adjustably mounted upon said handle, an arm extending from said sleeve, a bearing mounted upon said arm, and a sleeve rotatably mounted within said bearing, substantially as and for the purpose described.



2. In a device of the class described, the combination with a wrench having a handle, a support comprising a sleeve adjustably mounted upon said handle, an arm extending from said sleeve, a bearing mounted upon said arm, a sleeve adapted to be rotatably mounted within said bearing, and a flange formed upon said sleeve for limiting the inward movement of said sleeve in said bearing, substantially as and for the purpose described.

3. In a device of the character described, the combination of a wrench having a handle, a support comprising a sleeve adjustably mounted upon said handle, an arm extending from said sleeve, a bearing mounted upon said arm, a sleeve rotatably mounted within said bearing, a flange formed upon said sleeve and adapted to limit the inward movement thereof in said bearing, and means for maintaining the second mentioned sleeve in position in said bearing.

4. In a device of the character described, the combination of a wrench having a handle, a sleeve adjustably mounted upon said handle, an arm extending outwardly and upwardly from said sleeve, a circular bearing formed upon said arm, a sleeve rotatably mounted within said bearing, the outer periphery of said sleeve having an annular groove formed therein, and a set screw mounted within said bearing and operating within said groove, substantially as and for the purpose set forth.

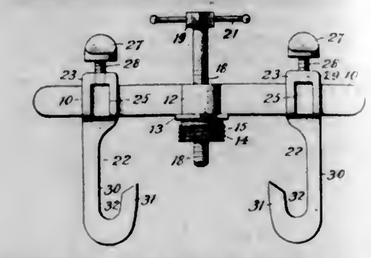
5. In a device of the character described, the combination with a handled wrench having a stationary and a movable jaw, a support adjustably mounted upon said handle, a bearing carried by said support, and means for maintaining said bearing in lateral spaced relation with said jaws, as and for the purpose described.

[Claims 6 and 7 not printed in the Gazette.]

1,064,400. COMBINATION PULLING-JACK. GUY E. TIMMINS, Baltimore, Md., assignor of one-half to Eduard Rennert, Baltimore, Md. Filed July 6, 1912. Serial No. 708,038. (Cl. 29—85.)

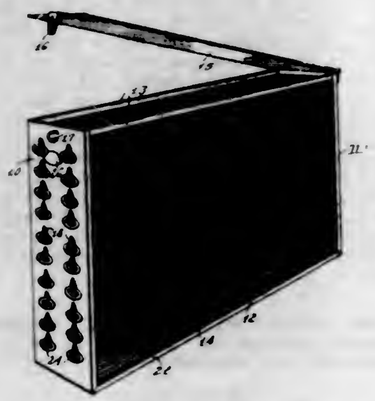
1. In a tool for removing pulleys, gears and the like from their supporting shafts, the combination of a forcing screw adapted to be set in line with the shaft and to engage the latter at its end, a bar for operatively supporting the screw, independently adjustable members supported on the bar at opposite sides of the screw and having lateral projections at their free ends adapted to engage the pulley, gear or the like, said members having openings therethrough disposed in intersecting planes, said openings being adapted to receive the bar and arranged so that the said lateral projections may be positioned to be parallel or at an angle to said bar.

2. In a tool of the class described, the combination of a jack screw adapted to be located in line with an element and to engage the latter, a member for operatively supporting the screw, and an internally and externally threaded nipple centrally in line with the screw and integrally connected to said member.



3. In a tool of the class described, the combination of a screw, means for operatively supporting the screw and having oppositely directed arms, adjustable members slidable on the arms and having projections thereon for engaging an element, each member having an opening therethrough to receive the bar, and means for securing the members in their adjusted positions.

1,064,401. SEED-CORN RACK. WILLIAM VAUDT, Booneville, Iowa. Filed Aug. 1, 1912. Serial No. 712,796. (Cl. 34—26.)



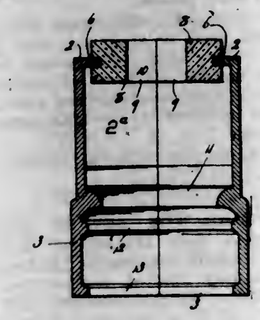
1. In a device of the class described, flat upright end members, horizontal members connecting said end members, a hinged cover, said end members being provided with a series of opposite openings arranged in pairs at the same height in each member to secure the wires mentioned herein, a plurality of corrugated wires provided with means at their ends for preventing the rotation of said wires.

2. In a device of the class described, a support having parallel upright members, a plurality of wires arranged in pairs parallel with each other, said wires being bent to form alternate depressions and ridges, the depressions of each pair of wires being designed to receive ears of corn resting upon said wires, said wires being detachably mounted on said upright members.

1,064,402. PIPE-CONDUIT FITTING FOR ELECTRIC INSTALLATION. WHEELER H. VIBBER, New London, Conn., assignor of one-half to The Gillette-Vibber Co., New London, Conn., a Corporation. Filed Oct. 3, 1910. Serial No. 585,118. (Cl. 247—5.)

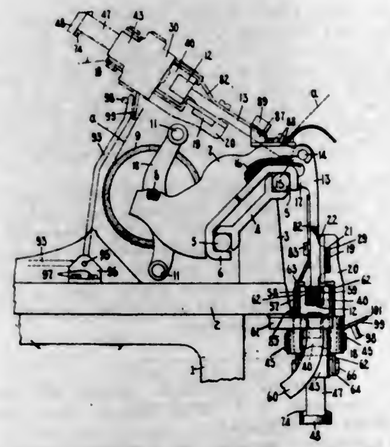
In a pipe-conduit fitting for electric installation with pipe-conduits, the combination with two corresponding fitting-sections each comprising an oblong body-portion having a single unobstructed oblong half-chamber provided at its open end with means for retaining in place a half-section of a two-part sectional insulating-frame,

and also comprising a semi-circular outlet-portion formed near its inner end with a semi-circular abutment or positioning-flange, and with a shallow semi-circular clearance groove flanked by semi-circular gripping-ribs; of two corresponding insulating frame-sections adapted to be held by the said retaining means within the open ends



of the fitting-sections when the same are clamped upon a pipe-conduit; and clamping devices for clamping the two fitting-sections upon the end of a pipe-conduit, whereby the entire fitting may be applied to a pipe-conduit after the wires have been run through the same and connected up, without cutting any of the wires.

1,064,403. TYPE-WRITING MACHINE. JOHN WALDHEIM, Newark, N. J., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed May 6, 1912. Serial No. 695,399. (Cl. 197—179.)



1. In a typewriting machine and in tabulating mechanism, the combination of a paper supporting element or platen, a stop, a magazine for said stop, a stop receiving element, said magazine and said element being relatively movable in the direction of the printing line on the platen, means for effecting a relative movement transversely of the printing line between the magazine and the paper supporting element, and means for ejecting said stop from said magazine on to said stop receiving element.

2. In a typewriting machine and in tabulating mechanism, the combination of a paper supporting element or platen, a stop, a magazine for said stop, a stop receiving element, said magazine and said element being relatively movable in the direction of the printing line on the platen, means for affording movement of the magazine toward and from the paper supporting element, and means for ejecting said stop from said magazine on to said stop receiving element.

3. In a typewriting machine and in tabulating mechanism, the combination of a frame element, a carriage element, a plurality of tabulator stops, means for moving said stops to operative position, and means for moving said stops to inoperative position, both of said means being supported by said carriage element and both being normally ineffective on said tabulator stops.

4. In a typewriting machine and in tabulating mechanism, the combination of a platen, a stop, a magazine for said stop, a stop receiving element, said magazine and said element having a relative movement in the direction of the printing line on the platen, means for effecting a movement of the magazine transversely of the printing line, means for ejecting said stop from said magazine on to said stop receiving element, and means for retracting said stop from said stop receiving element to said magazine.

5. In a typewriting machine and in tabulating mechanism, the combination of a platen or paper carrying element, a stop, a magazine for said stop, a stop receiving element, said magazine and said element being relatively movable in a direction lengthwise of the printing line on the platen, means for effecting a relative movement transversely of the printing line between the magazine and the paper carrying element, and means controlled by a key on said magazine for ejecting said stop from said magazine on to said stop receiving element.

[Claims 6 to 76 not printed in the Gazette.]

1,064,404. ORTHODONTIST'S PLIERS. WILLIAM ERNEST WALKER, New Orleans, La. Filed Oct. 14, 1911. Serial No. 654,768. (Cl. 81—3.)



1. A pair of pliers comprising jaws provided, the one with a pair of fixedly related but separated fingers of substantially circular section, and the other with a single finger of substantially circular section occluding the space between and touching the points of the pair of fingers.

2. A pair of pliers comprising jaws provided, the one with a pair of fixedy related but separated fingers of substantially circular cross section, and the other with a single finger of substantially circular cross section said single finger occluding the space between and touching the points of the pair of fingers, but standing apart from said pair of fingers at the base to leave a space between the single finger and the pair of fingers at their base.

3. A pair of pliers comprising jaws provided, the one with a pair of fixedly related but separated fingers of substantially circular cross section, and the other with a single finger of substantially circular cross section said single finger occluding the space between the points of the pair of fingers, but standing apart from said pair of fingers at the base to leave a space between the single finger and the pair of fingers at their base; said fingers converging toward their points in order to graduate the spaces left between the fingers, whereby they are adapted to receive stock of different diameters.

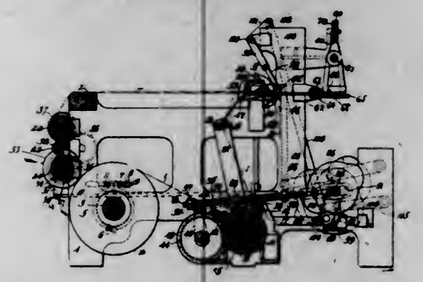
4. A pair of pliers comprising jaws provided, the one with a pair of fixedly related but separated fingers converging toward their points and of substantially circular cross section, and the other with a single finger of substan-

tially circular cross section said single finger occluding the space between the points of the pair of fingers, but standing apart from said pair of fingers at the base to leave a space between the single finger and the pair of fingers at their base; said fingers being inclined in position to graduate the spaces left between the fingers, whereby they are adapted to receive stock of different diameters, and said fingers being tapered from their bases outward so as to present larger diameters to the larger stock.

5. A pair of pliers comprising jaws provided, the one with a pair of fixedly related but separated fingers converging toward their points and of substantially circular cross section, and the other with a single finger of substantially circular cross section occluding the space between the points of the pair of jaws; said fingers being deflected laterally to present their ends at an angle to the longitudinal axis of the pliers.

[Claims 6 and 7 not printed in the Gazette.]

1,064,405. LOOM FOR TYING ORIENTAL KNOTS. THOMAS P. WALSH, Worcester, Mass., assignor to Walsh-Baker Corporation, Portland, Me. Filed Feb. 13, 1908. Serial No. 415,780. (Cl. 139—19.)



1. In a loom, warp-supporting means, combined with mechanism for knotting an intact weft thread onto the warp threads, including mechanism for coiling said intact weft thread about the warp threads with one coil only for any given warp in a series of circular, substantially parallel weft-thread coils lying in edge-to edge alinement in a plane perpendicular to the general longitudinal direction of the warp threads.

2. In a loom, means to support warp threads in pairs, means for delivering a weft thread transversely thereof, coöperating means to tie said weft thread, while intact, on each of said pairs of warp threads, with a tie comprising a transverse portion embracing both warp threads of the pair and thence from the opposite ends of said transverse portion extending in a single coil around the individual warp threads and out between them at a point adjacent the middle of said portion, with the weft thread thence extending in one direction to the same point in a tie of an adjacent pair and in the other direction to the same point in a tie of a pair in said other direction.

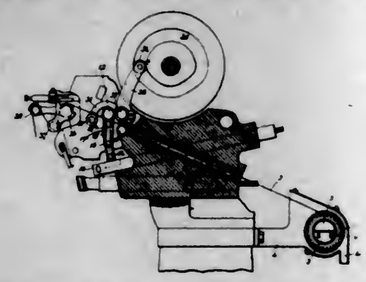
3. In a loom, means to support warp threads in pairs, means for delivering a weft thread transversely thereof, coöperating means to tie said weft thread, while intact, on each of said pairs of warp threads, with a tie comprising a transverse portion embracing both warp threads of the pair and thence from the opposite ends of said transverse portion extending in a single coil around the individual warp threads and out between them at a point adjacent the middle of said portion, with the weft thread thence extending in one direction to the same point in a tie of an adjacent pair and in the other direction to the same point in a tie of a pair in said other direction, and means for beating up the tied weft thread all across the loom with a movement lengthwise of the warp threads.

4. In a loom, warp-supporting means, combined with mechanism for knotting an intact weft thread onto the warp threads, including mechanism for coiling said intact weft threads in a series of circular, weft-thread coils lying in substantially edge-to edge alinement across the loom in a plane perpendicular to the general longitudinal direction of the warp threads, and means for beating up all of the weft threads along the warp threads into continuous contact with each other with their said circular coils parallel to each other and flat against each other along said warp threads.

5. In a loom, warp-supporting means, weft mechanism for forming weft loops in an intact weft thread, and mechanism for coiling said intact looped weft thread about the warp threads in a series of substantially parallel and lengthwise, edge-to-edge alined weft-thread coils lying in a plane transverse to the longitudinal direction of the warp thread.

[Claims 6 to 27 not printed in the Gazette.]

1,064,406. MACHINE FOR SEWING BOOTS AND SHOES. ARTHUR WARD and ALBERT SAMUEL GENT, Northampton, England, assignors to The Universal Shoe Machinery Company Limited, Northampton, England. Filed Oct. 24, 1911. Serial No. 656,536. (Cl. 112—20.)



1. In a chain stitch machine for sewing welted boots and shoes and turnshoes, a thread measuring device and means for regulating the same, comprising a welt guide slide, a tappet carried by the welt guide slide for operating the said measuring device and a striker for operating the tappet, the arrangement being such that the distance of the tappet from the striker may be varied automatically by the thickness of the work, substantially as described.

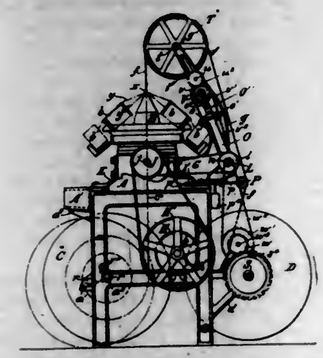
2. In a chain stitch machine for the purpose specified, a thread measuring device comprising two fixed pulley wheels, a movable pulley wheel acting intermediate of the fixed pulley wheels, a clamping device for the thread, a welt guide slide, a tappet mounted on the welt guide slide for operating the movable pulley wheel, a striker for operating the tappet and means for operating the striker, substantially as described.

1,064,407. BRAIDING-MACHINE. SIMON W. WARDWELL, Providence, R. I. Filed Aug. 3, 1910. Serial No. 575,297. (Cl. 28—4.)

1. In a braiding machine, the combination with the braiding mechanism B, of a driving-shaft therefor, an idler sprocket l, gear and chain connections for rotating said sprocket from the driving-shaft, sprockets m and n rotated with the sprocket l, a take-up wheel T, gear connections for rotating said wheel, a sprocket v' for driving the gears, a chain v^2 connecting said sprocket with the sprocket m, a take-up reel D for receiving the material from the take-up wheel, friction devices for driving said reel, a sprocket w' connected to drive said devices, and a chain w^2 connecting the sprocket w' with the sprocket n.

2. In a braiding machine, the combination with the driving-shaft f, of a sprocket m driven from said shaft, a take-up wheel T for feeding the material through the machine, a gear u^2 connected to rotate said wheel, a gear v engaging the gear u^2, a sprocket v' connected with the gear u^2, a chain connecting said sprocket to the sprocket m, and a bearing for the gear v and sprocket v' adapted to be adjusted toward and away from the axis of the

gear u^2 and in an arcual direction about the axis of the sprocket m.



3. In a take-up mechanism for braiding machines, the combination with a sprocket m, of an arm O mounted to swing on the axis of said sprocket, a second sprocket v' mounted on said arm to be adjusted toward and away from the sprocket m, a chain v^2 connecting said sprockets, a take-up wheel T, a gear u^2 connected to rotate said wheel, and a gear v connected to the sprocket v' and adapted to be meshed with the gear u^2.

4. In a take-up mechanism for braiding machines, the combination with the take-up wheel T, of a gear u^2 connected to drive said wheel, a sprocket m, an arm O mounted to swing on the axis of the sprocket m, an extension O' on said arm O adjustable longitudinally of the latter, a stud V on said extension, a sprocket v' on said stud, a chain v^2 connecting the sprockets m and v', a gear v mounted on the stud V and connected to be driven by the sprocket v^2, means to adjust the extension O' to vary the distance between the sprockets v' and m, and means to adjust the arm O about the axis of the sprocket m to bring the gear v in mesh with the gear u^2.

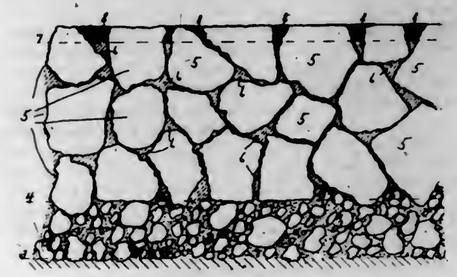
5. In a take-up mechanism for braiding machines, the combination with the upright arms g, of a cross shaft t mounted in bearings on said arms, a take-up wheel T on said shaft formed with a gear t', a second cross shaft u mounted in bearings on the arms g, a gear u' on the shaft engaging the gear t', a gear u^2 on said shaft u, a sprocket m rotatable on a bearing on one of the arms g, an arm O adjustable about the axis of the sprocket m, means to secure the arm O against the arm g, an extension O' adjustable longitudinally on the arm O, a stud V on said extension, a sprocket v' on said stud, a chain v^2 connecting the sprockets v' and m, a gear v mounted on the stud V to engage the gear u by adjustment of the arm O, and means to connect the gear v rotatably with the sprocket v'.

[Claim 6 not printed in the Gazette.]

1,064,408. CONCRETE PAVEMENT AND METHOD OF MAKING SAME. FREDRICK H. WEBSTER, Kansas City, Kans. Filed June 20, 1912. Serial No. 704,736. (Cl. 94—1.)

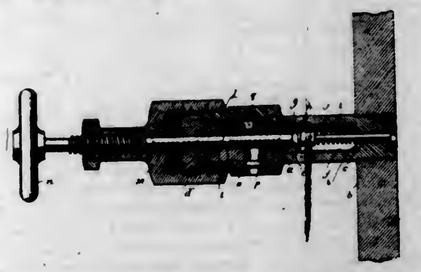
1. A cement concrete pavement comprising a sub-base formed of loose crushel rock of small maximum size and down with the dust included, a concrete stratum laid upon said sub-base, said stratum embodying larger sized stones of approximately uniform size and rolled hard to place the upper surfaces of the upper stones of said stratum in a common plane, which plane is the upper and exposed surface of the finished pavement, a filler for the voids between the stones in said stratum, said filler being formed of Portland cement mortar, and extending up to within a short distance of said common plane surface, and bituminous concrete for filling the interstices between the stones above said filler, said concrete being composed of bitumen and small sized stones free from dust, the upper plane of said concrete being substantially co-incident with said common plane.

2. A cement concrete pavement comprising a sub-base formed of loose crushed rock of small maximum size and down with the dust included, a concrete stratum including larger sized stones of approximately uniform size laid upon the sub-base and rolled heavily to place the upper surfaces of the upper stones in a common plane corresponding to the upper exposed surface of the finished pavement, said stratum having shallow interstices between the upper portions of said stones, and bituminous concrete filling said interstices up to said common plane, whereby the initially exposed surface of the finished pavement will be formed of the upper surfaces of said stones and the network of bituminous concrete within the interstices.



3. A cement concrete pavement comprising a concrete stratum embodying relatively large-sized stones rolled hard to place the upper surfaces of the upper stones of said stratum substantially in a common plane, which plane is the upper and exposed surface of the finished pavement, a filler for the voids between the stones in said stratum, said filler being formed of Portland cement mortar or grout and extending up to within a short distance of said common plane surface, and bituminous concrete filling the interstices between the stones above said Portland cement filler, said bituminous concrete being composed of relatively small sized stones and bituminous material, the upper plane of said bituminous concrete being substantially coincident with said common plane.

1,064,409. GAGE-COCK. JOSEPH RICHARD WHEARY, East Radford, Va. Filed Aug. 19, 1912. Serial No. 715,956. (Cl. 136—3.)

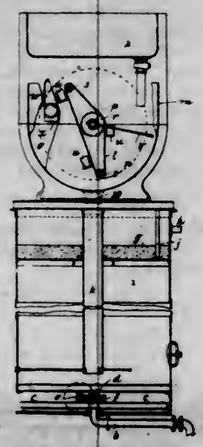


1. In a gage cock, the combination of a casing adapted to be attached to a boiler and provided with an inlet passage at its inner end and a lateral discharge opening near its outer end, the interior of the casing being enlarged to form an annular chamber coincidental with said lateral discharge passage and the inner portion of the valve casing being contracted to provide the tubular valve chamber f, an adjustable plug screwed into the outer end of the casing and having a lateral passage communicating with the said annular chamber formed in the casing and provided with a reduced tubular extension e fitting into the outer end of the valve chamber f and having its inner end formed into a valve seat, an inwardly opening valve normally seated against said seat, a valve opening rod extending through said plug, and a cap or bonnet supporting said rod and attached to the outer end of the casing.

2. In a gage cock the combination of a casing provided with an inlet passage at its inner end and having its inner end adapted for attachment to a boiler, said casing being provided with a lateral discharge opening at its outer end, a tubular plug fitted into the outer end of the casing and having its inner end formed into a valve seat facing inwardly, said plug being provided with a lateral passage putting its interior into communication with the discharge passage of the casing, a cap or bonnet secured to the outer end of the casing and inclosing the outer end of said plug, and an adjustable rod carried by said cap and extending longitudinally through the plug so as to be available for opening the valve, for the purposes set forth.

3. A gage cock consisting of a tubular casing adapted at one end for attachment to the boiler and having its interior enlarged at the other end, this enlarged part being provided with internal screw threads and a lateral discharge passage, a tubular plug screwed into the enlarged outer portion of the casing and provided with a lateral passage which communicates with the interior of the enlarged part of the casing, the inner end of this plug being reduced in diameter to form an annular shoulder, this reduced portion extending into the narrow diameter of the casing and having its inner end formed into a valve seat, a cap screwed upon the outer end of the enlarged part of the casing, a valve opening stem working through said cap and said plug and adapted to project beyond the valve seat, and a valve normally closing against said valve seat.

1,064,410. WATER-MOTOR. HAROLD JOSEPH WHEATON, London, England, assignor to Chauncey Justus Blair, Chicago, Ill. Filed Oct. 2, 1911. Serial No. 652,308. (Cl. 253—13.)



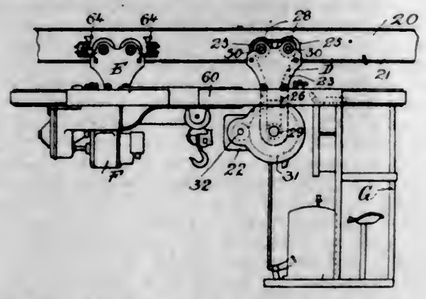
1. A rotating bucket of the class described comprising a central chamber, auxiliary chambers arranged to one side of the central chamber, only one of said auxiliary chambers communicating with the central chamber, means for causing the water in the central chamber to follow a circuitous path and throw the weight against the auxiliary chamber which communicates with the central chamber when the bucket rotates, and means for venting the central chamber to permit free flowing of the water to the auxiliary chamber.

2. In an apparatus of the class described, a bucket rotatably supported in the course of the flow of the water, said bucket having a central open chamber and a partition, a peripherical auxiliary bucket communicating with the open end of the central bucket, one wall of the said auxiliary bucket terminating in a plane with the open portion of the central chamber to form a passage for water to said central chamber, a second peripherical auxiliary chamber on the opposite side of the central chamber, said second auxiliary peripherical chamber being independent of the central chamber and the first mentioned peripherical auxiliary chamber, there being a vent opening formed between the partition and the second mentioned peripherical auxiliary chamber whereby to permit the escape of air when the water flows from the central chamber.

3. In a water-softening apparatus, a water-measuring tipping bucket rotatably supported in the course of the flow to the apparatus of water to be treated therein, said bucket having a central compartment open to said flow in one position of the bucket, a second compartment communicating with and extending partway about said central compartment to one side thereof, and a third compartment open to said flow in the other position of the bucket and closed to and extending partway about said central compartment to the opposite side thereof, and means for holding the bucket against backward turning from either of its discharging positions.

4. In water softening apparatus a tipping bucket having a central cylindrical main chamber and two peripheral auxiliary chambers the main chamber being in communication with only one of the peripherical auxiliary chambers whereby on the feeding in of the liquid the bucket makes a complete revolution for each discharge of the main chamber.

1,064,411. POWER-DRIVEN TROLLEY FOR FIXED-TONGUE-SWITCH TRACK SYSTEMS. NORMAN WHICHELLO, Muskegon, Mich. Filed Dec. 13, 1912. Serial No. 736,550. (Cl. 104—180.)



1. The combination with an overhead track rail system having a fixed tongue switch therein, of a trolley truck having wheels to operate along the track system and through said switch, and means, also arranged to pass through the switch for driving said wheels.

2. The combination with an overhead I-beam track system having a fixed tongue switch, of a trolley truck having wheels to operate along the flange of the said I-beam track system, a motor carried by said truck and means operated thereby and arranged to pass freely through the switch for driving said wheels.

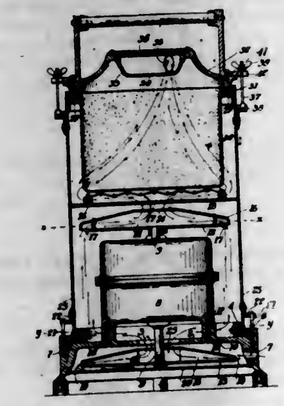
3. The combination with an overhead track system having a fixed tongue switch, of a trolley truck having wheels to operate along said track system, a propelling motor carried by the truck below the level of the switch tongues, and means arranged to pass freely through the switch driven by said motor for driving said wheels.

4. The combination with an overhead track system having a fixed tongue switch, of a trolley truck having a side plate arranged to pass freely through the switch openings, a motor carried by said truck, a truck wheel carried by said side plate and operating along the track system, and means also arranged to pass freely through the switch openings and operated by the motor for driving said wheel.

5. The combination with an overhead track system having a fixed tongue switch of a trolley truck including a side plate adapted to pass freely through the switch openings, wheels carried by said plate and arranged to operate along said track system, a motor carried by the truck, and means intermediate the motor and truck wheels and also arranged to pass freely through the switch openings to drive the truck wheels.

[Claims 6 to 24 not printed in the Gazette.]

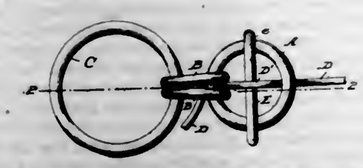
1,064,412. VACUUM-CLEANER. WALTER THOMAS WHITE, St. John, New Brunswick, Canada. Filed Aug. 10, 1912. Serial No. 714,445. (Cl. 230—11.)



1. In a vacuum cleaner the combination with an electric motor having its armature axis vertical and the shaft extending above and below the motor, of suction fans secured to the upper and lower ends of the shaft casing extending over the fans and revolving therewith, said casings having central inlet apertures therein, the upper fan casing having a horizontally circumferentially extending outlet aperture and the lower fan casing having a vertical circumferentially extending outlet aperture, and a base portion supporting the motor and having a top portion formed thereon with a central aperture registering with the central aperture in the lower fan casing, means on the top of the base for deflecting the air toward the central aperture therein, said top of the base being situated between the motor and the lower fan.

2. In a vacuum cleaner the combination with an electric motor having its armature axis vertical, and the shaft extending above and below the motor, of suction fans secured to the upper and lower ends of the shaft casing extending over the fans and revolving therewith said casing having central inlet apertures therein, the upper fan casing having a horizontally circumferentially extending outlet aperture and the lower fan casing having a vertical circumferentially extending outlet aperture, and a base portion supporting the motor and having a top portion formed thereon with a central aperture registering with the central aperture in the lower fan casing a circumferential wall and suitably curved blades, both formed on the top of the base for deflecting the air toward the central aperture therein, said top of the base being situated between the motor and the lower fan.

1,064,413. WIRE-STRETCHER FOR FENCES, &c. DAVID JAMES WINN, Sumter, S. C. Filed Feb. 15, 1913. Serial No. 748,628. (Cl. 39—53.)



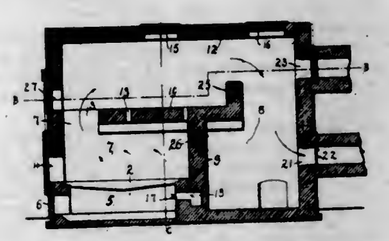
1. A wire stretcher comprising two plain rings, a loose link connection inclosing the sides of and coupling the two rings together, one of the rings being made circular and of smooth, uniform transverse section throughout its circumference, a diametrical grip bar having one end bent to one side of its longitudinal axis around one side of the circular ring to inclose it in an eye and form a hinged articulation adapted to shift around the circumference of the ring and the other end of the hinged grip bar being free and extending across the other side of the circular ring.

2. A wire stretcher comprising two plain rings, a plurality of loose links inclosing the sides of and coupling the two rings together, one of the rings being made circular and of smooth, uniform transverse section throughout its circumference, a diametrical grip bar having one end bent around one side of the circular ring to inclose it in an eye and form a hinged articulation adapted to shift around the circumference of the ring and the other end of the hinged grip bar being free and extending across the other side of the circular ring.

3. A wire stretcher comprising two plain rings of different sizes, two links separately connecting the two rings independently of each other adapted to distribute the strain and hold the wire in alinement, and a diametrical grip bar having one end bent around one side of the smaller ring and the other end free and extending across the other side of said ring.

4. A wire stretcher comprising two plain rings, two links separately connecting the two rings independently of each other adapted to distribute the strain and hold the wire in alinement, and a diametrical grip bar having one end bent around one side of one of the rings and its free end extending across the other side.

1,064,414. GARBAGE-DESTROYING FURNACE. PETER WYLIE and JOHN H. HOOPER, Vancouver, British Columbia, Canada. Filed Nov. 26, 1912. Serial No. 733,619. (Cl. 110—12.)

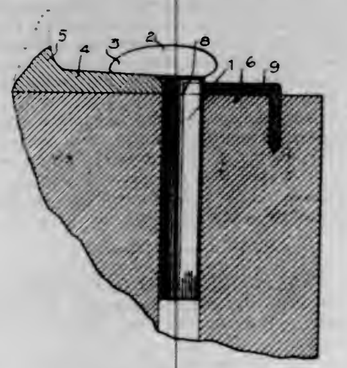


1. A garbage burning furnace comprising outer walls inclosing an internal chamber, a wall extending transversely of the chamber and extending from the bottom of the chamber toward the top, a second wall within the chamber extending from said transverse wall, in a longitudinal plane, to the front wall, said inner walls dividing said chamber into three distinct lower sections, a drying hearth consisting of a horizontal wall extending from one side to the other of the furnace and located at the upper extremity of said transverse and longitudinal dividing walls, said horizontal wall terminating short of the front and back walls of the furnace to leave passageways, and furnace grates in the two chambers formed by said transverse and longitudinal dividing walls, said grates projecting beneath said drying hearth, and offtake flues for said furnace, said offtake flues leading from the furnace to the rear of the drying hearth or transverse wall.

2. A garbage burning furnace comprising an outer wall inclosing a chamber, a transverse partition within said chamber and extending from one side wall to the other and approximately half way up the height of the chamber, a correspondingly extending longitudinal partition wall in said furnace chamber, said transverse and longitudinal walls dividing said furnace chamber into two distinct combustion spaces, grates within said combustion spaces and a drying hearth arched over said grates and supported by said longitudinal and transverse dividing walls, said hearth terminating short of the front wall of the furnace to leave a fire and smoke passage and terminating short of the rear wall of the furnace to leave a

corresponding passage, offtake flues from the furnace chamber leading from the furnace chamber to the rear of the drying hearth or transverse wall and air inlet flues delivering beneath the grates, said outer wall having a door in its front wall portion in alinement with the top of the drying hearth through which the contents of the hearth may be raked, and a door in the top of said outer wall through which the materials may be deposited on said hearth, said outer wall having charging openings for said grates substantially as shown.

1,064,415. SPIKE. FRANK WYNNE, Burlington, Vt. Filed Jan. 14, 1913. Serial No. 742,013. (Cl. 85—23.)



1. The combination with a spike having channels therein, of anchoring and guide means having one arm slidably engaged in said channels and the other arm directed downwardly and terminating in a point for engagement in a tie.

2. The combination with a spike comprising a body having longitudinal channels in its side faces and a head with an extended portion projecting from the front face of the body, of anchoring means having one arm slidably engaged in the channels of the spike body, while the other arm is adapted for engagement with the material with which the spike body is engaged.

3. The combination with a spike having longitudinal channels in the side faces of the body thereof, the outer edges of the channels being spaced from the front and rear edges of the spike member, said spike body being beveled upon its front and rear faces at the lower end of the body, of guide and anchoring means having one end engaged around the rear portion of the spike body and in the longitudinal channels in the side faces of the body.

4. The combination with a spike having longitudinal channels in opposite faces of its body portion, of an angular guide and anchor means having a dove-tailed opening in the free end of one arm to receive one edge of a spike body, the arms providing the dove-tailed opening in the end of the guide and anchoring means being adapted for slidable engagement in the longitudinal channels of the spike body, while the opposite end of the guide and anchor means is directed downwardly and pointed for engagement in a solid member with which the spike is engaged, said downwardly directed end of the guide and anchoring means being parallel with the spike body.

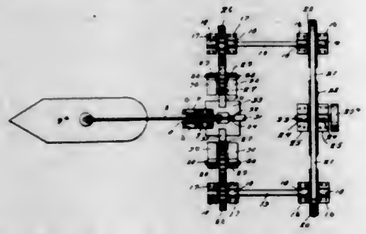
1,064,416. GARMENT-SUPPORTER. ABRAHAM L. ABERCROMBIE and JOHN P. CARTIN, Daytona, Fla. Filed Aug. 3, 1912. Serial No. 713,117. (Cl. 241—11.)

In a device of the character described, the combination of a slide provided with spaced slots and further provided with an opening between the slots, said opening being of a greater width than the slots and arranged in parallel relation therewith, said slots being adapted to receive a belt which extends across the central opening, one end of said central opening being contracted and extending



beyond the corresponding ends of the belt receiving slots and adapted to receive suspender attaching members.

1,064,417. WAVE-MOTOR. LUIS RAFAEL AGOSTINI, Caracas, Venezuela. Filed Sept. 4, 1912. Serial No. 718,573. (Cl. 253—8.)



1. In a machine of the character described, a plurality of spaced movable floats, anchor means for the floats so that the same will move away from each other when elevated by the waves, a flexible element connected with the floats to be pulled by the combined movements of the floats, and mechanism operated by the flexible element.

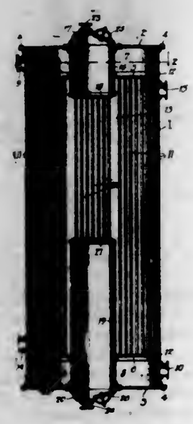
2. In a machine of the character described, a float, anchor chain or chains connected with the float, an upstanding supporting structure suitably mounted upon the shore, a pulley mounted upon the supporting structure, a flexible element connected with the float and passed about the pulley, a vertically movable weight connected with the flexible element and adapted to normally hold the float in such a position that the anchor chain or chains will be inclined, whereby when the waves elevate the float the same will move longitudinally in one direction to pull the flexible element for elevating the weight, sets of pawls pivotally connected with the weight, a pinion operated by one set of pawls upon the upward movement of the weight, and a pinion operated by the other set of pawls upon the downward movement of the weight.

3. In a machine of the character described, an upstanding supporting structure suitably mounted upon the shore, horizontal shafts connected with the supporting structure, a pinion rigidly connected with one end of each horizontal shaft, an inner supporting structure, pairs of pinions connected with the inner supporting structure and engaging the pinions carried by the horizontal shafts, a vertically movable weight disposed between the pairs of pinions, sets of pawls pivotally connected with opposite sides of the weight and engaging the pairs of pinions, a pulley mounted upon the upstanding supporting structure, above the weight, a cable connected with the weight and passed about the pulley, a movable float connected with the cable, pulleys carried by the horizontal shafts, a power distributing shaft disposed between the horizontal shafts, a pulley rigidly mounted thereon, and a belt engaging the pulleys carried by the horizontal shafts and the last named pulley.

4. In a machine of the character described, a plurality of movable floats, a pulley carried by one float, a cable attached to one float and passed about the pulley of the other float, a reciprocatory weight attached to the cable, and means operated by the weight.

5. In a machine of the character described, a float carrying a pulley, a movable float, a cable attached to the movable float and passed about the pulley, a support, a second pulley mounted upon the support and engaged by said cable, a weight connected with the cable, and means operated by the weight.

1,064,418. WATER-HEATER. CHARLES D. ALLAN, Chicago, Ill. Filed Jan. 20, 1913. Serial No. 743,021. (Cl. 62—30.)



1. A water heater comprising a shell, heads which close the ends thereof, tube sheets secured in said shell at a distance from its ends and forming chambers at the ends thereof, one of said chambers being provided with an opening adapted for connection with a source of supply of exhaust steam and the other with a discharge opening, tubes which connect said chambers, opposite ends of which are secured in said tube sheets, separate shells having closed ends which extend through and are secured in openings formed in the opposite ends of the heater and in the tube sheets adjacent thereto, respectively, one of said shells being provided with an opening adapted for connection with a source of supply of live steam and the other with a discharge opening, tubes which connect the interiors of said shells and are exposed in the space within the heater shell between the tube sheets therein, said heater shell being provided with water inlet and outlet openings which communicate with the space between the tube sheets in said shell and are adapted for connection with the pipes of a heating system, substantially as described.

2. A water heater comprising a shell, heads which close the ends thereof, tube sheets secured in said shell at a distance from its ends and forming chambers at the ends thereof, one of said chambers being provided with an opening adapted for connection with a source of supply of exhaust steam and the other with a discharge opening, straight tubes which connect said chambers, opposite ends of which are secured in said tube sheets, separate shells having closed ends which extend through and are secured in openings formed in the opposite ends of the heater and in the tube sheets adjacent thereto, respectively, one of said shells being provided with an opening adapted for connection with a source of supply of live steam, and the other with a discharge opening, straight tubes which connect the interiors of said shells and are exposed in the space within the heater shell between the tube sheets therein, said heater shell being provided with water inlet and outlet openings which communicate with the space between the tube sheets in said shell and are adapted for connection with the pipes of a heating system, substantially as described.

3. A water heater comprising a shell, heads which close the ends thereof, tube sheets secured in said shell at a distance from its ends and which form chambers at the ends thereof, one of said chambers being provided with an opening adapted for connection with a source of supply of exhaust steam and the other with a discharge opening, tubes which connect said chambers, the opposite ends of which are secured in said tube sheets, separate live steam shells which respectively extend through and are secured in openings formed in opposite heads of the heater and in the tube sheets adjacent thereto, respectively, and the outer ends of which, respectively, are exposed at the ends of the heater shell, one of said shells being provided with an opening adapted for connection with a source of supply of live steam and the other with a discharge opening, tubes which connect the interiors of said live steam shells and are exposed in the space within the heater shell between the tube sheets therein, said heater shell being provided with water inlet and outlet openings which communicate with the space between said tube sheets and are adapted for connection with the pipes of a heating system, substantially as described.

4. A water heater comprising a shell, removable heads which close the ends thereof, tube sheets secured in said shell at a distance from its ends and which form chambers at the ends thereof, one of said chambers being provided with an opening adapted for connection with a source of supply of exhaust steam and the other with a discharge opening, straight tubes which connect said chambers, the opposite ends of which are secured in said tube sheets, separate shells having ends riveted thereto which respectively extend through and are secured in openings formed in opposite heads of the heater and in the tube sheets adjacent thereto, respectively, and the outer ends of which, respectively, are exposed at the ends of the heater shell, the exposed end of one of said shells being provided with an opening adapted for connection with a source of supply of live steam and the exposed end of the other of said shells being provided with a discharge opening, straight tubes the opposite ends of which are secured in the adjacent ends of said shells and which connect the interiors thereof and are exposed in the space within the heater shell between the tube sheets therein, said heater shell being provided with water inlet and outlet openings which communicate with the space between said tube sheets and which are adapted for connection with the pipes of a heating system, one of said live steam shells being slightly longer than the length of the live steam tubes and the other thereof being sufficiently long to permit a man to work therein, and said live steam shells being provided in their exposed ends with manholes and manhole covers which close said manholes, substantially as described.

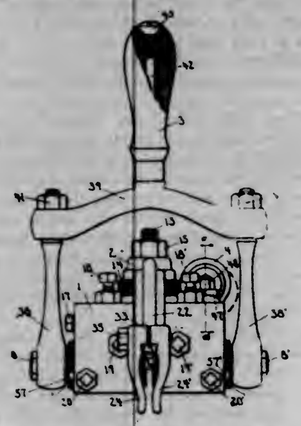
1,064,419. SHAPER FOR SWAGED SAW-TEETH. WILLIAM RICHARD ANTHONY, Memphis, Tenn. Filed Feb. 12, 1912. Serial No. 677,000. (Cl. 76—49.)

1. A shaper having a supporting frame to rest upon the saw teeth, with insertible hardened plates in contact with said teeth, each held between the side walls of a groove in the under side of said supporting frame, said grooves each being additionally deepened by a narrow slit to permit the walls being compressed against the sides of said hardened plates by screw means.

2. In a shaper for swaged teeth of circular, band, and gang saws, a supporting frame consisting of an arched front member 22 and an adjustable rear member 23 flexibly joined and securely clamped together at a hinge connection by a bolt 26 permitting different degrees of alinement of the under side of each member, said variations of alinement being effected by a screw 27 in a portion of one member pressing against a portion of the other member, all as herein shown and described.

3. A swage shaper having a supporting frame resting upon the saw teeth and carrying a body block grooved in its under side for the passage of a saw, deeper in the front side than in the back, said body block having in its lower half a cylindrical socket of uniform diameter, perpendicular to and crossing said groove, extending the

length of said body block, and threaded at each end, said cylindrical socket containing two interchangeable, cylindrical shaping dies, and receiving, at its threaded outer ends, inside and outside threaded bushings to engage the oppositely threaded clamp screws.



4. A swage shaper comprising a flexible supporting frame carrying within its arched portion a body block with vertical grooves on one of its sides, engaged therein by screws secured in the adjacent wall of the arch inclosing same, said body block having a groove in its under side for the passage of a saw, and, perpendicular to and crossing said groove, a cylindrical opening of uniform diameter the full length of the body block to receive and conduct the two duplicate, interchangeable, cylindrical shaping dies and means for compressing same, said dies being centrally joined by and slidable upon a connecting pin or tooth stop, and having, within the opening into which said tooth stop pin slides, a coil spring pressing against the end of said stop pin and the inside end of said opening to hold the dies apart when not compressed.

5. A shaper having a supporting frame carrying a body block with a cylindrical opening its entire length to conduct the shaping dies of like parallel faces and the bevel faces which form the side dress for the tooth being shaped, said dies being simultaneously compressed by oppositely threaded clamp screws with lever means for turning same in the threaded bushings screwed into the ends of the die opening, and each held from further turning therein by a screw in the body block setting into a groove in the side of said threaded bushing.

[Claims 6 to 14 not printed in the Gazette.]

1,064,420. WELL-BUCKET. BARTLETT J. BARNES, Bradleyville, Mo., assignor of one-third to James R. Jackson, Bradleyville, Mo., and one-third to Albert E. Dean, Brownbranch, Mo. Filed Aug. 12, 1912. Serial No. 714,640. (Cl. 103—35.)

1. A well bucket consisting of a frame adapted to be secured to the well rope, an open ended cylinder movably mounted within said frame, and means to close the lower end of said cylinder.

2. A well bucket comprising a suitable frame adapted to be secured to a well rope, a cylinder movably mounted within said frame, said cylinder having a restricted opening in its lower end, and a packing disk secured to the frame and positioned to close the opening in the lower end of the cylinder when in its lowermost position.

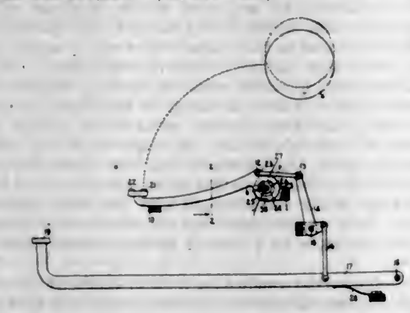
3. A well bucket comprising a frame, an open ended cylinder movably mounted within said frame, a ring secured within the lower terminal of said cylinder and having a restricted opening, a sleeve slidably mounted in the lower end of the frame, and a packing disk secured to said sleeve and adapted to engage the ring in the lower terminal of the cylinder to close the opening therein.

4. A well bucket comprising a frame having a bar formed with a ball, the ends of said bar extending downwardly and secured to rings at the upper and lower ends of said frame, other bars connecting said rings, the plate connecting the lower terminals of the first mentioned bar and having a central opening therein, a sleeve movably mounted in said openings and having an enlarged upper end, a disk mounted on the upper end of said sleeve, and a



packing disk superposed on the first mentioned disk, a cylinder movably mounted within the frame and having restricted ends, a ball secured to the upper end of the cylinder, and a ring secured within the lower end of the cylinder and having a restricted opening, said ring being adapted to seat upon the packing disk aforesaid, when the cylinder is in its lowermost position.

1,064,421. TYPE-WRITING MACHINE. EDWIN E. BARNEY, Marcellus, N. Y., assignor, by mesne assignments, to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Apr. 1, 1912. Serial No. 687,617. (Cl. 197—35.)



1. A type bar for typewriting machines having a pivot portion comprising two eye portions one surrounding the other and adapted for relative adjustment, and the outer eye portion being provided with means for facilitating such adjustment.

2. A type bar for typewriting machines having a pivot portion comprising two substantially concentric eye portions adapted for relative adjustment, and the outer eye portion being formed with a notch for facilitating such adjustment.

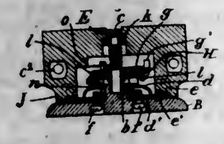
3. A type bar for typewriting machines having a pivot portion comprising two eye portions, one within the other, and a narrow connecting neck capable of distortion to vary the effective length of the type bar.

4. A type bar for typewriting machines having a pivot portion provided with a bearing eye, said bearing eye and the pivot portion surrounding the same being relatively movable with respect to each other.

5. A type bar for typewriting machines having a pivot portion integral with the bar but relatively movable with respect to the body portion of the bar by which body portion said pivot portion is surrounded.

[Claims 6 to 19 not printed in the Gazette.]

1,064,422. PULL-SWITCH FOR WALL-BOXES. FREDERIC BARR, New York, N. Y. Filed Jan. 17, 1911. Serial No. 603,079. (Cl. 175—290.)



1. In a pull switch, an insulating base, a spindle supported therein, switch contacts on opposite sides of said spindle, circuit terminals secured to said contacts, an oscillating lever on said spindle, an operating chain secured to said lever, a guard flange projecting from said base around the outer edges of said contacts between said circuit terminals, and a front plate having a guide passage for said chain.

2. In a pull switch, an insulating base, a spindle supported thereby, switch contacts carried by said base, an oscillating lever on said spindle, an operating chain secured to said lever, a bridge plate secured to said base, and a box secured to said bridge plate and surrounding and inclosing said base and having a guide passage for the chain at the front.

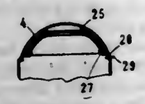
3. In a pull-switch having switch-fixtures with a spindle and seats with bearings for the said spindle, and a rocker-segment and chain for actuating such fixtures, the combination, with the spindle and one of the bearings fitted to rotate and to move lengthwise in its seat, of a spiral spring fitted to the spindle and engaging the rocker-segement and the said bearing, the bearing being movable lengthwise in its seat in opposition to the extension of the spring, and having a ratchet-connection with its seat, whereby the bearing may be turned to tighten the spring and the ratchet-parts held in engagement by the extension of the spring.

4. In a pull switch, an insulating switch base in two parts with a chamber open at the front, a spindle transverse to the chamber, switch contacts and circuit terminals carried by one part of the base on opposite sides of said spindle, said circuit terminals having binding posts at the front of the base and said base having grooves in its ends and front leading to said posts and an operating chain passing through the opening at the front of the base.

5. In a pull switch, an insulating body, contacts and a spindle therein, an insulating disk on said spindle flaring outwardly toward said contacts, an oscillating lever adapted to turn said disk step by step and an operating chain secured to the outer end of said lever, the flaring of said disk tending to cause said chain to draw away from said contacts when the chain is pulled.

[Claims 6 to 20 not printed in the Gazette.]

1,064,423. SOCKET FOR LAMPS, &c. FREDERIC BARR, New York, N. Y. Filed Mar. 23, 1912. Serial No. 685,755. (Cl. 173—362.)

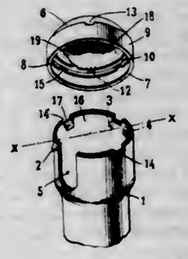


1. The combination of a socket cap having a plurality of interior recesses, an insulating lining fitting in said cap and a plurality of yielding metallic clips attached to said lining and projecting laterally therefrom and engaging in said recesses.

2. As an article of manufacture, an insulating socket cap lining and a plurality of yielding metallic clips secured to said lining, each clip having parts gripping the inner and outer surfaces of the lining respectively and each clip having a part projecting laterally for engagement in a recess in a socket cap.

3. As an article of manufacture, an insulating socket cap lining and a plurality of yielding metallic clips secured to the periphery of said lining, each clip having three parts, one of said parts gripping the inner edge of said lining, the second part gripping the outer edge of said lining and a third part projecting laterally from the periphery of said lining for engaging in a cap recess.

1,064,424. SOCKET CONSTRUCTION. FREDERIC BARR, New York, N. Y. Filed Aug. 2, 1912. Serial No. 712,856. (Cl. 173—362.)



1. In a socket shell, a body having notches in its upper edge and lateral projections near its edge, a cap having an interiorly directly marginal flange for interlocking with said projections and a ring interlocking with said cap and having horizontal and vertical flanges for positioning the edge of said body and having interiorly directed projections interlocking with the notches in the edge of said body.

2. In a socket shell construction, a cap having a rim with an interior shoulder and an interiorly directed marginal flange, a loose ring mounted in said rim adjacent said shoulder and of less depth than the distance between said shoulder and said flange, said cap and said ring having interlocking notches and projections preventing relative rotation, said ring being adapted to be moved away from said shoulder and a body having projections interlocking with said flange and preventing longitudinal separation, said body and ring having interlocking notches and projections preventing relative rotation.

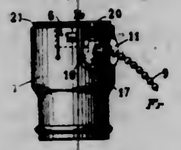
3. In a socket shell construction, a cap, a body having a notched edge telescoping therewith and a ring of angular section with a circumferential flange fitting around the edge of the body and an annular flange acting as a stop for the edge of the body, the circumferential flange having one or more projections interlocking with one or more corresponding notches in the edge of the body.

4. In a socket construction, a cap having an interior shoulder and one or more interiorly directed projections, a movable ring in said cap abutting against said shoulder and having one or more notches corresponding to the projections in the cap and a body telescoping with said cap and interlocking with said ring to prevent relative rotation and interlocking with said cap to prevent longitudinal separation.

5. In a socket construction, a body having four equally spaced notches in its open edge and oppositely positioned projections with abrupt edges facing away from said edge and a cap member having a rim with an inwardly directed marginal flange and one or more projections in said cap to interlock with the notches in said body when the projections on the body interlock with said flange.

[Claims 6 to 8 not printed in the Gazette.]

1,064,425. PULL-SOCKET. FREDERIC BARR, New York, N. Y. Filed Nov. 29, 1912. Serial No. 734,101. (Cl. 173—362.)



1. In a pull socket switch, a shell body having a slot, a chain guide having a base plate fitting around outside the walls of the slot and having lugs fitting within the edges of the slot and arranged so as to prevent lateral displacement, a switch carrying block having a lug projecting into said slot and overstanding said base plate and a cap.

2. A pull socket switch comprising a shell having a slot with shoulders on opposite sides of said slot, a chain guide having a base plate fitting outside the said shell and having two lugs engaging in the end of said slot inside said shell.

3. A pull socket switch comprising a shell having a slot with shoulders on opposite sides of said slot, a chain guide having a base plate fitting outside the said shell and having two lugs engaging in the end of said slot inside said shell and a switch carrying insulating block having a lug overstanding the edge of said base plate and a cap surrounding the edge of said shell body and said lug.

4. A pull socket comprising a shell having a slot with a shoulder and an extension slot and a chain guide having a base plate fitting the outside of said shell with a lug at the end to engage said shoulder and a lug at the opposite end to engage inside said shell at the end of said extension slot.

5. A pull socket comprising a shell having a slot with a shoulder on each side and an extension slot, and a chain guide having two hooked lugs bent inwardly to engage said shoulders and a third lug engaging inside the shell beneath said extension slot and means for holding said chain guide in place.

[Claim 6 not printed in the Gazette.]

1,064,426. ELECTRIC-SWITCH SOCKET. FREDERIC BARR, New York, N. Y. Filed Feb. 19, 1913. Serial No. 749,300. (Cl. 173—362.)



1. In a pull socket switch, the combination of a shell body provided with a chain slot, a chain guide having a base fitting the outside of the shell body and disposed over the chain slot to cover the lower end of the said slot, interlocking means on the chain guide base and shell body disposed below the end of the chain slot to secure the lower end of the chain guide base in close engagement with the shell body, and means securing the upper portion of the chain guide base in close engagement with the shell body.

2. In a pull socket switch, the combination of a shell body provided with a chain slot and with a seat below the end of the chain slot, a chain guide having a base lying on the outside of the shell body, fitting the shell body and covering the lower portion of the chain slot therein, a lug on the lower end of the chain guide base, engaging the seat below the chain slot to secure the lower end of the chain guide base against the outside of the shell body and prevent lateral displacement of the chain guide and means securing the upper end of the chain guide base against the shell body.

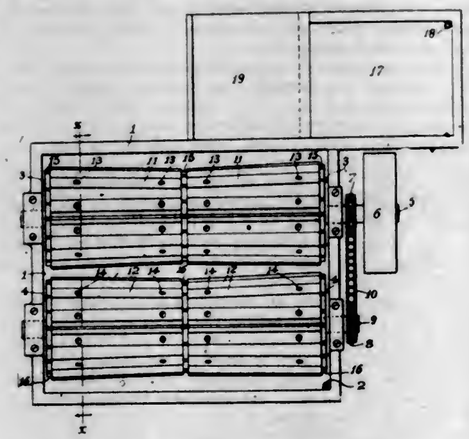
3. In a pull socket switch, the combination of a shell body provided with a chain slot, a seat below the chain slot and a seat disposed in a plane above that of the first seat, a chain guide, lugs substantially at the upper and lower ends of said chain guide adapted to engage in the seats in the shell body, and a spring tongue on the shell body adapted to engage over the top of one of the lugs when said lug is engaged in its seat, whereby to lock the chain guide in position upon the shell body.

4. In a pull socket switch, the combination of a shell body provided with a chain slot and with seats at points below and at opposite sides of the chain slot, a chain guide having a base fitting over the outside of the shell body and covering the lower end of the chain slot therein, lugs on the base of the chain guide engaging the seats at the opposite sides of and below the chain slot, and means securing the chain guide thus positioned upon the outside of the shell body.

5. In a pull socket switch, the combination of a shell body provided with a chain slot and with seats at opposite sides of the chain slot, a chain guide having a base fitting over the outside of the shell body and covering the lower end of the chain slot therein, hooked lugs on the base of the chain guide spaced apart to engage in the seats at the opposite sides of the chain slot in the shell body and a spring tongue on the shell body adapted to engage over the top of one of the hooked lugs when said lug is engaged in its seat whereby to lock the chain guide in position upon the shell body.

[Claims 6 to 10 not printed in the Gazette.]

1,064,427. METHOD OF MAKING NAPPED HATS IN THE ROUGH. HURLAND W. BATES, Bethel, Conn. Filed July 9, 1912. Serial No. 708,498. (Cl. 38—11.)



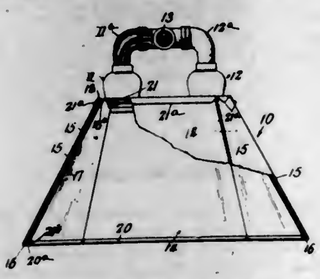
1. The method of making napped hats comprising covering the surfaces of felted disks or bodies with loose fur fibers, and subjecting said fur-covered disks or bodies to a squeezing and contracting process to cause said fibers to engage and adhere to said disks or bodies.

2. The method of making napped hats comprising saturating felted disks in hot water to soften them, covering the faces of the softened disks with loose fur fibers, and subjecting said fur-covered disks to a squeezing and contracting process to cause said fibers to engage and adhere to said disks or bodies.

1,064,428. REFLECTOR. WILLIAM A. F. BECKER, Chicago, Ill., assignor to Thomas Cusack Company, a Corporation of New Jersey. Filed Jan. 25, 1912. Serial No. 673,438. (Cl. 240—103.)

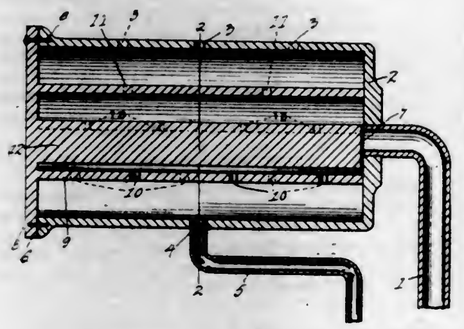
A reflector made of sheet metal comprising a shell having a plurality of inclined side walls and being open at top and bottom, said side walls having horizontal inwardly turned flanges at their top and bottom edges, and the flanges at their top edges having marginal down-turned flanges spaced from said side walls, a plurality of reflecting devices, one for each side wall of said shell, located

with their backs against the inner surface of said side walls of said reflector and with their top and bottom edges engaged by said horizontal flanges, an angular plate extending about the lower edges of the reflector and having a horizontal flange interposed between the several horizontal flanges at the bottom edges of the side walls of the



reflector and the lower edges of the reflecting devices, and an upright flange which engages the inner faces of the lower marginal parts of said reflecting devices, and an apertured top plate inclosing the top of said reflector and having flanges secured against the outer marginal surfaces of the side walls of said reflector.

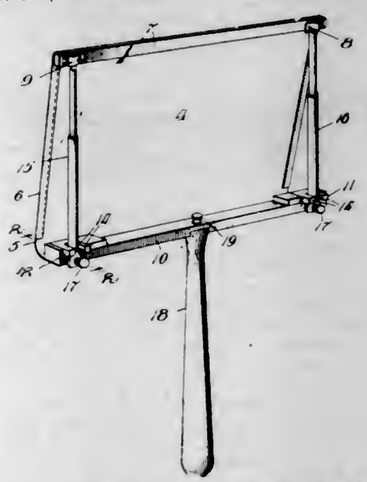
1,064,429. AIR AND OIL SEPARATOR FOR AIR-COMPRESSORS. AUGUST FRED BERGHAHN, Belleville, Ill. Filed Dec. 21, 1912. Serial No. 738,098. (Cl. 83—90.)



1. An oil and air separator comprising an outer casing having one end open, a removable head for said open end, the casing being provided with a pipe opening in the opposite end, means for securing the head in position, an inner casing carried by the head, said inner casing having one end surrounding the pipe opening in the outer casing, a baffle member in the inner casing, said baffle member being of T-shaped form in cross section and carried by the removable head, said inner casing being provided with oil outlet openings in its lower portion, said inner casing being also provided with air outlet openings in its upper portion, the outer casing being provided with air escape openings in its upper portion, a supply pipe secured in the pipe opening of the outer casing, and an oil return pipe secured in the lower portion of the outer casing.

2. An oil and air separator comprising an outer casing having one head formed therewith and a pipe secured centrally in said head, a removable head for the opposite end of the casing, an inner casing carried by the removable head and having its free end engaged against the integral head of the outer casing around the pipe, a longitudinally extending baffle member of T-shaped form in cross section secured at one end to the removable head within the inner casing and having its opposite end engaged against the end of the pipe, the horizontal portions of the baffle member being perforated, the upper and lower portions of the inner casing being perforated, and an oil return pipe secured in the lower portion of the outer casing.

1,064,430. PORTABLE WIND-SHIELD. PETER J. BERNARD, Chicago, Ill. Filed May 28, 1912. Serial No. 700,171. (Cl. 2—149.)



1. In a portable wind shield, a knock-down frame comprising a body formed of transparent flexible material and having upper and lower side frames, the upper side frame having retainers, and the lower side frame having adjustable side frame bars adapted to engage the retainers in the upper side frame, and locking means for maintaining said side frame in vertical position, substantially as described.

2. In a portable wind shield, a knock-down frame comprising a body formed of transparent flexible material having upper and lower side frames, the upper side frame having end spring clips, and the lower side frame carrying opposite adjustable side frame bars adapted to engage the spring clips on the upper side frame for maintaining the frame in extended position, and locking means for the side frame bars, substantially as described.

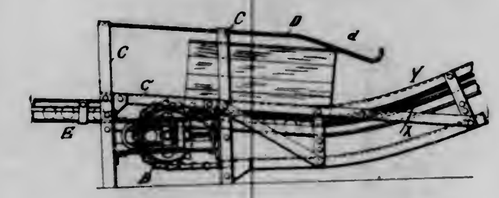
3. In a portable wind shield, a knock-down frame comprising a body formed of transparent flexible material and having upper and lower side frames, the upper side frame having retainers, and the lower side frame carrying adjustable side frame bars at its opposite ends, and locking members secured to said lower frame for maintaining the side frame bars in vertical position, substantially as described.

4. In a portable wind shield, a knock-down frame comprising a body formed of transparent flexible material and having upper and lower side frames, the upper side frame having retainers, and the lower side frame carrying adjustable side frame bars at its opposite ends, adapted to be swung inwardly adjacent to the lower frame when collapsed, and when in vertical position adapted to engage the retainers in the upper side frame, and locking means secured to the lower side frame for maintaining the side frame bars in vertical position, substantially as described.

5. In a portable wind shield, a knock-down frame comprising a body formed of transparent flexible material and having upper and lower side frames, the upper side frame having retainers at its opposite ends, and the lower side frame carrying adjustable side frame bars having their upper ends adapted to engage the retainers in the upper side frame, and locking members secured upon and adjacent to the ends of the lower side frame, adapted when in lowermost position to retain the side frame bars in vertical position, and adapted when raised to permit said frame bars to be lowered, substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

1,064,431. CONVEYER. MORRIS URI BERNHEIM, Louisville, Ky., assignor, by mesne assignments, to The Alvey-Ferguson Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 13, 1909. Serial No. 495,708. (Cl. 123—1.)



1. In a conveyer having a bed or floor and traveling devices for propelling packages along the same, means arranged above the receiving end of the bed or floor in such relation thereto as to permit a package to pass between it and the bed or floor, said means being yieldable upwardly to a package which is properly engaged with a propelling device and serving to restrain movement of a package improperly engaged with a propelling device.

2. In a conveyer having a bed or floor whose end at the receiving part of the conveyer is approximately horizontal, said bed or floor also having an upwardly inclined section leading from said approximately horizontal portion, means traveling above and below the bed or floor for propelling packages along the same, said means traversing an upward path at the receiving end of the approximately horizontal portion of the bed or floor, and upwardly-yieldable means arranged over said approximately horizontal part of the bed or floor in such relation to the package and bed or floor as to permit a package properly engaged with a propelling device to be forced through the space bounded above and below by said means and the bed or floor, respectively, and to restrain movement of a package improperly engaged with a propelling device.

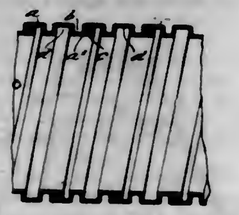
3. In a conveyer having a bed or way and traveling devices for propelling packages along the same, one or more arms arranged over the bed or floor in position to permit a package to pass beneath the same, said arms having yieldable extremities arranged in the path of the upper forward edge of the package.

4. In a conveyer having a bed or way and traveling devices for propelling packages along the same, and also with standards rising above its bed or way from each of its opposite sides, devices carried by the standards and projecting therefrom transversely over the floor or way, and arms secured to said devices and extending longitudinally over the floor or way and having yieldable extremities arranged in the path of the upper forward edge of a package on the floor or way.

5. In combination with a conveyer having a bed or floor provided with an approximately horizontal section at the receiving end of the conveyer and with an upwardly-inclined section leading from said approximately-horisontal section, means traveling above and below the bed or floor for propelling packages along the same, means for feeding packages to the approximately-horizontal receiving-section of the bed or floor, the propelling devices in their travel from the delivering end to the receiving section of the conveyer traversing a path which is intersected by the path of travel of a package to said receiving section, and upwardly-yieldable means arranged over the approximately-horizontal section of the conveyer, in such relation to the package and bed or floor as to permit a package whose rear end is properly engaged with a propelling device to be forced along the bed or floor while it will restrain movement up the inclined part of the conveyer of a package whose bottom is improperly engaged with a flight.

[Claims 6 to 10 not printed in the Gazette.]

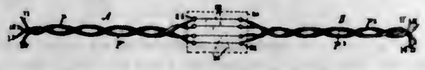
1,064,432. FLEXIBLE METALLIC TUBING. WILLIAM BERRYMAN and ARTHUR REDGRAVE, Penders End, England, assignors to The United Flexible Metallic Tubing Company Limited, Penders End, England. Filed Dec. 24, 1910. Serial No. 599,211. (Cl. 137—75.)



1. A flexible metal tubing consisting of a metal strip helically coiled to form a series of convolutions, said strip having an inwardly directed channel formed on one edge, and an outwardly directed and similarly shaped channel on the other edge parallel with the first channel, so that the channeled edges of two adjoining convolutions of the strip interlock, each convolution also having an inwardly directed channel and an outwardly directed channel between the interlocking channels and parallel therewith, and a packing strip seated in the interlocking channels; substantially as described.

2. A flexible metallic tubing, consisting of a metal strip helically coiled to form a series of convolutions, said strip having an inwardly directed channel formed on one edge, and an outwardly directed and similarly shaped channel on the other edge parallel with the first channel, so that the channeled edges of two adjoining convolutions of the strip interlock, each convolution also having a plurality of inwardly directed channels and a plurality of outwardly directed channels of similar shape to the interlocking channels and parallel therewith, the last mentioned channels being located between the interlocking channels, and a packing strip seated in the interlocking channels; substantially as described.

1,064,433. METHOD OF REDUCING TELEPHONIC DISTURBANCES. OTTO B. BLACKWELL, Maplewood, N. J., and GUSTAVUS A. ANDEREGG, Oak Park, Ill., assignors to American Telephone and Telegraph Company, New York, N. Y., a Corporation of New York. Filed Apr. 11, 1912. Serial No. 690,158. (Cl. 178—45.)



1. The method of reducing disturbances between groups of adjacent conductors which consists in determining the differences in capacities of the conductors of one group with relation to those of another, and then so combining the capacities of the groups that they tend to balance.

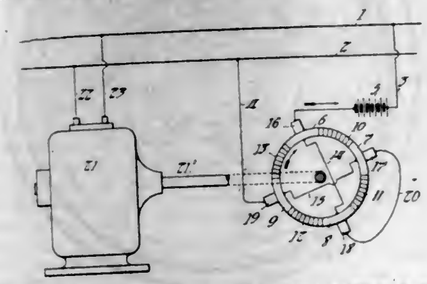
2. The method of balancing successive groups of conductors, between the conductors of each of which groups are inequalities in the capacities, which consists in determining such inequalities and then so joining the conductors in successive groups that said inequalities tend to neutralize one another.

3. The method of balancing successive groups of conductors which consists in connecting the groups to one another in various combinations, measuring the capacities between the conductors as thus joined, and permanently connecting the conductors to give the preferred relation between the capacities.

4. The method of balancing a phantom circuit, between the elements of successive sections of which there are inequalities in capacity, which consists in determining the inequality of capacity between the side circuits of the phantom and between the side circuits and the phantom, and then so joining such elements in the successive sections as to produce a minimum total unbalance.

5. The method of reducing disturbances between adjacent conductors arranged in successive groups which consists in determining the differences in capacities of the conductors of one group with relation to those of another of the series, and then so combining the capacities of the successive groups that they tend to balance.

1,064,434. ALTERNATING-CURRENT RECTIFIER. DONALD M. BLISS, West Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed Aug. 21, 1911. Serial No. 645,163. (Cl. 171—253.)



1. In an alternating current rectifying system, a commutator having a plurality of insulated pairs of electrically connected active segments, and a set of brushes common to all of said segments, half of which are arranged to be connected in series during alternate half waves of alternating current, and the other half of which are arranged to be connected in series during the other half waves of alternating current, substantially as described.

2. In an alternating current rectifying system, alternating current mains, a direct current translating device, a plurality of brushes, and a commutator for connecting the direct current translating device to the alternating current mains alternately through each half of the brushes, said commutator having conducting segments, all of which are adapted to coöperate with each of said brushes, substantially as described.

3. In an alternating current rectifying system, alternating current mains, a direct current translating device, a plurality of brushes, and a commutator for connecting the direct current translating device to the alternating current mains alternately through each half of the brushes, the said commutator having active segments adapted to contact with each of said brushes successively, substantially as described.

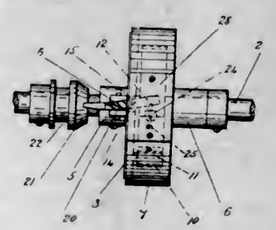
4. In an alternating current rectifier, a plurality of insulated pairs of oppositely disposed and electrically connected active segments symmetrically disposed and mounted for rotation around an axis, a set of brushes symmetrically disposed around said axis and located to contact with each of said segments during a portion of the rotative movement thereof, and means enabling said brushes to be connected in series through all of said segments while said brushes and segments are in contact, substantially as described.

5. In an alternating current rectifier, a plurality of insulated pairs of oppositely disposed and electrically connected active segments, said segments being symmetrically disposed and mounted for rotation around an axis, and a set of brushes, the number of which divided by the number of active segments is an integer, symmetrically disposed around said axis and located to contact with each of said segments during a portion of the rotative movement thereof, substantially as described.

[Claim 6 not printed in the Gazette.]

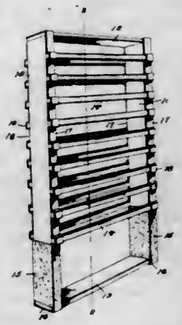
1,064,435. FRICTION-CLUTCH. LAWRENCE G. BLYSTONE, Cambridge Springs, Pa. Filed Oct. 4, 1912. Serial No. 723,895. (Cl. 192—14.)

1. In a friction clutch, the combination with two clutch members, of a resilient clutch band having one end secured to one clutch member, a clutch lever pivoted to the said clutch member and arranged longitudinally of its axis and connected at one end to the said band, a bell-crank lever having its arms arranged at substantially a right angle to each other and having its middle part pivoted to the said clutch member, one arm of the bell-crank lever being arranged radially of the axis of the clutch members with its free end portion provided with means for imparting motion to the free end portion of the clutch lever, and means for moving the bell-crank lever pivotally to tighten the clutch band on the other clutch member.



2. In a friction clutch, the combination with a clutch disk having an opening at its periphery, of a clutch wheel of smaller diameter than the clutch disk and provided with a peripheral extension which overlaps the said disk and forms a chamber, a resilient clutch band arranged in the said chamber and having one end secured to the said disk, said band being adapted to engage with the said clutch wheel, a clutch lever pivoted to the clutch disk and projecting through its said opening and having its inner end connected with the clutch band, a bell-crank lever having its arms arranged at substantially a right angle to each other and having its middle part pivoted to the clutch disk, one arm of the bell-crank lever being arranged radially of the axis of the disk and wheel with its free end portion provided with means for imparting motion to the projecting outer end portion of the clutch lever, and means for moving the bell-crank lever pivotally to tighten the clutch band on the clutch wheel.

1,064,436. DRIER. MARY H. BORUCH, Elba, Nebr. Filed Feb. 7, 1913. Serial No. 746,948. (Cl. 34—26.)

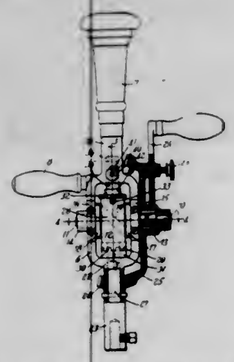


1. A drier device comprising a frame including vertical side members spaced apart, strips engaging the edges of the side members and bent into sockets at spaced intervals, and horizontal supporting members spaced apart and arranged in pairs and engaging in the sockets of the strips.

2. A drier device comprising a frame including vertical side members spaced apart, strips engaging the edges of the side members and bent into sockets at spaced intervals and extending at their upper ends over the side members to form receiving sockets above the same, horizontal supporting members spaced apart and arranged in pairs and engaging in the sockets of the strips, vermin-proof checking members upon the side members below the lower supporting members and extending below the side members to form sockets beneath the same, a base member re-

ceived at its ends in the sockets of the sheathing members, and a head member received at its ends in the sockets above the side members.

1,064,437. DRIVING MECHANISM. SEYMOUR A. BOSTWICK, Roxbury, Mass., assignor to Philip G. H. Bennet, Boston, Mass. Filed June 14, 1912. Serial No. 703,688. (Cl. 74—50.)

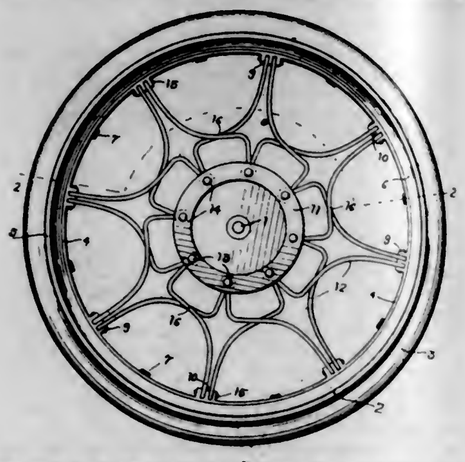


1. A device of the character described having, in combination, a frame, a driven shaft a driving shaft journaled therein, the median axial lines of said shafts extending at an angle to each other, said driven shaft being in two parts, one of said parts movable into and out of interlocking engagement with the other of said parts, a sleeve slidable in said frame longitudinally of said driven shaft and constituting a bearing for said movable part, means to lock said sleeve against longitudinal movement on said movable part while allowing the same to rotate therein, a pin fast to said sleeve and projecting outwardly therefrom through a U-shaped slot in said frame, a nut having screw-threaded engagement with the outer end of said pin and adapted to bear against said frame, whereby said movable part may be locked into and out of engagement with the other part of said driven shaft, a handle fast to said driving shaft, a gear fast to said driven shaft, another gear meshing into said first-named gear and means to lock said second-named gear to said driving shaft.

2. A device of the character described having, in combination, a frame, a driven shaft and a driving shaft journaled therein, the median axial lines of said shafts extending at an angle to each other, said driven shaft being in two parts, one of said parts movable into and out of interlocking engagement with the other of said parts, a sleeve slidable in said frame longitudinally of said driven shaft and constituting a bearing for said movable part while allowing the same to rotate therein, a pin fast to said sleeve and projecting outwardly therefrom through a U-shaped slot in said frame, a nut having screw-threaded engagement with the outer end of said pin and adapted to bear against said frame, whereby said movable part may be locked into and out of engagement with the other part of said driven shaft, a handle fast to said driving shaft, a gear fast to said driven shaft, another gear meshing into said first named gear and journaled on said frame concentric with said driving shaft and a screw on said handle adapted to engage said last named gear.

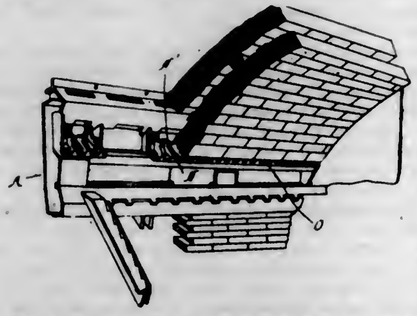
1,064,438. SPRING-WHEEL. FREDERICK WILLIAM BRISTOW, Dorrisville, Ill. Filed Dec. 23, 1912. Serial No. 738,336. (Cl. 152—50.)

A wheel of the class described comprising a hub and a rim, boxes secured at intervals to said rim, each of said boxes being formed with a partition wall, said hub being formed with annular channels, springs arranged in pairs disposed between said rim and said hub, the outer ends of each pair of springs being secured in one of said boxes upon the opposite sides of said partition plate whereby the outer ends of said springs are spaced, the intermediate portions of said springs extending circumferentially of the wheel in opposite directions, the inner end of



one spring of each pair being pivotally mounted in one of the channels in the hub, and the inner end of the other spring of each pair being pivotally mounted in the other channel in the hub, and said circumferentially extending portions of each pair of springs being offset in opposite directions, as and for the purpose described.

1,064,439. FURNACE. FRANK L. BROMLEY, Detroit, Mich., assignor to Detroit Stoker Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 22, 1910. Serial No. 598,839. (Cl. 110—29.)

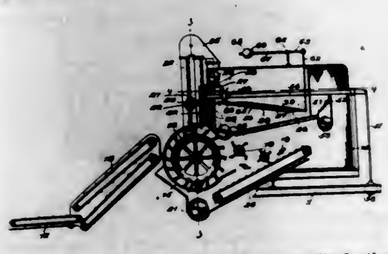


1. In a furnace, the combination with a refractory arch, of a fuel magazine at one side thereof, provided with a side wall having an outwardly extending ledge and a downwardly opening pocket positioned above said ledge and an arch abutment having a portion seated on said ledge, and a portion projecting into the pocket positioned thereabove.

2. In a furnace, the combination with a refractory arch, of a fuel magazine at one side thereof provided with a side wall having an outwardly extending ledge and a plurality of downwardly opening pockets positioned above said ledge, and a plurality of independent arch abutments each having a portion seated on said ledge and a portion projecting upwardly into one of the pockets.

1,064,440. GRAIN-CLEANER FOR HARVESTERS. ROBERT BROWN, Dayton, Wash. Filed Mar. 11, 1912. Serial No. 683,165. (Cl. 130—27.)

1. In a machine of the character described, the combination of a frame-work, a casing supported thereby, a shaking sieve mounted in the casing, a bar extending longitudinally of the casing above the sieve and mounted to turn about its longitudinal axis, a laterally swinging pendulum connected to one end of the bar, a strap connected to the bar, and a pivotal connection between the strap and the sieve.



2. In a machine of the character described, the combination of a frame-work, a casing supported thereon, a shaking sieve mounted in the casing, a bar extending longitudinally of the casing and mounted to turn about its longitudinal axis, a laterally swinging pendulum connected to said bar, a pivotal connection between the forward edge of the sieve and the bar, a hanger rod connected to the rear edge of the sieve, and a longitudinally swinging pendulum connected to said hanger rod.

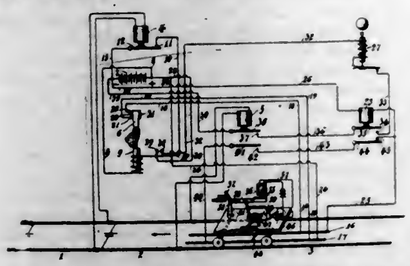
3. In a machine of the character described, the combination of a frame-work, a casing supported thereon, a shaking sieve mounted in the casing, a longitudinally extending bar mounted in the casing above the sieve and pivotally connected to the forward edge of the latter, a laterally swinging pendulum connected to said bar, a shaft extending transversely across the top of the casing, a hanger rod having a crank connection with the shaft and pivotally connected at its lower end to the rear edge of the sieve, and a longitudinally swinging pendulum connected to said shaft.

4. In a machine of the character described, the combination of a casing, a sieve mounted in said casing, a series of superimposed and spaced transversely extending bars mounted in the casing and separated from one wall thereof, means for forcing a blast of air laterally into the space between said bars and the said wall of the casing, and deflectors mounted in said space, for the purpose specified.

5. In a machine of the character described, the combination of a casing, a sieve mounted in the casing, means for establishing currents of air through the sieve, a series of upwardly and rearwardly inclined bars arranged in the casing at the rear end of the sieve and spaced laterally from each other, and a return auger underneath said bars, the upper edges of the bars being formed with upwardly and rearwardly facing shoulders.

[Claims 6 and 7 not printed in the Gazette.]

1,064,441. SYSTEM FOR VEHICLE CONTROL. JOHN T. CADE, Arcola, N. J., assignor to Federal Signal Company, a Corporation of New York. Filed Jan. 17, 1913. Serial No. 742,592. (Cl. 246—31.)



1. In a vehicle control system, the combination of an alarm device; vehicle controlled means for operating the alarm device; preventive means to forestall the operation of the alarm device; retarding means for the vehicle controlling said preventive means; and means to prevent power being applied to the vehicle for a predetermined time interval after said preventive means have been operated.

2. In a vehicle control system, the combination of an alarm device located on the trackway; vehicle controlled means for operating the alarm device; preventive means to forestall the operation of the alarm device; retarding means for the vehicle controlling said preventive means; and means to prevent power being applied to the vehicle for a predetermined time interval after said preventive means have been operated.

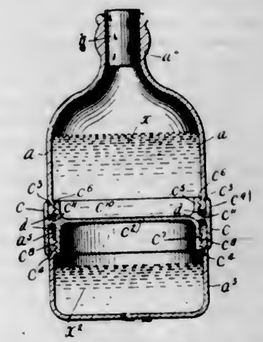
3. In a vehicle control system, the combination of an alarm device; vehicle controlled means for operating the alarm device; preventive means on the vehicle to forestall the operation of the alarm device; retarding means for the vehicle controlling said preventive means; and means to prevent power being applied to the vehicle for a predetermined time interval after said preventive means have been operated.

4. In a vehicle control system, the combination of an alarm device located on the trackway; vehicle controlled means for operating the alarm device; preventive means on the vehicle to forestall the operation of the alarm device; retarding means for the vehicle controlling said preventive means; and means to prevent power being applied to the vehicle for a predetermined time interval after said preventive means have been operated.

5. In a vehicle control system, the combination of a signal; an alarm device operable when the signal is in a predetermined condition of indication; vehicle controlled means for operating the alarm device when the signal is in said condition of indication; preventive means to forestall the operation of the alarm device; retarding means for the vehicle controlling said preventive means; and means to prevent power being applied to the vehicle for a predetermined time interval after said preventive means have been operated.

[Claims 6 to 14 not printed in the Gazette.]

1,064,442. BOTTLE. JOHN E. CADIGAN, New York, N. Y. Filed Dec. 26, 1912. Serial No. 738,542. (Cl. 215—71.)

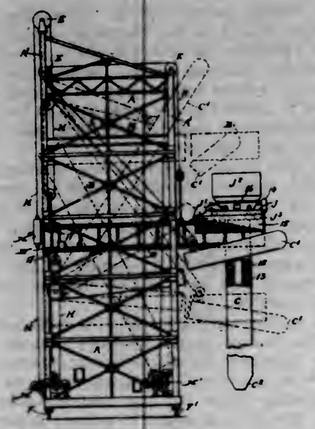


A bottle composed of top and bottom parts, the top part being provided with a neck and being open at the bottom, and the bottom part being open at the top, said parts being connected by a central annular member having a transverse web portion, and also provided with deep annular grooves in the top and bottom thereof and in which the bottom of the top part and the top of the bottom part are detachably secured.

1,064,443. APPARATUS FOR UNLOADING VESSELS. GEORGE CHARLES CHADWICK, Melbourne, Victoria, Australia. Filed Oct. 2, 1909. Serial No. 520,636. (Cl. 193—3.)

1. An elevator apparatus for coal and similar materials, comprising a tower, a boom vertically movable in

said tower, a conveyer horizontally movable on said boom and a chute also movable in said tower and pivotally connected at one end so as to be placed and supported in an inclined position for conveying away the material raised by the elevator.



2. An elevator apparatus for coal and similar materials comprising a tower, a boom, means for supporting and vertically moving the said boom in the tower, a conveyer horizontally movable on said boom and a chute pivotally mounted at one end and movable in said tower, so as to be arranged in conjunction with the conveyer for carrying away the material raised by the conveyer.

3. An elevator apparatus for coal and similar materials, comprising a tower, a boom, means for supporting and vertically moving the said boom in the tower, a conveyer horizontally movable on said boom, chutes, and means for moving the said chutes to properly place the same in position to carry away the materials raised by the elevator.

4. An elevator apparatus for coal and similar materials comprising a tower, a boom, means for supporting and vertically moving the said boom in the tower, a turntable mounted on the said boom so as to be horizontally movable thereon, a conveyer secured to the said turntable, chutes, and means for moving the said chutes to properly place the same in position to carry away the materials raised by the elevator.

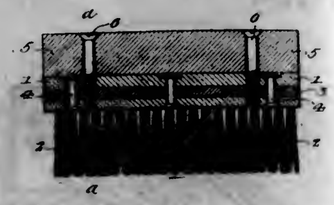
5. An elevator apparatus for coal and similar materials comprising a tower, a boom, means for supporting and vertically moving the said boom in the tower, a turntable mounted on the said boom so as to be horizontally movable thereon, a conveyer secured to the said turntable, chutes, means for moving the same to properly place the same in position to carry away the materials raised by the elevator, and means fixed in the tower for receiving the turntable and conveyer, when not in use, and then directly supporting the same, the said means being so arranged that the turntable and conveyer may run directly thereon from the boom.

1,064,444. BRUSH. FREDERICK W. COCKER, Philadelphia, Pa., assignor to M. Cocker & Co., Philadelphia, Pa., a Firm consisting of Mary Cocker and Frederick W. Cocker. Filed Apr. 24, 1912. Serial No. 692,849. (Cl. 15—13.)

1. The combination in a brush of a head; bristles mounted in said head; a back; a reinforcing plate mounted in one of the two members comprised by the head and back; and means engaging said reinforcing plate for holding together the head and the back.

2. The combination in a brush of a head; a series of bristles mounted therein; a back; a reinforcing plate set in said head; means for holding said plate in position; and means for holding together the back and the head.

3. The combination in a brush of a head; bristles mounted therein; a transversely extending reinforcing plate set in each end of said head; a back; and independent sets of devices for holding together the back and the head, and retaining the plate in place in the head respectively.

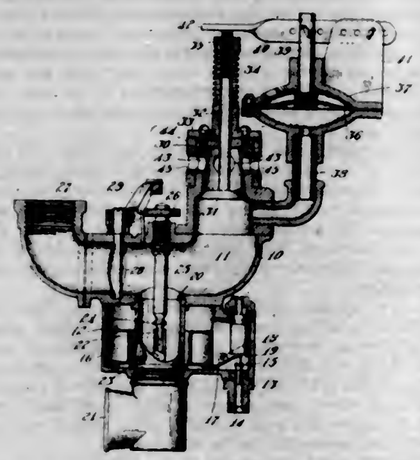


4. The combination in a brush of a head; bristles mounted therein; a back; a plate of reinforcing material set in said head; and screws mounted in the back and engaging the head for holding the back and the head together.

5. The combination in a brush of a head; bristles mounted therein; a back; a plate of reinforcing material set in said head; and screws mounted in the back and threaded into the plate in said head for holding the back and the head together; said screws engaging the back only at their heads.

[Claim 6 not printed in the Gazette.]

1,064,445. CARBURETER. ALPHONSO S. COMSTOCK, Evanston, Ill. Filed Feb. 26, 1912. Serial No. 680,039. (Cl. 48—155.2.)

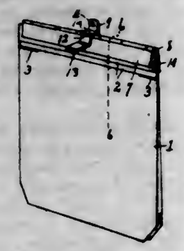


1. In a carbureter, in combination, a vacuum chamber, an air induction port and a fuel induction port open to such chamber, an auxiliary air port open to the vacuum chamber, a manually controllable regulating valve for the last named port, a normally closed valve in said port, a diaphragm directly responsive to the lowering of pressure in the vacuum chamber, a stem supported by the diaphragm, and a lever fulcrumed upon a fixed support and operatively connected with the atem and having a bearing on the valve in opposition to its closing means.

2. In a carbureter, in combination, a vacuum chamber, an air induction port and a fuel induction port open to such chamber, an auxiliary air port open to the vacuum chamber, a manually controllable regulating valve for the last named port, a normally closed valve in said port, a diaphragm directly responsive to the lowering of pressure in the vacuum chamber, a stem supported by the diaphragm, a lever fulcrumed upon a fixed support and operatively connected with the atem and having a bearing on the valve in opposition to its closing means and means for shifting the fulcrum of the lever.

3. In a carbureter, in combination, a vacuum chamber, an air induction port and a fuel induction port open to such chamber, an auxiliary air port open to the vacuum chamber, a normally closed valve in said port, a diaphragm directly responsive to the lowering of pressure in the vacuum chamber, a stem supported by the diaphragm, and a lever fulcrumed upon a fixed support and operatively connected with the stem and having a bearing on the valve in opposition to its closing means.

1,064,446. MOTHPROOF RECEPTACLE. JOHN N. COURTNEY, Detroit, Mich. Filed Aug. 26, 1910. Serial No. 579,147. (Cl. 150—6.)

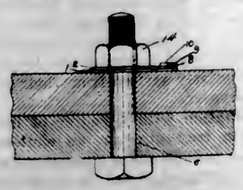


1. A moth proof receptacle comprising a bag, a foldable fly of fabric material attached to one margin of the mouth opening of the bag, said fly having terminal portions which project beyond the ends of the mouth opening and extend downwardly below the plan of said mouth, said terminal portions being foldable onto the body of the fly and onto the face of the bag adjacent the mouth thereof, said fly and foldable terminals being foldable over the mouth of the bag opening and onto the body of the bag, hinged jaws mounted on the bag at the top to clamp said foldable members together, and means for holding said jaws closed with spring tension.

2. A moth proof receptacle comprising a bag having a foldable upper portion, a fixed jaw secured to the outer wall of the bag below said foldable portion, a hanger within the bag secured through the wall of the bag to said fixed jaw, a movable jaw hinged to the fixed jaw to swing thereon, said movable jaw being adapted to embrace and clamp the foldable portion of the bag against the fixed jaw, and an exterior hanger secured to the fixed jaw for supporting the bag.

3. A moth proof receptacle comprising a bag, a metal plate mounted upon the top portion of the bag adjacent the mouth thereof, a movable jaw hinged to said plate, a spring mounted on said plate the margins of the mouth of the bag being foldable between said plate and spring-actuated jaw and a projecting member on the movable jaw adapted to engage said spring to hold with tension the movable jaw in the closed position.

1,064,447. NUT AND BOLT LOCK. CHARLES CARROLL CROSS, Philadelphia, Pa. Filed July 18, 1912. Serial No. 710,129. (Cl. 151—25.)



1. A nut and bolt lock consisting of a cam apertured to fit the nut, locking means adapted to engage the bolt and connected to the cam to be forced thereby into locking engagement with the bolt.

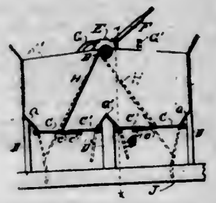
2. A nut and bolt lock consisting of a cam apertured to fit the nut and rotate therewith, locking means adapted to engage the bolt and connected to the cam to be forced thereby into locking engagement with the bolt, and means for locking the cam against rotation.

3. A nut and bolt lock consisting of a plate having a tapering slot for the bolt, the smaller end of which is of a width less than the diameter of the bolt, and means rotating with the nut and adapted to engage the plate and force it to one side so that the narrow portion of the slot engages the bolt and locks it.

4. A nut and bolt lock consisting of a cam having an aperture to receive and fit the nut, and a member having a tapering elongated slot to receive the bolt and provided with means opposite the large end of the slot for engaging the edge of the cam to force the slotted member to one side in the direction of the length of the slot and bring the narrow portion of the slot into engagement with the bolt.

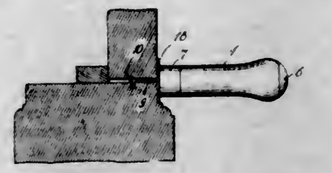
5. A nut and bolt lock consisting of a cam having an aperture to receive and fit the nut, and a member having a tapering elongated slot to receive the bolt and provided with means opposite the large end of the slot for engaging the edge of the cam to force the narrow portion of the slot into engagement with the bolt, and means for locking the cam against rotation.

1,064,448. DUMP-WAGON. HARVEY C. DANIELS, Grand Rapids, Mich. Filed Oct. 18, 1909. Serial No. 523,364. (Cl. 21—20.)



In combination with the axletrees, running gear and box of a dump wagon, high bolsters secured crosswise of the axletrees at each end and the center, the sides of the wagon box mounted on the bolsters at the ends of the axletrees with the lower edges of said sides inclined inwardly and projecting beyond the sides of the bolsters, an inverted V shaped ledge mounted on the bolsters at the center of the axletrees and extending longitudinal of the box forming inclines the lower edges of which project beyond the sides of the bolsters, a wide door hinged well back under the projecting lower edge of each side of the box and a narrow door hinged well back under the projecting lower edge of each incline in the center of the axletrees, said doors extending the entire length of the wagon box, and means for opening and closing the doors.

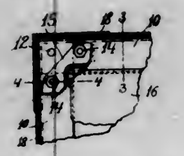
1,064,449. DOOR-SECURER. JOHN G. DANSEY, Topeka, Kans. Filed Sept. 12, 1912. Serial No. 720,075. (Cl. 16—8.)



A door securer of the character described, comprising a frame engaging member having on its inner end means to engage the door frame, or keeper of the lock, a threaded shank on the outer end of said member, a guard plate engaged with said member, a tubular handle forming in connection with said plate a clamping member, said handle having slidable engagement with said shank and being

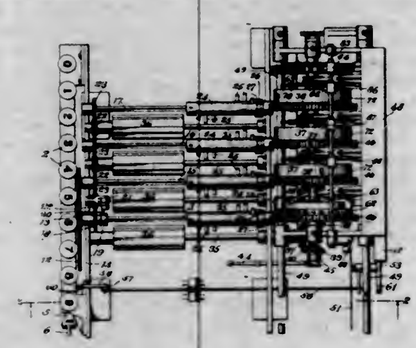
formed with an internal web and with a transverse aperture adjacent said web, a spring projected dog arranged to slide transversely in the handle adjacent said web, and having a central elongated shank receiving opening, one end of said opening being formed with a tooth to engage the threads of said shank, and a finger pin projecting from one end of the dog and through said aperture in the handle, whereby the tooth may be disengaged from said threaded shank to permit the quick removal of said clamping member.

1,064,450. PICTURE OR SIGN FRAME. FRANK G. DAVISON, Boston, Mass. Filed Dec. 23, 1912. Serial No. 738,166. (Cl. 40—152.)



A sheet metal frame comprising marginal members and connecting corner pieces overlapping said marginal members, the latter having flanges embracing edge portions of the marginal members, stay strips extending across the corners of the space within said frame and having offset portions intermediate their ends, said offset portions being located in a plane spaced from the plane of the inner edges of the marginal members a distance substantially equal to the thickness of a plate mounted in said frame, whereby said plate may be confined between said inner edges and offset portions, and fastenings passing through the ends of said strips and the corner pieces and marginal members of the frame.

1,064,451. CALCULATING-MACHINE. EDWARD L. DE FOREST, Westhampton, N. Y. Filed Feb. 2, 1912. Serial No. 674,948. (Cl. 235—82.)



1. A calculating machine comprising the combination of a plurality of independently-movable setting devices which may be independently positioned simultaneously to represent a number consisting of a plurality of digits and constituting a multiplicand, a series of depressible number-keys, a series of number-wheels, and means operated by the depression of any one of the number-keys for operating the number-wheels to position them in accordance with the product of said multiplicand consisting of a plurality of digits and the value of the depressed key.

2. A calculating machine comprising the combination of movable setting devices which may be independently positioned simultaneously to register a number consisting of a plurality of digits and constituting a multiplicand, a plurality of depressible keys, a plurality of number-wheels, carrying mechanism for carrying from one number-wheel to the wheel of next higher denomination and means operated by the depression of any one of said keys for operating the number-wheels to position them in accordance with the product of said multiplicand consisting of a plurality of digits and the value of the depressed key.

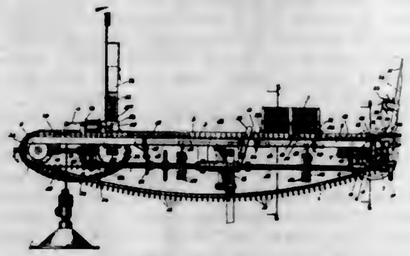
3. A calculating machine comprising the combination of setting means for setting up a number consisting of a plurality of digits, a plurality of number-wheels, a plurality of keys, and means actuated by a single depression of a key for actuating said wheels to cause them to indicate the product of said number consisting of a plurality of digits and the number of the key depressed, substantially as set forth.

4. A calculating machine comprising the combination of means for setting up a number consisting of a plurality of digits, a plurality of number-wheels, an operating device and means actuated by a single operation of the operating device for actuating the number-wheels to cause them to indicate the product of said number consisting of a plurality of digits and another number, substantially as set forth.

5. A calculating machine comprising the combination of a plurality of independently-movable setting devices which may be independently positioned simultaneously to represent a number consisting of a plurality of digits and constituting a multiplicand, a series of depressible number-keys, a series of number-wheels, a movable carriage on which the number-wheels are mounted, means operated by the depression of any one of the number-keys for operating the number-wheels in accordance with the product of said multiplicand consisting of a plurality of digits and the value of the depressed key, and means controlled by the depression of a number-key for causing movement of said carriage.

[Claims 6 to 32 not printed in the Gazette.]

1,064,452. BOX-FILLING MACHINE. JOHN W. DENMEAD, Akron, and JACOB P. WRIGHT, Barberton, Ohio, assignors to The Diamond Match Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 1, 1912. Serial No. 712,624. (Cl. 93—6.)



1. The combination with a source of match-supply, of means for impelling box-trays consecutively to and past said source of supply, an endless chain shuck-conveyer and an endless chain plunger-conveyer between which the filled trays pass after they leave the source of supply, means for impelling said conveyers concurrently with and in the same direction as the filled trays, plungers in the plunger-conveyer, and means for reciprocating said plungers during their travel adjacent the trays, whereby said trays are progressively shifted from their path into shucks in the shuck conveyer.

2. The combination with a source of match supply, of an endless chain tray-conveyer, an endless chain shuck-conveyer, and an endless chain plunger-conveyer, said tray-conveyer being arranged to travel to and past the source of match supply, and thence between the shuck and plunger conveyers, means for concurrently impelling the adjacent portions of said conveyers in the same direction, plungers in the plunger-conveyer, and means for reciprocating said plungers during their travel adjacent the tray-conveyer, whereby the filled trays are progressively ejected from the last-named conveyer and inserted into shucks in the shuck-conveyer.

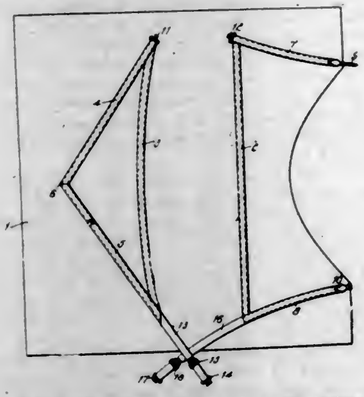
3. The combination with a source of match supply, of an endless chain tray-conveyer, an endless chain shuck-conveyer, and an endless chain plunger-conveyer, said tray-conveyer being arranged to travel to and past the source of match supply and thence between the shuck and plunger conveyers, means for concurrently impelling the adjacent portions of said conveyers in the same direction, means for supplying shucks to the shuck-conveyer, plungers in the plunger-conveyer, and means for reciprocating said plungers during their travel adjacent the tray-conveyer, whereby the filled trays are progressively ejected from the last-named conveyer and inserted into shucks in the shuck-conveyer.

4. The combination with a source of match supply, of an endless chain tray-conveyer, an endless chain shuck-conveyer, and an endless chain plunger-conveyer, said tray-conveyer being arranged to travel adjacent to and past the source of match supply and thence between the shuck and plunger conveyers, means for concurrently impelling the adjacent portions of said conveyers in the same direction, means for vibrating said tray-conveyer during a part of its travel, plungers in the plunger-conveyer, and means for reciprocating said plungers during their travel adjacent the tray-conveyer, whereby the filled trays are progressively ejected from the last-named conveyer and inserted into shucks in the shuck-conveyer.

5. The combination with a source of match supply, of an endless chain tray-conveyer traveling in a path adjacent thereto, means for supplying trays to said conveyer, an endless chain shuck-conveyer, means for supplying shucks thereto, an endless chain plunger-conveyer, plungers thereon, means for continuously and concurrently impelling said conveyers whereby the trays on the tray-conveyer after they have been supplied with matches are carried between the active stretches of the shuck and plunger conveyers, and in endwise alinement with the shucks and plungers of the latter conveyers, and means for reciprocating said plungers to and from the tray-conveyer while the three-named conveyers are running side by side, whereby the filled trays in the tray-conveyer are pushed into their complementary shucks borne by the shuck-conveyer.

[Claims 6 to 22 not printed in the Gazette.]

1,064,453. CONSTRUCTION OF HORSE-BLANKETS. LOUIS H. DIETZ, Chicago, Ill. Filed Nov. 11, 1912. Serial No. 730,585. (Cl. 54—79.)



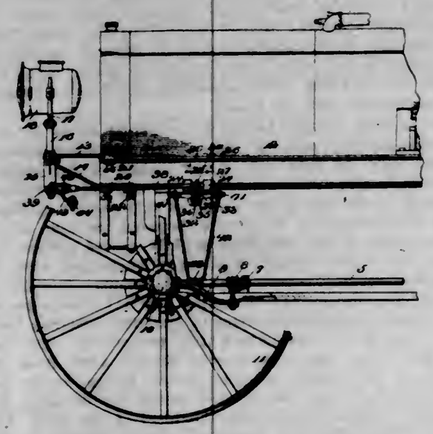
1. A horse blanket having two straight strips of reinforcing material secured thereto and extending from a point near the rear end of the middle of the blanket diagonally forward to points near the edges of the blanket slightly to the rear of the middle of said edges, a reinforcing strip secured to the blanket between the ends of the first named strips and being slightly curved toward the rear end of the blanket, a straight reinforcing strip of material secured transversely to the blanket forward of its middle portion and extending nearly to the edges of the blanket, reinforcing strips of material extending from the ends of the last named strip toward the front end of the blanket and being curved slightly away from the edges of the blanket, fastening devices secured to the forward ends of the last named strips for securing the blanket in place around the shoulders of the horse, and connecting strips and fastening devices secured to the connections of the other strips mentioned near the edges of the blanket for securing the edges of the blanket in place around the body of the horse, said connecting strips being crossed when in place upon the horse.

2. A horse blanket having two straight strips of reinforcing material secured thereto and extending from a point near the rear end of the middle of the blanket diagonally forward to points near the edges of the blanket slightly to the rear of the middle of said edges, a reinforcing strip secured to the blanket between the ends of the first named strips and being slightly curved toward the rear end of the blanket, a straight reinforcing strip of material secured transversely to the blanket forward of its middle portion and extending nearly to the edges of the blanket, reinforcing strips of material extending from the ends of the last named strip toward the front end of the blanket and being curved slightly away from the edges of the blanket, fastening devices secured to the forward ends of the last named strips for securing the blanket in place around the shoulders of the horse, and connecting strips and fastening devices secured to the connections of the other strips mentioned near the edges of the blanket for securing the edges of the blanket in place around the body of the horse, said connecting strips being crossed when in place upon the horse, the first three named strips being arranged to form a pocket in the blanket between them for receiving the hip bones of the horse.

3. A horse blanket having two straight strips of reinforcing material secured thereto and extending from a point near the rear end of the middle of the blanket diagonally forward to points near the edges of the blanket slightly to the rear of the middle of said edges, a reinforcing strip secured to the blanket between the ends of the first named strips and being slightly curved toward the rear end of the blanket, a straight reinforcing strip of material secured transversely to the blanket forward of its middle portion and extending nearly to the edges of the blanket, reinforcing strips of material extending from the ends of the last named strip toward the front end of the blanket and being curved slightly away from the edges of the blanket, fastening devices secured to the forward ends of the last-named strips for securing the blanket in place around the shoulders of the horse, and connecting strips and fastening devices secured to the connections of the other strips mentioned near the edges of the blanket for securing the edges of the blanket in place around the body of the horse, said connecting strips being crossed when in place upon the horse.

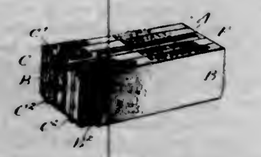
4. A horse blanket having two straight strips of reinforcing material secured thereto and extending from a point near the rear end of the middle of the blanket diagonally forward to points near the edges of the blanket slightly to the rear of the middle of said edges, reinforcing strips of material extending obliquely from the front end of the blanket toward its side edges and being curved slightly away from the edges of the blanket, fastening devices secured to the forward ends of the last named strips for securing the blanket in place around the shoulders of the horse, and connecting strips and fastening devices secured to the said reinforcing strips near the side edges of the blanket for securing the edges of the blanket in place around the body of the horse, said connecting strips being crossed when in place upon the horse, the said reinforcing strips constituting, together with the connecting strips, when in place upon the horse, a single, continuous girth crossing under the body of the horse and having no abrupt change in direction throughout.

1,064,454. LAMP-SUPPORT FOR VEHICLES. ARTHUR E. DOBBS, Winona, Minn. Filed July 31, 1912. Serial No. 712,607. (Cl. 240—62.)



The combination with a motor driven vehicle having a horizontally extending steering shaft, of a lamp support rotatably mounted upon the vehicle, a pair of hooks, a bracket carried by the hooks, means for securing the hooks to the frame of the vehicle, a rock arm pivotally mounted on the bracket, a cord connecting the ends of the rock arm and wound around the horizontal steering shaft, and means connecting the central portion of the rock arm to the lamp support.

1,064,455. PRINTING-FORM. PHILIP TELL DODGE, New York, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Oct. 26, 1912. Serial No. 727,801. (Cl. 101—175.)



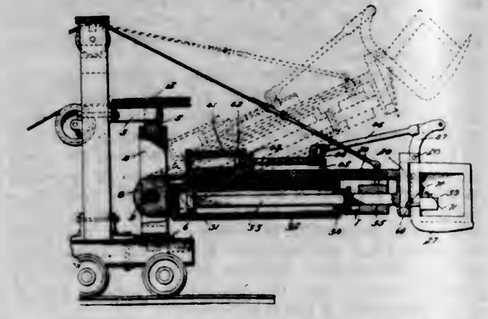
1. A printing form comprising a type having an overhanging character and a supporting shank of less width than the character, in combination with a slug recessed to receive said shank and extending beneath said overhanging character to support it, the said shank-receiving recess being of such depth that no part of the shank extends beyond the side surface of the slug.

2. A printing form comprising a type having an overhanging character and a supporting shank of less width than the character, in combination with a slug carrying printing characters on a portion of its edge and the remaining portion thereof extending beneath the overhanging type character to support it, and recessed in its side to receive said shank, the said recess being of such depth that no part of the shank extends beyond the side surface of the slug.

3. A printing form comprising a type with an overhanging character and a shank of less width than the character, in combination with a printing slug recessed in its side to receive said shank and in its edge to receive and support said overhanging character, the said side recess being of such depth that no part of the shank extends beyond the side surface of the slug.

4. A printing form comprising a type having an overhanging character and a supporting shank of less width than the character, in combination with a plurality of slugs in lateral contact with each other, and extending beneath said overhanging character to support it, and formed in their sides with recesses of sufficient depth to receive and contain the said shank.

1,064,456. EXCAVATOR AND LOADER. HUGH F. DOLAN, Pottsville, Pa. Filed Apr. 30, 1912. Serial No. 694,245. (Cl. 37—16.)



1. In an excavator and loader, the combination of a support; an arm mounted to have movement on said support; means for actuating the arm; a cylinder mounted on the arm; a piston operable in said cylinder; a shovel carried by the piston; a second cylinder carried by the piston of the first-named cylinder; a piston operable in said second cylinder; means connecting said second piston with the shovel to actuate the latter; and means for emptying the contents of the shovel, substantially as described.

2. In an excavator and loader, the combination of a support; an arm mounted to have movement on said support; means for moving said arm; a cylinder mounted on the arm; a piston operable in said cylinder; a carriage connected to move with said piston; a shovel carried by said carriage; a second cylinder carried by the carriage; a piston operable in said second cylinder; means connecting said second piston with the shovel to actuate the latter; and means for emptying the contents of the shovel, substantially as described.

3. In an excavator and loader, the combination of a support; an arm mounted to have movement on said support; means for moving said arm; a cylinder mounted on said arm; a piston operable in said cylinder; a carriage connected to be actuated by said piston; a shovel pivotally mounted on said carriage; a second cylinder mounted on the carriage; a piston operable in said second cylinder; a piston rod and link connection between said second piston and the shovel adapted to swing said shovel on its pivot; and means for emptying the contents of the shovel, substantially as described.

4. In an excavator and loader, the combination of a support; an arm movably mounted on said support; means for moving said arm on its support; a cylinder mounted on said arm; a carriage mounted to reciprocate on said arm; a piston operable in said cylinder; a piston rod connecting said piston with said carriage; a shovel pivotally mounted on said carriage; a second cylinder carried by the carriage; a cross head mounted to reciprocate on said carriage; a piston operable in said second cylinder; a piston rod connecting said piston and said cross head; a link connecting said cross head with said shovel to turn the latter on its pivot; and means for emptying the contents of the shovel, substantially as described.

5. In an excavator and loader, the combination of a support; an arm movably mounted on said support; means for moving said arm; a cylinder mounted within said arm; a carriage mounted to reciprocate on said frame above said cylinder; a piston operable in said cylinder; a piston rod connection between said piston and said carriage, said carriage provided with a head at its outer end; a shovel pivotally mounted on said head and adapted to be reinforced thereby; a second cylinder mounted on and carried by said carriage; a cross head mounted to reciprocate on said carriage; a piston operable in said second cylinder; a piston rod connection between said piston and said cross head; a link connection between said cross head and said shovel adapted to actuate the latter on its pivot; and means for emptying the contents of the shovel, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,064,457. SAFETY-RAZOR. CLIFFORD E. DUNN, New York, N. Y., assignor to Gillette Safety Razor Company, a Corporation of Massachusetts. Filed May 25, 1907. Serial No. 375,586. (Cl. 30—12.)



1. A safety razor having a pair of blade clamping members, a rack connected with one of said members, and a pivotally-mounted locking device connected with the other of said members and having its free end located in position to engage said rack for locking said members together.

2. A safety razor comprising a guard having a central opening therein, a handle having a yoke-shaped portion connected with said guard and provided with a curved rack, a cap having a pair of lugs and a locking device pivotally mounted between said lugs having a cam portion, said locking device being adapted to extend through the opening in said guard and to be engaged with its free end with said curved rack.

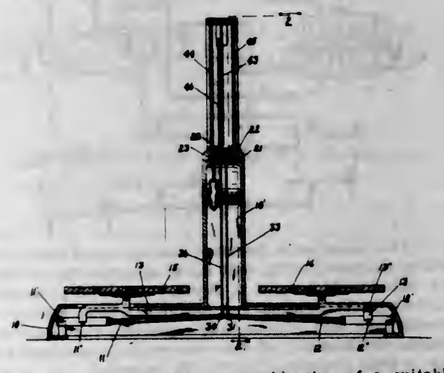
3. A safety razor having a pair of clamping members adapted to flex a thin razor blade, one of said members having an opening therein, a pivotal locking device connected with the other of the said members extending through said opening, and a rack fast with one of said members and located in position relatively to the free end of said pivotal locking device so as to be engaged thereby.

1,064,458. SCALE. FRANK P. DUNN, Anderson, Ind., assignor to The Anderson Tool Company, Anderson, Ind., a Corporation of Indiana. Filed June 21, 1909. Serial No. 503,338. (Cl. 73—104.)

1. A weighting scale including charts with two sets of reversely arranged oppositely facing scale graduations, an indicator adapted to traverse each set of scale graduations, means for fulcruming said indicators coaxially, oppositely extending arms rigidly connected with the indicators near their fulcrums, parallel connecting rods extending pivotally from said arms, a platform structure for receiving the load, a counterpoise and means for transmitting the effect of the load on said platform structure to said connecting rods.

2. In a weighing scale, the combination of a two-faced indicator, a pair of indicator fingers coöperating with said indicator, a suitable supporting structure, a pair of receiving platforms arranged upon opposite sides of said structure and connected for simultaneous movement in the same direction, a scale beam structure supporting said platforms, and means for counterbalancing said scale beam structure at different points under different loads.

3. In a weighing scale, the combination of a pair of scale beams, a pair of indicator members movable in opposite directions, indicating mechanism coöperating with said indicator members to gage the positions thereof, intermediate connections between said scale beams for producing opposite simultaneous movement thereof, counterbalancing mechanism applied to said scale beams for equilibrating the same at different points under different loads, and a receiving platform structure applied to the scale beams and extending to opposite sides of the indicating structure.

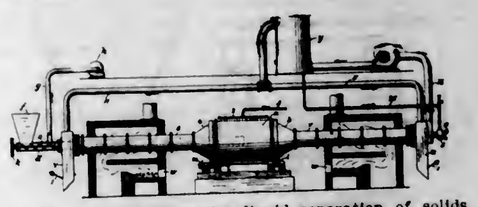


4. In a weighing scale, the combination of a suitable base having an intermediate upwardly extending casing, a pair of scale beams mounted within the base, a pair of load receiving platforms supported upon said scale beams and arranged one upon each side of said casing, indicating means in the upper part of said casing, and a connection from each of said scale beams to the indicating means.

5. In a weighing scale, the combination with a pair of scale beams, of a platform structure comprising a main portion one end of which is mounted upon one of said beams, another portion pivoted at one end of said main portion and mounted upon the other beam, and a separate platform carried near each end of said platform structure, substantially as and for the purpose set forth.

[Claims 6 and 7 not printed in the Gazette.]

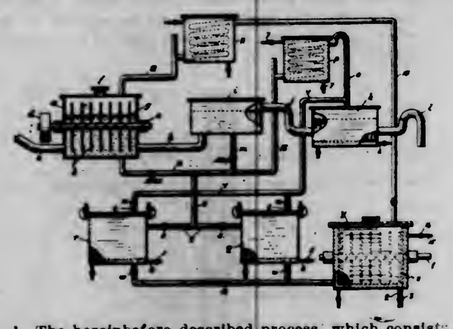
1,064,459. METHOD OF GRAVITY LIQUID SEPARATION OF SOLIDS. FRANCIS I. DU PONT, Wilmington, Del. Filed Dec. 1, 1909. Serial No. 530,759. (Cl. 83—85.)



1. The process of gravity liquid separation of solids, which consists in immersing the solids to be separated in a volatile gravity liquid, separately removing from the bath the separated constituents of different specific gravity, volatilizing the gravity liquid carried off by each constituent, condensing the same and returning the same to the separating bath, and maintaining the circuit of the liquid carried off from the bath by the constituents from its departure from the bath until return to the bath out of connection with the air.

2. The process of gravity liquid separation of solids, which consists in immersing the solids to be separated in a volatile gravity liquid, separately removing from the bath the separated constituents of different specific gravity, volatilizing the gravity liquid carried off by each constituent, condensing the same and returning the same to the separating bath, and maintaining the circuit including the bath, the liquid carried off by the constituents, the vaporization and condensation thereof out of connection with the air.

1,064,460. PRODUCTION OF BROMIN OR BROMIDS. FRANCIS I. DU PONT, Wilmington, Del., assignor to International Haloid Company, a Corporation of Delaware. Filed July 22, 1911. Serial No. 639,872. (Cl. 23—13.)

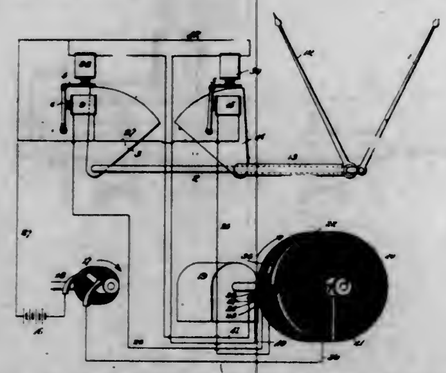


1. The hereinbefore described process, which consists in adding to and agitating with an aqueous solution containing uncombined bromin, a liquid substantially insoluble in the aqueous solution, and having a greater avidity for bromin than said solution, and separating the liquid containing the bromin from the aqueous layer, and agitating said bromin containing liquid with antimony.

2. The hereinbefore described process, which consists in adding to and agitating with an aqueous solution containing uncombined bromin, a liquid substantially insoluble in the aqueous solution, and having a greater avidity for bromin than said solution, and separating the liquid containing the bromin from the aqueous layer, and subjecting the bromin containing liquid to a drying or water removing action and then agitating it with antimony.

3. The hereinbefore described process, which consists in adding to and agitating with an aqueous solution containing uncombined bromin, carbon tetra chlorid, and separating the carbon tetra chlorid with its dissolved bromin from the aqueous layer, and causing the bromin while still in solution in the carbon tetra chlorid to act upon antimony.

1,064,461. SPEED-INDICATOR. LEONARD H. DYER, Greenwich, Conn. Filed May 6, 1908. Serial No. 431,078. (Cl. 235—104.)



1. A speed indicator having a plurality of counting mechanisms; an indicator actuated by each mechanism; means for alternately actuating said mechanisms; and time mechanisms co-acting therewith.

2. A speed indicator having with the observed mechanism; a plurality of means for successively indicating movements of the observed mechanism; means for actuating said means in alternation; and means co-acting with such first means at definite intervals of time.

3. A speed indicator comprising in combination; the observed mechanism; a plurality of means alternately responsive to movements of the observed mechanism; an indicator actuated by each of such mechanisms; with means operatable at intervals of time, coöperating and co-acting with the first means, to change the status of such first means at alternate intervals.

4. A speed indicator comprising in combination, the observed mechanism, a plurality of devices alternately and intermittently responsive to movements of the observed mechanism, to totalize movements; and means operatable at regular intervals co-acting with the first means.

5. A speed indicating apparatus comprising in combination with the observed mechanism; a plurality of totalizing devices alternately and intermittently moved by the observed mechanism; an indicator actuated by each of such devices; and time mechanism, the said time mechanism co-acting with the totalizing devices to affect the indicators at regular intervals.

[Claim 6 not printed in the Gazette.]

1,064,462. SEALING DEVICE. WILLIAM KERR EDGAR, Iola, Kans., assignor to The Metal Car Seal Company, Lawrence, Kans. Filed Mar. 6, 1912. Serial No. 682,065. (Cl. 70—98.)



1. In a sealing device substantially as specified, a strip of material bent into an angular loop, same being weakened at each bend by partial severance and having its ends intersectionally engaged by the insertion of a T-shaped head, at one, into a T-shaped slot, at the other, and secured by bending either or both of the ends projecting beyond the line of intersection.

2. In a sealing device substantially as specified, a strip of material bent into an angular loop, same being weakened at each angle by partial severance, and having its ends engaged by the insertion of a T-like head, at one, into a T-like slot, flanked by a shutter, at the other, and secured by bending said shutter over in either of the two possible directions.

3. In a sealing device substantially as specified, a strip of metal bent into an angular loop, same being provided with means at each bend to insure severance on being rebent, and having its ends engaged by the insertion of a T-shaped head, at one, into a T-shaped slot, flanked by a shutter, at the other, and secured by bending said shutter over in either of the possible directions at a point provided with means to insure its severance on being rebent.

4. In a sealing device as specified, a strip of metal bent into a triangular loop, same being weakened at each bend by partial severance, and having its ends engaged by the insertion of a reduced T-like head, at one, into a T-like slot, flanked by a shutter, at the other, and secured by bending said shutter over at the transverse portion of said slot, there being means provided at the extremities of said portion of said slot to insure severance thereat on being rebent.

1,064,463. SEALING DEVICE. WILLIAM KERR EDGAR, Lawrence, Kans., assignor to The Metal Car Seal Company, Lawrence, Kans. Filed Sept. 3, 1912. Serial No. 718,344. (Cl. 70—98.)

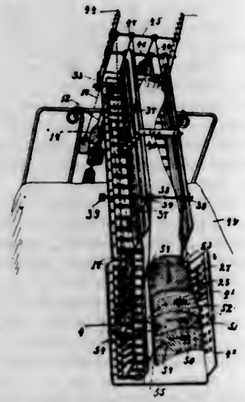
1. In a sealing device substantially as specified, a strip of material bent into an angular loop, same being weakened at each bend by partial severance, and having its ends intersectionally engaged by the insertion of a T-like tongue, at one, into a T-like slot flanked by a locker provided with an opening adjacent said slot, at the other, and secured by bending said locker down as far as possible over the projecting end of said tongue, the latter entering and fitting into said opening.

2. A strip of material bent into an angular loop, same being partially severed at each bend by an oblong perforation, and having its ends intersectionally engaged by the insertion of a T-like tongue with shoulders, at one, into a T-like slot flanked by a number-bearing locker provided with an opening adjacent said slot, at the other, and secured by bending said locker down as far as possible over the projecting end of said tongue, the latter entering and fitting snugly into said opening.



3. A strip of metal bent into a triangular loop, same being partially severed and weakened at each angle by an oblong perforation with circular extremes, and having its ends intersectionally engaged by the insertion of a T-like tongue with lugs at its base, at one, into a T-like slot flanked by a number-bearing locker provided with an opening adjacent said slot, at the other, and secured by bending said locker down as far as possible over the projecting end of said tongue, the latter entering and fitting snugly into said opening.

1,064,464. SURGICAL APPARATUS FOR SETTING FRACTURED LEGS. WENDELIN EMGE, Hohentengen, Germany. Filed Jan. 6, 1910. Serial No. 536,632. (Cl. 128—52.)



1. In apparatus for the purposes described, the combination with the hinged grate and side-walls carried thereby, of an adjustable rod or guide-support on the underside of the grate provided with guides for a tension cord and adjustable longitudinally with reference to the grate.

2. In apparatus for the purposes described, the combination with the hinged grate and side-walls carried thereby, of a rod or guide-support carried thereby and arranged transversely on one of the side-walls and adjustable longitudinally with reference to the grate, and guides for a tension cord carried by said rod or guide-support.

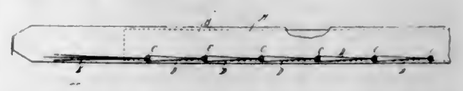
3. In apparatus for the purposes described, the combination with the hinged grate and side-walls carried thereby, of a rod or guide-support carried by the underside of the grate and adjustable longitudinally with reference thereto, and guides for a tension cord carried by said adjustable rod and adjustable transversely with respect thereto.

4. In apparatus for the purpose described, the combination with the hinged grate and side-walls carried thereby, of a rod or guide-support carried on one of the side-walls and arranged transversely and adjustable thereon longitudinally with respect to the grate, and guides for a tension cord carried by said rod and adjustable transversely thereto.

5. In apparatus for the purposes described, the combination with the hinged grate adapted to support the limb, of guides arranged on the outer end of said grate, and longitudinally adjustable guides on the underside of said grate said guides being adapted to guide the tension cords attached to the fractured limb.

[Claims 6 to 9 not printed in the Gazette.]

1,064,465. INDICATING MEANS FOR ROLL-FILMS. HORACE M. ENGLE, Roanoke, Va. Filed Sept. 10, 1912. Serial No. 719,603. (Cl. 95—9.)



1. A roll film having an opaque protective ribbon provided at the back with film section marks spaced apart, and marks between the said film section marks and graduated to indicate the approach of the succeeding film section mark.

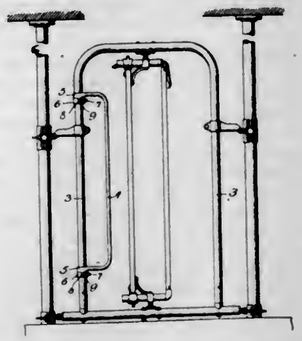
2. A roll film having an opaque protective ribbon provided at the back with film section marks spaced apart, and connecting marks intermediate the said film section marks, and graduated from one film section mark to the other to indicate the approach of a film section mark at the observation window of a camera when unwinding the roll film for moving an unexposed film section into exposing position.

3. A roll film having an opaque protective ribbon provided at the back with film section marks spaced apart, and connecting marks intermediate the said film section marks, and formed by lines converging from one film section mark to the next following one.

4. A roll film having an opaque protective ribbon provided at the back with film section marks spaced apart, and connecting marks intermediate the said film section marks, the said film section marks being in the form of circles inclosing consecutive numerals, and the said connecting marks being formed by converging lines extending tangentially from one circle and having the apex terminating at the front of the next following circle.

5. A roll film having an opaque protective ribbon provided at the back with film section marks spaced apart, connecting marks intermediate the said film section marks and graduated to indicate the approach of the succeeding film section mark, and a leading to mark preceding the first film section mark.

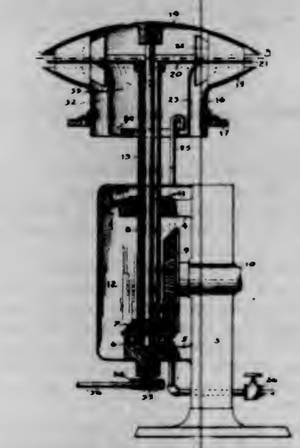
1,064,466. STOP DEVICE FOR STALLS. HENRY L. FERRIS, Harvard, Ill., assignor to Hunt, Helm, Ferris & Company, Harvard, Ill., a Corporation of Illinois. Filed Mar. 14, 1912. Serial No. 683,762. (Cl. 119—27.)



In combination, a stall-frame member, notched collars on said stall frame-members, and a stop member extend-

ing within said stall-frame member and having its ends formed with hollow bosses adapted to surround said stall frame-member, and projections on said bosses adapted to seat in the notches in said collars.

1,064,467. CENTRIFUGAL OIL-BURNER. MILTON A. FESLER, San Francisco, Cal., assignor to Fess System Co., a Corporation. Filed Oct. 19, 1911. Serial No. 655,457. (Cl. 158—77.)



1. The combination of a vertical shaft, upper and lower plates, the peripheries of which approach in close proximity to each other, an intermediate plate carried by said shaft, means independent of said shaft for supporting said upper and lower plates, concentrically disposed conduits leading respectively into the spaces between the upper and intermediate plates, and the intermediate and lower plates, an oil pipe discharging within one of said conduits, and means for rotating the shaft, substantially as described.

2. The combination of a vertical shaft, upper and lower plates, the peripheries of which approach in close proximity to each other, an intermediate plate carried by said shaft, means independent of said shaft for supporting said upper and lower plates, vertical webs formed on each side of said intermediate plate and rotating with said shaft, concentrically disposed conduits leading respectively into the spaces between the upper and intermediate plates, and the intermediate and lower plates, an oil pipe discharging within one of said conduits, and means for rotating the shaft, substantially as described.

3. The combination of a vertical shaft, upper and lower plates, the peripheries of which approach in close proximity to each other, an intermediate plate carried by said shaft, means independent of said shaft for supporting said upper and lower plates, concentrically disposed conduits leading respectively into the spaces between the upper and intermediate plates, and the intermediate and lower plates, an annular channel formed at the lower end of the inner conduit, an oil pipe discharging within said channel, and means for rotating the shaft, substantially as described.

4. In a furnace, a burner having a vertical shaft, upper and lower plates, the peripheries of which approach in close proximity to each other, an intermediate plate carried by said shaft, means independent of said shaft for supporting said upper and lower plates, concentrically disposed conduits leading respectively into the spaces between the upper and intermediate plates, and the intermediate and lower plates, an oil pipe discharging within one of said conduits, partitions beneath said burner, the space between the partitions opening into said conduits, a pipe for conducting the air to said space, and means whereby the heat of the products of combustion at the burner heats said air, substantially as described.

5. In combination with a casing of a furnace, a vertical shaft, means for rotating the same, means, secured to and rotating with said shaft, for atomizing oil by centrifugal force, a guide plate forming an air conduit with said means, means for supplying oil to said atomizing means, and means, extending inwardly from the outside of said casing, for varying the distance between said atomizing means and plate to vary the supply of air.

1,064,468. WIND-SHIELD FOR EYEGLASSES. IVAN FOX, Media, Pa. Filed Aug. 16, 1911. Serial No. 644,378. (Cl. 88—41.)



1. A wind shield for eye glasses, consisting of a strip of suitable material bent to conform to the shape of the lenses of a pair of eye glasses and a spring member secured to the inner side of the basal edge portion of said member and adapted to extend around the edge of a lens, the said spring member being provided with clips for engaging the edge of the said lens, and the opposite ends of the said spring being situated in contact with the edge of a lens at points between the central vertical axis of a lens and its point of connection to the means for connecting the lenses of a pair of eye glasses together.

2. A wind shield for eye glasses and spectacles consisting of a strip of suitable material so shaped and formed that its rear edges are located in contiguity to the upper, lower, and outer edges of the socket of the eye of the wearer and the front edge of which is connected to a spring of a shape conforming generally to the lenses of a pair of eye glasses and provided with means for securing the said shield to a lens and the opposite ends of the said spring being located toward the median line of a pair of eye glasses from the central vertical axis of a lens and the said ends, when the said shield is not in position upon a lens, occupying positions closer together than the width of the lens between said end when the shield is in use.

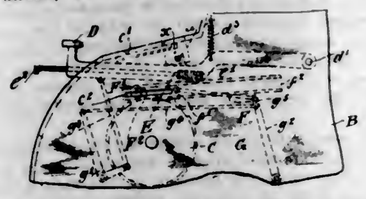
3. The combination of a pair of eye glasses or spectacles with wind shields having a plurality of clips adapted to engage the said eye glasses or spectacles for securing the said shields in position, the said shields being so shaped and constructed as to fit snugly against the portions of the face above, at the outer corners of, and below the eyes and so as to provide a space between the face and the lower edges of the lenses whereby limited quantities of air are permitted to enter the space between the lenses and the eyes.

4. A wind shield for eye glasses consisting of a strip of suitable material bent to the form of an open loop, a spring similarly bent and secured to the basal edge of the said shield, the length of the said shield and of the said spring being less than the distance around the edges of the lenses of the eye glasses, and the opposite ends of the said shield and spring being separated from each other a distance less than the width of the said lenses and the said spring being provided with lugs which fit over the edges of the eye glass lenses substantially as described.

1,064,469. REGISTERING DEVICE. JOHN GLENN, New York, N. Y. Filed Feb. 9, 1912. Serial No. 676,510. (Cl. 235—3.)

1. A registering device including in combination a totalizer or registering means, movable means and means which normally lock the movable means in inoperative position, the movable means normally obstructing the totalizer or registering means from view, but which when unlocked permits a print or impression to be taken from the totalizer or registering means and which also assists in the formation of the print or impression, said movable means also movable to a position where a reading can be taken directly on the totalizer or registering means.

2. A registering device including in combination a casing provided with registering means, a movable printing and shutter means which normally obstructs the registering means from view and locking means for normally holding the printing and shutter means in inoperative position, the printing and shutter means when unlocked movable so as to impress a reading on a strip of paper or other object, said printing and shutter means also movable when unlocked to such position whereby a reading can be directly made upon the registering means.



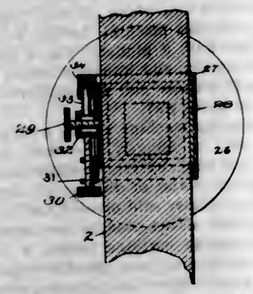
3. In a registering device, the combination of a casing, a totalizer, means for normally obstructing the latter from view but which can be moved so that a reading of the totalizer can be made by the eye of the operator, means for moving the last mentioned means so the totalizer can be read by the eye of the operator, and means for forming an impression or print of the totalizer reading, the last mentioned means being constructed and arranged so that the totalizer can be seen and read when the first mentioned means is in a position for the reading to be made by the eye.

4. A registering device including in combination a casing provided with a window, a registering means within the casing, a movable means normally obstructing the registering means from view through the window, but movable to a position where the registering means can be seen, and printing means coöperatively related with the registering means whereby a reading of the registering means can be impressed, printed or stamped when desired.

5. A registering device including in combination, a casing provided with a window, a totalizer within the casing, a movable shutter normally closing the window but movable to a position where the totalizer can be seen and printing means coöperatively related with the totalizer whereby a reading can be impressed, printed or stamped, the shutter and printing means being constructed and arranged so that the printing means can be brought into operation only after the shutter has been moved from its normal position.

[Claims 6 to 12 not printed in the Gazette.]

1,064,470. SURVEYOR'S ROD. MERRILL M. GOODNOW, Seattle, Wash. Filed Dec. 4, 1908. Serial No. 466,017. (Cl. 88—66.)

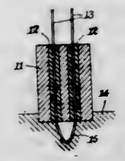


1. In a surveyor's rod, a rod proper, a target therefor, a housing secured to said target, a second housing positioned within said first mentioned housing, said second mentioned housing secured to said rod proper, means for clamping said second mentioned housing to said rod proper, and a tension screw for varying the position of said housings in relation to each other for adjusting the position of said target on said rod proper.

2. In a surveyor's rod, a rod proper, a target, a housing secured to said target, a second housing positioned within said first mentioned housing and secured to said rod proper, an adjusting screw for moving said first mentioned housing longitudinally in one direction of said rod proper after said second mentioned housing has been clamped to said rod proper, and a spring for moving said first mentioned housing in an opposite direction.

3. In a surveyor's rod, a rod proper formed of a plurality of parts, an adjustable target connected with one of said parts, a clamp secured to said part last mentioned for engaging the adjacent part, said clamp comprising a primary housing, an adjustable secondary housing positioned within the primary housing, an adjusting screw for moving said secondary housing in one direction, means for moving said housing in the opposite direction, a pair of clamping wedges mounted in the secondary housing and adapted to engage the adjacent part of the rod, and means for varying the position of said wedges for causing them to clamp the part last mentioned, of said rod.

1,064,471. THERMOTELEPHONE OR THE LIKE. BRONISLAW GWÓŹDŹ, Schöneiche, near Berlin, Germany. Filed Nov. 15, 1912. Serial No. 731,557. (Cl. 179—101.)



1. In a thermo-telephone, the combination with a plastic hardening body, of a Wollaston wire passing through the body and having a bent portion thereof projecting out of the same, and a hard body surrounding and protecting the plastic hardening body.

2. In a thermo-telephone, the combination with a plastic hardening body, of a Wollaston wire passing through the body and having a bent portion projecting out of the same, and a metal body surrounding and protecting the plastic hardening body.

3. In a thermo-telephone, the combination with a plastic hardening body, of a Wollaston wire passing through the body and having a bent portion projecting out of the same, and a metal body surrounding and protecting the plastic hardening body and electrically connected to one end of the said Wollaston wire.

4. In a thermo-telephone, the combination with a plastic hardening body, of a Wollaston wire passing through the body and having a bent portion projecting out of the same, a metal body surrounding and protecting the plastic hardening body, and a socket carrying the outer body and adapted to protect the said bent portion of the wire.

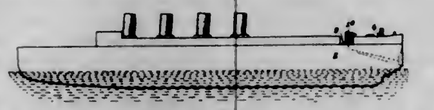
5. In a thermo-telephone, the combination with a plastic hardening body, of a Wollaston wire passing through the body and having a bent portion projecting out of the same, a metal body surrounding and protecting the plastic hardening body, and a socket carrying the outer body, the socket being provided with a bow for supporting and protecting the said bent portion of the wire.

[Claim 6 not printed in the Gazette.]

1,064,472. COMBINED LIFE-BOAT AND MARINE SAFE. AUGUST HAAS, Grapeville, Pa. Filed Dec. 7, 1912. Serial No. 735,404. (Cl. 9—12.)

1. The combination of a ship formed with a berth open through a wall thereof, the berth provided with slideways sloping upwardly from its outer end to its inner end, an emergency boat having its bottom sloped from end to

end complementary with the sloping slideways and adapted to rest and slide on the latter, the emergency boat having decks that are substantially level when the boat is in position in said berth and also which are substantially level when the emergency boat is afloat and separated from the ship.



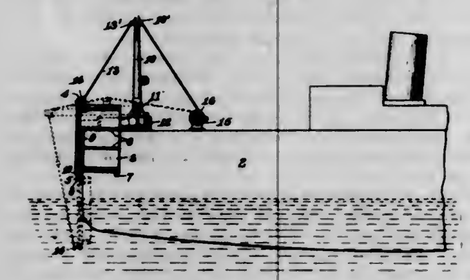
2. The combination of a ship formed with a berth open through the stern thereof, the berth provided with downwardly and outwardly sloping slideways, an emergency boat, downwardly projecting runners arranged longitudinally of said boat and slidable on the slideways, and means for detachably securing said boat within the berth.

3. The combination of a ship formed with a berth open at one end through a wall of the ship, downwardly and outwardly inclined slideways in the berth, an emergency boat having its greatest depth at its stern end and decreasing in depth toward its bow, runners extending longitudinally of said boat and sloping downwardly from its bow to its stern with the runners supporting the boat on said slideways, and means for removably confining the boat within said berth.

4. The combination of a ship formed with a berth open at one end through a wall of the ship, downwardly and outwardly inclined slideways in the berth, an emergency boat having its greatest depth at its stern and decreasing in depth toward its bow, runners extending longitudinally of the boat at opposite sides of the bottom thereof with the runners inclined downwardly from the bow to the stern, and supporting the boat within the berth on said slideways, and means for removably confining the boat within the berth.

5. The combination of a ship formed with a berth open through a wall of the ship, a self-launching emergency boat within the berth, a vertically movable bolt carried by said boat with its lower end adapted to engage a socket in the ship, and a lever fulcrumed on the emergency boat and operatively connected to said bolt with the lever accessible from the emergency boat for releasing the latter.

1,064,473. MARINE BRAKE AND SHOCK-ABSORBER. AUGUST HAAS, Grapeville, Pa. Filed Dec. 7, 1912. Serial No. 735,405. (Cl. 114—145.)



1. The combination with a ship, of two retarder sections hinged together, a horizontal hinge supporting the retarder sections on the ship prow with the sections adapted to swing backwardly and with one face of each section disposed toward the ship when the sections are turned upwardly and the reverse side of each section disposed toward the ship when turned downwardly.

2. The combination with a ship, of two retarder sections, means for supporting the sections on the ship prow above the water line, and means for lowering and for reversing the sections, thereby turning outwardly the faces thereof that are innermost when the sections are raised and at the same time extending the sections into the water.

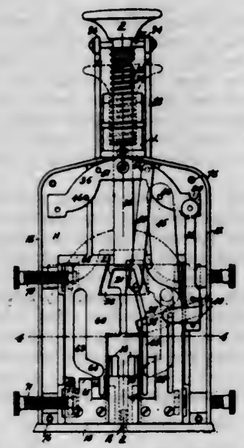
3. The combination with a ship, of two retarder sections united to turn about a vertical axis, a horizontal hinge adapted to support the sections in upturned position with faces thereof disposed toward the sides of the prow and said hinge adapted to support the sections in downturned position with the reverse sides thereof disposed toward the prow, and means for holding the sections laterally extended when in downturned position.

4. The combination with a ship, of two retarder sections united to turn about a vertical axis, a horizontal hinge adapted to support the sections in upturned position with faces thereof disposed toward the sides of the prow and said hinge adapted to support the sections in downturned position with the reverse sides thereof disposed toward the prow, and means carried by said reverse sides for engaging the prow and holding the sections extended laterally.

5. The combination with a ship, of two retarder sections connected by a vertical hinge, a horizontal hinge connecting the hinge-connected sections to the ship prow with the sections when in upturned position adapted to engage opposite sides of the prow and with the reverse faces of the sections adapted to engage the prow when the sections are turned downward.

[Claims 6 to 9 not printed in the Gazette.]

1,064,474. CORK-STAPLING MACHINE. JULIUS G. HANSEN and MARTIN R. SCHAFFER, Reading, Pa. Filed July 6, 1911. Serial No. 637,064. (Cl. 140—94.)



1. In a cork stapling machine having a cork support and a staple guide-way, vertically moving knives, a vertically moving central driver, and side drivers, all coöperatively arranged in the plane of said guide-way.

2. In a cork stapling machine having a cork support and a staple guide-way, a plunger, and a central driver, vertically guided knives, and laterally swung side drivers, all carried by said plunger and coöperatively arranged in the plane of said guide-way.

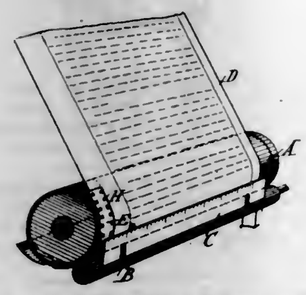
3. In a cork-stapling machine having a cork support and a staple guide-way, a plunger, a central driver fixedly secured thereto and side drivers pivotally carried thereby all arranged in the plane of said guide-way, and fixed means for closing together said pivoted side drivers during a determined portion of the plunger movement.

4. In a cork stapling machine having a cork support, a central staple guide-way, and side-driver guide-ways; a plunger, and a central driver and pivoted side drivers all carried by said plunger and arranged in the plane of said staple guide-way; the free ends of said pivoted side drivers being engaged in their respective guide-ways and the end portions of the latter being inclined toward the axis of the plunger.

5. In a cork stapling machine having a cork support and a staple guide-way, a plunger carrying a central driver and side knives, all arranged in the plane of said guide-way, and side drivers also arranged in said plane and adapted to be operated by said plunger.

[Claims 6 to 26 not printed in the Gazette.]

1,064,475. LINE-INDICATOR FOR TYPE-WRITING PAPER. JEFFERSON A. GARFIELD HARTON, Brooklyn, N. Y. Filed Mar. 7, 1912. Serial No. 682,299. (Cl. 197—189.)



1. A line indicator applicable to a lower corner of a sheet of typewriter paper and consisting of a right angled pocket closed at its bottom and on one side and open at its top and on the opposite side, the outer face of said pocket being provided with a character indicating a determinate writing limit from the bottom of said pocket.

2. A line indicator applicable to a lower corner of a sheet of typewriter paper and consisting of a right angled pocket closed at its bottom and on one side and open at its top and on the opposite side, the outer face of said pocket being provided with a series of characters indicating typewriter line spacing.

3. A line indicator applicable to a lower corner of a sheet of typewriter paper and consisting of a right angled pocket closed at its bottom and on one side and open at its top and on the opposite side, the outer face of said pocket being provided with two series of characters for indicating typewriter line spacing disposed side by side and apart from each other, either series being exposed to view when the other is covered by the paper clip of the typewriter.

4. A line indicator applicable to a lower corner of a sheet of typewriter paper and consisting of a right angled pocket closed at its bottom and on one side and open at its top and on the opposite side, the outer face of said pocket being provided with a series of numerals arranged progressively from the bottom upward and indicating typewriter line spacing.

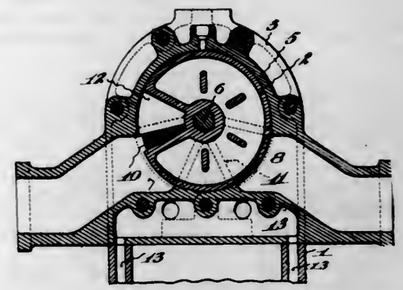
5. A line indicator applicable to a lower corner of a sheet of typewriter paper and consisting of a right angled pocket closed at its bottom and on one side and open at its top and on the opposite side, the outer face of said pocket being provided with two series of numerals arranged progressively apart from each other side by side and reading from the bottom upward, either series being exposed for indicating typewriter line spacing when the other series is covered by the paper clip of the typewriter.

[Claim 6 not printed in the Gazette.]

1,064,476. GASOLENE-ENGINE. WILLIAM E. HASKELL, Brattleboro, Vt. Filed Dec. 22, 1911. Serial No. 667,279. (Cl. 123—190.)

1. A gasolene engine having, in combination, a single rotary valve, a valve housing embracing the valve and having inlet and exhaust passages for leading the mixture from the intake to the valve space and from the valve space to the exhaust and passages from the cylinder to the valve space opening upon axially opposite sides of the valve so as thereby to counterbalance each other and to relieve the valve from unbalanced pressures during explosion, substantially as described.

2. A gasolene engine having, in combination, a cylinder, a valve housing on the cylinder, a single rotary valve mounted in the valve housing and provided with an opening therein, inlet and exhaust ports in the valve housing, and passages from the valve space to the cylinder opening into the valve space upon axially opposite sides of the valve and being of equal counterbalancing areas, substantially as described.



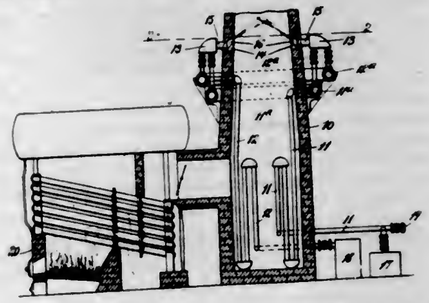
3. A gasolene engine having, in combination, a cylinder, a valve housing on the cylinder, a rotary valve in the valve housing provided with a sector-shaped opening therein, inlet and exhaust ports in the housing opening on the periphery of the valve, passageways in the valve housing to the cylinder having ports opening upon axially opposite sides of the valve and being of equal area, substantially as described.

4. A gasolene engine having, in combination, a cylinder, a valve housing provided with a cylindrical valve chamber, a rotary disk valve mounted in and fitting said chamber provided with a sector-shaped valve opening, said housing being provided with peripheral ports opening into said valve chamber and with passages leading to the cylinder and having equal, axially opposed, lateral ports also opening into said valve chamber, substantially as described.

5. A gasolene engine having, in combination, a cylinder, a rotary valve, a valve housing provided with a cylindrical valve chamber and with inlet and exhaust passages having ports opening into the periphery of said valve chamber and also with passages leading to the cylinder and having equal and axially opposed ports opening into the sides of the valve chamber, substantially as described.

[Claims 6 to 14 not printed in the Gazette.]

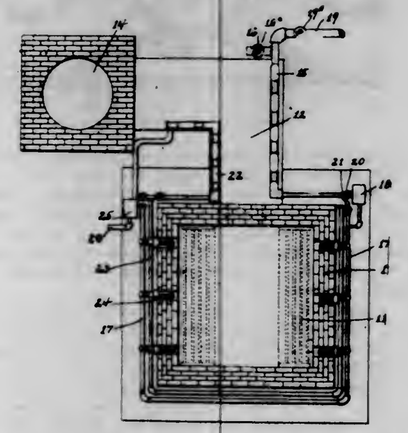
1,064,477. SMOKE-CONSUMING SYSTEM. EDWIN G. HATCH, New York, N. Y. Filed Mar. 7, 1911. Serial No. 612,848. (Cl. 110—22.)



The combination of a furnace of the type burning a primary fuel and having a fuel bed, a combustion chamber and a draft flue terminating at the outlet to atmosphere of the stack or chimney, and smoke consuming and draft accelerating apparatus applied to said draft flue and comprising a series of burners arranged to discharge in substantially the same plane inside of said draft flue intermediate the fuel bed and the outlet of the draft flue

to atmosphere, without obstructing the draft, separate and independent main air pipes and main auxiliary fuel pipes extending from the base of the draft flue to points in proximity to said burners, a plurality of branch pipes partially encircling the stack and connecting said main independent air and fuel pipes to the burners for separately supplying fuel and an accelerated draft of air to the burners and mixing the air and fuel at the burners, means for supplying a regulable accelerated draft of air under pressure to the air pipes and means for supplying a regulable quantity of gaseous or vaporous fuel to the auxiliary fuel pipes.

1,064,478. SMOKE-CONSUMING SYSTEM. EDWIN G. HATCH, New York, N. Y. Filed May 18, 1911. Serial No. 628,114. (Cl. 110—22.)



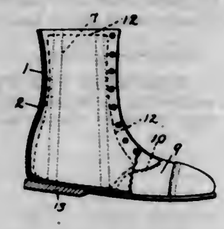
The combination of a furnace of the type burning a primary fuel and having a fuel bed, a combustion chamber and a waste flue leading to the stack or chimney, and apparatus for economizing heat and consuming smoke applied to said furnace and comprising series of air pipes and series of fuel pipes arranged within and against the opposite sides respectively of the waste flue without obstructing the draft, means for supplying a regulable accelerated draft of air under pressure to said series of air pipes, means for supplying a regulable quantity of gaseous or vaporous fuel under pressure to said series of fuel pipes, burners located along both sides of the combustion chamber from end to end and solely above the fuel bed, separate and independent main conduits outside of and encompassing the combustion chamber and leading from the series of air pipes and the series of fuel pipes respectively to points in proximity to the burners, a plurality of branch connections from said independent main conduits to the burners, for separately supplying the draft of air and the auxiliary gaseous or vaporous fuel to the burners and mixing the air and fuel at the burners, valves for controlling said independent main conduits and valves on the branch connections for individually controlling the said plurality of branch connections from the said main conduits to the burners, independently of the main conduits.

1,064,479. ANKLE-SUPPORTING SHOE. RAYMOND HEALY, Brooklyn, N. Y. Filed Oct. 12, 1910. Serial No. 586,618. (Cl. 36—71.)

1. In an ankle supporting shoe, an outer leather and a lining arranged to form a pocket, a corset loosely inserted in said pocket and not attached to said lining or said outer leather, and stiffening stays coöperating with said corset.

2. In an ankle supporting shoe, an outer leather and a lining arranged to form a pocket closed along all edges, a corset loosely inserted in said pocket, and stiffening stays coöperating with said corset.

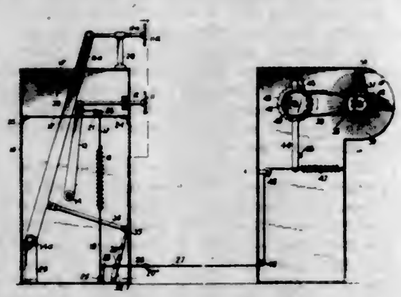
3. In an ankle supporting shoe, an outer leather and a lining arranged to form a pocket, a corset loose in said pocket, and stiffening stays secured to said lining.



4. In an ankle supporting shoe, an outer leather and a lining arranged to form a pocket, a corset consisting of relatively stiff material conforming approximately to the shape of said pocket and loosely inserted therein, and stiffening stays secured to said lining.

5. In an ankle supporting shoe, an outer leather and a lining arranged to form a pocket, a corset of relatively stiff material loosely inserted in the said pocket and cooperating stiffening stays secured to the lining.

1,064,480. GAME APPARATUS. HERBERT WILLIAM HELLIKER, Oakland, Cal. Filed Nov. 8, 1912. Serial No. 730,163. (Cl. 46—59.)



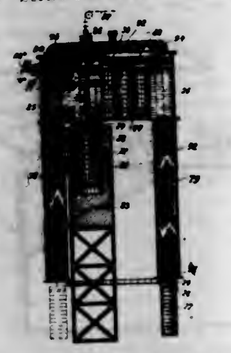
1. The herein described game apparatus comprising a series of similarly mounted targets, an indicator having individual indicating means and connections therefrom to the aforesaid targets respectively, a master target, and connections between said master target and the indicator mechanisms whereby all of the indicator mechanisms may be operated simultaneously from the master target.

2. In a game apparatus, the combination of an indicator comprising a series of indicator mechanisms, a series of targets, connections between the indicator mechanisms and the several targets respectively whereby the operation of any target will affect its indicator mechanism, and means for actuating all of the indicator mechanisms simultaneously independently of the aforesaid targets.

3. In a game apparatus, the combination of a series of plungers, a series of indicator mechanisms, means connecting the plungers and said mechanisms respectively in pairs whereby the operation of any of said plungers will correspondingly affect their indicator mechanisms independently of the remaining plungers and their indicator mechanisms, and means operating independently of said plungers for operating all of said indicator mechanisms simultaneously.

4. In a game apparatus, the combination of a series of plungers, a series of indicator mechanisms, means connecting the indicator mechanisms to the plungers each to each, said connecting means including eye-bolts, an actuator through which said eye-bolts may be individually operated, and means to actuate the actuator to cause simultaneous actuation of all of the eye-bolts and the indicator mechanisms affected thereby.

1,064,481. ANNEALING APPARATUS. HERMANN HILLEBRAND, Jr., Werdohl, Westphalia, Germany. Filed June 19, 1912. Serial No. 704,495. (Cl. 148—16.)



1. In an annealing apparatus of the class described, the combination with a closed casing adapted to be filled with neutral gas and to serve as a cooling chamber, of an annealing pot communicating with said casing, a furnace for heating said annealing pot, means for introducing wares to be annealed into said closed casing in a direction parallel to said annealing pot while excluding the air, means for shifting the introduced wares into the axis of said annealing pot, means for inserting the wares in said annealing pot while shutting off the latter from the cooling chamber and for again withdrawing the wares when annealed, means for moving the annealed wares step by step in a direction at right angles to said pot so as to allow them to cool off, and means for withdrawing the cooled wares from said casing while excluding the air.

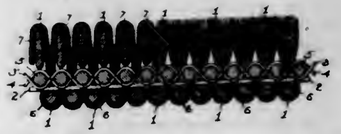
2. In an annealing apparatus of the class described, the combination with a closed casing adapted to serve as a cooling chamber, of two vertical tubes beneath said casing and communicating therewith and at the lower end with the atmosphere, an annealing pot parallel to said two tubes and communicating with said casing, said casing and said annealing pot and the greater part of said two tubes being adapted to be filled with a light neutral gas, a furnace for heating said annealing pot, means for introducing wares to be annealed from below through one of said two tubes into said casing, means for horizontally shifting the introduced wares into the axis of said annealing pot, means for inserting the wares in said annealing pot while shutting off the latter from the cooling chamber and for again withdrawing the wares when annealed, means for horizontally shifting the annealed wares step by step so as to allow them to cool off, and means for withdrawing the cooled wares from said casing downward through the other of said two tubes.

3. In an annealing apparatus of the class described, the combination with a cylindrical closed casing adapted to serve as a cooling chamber, of a vertical tube beneath said casing and communicating therewith and at the lower end with the atmosphere, an annealing pot parallel to said tube and communicating with said casing, said casing and said annealing pot and the greater part of said tube being adapted to be filled with a light neutral gas, a furnace for heating said annealing pot, means for introducing wares to be annealed from below through said tube into said casing, means for horizontally shifting the introduced wares into the axis of said annealing pot, means for inserting the wares in said annealing pot while shutting off the latter from the cooling chamber and for again withdrawing the wares when annealed, means for horizontally shifting the annealed wares along the periphery of a circle step by step so as to allow them to cool off, and means for withdrawing the cooled wares from said casing downward through said tube.

4. In an annealing apparatus of the class described, the combination with a closed casing adapted to serve as a cooling chamber, of two vertical tubes beneath said casing and communicating therewith and at the lower end with the atmosphere, an annealing pot beneath said casing and communicating therewith, said casing and said annealing pot and the greater part of said two tubes being adapted to be filled with a light neutral gas, a furnace for heating said annealing pot, two pistons each provided with a rail, means for moving up and down said two pistons through said two tubes and the cooling chamber, a third piston adapted to shut off said annealing pot from the cooling chamber and provided with a rail, means for moving said third piston up and down through the cooling chamber, two rail parts at the top of the cooling chamber adapted to periodically register with the rails of said three pistons, wheeled holders for wares adapted to be laterally moved one after the other over the rail of one piston when at the lower end of one tube and off the rail of the second piston when at the lower end of the second tube, also to be shifted from the rail of the first piston when raised to one of said two rail parts, then therefrom to the rail of the third piston when raised, afterward therefrom to the second rail part and subsequently therefrom to the rail of the second piston, and means for horizontally shifting said holders in the cooling chamber.

5. In an annealing apparatus of the class described, the combination with a cylindrical closed casing adapted to serve as a cooling chamber, of a vertical tube beneath said casing and communicating therewith and at the lower end with the atmosphere, an annealing pot beneath said casing and communicating therewith, said casing and said annealing pot and the greater part of said tube being adapted to be filled with a light neutral gas, a furnace for heating said annealing pot, a first piston provided with a rail, means for moving said first piston up and down through said tube and the cooling chamber, a second piston adapted to shut off said annealing pot from the cooling chamber and provided with a rail, means for moving said second piston up and down through the cooling chamber, two rail parts at the top of the cooling chamber adapted to register with the rails of said two pistons in their highest position and forming therewith a circle, wheeled holders for wares adapted to be laterally moved over the rail of said first piston when at the lower end of said tube and off the same, also to be shifted from the rail of the first piston when raised to one of said two rail parts, then therefrom to the rail of said second piston when raised, afterward therefrom to the second rail part and subsequently therefrom to the rail of the first piston, and means for horizontally shifting said holders in the cooling chamber.

1,064,482. WOVEN PILE FABRIC. RICHARD HIRST, Philadelphia, Pa. Filed Oct. 28, 1912. Serial No. 728,095. (Cl. 139—71.)

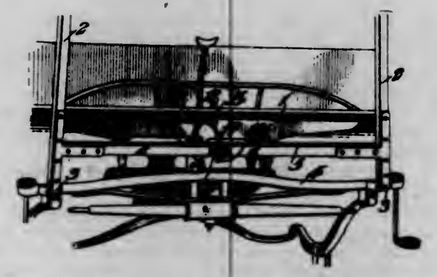


1. A woven pile fabric having a cut pile on one face and an uncut pile on the opposite face both formed by the same pile warp threads, in combination with upper and lower like sets of weft threads, the pile forming warp threads passing between successive weft threads of the upper set and being looped around the corresponding weft threads of the lower set, whereby the rows of pile are disposed closely together on both faces of the fabric.

2. A woven pile fabric having a patterned cut pile on one face and a patterned uncut pile on the opposite face both formed by the same party-colored pile warp threads in combination with upper and lower like sets of weft threads, said pile forming warp threads passing between successive weft threads of the upper set and being looped around the corresponding weft threads of the lower set whereby the rows of pile are disposed closely together on both faces of the fabric and a corresponding pattern is produced on each face of the fabric.

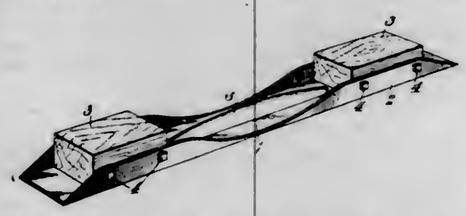
3. A woven pile fabric composed of upper and lower like sets of weft threads separated by longitudinal stuffer threads, pairs of binder warp threads interwoven with the weft threads of the upper set and pile-forming warp threads passing between successive weft threads of the upper set and looped around the corresponding weft threads of the lower set.

1,064,483. WAGON-SHAFT HOLDER. ARTHUR CLAYTON HIXON, Philadelphia, Pa. Filed July 9, 1912. Serial No. 708,452. (Cl. 21—63.)



In a device of the character stated, the combination of a hook member fastened beneath the footboard of a vehicle, said member comprising a hook portion of predetermined length, a retaining plate secured upon the bottom face of a cross-bar of a pair of shafts, a rearwardly turned end on said hook portion adapted to form a lock beneath said plate and means on said plate adapted to coact with the hook portion of said hook member and prevent lateral movement thereof.

1,064,484. METAL RAILWAY-TIE. MICHAEL E. HOGAN, St. Louis, Mo. Filed Feb. 14, 1913. Serial No. 748,324. (Cl. 238—5.)



1. A railway tie comprising a metal body portion provided with an approximately horizontally-disposed web, a longitudinally disposed cambered rib that is pressed upwardly from said web and side flanges formed integral with said web.

2. A railway tie comprising a metal body portion provided with an approximately horizontally-disposed web, and a longitudinally disposed hollow rib and side flanges formed integral with said web, said side flanges being so formed that water can drain laterally off the web.

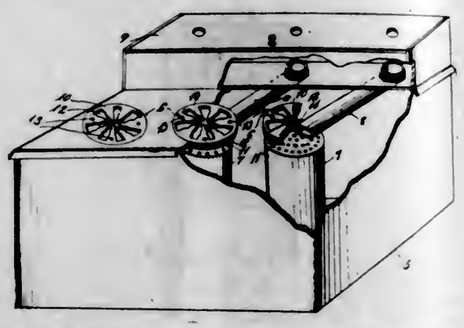
3. A railway tie comprising a metal body portion provided with an approximately horizontally-disposed web that has an integral longitudinally extending hollow cambered rib which stiffens said web.

4. A railway tie comprising a pressed metal body portion provided with an approximately horizontally-disposed web that has an integral longitudinally extending cambered rib that is pressed upwardly therefrom which stiffens said web, and non-metallic rail-supporting members securely connected to said body portion.

5. A railway tie comprising a pressed metal body portion provided with an approximately horizontally-disposed web, upwardly projecting flanges on said web that are reduced in height adjacent the center of the tie, and a longitudinally-disposed hollow U-shaped rib on said web for stiffening and strengthening the center portion of same.

[Claims 6 to 8 not printed in the Gazette.]

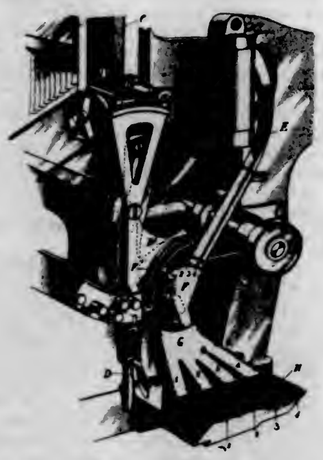
1,064,485. OIL-STOVE ATTACHMENT. FRED HUTCHENS, Valton, Wis. Filed Nov. 10, 1910. Serial No. 591,667. (Cl. 126—214.)



The combination with an oil stove comprising a casing having openings in its top portion and burners vertically mounted within the casing; of grates mounted in openings in the top of the casing over the burners and spaced from the latter, each of said grates comprising circular upper and lower plates of metal having radial openings therethrough and an intermediate section of asbestos slidably engaged between said plates and provided with openings adapted to be moved into and out of registry with the openings in the plates.

1,064,486. [WITHDRAWN.]

1,064,487. TYPOGRAPHICAL COMPOSING-MACHINE. DAVID SHERWOOD KENNEDY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Apr. 3, 1912. Serial No. 688,121. (Cl. 199—7.)



1. In a typographical composing machine, the combination of a plurality of magazines capable of independent use, a corresponding plurality of sorts-receiving devices, and connections whereby the mechanical selection of a magazine effects the selection of the corresponding sorts-receiving device.

2. In a typographical compising machine, the combination of a plurality of magazines capable of independent use, and a corresponding plurality of sorts-receiving devices, together with means whereby the selected magazine and its corresponding sorts-receiving device are simultaneously brought into operative relations to the other parts.

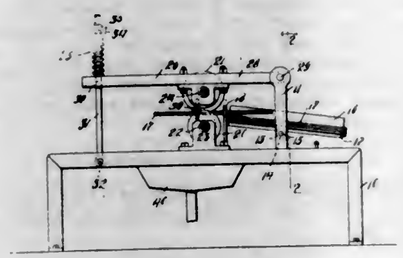
3. In a typographical composing machine, the combination of a plurality of magazines capable of independent use, a corresponding plurality of sorts-receiving receptacles, means to deliver the sorts into one of the said receptacles at a time, and connections to adjust said delivery means to correspond to the magazine in operation.

4. In a typographical machine, the combination of a plurality of magazines capable of independent use and adjustable means adapted to deliver sorts-matrices at one point or another corresponding to the magazine in operation.

5. In a typographical composing machine, the combination of a plurality of magazines capable of independent use, means adapted to deliver sorts-matrices at one point or another, and connections whereby the said means are adjusted to correspond to the magazine in operation.

[Claim 6 not printed in the Gazette.]

1,064,488. MACHINE FOR FORMING BARREL-STAVES. FRANK MARION KENNEDY, Clarendon, Ark. Filed Sept. 4, 1912. Serial No. 718,444. (Cl. 144—255.)



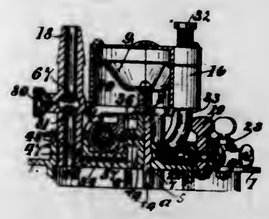
1. In a device of the class described, comprising a plurality of pairs of superposed revolving and axially translating rollers and forming by their opposite surfaces the bilge of a stave, and having means for adjusting the pressure between said superposed rollers.

2. In a device of the class described, comprising a plurality of pairs of superposed revolving and axially translating rollers, forming with their opposite surfaces the bilge of a stave, a member associated with each pair of said rollers and having means to admit only one stave at a time to said pair of rollers, and a tilting table associated with said member, to allow the forward end of staves placed on said table to face the means in said member for admitting only one at a time, said superposing rollers having resilient means to adjust the pressure between said pairs of superposed rollers.

3. In a device of the class described, comprising a plurality of pairs of superposed revolving and axially translating convex and concave rollers, said convex and concave rollers having the radius of their curvature greater than the radius of the bilge of the barrel for which the staves are intended.

4. In a device of the class described, comprising a plurality of revolving and axially translating concave rollers, an equal plurality of revolving and translating convex rollers, superposing said concave rollers, adjustable means at each side of said rollers, to limit said axial translation of said rollers, the convex rollers being adapted to move vertically, means associated with said convex and concave rollers, to prevent the surfaces of revolution of said rollers from coming in contact, adjustable resilient means associated with said convex rollers, to adjust the pressure between said convex and said concave rollers, a rocking table adapted to receive the staves, a standard between said rocking table and each pair of said convex and concave rollers, said standard having means for allowing only one stave to be fed at a time to said rollers from said table, and a dripping pan under each pair of said rollers, adapted to collect the sap removed from the surface of the stave by said rollers.

1,064,489. MILKING-MACHINE. ROBERT KENNEDY, Glasgow, Scotland. Filed Jan. 12, 1910. Serial No. 537,677. (Cl. 31—101.)



1. In a milking machine both controlled and operated automatically by suction, pulsating mechanism comprising, in combination, a movable device which is operated pneumatically, a plurality of members connected to the device and moving therewith, said members being moved by the device in one direction and by the suction, which constantly acts thereon, in the other direction, and pneumatically operated means controlled by said members for controlling the pulsating operation.

2. In a milking machine both controlled and operated automatically by suction, pulsating mechanism comprising, in combination, a pair of members constantly acted on by the suction, a chamber, pneumatically operated means within the chamber, for moving said members against the said suction, and pneumatically operated means controlled by said members for controlling the operation of the said means within the chamber.

3. In a milking machine both controlled and operated automatically by suction, pulsating mechanism comprising, in combination, a movable device having a pair of parallel members constantly acted on by the suction, a chamber, a diaphragm within the chamber and connected to said device and pneumatically operated means controlled by said movable device for controlling the operation of the diaphragm within the chamber.

4. In a milking machine both controlled and operated automatically by suction, pulsating mechanism comprising, in combination, a movable device having a pair of members constantly acted on by the suction, a chamber, a pneumatically operated diaphragm within the chamber for operating the device and pneumatically operated means controlled by said movable device for controlling the admission of air to and its exhaust from the said chamber.

5. In a milking machine both controlled and operated automatically by suction, pulsating mechanism comprising, in combination, a movable device having a pair of parallel members constantly acted on by the suction, a chamber, a diaphragm within the chamber for moving the said device against the said suction, and pneumatically operated means controlled by said movable device for controlling the admission of air to and its exhaust from the said chamber.

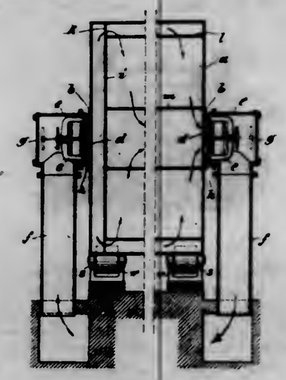
[Claims 6 to 23 not printed in the Gazette.]

1,064,490. MALT-DRUM. FRIEDRICH KNÜTTEL, Charlottenburg, Germany. Filed Aug. 20, 1912. Serial No. 716,000. (Cl. 34—5.)

1. In a malting drum, the combination of rollers, a non-perforated drum casing rotatably and circumferentially mounted on said rollers, said drum casing having axial openings, a perforated central tube, stationary pipes for supplying and discharging air, valve seats arranged on said axial openings of the drum casing, valve disks mounted movably on the said seats and means for closing the valve disks air-tight, substantially as set forth.

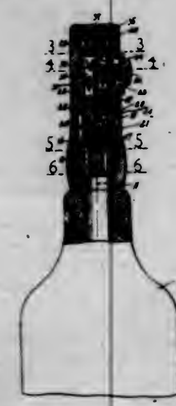
2. In a malting drum, the combination of rollers, a non-perforated drum casing rotatably and circumferentially mounted on said rollers, said drum casing having axial openings, a perforated central tube, a partition, a perforated casing within the drum casing, stationary pipes for supplying and discharging air, valve seats arranged on said axial openings of the drum casing within chambers

of the stationary pipes, brackets secured to said seats, valve disks mounted movably on said brackets, and means



for closing and opening the chambers of the stationary pipes, substantially as set forth.

1,064,491. NON-REFILLABLE BOTTLE. GEORGE KOMLÓSY, Yonkers, N. Y. Filed Jan. 20, 1913. Serial No. 743,194. (Cl. 215—69.)

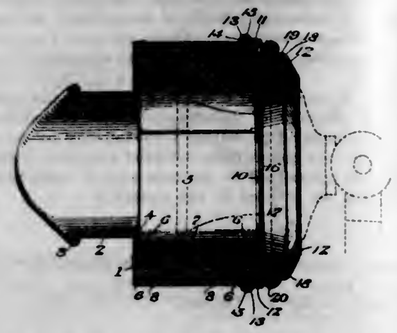


1. In a non-refillable bottle, the combination with the neck of a bottle, of a barrel irremovably attached thereto forming a continuation of said neck, a valve seat upon said neck, a valve upon said seat, means shiftably arranged in said barrel adapted to hold said valve upon said seat, an actuating member for locking said last named means in such holding position, and a spring adapted to shift said holding means when disengaged from said actuating member, whereby said valve is free to leave its seat.

2. In a non-refillable bottle, the combination with the neck of a bottle, of a barrel irremovably attached thereto forming a continuation of said neck, a valve seat upon said neck, a valve upon said seat, a longitudinally grooved cylindrical body shiftably arranged in said barrel adapted to hold said valve upon said seat, an actuating member for locking said cylindrical body in such holding position, and a spring adapted to shift said cylindrical body when disengaged from said actuating member, whereby said valve is free to leave its seat.

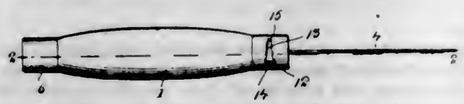
1,064,492. MUFFLER ATTACHMENT FOR TELEPHONES. GEORGE KRACKER, Philadelphia, Pa. Filed Jan. 18, 1912. Serial No. 671,954. (Cl. 179—188.)

In a device of the character stated, a casing tubular in form and having an open end affording free access to the interior thereof, a mouthpiece secured to the opposite end of said casing and communicating with the interior thereof, a sound muffling spiral member located in said casing and readily removable therefrom, said member being circumferentially arranged with respect to the axial path of sound waves from said mouthpiece, an annular member fitted within the open end of said casing and retaining said spiral member in normal position, a cap having an



opening therein adapted to fit over the open end of said casing, lugs on said casing, means on said cap adapted to interlock with said lugs to removably secure said cap to said casing, an outwardly flaring flange formed integral with said cap, and an elastic fastening means secured to said flange and adapted to retain said casing in position upon a telephone transmitter.

1,064,493. TOOL-HANDLE. EDWARD KROPAT, Rochester, N. Y. Filed June 29, 1912. Serial No. 706,702. (Cl. 145—83.)

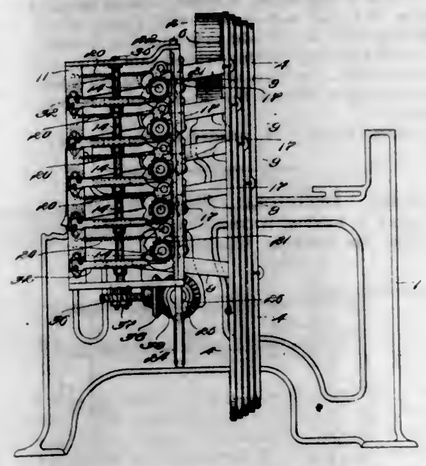


1. The combination with a tool having a flat, straight edge thereof with spaced notches, of a handle therefor comprising a body having a longitudinal slot adapted to receive said shank, said slot opening into the sides of the body at one end thereof, this end of the body having a semi-circumferential groove communicating medially with one side of the slot, a ferrule rotatably mounted on said end of the body, and an instruck boss formed in said ferrule and movable in the body groove for locking engagement with one of the tool shank notches.

2. The combination with a tool having a shank provided with a transverse notch, of a handle therefor comprising a body having a longitudinal slot adapted to receive said shank, the said slot opening through the sides of the body at one end thereof, this end of the body being provided with a semi-circumferential groove communicating medially with one side of the slot, a ferrule rotatably mounted upon one end of the body, an instruck tapered boss formed on the inner periphery of said ferrule and extending semi-circumferentially, the said boss being adapted for movement within the body groove and for engagement within the notch of the tool shank.

1,064,494. SHEDDING MECHANISM FOR LOOMS. FRED LACEY, Lowell, Mass. Filed Aug. 7, 1911. Serial No. 642,775. (Cl. 139—79.)

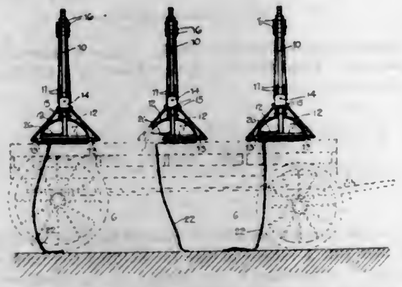
1. In loom shedding mechanism, the combination with a series of harness-frames in a loom, of a series of cranks supported by bearings occupying fixed or stationary positions one above another in the loom and respectively connecting operatively with the respective harness-frames, a driven gear for each crank, a moving toothed driver, starting devices for causing the actuation of a crank and its rotation through a half-revolution through the agency of said driver and the driven gear pertaining to such crank, and pattern-mechanism having lines of pattern-indicators one above another controlling said starting devices.



2. In loom shedding mechanism, the combination with a series of harness-frames in a loom, of a series of cranks mounted one above another and respectively connected operatively with the respective harness-frames, a mutilated gear for each crank, starting teeth in connection with said mutilated gear, a toothed driver which coacts with said starting teeth and the mutilated gears in giving half-revolutions to the said cranks and thereby raising and lowering the respective harness-frames, and pattern-mechanism having lines of pattern-indicators one above another in control of the said starting teeth.

3. In loom shedding mechanism the combination with a series of harness-frames, of a series of harness-levers with which the said harness-frames are connected, the said harness-levers being mounted one above another, a series of cranks for actuating said harness-levers, and pattern-controlled mechanism for giving half-revolutions to said cranks to actuate the harness-levers to raise and lower the harness-frames.

1,064,495. SHOCK-LOADER. GEORGE L. LADY, Baileyton, Tenn. Filed Jan. 25, 1913. Serial No. 744,212. (Cl. 214—2.)



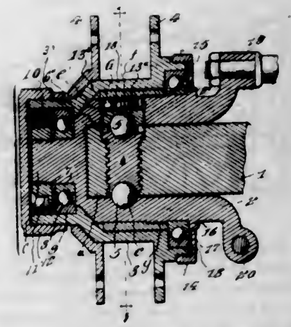
1. In a shock loader, the combination with a wheeled frame, of a shock loading frame pivotally mounted upon said main frame to extend transversely therefrom when in its loading position, supporting bars for the shock mounted upon said main frame, means carried by the main frame including a winding shaft and a rope connected thereto to move the shock inwardly and upwardly and secure the same upon said supporting bars, and additional means for swinging said frame and shock upwardly and inwardly upon the wheeled frame, said latter means including a shaft and winding drum mounted upon the shock loading frame.

2. In a shock loader, the combination with a wheel supported frame, of a shock loading frame pivotally mounted upon said wheeled frame to extend transversely therefrom when in its loading position, means mounted upon said loading frame to load and secure a shock thereon, a standard also pivotally mounted upon the wheeled frame at the inner end of the loading frame, and means mounted upon the loading frame and a flexible connection between the same, the wheeled frame, the standard and the loading frame to swing the standard and loading frame transversely of the wheeled frame and dispose said loading frame and standard upon the wheeled frame.

3. In a shock loader, the combination with a wheeled frame, of a shock loading frame pivotally mounted upon said wheeled frame to extend transversely therefrom when in its loading position, means carried by said loading frame to load and secure a shock thereon, a standard pivotally mounted upon the wheeled frame at the inner end of the loading frame, bars rigidly connecting said standard to the loading frame, pulleys arranged upon said standard, the wheeled frame and the loading frame and a rope passing around said pulleys, and a winding drum mounted upon the loading frame to wind said rope thereon and swing said standard and loading frame transversely of the wheeled frame and dispose the same thereupon.

4. In a shock loader, the combination with a wheeled frame, of a loading frame pivotally mounted at one end upon said wheeled frame to extend transversely therefrom when in its loading position, means carried by the loading frame to position and secure a shock thereon, a standard pivotally mounted at its lower end upon the wheeled frame at the inner end of said loading frame, bars rigidly connecting said standard and the loading frame, a rope connecting said standard and loading frame, and a winding drum mounted upon the loading frame to wind said rope thereon and lower the standard to rest upon said wheeled frame and simultaneously dispose the loading frame and the shock carried thereby above said wheeled frame and inwardly of the pivoted end of the loading frame.

1,064,496. AUTOMOBILE FRONT AXLE. CARL LAGERGREN, Osterville, Mass. Filed Feb. 23, 1912. Serial No. 679,325. (Cl. 21—93.)



1. In combination an axle, a wheel bearing mounted upon the axle and adapted to turn to the right or left, a ball above and a ball below the axle in line with the steering axis and forming interlocking means between the axle and wheel bearing.

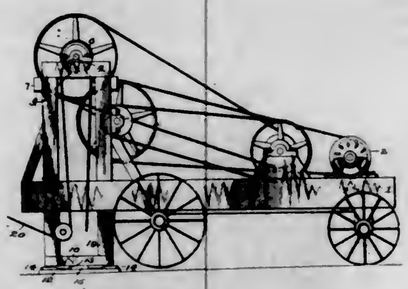
2. In combination an axle having a vertical opening near its outer end, a wheel bearing mounted upon the axle to turn laterally thereon about a vertical axis, said wheel bearing having a depression and an opening at diametrically opposite points and arranged in line with the vertical opening of the axle, pivot connecting means let into the vertical opening of the axle and projecting to engage the wheel bearing, and a plug threaded into the opening of the wheel bearing and engaging the pivot connecting means between the wheel bearing and axle.

3. In combination an axle having a vertical opening near its end, a wheel bearing mounted upon the axle and having a depression and threaded opening at diametrically opposite points in line with the vertical opening of the axle, a stud let into the vertical opening of the axle and having depressions in its ends, balls seated in the depressions in the ends of the stud and projecting beyond the sides of the axle, the lower ball entering the depression of the wheel bearing, and a plug threaded into the opening of the wheel bearing and having a depression to receive the projecting portion of the upper ball.

4. In combination an axle having a vertical opening near its end, a wheel bearing mounted upon the axle and having a depression in the upper side of its lower portion, and an opening in its upper portion, said depression and opening being in line with the vertical opening of the axle, a pivot stud adjustable in the vertical opening of the axle, means for securing said pivot stud to the axle in the adjusted position, a ball confined between the lower end of the pivot stud and the depression of the wheel bearing, a second ball mounted upon the pivot stud, and a plug fitted in the opening in the upper portion of the wheel bearing and confining said second ball upon the pivot stud.

5. In combination an axle having a vertical opening near its end, a wheel bearing having an opening and a depression in its upper and lower portions in line with the vertical opening of the axle, a pivot stud threaded in the vertical opening of the axle, means for securing the pivot stud in an adjusted position, a ball confined between the lower end of the pivot stud and the depression formed in the lower portion of the wheel bearing, a plug threaded into the opening in the upper portion of the wheel bearing, a second ball confined between said plug and the upper end of said pivot stud, and means for securing the plug in the adjusted position.

1,064,497. STUMP-PULLER. ARTHUR C. LAING, Dawson, Ga. Filed Aug. 8, 1912. Serial No. 714,092. (Cl. 57—103.)



1. In a stump puller having a frame and a cable removably attached thereto, a bracing member pivoted at one side to the frame, and a pulley journaled to the bracing member on the other side thereof, the said pulley being designed to have the cable passed therearound.

2. In a stump puller, a main frame, a side frame connected to said main frame, a drum supported in said side frame for receiving strain, and a swinging support hinged to the main frame under the side frame for taking the strain.

3. In a stump puller, a main frame, a side frame connected to said main frame, a drum supported in said side frame for receiving strain, a swinging support hinged to the main frame under the side frame for taking the strain, and means for jacking the swinging support under the frame.

4. In a stump puller, a frame, a drum mounted in said frame, a pulley on said frame, a rope adapted to be wound around said drum several turns, one end of said rope connecting with the stump and the other end passing around the pulley and free to be handled, the latter mentioned end being pulled down as the strain is applied to take up slack.

5. In a stump puller, a frame, a drum mounted on said frame, a pulley mounted on said frame, a rope having two free ends, one of said ends engaging a stump, and the other of said ends passing around said pulley and adapted to be handled, a portion of said rope intermediate the ends being wrapped around the drum, and a support for said frame.

[Claims 6 and 7 not printed in the Gazette.]

1,064,498. ARTIFICIAL-STONE BUILDING-BLOCK. FRANK F. LANDIS, Waynesboro, Pa. Filed Oct. 10, 1905. Serial No. 282,148. (Cl. 72—43.)



1. In a wall structure, a building block comprising an outer wall portion and a transverse bonding leg and formed with a projecting lug extending horizontally on its inside and between depressions therein and located near the center of gravity, forming a handle for lifting and handling said block, and having notches in its ends, a lug on the outer face of its transverse bonding leg and a depression alongside thereof, said parts being adapted to inter-engage with corresponding parts of adjacent blocks, substantially as set forth.

2. In a wall structure a building block comprising an outer wall portion and a transverse bonding leg and formed with a projecting longitudinally extending lug near the center of gravity on its inside surface and having a recess on each side of said lug, an end of said block being formed with a transverse recess, and a lug and depression side by side being formed on the outer face of the bonding leg of the block, the ends being formed tapered outwardly from an intermediate point and inwardly from said point, whereby they are adapted to form V-shaped joints between the adjacent blocks of the wall, all substantially as set forth.

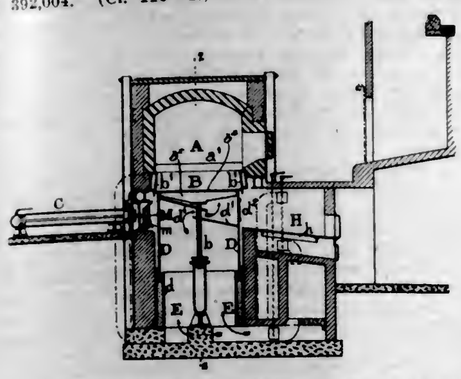
1,064,499. RAILWAY-SWITCH. JOHN H. LANEY, Savannah, Mo. Filed Oct. 31, 1911. Serial No. 657,755. (Cl. 104—115.)



1. In a railway switch, a pivoted tongue having upon its under side a recess, means for holding the tongue when positioned comprising a pin located in the recess and having a head adapted to turn as the tongue swings, and resilient means located in the recess between the head of the pin and the end of the recess for resiliently hold the tongue in position.

2. In a railway switch, a pivoted tongue having upon its under side an elongated recess disposed with its long dimension radially to the pivotal point of the tongue, a pin having a head located in the recess and adapted to turn as the tongue swings, a block bearing against said head, an adjusting screw engaging the block, a second block having a bearing receiving the end of the screw, and a spring interposed between the last mentioned block and the end of the recess.

1,064,500. FURNACE. HENRY NORMAN LEASK, Egremont, England. Filed Sept. 9, 1907. Serial No. 392,004. (Cl. 110—1.)



1. A furnace having a combustion chamber, a rising and falling grate member, hydraulic means engaging said grate member to control the rising and falling movements of the latter, and a device having a fixed applied position relatively to the grate and movable across the latter member when the latter is lowered for removing the mass supported thereon without displacing said grate member from its engaging means.

2. A furnace comprising a combustion chamber, a rising and falling grate member coöperating with the combustion chamber and having a channel form, hydraulic means for engaging the said grate member to control the rising and falling movements of the latter, and means to traverse the grate member between the sides thereof when in its lowered position to remove therefrom the material supported thereon without displacing the said member from its engaging means.

3. A furnace comprising a combustion chamber, a rising and falling grate member coöperating with the said chamber, a wall depending from the grate member, and a receptacle below the grate member for containing liquid and into which the said wall movably projects to form a seal for the wall.

4. A furnace comprising a combustion chamber provided with a rising and falling grate, means movable across the grate to discharge the mass supported on the grate when the latter is in lowered position, and an inclosed cooling chamber to receive the mass discharged from said grate.

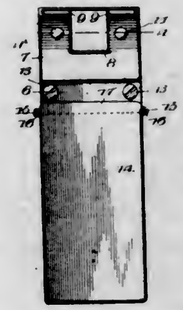
5. A furnace having a combustion chamber provided with a rising and falling grate member, a wall projecting downwardly from the grate member, a liquid containing receptacle below the grate member for receiving said wall to form a seal for the latter, said wall and receptacle constituting a duct and in communication with said combustion chamber, and a second duct for supplying air to the ducts formed by the wall and receptacle.

[Claims 6 to 10 not printed in the Gazette.]

1,064,501. BOTTLE-OPENER. JAMES LEE, Bradley, Ill. Filed Aug. 28, 1912. Serial No. 717,617. (Cl. 65—46.)

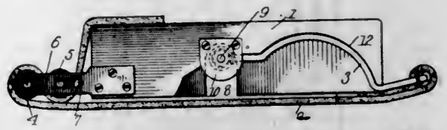
1. A cap remover comprising a chute adapted to be fixed to a stationary part and having a recess in its front opening through the upper free edge thereof, rearwardly converging members integrally formed with the opposed walls of the said recess and adapted to engage a crown cap when fastened on a bottle whereby on pressing downwardly upon the latter the said cap will be removed from such bottle and a receiver detachably engaged with the chute and adapted to receive the caps therefrom and when removed from the bottle.

2. A cap remover comprising a chute adapted to be fixed to a stationary part and having a recess in its front opening through the upper free edge thereof, rearwardly converging members integrally formed with the opposed walls of the said recess and adapted to engage a crown cap when fastened on a bottle whereby on pressing downwardly upon the latter the said cap will be removed from such bottle, a receiver detachably engaged with the chute and adapted to receive the caps therefrom and when removed from the bottle, and means for sustaining the chute in requisite position.



3. A bottle cap remover comprising a frame, a chute rising from the frame and being rearwardly inclined and having a recess in its front wall opening through its upper edge, cap engaging members at opposite sides of the recess and extended inwardly of the chute, a box-like body detachably connected with the frame and receiving a cap when removed from a bottle, and means mounted transversely in the chute for preventing the bulging of its front wall.

1,064,502. MOP. THOMAS W. LESLIE, New York, N. Y. Filed Sept. 27, 1912. Serial No. 722,623. (Cl. 15—43.)



1. In an improved mop, the combination of a body, a U-shaped bar pivotally secured thereto adjacent the sides, a strip of absorbent material secured to said U-shaped bar, and a pair of rollers carried by the body at one end, one of said rollers being mounted to move toward and from the other roller, the end of said absorbent material being passed around and between said rollers, whereby, when tension is applied to said end, the absorbent material will be caused to pass between the rollers and the moisture expelled therefrom.

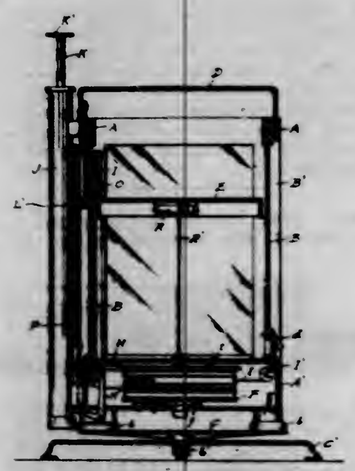
2. An improved mop comprising a body having a transverse recess in the bottom and lateral recesses in its sides, a spindle rotatably mounted in the transverse recess, a U-shaped bar having its ends secured to the spindle, said bar normally projecting along the side of the body and received in the lateral recesses and extending beyond one end of the body, resilient means for holding said bar in extended position, a strip of absorbent material secured to the U-shaped bar, and a pair of rollers carried at the other end of the body, one of said rollers being mounted for movement toward and from the other roller, the free end of said absorbent material being passed around and between said rollers, whereby when the bar is moved from extended position and tension applied to the free end of the absorbent material, the movable roller will be forced against said material, the bar rotated with said spindle as an axis against the tension of the resilient means, and the moisture in said absorbent material wrung therefrom.

3. In a mop, the combination of a body, a U-shaped bar pivotally secured thereto adjacent the sides, resilient means engaging the bar and the body to hold the bar substantially parallel with the body, a strip of absorbent

material secured to said U-shaped bar, and a pair of rollers carried by the body at one end, the end of said absorbent material being passed between said rollers, whereby when the absorbent material is tensioned it will be drawn through the rollers and the moisture expelled from said material.

4. In an improved mop, the combination of a body having a pair of extensions at one end, a roller mounted in the outer end of said extensions, a second roller mounted in said extensions between the end of the body and the first roller, said extensions having longitudinal slots, and said second roller having journals which are received in said slots, a strip of absorbent material, and means for movably mounting one end of said strip, said strip having its other end passed over the first roller and between the same and the second roller, and then around the second roller, whereby when the strip is pulled, the second roller will be forced against the first roller to wring out the strip.

1,064,503. AUTOMATIC SANITARY BREAD-SERVER. ROBERT LEWIS and JOHN MILTON KINNAMAN, St. Joseph, Mo. Filed Nov. 30, 1912. Serial No. 734,328. (Cl. 45—71.)

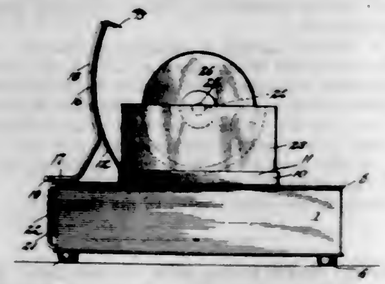


1. In an automatic sanitary bread server the combination of a supporting base, a plate pivotally revoluble on said supporting base, a cabinet having feet at the base thereof supported on said revoluble plate, a slidable withdrawable closure above the cabinet base, a vertical tube at each corner of the cabinet, a tube for operating mechanism adjacent one of said corner tubes said tube having a vertical slot therein, the lower part of the tube forming a liquid chamber, a spring actuated revoluble drum at the base of the cabinet, a bread elevating plate within the cabinet, pulleys in the tops of the corner tubes, pulleys in the bottoms of said corner tubes and cables adapted to travel in said tubes engaging with said pulleys and said spring actuated drum, an inner small tube within said tube for the operating mechanism and a push button thereon, a rod inside said inner tube, a plunger on the bottom of said rod, a second plunger spaced above the other plunger and rigid on said rod, a spiral spring around said rod seated on said second plunger, a collar integral with the bottom of said inner small tube bearing upon the top of said spiral spring, a tubular by-pass adjacent the bottom of said operating mechanism tube and an adjusting screw to regulate the flow of liquid, a horizontal arm fastened to said rod extending through the slot in the inner tube and through the vertical slot in said operating tube, a sleeve, a spring actuated hook pivotally attached to said inner tube and a lug thereon to release the hook from engagement with said arm, a cover on said cabinet, a lever pivotally secured at its lower end to said arm for raising and lowering the cover, a hook within said cover and spring actuating rods connected with said lever, a flat rod provided with a slot having a right angle horizontal extension therein, the rod extended alongside the operating tube, a crank lever and a catch engaging a spring actuated drum located in the base of the device, a folding handle by which to grasp the locking mechanism, a spring balance drum on the under side of the elevator plate and a cable connected with the base of the cabinet to take up lost motion.

2. In an automatic sanitary bread server the combination with a bread cabinet having a hinged cover with a lock and hook, the tubes at the corners thereof, a spring actuated revoluble drum in the base thereof, an elevator plate within said cabinet, upper and lower pulleys in said tubular corners, and cables having connection with said drum and carried on said pulleys, of a vertical tube for operating mechanism having a liquid chamber at the bottom and a slot in the side adjacent one of said corner tubes, a smaller tube within said adjacent tube and the push button thereon, a push rod in said smaller tube, a plunger on the bottom thereof, a second plunger spaced from said bottom plunger rigid on said push rod, a collar integral with the lower part of said small tube, and a spiral spring seated on said second plunger, a by-pass connected with said liquid chamber, a short horizontal rod and a lever connected therewith, a spring actuated hook with lug thereon adapted to engage with said short horizontal rod, the releasing of said spring actuated hook raising said lever, releasing the hook on said cover and lifting said cover to an open position.

3. A bread server comprising a cabinet, a hinged cover thereon provided with mechanism for raising and lowering the same automatically, a bread elevating plate in said cabinet, a spring actuated drum in the base of said cabinet, tubular corners on said cabinet, upper and lower pulleys therein, and the cables traveling thereon, said cables being connected to said spring actuated drum and elevator plate, an adjacent tube, a smaller inner tube and rod therein, and a push button thereon to operate the connecting mechanism raising and lowering said elevator plate, substantially as described.

1,064,504. GUMMED-TAPE MOISTENER. ALBERT H. LINAWEAVER, Findlay, Ohio. Filed Sept. 24, 1912. Serial No. 722,089. (Cl. 91—14.)



A gummed tape moistening device of the class described comprising a case having a vertical axis rising from its bottom having a roll of gummed tape and also provided at one side wall with a vertical guide opening for the tape and with an inclined guide bar, a removable top to close the upper side of the case, the said top being provided on its upper side with a recess, one wall of which has an upwardly extending guide, the said guide being provided with a cutter bar at its upper end and also provided at an intermediate point with spaced guides, a brace for the said guide secured on the removable top and provided at one end of the top with a guide element for the tape, a reservoir on the case, fitted in the recess thereof, and a moistening cylinder mounted for rotation in the reservoir.

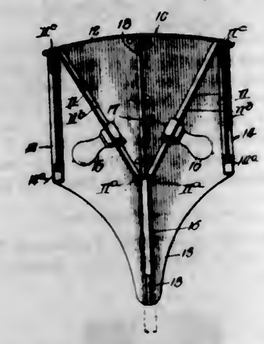
1,064,505. GAS-BURNER. MARTIN W. LONGFELLOW, Baltimore, Md., assignor to The Baltimore Gas Appliance and Manufacturing Company, Baltimore, Md. Filed Dec. 30, 1911. Serial No. 668,726. (Cl. 158—118.)



1. As an improvement in gas burners, an adjustable mixer shield provided with an arcuate slot, the side walls of said slot being provided with notches, and a locking screw extended through said slot and engaging said notches.

2. As an improvement in gas burners, an adjustable mixer shield provided with an arcuate slot, the side walls of said slot being provided with notches extending partially through the slot, and a locking screw extended through said slot and having a head of a size to engage said notches.

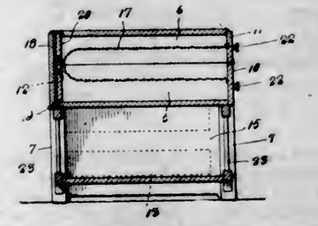
1,064,506. ELECTRICALLY-ILLUMINATED SIGN. JAMES M. LOUGHLIN, Chicago, Ill., assignor to Thomas Cusack Company, a Corporation of New Jersey. Filed May 4, 1912. Serial No. 695,041. (Cl. 40—130.)



1. In an illuminated sign, in combination, a longitudinally extending supporting member having oppositely inclined, downwardly converging sides adapted for the attachment of illuminating devices, end members which project laterally beyond said main supporting member and vertically below the same, fixed translucent panels in horizontal alinement with the inclined sides of said supporting member, and a removable sign panel located intermediate of and below said inclined sides, said end members and the ends of said removable sign panel being each provided, the one with a pair of spaced flanges to form a groove, and the other with a single flange adapted for engagement in said groove, the said associated flanges being provided with apertures to receive supporting bolts.

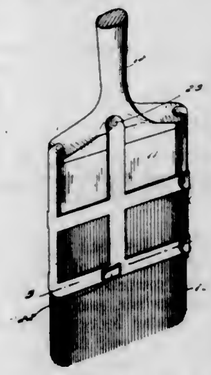
2. In an electrically illuminated sign, in combination, a closed box extending longitudinally of the sign, said box having oppositely inclined, downwardly converging side walls adapted for the attachment of electric lamp sockets, and end walls which project laterally beyond said side walls and vertically below the same, means forming laterally spaced, longitudinal flanges at the lower edges of said side walls providing a downwardly opening groove, fixed translucent sign panels in horizontal alinement with the inclined sides of said box having their ends attached to the said end walls, and a removable sign panel located intermediate of and below said inclined side walls and having a part along its upper longitudinal edge adapted to engage within said downwardly opening groove, said end walls and the ends of said removable sign panel being each provided, the one with a pair of spaced flanges to form a groove and the other with a single flange adapted for engagement in said groove, the said flanges being provided with associated apertures to receive supporting bolts.

1,064,507. BED-TABLE. BERNARD L. MAISON, Sacramento, Cal. Filed Jan. 29, 1913. Serial No. 745,002. (Cl. 5—17.)



An article of furniture comprising a foldable sectional body adapted to be folded and unfolded for forming a table and bedstead frame respectively, a support for the body including stationary legs, slides connected with the said support, legs connected with the outer ends of the slides and adapted to support one of the sections of the body when unfolded, the said body being open at one end thereof, and a two-part hinged closure for the open end of the body and adapted to be extended on the slide to form a rest for the sections unfolded onto the same.

1,064,508. BRIDLE FOR BRUSHES. JAMES MANDER, Philadelphia, Pa. Filed Aug. 21, 1912. Serial No. 716,271. (Cl. 15—23.)

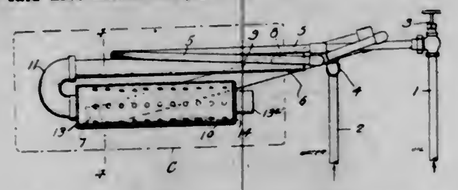


As a new article of manufacture, a bridle for brushes comprising a skeleton consisting of a single piece of material including an upper binding strip and a lower slotted binding strip, cross pieces connecting the binding strips, a longitudinally slotted locking strip at the inner ends of the binding strips, and a securing strip struck from the lower slotted binding strip at a point substantially medially thereof, and adapted to be passed through the broom material and the slot in the lower strip.

1,064,509. OIL-BURNER. ARTHUR D. MARCOTTE, Eunice, La. Filed Mar. 22, 1912. Serial No. 685,401. (Cl. 158—56.)

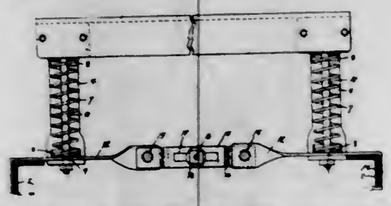
1. In an oil burning device, a central perforated tube, an exterior removable perforated casing carried by said central tube, a pipe disposed above said outer casing and having communication with the interior of said central tube, one end of said pipe being open, means for delivering a mixture of oil vapor and air into said open end, said means comprising an oil supply pipe and a water supply pipe a U-shaped tube disposed above said perforated casing

and connected with said oil supply pipe, a water receptacle disposed adjacent to the exterior of said casing and connected to said water supply pipe, and a common conduit communicating with said water receptacle and with said U-shaped tube and arranged to extend into the open end of said first mentioned pipe.



2. In an oil burning device, a central perforated tube, an exterior removable perforated casing carried by said central tube, a pipe disposed above said outer casing and having communication with the interior of said central tube, one end of said pipe being open, means for delivering a mixture of oil vapor and air into said open end, said means comprising an oil supply pipe and a water supply pipe, a U-shaped tube disposed above said perforated casing and connected with said oil supply pipe, an inclined water tube disposed adjacent to the exterior of said casing and connected to said water supply pipe, and a common conduit communicating with said inclined water tube and with said U-shaped tube and arranged to extend into the open end of said first mentioned pipe.

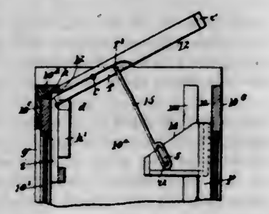
1,064,510. MATTRESS-FRAME. REINHOLD G. MARQUARDT, Milwaukee, Wis., assignor to Milwaukee Woven Wire Works, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 13, 1913. Serial No. 753,940. (Cl. 5—63.)



1. In a device of the described class, the combination with the side rails of a bedstead, of a pair of transversely arranged bars, each bar comprising two separable members adjustably connected together, each separable member being provided with angular brackets adapted to extend across and rest upon the upper horizontal surface down past the exterior vertical surface to and beneath the lower edge of the respective side rails of the bedstead, means for adjustably connecting the inner ends of said separable members together, a compression spring supported in a vertical position from each of said separable members within the side rails of the bedstead, and a mattress frame supported from the upper ends of said springs.

2. In a device of the described class, the combination with the side rails of a bedstead, of a pair of transversely arranged bars, each bar comprising two separable members adjustably connected together, each separable member being provided with angular brackets adapted to extend across and rest upon the upper horizontal surface down past the exterior vertical surface to and beneath the lower edge of the respective side rails of the bedstead, means for adjustably connecting the inner ends of said separable members together, a compression spring supported in a vertical position from each of said separable members within the side rails of the bedstead, a cup-shaped disk inclosing the respective ends of each of said springs, each disk being provided with a central aperture, a rod centrally located within each of said springs, having its respective ends within the apertures of said cup-shaped disks, a corner bracket forming an integral part of said mattress frame located at its respective corners, said bracket being adapted to support a mattress fabric from and above said frame and to form supporting bearings for said vertical rods, said brackets being adapted to support said rods, said rods to hold said cup-shaped disks, while said disks in turn retain the respective ends of said springs in place, all substantially as and for the purpose specified.

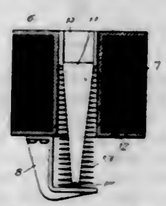
1,064,511. TYPE-WRITER CABINET. JAMES ELMER MARTIN, Kensington, Minn. Filed Jan. 3, 1910. Serial No. 536,008. (Cl. 45—52.)



1. In combination, a rectangular-bodied cabinet, having the upper edge of its front wall depressed, an extension piece for said front wall slidable thereon, and a lid pivoted near one transverse edge between the side walls of the body, said lid depressing the extension piece when rocked into open adjustment and raising said extension piece when rocked into open adjustment and raising said piece when the lid is closed.

2. In a typewriter cabinet, the combination with the body of the cabinet having its front wall depressed, of a slidable extension piece for the said front wall, said extension projecting in the depression of the front wall and provided with a rabbet on its inner lower edge, and a lid pivoted at its side edges between the sides of the cabinet and having a rabbet on its front edge engaging the rabbet of the extension piece when the lid is closed.

1,064,512. ELECTROMAGNET. FREDERICK W. MARTINI, Chicago, Ill. Filed Oct. 26, 1912. Serial No. 727,837. (Cl. 175—21.)



1. As an article of manufacture an electro-magnet having a solid core and a plicatile armature, the first lamina of which has one edge always in contact with the solid core of said electro-magnet.

2. As an article of manufacture an electro-magnet having a fixed core and a plicatile armature extendible therefrom, the first lamina of said armature having its free edge always in contact with said fixed core, the material of said armature extending integrally from lamina to lamina to the other free edge of said plicatile armature.

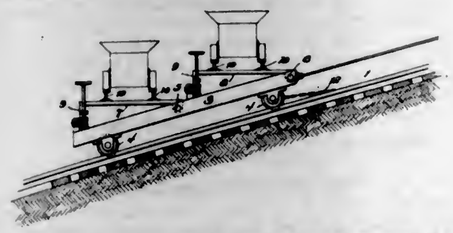
3. As an article of manufacture an electro-magnet having a solid core and an extendible plicatile armature, the first lamina of which is always in contact with the solid core of said electro-magnet, and a guide for said armature adapted to receive a thrust to move the same upon each successive movement of the laminæ of said armature beginning with that lamina which is always in contact with the solid core of the electro-magnet, whereby said guide is movable by the cumulative effects of the individual laminæ.

4. As an article of manufacture an electro-magnet having a solid core partly filling the center thereof and an extendible armature comprising a strip of magnetically susceptible material folded upon itself, to form a plurality of alternate laminæ disposed in angular planes, with reference to each other when deënergized and adapted to occupy parallel planes when energized, said armature when so energized and compressed substantially filling that portion of the center of electro-magnet not occupied by the solid core thereof, and when deënergized extending beyond the electro-magnet, the innermost lamina of said armature having its free edge always in contact with said solid core, for purposes described.

5. As an article of manufacture an electro-magnet having a solid core and an extensible member comprising a plurality of laminæ the innermost of which is always in contact with said solid core, successive laminæ, from innermost to outermost, becoming when energized effective magnetically as a part of said solid core, a movable member of diamagnetic material adapted and arranged to receive thrusts from each of said laminæ as it moves from inclined position to energized position in which it acts as a part of the solid core.

[Claims 6 and 7 not printed in the Gazette.]

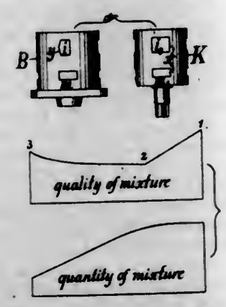
1,064,513. TRUCK. ALEXANDER MCALLISTER and THOMAS LOGAN, Hanna, Wyo. Filed July 20, 1912. Serial No. 710,572. (Cl. 105—15.)



1. A car carrying truck comprising a wheeled frame, platforms pivoted at one end to the frame and having their surface inclined with relation to the frame, tracks carried by the platform, and means for raising and lowering the free end of the platform.

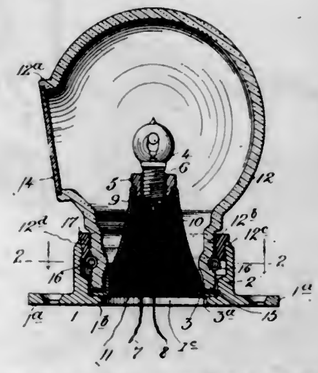
2. A car carrying truck comprising a wheeled frame, platforms pivoted at one end to the frame and having their surface inclined with relation to the frame, tracks carried by the platform, and means for locking cars on the tracks against lateral movement over the platform.

1,064,514. METHOD OF REGULATING AND CONTROLLING THE VALVE-MOTION IN EXPLOSIVE-MOTORS. GUSTAV MEES, Barmen, Germany, assignor, by mesne assignments, to The Colonial Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Original application filed Apr. 16, 1904, Serial No. 203,450. Divided and this application filed Jan. 18, 1906. Serial No. 296,668. (Cl. 123—100.)



The method of regulating the admission of explosive mixture to an internal combustion engine subjected to varying loads, which consists in supplying to said engine an increasingly greater quantity of mixture of slightly diminishing quality or richness from minimum load to a predetermined normal load, and then in supplying from said normal load to maximum load a substantially constant quantity of mixture of increasing richness.

1,064,515. ELECTRIC SIGNAL-LAMP. ARTHUR K. MILLER, Peekskill, N. Y. Filed Dec. 20, 1912. Serial No. 737,792. (Cl. 240—11.)



1. An electric tail lamp comprising a bracket, a support for an electric lamp, a globe having a neck adapted to receive said support, said globe being provided with a clear pane, a nut rotatively mounted upon said neck, and means on said neck to retain said nut thereon for securing said globe upon said bracket.

2. An electric tail lamp comprising a bracket, a support for an electric lamp, a colored globe having a neck adapted to receive said support, said globe being provided at one side of the axis of the globe and neck with a clear pane, a nut rotatively mounted upon said neck, and means on said neck to retain said nut thereon for securing said globe upon said bracket.

3. An electric tail lamp comprising a bracket, a hollow support for an electric lamp provided with means to retain a lamp thereon, conductors extending through said support from said retaining means, insulation within said support embedding said conductors, a globe having a neck receiving said support, and means for detachably retaining said globe upon the bracket.

4. An electric tail lamp comprising a bracket having a chamber on one side communicating with an opening in line with said chamber, a hollow support upon the bracket, a lamp socket carried by the support, conductors extending through the support from said socket, insulation within the support embedding said conductors, said conductors passing through said opening in the bracket, a globe having a neck receiving said support, and means for detachably retaining said globe upon the bracket.

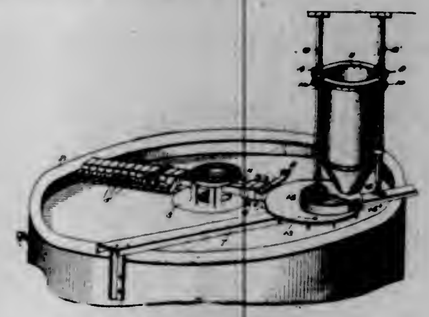
5. An electric tail lamp comprising a bracket having a chamber on one side communicating with an opening in line with said chamber, a hollow support upon the bracket, a lamp socket carried by the support, conductors extending through the support from said socket, said conductors passing through said opening in the bracket, a globe having a neck receiving said support, a nut rotatively mounted upon the neck, means for retaining the nut upon the neck, and means for detachably connecting the nut with said chamber for retaining said globe adjustably upon the bracket.

[Claims 6 to 10 not printed in the Gazette.]

1,064,516. FEEDING DEVICE FOR FURNACES. ERNEST B. MILLER, Baltimore, Md. Filed Feb. 2, 1911. Serial No. 606,101. (Cl. 75—143.)

1. In a furnace feeding mechanism, a horizontal feed table mounted above the furnace, devices for intermittently rotating said feed table, a feed hopper mounted above the said feed table and eccentrically of the axis of

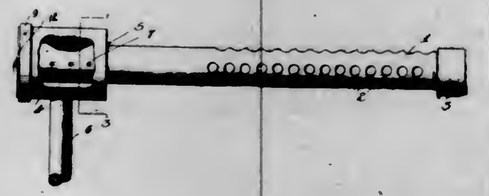
the same, and a fixed sweep or blade of a helical form mounted above said table and on the axis thereof and adapted to force substantially all the material fed from the hopper on to the table into the furnace.



2. In a furnace feeding device, a feed hopper, a rotatable feed table mounted underneath the same, a rabble arm extending transversely of the top of the furnace and carrying means for contacting with and intermittently rotating said table, and a fixed spiral sweep mounted above said table and adapted to force the material therefrom into the furnace.

3. In a furnace feeding device, a feed hopper, a rotatable feed table mounted beneath the same and having angle pieces attached to the bottom, a rabble arm extending transversely of the top of the furnace, driving catches connected to said arm for contacting with and intermittently rotating the table, and a fixed spiral sweep mounted above said table and adapted to force the material therefrom into the furnace.

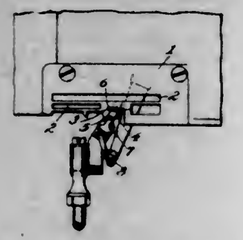
1,064,517. GAS-BURNER. FRANK MINNICK, Hamilton, Ohio. Filed June 8, 1912. Serial No. 702,501. (Cl. 158—99.)



A gas burner comprising a tube having staggered outlet openings in its sides and top, a cap for closing one end of the tube, a casing surrounding the open end of the tube and separated therefrom, means carried by the casing for controlling the air into the open end of the tube, flanges carried by the casing for engaging the tube and for forming a gas tight connection between the casing and the tube, and a gas inlet pipe leading into the bottom of the casing, said tube having a plurality of apertures in its sides and top, said apertures extending diagonally through the walls of the tube and adapted to project the gas passing therethrough toward the closed end of the tube and to suck air into the open end of the tube.

1,064,518. THROAT-PLATE FOR SEWING-MACHINES. JAMES R. MOFFATT, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 26, 1906. Serial No. 345,184. (Cl. 112—29.)

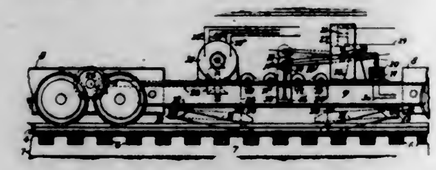
1. A throat plate for sewing machines, having a circular needle opening and a thread slot leading therefrom, the wall of said needle opening extending in front of and in rear of the needle in the line of feed, a stitch finger, over which stitches may be formed, the sides of said finger being inclined to the line of feed, and one of said inclined sides, extending into said needle opening; substantially as described.



2. A throat plate for sewing machines, having a circular needle opening and a thread slot leading therefrom, the wall of said needle opening extending in front of and in rear of the needle in the line of feed, a stitch finger formed integrally with the throat plate, over which stitches may be formed, the sides of said finger being inclined to the line of feed, and one of said inclined sides extending into said needle opening.

3. A throat plate for sewing machines, having a needle opening and a thread slot leading therefrom, the wall of said needle opening extending in front of and in rear of the needle, in the line of feed, a stitch finger over which stitches may be formed, the sides of said finger being inclined to the line of feed and one of said inclined sides leading to the needle opening and the under side of said stitch finger being inclined upward in the direction of the line of feed.

1,064,519. MEANS FOR LOCKING TRAVELING CRANES. WILL K. MONROE, Cleveland, Ohio, assignor to The Brown Hoisting Machinery Company, Cleveland, Ohio, a Corporation. Filed Dec. 2, 1912. Serial No. 734,565. (Cl. 188—39.)



1. A means for locking traveling cranes and similar constructions, comprising the combination with a tongue-piece pivotally connected to the same, of a series of stops for said piece located exteriorly of the crane within the lowest range of the oscillation of the piece around said pivotal connection, together with electrically controlled means for oscillating said piece upwardly around said connection to a position clear of said stops, substantially as shown and described.

2. A means for locking traveling cranes and similar constructions, comprising the combination of oppositely related tongue-pieces pivotally attached to the same, a solenoid on said crane, a lever suitably connected to the solenoid to be actuated thereby when said solenoid is energized, and, to the tongue-pieces to oscillate the same around their pivotal connections to the crane when actuated, as aforesaid, and an electric circuit controlled from said crane and interrupted by said solenoid, substantially as shown and described.

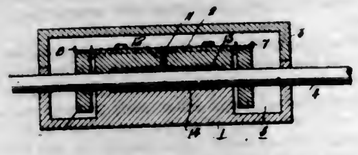
3. A means for locking traveling cranes and similar constructions, comprising the combination of oppositely related tongue-pieces pivotally attached to and depending from the same, a solenoid on said crane, a lever suitably connected to the solenoid to be actuated thereby when the solenoid is energized, and to the tongue-pieces to raise the same around their pivotal connections to the crane when actuated, as aforesaid, and an electric circuit, controlled from said crane and interrupted by said solenoid substantially as shown and described.

4. The combination, with an electric traveling crane movably mounted upon rails and supporting ties, of oppositely related tongue-pieces pivotally attached at one end of said pieces to the frame work of said crane and depending downwardly therefrom below the upper surface of the ties, suitable solenoid mechanism on the crane to raise said pieces upwardly, around their pivotal connections with the crane, from below said surface of the ties when said solenoid is energized, and an electric circuit, controlled from said crane, and interrupted by said solenoid, substantially as shown and described.

5. The combination, with an electric traveling crane or similar structure, of oppositely related tongue-pieces pivotally attached at one end of said pieces to the frame-work of the crane, and depending downwardly therefrom in the path of its travel, stops suitably arranged at intervals in said path to engage said pieces when in their downwardly depending position, suitable solenoid mechanism on the crane to raise said pieces out of said engagement with the stops when the solenoid is energized, and thereafter to close the electric circuit that actuates the crane-traveling motor, together with a subordinate electric circuit for energizing said solenoid, substantially as shown and described.

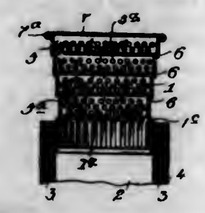
[Claim 6 not printed in the Gazette.]

1,064,520. SELF-LUBRICATING BEARING. CLARENCE H. MOORE, Cincinnati, Ohio. Filed Nov. 21, 1911. Serial No. 661,493. (Cl. 64—32.)



A self lubricating bearing comprising a box having a central boss arising therein and forming with the box wells on opposite sides of the boss and a communicating channel between the wells, a shaft resting upon the boss, feed wheels carried by the shaft and operating in the wells, a cap piece secured upon the boss and holding the shaft in position, said cap piece having a flange overhanging the communicating channel and having channels formed in the upper side thereof extending from the wells to the center of the box and through the upper part to the axle, trough-shaped members carried by the flange and resting against the feed wheels to remove the oil therefrom and to conduct the same to the channels, and a top or cover for the box.

1,064,521. AIR-DISTRIBUTER FOR LAMPS AND STOVES. STEPHEN B. MORSS, Rahway, N. J. Filed Feb. 20, 1913. Serial No. 749,589. (Cl. 67—63.)



1. An air distributer for lamps and stoves provided with an exterior perforated wall and having a plurality of air deflectors located within said wall one above the other, said deflectors having openings decreasing in relative size one above the other.

2. An air distributer for lamps and stoves having a plurality of internal air deflectors, said deflectors having openings, and perforations surrounding said openings.

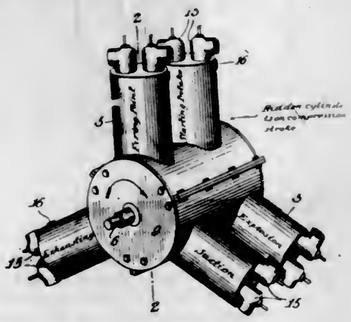
3. An air distributer for lamps and stoves having a plurality of internal air deflectors located one above the other, said deflectors having openings decreasing in relative size one above the other and having perforations surrounding said openings.

4. An air distributer for lamps and stoves having a plurality of spaced deflectors therein of gradually increasing diameter in an upward direction.

5. An air distributer for lamps and stoves having a plurality of spaced deflectors therein, said distributer having ledges upon which said deflectors rest.

[Claims 6 to 10 not printed in the Gazette.]

1,064,522. ROTARY INTERNAL-COMBUSTION MOTOR. GLENN MUFFLY, Dubuque, Iowa. Filed Feb. 24, 1910. Serial No. 545,769. (Cl. 123—44.)



1. A rotary internal combustion motor with cylinders arranged radially about a common axis in two or more planes or groups, pistons acting within said cylinders and the whole so timed that the explosions will occur in rotation between the various planes or groups of cylinders.

2. A rotary internal combustion motor having an even number of cylinders arranged radially about a common axis in two planes or groups, pistons acting within said cylinders, and means being provided for supplying an explosive mixture and firing same within the cylinders of the two planes or groups alternately in such manner that no two consecutive explosions shall occur in the same group of cylinders.

3. A gas engine of the revolving cylinder type with cylinders arranged in two star-shaped groups, rigidly connected and rotating in separate planes about the same axis, said cylinders being provided with pistons connected with a suitable crank shaft or eccentric device, inlet and exhaust ports, ignition device and all necessary mechanism, the whole being so timed that the explosions will alternate between the two groups of cylinders and occur at equal intervals in the revolution of the cylinders.

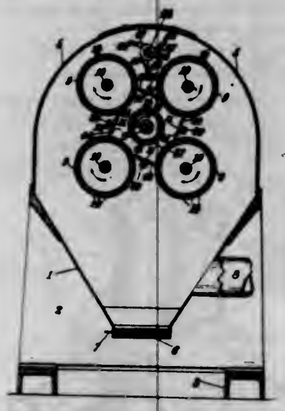
1,064,523. DELINTER. JOSEPH D. MULLEN, St. Louis, Mo., assignor to Texas Delinter Company, Limited, Shreveport, La., a Corporation of Louisiana. Filed Apr. 24, 1912. Serial No. 692,763. (Cl. 13—10.)

1. A delinting machine having a delinting chamber, a plurality of delinting cylinders forming a portion of the wall of said chamber, and being externally screw-threaded to assist in the feeding of the seeds through said chamber, and the threads on said cylinders being of relatively large pitch to feed the seeds and being serrated to remove the lint and fiber from the seeds, and a rotary delinting member within said chamber.

2. A delinting machine having a delinting chamber, a plurality of delinting cylinders forming a portion of the wall of said chamber and being externally screw-threaded, the threads being of relatively large pitch to assist in the feeding of the seeds through said chamber, and a delinting cylinder within said chamber also externally screw-threaded and having its threads of relatively large pitch to assist in feeding the seeds through said chamber, the threads on each cylinder being serrated to remove the lint and fiber from the seeds.

3. In a delinting machine in combination with a plurality of spaced rotatable delinting cylinders, and means to

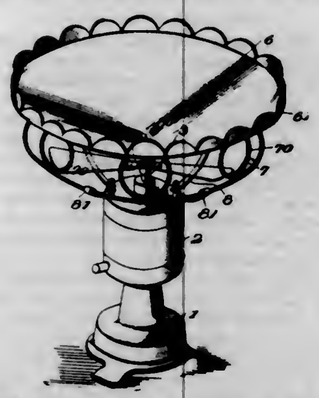
close the spaces between said cylinders, said cylinders and closing means forming the walls of a delinting chamber, a rotatable delinting cylinder in the center of said chamber, a fan located above the uppermost of said closing means, and means to rotate said fan and all of the said delinting cylinders in unison.



4. In a delinting machine, in combination with a plurality of spaced rotatable delinting cylinders, and means to close the spaces between the cylinders, a rotatable delinting cylinder arranged substantially in the center of said space, a fan located above the upper of said closing means, means to rotate said central cylinder and therewith the first mentioned cylinders, and means operated by the means for rotating said central cylinder to actuate the fan.

5. In a delinting machine, in combination with a plurality of spaced rotatable delinting cylinders, and means to close the spaces between the cylinders, a rotatable delinting cylinder arranged substantially in the center of said space, means above one of said closing means to prevent the accumulation of lint on the latter, means to rotate said central cylinder and therewith the first mentioned cylinders, and means operated by the means for rotating said central cylinder to actuate the means for preventing the accumulation of lint.

1,064,524. ATTACHMENT FOR ELECTRIC FANS AND THE LIKE. WILLIAM NELSON and JOHN W. RUGGABER, Racine, Wis., assignors to Racine Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed Apr. 23, 1912. Serial No. 692,751. (Cl. 230—1.)



1. A table fan comprising a support, a rotary fan arranged above and carried by said support and arranged to generate an upwardly-directed air blast, a center-piece tray arranged horizontally above said fan and having an upwardly and outwardly flaring under surface to distribute said air blast approximately radially, approximately horizontal arms at their inner ends secured to said support and at their free ends doubled up and back to form hooks, a horizontally-disposed ring, and tray-supporting uprights at their upper portions fixed thereto and at their lower portions fixed to said ring, said ring resting on said arms and removably fitting in said hooks, whereby said tray, uprights and ring constitute a fan guard removable bodily from and supported by said arms.

2. A table fan comprising a support, a rotary fan arranged thereabove to generate an upwardly-directed air blast, a centrally-depressed disk arranged approximately horizontally and centrally above said fan and unobstructed at its depressed top to form a center-piece-supporting tray or the like, said disk flaring upwardly and outwardly at its under surface to distribute said air blast approximately radially, arms below said fan and secured to said support, and fan-guard uprights secured to and supporting said tray and secured together, and supported by said arms, whereby said tray and uprights constitute a fan guard.

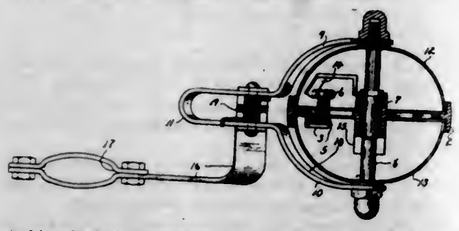
3. A table fan consisting of a pedestal at its upper end provided with a motor casing, a fan above said casing arranged to generate an upwardly-directed air blast, outwardly-projecting arms arranged below said fan and at their inner ends secured to the upper end of said casing, a center-piece receiving and supporting tray arranged above said fan and having an upwardly and outwardly flaring under surface to distribute said air blast approximately radially, a supporting ring engaging the outer ends of said arms and supported thereby, and fan-guard uprights connecting said tray and the ring and supporting the tray therefrom.

4. A fan comprising a casing having supporting means, a rotary air-blast-generating element carried thereby and arranged exteriorly of the casing; arms arranged behind said element and at their inner ends secured to said casing, the outer free ends of said arms being bent forwardly and forming permanently open sockets at the front sides of said arms; and a guard for said element consisting of secured means arranged in front of and circumferentially about said element and a stiff ring carrying said means and of greater diameter than said element; said ring fitting in said sockets and removable forwardly therefrom and being detachably clasped thereby against the front sides of said arms, said means and ring forming a unitary structure supported by and radially removable from and applicable to said arms.

5. A fan comprising a support, a fan carried by said support and rotating on a vertical axis, approximately-horizontal arms arranged below said fan and at their inner ends secured to said support, the free ends of said arms being bent to form open sockets at the upper sides of said arms, and a guard for said element consisting of a guard-supporting ring of greater diameter than said fan and fitting said sockets and removable upwardly therefrom and thereby held detachably clasped against the upper sides of said arms, a disk having an upwardly and outwardly flaring under surface above said fan, and disk-supporting uprights fixed to said disk and to said ring.

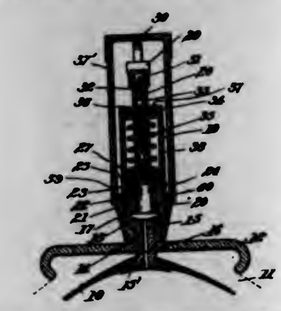
[Claim 6 not printed in the Gazette.]

1,064,525. BICYCLE-BELL. EDWARD P. NICHOLS, East Hampton, Conn., assignor to The Starr Bros. Bell Co., East Hampton, Conn., a Corporation. Filed Oct. 7, 1912. Serial No. 724,407. (Cl. 116—56.)



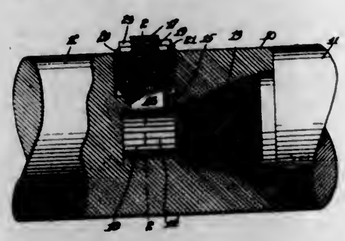
A bicycle bell comprising a yoke, a shaft fixed in the outer ends of said yoke, a ring-like frame free to rotate on said shaft, said frame carrying two reversely turned hammers, a gong on each end of said shaft, and a tripper within each gong and adapted as the frame is turned to cause the hammers to strike the respective gongs.

1,064,526. AUTOMATIC RELIEF-VALVE FOR PNEUMATIC TIRES. SEAMAN P. NOE, Ocean Grove, N. J. Filed Mar. 6, 1912. Serial No. 681,999. (Cl. 152—12.)



In a valve structure of the character described, a casing provided with apertures in its side walls and having a valve seat therein, the inner end of the valve seat being spaced from the inner wall of the casing to form an annular passage adjacent said apertures, a valve provided with a hollow stem, and a check valve in the hollow stem to permit inflation of the tire through the stem, said first-mentioned valve being lifted from its valve seat under influence of excessive pressure in the tire and which excessive pressure is forced by said first-mentioned valve out of the casing through said passage and said apertures.

1,064,527. SECURING DEVICE. EVERETT EDWARD NORRIS, Breckenridge, Colo. Filed Dec. 18, 1912. Serial No. 737,489. (Cl. 255—32.)



1. In a device for relatively locking a plurality of connectible members, a gripping member carried by one of the members and adapted to grip the other member, and a plug for threaded connection with the gripping member and with the first member for securing the gripping member in gripping engagement with the second member.

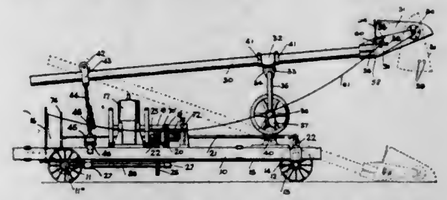
2. In a device for relatively locking a plurality of connectible members, a gripping member carried by one of the members, a plug for threaded connection with the gripping member and with the first member for securing the gripping member in gripping engagement with the second member, and means for relatively locking the gripping member with respect to the said plug.

3. In a securing device, the combination with a gripping member comprising a gripping head and an integral threaded shank, of a tubular plug interiorly and exteriorly threaded, with the interior threads of the plug adapted for threaded connection with the shank of the gripping member and the exterior threads of the plug adapted for threaded connection with an object adapted to be retained in locked engagement with another object engaged by the head of the gripping member.

4. In a securing device, the combination with a gripping member comprising a gripping head and an integral threaded shank, of a tubular plug interiorly and exteriorly threaded, with the interior threads of the plug adapted for threaded connection with the shank of the gripping member and the exterior threads of the plug adapted for threaded connection with an object adapted to be retained in locked engagement with another object engaged by the head of the gripping member, and a cotter pin adapted to extend transversely through the free end of the said shank, with the ends of the cotter pin extending into recesses formed in the said plug to lock the said shank against rotation relatively to the plug.

5. In a securing device, the combination with a gripping member, of threads thereon, a plug for threaded connection with the gripping member, and threads formed on the peripheral surface of the plug, with the threads on the said gripping member being greater in number per standard unit than the threads on the peripheral surface of the plug.

1,064,528. POWER-SHOVEL. ADOLPH OFFERMANN, Davenport, Iowa. Filed Apr. 25, 1912. Serial No. 693,018. (Cl. 37—16.)



1. In a power shovel, an arm carrying a pivoted scoop, a crank shaft on which said arm is swiveled and mounted to rock in a vertical plane, a restraining device engaging the arm in the rear of the crank shaft, and a trolley rail on which said restraining device has guided movement in a direction transverse to the length of the shovel arm.

2. A power shovel comprising a shovel arm carrying a pivoted scoop, a crank shaft, means for actuating said shaft, connections between the cranked portion of the shaft and the shovel arm, said connections permitting the vertical rocking of the shovel relatively to the shaft and a lateral swiveling of the shovel, a restraining device for the rear end of the shovel arm, said restraining device comprising a roller traveling on the shovel arm, a member carrying said roller, a rail, a device having guided movement on the rail, transversely to the said shovel, and connections between the said device traveling on the rail and the roller member.

3. In a power shovel, an elongated shovel arm carrying a scoop, a crank shaft, a block loosely mounted on the cranked portion of said shaft, a sleeve on the shovel arm and having swiveled connection with the said block, and actuating means for the crank shaft.

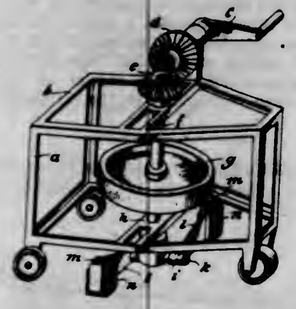
4. In a power shovel, an arm carrying a scoop at one end, a carrying and supporting member on which said arm is mounted to turn laterally at a point between the ends of the arm, and means for giving to said member, and with it the scoop arm and scoop carried thereon, a forward and upward movement for loading and raising the scoop, and a rearward and downward movement to its original position.

5. In a power shovel, an arm carrying a scoop at its forward end, a member on which said arm is mounted, at a point between the ends of the arm, to turn laterally, means for raising and lowering said member and the scoop-carrying arm, and manually-controlled means engaging the rear end of the arm, said means having guided lateral movement to swing the arm and scoop laterally.

1,064,529. GRINDING OR POLISHING MACHINE MOVABLE ON THE SURFACE TO BE TREATED. ERICH OFFERMANN, Aix-la-Chapelle, Germany. Filed June 6, 1912. Serial No. 702,025. (Cl. 51—11.)

1. Grinding and polishing machine consisting of a frame movable on the surface that is to be treated, of a spindle

journaled in said frame, means for rotating said spindle, oscillating arms at the lower end of the spindle, said arms being turnable around a horizontal axle and which receive grinding-blocks at their ends; the axis of revolution lying beyond the center of gravity of each oscillating arm with its grinding-block, in order to increase the force of pressure exerted by the grinding-blocks on the surface to be treated, by the centrifugal force produced by the rotation of the spindle.

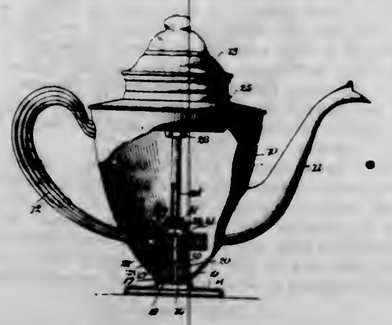


2. In a grinding and polishing machine, the combination of a frame, a vertical shaft mounted in the frame, means for rotating the shaft, and arms loosely pivoted to the lower end of the vertical shaft and carrying at their ends grinding blocks which bear on the surface to be ground.

3. In a grinding and polishing machine, the combination of a frame, a vertical shaft mounted in the frame, means for rotating transverse trunnions extending from the opposite sides of the shaft near the lower end of the latter, an arm carrying a grinding block loosely mounted on each bearing the arms extending in opposite directions, the center of gravity of the arms being above the center of the trunnions to cause the grinding blocks to bear on the surface being treated when the shaft is rotated, and means for rotating the shaft.

4. In a grinding machine, the combination of a frame, a vertical shaft mounted in the frame, an arm loosely pivoted to the shaft and having at its outer end a grinding block, the axis of revolution lying beyond the center of gravity of the oscillating arm with its grinding block, whereby to increase the pressure exerted by said block on the surface being treated by the centrifugal force produced when the shaft is rotated, and means for rotating the shaft.

1,064,530. PERCOLATOR. JOHN J. O'MARA, New York, N. Y. Filed Apr. 10, 1911. Serial No. 620,090. (Cl. 53—3.)



1. A device of the class described comprising a main vessel, a heating chamber associated therewith and having an outlet, a percolating tube adapted to convey heated fluid to the material from which the infusion is to be made, and a union for removably connecting said tube and outlet part of said chamber, said union comprising two telescoping members forming therebetween a single circular interrupted passage for the entrance of fluid into said chamber from said main vessel, one of said members having a notch, the other of said members having an extension adapted to be received in said notch and forming therewith an interlocking connection, preventing a relative turning movement of said members when said union is assembled.

2. A device of the class described comprising a main vessel; a heating chamber associated therewith and having an outlet part; a percolating tube adapted to convey heated fluid to the material from which the infusion is to be made; and a union for removably connecting said tube and said outlet part of said heating chamber, said union comprising a member having spaced flanges and a wall between said flanges, said member having an opening at one side of said wall and a collar adapted to sit upon said flanges and forming therewith a single circular interrupted passage, said interruption being formed by said wall between said flanges, said collar having an opening at a point corresponding to the side of said wall remote from said opening of said first member.

3. A device of the class described, comprising a main vessel, a heating chamber associated therewith and having an outlet part, a percolating tube adapted to convey heated fluid to the material from which the infusion is to be made, and a union for removably connecting said tube and said outlet part of said chamber, said union comprising a tubular member adapted to receive said outlet part telescopically, and having spaced flanges, a wall between said flanges, having an extension projecting beyond said flanges, and a collar adapted to be separably associated with said member, and engaging at said flanges, said collar having a notch adapted to receive said extension, and having an opening at one side of said notch, said tubular member having an opening at one side of said wall communicating with the interior of said member.

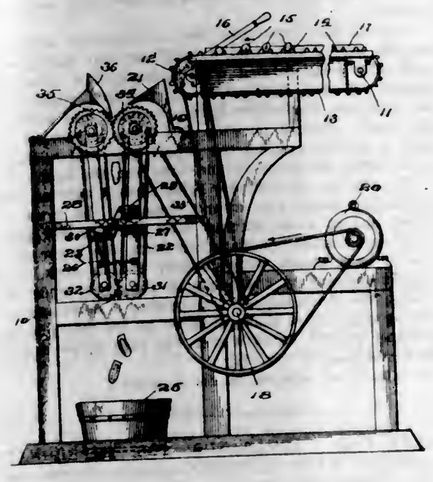
4. In a device of the class described, a union for removably connecting the percolating tube and the heating chamber, said union comprising a member having spaced flanges and a wall between said flanges, said member having an opening at one side of said wall, and a collar adapted to seat upon said flanges and forming therewith a tortuous passage, said collar having an opening at a point corresponding to the side of said wall remote from said opening of said first member.

5. In a device of the class described, a union for removably connecting the percolating tube and the heating chamber, said union comprising a member having spaced flanges and a wall between said flanges, said member having an opening at one side of said wall, and a collar adapted to seat upon said flanges and forming therewith a tortuous passage, said collar having an opening at a point corresponding to the side of said wall remote from said opening of said first member, said members having respectively an extension and a notch forming an interlocking connection, whereby said members, when said union is assembled, are in predetermined relative positions.

1,064,531. PICKLE-SPLITTER. BEN OTT, Louisville, Ky. Filed Apr. 30, 1912. Serial No. 694,046. (Cl. 146—7.)

1. In a pickle splitter, rollers journaled in spaced relation having substantially parallel axes, gears carried by the rollers and intergearing with each other, frames depending from the axes of the rollers, other rollers carried at the lower ends of the frames, conveyers passing over the rollers of like frames, a knife located at the lower end of and between the conveyers and means to provide equal movement of the conveyers away from the knife.

2. In a pickle splitter, a frame, rollers journaled upon the frame in spaced relation and with substantially parallel horizontal axes, conveyers depending from the axes of the rollers and movable thereon as centers, gears carried by the rollers intergearing with each other, means to apply power to one of the rollers to move the conveyers in complementary directions, a knife located between the



lower ends of the conveyers and means insuring a similar movement of the conveyers away from the knife.

1,064,532. CAN-COVER. EDWARD M. PEACOCK, Jersey City, N. J., assignor to Dairymen's Manufacturing Company, a Corporation of New York. Filed Mar. 8, 1913. Serial No. 752,858. (Cl. 31—77.)



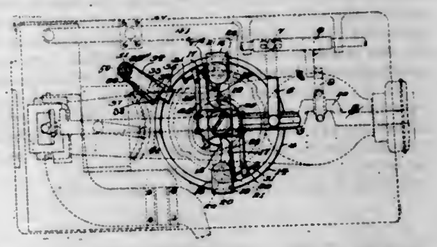
1. A can cover comprising a top member and a stopper member, the top member having an outwardly extending flange portion continuous therewith and having an annular fold substantially at the juncture of the top portion and the flange portion turned down upon the top portion, and the stopper member having a flange at its upper end received and held in the fold.

2. A can cover comprising a top member having a flat top portion and an outwardly and downwardly extending flange portion continuous therewith and having an annular outwardly turned fold substantially at the juncture of the flat top portion and the flange portion, and a stopper member having an outwardly turned flange at its upper end received and held in the fold of the top member.

3. A can cover comprising a top member and a stopper member, the top member having an annular recess and an annular fold adjacent to the recess open on its under side and disposed in the recess flush with the top member, and the stopper member having a flange at its upper end received and held in the fold.

4. A can cover comprising a top member having a flat top portion and an outwardly and downwardly extending flange portion continuous therewith and having an annular recess at the juncture of the flat top portion and the flange portion, an annular outwardly turned fold disposed in the recess flush with the top portion, and a stopper member having an ontwardly turned flange at its upper end received and held in the fold of the top member.

1,064,533. FEEDING MECHANISM FOR BUTTON-HOLE-MACHINES. CHARLES MARTIN PERKINS, Cohoes, N. Y. Filed Aug. 3, 1912. Serial No. 713,187. (Cl. 112—4.)



1. In a sewing machine, the combination of stitch forming mechanism, a relatively movable work holder, a feed wheel for producing the relative movements between the work holder and the stitch forming mechanism, a dog cooperating with the feed wheel, comprising two members pivoted together on the same pivot adapted to form clamping jaws which engage the feed wheel, means for operating the two members to turn them on their pivot to cause them to clamp the feed wheel, and for reversely operating said members to destroy the clamping action of said members.

2. In a sewing machine the combination of stitch forming mechanism, a relatively movable work holder, a feed wheel for producing the relative movements between the work holder and the stitch forming mechanism, said feed wheel having a flange, an oscillating lever having two abutments and operating over the feed wheel, dogs on the feed wheel, each dog comprising two members pivoted together and lying adjacent opposite sides of the flange, one of the members having an extension, the extensions of the members being in the path of movement of the abutments, whereby when the oscillating lever is operated in one direction the members of the dogs will be partially rotated to clamp the flange and move the feed wheel, and means controlled by the oscillating lever to release the members from the flange when the oscillating lever is returned to normal position.

3. In a sewing machine the combination of stitch forming mechanism, a relatively movable work holder, a feed wheel for producing the relative movements between the work holder and the stitch forming mechanism, said feed wheel having a flange, an oscillating lever having two abutments and operating over the feed wheel, dogs on the feed wheel, each dog comprising two members pivoted together and lying adjacent opposite sides of the flange, one of the members having an extension, the extensions of the members being in the path of movement of the abutments, whereby when the oscillating lever is operated in one direction the members of the dogs will be partially rotated to clamp the flange and move the feed wheel, a leaf spring secured to the inner member of each dog, the outer end of the spring overlapping both members of the dog, arms projecting from the oscillating lever, screws extending from the arms and bearing on the leaf springs to release the members from the flange when the oscillating lever is returned to normal position.

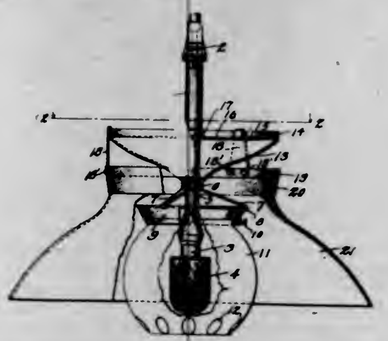
4. In a sewing machine, the combination of stitch forming mechanism, feeding mechanism including a feed wheel with a flange, an oscillating lever, a dog including two members pivoted together on the same pivot and adapted to engage the flange, one of said members being in the path of movement of the oscillating lever, whereby to partially rotate both members to clamp the opposite sides of the flange when said lever is moved in one direction, and means controlled by the oscillating lever to release the clamping action of the pivoted members when said lever is moved in the opposite direction.

5. In a sewing machine, the combination of stitch forming mechanism, feeding mechanism including a feed wheel provided with a flange, dogs coöperating with the flange,

each dog comprising an outer member having a lip to engage the periphery of the flange and an inner member having a seat for the outer member and an eccentric head to engage with the inner surface of the flange, the inner member having an extension and a leaf spring secured thereto, the outer end of the spring overlapping both the inner and outer members, means for pivotally connecting the two members of each dog, an oscillating lever having abutments which contact with the extensions and partially rotate the members of the dogs to clamp the flange, arms extending from the oscillating lever, adjusting devices carried by the arms to engage with the leaf springs to disengage the members from the flange when the oscillating lever is returned to its normal position.

[Claims 6 and 7 not printed in the Gazette.]

1,064,534. LAMP STRUCTURE. FERDINAND PIASZEK, Saginaw, Mich. Filed Nov. 27, 1912. Serial No. 733,867. (Cl. 67—94.)



1. In a light structure, the combination with a support and a light pendent therefrom, of an inverted, substantially conical reflector above the light, a shade spaced below the upper portion of the reflector and disposed for facilitating circulation of air past the light through the space between the reflector and shade, and a globe for the light having air circulating means coöperating with the space between the reflector and shade.

2. In a light structure, the combination, with a support and a light pendent therefrom, of a reflector sustained by said support above the light, said reflector being of substantially inverted conical form, and a shade disposed to substantially surround the light and having its upper portion spaced below and of substantially the diameter of the greatest diameter of the reflector, said shade flaring downwardly from its upper portion.

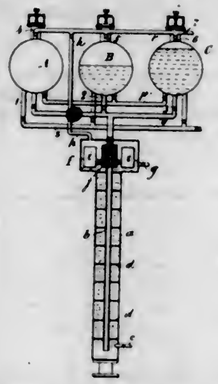
3. In a light structure, the combination, with a supporting supply tube and a light pendent therefrom, the said tube being formed with a bead, of a substantially conical reflector disposed in an inverted position above the head and having its apex truncated and surrounding the supply pipe in position for being supported by the bead, a spider engaging the supply pipe and having arms outstanding therefrom to and engaging the outer portions of the reflector, the reflector being formed with an annular upstanding flange and with tabs struck from the flange over the arms of the spider, and a shade pendent from the reflector in position for substantially surrounding the light.

4. In a light structure, the combination, with a supporting supply tube and a light pendent therefrom, the said tube being formed with a bead, of a substantially conical reflector disposed in an inverted position above the bead and having its apex truncated and surrounding the supply pipe in position for being supported by the bead, a spider engaging the supply pipe and having arms outstanding therefrom to and engaging the outer portions of the reflector, the reflector being formed with an annular upstanding flange and means engaging the arms of the spider, spaced hooks having hook portions engaging the flange and shanks pendent therefrom, the lower end portion of each shank being formed with a hook, and a shade support engaged by the hooks at the lower ends of said shanks.

5. In a light structure, the combination, with a supporting supply tube and a light pendent therefrom, the said tube being formed with a bead of a substantially conical reflector disposed in an inverted position above the bead and having its apex truncated and surrounding the supply pipe in position for being supported by the bead, a spider engaging the supply pipe and having arms outstanding therefrom to and engaging the outer portions of the reflector, the reflector being formed with an annular upstanding flange and means engaging the arms of the spider, spaced hooks having hook portions engaging the flange and shanks pendent therefrom, the lower end portion of each shank being formed with a hook, a shade support engaged by the hooks at the lower ends of said shanks, the shade support comprising a downwardly converging ring, and a shade engaged by the ring and having its upper portion flared within the ring proportionally to the convergence of the ring.

[Claim 6 not printed in the Gazette.]

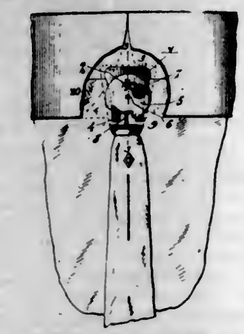
1,064,535. APPARATUS FOR IMPREGNATING LIQUIDS WITH CARBONIC ACID. ANDERS ANDERSEN PINDSTOFTE, Copenhagen, Denmark. Filed Oct. 14, 1911. Serial No. 654,756. (Cl. 209—1.)



In an apparatus for impregnating liquids with carbonic acid, the combination of a closed impregnating chamber, a number of partitions provided with small holes and arranged above one another in said impregnating chamber, a supply pipe for carbonic acid inserted near the bottom of said chamber, and an air outlet pipe leading from the top of said chamber, with a supply pipe for the liquid to be impregnated, which supply pipe extends from the top of the chamber to near its bottom, a bottling pipe leading from the top of the chamber, and a liquid reservoir arranged above said chamber and having its upper part connected to the air outlet pipe and its bottom connected to the liquid supply pipe; substantially as described and illustrated and for the purpose specified.

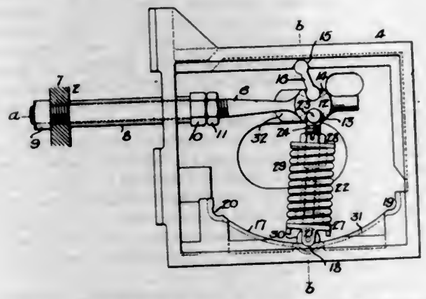
1,064,536. TIE-BUTTON LOCK. CHARLES S. PORTER, Rochester, N. Y. Filed July 10, 1912. Serial No. 708,644. (Cl. 24—59.)

A tie fastener, comprising an attaching plate to which a tie may be secured, said plate having a hole for the head of a collar button, laterally projecting tabs at the bottom of said plate adapted to engage under the bottom edge of a collar, a disk-shaped locking plate pivotally connected with the attaching plate and provided with a key-hole slot to receive the collar button, and a spring stop on the attaching plate, said locking plate being cut away along a portion of its margin leaving spaced limiting shoulders



which come into contact with said spring stop, and an eccentric edge which bears and rides against the spring stop.

1,064,537. SPRING-SWITCH. CHARLES A. PSILANDER, Philadelphia, Pa., assignor to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 27, 1912. Serial No 711,902. (Cl. 104—79.)



1. The combination in an actuating and locking mechanism for tongue switches, of a tongue; a rod connected thereto and having a socket at each side; a casing into which the rod extends; said casing having a notch at one side and a plurality of notches at the opposite side; a non-yielding rocker located on one side of the rod and adapted to engage one socket in the rod and the notch in the casing; and a yielding rocker on the other side of the rod adapted to engage the other socket in the rod and either of the plurality of notches at the other side of the casing.

2. The combination in an actuating and locking mechanism for tongue switches, of a tongue; a rod connected thereto; a casing into which the rod extends; a head on the rod having sockets at each side; a casing having a notch in one side wall and a plurality of notches in the oposite side wall and connected by a segmental track; a non-yielding rocker between the wall having a single notch and the head of the rod; and a yielding rocker having one end resting in the socket in the rod and the other end capable of being shifted to rest in either of the sockets in the other side wall of the casing.

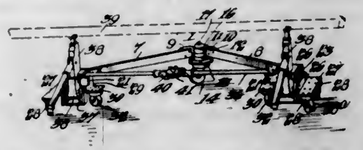
3. The combination in an actuating and locking mechanism for tongue switches, of a tongue; a rod having a socket in each side; a non-yielding rocker adapted to one of said sockets; a casing having three sockets therein; and a yielding rocker adapted to the socket in the rod and any one of the sockets in the casing; said casing sockets being so arranged, with respect to the rod, that the rocker in either of its three positions will yieldingly hold the tongue with equal pressure.

4. The combination in actuating and locking mechanism for tongue switches, of a switch tongue; a rod attached to the tongue; a casing into which the rod extends; a head on the rod having sockets on each side thereof; said casing having a single groove at one side thereof; a non-yielding rocker located between the groove in the casing and one of the sockets in the head; said casing having notches on the opposite side connected by a segmental track; and a yielding rocker having projections adapted to enter one of the notches and carrying a spring which will yield when the switch tongue is actuated and will allow for the adjustment of the rocker in the casing.

5. The combination in actuating and locking means for tongue switches, of a switch tongue; a rod attached to the tongue; a casing into which the rod extends; said rod having sockets at its inner end at each side; a casing having a socket in one wall; a non-yielding rocker located between the last mentioned socket and one socket in the rod; the casing having three sockets on the opposite side thereof; a segmental track connecting the sockets; a yielding rocker mounted between the socket and the rod and in one of the sockets in the casing; and a roller adapted to travel between the sockets.

[Claim 6 not printed in the Gazette.]

1,064,538. FOLDING JACK TRUCK MECHANISM. EDWIN G. QUICKEL and ALLEN E. QUICKEL, York, Pa. Filed Oct. 31, 1912. Serial No. 728,841. (Cl. 57—15.)



1. A folding jack truck mechanism comprising a plurality of supporting shoes, an arm rigidly connected with each shoe, said arms being pivotally connected together, and coupling rods extending from one shoe to another.

2. A folding jack truck mechanism comprising a pair of supporting shoes, arms connected with said shoes and pivotally connected together, coupling rods connected with said shoes and provided with heads, said coupling heads being movable at different angles relatively to each other, and means controllable at the will of the operator for securing said heads rigidly together in order to render said coupling rods rigid.

3. A folding jack truck mechanism comprising a pair of shoes, arms rigidly connected therewith and pivotally connected together, a caster connected with said arms at the point of pivotal connection thereof, coupling rods pivotally connected with said shoes and provided with heads, said heads being movable relatively to each other for enabling the coupling rods to be adjusted relatively to each other, and means controllable at the will of the operator for securing said heads rigidly together.

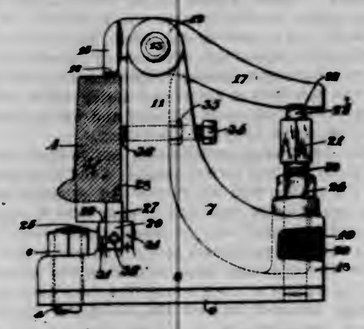
4. A folding jack truck mechanism comprising a plurality of supporting shoes, arms connected rigidly with said supporting shoes and pivotally connected together, coupling rods pivotally connected with said supporting shoes and adjustable relative to each other, and means controllable at the will of the operator for securing said arms together when thus adjusted.

5. A folding jack truck mechanism comprising a plurality of supporting shoes, an arm rigidly connected with each shoe, the arms being pivotally connected together, and bracing mechanism extending from one shoe to another.

1,064,539. SIDE-GRIPPING CHUCK FOR LATHES OR BORING-MILLS. AUSTON H. REAM, Verona, Pa. Filed Oct. 15, 1912. Serial No. 725,777. (Cl. 82—40.)

1. A chuck consisting of a housing having means for locating and securing it to a face-plate, an outer hinge bearing having a pivoting bolt, and an inner bearing face, an outer lever fulcrumed on the pivoting bolt having a gripping jaw, and means incorporated with the housing

for adjusting said lever and jaw with relation to said bearing face, substantially as set forth.



2. A chuck consisting of a housing having means for locating and securing it to a face-plate, an inner bearing face, an outer pivoted jaw having a lever extension, and an adjusting screw mounted in the housing and adapted to bear against said lever, substantially as set forth.

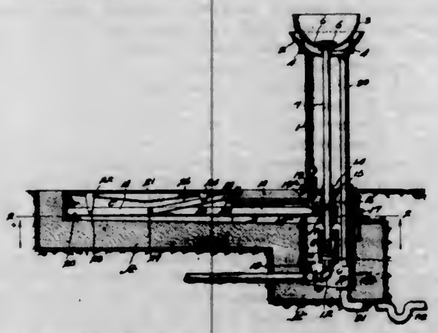
3. A chuck consisting of a housing having means for locating and securing it to a face-plate and an inner bearing face, an outer pivoted jaw having a lever extension, an adjusting screw mounted in the housing provided with a tightening lock nut and adapted to bear against said lever, and an additional adjusting screw in the housing for the article being treated, substantially as set forth.

4. In a chuck, the combination with a housing having an adjustable gripping jaw and means for exerting clamping pressure therethrough; of a removable bearing shoe on the housing adapted to be set in operative relation with said jaw and provided with a securing device for holding it in position, substantially as set forth.

5. A chuck consisting of a housing having means for locating and securing it to a face-plate, an inner bearing face, an outer pivoted jaw, means for adjusting said jaw with relation to said bearing, and a centralizing set screw adapted to provide a bearing for the face of the material being treated, substantially as set forth.

[Claims 6 and 7 not printed in the Gazette.]

1,064,540. SANITARY DRINKING-FOUNTAIN FOR HORSES AND CATTLE. WILLIAM JOHN REGAR, Tampa, Fla. Filed Dec. 19, 1912. Serial No. 737,717. (Cl. 119—76.)



1. A sanitary fountain for stock, comprising a hollow pedestal, a catch basin carried thereby, a drinking bowl mounted above said catch basin, and having an opening in its bottom, with a valve seat around said opening, a supply pipe slidably mounted in said pedestal and carrying a valve adapted to close the opening in the bottom of said bowl when the supply pipe is in the lowered position, a second valve carried at the lower end of said supply pipe and closing the same, said supply pipe being provided with perforations above said valve, a water main connected to any suitable source of water supply, a supply box connected to said water main, and provided with a valve seat closed by the valve on the lower end of said supply pipe when said pipe is in the raised position, and means adapted to be operated by the weight of the animal for moving said supply pipe down to the lowered position, with independent means for restoring the parts to the initial position, substantially as described.

2. A sanitary fountain for stock, comprising a hollow pedestal, a catch basin carried thereby, a drinking bowl mounted above said catch basin, and having an opening in its bottom, with a valve seat around said opening, means for adjusting the position of said drinking bowl relative to said catch basin, a supply pipe slidably mounted in said pedestal and carrying a valve adapted to close the opening in the bottom of said bowl when the supply pipe is in the lowered position, a second valve carried at the lower end of said supply pipe and closing the same, said supply pipe being provided with perforations above said valve, a water main connected to any suitable source of water supply, a supply box connected to said water main, and provided with a valve seat closed by the valve on the lower end of said supply pipe when said pipe is in the raised position, and means adapted to be operated by the weight of the animal for moving said supply pipe down to the lowered position, with independent means for restoring the parts to the initial position, substantially as described.

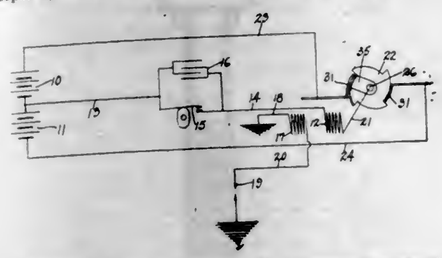
3. A sanitary fountain for stock, comprising a drinking bowl having an opening in its bottom, with a valve seat around said opening, a supply pipe slidably mounted relative to said bowl, and carrying a valve adapted to close the opening in the bottom of said bowl when the supply pipe is in the lowered position, a second valve carried at the lower end of said supply pipe and closing the same, said supply pipe being provided with perforations above said valve, a water main connected to any suitable source of water supply, a supply box connected to said water main, and provided with a valve seat closed by the valve on the lower end of said supply pipe when said pipe is in the raised position, and means adapted to be operated by the weight of the animal for moving said supply pipe down to the lowered position, with independent means for restoring the parts to the initial position, substantially as described.

4. A sanitary fountain for stock, comprising a drinking bowl having an opening in its bottom, with a valve seat around said opening, and carrying a valve adapted to close the opening in the bottom of said bowl when the supply pipe is in the lowered position, a second valve carried at the lower end of said supply pipe and closing the same, said supply pipe being provided with perforations above said valve, a water main connected to any suitable source of water supply, a supply box connected to said water main, and provided with a valve seat closed by the valve on the lower end of said supply pipe when said pipe is in the raised position, and means adapted to be operated by the weight of the animal for moving said supply pipe down to the lowered position, with independent means for restoring the parts to the initial position, substantially as described.

5. A sanitary fountain for stock, comprising a drinking bowl having an opening in its bottom, with a valve seat around said opening, a supply pipe slidably mounted relative to said bowl and carrying a valve adapted to close the opening in the bottom of said bowl when the supply pipe is in the lowered position, a second valve carried at the lower end of said supply pipe and closing the same, said supply pipe being provided with perforations above said valve, a water main connected to any suitable source of water supply, a supply box connected to said water main, and provided with a valve seat closed by the valve on the lower end of said supply pipe when said pipe is in the raised position, a platform and levers adapted to be operated by the weight of the animal for moving said supply pipe down to the lowered position, with a spring for restoring the parts to the initial position, substantially as described.

[Claims 6 to 12 not printed in the Gazette.]

1,064,541. SYSTEM OF DISTRIBUTING ELECTRIC ENERGY. IRVING J. REUTER and FRANKLIN P. McDERMOTT, Jr., Anderson, Ind., assignors to Remy Electric Company, Anderson, Ind., a Corporation. Filed Apr. 4, 1912. Serial No. 688,529. (Cl. 171—97.)



1. A source of electric energy, a current consuming means electrically connected therewith, and a switch for starting and stopping the flow of current through said current consuming means according to whether it is desired to have said current consuming means in operation or not and arranged to reverse the direction of current through the current consuming means each time that the current is started by said switch.

2. A source of electric energy, a current consuming means, and a switch for starting and stopping the flow of current through said current consuming means according to whether it is desired to have said current consuming means in operation or not, said switch being connected with the positive and negative poles of the source of electric energy and arranged for starting the flow of current through said current consuming means in different directions a substantially equal number of times.

3. A source of electric energy, a current consuming means, and a switch for starting and stopping the flow of current through said current consuming means, said switch having a plurality of positive connections and a plurality of negative connections with the source of electric energy and arranged for reversing the direction of current through the current consuming means each time that the current is started by said switch.

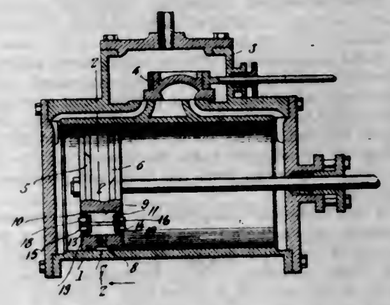
4. A plurality of sources of electric energy, a current consuming means, a switch for connecting said current consuming means successively with each source of electric energy, and means for preventing said switch from connecting one source of electric energy with the current consuming means until it has been connected with the other sources or sources of electric energy.

5. A plurality of sources of electric energy, a current consuming means, the positive pole of one of said sources of electric energy and the negative pole of another source of electric energy being connected to one terminal of said current consuming means, a switch connected with the other terminal of the current consuming means and adapted to electrically connect said last-mentioned terminal of the current consuming means with the other terminals of said sources of electric energy, and means for preventing the switch from connecting the current consuming means with one source of electric energy until it has connected it with the other sources of electricity in succession.

[Claim 6 not printed in the Gazette.]

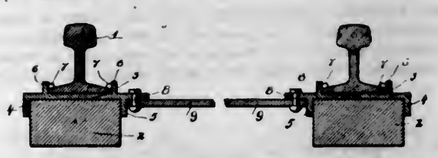
1,064,542. PISTON-SUPPORT. ALBERT RITTERSBACH, Philadelphia, Pa. Filed Sept. 11, 1912. Serial No. 719,803. (Cl. 121—105.)

In a reciprocating engine a piston having a transverse bore, heads closing the respective ends of the bore to form a chamber, and each formed with a central opening of less diameter than the similar dimension of the bore, a pocket formed in the periphery of the chamber and a port to establish communication between said pocket and chamber, and a valve member operating in the chamber and comprising valve sections to coöperate with the opening in the heads, and a connection between said valve members of less length than the distance between the proximate surface of the head and projections from the valve members at all times seated in the openings in the heads and



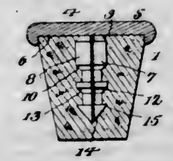
guiding the valves in a movement, said projections being cruciform to at all times form ports between the projections and the walls of the head openings.

1,064,543. RAILROAD-TIE. JOSEPH ROGERS, North Vernon, Ind. Filed Nov. 15, 1912. Serial No. 731,581. (Cl. 238—5.)



The herein described construction of rail supports, including a pair of spaced longitudinally extending wooden sleepers, a plate arranged upon the top of each of the sleepers, each of said plates having angular sides which are adapted to engage with the opposite side faces of the sleepers, the said plates adjacent their longitudinal edges having each a pair of malleable ribs extending the entire length of the plates and spaced to receive the rails therebetween, said ribs being slitted to provide fingers which are bent over the opposite longitudinal edges of the base flanges of the rails, the plates being extended beyond their inner flanges, the said extending portion being provided with a plurality of spaced openings, spacing rods arranged beneath the projecting edges of the base and contacting with the inner side flanges provided by the plates, and securing elements passing through the openings in the plate extensions and through similar openings in the spacing member.

1,064,544. BOTTLE-STOPPER. LOUIS ROSENFIELD, Chicago, Ill., and JOSEPH E. OPPER, Louisville, Ky. Filed Oct. 4, 1912. Serial No. 723,979. (Cl. 215—51.)



1. In a bottle stopper, comprising a body of compressible material having a central cylindrical socket therein, a cap having a shank attached centrally to its under side, said shank being formed with an enlargement and a reduced portion below the enlargement and a second enlargement below said reduced portion, said shank being further reduced in diameter below the second enlargement and provided at its lower end with a pointed head, the stopper

body being adapted to conform to the various recesses and shoulders formed by the enlargements, reduced portions and head.

2. A bottle stopper comprising a body of compressible material having a cylindrical socket therein, a cap having a rectangular shank centrally attached to its under side, said shank being formed with an enlargement adjacent to the cap, a reduced portion below the enlargement, a second enlargement below the reduced portion, and a second reduced portion below the second enlargement, and a conical head on the end of the shank, thereby providing means engaged by the stopper body, for preventing the shank from being withdrawn from the body, and preventing its turning therein.

3. A bottle stopper comprising a body of compressible material, a cap having a recess in its under face, a rectangular shank centrally secured to said under face, said shank being provided with a rectangular enlargement adjacent to the cap and provided with a cut-away portion adjacent to the cap, for the purpose set forth, a reduced portion below the enlargement, a second enlargement below said reduced portion and a second reduced portion below the intermediate enlargement and having a conical head thereon, whereby shoulders and recesses are formed which are engaged by the elastic material of the cork to prevent the cap and cork body from being separated.

1,064,545. BLADE-HOLDING DEVICE. JOHN G. ROTE, Brookline, Mass., assignor, by mesne assignments, to Gillette Safety Razor Company, a Corporation of Massachusetts. Filed May 11, 1907. Serial No. 373,128. (Cl. 30—25.)



1. A razor-blade holding device comprising a blade support, means for attaching the blade thereto, a laterally-swinging clamping member pivotally attached to said support, and a spring-pressed latch upon said device for locking said clamp in place, substantially as described.

2. A razor-blade holding device comprising a blade support, means for attaching the blade thereto, a laterally-swinging clamping member pivotally attached to said support, and a spring-pressed, longitudinally-sliding latch upon said device for locking said clamp in place, substantially as described.

3. A razor-blade holding device comprising a blade support, blade-retaining lugs thereon, a clamping plate attached to said blade support and recessed to receive the heads of said lugs, and a spring-pressed sliding latch entering a notch on said clamp to lock the same to the support, substantially as described.

4. A razor-blade holding device comprising a handle, an integral extension thereof forming a blade support, blade-retaining lugs thereon, a laterally-swinging clamping member pivotally mounted upon said blade support, and recessed to receive the heads of said lugs, and a spring-pressed latch automatically locking said clamping member to said support upon the closing of the parts, substantially as described.

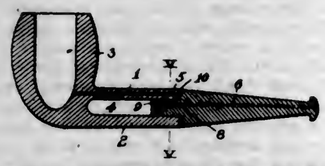
5. A razor-blade-holding device for a double-edge blade, comprising two arms, each provided with a flat blade seat and pivotally connected together for relative movement in the plane of the blade-seat, blade-retaining lugs upon one of said arms, the other arm having slots for receiving said lugs, the parts being so constructed and adapted that when clamped together upon a blade the same will be firmly held and both of its edges exposed, an engaging member carried by one arm for overlying the end of the other arm for preventing separation of the arms in a direction vertical to the blade-seat, and locking means for securing said arms against relative movement about the pivot.

1,064,546. SELF-LOCKING BOLT. CATHERINE RYAN, St. Paul, Minn. Filed Dec. 18, 1911. Serial No. 666,567. (Cl. 151—14.)



In combination with a nut or bur, a bolt having threads near the end of substantially uniform depth and of a size normally to receive the nut, said threads thereafter progressively increasing in outer peripheral diameters up to a maximum and then progressively diminishing for a determined distance, the bottoms of said threads falling in a cylindrical surface concentric with the axis of the bolt, so that when the nut is screwed on so as to force the threads thereof over said threads of largest diameter, the nut will thereby be held wedged upon the bolt.

1,064,547. PIPE. JAMES T. SARGENT, Chicago, Ill. Filed Oct. 30, 1912. Serial No. 728,709. (Cl. 131—12.)



1. A pipe having in combination a bowl and stem, said stem having a main smoke passage of small substantially uniform caliber connected to the bowl, and with a pocket of large capacity relative to the passage, a smoke reversing passage extending from the main passage and arranged to deliver the smoke into the rear end of the pocket and to direct it toward the forward end, a portion of the reversing passage between its ends being made of larger diameter than the main passage, and an outlet passage extending from the rear end of the pocket through the mouth piece of the stem.

2. A pipe having in combination a bowl and stem, said stem having a main smoke passage of substantially uniform small cross-sectional dimensions extending from the bowl, a pocket of large capacity relative to said passage and connected thereto, and an outlet passage extending from the pocket, and means for introducing air into the stream of smoke prior to its entrance into the pocket and in opposition to the direction of flow of the smoke.

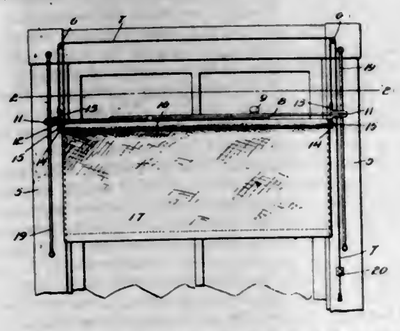
3. A pipe comprising a bowl and stem portion and a mouth piece portion, said stem portion being bored to provide a smoke passage leading from the bowl, an expansion chamber, and a reverse passage connecting the first passage and chamber, and means providing for the admission of air to mix with the smoke prior to its entrance into the expansion chamber and controlled by the adjustment of the mouth piece.

4. A pipe having in combination a bowl, a stem formed in sections, a pocket formed in the bowl section of the stem, a main smoke passage extending from the bowl to the pocket the pocket being of large capacity relative to said passage, an outlet passage extending from the pocket and through the mouth section of the stem, means for introducing air into the stream of smoke prior to its entrance into the pocket, the inflow of air being controlled by the adjustment of one of the stem sections relative to the other.

5. A pipe having in combination a bowl and stem, said stem having a main smoke passage extending from the bowl, a pocket of large capacity relative to said passage and connected thereto, and an outlet passage extending from the pocket, and means for directing a stream of air into the smoke in the main passage at an angle to the direction of flow of the smoke.

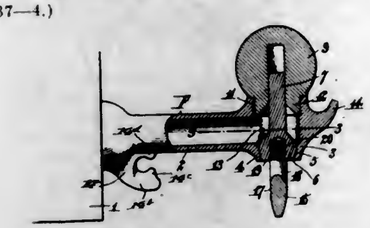
[Claims 6 to 10 not printed in the Gazette.]

1,064,548. WINDOW-SHADE. ROBERT J. SCHANWECKER, Cumberland, Md. Filed May 17, 1911. Serial No. 627,725. (Cl. 156—27.)



The combination with spaced vertically arranged stationary guide rods, of a center member, outer substantially U-shaped clips fixed to the outer end of said member and each being formed from a single piece of material bent to provide out-turned ears containing perforations, said clips being formed with apertures receiving the guide rods, guide pulleys adapted to be mounted above and contiguous to the upper ends of the guide rods, and flexible cords trained over said pulleys and engaged in the perforations provided in the uppermost ears of the clips, the said clips being of the same width with respect to the member and are adapted to form seats therein for receiving the outer ends of the bars between the ears of the said clips, the perforations in the lowermost ears being designed to receive the journaled ends of a shade roller.

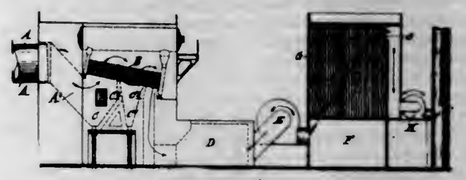
1,064,549. FAUCET. WALTER A. SCHMEYKAL, Chicago, Ill. Filed Nov. 21, 1911. Serial No. 661,547. (Cl. 137—4.)



1. An automatic faucet comprising a barrel-like body portion, a valve chamber at one end of said body portion and having a valve seat formed therein, a movable valve for said seat, a valve operating bar, and a supporting hook depending from the end of the barrel opposite the valve chamber for receiving said operating bar and holding the same in elevated or open position.

2. An automatic faucet comprising a tubular barrel adapted to be connected at one end to a container, a valve chamber formed at the opposite end of said barrel, a dome threaded into the top of said valve chamber and communicating therewith, a valve adapted to seat within the valve chamber, a stem on said valve and projecting into the dome to cushion the movement of the valve to open position and guide such valve in its path of movement, and a valve lifting bar detachably connected to said valve and operable to open the faucet.

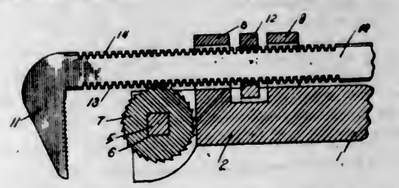
1,064,550. PROCESS OF UTILIZING THE WASTE GASES OF COMBUSTION FROM PORTLAND-CEMENT, LIME, AND OTHER KILNS. FRIEDRICH SCHOTT, Heidelberg, Germany. Filed Dec. 30, 1912. Serial No. 739,283. (Cl. 23—22.)



1. The process herein described of utilizing the waste-gases of combustion from Portland cement, lime and other kilns, which consists in separating the heavier particles of dust from the gases of combustion, cooling the gases for changing the potassium and ammonia salts into solidified form, and then separating the finer particles of dust together with the potassium and ammonia salts by filtration from the purified gases of combustion.

2. The process herein described of utilizing the waste-gases of combustion from Portland cement, lime and other kilns, which consists in separating the coarser particles of dust from the gases of combustion, reducing the temperature of the gases and changing the potassium and ammonia salts contained therein into solidified form, separating the finer particles of dust together with the potassium and ammonia salts by filtration, and drawing off the remaining gases by suction into the atmosphere.

1,064,551. WRENCH. JOHN S. SCHUGART, Warren, Pa. Filed July 19, 1911. Serial No. 639,292. (Cl. 81—96.)



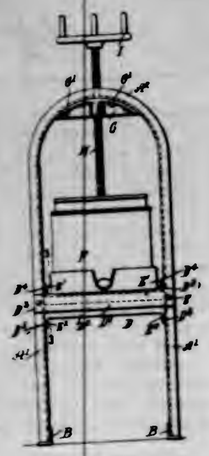
In a wrench, a shank having one of its ends enlarged, and being provided with spaced yokes, the said shank having its outer end bifurcated, a wheel having its periphery provided with teeth which are inclined in one direction trunnioned within the bifurcated end of the shank, the said wheel extending both above and behind the shank, a jaw member having a longitudinally arranged bar which loosely passes through the yokes, the said bar having both its rear and front edges formed with threads, the threads upon the front edge of the bar adapted to co-act with the teeth of the wheel, a nut for the toothed bar, arranged between the yokes, and said nut being of a width sufficient to permit the wheel upon rotation to slide the bar longitudinally a distance sufficient to draw the jaw of the wrench toward the toothed wheel whereby both the jaw and the wheel will bite tightly upon the article gripped.

1,064,552. PRESS. PHILIP LOUIS SERWE, Seattle, Wash. Filed Aug. 22, 1912. Serial No. 716,428. (Cl. 100—44.)

1. In a lard press, an inverted U-shaped frame of channel iron, feet of angle iron fastened to the ends of the sides of the said frame, and a support connecting the sides of the frame with each other at a point between the lower ends of the frame and the upper curved portion of the frame, the said support being formed of two telescoping channel irons extending between the sides of the frame and having terminal flanges fastened to the outer faces and the inside faces of the sides of the frame.

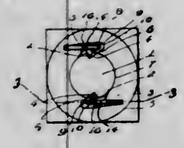
2. In a press of the character described, a frame formed of an inverted U-shaped member of channel iron and pro-

vided with feet at the lower ends thereof, and with a support secured to and between the side portions of the said member, said support consisting of telescoping channel irons, the upper one being provided at its ends with side flanges engaging the side members of the frame and upwardly projecting flanges engaging the inner faces of the members, and the lower one provided with downwardly projecting flanges engaging the inner faces of the said members.



3. In a press of the character described, a frame comprising an inverted U-shaped member of channel iron, feet of angle iron secured to the lower ends of the said member, a nut secured to the under side of the curved connecting portion of the U-shaped member, and a support secured to and between the sides of the said member, said support consisting of two telescoping channel irons, the upper one being provided at its ends with side flanges and an upwardly projecting flange and the lower one with downwardly projecting flanges.

1,064,553. NUT-LOCK. ALBERT SHUSTER, Shamokin, Pa. Filed May 14, 1912. Serial No. 697,253. (Cl. 151—12.)



1. In a nut lock a bolt having a longitudinal groove, a nut adjustable on the bolt and provided with a longitudinal recess therein which opens into the bolt opening of the nut, a dog mounted for rocking movements in the recess, a spring having an intermediate portion fixed to the dog and having end portions fixedly secured in the nut whereby the dog is held under tension and normally extended in the direction of the bolt opening in the nut, means for manipulating said dog.

2. In a nut lock a bolt having a longitudinal groove, a nut adjustably mounted on the bolt and provided with a recess, a dog mounted for rocking movements in the groove of the nut and provided with a rectangular passage, a spring secured to the nut and having a rectangular portion extending through the passage in the dog whereby the latter is normally held under tension to effect its automatic projection into the groove of the bolt on adjustment of the nut to one position, and means for manipulating said dog.

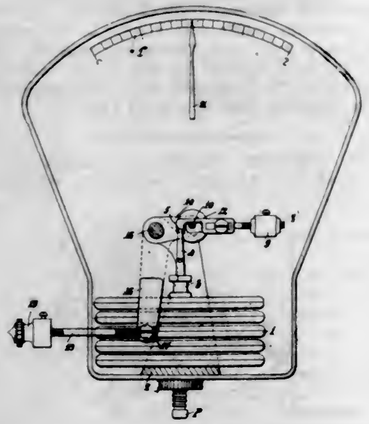
1,064,554. FASTENER FOR BUTTONS AND ANALOGOUS OBJECTS. JEAN RODOLPHE GUIDO SIEGRIST, Neuilly-sur-Seine, France. Filed Mar. 14, 1911. Serial No. 614,373. (Cl. 24—94.)



1. A button comprising a body portion formed with a single opening, a bendable rotating plate adapted to be connected to the body portion, said bendable plate having a single opening which registers with the single opening in the body portion, the bendable portion being bent to lie across the plane of the registering openings, a fastening device provided with a plurality of prongs, all of which extend through the registering openings and which are oppositely bent around the bent portion of the plate.

2. A button comprising a body portion formed with a central concave seat, in the center of which is formed a single opening, a hollow cap having a convex portion which fits in the concave seat, a bendable rotating plate adapted to be connected to the body portion, said bendable plate having a single opening which registers with the single opening in the body portion, and being bent to lie across the plane of the registering openings, a fastening device provided with a plurality of prongs, all of which extend through the hollow cap and the registering openings and which are oppositely bent around the bent portion of the plate.

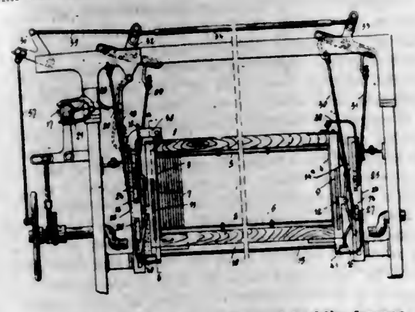
1,064,555. VACUUM OR PRESSURE GAGE. JOHN F. SIMMANCE and JACQUES ABADY, London, England. Filed July 26, 1910. Serial No. 573,829. (Cl. 73—110.)



1. A vacuum or pressure gage comprising a flexible box or bellows diaphragm, a rotatable spindle, a hand mounted against rotation thereon, adjustable means for causing the expansion and contraction of the diaphragm to rotate the spindle, and means for adjusting the instrument to correspond exactly with the scale on the dial, the said means comprising a base, an arm fixed to and depending from the spindle, and means for varying the distance between the base and the arm.

2. A vacuum or pressure gage comprising a flexible box or bellows diaphragm, a base plate therefor, a rotatable spindle, a hand mounted against rotation thereon, adjustable means for causing the expansion and contraction of the diaphragm to rotate the spindle, and means for varying the distance between the spindle and the base plate for adjusting the instrument to correspond exactly with the scale on the dial.

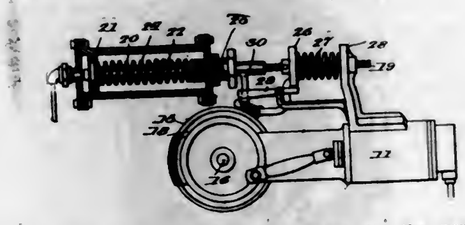
1,064,556. PATTERN-CONTROLLED SHEDDING-MOTION. WILHELM SIMMCHEN, Aussig-Kleische, Austria-Hungary, assignor to The Firm of C. Wolfrum, Aussig, Bohemia, Austria-Hungary. Filed Jan. 31, 1911. Serial No. 605,774. (Cl. 139—79.)



1. In a dobby the combination of heddle frames, hooks articulated at opposite sides of the heddle frames, the hooks of the one side being connected to the hooks of the other side respectively and one single pattern device controlling the two sets of hooks by actuating the set of hooks of the one side.

2. In a dobby the combination of heddle frames, hooks articulated at opposite sides of the heddle frames, the hooks of the one side being connected to the hooks of the other side respectively by rods articulated to the lower ends of the respective hooks and leaf springs actuating the one set of hooks to bring the upper ends of the hooks in engagement with the respective shed blades.

1,064,557. MEANS FOR PRODUCING AND CONTROLLING PNEUMATIC PRESSURE. HARRY SMITH, Harpers Ferry, Iowa. Filed June 26, 1912. Serial No. 706,003. (Cl. 230—24.)



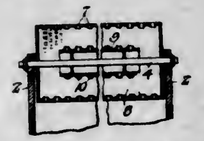
1. The herein described mechanism for the purpose specified the same consisting of a cylinder, a piston arranged to operate therein, means for moving the piston in one direction, a spring for moving the piston in an opposite direction, a stop, a spring acting on the stop to hold it in a given position, a lock for holding the stop when moved by the said piston, and a trip connected with the piston for disengaging the lock from the stop.

2. The herein described mechanism for the purpose specified, the same consisting of a cylinder, a piston arranged to operate therein, means for moving the piston in one direction, a spring for moving the piston in an opposite direction, a stop arranged to be operated by means of the piston, a spring acting on the stop to hold it in a given position, a lock consisting of a bar pivoted between its ends and having one of such ends arranged to engage the stop, the opposite end portion being inclined, and a trip having connection with the piston and arranged to cooperate with the inclined part of the lock to effect positive movement of the latter.

3. The herein described mechanism for the purpose specified, the same consisting of a cylinder, a piston arranged to operate therein and provided with a tubular stem, a rod telescoping with such tubular stem, means for moving the piston in one direction, a spring mounted upon the tubular stem and adapted to move the piston in an opposite direction, a stop secured to the said rod, a spring normally holding the stop in a given position, a lock arranged to engage the stop and hold it when moved against the tension of its operating spring, and a trip carried by the said tubular stem and adapted to effect a release of the lock from the said stop.

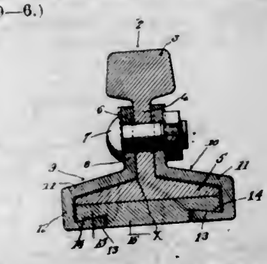
4. In mechanism of the character and for the purpose herein set forth, the combination of a cylinder, a piston arranged within the cylinder, a tubular stem connected with the piston and extending through an end of the cylinder, a set nut threaded to the end of the cylinder through which the tubular stem passes and having the latter extending therethrough, an expansible helical spring mounted upon the tubular stem between the piston and set nut, a rod telescoping with the tubular stem, a stop secured to said rod, a spring normally exerting a pressure upon the stop to hold it in given position, a pivoted lock arranged to engage the stop to hold it when moved against the tension of its operating spring, and a trip carried by the tubular stem and adapted to release the lock from the said stop.

1,064,558. POTATO-PARING MACHINE. JAMES M. SMITH and JOHN H. SMITH, Fairchild, Wis. Filed Mar. 29, 1911. Serial No. 617,639. (Cl. 146—14.)



In a cleaning and paring device, a trough, a shaft supported for rotation thereon, a foraminous cylindrical casing carried by said shaft and having a hinged closure and inwardly extending abrading members, and an abrading cylinder mounted upon the shaft and rotatable therewith within the cylindrical casing, said abrading cylinder being provided with open ends terminating at a distance from the ends of the cylindrical casing and with outwardly extending abrading members.

1,064,559. JOINT-CHAIR. JACOB L. SPARLING, Bay City, Mich. Filed Nov. 22, 1911. Serial No. 661,772. (Cl. 239—6.)

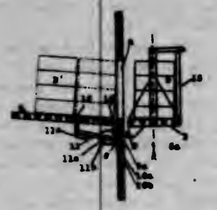


1. In a joint chair, the combination with rail ends to be connected, fish plates mounted upon opposite sides of the rail, bolts for connecting the fish plates to the rail flanges carried by the fish plates and extending beneath the rail and having upwardly and inwardly inclined seats, a connector plate, and inclined seats on the connector plate engaging the inclined seats on the flanges and adapted to draw the flanges together when pressure is applied to the rail.

2. In a joint chair, the combination with rail ends to be connected, of fish plate members having bodies lying upon the base flanges of the rail, bolt flanges extending at an angle therefrom and diverging from the web of the rail, L-shaped flanges connected to the body and having a portion extending beneath the base flanges of the rail and being provided with inclined seats adapted to form with the base of the rail half dovetail grooves, a connector plate arranged beneath the rails and having half dovetail

extensions to lie in said grooves and engage said seats of the L-shaped flange and to slide thereon, and bolts passing through the bolt flanges and the webs of the rails.

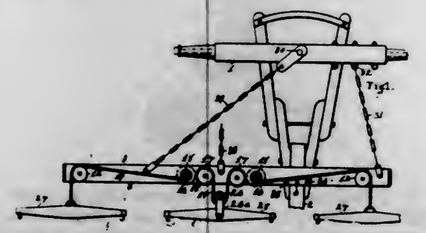
1,064,560. CONVEYER FOR COOLING APPARATUS. WILLIAM F. SPRING, Portland, Oreg. Filed Aug. 13, 1912. Serial No. 714,792. (Cl. 193—2.)



1. In a cooling device, a casing having an opening in the side thereof, a runway leading to the opening, a bracket having a vertical slot, secured to the casing beneath said opening, a lever, having a slotted end, pivoted to the casing, a lever having a slotted end, pivoted to the outer portion of said bracket, a stop pivoted to the front end thereof and rising through the runway, a rear stop having a transverse pivot bar, adapted to operate in the slot of said bracket and forming a bearing for the slotted ends of said levers, and means for operating said levers to engage and disengage the stops.

2. The combination in a cooling device, of a casing having an opening in the side thereof, a car movable vertically in the casing, a runway leading to said opening, a bracket having a vertical slot therein, secured to the casing beneath said opening, a lever having a slotted end pivoted to the casing and extending within the casing wall, a lever having a slotted end, pivoted to the outer portion of said bracket, a stop member pivoted to the front end thereof and rising through the runway, a rear stop having a transverse pivot bar adapted to reciprocate in the slot of said bracket and forming a bearing for the slotted ends of said levers, means upon the car adapted to engage the first mentioned lever for operating said stops, and means for automatically restoring the stops to initial position.

1,064,561. EVENER. LOUIS C. STRUENSEE, Oshkosh, Wis. Filed Oct. 2, 1912. Serial No. 723,483. (Cl. 21—76.)



1. An evener for three draft animals, adapted to be attached to an object to be drawn, consisting of a bar of a suitable length, two pairs of gear wheels spaced apart, those of each pair being of a like diameter and in mesh, a pulley integral with each gear wheel, those of the inner gear wheels of each pair being approximately double the diameter of that of the outer pulleys of each pair and each of the gear wheels and pulleys being suitably mounted for revolution upon the bar, a groved face pulley mounted for revolution near each end of the bar, a flexible member secured, one end to each one of said larger pulleys and normally nearly encircling each pulley, a sheave block, a pulley therein, around which the slack of said flexible member is passed, means for attaching a draft animal to said sheave block, a flexible member secured at one end to each of said smaller pulleys and normally nearly encircling the same, thence running to and around one of the aforesaid grooved face pulleys, and means for attaching a draft animal to the free ends of each of said last two named flexible members.

2. An evener for three draft animals, adapted to be attached to an object to be drawn, consisting of a bar formed of two nearly similar strips of band metal of a suitable length, a right angled bend near the ends of each strip, the angular bent ends of one strip fitting within the angular bent ends of the other strip, one or more bolts through the angular bent ends of each strip and the two strips spaced apart a suitable distance, a grooved face pulley mounted for revolution near each end of said space, two pairs of gear wheels spaced apart, those of each pair being of a like diameter and in mesh, a pulley integral with each gear wheel, those of each inner gear wheels being approximately, double the diameter of those of the outer gear wheels, and each of the gear wheels and pulleys being mounted for revolution between said strips within a suitable space, a flexible member secured at each end to one of said larger pulleys and normally, nearly encircling each pulley, a sheave block, a pulley therein around which the slack of said flexible member is passed, means for attaching a draft animal to said sheave block, a flexible member secured at each end to each of said smaller pulleys and normally nearly encircling each pulley, thence running to and around one of the aforesaid grooved face pulleys, and means for attaching a draft animal to the free ends of each of said last two named flexible members.

1,064,562. FLUID POWER-TRANSMISSION APPARATUS. FRANK H. SUMMERIL, Denver, Colo., assignor of one-half to Horatio N. Norton, Mount Vernon, N. Y. Filed May 21, 1910. Serial No. 562,790. Cl. 138—3.)



1. In fluid power-transmission apparatus for vehicles, the combination with a wheel of the vehicle, and a pump for circulating the fluid, of a motor, comprising a stationary member in which is formed a channel for the driving liquid, independent pistons located in said channel, the latter being exteriorly closed by the rim of the vehicle, the adjacent surfaces of the stationary member and the wheel rim being provided with recesses to accommodate the pistons, whereby the depth of the channel increased by that of a recess is just equal to the diameter of a piston, the stationary member being provided with an induction and exhaust passage in communication with the said channel and the pump for circulating purposes.

2. The combination with a vehicle, a wheel thereof and a liquid pump, of a stationary member having induction and exhaust passages in communication with the pump, a circular chamber between the stationary member and the rim of the wheel, recesses formed in the adjacent surfaces of the wheel rim and the stationary member, pistons located in said chamber and of a diameter equal to the depth of the channel plus that of the recesses, there being a piston for each recess in both members, substantially as described.

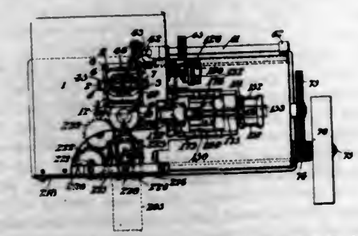
3. The combination with a vehicle, a pair of wheels thereof, and a liquid pump, of a stationary member for each wheel of the vehicle, said member having induction and exhaust passages in communication with the pump, a circular chamber between the stationary member and the rim of each wheel, recesses formed in the adjacent surfaces of the wheel rims and the stationary members, pistons located in the said chambers and of a diameter equal to the depth of the chamber plus that of the recesses, there being a piston for each recess in both members.

4. The combination with a vehicle, a pair of wheels thereof and a pump, of a stationary member having induction and exhaust passages for each wheel, a circular chamber between the stationary member and the rim of each wheel, recesses formed in the adjacent surfaces of the wheel rims and the corresponding stationary members, pistons located in said chambers and of a diameter equal to the depth of the chamber plus that of one of the recesses of either the stationary member or the wheel rim, there being a piston for each recess in both members, and means for introducing liquid from the pump to the piston chambers of each wheel, whereby certain of the pistons act as driving members for the wheel rims, while other coöperating pistons serve as abutments, the coöperating pistons exchanging places at predetermined intervals and acting alternately as driving and abutment members, substantially as described.

5. The combination with a wheel to be rotated, of a liquid motor, comprising a circular chamber closed on one side by a portion of the wheel to be rotated, the opposite side of the chamber being closed by a stationary member, the adjacent surfaces of the wheel portion and stationary member having shallow recesses, pistons located in said chamber and of a diameter equal to the depth of the chamber plus that of one of the recesses, there being a piston for each recess in both the stationary member and the wheel portion, and means for introducing liquid to the said chamber and exhausting it therefrom, the liquid entering the chamber between pairs of coöperating pistons, one of which serves as a driving member, while the other serves as an abutment member, the pairs of coöperating pistons changing functions as the recesses in the two members register, whereby the driving piston becomes the abutment member and the abutment member the driving piston, substantially as described.

[Claims 6 to 24 not printed in the Gazette.]

1,064,563. MECHANISM FOR MAKING PAPER RECEPTACLES. GEORGE W. SWIFT, Jr., Bordentown, N. J. Filed Sept. 21, 1911. Serial No. 650,492. (Cl. 93—36.)



1. In mechanism of the class described, a horizontal plane table having a stationary die with a vertical opening therethrough; a plunger die mounted to vertically reciprocate above said stationary die and to fold a plane sheet blank to form a receptacle by pressing it downward from said table through said stationary die; vertically reciprocatory holders arranged in a horizontally circular series beneath said dies, adapted to successively receive the folded receptacles; means coupling the diametrically opposite holders in said series, whereby depression of one by said plunger die raises the other, to discharge the receptacle from the latter; a carrier rotary upon a vertical axis supporting said holders; means arranged to turn said carrier, including a rotary driving member; stop mechanism arranged to detain said carrier at each quarter turn of the latter, during the continued rotation of said driving member; wire bailing mechanism arranged to successively coöperate with each holder to provide the receptacle therein with a swing bail clenched through the folds of said receptacle; discharging mechanism for said receptacles arranged to coöperate with said holders when the latter are raised; said plunger die, bailing mechanism and discharging mechanism being arranged to operate upon said receptacles at respective quadratic positions of the latter; a discharge conduit arranged to register with said holders in the discharging position of the latter; and, means arranged to successively nest said receptacles in said conduit.

2. In mechanism of the class described, a horizontal plane table having a stationary die with a vertical opening therethrough; a plunger die mounted to vertically reciprocate above said stationary die and to fold a plane sheet blank to form a receptacle by pressing it downward from said table through said stationary die; vertically reciprocatory holders arranged in a horizontally circular series beneath said dies, adapted to successively receive the folded receptacles; means coupling the diametrically opposite holders in said series, whereby, depression of one by said plunger die raises the other, to discharge the receptacle from the latter; a carrier rotary upon a vertical axis supporting said holders; means arranged to turn said carrier, including a rotary driving member; stop mechanism arranged to detain said carrier at each quarter turn of the latter, during the continued rotation of said driving member; wire bailing mechanism arranged to successively coöperate with each holder to provide the receptacle therein with a swing bail clenched through the folds of said receptacle; and, discharging mechanism for said receptacles arranged to coöperate with said holders when the latter are raised; said plunger die, bailing mechanism and discharging mechanism being arranged to operate upon said receptacles at respective quadratic positions of the latter.

3. In mechanism of the class described, a horizontal plane table having a stationary die with a vertical opening therethrough; a plunger die mounted to vertically reciprocate above said stationary die and to fold a plane sheet blank to form a receptacle by pressing it downward from said table through said stationary die; vertically reciprocatory holders arranged in a horizontally circular series beneath said dies, adapted to successively receive the folded receptacle; means coupling the diametrically opposite holders in said series, whereby, depression of one by said plunger die raises the other, to discharge the receptacle from the latter; a carrier rotary upon a vertical axis supporting said holders; means arranged to turn said carrier, including a rotary driving member; stop mechanism arranged to detain said carrier at each quarter turn of the latter, during the continued rotation of said driving member; wire bailing mechanism arranged to successively coöperate with each holder to provide the receptacle therein with a swing bail clenched through the folds of said receptacle: and, said plunger die, bailing mechanism and discharging mechanism being arranged to operate upon said receptacles at respective quadratic positions of the latter.

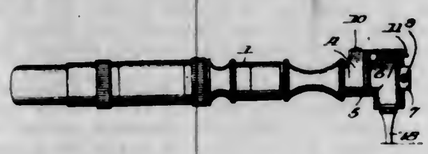
4. In mechanism of the class described, a horizontal plane table having a stationary die with a vertical opening therethrough; a plunger die mounted to vertically reciprocate above said stationary die and to fold a plane sheet blank to form a receptacle by pressing it downward from said table through said stationary die; vertically reciprocatory holders arranged in a horizontally circular series beneath said dies, adapted to successively receive the folded receptacles; means coupling the diametrically opposite holders in said series, whereby depression of one by said plunger die raises the other, to discharge the receptacle from the latter; a carrier rotary upon a vertical axis sup-

porting said holders; means arranged to turn said carrier, including a rotary driving member; a stop mechanism arranged to detain said carrier at each quarter turn of the latter; discharging mechanism for said receptacles arranged to coöperate with said holders when the latter are raised; said plunger die, and discharging mechanism being arranged to operate upon said receptacles at different positions of the latter; a discharge conduit arranged to register with said holders in the discharging position of the latter; and, means arranged to successively nest said receptacles in said conduit.

5. In mechanism of the class described, a horizontal plane table having a stationary die with a vertical opening therethrough; a plunger die mounted to vertically reciprocate above said stationary die and to fold a plane sheet blank to form a receptacle by pressing it downward from said table through said stationary die; vertically reciprocatory holders arranged in a horizontally circular series beneath said dies, adapted to successively receive the folder receptacles; means coupling the diametrically opposite holders in said series, whereby, depression of one by said plunger die raises the other, to discharge the receptacle from the latter; a carrier rotary upon a vertical axis supporting said holders; means arranged to turn said carrier, including a rotary driving member; stop mechanism arranged to detain said carrier at each quarter turn of the latter; and, discharging mechanism for said receptacles arranged to coöperate with said holders when the latter are raised; said plunger die, and discharging mechanism being arranged to operate upon said receptacles at different positions of the latter.

[Claims 6 to 22 not printed in the Gazette.]

1,064,564. DENTAL DRILL-HOLDING DEVICE. JOHN W. TENNY, Ponchatoula, La., assignor of one-half to Reubin A. Pierson, Ponchatoula, La. Filed Mar. 25, 1913. Serial No. 756,654. (Cl. 32—11.)

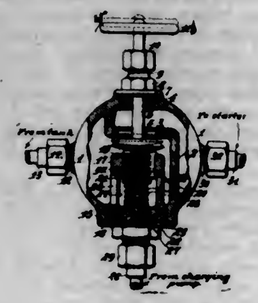


1. A dental-drill holder having a head comprising a fixed section and a hinged section, means for adjustably fixing the hinged section with respect to the fixed section, a sleeve secured and journaled between the fixed section and the hinged section; said sleeve being constructed and arranged to receive a drill, and means in the holder for transmitting rotary motion to the sleeve.

2. A dental-drill holder having a head comprising a fixed section having a lug and a hinged section having a lug opposed to that of the fixed section, an adjusting screw connecting the said lugs, a sleeve secured and journaled between the fixed section and the hinged section; said sleeve being constructed and arranged to receive a drill, and means in the holder for transmitting rotary motion to the sleeve.

3. A dental-drill holder comprising a body, a head section fixed thereto, a head section hinged to the fixed section, means for adjustably fixing the hinged section with respect to the fixed section, a sleeve journaled and secured between the fixed section and the hinged section and having an exterior flange and an interior abutment and also having an upper end aperture of angular form in cross-section, a shaft journaled in the body and connected by gearing with the sleeve, a drill arranged in the sleeve and having a shoulder opposed to the interior abutment thereof and also having a portion corresponding in shape to and snugly occupying the upper end aperture of the sleeve and further having a groove disposed above the sleeve, and a latch pivoted in the fixed head section and notched to engage the grooved portion of the drill.

1,064,565. VALVE DEVICE. EDWARD J. THURBER, New Orleans, La., assignor to Thurber Rotary Starter Co., New Orleans, La., a Corporation. Filed Aug. 17, 1912. Serial No. 715,591. (Cl. 137—26.)



1. In a valve device, a valve casing having three outlet passages and two valves proper for controlling communication between said passages, connections between said valves proper in virtue of which upon the commencement of movement of the connection one of said valves proper will be unseated, and upon further movement the other valve proper will be seated, and means continuously tending to unseat one of said valves and simultaneously seat the other valve, said connection constituting means in virtue of which both of said valves may be "held" to their seats.

2. A valve mechanism comprising a casing having three passages communicating with the exterior, a valve adapted for either rotary or reciprocatory motion for controlling communication between one of said passages and the other two passages, a reciprocating valve for controlling one of said two passages, and a single means for seating or unseating both of said valves.

3. A valve mechanism comprising a casing having an internal web provided with a passage having a valve seat, said casing having two ducts located on opposite sides of the valve seat for external communication, a valve proper for engaging said valve seat to control the passage between said two ducts, a valve stem carrying said valve proper and projecting to the outside of said casing, said valve stem being either reciprocable or rotatable, a third duct having a valve seat for effecting communication with the interior of one part of said valve casing and the exterior thereof, a valve within the valve casing for controlling the passage through said last named duct, and connections between said last named valve and said first named valve, whereby the movement of said stem may effect the operation of said last named valve.

4. A valve mechanism comprising a casing having an internal web provided with a passage having a valve seat, said casing having two ducts located on opposite sides of the valve seat for external communication, a valve proper for engaging said valve seat to control the passage between said two ducts, a valve stem carrying said valve proper and projecting to the outside of said casing, said valve stem being either reciprocable or rotatable, a third duct having a valve seat for effecting communication with the interior of one part of said valve casing and the exterior thereof, a valve within the valve casing for controlling the passage through said last named duct, and connections between said last named valve and said first named valve, whereby the movement of said stem may effect the operation of said last named valve, and means continuously tending to open the said last named valve.

5. A valve mechanism comprising a casing having an internal web provided with a passage having a valve seat, said casing having two ducts located on opposite sides of the valve seat for external communication, a valve proper for engaging said valve seat to control the passage between said two ducts, a valve stem carrying said valve proper and projecting to the outside of said casing, said valve stem being either reciprocable or rotatable, a third duct having a valve seat for effecting communication with the interior of one part of said valve casing and the exterior thereof, a valve within the valve casing for controlling the passage through said last named duct, and connections between said last named valve and said first named valve, whereby the movement of said stem may effect the operation of said last named valve, said connections including a threaded engagement between said first named valve and said last named valve, and means for holding said last named valve from turning while permitting it to reciprocate.

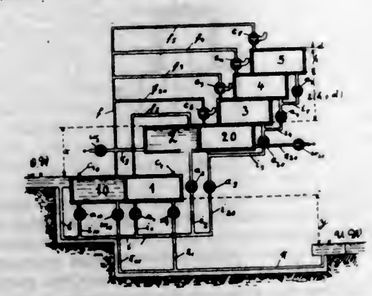
[Claims 6 and 7 not printed in the Gazette.]

1,064,566. CORK-EXTRACTOR. FRANCIS M. THURMAN, Arapaho, Okla. Filed July 13, 1912. Serial No. 709,167. (Cl. 215—53.)



As a new article of manufacture, a cork extractor comprising a single piece of ribbon-like material bent laterally at the upper end thereof to provide a handle of the same width as the body of the piece of material, with the piece of material adjacent the inner end of the handle constituting a shank of coextensive width throughout its length, with the said shank adapted to pass centrally through the cork and project from the under side thereof so that the handle will normally be spaced from the upper face of the cork, the lower end of the said shank terminating in a beveled cutting edge lying in the longitudinal plane of the shank, and a flange formed at the lower end of the shank adjacent the beveled cutting edge thereof, the said flange being reduced in width and bent adjacent the cutting edge to extend laterally to the shank, with the free end of the said flange terminating in a beveled cutting edge.

1,064,567. PROCESS AND APPARATUS FOR AUTOMATICALLY RAISING WATER. GUSTAV TIEDTKE, Dortmund, Germany. Filed Aug. 3, 1912. Serial No. 713,104. (Cl. 103—67.)



1. In an apparatus for raising water, the combination with a fixed upper and a fixed lower water level of a pair of air-tight vessels of equal dimensions, arranged above the lower water level but not higher than the upper water level; a pair of air-tight vessels of the same dimensions arranged above the said first pair, at a height not greater than the distance between the bottom of the lower vessels and the lower water level; a pipe connecting the top of one of said lower vessels to the top of one of the upper vessels; similar connecting means arranged between the other lower and higher vessel; pipes connecting the bottom of each of the upper and of the lower vessels to the upper water level; similar means connecting the bottom of the lower vessels to the lower water level; means for permitting the exit of air from each of said vessels; additional means permitting the exit of water from the upper pair of vessels; means on the pipes connecting the bottom of the vessels to the upper and lower water levels adapted to interrupt the connection between the vessels and the water levels; a vessel of the same dimensions as the vessels previously referred to arranged above the upper vessel; a pipe connecting the top of said vessel to the lowest vessel; a pipe connecting the bottom of said vessel with the bottom of the next lower vessel; means for interrupting the connection between the topmost vessel and each of the other vessels, and the atmosphere.

2. In apparatus for raising water, the combination with a fixed upper and a fixed lower water level of a pair of air-tight vessels of equal dimensions arranged above the lower water level but not higher than the upper water level; a pair of air-tight vessels of the same dimensions arranged above the said first pair, at a height not greater than the distance between the bottom of the lower vessels and the lower water level; a pipe connecting the top of one of said lower vessels to the top of one of the upper vessels; similar connecting means arranged between the other lower and higher vessels; pipes connecting the bottom of each of the upper and of the lower vessels to the upper water level; similar means connecting the bottom of the lower vessels to the lower water level; means for permitting the exit of air from each of said vessels; additional means permitting the exit of water from the upper pair of vessels; means on the pipes connecting the bottoms of the vessels to the upper and lower water levels, adapted to interrupt the connection between the vessels and the water levels; a plurality of vessels, each of the same dimensions as the vessels previously referred to, arranged immediately one above the other, the lowermost vessel of the series being arranged immediately above the upper pair of vessels first above mentioned; pipes connecting the bottom of each of said last mentioned vessels to the bottom of the vessel next below; means for connecting the top of each of said vessels to one member of the lowest pair of vessels; means adapted to admit air to each of said vessels.

1,064,568. CAPSULE-FILLING DEVICE. WILLIAM GEORGE TOPLIS, Philadelphia, Pa. Filed July 26, 1909. Serial No. 509,622. (Cl. 128—32.)



1. In a capsule-filling device, a capsule-receiving block comprising two members of reverse wedge shape and separable one from the other, the upper member having capsule receiving openings formed therein and extending through the same.

2. In a capsule-filling device, a capsule-receiving block having therein openings with resilient bottoms which normally close said openings.

3. In a capsule-filling device, a capsule-receiving block composed of two members, and an interposed sheet of resilient material, the upper member having capsule-receiving openings whose bottoms are formed by said resilient material.

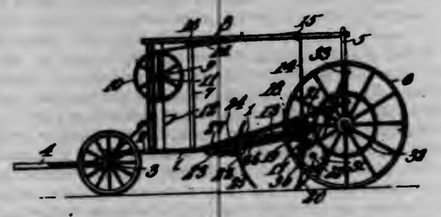
4. In a capsule-filling device, a capsule-receiving block comprising two members, and an interposed sheet of resilient material, the upper member having capsule-receiving openings therein and the lower member having tapering recesses corerresponding to said openings.

5. In a capsule filling device the capsule-receiving block comprising two members, one fitted to slide on the other, the upper member having capsule receiving openings formed therein and extending through the same, said upper member providing an open bottom recess for the recep-

tion of the lower member, which recess has at the sides projecting portions for the support of said lower member.

[Claims 6 to 17 not printed in the Gazette.]

1,064,569. HAY-RAKE. HJALMAR TORGERSEN, Ashby, Minn. Filed Jan. 25, 1912. Serial No. 673,390. (Cl. 56—67.)



1. In a rake the combination with a wheel supported structure and gathering teeth depending therefrom, of fingers supported in front of the teeth and adapted to ride over the material to be gathered, means for connecting the fingers to the structure to permit the fingers to slide bodily relative to the structure and toward or from the teeth.

2. In a rake, the combination with a wheel supported structure and gathering teeth depending therefrom, of fingers supported in front of the teeth and adapted to ride over the material to be gathered, means for connecting the fingers to the structure to permit the fingers to slide bodily relative to the structure and toward or from the teeth, and resilient means connected to the fingers and structure for holding said fingers normally drawn toward the teeth.

3. A rake including a wheel supported structure, gathering teeth depending therefrom, a series of fingers inclined downwardly and rearwardly from the supporting structure, means connecting said series to the structure to permit the series of fingers to slide bodily along the structure and toward or from the teeth, and spring connections between said series of fingers and the structure for holding the fingers normally drawn toward the teeth.

4. A rake including a wheel supported structure, gathering teeth extending downwardly therefrom, guides upon the structure, a series of fingers pivotally supported by the guides and adapted to slide bodily upon the guides and toward or from the teeth, and yielding means connected to said series of fingers for holding the fingers normally drawn toward the teeth, said fingers being adapted to ride over material in the paths thereof.

5. A rake including a wheel supported structure, gathering teeth extending downwardly therefrom, guides upon the structure, a series of fingers pivotally supported by the guides and adapted to slide bodily upon the guides and toward or from the teeth, yielding means connected to said series of fingers for holding the fingers normally drawn toward the teeth, said fingers being adapted to ride over material in the paths thereof, and means for simultaneously elevating the teeth and fingers relative to the structure.

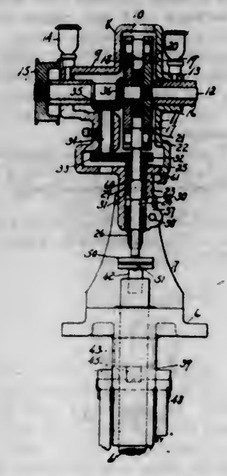
[Claims 6 and 7 not printed in the Gazette.]

1,064,570. RIVETING-MACHINE. HARRY P. TOWNSEND, Waterbury, Conn. Filed Aug. 21, 1909. Serial No. 514,007. (Cl. 78—21.)

1. In a hammering device, a rotary striker head, strikers loosely mounted in said head to have a limited unobstructed movement at the time of delivery of a blow, and means for rotating the striker head.

2. In a hammering device, a rotary striker head having openings, strikers having hubs located in said openings and smaller in size than the openings, whereby a limited unobstructed movement of the strikers at the time of delivery of a blow is permitted, and means for rotating the striker head.

3. In a hammering device, a rotary striker head having a peripheral groove and openings from said groove, strikers having hubs located in said openings and smaller in size than the openings whereby a limited unobstructed movement of the strikers at the time of delivery of a blow is permitted, and means for rotating the striker head.

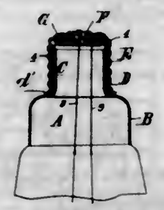


4. In a hammering device, a rotary striker head having a peripheral groove and openings therefrom, strikers located in said groove and having integral hubs located in said openings and smaller in size than the openings, whereby a limited unobstructed movement of the strikers at the time of delivery of a blow is permitted, and means for rotating the striker head.

5. A rotary striker head, strikers loosely mounted in said head to have a limited unobstructed action at the time of delivery of a blow, a hammer movably mounted to receive glancing blows of the strikers across its end in a direction laterally to its direction of movement, and means for supporting the work to receive the blows delivered by said hammer.

[Claims 6 to 14 not printed in the Gazette.]

1,064,571. BASE FOR ELECTRIC INCANDESCENT LAMPS. PAUL GABRIEL TRIQUET, Paris, France. Filed July 28, 1910. Serial No. 574,367. (Cl. 176—37.)

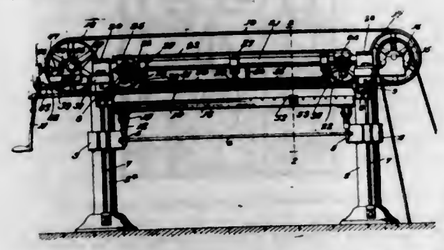


1. An incandescent lamp comprising a body, a base collar provided with a metallic neck attached to the body, a cap of insulating material, a metallic contact in said cap, a metallic base sleeve having screw threads surrounding the neck, and attached to the cap, an insulating sleeve interposed between the neck and the base sleeve and means for connecting the filament of the lamp to the contact in the cap and base sleeve.

2. A base for incandescent lamps comprising in combination with the base body a collar having a screw threaded sleeve made of insulating material and having a spread out edge screwed on said neck, and a base contact sleeve screwed on said insulating sleeve, substantially as and for the purpose set forth.

3. A base for incandescent lamps comprising in combination with a base body a collar having a screw threaded neck a screw threaded sleeve made of insulating material and having a spread out edge and screwed in said neck, a base contact sleeve screwed on said insulating sleeve, and a coating of adhesive material applied on said insulating sleeve, substantially as and for the purpose set forth.

1,064,572. SANDING-MACHINE. GEORGE D. TROGDON, Toccoa, Ga. Filed June 7, 1912. Serial No. 702,324. (Cl. 51—13.)



1. In an abrading machine of the character described, an endless abrading band, a pressure bar mounted behind the band of relatively soft material, and a cushioning band, one flight of which extends between the pressure bar and the abrading band.

2. In an abrading machine of the character described, an endless abrading band, a pressure bar disposed behind one portion of the band and movable toward or from the band, and an endless cushioning band one flight of which extends between the pressure bar and the abrading band, said cushioning band being driven by its engagement with the abrading band.

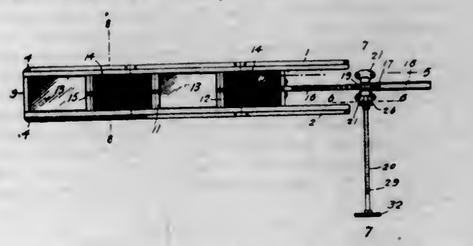
3. In an abrading machine of the character described, a supporting frame, oppositely disposed band wheels mounted on the frame, an abrading band passing over said wheels, a supporting member disposed between the upper and lower flights of the abrading bands, a pressure bar operatively supported upon the supporting member and movable toward, to or from the abrading band, oppositely disposed freely running band wheels mounted upon the said supporting member and disposed at each end of the pressure bar, and a cushioning band passing from said last-named band wheels between said pressure bar and the adjacent flight of the abrading band.

4. In an abrading machine of the character described, a supporting frame including oppositely disposed vertical posts, oppositely disposed band wheels supported on said posts, a carriage supported on said posts, an endless abrading band passing over said band wheels and above the carriage, a supporting member extending between said posts and disposed between the upper and lower flights of the endless abrading band, brackets mounted on said supporting member, a pressure bar yieldingly supported upon said brackets and disposed above the lower flight of the abrading band, a shaft mounted upon said brackets and having cams engaging said pressure bar whereby to force the pressure bar toward or from the abrading band, band wheels supported on said supporting member at each end of the pressure bar, and an endless cushioning band extending over said last-named band wheels and having its lower flight disposed in contact with the lower flight of the abrading band and between said abrading band and the pressure bar, said band being driven by contact with the lower flight of the abrading band.

5. An abrading machine of the character described including oppositely disposed standards, collars supported on said standards and vertically slidable with relation thereto, transversely extending rails supported on said collars, feed screws passing through the collars whereby they may be vertically adjusted, means for operating both of said feed screws simultaneously, a carriage slidingly supported upon said rails, oppositely disposed band wheels carried by said standards, an abrading band passing over said band wheels, a pressure bar disposed above the lower flight of the band, means for raising and depressing the pressure bar, oppositely disposed freely running band wheels supported at the ends of the pressure bar, and an endless cushioning band passing over said last-named band wheels and the pressure bar and the lower flight of the abrading band, and driven by contact with the abrading band.

[Claims 6 to 8 not printed in the Gazette.]

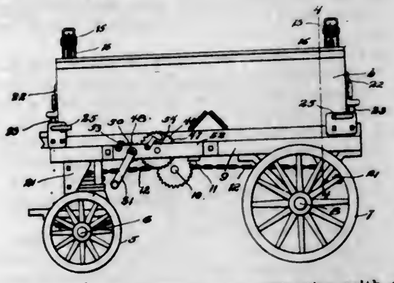
1,064,573. LIGHTING AND VENTILATING APPARATUS. JOHN O. ULRICH, Tamaqua, Pa. Filed Apr. 15, 1912. Serial No. 691,000. (Cl. 98—27.)



1. A wall having a series of succeeding alternately arranged screens and windows and a slide composed of connected successively and alternately arranged screens and windows, corresponding in relation and dimensions to those of the wall, whereby the slide may be adjusted to register its screens with those of the wall or with the windows of the wall, the windows of the slide in the latter adjustment registering with the screens of the wall, means for moving the slide, and means for locking the slide in adjusted position.

2. A wall having a series of succeeding alternately arranged screens and windows and a slide composed of connected successively and alternately arranged screens and windows corresponding in relation and dimension to those of the wall, whereby the slide may be adjusted to register its screens with those of the wall or with the windows of the wall, the windows of the slide in the latter adjustment registering with the screens of the wall.

1,064,574. DUMPING-VEHICLE. JOHN H. URSBRUCK, Philadelphia, Pa. Filed Mar. 2, 1912. Serial No. 681,067. (Cl. 21—86.)



1. In a dumping vehicle, the combination with a supporting frame; of a vertically movable body arranged on the frame, means for moving the body bodily upward, uprights carried by the frame and extending through the body and forming guides for the movements thereof, dog and ratchet structures associated with the body and uprights, serving to secure the body in raised position, and means including a cam rod to actuate the dog and ratchet to permit the body to return to normal position.

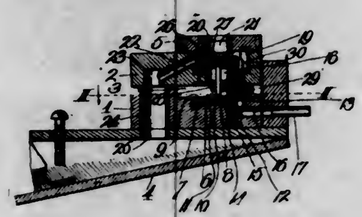
2. In a dumping vehicle, the combination with a supporting frame; of a vertically adjustable body arranged on the supporting frame, tiltable dump members arranged in the body, means for securing the body in adjusted position, and a single means for independently adjusting the body and tilting the dump members.

3. In a dumping vehicle, the combination with a supporting frame; of a vertically adjustable body arranged on the supporting frame, tiltable dump members arranged in the body, means for securing the body in adjusted position, and means including a single train of gearing for independently adjusting the body and tilting the dump members.

4. In a dumping vehicle, the combination with a supporting frame; of a vertically adjustable body arranged on the supporting frame, tiltable dump members arranged in the body, means for securing the body in adjusted position, and means including a shaft and a plurality of reversely wound flexible elements thereon for independently adjusting the body and tilting the dump members.

5. In a dumping vehicle, the combination with a supporting frame; of a vertically adjustable body arranged on the supporting frame, tiltable dump members arranged in the body, means for securing the body in adjusted position, and means for adjusting the body and tilting the dump members and including a shaft adapted when turned in one direction to move the body and when turned in the opposite direction to move the dump members.

1,064,575. PIANO-PLAYER MECHANISM. WILLIAM T. WAITE, Kansas City, Mo., assignor of one-third to S. M. Henley and one-third to A. Steinmetz, Kansas City, Mo. Filed Aug. 29, 1912. Serial No. 717,743. (Cl. 84—178.)



1. In a piano-player mechanism, a vacuum chest having a vacuum chamber, an air duct, a diaphragm separating the vacuum chamber from the air duct, and provided with a vent or bleed-opening therethrough whereby air may vent into the vacuum chamber, and a valve for closing said vent or bleed-opening when the diaphragm has been raised through the pull of the vacuum in said vacuum chamber.

2. In a piano-player mechanism, a vacuum chest having a vacuum chamber, an air duct, a diaphragm separating the vacuum chamber from the air duct, and a vent or bleed-opening whereby air may vent into the vacuum chamber, a valve for closing said vent or bleed-opening when the diaphragm has been raised through the pull of the vacuum in said vacuum chamber, and means for closing said vent or bleed-opening when the diaphragm is in normal or depressed position.

3. In a piano-player mechanism, a vacuum chest, an air duct leading thereto, a movable diaphragm between the interior of the chest and the air duct, said diaphragm provided with a bleed opening, and means acting to close said bleed-opening each time the diaphragm is moved.

4. In a piano-player mechanism, a vacuum chest, an air duct leading thereto, a diaphragm between the interior of the chest and the air duct, provided with a bleed-opening, a valve adapted to close said bleed-opening each time the diaphragm is raised, and adjustable means carrying said valve whereby the latter may be positioned to close said bleed-opening at the proper time.

5. In a piano-player mechanism, a vacuum chest, an air duct leading thereto, a diaphragm between the interior of the chest and the air duct, provided with a bleed-opening, and an adjustably supported valve adapted to close said bleed opening at intervals.

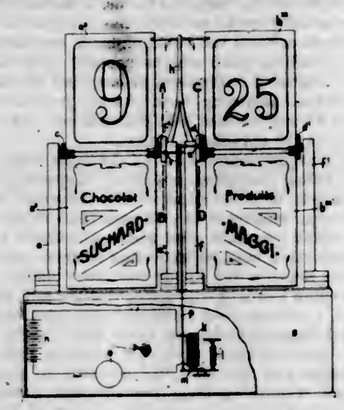
[Claims 6 to 9 not printed in the Gazette.]

1,064,576. COMPOSITE-PICTURE DEVICE. THOMAS E. WASHBURN, Coalinga, Cal. Filed Aug. 23, 1912. Serial No. 716,728. (Cl. 46—41.)



A device for exhibiting a composite picture, the same comprising a casing having a side observation opening, rotary members mounted within the casing in axial alinement, each bearing on its circumference corresponding parts of the figure to be displayed and so arranged as to admit of the matter upon any one of the members being brought into position to register with the matter on the remaining members to produce a composite whole, and stems having connection with the respective members and having a concentric arrangement and projecting to different distances beyond the casing and provided at their projecting ends with thumb pieces, the said rotary members having the meeting face of one recessed to receive the meeting face of the other to hold the several members in fixed position.

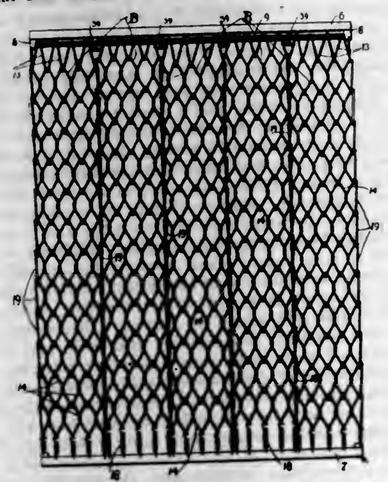
1,064,577. ADVERTISING-CLOCK. NATHAN WEIL, Chaux-de-Fonds, Switzerland. Filed May 21, 1912. Serial No. 698,710. (Cl. 58—126.)



1. In an advertising clock of the kind described, the combination of two separate series of plates pivotally connected with two horizontal arbors arranged in the same vertical plane and bearing each on one face a numeral constituting a time indication and also on the opposite face an advertisement, and of stops to allow one of the plates of each series to be released and to fall at predetermined intervals of time, with two ratchet wheels and two rocking levers provided with spring-controlled pawls for operating said ratchet wheels and controlled by a common electromagnetic device in accordance with the impulses of current of an electric clock, one of the said ratchet wheels being arranged on one of the said arbors, while the second ratchet wheel bears a snail engaged by one end of a lever loosely mounted on the second of the said arbors and provided with a spring controlled pawl adapted to engage with the teeth of a third ratchet wheel rigidly mounted on the said second arbor, substantially as described.

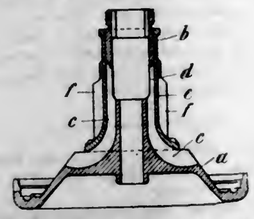
2. In an advertising clock of the kind described, the combination of two separate series of hour and minute plates bearing advertisements on that of their faces which is opposite to the one bearing the time indication and pivotally connected with two horizontal arbors arranged in the same vertical plane, of a stop to allow one of the hour plates and to be released and to fall after each hour and of a stop to allow one of the minute plates and to be released and to fall after each minute, with two ratchet wheels and two rocking levers provided with spring-controlled pawls for operating said ratchet wheels and controlled by a common electromagnetic device in acordance with the impulses of current of an electric clock, one of the said ratchet wheels being arranged on one of the said arbors, while the said ratchet wheel bears a snail engaged by one end of a lever loosely mounted on the second of the said arbors and provided with a spring-controlled pawl adapted to engage with the teeth of a third ratchet wheel rigidly mounted on the said second arbor, substantially as described.

1,064,578. BED-SPRING FABRIC. FREDERICK W. H. WEISHAUPT, Washington, D. C. Filed Apr. 27, 1912. Serial No. 693,623. (Cl. 245—5.)



A bed fabric comprising a plurality of groups or sections of longitudinal series of units, the groups being loosely connected at their side edges for longitudinal movement with respect to each other and the units of each longitudinal series being connected to the corresponding units at the sides thereof of the next series for longitudinal movement with respect thereof to a lesser degree than the longitudinal movement of the groups with respect to each other.

1,064,579. CENTRAL FEED-PIPE FOR CENTRIFUGAL BOWLS. SVEN WENNBERG, Söderteije, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Filed Sept. 30, 1912. Serial No. 723,045. (Cl. 127—20.)



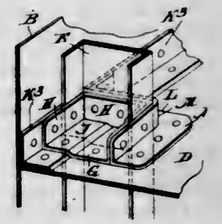
1. In a centrifugal separator bowl having its bottom part cast in one piece with a central feed pipe, adapted to inclose the upper end of the driving shaft and in the upper part of which the liquid to be separated is introduced, a number of downwardly extending grooves formed in the walls of the feed pipe and the bottom part of the bowl and communicating with the interior of the central feed pipe, said grooves being curved outwardly, and a sleeve fitting closely to the central feed pipe and closing said grooves outwardly leaving their outer ends free.

2. In a centrifugal separator bowl having its bottom part cast in one piece with a central feed pipe adapted to inclose the upper end of the driving shaft and in the upper part of which the liquid to be separated is introduced, a number of downwardly extending grooves formed in the walls of the feed pipe and the bootom part of the bowl and communicating with the interior of the central feed pipe, said grooves being curved outwardly, and a sleeve fitting closely to the central feed pipe and closing said grooves outwardly leaving their outer ends free, and a number of vertical wings on the wall of the said sleeve forming guides for the conical plates of the liner.

3. In a centrifugal separator, a bowl having a bottom part and a central feed pipe constituting a continuation thereof and adapted to inclose the upper end of the driving shaft and in the upper part of which the liquid to be separated is introduced, there being a number of downwardly extending milk-conveying grooves formed in the walls of the feed pipe and the bottom part of the bowl and communicating with the interior of the central feed pipe, the lower or exit ends of which extend outwardly and open into the lower part of the bowl, and a sleeve fitting the central feed pipe and closing said grooves outwardly except at their lower or exit ends.

4. In a centrifugal separator, a bowl having a bottom part and a central feed pipe constituting a continuation thereof and adapted to inclose the upper end of the driving shaft and in the upper part of which the liquid to be separated is introduced, there being a number of downwardly extending milk-conveying grooves formed in the walls of the feed pipe and the bottom part of the bowl and communicating with the interior of the central feed pipe, the lower or exit ends of which extend outwardly and open into the lower part of the bowl, a sleeve fitting the central feed pipe and closing said grooves outwardly except at their lower or exit ends, and a number of vertically extending wings on the walls of said sleeve forming guides for the conical plates of the liner.

1,064,580. METALLIC STRUCTURAL JOINT. EDWIN B. WHEELER, Philadelphia, Pa. Filed Nov. 20, 1911. Serial No. 663,118. (Cl. 189—36.)



1. In a tank construction, a flanged beam, a compartment-member formed with an opening through which said beam passes, and an angle-bracket of L-shaped cross section embracing said beam to close the space between the latter and the opening and having its flanges secured to the beam and to the compartment-member to afford calking edges.

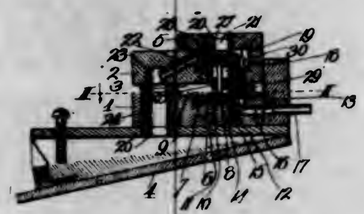
2. In a tank construction, a flanged beam, a compartment member having an opening through which said beam passes, a flanged angle-bracket of L-shaped cross section constructed to embrace said beam and having its flanges secured to the latter and to the compartment member, and a flanged box shaped to fit into said beam and secured to the latter and to the compartment member, the flanges of said bracket and box affording calking edges.

3. In a dumping vehicle, the combination with a supporting frame; of a vertically adjustable body arranged on the supporting frame, tiltable dump members arranged in the body, means for securing the body in adjusted position, and means including a single train of gearing for independently adjusting the body and tilting the dump members.

4. In a dumping vehicle, the combination with a supporting frame; of a vertically adjustable body arranged on the supporting frame, tiltable dump members arranged in the body, means for securing the body in adjusted position, and means including a shaft and a plurality of reversely wound flexible elements thereon for independently adjusting the body and tilting the dump members.

5. In a dumping vehicle, the combination with a supporting frame; of a vertically adjustable body arranged on the supporting frame, tiltable dump members arranged in the body, means for securing the body in adjusted position, and means for adjusting the body and tilting the dump members and including a shaft adapted when turned in one direction to move the body and when turned in the opposite direction to move the dump members.

1,064,575. PIANO-PLAYER MECHANISM. WILLIAM T. WAITE, Kansas City, Mo., assignor of one-third to S. M. Henley and one-third to A. Steinmetz, Kansas City, Mo. Filed Aug. 29, 1912. Serial No. 717,743. (Cl. 84—178.)



1. In a piano-player mechanism, a vacuum chest having a vacuum chamber, an air duct, a diaphragm separating the vacuum chamber from the air duct, and provided with a vent or bleed-opening therethrough whereby air may vent into the vacuum chamber, and a valve for closing said vent or bleed-opening when the diaphragm has been raised through the pull of the vacuum in said vacuum chamber.

2. In a piano-player mechanism, a vacuum chest having a vacuum chamber, an air duct, a diaphragm separating the vacuum chamber from the air duct, and a vent or bleed-opening whereby air may vent into the vacuum chamber, a valve for closing said vent or bleed-opening when the diaphragm has been raised through the pull of the vacuum in said vacuum chamber, and means for closing said vent or bleed-opening when the diaphragm is in normal or depressed position.

3. In a piano-player mechanism, a vacuum chest, an air duct leading thereto, a movable diaphragm between the interior of the chest and the air duct, said diaphragm provided with a bleed opening, and means acting to close said bleed-opening each time the diaphragm is moved.

4. In a piano-player mechanism, a vacuum chest, an air duct leading thereto, a diaphragm between the interior of the chest and the air duct, provided with a bleed-opening, a valve adapted to close said bleed-opening each time the diaphragm is raised, and adjustable means carrying said valve whereby the latter may be positioned to close said bleed-opening at the proper time.

5. In a piano-player mechanism, a vacuum chest, an air duct leading thereto, a diaphragm between the interior of the chest and the air duct, provided with a bleed-opening, and an adjustably supported valve adapted to close said bleed opening at intervals.

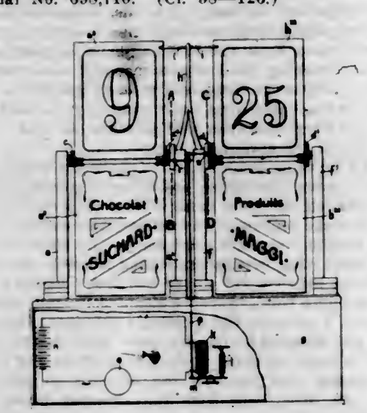
[Claims 6 to 9 not printed in the Gazette.]

1,064,576. COMPOSITE-PICTURE DEVICE. THOMAS E. WASHBURN, Coalinga, Cal. Filed Aug. 23, 1912. Serial No. 716,728. (Cl. 46—41.)



A device for exhibiting a composite picture, the same comprising a casing having a side observation opening, rotary members mounted within the casing in axial alinement, each bearing on its circumference corresponding parts of the figure to be displayed and so arranged as to admit of the matter upon any one of the members being brought into position to register with the matter on the remaining members to produce a composite whole, and stems having connection with the respective members and having a concentric arrangement and projecting to different distances beyond the casing and provided at their projecting ends with thumb pieces, the said rotary members having the meeting face of one recessed to receive the meeting face of the other to hold the several members in fixed position.

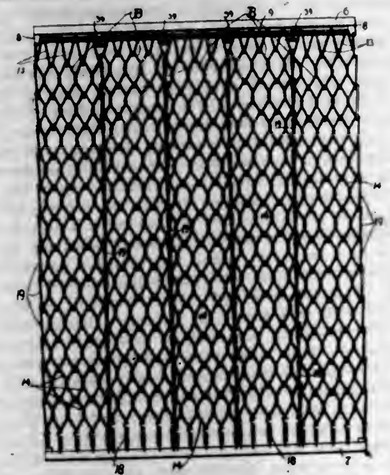
1,064,577. ADVERTISING-CLOCK. NATHAN WEIL, Chaux-de-Fonds, Switzerland. Filed May 21, 1912. Serial No. 698,710. (Cl. 58—126.)



1. In an advertising clock of the kind described, the combination of two separate series of plates pivotally connected with two horizontal arbors arranged in the same vertical plane and bearing each on one face a numeral constituting a time indication and also on the opposite face an advertisement, and of stops to allow one of the plates of each series to be released and to fall at predetermined intervals of time, with two ratchet wheels and two rocking levers provided with spring-controlled pawls for operating said ratchet wheels and controlled by a common electromagnetic device in accordance with the impulses of current of an electric clock, one of the said ratchet wheels being arranged on one of the said arbors, while the second ratchet wheel bears a snail engaged by one end of a lever loosely mounted on the second of the said arbors and provided with a spring controlled pawl adapted to engage with the teeth of a third ratchet wheel rigidly mounted on the said second arbor, substantially as described.

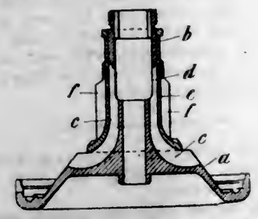
2. In an advertising clock of the kind described, the combination of two separate series of hour and minute plates bearing advertisements on that of their faces which is opposite to the one bearing the time indication and pivotally connected with two horizontal arbors arranged in the same vertical plane, of a stop to allow one of the hour plates and to be released and to fall after each hour and of a stop to allow one of the minute plates and to be released and to fall after each minute, with two ratchet wheels and two rocking levers provided with spring-controlled pawls for operating said ratchet wheels and controlled by a common electromagnetic device in acordance with the impulses of current of an electric clock, one of the said ratchet wheels being arranged on one of the said arbors, while the said ratchet wheel bears a snail engaged by one end of a lever loosely mounted on the second of the said arbors and provided with a spring-controlled pawl adapted to engage with the teeth of a third ratchet wheel rigidly mounted on the said second arbor, substantially as described.

1,064,578. BED-SPRING FABRIC. FREDERICK W. H. WEISHAUPT, Washington, D. C. Filed Apr. 27, 1912. Serial No. 693,623. (Cl. 245—5.)



A bed fabric comprising a plurality of groups or sections of longitudinal series of units, the groups being loosely connected at their side edges for longitudinal movement with respect to each other and the units of each longitudinal series being connected to the corresponding units at the sides thereof of the next series for longitudinal movement with respect thereof to a lesser degree than the longitudinal movement of the groups with respect to each other.

1,064,579. CENTRAL FEED-PIPE FOR CENTRIFUGAL BOWLS. SVEN WENNBERG, Södertelje, Sweden, assignor to The De Laval Separator Company, New York, N. Y. Filed Sept. 30, 1912. Serial No. 723,045. (Cl. 127—20.)



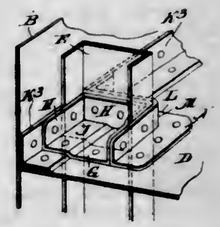
1. In a centrifugal separator bowl having its bottom part cast in one piece with a central feed pipe, adapted to inclose the upper end of the driving shaft and in the upper part of which the liquid to be separated is introduced, a number of downwardly extending grooves formed in the walls of the feed pipe and the bottom part of the bowl and communicating with the interior of the central feed pipe, said grooves being curved outwardly, and a sleeve fitting closely to the central feed pipe and closing said grooves outwardly leaving their outer ends free.

2. In a centrifugal separator bowl having its bottom part cast in one piece with a central feed pipe adapted to inclose the upper end of the driving shaft and in the upper part of which the liquid to be separated is introduced, a number of downwardly extending grooves formed in the walls of the feed pipe and the bootom part of the bowl and communicating with the interior of the central feed pipe, said grooves being curved outwardly, and a sleeve fitting closely to the central feed pipe and closing said grooves outwardly leaving their outer ends free, and a number of vertical wings on the wall of the said sleeve forming guides for the conical plates of the liner.

3. In a centrifugal separator, a bowl having a bottom part and a central feed pipe constituting a continuation thereof and adapted to inclose the upper end of the driving shaft and in the upper part of which the liquid to be separated is introduced, there being a number of downwardly extending milk-conveying grooves formed in the walls of the feed pipe and the bottom part of the bowl and communicating with the interior of the central feed pipe, the lower or exit ends of which extend outwardly and open into the lower part of the bowl, and a sleeve fitting the central feed pipe and closing said grooves outwardly except at their lower or exit ends.

4. In a centrifugal separator, a bowl having a bottom part and a central feed pipe constituting a continuation thereof and adapted to inclose the upper end of the driving shaft and in the upper part of which the liquid to be separated is introduced, there being a number of downwardly extending milk-conveying grooves formed in the walls of the feed pipe and the bottom part of the bowl and communicating with the interior of the central feed pipe, the lower or exit ends of which extend outwardly and open into the lower part of the bowl, a sleeve fitting the central feed pipe and closing said grooves outwardly except at their lower or exit ends, and a number of vertically extending wings on the walls of said sleeve forming guides for the conical plates of the liner.

1,064,580. METALLIC STRUCTURAL JOINT. EDWIN B. WHEELER, Philadelphia, Pa. Filed Nov. 20, 1911. Serial No. 663,118. (Cl. 189—36.)



1. In a tank construction, a flanged beam, a compartment-member formed with an opening through which said beam passes, and an angle-bracket of L-shaped cross section embracing said beam to close the space between the latter and the opening and having its flanges secured to the beam and to the compartment-member to afford calking edges.

2. In a tank construction, a flanged beam, a compartment member having an opening through which said beam passes, a flanged angle-bracket of L-shaped cross section constructed to embrace said beam and having its flanges secured to the latter and to the compartment member, and a flanged box shaped to fit into said beam and secured to the latter and to the compartment member, the flanges of said bracket and box affording calking edges.

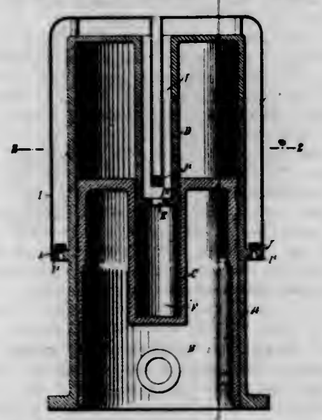
3. In a tank construction, a flanged beam, a compartment member having an opening through which said beam passes, a flanged box shaped to partly fit into said beam and secured to said compartment member, a flanged angle-bracket of L-shaped cross-section constructed to embrace said beam and secured to the compartment member, and fastening means through the flanges of said angle-bracket, beam and box, the edges of said bracket and box affording calking edges.

4. In a compartment having a top and sides, the combination of a beam passing through the compartment and secured to one side thereof, a bracket of L-shaped cross section, a box, said bracket and box secured to fit around the exposed sides of said beam, an angle bar connected to the top and said side of said compartment, one side of said box and said bracket overlapping said angle bar.

5. In a tank construction, a flanged beam, a compartment-member having an opening through which said beam passes, a flanged plate of L-shaped cross section constructed to embrace three sides of said beam and overlapping the adjacent sides of the compartment-member, a part of which member forms the final boundary of the flanged beam, all securely riveted together to afford calking edges.

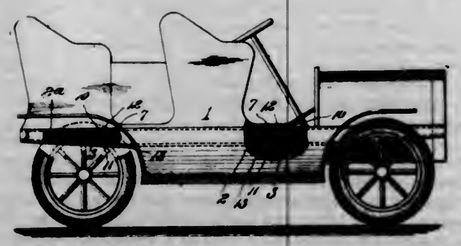
[Claim 6 not printed in the Gazette.]

1,064,581. MEANS FOR COOLING COMBUSTION-ENGINES. HAROLD S. WHEELER, Manistee, Mich. Filed May 13, 1910. Serial No. 561,080. (Cl. 123—171.)



An internal combustion engine having a cylinder head provided with a tube extending into the cylinder and open at its outer end and provided at its inner end with a port, a piston reciprocating in the cylinder and having a chamber within which the tube fits closely, said cylinder having the end adjacent to the said head inclosed with a jacket having inlet and outlet valves.

1,064,582. MOTOR-VEHICLE. OSWALD B. WIPPLER, St. Louis, Mo. Filed July 3, 1912. Serial No. 707,511. (Cl. 21—90.)



1. In a device for detachably holding a motor vehicle body to its supporting frame or chassis, a plate adapted to be horizontally applied and fixed to the under side of the vehicle body, a pair of movable locking bars horizontally-disposed relatively to, and movable in a horizontal plane substantially parallel with the plane of, said plate, said bars being adapted to be oppositely projected into and retracted out of, locking engagement with the chassis, a horizontally disposed lever pivotally connected to said plate and to said bars and being sidewise movable in a horizontal plane to one side of, and substantially parallel with, the horizontal planes of said plate and said bars, said bars lying at one end between said lever and plate and said lever being adapted to oppositely project said bars into, and retract said bars out of, locking engagement with said chassis and means adapted to releasably lock said bars in locking position; substantially as described.

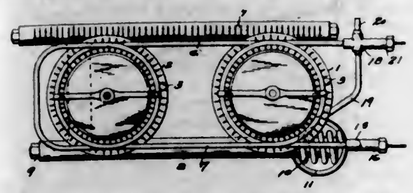
2. In a device for detachably holding a motor vehicle body to its supporting frame or chassis, a plate adapted to be horizontally applied and fixed to the under side of the vehicle body, a pair of movable locking bars horizontally-disposed relatively to, and movable in a horizontal plane substantially parallel with the plane of, said plate, said bars being adapted to be oppositely projected into, and retracted out of, locking engagement with the chassis, a horizontally-disposed lever pivotally connected to said plate and to said bars and being sidewise movable in a horizontal plane to one side of, and substantially parallel with, the horizontal planes of said plate and said bars, said bars lying at one end between said lever and plate and said lever being adapted to oppositely project said bars into, and retract said bars out of, locking engagement with said chassis, a spring-member carried by said lever adapted to detachably engage with one of said bars when said bars are in locking position to releasably lock said bars in such position; substantially as described.

3. In a motor vehicle, the combination with the body and its supporting frame or chassis, of a plate horizontally fixed to the under side of said body, a pair of movable locking bars horizontally-disposed relatively to, and movable in a horizontal plane substantially parallel with the plane of, said plate, said bars being adapted to be oppositely projected into, and retracted out of, locking engagement with said frame or chassis, a horizontally-disposed lever pivotally connected to said plate and to said bars adjacent their inner ends and being sidewise movable in a horizontal plane substantially parallel with the horizontal planes of said plate and said bars, said bars lying at their inner ends between said lever and body and said lever being adapted to oppositely project said bars into, and retract said bars out of, locking engagement with said chassis, keepers fixed to said body for the free ends of said bars and in which said bars at their free ends are slidably movable, and a spring-member carried by said lever adapted to detachably engage with one of said bars when said bars are in locking engagement with said chassis to releasably lock said bars in such position; substantially as described.

4. In a device for detachably locking a motor vehicle body to its supporting-frame or chassis, a plate adapted to be applied and fixed to the under side of the vehicle body, a pair of movable locking bars adapted to be oppositely projected into, and retracted out of, locking engagement with the frame or chassis, said bars being also adapted to abut against each other at their inner ends when in locking position, a lever pivotally connected to said plate and to said bars adapted to oppositely project said bars into, and retract said bars out of, locking engagement with said frame or chassis, said bars lying at their inner ends between said lever and said plate and means adapted to releasably lock said bars in locking position; substantially as described.

1,064,583. OIL-BURNER. WILLIAM THOMAS WOOD, Nashville, Tenn. Filed Feb. 26, 1912. Serial No. 679,875. (Cl. 158—65.)

1. In an oil burner, the combination with a burner tube, and burner sections, of a mixing chamber communicating with said parts, a starting coil encircling said chamber for a part of its length, a feed tube communicating with the chamber, a connection between the starting coil and feed tube, a vaporizer tube communicating with the feed tube, an oil supply pipe communicating with the vaporizer tube and with the starting coil, and means for controlling the fluid supply to the vaporizer tube.



2. In an oil burner, the combination with a burner tube and burner sections, of a mixing chamber communicating with said parts, a starting coil associated therewith, a feed tube communicating with the chamber, a connection between the starting coil and feed tube, a vaporizer tube communicating with the feed tube, an oil supply pipe communicating with the vaporizer tube and with the starting coil, means for controlling the fluid supply to the vaporizer tube, and a control device movable in said mixing chamber to regulate the flow of gas to the burner tube and sections.

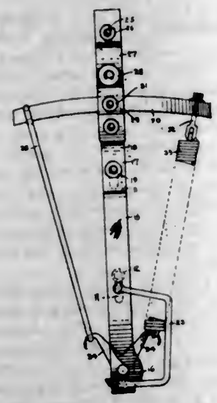
3. In an oil burner, the combination with a burner tube and burner sections, of a mixing chamber communicating therewith, a starting coil for said chamber, a feed tube arranged at right angles to and communicating with said chamber, a connection between the starting coil and feed tube, a vaporizer tube communicating with the feed tube, a three-way coupling communicating with said vaporizer tube and starting coil, an inlet pipe entering said three-way coupling, and control means for said three-way coupling, and a control device movable in said mixing chamber to regulate the flow of gas to the burner sections and tube.

4. The combination with a burner tube and burner sections, of a vaporizer tube passing adjacent the burner tube and encircling each burner section, and a mixing chamber provided with means for controlling the supply of gas to the burner sections and tube.

5. The combination with a burner tube and burner sections, of a vaporizer tube passing adjacent the burner tube and encircling each burner section, a feed tube into which said vaporizer tube enters, a mixing chamber adjacent said feed tube, and a coupling into which the other end of said vaporizer tube enters.

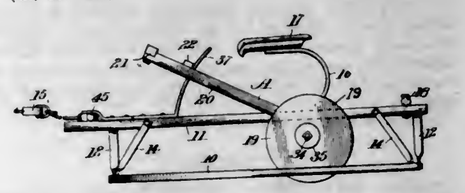
[Claims 6 and 7 not printed in the Gazette.]

1,064,584. WINDMILL-COUPLING. ALLEN A. YATES, Lake Benton, Minn. Filed Feb. 13, 1912. Serial No. 677,393. (Cl. 74—17.)



In a device of the kind described, a member adapted for connection to a wind mill rod, a second member slidable on the first member, a pin carried by the second member for connecting said member to a sucker rod, a hook mounted on the second member and pivoted with reference thereto, said hook being engageable with said pin to form a keeper for the sucker rod, a slotted hanger pivoted to the first member, an equalizer lever passing through said hanger, a set screw for holding said equilizing lever in adjusted position, a pair of inverted hooks extending laterally from the second member, a link connecting one of said hooks with one end of the equalizer lever, and a spring connecting the remaining hook with the remaining end of the equalizer lever.

1,064,585. CULTIVATOR. MENNO S. YODER, Shipshewana, Ind. Filed Jan. 6, 1913. Serial No. 740,485. (Cl. 55—22.)



1. The combination with a wheeled body member, of a substantially oval-shaped soil crust breaking member secured to said body member.

2. The combination with a body member, of a substantially oval-shaped soil crust breaking member secured to said body member.

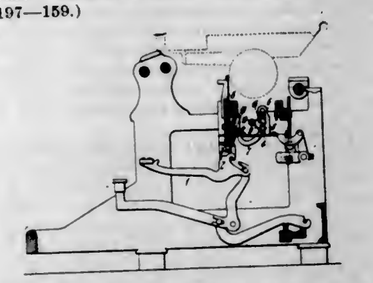
3. The combination with a wheeled body member, of a substantially oval-shaped soil crust breaking member secured to said body member, the crust breaking member surrounding the wheels of the body member.

4. The combination with a wheeled body member, of a substantially oval-shaped soil crust breaking member secured to said body member, the crust breaking member surrounding the wheels of the body member, and having its upper and lower edges relatively sharp.

5. The combination with a body member, of a substantially oval-shaped soil crust breaking member secured to said body member, the crust breaking member surrounding the wheels of the body member.

[Claims 6 to 25 not printed in the Gazette.]

1,064,586. TYPE-WRITING MACHINE. FRANK A. YOUNG, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed June 8, 1912. Serial No. 702,399. (Cl. 197—159.)



1. In a ribbon vibrating mechanism, an actuator, a lever engaged by the actuator, said lever having an open bearing and an upstanding projection adjacent thereto, and a vibrator mounted on said bearing, said projection being adapted to limit the lateral movement of the vibrator to prevent its accidental disengagement.

2. In a ribbon vibrating mechanism, an actuator, a lever engaged by the actuator, said lever having a depending hooked bearing and an upstanding projection adjacent thereto, and a vibrator mounted on said bearing, said pro-

jection being adapted to limit the lateral movement of the vibrator to prevent its accidental disengagement.

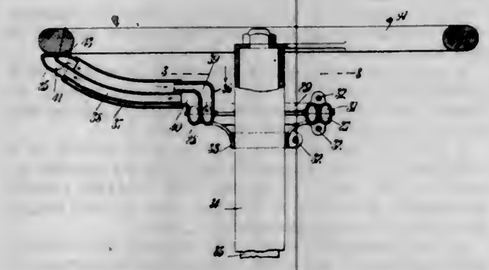
3. In a ribbon vibrating mechanism, an actuator, a lever engaged thereby, said lever having a depending hooked bearing on one side thereof and a projection on the other side thereof adjacent to said bearing, and a vibrator mounted on said bearing, said projection being adapted to limit the lateral movement of the vibrator to prevent its disengagement.

4. In a ribbon vibrating mechanism, an actuator, a lever engaged thereby, said lever having a depending hooked bearing and a projection above said hook, said projection having an abrupt face disposed in a substantially vertical plane intermediate the point and bend of the hook, and a vibrator mounted on said bearing, said projection being adapted to lock the vibrator in position so as to prevent its disengagement.

5. In a ribbon vibrating mechanism, an actuator, a lever having a wrist engaged by the actuator, and a vibrator detachably connected to the lever, said lever being formed adjacent the bearing for the vibrator with a projection to prevent accidental disengagement of the vibrator from the lever.

[Claims 6 and 7 not printed in the Gazette.]

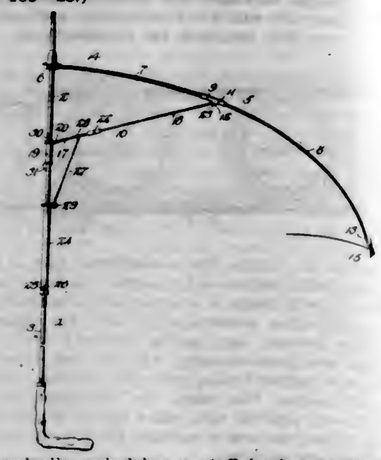
1,064,587. HAND-GRIP. ARTHUR YOUNGS, Newburgh, N. Y. Filed Jan. 15, 1912. Serial No. 671,151. (Cl. 237—4.)



1. The combination with a controlling device, comprising a rotary member and a stationary member, of a hand grip having a plurality of hollow radiating chambers elongated and curved for mounting upon said rotary member; a plurality of plates having a plurality of annular grooves, said grooves arranged to register to form passages when said plates are overlaid; means for securing one of said plates rigidly upon said rotary member and the other of said plates upon said stationary member; a plurality of couplings having a return chamber and a supply channel, said chambers and channels in each of said couplings opening into said passages respectively; means for connecting said couplings with said radiating chambers; and means for supplying a heating medium to one of said passages and for exhausting said medium from the other of said passages.

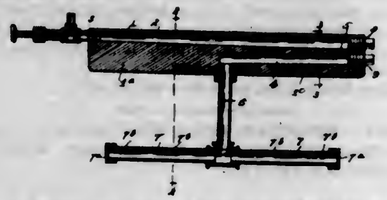
2. The combination with a controlling device, comprising a movable member and a stationary member, of a hollow hand grip having circulating chambers; means for temporarily mounting said grip upon said movable member; a plurality of coupling plates, each provided with a plurality of annular grooves, said grooves in each plate being arranged to register with the grooves of the other plate to form semi-circular passages, said plates being constructed in sections which, when united, form complete circular passages; means for uniting said sections to form complete plates; means for uniting said complete plates to permit relative rotation thereof; means for mounting said plates, one upon said movable member and the other upon said stationary member; means for operatively connecting said passages and said circulating chambers of the hand grip; and means for supplying a heating medium to one of said passages and for exhausting said medium from the other of said passages.

1,064,588. FOLDING UMBRELLA. GEORGE W. ALLEN, Runge, Tex. Filed Aug. 8, 1912. Serial No. 713,062. (Cl. 135—25.)



An umbrella embodying a staff having members provided with a flexible joint whereby the staff may be folded, a foldable rib comprising upper and lower members pivotally connected together, the upper member being pivotally connected at its upper end to the staff, a runner on the staff, a foldable brace comprising inner and outer members pivotally connected together and also respectively and pivotally connected to the runner and to the jointed rib, a supplemental runner arranged on the staff and a flexible connection between the supplemental runner and the inner brace member, the length of the said flexible connection being such as to enable the supplemental runner to cover and stiffen the joint between the staff members and cause the brace to be straightened and to support the rib in open position.

1,064,589. OIL-BURNER. EDWARD R. ANDERSON, Blackstone, Va. Filed Feb. 27, 1913. Serial No. 751,116. (Cl. 158—63.)



1. A burner for liquid fuels, comprising an elongated body constructed with substantially parallel primary and secondary heating chambers; the primary chamber extending the whole length of the burner, and being provided with a controllable fuel inlet at one end and an interchamber port of communication at the other end; the secondary heating chamber extending from said port of communication to the middle of the burner; an outlet tube extending perpendicularly to the middle end of the secondary chamber, and in the plane of the two chambers, and burner tubes extending oppositely from the end of said outlet tube, in the plane of the two chambers, and adapted to discharge fuel on opposite sides of the outlet tube and toward the chambers.

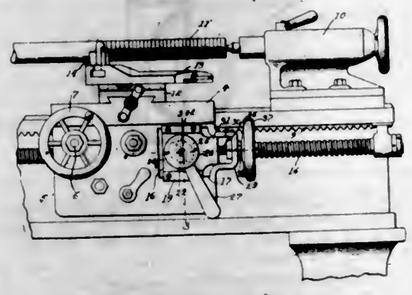
2. A burner for fluid fuels comprising an elongated body constructed with superposed primary and secondary heating chambers with a fuel inlet at one end of the primary chamber and a port establishing communication between the chambers at the end remote from said inlet; a fuel outlet leading from the secondary chamber at the end remote from said port, and a burner tube supplied by said fuel outlet adapted to direct its flame toward the secondary chamber; said secondary chamber extending but a portion of the length of the primary chamber, and there being a protecting wall of increased thickness beneath that portion of the primary chamber which extends beyond the secondary chamber.

3. A burner for fluid fuels comprising an elongated body constructed with superposed primary and secondary heating chambers with a fuel inlet at one end of the primary chamber and a port establishing communication between the chambers at the end remote from said inlet; a fuel outlet leading from the secondary chamber at the end remote from said port, and a burner tube supplied by said fuel outlet adapted to direct its flame toward the secondary chamber; said secondary chamber extending but a portion of the length of the primary chamber, and there being a protecting wall of increased thickness beneath that portion of the primary chamber which extends beyond the secondary chamber; the fuel outlet from the secondary chamber being located at an intermediate point in the burner body and the burner tube being extended on opposite sides of said fuel outlet.

4. A burner for fluid fuels comprising an elongated body constructed with superposed primary and secondary heating chambers with a fuel inlet at one end of the primary chamber and a port establishing communication between the chambers at the end remote from said inlet; a fuel outlet leading from the secondary chamber at the end remote from said port, and a burner tube supplied by said fuel outlet adapted to direct its flame toward the secondary chamber; said primary and secondary chambers being provided with end closures; the port between the chambers being adjacent to an end closure and inclined toward the same.

5. A burner for fluid fuels comprising an elongated body constructed with superposed primary and secondary heating chambers with a fuel inlet at one end of the primary chamber and a port establishing communication between the chambers at the end remote from said inlet; a fuel outlet leading from the secondary chamber at the end remote from said port, and a burner tube supplied by said fuel outlet adapted to direct its flame toward the secondary chamber; said burner body being constructed with a relatively thin wall above the primary chamber and with thicker walls between the chambers and beneath the secondary chamber.

1,064,590. THREAD-CUTTING LATHE. WILLIAM F. ANDRICKS, Bowling Green, Ohio. Filed Aug. 2, 1912. Serial No. 712,937. (Cl. 82—23.)



In combination with a tool rest for lathes, an apron secured to said tool rest, said apron having a substantially rectangular aperture adjacent one end, one side of the rectangular aperture extending outwardly to form a U-shaped member, thereby forming a reduced aperture intermediate its arms, a block slidable in the aperture, said block provided with a reduced end adapted to extend into the aperture formed intermediate the U-shaped arms, a threaded shaft extending through the end of the U-shaped member, an internally threaded collar adapted to coöperate with the threaded shaft, and a hand wheel secured to the end of the threaded shaft and provided with an outwardly tapering collar having graduations thereabout, whereby micrometer adjustment of a tool carried by the tool rest is obtained.

1,064,591. SOAP. THOMAS ANYON, Fallowfield, England. Filed July 1, 1912. Serial No. 706,991. (Cl. 87—16.)

1. A process for the manufacture of soap consisting of adding yeast to melted fats or oils, treating the mixture with caustic lye while under heat or agitation thus gradually setting up a chemical action between the alkali and the fats or oils and the alkali and the yeast, and converting the latter into a detersive substance, as and for the purpose hereinbefore specified.

2. As a new product, a soap in which the usual proportion of fats and oils, to the weight of soap to be produced, is greatly diminished and their place taken by the production of detersive substances produced by the action of alkali on the protoplasm or cell contents of yeast, substantially as and for the purpose specified.

1,064,592. SPARK-ARRESTER. SUSAN LOUISE ARNOLD, Ottawa, Ill. Filed Oct. 19, 1912. Serial No. 726,720. (Cl. 110—130.)

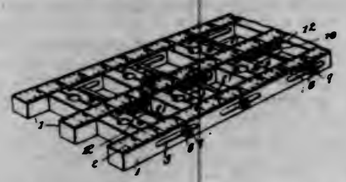


In a spark arrester, a cylinder adapted to enter a smoke stack, an annular member secured to said cylinder, an annular band secured to said member, a mesh work inclosure secured to the annular band and provided with a cover plate, an annular ring secured to the annular band and provided with overturned ear clamps arranged in pairs, an inner cylinder spaced apart from the first cylinder and having arms to engage each pair of ear clamps for supporting the inner cylinder, the mesh work inclosure having a reinforcing band, the cover plate having an inner annular flange, and stay rods connecting the cover plate and the annular ring for reinforcing the mesh work inclosure.

1,064,593. TEMPLET. HARRY B. ASH, St. Louis, Mo., assignor to the Offill-Thon Manufacturing Company, Ashley, Ill. Filed July 19, 1910, Serial No. 572,702. Renewed Mar. 1, 1913. Serial No. 751,647. (Cl. 73—148.)

1. A templet comprising a plurality of parallel bars, each having on one face a scale, and each having a plurality of longitudinally extending slots, the slots of one bar registering with the slots of the other bars when said bars are arranged alongside each other with the scales uppermost, one of the bars being countersunk around the slot, and a slotted plate filling in the countersink, bolts passing through the registering slots, each bolt having a head engaging the outer face of the plate, and a square portion fitting in the slot, and a threaded portion projecting beyond the bars, nuts engaging the bolts, and a plurality of similar gage blocks supported between the

bars substantially perpendicular thereto, each block having a center line running longitudinally of one face, and sundry of the blocks having an opening whose longitudinal center intersects the line at right angles thereto, the said openings of the respective blocks being at different distances from the ends of the said blocks, and barbs projecting from one end of each block.



2. A templet comprising a plurality of bars, each having on one face a scale, and a plurality of longitudinal slots, the slots of one bar registering with the slots of the other bars when the bars are arranged alongside each other with the scales upward, bolts traversing the slots for securing the bars together, and gage block supported between and with their ends abutting the bars, each of said blocks having barbs at one end, and a center line along the longitudinal center of one face, said line cooperating with the scale, sundry of the blocks having openings in the line, the opening of each block being at a different point in the line from the openings of the other blocks.

3. A templet comprising a plurality of bars, each having on one face a scale, and a plurality of longitudinal slots, the slots of one bar registering with the slots of the other bars when the bars are arranged alongside each other with the scales upward, bolts traversing the slots for securing the bars together, and gage blocks supported between the bars in a position substantially perpendicular thereto, said blocks having each a center line on its upper face, and a transverse opening in the line.

4. A templet comprising a plurality of bars, each having on one face a scale, and a plurality of longitudinal slots, the slots of one bar registering with the slots of the other bars when the bars are arranged alongside each other with the scales upward, bolts traversing the slots for securing the bars together, and a plurality of gage blocks having means for guiding a punch and arranged between the bars and supported thereby, each of said blocks having a center line longitudinally of one face for coöperating with the scale.

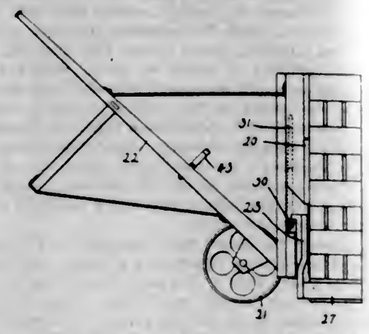
5. A templet comprising a plurality of bars, each having on one face a scale, and a plurality of longitudinal slots, the slots of one bar registering with the slots of the other bars when the bars are arranged alongside each other with the scales upward, bolts traversing the slots for securing the bars together, and a plurality of gage blocks having means for guiding the punch and supported between the bars and perpendicular thereto.

1,064,594. BRICK-TRUCK. WILLIAM H. BARNES, Spokane, Wash. Filed May 16, 1912. Serial No. 697,794. (Cl. 21—116.)

1. In a brick truck, a deck, bearing wheels supporting the deck, crossed arms pivoted at the back of the deck, fingers carried by the arms projecting beneath and in front of the deck, and means to move the arms pivotally to cause the fingers to engage adjacent sides of spaced bricks.

2. In a brick truck, a deck, supporting wheels for the deck, crossed arms pivoted in the rear of the deck and provided with offsets, fingers carried at the lower extremities of the arms projecting beneath and in front of the deck, and a rock shaft engaging the offsets adapted to move the arms upon their pivots.

3. In a brick truck, a deck, supporting wheels for the deck, crossed arms pivoted in the rear of the deck and extending below the deck, fingers carried at the lower extremities of the arms and projecting forwardly of the deck, means carried by the fingers for engaging the under sides of supported bricks, means whereby the engagement of the under sides of such supported bricks causes the fingers to expand to engage adjacent sides of spaced bricks, and offsets carried at the upper ends of the arms, a rock shaft journaled in the rear of the deck and engaging the offsets, and means to actuate the rock shaft.

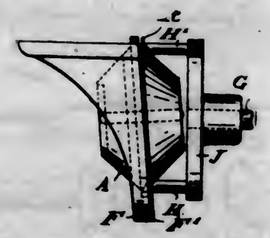


4. In a brick truck, a deck, a supporting carriage, arms pivoted at the rear of the deck and extending downwardly below the lower edge of the deck, fingers carried at the lower ends of the arms and extending beneath and forwardly of the deck, a rock shaft journaled upon the back of the deck, and means whereby the rotation of the rock shaft moves the arms.

5. In a brick truck, a deck, a supporting carriage for the deck, arms crossed and pivoted upon the back of the deck and extending below the edge thereof, fingers secured to the lower ends of the arms and extending beneath and forwardly of the deck, a rock shaft journaled upon the rear of the deck, and cam engagement between the rock shaft and arms whereby the rotation of the rock shaft moves the arms upon their pivots.

[Claims 6 and 7 not printed in the Gazette.]

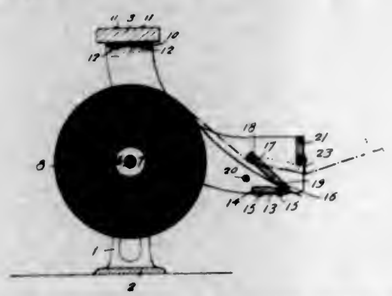
1,064,595. SEWING-MACHINE. FREDERICK JOHN TURNER BELL and HARDY CECIL BELL, Bury, England. Filed July 11, 1910. Serial No. 571,325. (Cl. 112—22.)



In a sewing machine, a bobbin casing of a double conical form, rotating means therefor having pins which are adapted to alternately engage with and disengage from said casing, a peripheral rim or flange around said casing, and a stationary race engaging on opposite sides of such peripheral rim or flange, that side of such race which is nearest the means for rotating the casing being continuous and without break and being so formed at that part opposite to which the disengaged driving pin passes as to permit the passage of the needle thread between itself and the casing and to directly interpose itself between the casing and the end of the disengaged driving pin.

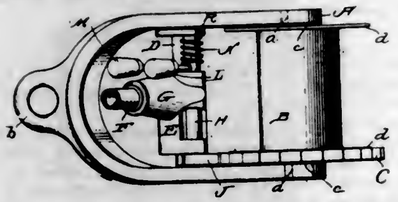
1,064,596. CUTTER FOR PAPER-HOLDERS. MARTIN LUTHER BENGSTON, Williams, Ariz. Filed May 20, 1912. Serial No. 698,600. (Cl. 211—32.)

1. The combination with a paper holder comprising a pair of spaced standards, a roller journaled between the standards, and a cross plate connecting the tops of the standards above the roller, of a cutting device comprising an arc-shaped arm secured at one end to the cross plate at each end of the roller, the free ends of the arms extending in front of the roller, a plate connecting the arms at their lower edges and near their free ends, said plate having its upper face beveled at its front edge, a second plate pivoted at its upper edge between the arms, the free lower edge of the plate resting normally on the first plate at its front edge and clamping the paper on said plate, said second plate being beveled on its lower face at its front edge, a roller journaled between the arms below and in rear of the pivoted edge of the second plate, a cross bar connecting the front ends of the arms at their upper edges, the lower edge of the bar being in position for engagement by the free edge of the second plate when said plate is moving upward, and a blade secured to the front face of the cross bar at its lower edge, the free lower edge of the blade being serrated and extending below the lower face of the second plate when said plate is in engagement with the cross bar.



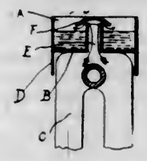
2. The combination with a paper holder comprising a pair of spaced standards, a roller journaled between the standards, and a cross plate connecting the tops of the standards above the roller, of a cutting device comprising an arc-shaped arm secured at one end to the cross plate at each end of the roller, the free ends of the arms extending in front of the roller, a plate connecting the arms at their lower edges and near their free ends, said plate having its upper face beveled at its front edge, a second plate pivoted at its upper edge between the arms, the free lower edge of the plate resting normally on the first plate at its front edge and clamping the paper on said plate, second plate being beveled on its lower face at its front edge, a cross bar connecting the arms and in position for engagement by the free edge of the second plate when lifted by the paper, and a blade secured to the bar and depending below the same, the lower edge of the blade being serrated and extending below the second plate when in engagement with the bar.

1,064,597. PAWL AND RATCHET. CLIFFORD W. BENNETT, Colorado Springs, Colo. Filed Oct. 5, 1911, Serial No. 652,937. Renewed Feb. 13, 1913. Serial No. 748,220. (Cl. 74—16.)



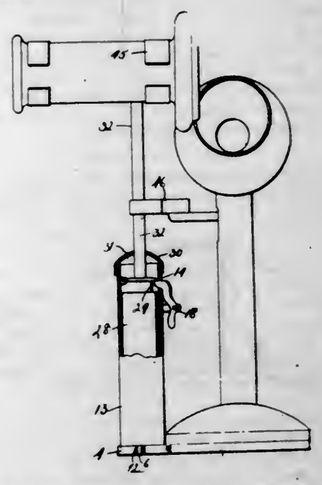
The combination of a frame, a single ratchet disk mounted in the frame, a rocker also mounted in the frame, shafts journaled in the rocker at opposite sides of the center of movement thereof, pawls fixed to and extending downward from said shafts and positioned to engage teeth of the single ratchet disk at different points, springs for holding the pawls in a yielding manner against the ratchet teeth, an operating lever on the rocker, and lever handles fixed to the said shafts and extending in the same direction as said operating lever; both of said lever handles being arranged in the same longitudinal vertical plane and also arranged adjacent the operating lever, for the purpose set forth.

1,064,598. AIR-MOISTENING AND DUST-SETTLING DEVICE FOR RADIATORS. HUGO R. BEYER, Wilkinsburg, Pa. Filed Dec. 23, 1912. Serial No. 738,337. (Cl. 98—47.)



An air moistening and dust settling device for radiators comprising a water containing receptacle adapted to rest upon the radiator, the side walls of said receptacle extending down over the opposite sides of the radiator, the bottom of the receptacle provided with a centrally disposed slot, the walls of which extend upwardly above the bottom, and a concaved deflecting hood over the upper edges and spaced apart from the walls of said slot, as shown and described.

1,064,599. TELEPHONE ATTACHMENT. WILLIAM BIMSON, Philadelphia, Pa. Filed Feb. 2, 1912. Serial No. 674,908. (Cl. 179—149.)



1. In an attachment for telephones, a base having an extension formed therewith in the form of a split ring, means for attaching said base to a telephone instrument, a tube carried by the base and held in place by the split ring, a plate pivotally hinged in the upper end of the tube, said pivot point being off center, a weight attached to said plate for normally drawing the major portion downward, an arm carried by said plate, a receiver holder carried by the outer end thereof and a finger carried by said arm adapted to co-act with the receiver hook for depressing the latter when the telephone is out of use.

2. In an attachment for telephones, a base, means for fastening said base to the telephone, a tube carried by said base, a plate pivotally hinged in the upper end of said tube, a weight slidably mounted in the tube, means for

fastening said weight to the plate whereby a portion of said plate will be drawn downward, an arm carried by said plate, a receiver holder carried by said arm, a finger also carried by said arm co-acting with the receiver hook and a catch for holding the plate against the action of the weight.

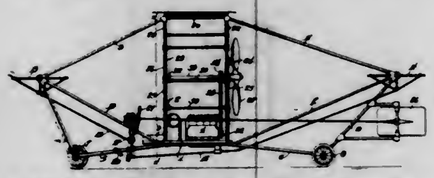
3. In a device of the character described, a base, adapted to be attached to a telephone, a tube carried by said base, a supporting arm pivotally hinged to the tube, a finger carried by said arm adapted to co-act with the receiver hook of the telephone for normally depressing said receiver hook, a weight mounted within the tube and attached to the support for normally drawing the finger into contact with the receiver hook, a catch for holding the support against the action of the weight and means co-acting with the catch whereby said catch will be prevented from holding the support against the action of the weight.

4. In a device of the character described, a base means carried thereby for attaching the same to a base of a telephone, a tube carried by the base, a plate pivotally hinged within the tube, a supporting arm carried by said plate, a receiver holder carried by the outer end of the supporting arm, a finger also carried by the supporting arm adapted to co-act with the receiver hook, a weight slidably mounted within the tube, means for attaching said weight to the hinged plate, said weight adapted to normally draw the finger into contact with the receiver hook for depressing said receiver hook, and means pivoted to the tube co-acting with the hinged plate for holding the same against the action of the weight.

5. In a device of the character described, a base, means carried thereby for attaching the same to a base of a telephone, a tube carried by the base, a plate pivotally hinged within the tube, a supporting arm carried by said plate, a receiver holder carried by the outer end of the supporting arm, a finger also carried by the supporting arm adapted to co-act with the receiver hook, a weight slidably mounted within the tube, means for attaching said weight to the hinged plate, said weight adapted to normally draw the finger into contact with the receiver hook for depressing said receiver hook, a catch carried by the tube co-acting with the hinged plate for holding said plate against the action of the weight and means for holding said catch out of engagement with the hinged plate.

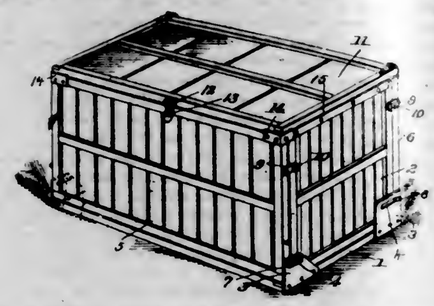
[Claim 6 not printed in the Gazette.]

1,064,600. FLYING-MACHINE. DAVID BLASER, Milan, Ill. Filed Feb. 1, 1913. Serial No. 745,654. (Cl. 244—14.)



A flying machine embodying a car, an elongated vertical frame rising from the car, a supporting surface carried by said frame, head and tail frames carried by the vertical frame, steering means including horizontal rudders mounted upon said head and tail frames at distances in front and rear of the frame corresponding substantially to the height of said frame, said rudders corresponding substantially in width with the width of the frame, a longitudinally extending propeller shaft mounted at an intermediate point upon the frame in horizontal alinement with said rudders and in the vertical plane of the longitudinal axis of the machine, an aviator's seat at the front of the car, a motor mounted upon the car in rear of said seat, a propeller mounted upon said shaft and arranged to deliver its thrust power in a horizontal plane coincident with the normal plane of travel of the horizontal rudders and in the central horizontal transverse line of the machine, and a driving connection between the motor and the propeller shaft.

1,064,601. COLLAPSIBLE CRATE. ALBERT J. BODKER and WILLIAM H. BODKER, Ponchatoula, La. Filed Apr. 9, 1912. Serial No. 689,490. (Cl. 217—15.)



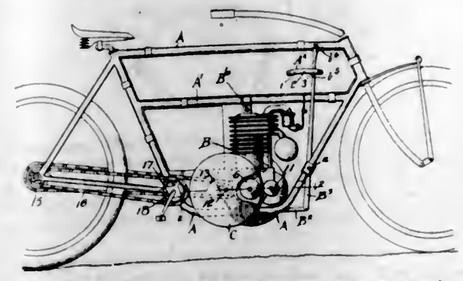
1. A crate comprising a bottom panel, plates arranged in pairs and attached to the corner portions of the bottom panel and extending above the same, each plate having a slot extending parallel to the plane of the bottom panel and spaced above the same, a front panel having pins extending respectively through the slots of one pair of said plates, a rear panel having pins extending through the slots of the other pair of said plates, end panels hingedly connected to the bottom panel and foldable inwardly and bearing between the front and back panels and against the plates when in open position, corner plates connected to the front panel and extending above the same, bearing plates connected to the end panels and extending above the same, and a top panel hingedly connected to the back panel and bearing upon the upper edges of the front and back panels and the end panels and behind the corner plates and the bearing plates.

2. A crate comprising a bottom panel, a front panel movably connected to the bottom panel and foldable inwardly, a back panel movably coupled to the bottom panel and foldable inwardly, corner members connected to the free ends of the front panel and extending above the same, end panels movably connected to the bottom panel and foldable inwardly, guard plates connected to the free edges of the end panels and extending above the same, and a top movably coupled to the rear panel and bearing upon the upper edges of the front and end panels and against the inner faces of the corner members and of the plates of the end members.

3. A crate comprising a bottom panel, a front panel movably connected to the bottom panel and foldable inwardly, a back panel movably coupled to the bottom panel and foldable inwardly, corner members connected to the free ends of the front panel and extending above the same, end panels movably connected to the bottom panel and foldable inwardly, guard plates connected to the free edges of the end panels and extending above the same, a top movably coupled to the rear panel and bearing upon the upper edges of the front and end panels and against the inner faces of the corner members and of the plates of the end members, pins projecting from the end panels, hooks connected to the front panel and to the back panel and engaging over the pins when the panels are in open position, and means for fastening the free edge of the top to the front panel.

1,064,602. MOTOR-CYCLE. WILLIAM CHARD BOND, Washington, D. C. Filed Mar. 21, 1908. Serial No. 422,555. (Cl. 21—90.)

1. In a motor cycle drive, the combination, of a drive wheel, a crank-shaft, a cam shaft geared thereto, a friction wheel on its outer end, another friction wheel mounted on the outer end of said crank-shaft adjacent to the friction wheel on the cam shaft, a countershaft mounted in suitable bearings parallel with said crank-shaft and geared to said drive wheel, a friction wheel mounted on said countershaft having a rim interposed between the friction wheels on the cam shaft and crank-shaft, and means for throwing one or the other of said friction wheels into contact with the rim of said wheel on said countershaft, substantially as set forth.



2. A motor cycle comprising a frame, a drive wheel, an engine slidably mounted on said frame, means for sliding and securing said engine, a crank-shaft, a cam shaft geared thereto, a friction wheel on the adjacent outer end of each of said shafts, a countershaft, gearing connecting said countershaft to the drive wheel, and a friction wheel on said countershaft provided with a rim extending between the wheels on said crank shaft and cam shaft, substantially as set forth.

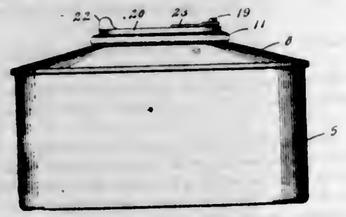
3. In a motor cycle, the combination, of a frame, a drive wheel, an engine, a crank-shaft on the engine, a cam shaft geared thereto, friction wheels on the adjacent outer ends of said shafts, one being of larger diameter than the other, a friction wheel mounted with its rim between the adjacent faces of said friction wheels, gearing connecting said friction wheel with the drive wheel, and means for throwing one or the other of said friction wheels geared to the engine into contact with the friction wheel geared to said drive wheel, substantially as set forth.

4. A motor cycle, comprising a frame, a drive wheel, a motor having a crank shaft and a cam shaft on said frame, and gearing connecting said motor with the drive wheel comprising friction gears arranged to be driven interchangeably directly from the crank shaft or from the cam shaft, substantially as set forth.

5. In a motor cycle, the combination, of a frame, a drive wheel, a motor, a cam shaft, a countershaft geared to said drive wheel, and gearing connecting said motor with the drive wheel comprising friction gears, one of which is mounted directly on the motor shaft, one on said cam shaft, and a third on said countershaft, and means for connecting said third friction gear with either of the others, whereby the vehicle may be driven directly from the engine shaft or through the cam shaft, substantially as set forth.

[Claims 6 to 8 not printed in the Gazette.]

1,064,603. LID FOR MILK-CROCKS. MARY FLORENCE BORING, Washington, Ind. Filed Dec. 17, 1912. Serial No. 737,332. (Cl. 31—14.)

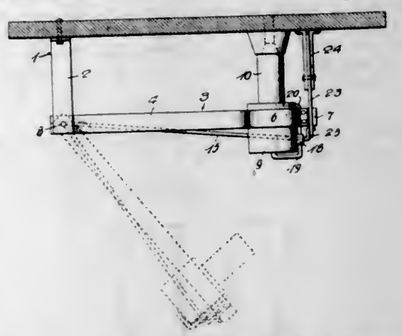


1. A crock comprising a body portion, a top therefor having a depending annular flange adapted to engage said body, said top being provided with a central opening, an element mounted in said opening and including superimposed members forming an annular groove therebetween, a screen mounted in said groove, and lugs depending from one of said members and adapted to engage the wall of the opening in said top and the under surface of the latter.

2. A crock comprising a body portion, a top therefor having a depending annular flange adapted to engage said body, said top being provided with a central opening, an element mounted in said opening and including superimposed members forming an annular groove therebetween, a screen mounted in said groove, lugs depending from one of said members and adapted to engage the wall of the opening in said top and the under surface of the latter, and a closure for said element pivoted to the other superimposed member.

3. A crock comprising a body portion, a top therefor having a depending annular flange adapted to engage said body, said top being provided with a central opening, an element mounted in said opening and including superimposed members forming an annular groove therebetween, a screen mounted in said groove, lugs depending from one of said members and adapted to engage the wall of the opening in said top and the under surface of the latter, a closure for said element pivoted to the other superimposed member, and means engaging said closure for retaining the same in an adjusted position.

1,064,604. AUTOMATIC TAP-HOLE STOPPER. ERNEST S. BOUDREAU, Tacoma, Wash. Filed Feb. 20, 1913. Serial No. 749,756. (Cl. 75—193.)



1. An automatic tap hole stopping device comprising a hinged frame, a cylinder and a clay supporting chamber carried by said frame, a piston in the cylinder and a plunger in the chamber and having an operative connection with said piston, means for controlling the admission and discharge of compressed fluid to said cylinder, a catch to automatically engage said frame when the latter is swung to an operative position, and devices for actuating said controlling means when the frame is brought into this position.

2. An automatic tap hole stopping device comprising a hinged cylinder supporting frame, a compressed fluid cylinder carried by said frame, a clay supporting chamber connected with said cylinder, a piston slidably mounted in the latter, a plunger slidably mounted in said clay supporting chamber and having an operative connection with said piston, whereby the plunger is projected and retracted in said clay chamber to force the plug of clay contained therein into the tap hole of a furnace, a valve to control the admission and discharge of the compressed fluid to said cylinder, a stem connected with said valve, a catch to automatically engage said cylinder supporting frame when the latter and the parts carried thereby are swung to an operative position thereby locking these parts in this position, and means to engage the stem of said valve, whereby the latter is automatically operated to admit compressed fluid to said cylinder thereby projecting the piston therein and the plunger in said clay supporting chamber to force the clay from the latter into the tap hole of the furnace.

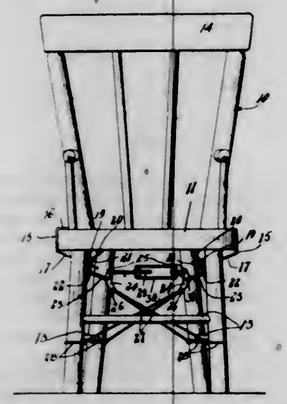
3. An automatic tap hole stopping device comprising a hinged frame, a compressed fluid cylinder carried by said frame, a clay supporting chamber connected with said

cylinder, a piston slidably mounted in the latter, a plunger slidably mounted in said clay supporting chamber and having an operative connection with said piston, a valve to control the admission and discharge of the compressed fluid to said cylinder, a spring actuated arm having on its outer end a beveled catch, a lug on said frame adapted to be brought into engagement with the catch, and a crank on the stem of said valve adapted to be simultaneously turned by said catch, whereby the valve is actuated to admit fluid to the cylinder for projecting the piston therein and the plunger in said clay chamber.

4. An automatic tap hole stopping device comprising a frame hinged at one end to a support, a clay-carrying chamber mounted in the other end of the frame, a plunger movable within said chamber, projecting mechanism for said plunger, and means for actuating said projecting mechanism, said means including a crank; combined with an arm so located as to be struck by said crank when the frame is swung to operative position, for the purpose set forth.

5. An automatic tap hole stopping device comprising a frame hinged at one end to a support, a clay-carrying chamber mounted in the other end of the frame, a plunger movable within said chamber, projecting mechanism for said plunger, and means for actuating said projecting mechanism, said means including a crank; combined with a fixed bracket, an arm pivoted therein, a catch at its outer end, a spring throwing said catch normally downward to a point where it will be struck by said crank when the frame is swung to operative position, and a lug on this end of the frame adapted to be engaged by said catch.

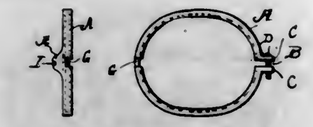
1,064,605. BRACE. JOSEPH BOUSKA, Bridgeport, Wash. Filed Oct. 26, 1911. Serial No. 656,849. (Cl. 155—3.)



The combination with a chair, of plates secured to opposite sides of the seat thereof respectively and having inwardly directed lower ends provided with slots, bearing plates extending through each of said slots and having one end in engagement with the bottom of the chair seat, links pivotally connected to the other ends of said bearing plates, an angle lever pivotally connected to the free end of each link, a connection between corresponding ends of the angle levers, said connection including a turn-buckle whereby the angle levers may be pivotally adjusted, and connections between the other ends of said angle levers and the legs of the chair.

1,064,606. EYEGLASS-REPAIRING DEVICE. HARRY BRANNON, Philadelphia, Pa. Filed Feb. 3, 1911. Serial No. 606,334. Renewed Nov. 4, 1912. Serial No. 729,473. (Cl. 38—41.)

1. An eye glass repairing device comprising a ring of resilient metal, said ring having a groove therein and a raised portion formed from one side thereof having a notch therein.

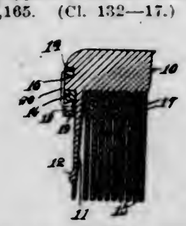


2. In an eye glass repairing device, a split ring having an annular internal groove and provided with a notch, said groove adapted to register with the lens of a pair of eye glasses and said notch adapted to register with the bridge of said eye glasses, and means for drawing the ends of the split ring together.

3. An eye glass repairing device comprising a strong metallic split ring, lugs formed on the ends of the ring, a screw passing through the lugs for drawing the ends of the ring together, and a raised portion formed on one side of the ring having a notch therein with which is adapted to register the bridge of the eye glasses.

4. In an eye glass repairing device, a split metallic ring having an internal annular groove and a notch formed on one side thereof, a raised portion formed upon the opposite side of the ring having a notch therein, said annular groove adapted to register with the lens of a pair of eye glasses and one of the notches adapted to register with the bridge of said eye glasses, lugs formed upon the ends of the split ring, and a screw for drawing the said ends together.

1,064,607. SANITARY COMB. SAMUEL P. BRONSON, Coregidor, Philippine Islands. Filed Apr. 25, 1912. Serial No. 693,165. (Cl. 132—17.)



The combination with a comb having a beveled socket formed in each end of the head, shoulders formed at the junctures of the end teeth and the head and projections formed on the outer surface of the end teeth, of a cleaner bar slidable over the teeth of the comb adapted to engage said shoulders and said projections, said cleaner bar having a beveled socket in each end thereof, and resilient fastening clips, each having fingers with beveled enlargements on their outer ends to removably engage in the beveled sockets of the comb and cleaner bar.

1,064,608. LOCK CONTROL. CHARLES P. BURT, Atlanta, Ga. Filed Apr. 27, 1912. Serial No. 693,698. (Cl. 116—31.)

1. A motor control element, means for locking said element in predetermined control position, and remotely governed means to prevent the operation of the control element locking means in other than a selected position of said element.

2. In combination with motor reversing mechanism and a locking device therefor; of means for rendering the locking device inoperative when the said mechanism is arranged differently from a required position.

3. In combination with motor reversing mechanism, and a locking device therefor; of a deck annunciator, and means controlled thereby for rendering the locking device inoperative when the mechanism is arranged in opposition to a required position.

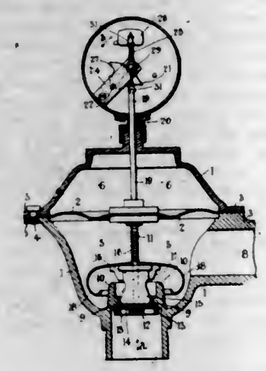
4. In combination with motor reversing mechanism and a locking device therefor; of an engine room annunciator, and means controlled thereby for rendering the locking device inoperative when the mechanism is arranged in opposition to a required position.



5. In combination with motor reversing mechanism, and a locking device therefor; of a signaling device including an annunciator, and means controlled thereby for rendering the locking device inoperative when the mechanism is arranged in opposition to a required position.

[Claims 6 to 10 not printed in the Gazette.]

1,064,609. GAS-REGULATOR. HENRY M. CALDWELL and THOMAS SMITH, London, England. Filed Nov. 15, 1909. Serial No. 528,135. (Cl. 50—27.)



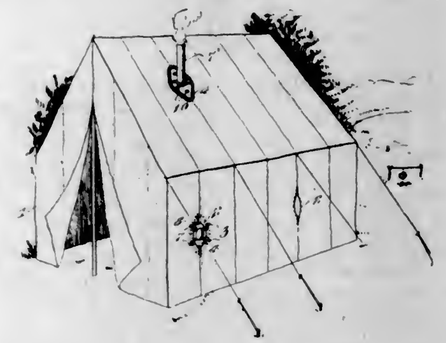
1. In a device of the class described, the combination of a chamber provided with an inlet opening, an outlet opening, a valve seated in the inlet opening, a diaphragm extending across the chamber, and a variable pressure means; the valve in the inlet opening, the diaphragm and the variable pressure means being operatively connected so that when the pressure from the source of supply exceeds a certain amount, the valve will become seated, said valve being provided with an opening closed with a relief valve whereby when the valve in the inlet opening becomes seated gas can pass into the chamber.

2. In a device of the class described, the combination of a chamber provided with an inlet opening, an outlet opening, valve operating means operated by the pressure of gas within the chamber, said valve which is in the inlet opening being provided with an opening passing therethrough and a relief valve seated thereupon to permit gas to pass from the source of supply into the chamber when the pressure becomes too great and spring means between the valve operating means and the auxiliary or relief valve to hold the latter in place.

3. In a device of the class described, the combination of a chamber provided with an inlet opening, a valve seated therein which in order to be opened must be moved against the pressure of the supply, said valve provided with an opening and a rod connecting it to the valve operating mechanism, an auxiliary relief valve adapted to close said opening and slidably mounted on said rod and spring means between the rod and the auxiliary valve to hold it normally in place.

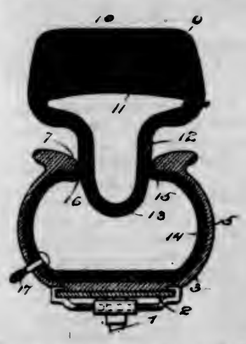
4. In a device of the class described, the combination of a chamber provided with inlet and outlet openings, a valve seated in the inlet opening which in order to open must be forced against the pressure from the source of supply, said valve provided with an opening leading from the source of supply to the interior of the chamber operating means connected to said valve, a spring pressed auxiliary valve which normally keeps the opening of the first mentioned valve closed and a baffle member located between the spring of the auxiliary valve and the inlet opening.

1,064,610. FRAME FOR TENT-OPENINGS. FRED P. CANFIELD, Albuquerque, N. Mex., assignor to The Hanlon Tent Ring Company, Albuquerque, N. Mex., a Corporation. Filed Feb. 28, 1912. Serial No. 680,389. (Cl. 135—14.)



In a device for the purpose set forth, the combination with a fabric body having an opening, of a pipe ring for said opening, said ring comprising a flattened plate having beaded edges and a rib adjacent its edges, L-shaped locking fingers arranged for rotation upon the plate, and the said fingers, when rotated, adapted to engage with the fabric to compress the same against the bead and rib to bulge the fabric between the said bead and rib.

1,064,611. TIRE. WILLIAM G. CHIPLEY, New Orleans, La., assignor to Pneumatic Rim & Tire Company, Wilmington, Del., a Corporation of Delaware. Filed Apr. 10, 1911. Serial No. 620,038. (Cl. 152—22.)



In a device of the character described, the combination with a rim having an annular groove, of a tire formed with

an inflatable portion fitting into said annular groove for holding the tire in place, and an independent inflatable portion arranged above the annular groove formed so that one end thereof will project into said annular groove and into said first mentioned inflatable portion.

1,064,612. BUSHING FOR THE SUSPENSION-PLATES OF HOIST-BLOCKS. JEROME G. CLINE, Plainfield, N. J., assignor to The Yale & Towne Manufacturing Company, Stamford, Conn. Filed Jan. 31, 1912. Serial No. 674,528. (Cl. 64—10.)



1. The combination of a suspension plate having an elliptical opening therein, and a recess communicating with said opening, and a bushing shaped to conform to said opening and provided at its outer end with a peripheral flange of greater diameter than the long diameter of said opening, and adapted to bear against the front face of said plate and cover and close the opening, and provided in the rear of said flange with a groove extending part way around the bushing at the lower side of the latter and adapted to form a seat for the wall of the opening in the plate, the said bushing also provided with an integral projection adapted to rest within the recess for preventing the bushing from turning.

2. The combination of a suspension plate having an elliptical opening therein, and a recess communicating with said opening, a bushing shaped to conform to and fit said opening and provided at its outer end with a peripheral flange to bear against the outer face of the plate, a groove in rear of the flange at the underside of the bushing forming a seat for the wall of the opening in the plate, and an integral projection in the plane of the groove adapted to rest within the recess in the plate.

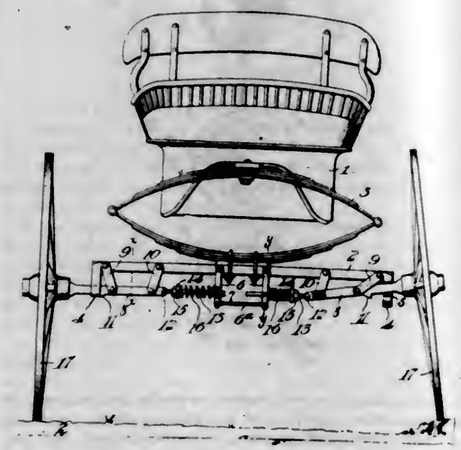
3. The combination of a suspension plate having an oblong opening therein, and a recess communicating with the upper part of said opening, and a bushing having an end flange of greater diameter than the opening in the plate, a groove in its lower half adjacent the flange to receive the plate, a tapering or beveled inner end, and an integral projection adapted to rest in the recess in the plate.

1,064,613. SPRING-AXLE. CHARLEY J. COGGIN, San Angelo, Tex. Filed Feb. 27, 1912. Serial No. 680,142. (Cl. 21—187.)

1. An axle, a stringer, links supporting the axle and pivotally connected thereto at different points in its length, the points of suspension and connection of the links with the axle being disalined vertically so that upward movement of one end of the axle produces downward movement of the opposite end of the axle and vice versa.

2. In combination, a stringer forming a support, an axle mounted to have a limited vertical and longitudinal play, oppositely inclined links connecting the axle with the said support, and a spring normally exerting an endwise pressure upon the axle.

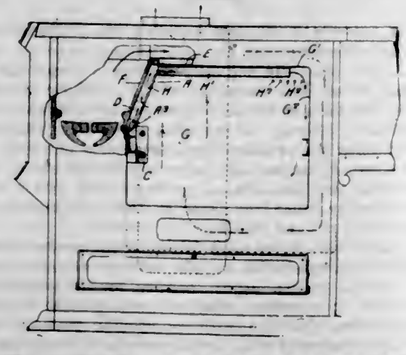
3. In combination, a stringer forming a support, an axle mounted upon the support and having a limited longitudinal and vertical play, link connections between the axle and support, a rod having pivotal connection at one end with the axle and sliding connection at its opposite end with the said support, and a spring exerting an endwise pressure upon said rod and serving to normally hold the axle in a given position.



4. A stringer having a vertical slotted hanger at its outer end, a bar pendant from the stringer and having an opening, an axle passing through the slot of said hanger, oppositely inclined links connecting the axle with the stringer, a rod pivotally connected at one end with the axle and having its opposite end portion slidably arranged in the opening of the beforementioned bar, a helical spring mounted upon said rod and exerting an endwise pressure thereon, and means for varying the tension of said spring.

5. In combination, an approximately horizontal support, hangers arranged on the outer ends of said support, each having a vertically disposed slot, bars pendant from the support each having an opening, axles passing through the slots of said hangers, oppositely inclined links pivotally connecting the axles to the support, threaded rods having pivotal connection at their outer ends with the inner ends of the axles and having their inner ends passing loosely through the openings of the beforementioned bars, helical springs mounted on said rod and exerting an endwise pressure thereon, and means for varying the tension of said springs.

1,064,614. RANGE AND STOVE. ERNEST CHAPIN COLE, Chicago, Ill. Filed June 1, 1912. Serial No. 700,924. (Cl. 126—21.)



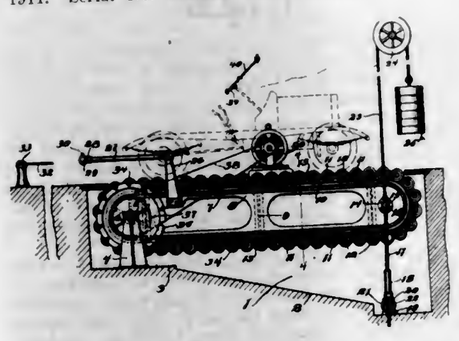
1. The combination, substantially as shown and described with an oven and a fire-back, the former of which is provided with inlet and outlet openings formed through its rear wall and respectively located adjacent the lower rear portion of the fire-back, and at the opposite side of the oven, of a shield within the oven and comprising an imperforate top wing secured in spaced relation to the oven top plate whereby to form an air circulating space, and open at one end into the oven adjacent the said air outlet openings, and an imperforate inclined wing secured in spaced relation against the fire-back and forming an air circulating flue, the upper end of which is in communication with the adjacent end of the top wing flue, said inclined wing flue being open at one side to the oven and at its opposite side to the said air inlet openings.

2. The combination, substantially as shown and described with an oven and a fire-back, the former of which is provided with inlet and outlet openings formed through its rear wall and respectively located adjacent the lower rear portion of the fire-back, and at the opposite side of the oven, of a shield within the oven and comprising an imperforate top wing secured in spaced relation to the oven top plate whereby to form an air-circulating space, and open at one end into the oven adjacent the said air outlet openings, and an imperforate inclined wing secured in spaced relation against the fire-back and forming an air-circulating flue, the upper end of which is in communication with the adjacent end of the top wing flue, said inclined wing flue being open at one side to the oven and having a portion at the other side overlying the said air inlet and forming a cold air receiving duct which communicates with said air-circulating flue.

3. The combination, substantially as shown and described, with an oven and a fire-back, the former of which is provided with inlet and outlet openings formed through its rear wall and respectively located adjacent the lower rear portion of the fire-back and at the opposite side of the oven, of a shield within the oven and forming air-circulating flues alongside the fire-back and along the oven top, which flues open at one end adjacent to said air outlet openings, and at their opposite end to the said inlet openings and also to the oven and which have otherwise imperforate walls between their ends.

4. An oven shield comprising a relatively flat top wing having side closing flanges and an inclined wing extending from said first wing and having a closing flange at its lower end and an angularly bent portion at one side, the said wings being adapted to form one wall of communicating flues and said angularly bent portion of the inclined wing being adapted to form one wall of an air duct communicating with said flue.

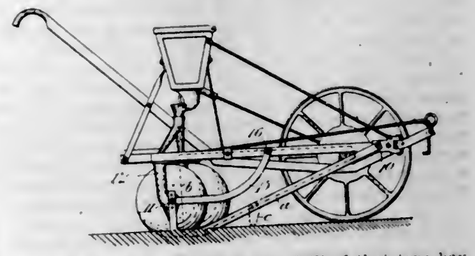
1,064,615. TESTING DEVICE FOR MOTOR-VEHICLES. CHARLES JOHN COOKE, Albany, N. Y. Filed Dec. 20, 1911. Serial No. 666,935. (Cl. 73—51.)



1. The combination with a steerable motor vehicle, of a movable supporting platform therefor, a stationary member, and a flexible connection between the stationary member and the vehicle which is adapted to slide over the stationary member as the vehicle is steered from side to side of the platform.

2. The combination with a steerable motor vehicle, of a movable supporting platform therefor, a stationary member, and a connection between the stationary member and the vehicle which is adapted to slide over the stationary member as the vehicle is steered from side to side of the platform.

1,064,616. ATTACHMENT FOR GRAIN-DRILLS. MERRITT COPELAND, St. Paul, Ind. Filed Nov. 13, 1911. Serial No. 660,001. (Cl. 111—36.)

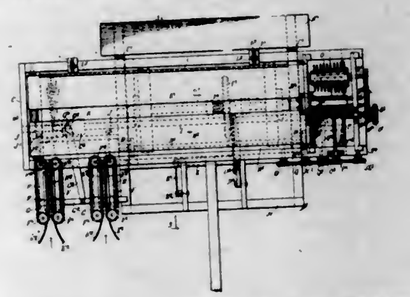


1. The combination with a grain drill of that type having a frame formed narrow at its front and wide at its rear with said front supported on a single wheel and the drill mechanism mounted on said rear, of steady runners for laterally supporting the rear end of said drill mounted on each side of said frame, each of said runners consisting of a bar attached to the front end of said frame and extending at an angle outwardly and downwardly from said front end toward the ground and having a horizontal foot or bearing portion adapted to rest upon the ground outside and adjacent to the end disks and having a vertical standard formed to be adjustably attached to the rear end of said frame, substantially as set forth.

2. In a grain drill, the combination with the frame, the disks and drill mechanism, of runners attached to the sides thereof with their rear ends resting upon the ground, and fenders also attached to said runners in position to deflect the stalks of corn from the disks of the drill, substantially as set forth.

3. A grain drill comprising runners adjustably attached to its sides, fenders attached to said runners, and shields extending from said runners upward toward the frame, substantially as set forth.

1,064,617. BROOM-CORN-CLEANING MACHINE. EMUEL CORY, Colfax, Ind. Filed Dec. 14, 1910. Serial No. 597,208. (Cl. 130—30.)



1. In a broom corn cleaning machine, a conveyer, a revoluble threshing drum at the discharge end of the conveyer, the axis of the drum being parallel with the line of travel of the conveyer, a revoluble cutter at the same end of the conveyer and spaced from the threshing drum, the axis of the cutter being at right angles to the line of travel of the conveyer, and two pairs of parallel endless chains, one pair above the other and arranged between the threshing drum and the cutter, the adjacent runs of the endless chains of the pairs of chains being adapted to grip the stalks intermediate of their ends and present the heads to the threshing drum and their butts to the cutter.

2. In a broom corn cleaning machine, a conveyer, two pairs of spaced and parallel endless chains at the discharge end of the conveyer and in alinement therewith, the chains of one pair being one above the other pair and the wheels over which the chains of the lower pair of chains pass at one end being on one of the rollers of the conveyer, whereby the said chains will be operated from the conveyer, a revoluble threshing drum at one side of the chains and having its axis parallel with the line of travel of the conveyer, and a revoluble cutter at the other side of the said chains, and having its axis at right angles to the line of travel of said conveyer.

3. In a broom corn cleaning machine, a conveyer, spaced sprocket wheels on the roller of the conveyer, a pair of spaced sprocket wheels above the sprocket wheels of the conveyer roller, a pair of spaced sprocket wheels in front of each pair of the hereinbefore named sprocket wheels, chains passing around said pairs of sprocket wheels, a threshing device at one side of the said chains, a cutter at the other side of the chains, and means for operating the conveyer.

4. In a broom corn cleaning machine, a conveyer, a pair of spaced sprocket wheels on the roller of the conveyer at the discharge end thereof, a pair of spaced sprocket wheels above the sprocket wheels on the conveyer roller, a pair of spaced sprocket wheels in front of each pair of the hereinbefore named pairs of sprocket wheels, chains passing around said sprocket wheels, a threshing drum at one side of the chains and having its axis parallel with said chains, a rotary cutter at the other side of the said chains and having its axis at right angles to the chains, and means for operating the upper chains and cutter from the said roller of the conveyer.

1,064,618. WELL-DRILLING TOOL. RAS CRAIG, Los Angeles, Cal. Filed May 14, 1912. Serial No. 697,319. (Cl. 255—63.)



1. A well-drilling tool comprising a shank having a transverse slot and longitudinal grooves along its sides, a head having a transverse spline to fit the slot and having a furcated stem slidable in the grooves, key-seats in the shank and stem respectively, and a wedge-shaped key in the key-seats to relatively move the shank and head to draw the head tightly into place.

2. A well-drilling tool comprising a shank having a transverse slot and longitudinal grooves along its sides, a head having a transverse spline to fit the slot and having a furcated stem slidable in the grooves, key-seats in the shank and stem respectively, and a wedge-shaped key in the key-seats to fasten the furcations in the grooves.

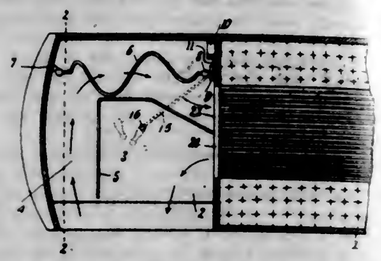
3. A well-drilling tool comprising a shank having a transverse slot and a seat, a head having a transverse spline to fit the slot and having a stem slidable in the seat, wedging means to fasten the stem in the seat and additional means preventing separation of the shank and head and allowing for take-up of the wedging means.

4. A well-drilling tool comprising a shank having longitudinal grooves, and a detachable head fitting the shank and provided with a furcated stem to fit the grooves.

1,064,619. PASSENGER-COUNTING DEVICE. MAX H. CRAMPTON, New York, N. Y. Filed Feb. 23, 1912. Serial No. 679,232. (Cl. 39—99.)

1. In a device of the character described, a spirally wound counting bar adapted to be turned by a person passing longitudinally thereof.

2. In a device of the character described, a spirally wound counting bar formed substantially with one convolution whereby a person passing longitudinally thereof will turn the same one revolution, and a supporting bar for each end of said spirally wound bar for holding said spirally wound counting bar in position.



3. In a device of the character described, the combination with a housing and a rail arranged therein for defining an entrance passageway, of a twisted bar extending longitudinally of said passageway, said twisted bar being formed with substantially a single convolution, said rail being arranged adjacent said convolution whereby a person passing from one end to the other thereof in said passageway will turn the bar for a single revolution.

4. In a device of the character described, the combination with a housing and a rail arranged therein for defining an entrance passageway, of a twisted bar extending longitudinally of said passageway, said twisted bar being formed with substantially one convolution and substantially occupying the full width of said passageway whereby a person passing through said passageway will strike against said bar and turn the same one revolution.

5. In a device of the character described, a twisted counting bar formed with a single convolution merging into end journals, and means for rotatably supporting said journals whereby a person may pass in either direction longitudinally of said bar and rotate the bar a single revolution upon the travel from one end to the other thereof regardless of the direction of movement.

[Claim 6 not printed in the Gazette.]

1,064,620. REGISTERING DEVICE. IRA M. DE PUY, Hackensack, N. J. Filed Aug. 2, 1912. Serial No. 712,960. (Cl. 235—93.)

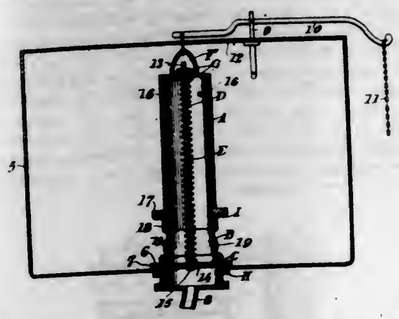


1. In a device of the character described, a car, a turnstile and trip and total registering devices operatively connected therewith to register the entry of the passengers during the passage of the car through each zone and the total number of passengers entering the car during any number of zones, and an independent turnstile and trip and total registering mechanism operable thereby to register the number of persons leaving the car during its passage through each zone and the total number of exits during the passage of the car through a multiplicity of zones.

2. The method of registering carfares which consists in automatically registering the number of passengers entering a car during each zone, automatically registering the number of exits from the car in each zone, registering the number of passengers in the car during its passage through each zone, registering the number of exits in each zone, and the total number of exits in a multiplicity of zones.

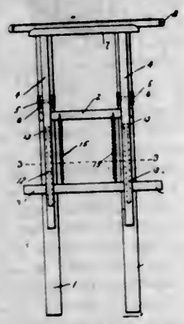
1,064,621. VALVE FOR CLOSET-TANKS. GENNARO DE ROSA, New York, N. Y. Filed Mar. 29, 1912. Serial No. 687,286. (Cl. 4—5.)

The combination with a flush tank formed with an opening, a bushing secured in said opening, a shell mounted in said tank and having a valve lip to engage the edge of the bushing to prevent the escape of water from the tank, an operating lever connected to the shell, the connection preventing rotated movement of the shell, a spider arm bridging the bushing, a rod connected to the shell and slidably mounted in the arm, a spring encircling the rod



and bearing on the spider and against the shell and a collar removably secured to the shell formed with opposing openings in the wall thereof, said collar being secured to the shell below the valve lip thereof and the openings therein formed to permit the collar to embrace the spider arm when the shell is in lowered position.

1,064,622. SAW-VISE. CHARLES A. DORR, Jr., Montello, Mass. Filed Feb. 7, 1913. Serial No. 746,941. (Cl. 76—78.)

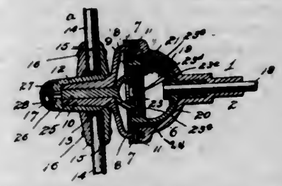


1. A vise comprising a pair of legs, a jaw secured thereto, a pair of levers pivoted to said legs, a jaw secured to said levers, a wedge bar slidably mounted between said levers and legs, and spring means adapted to move said wedge bar in one direction, whereby the jaws are forced toward each other.

2. A vise comprising a pair of legs, a jaw connected to said legs, a pair of pivoted levers also secured to the legs, a jaw mounted upon said levers, a wedge bar having recesses formed in its rear edge for engagement with said legs, and spring means for drawing the wedge bar toward the pivot points of the levers, whereby the jaws are forced toward each other.

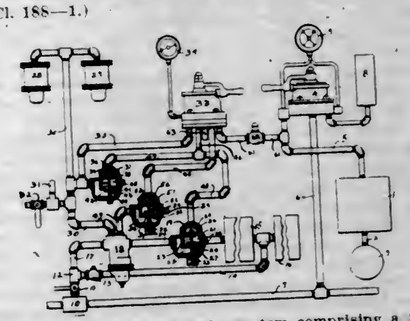
3. A vise comprising a pair of legs, a jaw connected to the pivoted ends thereof, a pair of levers pivotally secured intermediate their ends to said legs, a jaw secured to the pivoted ends of said levers, the legs being formed with longitudinal recesses in their front faces, a wedge bar having its rear edge recessed to receive said legs and formed with dove-tail projections adapted to fit within said longitudinal recesses, the forward edge of the wedge bar being transversely recessed for engagement with the lower ends of the levers, a brace connecting said legs, and contractile spiral springs secured to said brace and wedge bar, whereby the latter is drawn toward the pivot points of the levers to force the second mentioned jaw toward the first.

1,064,623. AUTOMOBILE RUNNING-GEAR. CHRISTIAN W. DUERRSTEIN, Guilford, Ill. Filed June 20, 1911. Serial No. 634,229. (Cl. 21—90.)



In a vehicle running gear, the combination with a front axle, of a cup carried at the end of the axle, a shaft extending through the axle, a cup at the end of the shaft and disposed within the first-mentioned cup, a ring within the last-mentioned cup and provided with a plurality of spaced parallel bars, a yoke swiveled to the bars, a swivel pin passing through the said ring and disposed between the bars and terminating in the inner cup member, and a shaft connected to the yoke and projecting through an opening in the skein of the axle.

1,064,624. AIR-BRAKE SYSTEM. FRANK H. DUKESMITH, Buffalo, N. Y., assignor to The United States Air Brake Corporation, Buffalo, N. Y., a Corporation of New York. Filed Oct. 25, 1912. Serial No. 727,747. (Cl. 188—1.)



1. An independent air brake system comprising a main reservoir, means for supplying said reservoir with compressed air, an independent brake valve adapted by manual control of its parts to effect passages for the flow of compressed air to parts of said system and to the atmosphere and to retain said compressed air within said system parts, piping connections between said independent brake valve and said main reservoir, having within said connections a pressure reducing valve, a brake cylinder, tubular connections between said brake valve and said brake cylinder, an exhaust valve in communication with said tubular connections, adapted to be controlled manually by pressure, and a conduit connecting said independent brake valve with said exhaust valve.

2. In an air brake system an engineer's automatic brake valve, a train pipe, a triple valve connected by piping to said train pipe, a stop-valve adapted to be normally open and to be closed independently, by means of compressed air passing to it through an independent air connection, an auxiliary reservoir, piping between said auxiliary reservoir and said triple valve having thereon the said stop-valve, normally open to allow of the free passage of air between said triple valve and said auxiliary reservoir, a brake cylinder, piping connections between said brake cylinder and said triple valve, an independent brake valve adapted by manual control of its parts to effect passages for the flow of compressed air to parts of said system or to the atmosphere, or to retain said compressed air within parts of said system, piping connections between said independent brake valve and said main reservoir, tubular connections between said independent brake valve and said brake cylinder, an exhaust

valve adapted to be manually controlled by pressure and to be normally closed, said exhaust valve being in communication with said tubular connections; independent tubular connections between said independent brake valve and said exhaust valve, a retaining valve in communication with the exhaust channel of said triple valve adapted to be manually controlled by pressure, and adapted to be normally open to the atmosphere, independent connections between said retaining valve and said independent brake valve, and an independent conduit between said stop-valve and said independent tubular connections, said stop-valve being thereby connected to said independent brake valve.

3. In an air brake system, a main reservoir, means for supplying compressed air to said main reservoir, a brake cylinder, a conduit adapted to pass compressed air to said brake cylinder, and to allow said air to exhaust from said brake cylinder, means adapted to automatically operate said brake cylinder, and means adapted to independently operate said brake cylinder, said means affording three simultaneously operating exhaust outlets for quickly releasing pressure from said brake cylinder.

4. In an air brake system, a main reservoir, means for supplying said main reservoir with compressed air, an auxiliary reservoir, a triple valve, a brake cylinder, a conduit adapted to pass compressed air to said brake cylinder and to allow said air to exhaust from said brake cylinder, a stop-valve between the auxiliary reservoir and the triple valve adapted to be normally open and to be closed by pressure independently applied, an engineer's automatic brake valve, means, apart from said brake valve, adapted to independently operate said brake cylinder, means adapted to release said brake cylinder through said conduit direct to the atmosphere and correlated means adapted to simultaneously close the said stop-valve to confine air in said auxiliary reservoir pending the independent release of said brake cylinder.

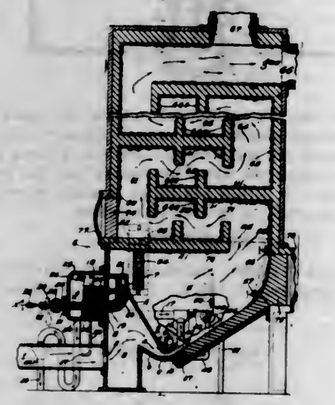
5. In an air brake system a source of fluid pressure, a brake cylinder, an exhaust valve adapted to be manually controlled by pressure connected with said brake cylinder, a triple valve, a retaining valve connected with said triple valve and adapted to be manually controlled by pressure, an auxiliary reservoir, a stop-valve connected with said triple valve and said reservoir and adapted to be manually controlled by pressure, an independent brake valve comprising a casing having an inner chamber connected with a source of fluid pressure, a valve seat having therein four ports, one of which is connected with the atmosphere, one of which is connected to said brake cylinder, one of which is connected with said exhaust valve and one of which is connected with said stop valve, a disk engaging said valve seat, and forming a floor to said chamber, said disk having passing there through three holes, one of which holes being connected with a circumferential cavity, open to the face of said valve seat, said disk having also an exhaust cavity open to the face of said valve seat and said port connected to the atmosphere, said ports, holes and cavities being so correlated as to form passages within said valve to perform functions in five definite angular positions of said disk on said valve seat substantially as set forth.

[Claim 6 not printed in the Gazette.]

1,064,625. METHOD OF PRODUCING GAS. ORVILLE H. ENSIGN, Los Angeles, Cal. Filed May 27, 1909. Serial No. 498,764. (Cl. 48—74.)

1. The method of producing gas, which consists in supplying to a heated chamber air and hydrocarbonaceous material having light and heavy constituents; there separating the lighter constituents from the heavier constituents; causing combustion of the heavier constituents, thereby producing heat; applying such heat to produce from the lighter constituents without kindling the same, fixed hydrocarbon-gases; mingling these hydrocarbon-gases with the fixed products of combustion in contact with incandescent carbon, and thus producing a fixed inflammable gas.

2. The method of producing fixed gas, which consists in causing a continuous flow of air and oil into the combustion-chamber, the oil flowing toward the air; causing combustion of the oil at the confluence of the oil and air; causing the distillation of the more volatile portions of the oil by the heat of such combustion before such volatile portion reaches the zone of combustion, satisfying the oxygen of the air-supply by the combustion of the residuum and thereby maintaining sufficient heat in the zone of combustion to break up the distilled vapors and so convert that portion of the oil into hydrocarbon-gases; and then causing these products mingled together to pass onward through heated passages in contact with hot carbon, thus adding carbon to any carbon-dioxid formed in the flame-zone and reducing this carbon-dioxid to carbon-monoxid, the resultant gas being a mixture of carbon-monoxid, hydrocarbon-gases and a small percentage of free hydrogen.



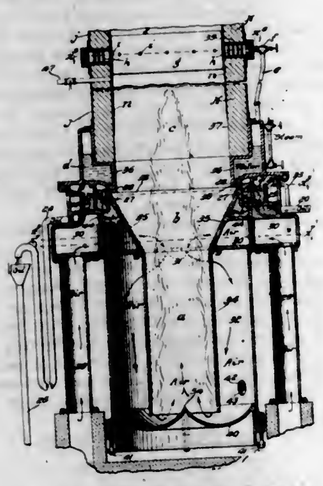
3. The method of making producer gas set forth, which consists in supplying to a confined space, oil and air under a common pneumatic pressure and thereby causing adjustable proportionate amounts of oil and air to be supplied in said space; igniting portions of the oil and thereby consuming the air; adjusting the proportions of oil and air until a flame results from the ignition of a portion of the mixture and until only a partial combustion ensues; employing the heat thus developed to dissociate and distil without kindling the remainder of the fuel introduced into said space, thereby producing a heated vaporous mass; causing said mass to move onward meanwhile retaining the heat of the mass and continually stirring and mixing the materials of said mass; depositing from said mass at the outer limits thereof a thin coating of incandescent carbon from portions of the gas in said mass; bringing other portions of the gas into contact with such carbon deposit, thereby taking up the carbon and continuing the process without material cooling of the mass until there is eliminated from the mass the combustible hydrocarbon vapors and such vapors are transformed into hydrocarbon gases.

4. The method of producing gas from hydrocarbon oil, which consists in mingling in a confined space atmospheric air and hydrocarbon vapors under a heat sufficient to effect partial combustion and to break up hydrocarbon vapors into gases; then conducting the resulting product onward in a mass and causing deposits to form around the body of the gases, maintaining such deposit at a high temperature and a fixed thickness by constantly depositing carbon from the gaseous vapors and taking up carbon by gases having an affinity therefor, thus causing the carbon-dioxid contained within the mass to give up a portion of its oxygen and to take up a portion of the carbon from the deposit, thereby forming carbon-monoxid from the dioxid originally formed, also keeping whatever portion of the fuel may be in the form of a distillate or vapor from the original petroleum at a high temperature sufficiently high to gradually convert such portion of the fuel into the nearest hydrocarbon compound which is a gas.

5. In the process of making gas from hydrocarbon oils, the method set forth which consists in maintaining a heated passage having a carbon lining, and conducting therealong gas containing carbon-dioxid at a temperature to break up in contact with said lining to form a carbon-monoxid product; the temperature of said carbon lining being practically maintained at a degree at which the condensation of carbon and the breaking up of the carbon-dioxid will balance each other substantially as and for the purpose set forth.

[Claims 6 to 11 not printed in the Gazette.]

1,064,626. METHOD OF PRODUCING GAS. ORVILLE H. ENSIGN, Los Angeles, Cal. Filed Nov. 29, 1909. Serial No. 530,491. (Cl. 48—203.)



1. The process of making producer gas from hydrocarbon fuel which consists in causing the separation of such fuel by gravity and distillation simultaneously into heavier and lighter portions, causing partial combustion of a separated heavier portion and applying the heat of such combustion directly to the fuel in the process of such separation, and progressively dissociating the fuel by the heat of the combustion of such heavier portion and thereby forming hydro-carbon gaseous compounds, meanwhile maintaining the gaseous products from the lighter portions practically free from combustion.

2. The process of making producer gas from hydrocarbon fuel which consists in causing the separation of such fuel by gravity and distillation simultaneously into heavier and lighter portions, causing partial combustion of a separated heavier portion and applying the heat of such combustion directly to the fuel in the process of such separation, and progressively dissociating the fuel by the heat of the combustion of such heavier portion and thereby forming hydro-carbon gaseous compounds, and holding these dissociated compounds and the products of partial combustion at a high temperature, meanwhile maintaining the gaseous products from the lighter portions practically free from combustion.

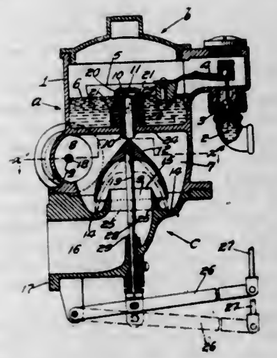
3. The process of making producer gas from hydrocarbon fuel which consists in causing the separation of such fuel by gravity and distillation simultaneously into heavier and lighter portions, causing partial combustion of a separated heavier portion and applying the heat of such combustion directly to the fuel in the process of such separation, and progressively dissociating the fuel by the heat of the combustion of such heavier portion and thereby forming hydro-carbon gaseous compounds, and holding these dissociated compounds at a high temperature obtained from the heat thus produced, meanwhile maintaining the gaseous products from the lighter portions practically free from combustion.

4. The process of making producer gas from hydrocarbon fuel which consists in causing the separation of such fuel by gravity and distillation simultaneously into heavier and lighter portions, causing partial combustion of a separated heavier portion and applying the heat of such combustion directly to the fuel in the process of such separation, and progressively dissociating the fuel by the heat of the combustion of such heavier portion and thereby forming hydro-carbon gaseous compounds, meanwhile maintaining the gaseous products from the lighter portions practically free from combustion and stirring and mixing the products while heated.

5. In the production of producer gas, the step set forth which consists in breaking up crude hydro-carbon fuel by progressive distillation and gravity within a combustion chamber; meanwhile maintaining the gaseous products of the lighter constituents practically free from combustion.

[Claims 6 to 17 not printed in the Gazette.]

1,064,627. VAPORIZER. ORVILLE H. ENSIGN, Los Angeles, Cal. Filed Jan. 5, 1912. Serial No. 669,672. (Cl. 48—155.1.)



1. A vaporizer comprising a liquid supply chamber, means to supply liquid to said chamber, a vortex mixing chamber provided with a tangential air inlet and an axial mixture outlet, means to conduct liquid from the supply chamber to the mixing chamber, and an air passage open toward the inflowing air in the air inlet and communicating with the supply chamber; said supply chamber being otherwise closed against atmospheric pressure.

2. A vaporizer comprising a liquid supply chamber, means to supply liquid to said chamber, a vortex mixing chamber provided with a tangential air inlet and an annular axial mixture outlet, means to conduct liquid from the supply chamber to the mixing chamber, and an air passage open toward the inflowing air in the air inlet and communicating with the supply chamber; said supply chamber being otherwise closed against atmospheric pressure.

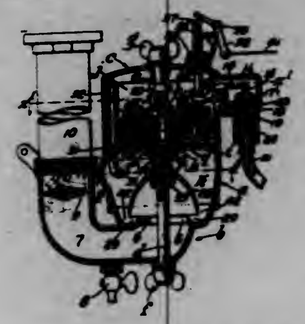
3. In a vaporizer the combination with the mixing chamber floor and outlet nozzle, of a conical distributer having a lower edge to surround the outlet nozzle.

4. In a vaporizer the combination with the mixing chamber floor and outlet nozzle, of a conical distributer having a lower edge to surround the outlet nozzle, and means to move the distributer toward and from the nozzle.

5. A vaporizer comprising a liquid supply chamber; a vortex mixing chamber provided with a tangential air inlet; means to supply liquid through the bottom of the liquid supply chamber to the center of the vortex or air produced in the mixing chamber; and means provided for passing the mixture out of the center of the vortex through a mixture outlet.

[Claims 6 to 23 not printed in the Gazette.]

1,064,628. CARBURETER. ORVILLE HIRAM ENSIGN, Los Angeles, Cal. Filed Apr. 11, 1912. Serial No. 690,191. (Cl. 48—155.1.)



1. A carbureter comprising a body having upper and lower terminal seats and between said seats a supply chamber, a snail shell like air inlet and carbureting chamber below the supply chamber and a centrally perforated partition betweeen the supply chamber and carbureting chamber; an outlet member fitting the lower seat of the body; a cap fitting the upper seat; a bolt threaded at both ends, one end of the bolt being hollow and screwed through the partition and provided with a port opening into the carbureting chamber; the lower end of said bolt extending through the outlet member and provided with a nut to hold the outlet member in place; an upper bolt having a hollow lower end screwed onto the upper end of the first bolt and provided with a port from the supply chamber to the interior of the bolt; the upper end of said upper bolt extending through the cap and provided with a nut to engage the cap; the cavities of the two bolts forming a nozzle chamber; a nozzle mounted in said nozzle chamber and provided at the top with an orifice; and means to maintain a liquid level in said supply and nozzle chambers just below the level of the top of the nozzle.

2. A carbureter comprising a body having upper and lower terminal seats and between said seats a supply chamber, a snail shell like air inlet and carbureting chamber below the supply chamber and a centrally perforated partition between the supply chamber and carbureting chamber; an outlet member fitting the lower end of the body and rotatable thereon; a cap fitting the upper seat; a bolt threaded at both ends, one end of the bolt being hollow and screwed through the partition and provided with a port opening into the carbureting chamber; the lower end of said bolt extending through the outlet member and provided with a nut to hold the outlet member in place; an upper bolt having a hollow lower end screwed onto the upper end of the first bolt and provided with a port from the supply chamber to the interior of the bolt; the upper end of said upper bolt extending through the cap and provided with a nut to engage the cap; the cavities of the two bolts forming a nozzle chamber; a nozzle mounted in said nozzle chamber and provided at the top with an orifice; and means to maintain a liquid level in said supply nozzle chambers just below the level of the top of the nozzle.

3. A carbureter comprising a body having upper and lower terminal seats and between said seats a supply chamber, a snail shell like air inlet and carbureting chamber below the supply chamber and a centrally perforated partition between the supply chamber and carbureting chamber; an outlet member fitting the lower seat of the body; a cap fitting the upper seat; a bolt threaded at both ends, one end of the bolt being hollow and screwed through the partition and provided with a port opening into the carbureting chamber; the lower end of said bolt extending through the outlet member and provided with a nut to hold the outlet member in place; an upper bolt having a hollow lower end screwed onto the upper end of the first bolt and provided with a port from the supply chamber to the interior of the bolt; the upper end of said upper bolt extending through the cap and provided with a nut to engage the cap; the cavities of the two bolts forming a nozzle chamber; a nozzle mounted in said nozzle chamber and provided at the top with an orifice; means to maintain a liquid level in said supply and nozzle chambers just below the level of the top of the nozzle; and a distributer in the carbureting chamber below the supply port.

4. A carbureter comprising a body having upper and lower terminal seats and between said seats a supply chamber, a snail shell like air inlet and carbureting chamber below the supply chamber and a centrally perforated partition between the supply chamber and carbureting chamber; an outlet member fitting the lower seat of the body; a cap fitting the upper seat; a bolt threaded at both ends, one end of the bolt being hollow and screwed through the partition and provided with a port opening into the carbureting chamber; a distributer on said bolt; the lower end of said bolt extending through the outlet member and provided with a nut to hold the outlet member in place; an upper bolt having a hollow lower end screwed onto the upper end of the first bolt and provided with a port from the supply chamber to the interior of the bolt; the upper end of said upper bolt extending through the cap and provided with a nut to engage the cap; the cavities of the two bolts forming a nozzle chamber; a nozzle mounted in said nozzle chamber and provided at the top with an orifice; and means to maintain a liquid level in said supply and nozzle chambers just below the level of the top of the nozzle.

5. A carbureter comprising a body having a supply chamber, a snail shell like air inlet and carbureting chamber below the supply chamber and a centrally perforated partition between the supply chamber and carbureting chamber; an outlet member fitting the lower end of the body; a bolt screwed into the partition and provided with a port opening into the carbureting chamber; a distributer on said bolt; the lower end of said bolt extending through the outlet member and provided with a nut to hold the outlet member in place; and means to supply liquid to the port.

[Claims 6 to 8 not printed in the Gazette.]

1,064,629. LOCK-NUT. GEORGE W. FENSTEMAKER, Amboy, Ill., assignor of one-half to Peter O'Conner, Amboy, Ill. Filed June 4, 1912. Serial No. 701,639. (Cl. 151—54.)

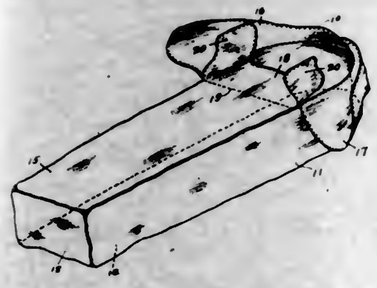


1. In a nut lock, a plate having bolt receiving apertures and lateral projections, a stop formed of a U-shaped member connected by its ends to the plate betwen the projections, an endless open frame engaging the plate and extending between the projections and the stop and adapted to bear over a plurality of nuts, and a plurality of keys extending through the projections of the frame and the stop.

2. In a nut lock, a plate having bolt-receiving apertures and lateral projections, a stop formed of a U-shaped member connected by its ends to the plate between the projections, a yieldable filling within said stop, an endless open frame engaging the plate and extending between the projections and the stop and adapted to bear over a plurality of nuts, and a plurality of keys extending through the projections, the frame and the stop and its filling.

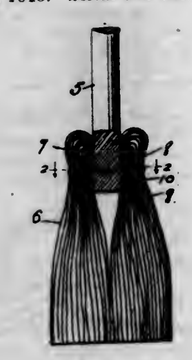
1,064,630. SLEEPING-BAG. ANTHONY FIALA, Brooklyn, N. Y. Filed July 9, 1912. Serial No. 708,514. (Cl. 5—5.)

A sleeping bag comprising an elongated bag having one end rounded, one of the sides thereof having an opening therein adjacent the rounded end, a flap formed by the shortened side formed by the opening extending beyond the edge of the opening, extensions from said flap beyond



the edges of said side, said extensions being foldable within the bag and a flap carried by each of the sides surrounding the opening, said flaps partially overlapping one another and the first mentioned flap and its extensions.

1,064,631. MOP. RICHARD N. FICKETT, Jr., Atlanta, Ga. Filed Feb. 12, 1913. Serial No. 748,004. (Cl. 15—56.)



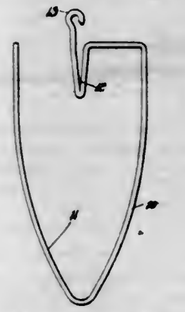
1. In a mop, a mop stick, a collar attached to the mop stick but spaced therefrom, said collar projecting beyond the lower end of the stick, mop fiber secured between the collar and the stick, lengths of fiber overlying the said collar and forming a mop, and a binder exteriorly of the mop fiber near the end of the stick.

2. In a mop, a mop stick, a collar comprising a length of flexible material having its ends overlapping, a fastener extending through the overlapping ends of the collar and stick, the said collar being in spaced relation to the stick and having its end projecting beyond the end of the stick, and fiber forming a mop clamped between the collar and the stick intermediate the length of the said fiber, a portion of the length of said fiber extending over the collar.

3. In a mop, a mop stick, a collar comprising a length of flexible material having its ends overlapping, a fastener extending through the overlapping ends of the collar and the stick, the said collar being in spaced relation to the stick and having its end projecting beyond the end of the stick, fiber forming a mop clamped between the collar and the stick intermediate the length of the said fiber, a portion of the length of said fiber extending over the collar, and fastenings for securing the overlapping edges of the collar.

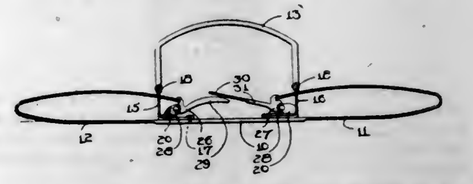
1,064,632. HIDE-STRETCHER. EURITH L. FITZGERALD, Cambridge, Md. Filed July 16, 1912. Serial No. 709,802. (Cl. 149—21.)

As a new article of manufacture, a hide stretcher comprising a single piece of spring-like material bent in a V-shape to form a stretching body, the said piece of material being then bent to form a securing member having a



V-shape and the free end of the said piece of material being then looped to form an eye.

1,064,633. TRAP. ARTHUR C. FORCE, Roberts, Idaho. Filed Aug. 17, 1912. Serial No. 715,604. (Cl. 43—23.)



1. A trap comprising a center bar, resilient arms extending from said center bar and bent to form springs having perforated free ends, brackets secured to the end portions of said center bar and passing through the perforations of said springs when said springs are bent to a contracted position, jaws passing through the perforations of said springs and pivotally connected to the upper end portions of said brackets, pivot ears mounted upon the lower portions of said brackets and having their outer ends fitting tightly against the vertical portions of said brackets to prevent pivotal movement of said pivot ears, each of said pivot ears being formed from a blank having perforated side wings bent to form vertically extending flanges, triggers pivotally mounted between the flanges of said pivot ears and adapted to engage the free ends of said resilient arms, a curved lever extending from one of said triggers, and a lever extending from the other of said triggers and provided with a trip plate at its free end portion positioned above the first mentioned lever.

2. A trap comprising a center bar, brackets mounted upon said center bar, jaws pivotally connected with the upper end portions of said brackets, pivot ears secured to the lower portions of said brackets and having their outer ends contacting with the vertical portions of said brackets to prevent pivotal movement of said pivot ears, springs carried by said center bar for normally holding said jaws in a closed position, triggers pivotally connected with said pivot ears and adapted to engage said springs to hold the same in a contracted position, a curved lever extending from one of said triggers, and a lever extending from the other of said triggers and provided with a trip plate at its free end portion above the end portion of said first mentioned lever.

1,064,634. PENHOLDER. JOHN FORST, Jr., Boston, Mass. Filed Feb. 7, 1913. Serial No. 746,875. (Cl. 120—101.)

1. As a new article of manufacture, a pen holder comprising a collar, a plurality of curved spring-like members having their inner ends secured to the inner end of the collar and their forward ends normally in engagement, and a handle adapted to be inserted in the inner end of the collar to engage the spring-like clamping mem-

bers and move the same toward the wall of the collar to clamp a nib between one of the members and the wall of the collar.



2. In a pen holder, the combination with a collar, of spring-like clamping members supported therein, with the forward ends thereof normally spaced from the wall of the collar, and a handle for removable insertion in the collar to engage the spring-like members and move the same into position to clamp a nib against the inner wall of the collar.

1,064,635. ARTIFICIAL TOOTH. JOSEPH A. GARDNER, Memphis, Tenn., assignor of one-half to Robert D. Goodwyn, Memphis, Tenn. Filed July 17, 1912. Serial No. 710,047. (Cl. 32—9.)



1. An artificial tooth comprising a body portion provided with an occlusal portion having a flat base face and formed with an unrecessed integral lug extending downwardly from said base face for engaging a correspondingly-shaped backing.

2. An artificial tooth, comprising an occlusal portion having a flat base face, and a buccal portion at an angle thereto having an inner face provided with a shoulder spaced from said flat base face.

3. An artificial tooth comprising an occlusal portion having a flat base face, and a buccal portion having a flat inner face extending at an obtuse angle to said flat base face and provided with a shoulder spaced from the latter.

4. An artificial tooth comprising an occlusal portion provided with the usual grinding cusps and intermediate depression and having a flat base face, and an integral unrecessed lug extending from said flat base face beneath such depression for engaging a backing.

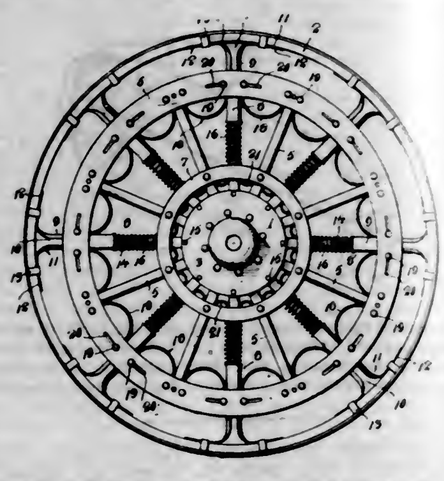
5. An artificial tooth comprising an occlusal portion provided with the usual grinding cusps, and formed with spaced bearing faces extending outside of said cusps for firmly seating in a backing.

1,064,636. SPRING VEHICLE-WHEEL. JOHN GIBSON, Courtenay, N. D. Filed June 28, 1912. Serial No. 706,508. (Cl. 152—28.)

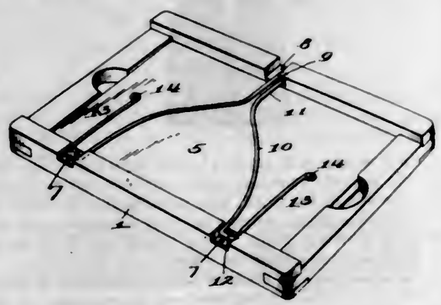
1. A spring vehicle wheel, comprising a hub, a felly, annular bands of equal size intermediate the hub and felly and formed with circumferential slots, spokes connecting the hub and bands, plungers connected to the felly and extending inward between the annular bands and between the spokes, cushioning springs yieldingly sustaining said plungers, circumferentially acting cushioning springs interposed between the spokes and plungers and provided with eyes at their extremities, and pins inserted through said eyes and working in the slots in the annular bands.

2. A spring vehicle wheel, comprising a hub, a felly, annular bands of equal size intermediate the hub and felly, spokes connecting the hub and bands, plungers connected to the felly and extending inward between the annular bands and between the spokes, and cushioning springs yieldingly sustaining said plungers, the outer ends of the plungers embodying integral spring attaching portions which are slidingly connected with the felly.

3. A spring vehicle wheel, comprising a hub, a felly, annular bands of equal size intermediate the hub and felly, spokes connecting the hub and bands, plungers embodying outer tubular sections attached to the felly, inner sections slidable in the outer sections and having a joint connection with the hub, and springs coiled around the inner spoke sections and serving to press the outer spoke sections in an outward direction.



1,064,637. PHOTOGRAPHIC-PRINTING FRAME. JOSEPH GODDARD, Rochester, N. Y., assignor to Seneca Camera Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 25, 1912. Serial No. 733,559. (Cl. 95—77.)



1. A printing frame comprising a body, a back member coöperative therewith, and a resilient member having an intermediate part and arms arranged in doubled relation thereto, said arms and intermediate part forming engaging portions, one of which is pivoted to the body, another detachably connected to the body, and the third coöperative with the back member to press the same into operative position.

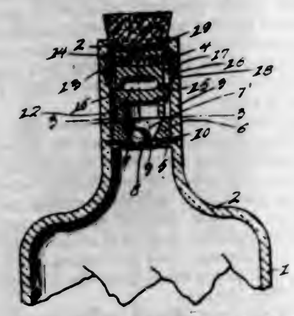
2. A printing frame having, in combination, a body, a back member coöperating with the body, and a resilient connecting member comprising an intermediate part and two arms extending in the same general direction from the intermediate part, the intermediate part and the arms providing three engaging portions, one of which is pivoted to the body, a second is detachably secured to the body, and the third engages the back member and normally presses it into operative position.

3. A printing frame having, in combination, a body provided at one side with a pivotal bearing and at the opposite side with an abutment, a back member coöperating with the body, and a connecting member having an intermediate portion pivoted to the body in said bearing and having two arms extending in the same general direction from the pivotal point and normally engaging, respectively, said abutment and the back member, whereby the connecting member is normally fixed against pivotal movement and the back member is retained in coöperative relation with the body.

4. A photographic printing frame having a body, a back member coöperative therewith, a catch on the body, and a resilient connecting member having one end attached to the back member, another end coöperative with said catch, and an intermediate portion pivotally connected to the body, said connecting member being operative to yieldingly hold the back member in operative position.

5. A device of the character described comprising a body, a back member coöperative therewith, the body having a hinge member at one side and a catch member opposite thereto, and a resilient connecting member having a portion bent to form a pintle coöperative with said hinge member and having a portion coöperative with said catch member, said connecting member being attached to the back member to hold the latter in operative position in the body and to carry the back member into inoperative position.

1,064,638. NON-REFILLABLE BOTTLE. EMERY GRAVES, Syracuse, N. Y. Filed Mar. 26, 1913. Serial No. 757,026. (Cl. 215—65.)



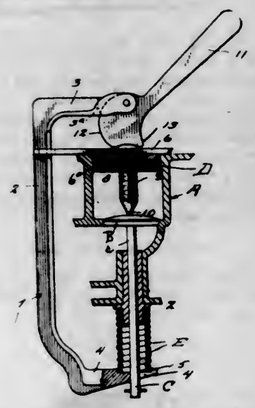
The combination with a liquid receptacle having a dispensing neck, of an annular shelf formed interiorly of said neck adjacent its lower terminal, a valve seat mounted on said shelf, a valve arranged in said valve seat, a cored cylinder arranged within said bottle neck and adjacent the said valve seat, said cylinder being provided with a serpentine fluid passage communicating at its lower terminal with the said valve seat, and at its upper terminal with a plurality of perforations formed in the wall of the cylinder and adjacent the upper end thereof, an annular shoulder formed interiorly of the said bottle neck, a plurality of leaf springs carried by the said cylinder and adapted to engage the said shoulders in open position of the said cylinder, a sealing washer mounted interiorly of the said neck and adapted to seal the said perforations of the said cylinder in the closed position of said cylinder, said cylinder being adapted to be drawn upwardly to bring the said perforations out of engagement with the said last-mentioned portion.

1,064,639. ACID ARSENATE OF LEAD. CLARE H. HALL, Milwaukee, Wis., assignor to Corona Chemical Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 1, 1913. Serial No. 751,465. (Cl. 23—13.)

1. The herein-described dry, soft, white bulky powder essentially acid arsenate of lead ($PbHAsO_4$) distinguished by the fact that when mixed with water in the percentage of 15 grams to a total volume of 250 c. c., and allowed to settle the line of demarcation between the clear and clouded parts of the fluid is not below 175 c. c., at the end of 5 minutes, and not below 140 c. c., at the end of 10 minutes.

2. The herein-described dry, soft, white bulky powder essentially acid arsenate of lead ($PbHAsO_4$) distinguished by the fact that when mixed with water in the percentage of 15 grams to a total volume of 250 c. c., the line of demarcation between the clear and clouded parts of the fluid is approximately at 210 c. c. at the end of 5 minutes and approximately at 175 c. c. at the end of 10 minutes.

1,064,640. VALVE-SPRING LIFTER. WILLIAM M. HALLBAUER, St. Louis, Mo. Filed May 8, 1911. Serial No. 625,935. (Cl. 29—87.1.)

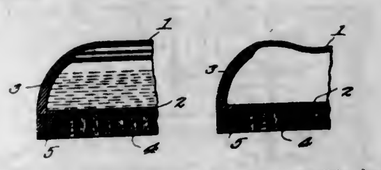


1. In a valve spring lifter, a U shaped frame, a cam lever fulcrumed upon one arm of said U, a plate slidably mounted on said frame and engageable by said cam, the other arm of said U being provided with a slot for the reception of a valve rod and a recess for seating a valve spring, and a pin on said slidable plate adapted to engage said valve rod.

2. In a device of the character described, an upright, an arm extending from one end of said upright, said arm being provided with a slot and a recess, a second arm extending from the other end of said upright, a cam lever pivoted upon said second named arm, a plate slidably mounted on said upright and adapted to be engaged by said cam lever, a screw threaded pin depending from said slidable plate, and a screw threaded thimble in engagement with said pin and adapted to engage a valve rod, said first named arm being adapted to engage a valve spring.

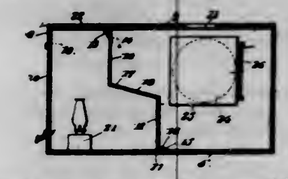
3. In a device of the character described, a rigid supporting frame, a laterally extending arm formed upon one end of said frame, a cam lever provided with a stop and pivoted upon said arm, a slidable plate mounted upon said frame and adapted to engage a valve rod, a second laterally extending arm formed upon the other end of said frame, said second named arm being provided with a slot for receiving said valve rod and being adapted to engage a valve spring.

1,064,641. BATH-BRUSH. ANNIE W. HALSTEAD, Keslers Cross Lanes, W. Va. Filed Jan. 22, 1913. Serial No. 743,610. (Cl. 15—51.)



A bath brush comprising a hollow flexible body, the sides of which are of greater thickness than the top and bottom, perforated flexible teeth leading from the body, said teeth being normally closed and opened by pressure thereon, and a flange secured to the body and encircling the teeth.

1,064,642. EGG-TESTER. JOSEPH C. HANCOCK, Nacogdoches, Tex. Filed Sept. 6, 1912. Serial No. 718,969. (Cl. 99—6.)



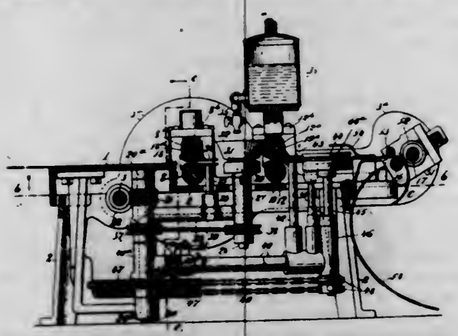
A device of the class described comprising a casing consisting of a bottom, side and end walls, a top having a sight opening therein, said bottom and side walls being provided with communicating grooves, a vertically arranged partition mounted in said grooves and including an inclined portion intermediate the ends thereof having an opening therein, one of the side walls being also provided with an opening adjacent the forward end thereof, a door for normally closing said opening, and an illuminating device mounted in said casing.

1,064,643. PLUG FOR TIRES. DE LANCEY P. HARRIS, New York, N. Y. Filed June 26, 1909. Serial No. 504,480. (Cl. 152—26.)



A plug for closing punctures in pneumatic tires having in combination a screw threaded shank, a retaining nut having an angular periphery threaded on the shank, and a metallic head secured to one end of the shank, substantially at a right angle thereto, the opposite end of said shank being bent over to provide a handle and said head being substantially circular, except on one side where it is provided with an integral curved extension having one side convex and the other side concave, said sides uniting in a point to be inserted in the puncture and guide the introduction of the entire head within the tire upon the rotation of the shank and head toward the concave side of the latter.

1,064,644. AUTOMATIC EDGE-IRONER FOR COLLARS AND CUFFS. LEWIS R. HEIM, Danbury, Conn. Filed Mar. 28, 1907. Serial No. 364,979. (Cl. 68—9.)



1. A machine of the character described comprising a frame, feeding mechanism, rearwardly converging arms pivotally supported by said frame and provided with upright rods, moistening devices carried by said arms, means for normally bringing the free ends of said arms together, means carried by said upright rods for separating said moistening devices, and means for ironing the work after it leaves said moistening devices.

2. A machine of the character described comprising a frame, feeding mechanism, rearwardly converging arms pivotally supported by said frame and provided with upright rods, shafts rotatably mounted in said arms, moistening devices carried by said shafts, said shafts being provided with means for carrying off surplus moisture, means for normally bringing the free ends of said arms together, means carried by said upright rods for separating said moistening devices, and means for ironing the work after it leaves said moistening devices.

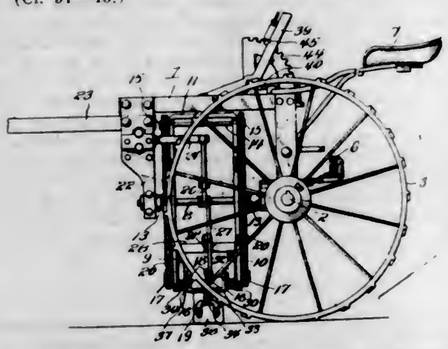
3. A machine of the character described comprising a frame, feeding mechanism, rearwardly converging arms pivotally supported by said frame and provided with upright rods, shafts rotatably mounted in said arms and provided with enlarged heads, moistening devices carried by said shafts, said heads and said shafts being provided with means for carrying off surplus moisture, means for normally bringing the free ends of said arms together, means carried by said upright rods for separating said moistening devices, and means for ironing the work after it leaves said moistening devices.

4. A machine of the character described comprising a frame, feeding mechanism, rearwardly converging arms pivotally supported by said frame and provided with upright rods, shafts rotatably mounted in said arms, moistening devices carried by said shafts, means for normally bringing the free ends of said arms together, means carried by said upright rods for separating said moistening devices, and means for ironing the work after it leaves said moistening devices.

5. A machine of the character described comprising a frame, feeding mechanism, rearwardly converging arms pivotally supported by said frame and having sockets provided with upright rods, shafts rotatably mounted in said arms and provided with reduced portions, moistening devices mounted on said reduced portions, means for normally bringing the free ends of said arms together, means carried by said upright rods for separating said moistening devices, and means for ironing the work after it leaves said moistening devices.

[Claims 6 to 19 not printed in the Gazette.]

1,064,645. COTTON-CHOPPER. OSCAR S. HELLUMS, Dawson, Tex. Filed Aug. 1, 1912. Serial No. 712,740. (Cl. 97—45.)



1. In a cotton chopper, a driven shaft, fixed bearings for said shaft, a vertically adjustable frame having slots straddling the shaft, a hoe supported by the frame and deriving motion from the shaft, and means for vertically adjusting and for laterally tilting the frame.

2. In a cotton chopper, a driven shaft, a vertically adjustable frame having slots straddling the shaft, a hoe supported by the frame for orbital movement and deriving motion from the shaft, and means for vertically adjusting and for tilting the frame.

3. In a cotton chopper, a driven shaft, a vertically adjustable hoe carrying frame having slots straddling the shaft, a second shaft deriving motion from the driven shaft, a radially slidable crank carried by the second shaft, a cam guiding the radially slidable crank, and a hoe operatively connected with the crank.

4. In a cotton chopper, a driven shaft, a hoe carrying frame, a second shaft carried by the hoe carrying frame and deriving motion from the driven shaft, a radially slidable crank carried by the second shaft, a cam guiding the movement of the radially slidable crank, a hoe operatively connected with the crank, and means for effecting vertical adjustment and tilting adjustment of the hoe carrying frame.

5. In a cotton chopper, a driven shaft, a vertically and tiltably adjustable hoe carrying frame, a second shaft carried by said frame and deriving motion from the driven shaft, a radially slidable crank carried by the second shaft, a cam guiding the movement of the crank, a hoe operatively connected with the crank, and supporting means for the cam including a horizontal member mounted on the hoe carrying frame, a relatively stationary bracket, and links connecting said bracket with the horizontal member.

[Claims 6 and 7 not printed in the Gazette.]

1,064,646. PAPER-FILE. IREDELL HILLIARD, Georgetown, S. C. Filed July 20, 1912. Serial No. 710,573. (Cl. 129—23.)



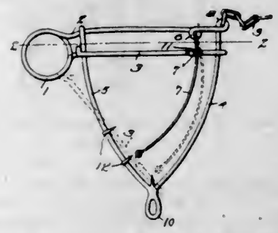
1. A paper file comprising a frame, a pin connected with the frame upon which the papers are impaled, a keeper, having its end bifurcated, pivotally mounted in such position that the pin comes within the bifurcated portion, the keeper so pivoted to the frame that it has movement in a vertical plane downwardly and upwardly from the horizontal, and a spring for resiliently holding the keeper in position approximately at right angles to the pin.

2. A paper file comprising a frame, a bell crank keeper having one of its arms bifurcated, a pivotal connection between the keeper and frame approximately at the angle of juncture between the two arms of the keeper, a pin connected with the frame and extending upwardly into the bifurcated portion of the keeper in such a manner that the bifurcated arm has free pivotal movement downwardly and upwardly, and a spring connected to the free arm and to the frame for holding the bifurcated arm of the keeper in position approximately at right angles to the pin.

3. A paper file comprising a frame, a bearing struck up from the lower portion of the frame, a pin mounted to have sliding and pivotal movement in said bearing, a bent up portion adjacent the bearing having a groove formed therein in which the pin is held when in an operative position and from which it is disengaged by sliding through the bearing so that it may be swung flat against the frame, and a keeper pivoted near the upper portion of the frame to lie in a normal position approximately at right angles to the pin and to be swung downwardly as the papers are placed upon the pin and upwardly as they are removed.

4. A paper file comprising a frame, a pin pivotally connected to the frame to be swung flat against the frame for packing, means for holding the pin in its operative position separated from and approximately parallel with a portion of the frame, a bell crank keeper having one of its arms bifurcated to receive the pin, bearings formed on the upper portion of the frame, bearing pins formed on the keeper adjacent the angle of juncture between the arms thereof, and received in the bearings, and a spring connected to the free arm of the keeper and with the frame for holding the bifurcated arm in a position to retain the papers on the pin.

1,064,647. ANIMAL-TRAP. GEORGE NELSON HOFFMAN, Waterford, N. Y. Filed July 16, 1912. Serial No. 709,777. (Cl. 43—21.)



1. An animal trap consisting of a spring, one terminal thereof being formed into an enlarged loop and the other terminal constituting a gripping jaw, a trigger carried by the loop terminal, and coöperating means adapted to engage with the gripping jaw when said trigger is disposed in the same plane as the loop aforesaid to hold the jaw set, and also adapted to engage said gripping jaw when the trigger is disposed at an angle out of the plane of the loop.

2. An animal trap comprising a spring, one terminal being formed into an enlarged loop and the other terminal constituting a gripping jaw, a trigger, means formed on the trigger to coöperate with the jaw when the former is in the same plane as the loop and also when out of the plane of the loop, and means carried by the jaw for holding the trigger set in either of the positions aforesaid.

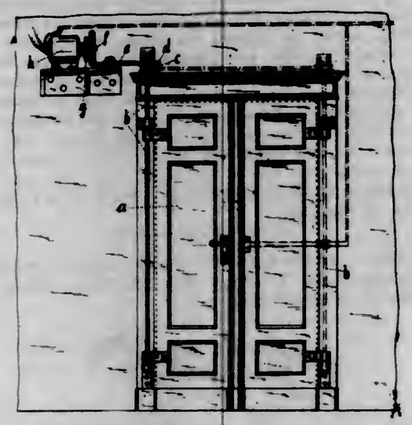
3. An animal trap consisting of a spring, one terminal being formed into an enlarged loop, and the other terminal constituting a gripping jaw, a trigger having a projection for engaging the said jaw when in the same plane as the enlarged loop, and an extension for engagement with the jaw when placed at substantially right angles to said jaw.

4. An animal trap comprising a spring, one terminal being formed into an enlarged loop of substantially triangular shape and the other terminal being bent around said loop to form a gripping jaw, a trigger pivotally carried by the loop aforesaid, coöperating means engaging with the jaw when the former is in the plane of the loop, and also adapted to engage with the jaw when out of the plane of the loop, and means formed on the loop for limiting the movemnet of the gripping jaw when the latter has been released from the trigger.

5. An animal trap consisting of a single piece of wire formed intermediate its ends with a spiral spring, one terminal of the wire being bent to form a vertical loop of substantially triangular shape, said loop having an eye to serve as a base for the trap, and the other terminal of the wire being bent to form an elongated loop to serve as a gripping jaw, a plate arranged transversely of the elongated loop and secured thereto, and a trigger pivotally mounted upon the vertical loop and having a projection for engagement with the plate aforesaid when the trigger is in the same plane as the vertical loop and an extension adapted to be engaged with the plate when the trigger is disposed at substantially right angles to said last-mentioned loop.

[Claim 6 not printed in the Gazette.]

1,064,648. DOOR-OPERATING MEANS. ARNO HÖHNE and HERMANN KRAKE, Leipsig, Germany. Filed Mar. 30, 1912. Serial No. 687,401. (Cl. 39—95.)



1. In an automatic opening and closing device for doors the combination with the movable door portion of an electric motor, a contact device associated with and actuated by the door handle, a tooth gear arranged on the door shaft and a toothed rocking lever located between said wheel and the motor and adapted to be actuated by the said motor substantially as set forth.

2. In an automatic opening and closing device for doors the combination with a movable door portion, of an electric motor, a contact device associated with and actuated by the door handle, a tooth gear mounted on the door shaft, a toothed sector interposed between said gear and the electric motor and provided with a slotted arm and an eccentric pin engaging with the said slotted arm and actuated by the said motor whereby a rocking movement is imparted to the said sector substantially as set forth.

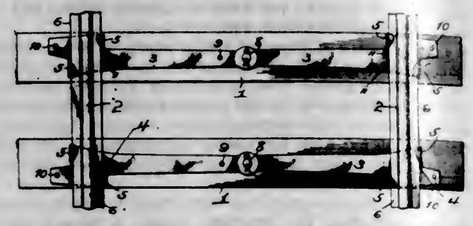
3. In an automatic opening and closing device for doors the combination with a movable door portion, of an electric motor, a contact device associated with and actuated by the door handle, a gear interposed between the door shaft and the said electric motor and a friction clutch between said gear and said door shaft all substantially as described.

4. In an automatic opening and closing device for doors the combination with a movable door portion of an electric motor, a contact device associated with and actuated by the door handle, a bell crank lever forming part of the said contact device and a spring holding said bell crank lever normally in contact with the catch of the said movable door portion substantially as described.

5. In an automatic opening and closing device for doors, the combination with a motor operatively connected with the door, of a slidable catch *m* operatively connected with the door handle, and a contact device electrically connected with the motor, said device including a bell crank lever having arms *i* and *k*, one arm lying in the path of movement of the slidable catch *m*, and the other arm adapted to make and break engagement with a contact-piece, substantially as described.

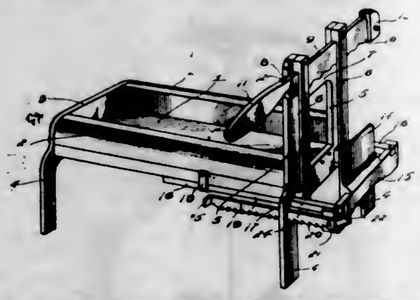
1,064,649. DEVICE FOR SECURING RAILROAD-RAILS TO TIES. ELMER HUDSON, Golden, Ill., assignor of one-half to J. J. Emminga and F. E. Sahland, Golden, Ill. Filed Apr. 10, 1913. Serial No. 760,181. (Cl. 238—5.)

1. The combination of a pair of clamps, a pin carried by said clamps and pivotally connecting the inner ends of the latter, each clamp provided with a pair of diagonally disposed rail clamping lips and with a hole at its outer end for the passage of a spike for securing the clamps to the top face of the tie, whereby the clamp can be raised for the introduction of shims under the same and means intermediate the rails for locking the clamps to the tie and for preventing them from turning.



2. The combination with a pair of clamps each having a pair of diagonally disposed clamping lips, a spike hole adjacent its outer end and a pin hole at its inner end, and one provided intermediate the rails with means for locking the same to the tie whereby pivotal movement of the clamps on the outer spikes will be prevented, and a pin passing through the meeting ends of the two clamps for pivotally connecting them, the construction being such that either or both clamps may be elevated for the insertion of shims between the clamps and tie.

1,064,650. BREAD-SLICER. WILLIAM H. ITALY, Brooklyn, N. Y. Filed July 2, 1912. Serial No. 707,270. (Cl. 146—12.)

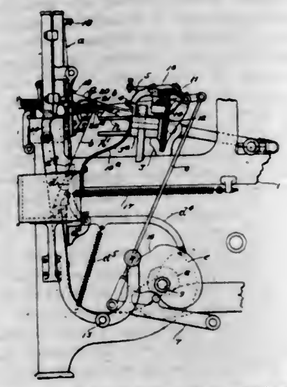


The combination of a frame, bread supporting table, longitudinally slotted uprights at opposite sides of one end of the table, a bread cutting knife mounted to reciprocate through said uprights, a slidable gage, parallel bars extending perpendicularly therefrom, the frame being provided with guideways through which said bars are movable, a rack bar pivotally attached to the gage and slidable through an opening in the frame, a fixed pin on the frame with which said rack bar engages, a guide engaging stop at one end of said rack bar, and a finger piece at the opposite end of said rack bar projecting beyond the pivot of the rack bar.

1,064,651. WEFT-PARTER DEVICE FOR LOOMS. SIMEON S. JACKSON, Boston, Mass., assignor to The Stafford Company, Readville, Mass., a Corporation of New Jersey. Filed Feb. 2, 1912. Serial No. 675,033. (Cl. 139—85.)

1. In a weft-replenishing loom in which the working shuttle is expelled forwardly from a shuttle-box on the lay, the combination with a weft-parter adjacent the selvage of the cloth, of a movable weft or filling-support mounted adjacent the weft-parter, and a rotatable cam controlling the said weft or filling-support and operating to give the latter a normal position adjacent the breast-beam and to move the same rearward into position to receive thereon the portion of weft or filling extending from the selvage to the expelled shuttle as the latter falls in front of the lay, and then move such portion of weft or filling forward into the range of action of the weft-parter.

2. In a weft-replenishing loom in which the working shuttle is expelled forwardly from a shuttle-box on the lay, the combination with a weft-parter adjacent the selvage of the cloth, of a weft or filling-support, a carrier-lever therefor, and a rotatable cam in operative control of the said carrier-lever whereby the weft or filling-support is given a normal forward position, moved rearward therefrom to receive upon it the portion of weft or filling extending from the selvage to the expelled shuttle as the latter falls in front of the lay, and then forward to carry such portion into the range of action of the weft-parter.



3. In a weft-replenishing loom, the combination with a weft-parter, of a weft or filling support, a carrier-lever therefor, and a rotatable cam in operative control of the said carrier-lever whereby the weft or filling-support is moved rearward to receive the portion of weft or filling extending from the selvage to the expelled weft-carrier, and then forward to carry such portion into the range of action of the weft-parter.

1,064,652. HOLDER FOR SAFETY-RAZOR BLADES. EDWARD JAMES, New York, N. Y. Filed May 21, 1912. Serial No. 698,811. (Cl. 30—25.)



1. A holder for razor blades comprising handle members, blade seats formed therein, said blade seats being formed to accommodate the backs of certain styles of blades, an insertible and reversible member having a shank portion of the size of a depression in one of the seat members, said insertible member having lugs extending from the shank portion thereof, bosses formed on said lugs, said blade seats being recessed to receive said lugs and bosses, and means for fastening said insertible member in one of said blade seats.

2. A holder for safety razor blades in combination with handle members, an insertible and reversible member having sets of bosses formed thereon, each of said sets being spaced differently from the other.

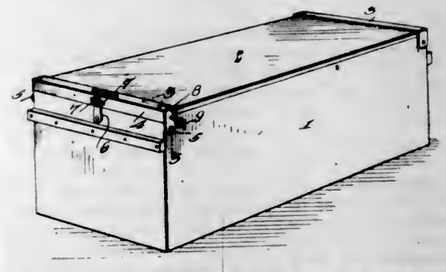
3. In a safety razor blade holder comprising handle members, blade seats secured therein, said blade seats recessed to accommodate various styles of blades and an insertible and reversible member capable of being placed within the recess portion of one of the blade seats, bosses struck from said insertible and reversible member from opposite faces thereof, the bosses of one face accommodating one style blade while the bosses of the opposite face accommodate another style blade, openings formed in the blade seat of one of the members and springs extending from said bed plate member into the opening formed in said bed member and said springs engaging the inside of the bosses formed on said insertible member so as to secure the same securely in place.

4. In a holder for safety razor blades in combination with handles having blade seats formed therein, said blade seats being recessed, to receive backs formed on blades of various styles, an insertible and reversible member comprising a shank having enlargments extending from the ends thereof, enlargements from the sides of said shank having bosses formed thereon, the bosses formed on the enlargements to one side having the ends thereof spaced farther apart than the bosses formed on the opposite side, the enlargements to the side having the bosses thereon closer together being recessed and springs carried by one of the bed plate members adapted to engage the inside of the bosses formed on said insertible member to one side or the other as the case may be when the insertible member is placed in the recess of one of the blade seats.

5. A holder for safety razor blades in combination with handle members, an insertible and reversible member having lugs formed thereon, bosses formed on said lugs, said bosses being arranged in sets, the distance between the bosses of one set being different from that between the other, each of said sets of bosses being intended to receive a safety razor blade and each of said sets of bosses being arranged to receive a fastening means.

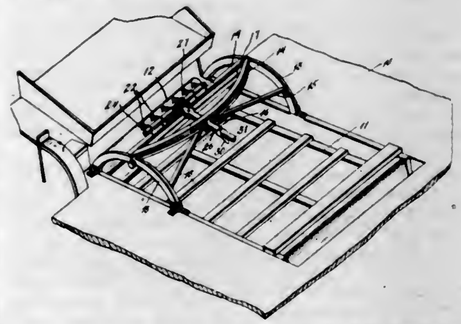
[Claim 6 not printed in the Gazette.]

1,064,653. BOX-COVER FASTENING. CHARLES T. JENEWEIN, Blackhawk, and CHARLES W. DOBELIN, Madison, Wis. Filed Dec. 6, 1912. Serial No. 735,288. (Cl. 70—3.)



The combination with a box body and cover, of a keeper constructed of metal and pivoted to one end and upper angle of the body, so that when swung up into vertical position the keeper projects over and receives the end of the cover, and a turn-button pivoted below the keeper and adapted to engage the same when adjusted in a vertical position, as described.

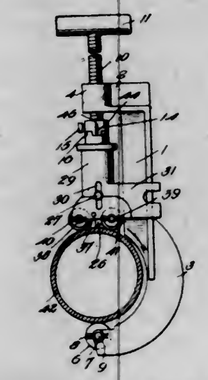
1,064,654. SNAPPING-ROLL CLEANER. FREDERICK L. JEROME, Bangor, Wis. Filed Oct. 23, 1912. Serial No. 727,429. (Cl. 130—5.)



A cleaner for snapping rolls including side members, a bridge piece connecting said members, a rocking frame journaled at one end in said side members, a plurality of parallel teeth each pivoted to said frame and extending forwardly therefrom, a link pivotally connecting all of said teeth together, a lever pivoted on said frame and terminally pivoted to said link and adapted to shift said teeth

on their pivots, a bracket depending from said bridge pieces, said lever being adapted to be depressed into said bracket with a resultant rocking upward of said frame on its pivots, and interlocking means between said lever and said bracket for removably securing said lever to said bracket.

1,064,655. PIPE-CUTTER. WILLIE HARRY JOHNSON, Waco, Tex. Filed Mar. 12, 1912. Serial No. 683,321. (Cl. 81—192.)



1. A pipe cutter comprising a standard having at one end a lateral arm provided with a threaded bearing, and at the other with an arc shaped extension for partially encircling the pipe, a disk cutter having a double cutting edge journaled at the end of the extension, a sleeve movable on the standard toward and from the disk cutter, rollers on the sleeve for engaging the pipe, a holder slidable in the sleeve and provided with a recess in its upper end internally threaded in the opposite direction to the bearing, and at the same pitch, a connecting member seated in the upper end of the sleeve and provided with a threaded stem engaging the recess, means for limiting the movement of the holder in the sleeve, a cutting blade secured in the holder, a rod threaded into the bearing of the lateral arm, a rotatable connection between a connecting member and the rod, and releasable means for clutching a connecting member to the rod.

2. A pipe cutter comprising a standard having at one end a lateral arm provided with a threaded bearing, and at the other with an arc shaped extension for partially encircling the pipe, a disk cutter having a double cutting edge journaled at the end of the extension, a sleeve movable on the standard toward and from the disk cutter, rollers on the sleeve for engaging the pipe, a holder slidable in the sleeve and provided with a recess in its upper end internally threaded in the opposite direction to the bearing, and at the same pitch, a connecting member seated in the upper end of the sleeve and provided with a threaded stem engaging the recess, means for limiting the movement of the holder in the sleeve, a cutting blade secured in the holder, a rod threaded into the bearing of the lateral arm, and a rotatable connection between a connecting member and the rod.

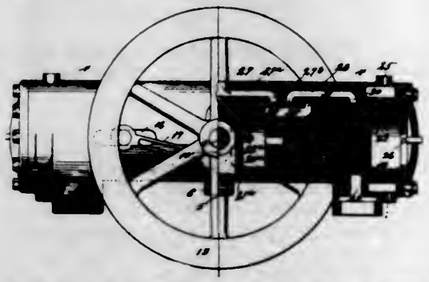
3. A pipe cutter comprising a support having an arc shaped extension for partially encircling the pipe to be cut, a disk cutter provided with a double cutting edge journaled at the outer end of the extension, a sleeve mounted to slide on the support toward and from the cutter, rollers on the sleeve for engaging the pipe, a holder in the sleeve, a cutter blade connected to the holder and arranged between the rollers and cutting between the incisions of the disk cutter, said holder having an internally threaded recess in its upper end, a connecting member having a threaded stem engaging the recess, a rod rotatably connected to a connecting member, said support having a bearing threaded in the opposite direction to the recess for engagement by the rod, and means for rigidly connecting the rod to a connecting member to constrain a connecting member to rotate with the rod.

4. A pipe cutter comprising a support having an arc shaped extension for partially encircling the pipe to be cut, a disk cutter provided with a double cutting edge journaled at the outer end of the extension, a sleeve mounted to slide on the support toward and from the cutter, rollers on the sleeve for engaging the pipe, a holder in the sleeve, a cutter blade connected to the holder and arranged between the rollers and cutting between the incision of the disk cutter, said holder having an internally threaded recess in its upper end, a connecting member having a threaded stem engaging the recess, a rod rotatably connected to a connecting member, the support having a threaded bearing for engagement by the rod, and means for securing the rod to a connecting member.

5. A pipe cutter comprising a support having an arc shaped extension for partially encircling the pipe to be cut, a disk cutter provided with a double cutting edge journaled at the outer end of the extension, a sleeve mounted to slide on the support toward and from the cutter, rollers on the sleeve for engaging the pipe, a holder in the sleeve, a cutter blade connected to the holder and arranged between the rollers and cutting between the incisions of the disk cutter, means for simultaneously feeding the disk cutter and the holder toward the pipe, said means being rotatable with respect to the holder, and means for connecting the holder to the feeding means to cause the holder to rotate with the feeding means.

[Claims 6 to 17 not printed in the Gazette.]

1,064,656. VAPOR-ENGINE. WILLIAM G. JOHNSTON, Woodbury, N. J., assignor, by mesne assignments, to The Engineering and Development Company of America, Salisbury, Md., a Corporation of Maryland. Filed May 2, 1910, Serial No. 558,838. Renewed Aug. 31, 1912, Serial No. 718,145. (Cl. 123—56.)



1. An internal combustion engine, having in combination opposed cylinders, a piston in each cylinder, a partition in each cylinder, a fuel-chamber between the partitions, an inlet-port in each partition for admitting a charge of fuel between each partition and piston, and ports for the passage of each charge of fuel to an explosion-chamber at the rear of each piston.

2. An internal combustion engine, having in combination opposed cylinders, a piston in each cylinder, a partition in each cylinder, a fuel-chamber between the partitions, means for supplying fuel to said chamber, an inlet-port in each partition for admitting a charge of fuel between each partition and piston, an explosion-chamber at the rear of each piston, and ports for the passage of each charge of fuel to each explosion-chamber.

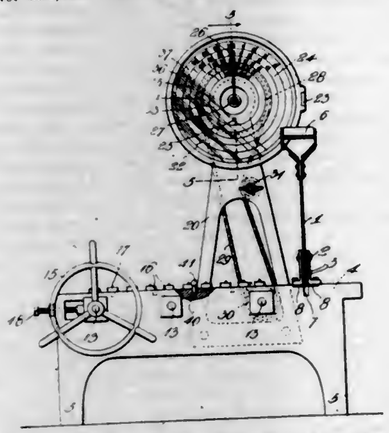
3. In an internal combustion engine, the combination with opposed cylinders, a shaft extending across between the same, pistons operating in the cylinders and having crank connections with the shaft, spaced partitions located on oposite sides of the shaft within the cylinders, and having inlet ports, means for introducing fuel between the partitions, and outwardly opening valves controlling the ports in the partitions.

4. In an internal combustion engine, the combination of oppositely disposed cylinders having oppositely disposed slots in their sides, a picton operative in each cylinder and provided with gudgeons projecting through said slots, a fuel supply chamber formed between the pistons, said chamber being divided into a compression chamber for each cylinder, and a fuel supply common to both compression chambers.

5. In an internal combustion engine, the combination of oppositely disposed cylinders having oppositely disposed slots in their side walls, a piston operative in each cylinder and provided with gudgeons projecting through said slots, a fuel supply chamber formed between the pistons, partitions dividing said chamber into compression chambers, one for each cylinder, a fuel supply common to both compression chambers and valve controlled ports in each partition through which fuel is admitted into each compression chamber.

[Claims 6 to 13 not printed in the Gazette.]

1,064,657. INDICATOR FOR MEAT-CUTTERS. ELLIOTT W. JONES, Opelika, Ala. Filed Oct. 12, 1911. Serial No. 654,420. (Cl. 73—151.)

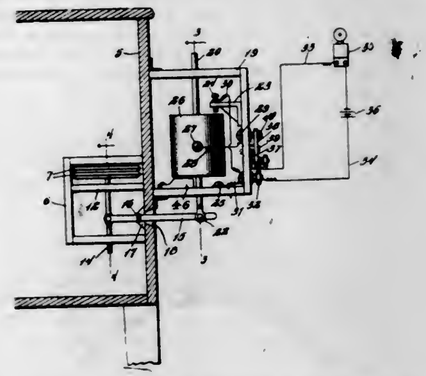


In a device of the character described, the combination with a movable device, of a base, a standard rising from the base, an indicator mounted on the standard, a casing secured to the upper end of the standard and having a glass hinged face, a dial removably secured within the casing, an arbor journaled through the center of the casing, an index hand mounted on the arbor, a wheel on the rear extremity of the arbor, a belt between said wheel and the movable device, a belt tightener carried by the standard and coöperating with the belt, said dial having a plurality of rings with spaces of different widths, and said spaces having graduations thereon which are nearer one side of the spaces than the other.

1,064,658. INCUBATOR-ALARM. CLYDE WANDS KELLEY, Wellington, Tex. Filed June 26, 1912. Serial No. 705,991. (Cl. 177—311.)

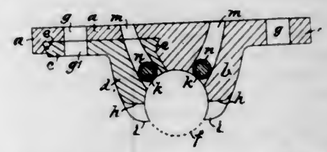
1. The combination with an incubator, of a frame mounted exteriorly thereof, a thermostat supported interiorly of the incubator, an electric circuit having a bell therein, contacts arranged in spaced relation on the frame and connected with said circuit, a sliding rod mounted in said frame, a cylindrical body carried by said rod and engageable with either of said contacts, an electric connection between said body and said circuit and having a cut-out, and a lever pivotally mounted on the incubator and having connection with said rod and thermostat.

2. The combination with an incubator, of a frame mounted exteriorly thereof, a thermostat supported interiorly of the incubator, an electric circuit having a bell therein, contacts arranged in spaced relation on the frame and connected with said circuit, a sliding rod mounted in said frame, a cylindrical body carried by said rod and engageable with either of said contacts, an electric connection between said body and said circuit and having a cut-out, a lever pivotally mounted on the incubator and having connection with said rod and thermostat, and means mounted on the frame and movable into the path



of the said body to hold the same out of engagement with one of the contacts.

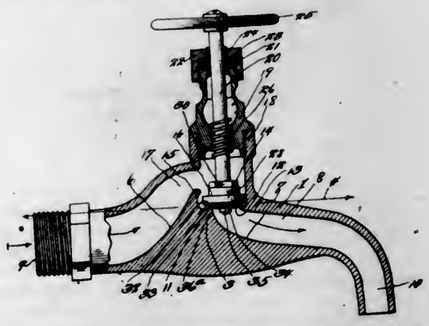
1,064,659. AXLE-BEARING. JOHN KING, Leeds, England. Filed July 14, 1911. Serial No. 638,529. (Cl. 64—10.)



1. An axle-bearing pedestal having a fixed side-cheek and provided with a guide-way parallel to the axle, in combination with a removable side cheek fitted in said guide-way, these side cheeks being provided at one end with a pair of downward extensions.

2. An axle-bearing pedestal having a fixed side-cheek and provided with a guide-way longitudinal of the bearing, in combination with a side-cheek removable longitudinally in either direction fitted into said guideway and means for fastening the same, the two guide-cheeks forming an axle-receiving recess and extending approximately to the middle line thereof.

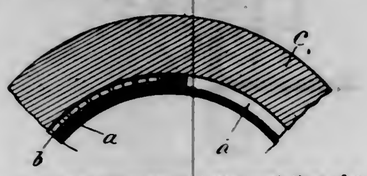
1,064,660. GLOBE FAUCET OR VALVE. CONRAD H. KLEE, Honesdale, Pa. Filed Jan. 15, 1913. Serial No. 742,116. (Cl. 137—4.)



1. In a globe faucet, a casing having an inlet and a discharge passage merging together in communication, a valve seat located substantially at the point of communication, the inlet passage terminating in a lip adjacent to and rising above and inclined toward the valve seat, and a valve member to coöperate with said seat.

2. In a globe faucet, a casing having inlet and discharge passages, a valve seat located substantially at the junction of the two passages, the inlet passage being contracted adjacent to and above the valve seat, the inlet passage terminating in a goose neck lip at the contracted portion of the passage adjacent to and rising above and inclined toward the valve seat, and a valve member coöperating with said seat.

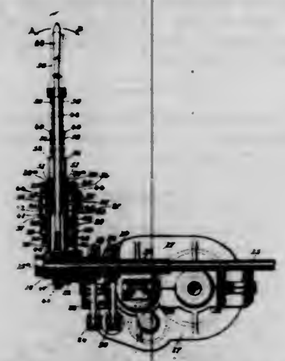
1,064,661. UNPERFORABLE METALLIC BAND FOR TIRES. GEORGES AUGUSTE VICTOR LONGUEMARE, Ste. Adress, France. Filed July 22, 1911. Serial No. 639,877. (Cl. 152—18.)



1. A protector for pneumatic tires, consisting of a band of flexible material, a plurality of closely grouped small hexagonal metallic plates riveted to said band and spaced regularly apart so as not to overlap and provided with convex surfaces, and a sheath or cover of india rubber enveloping said band and plates.

2. The combination with the outer casing or shoe of a pneumatic tire and an inner tube therefor, of a protector for said inner tube consisting of a band of suitable material provided with a plurality of closely grouped but not overlapping small metallic plates suitably secured thereto and provided with convex surfaces, and a sheath or covering of rubber inclosing said band and plates, said protector being located freely between said shoe and inner tube with said plates bearing against said shoe.

1,064,662. TRANSMISSION-LEVER. JOHN M. MACK, Allentown, Pa., assignor to International Motor Company, Wilmington, Del., a Corporation of Delaware. Original application filed Apr. 28, 1906, Serial No. 314,226. Divided and this application filed Mar. 7, 1910. Serial No. 547,733. (Cl. 74—39.)



1. The combination with a transmision mechanism embodying a plurality of shifting rods, of means for actuating the same comprising a supporting shaft, a plurality of sleeves revolubly arranged thereon, arms fixed upon said sleeves adapted for connection with said shifting rods, supplemental levers fixed upon said sleeves, guides for said supplemental levers, a support for said guides, locking devices arranged upon said supplemental levers adapted to hold said supplemental levers normally locked to their neutral positions, an oscillating, operating lever pivotally mounted upon said supporting shaft intermediate said supplemental levers, and normally engaging the locking devices of both of said supplemental levers, means arranged upon said operating lever adapted to actuate the locking device of either of said supplemental levers whereby to lock said supplemental lever in operative relation with said operating lever, without disturbing the locking device for maintaining the other of said supplemental levers in its neutral position, and a plurality of locking devices arranged upon said operating lever adapted to lock said operating lever and either one of said supplemental levers engaged thereby to any of their adjusted positions, substantially as specified.

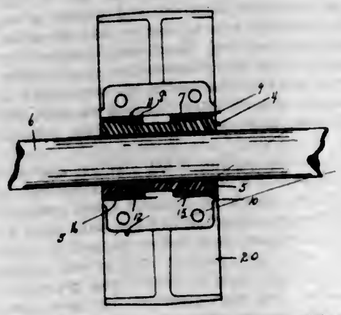
2. The combination with a transmission mechanism embodying a plurality of shifting rods, of means for actuating the same comprising a supporting shaft, a plurality of sleeves revolubly arranged thereon, arms fixed upon said sleeves adapted for connection with said shifting rods, supplemental levers fixed upon said sleeves having slots adjacent to their upper ends, guide plates for said supplemental levers, a support for said guide plates, stops arranged intermediate said guide plates, spring actuated locking devices arranged upon said supplemental levers adapted to engage said guide plates, to hold said supplemental levers locked to their neutral positions, projections upon said locking devices extending through the slots in said supplemental levers, a collar loosely mounted upon one of said sleeves intermediate the supplemental levers, an operating lever having its lower end forked and pivotally secured to said collar, cam projections arranged upon the sides of said operating lever adapted to engage the projections of the locking devices of said supplemental levers, spring actuated locking devices arranged upon said operating lever adapted to engage one of said guide plates to lock the same, and the supplemental lever engaged thereby to their adjusted positions, and a lever and rods connected to said locking devices whereby to release the same, substantially as specified.

3. The combination with a transmission mechanism embodying a plurality of shifting rods, of means for actuating the same, comprising a supporting shaft, a plurality of sleeves revolubly arranged thereon, arms fixed upon said sleeves and connected with said shifting rods, supplemental levers fixed upon the outer ends of said sleeves and provided adjacent to their upper ends with longitudinal slots; means for guiding said supplemental levers, stops for limiting the movement of said supplemental levers, spring-pressed bolts on said supplemental levers for locking the same to their neutral positions, members on said spring-pressed bolts extending through the longitudinal slots in said supplemental levers, an operating lever having its lower end pivotally mounted intermediate the fixed ends of said supplemental levers and adapted to oscillate longitudinally of said sleeves to engage either of said supplemental levers, means arranged upon said operating lever adapted to engage the members mounted upon the spring-pressed bolts on said supplemental levers to unlock either of said supplemental levers, means for locking said operating lever and the supplemental lever engaged thereby to their operative positions, and a release for said last-named locking means, substantially as specified.

1,064,663. PULLEY-FASTENER. WYLLYS D. MAYNARD, Utica, N. Y., assignor of one-fourth to Lean F. Snyder and one-fourth to Charles W. Hill, Utica, N. Y. Filed June 13, 1910. Serial No. 566,588. (Cl. 74—8.)

1. In a pulley fastener, the combination with a shaft of a member to be keyed thereto, a bushing comprising two sections and having spirally arranged members mounted on said shaft, said sections formed to taper in opposite longitudinal directions from the central portion of said bushing, split collars having spiral grooves, mounted on said bushing, said grooves adapted to conform to the contour of said spiral members on said bushing, whereby the turning of said shaft will cause said collars to move in opposite directions longitudinally on said bushing and thereby cause said collars to expand to secure the member to said shaft.

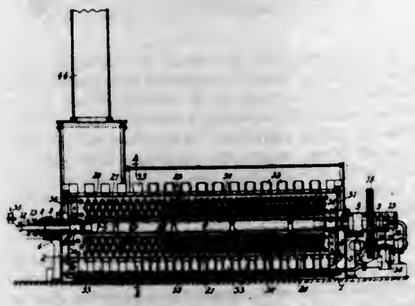
2. In a pulley fastener of the character described, the combination with a shaft of a member to be secured thereto, a bushing comprising two sections and having spirally arranged members formed thereon, said sections formed to taper in opposite longitudinal directions from the central portion of said bushing, split collars having spiral grooves formed therein, mounted on said bushing, said grooves adapted to conform to the contour of said spiral members on said bushing, whereby the turning of said shaft will cause said collars to expand to secure the member to said shaft.



3. In a pulley fastener, the combination with a shaft of a member to be keyed thereto, a bushing mounted on said shaft, said bushing comprising two sections and having spirally arranged members formed thereon, said members progressing in opposite longitudinal directions from the central portion of said bushing, and split collars having spiral grooves, mounted on said bushing, said grooves adapted to conform to the contour of said spiral members on said bushing, whereby the turning of said shaft will cause said collars to expand to secure the pulley to a shaft.

4. In a pulley fastener, the combination with a shaft of a member to be keyed thereto, a split bushing mounted on said shaft, said bushing having ends tapering inwardly toward its central portion and spiral members arranged thereon, split collars having spiral grooves, mounted on said bushing, said grooves adapted to conform to the contour of said spiral members on said bushing, whereby the turning of said shaft will cause said collars to move in opposite directions on said bushing and thereby cause said collars to expand to automatically secure a pulley to a shaft.

1,064,664. ROTATORY TUBULAR HEATING-BODY FOR TROUGH-DRIERS. RICHARD MEISTER, Meerane, Germany, assignor to The Firm Phönix-Werk G. M. B. H., Specialfabrik moderner Trockenapparate, Meerane, Germany. Filed July 11, 1912. Serial No. 708,869. (Cl. 34—44.)



1. A rotatory tubular heating body of the character described, comprising a shaft, a steam inlet-chamber arranged in one end of said shaft, a steam outlet-chamber arranged in the other end of said shaft, a series of serpentines encircling said shaft, a multibranched head for connecting the one end of said serpentines with said inlet-chamber, and another multibranched-head for connecting the other end of said serpentines with said outlet-chamber.

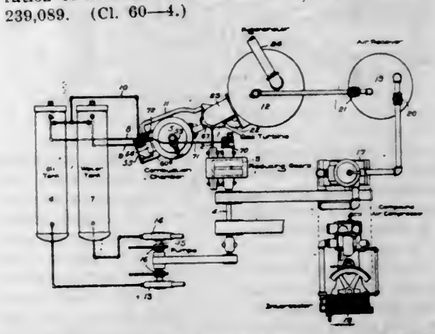
2. A rotary drier comprising a stationary housing, a shaft journaled therein, a steam inlet chamber formed within said shaft at one end thereof, a steam outlet chamber formed within the shaft at the other end thereof, and a series of coiled tubes encircling the shaft and communicating with said inlet and outlet chambers, the free space between the tube-coils diminishing from the inlet chamber toward the outlet chamber.

3. A rotatory tubular heating-body of the character described, consisting of a shaft, a steam inlet-chamber in said shaft, a steam outlet-chamber also provided in said shaft, and a series of serpentines communicating with said chambers and provided with windings the angle of inclination of which decreases in the direction from the steam inlet-chamber toward the steam outlet-chamber.

4. In a rotatory tubular heating-body of the character described the combination of a shaft, a steam inlet-chamber provided in said shaft, a steam outlet-chamber also arranged in said shaft, a plurality of serpentines, braces arranged between said serpentines parallel to the axis of rotation, and staying means for rigidly connecting said serpentines with each other and with said shaft and retaining them concentric to the latter.

5. The combination of a rotatory tubular heating-body of the character described with the stirrer of a trough-drier comprising a shaft, a steam inlet-chamber arranged in said shaft, a steam outlet-chamber likewise arranged in said shaft, a series of serpentines encircling said shaft and communicating with said chambers, shovel-carriers provided with a series of shovels each, supports secured to said shaft and supporting said shovel-carriers, braces arranged between said serpentines parallel to the axis of rotation, and staying-means for rigidly connecting said shaft, braces, serpentines and shovel-carriers.

1,064,665. GAS-TURBINE. SANFORD A. MOSS, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 31, 1904. Serial No. 239,089. (Cl. 60—4.)



1. In combination, a turbine, a combustion chamber for supplying the turbine with vapor energy, means for discharging fuel and a cooling agent into the combustion chamber, a governor responsive to the load on the turbine for controlling said means, a compressor for discharging air into the combustion chamber against the pressure therein, a regulator for the compressor that is responsive to pressure variations, a conduit leading from the combustion chamber through which the resultant products of the action of the fuel, air and cooling agent therein pass to the turbine, and a regenerator heated by the gases exhausting from the turbine which increases the temperature of the air as it passes from the compressor to the combustion chamber.

2. In combination, a turbine having a wheel or rotor, a combustion chamber, means feeding fuel, air and water to the combustion chamber, valve means for varying the supplies of fuel, air and water to the chamber, a governor responsive to the speed of the turbine for controlling said valve means, a nozzle that receives the products of combustion from the chamber and discharges them against

the wheel, and a regenerator that utilizes the turbine exhaust to heat the air on its way to the combustion chamber.

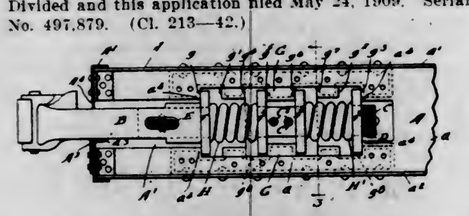
3. In combination, a gas turbine, a combustion chamber for supplying the turbine with motive fluid, a tank under pressure for directly supplying fuel to the combustion chamber against its internal pressure, a source of air supply under pressure discharging into the chamber, a tank for supplying water to the fuel and air after they are mixed and previous to combustion, means for raising the temperature of the air prior to delivery to the combustion chamber, and an equalizing connection between the tanks and said source of air supply.

4. In combination, a gas turbine, a combustion chamber arranged to supply products of combustion to the turbine for producing rotation, means for supplying combustible materials to the chamber, a regenerator through which at least one of said materials passes on its way to the chamber, a conduit for conveying exhaust gases from the turbine to the regenerator, and a governing device responsive to load changes on the turbine for regulating the quantity of combustible material admitted to the chamber.

5. In combination, a turbine, a combustion chamber, means feeding fuel and air to the combustion chamber, valve means for regulating the supply of fuel and air to the chamber, a governor responsive to the speed of the turbine for controlling said valve means, and means for conveying the products of combustion from the chamber to the turbine.

[Claims 6 to 13 not printed in the Gazette.]

1,064,666. DRAFT-RIGGING FOR RAILWAY-CARS. JOHN F. O'CONNOR, Chicago, Ill., assignor, by mesne assignments, to William H. Miner, Chicago, Ill. Original application filed Mar. 16, 1908, Serial No. 421,438. Divided and this application filed May 24, 1909. Serial No. 497,879. (Cl. 213—42.)



2. In a tandem spring draft rigging, the combination with a draw-bar and horizontally disposed draw-bar yoke connected to said draw-bar, tandem arranged springs and front, rear and intermediate followers, of a single center-sill in line with the draw-bar and having a longitudinal slot or opening to receive the draw-bar, followers and springs, and pairs of channel-shaped stop castings fitting on opposite sides of the upright web of said center-sill and against the flanges thereof and secured thereto, and provided with front, rear and intermediate stop shoulders for the front, rear and intermediate followers to abut against, substantially as specified.

2. In a tandem spring draft rigging, the combination with a draw-bar, of a horizontally disposed draft yoke connected thereto, vertically disposed front, rear and intermediate followers extending through said draft yoke, tandem springs between said followers and a single center sill in line with the draw-bar and having a longitudinal slot in its upright web, to receive the draw-bar, springs and followers, and stop members having a plurality of stop shoulders for the followers to abut against secured on opposite sides of the center sill web above and below the followers, substantially as specified.

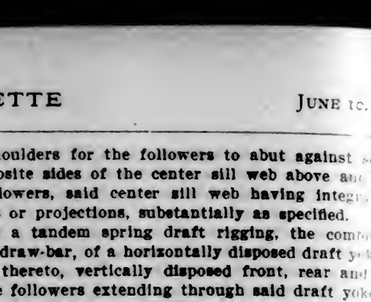
3. In a tandem spring draft rigging, the combination with a draw-bar, of a horizontally disposed draft yoke connected thereto, vertically disposed front, rear and intermediate followers extending through said draft yoke, tandem springs between said followers and a single center sill in line with the draw-bar and having a longitudinal slot in its upright web to receive the draw-bar, springs and followers, and stop members having a plurality of stop shoulders for the followers to abut against secured on opposite sides of the center sill web above and below the followers, said center sill web having integral stop tongues or projections, substantially as specified.

4. In a tandem spring draft rigging, the combination with a draw-bar, of a horizontally disposed draft yoke connected thereto, vertically disposed front, rear and intermediate followers extending through said draft yoke, tandem springs between said followers and a single center sill in line with the draw-bar and having a longitudinal slot in its upright web to receive the draw-bar, springs and followers, and stop members having a plurality of stop shoulders for the followers to abut against secured on opposite sides of the center sill web above and below the followers, and tie-plates secured on each side of said center-sill and embracing the draft yoke, substantially as specified.

5. In a tandem spring draft rigging, the combination with a draw-bar, of a horizontally disposed draft yoke connected thereto, vertically disposed front, rear and intermediate followers extending through said draft yoke, tandem springs between said followers and a single center sill in line with the draw-bar and having a longitudinal slot in its upright web to receive the draw-bar, springs and followers, and stop members having a plurality of stop shoulders for the followers to abut against secured on opposite sides of the center sill web above and below the followers, and tie-plates secured on each side of said center sill and embracing the draft-yoke, said tie-plates having channels to receive and guide the draft yoke, substantially as specified.

[Claims 6 to 27 not printed in the Gazette.]

1,064,667. SEWING-MACHINE. LANSING ONDERDONK, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Original application filed July 26, 1904, Serial No. 218,192. Divided and this application filed June 18, 1910. Serial No. 567,677. (Cl. 122—6.)



1. A sewing machine including in combination, a cloth plate, a trimming device comprising coöperative members, means beneath the cloth plate for supporting one of said members, means for laterally adjusting said member, and a guide extending above the cloth plate for diverting the trimmed-off strip, means for adjusting said guide to correspond with the different positions of the trimming device, and means whereby said guide may be moved independent of the trimming device to give access to the operating parts of the machine behind said guide.

2. A sewing machine including in combination, a cloth plate, a trimming device comprising coöperative members, means beneath the cloth plate for supporting one of said members, means for laterally adjusting said member, a guide for diverting the trimmed off strip extending above said cloth plate and located in the rear of the trimming device, means for yieldingly holding said guide against the trimming member, whereby as said trimming member is adjusted said guide will be moved therewith, and means whereby said guide may be moved independent of the trimming device, to give access to the operating parts of the machine behind said guide.

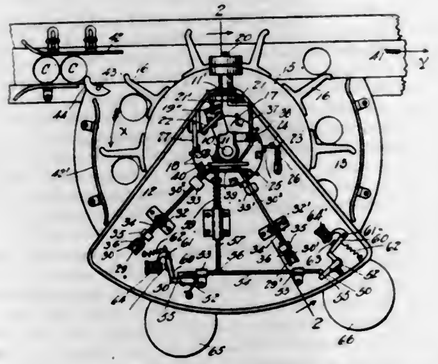
3. A sewing machine including in combination, a cloth plate, a trimming device comprising upper and lower coöperating members, a guide for directing the trimmed off strip and a member carried by said guide for preventing the strip trimmed off from the body fabric from passing underneath the cloth plate, and means for moving said guide independent of the trimming device, whereby access may be had to the operating parts of the machine behind said guide.

4. A sewing machine including in combination, a cloth plate, a trimming device comprising upper and lower coöperating members, said lower member being supported by the cloth plate, means for adjusting the position of said trimming device, a guide for directing the trimmed off strip located in rear of the trimming device, a member carried by said guide and extending substantially at right angles thereto for preventing the trimmed off strip from passing underneath the cloth plate, means for adjusting said guide to correspond to the various adjusted positions of the trimming device, and means whereby said guide may be moved independently of the trimming device, so that access to the operating parts of the machine in the rear of the guide, may be had.

5. In a sewing machine for overseaming fabrics, a cloth plate, a trimming device, means beneath said cloth plate to support a portion of said trimming device, means to laterally adjust said trimming device, an adjustable guide extending above said cloth plate for diverting the trimmed off strip, and means whereby said guide may be moved independent of the trimming device to give access to the operating parts of the machine behind said guide.

[Claims 6 to 19 not printed in the Gazette.]

1,064,668. CAN-WEIGHING MACHINE. JAMES F. PERKINS, Seattle, Wash. Filed Oct. 23, 1911. Serial No. 656,243. (Cl. 73—51.)



1. In a weighing machine of the class described, a weighing scale, a rotary carrier for conveying articles to be weighed to said scale, an ejector, a spring tending to cause said ejector to become operative, devices acting in opposition to said spring for normally retaining said ejector in inoperative position, and electric apparatus arranged to be energized by the scale when the latter is influenced by an article being weighed for causing said devices to become temporarily inoperative whereupon said spring is rendered capable of asserting its power to actuate the ejector for the purpose of removing the article from said carrier.

2. In a weighing machine of the class described, the combination with the weighing scale, a carrier for conveying cans to the scale for weighing, means for actuating said carrier, an ejector, means tending to move said ejector into operative condition, electric controlled devices opposing the last named means to normally retain said ejector in inoperative position, and means affected by the movement of said scale when influenced by an article differing in weight from that for which the scale is adjusted whereby said electric controlled devices are actuated to present the ejector into position for engaging such article through a coöperative movement performed by said carrier.

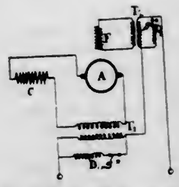
3. In a weighing machine, the combination with a rotary carrier, means for imparting intermittent progressive motions to said carrier, and means for imparting relatively small reverse movements to the carrier at the termination of the successive advance movements thereof, of weighing scales having a pan disposed to receive the articles to be weighed, an ejector, a spring tending to maintain said ejector in operative position, spring controlled means for releasably retaining said ejector in inoperative position, an electro-magnet, a normally incomplete electric circuit embracing said magnet, means actuated by said scales for completing said circuit when an article of a weight different to that for which the scale is adjusted is brought upon the scale-pan whereby the magnet is energized to disengage said spring controlled means with respect to the ejector so that the latter becomes operative, and means whereby the ejector is subsequently restored to its inoperative position for reëngagement by said spring controlled means.

4. In a weighing machine, the combination with a rotary carrier, means for imparting intermittent progressive motions to said carrier, means for imparting relatively small reverse movements to the carrier at the termination of the successive advance movements thereof, a conveyer for supplying the articles for weighing to the machine, and devices controlled by said carrier for delivering said articles from the conveyer periodically to the carrier, of weighing scales having a pan disposed to receive the articles to be weighed, an ejector, a spring tending to maintain said ejector in operative position, spring controlled means for releasably retaining said ejector in inoperative position, an electro-magnet, a normally incomplete electric circuit embracing said magnet, means actuated by said scales for completing said circuit when an article of a weight different from that for which the scale is adjusted is brought upon the scale pan whereby the magnet is energized to disengage said spring controlled means with respect to the ejector so that the latter becomes operative, and means whereby the ejector is subsequently restored to its inoperative position for reëngagement by said spring controlled means.

5. In a weighing machine of the class described, the combination with a platform, a carrier disposed above the platform, mechanism for imparting intermittent rotary motions to said carrier, a weighing scale having a pan operating in an opening provided in said platform, devices for regulating said scale for tipping the same at a predetermined weight, means controlled by said mechanism whereby the scale is alternately rendered operative and inoperative, and a vibratory arm made operative by the tipping of the scale for ejecting cans from said platform.

[Claims 6 to 8 not printed in the Gazette.]

1,064,669. ALTERNATING-CURRENT GENERATOR. ARTHUR SCHERBIUS, JULIUS JONAS, and HEINRICH MEYER-DELIUS, Baden, Switzerland, assignors to Aktiengesellschaft Brown, Boveri & Cie., Baden, Switzerland. Filed Feb. 28, 1912. Serial No. 680,539. (Cl. 171—119.)

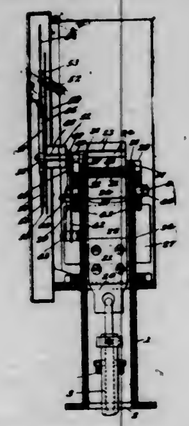


1. Apparatus for generating alternating currents comprising the combination with a main field winding and an armature winding connected in normal series relation, of two saturated inductive means, one for affecting the current in the field winding and the other for affecting the current in the armature winding.

2. In combination with a series type alternating current commutator generator having main field windings, and means for introducing working currents into the armature, of means for stabilizing said generator comprising means adapted to be saturated at normal load, associated respectively with the field windings and the means for introducing working currents into the armature.

3. In combination an alternating current series type commutator generator having compensating field and armature windings, and means for stabilizing said generator, comprising two choke coils, one connected in parallel with said field windings and the other connected in parallel with both the compensating and armature windings, said choke coil being saturated at normal load at which the machine is to generate.

1,064,670. MEASURING INSTRUMENT. WILHELM SIMONSSON, New York, N. Y. Filed Aug. 5, 1907. Serial No. 387,144. (Cl. 73—29.)



1. A measuring instrument having a pending flexible suspender, a member having a surface adapted to be traversed by said suspender during the measuring operation, a suspended weighted lever supported for rocking movement by said suspender and adapted, when moved, to traverse the surface of said member, and means for holding the lever out of binding engagement with the suspender when the lever is rocked.

2. A measuring instrument having a bearing member provided with a curved surface, a pendent flexible suspender arranged to wind upon the curved surface of said member, a lever supported for swinging movement upon the suspender and adapted, when moved, to traverse the bearing member, a weight connected with the lower part of said lever, a part concentric with, but of greater radius than the curved surface of the bearing member, and arranged for contact with the lever, when the same is moved, to hold said lever from binding engagement with the suspender, and draft and index mechanisms operatively connected with said lever.

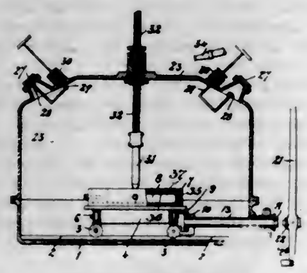
3. A measuring instrument comprising a member having a curved surface, a pendulating weighted lever adapted, when moved, to traverse the curved surface of said member, a flexible suspender for the lever, means movable relatively to the curved surfaced member and arranged to hold the lever out of contact with the suspender during movement of the lever, and draft and index mechanisms operatively connected with said lever.

4. A measuring instrument comprising a flexible suspender, a pendulating weighted lever connected with the suspender, two members one of which is movable relatively to the other, one of said relatively movable members having a curved surface whereon the suspender is arranged to wind and the other of said relatively movable members being arranged to hold the lever out of contact with the suspender during the movement of the lever, and draft and index mechanisms.

5. A measuring instrument comprising a bearing member having a curved surface, a flexible suspender arranged to wind upon the curved surface of said bearing member, a weighted lever suspended from said suspender and adapted, when moved, to traverse said bearing member, a movable part engaged with the lever and adapted to hold the same from contact with the suspender during the movement of the lever along said bearing member, and draft and index mechanisms operatively connected with the said lever.

[Claims 6 to 16 not printed in the Gazette.]

1,064,671. TREATMENT OF STEEL AND IRON SURFACES. WILLIAM SPEIRS SIMPSON, London, England. Filed Aug. 17, 1912. Serial No. 715,638. (Cl. 148—10.)



1. The method of impregnating steel or iron surfaces with metals or metallic compounds for hardening, toughening or improving the same, to any desired depth, which consists in fusing electrically and alloying such surfaces while in a substantial vacuum.

2. The method of impregnating steel or iron surfaces with metals or metallic compounds for hardening, toughening or improving the same, to any desired depth, which consists in fusing electrically, alloying and carburizing such surfaces while in a substantial vacuum.

3. The method of impregnating steel or iron surfaces with foreign matter for hardening, toughening or improving the same, to any desired depth, which consists in applying said matter to said surfaces, covering said matter with fusible slag, and thereafter melting said surfaces and matter by means of an electric arc while in a substantial vacuum.

4. The method of impregnating steel or iron surfaces with foreign matter for hardening, toughening or improving the same, to any desired depth, which consists in applying said matter to said surfaces, covering said matter with fusible slag, and thereafter springing an electric arc through the stratum of slag to melt said surfaces and matter, while in a substantial vacuum, without the electrodes coming into actual contact with the molten metal.

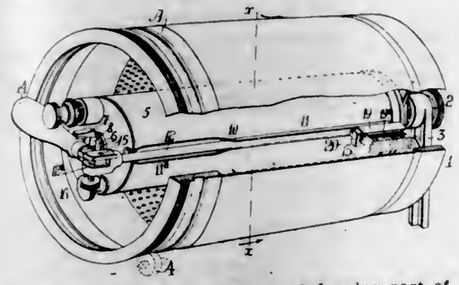
5. The herein described method of hardening, toughening and improving metallic surfaces which involves fusing the same electrically while in a substantial vacuum and superheating such molten surfaces, whereby perfect diffusion of the alloys is effected and occluded gases are liberated from the molten metal and withdrawn as liberated.

1,064,672. STENCILING-MACHINE. STEPHEN T. SMITH, Jr., Stamford, Conn., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 26, 1909. Serial No. 524,596. (Cl. 101—132.)

1. A stenciling cylinder open at one end and having a perforated body, and also having an interior ink fountain extending from end to end thereof, and a tubular socket or sheath secured upon said fountain and extending thereJUNE 10, 1913. U. S. PATENT OFFICE. 549

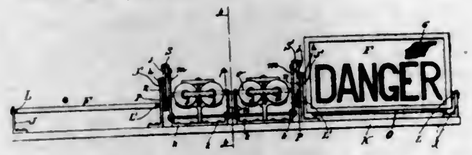
along, and adapted to receive a rod forming part of an ink-distributing brush, said sheath having a longitudinal slot adapted to receive a neck connected to said rod.

2. A stenciling cylinder open at one end and having a perforated body, and also having an interior ink fountain extending from end to end thereof, and a tubular socket or sheath secured upon said fountain and extending there-



along, and adapted to receive a rod forming part of an ink-distributing brush, said sheath having a longitudinal slot adapted to receive a neck connected to said rod, and said slot enlarged or flaring at its outer end.

1,064,673. DANGER-SIGNAL FOR RAILWAYS. CLARENCE N. STEEVENS, Owego, N. Y. Filed Nov. 7, 1911. Serial No. 659,041. (Cl. 246—23.)



1. A danger signal adapted to be located at a crossing and indicate from either side the approach of trains coming from either direction, comprising a stand, a signal head, pairs of longitudinally extending movable signal members located at each end of the head, each of said members being mounted on inner and outer pivots, operative connections between the inner pivots of each pair, for simultaneously rocking the members of each pair on their pivots, and independent electroresponsive means for separately actuating the operative connections of each pair of signal members.

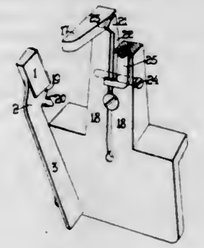
2. A danger signal adapted to be located at a crossing and indicate from either side the approach of trains coming from either direction, comprising a stand, a signal head, pairs of longitudinally extending movable signal shutters located at each end of the head, pivots at the inner and outer ends of said shutters, cross connections between the inner pivots of each pair of shutters, for simultaneously rocking the shutters of each pair on their pivots, and independent electroresponsive means for separately actuating the cross connections between the shutters of each pair.

1,064,674. TYPE-WRITING MACHINE. FRANK C. URSBRUCK, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 16, 1910. Serial No. 592,615. (Cl. 197—43.)

1. In a typewriting machine, the combination with a platen, and type bars having types, of a yielding centering guide and fixed side guide fingers, engaged by the bars as the types approach the platen, to aline said types.

2. In a typewriting machine, the combination with a platen and type bars having types, of a gage in the path of the type bars to aline the types, said gage being movable to accommodate different thicknesses of work sheets, fixed side guide fingers, and means to hold the gage normally advanced from the platen.

3. In a typewriting machine, the combination with a platen, and type bars having types, of a spring-returned centering guide engaged by the bars as the types approach the platen, and fixed side guide fingers, to aline the types with the printing line and to steady the type bars at the time of impact against the platen.

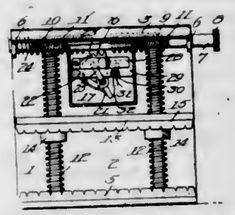


4. In a typewriting machine, the combination with a platen, type bars having types and a type bar guide, of a centering guide pivoted between the arms of the type bar guide, a spring to hold the centering guide advanced from the platen, said type bars each having a centering notch to fit over the centering guide, as its type approaches the platen to direct the types to the printing line.

5. In a typewriting machine, the combination with a platen, of type bars having centering notches extending across said bars, types on the bars, fixed side guide fingers, a yielding centering guide in the path of the type bars, comprising a tapering gage over which the notches fit to shift the type bars bodily relatively to their fulcrums, and direct the types to the printing line.

[Claims 6 to 8 not printed in the Gazette.]

1,064,675. BOOK BINDER OR LOCK. JOHN VAN DER WEL, Seattle, Wash. Filed Mar. 9, 1912. Serial No. 682,572. (Cl. 129—35.)



1. In a device of the class described, a fixed jaw, a movable jaw, means for actuating said movable jaw toward said fixed jaw to produce a clamping action, an actuating member for said means, and a locking device operable from said member subsequent to the initial movement of said jaw to produce a clamping action.

2. In a device of the class described, a fixed jaw, a movable jaw, means for actuating said movable jaw toward said fixed jaw to produce a clamping action, an actuating member for said means, a locking device operable from said member subsequent to the initial movement of said jaw to produce a clamping action, and means for releasing said locking device.

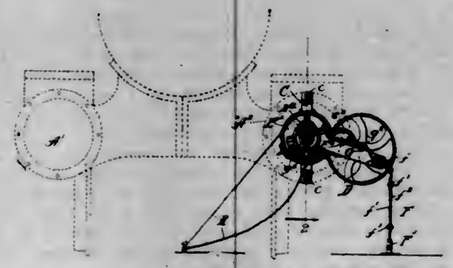
3. In a device of the class described, a fixed jaw, a movable jaw, means for actuating said movable jaw toward said fixed jaw to produce a clamping action, an actuating member for said means and movable therefrom subsequent to the initial movement of said movable jaw to produce the clamping action, and a locking device operable from said member in the movement thereof subsequent to the initial movement of the movable jaw.

4. In a device of the class described, a fixed jaw, a movable jaw, means for actuating said movable jaw to produce a clamping action, an actuating member for said means and movable therefrom subsequent to the initial movement of said movable member to produce a clamping action, a locking device operable from said member in the further movement thereof, and means for releasing said locking device.

5. In a device of the class described, a fixed jaw, a movable jaw, means for actuating said movable jaw to produce a clamping action, an actuating member for said means and movable therefrom subsequent to the initial movement of said movable member to produce a clamping action, a locking device operable from said member in the further movement thereof, and key operated means for releasing said locking device.

[Claims 6 and 7 not printed in the Gazette.]

1,064,676. CYLINDER-BORING APPARATUS. CHARLES F. WINN, Milwaukee, Wis., assignor to Joseph T. Ryerson & Son, Chicago, Ill., a Corporation of Illinois. Filed June 15, 1909. Serial No. 502,335. (Cl. 77—2.)



1. In a cylinder boring machine, the combination with a rotary bar, of means for supporting said bar in operative relation to the cylinder, a tool supporting head mounted upon said bar, power transmitting mechanism for rotating said bar, a frame supporting said mechanism and itself pivotally supported at one end upon said bar, and a standard supporting the other end of said supporting frame.

2. In a cylinder boring machine, the combination with a rotary bar, of means for supporting said bar in operative relation to a cylinder, a master tool supporting head mounted upon said bar to rotate therewith and to move longitudinally thereon, an auxiliary tool support removably surrounding said master head, and means for securing tools either upon said supporting head or upon said auxiliary tool support.

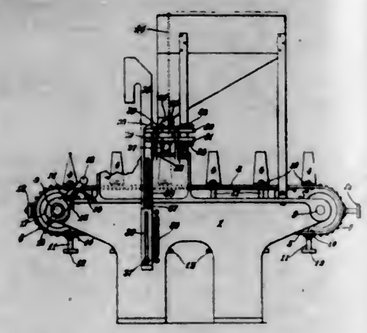
3. In a cylinder boring machine, the combination with a rotary bar, of means for supporting said bar in operative relation to a cylinder, a master tool supporting head mounted upon said bar to rotate therewith and to move longitudinally thereon, an auxiliary tool support removably surrounding said master head, pairs of lugs on said tool support having inclined tool seats between the lugs in each pair, and means for clamping the tools against said seats between the lugs in said pairs.

4. In a cylinder boring machine, the combination with a rotary bar, of means for supporting said bar in operative relation to a cylinder, a tool supporting head mounted upon said bar to rotate therewith and movable longitudinally thereon, means for rotating said bar, a screw threaded shaft extending longitudinally of said bar, a nut on said head engaged by said screw threaded shaft, a speed mechanism carriage fixed upon and rotating with the end of said bar and through which said shaft extends, differential gear wheels fixed upon said shaft, a counter shaft journaled upon said carriage, differential gear wheels fixed upon said counter shaft, means for preventing the rotation of said countershaft and means for axially moving said counter shaft to engage one of the gear wheels thereon with the corresponding gear wheel on the screw threaded shaft.

5. In a cylinder boring machine, the combination with a rotary bar, of means for supporting one end of said bar adjacent the back end of a cylinder, a saddle adapted to be secured to the other end of a cylinder and having a ring surrounding the bar, a collar fixed to said bar, means for rotatably supporting said collar within said ring, said means and collar comprising radially overlapping portions to prevent longitudinal movement of said bar, a tool supporting head, means for connecting said head to said bar to rotate therewith but to move longitudinally thereon, and means for rotating said bar.

[Claim 6 not printed in the Gazette.]

1,064,677. APPARATUS FOR FILLING BOTTLES. JOHN L. ZEILER, Orosi, Cal. Original application filed Aug. 21, 1911, Serial No. 645,207. Divided and this application filed Oct. 26, 1912. Serial No. 727,888. (Cl. 226—17.)



1. In a filling mechanism, the combination, with a liquid-containing reservoir having an outlet passage leading therefrom, a measuring device into which said passage opens provided with a discharge passage, and a valve rotatably arranged in each passage, of a pair of slides, one connected with one valve and the other with the other valve for actuating the same, and a depressible operating bar having a portion arranged to successively engage said slides during the movement of the bar for shifting said slides.

2. In a filling mechanism, the combination, with a liquid-containing reservoir having an outlet passage leading therefrom, a measuring device into which said passage opens provided with a discharge passage, and a valve rotatably arranged in each passage and having a crank arm, of a pair of endwise movable parallel slides each having a central slot wherein the terminal of the adjacent valve arm is journaled, a depressible operating bar having a cam arranged to successively engage said slides at one end of the latter during its movements for shifting the slides to rock said valves, and means connected to the other end of said slides for normally holding their first named ends in the path of travel of said cam.

3. In a filling machine, the combination, with a liquid-containing receptacle having a valved-controlled inlet and a valve-controlled outlet, and means for supplying liquid to said receptacle, of a horizontally arranged slide operatively connected with each controlling valve, and a vertically movable operating element having a portion thereon arranged to successively engage the adjacent ends of said slides during its movements, to shift said slides and actuate said valves.

4. In a filling mechanism, the combination, with a liquid-containing reservoir, and a rocking controlling valve therefore provided with an arm, of an endwise-movable valve-actuating slide to which said arm is connected, and a depressible bar having a cam arranged to directly engage one end of said slide during the movement of the bar for shifting said slide.

1,064,678. GUIDE FOR DEVELOPING-TANKS. FRANK M. ALEXANDER, Pittsburgh, Pa. Filed July 24, 1912. Serial No. 711,237. (Cl. 95—98.)

1. The combination with a photographic plate rack having a plurality of relatively spaced plate seats adapted to receive and retain the plates when inserted edgewise therein, of a carriage provided with a plurality of plate guides correspondingly spaced with reference to the plate seats, said carriage being movable transversely of the plate seats, said carriage being movable transversely of the latter between two positions in one of which its guides are in register with the respective units of one set of seats and in the other of which they are in register with the respective units of another set of seats, each set of seats being respectively composed of non-successively arranged units.

2. The combination with a photographic plate rack having a plurality of relatively spaced plate seats adapted to receive and retain the plates when inserted edgewise therein, of a carriage provided with a plurality of plate guides correspondingly spaced with reference to the plate seats, said carriage being movable transversely of the latter between two positions in one of which its guides are in register with the respective units of one set of seats and in the other of which they are in register with the respective units of a different set of seats, each set of seats being respectively composed of non-successively arranged units.

3. The combination with a photographic plate rack having a plurality of relatively spaced plate seats adapted to receive and retain the plates when inserted edgewise therein, of a carriage provided with a plurality of plate guides correspondingly spaced with reference to the plate seats, said carriage being movable transversely of the latter between two positions in one of which its guides are in register with the respective units of one set of seats and in the other of which they are in register with the respective units of a different set of seats, each set of seats being respectively composed of units arranged alternately with respect to the units of the other set.

4. The combination with a photographic plate rack having a plurality of relatively spaced plate seats adapted to receive and retain the plates when inserted edgewise therein, of a carriage provided with a plurality of plate guides correspondingly spaced with reference to the plate seats, said carriage being movable transversely of the latter between two positions in one of which its guides are in register with the respective units of one set of seats and in the other of which they are in register with the respective units of a different set of seats, and means for centering the carrier in each of its two positions to insure alinement of the respective seats and guides.

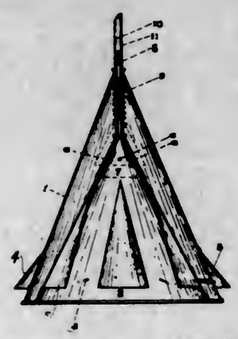
5. The combination with a photographic plate rack having a plurality of relatively spaced plate seats adapted to receive and retain the plates when inserted edgewise therein, and opening at one end of the rack, of a carriage plate provided with a plurality of seats forming plate guides correspondingly spaced with reference to the seats, said carriage being shiftable transversely of the latter between two positions in one of which its guides are in register with the respective units of one set of seats and in the other of which they are in register with the respective units of another set of seats and depending flanges on the carrier plate adapted to alternately engage opposite sides of the rack to center the carrier plate in its respective positions.

[Claims 6 to 9 not printed in the Gazette.]

1,064,679. CLOTHES-POUNDER. JAMES D. AVERY, Ogden, Utah. Filed Aug. 21, 1912. Serial No. 716,322. (Cl. 68—5.)

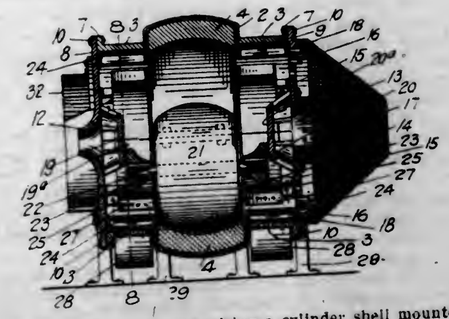
1. In devices of the class described consisting substantially of two inverted funnels of unequal size the larger superimposed over the smaller funnel, the addition of a smaller inverted funnel placed upon the top of the inner funnel and adapted to cover and uncover air holes in the top of the said inner funnel, a spring placed above the said smaller funnel adapted to press the said smaller funnel over the said air holes and to permit it to rise and uncover the said holes when pressed upward by the air within the innermost funnel.

2. In devices of the class described the combination of two inverted funnels of unequal size, the larger superimposed upon the smaller funnel, the two funnels connected by air ducts passing between them near the bottom, an open space existing between the two funnels, an annular flaring lip formed upon the outside of the outer funnel and covering the outer openings of the air ducts, air holes in the top of the innermost funnel, another small inverted funnel placed upon the top of the said innermost funnel and moving upon a rod or cylinder extending upward and connecting the tops of the two funnels, a spiral spring surrounding the said rod or cylinder and placed between the tops of the inner funnel and the outer funnel and adapted to exert a tension upon the said smaller funnel and keep the said air holes closed unless the said spring is compressed by the pressure of the air through the said holes in the said inner funnel.



3. In devices of the class described the combination of two inverted funnels of unequal size, the larger superimposed upon the smaller funnel, the two funnels connected by air ducts passing between them near the bottom, an open space existing between the two funnels, an annular flaring lip formed upon the outside of the outer funnel and covering the outer openings of the air ducts, air holes in the top of the innermost funnel, another smaller inverted funnel placed upon the top of the said innermost funnel and moving upon a rod or cylinder extending upward and connecting the tops of the two funnels, a spiral spring surrounding the said rod or cylinder and placed between the tops of the inner funnel and the outer funnel and adapted to exert a tension upon the said smaller funnel and keep the said air holes closed unless the said spring is compressed by the pressure of the air through the said holes in the said inner funnel, a plurality of vertically bisected inverted funnels placed upon the inside wall of the inner funnel and adapted to form air pockets, all substantially as above described.

1,064,680. CRUSHING-MILL. JOSEPH S. BARTLEY, Denver, Colo. Filed Feb. 11, 1911. Serial No. 607,933. (Cl. 83—9.)



1. A crushing mill comprising a cylinder shell mounted to rotate about a horizontal axis, heads closing the ends

of the said shell, and provided with central, guiding faces transverse to its axis of rotation, an annular mortar having its inner surface within the said shell, and a circular muller loosely supported upon the said surface and having the opposite ends of its axle contiguous to the said faces.

2. A crushing mill comprising a cylindrical shell mounted to rotate about a horizontal axis, heads closing the ends of the said shell and provided with inwardly projecting hollow, circumferentially apertured bosses having guiding faces transverse to the axis of rotation, an annular mortar having its inner surface within the said shell, and a circular muller loosely supported upon the said surface and having parts contiguous to the said faces, the said heads having openings communicating with the interiors of the respective bosses.

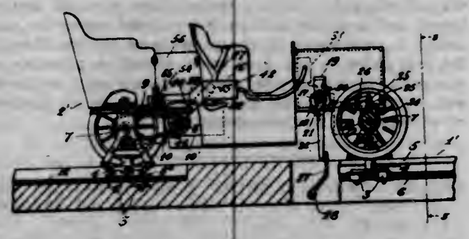
3. A crushing mill comprising a cylindrical shell mounted to rotate about a horizontal axis, heads closing the ends of said shell and having faces transverse to its axis of rotation, an annular mortar having its inner surface within the said shell, a circular muller loosely supported upon the said surface, and blocks secured at opposite sides of the said muller contiguous to the said faces.

4. A crushing mill comprising a cylindrical shell mounted to rotate about a horizontal axis, heads closing the ends of said shell and having faces transverse to its axis of rotation, a plurality of annular mortars having their inner surfaces within the said shell, circular mullers loosely supported upon the respective surfaces, blocks secured at the outer sides of the outermost mullers contiguous to the said faces, and blocks extending laterally from adjoining mullers, contiguous to each other.

5. A crushing mill comprising a cylindrical shell mounted to rotate about a horizontal axis, an annular mortar having its inner surface within the said shell, a circular muller loosely supported upon the said surface, means for feeding material into the said shell, a series of buckets upon the interior surface of the shell for conveying material fed into the same, to a point above its axis of rotation, and a ring spaced concentrically from the said series of buckets and having oblique riffles upon its outer surface.

[Claims 6 and 7 not printed in the Gazette.]

1,064,681. RACING AMUSEMENT APPARATUS. HAL E. CAWTHON and FRANK L. THORNTON, Seattle, Wash. Filed May 12, 1911. Serial No. 626,798. (Cl. 104—210.)



1. A power driven vehicle, means thereon for controlling the speed thereof, and movable means on said vehicle driven in common therewith for effecting adjustments of said first means to obtain an increase in the speed of the vehicle, said first means being normally disconnected from said movable means.

2. A power driven vehicle, normally inactive means thereon for controlling the feed of the driving agent, movable means on said vehicle driven in common therewith for effecting adjustments of said controlling means, and means whereby movement of said movable means is communicated to said first means to effect an increase in the speed of the vehicle.

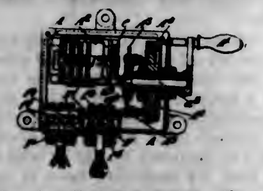
3. A power driven vehicle, means thereon for controlling the feed of the driving agent, a continuously driven means normally free of said first means, and means whereby said last means is connected with said first means for adjusting the same intermittently.

4. In an electric motor driven vehicle, in combination with the motor and its circuit, a resistance, means for connecting said resistance in said circuit, a continuously operating means on said vehicle driven in common with the motor of said vehicle, and means for communicating movement from said last means to said first means for effecting intermittent adjustments of the latter.

5. In a motor driven vehicle, in combination with an electric circuit and the vehicle motor included therein, a rheostatic controller included in said circuit, and means driven in common with said motor for effecting intermittent adjustments of the rheostat arm, said means being normally free for movement independently of said controller.

[Claims 6 to 12 not printed in the Gazette.]

1,064,682. ELECTRICAL APPARATUS FOR TRANSMITTING AND RECEIVING SIGNALS. ARTHUR TREVOR DAWSON and GEORGE THOMAS BUCKHAM, Westminster, London, England, assignors to Vickers Limited, London, England. Original application filed Nov. 26, 1906, Serial No. 345,231. Divided and this application filed Oct. 20, 1911. Serial No. 655,663. (Cl. 177—324.)



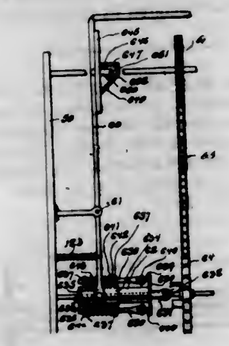
1. In electric signaling apparatus, the combination with a dynamo-electric instrument and a counting device mechanically connected thereto, of a hand switch comprising electrical contacts connected to the armature windings of the dynamo electric instrument, a rotary switch arm coöperating therewith, a crank handle, a spindle carrying said crank handle, and internal annular reducing gear mechanically connecting the spindle and the rotary switch arm.

2. In electric signaling apparatus, the combination with a dynamo-electric instrument and a counting device mechanically connected thereto, of a hand switch comprising electrical contacts connected to the armature windings of the dynamo electric instrument, a rotary switch arm coöperating therewith, a crank handle, a spindle carrying said crank handle, a toothed wheel on said spindle, teeth formed internally upon the switch arm and concentrically with the said spindle, a stationary cover plate, and an intermediate toothed wheel freely mounted on said plate and gearing with the toothed wheel on the spindle and with the internally formed teeth on the switch arm.

1,064,683. ONE-REVOLUTION CLUTCH. GUY DESMOND GRIFFITHS, Acme, Alberta, Canada. Original application filed Oct. 5, 1911, Serial No. 653,020. Divided and this application filed May 6, 1912. Serial No. 695,525. (Cl. 64—46.)

1. A one-revolution clutch comprising the combination of a first and second shaft; bearings therefor; a sprocket-wheel loosely journaled on said second shaft provided with a stud; a clutch member splined on said second shaft and provided near one end with a vertically-disposed plate; a sleeve mounted on said clutch member; spring-controlled rods mounted in supports carried by said sleeve, and each provided in its outer end with a roller journaled therein, each roller designed to operate against said plate; spring-controlled shifting means whereby said sleeve and clutch member are moved along said second shaft at certain times to clutch said sprocket wheel thereto, and means mounted on said first shaft whereby as said shifting means is moved, as described, said sprocket wheel will be clutched to said second shaft while said first shaft makes a complete revolution.

2. A one-revolution clutch comprising the combination of a first and second shaft; bearings therefor; a sprocket-wheel loosely journaled on said second shaft provided with a stud; a clutch member splined on said second shaft and provided near one end with a vertically-disposed plate; a sleeve mounted on said clutch member; spring-controlled rods mounted in supports carried by said sleeve, and each provided in its outer end with a roller journaled therein, each roller designed to operate against said plate; spring-controlled shifting means whereby said sleeve and clutch member are moved along said second shaft at certain times to clutch said sprocket wheel thereto; a disk mounted on said first shaft and provided with a pocket, and means carried by said shifting means designed to co-act with said disk at certain times whereby said shifting means forces said clutch member and its connected parts to clutch said sprocket wheel to said second shaft, as set forth and for the purpose specified.

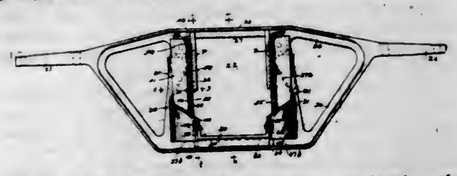


3. A one-revolution clutch comprising the combination of a first and second shaft; bearings therefor; a sprocket wheel loosely journaled on said second shaft provided with a stud; a clutch member splined on said second shaft and provided near one end with a vertically-disposed plate; a bracket carried by said clutch member in each end of which is journaled a roller; a sleeve mounted on said clutch member; spring-controlled rods mounted in supports carried by said sleeve and each provided in its outer end with a roller journaled therein, each roller designed, to operate against said plate; spring-controlled shifting means whereby said sleeve and clutch member are moved along said second shaft at certain times to clutch said sprocket wheel thereto, and means mounted on said first shaft whereby, when said shifting means is moved as described, said sprocket wheel will be clutched to said second shaft while said first shaft makes a complete revolution.

4. In a one-revolution clutch, the combination of a first and second shaft; bearings therefor; means for operating said second shaft; a sprocket wheel loosely journaled on said second shaft; a spring-controlled lever; a support for said lever; a clutch member splined on said second shaft to which said lever is pivoted; means for operating said arm to clutch said sprocket wheel to said second shaft by moving said clutch member; means for transmitting energy from said second-mentioned shaft to said first shaft, and a member keyed to said first-shaft and co-acting with said arm whereby said sprocket wheel is clutched to said second shaft long enough to permit said first shaft to be turned one revolution.

1,064,684. RAILWAY-TRUCK. ALONZO L. HASTINGS, Chicago, Ill. Filed Dec. 12, 1911. Serial No. 665,267. (Cl. 105—243.)

1. In a railway truck, the combination of a side frame having a central opening surrounded by side walls and a top and bottom wall, a chafing frame formed integral of sheet metal and having a slot for receiving one of said side walls, a spring plank extending through said central opening and supported from the lower wall thereof, and wings extending laterally from the lower end of each chafing frame into engagement with the sides of the spring plank and rigidly secured to the spring plank.



2. In a railway truck side frame, the combination of a body part having a central opening surrounded by side wall and by an upper and a lower wall, a chafing frame secured to each of the side walls of said opening, said frames having pockets in their opposed faces, and a wearing plate secured in the pocket of each of said chafing frames.

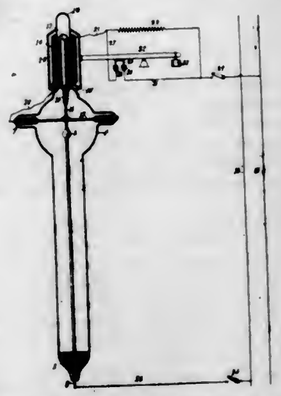
3. In a railway truck side frame, the combination of a body part having a central opening surrounded by side walls and by an upper and a lower wall, a chafing frame secured to each of the side walls of said opening, said frames having pockets in their opposed faces, and a wearing plate detachably secured in the pocket of each chafing frame.

4. In a railway truck, the combination of a side frame having a central opening surrounded by side walls and an upper and a lower wall, a chafing frame applied to each side wall and having a head part, said head parts extending transversely through said central opening and opposed to each other, and a wearing plate detachably secured to each head part for receiving bolster mechanism.

5. In a railway truck, the combination of a side frame having a central opening surrounded by side walls and an upper and a lower wall, a chafing frame applied to each side wall and having a head part, said head parts extending transversely through said central opening and opposed to each other, the head of each chafing frame having a pocket in its face, and a wearing plate for each chafing frame having a lug extending into said pocket.

[Claims 6 to 13 not printed in the Gazette.]

1,064,685. ELECTRIC-LIGHTING APPARATUS. PETER COOPER HEWITT, New York, N. Y., assignor, by mesne assignments, to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed Mar. 23, 1901. Serial No. 52,488. (Cl. 176—45.)



1. In a gas or vapor electric apparatus of the character described, a positive electrode, a negative electrode having a projection in the form of a solid conductor extending into contact with the positive electrode when the apparatus is not in operation, a conducting gas or vapor between the electrodes, in combination with means for separating the electrodes.

2. In a gas or vapor electric apparatus of the character described, a hermetically sealed container, a positive electrode and a negative electrode within the container, the said negative electrode having a projection in the form of a conductor extending into contact with the positive electrode, a conducting gas or vapor between the electrodes and means operated by the passage of the current through the apparatus for separating the electrodes.

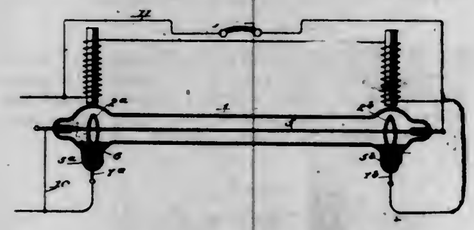
3. In a gas or vapor electric apparatus of the character described, a positive electrode, a negative electrode extending into contact with the positive electrode, an inclosed conducting gas or vapor between the electrodes, means for separating the electrodes by the action of the current passing through the electrodes, a resistance in series with the apparatus when the electrodes are in contact, and means also brought into operation by the action of the current for cutting out resistance when the electrodes are separated.

4. In a gas or vapor electric apparatus of the character described, a hermetically sealed container inclosing a pair of electrodes in contact with each other, a conducting gas or vapor between the electrodes, one of the electrodes being movable, magnetic material connected with the movable electrode, and a solenoid in circuit with the electrode in operative relation to the magnetic material.

5. In a gas or vapor electric apparatus of the character described, a pair of electrodes, a conducting gas or vapor between the electrodes, a solenoid outside the apparatus and an armature in operative relation to the said solenoid, the said armature being inclosed within the container and being sealed hermetically with relation to the other elements within the container.

[Claims 6 to 31 not printed in the Gazette.]

1,064,686. GAS OR VAPOR ELECTRIC APPARATUS. PETER COOPER HEWITT, New York, N. Y., assignor, by mesne assignments, to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Original application filed Mar. 23, 1901, Serial No. 52,488. Divided and this application filed Sept. 18, 1902. Serial No. 123,874. (Cl. 176—45.)



1. In an electric gas or vapor apparatus of the character described, the combination with a negative electrode, a positive electrode, and means for forming a solid electrical connection between the two electrodes within the apparatus, of electro-magnets acting to sever such connection, one of the said magnets being adapted to act more slowly than the other.

2. In an electric gas or vapor apparatus of the class described, the combination with a negative electrode and a positive electrode, of means for forming a solid electrical connection between the two electrodes within the apparatus, such means consisting of a metallic conductor which is adapted to carry the normal current without excessive heating, but which will become heated to a red heat by the flow of an excess of current.

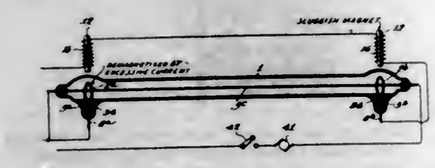
3. In a gas or vapor electric apparatus, the combination of a positive electrode, a negative electrode and an extension of one of the electrodes reaching between the electrodes, said extension constituting means for forming a solid electrical connection between the two electrodes within the apparatus, together with means for interrupting such connection near one electrode and means for subsequently separating said extension from the other electrode at or near one end.

4. In an electric gas or vapor apparatus of the character described, the combination with a vaporizable negative electrode and a positive electrode, of means for forming a solid electrical connection between the said electrodes within the apparatus, such connection including said anode and depending upon magnetic material in connection therewith, which material is adapted to carry the normal current without excessive heating but which will become heated to a red heat by the flow of excessive current, the said magnetic conductor being acted upon by a magnet for severing the connection between said conductor and the solid electrical connection between the electrodes.

5. In a gas or vapor electric apparatus, the combination of a negative electrode, a positive electrode, means for forming a solid electrical connection between the electrodes within the apparatus, means for severing such connection at one of said electrodes, and means for subsequently severing such connection at the other electrode.

[Claims 6 to 44 not printed in the Gazette.]

1,064,687. VAPOR ELECTRIC DEVICE. PETER COOPER HEWITT, New York, N. Y., assignor, by mesne assignments, to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Original application filed Mar. 23, 1901, Serial No. 52,488. Divided and this application filed May 1, 1905. Serial No. 258,149. (Cl. 176—45.)



1. A mercury vapor apparatus comprising an exhausted container supported in a horizontal position and an electrode at each end, one at least of which includes a ring and an eye-bolt, and means, whereby a relative movement of the said ring and the other electrode will interrupt a metallic contact within the container.

2. A mercury vapor apparatus comprising a container for mercury, electrodes therein normally connected inside the container by good conducting material, and means whereby a movement of the said container will initiate a flow of current through the mercury vapor.

3. The combination of an exhausted envelop, electrodes therein, and means whereby movements of said container in opposite directions will alternately connect and disconnect said electrodes to initiate a flow of current therethrough.

4. A vapor device comprising a movable container, normally connected electrodes or contacts in said container and included in the main operating-circuit of the device, one of such electrodes being a conducting liquid, and means whereby a suitable movement of the container will make and break conductive connection between the said electrodes.

1,064,688. ELECTRIC-LIGHTING APPARATUS. PETER COOPER HEWITT, Ringwood Manor, N. J., assignor, by mesne assignments, to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Original application filed Mar. 23, 1901, Serial No. 52,488. Divided and this application filed Feb. 23, 1910. Serial No. 545,290. (Cl. 176—45.)

1. A vapor electric device comprising an exhausted horizontal tubular container, a mercury cathode and a movable solid anode therein, in combination with an extension of the mercury of said cathode in contact with said anode in the non-operating condition of said apparatus and means for moving said anode to break said contact.

2. A mercury vapor apparatus comprising an exhausted container, separated electrodes therein, one being a liquid cathode, and means for utilizing an extension of the liquid of the cathode for temporarily connecting the electrodes.

3. In a vapor electric apparatus comprising an exhausted container, widely separated electrodes therein, and means for utilizing a long thin filament of said conducting liquid for temporarily connecting said electrodes.

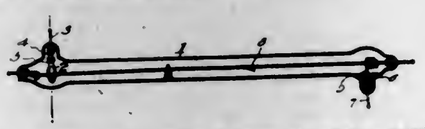


4. In a vapor electric apparatus comprising an exhausted container, separated electrodes therein, and means for utilizing conducting liquid for temporarily connecting said electrodes in combination with means for producing an interruption in the circuit thus established between the electrodes.

5. In a mercury vapor apparatus an exhausted container and separated electrodes therein connected by liquid material in the non-operating position and automatic means for interrupting the connection between the electrodes upon the passage of current through the apparatus.

[Claim 6 not printed in the Gazette.]

1,064,689. VAPOR ELECTRIC DEVICE. PETER COOPER HEWITT, Ringwood Manor, N. J., assignor, by mesne assignments, to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 6, 1910. Serial No. 595,948. (Cl. 176—45.)



1. The combination with a vapor apparatus provided with a normally closed internal circuit, of an electromagnet external to the apparatus included in the said circuit and mechanical connections between the magnet armature and the apparatus for rupturing the said internal circuit when the magnet is energized.

2. The combination of a vapor electric lamp movably supported in a substantially horizontal position, with positive means for moving the lamp out of its normal position by rocking it around an axis of motion parallel to the axis of the lamp.

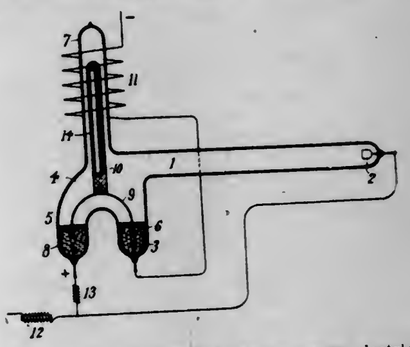
3. The combination of a tubular mercury vapor apparatus supported in an approximately horizontal position and having electrodes near its respective ends and means for turning it around a horizontal axis.

1,064,690. AUTOMATIC STARTING DEVICE FOR VAPOR-LAMPS. PETER COOPER HEWITT, New York, N. Y., assignor, by mesne assignments, to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed May 2, 1903. Serial No. 155,309. (Cl. 176—49.)

1. The combination with a gas or vapor electric apparatus comprising a conducting gas or vapor, a positive electrode and a negative electrode therefor, of a continuous conductor between the positive and the negative electrode, and starting means consisting of means for separating the said conductor from both electrodes.

2. The combination with a gas or vapor electric apparatus comprising a conducting gas or vapor, a positive and a negative electrode therefor, of a continuous conductor between the positive and the negative electrode, and automatic starting means consisting of means for separating the said conductor from both electrodes.

3. The combination with a gas or vapor electric apparatus comprising a conducting gas or vapor, a positive electrode and a negative electrode therefor, of a continuous conductor between the positive and the negative electrodes, and automatic means for successively separating the said conductor from both electrodes.

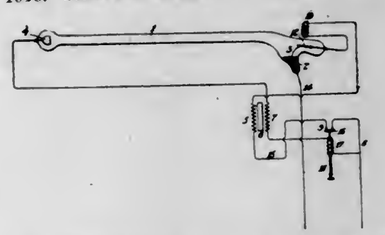


4. The combination with a gas or vapor electric apparatus comprising a conducting gas or vapor, a positive electrode and a negative electrode therefor, of a continuous conductor between the positive and the negative electrodes, and electro-magnetic means for successively separating the said conductor from both electrodes.

5. The combination with a gas or vapor electric apparatus comprising a conducting gas or vapor, a positive and a negative electrode therefor, of a continuous conductor between the positive and the negative electrodes, and automatic means for separating the said conductor from both electrodes, the rupture of the positive electrode taking place prior to that at the negative.

[Claims 6 to 12 not printed in the Gazette.]

1,064,691. SYSTEM OF ELECTRICAL DISTRIBUTION. PETER COOPER HEWITT, New York, N. Y., assignor, by mesne assignments, to Cooper Hewitt Electric Company, Hoboken, N. J., a Corporation of New Jersey. Filed Apr. 28, 1905, Serial No. 257,809. Renewed Jan. 27, 1913. Serial No. 744,594. (Cl. 176—49.)



1. In a vapor electric apparatus of the character described, the combination of two working electrodes, a starting electrode, means for separating the starting electrode from one of the working electrodes, a transformer having one coil connected in circuit with the starting electrode and the other coil connected in circuit with the other working electrode.

2. In a vapor electric apparatus of the character described, the combination of two working electrodes, a starting electrode, means for separating the starting electrode from one of the working electrodes, a transformer having one coil connected in circuit with the starting electrode and the other coil connected in circuit with the other working electrode, and means for interrupting the circuit of the starting electrode by current passing in the circuit of the last named working electrode.

3. In a vapor electric apparatus of the character described, the combination of two working electrodes, a starting electrode, means for separating the starting electrode from one of the working electrodes, a transformer having one coil connected in circuit with the starting electrode and the other coil connected in circuit with the

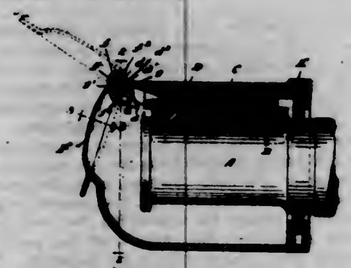
other working electrode, and means in the circuit of the last named working electrode for interrupting the circuit connected with the starting electrode.

4. In a vapor electric apparatus of the character described, the combination of two working electrodes, a starting electrode and a transformer having its respective coils electrically connected in the circuits leading to one working electrode, and to the starting electrode.

5. In a vapor electric apparatus of the character described, the combination of two working electrodes, a starting electrode, a transformer having its respective coils electrically connected in the circuit leading to a working electrode and to the starting electrode and means for moving the starting electrode to make and break contact with the other working electrode.

[Claims 6 to 12 not printed in the Gazette.]

1,064,692. JOURNAL-BOX AND LID FOR CARS. JOHN F. O'CONNOR, Chicago, Ill. Filed Jan. 11, 1909. Serial No. 471,548. (Cl. 64—23.)



1. The combination with a journal box having an open inner end for the axle journal to project through, and provided at its upper end with a hinge member and a curved spring seat adjacent thereto and on the interior thereof, of a lid having a hinge member and a curved spring seat adjacent thereto and on the interior thereof, and a C-shaped spring having curved ends fitting in said spring seats of the journal box and lid and surrounding and interiorly housing the hinge members of the journal box and lid, substantially as specified.

2. The combination with a journal box having an open inner end for the axle journal to project through, and provided at its upper end with a hinge member and a spring seat adjacent thereto and on the interior thereof, of a lid having a hinge member and a spring seat adjacent thereto and on the interior thereof, each of said seats being in the form of a socket and a C-shaped spring having its ends removably fitting in said spring seats of the journal box and lid and surrounding and interiorly housing the hinge members of the journal box and lid, said hinge members of the journal box and lid having interengaging stop shoulders, substantially as specified.

1,064,693. EXTENSION STEP-LADDER. AIKEN C. TAYLOR, Richmond, Va., assignor to Extension Step-Ladder and Specialty Co., Inc., Richmond, Va. Filed Mar. 14, 1912. Serial No. 683,694. (Cl. 228—19.)

1. In an extension step-ladder, the combination with the main ladder-section, the hinged prop-section, and the extension-section, the side-bars of the hinged prop-section being longer than those of the main ladder-section, whereby when the ladder is extended its highest point is vertically above a point between the lower ends of the two sections.

2. In a step-ladder, the combination with the main ladder-section and the hinged prop-section, of the jointed brace-sections between the two, the outer ends of the brace-sections being pivotally connected to the side-bars of the main ladder and prop-section, and between their pivot points having a projection designed to engage an opening in one of said sections, whereby the two latter sections may be locked together.

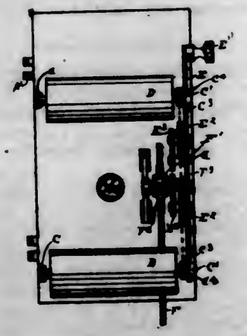
3. In a step-ladder, the combination with the main ladder-section and the hinged prop-section, of the braces 11 and 12, hinged at their overlapped meeting-ends, as at 14, and pivoted at their outer ends to the side bars of the main ladder-section and the prop section respectively, the pivot point of the latter being lower than that of the former section, the stud 15 formed at the inner end of the section 12, and the hole 16 formed in the side-bar of the main ladder-section.



4. In an extension step-ladder, the combination with the main ladder-section, the sliding extension-section, and the rear prop-section, of the bracket 19, the same embracing the upper ends of the side-bars of the main ladder-section and the prop-section, rigidly secured to the former and pivotally secured to the latter, and having their inner ends laterally bent to form keepers 20 for engaging the side-bars of the extension-section.

5. In an extension step-ladder, the combination with the main ladder-section, the sliding extension-section, and the rear prop-section, of the bracket 19, embracing and secured to the ends of the main ladder-section and pivotally connected to the corresponding ends of the prop-section, and having their inner terminals bent to form keepers 20 engaging the side-bars of the extension-section, the inclined braces 23, and the cross-bar 17, secured to a step of the main ladder-section and having its ends bent to form keepers 18 for engaging the side-bars of the extension-section below the brackets.

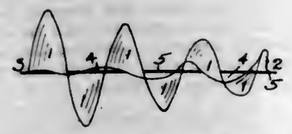
1,064,694. MECHANICALLY-OPERATED ROAD-MAP. MAX BREMSY, New Rochelle, N. Y. Filed Sept. 8, 1909. Serial No. 516,779. (Cl. 40—42.)



A mechanically operated road map comprising a winding and a re-winding roll, a sprocket secured in operable relation with each of said rolls and an endless chain engaging both said sprockets, a driving mechanism comprising a worm and a gear and worm wheel secured together and operated by means of said worm, and a driven mechanism

comprising a pair of sprockets in mesh with said chain, and means operatively connected to said sprockets and adapted to be brought into driving engagement with said driving gear for alternately driving said sprockets in opposite directions.

1,064,695. SCREW-PROPELLER. FRANK DE KONING, Freeport, N. Y. Filed Nov. 7, 1911. Serial No. 659,008. (Cl. 170—175.)



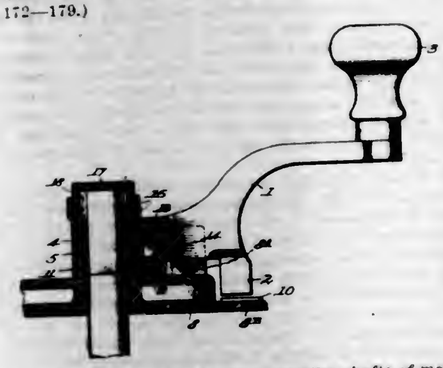
1. A propeller blade increasing in width and spirally and conically wound forming an open conical center, the narrow end of the blade commencing at the large diameter of the conical center.

2. A propeller blade conically and spirally wound forming an open conical center and supported by a shaft, the said blade tapering from its small end, increasing in width as it approaches the small diameter of the open conical center.

3. In a propeller of the class described a spiral blade of varying width having its helix increasing gradually in diameter provided with an open conical center increasing in diameter inversely with the helix.

4. A propeller blade conically and spirally wound forming an open conical center the outside and inside diameters of the blade thus coiled varying inversely.

1,064,696. CLAMP CONTROLLER-HANDLE FOR MOTORNEERS. JAMES BOOKER JACKSON, Denver, Colo. Filed Dec. 26, 1912. Serial No. 738,729. (Cl. 172—179.)



1. A controller handle for the controller shafts of motorneers, comprising a handle provided with a bushing in its pivotal controller shaft engaging end, means for securing said bushing to the handle receiving end of the controller shaft, said bushing being loosely mounted in said handle to permit said handle to turningly move reciprocally thereon independently of said bushing, and means for keying said bushing to said handle to define its movement on said bushing.

2. A controller handle for the controller shafts of motorneers, comprising an operative controller handle, provided with a bushing mounted rotatively in its pivotal end, said bushing being arranged to be mounted on and keyed to the crank handle receiving end of a controller shaft, means for keying said bushing to said handle to determine the extent of the handle's turning movement thereon, and means for securing said bushing to said handle.

3. A controller handle for the controller shafts of motorneers, comprising a controller handle provided with a pivotal end containing a shaft surrounding aperture, a bushing fitting said aperture with a rotatable fit, said bushing being provided with a controller shaft fitting and keying aperture, said bushing being provided with a tapering threaded end portion arranged to project above said handle, and having a slot extending through and across said taper threaded end, check nuts arranged to thread to said slotted taper threaded end, and a hooded nut threaded to said end and arranged to cover said check nuts and to clamp and key said bushing to said shaft, and means for limiting the turning movement of said handle on said bushing to a short predetermined reciprocal turning movement whereby said handle can be turned backward on said bushing a short distance when said bushing is keyed to a controller shaft without turning the controller shaft back with said handle.

4. A controller handle for the controller shafts of motorneers, provided with an aperture in its end larger than the controller shaft to which it is to be applied, a bushing fitting loosely in said aperture, provided with an axial aperture of a form arranged to key to the controller shafts, and provided with a threaded tapering slotted end, and means including a hooded nut having a tapered threaded aperture fitting the taper end of said bushing, arranged to clamp the slotted end of said bushing to said controller shaft firmly enough and tightly enough to positively turn the same, and means for connecting said handle to said bushing to turn thereon a short distance, and keyed thereto to move said bushing and consequently said controller shaft with it when moved in either direction, whereby said controller handle is provided with a short backward movement at each progressive check resistance point of the motorneer independent of and without moving the controller shaft with it.

5. A controller handle for the controller shafts of motorneers, comprising an operatively arranged handle provided with an aperture in its controller shaft engaging end of considerably larger diameter than the handle engaging end of said controller shaft, and also provided with a transversely arranged oblong recess in its bottom edge, a bushing loosely mounted in said handle's controller shaft's surrounding aperture provided with a flanged bottom portion which rests on top of the motorneer and on which the adjacent end of the handle rests, a lug portion on the flange of said bushing extending to the oblong recess in said handle, a pin portion on the end of the extending lug of said bushing projecting into the oblong recess of said handle loosely and adapted to engage the handle at the opposite ends of said recess, when said handle is moved on said bushing, and means for securing said bushing to said handle, said bushing being provided with an axial aperture adapted to fit removably on the end of said controller shaft and arranged to key to it, whereby said handle can be moved backward at the stopping points of said motorneer in its progressive swinging operative current turning movement on said motorneer without turning said controller shaft backward with it.

[Claims 6 and 7 not printed in the Gazette.]

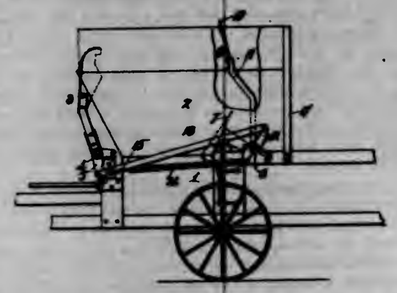
REISSUES.

13,571. PACKER FOR BALING-PRESSES. DAVID E. BELLINGER, Chanute, Kans., assignor to Admiral Hay Press Co., Kansas City, Mo., a Corporation of Missouri. Filed Jan. 16, 1909. Serial No. 473,031. Original No. 872,639, dated Dec. 3, 1907. Serial No. 365,527. (Cl. 100—25.)

1. In a baling press embodying a feeder and a tucker, the two being spaced apart and arranged upon opposite sides of the feed opening in a side of the baling chamber, a packer pivotally supported in the rear of the tucker and adapted to condense the material and to force the same away from the tucker and beneath and into the path of the feeder, and actuating means for the feeder and packer.

2. In a baling press embodying a feeder and a tucker, the two being spaced apart and arranged upon opposite sides of the feed opening in a side of the baling chamber, a packer pivotally supported in the rear of the tucker and adapted to condense the material and to force the

same away from the tucker and beneath and into the path of the feeder, a yielding connection between the packer and feeder and positive connection for transmitting motion from the feeder to the packer.



3. In a baling press embodying a feeder and a tucker arranged upon opposite sides of the feed opening leading to the baling chamber, a pivoted packer arranged to operate over the tucker and to move the material away from said tucker toward the feeder and beneath the same, a rod or bar having crank connection with the feeder and packer and a spring connecting the outer end of said rod or bar with a crank of the packer.

4. In a press embodying a feeder and a tucker arranged upon opposite sides of the feed opening of the baling chamber, a double crank removably fitted upon the packer shaft, a packer pivotally mounted and adapted to force the material away from the tucker and toward and beneath the feeder, a rod or bar connecting one arm of said double crank with a crank of the feeder shaft, and a spring connecting the opposite arm of said double crank with the outer end of said rod or bar.

5. In a press embodying a feeder and a tucker located upon opposite sides of the feed opening of the baling chamber, a packer arranged to move the material from the tucker toward and beneath the feeder, a shaft for the packer, a double crank removably fitted upon said shaft to admit of the feeder normally occupying either a vertical or an inclined position, a rod or bar connecting one arm of said crank with a crank of the feeder shaft, and a spring connecting the other arm of the crank with the outer end of said rod or bar.

6. In a baling press embodying a feeder and a tucker arranged upon opposite sides of the feed opening of the baling press, a packer adapted to force the material away from the tucker toward and beneath the feeder, and a guard for closing the space between the upper end of the tucker and the packer and forming a bottom to the extension of the hopper to prevent material finding its way into the space in the rear of the tucker.

7. In a press, the combination of a feeder, a packer and connecting means between the feeder and packer including parts adapted to be thrown into and out of engagement to admit of simultaneous movement of the feeder and packer, or independent movement of the feeder alone.

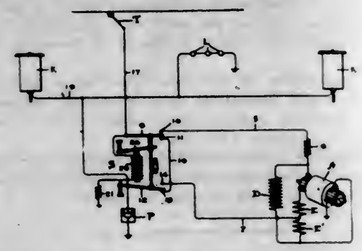
8. In a press, the combination of a feeder, a tucker, a guard extended outward from the upper end of the tucker, and a packer arrranged to operate over the guard and having an extension to sweep over the guard and remove material therefrom.

9. In a baling press, a feeder and a packer pivoted at fixed points at the front and rear sides respectively, of the feed opening of the baling chamber, and means directly connected to both the packer and feeder whereby they are swung toward each other to cause the packer to condense baling material in the hopper in the path of the feeder; said means holding the packer in its condensing position until the feeder has about completed its downward or compression stroke.

10. In a baling press, a feeder and a tucker arranged at opposite sides of the feed opening for the baling chamber, a packer at the same side of the feed opening as the tucker and arranged to operate over and move material away from the tucker toward and below the feeder, and means to actuate the feeder and packer and cause the latter to condense the baling material and force the same into the path of the feeder and between the same and said feed opening; said means holding the packer in its condensing position until the feeder has about completed its downward or compression stroke.

11. In a baling press embodying a feeder and a tucker arranged upon opposite sides of the feed opening leading to the baling chamber, a pivoted packer arranged to operate over the tucker and to move the material away from said tucker toward the feeder and beneath the same, a rod or bar having crank connection with the feeder and packer, and yielding means for restoring the packer and feeder to normal position after the same have performed their packing and feeding operations.

13,572. SELECTIVE SYSTEM. EUGENE R. CARICHOFF, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 3, 1913. Serial No. 765,722. Original No. 1,057,035, dated Mar. 25, 1913, Serial No. 515,138. (Cl. 191—3.)



1. In an electrically driven car intended for operation on sections of line furnishing current at different potentials, means carried by the car for reducing the potential of the current furnished certain car circuits when the car is operating on a high potential section of line, and electro-magnetically operated means having a single actuating coil connected to the source for automatically connecting said circuits either directly to the source or to the potential reducing means and for disconnecting the potential reducing means from the source and connecting it thereto according as the car is on a low or high potential section of line.

2. In an electrically driven car intended for operation on sections of line furnishing current at different potentials, a dynamotor carried by the car for reducing the potential of the current furnished certain car circuits when the car is operating on a high potential section of line, a selective switch device having a single actuating coil connected to the source for automatically connecting said circuits either directly to the source or to said dynamotor and for disconnecting said dynamotor from the source or connecting it thereto according as the car is on the low or high potential section of line.

3. In an electrically driven car intended for operation on sections of line furnishing current at different potentials, a dynamotor carried by the car for reducing the potential of the current furnished certain car circuits when the car is operating on a high potential section, a selective switch device for connecting said circuits either directly to the source or to the dynamotor and for disconnecting said dynamotor from the source or connecting it thereto according as the car is on a low or high potential section of line, and an electromagnet having a single coil permanently connected to the source for automatically operating said switch device according to the potential of the section of line upon which the car is located.

4. In combination, a source supplying current at different potentials, an auxiliary source deriving its generating power from the main source and supplying current at substantially constant potential, a circuit to be supplied with current, and an electromagnetically operated device having a single coil connected to the source of varying potential for conhecting said circuit to the source of varying potential while that potential is below a certain value and for connecting said circuit to the source of constant potential when the potential at the other source exceeds said certain value.

5. In combination, a source supplying current at different potentials, an auxiliary source deriving its generating power from the main source and supplying current at substantially constant potential, a circuit to be supplied with current, switch devices for connecting said circuit to one or the other of said sources, and a single electromagnet connected to the source of varying potential for operating said switch devices to connect said circuit to the source of varying potential when the potential thereat is below a certain value and to connect said circuit to the source of constant potential when the potential at the other source exceeds said certain value.

6. In combination, a source supplying current at different potentials, an auxiliary source deriving its generating power from the main source and supplying current at substantially constant potential, a circuit to be supplied with current, a normally open switch for connecting said circuit to the source of varying potential, a normally open switch for connecting said circuit to the source of constant potential, and an electromagnet energized proportionally to the potential at the source of varying potential and arranged to operate said switches so that the first switch will close when the voltage at the variable potential source is below a certain value and the second switch will close when the potential at the variable potential source exceeds said certain value, and means for rendering said first switch slow in closing.

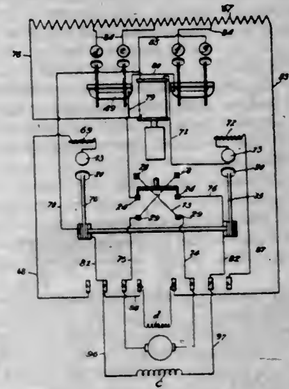
7. In an electrically driven car intended for operation on sections of line furnishing current for different potentials, means carried by the car for reducing the potential of the current furnished certain car circuits when the car is operating on a high potential section of line, an electromagnetic selective switch having a single actuating coil connected to the source of current, said electromagnet having an armature arranged to be attracted thereby at all operating currents in said magnet, a second armature arranged to be attracted by said magnet only when the current therein exceeds a certain value, switches controlled by the movement of said armatures, and connections whereby when one of said armatures is attracted the car circuits will be connected directly with the source of current and when the other armature is attracted said circuits will be connected with the said source through the said potential reducing means.

8. In an electrically driven car intended for operation on sections of line furnishing current at different potentials, means carried by the car for reducing the potential of the current furnished certain circuits when the car is operating on a high potential section of line, an electromagnetic switch having a single actuating coil connected with the source of current, said coil having an armature arranged to be attracted thereby at all operating currents in said magnet, a switch controlled by said armature normally biased to a mid-position between two operative positions, a second armature arranged to be attracted by said coil only when the current therein exceeds a certain value, and connections whereby when said first armature is attracted the said circuits will be connected directly with the source of curernt and when the second armature is attracted the car circuits will be connected with the said source through said potential reducing means.

13,573. MOTOR-STARTER. CLAY JEWELL, Baltimore, Md., assignor to The Jewell Electric Company, Baltimore, Md., a Corporation of Maryland. Filed Feb. 28, 1913. Serial No. 751,390. Original No. 1,035,593, dated Aug. 13, 1912, Serial No. 603,693. (Cl. 172—288.)

1. In a motor starter, the combination of a starting resistance, a plurality of contact blocks electrically connected with different points in said resistance, a series of pivotally mounted yieldable and longitudinally adjustable short circuiting members, means for moving the said members into engagement with said blocks, and means for retarding the movement of the first-mentioned means.

2. In a motor starter, the combination of a starting resistance, a plurality of contact blocks electrically connected with different points in said resistance, a series of pivotally mounted and electrically connected short circuiting members provided with movable pins, and means for engaging said pins to move said members, for the purpose described.



3. In a motor starter, the combination of a starting resistance, a plurality of contact blocks electrically connected with different points in said resistance, a series of independently movable and electrically connected short circuiting members having adjustable pins, means for engaging said pins to move said members, and retarding means for said pin engaging means.

4. In a motor starter, the combination of a starting resistance, a plurality of contact blocks electrically connected with different points in said resistance, a series of pivotally mounted and electrically connected short circuiting members provided with adjustable and yieldingly held pins, and means for engaging said pins to move said members, for the purpose described.

5. In a motor starter, the combination of a starting resistance, a plurality of contact blocks electrically connected with different points in said resistance, a series of pivoted and electrically connected short circuiting members provided with adjustable and yieldingly held pins, and adjustable means for moving said members, for the purpose described.

6. In a motor starter, the combination of a starting resistance, a plurality of contact blocks electrically connected with different points in said resistance, a series of pivoted and electrically connected short circuiting members provided with adjustable and yieldingly held pins, adjustable means for moving said members, and means for retarding the movement of the first-mentioned means.

7. In an automatic starter, the combination with a plurality of movable contact members, of vertically adjustable means for moving the contact members, electro-magnetic means for causing movement of said adjustable means into engagement with said contact members, and a retarding mechanism for said adjustable means connected directly to said electro-magnetic means.

8. In a motor starter, in combination, a pivoted contact member, a solenoid, a bar connected to the core of the solenoid provided with an adjustable bearing plate for moving the contact member, and a retarding device for the bar connected directly to said core.

9. In an automatic starter, the combination with a plurality of pivoted contact members, of adjustable reciprocating means for moving the contact members, electromagnetic means for causing the movement of said reciprocating means into engagement with said contact members and a retarding mechanism for the reciprocating means connected directly to said electromagnetic means.

10. In an automatic starter, the combination with a plurality of pivoted contact members provided with movable pins, of adjustable reciprocating means for moving the contact members, and means for causing the movement of

said reciprocating means into engagement with said pins on the contact members.

11. In an automatic starter, the combination with a starting resistance, of a plurality of contact blocks electrically connected with different points in said resistance, a plurality of contact members provided with movable pins, reciprocating means for moving the contact members, and means for causing the movement of said reciprocating means into engagement with the pins on the contact members to move said members into engagement with the contact blocks.

12. In an automatic starter, the combination with a plurality of contact members, of reciprocating means for moving the contact members, and adjustable means carried by the contact members for cushioning the thrust of the reciprocating means.

13. In an automatic starter, the combination with a plurality of contact members, of means for operating the contact members, electromagnetic means for actuating the operating means, and means on the contact members engageable by the operating means to cushion the thrust of the latter.

14. In an automatic starter, the combination with a plurality of pivoted contact members, of reciprocating means for moving the contact members, means for actuating the reciprocating means, and means on the pivotally mounted contact members adapted to cushion the thrust of and be engaged by the reciprocating means.

15. In an automatic starter, the combination with a contact member, of means for actuating the contact member, the contact member comprising a tubular portion, and means carried by the tubular portion and engaged by the actuating means to move the contact member.

16. In an automatic starter, the combination with a plurality of contact members, of means for moving the contact members, the contact members each comprising a tubular portion, yieldingly held means on the tubular portion and adapted to be engaged by said moving means to operate the contact members.

17. In an automatic starter, the combination with a contact member, of means for moving the contact member, means for actuating said moving means, each contact member comprising a tubular portion, an adjustable means slidable in the tubular portion and adapted to be engaged by said movable means to operate the contact member associated therewith.

18. In a motor starter, the combination of a starting resistance, contact blocks electrically connected with different points in said resistance, a plurality of short circuiting members, means for actuating said short circuiting members, each of said members comprising a tubular portion, an adjustable and yieldingly held means movable on the tubular portion and adapted to be engaged by the actuating means to operate the short circuiting member.

19. In a motor starter, the combination of a starting resistance, contact blocks electrically connected with different points in said resistance, a plurality of pivoted short circuiting members, each comprising a tubular portion, an adjustable and yieldingly held means movable on the tubular portion, and means for actuating the short circuiting member and adapted to engage the adjustable and yieldable means to be cushioned thereby.

20. In an automatic starter, the combination with a starting resistance, of a plurality of contact blocks electrically connected with different points in said resistance, a plurality of short circuiting members, each comprising a tubular portion, a yieldingly held means carried by the tubular portion, and means for actuating said short circuiting members.

21. In an automatic starter, the combination with a starting resistance, of a plurality of contact blocks electrically connected with different points in said resistance, a plurality of pivoted short circuiting members, each comprising a tubular portion, a yieldingly held member slidable in the tubular portion, and reciprocating means for actuating the short circuiting members.

22. In an automatic starter, the combination with a starting resistance, of a plurality of contact blocks electrically connected with different points in said resistance, a plurality of pivoted contact members, adjustable reciprocating means for moving the contact members, and means for causing the movement of said reciprocating means into engagement with the contact members to move the latter into engagement with said contact blocks.

23. In a motor starter, the combination with a plurality of short circuiting contact members having direct electrical connection with one another, of bodily reciprocating means for successively moving the contact members, and cushioning means for cushioning the thrust of the reciprocating means upon the contact members.

24. In a motor starter, the combination of a resistance, a contact member associated with the resistance, means for engaging and moving the contact member, the latter being adapted to short circuit a part of the resistance, cushioning and adjusting means between the moving means and contact member arranged to cushion the thrust of the moving means and to permit the relation of the latter and the member which it engages to be varied.

25. In a motor starter, the combination of a plurality of independently movable contact members having direct electrical connection with one another, means normally out of contact therewith for operating the contact members, electro-magnetic means for actuating the operating means, and cushioning means for cushioning the thrust of the operating means when the latter engages the contact members.

26. In a motor starter, the combination with a contact member, of a reciprocating member for actuating the contact member and independent of the latter, one of said members having a cushioning device for contacting with the other, for the purpose set forth.

27. In a motor starter, the combination with a contact member, of a reciprocating member for actuating the contact member, said members being normally disengaged and one of said members having a tubular portion and a cushioning device mounted in said tubular portion for contacting with the other member, for the purpose set forth.

28. In a motor starter, the combination with a plurality of contact members, of means for moving the contact members, said means and members being normally disengaged and cushioning means between the said moving means and the contact members.

29. In a motor starter, the combination with a plurality of independently movable contact members, of means for moving the contact members and cushioning means between the said moving means and the contact members, the said cushioning means comprising tubes and spring plungers mounted therein.

30. In a motor starter, in combination a starting resistance, a plurality of contact blocks electrically connected with different points in said resistance, a series of pivotally mounted short-circuiting members, reciprocating means adapted to move said members successively, and cushioning means between the moving means and the short-circuiting members.

31. In a motor starter, the combination with a plurality of pivoted contact members, of a solenoid, a bar connected to the core of the solenoid, the said bar being adapted to operate the contact members, and yieldable actuating means between the bar and the contact members.

32. In a motor starter, the combination with a plurality of pivoted contact members, of a solenoid, a bar connected to the core of the solenoid, the said bar being adapted to operate the contact members, actuating means between the bar and the contact members, and means for adjusting the connections between the bar and the contacts of the contact members.

33. In a motor starter, the combination of a starting resistance, a series of contact blocks connected with different points in said resistance, a series of independently movable and electrically connected short circuiting members adapted to coöperate with the blocks, and means for actuating said members comprising telescoping elements and yieldable means associated therewith.

34. In a motor starter, the combination of a resistance, contact blocks electrically connected with different points in the resistance, short-circuiting means comprising members normally electrically disconnected from said blocks and adapted when actuated to coöperate with the blocks to short-circuit the resistance, and means for actuating the short circuiting means, one of said means being provided with a cushioning device adapted to engage the other means.

35. In a motor starter, the combination of a resistance, a plurality of independently movable short-circuiting members electrically connected with one another and with only one end of said resistance, and means normally disconnected from the members for successively operating said members to gradually short-circuit said resistance, and means for cushioning the thrust of the operating means upon the members.

36. In a motor starter, the combination of a suitable supporting panel, a starting resistance, contacts on the panel electrically connected with different points of the resistance, a pair of brackets mounted on the panel, short-circuiting members supported on the brackets, circuit closers on the panel, and means including a shaft for operating the short-circuiting members and circuit closers.

37. In a motor starter, the combination of a suitable supporting panel, a starting resistance, contact blocks on the panel electrically connected with different points of the resistance, a pair of brackets electrically connected, short-circuiting members supported on the brackets so as to be independently movable, circuit closing and current reversing devices supported on the panel, and means including a shaft and telescopic means for actuating the short-circuiting members, and circuit closing and current reversing devices.

38. In a motor starter, the combination of a suitable supporting panel, brackets thereon, short-circuiting members pivotally mounted on the brackets, operating means for the short-circuiting members comprising a rod and plunger supported independently of the brackets and working in alinement with one another and along a line between the brackets.

39. In a motor starter, the combination of a suitable supporting panel, a starting resistance, members mounted on the panel and adapted to successively short-circuit sections of the resistance, main circuit closers mounted on the panel, and means for actuating the short-circuiting members and the circuit closers, said means including a bar and a rod operatively connected together.

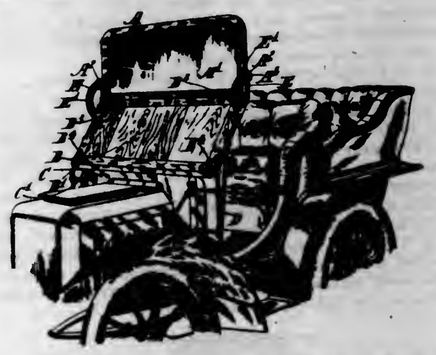
40. In a motor starter, the combination of a suitable supporting panel, a resistance, contacts on the panel connected with different points of said resistance, a pair of brackets mounted on the panel, short-circuiting members supported on the brackets and electrically connected with one another, means for actuating the short-circuiting members to move the latter into engagement with the contacts, said means including an operating device working along a line between the brackets, and a device connected with the operating device and adapted to successively engage the short-circuiting members.

41. In a motor starter, the combination of a suitable panel, a starting resistance, a series of short-circuiting members adapted to gradually cut out the said resistance, main circuit closers, brackets on the panel for pivotally supporting the short-circuiting members and main circuit closers, and means for actuating the short-circuiting members and circuit closers, said means having a part which works between the brackets supporting the short-circuiting members.

42. In a motor starter, the combination of a suitable supporting panel, a starting resistance, members pivoted on the panel and adapted to successively short-circuit sections of the resistance, main circuit closers mounted on the panel, and means for actuating the short-circuiting members and the circuit closers, said means including a bar having parts adapted to engage the pivoted short-circuiting members to move the same, and an element connected to the bar and movable therewith.

43. In a motor starter, the combination of a suitable supporting panel, separate brackets supported on the panel, a starting resistance, contact blocks secured to the panel adjacent the one edge of the panel, short-circuiting members coöperating with the contact blocks and pivotally supported in said brackets, said brackets and short-circuiting members being electrically connected together, main circuit closers pivoted on the panel, and means for actuating the circuit closers and short-circuiting members, said means comprising a rotatable shaft, a rod, a bar connected to move with the rod and devices on said bar for engaging the short-circuiting members to move the same.

13,574. WEATHER-SCREEN FOR MOTOR AND SIMILAR VEHICLES. HENRI SAUL SAMUEL, Hadlow, England, assignor, by mesne assignments, to The Stahlbrodt Company, Rochester, N. Y., a Corporation of New York. Filed Sept. 12, 1912. Serial No. 720,100. Original No. 879,195, dated Feb. 18, 1908, Serial No. 292,781. (Cl. 21—148.)



1. Wind-guard for vehicles consisting of a lower rigid flat portion permanently and immovably secured to the vehicle at its front or lower edge and extending transversely thereof and inclined rearwardly in proximity to the steering wheel or handle, an upper flat portion extending upwardly from the rear or upper edge of the lower portion in front of the driver's face, and permanently hinged to pivot relatively to the lower portion through an angle of 90°, and means arranged laterally of both members at each end thereof for rigidly securing them in any one of a plurality of different relative positions of adjustment.

2. A wind-guard for vehicles consisting of a lower stationary and rigidly supported flat portion extending transversely of the vehicle and inclined rearwardly in proximity to the steering wheel or handle, an upper transparent flat portion adjustably and permanently hinged upon the lower portion and adapted to be folded forwardly against the latter into parallelism therewith, and means for maintaining the portions in one of their positions of relative adjustment, said means being arranged laterally so as to clear the parts when folded.

3. In a wind-shield for a motor or similar vehicle, the combination with the dash or front part of the vehicle, of a lower member fixed to the dash and extending inwardly and upwardly to a level near that of the steering wheel or handle, the rods D for maintaining the member in such fixed and rigid position arranged rearwardly of the member and connected thereto and to a rigid part of the vehicle, a second flat and rigid member having a permanent hinged connection with the lower member and extending vertically upward from the lower member in front of the driver's face and means arranged at the ends of the members for adjusting the upper member relatively to the lower member.

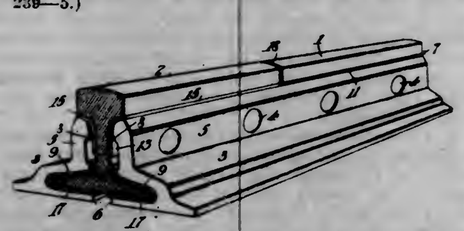
4. In a wind-shield for a motor or similar vehicle, the combination with the dash or front part of the vehicle of a lower fixed member extending inwardly and upwardly from the dash to a level near that of the steering wheel or handle, a flat movable member extending up in front of the driver's face hinged or pivoted to the lower member, a slotted quadrant fixed to one member, and a clamping

device on the other member cooperating with the slotted quadrant for the purpose described.

5. In a wind shield for motor or similar vehicles, the combination with the dash, of a lower flat member rigidly fixed at its front or lower edge to the upper edge of the dash and extending at an inclination rearwardly and upwardly to a level near that of the steering wheel or handle, the rods D for maintaining the member in such fixed and rigid position arranged rearwardly of the member and connected thereto at its respective ends and to a rigid part of the vehicle, a second flat and rigid member having a permanent hinged connection with the lower member to turn relatively thereto on an axis substantially coincident with its lower edge and with the upper edge of the lower member said upper member normally extending upwardly from the lower member in front of the driver's face but being adapted to fold forwardly against the lower member, and means arranged at each end of the members for adjusting the upper member relatively to the lower member each comprising interlocking devices connected to the members respectively at points adjacent to their axis of relative movement.

6. In a wind shield for motor or similar vehicles, the combination with the dash or front part of the vehicle, of a lower member immovably fixed at its forward portion to the dash and extending inwardly and upwardly to a level near that of the steering wheel or handle, means arranged in rear of the dash and extending from the rearward portion of said member to a rigid part of the vehicle to maintain the member in such fixed and rigid position, a second flat member extending vertically upward from the lower member in front of the driver's face and means for adjusting the upper member relatively to the lower member embodying laterally arranged securing devices at one end of the upper member.

13,575. INSULATED RAIL-JOINT. EDWARDS F. SCHERMERHORN, Brooklyn, N. Y., assignor to The Rail Joint Company, New York, N. Y., a Corporation of New York. Filed May 1, 1913. Serial No. 764,962. Original No. 1,006,597, dated Oct. 24, 1911, Serial No. 629,560. (Cl. 238—5.)



1. In an insulated rail joint, the rail ends, the joint bars, rail-head insulation for one of the rails, compensating metal fillers for the head of the other rail, and a base section of insulation for the rail flanges extending over both rail ends.

2. An insulated rail joint having head insulation for its leaving rail, corresponding metal fillers for the head of its receiving rail, and a base insulation for the rail flanges that extends the full length of the joint.

3. In an insulated rail joint, the rail ends, the joint bars, rail-head insulation for the leaving rail, compensating metal fillers for the head of the receiving rail, and base insulation for the rail flanges, separate from said other insulation and said metal fillers, and extending the full length of the joint.

4. In an insulated rail joint, the rail ends, the joint bars, upper sections of insulation arranged under the head of one rail, corresponding upper metal fillers arranged under the head of the other rail, and separate base insulation for the rail flanges extending over both rail ends.

5. In an insulated rail joint, the rail ends, the joint bars, upper sections of insulation disposed above the line of joint bolts and arranged under the head of one rail, corresponding upper metal fillers disposed above the joint bolts and arranged under the head of the other rail, and separate base insulation for the rail flanges disposed below the joint bolts and extending over both rail ends.

6. In an insulated rail joint, the rail ends, the joint bars, upper detachable sections of insulation arranged under the head of one rail, corresponding upper detachable metal fillers arranged under the head of the other rail, and separate base insulation for the rail flanges extending over both rails.

7. In an insulated rail joint, the rail ends, the joint bars, upper detachable sections of insulation arranged under the head of one rail and interlocked with the joint bolts, corresponding upper metal fillers arranged under the head of the other rail, and interlocked with the joint bolts, and separate base sections of insulation embracing the rail flanges of both rails.

8. In an insulated rail joint, the rail ends, the joint bars, an upper section of insulation arranged under the head of one rail, a correspondingly upper metal filler arranged under the head of the other rail, and a separate base insulation for the rail flanges extending over both rail ends.

9. An insulated rail joint having splice bars, rail head insulation between one rail head and one splice bar, and a compensating metal filler betwen the other rail head and said splice bar, and base insulation for the flanges of both rails.

10. An insulated rail joint including the rails, a joint bar, a metal filler between one rail and said joint bar, and insulation for the bar including a head section between the bar and the other rail and a base section for the flanges of both rails.

11. An insulated rail joint including in combination with the rails, a joint bar which is in electrical contact with the head of one rail and having an electrically insulated bearing beneath the head of the other rail, and an electrical insulation interposed between said bar and the rail flanges.

12. An insulated rail joint including in combination with the rails, a joint bar having an electrical bearing contact with the head of one rail, and having an electrically insulated bearing with the head of the other rail and electrical base insulation extending under both rails.

13. An insulated rail joint including in combination with the rails, a joint bar having an electrical bearing contact with the head of one rail, and having an electrical insulated bearing with the head of the other rail, and electrical insulation for the bases of both rails.

13,576. CAR-TRUCK. CHARLES T. WESTLAKE, St. Louis, Mo., assignor to Swing Rolling Truck Co., a Corporation of Delaware. Filed Jan. 28, 1913. Serial No. 744,790. Original No. 819,480, dated May 1, 1906, Serial No. 290,724. (Cl. 105—243.)



1. A car having a rolling body support adapted to elevate one side thereof only as the car body moves laterally with respect to the truck.

2. A car having a rolling body support adapted to raise one side thereof while the other side moves in a substantially horizontal plane.

3. In a car, the combination with a bolster, of a rolling support for said bolster adapted to elevate one end thereof only as said bolster moves upon said rolling support.

4. A car having a rolling body support adapted, when the car body moves laterally from its normal position, to elevate one side of said body to a higher plane than the other.

5. In a car, the combination of a bolster, and a pair of roller supports for said bolster; one of said supports being adapted to impart a rising motion to one end of said bolster while at the same time the other of said supports provides for a horizontal motion of the other end of said bolster.

6. In a car, the combination of a bolster, two sets of bearing plates supporting said bolster, and rollers interposed between the bearing plates of each of said sets; said bearing plates having runways for said rollers that are in part inclined planes and in part horizontal planes.

7. In a car, the combination of a bolster, two sets of bearing plates supporting said bolster, and rollers interposed between the bearing plates of each of said sets; one of said bearing plates in each set having a runway in part an outwardly extending inclined plane and in part a horizontal plane and the mating bearing plate in each set having a runway in part an inwardly extending inclined plane and in part a horizontal plane.

8. In a car, the combination of a bolster, two sets of bearing plates supporting said bolster, and rollers interposed between the bearing plates of each of said sets; each of said bearing plates having a plurality of runways each in part an inclined and in part a horizontal plane.

9. In a car, the combination of a bolster, two sets of bearing plates supporting said bolster, and rollers interposed between the bearing plates of each of said sets; one of said bearing plates in each set having a plurality of runways each in part an outwardly extending inclined plane, and in part a horizontal plane, and the mating bearing plate in each set having a plurality of runways each in part an inwardly extending inclined plane and in part a horizontal plane.

DESIGNS.

44,160. GEM-SETTING. HENRY ACKERMAN, Weehawken, N. J. Filed Mar. 18, 1913. Serial No. 755,255. Term of patent 14 years.



The ornamental design for a gem setting as shown.

44,161. BADGE. WILMER ATKINSON, Philadelphia, Pa. Filed Mar. 14, 1913. Serial No. 754,395. Term of patent 7 years.



The ornamental design for a badge, as shown.

44,162. MUSICAL INSTRUMENT. ALFRED J. BATEMAN, Oakland, Cal. Filed Oct. 8, 1912. Serial No. 724,857. Term of patent 3½ years.



The ornamental design for a musical instrument, as shown.

44,163. CONTAINER OR JAR. ANDREW BAXTER, Jr., Brooklyn, and ALBERT MARCHER, New York, N. Y. Filed Mar. 21, 1912. Serial No. 685,354. Term of patent 7 years.



The ornamental design for a container or jar, as shown.

44,164. TIRE. WILLIAM R. BLOWERS, Toronto, Ontario, Canada. Filed Dec. 14, 1912. Serial No. 736,851. Term of patent 3½ years.



The ornamental design for a tire as shown and described.

44,165. WATER-CLOSET BOWL. ANDREW COCHRAN, Trenton, N. J. Filed Feb. 12, 1913. Serial No. 747,989. Term of patent 14 years.



The ornamental design for a water closet bowl, as shown.

44,166. WATER-CLOSET BOWL. ANDREW COCHRAN, Trenton, N. J. Filed Feb. 12, 1913. Serial No. 747,990. Term of patent 14 years.



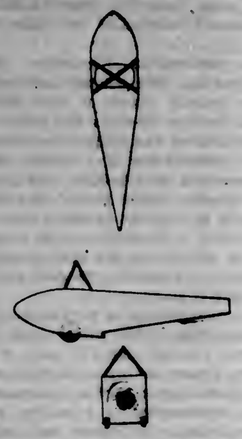
The ornamental design for a water closet bowl, as shown.

44,167. WATER-CLOSET BOWL. ANDREW COCHRAN, Trenton, N. J. Filed Feb. 12, 1913. Serial No. 747,991. Term of patent 14 years.



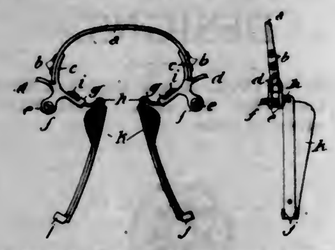
The ornamental design for a water closet bowl, as shown.

44,168. HYDROAEROPLANE-BODY. EDSON F. GALLAUDET, Norwich, Conn. Filed May 9, 1912. Serial No. 696,230. Term of patent 14 years.



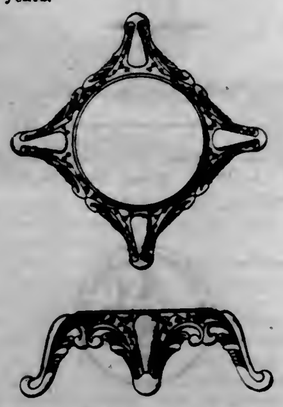
The ornamental design for a hydro-aeroplane body, substantially as shown and described.

44,169. MOUNT FOR PINCE-NEZ. ALBERT GANCE, Arcueil-Cachan, France, assignor to Societe des Lunetiers (Postel, Blanc, Bourse & Cie.), Paris, France, a Corporation of France. Filed Mar. 12, 1913. Serial No. 753,849. Term of patent 3½ years.



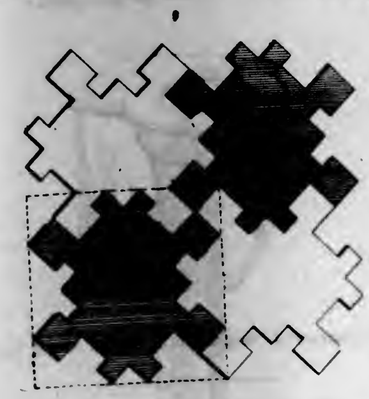
The ornamental design for a mount for pince-nez as shown and described.

44,170. CANDELABRUM-BASE. CHARLES H. GUENTHNER, Niagara Falls, N. Y., assignor to Wm. A. Rogers, Limited, Toronto, Canada, a Corporation of Ontario. Filed Mar. 24, 1913. Serial No. 756,600. Term of patent 7 years.



The ornamental design for a candelabrum base, as shown.

44,171. FLOOR-COVERING. PERCY O. JUDSON, Hackensack, N. J. Filed Oct. 22, 1912. Serial No. 727,442. Term of patent 14 years.



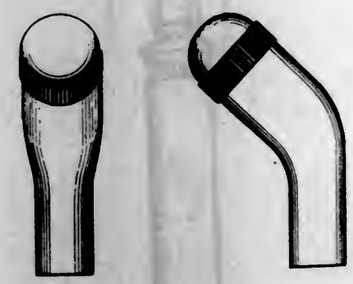
The ornamental design for floor covering as shown and described.

44,172. PUZZLE. CHARLES KALLA, Chicago, Ill. Filed Mar. 3, 1913. Serial No. 751,932. Term of patent 7 years.



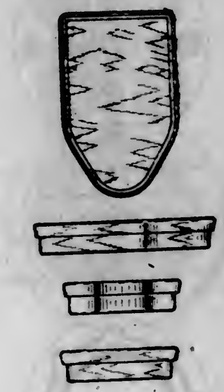
The ornamental design for a puzzle, as shown.

44,173. HANDLE FOR VACUUM-CLEANERS. JAMES B. KIRBY, Cleveland, Ohio. Filed Jan. 13, 1913. Serial No. 741,613. Term of patent 14 years.



The ornamental design for a handle for vacuum cleaners, as shown.

44,174. FLEXIBLE FRAME-COVER FOR SURGEONS' OPERATING-PANS. FREDERICK R. LINTLEMAN, Harlan, Iowa. Filed Mar. 12, 1913. Serial No. 753,847. Term of patent 14 years.



The ornamental design for a flexible frame-cover for surgeon's operating-pan, as shown.

44,175. GOLF-BALL. PATRICK ALPHONSUS MARTIN and JOHN STANLEY, Birmingham, England. Filed June 3, 1912. Serial No. 701,461. Term of patent 7 years.



The ornamental design for a golf ball, as shown.

44,176. GOLF-BALL. PATRICK ALPHONSUS MARTIN and JOHN STANLEY, Birmingham, England. Filed June 3, 1912. Serial No. 701,462. Term of patent 7 years.



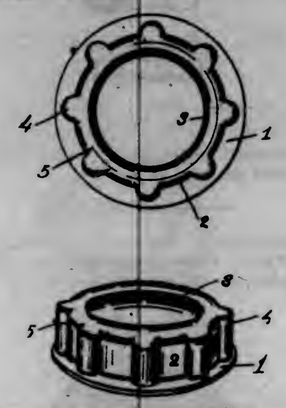
The ornamental design for a golf ball, as shown.

44,177. GOLF-BALL. PATRICK ALPHONSUS MARTIN and JOHN STANLEY, Birmingham, England. Filed June 3, 1912. Serial No. 701,463. Term of patent 7 years.



The ornamental design for a golf ball, as shown.

44,178. COUPLING OR NIPPLE FOR PIPES. ADNAH MCMURTRIE. New York, N. Y., assignor to Thomas & Betts Company, New York, N. Y., a Corporation of New York. Filed May 25, 1909. Serial No. 498,378. Term of patent 14 years.



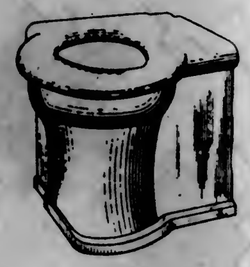
The ornamental design for a coupling or nipple for pipes, substantially as herein shown and described.

44,179. AUTOMOBILE-RADIATOR. CARL A. NERACHER, Toledo, Ohio, assignor to The Willys-Overland Company, Toledo, Ohio, a Corporation of Ohio. Continuation of application Serial No. 722,767, filed Sept 27, 1912. This application filed Feb. 17, 1913. Serial No. 749,042. Term of patent 14 years.



The ornamental design for an automobile radiator, substantially as shown.

44,180. WATER-CLOSET BOWL. WILLIAM G. NEWTON, New Haven, Conn., assignor to The Peck Bros. & Co., New Haven, Conn., a Corporation. Filed Mar. 19, 1913. Serial No. 755,555. Term of patent 7 years.



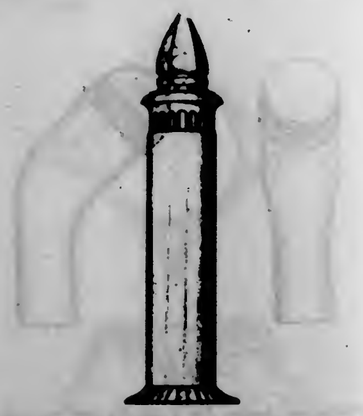
The ornamental design for a water closet bowl, as shown.

44,181. ELECTRIC BRACKET. FRANK NELSON OLCOTT, New York, N. Y., assignor to Black & Boyd Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Apr. 10, 1912. Serial No. 689,912. Term of patent 3½ years.



The ornamental design for an electric bracket, as shown and described.

44,182. JAR. DANIEL A. RIPLEY, Pittsburgh, Pa. Filed May 17, 1911. Serial No. 627,879. Term of patent 7 years.



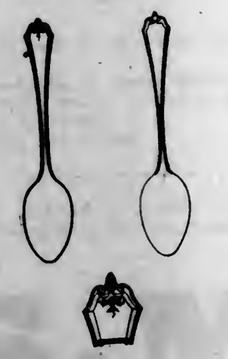
The ornamental design for a jar, as shown.

44,183. JAR. DANIEL A. RIPLEY, Pittsburgh, Pa. Filed May 17, 1911. Serial No. 627,880. Term of patent 7 years.



The ornamental design for a jar as shown.

44,184. SPOON. ALBERT F. SAUNDERS, Syracuse, N. Y., assignor to T. N. Benedict Mfg. Co., East Syracuse, N. Y. Filed Apr. 24, 1912. Serial No. 692,985. Term of patent 7 years.



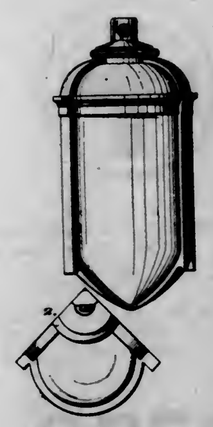
The ornamental design for a spoon as shown.

44,185. BERTH-LAMP. LINDSLEY SCHEPMOES, Hasbrouck Heights, N. J., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Nov. 25, 1912. Serial No. 733,531. Term of patent 7 years.



The ornamental design for a berth-lamp, as shown.

44,186. BERTH-LAMP. LINDSLEY SCHEPMOES, Hasbrouck Heights, N. J., assignor to The Safety Car Heating & Lighting Company, a Corporation of New Jersey. Filed Nov. 25, 1912. Serial No. 733,533. Term of patent 7 years.



The ornamental design for a berth lamp, as shown.

44,187. TOY PEDESTAL. NATHAN SHUER, Chicago, Ill. Filed Dec. 14, 1912. Serial No. 736,844. Term of patent 3½ years.



The design of a toy pedestal as shown and described.

44,188. BOTTLE. JULIUS STEELE, Chicago, Ill. Filed Jan. 23, 1913. Serial No. 743,877. Term of patent 14 years.



The ornamental design for a bottle, as shown.

TRADE-MARKS

PUBLISHED JUNE 10, 1913.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 54,621. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE WILLIS ELECTRIC METER COMPANY, Chicago, Ill. Filed Feb. 20, 1911.

STRAIGHT LINE

Particular description of goods.—Electric Meters.
Claims use since Sept. 1, 1910.

Ser. No. 55,140. (CLASS 39. CLOTHING.) WORLD'S STAR KNITTING COMPANY, Bay City, Mich. Filed Mar. 17, 1911.



No claim being made to the words "Mills—From the Mill to the Home."
Particular description of goods.—Shirts, Drawers, and Union Suits, Made Wholly or Partly of Textile and Knitted Fabrics, and Hosiery.
Claims use since Jan. 1, 1895.

Ser. No. 58,128. (CLASS 12. CONSTRUCTION MATERIALS.) NEWARK HAIR FELT CO., Newark, N. J. Filed Aug. 10, 1911.

S&M

Particular description of goods.—Hair Felt for Use in Insulation for Covering Cold-Water Pipes and Lining Refrigerator-Cars.
Claims use since May 15, 1910.

Ser. No. 59,811. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PILLSBURY FLOUR MILLS COMPANY, Minneapolis, Minn. Filed Nov. 20, 1911.



Particular description of goods.—Wheat-Meal.
Claims use since Oct. 10, 1911.

Ser. No. 60,401. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) ALBERT T. SCHLICHTING, Newark, N. J. Filed Dec. 21, 1911.



Particular description of goods.—Metal-Polishes.
Claims use since Jan. 15, 1906.

Ser. No. 62,166. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y. Filed Mar. 14, 1912.

OREO

Particular description of goods.—Biscuit.
Claims use since Mar. 6, 1912.

Ser. No. 62,548. (CLASS 39. CLOTHING.) HYGIENIC FIBRE COMPANY, New York, N. Y. Filed Mar. 20, 1912.

K BAND

No claim being made herein to the word "Band."
Particular description of goods.—Sanitary Napkins.
Claims use since prior to September, 1906.

Ser. No. 63,055. (CLASS 37. PAPER AND STATIONERY.) JOSEF MAYER, Hohenaschau, Bavaria, Germany. Filed May 20, 1912.

Ex epistolis

Particular description of goods.—Letter-Paper and Envelops.
Claims use since Feb. 6, 1912.

Ser. No. 64,234. (CLASS 19. CONSTRUCTION MATERIALS.) PETROSOTE MANUFACTURING CO., Lincoln, Nebr. Filed June 17, 1912.

Petrosote

Particular description of goods.—A Coal-Tar Preservative for Use in the Preservation of Wood and Building Material.
Claims use since Jan. 1, 1908.

Ser. No. 64,259. (CLASS 37. PAPER AND STATIONERY.) UNITED AUTOGRAPHIC REGISTER COMPANY, Chicago, Ill. Filed June 18, 1912.

Autaco

Particular description of goods.—Writing-Pads, Manifolding-Paper, and Print-Paper in Rolls for Use in Autographic Registers and Typewriters.
Claims use since about February, 1912.

Ser. No. 64,471. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MARK CROSS COMPANY, New York, N. Y. Filed June 20, 1912. Under ten-year proviso.

CROSS

Particular description of goods.—Razors, Scissors, Pocket-Knives, and Knives Made of Base Metal for Table and Domestic Use.
Claims use since Jan. 1, 1912.

Ser. No. 64,515. (CLASS 39. CLOTHING.) MOORE AND PRESSEN, New York, N. Y. Filed July 19, 1912.

MF

Particular description of goods.—Hosiery.
Claims use since July 1, 1910.

Ser. No. 64,699. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH J. PAYNE, Hamilton, Ohio. Filed Sept. 9, 1912. Under ten-year proviso.



Particular description of goods.—A Medicinal Compound Used as a Remedy for Rheumatism.
Claims use since July 1, 1882.

Ser. No. 65,709. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SCHÜLKE & MAYR, Hamburg, Germany. Filed Sept. 12, 1912.

Grotan

Particular description of goods.—Disinfectants and Antiseptics.
Claims use since Feb. 15, 1906.

Ser. No. 66,364. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) J. D. RIEDEL AKTIENGESELLSCHAFT, Berlin, Germany. Filed Oct. 19, 1912.

Hexal.

Particular description of goods.—Internal Disinfectants for Uric-Acid Diathesis and Genito-Urinary Inflammations
Claims use since July 14, 1911.

Ser. No. 66,771. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE TURKENE MEDICAL COMPANY, Minneapolis, Minn. Filed Nov. 9, 1912.



No claim being made to the word "Constantinople."
Particular description of goods.—A Remedy Used in the Treatment of Rheumatism and Colds.
Claims use since Apr. 1, 1909.

Ser. No. 66,929. (CLASS 12. CONSTRUCTION MATERIALS.) THE AMERICAN ROOFING CO., INC., Kansas City, Mo. Filed Nov. 15, 1912.

Arcotile

The word "Tile" being disclaimed.
Particular description of goods.—Asphalt Shingles.
Claims use since Sept. 6, 1912.

Ser. No. 67,314. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) UNIVERSAL MOTOR TRUCK COMPANY, Detroit, Mich. Filed Dec. 9, 1912.

Universal

Particular description of goods.—Motor Vehicles, Trucks, Running-Gears, Chassis, and Bodies.
Claims use since on or about Dec. 1, 1910.

Ser. No. 67,661. (CLASS 2. RECEPTACLES.) AMERICAN CAN COMPANY, New York, N. Y. Filed Jan. 2, 1913.

CANCO

Particular description of goods.—Friction-Top Cans, Coffee-Cans, Spice-Cans, Baking-Powder Cans, Varnish-Cans, Squeeze-Top Cans, Oil-Cans, Syrup-Cans, Olive-Oil Cans, Cracker-Cans, Paint-Cans, Pails, Butchers' Supply-Pails, Five-Gallon Cans, Wire-Top Cans, Open-Top Cans, Square Cans.
Claims use since July 1, 1912.

Ser. No. 67,668. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PETER BURNS, Washington, D. C. Filed Jan. 2, 1913.

MAIDEN

Particular description of goods.—Ointment.
Claims use since Aug. 1, 1912.

Ser. No. 67,745. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) H. DIEDERICHSEN & Co., Hamburg, Germany. Filed Jan. 6, 1913.



The Chinese characters in which, translated into English, mean "Great Prosperity."
Particular description of goods.—Eggs, Egg Products in Dry, Liquid, Ground, or Pulverized State for Eating and Industrial Purposes, Egg-Yolks, Albumin.
Claims use since Sept. 15, 1912.

Ser. No. 67,948. (CLASS 12. CONSTRUCTION MATERIALS.) NEWAYGO PORTLAND CEMENT COMPANY, Newaygo, Mich. Filed Jan. 16, 1913.



Particular description of goods.—Portland Cement.
Claims use since Aug. 1, 1912.

Ser. No. 67,984. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) FLEMISH ART COMPANY, New York, N. Y. Filed Jan. 18, 1913.



No claim being made to the word "Pyro."
Particular description of goods.—Pyrographic Devices and Apparatus.
Claims use since Feb. 1, 1912.

Ser. No. 67,986. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) FLEMISH ART COMPANY, New York, N. Y. Filed Jan. 18, 1913.



No claim being made to the word "Pyro."
Particular description of goods.—Pyrographic Devices and Apparatus.
Claims use since Feb. 1, 1912.

Ser. No. 68,034. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. M. GALT & Co., Washington, D. C. Filed Jan. 21, 1913.

GOLDEN HILL

Particular description of goods.—Wheat-Flour.
Claims use since the year 1883.

Ser. No. 68,048. Renewal. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) MISSOURI MEERSCHAUM COMPANY, Washington, Mo. Filed Jan. 22, 1913.

MISSOURI MEERSCHAUM CO.

Particular description of goods.—Corncob Pipes.
Claims use since Nov. 1, 1879.

Ser. No. 68,055. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE DUNLOP PNEUMATIC TYRE CO. LTD., London, England. Filed Jan. 22, 1913.

RAF

Particular description of goods.—Wheels (Metal) for Motor-Cars.
Claims use since about February, 1912.

Ser. No. 68,301. (CLASS 31. FILTERS AND REFRIGERATORS.) THE WISCONSIN CHATTING CO., New London, Wis. Filed Feb. 3, 1913.

De Luxe

Particular description of goods.—Refrigerators.
Claims use since Jan. 1, 1913.

Ser. No. 68,517. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) FRANK JAGER, Chicago, Ill. Filed Feb. 12, 1913.



The trade-mark consists of a representation of the capital letter "J," having intertwined on the upper portion thereof the capital letter "S," of lesser prominence therefore than the said capital letter "J." The essential feature of the trade-mark is the letter "J," carrying thereon the capital letter "S."
Particular description of goods.—Railway-Car-Door Metal Castings.
Claims use since Jan. 1, 1913.

Ser. No. 68,565. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HERMAN C. MICHELSON, Detroit, Mich. Filed Feb. 15, 1913.

Louise

Particular description of goods.—Candies.
Claims use since Dec. 15, 1912.

Ser. No. 68,660. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. J. BADENOCH CO., Chicago, Ill. Filed Feb. 18, 1913.

Graingold

Particular description of goods.—Horse and Cattle Feed.
Claims use since Feb. 1, 1912.

Ser. No. 68,642. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SCHÜLKE & MAYR, Hamburg, Germany. Filed Feb. 20, 1913.

Sagrotan

Particular description of goods.—Disinfectants and Antiseptics.
Claims use since Aug. 15, 1912.

Ser. No. 68,654. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) HERBERT LEE HERRING, Atlanta, Ga. Filed Feb. 21, 1913.

Bess-Co

The word "Bess-Co."
Particular description of goods.—A Non-Alcoholic Soda-Fountain Beverage, and Tablets, Being a Confection in Concentrated Form of the Said Beverage. The Drink is Sold in Syrup Form to be Used at Soda-Founts and Also in Extract Form (Concentrated) for the Manufacture of the Above-Mentioned Syrup, Which is Made into Syrup Form by the Addition of Sugar and Water.
Claims use since January, 1913.

Ser. No. 68,680. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE DUCHESS LULU COMPANY, Grand Rapids, Mich. Filed Feb. 24, 1913.



The picture being a pen-drawing from a portrait of Lulu L. Bradshaw.
Particular description of goods.—Toilet Cream and Complexion-Powder.
Claims use since Jan. 31, 1913.

Ser. No. 68,929. (CLASS 38. PRINTS AND PUBLICATIONS.) THOMSON & BURTON CO., Chicago, Ill. Filed Mar. 8, 1913.

Profitable Retailing

Particular description of goods.—A Monthly Periodical.
Claims use since Jan. 31, 1912.

Ser. No. 68,942. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ABE L. HOFFMAN, Brainerd, Minn. Filed Mar. 10, 1913.

WHITE WAY

Particular description of goods.—A Liquid for Plating Brass and Copper Articles.
Claims use since on or about Feb. 6, 1913.

Ser. No. 69,077. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BORDEN MILK COMPANY, LIMITED, Montreal, Canada. Filed Mar. 17, 1913.



Particular description of goods.—Condensed Milk.
Claims use since Aug. 3, 1888.

Ser. No. 69,113. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PARRISH BROTHERS, INC., Baltimore, Md. Filed Mar. 17, 1913. Under ten-year proviso.

AMERICAN

Particular description of goods.—Pickle-Spice.
Claims use since May 26, 1890.

Ser. No. 69,178. (CLASS 38. PRINTS AND PUBLICATIONS.) COUNTRY LIFE PUBLISHING COMPANY, San Francisco, Cal. Filed Mar. 19, 1913. Under ten-year proviso.

ORCHARD and FARM

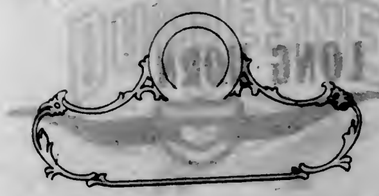
Particular description of goods.—A Magazine.
Claims use since the year 1888.

Ser. No. 69,297. (CLASS 37. PAPER AND STATIONERY.) THE MULTIPOST COMPANY, Rochester, N. Y. Filed Mar. 24, 1913.

MULTIPOST

Particular description of goods.—Stamp-Affixers.
Claims use since Nov. 1, 1910.

Ser. No. 69,319. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) THE EASIEST WAY MANUFACTURING COMPANY, Sandusky, Ohio. Filed Mar. 25, 1913.



Particular description of goods.—Laundry Washing-Machines.
Claims use since Sept. 17, 1912.

Ser. No. 68,064. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. M. GALT & Co., Washington, D. C. Filed Jan. 21, 1913.

GOLDEN HILL

Particular description of goods.—Wheat-Flour.
Claims use since the year 1863.

Ser. No. 68,048. Renewal. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) MISSOURI MEERSCHAUM COMPANY, Washington, Mo. Filed Jan. 22, 1913.

MISSOURI MEERSCHAUM

Particular description of goods.—Corncob Pipes.
Claims use since Nov. 1, 1879.

Ser. No. 68,055. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE DUNLOP PNEUMATIC TYRE CO. LTD., London, England. Filed Jan. 22, 1913.

RAF

Particular description of goods.—Wheels (Metal) for Motor-Cars.
Claims use since about February, 1912.

Ser. No. 68,301. (CLASS 31. FILTERS AND REFRIGERATORS.) THE WISCONSIN HEATING Co., New London, Wis. Filed Feb. 3, 1913.

De Luxe

Particular description of goods.—Refrigerators.
Claims use since Jan. 1, 1913.

Ser. No. 68,517. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) FRANK JAGER, Chicago, Ill. Filed Feb. 12, 1913.



The trade-mark consists of a representation of the capital letter "J," having intertwined on the upper portion thereof the capital letter "S," of lesser prominence therefore than the said capital letter "J." The essential feature of the trade-mark is the letter "J," carrying thereon the capital letter "S."
Particular description of goods.—Railway-Car-Door Metal Castings.
Claims use since Jan. 1, 1913.

Ser. No. 68,565. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) HERMAN C. MICHELSON, Detroit, Mich. Filed Feb. 15, 1913.

Louise

Particular description of goods.—Candies.
Claims use since Dec. 15, 1912.

Ser. No. 68,600. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. J. BADENOCH Co., Chicago, Ill. Filed Feb. 18, 1913.

Graingold

Particular description of goods.—Horse and Cattle Feed.
Claims use since Feb. 1, 1912.

Ser. No. 68,642. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SCHÜLKE & MAYR, Hamburg, Germany. Filed Feb. 20, 1913.

Sagrotan

Particular description of goods.—Disinfectants and Antiseptics.
Claims use since Aug. 15, 1912.

Ser. No. 68,654. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) HERBERT LEE HERRING, Atlanta, Ga. Filed Feb. 21, 1913.

Bess-Co

The word "Bess-Co."
Particular description of goods.—A Non-Alcoholic Soda-Fountain Beverage, and Tablets, Being a Confection in Concentrated Form of the Said Beverage. The Drink is Sold in Syrup Form to be Used at Soda-Founts and Also in Extract Form (Concentrated) for the Manufacture of the Above-Mentioned Syrup, Which is Made into Syrup Form by the Addition of Sugar and Water.
Claims use since January, 1913.

Ser. No. 68,680. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE DUCHESS LULU COMPANY, Grand Rapids, Mich. Filed Feb. 24, 1913.



The picture being a pen-drawing from a portrait of Lulu L. Bradshaw.
Particular description of goods.—Toilet Cream and Complexion-Powder.
Claims use since Jan. 31, 1913.

Ser. No. 68,929. (CLASS 38. PRINTS AND PUBLICATIONS.) THOMSON & BURTON Co., Chicago, Ill. Filed Mar. 8, 1913.

Profitable Retailing

Particular description of goods.—A Monthly Periodical.
Claims use since Jan. 31, 1912.

Ser. No. 68,942. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ABE L. HOFFMAN, Brainerd, Minn. Filed Mar. 10, 1913.

WHITE WAY

Particular description of goods.—A Liquid for Plating Brass and Copper Articles.
Claims use since on or about Feb. 6, 1913.

Ser. No. 69,077. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BORDEN MILK COMPANY, LIMITED, Montreal, Canada. Filed Mar. 17, 1913.



Particular description of goods.—Condensed Milk.
Claims use since Aug. 3, 1888.

Ser. No. 69,113. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PARRISH BROTHERS, INC., Baltimore, Md. Filed Mar. 17, 1913. Under ten-year proviso.

AMERICAN

Particular description of goods.—Pickle-Spice.
Claims use since May 26, 1890.

Ser. No. 69,178. (CLASS 38. PRINTS AND PUBLICATIONS.) COUNTRY LIFE PUBLISHING COMPANY, San Francisco, Cal. Filed Mar. 19, 1913. Under ten-year proviso.

ORCHARD and FARM

Particular description of goods.—A Magazine.
Claims use since the year 1888.

Ser. No. 69,297. (CLASS 37. PAPER AND STATIONERY.) THE MULTIPOST COMPANY, Rochester, N. Y. Filed Mar. 24, 1913.

MULTIPOST

Particular description of goods.—Stamp-Affixers.
Claims use since Nov. 1, 1910.

Ser. No. 69,319. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) THE EASIEST WAY MANUFACTURING COMPANY, Sandusky, Ohio. Filed Mar. 25, 1913.



Particular description of goods.—Laundry Washing-Machines.
Claims use since Sept. 17, 1912.

Ser. No. 69,398. (CLASS 12. CONSTRUCTION MATERIALS.) JOHN ANDREW SCHARWATH, New York, N. Y. Filed Mar. 28, 1913.



Particular description of goods.—Fire and Water Proof Air-Cell Pipe-Covering.
Claims use since about March, 1912.

Ser. No. 69,412. (CLASS 39. CLOTHING.) BAILL BROTHERS, New York, N. Y. Filed Mar. 29, 1913.



Particular description of goods.—Felt, Straw, Cloth, and Silk Hats and Caps, Hosiery, Knitted and Woven Underwear, Pajamas, Outer Shirts, Sweaters, Outer and Under Suits, Bath-Robes, and Waterproof Coats for Men, Hats, Shirt and Under Waists, Cloaks, and Outer and Under Suits and Knitted and Woven Underwear for Women.
Claims use since Mar. 12, 1913.

Ser. No. 69,452. (CLASS 38. PRINTS AND PUBLICATIONS.) BROWN & BIGELOW, St. Paul, Minn. Filed Mar. 31, 1913.

The Business Builder

Particular description of goods.—A Monthly Periodical.
Claims use since March, 1906.

Ser. No. 69,464. (CLASS 10. FERTILIZERS.) INDUSTRIAL COTTON OIL COMPANY, Houston, Tex. Filed Mar. 31, 1913.

LONG HORN

Particular description of goods.—Fertilizers.
Claims use since Feb. 24, 1913.

Ser. No. 69,486. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.



Particular description of goods.—Salt, Laundry Starch, Cooking-Soda, and Bluing.
Claims use since about Jan. 1, 1908.

Ser. No. 69,527. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE COLORADO SANITARIUM FOOD COMPANY, Boulder, Colo. Filed Apr. 2, 1913.

Branola

Particular description of goods.—A Cereal Breakfast Food.
Claims use since Jan. 1, 1908.

Ser. No. 69,640. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) PACIFIC NOVELTY COMPANY, New York, N. Y. Filed Apr. 7, 1913.



Particular description of goods.—Hair-Brushes, Nail-Brushes, Toilet-Brushes, Cloth-Brushes, and Hat-Brushes.
Claims use since on or about July 15, 1912.

Ser. No. 69,670. (CLASS 12. CONSTRUCTION MATERIALS.) WARNER-QUINLAN ASPHALT COMPANY, Syracuse, N. Y. Filed Apr. 8, 1913.



Particular description of goods.—Asphaltum.
Claims use since about Aug. 15, 1912.

Ser. No. 69,685. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SELDNER & ENEQUIST, New York, N. Y. Filed Apr. 9, 1913.

COLLO-SOL

Particular description of goods.—A Solution Designed to Accelerate the Preparation of Photographic Collodion.
Claims use since Feb. 3, 1913.

Ser. No. 69,706. (CLASS 43. THREAD AND YARN.) S. MANLOVE & SONS LTD., Manchester, England. Filed Apr. 10, 1913. Under ten-year proviso.



No claim of exclusive right is made to any of the letter-press appearing on the said trade-mark except in so far as it consists of applicant's own name and address or the foreign equivalent thereof.
Particular description of goods.—Sewing-Cotton on Spools or Reels.
Claims use since June 27, 1892.

Ser. No. 69,707. (CLASS 43. THREAD AND YARN.) S. MANLOVE & SONS LTD., Manchester, England. Filed Apr. 10, 1913. Under ten-year proviso.



No claim of exclusive right is made to any of the letter-press appearing on the said trade-mark except in so far as it consists of applicant's own name and address or the foreign equivalent thereof.
Particular description of goods.—Sewing-Cotton on Spools or Reels.
Claims use since June 27, 1892.

Ser. No. 69,715. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE AMERICAN BRASS COMPANY, Waterbury, Conn. Filed Apr. 11, 1913.



Particular description of goods.—Electric Wire and Cables.
Claims use since the year 1881.

Ser. No. 69,751. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE SNOW FLAKE AXLE GREASE COMPANY, Fitchburg, Mass. Filed Apr. 12, 1913.

SIGMA

Particular description of goods.—Soap.
Claims use since May 1, 1912.

Ser. No. 69,817. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) P. BAILLY & CIE., Paris, France. Filed Apr. 16, 1913. Under ten-year proviso.

GUYOT

Particular description of goods.—Shoulder-Braces and Suspenders.
Claims use since Jan. 29, 1857.

Ser. No. 69,818. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) P. BAILLY & CIE., Paris, France. Filed Apr. 16, 1913. Under ten-year proviso.

BRETELLES HYGIÉNIQUES

Particular description of goods.—Shoulder-Braces and Suspenders.
Claims use since about the 29th of January, 1857.

Ser. No. 69,831. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE ROESSLER & HASSLACHER CHEMICAL CO., New York, N. Y. Filed Apr. 16, 1913.

CWC

Particular description of goods.—Carbolic Acid.
Claims use since Oct. 1, 1912.

Ser. No. 69,865. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE PITTSBURGH DRY GOODS COMPANY, Pittsburgh, Pa. Filed Apr. 17, 1913.



Particular description of goods.—Wool Blankets.
Claims use since January, 1884.

Ser. No. 69,875. (CLASS 47. WINES.) ADOLPH VOLTTER, New York, N. Y. Filed Apr. 17, 1913.

STREGA

Particular description of goods.—Wines.
Claims use since March, 1911.

Ser. No. 69,889. (CLASS 17. TOBACCO PRODUCTS.) GEORGE FRANK DAVENPORT, Boston, Mass. Filed Apr. 18, 1913. Under ten-year proviso.

ANNIE PIXLEY

Particular description of goods.—Cigars, Cigarettes, Smoking, Chewing, and Snuff Tobacco.
Claims use since Nov. 29, 1889.

Ser. No. 69,890. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) COLONEL DAVIS, Philadelphia, Pa. Filed Apr. 18, 1913.



Particular description of goods.—A Liniment for Frosted Feet and Chilblains and a Salve for Corns.
Claims use since Feb. 10, 1913.

Ser. No. 69,907. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE SINCLAIR MANUFACTURING COMPANY, Toledo, Ohio. Filed Apr. 18, 1913.



Particular description of goods.—Chlorid of Lime, Concentrated Lye, Powdered Borax, and Ammonia.
Claims use since September, 1911.

Ser. No. 69,933. (CLASS 37. PAPER AND STATIONERY.) ADIRONDACK TISSUE PAPER CO., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Nov. 24, 1912.

Ser. No. 69,934. (CLASS 37. PAPER AND STATIONERY.) ADIRONDACK TISSUE PAPER CO., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Nov. 24, 1912.

Ser. No. 69,935. (CLASS 37. PAPER AND STATIONERY.) ADIRONDACK TISSUE PAPER CO., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Nov. 24, 1912.

Ser. No. 69,936. (CLASS 37. PAPER AND STATIONERY.) ADIRONDACK TISSUE PAPER CO., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Nov. 24, 1912.

Ser. No. 69,969. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Apr. 21, 1913.

LOTUS

Particular description of goods.—Toilet-Paper.
Claims use since Feb. 4, 1911.

Ser. No. 69,970. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since May 20, 1912.

Ser. No. 69,971. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Dec. 2, 1912.

Ser. No. 69,973. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Apr. 21, 1913.

CHEVIOT

Particular description of goods.—Toilet-Paper.
Claims use since Mar. 4, 1910.

Ser. No. 69,974. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Apr. 21, 1913.

EXCHANGE

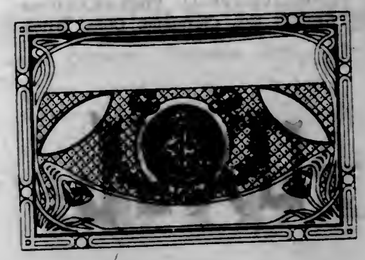
Particular description of goods.—Toilet-Paper.
Claims use since Jan. 1, 1906.

Ser. No. 69,975. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Apr. 1, 1913.

Ser. No. 69,976. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Jan. 19, 1911.

Ser. No. 69,991. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ADOLPH KEMPLER, Philadelphia, Pa. Filed Apr. 22, 1913.

CAFAST

Particular description of goods.—An Ingredient for Coffee.
Claims use since Jan. 5, 1912.

Ser. No. 70,012. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDREW H. JONES, Louisville, Ky. Filed Apr. 23, 1913.

CAR-TEUR-O

Particular description of goods.—Blood-Purifier.
Claims use since Apr. 14, 1913.

Ser. No. 70,022. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) TAILBY-NASON COMPANY, South Berwick, Me., and Boston, Mass. Filed Apr. 23, 1913.

MINTO-PAYES

Particular description of goods.—Digestive Tablets.
Claims use since on or about Apr. 12, 1913.

Ser. No. 70,027. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FORRESTER REMEDY CO., Cleveland, Ohio. Filed Apr. 24, 1913.

OXEL

Particular description of goods.—Ointment.
Claims use since Mar. 1, 1913.

Ser. No. 70,028. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN HOEFFLER, Cleveland, Ohio. Filed Apr. 24, 1913.



The portrait being that of myself, associated with a facsimile of my signature, together with the words "St. Johannes Salve," no claim being made to the exclusive use of the words "St. Johannes Salve."
Particular description of goods.—An Ointment.
Claims use since Mar. 22, 1913.

Ser. No. 70,062. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE NATIONAL PAINT & VARNISH COMPANY, Cleveland, Ohio. Filed Apr. 25, 1913.

WARRIOR

Particular description of goods.—Paints for Buildings of All Kinds.
Claims use since about Feb. 28, 1907.

Ser. No. 70,063. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE NATIONAL PAINT & VARNISH COMPANY, Cleveland, Ohio. Filed Apr. 25, 1913.

CREOLASTIC

Particular description of goods.—Paints for Metal Surfaces.
Claims use since about Feb. 19, 1909.

Ser. No. 70,074. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEON BECKER, San Francisco, Cal. Filed Apr. 26, 1913.

HERBEROI

Particular description of goods.—A Hair-Grower and Hair and Scalp Remedy.
Claims use since Apr. 10, 1913.

Ser. No. 70,116. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PEARSON'S ANTISEPTIC COMPANY, LIMITED, London, England. Filed Apr. 29, 1913.

PACOLOL

Particular description of goods.—A Disinfectant.
Claims use since Aug. 9, 1912.

Ser. No. 70,133. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HELLER & LONG, New York, N. Y. Filed Apr. 30, 1913.

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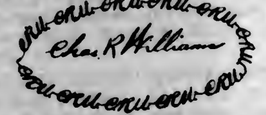
Particular description of goods.—Handkerchiefs.
Claims use since on or about Apr. 1, 1913.

Ser. No. 70,137. (CLASS 39. CLOTHING.) MAGRANE HOUSTON COMPANY, Boston, Mass. Filed Apr. 30, 1913.

HONESTY
TRADE MARK
HOSIERY
Your Word is Enough

The words "Hosiery," "Your Word is Enough," and "Trade-Mark" being disclaimed.
Particular description of goods.—Hosiery.
Claims use since Apr. 20, 1913.

Ser. No. 70,144. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES R. WILLIAMS, Baltimore, Md. Filed Apr. 30, 1913.



The signature shown being a facsimile of my signature.
Particular description of goods.—A Remedy for Diseases of Hogs.
Claims use since Apr. 26, 1913.

Ser. No. 70,154. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) LYDON MANUFACTURING COMPANY, Chicago, Ill. Filed May 1, 1913.

Speedler

Particular description of goods.—Valves for Gas-Engines.
Claims use since Feb. 1, 1913.

Ser. No. 70,159. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J. Filed May 1, 1913.

S

Particular description of goods.—Sewing-Machine Needles.
Claims use since on or about May 8, 1905.

Ser. No. 70,163. (CLASS 39. CLOTHING.) "SEMPERIT" OESTERREICHISCH-AMERIKANISCHE GUMMIWERKE AKTIENGESELLSCHAFT, Vienna, Austria. Filed May 1, 1913.

SEMPERIT

Particular description of goods.—Rubber Shoes, Rubber Heels for Shoes and Boots, Shoes and Boots Having Rubber Heels and Soles, Shoes and Boots Having Rubber Heels and Leather Soles, and Rubber Gloves.
Claims use since about July 2, 1906.

Ser. No. 70,188. (CLASS 39. CLOTHING.) W. S. PECK & Co., Syracuse, N. Y. Filed May 2, 1913.

ASCOT

Particular description of goods.—Suits—Namely, Coats, Waistcoats, and Trousers—and Overcoats.
Claims use since Feb. 28, 1913.

Ser. No. 70,259. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE BLANTON & MCKAY COMPANY, Cincinnati, Ohio. Filed May 6, 1913.

Fayway

Particular description of goods.—Butter-Separators, Churns, and Machines for Mixing Milk Products.
Claims use since Mar. 26, 1913.

Ser. No. 70,305. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE ORVILLE SIMPSON COMPANY, Cincinnati, Ohio. Filed May 8, 1913.

"ROTEX"

Particular description of goods.—Milling-Machines.
Claims use since Apr. 14, 1913.

Ser. No. 70,358. (CLASS 41. CANES, PARASOLS, AND UMBRELLAS.) F. REVEL PERE & FILS, Lyon, France. Filed May 10, 1913.



Particular description of goods.—Parasols and Umbrellas.
Claims use since about Jan. 1, 1883.

Ser. No. 70,367. (CLASS 36. CLOTHING.) CHIPMAN, HARWOOD & CO., Boston, Mass. Filed May 12, 1913.

THE

MERRY-GO-ROUND

Particular description of goods.—Misses' and Children's Leather and Canvas Shoes.
Claims use since January, 1913.

Ser. No. 70,437. (CLASS 48. MALT EXTRACTS AND LIQUORS.) THE TERRE HAUTE BREWING COMPANY, Terre Haute, Ind. Filed May 15, 1913.



Particular description of goods.—Beer.
Claims use since May 2, 1913.

Ser. No. 70,455. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) STONE HILL WINE COMPANY, Hermann, Mo. Filed May 16, 1913. Under ten-year provis-

GASCONADE

Particular description of goods.—Straight, Blended, Compounded, and Imitation Whiskies.
Claims use since prior to 1878.

TRADE-MARKS

REGISTERED JUNE 10, 1913.

91,926. INSECTIFUGE. THE ABSORENE MFG. CO., St. Louis, Mo.
Filed June 14, 1911. Serial No. 57,029. PUBLISHED APRIL 1, 1913.

91,927. SASH-CORD MANUFACTURED FROM VEGETABLE FIBER. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and New York, N. Y.
Filed March 9, 1912. Serial No. 62,069. PUBLISHED APRIL 1, 1913.

91,928. CLOTHES-LINES MANUFACTURED FROM VEGETABLE FIBER. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and New York, N. Y.
Filed March 9, 1912. Serial No. 62,066. PUBLISHED APRIL 1, 1913.

91,929. CLOTHES-LINES MANUFACTURED FROM VEGETABLE FIBER. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and New York, N. Y.
Filed March 9, 1912. Serial No. 62,065. PUBLISHED APRIL 1, 1913.

91,930. CLOTHES-LINES MANUFACTURED FROM VEGETABLE FIBER. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and New York, N. Y.
Filed March 9, 1912. Serial No. 62,064. PUBLISHED APRIL 8, 1913.

91,931. CLOTHES-LINES MANUFACTURED FROM VEGETABLE FIBER. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and New York, N. Y.
Filed March 9, 1912. Serial No. 62,063. PUBLISHED APRIL 8, 1913.

91,932. CLOTHES-LINES MANUFACTURED FROM VEGETABLE FIBER. AMERICAN MANUFACTURING COMPANY, Boston, Mass., and New York, N. Y.
Filed March 9, 1912. Serial No. 62,062. PUBLISHED APRIL 8, 1913.

91,933. REMEDY FOR CONSTIPATION, BILIOUSNESS, GRIPPE, COLDS, AND CORYZA. THE ANTI-KAMNIA CHEMICAL COMPANY, St. Louis, Mo.
Filed January 17, 1913. Serial No. 67,959. PUBLISHED APRIL 8, 1913.

91,934. SKIN REMEDY TERMED REJUVENATING MILK. SOPHIE C. AUS, New York, N. Y.
Filed January 25, 1913. Serial No. 68,110. PUBLISHED APRIL 8, 1913.

91,935. CLEANSING PREPARATION. AUSTIN SOAP WORKS, Chicago, Ill.
Filed May 4, 1912. Serial No. 63,340. PUBLISHED APRIL 8, 1913.

91,936. CERTAIN MEDICINES AND PHARMACEUTICAL PREPARATIONS. J. C. AYER COMPANY, Lowell, Mass.
Filed March 17, 1913. Serial No. 69,073. PUBLISHED APRIL 8, 1913.

91,937. CERTAIN NAMED CLOTHING FOR MEN, BOYS, WOMEN, AND GIRLS. JESSIE H. BANCROFT, New York, N. Y.
Filed February 11, 1913. Serial No. 68,494. PUBLISHED APRIL 8, 1913.

91,938. PUSHMOBILES. JAMES BARKER, Philadelphia, Pa.
Filed December 11, 1912. Serial No. 67,338. PUBLISHED APRIL 1, 1913.

91,939. CERTAIN GAMES AND ACCESSORIES FOR SAME. JOHN HOBBS BEAMISH, London, England.
Filed August 23, 1912. Serial No. 65,385. PUBLISHED APRIL 8, 1913.

91,940. BICYCLES. BELKNAP HARDWARE AND MANUFACTURING COMPANY, Louisville, Ky.
Filed December 6, 1911. Serial No. 60,107. PUBLISHED APRIL 1, 1913.

91,941. SHEATHING-PAPERS. BERLIN MILLS COMPANY, Portland, Me.
Filed October 26, 1912. Serial No. 66,540. PUBLISHED APRIL 8, 1913.

91,942. REMEDY FOR RHEUMATISM. CHESTER J. BROWN, Newburgh, N. Y.
Filed January 20, 1913. Serial No. 68,006. PUBLISHED APRIL 8, 1913.

91,943. STICKY DEVICES FOR CATCHING FLIES. THE BROWN MANUFACTURING COMPANY, LTD., Letchworth, England.
Filed May 23, 1912. Serial No. 63,734. PUBLISHED APRIL 8, 1913.

91,944. COAL. CITY COAL COMPANY, Akron, Ohio.
Filed November 23, 1912. Serial No. 67,066. PUBLISHED APRIL 8, 1913.

91,945. COTTON GOODS IN THE PIECE. COHN HALL MARX CO., New York, N. Y.
Filed March 11, 1913. Serial No. 68,959. PUBLISHED APRIL 8, 1913.

91,946. LADIES' DRESSES AND GOWNS. COOPER-DE LERY GOWN COMPANY, INC., New York, N. Y.
Filed March 5, 1913. Serial No. 68,841. PUBLISHED APRIL 8, 1913.

91,947. PERIODICAL MAGAZINE OF MERCHANDIZING METHODS. CO-OPERATIVE MERCHANDISING SERVICE CO., New York, N. Y.
Filed November 7, 1912. Serial No. 66,750. PUBLISHED APRIL 1, 1913.

91,948. CERTAIN NAMED FURNITURE AND UPHOLSTERY. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed May 13, 1911. Serial No. 56,475. PUBLISHED APRIL 8, 1913.

91,949. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed May 13, 1911. Serial No. 56,476. PUBLISHED APRIL 8, 1913.

91,950. CERTAIN NAMED CLOTHING. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed May 13, 1911. Serial No. 56,477. PUBLISHED APRIL 8, 1913.

91,951. CERTAIN NAMED FURNITURE AND UPHOLSTERY. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed November 28, 1911. Serial No. 59,978½. PUBLISHED APRIL 1, 1913.

91,952. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS. DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany.
Filed November 28, 1911. Serial No. 59,982½. PUBLISHED APRIL 8, 1913.

91,953. REMEDY FOR RHEUMATISM, GOUT, URIC ACID, AND NEURALGIA. ADELAIDE C. DREW, Boston, Mass.
Filed November 13, 1912. Serial No. 66,881. PUBLISHED APRIL 8, 1913.

91,954. SHOE-LACINGS, CORSET-LACINGS, UNDERWEAR-LACINGS, BLOUSE-LACINGS, AND BRAID. ELMWOOD MILLS, Providence, R. I.
Filed February 25, 1913. Serial No. 68,718. PUBLISHED APRIL 8, 1913.

91,955. PILLOWS. CHAS. EMMERICH & Co., Chicago, Ill.
Filed October 16, 1912. Serial No. 66,317. PUBLISHED APRIL 1, 1913.

91,956. MARINE REVERSE GEARS AND CLUTCHES. EVANS STAMPING & PLATING CO., Taunton, Mass.
Filed January 4, 1913. Serial No. 67,734. PUBLISHED APRIL 1, 1913.

91,957. LEATHER SHOES. THE FORBUSH SHOE COMPANY, North Grafton, Mass.
Filed March 5, 1913. Serial No. 68,844. PUBLISHED APRIL 8, 1913.

91,958. MASSAGE-CREAM. PAUL JEAN FOUQUIER, Paris, France.
Filed May 27, 1911. Serial No. 56,615. PUBLISHED FEBRUARY 13, 1912.

91,959. HOSIERY. GOTHAM SILK MFG. CO., New York, N. Y.
Filed June 15, 1912. Serial No. 64,201. PUBLISHED APRIL 8, 1913.

91,960. COTTON CLOTH AND CLOTH MADE OF CERTAIN NAMED MATERIALS. S. H. GREENE & SONS CORPORATION, Clyde, R. I.
Filed March 14, 1913. Serial No. 69,028. PUBLISHED APRIL 8, 1913.

91,961. MEN'S HALF-HOSE OR SOCKS. GUY, CURRAN & Co., Washington, D. C.
Filed March 3, 1913. Serial No. 68,815. PUBLISHED APRIL 8, 1913.

91,962. RUBBER BOOTS, SHOES, OVERSHOES, AND RUBBER-SOLED CANVAS BOOTS AND SHOES. HOOD RUBBER COMPANY, Boston, Mass.
Filed February 21, 1913. Serial No. 68,653. PUBLISHED APRIL 8, 1913.

91,963. COTTON FLANNEL AND OUTING PIECE GOODS. HUNTER MANUFACTURING & COMMISSION CO., New York, N. Y.
Filed March 5, 1913. Serial No. 68,847. PUBLISHED APRIL 8, 1913.

91,964. COTTON FLANNEL AND OUTING PIECE GOODS. HUNTER MANUFACTURING & COMMISSION CO., New York, N. Y.
Filed March 11, 1913. Serial No. 68,963. PUBLISHED APRIL 8, 1913.

91,965. CERTAIN NAMED MEN'S, WOMEN'S, AND CHILDREN'S GARMENTS. A. G. HYDE & SONS, New York, N. Y.
Filed January 24, 1913. Serial No. 68,091. PUBLISHED APRIL 8, 1913.

91,966. BRICK. HYDRAULIC PRESS BRICK CO., St. Louis, Mo.
Filed January 27, 1913. Serial No. 68,141. PUBLISHED APRIL 1, 1913.

91,967. COMPOSITION FOR RENDERING CERTAIN NAMED CONSTRUCTION MATERIALS WATERPROOF. IMPERVIOUS PRODUCTS COMPANY, New York, N. Y.
Filed May 15, 1912. Serial No. 63,558. PUBLISHED APRIL 1, 1913.

91,968. CERTAIN NAMED CLOTHING. WM. H. JACOBSEN, Minneapolis, Minn.
Filed December 24, 1912. Serial No. 67,576. PUBLISHED APRIL 8, 1913.

91,969. CORSETS. KABO CORSET COMPANY, Chicago, Ill.
Filed December 30, 1912. Serial No. 67,642. PUBLISHED APRIL 8, 1913.

91,970. CERTAIN NAMED MOTOR-VEHICLES. KEARNS MOTOR CAR COMPANY, Beavertown, Pa.
Filed May 8, 1912. Serial No. 63,412. PUBLISHED APRIL 1, 1913.

91,971. CORDS, TWINES, ROPES, AND LINES OF CERTAIN NAMED MATERIALS. HENRY C. KELLEY COMPANY, New York, N. Y.
Filed January 14, 1913. Serial No. 67,917. PUBLISHED APRIL 1, 1913.

91,972. COMPOSITION ROOFING-SHEETS. KENOVA LUMBER & SUPPLY COMPANY, Kenova, W. Va.
Filed May 15, 1912. Serial No. 63,560. PUBLISHED JULY 2, 1912.

91,973. TOYS. KOOLBITE TOY CO., Chicago, Ill.
Filed October 30, 1912. Serial No. 66,634. PUBLISHED APRIL 8, 1913.

91,974. AUTOMOBILES. LANCIA & Co., Turin, Italy.
Filed July 10, 1911. Serial No. 57,574. PUBLISHED APRIL 1, 1913.

91,975. BAKING-POWDER AND BAKING-SODA. LAYTON PURE FOOD COMPANY, St. Louis, Mo., and East St. Louis, Ill.
Filed February 10, 1913. Serial No. 68,433. PUBLISHED APRIL 8, 1913.

91,976. CORSETS. MASSACHUSETTS CORSET COMPANY, Worcester, Mass.
Filed January 18, 1913. Serial No. 67,997. PUBLISHED APRIL 8, 1913.

91,977. HEATING STOVES AND RANGES. MICHIGAN STOVE COMPANY, Detroit, Mich.
Filed February 8, 1913. Serial No. 68,405. PUBLISHED APRIL 8, 1913.

91,978. A VARNISH. MARTIN G. MOCK, Houston, Tex.
Filed July 16, 1912. Serial No. 64,798. PUBLISHED MARCH 4, 1913.

91,979. LIME. THE MOORES LIME CO., Springfield, Ohio.
Filed November 8, 1912. Serial No. 66,768. PUBLISHED APRIL 8, 1913.

91,980. UNDERWEAR—VIZ., COMBINATION-UNDERWEAR, PETTICOATS, CORSETS, WAISTS, AND BUST-CONFINERS. JENNIE B. MORRILL, Boston, Mass.
Filed January 30, 1913. Serial No. 68,212. PUBLISHED APRIL 8, 1913.

91,981. MEDICINES, PREPARATIONS, OR COMPOUNDS USED IN TREATING CERTAIN NAMED DISEASES. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,890. PUBLISHED APRIL 8, 1913.

91,982. MEDICINES OR PREPARATIONS INTENDED AS REMEDES FOR CERTAIN NAMED DISEASES. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,892. PUBLISHED APRIL 8, 1913.

91,983. MEDICINES OR PREPARATIONS DESIGNED FOR THE TREATMENT OF CERTAIN NAMED DISEASES. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,895. PUBLISHED APRIL 8, 1913.

91,984. MEDICINES AND PREPARATIONS FOR THE TREATMENT OF CERTAIN NAMED DISEASES. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,896. PUBLISHED APRIL 8, 1913.

91,985. MEDICINES AND PREPARATIONS FOR THE TREATMENT OF CERTAIN NAMED DISEASES. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,897. PUBLISHED APRIL 8, 1913.

91,986. MEDICINES, PREPARATIONS, COMPOUNDS, AND TABLETS FOR CERTAIN NAMED DISEASES. THE DR. J. H. MCLEAN MEDICINE COMPANY, St. Louis, Mo.
Filed January 13, 1913. Serial No. 67,898. PUBLISHED APRIL 8, 1913.

91,987. MATCHES. NITEDALS TÆNDSTIKFABRIK, Grönvold, near Christiania, Norway.
Filed March 7, 1912. Serial No. 62,001. PUBLISHED APRIL 8, 1913.

91,988. MATCHES. NITEDALS TÆNDSTIKFABRIK, Grönvold, near Christiania, Norway.
Filed March 7, 1912. Serial No. 62,003. PUBLISHED APRIL 8, 1913.

91,989. MATCHES. NITEDALS TÆNDSTIKFABRIK, Grönvold, near Christiania, Norway.
Filed November 12, 1912. Serial No. 66,831. PUBLISHED APRIL 8, 1913.

91,990. MATCHES. NITEDALS TÆNDSTIKFABRIK, Grönvold, near Christiania, Norway.
Filed November 12, 1912. Serial No. 66,832. PUBLISHED APRIL 8, 1913.

91,991. MATCHES. NITEDALS TÆNDSTIKFABRIK, Grönvold, near Christiania, Norway.
Filed November 12, 1912. Serial No. 66,833. PUBLISHED APRIL 8, 1913.

91,992. MATCHES. NITEDALS TÆNDSTIKFABRIK, Grönvold, near Christiania, Norway.
Filed November 12, 1912. Serial No. 66,834. PUBLISHED APRIL 8, 1913.

91,993. FERTILIZER. PACIFIC BONE COAL & FERTILIZING CO., San Francisco, Cal.
Filed June 5, 1912. Serial No. 63,991. PUBLISHED APRIL 1, 1913.

91,994. LEATHER SHOES. M. A. PACKARD CO., Brockton, Mass.
Filed May 18, 1912. Serial No. 63,630. PUBLISHED DECEMBER 24, 1912.

91,995. WINDOW-SHADE CLOTH, CARPETS, AND RUGS. PALRURA MANUFACTURING COMPANY, Orange, N. J.; Philadelphia, Pa., and New York, N. Y.
Filed February 8, 1913. Serial No. 68,409. PUBLISHED APRIL 8, 1913.

91,996. METAL CAPS, STOPPERS, AND COVERS FOR JARS, CANS, BOTTLES, AND RECEPTACLES. PARAGON METAL CAP CO., Brooklyn, N. Y.
Filed October 19, 1912. Serial No. 66,385. PUBLISHED FEBRUARY 4, 1913.

91,997. DOLLS. THE PARSONS-JACKSON CO., Cleveland, Ohio.
Filed February 17, 1912. Serial No. 61,579. PUBLISHED APRIL 1, 1913.

91,998. CEMENT USED TO CAUSE THE ADHERENCE OF CERTAIN CONSTRUCTION MATERIALS. THE PLASTICO NON-STAINING CEMENT COMPANY, Cleveland, Ohio.
Filed May 14, 1912. Serial No. 63,537. PUBLISHED NOVEMBER 12, 1912.

91,999. TONIC BLOOD-PURIFIER. A. PONTECORVO, New York, N. Y.
Filed May 3, 1911. Serial No. 56,130. PUBLISHED APRIL 8, 1913.

92,000. LINIMENTS. RHEUMOL REMEDY COMPANY, Wausau, Wis.
Filed January 7, 1911. Serial No. 53,737. PUBLISHED APRIL 8, 1913.

92,001. HAIR-DYES. GUSTAV SATTLER, New York, N. Y.
Filed July 17, 1912. Serial No. 64,788. PUBLISHED APRIL 8, 1913.

92,002. GARMENT FASTENERS AND SUPPORTERS. ISAAC SCHEINMAN, New York, N. Y.
Filed February 3, 1913. Serial No. 68,288. PUBLISHED APRIL 8, 1913.

92,003. MEDICINAL COMPOUND TO BE USED AS A REMEDY FOR RHEUMATISM. ERIC SCOW, Chicago, Ill.
Filed February 1, 1913. Serial No. 68,271. PUBLISHED APRIL 8, 1913.

92,004. CERTAIN CHEMICALLY-PREPARED SUBSTANCES FOR FILTERING PURPOSES. SEITZ-WERKE THEO & GEO SEITZ, Kreuznach, Germany.
Filed December 11, 1912. Serial No. 67,342. PUBLISHED APRIL 8, 1913.

92,005. GLASS CHIMNEYS, GLASS GLOBES, GLASS SHADES, AND GLASS REFLECTORS. SOCIÉTÉ ANONYME, CHAUFFAGE ET ÉCLAIRAGE SEPULCHRE, Herstal, near Liege, Belgium.
Filed November 17, 1908. Serial No. 38,712. PUBLISHED NOVEMBER 5, 1912.

92,006. METAL LAMP-CHIMNEYS AND METAL LAMP-REFLECTORS. SOCIÉTÉ ANONYME CHAUFFAGE ET ÉCLAIRAGE SEPULCHRE, Herstal, near Liege, Belgium.
Filed April 28, 1909. Serial No. 42,102. PUBLISHED NOVEMBER 5, 1912.

92,007. CERTAIN NAMED CLOTHING. A. G. SPALDING & BROS., Jersey City, N. J., and New York, N. Y.
Filed January 3, 1913. Serial No. 67,699. PUBLISHED APRIL 8, 1913.

92,008. COMPOSITION FOR MAKING CERTAIN NAMED CONSTRUCTION MATERIALS WATERPROOF. STANDARD PAINT COMPANY, Boundbrook, N. J., and New York, N. Y.
Filed December 20, 1912. Serial No. 67,524. PUBLISHED APRIL 1, 1913.

92,009. BLOW-GUNS. STANISLAUS KIERSKI, Minneapolis, Minn.
Filed January 25, 1913. Serial No. 68,118. PUBLISHED APRIL 8, 1913.

92,010. FIREPROOFING COMPOSITION MATERIAL USED AS A SUBSTITUTE FOR WOOD, &c. BALTHASAR SUTTER, New York, N. Y.
Filed November 22, 1912. Serial No. 67,062. PUBLISHED APRIL 8, 1913.

92,011. FLOWER, FRUIT, AND TRUCK SEEDS. GEO. TAIT & SONS, INC., Norfolk, Va.
Filed November 22, 1912. Serial No. 67,064. PUBLISHED APRIL 8, 1913.

92,012. BRICKS. THOMAS MOULDING COMPANY, Chicago, Ill.
Filed January 9, 1911. Serial No. 53,782. PUBLISHED APRIL 1, 1913.

92,013. LUMBER, FLOORING, SIDING, AND SHINGLES. THE TRANSFER LUMBER & SHINGLE CO., North Tonawanda, N. Y.
Filed January 18, 1913. Serial No. 68,003. PUBLISHED APRIL 1, 1913.

92,014. COTTON-WASTE. UNION WADDING CO., Pawtucket, R. I.
Filed September 12, 1912. Serial No. 65,705. PUBLISHED APRIL 8, 1913.

92,015. SNAP-FASTENERS. UNITED STATES FASTENER COMPANY, Portland, Me.
Filed March 5, 1913. Serial No. 68,858. PUBLISHED APRIL 8, 1913.

92,016. LAUNDRY WASHING-MACHINES. UTAHNA DEVELOPMENT COMPANY, Salt Lake City, Utah.
Filed April 26, 1912. Serial No. 63,142. PUBLISHED APRIL 1, 1913.

92,017. FIBROUS, COTTON, CANVAS, FLAX, RUBBER, AND ASBESTOS ROD-PACKING. VULCAN ASBESTOS MANUFACTURING CO., New York, N. Y.
Filed January 30, 1913. Serial 68,222. PUBLISHED APRIL 8, 1913.

92,018. SNAP-BUTTONS USED AS GARMENT-FASTENERS. WALDES & Co., Prague-Wrschowitz, Austria-Hungary.
Filed March 15, 1913. Serial No. 69,065. PUBLISHED APRIL 8, 1913.

92,019. SNAP-BUTTONS USED AS GARMENT-FASTENERS. WALDES & Co., Prague-Wrschowitz, Austria-Hungary.
Filed March 15, 1913. Serial No. 69,066. PUBLISHED APRIL 8, 1913.

92,020. SNAP-BUTTONS USED AS GARMENT-FASTENERS. WALDES & Co., Prague-Wrschowitz, Austria-Hungary.
Filed March 15, 1913. Serial No. 69,067. PUBLISHED APRIL 8, 1913.

92,021. CERTAIN CHEMICAL PREPARATIONS. NORTHAM WARREN, New York, N. Y.
Filed August 28, 1912. Serial No. 65,470. PUBLISHED APRIL 8, 1913.

92,022. TOOTH-PASTE. JAMES T. WHITE, New York, N. Y.
Filed February 7, 1913. Serial No. 68,397. PUBLISHED APRIL 8, 1913.

92,023. SHOW-CASES, COUNTERS, OFFICE-PARTITIONS, AND PRESCRIPTION DESKS, CABINETS, AND DRAWERS. CHAS. P. WHITTLE MFG. CO., Boston, Mass.
Filed December 19, 1912. Serial No. 67,508. PUBLISHED APRIL 8, 1913.

92,024. SNUFF. JOSEPH & HENRY WILSON, LTD., Sheffield, England.
Filed May 3, 1910. Serial No. 49,483. PUBLISHED APRIL 8, 1913.

92,025. HAIR-TONIC, FACE-POWDER, FACE-CREAM, AND NAIL-BLEACH. DORITHY D. WOOD, Kansas City, Mo.
Filed October 26, 1912. Serial No. 66,538. PUBLISHED APRIL 8, 1913.

LABELS

REGISTERED JUNE 10, 1913.

17,057.—*Title:* "SUPREME SODA." (For Soda Crackers.) THE MERCHANTS BISCUIT COMPANY, Denver, Colo.
Filed April 18, 1912.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE PILLARD.

Decided March 26, 1913.

1. APPLICATION—PROSECUTION—FINAL REJECTION—APPEAL.

"The mere fact that applicant had presented a claim after final rejection, which the Examiner refused to enter, would have constituted no ground for not forwarding the appeal had no reference been made to this refusal in the appeal itself. (*Ex parte Durafort*, 110 O. G., 2017, and *ex parte Bach*, 118 O. G., 1363.)"

2. SAME—SAME—SAME—SAME—ABANDONMENT.

Where after a final rejection the applicant filed an amendment directing the cancelation of the claims and the presentation of one new claim in lieu thereof and the Examiner held that this amendment could not be entered, since applicant had not complied with the provisions of Rule 68, and on the last day of the year following the final rejection applicant appealed and assigned as one of the errors refusal to admit the amendment, *Held* that the application should not have been held abandoned, but that the appeal should have been forwarded and attention merely called to the fact that one ground of the appeal presented a question not reviewable by the Examiners-in-Chief.

ON PETITION.

COIN-OPERATED CLEANING-MACHINE.

Mr. George R. Hamlin for the applicant.

MOORE, *Commissioner:*

This is a petition from the action of the Primary Examiner refusing to forward an appeal and holding the application abandoned.

The claims in this case were finally rejected on March 15, 1911. In view of an argument filed by the applicant this final rejection was withdrawn and action given on the merits of the claims as amended. After some further prosecution the claims were again finally rejected on October 18, 1911. On August 23, 1912, an amendment was filed directing the cancelation of the claims and the entry of one new claim in place thereof. On October 17, 1912, one day before the expiration of the year, the Examiner refused to enter the amendment, since it was not filed in accordance with the provisions of Rule 68, and applicant's attention was directed to the fact that the year within which responsive action should be taken would expire on one year from October 18, 1911.

On October 18, 1912, an appeal was filed, the first two grounds of which relate to the rejection of claims 1 to 4, inclusive. The third ground of the appeal reads as follows:

The Primary Examiner erred in not entering and allowing the claim presented August 23, 1912.

On the same day applicant filed an amendment directing the entry of a claim numbered 5, this claim being identical with the claim presented in the amendment of August 23, 1912. On November 12, 1912, the Examiner refused to forward the appeal, since it was accompanied by a proposed amendment, and therefore the case was not in condition for appeal, and on the further ground that the appeal presented as one of the grounds of error the refusal of the Examiner to enter and consider a claim presented after final rejection, and he held the application abandoned. After some further correspondence the present petition was filed on January 20, 1913. In his answer to the petition the Examiner points out that the refusal to cancel the claims and substitute others is a matter that cannot be properly considered on appeal and that the appeal, in effect, asks for inconsistent and contradictory remedies.

The mere fact that applicant had presented a claim after final rejection, which the Examiner refused to enter, would have constituted no ground for not forwarding the appeal had no reference been made to this refusal in the appeal itself. (*Ex parte Durafort*, 110 O. G., 2017, and *ex parte Bach*, 118 O. G., 1363.)

The Examiner was clearly right in refusing to enter the amendment, since, as applicant admitted in his letter of August 23, 1912, the final rejection was a proper one and he had not complied with the requirements of Rule 68 in presenting the amendment. It is believed, however, that the Examiner should have forwarded the appeal, answering it in the usual way so far as grounds 1 and 2 thereof were concerned and with respect to ground 3 merely calling attention to the fact that the question presented thereby is not one for consideration by the Examiners-in-Chief on appeal and that he should not have held the application abandoned.

The petition is granted to the extent indicated.

EX PARTE U. H. DUDLEY & COMPANY.

Decided May 19, 1913.

TRADE-MARK—"ARAB." FOR DATES—DESCRIPTIVE.

The word "Arab" as applied to dates *Held* descriptive, and therefore not registrable.

ON APPEAL.

TRADE-MARK FOR DATES.

Mr. Samuel F. D. Jones for the applicant.

BILLINGS, *First Assistant Commissioner:*

This is an appeal from the decision of the Examiner of Trade-Marks refusing to register as a trade-mark for dates the mark consisting of the word "Arab" and the representation of a man on horseback.

The ground of rejection is that the word "Arab" is descriptive or misdescriptive as applied to dates and that the mark is not registrable unless this word is disclaimed or removed from the drawing.

One of the definitions given in the *Century Dictionary* of the word "Arab" is:

II. *a.* Of or pertaining to the Arabs or to Arabia; Arabic; Arabian; as, an Arab steed.

One of the principal products of Arabia is dates, (*Lippincott's Gazetteer of the World.*) It is believed, therefore, that this term used upon dates clearly indicates to the purchasing public that such dates come from Arabia. If this be a fact, the mark is descriptive, and if not it is deceptive. In either case it is not registrable as presented.

The decision of the Examiner of Trade-Marks is affirmed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE HARBECK.

Decided February 3, 1913.

1. PATENTABILITY—DOUBT RESOLVED IN FAVOR OF THE APPLICANT.

"It is easy to dispose of a case, where the issue of invention is close, by holding that the advance over the prior art constitutes a mere mechanical change apparent to those skilled in the art. But, in the absence of proof to support this conclusion, and where the question of patentability is close, the doubt should be resolved in favor of the applicant. (*In re Eastwood*, 33 App. D. C., 291.)"

2. SAME—CHANGE OF MATERIAL.

"While the use of new materials to produce a known result, or of known materials to produce a new but obvious result, may not always constitute invention, if the new idea, when applied, brings success out of failure, produces a new and useful result and saving in operation or production, or efficiency instead of inefficiency, gives to the device new functions and useful properties, it is invention, and may be patented."

3. SAME—PAPER-WALL CAN.

A can-body composed of layers of paper united to each other by a fused cement *Held* patentable over the prior art.

Mr. H. N. Low and *Mr. J. W. Munday* for the appellant.

Mr. Robert F. Whitehead for the Commissioner of Patents.

VAN ORSDEL, *J.:*

This is an appeal from the Commissioner of Patents refusing a patent to appellant for a device consisting of a paper vessel, the walls of which are formed of layers of paper held together by a fused cement. The claims are as follows:

1. The vessel having walls made of layers of paper united to each other by a fused cement.

2. The can body composed of oblong layers of paper cemented to each other step fashion by a fused cement and having its stepped ends cemented together by the fusible cement and caused to adhere to each other by the application of heat.

3. The can body composed of layers of paper cemented together by fused cement and creased with three creases to facilitate bending at the corners into a square form and to flatten for shipment.

4. The can body composed of layers of paper cemented together by fused cement and creased to facilitate bending at the corners into a square form, a plurality of creases being given for each corner that the corner may be rounded to facilitate the crimping or seaming of the sheet metal heads on the body.

5. The combination of the can body made of layers of paper cemented together by fused cement and made to adhere by the application of heat and having sheet metal heads applied thereto.

6. The combination of the can body made of layers of paper cemented together by fused cement and having sheet metal heads applied thereto, said can body being made square with creased rounded corners, and said heads being rounded at the corners to correspond.

Appellant described the invention in his specification as follows:

The vessels made in this manner wherein the layers are cemented by a cement consisting of a fusible compound united by application of heat, as constradistinguished from the ordinary cements employed in similar relation, are much more thoroughly water and grease proof than such paper vessels seamed or built up by the employment of such solvent softened pastes or cements. Because, in order to harden solvent softened cement, the solvent must be dried out, which it can only do by passing through the layers of paper between which it is placed, and which escape of the solvent through the paper tends to leave both the paper and the cement in a state where they are pervious to water and grease, especially the latter. And this impervious character of the can body built up of layers of paper united by fusible cement is specially valuable where the can or vessel is to be used for containing aromatic foods, such as coffee, tea, etc., as will be readily understood.

The principle feature of the invention consists in the use of fused cement, instead of a soluble adhesive. It is claimed that all former efforts in this direction, and numerous patents are cited, have proved defective, in that soluble adhesive or cement was used, and, when the solvent evaporated or dried out, it left the walls of the vessel porous, and not impervious to gases or moisture. Overcoming this defect is the problem appellant claims to have solved. Not only is no solvent used in appellant's cement, but he claims to use a combination which gives rise to no objectionable odors when his vessel is put into use.

In all the references cited, the pastes, glues or cements used in adhering or cementing the layers of paper or other material together are softened by solvents, which require a drying out or evaporating process. Appellant's discovery, as suggested, in cementing together the layers of paper by a fusing process, consists of rolling the cemented layers of paper between heated rolls, thus eliminating the drying out or evaporating process.

No evidence was taken nor were affidavits called for in the Patent Office. The statement of appellant in his application must be accepted as true. The facts of discovery and of utility are admitted. It is not contended that impervious sheets made of layers of paper united by fused cement capable of being converted into air-tight and waterproof vessels were in prior use. The application was rejected by the Patent Office for the reason that the change from the prior art, where the sheets were made of layers of paper united by the use of soluble

cement, to the use of fused cement, which, according to the specification, marked the transition from failure to success in this art, was a mere mechanical step capable of being taken by any one skilled in the art. The references cited indicate the antiquity of the art. Numerous attempts have been made to solve the problem, but the step applicant took seems not to have suggested itself to any of them.

The most ancient reference given is the patent granted to one Jaloureau, February 10, 1863. It consisted in an—

improved process of manufacturing waterproof cement pipes—

for—

conveying and holding liquids or gases, and for other purposes, from sheets or rolls of paper, or other tissues.

He saturated the sheets of paper with an adhesive and rolled them upon a mandrel. The adhesive was composed of—

liquid, bituminous, or other equivalent mastic. * * * Bituminous or equivalent mastic or cement may be used, but bituminous mastic, made in the usual manner of asphalt or coal-tar, in admixture with earthy substances, is preferred.

He described an adhesive of such a nature that it had to be dried out. After describing the drying process, the specification continues:

After the above operation, the mastic coating is permitted to cool, which may be accelerated by a shower of cold water, and after the formed tube or pipe is cooled, the mandrel can be taken out by simply standing it on end and giving it a few knocks. Until the several coatings of mastic become thoroughly dry the tube or pipe thus formed is liable to get out of shape, and to prevent this, when the iron mandrel is taken out, all that is necessary is to insert a wooden mandrel. After the mastic has become dry and indurated the paper sleeve may be removed. * * * The inside of the pipe may be coated. * * * Instead of the inner coating of mastic a thin tube of glass or earthenware may be put upon the mandrel and by the process above described covered with paper.

It will be observed that Jaloureau not only used a solvent which dried out after cooling, but, from his provision for an inside lining of the pipe, either with mastic or a glass tube, he does not seen to have had any conception of so combining the paper and adhesive alone that they would be impervious.

The nearest approach to appellant's discovery is found in the patent to Johnson referred to in the Commissioner's decision. Johnson secured a patent for what he called an "impervious wrapping-paper." He described it as—

a thin, adhesive, flexible paste, impervious to air and water, which is inodorous and will not decompose can be made of a compound of caoutchouc and paraffin or caoutchouc and Japan wax; and two sheets of Manila paper, attached together by this paste, spread only on the inner or contactual sides, make a combined sheet that is soft, pliable, tough, and cheap, impervious to air and water, and efficient for an impervious wrapping-paper.

Johnson does not explain the manner of dissolving the substances used, but he does describe it as "a paste, spread only on the inner of contactual sides" of the paper. Nowhere does he refer to a fusing process. It is doubtful if a paste composed in part of caoutchouc (india-rubber) would fuse, and, in view of subsequent efforts by inventors, with Johnson's invention in the field, it is reasonable to conclude he used a solvent to reduce the ingredients to a paste.

The Commissioner summarily disposes of the case as follows:

It is argued by the applicant that the adhesive used by Johnson is not a fused cement. It is not stated in the Johnson patent that the layers of the paper are caused to adhere to each other by the application of heat, but even if the adhesive used by Johnson is not a fusible cement, it would certainly not require invention to use such a cement in view of the other references cited by the Examiner against claim 1. The patents to Conley and Jones show a can body made of layers of paper cemented together. It would obviously require no invention to use the particular kind of paper shown in the patent to Johnson for this purpose.

The Jones patent, cited as a controlling reference, is for a can or vessel with its walls constructed of two thicknesses of pasteboard and an interpolated sheet of tin-foil. Jones placed the tin-foil between the layers of paper to make the paper wall impervious.

The Conley patent has even less bearing on the present issue than the Jones device. It consisted of a wrapper for tobacco and is described by the patentee as belonging—

to that class of wrappers known as foil wrappers which are extensively used in packing tobacco and other articles.

In his specification he describes the construction and utility of the wrappers as follows:

I take a sheet of foil and a sheet of paper and secure them together face to face in any suitable manner, as, for instance, by means of thin zones of adhesive material, leaving at one end of the wrapper a tongue or strip of foil projecting from the edge of the paper and a tongue or strip of paper projecting from the edge of the foil. It will be observed that when the wrapper is used to envelop a package, the projecting tongue or strip of foil may be brought against a foil surface, so as to form an air-tight joint. * * * The value of foil as a wrapper lies chiefly in its preserving, as nearly as possible, the original qualities of the contents of the package which it envelops by preventing the escape of moisture from within and by excluding therefrom external air and water.

It, therefore, appears that Conley relied entirely upon the tin-foil to assure imperviousness.

With constructive notice, at least, of Johnson's patent, which was issued twelve years before the patent to Conley and twenty years before Jones entered the field in 1903, it does not seem to have been apparent to either of these inventors, whom it must be assumed knew the state of the art, that the problem could be solved by using a fused cement. While neither of these patents, we think, anticipates appellant's invention, since the devices are entirely different in structure from appellant's device, it is inconceivable that, if they had possessed knowledge of the fusing process, they would have adopted the more expensive and cumbersome method of attaching to the layers of paper a metallic substance to secure imperviousness, which was the chief object sought by both inventors.

It is easy to dispose of a case, where the issue of invention is close, by holding that the advance over the prior art constitutes a mere mechanical change apparent to those skilled in the art. But, in the absence of proof to support this conclusion, and where the question of patentability is close, the doubt should be resolved in favor of the applicant. (*In re Eastwood*, 33 App. D. C., 291.) In *Smith* v. *Goodyear Vulcanite Co.* (93 U. S., 486) the Court was considering the patentability of a method of making artificial teeth. It was urged that it was not a patentable invention, but that it consisted of a mere mechanical substitution of vulcanite for other materials which had long been used as a base for artificial teeth,—the use of one material for another in the formation of a product. But in disposing of this contention the Court said:

It is evident that this is much more than employing hard rubber to perform the functions that had been per-

formed by other materials, such as gold, silver, tin, platinum, or gutta-percha. A new product was the result, differing from all that had preceded it, not merely in degree of usefulness and excellence, but differing in kind, having new uses and properties.

In the same case the Court quoted with approval from *Webster on Patents*, as follows:

The utility of the change, as ascertained by its consequences, is the real practical test of the sufficiency of an invention; and since the one cannot exist without the other, the existence of the one may be presumed on proof of the existence of the other. Where the utility is proved to exist in any degree, a sufficiency of invention to support the patent must be presumed.

The Court also distinguished the case of *Hotchkiss* v. *Greenwood* (11 How., 248) in the following language:

The patent in that case was for an improvement in making door and other knobs for doors, locks, and furniture, and the improvement consisted in making them of clay or porcelain, in the same manner in which knobs of iron, brass, wood, or glass had been previously made. Neither the clay knob nor the described method of attaching it to the shank was novel. The improvement, therefore, was nothing more than the substitution of one material for another in constructing an article. The clay or porcelain knob had no properties or functions which other door-knobs made of other materials had not. It was cheaper, and perhaps more durable, but it could be applied to no new use, and it remedied no defects which existed in other knobs. Hence it was ruled that the alleged improvement was not a patentable invention. The case does decide that employing one known material in place of another is not invention, if the result be only greater cheapness and durability of the product. But this is all. It does not decide that no use of one material in lieu of another in the formation of a manufacture can, in any case, amount to invention, or be the subject of a patent. If such a substitution involves a new mode of construction, or develops new uses and properties of the article formed, it may amount to invention. The substitution may be something more than formal. It may require contrivance, in which case the mode of making it would be patentable or the result may be the production of an analogous but substantially different manufacture. This was intimated very clearly in the case of *Hicks* v. *Kelsey*, (18 Wall, 670,) where it was said: "The use of one material instead of another in constructing a known machine is, in most cases, so obviously a matter of mere mechanical judgment, and not of invention, that it cannot be called an invention, unless some new and useful result, as increase of efficiency, or a decided saving in the operation, be obtained."

This, we think, conclusively confirms appellant's right to a patent. While the use of new materials to produce a known result, or of known materials to produce a new but obvious result, may not always constitute invention, if the new idea, when applied, brings success out of failure, produces a new and useful result and saving in operation or production, or efficiency instead of inefficiency, gives to the device new functions and useful properties, it is invention, and may be patented. Appellant has met these requirements. His situation, as disclosed by this record, is most aptly stated in *Loom Co.* v. *Higgins*, (105 U. S., 580,) as follows:

It is further argued, however, that, supposing the devices to be sufficiently described, they do not show any invention; and that the combination set forth in the fifth claim is a mere aggregation of old devices, already well known; and therefore it is not patentable. This argument would be sound if the combination claimed by Webster was an obvious one for attaining the advantages proposed,—one which would occur to any mechanic skilled in the art. But it is plain from the evidence, and from the very fact that it was not sooner adopted and used, that it did not, for years, occur in this light to even the most skilled persons. It may have been under their very eyes, they may almost be said to have stumbled over it; but they certainly failed to see it, or to estimate its value, and to bring it into notice. * * * Now that it has succeeded, it may seem very plain to any one that he could have done it as well. This is often the case with inventions of the greatest merit. It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produces a new and beneficial result, never before attained, it is evidence of invention.

We are of opinion that appellant has discovered something new and useful and has demonstrated its utility. These are the elements which enter into patentable invention. As the Court said in *Diamond Rubber Co.* v. *Consolidated Tire Co.*, (220 U. S., 434:)

This satisfies the law, which only requires as a condition of its protection that the world be given something new and that the world be taught how to use it. It is no concern of the world whether the principle upon which the new construction acts be obvious or obscure, so that it inheres in the new construction.

In other words, the inventive discovery made by appellant consisted in an intelligent apprehension of the elements entering into the device and the bringing of them together in such a relation as to produce a new and useful article of commerce. The extent to which he modified or altered existing inventions is unimportant, since he accomplished a new and beneficial result not so obvious as to suggest itself to those skilled in the art. It remained for appellant to discover the hidden cause that marked the line between failure and success. In *Diamond Rubber Co.* v. *Consolidated Tire Co.*, *supra*, the Court divides patentable invention into two classes, as follows:

In other words, the invention may be broadly new, subjecting all that comes after it to tribute (*Railway Co.* v. *Sayles*, 97 U. S., 554, 556); it may be the successor, in a sense, of all that went before, a step only in the march of improvement, and limited, therefore, to its precise form and elements.

The invention in this case belongs to the latter class. It is the successor of all former attempts to develop this particular art. It marks a step—an improvement,—perhaps not the final one, but none the less important.

As to appellant's claims, the first and second are the only ones which have any direct relation to the use of a fused cement instead of a solvent in making impervious paper walls for use in the construction of vessels. These claims will be allowed. Claims 3, 4, 5 and 6 are disallowed for the reason that they disclose nothing new over the prior art, as shown in a number of the references cited. The decision of the Commissioner of Patents is reversed, and the clerk is directed to certify these proceedings as by law required.

Reversed.

Court of Appeals of the District of Columbia.

IN RE MOULTON AND JONES.

Decided March 10, 1913.

1. PATENTABILITY—PROCESS—PRIOR APPARATUS PATENT—ANTICIPATION.

"It is true, of course, that a process and an apparatus, or mechanism by which it may be performed may constitute separate and independent inventions. It is also true, as contended by the appellants, that a process is not anticipated by a prior mechanism, by which, with some alterations, it might have been performed. It is not only necessary that the prior patents might have been used to carry out the process, but that such use was either contemplated or would have occurred, in the ordinary mechanical operation of the device. (*Carnegie Steel Company* v. *Cambria Iron Company*, 185 U. S., 403, 422, 423; *in re Creveling*, 25 App. D. C., 530, 535.)"

2. SAME—METHOD OF CONDENSING STEAM.

A method of condensing steam *Held* unpatentable in view of a prior patent showing a condenser where it appears that the several steps of the process are directly carried out by the patented device, all that applicants have discovered being the underlying principle of that device.

Mr. L. V. Moulton for the appellants.

Mr. William R. Ballard for the Commissioner of Patents.

SHEPARD, *C. J.*:

This is an appeal from the decision of the Commissioner of Patents rejecting an application for a patent, having the following claims:

1. The method of condensing steam comprising forming the steam into flowing streams, dividing and deflecting said streams at frequent intervals and exposing the divided streams to cooling surfaces against which said divided streams of steam are deflected.

2. The method of condensing steam comprising causing the steam to flow in numerous streams, dividing the streams at frequent intervals, deflecting these divisions in alternate directions, whereby a vibratory movement is set up in the steam, and directing these divided streams against cooling surfaces.

3. The method of condensing steam comprising forming the same into rapidly flowing and divided streams alternately disposed with corresponding streams of cooling fluid, said steam and fluid being separated by heat transmitting walls; retarding and dividing the streams and deflecting the divided streams of steam against the said walls.

4. The method of condensing steam comprising passing the same in a stream between cooling walls, dividing the stream of steam at frequent intervals by a cooling material and deflecting the divided stream of steam alternately against said walls and against said material.

The following patents were cited as references anticipating the invention claimed: Marchant, June 6, 1882; Howarth, (British,) March 4, 1884; Shiels and Alexander, March 21, 1905; Burdh, June 6, 1905.

It is true, of course, that a process and an apparatus, or mechanism by which it may be performed may constitute separate and independent inventions. It is also true, as contended by the appellants, that a process is not anticipated by a prior mechanism, by which, with some alterations, it might have been performed. It is not only necessary that the prior patents might have been used to carry out the process, but that such use was either contemplated or would have occurred, in the ordinary mechanical operation of the device. (*Carnegie Steel Company* v. *Cambria Iron Company*, 185 U. S., 403, 422, 423; *in re Creveling*, 25 App. D. C., 530, 535.)

The Commissioner did not gainsay these principles, but denied their application to the facts disclosed by the application and the references.

The steps of the process claimed are: 1. Dividing the steam into streams. 2. Subjecting those streams to the action of cooling-surfaces. 3. Causing the streams to be deflected against the cooling-surfaces. The first two steps he found to be admittedly and notoriously old, and that the gist of the invention consists in causing these divided streams to impinge against the cooling-surfaces repeatedly by deflecting them. This he held to be a legitimate step in the process of condensing steam, since it directly cooperates with the other steps mentioned; having for its object the continuous removal of the film of condensed steam from the cooling-surfaces, which film, if unremoved, would tend to retard the cooling of the steam. Applicants accomplish this purpose by inserting layers of wire-gauze between adjacent cooling-surfaces which serve to break up the streams and deflect them against the surfaces. We concur in the following statement of the Commissioner:

In the English patent (Howarth) the same structure is used for dividing the steam into streams, and in Figure 6 the use of wire gauze between the adjacent cooling surfaces is illustrated. It would be impossible to use a condenser constructed according to the British patent with the wire gauze without performing the process upon which the applicants seek a patent. In their brief applicants point out that the description of Fig. 6 in the British patent does not disclose the steps of the process of the appealed claims. The description of this figure does state that wire-gauze is particularly for use where "it is found desirable to break up the volume passing between the plates," but it is not upon this meager description that this rejection is based; it is upon the description of the apparatus as a whole and the purpose for which it is intended, and the fact which applicants do not deny, that the process of the appealed claims is necessarily involved in the use of the apparatus shown in the British patent. It is true that an apparatus is not an anticipation of a process where it does not suggest the process to those skilled in the art, although the apparatus with some slight changes might be used to carry out that process, but where, as in this instance, the use of the apparatus unavoidably results in the performance of the process, the case is different.

His conclusion was that applicants—

have merely conceived a new thing of operation, or at best discovered the underlying principle of an old device.

It may be added that Fig. 7 of the Howarth patent as well as the structures described in the other references, while differing from the apparatus disclosed by applicants, show that the steam is necessarily divided into numerous streams which are repeatedly deflected against the cooling-surfaces.

The chief contention of the applicants is that they discovered the principle of their process which is the sweeping away of the air set free by the steam and the water of condensation adhering to and creating a film on the cooling-surfaces that retards the condensation; and that this principle or purpose is not disclosed in the descriptions of the cited patents. They argue that, aside from "breaking up the volume passing between the plates," Howarth's patent is silent as to "acts performed upon the subject-matter (steam)."

Grant that where Howarth described a device for condensing steam which, by necessarily dividing the steam into streams and causing them to deflect against the cooling-surfaces in their passage, increased the condensing capacity of a given area by removing the film thereon, he was putting in operation a natural law without fully understanding or appreciating the principle or theory of that operation, still he was entitled to all the direct uses of his invention. (*Rosell* v. *Allen*, 16 App. D. C., 559, 566.)

The sweeping away of the film is the direct result of the division of the steam into streams, and their deflection against the cooling-surfaces whereon the film may have been formed. The several steps of the process, the division of the streams and deflecting them against the cooling-surfaces provided to operate upon them were directly carried out by the Howarth device; and all that the applicants have discovered, as said by the Commissioner, is the underlying principle of that device.

The decision is right and will be affirmed. The clerk will certify this decision to the Commissioner of Patents.

Affirmed.

ADJUDICATED PATENTS.

(U. S. C. C. A.) The Cowles patent, No. 319,795, for a process of smelting ores or metalliferous compounds by an electric current, *Held* infringed. *Carborundum Co.* v. *Electric Smelting & Aluminum Co.*, 203 Fed. Rep., 976.

(U. S. C. C. A.) The Thropp patent, No. 822,561, for apparatus for manufacturing tires for automobiles, *Held* void for anticipation. *De Laski & Thropp Circular Woven Tire Co.* v. *Fisk Rubber Co.*, 203 Fed. Rep., 986.

(U. S. C. C.) The Harroun patent, No. 873,544, for an automobile-bumper, *Held* valid and infringed. *Turner Brass Works* v. *Appliance Mfg. Co.*, 203 Fed. Rep., 1001.

(U. S. D. C.) The Palmer patent, No. 878,995, for an apparatus for inverting tubular fabrics, *Held* not so clearly infringed by a machine used by defendant as to justify the granting of a preliminary injunction. *Palmer* v. *Superior Mfg. Co.*, 203 Fed. Rep., 1003.

(U. S. C. C. A.) The Sager patent, No. 885,181, for an automobile-buffer, *Held* void for lack of invention in view of the prior art. *J. H. Sager Co.* v. *Emil Grossman Co.*, 203 Fed. Rep., 996.

Act Amending German Patent and Trade-Mark Law.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 4, 1913.

The following translation of certain sections of the act amending the German patent and trade-mark law, which have been received from the consul-general at Berlin, through the Department of State, is published for the information of those concerned.

EDWARD B. MOORE,
Commissioner.

Translations of Certain Sections Mentioned in Article I of Law of March 31, 1913, Amending German Patent and Trade-Mark Laws.

Paragraph 1 of section 13 of the law for the protection of utility models of June 1, 1891:

Those who have no residence nor establishment in this country (Germany) can claim the protection of this law only when in the country where the person in question has residence or an establishment German utility models enjoy protection, as witnessed by a proclamation published in the *Imperial Law Gazette* (*Reichsgesetzblatt*).

Paragraph 1 of section 23 of the law for the protection of trade-marks of May 12, 1894:

Those who have no residence or establishment in this country (Germany) can claim the protection of this law only when in the country where the person in question has residence or an establishment German trade-marks are admitted to legal protection to the same extent as domestic trade-marks, as witnessed by a proclamation published in the *Imperial Law Gazette*.

Section 28 of the law of unfair competition of June 7, 1909:

Those who do not maintain a central establishment in this country (Germany) can claim the protection of this law only when in the country in which the person in question has his central establishment German business men enjoy similar protection, as witnessed by a proclamation published in the *Imperial Law Gazette*.

Translation of Law of March 31, 1913, Amending German Patent and Trade-Mark Laws.

ARTICLE I.

The provisions of paragraph 1 of section 13 of the law for the protection of utility models of June 1, 1891, of paragraph 1 of section 23 of the law for the protection of trade-marks of May 12, 1894, and of section 28 of the law of unfair competition of June 7, 1909, do not apply to citizens of the (German) Empire.

ARTICLE II.

The Imperial Chancellor determines up to what moment in the course of an application for a patent, a utility model patent or a trade-mark registration on the priority declaration relative to the date and country of prior application, provided for in paragraph *d* of article 4 of the revised Paris convention of June 2, 1911, for the protection of industrial property, may take place; also, whether or not the certificate mentioned therein must be submitted at the same time as the priority declaration. If either the declaration or the certificate is not filed within the time prescribed, the priority claim is nullified.

ARTICLE III.

The law for the protection of trade-marks of May 12, 1894, is amended in the following particulars:

1. Section 4 (of that law) embraces the following:

SEC. 4. Registration is to be refused in the case of marks common to the trade, as well as to trade-marks—

(1) Which consist exclusively of figures, letters, or of such words as contain information as to the manner, time and place of manufacture, as to the quality, as to the destination, or as to the price, quantity or weights of the goods;

(2) Which contain the arms of a State, or other State shield, or the arms of an inland (that is, German) town, parish or other community;

(3) Which contain representations which might excite annoyance or declarations which do not *prima facie* conform to the actual facts and involve the danger of deception.

The provisions of No. 2 are without force if the applicant is authorized to place the shield or arms in the trade-mark.

Marks which have become void may not be registered anew for the goods for which they were registered or for similar goods on behalf of some one other than the last proprietor until after the expiration of two years from the day of voidance.

2. The following provisions are inserted as sections 24^a to 24^h:

SEC. 24^a. Associations recognized by law and pursuing economic ends may register marks which shall serve as trade-marks in the business operations of their members, even if such associations do not own an establishment for the manufacture or handling of goods (association marks).

Juridical persons under the law stand in the same position as the above-mentioned associations.

The provisions as to trade-marks apply to association marks in so far as other provision is not made in sections 24^a to 24^h.

SEC. 24^b. The application for the registration of an association mark must be accompanied by a statement setting forth the name, location, purpose and organization of the association, and containing information as to those entitled to use the mark, the regulations governing its use and the rights and duties of the members in the case of the misuse of the mark. Subsequent changes are to be reported to the Patent Office. The examination of the statement is free to all.

A charge of 150 marks ($35.70) is to be collected in connection with every application for the registration of an association mark and a charge of 50 marks ($11.90) in connection with each renewal. When the first application is not granted, 100 marks ($23.80) of the fee is refunded.

SEC. 24^c. The regulations of the Patent Office govern preparation of the register of association marks.

SEC. 24^d. The rights obtained from the application for registration of an association mark or actual registration cannot as such be transferred to another.

SEC. 24^e. A third person may ask for the cancelation of an association mark without prejudice to the provisions of section 9, Nos. 1 and 3—

1. If the association for which the mark has been registered no longer exists;

2. If the association permits the mark to be used in a manner contrary to the general purposes of the association or to the statement which accompanied the application for its registration. Such misuse of the mark may be said to exist when the business world is misled by others being permitted to use the mark.

Paragraph 3 of section 9 applies in cases arising under No. 1.

SEC. 24^f. The claim of an association for damages by reason of the unauthorized use of the association mark (sec. 14) embraces also any damages suffered by its members.

SEC. 24^g. If it be proved to the Patent Office that a registered trade-mark was used by an association up to the time of the going into effect of this law, on the application of the association the mark shall be transferred to the register of association marks. The application must be made within one year from the going into effect of this law and all the provisions for registering an association mark must be complied with. The term for the renewal of the mark begins with the filing of the application.

SEC. 24^h. The provisions as to association marks apply to foreign association marks only when reciprocity is provided for in a decree published in the *Imperial Law Gazette* (*Reichsgesetzblatt*).

ARTICLE IV.

This law goes into effect simultaneously with the revised Paris convention of June 2, 1911, for the protection of industrial property.

March 31, 1913.

Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 22, 1913.

Nevada Milling Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of The Ansted & Burk Co., of Springfield, Ohio, for registration of a trade-mark and trade-mark registered February 11, 1908, No. 67,569, to the Nevada Milling Co., of Nevada, Mo., and a notice of such declaration sent by registered mail to said Nevada Milling Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Nevada Milling Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

EDWARD B. MOORE, *Commissioner.*

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

Vol. 191—No. 3. TUESDAY, JUNE 17, 1913. Price—$5 per year.

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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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ISSUE OF JUNE 17, 1913.

Patents	636—No.	1,064,697 to No.	1,065,332, inclusive.
Designs	40—No.	44,189 to No.	44,228, inclusive.
Trade-Marks	128—No.	92,026 to No.	92,153, inclusive.
Labels	23—No.	17,058 to No.	17,080, inclusive.
Prints	14—No.	3,292 to No.	3,305, inclusive.
Reissues	3—No.	13,577 to No.	13,579, inclusive.
Total	844		

TO RESIDENTS OF THE UNITED STATES.

States.	Patents and Designs.	Trade-Marks, Labels, and Prints.	States.	Patents and Designs.	Trade-Marks, Labels, and Prints.
Alabama	2	.....	North Carolina	3	2
Arizona	2	.....	North Dakota	3	1
Arkansas	2	.....	Ohio	38	10
California	39	8	Oklahoma	5	.....
Colorado	11	.....	Oregon	6	1
Connecticut	21	2	Pennsylvania	55	6
Delaware	.....	1	Rhode Island	6	1
Florida	1	2	South Carolina	.....	.....
Georgia	12	2	South Dakota	.....	.....
Idaho	1	1	Tennessee	4	2
Illinois	73	14	Texas	6	6
Indiana	10	3	Utah	2	1
Iowa	10	.....	Vermont	1	.....
Kansas	13	1	Virginia	6	1
Kentucky	12	1	Washington	8	2
Louisiana	1	1	West Virginia	1	.....
Maine	4	3	Wisconsin	13	2
Maryland	6	3	Wyoming	.....	.....
Massachusetts	24	9			
Michigan	18	5	Alaska, District of	.....	.....
Minnesota	11	1	Canal Zone	.....	.....
Mississippi	3	1	District of Columbia	3	.....
Missouri	28	1	Hawaii Territory	2	.....
Montana	1	1	Philippine Islands	1	3
Nebraska	4	2	Porto Rico	.....	.....
Nevada	1	.....	U. S. Army	.....	.....
New Hampshire	3	.....	U. S. Navy	.....	.....
New Jersey	30	14			
New Mexico	2	.....	Total to residents of the United States	596	145
New York	88	31			

TO RESIDENTS OF FOREIGN COUNTRIES.

Countries.	Patents and Designs.	Trade-Marks.	Countries.	Patents and Designs.	Trade-Marks.
Argentina	.....	.....	Netherlands	.....	.....
Austria-Hungary	1	2	Newfoundland	.....	.....
Belgium	1	1	New South Wales	.....	.....
Bermuda	.....	.....	New Zealand	.....	.....
Brazil	.....	.....	Norway	.....	.....
British West Indies	.....	.....	Peru	.....	.....
Canada	9	.....	Queensland	.....	.....
Cape Colony	1	.....	Russia	.....	.....
Chile	.....	.....	Scotland	5	.....
China	.....	.....	South Australia	.....	.....
Costa Rica	.....	.....	Spain	.....	.....
Cuba	1	1	Sweden	3	1
Denmark	1	.....	Switzerland	.....	.....
Ecuador	.....	.....	Transvaal, South Africa	.....	.....
England	20	11	Victoria	1	.....
France	12	2	Western Australia	.....	.....
Germany	21	1			
Ireland	.....	.....	Total to residents of foreign countries	80	19
Italy	2	.....			
Japan	1	.....			
Mexico	1	.....			

Photographic Copies of Drawings.

The Patent Office will furnish photographic prints of any unbound drawing, foreign or domestic, which may be in its possession. These prints will be made only in two sizes, 8 by 12½ at 15 cents per sheet and 10 by 15 at 25 cents per sheet.

This Office has no printed copies of foreign patents for sale.

In ordering photographic copies of drawings of foreign patents cited as references, applicants must state the date and number thereof, the name of the patentee, the country in which each patent was granted, and the class and subclass in which the patent is classified. If the class and subclass were not given in the Office letter citing the patent, the applicant must state the serial number of the application in which it was cited, the number of the action therein, the name of the inventor, and the title of the invention.

The photoprints will be furnished more expeditiously if the number of the division is also given in which they may be found. A separate order should be made for each case, for which the Office will furnish blanks gratuitously upon request.

BOUND VOLUMES CANNOT BE USED FOR MAKING PRINTS.

Failure to give the fullest data whereby the mounted drawing may be found will cause unnecessary delay and correspondence.

Applicants and attorneys are strongly urged to file a set of prints, small size, 8 by 12½ inches, or order them to be made by the Office, 15 cents per sheet, at the time of filing an application. Such procedure will save delay later, if correction of the drawing is desired or required.

Foreign Patents.

RULE 29. The receipt of Letters Patent from a foreign government will not prevent the inventor from obtaining a patent in the United States, unless *the application on which the foreign patent was granted was filed more than twelve months prior to the filing of the application in this country, in which case no patent shall be granted in this country.*

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business June 14, 1913.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
313	1. Fences; Harrows and Diggers; Plows; Seeders and Planters; Trees, Plants, and Flowers.	Apr. 8	Apr. 7	697
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Pneumatic Despatch; Pneumatics; Presses; Store-Service; Tobacco.	Mar. 6	Apr. 3	688
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Metal-Founding: Metallurgy; Plastic Metal Working.	May 15	June 2	249
232	4. Bridges; Conveyers; Excavating; Hoisting; Hydraulic Engineering; Loading and Unloading; Metallic Building Structures; Traversing Hoists.	Mar. 5	Apr. 23	674
167	5. Bookbinding; Harvesters; Jewelry; Music.	Mar. 15	Apr. 7	571
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Medicines; Preserving; Sugar and Salt; Substance Preparation.	Feb. 21	Apr. 7	818
312	7. Educational Appliances; Clutches; Games and Toys; Mechanical Motors; Optics; Velocipedes.	Feb. 7	Apr. 5	998
131	8. Beds; Chairs; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Feb. 15	May 22	622
142	9. Air and Gas Pumps; Fluid-Pressure Regulators; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Wind-Wheels.	Feb. 7	May 10	640
235	10. Carriages and Wagons.....	Feb. 7	Apr. 8	1219
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whips and Whip Apparatus.	Apr. 24	Apr. 24	375
322	12. Elevators; Journal-Boxes, Pulleys, and Shafting; Lubrication; Machine Elements.	Mar. 12	Mar. 31	1231
329	13. Arms, Projectiles, and Explosive Charges, Making; Bolt, Nail, Nut, Rivet, and Screw Making; Boring and Drilling; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 24	Apr. 10	666
307	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Metal-Ornamenting; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 24	May 15	514
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Liquid Coating Compositions; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastic Compositions; Plastics.	Jan. 2	Apr. 14	1327
109	16. Radiant Energy; Telegraphy; Telephony.	Jan. 27	Mar. 24	559
303	17. Matrix-Making; Paper Manufactures; Printing; Type-Bar Making.	May 1	May 15	285
227	18. Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	May 5	Apr. 26	230
236	19. Dampers, Automatic; Furnaces; Heat-Distributing Systems; Stoves and Furnaces.	Mar. 1	Apr. 23	505
179	20. Artificial-Limbs; Builders' Hardware; Dentistry; Locks and Latches; Safes; Undertaking.	Apr. 15	May 12	228

Applications Under Examination—Continued.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended	
112	21. Brakes and Gins; Carding; Cloth-Finishing; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 7	Mar. 11	630
249	22. Aeronautics; Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Firearms; Marine Propulsion; Ordnance; Ships.	Feb. 17	May 7	351
379	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Time-Controlling Mechanism.	Mar. 6	Apr. 7	545
144	24. Apparel; Apparel Apparatus; Sewing-Machines.	Apr. 3	May 2	515
315	25. Butchering; Mills; Threshing; Vegetable Cutters and Crushers.	May 2	May 19	234
106	26. Electricity, Generation: Motive Power.	Feb. 10	Mar. 12	504
372	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 19	Apr. 25	523
65	28. Internal-Combustion Engines.	Jan. 30	Feb. 1	1140
147	29. Coopering; Fire-Escapes; Ladders; Rools; Wheelwright-Machines: Wooden Buildings; Wood-Sawing; Wood-Turning; Wood-working; Woodworking-Tools.	Dec. 24	Apr. 15	784
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Mar. 10	May 29	412
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue.	Mar. 12	Mar. 12	535
278	32. Carbonating Beverages; Dispensing Beverages; Dispensing-Cans; Ornamentation; Packaging Liquids; Refrigeration.	Mar. 11	May 12	399
71	33. Cutlery; Domestic Cooking Vessels; Masonry and Concrete Structures; Paving; Tents, Canopies, Umbrellas, and Canes.	Jan. 6	Apr. 16	433
304	34. Railways; Railway-Brakes; Railway Rails and Joints; Railway Rolling-Stock; Railway Ties and Fasteners.	Apr. 24	Apr. 18	486
244	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Garment-Supporters; Toilet.	Mar. 18	May 7	884
264	36. Drafting; Driers; Engraving; Measuring Instruments; Photography.	Apr. 16	Apr. 4	906
107	37. Electric Lamps; Electricity, Conductors; Electricity, Conduits; Electricity, General Applications.	Dec. 7	Feb. 19	1051
378	38. Animal Husbandry; Artesian and Oil Wells; Fishing and Trapping; Stationery; Stone-Working.	Feb. 10	Apr. 1	835
321	39. Water Distribution.....	Mar. 17	May 5	451
280	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 12	Apr. 4	880
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	May 7	Apr. 30	559
279	42. Electric Railways; Electric Signaling; Railway Signaling; Signals.	Feb. 12	Mar. 5	815
382	43. Baths and Closets; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 14	May 6	286

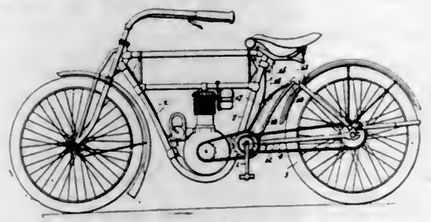
Oldest new case, Dec. 7; oldest amended, Feb. 1.
Total number of applications awaiting action..... 27,343

161	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.			
	Trade-Marks.....	Apr. 2	May 22	913
	Designs.....	Apr. 17	May 15	224
	Labels and Prints.....	June 2	June 6	73

PATENTS

GRANTED JUNE 17, 1913.

1,064,697. RESILIENT CYCLE-FRAME. ARTHUR A. BAMFORD, Chicago, Ill. Filed May 7, 1912. Serial No. 695,666. (Cl. 208—94.)



1. A vehicle of the character described including pivotally connected frames, and a leaf spring coupled to said frames, said spring being slidably connected with at least one of said frames.

2. A vehicle of the character described, including a front frame section carrying a supporting and steering wheel, a rear frame section carrying a supporting and driving wheel, said frame sections being pivotally connected, and a leaf spring fixed at its lower end to the lower, rear portion of the main frame section and having divisions respectively connected with the upper rear portion of said main frame section and the upper front portion of the rear frame section above the pivotal connection.

3. A vehicle of the character described, including a front frame section carrying a supporting and steering wheel, a rear frame section carrying a supporting and driving wheel, said frame sections being pivotally connected for relative vertical motion, and a leaf spring comprising two spring sections secured at their lower ends to each other and to the main frame section, and having their upper ends free from connection with each other and respectively connected with said frame section.

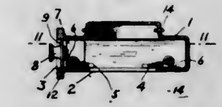
4. A vehicle of the character described, including a front frame section carrying a supporting and steering wheel, a rear frame section carrying a supporting and driving wheel, a pivotal connection between the lower front portion of the rear frame section and the lower rear portion of the main frame section to adapt said sections to have relative vertical movement, and a leaf spring secured at its lower end to the rear portion of the main frame section and having diverging divisions respectively connected with the upper rear portion of the main frame section and the upper front portion of the rear frame section.

5. A vehicle of the character described, including a front frame section provided with a supporting and steering wheel, a rear frame section provided with a supporting and driving wheel, said sections being pivotally connected for relative vertical movement, and a leaf spring fixed at its lower end to the main frame section and having divisions connected at their free ends to the respective frame sections.

[Claims 6 to 10 not printed in the Gazette.]

1,064,698. MILK-BOTTLE HOLDER. WILLIAM F. BEATON, Philadelphia, Pa. Filed Oct. 2, 1912. Serial No. 723,638. (Cl. 232—42.)

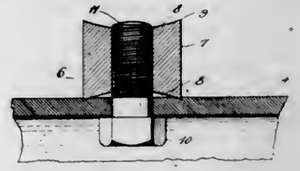
1. A milk bottle holder comprising the combination of a housing having an opening for the insertion and removal of a flanged bottle neck, pivotal jaws for receiving and automatically holding the bottle neck, a slidable member to which one of said jaws is pivoted, and means independent of the bottle for controlling the sliding movement of said member.



2. A milk bottle holder comprising the combination of a housing having an opening for the reception and removal of a bottle neck and having a second opening, pivotal bottle neck grasping jaws, a movable member to which one of said jaws is pivoted and which is projectable through the second opening, and a cap for engagement and disengagement in respect to the housing to obstruct and uncover the second opening and thereby lock and unlock the bottle.

3. A milk bottle holder comprising the combination of a housing having two openings, pivotal jaws of which one is slidable, a cap for covering and uncovering one of the openings to control the sliding movement of the slidable jaw, and a movable member for locking and unlocking the cap and housing in respect to each other.

1,064,699. CORN-SHELLER CYLINDER AND TEETH. ANDREW HERMAN BERNS and HERMAN ANDREW BERNS, Chebanse, Ill. Filed Mar. 14, 1910. Serial No. 549,264. (Cl. 130—6.)



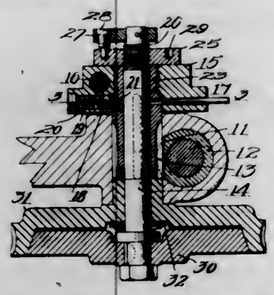
1. A new article of manufacture, comprising a tooth for a corn sheller cylinder, of substantially rectangular cross section with a hole extending longitudinally through the same, the ends of said tooth being cut away adjacent to the hole so that the outer edges of the tooth will engage with the cylinder.

2. A tooth for a corn-shelling cylinder, of angular cross-section and having one or both of its ends spherically concaved to form sharp cutting edges and to permit its close engagement with the cylinder and having a threaded hole therethrough.

1,064,700. FEED DEVICE. WILLIAM W. BIRD and LOUIS W. RAWSON, Worcester, Mass., assignors to Worcester Polytechnic Institute, a Corporation of Massachusetts. Filed Aug. 8, 1912. Serial No. 713,955. (Cl. 77—32.)

1. In a device of the character described, the combination with a constantly rotating feed shaft, a spindle, and a feed lever, of means connected with the feed lever for feeding said spindle forward as the feed lever is moved, and means whereby when the spindle meets a resistance and the advance of the feed lever is continued positively in the same direction, the spindle will be disconnected from the feed lever and connected with said feed shaft.

2. In a device of the character described, the combination with a reciprocable spindle, a feed lever rotatable about an axis, means connected with the feed lever for feeding said spindle forward as the feed lever is turned in one direction, and means whereby when the spindle meets a resistance and the feed lever is advanced positively in the same direction, the spindle will be automatically disconnected from the feed lever.



3. In a device of the character described, the combination with a feed shaft, a reciprocable spindle, and a feed lever, of means connected with the feed lever for feeding said spindle forward as the feed lever is moved, a rack connected with said spindle, a pinion for operating the rack, means for connecting the feed lever with said pinion to transmit the motion of the feed lever directly to the pinion and disconnecting it from the feed lever when the feed lever is advanced in the same direction after the spindle meets an obstruction, and means whereby the pinion will be connected with the feed shaft when the feed lever is disconnected from the pinion.

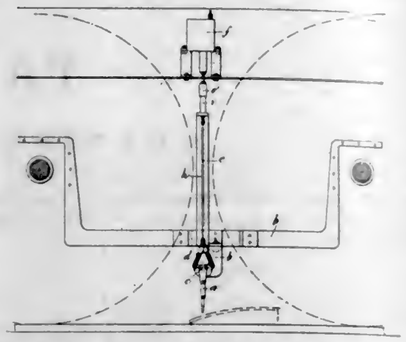
4. In a device of the character described, the combination with a feed shaft, a reciprocable spindle, and a feed lever, of means connected with the feed lever for feeding said spindle forward as the feed lever is moved, a rack connected with said spindle, a pinion for operating the rack, means for connecting the feed lever with said pinion to transmit the motion of the feed lever directly to the pinion, said means being capable of yielding and of being disconnected from the pinion when the feed lever is turned positively forward after the spindle meets a resistance, and means whereby when this motion takes place the pinion will be connected with the feed shaft.

5. In a device of the character described, the combination of a shaft, a clutch member fixed thereon, a second clutch member rotatably mounted on the shaft, means for normally forcing said clutch members apart, a rack, a pinion fixed to said shaft and meshing with the rack, a feed lever, a yielding connection between the feed lever and the pinion whereby normally the feed lever will rotate the pinion and shaft, and feed the rack, and means whereby when the connection between the feed lever and pinion is broken, the further motion of the feed lever in the direction for feeding the rack will cause the shaft to be moved longitudinally and the clutch members to be operatively engaged.

[Claims 6 to 10 not printed in the Gazette.]

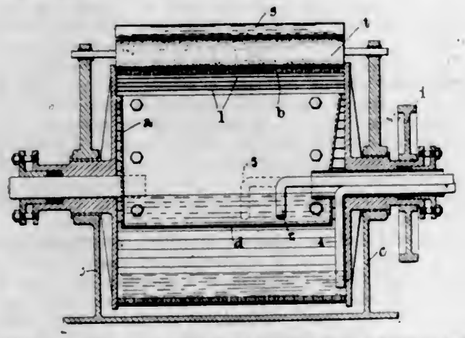
1,064,701. APPARATUS ON RAILWAY-VEHICLES FOR THE PURPOSE OF PREVENTING THE PASSING OF SIGNALS WHEN AT DANGER. JACQUES PIERRE DE BRAAM, Paris, France. Filed Sept. 26, 1911. Serial No. 651,333. (Cl. 246—59.)

1. In railway controlling apparatus of the character described, in combination, a member adapted to be actuated by a track device, said member being mounted on a portion of the vehicle which is free from spring support, safety mechanism, a second member operatively connected to said safety mechanism, said member being mounted on a spring supported portion of the vehicle, said members being normally disconnected from one another, and means adapted to be actuated by the movement of said first member for operatively connecting it to said second member, whereby movement of said first member will cause said second member to move, thereby actuating said safety mechanism.



2. In railway controlling apparatus of the character described, in combination, safety mechanism, a rod adapted to be actuated by a track device, a sleeve operatively connected to said safety mechanism, said rod and said sleeve being normally disconnected from one another, tongs connected to said rod and positioned within said sleeve, means normally holding said tongs out of engagement with said sleeve, whereby said rod and said sleeve are free to move relatively to one another, and a spring adapted to force said tongs into engagement with said sleeve upon actuation of said rod, whereby said rod and said sleeve will be coupled together.

1,064,702. FILTERING APPARATUS. THOMAS BREAKELL, Wirksworth, England. Filed Mar. 12, 1910. Serial No. 549,057. (Cl. 75—86.)



1. A machine for separating liquids from materials and for washing and saturating materials with liquids comprising a continuous cylindrical filtering surface, means for rotating said surface, means for constantly exerting a uniform suction within said surface, stationary means for applying the material to said surface, stationary devices spaced from said applying means and from one another, for applying a washing medium to the material at a plurality of points and stationary means for separately catching and withdrawing the filtrates which pass through the filtering means between the points of application of the material and washing medium.

2. A machine for separating liquids from materials and for washing and saturating materials with liquids comprising a continuous filtering surface, means for rotating said surface, means for exerting a suction upon said filtering surface, a knife forming with the filtering surface a container for the material whereby the latter is fed on to said surface, an edge to said knife for removing the residue from the filtering surface and means for catching the filtrate which passes through said filtering surface.

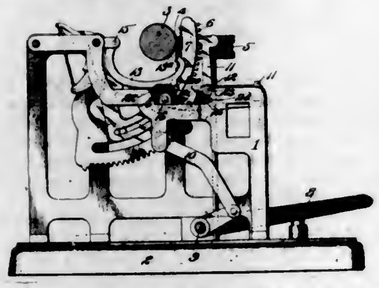
3. A machine for separating liquids from materials and for washing and saturating materials with liquids, comprising a continuous filtering surface, means for rotating said surface, means for exerting a suction upon said filtering surface, a container from which the material is applied to the filtering means, a knife for removing the residue from the filtering surface, means for reciprocating said knife longitudinally, and means for catching the filtrate which passes through said filtering surface.

4. A machine for separating liquids from materials and for washing and saturating materials with liquids, comprising a cylindrical filtering surface, means for exerting a suction within said surface, means for rotating said surface, a knife forming with said filtering surface a container for the material whereby it is fed on to the said surface, an edge to said knife for removing the residue from the filtering surface, stationary means, spaced from said container, for applying a washing medium to the material, and means for separating the filtrates which respectively pass through the filtering surface before reaching the point of application of the washing medium, and after passing said point.

5. A machine for separating liquids from materials and for washing and saturating materials with liquids, comprising a cylindrical filtering surface, means for exerting a suction within said surface, means for rotating said surface, a container from which the material is applied to the filtering means, a knife for removing the residue from the filtering surface, means for reciprocating said knife longitudinally, stationary means spaced from said container, for applying a washing medium to the material, and means for separating the filtrates which respectively pass through the filtering surface before reaching the point of application of the washing medium and after passing said point.

[Claims 6 to 12 not printed in the Gazette.]

1,064,703. RIBBON-CONTROLLING MECHANISM. BYRON E. BROWN, Poplar Bluff, Mo., assignor to Dalton Adding Machine Company, St. Louis, Mo., a Corporation of Missouri. Filed Mar. 8, 1909. Serial No. 482,017. (Cl. 197—157.)



1. In a recording machine, the combination with a platen arranged to hold paper, recording type, a ribbon, a movable support holding the ribbon between the type and the platen, and a rock shaft controlling all of said type, of manual means for rocking said shaft in one direction, and means controlled by said shaft for actuating said ribbon support to move the ribbon varying distances at successive operations of said shaft by said manual means, substantially as specified.

2. In a recording machine, the combination with recording mechanism, a ribbon, a movable support for said ribbon, and a rock shaft controlling said recording mechanism, of an eccentric actuator for said support, and means actuated by said shaft for operating said actuator as an incident to the operation of said recording mechanism, substantially as specified.

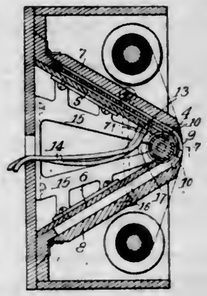
3. In a recording machine, the combination with recording mechanism, a ribbon, a pivoted ribbon support, and means for operating said recording mechanism, of a plate, a series of projections of different lengths on said plate, and means for operating said plate and projections to move said ribbon support as an incident to the operation of said recording mechanism, substantially as specified.

4. In a recording machine, a ribbon, a support for holding and moving said ribbon, a revoluble plate, an element on said support engaging said plate, pins on one side of said plate, an operating member arranged to engage said pins to rotate said plate, and means for actuating said operating member, substantially as specified.

5. In a recording machine, the combination with a platen, type-carriers, a ribbon, and a lever controlling all of said type-carriers, of a support for said ribbon, an element for moving said support varying distances, and means operated by said lever for operating said element, substantially as specified.

[Claims 6 to 16 not printed in the Gazette.]

1,064,704. TRACKER DEVICE FOR AUTOMATIC MUSICAL INSTRUMENTS. CHARLES S. BURTON, Oak Park, Ill. Filed June 24, 1912. Serial No. 705,393. (Cl. 84—185.)



1. A tracker device for automatic musical instruments comprising in combination with a sheath, a flexible apron having upon one side a set of longitudinally extending grooves, uniformly spaced at each end and diverging from each other, and having upon the other side a set of parallel grooves spaced from each other, their spacing corresponding to that of the grooves upon the opposite side near their more widely spaced ends, the apron having apertures connecting the respective grooves of the first set with the corresponding grooves of the opposite set located at a line transverse to the grooves at which the spacing of the two sets is the same, the sheath having in its wall at the side of the apron having the diverging grooves, a rift extending transversely of said grooves.

2. A tracker device for automatic musical instruments, comprising in combination a flexible apron having upon one side longitudinally extending equally spaced diverging grooves, stopping short of the ends of the apron, and upon the other side longitudinally extending equally spaced parallel grooves stopping short of the ends of the apron, the spacing of the second set of grooves being substantially that of the more widely spaced ends of the first set, the apron having apertures connecting the respective grooves of the first set with the corresponding grooves of the second set at a transverse line at which their spacing is equal; a sheath in which such apron is mounted for longitudinal movement, comprising two portions at an angle to each other and a curved portion which connects them, the inner and outer walls of such sheath being movable relatively to close upon and release the apron, the outer wall having a narrow rift at the said curved portion extending transversely of the grooves of the apron.

3. A tracker device for automatic musical instruments comprising a flexible apron and a sheath in which it is mounted for longitudinal movement, said sheath having its opposite end portions at an angle to each other and connected by an intermediate outwardly convex portion, the outer surface of the apron having a set of longitudinally extending grooves more widely spaced at one end than at the other end, the inner surface of the apron having a set of longitudinally extending grooves which are parallel throughout, the apron having apertures which connect the grooves of the first set with those of the second set at a transverse line at which the two sets are equally spaced, the outer wall of the casing having a rift

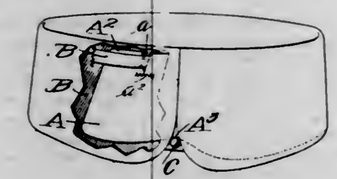
extending transversely of the set of diverging grooves of the apron, and the inner wall having apertures registering with the grooves of the parallel set of grooves.

4. A tracker device for automatic musical instruments comprising a flexible apron having at one portion of its superficial area a set of grooves more widely spaced at one end than at the other, and at another portion of said area, a set of grooves which are parallel throughout, and whose spacing is substantially that of the other set at or near the more widely spaced end of the other set, the respective grooves of the first set having communication in the substance of the apron with the corresponding grooves of the other set, and a sheath in which said apron is mounted for longitudinal movement between the opposite walls of the sheath, said sheath having a narrow rift extending transversely of the grooves of the apron at a line past which the portion of the apron's area having the diverging set of grooves moves, and having another portion of its extent past which the set of parallel grooves move provided with apertures registering with said grooves respectively.

5. A tracker device for automatic musical instruments comprising a flexible apron and a sheath between whose opposite walls the apron is retained and adapted to be moved longitudinally, said sheath having a bend intermediate its ends, and a rift at such bend; air ducts formed by grooves in the apron crossing such rift, the sheath having apertures registering with the said air ducts at an area remote from the rift.

[Claims 6 to 9 not printed in the Gazette.]

1,064,705. TURN-DOWN COLLAR. CHARLES O. BUTTRICK, Newton, Mass. Filed Dec. 19, 1912. Serial No. 737,600. (Cl. 2—69.)



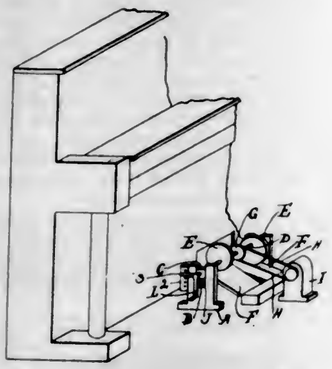
1. As an article of manufacture, a collar having a band with an underlying and an overlapping end, said underlying end having a perforation for a collar button or stud and having a pocket sewed to it on the outer surface at a distance from the free end thereof and at two edges of the pocket, one being on the side of the pocket toward said free end, said pocket having an open bottom above the bottom of the band, and the overlapping end of the band having an upwardly extending projection at the end thereof separated from the main part of the band by a space extending downwardly from the top of said overlapping end to the level of the open bottom of said pocket, whereby said projection can be inserted its full length in said pocket to bring the two ends of the band into proper relation to each other and hold them there.

2. As an article of manufacture, a turn-down collar having a vertical pocket on the front of the band thereof near the top of one end spaced from the bottom of the band and secured at its front and rear edges to the band, the opposite end of the band being imperforate, and having a vertical projection extending upwardly from the bottom thereof and separated from the body thereof by a space extending downwardly from the top of the band for engagement in the pocket to hold the imperforate end against longitudinal and upward motion.

3. As an article of manufacture, a turn down collar having a band with an underlying and an overlapping end, said underlying end having a perforation for a collar button or stud and having a pocket on the outer surface at a distance from the free end thereof, said pocket having an open bottom above the bottom of the band, and the overlapping end of the band having an upwardly extending projection at the end thereof separated from the main part of the band by a space extending downwardly from the top of said overlapping end to the level of the open bottom of said pocket, the bottom of the overlapping end being located at the same elevation as said perforation for resting on a shirt stud in the perforation and holding the overlapping end up.

4. As an article of manufacture, a turn down collar having a band with an underlying and an overlapping end, said underlying end having a perforation for a collar button or stud and a pocket on the outer surface having an open bottom, and the overlapping end of the band having an upwardly extending projection, the bottom of the overlapping end being located at the same elevation as said perforation for resting on a shirt stud in the perforation and holding the overlapping end up.

1,064,706. PEDAL-OPERATOR FOR PNEUMATIC PIANOS. JOHN C. CAKE, Chester, Pa. Filed Jan. 13, 1911. Serial No. 602,437. (Cl. 74—1.)



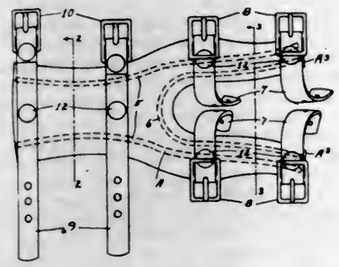
1. In a pedal operator a frame comprising a pair of standards, each having a vertical longitudinal slot therein, a bearing slidably mounted in each of said slots, a shaft journaled in said bearings, cams carried by said shaft coacting with the pedals, means for normally holding the shaft upward, foot rests for depressing the shaft, and means for revolving said shaft.

2. The combination with a plurality of pedals and a motor, of a frame, a shaft supported in the frame, devices on the shaft adapted to engage the pedals, a device controlling the speed of the motor, and means for moving the first-mentioned shaft to move the pedal operating devices toward and away from the pedals, and simultaneously operating the motor controlling device, whereby the speed of the shaft is increased as the pedal operating devices are moved toward the pedal, substantially as described.

3. In a pedal operator, the combination with a frame, of a shaft movably supported on the frame, cams mounted on the shaft, foot rests constructed to move the shaft and cams whereby the stroke of the cams may be varied with relation to the pedals upon which they operate, a motor, means connecting the motor and shaft, motor controlling mechanism, and means connected with the shaft whereby the motor controlling mechanism is operated simultaneously with the movement of the shaft, substantially as described.

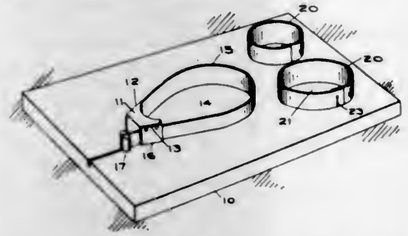
4. In a pedal operator, the combination with a frame, of a shaft movably supported on the frame, cams mounted on the shaft, and mechanical means for moving the shaft and cams whereby the stroke of the cams may be varied with relation to the pedals upon which they operate, a motor, and means connecting the motor and shaft, and means operated by the first-mentioned mechanical means, whereby the speed of the motor is controlled simultaneously with the stroke of the cams, substantially as described.

1,064,707. HORSETAIL-HOLDER. JOHN ROSSER CANION, Austin, Tex. Filed Sept. 5, 1912. Serial No. 718,764. (Cl. 54—78.)



In a harness device of the class described, an oblong body member comprising a pair of similar flat and flexible cover portions forked in a U shape at one end and sewed together around their edges, in combination with a long and slender U shaped resilient member lying between said cover portions adjacent to the inner side of the fork formed by said cover portions, a pair of long and slender resilient members lying between said cover portions adjacent to their longitudinal outer edges, and means constructed and arranged to secure the body member to the tail of a horse.

1,064,708. COLLAR-PACKAGER. WILLIAM E. CARTER, Anderson, Ind. Filed Apr. 27, 1912. Serial No. 693,709. (Cl. 223—55.)



1. A collar packager comprising a base, a block support mounted thereon, a flexible strip fastened to one side of the support and slidable against the other side thereof to vary the size of the collar-inclosing figure formed thereby.

2. A collar packager comprising a support, a flexible strip movable relatively to said support and with said support forming a closed collar-inclosing figure which is varied in size by said movement, and means coöperating with said support and strip for holding collars in the plane thereof.

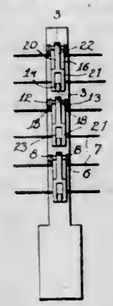
3. A collar packager comprising a base, a support mounted thereon, said support being a concavely curved side, a flexible strip coöperating with the curved side of said support to form a closed curved collar-inclosing figure, said strip being movable relatively to said support to vary the size of said figure.

4. A collar packager comprising a base, a support mounted thereon, a flexible strip located in a plane substantially parallel to the base and coöperating with said support to form a closed collar-inclosing figure, said strip being movable relatively to said support to vary the size of said figure.

5. A collar packager comprising a base, a support mounted thereon, a flexible strip coöperating with said support to form a closed collar-inclosing figure, said strip being movable relatively to said support to vary the size of said figure, said support and said strip being set into the surface of said base.

[Claim 6 not printed in the Gazette.]

1,064,709. COMBINED FENCE-POST AND WIRE-FASTENER. ISAAC E. CHENOWTH, Rodeo, N. Mex. Filed Aug. 22, 1912. Serial No. 716,465. (Cl. 39—76.)



1. The combination with a post, of a wire clamping plate supported thereon, and a yieldable means carried by the post and having locking engagement therewith and adapted in its normal position to lock the plate against the post and upon compression to be released from its locking position.

2. The combination with a post including a hook, of a wire clamping plate supported on the post, and a yieldable locking plate carried by the post and having interlocking engagement with the hook, said locking plate being adapted to be released from its engagement with the hook upon compression.

3. The combination with a post including a hook, of a pin supported transversely of the post in spaced relation to the hook, a wire clamping plate supported on the pin for outward swinging movements, and means connected to the hook and pin for clamping the plate against the post.

4. The combination with a post including a hook, of a pin supported transversely of the post in spaced relation to the hook, a wire clamping plate supported on the pin for outward swinging movements, and a locking plate connected at one end to the pin and having interlocking engagement at its other end with the hook, said locking plate having a portion thereof outwardly bowed and adapted upon compression to release the plate from its engagement with the hook.

5. The combination with a post having a pair of spaced lugs extending outwardly from one face thereof, a pin carried by said lugs, a hook projecting outwardly from the post and disposed below and in spaced relation to the lugs, a wire clamping plate supported on the pin for outward swinging movements, and a locking plate connected at one end to the pin and having interlocking engagement at its other end with the hook, said locking plate having a portion thereof outwardly bowed and adapted upon compression to release the plate from its engagement with the hook.

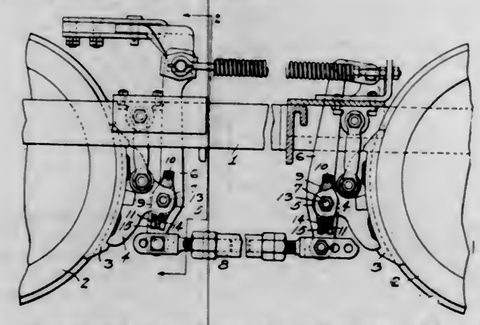
[Claims 6 to 11 not printed in the Gazette.]

1,064,710. NON-RATTLING SPRING. ANDREW CHRISTIANSON, Butler, Pa., assignor to Standard Motor Truck Co., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1912. Serial No. 727,269. (Cl. 188—84.)

1. A device for preventing the rattling and wear of jointed parts consisting of a leaf spring having a bowed central portion adapted to rest on one of the joint members and having a bearing extension adapted to extend down at the side of said joint member and having a bearing upon the other joint member, and means for connecting the jointed parts and holding said spring in position.

2. A device for preventing the rattling and wear of jointed parts consisting of a bowed leaf spring apertured intermediate its ends to receive the connecting bolt of the joint and having bearing extensions adapted to extend down upon either side of one of said jointed parts and bear upon the other of said jointed parts and means for holding the jointed parts together and for maintaining the spring member in proper bearing position.

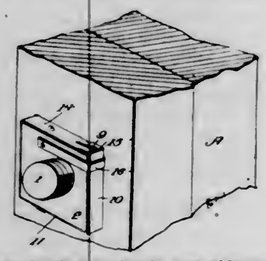
3. A device for preventing rattling and wear of jointed parts consisting of a leaf spring having an aperture for the reception of the joint bolt or pin and having an extension adapted to extend down at the side of one of said jointed members and bear upon the other jointed member, in combination with a fastening member for holding said pin, said jointed members and said spring members together and means for holding the bearing portion of said spring in proper bearing position.



4. A device for preventing rattling and wear of jointed parts consisting of a bowed leaf spring centrally apertured to receive the joint pin or bolt, said spring member having opposite extensions adapted to extend down upon either side to one of said joint members and bear upon the other joint member at either side of their junction, said joint members, bolt and spring being held together by the joint bolt and nut, one of said spring extensions having means to engage a complemental part of one of said joint members to maintain the spring in proper bearing position.

5. A device for preventing rattling and wear of jointed parts consisting of a bowed leaf spring having a central aperture to receive the bolt of the joint and having arms adapted to extend down upon either side of the jointed members to bear upon the other jointed member, and means for holding said spring in proper bearing position on said second member.

1,064,711. NUT-LOCK. BENJAMIN J. COBB, Rome, Ga. Filed Dec. 14, 1911. Serial No. 665,691. (Cl. 151—25.)



1. A lock nut having a slot in one side communicating with its bore, a bolt-engaging member pivoted in said slot and adapted to intersect the bore, a locking member pivoted on one side of the nut and adapted to cover said slot and engage the bolt-engaging member, and a keeper secured to the nut and having an end overlapping the free end of the locking member.

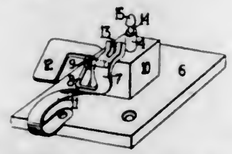
2. A lock nut having a slot in one side communicating with its bore, a bolt-engaging member pivoted in said slot and adapted to intersect the bore, a locking member pivoted on one side of the nut and adapted to cover said slot and engage the bolt-engaging member, a keeper secured to the nut and having an end adapted to overlap the free end of the locking member, and a clip pivoted on the nut and adapted to extend over the locking member between the ends of the same.

3. A lock nut having a threadless bore and provided with a slot communicating therewith, a bolt engaging blade pivoted in said slot and having its free end extended beyond the adjacent side of the nut, a spring pivoted to the nut and adapted to be held in depressed engagement with the free end of the blade, and a locking member adapted to engage the spring and hold the latter in engagement with the blade.

4. A lock nut having a threadless bore and provided with a slot communicating therewith, a bolt engaging blade pivoted in the slot and having its free end extended beyond the adjacent side of the nut, an angular spring covering the slotted side of the nut and capable of pivotal movement to expose said slot, the free end of the spring being angularly disposed and bifurcated to engage the free end of the bolt-engaging blade, and means for retaining the spring in engagement with the blade.

5. A lock nut having a threadless bore and provided with a slot communicating therewith, a bolt-engaging blade pivoted in the slot and having its free end extended beyond the adjacent side of the nut, a locking member pivoted to the nut and having its free end adapted to engage the blade, and a U-shaped clip pivoted to the nut and adapted to engage the spring and secure the latter in engagement with the blade.

1,064,712. DESK-CLAMP FOR TYPE-WRITING MACHINES. CORNELIUS B. CORCORAN, New York, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Apr. 14, 1910. Serial No. 555,365. (Cl. 45—52.)



The combination with a typewriting machine, of a base-board for supporting said machine, said machine having feet for holding it in spaced relation from said base-board, means for proventing the transverse displacement of said machine with respect to said base-board, comprising perforated lugs on said machine having openings therein and posts with reduced necks on said base-board arranged to fit in and to project through said openings to and beyond the far side of said lugs, releasable latches to overlie said lugs to engage said necks and prevent said machine from rising from said base-board, and a spring for each of said latches, each of said latches having faces cooperating alternately with said spring to be locked in a position above the associated lug and in a position away from the associated lug; said latches also having handles extending beyond the confines of said machine so as to be readily accessible.

1,064,713. COMPOSITION OF MATTER FOR THE TREATING OF MOLDING-SAND. THOMAS E. COUPE, Toronto, Ontario, Canada. Filed June 10, 1912. Serial No. 702,747. (Cl. 22—188.)

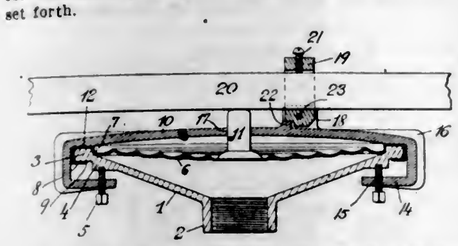
1. A composition of matter, comprising, linseed cake meal about 8%, sea coal about ¼%, lime from one per cent. to five per cent., and water about 91¼% all thoroughly mixed and saturated.

2. A composition of material for treating molding sand, comprising, linseed cake meal, sea coal, water, and lime, in or about the proportions named all thoroughly mixed together.

1,064,714. REGULATOR. EDWARD J. DEEGAN, New York, N. Y. Filed Feb. 26, 1913. Serial No. 750,715. (Cl. 60—2.)

1. In a regulating device, the combination of a hollow base, provided with a rim, a diaphragm extending over the said base and having its edge brought down upon said rim and carried down about and under said rim and soldered fast on a line lying under the rim and within its outer edge together with a cover, and means for transmitting the diaphragm motion, substantially as set forth.

2. In a regulating device, the combination of a hollow base provided with a rim, a diaphragm extending over the said base, secured to said rim and provided with a hinge shoulder extending from the diaphragm on a line closely adjacent to said rim, together with a cover, and means for transmitting the diaphragm motion, substantially as set forth.



3. In a regulating device, the combination of a hollow base, provided with a rim, a diaphragm extending over the said base, and having its edge brought down upon said rim and carried down about and under said rim and soldered fast on a line lying under the rim and within its outer edge, together with a cover provided with a rim seated tightly over that part of the diaphragm above the rim of the base, and means for transmitting the diaphragm motion, all substantially as set forth.

4. In a regulating device, the combination of a hollow base, provided with a rim, a diaphragm extending over the said base and having its edge brought down upon said rim and carried down about and under said rim and soldered fast on a line lying under the rim and within its outer edge, together with a cover, provided with an aperture at the center and clamping fingers extending around the rim of the base and the edge of the diaphragm and fastening devices connected with said fingers, substantially as set forth.

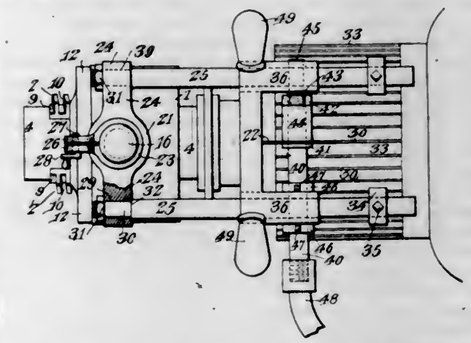
5. In a regulating device, the combination of a hollow base, provided with a rim, a diaphragm extending over the said base and having its edge brought down upon said rim and carried down about and under said rim and soldered fast on a line lying under the rim and within its outer edge, together with a circular cover, provided with a rim adapted to be pressed down upon that part of the diaphragm overlying the rim of the base, said cover being provided with an aperture at the center and clamping fingers, extending around the rim of the base and the edge of the diaphragm, and fastening devices connected with said fingers, substantially as set forth.

1,064,715. MACHINE FOR CUTTING OUT MICA BETWEEN SEGMENTS IN COMMUTATORS. WILLIAM DICKENSON, New Orleans, La., assignor, by direct and mesne assignments, to General Electric Company, a Corporation of New York. Filed May 11, 1910. Serial No. 560,740. (Cl. 29—69.)

1. A machine for slotting commutators including a clamp provided with means for engaging an armature shaft, a support mounted on said clamp for rotary adjustment around the armature shaft, said clamp forming a bearing for said support, a guiding frame mounted on said support, and cutting mechanism movably mounted on said guiding frame.

2. A machine for slotting commutators including a guiding frame having a sleeve, a supporting means for the guiding frame having a stem and an armature shaft receiving opening, said supporting means being capable of rotary adjustment around the armature shaft, said sleeve being mounted on said stem, a slidable carriage mounted on the guiding frame and having spaced bearings, a shaft journaled in said bearings, a rotary cutter mounted on the shaft, and flexible shafting connected with said shaft for rotating the cutter.

3. A machine for slotting commutators including a clamp provided with means for engaging an armature shaft, a support mounted on said clamp for rotary adjustment around the armature shaft; said clamp forming a bearing for said support, a guiding frame mounted on said support having spaced guide rods, a carriage provided with spaced side portions having longitudinal openings to receive the guide rods and provided with a transversely alined bearing, a transverse shaft journaled in said bearing, a rotary cutter carried by the shaft, and stops mounted on the guide rods limiting the movement of the carriage.

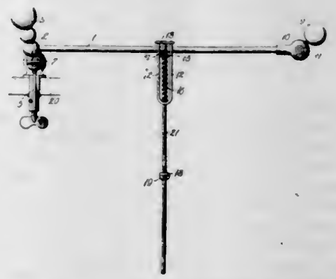


4. A machine for slotting commutators including a support comprising a stem having an armature shaft receiving opening and capable of rotary adjustment around the armature shaft, a guiding frame comprising a sleeve arranged on the stem and provided with projecting arms, and guide bars extending from the arms, a carriage movable along the guide bars, and a cutting device mounted on the carriage.

5. A machine for slotting commutators including a support comprising a stem having an armature shaft receiving opening and capable of rotary adjustment around the armature shaft, a guiding frame comprising a sleeve arranged on the stem and provided with projecting arms, and guide bars extending from the arms, a carriage movable along the guide bars, a cutting device mounted on the carriage, and stops mounted on the guide rods and limiting the movement of the carriage.

[Claims 6 to 23 not printed in the Gazette.]

1,064,716. VIBRATOR. FRANK C. DORMENT, Detroit, Mich., assignor to Wireless Vibrator Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 5, 1913. Serial No. 759,211. (Cl. 128—16.)



1. A massaging vibrator comprising a handle, a slide rod adapted to be adjustably secured therein, means for fixing the handle in desired angular position, a yoke having arms in sliding engagement with the rod, spring pressed means in the yoke for preventing slack between the arms and the slide rod, and a pair of vibrating rods extending from the yoke.

2. A massaging vibrator comprising a slide rod, a yoke having arms provided with guide apertures through which the slide rod passes, spring pressed means in the

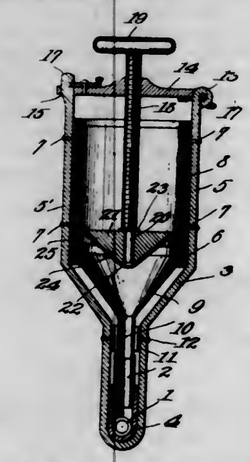
yoke bearing against the slide rod for preventing slack between the latter and the yoke arms and a pair of vibrating rods secured to the yoke to extend transversely to the slide rod.

3. A massaging vibrator comprising a slide rod, a handle for adjustably securing the slide rod at one end, means for clamping the handle at any desired angle, a pair of vibrating rods transverse to the slide rod, a yoke to which the vibrating rods are secured, adapted to move longitudinally on the slide rod and yielding means for maintaining the slide rod and yoke in operative relation.

4. A massaging vibrator comprising a slide rod, a U-shaped sheet metal yoke whose arms are in sliding engagement with the slide rod, a bridge connecting the yoke arm ends, a pair of parallel vibrating rods passing through the bend of the yoke and attached to the bridge, a cross piece sliding on the vibrating rods, a friction roller on the cross piece adapted to bear against the slide rod and springs on the vibrating rods for projecting the cross piece and roller against the slide rod.

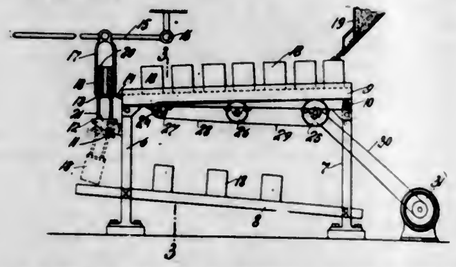
5. A massaging vibrator comprising a clamp, a weighted handle angularly adjustable on the clamp, a slide rod adjustably secured at one end to the handle, a U-shaped metal strip having parallel apertured arms in sliding engagement with the slide rod, a bridge connecting the arms at the ends thereof a pair of vibrator rods secured to the yoke, a cross piece sliding on the rods within the yoke, a friction roller on the cross piece, springs on the rods for projecting the roller against the slide rod and a weight bar adjustable longitudinally on the vibrator rods.

1,064,717. LUBRICATOR. GEORGE F. EDGINGTON, Jeffersonville, Ind. Filed Aug. 14, 1912. Serial No. 715,100. (Cl. 221—47.)



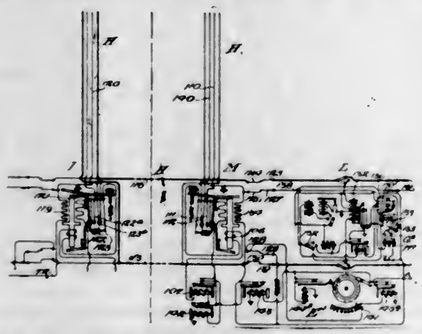
A lubricator, including a supporting frame, having a Y-shaped nipple engaging portion terminating in two parallel and spaced arms, one of said arms being provided with a hinging member, and the opposite arm being provided with a latch member, an open ended cylinder disposed between the parallel arms and terminating at a point adjacent the junction of the Y-shaped portion with the parallel arms of the frame, the opposite end of the cylinder terminating at a point within the terminal of the parallel arms, a lubricant container having a cylindrical body portion open at one end and carrying a funnel shaped eduction portion at the opposite end, the cylindrical portion being slidably mounted within and of lesser length than the first mentioned cylinder, the outlet end of the funnel portion being projected between the reduced portion of the Y-shaped portion of the frame, a bridging plate having a hinging member coacting with the hinging member of one of the parallel arms of the frame, the opposite end being apertured to receive the opposite parallel arm, a coöperating latching member carried by the free end of the bridging member for engaging the latch member of the arm, the central portion of the bridging member being provided with a threaded aperture therethrough, a handle actuated screw mounted in said aperture for movement therethrough, the lower end of said screw being reduced, and a cone-shaped plunger rotatably mounted upon the lower end of the screw and carried by the screw, said plunger being disposed for movement into and out of the cylindrical body portion of the lubricant container.

1,064,718. MOLDING-MACHINE. JOHN G. ELLENDT, Rochester, N. Y. Filed Oct. 3, 1911. Serial No. 652,622. (Cl. 25—41.)



In a molding machine, a framework supporting a slideway, molds adapted to pass along said slideway, means for vibrating said slideway, means for filling said molds at the top of said slideway, means for stripping said molds at the foot of said slideway, said stripping means comprising a pivoted platform having uprights to receive the molded mass, and means for forcing the mold away from the same.

1,064,719. TELEPHONE TRUNKING SYSTEM. EDWARD D. FALES, La Grange, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed July 6, 1908. Serial No. 442,198. (Cl. 179—18.)



1. In a telephone system, a two-way trunk-line, a non-numerical trunking switch for each end of said line, and trunks, each switch adapted to automatically select idle trunks.

2. In a telephone system, a two-way trunk-line, means for seizing said line, a non-numerical trunking switch for each end of said line, instrumentalities operative to make either end of the line busy when the other end is seized, and trunks, each switch adapted to automatically select idle trunks.

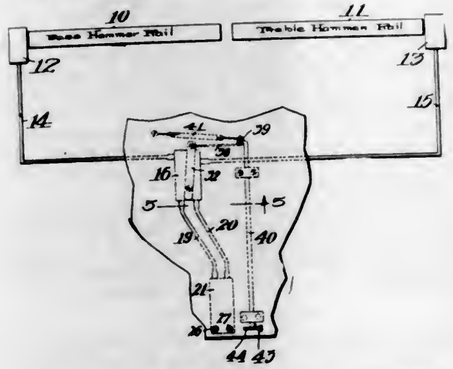
3. In a telephone system, a two-way trunk-line, a non-numerical trunking switch for each end of said line, each switch adapted to automatically extend a trunking connection from said line in the direction of the called subscriber, numerical trunking switches for seizing either end of said trunk-line, and instrumentalities operative to render either end of said trunk-line busy when the other end is seized.

4. In a telephone system, a two-way trunk-line, means for seizing said line, a non-numerical trunking switch for each end of said line, instrumentalities operative to make both ends of said trunk-line busy when either end thereof is seized, and trunks, each switch adapted to automatically select idle trunks.

5. In a telephone system, a two-way trunk-line, a non-numerical trunking switch for each end of said line, each switch adapted to automatically extend a trunking connection from said line in the direction of the called subscriber, numerical trunking switches for seizing either end of said trunk-line, and instrumentalities operative to render both ends of said trunk-line busy when either end thereof is seized.

[Claims 6 to 40 not printed in the Gazette.]

1,064,720. MUSICAL INSTRUMENT. JOSEPH FIALA, New York, N. Y., assignor to Standard Pneumatic Action Co., New York, N. Y., a Corporation of New York. Filed Dec. 5, 1912. Serial No. 735,012. (Cl. 84—160.)



1. In a musical instrument, the combination with the hammer rest rail comprising a plurality of independently movable sections normally located in alinement, of a pneumatic connected with each of said sections for operating it, means for admitting air to each of said pneumatic, a push button for controlling each of said means independently, and a valve for simultaneously admitting air to all of said pneumatics.

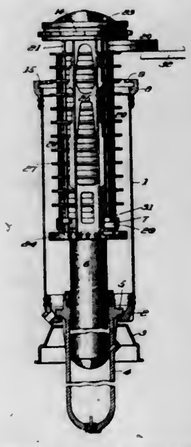
2. In a musical instrument, the combination with the hammer rest rail comprising a plurality of independently movable sections, of a pneumatic connected with each of said sections for operating it, means for admitting air to each of said pneumatics independently, a push button for controlling each of said means independently, a valve for simultaneously admitting air to all of said pneumatics, means for normally holding said valve closed, and a lever having an operative handle adjacent to said push buttons for opening said valve.

3. In a musical instrument, the combination with the hammer rest rail comprising a plurality of independently movable sections, of a pneumatic connected with each of said sections for operating it, means for admitting air to each of said pneumatics, a push button for controlling each of said means independently, a valve for simultaneously admitting air to all of said pneumatics, said valve being adapted to swing on a vertical axis, a horizontal rod connected with said valve for swinging it, a horizontal shaft transverse to said rod having an arm pivotally connected with the rod, and an arm on the other end of said shaft near said buttons for operating the shaft.

4. In a musical instrument, the combination with a hammer rest rail comprising a plurality of independently movable sections, a pneumatic connected with each of said sections for operating it, a valve for simultaneously admitting air to all of said pneumatics, said valve being adapted to swing on a vertical axis, a horizontal rod connected with said valve for swinging it, a horizontal shaft transverse to said rod having an arm pivotally connected with the rod, an arm on said shaft for operating it, a spring connected with the first named arm for holding the valve yieldingly in closed position, and a stop for engaging the second arm to limit the motion of the valve due to the spring.

5. In a musical instrument, the combination with a hammer rest rail in sections, said sections being normally in alinement but movable independently of each other, a pneumatic for operating each of said sections, a channel box provided with a plurality of channels, one communicating with each of said pneumatics, a plate having a corresponding number of openings therein each independently connected with one of said channels, valves for controlling the admission of air to said openings, said channel box having openings in the surface thereof connected with all of said channels, a valve oscillatable along the surface of said channel box, a stop for limiting the motion of said valve to a position in which it covers said opening, a pin on which said valve is pivoted, said pin extending beyond the surface of the valve, a spring engaging the head of the pin for holding the valve against the surface of said channel box, a rod connected with the end of the valve, a shaft having an arm to which the rod is pivoted, and a spring for normally holding the valve in position over said opening.

1,064,721. VULCANIZING-PRESS. JOHN R. GAMMETER, Akron, Ohio, assignor, by mesne assignments, to The B. F. Goodrich Company, a Corporation of New York. Filed Nov. 3, 1910. Serial No. 590,413. (Cl. 18—17.)



1. In a vulcanizing press, a vulcanizing chamber, a mold-carrying frame therein, unitary means for moving said frame from and into the chamber and for pressing the mold carried thereby, and independent means for supporting the said frame.

2. In a vulcanizing press, in combination, a vulcanizing chamber, a cover therefor, and unitary means for compressing a mold containing an article to be vulcanized, moving said cover to a position permitting the discharge of the mold, and moving said mold out of said chamber.

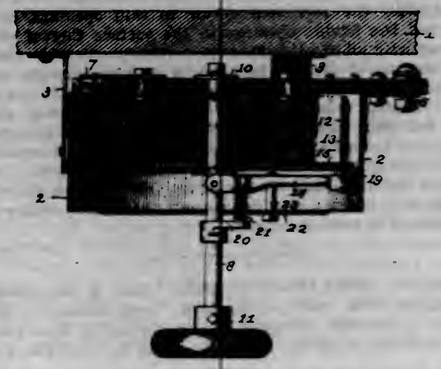
3. In a vulcanizing press, in combination, a vulcanizing chamber, a cover therefor, and unitary means for introducing a mold containing an article to be vulcanized into said chamber, moving said cover into position to close said chamber, subjecting said mold to pressure during the vulcanizing operation, moving said cover to a position permitting the discharge of the mold and moving said mold out of said chamber.

4. In a vulcanizing press, in combination, a vulcanizing chamber, a cover therefor, and unitary means for subjecting a mold containing an article to be vulcanized to pressure during the vulcanizing operation, and for moving said cover into a position in which it closes said chamber or into a position permitting the discharge of the mold.

5. In a vulcanizing press, in combination, a vulcanizing chamber, a cover therefor, and a plunger adapted to compress a mold containing an article to be vulcanized between its face and said cover, said plunger acting also to move said cover to a position permitting the discharge of the mold.

[Claims 6 to 27 not printed in the Gazette.]

1,064,722. RHEOSTAT. WILLIAM G. GILLIG, Chicago, Ill. Filed Feb. 1, 1913. Serial No. 745,548. (Cl. 219—55.)



1. In a rheostat, the combination of a resistance wire formed into a series of convolutions, a flexible contact member having its free margin in adjacent relation to such convolutions, and a movable pressure member adapted to force successive portions of said contact member into contact with successive portions of said convolutions.

2. In a rheostat, the combination of a resistance wire formed into a series of convolutions and curved into a ring form, a non-revoluble contact disk having its free margin in adjacent relation to said convolutions, and a shiftable pressure member adapted to force successive marginal portions of the disk into contact with successive portions of said convolution.

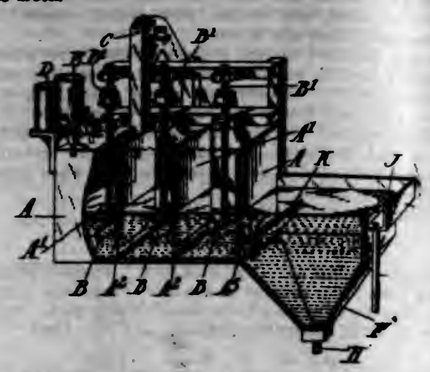
3. In a rheostat, the combination of a resistance wire formed into a series of convolutions and curved into a ring form, a non-revoluble contact disk having its free margin in adjacent relation to said convolutions, and a shiftable pressure member adapted to force successive marginal portions of the disk into contact with successive portions of said convolutions, the said disk being slotted radially to form a spring tongue.

4. In a rheostat, the combination of an inclosing shell, a longitudinal rail of insulating material secured at one end of said shell, and carrying the connecting wires of the apparatus, a ring shaped resistance element disposed axially in the inclosing shell, a non-revoluble and flexible contact disk having its free margin in adjacent relation to the aforesaid ring shaped resistance element, a centrally arranged operating shaft, a radial spring impelled radial arm on said shaft, and a pressure member on the outer end of said arm, bearing and sliding upon the marginal portion of the contact disk and adapted to force successive marginal portions of the disk into contact with successive portions of the aforesaid ring shaped resistance element.

1,064,723. ORE CONCENTRATION. HENRY HOWARD GREENWAY, Melbourne, Victoria, and HENRY LAVERS, Broken Hill, New South Wales, Australia, assignors to Minerals Separation Limited, London, England. Filed Oct. 17, 1910. Serial No. 587,621. (Cl. 83—85.)

1. The herein described process of concentrating ores, which consists in mixing finely divided ore with water containing a froth-producing essential oil, agitating the mixture to form a froth, and separating the froth.

2. The herein described process of concentrating ores, which consists in mixing finely divided ore with water containing a small quantity of a froth-producing essential oil, agitating the mixture to form a froth, and separating the froth.



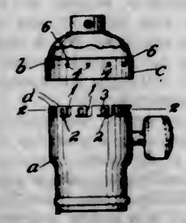
3. The herein described process of concentrating ores which consists in mixing finely divided ores with water containing a froth-producing essential oil, heating the mixture, agitating the heated mixture to form a froth, and separating the froth.

4. The herein described process of concentrating ores, which consists in mixing finely divided ores with water containing eucalyptus oil, agitating the mixture to form a froth, and separating the froth.

5. The herein described process of concentrating ores, which consists in mixing finely divided ores with water containing a small quantity of eucalyptus oil, agitating the mixture to form a froth, and separating the froth.

[Claims 6 to 8 not printed in the Gazette.]

1,064,724. CASING. MONROE GUETT, Hartford, Conn., assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Sept. 15, 1911. Serial No. 649,509. (Cl. 173—362.)



1. A casing of the character described formed in two parts, the end of one of which is adapted to fit within the end of the other, a plurality of similar apertured spring tongues formed at the end of one of the parts, and a plurality of similar projections on the other part adapted to fit within the apertures in said spring tongues, said projections having positive locking engagement with an end wall of the apertures to prevent longitudinal movement of the parts relatively to one another and frictional engagement with a side wall of said apertures to prevent rotary movement of the parts relatively to one another.

2. A casing of the character described composed of two parts, the end of one being adapted to fit into the end of the other, a plurality of similar apertured spring tongues formed at the end of one of the parts, and a corresponding number of similar projections formed on the other part, said projections having inclined side walls adapted to coöperate with said tongues to move them radially and a shoulder adapted to positively interlock with an edge of the apertures in said spring tongues.

3. A casing of the character described composed of two parts, the end of one being adapted to fit within the end of the other, circumferentially extending apertured spring tongues formed in the end of one of said parts, inwardly extending projections on the other part having oppositely inclined side walls adapted to coöperate with said spring tongues when said parts are rotated relatively to one another to permit said projections to be moved into registering position with the apertures, and a shoulder on said projections adapted to fit within the apertures formed in said tongues and to lock said parts against longitudinal displacement.

4. In a casing of the character described, a body having similar spring tongues formed at its edge, each of said spring tongues having an aperture, said body having a longitudinal slot formed in front of each spring tongue, a cap adapted to fit over the end of said body, inwardly extending projections on said cap adapted to move in said slots into alinement with the apertures in the tongues, said projections having inclined side walls adapted to act upon said spring tongues to move them upon the relative rotation of the parts to permit said projections to enter the apertures, said projections being provided with an abrupt end wall adapted to engage a wall of the apertures to positively lock the cap to the body against longitudinal displacement.

5. In a casing of the character described a body, a series of similar apertured spring-tongues formed at the end thereof; a cap and a series of similar projections thereon adapted in size to fit in the apertures, said projections having oppositely inclined faces merging into the surface of the cap and by means of which said spring-tongues are displaced upon relative rotation of the cap and body in order to move said projections into or out of the apertures, said projections having an abrupt shoulder adapted to engage a wall of said aperture to prevent longitudinal displacement of the cap and body.

[Claims 6 and 7 not printed in the Gazette.]

1,064,725. MULTIPLE-TOOL HOLDER. FREDERICK M. HALL, Waterbury, Conn. Filed June 20, 1912. Serial No. 704,733. (Cl. 29—97.)



1. A tool holder comprising an elongated body, a laterally and downwardly extending intermediate section, and a fixed head, said body, section and head being formed integral; an adjustable head freely engaging said fixed head, for movement upwardly and downwardly along the inner face thereof; and means for effecting and controlling the adjustments of said adjustable head, said heads being adapted, each to receive and sustain a metal-cutting tool.

2. A tool holder comprising an elongated body, a laterally and downwardly extending intermediate section, and a fixed head, said body, section and head being formed integal; an adjustable head freely engaging said fixed head, for movement upwardly and downwardly along the inner face thereof; and means for effecting and controlling the adjustments of said adjustable head, said heads being adapted, jointly, to receive and sustain, in parallelism and uniformly inclined, metal-cutting tools.

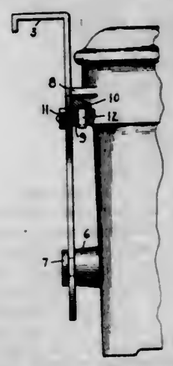
3. A tool holder comprising an elongated body, a laterally and downwardly extending intermediate section, and a fixed head, said body, section and head being formed integral, and the latter, said head, affording, at its inner face, opposite ways which overlie more or less the intermediate section aforenamed; an adjustable head slidingly engaging said ways for movement upwardly and downwardly therealong; and means for effecting and controlling the adjustments of said adjustable head said heads being adapted, each to receive and sustain a metal-cutting tool.

4. A tool holder comprising an elongated body having a longitudinal bore, a laterally and downwardly extending intermediate section, and a fixed, downwardly extending head, the latter affording at its inner face a guide having a central, longitudinal, smooth-walled channel arranged in axial alinement with the bore aforenamed, and said body, section and fixed head being formed integral; an operating-rod rotatably occupying said bore and the channel aforenamed; means for preventing longitudinal displacement of said operating-rod; means for actuating the same; and an adjustable head, the latter slidingly engaging said guide and having a threaded engagement with the operating-rod aforenamed, and said heads being adapted, each to receive and maintain a metal-cutting tool.

5. A tool holder comprising an elongated body having a central, longitudinal bore enlarged near its lower extremity to form an annular shoulder, a laterally and downwardly extending intermediate section, and a fixed, downwardly extending head, the latter affording at its inner face a guide having a longitudinal, smooth-walled channel arranged in axial alinement with the enlarged portion of the bore aforenamed, said body, section and fixed head being formed integral; an operating-rod rotatably occupying said bore and the channel aforenamed and provided with an annular shoulder adapted to coöperate with the annular shoulder aforenamed of said bore, whereby displacement of said operating-rod upwardly is prevented; a collar firmly mounted on said operating-rod near its upper extremity and overlying the top of said body, whereby displacement of said operating-rod downwardly is prevented; means for actuating said operating-rod; and an adjustable head, the latter slidingly engaging said guide and having a threaded engagement with said operating-rod, and said heads being adapted, each to receive and maintain a metal-cutting tool.

[Claim 6 not printed in the Gazette.]

1,064,726. HANGER. WALTER A. HALL, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Feb. 11, 1911. Serial No. 607,975. (Cl. 248—30.)

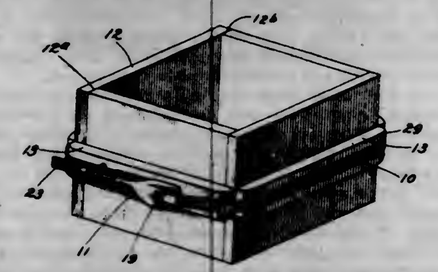


1. The combination of a substantially U-shaped hanger narrower at the bottom than at the top, with a device to be suspended provided with a lug engaging in the narrowed portion of the hanger, and means in operative relation with the device and the upper portion of the hanger adapted to fasten the device to the hanger.

2. The combination of a hanger narrower at the bottom than at the top provided with attaching and engaging portions, with a device to be suspended provided with a lug engaging in the narrowed portion of the hanger, means in the upper portion of said device for suspending the same, and means in operative relation with said means and said attaching portions for fastening the device to the hanger.

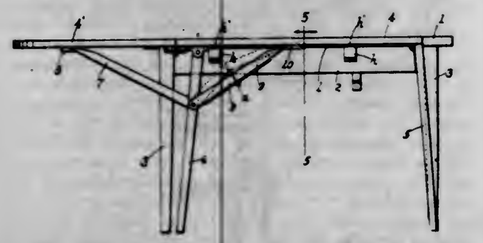
3. The combination of a hanger narrower at the bottom than at the top and provided with attaching openings and engaging portions, with a device to be suspended provided with a headed lug engaging in the narrowed portion of the hanger and with bolt receiving openings, and bolts in the attaching openings of the hanger and the receiving openings of the suspended device.

1,064,727. CLAMP FOR CONCRETE-FORMS. DAVID T. HARRIES and GRIFFITH JONES, Chicago, Ill. Filed July 10, 1911. Serial No. 637,598. (Cl. 24—19.)



In a clamp for concrete forms, the combination with a flexible metallic band, of a lever to one end of which said band is pivotally attached, said lever having an opening through which said band adjustably passes, the walls on opposite sides of said opening being formed with angular edges around which the band passes and by which the band is bent and thereby prevented from slipping relatively to said lever when the latter is oscillated to draw the portions of said band which it engages past each other.

1,064,728. IRONING-BOARD ATTACHMENT FOR KITCHEN-TABLES. MARIE J. E. HARTMANN, St. Louis, Mo. Filed Dec. 2, 1912. Serial No. 734,617. (Cl. 68—10.)

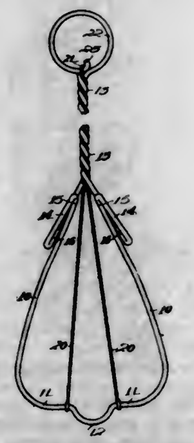


1. In combination with a table-top, a member hinged adjacent to one edge thereof and adapted to be unfolded or swung outwardly therefrom and in substantial continuity therewith, and foldable inwardly in substantial parallelism with the top, said member forming the main section of an ironing-board, an extension hinged to one end of said section and adapted to be unfolded or swung outwardly therefrom in substantial parallelism with said table top and beyond the contiguous edge thereof, suitable members on the main section located respectively at the outer corner thereof and at a point adjacent the hinge-axis of the extension for supporting the main section in its unfolded position, and means for supporting the extension when unfolded.

2. In combination with a table-top and frame therefor, an angle hinge-leaf secured to the frame and foldable to bring its free leg into substantial parallelism with the bottom of the table-top and into engagement with the bottom edge of the frame, a member secured to the free leg of the hinge-leaf and forming a main section of an ironing-board in the unfolded or outwardly swung position of the hinge-leaf, the bottom of the table-top being provided with a recess for receiving the base of the leg upon the unfolding of the latter, a latch depending from the bottom of the table-top for locking the section when folded inwardly under the top, an extension hinged to one end of the main section and adapted to be unfolded therefrom to extend beyond the end of the table, a leg hinged to the outer corner of the main section, a leg hinged to the main section at a point adjacent the hinge-axis of the extension, a strut hinged to the last named leg and engaging the extension in the unfolded position of the latter, and a toggle-brace hinged to the last named leg and engaging the bottom of the main section.

3. In combination with a table-top and frame therefor, a pair of angle hinge-leaves secured to the side of the frame and foldable and unfoldable into substantial parallelism with the top, a board secured to the outer legs of the angle-leaves, an extension hinged to one end of said board, a leg hinged to the bottom of the outer corner of the board, a leg hinged to the bottom of the board adjacent the hinge-axis of the extension, a strut hinged on one side of the last mentioned leg and engaging the extension when the latter is unfolded, a toggle-brace hinged on the opposite side of the last mentioned leg and engaging the bottom of the board when the parts are unfolded, the legs, strut, extension and toggle-brace being jointly foldable against the bottom of the board to permit the latter to be folded under the table-top, and means for securing the several parts in their folded position under the table-top.

1,064,729. KITCHEN UTENSIL. JAMES HICKEY, Worcester, Mass. Filed Nov. 13, 1909, Serial No 527,821. Renewed Nov. 4, 1912. Serial No. 729,472. (Cl. 65—28.)



1. As an article of manufacture, a kitchen utensil comprising side members, said side members extending rearwardly and forming a handle, and opposite projections extending up from and supported entirely by the two side members near the handle, and in planes transverse to that of the side members and integral therewith but independent thereof.

2. As an article of manufacture, a kitchen utensil comprising a wire frame having two integral side members converging toward each other and united at the rear, a rigid handle integral with said side members and extending from the point of union thereof, and two integral rings extending up from the side members and in planes transverse to that of the side members, connected with each side member near the handle.

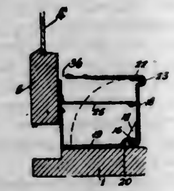
3. As an article of manufacture, a kitchen utensil comprising a wire frame having a front cross bar, and two side members, said side members converging toward each other from said cross bar and meeting at the rear, and a handle formed by twisting the continuations of said side members together, each of said members having a coil extending up therefrom near the handle to a height substantially equal to the width of the frame at that point.

4. As an article of manufacture, a kitchen utensil comprising a frame consisting of a single piece of wire having a front cross bar provided with an offset center, sides meeting at the rear and continuing rearwardly to form a handle, each side having an integral coil extending upwardly therefrom near the handle, and longitudinal bars secured to said cross bar near the offset and extending between the side members of the frame and at a lower level, said bars being connected with the extensions of the side members to strengthen the handle.

5. As an article of manufacture, a kitchen utensil comprising a frame consisting of a single piece of wire having a front cross bar, sides twisted together at the rear to form a handle, each side having a coil extending up therefrom near the handle, and bars secured to said cross bar and extending between the side members of the frame, said bars being twisted in with the extensions of the side members to strengthen the handle.

[Claim 6 not printed in the Gazette.]

1,064,730. WINDOW-VENTILATOR. HENRY HIGGIN, Newport, Ky., assignor of one-half to The Higgin Manufacturing Company, Newport, Ky., a Corporation of West Virginia. Filed Jan. 27, 1913. Serial No. 744,369. (Cl. 98—31.)



1. In a device of the character specified, the combination with the window, of a ventilator casing comprising end walls and a front wall pivotally mounted in the casing, a ventilator plate, and means for detachably securing the same to the window sash, the front wall being adapted to be turned down over the ventilator plate when the window is closed.

2. In a device of the character specified, the combination with the window, of a ventilator casing comprising end walls and a front wall pivotally mounted in the casing, a ventilator plate, and means for detachably securing the same to the window sash, the front wall being adapted to be turned down over the ventilator plate when the window is closed, with stops on the casing to limit the movement of the ventilator plate within the casing with the raising of the window.

3. In a device of the character specified, the combination with the window, of a ventilator casing comprising end walls and a front wall pivotally mounted in the casing, a ventilator plate, and means for detachably securing the same to the window sash, the front wall being adapted to be turned down over the ventilator plate when the window is closed, inwardly projecting flanges for the end walls to engage and stop the ventilator plate with the raising of the window.

4. In a device of the character specified, the combination with the window, a ventilator casing comprising end walls, with inwardly projecting flanges mounted on the window casing, with a front wall pivotally mounted at its lower edge to the end walls to form a box open at the top and rear, a ventilator plate adapted to form the top of the box casing, and means for securing same detachably to the window sash.

5. In a device of the character specified, the combination with the window, a ventilator casing comprising end walls, with inwardly projecting flanges mounted on the window casing, with a front wall pivotally mounted at its lower edge to the end walls to form a box open at the top and rear, a ventilator plate adapted to form the top of the box casing, and means for securing same detachably to the window sash, with the flanges of the end wall cut away to permit the withdrawal of the ventilator plate from the casing when desired.

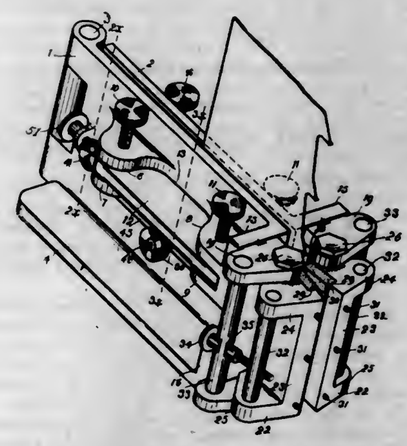
1,064,731. FURRING-STRIP. ALBERT G. HIGGINS, Kansas City, Mo. Filed Mar. 29, 1912. Serial No. 686,982. (Cl. 72—120.)



1. A furring strip formed from a single piece of wire and comprising body strands and base and face members spaced by the body strands, said base and face members having end loops integral with the body strands and providing abutment surfaces, and each alternate body strand being inclined backwardly across the width of the strip to bring the loops of adjacent base and face members into registration, for the purpose set forth.

2. A furring strip formed from wire, and having base and face strands extended in substantially parallel planes, said strands being spaced and bent at their ends to form loops, the loops on adjacent strands being connected by converging body strands, for the purpose set forth.

1,064,732. SAW-JOINTER AND SIDE-DRESSING DEVICE. LEWIS J. HILER, Rochester, N. Y. Filed Apr. 19, 1912. Serial No. 691,946. (Cl. 76—47.)



1. In a device for side dressing saws, the combination of a pair of pivoted jaws, a bracket pivotally mounted on the forward end of each of said jaws, a frame pivotally mounted on each of said brackets, a grinding device carried on each of said frames.

2. In a device for side dressing saws, the combination of a pair of pivoted jaws, a bracket pivotally mounted on the forward end of each of said jaws, a frame pivotally mounted on each of said brackets, a grinding device carried on each of said frames, said frame being mounted to swing transversely to the swing of the bracket.

3. In a device for side dressing saws, the combination of a pair of pivoted jaws, a bracket pivotally mounted on the forward end of each of said jaws, a frame pivotally

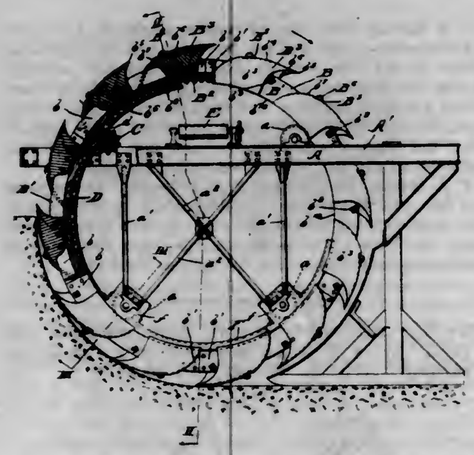
mounted on each of said brackets, a grinding device carried on each of said frames, said frame being mounted to swing transversely to the swing of the bracket, a back gage adjustably mounted on one of said jaws and extending between them, said gage being movable along the jaws, means for clamping said gage in any position.

4. In a device for side dressing saws, the combination of a pair of pivoted jaws, grinding devices pivotally mounted on said jaws to rotate in two planes.

5. In a device for side dressing saws, the combination of a pair of pivoted jaws, grinding devices pivotally mounted on said jaws to rotate in two planes, the opening between said jaws being adapted to receive the whole width and thickness of the saw blade.

[Claims 6 to 16 not printed in the Gazette.]

1,064,733. DITCHING-MACHINE. CARL HORIX, Toledo, Ohio. Filed Sept. 7, 1911. Serial No. 648,146. (Cl. 37—17.)



1. In a ditching-machine, an open-center ditching-wheel comprising the combination of an annular ring-portion provided with two side-members; an internal gear-member secured between said side-members; and a plurality of outwardly projecting scoops also secured between the latter.

2. In a ditching-machine, a ditching-wheel comprising the combination of an annular member consisting of a plurality of plates forming two oppositely disposed annular rings; an internal gear-member secured between said two rings; and a plurality of outwardly projecting scoops secured between said rings.

3. In an open center ditching-wheel, the combination with an annular ring-portion comprising in its structure two side-members; of a plurality of outwardly projecting scoops each having an internal inwardly projecting portion extending transversely with relation to the wheel's axis seated and secured between said side-members.

4. In an open center ditching-wheel, the combination with an annular ring-portion comprising in its structure two side-members; of a plurality of outwardly projecting scoops each having an internal inwardly projecting portion extending transversely with relation to the wheel's axis seated and removably secured between said side-members.

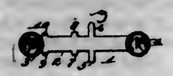
1,064,734. TOWEL-RACK. ALFRED H. HOWE, New York, N. Y. Filed May 23, 1912. Serial No. 699,149. (Cl. 248—19.)

A band adapted to be extended around and held in position on a hot water boiler, the ends of the band being provided with a number of openings, the said ends being also provided with inwardly extending diverging slots, each end portion being adapted to be bent on lines substantially coincident with the said slots, the ends of the band provided with the openings being also bent, whereby they extend substantially normal from the said band with



the openings therein in register, and a fastening device passing through all of the said registering openings, whereby the band is held in position.

1,064,735. COMBINATION EMBOSSING DEVICE AND POCKET-CLASP. JOHN JACHENS, San Francisco, Cal. Filed Nov. 6, 1911. Serial No. 658,857. (Cl. 101—58.)



1. In a device of the character specified, the combination with a split elongated band, and a collar slidable over the same, of an embossing device pivoted to said collar.

2. In a device of the character specified, the combination with a split elongated band, and a collar slidable over the same, of an elongated U-shaped spring pivoted to said collar, and a pair of embossing dies at the extremities of said spring.

3. In a device of the character specified, the combination with a split elongated band, and a collar slidable over the same, of an elongated U-shaped spring pivoted to said collar, a pair of embossing dies at the extremities of said spring, and registration guides on one of the legs of said U for engaging the other leg.

4. In a device of the character specified, the combination with a split, elongated band, and a collar slidable over the same, of an elongated U-shaped spring pivoted to said collar, a pair of embossing dies at the extremities of said spring, and registration guides on one of the legs of said U extending beyond the plane of the other leg for engaging the outside of a pocket.

5. In a device of the character specified, a band for engaging a pencil or similar article, a pair of embossing dies adapted to be set under the end of said band, and under the end of the pencil engaged thereby, and a connection between said band and said dies having "give" enough to allow the pencil to be moved in a rotary manner whereby a point to point pressure is imparted to said dies.

1,064,736. SPEED-CHANGING GEARING. WILLIAM THOMAS JAMES, Chicago, Ill. Filed June 2, 1909. Serial No. 499,779. (Cl. 74—7.)



1. In a speed changing gear, a housing, a drive shaft projecting into the housing, a drive gear thereon, three driven shafts spaced about the drive shaft and projecting from the front of the housing, a fourth driven shaft mounted in the housing in alinement with the drive shaft, and also projecting from the front of the housing, a gear revoluble on each of the three driven shafts meshing with the drive gear, a pinion coaxial with each of the gears on the three driven shafts and mounted to move therewith, a fifth gear mounted revolubly on the inner end of the fourth driven shaft meshing with the last mentioned

pinions, a pinion coaxial with said fifth gear and mounted to move therewith, coöperating means outside of said housing coöperable with the pinions of the three driven shafts, and a connection between said coöperative means and the pinion said means being coaxial with said fifth gear.

2. In speed changing gearing, a drive gear, three driven gears meshing therewith, a pinion co-axial with and movable with each of said driven gears, an internal gear meshing with said pinions and driven thereby and having an axis in alinement with that of the drive gear, a housing inclosing said drive gear and driven gears, said housing being divided along the line of the axis of the driven and driving shafts, said internal gear and coöperating pinions being arranged outside said housing, the shafts of the three driven gears projecting from the front of the housing and spaced about the drive shaft, and a driven shaft on which the internal gear is fixedly secured and on which said drive gear is revolubly mounted.

3. The combination, in speed changing gearing, of a housing, a driven shaft mounted in the housing and projecting therefrom, a drive gear in the housing mounted revolubly on the driven shaft, three driven shafts in the housing spaced about the first mentioned driven shaft and projecting from said housing, a driven gear in the housing on each of the three driven shafts and meshing with the drive gear, intermediate gearing, a pinion secured on each of the last mentioned driven shafts outside of said housing and coaxial with each of the said three gears, and an internal gear non-revolubly secured on the first mentioned driven shaft outside of said housing and meshing with the said three pinions.

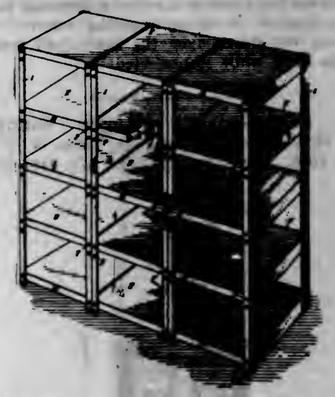
4. In combination in speed changing gearing, a housing, a drive shaft projecting into the housing, a drive gear thereon, three driven shafts spaced about the drive shaft and projecting from the front of the housing, a fourth driven shaft mounted in the housing in alinement with the drive shaft and also projecting from the front of the housing, a gear revoluble on each of the three driven shafts meshing with the drive gear, a pinion co-axial with each of the gears on the three driven shafts and mounted to move therewith, a fifth gear mounted revolubly on the inner end of the fourth driven shaft meshing with the last mentioned pinions, a pinion co-axial with said fifth gear and mounted to move therewith, a gear secured on each of the three driven shafts and meshing with said last mentioned pinion, a pinion secured to the outer end of each of the three driven shafts, and an internal gear secured to the outer end of said fourth driven shaft outside of said housing and meshing with the three last mentioned pinions.

5. In combination, in speed changing gearing, a housing divided into two parts, a shaft having its axis located on the line of division between the parts of the housing, one of the parts of the housing being provided with externally extending integral bearings for said shaft, a master gear mounted on the shaft, a plurality of shafts mounted in the housing, closed bearings for the ends of said shafts, a driven gear carried by each of said last shafts and meshing with the master gear, a pinion co-axial with and movable with each of said driven gears, a driven shaft in alinement with said first mentioned shaft also located on the line of division between the parts of the housing, a drive gear meshing with the said pinions and an internal gear secured to the outer end of the driven shaft, outside of said housing.

[Claim 6 not printed in the Gazette.]

1,064,737. METAL SHELVING CONSTRUCTION. CHARLES R. JAMISON, Canton, Ohio, assignor to The Berger Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Aug. 30, 1911. Serial No. 646,891. (Cl. 211—27.)

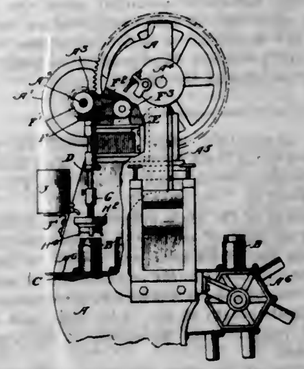
1. Metal shelving construction comprising vertically disposed supports and horizontally disposed shelves, each shelf provided with an integral, vertically disposed flange connected to said supports by pairs of vertically spaced connecting means, and the portion of said flange intermediate said vertical supports formed to present a vertical exposure at the edge of the shelf less in vertical dimension than the vertical dimension of said flange.



2. Metal shelving construction comprising vertically disposed supports and horizontally disposed shelves, each shelf provided with vertically disposed support-attaching portions engaging said vertically disposed supports and connected thereto by pairs of vertically spaced connecting means, and the edge of the shelf intermediate said attaching portions formed to present an exposed edge of less vertical dimension than the vertical dimension of said attaching portions.

3. Metal shelving construction comprising vertical supports having inner, vertically disposed angular corners and sheet metal shelves provided with corners and support-attaching portions bent at right angles to the plane of the shelf and forming vertically disposed corners adapted to fit into the vertically disposed angles of said supports, the edge of said shelf intermediate said vertical supports bent to form a vertically disposed flange, an integral, horizontally disposed flange, and an edge flange arranged at an angle to said horizontally disposed flange, the said vertical flange being of less vertical dimension than the vertical dimension of said support-attaching portions.

1,064,738. ADHESIVE-APPLYING DEVICE. CHARLES FRANCIS JENKINS, Washington, D. C., assignor to Single Service Package Corporation of America, New York, N. Y., a Corporation of New Jersey. Filed Mar. 4, 1910. Serial No. 547,376. (Cl. 91—39.)



The combination with a support for an open receptacle, of a pendant shaft normally at some distance above the receptacle and alining with its axis, a brush fixed to the lower end of the shaft, a sleeve slidingly mounted upon the shaft, normally inclosing said brush, and adapted to be arrested in its downward movement by engaging

the mouth of the receptacle, means for supplying adhesive upon the walls of said sleeve above the brush, means for lowering the shaft until the brush projects within the receptacle from the arrested sleeve and restoring the parts to normal position, a spring resisting relative upward movement of the sleeve upon the shaft, and means for rotating the shaft while so projected.

1,064,739. ELECTRICALLY HEATED SOLDERING-IRON. MONTGOMERY H. JOHNSON, Utica, N. Y. Filed Dec. 18, 1909. Serial No. 533,919. (Cl. 219—28.)



1. In an electrically heated soldering iron, the combination of a hermetically-sealed heater-case, an electric heat-generating coil located in said case, and a solder-fusing member adapted to be heated from said case.

2. In an electrically heated soldering iron, the combination of a hermetically-sealed heater-case having autogenous joints, an electric heat-generating coil located in said case, and a solder-fusing member adapted to be heated from said case.

3. In an electrically heated soldering iron, the combination of a heater case, a hollow stem extending therefrom, an electric heat-generating coil located in said case and hermetically sealed therein, leads from said coil passing out through said stem and hermetically sealed therein, the joints in said case and between said case and stem being autogenous, and a solder-fusing member adapted to be heated from said case.

4. In an electric heater device, the combination of a hollow casing, insulation arranged about the inner surface of the outer shell of said casing and an electric heat-generating coil arranged in open convolutions within said insulation and tensioned to expand thereagainst and hold said insulation against the casing.

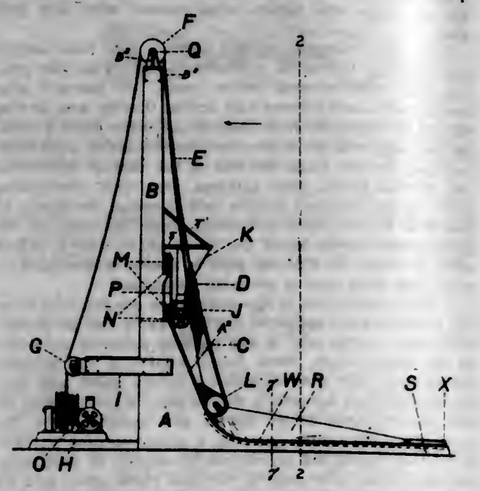
1,064,740. MACHINE FOR CONSTRUCTING POLES, PILES, OR COLUMNS OF PLASTIC MATERIAL. ROBERT M. JONES, Denver, Colo. Filed Dec. 16, 1911. Serial No. 666,233. (Cl. 25—1.)

1. A machine of the class described comprising a structure having an inclined surface, a flexible blanket secured thereon along one of its ends, and means for imparting a reciprocating movement to the opposite end of said blanket.

2. A machine of the class described comprising a flexible blanket secured thereto at one of its ends, and means for imparting a reciprocatory movement to the opposite end of said blanket.

3. A machine of the class described, comprising a suitable support, a flexible blanket secured thereto at one of its ends, and means for imparting a differential reciprocating movement to the opposite end of the same, by forces applied at unequal velocities at separate points thereof.

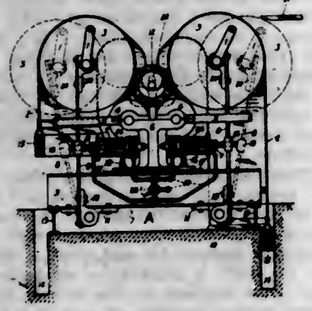
4. A machine of the class described comprising a suitable support, a flexible blanket secured thereto at one of its ends, means for imparting a reciprocating movement to the opposite end of said blanket, and equalizing levers interposed between said end and said means.



5. A machine of the class described comprising a suitable support, a flexible blanket secured thereto at one of its ends, a winding drum, and a cable or rope wound on said drum in connection with the opposite end of said blanket.

[Claims 6 to 12 not printed in the Gazette.]

1,064,741. MACHINE FOR FORMING POLES, PILES, AND PIPES OF PLASTIC MATERIAL. ROBERT M. JONES, Denver, Colo. Filed July 16, 1912. Serial No. 709,808. (Cl. 25—80.)



1. A machine of the class described comprising a pair of rotary rollers placed in spaced relation to each other, a blanket loosely supported thereon, and a support for the sag of said blanket between said rollers.

2. A machine of the class described comprising a pair of rotary rollers placed in spaced relation to each other, a blanket loosely supported thereon, and a rolling support for the sag of said blanket between said rollers.

3. A machine of the class described comprising a pair of rotary rollers laterally, movably mounted in spaced relation to each other, a blanket loosely supported thereon, and means to yieldingly oppose a lateral movement of said rollers.

4. A machine of the class described comprising a pair of rotary rollers laterally movably mounted in spaced relation to each other, a blanket loosely supported thereon, and means normally, yieldingly opposing a lateral movement of said rollers and adapted to separate the same to increase the distance between them, by moving them simultaneously in opposite directions.

5. A machine of the class described comprising a pair of rollers in spaced relation to each other, oscillatory bearings in which said rollers are rotatably mounted, a blanket loosely supported on said rollers, and means to yieldingly oppose a movement of said bearings about their axes of oscillation.

1,064,742. PROCESS OF FORMING AND MAKING CONCRETE POLES, PILES, AND COLUMNS. ROBERT M. JONES, Denver, Colo. Filed Feb. 17, 1911, Serial No. 609,170. Renewed Feb. 24, 1913. Serial No. 750,415. (Cl. 25—156.)



1. The process of molding articles of the class described, consisting in imparting to a body of plastic material, a revolving motion by reciprocatory movement of a surface upon which it is loosely supported.

2. The process of molding articles of the class described, consisting in imparting to a body of plastic material, a revolving motion about a longitudinal axis by movement of a surface upon which it is loosely supported, in a direction transverse to said axis.

3. The process of molding articles of the class described, consisting in imparting to a body of plastic material a revolving motion about a longitudinal axis by a reciprocating movement of a sagging flexible surface upon which it is loosely supported, in a direction transverse to said axis.

4. The process of molding articles of the class described, consisting in imparting to a body of plastic material a revolving motion about a longitudinal axis by a reciprocating movement in a direction transverse to said axis, of the free end of a sagging, flexible surface upon which it is loosely supported, and whose opposite end is fixed.

5. The process of molding articles of the class described, consisting in embedding a core in a body of plastic material, imparting to the latter a revolving motion in a direction transverse to the axis of said core, by movement of a surface upon which it is loosely supported, and removing the core after the material has become hardened.

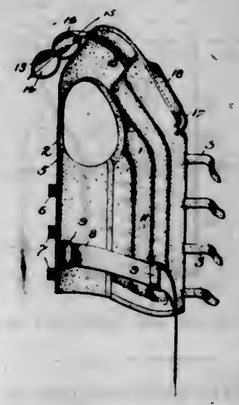
[Claims 6 and 7 not printed in the Gazette.]

1,064,743. LIFE-PRESERVER. IRWIN FLOYD KEPLER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Apr. 15, 1912. Serial No. 690,868. (Cl. 9—20.)

1. In a life preserver, the combination of a vest-like garment; a buoyant mass of limited thickness mounted in the front thereof; and a second flat buoyant mass flexibly attached by one edge across the shoulders of said garment, and adapted normally to lie flat upon the back of the wearer's shoulders but to swing up and support the wearer's head when he is in the water.

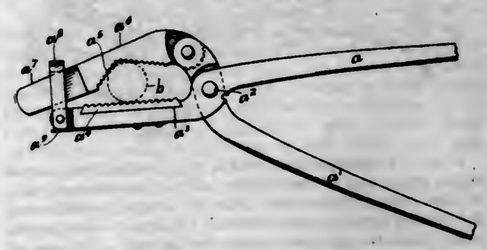
2. In a life preserver, the combination of a vest-like garment; air chambers formed in the front portion thereof, one at each side, and each consisting of a plurality of inter-communicating cells; another air chamber hingedly attached across the shoulders of said garment and adapted both to lie in contact with the shoulders and to swing to a position back of the wearer's head to support the same; and means for inflating said air chambers.

3. In a life preserver, the combination of a vest-like garment; air chambers formed in the front portion thereof, one at each side, and each consisting of a plurality of inter-communicating cells; another air chamber hingedly attached across the shoulders of said garment and adapted both to lie in contact with the shoulders and to swing



to a position back of the wearer's head to support the same; means for inflating said air chambers; and a belt connected to said garment and adapted to hold the lower portion thereof in position upon the wearer.

1,064,744. WRENCH. JOHN M. KINDT, Philadelphia, Pa., assignor to Joseph Pennell, Wawa, Pa. Filed Aug. 31, 1912. Serial No. 717,990. (Cl. 81—81.)



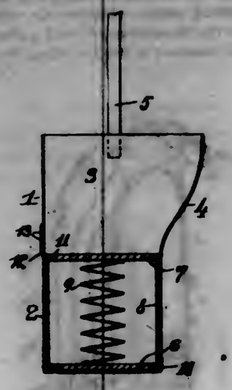
1. A wrench, comprising pivoted members, one consisting of a single-piece having a straight ratcheted surface and the other consisting of two pivoted members having a V-shaped ratcheted surface and means in terminal portions of both of said members, whereby they are in slidable engagement with each other, substantially as and for the purposes described.

2. A wrench, comprising pivoted members, one consisting of a single-piece having a straight ratcheted surface and a pivoted loop-extension and the other consisting of two pivoted members having in one a V-shaped ratcheted surface and a tongue arranged to slidably engage said loop-extension, substantially as and for the purposes described.

1,064,745. HORSE FEED-BAG. HARRY KLENERT, New York, N. Y. Filed Dec. 23, 1912. Serial No. 738,173. (Cl. 119—65.)

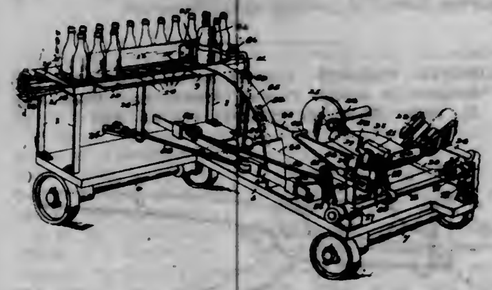
A feed bag comprising a lower cylindrical portion and an upper oblong mouth portion which flares to the one side of the said cylindrical portion, a feed elevating device contained within said cylindrical portion and comprising a false bottom adapted to receive the feed, a cylindrical covering secured to said false bottom, a fixed bottom,

means for securing said covering and said cylindrical leg portion to the said fixed bottom and a spring between



the said two bottoms and within the said cylindrical covering.

1,064,746. BOTTLE-HANDLING DEVICE. THOMAS F. LAMB, Newark, Ohio, assignor to The American Bottle Company, Newark, Ohio, a Corporation of Ohio. Filed Mar. 7, 1913. Serial No. 752,599. (Cl. 198—1.)



1. In a bottle-handling device, the combination with a table, and a row of bottle-seats slidably mounted thereon in edge contact with each other, of means for delivering the bottles from a bottle-forming machine to said bottle-seats successively, and means for moving said row of bottle-seats lengthwise of the row between successive deliveries of bottles thereto.

2. In a bottle-handling device, the combination with a table having an endless guide-way formed in its upper surface, of bottle-seats slidably mounted in said guide-way in edge contact with each other, means for delivering the bottles from a bottle-forming machine to said bottle-seats successively, and a pair of alternately acting pushers at opposite ends of said table, respectively, acting in turn to advance a group of said bottle-seats lengthwise of said guide-way.

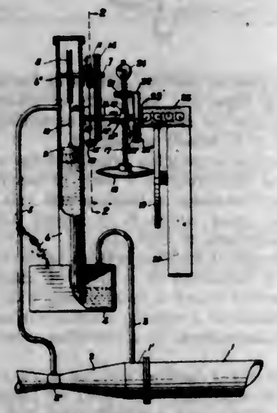
3. In a bottle-handling device, the combination with a table having an endless guide-way formed in its upper surface, of bottle-seats slidably mounted in said guide-way in edge contact with each other, means for delivering the bottles from a bottle-forming machine to said bottle-seats successively at a fixed point on said guide-way, a pair of pushers slidably mounted in opposite ends of said table and connected for simultaneous movement in opposite directions relatively to said table, said pushers on their inward movements advancing a group of said bottle-seats lengthwise of said guide-way, and means for effecting reciprocating movements of said pushers.

4. In a bottle-handling device, the combination with a table having a guide-way formed in its upper surface and comprising parallel straight sections each communicating with the other at one end by a curved section, of bottle-seats slidably mounted in said sections of the guide-way in edge contact with each other, means for delivering the bottles from a bottle-forming machine successively to the bottle-seats in one of said guide-way sections, and a pair of alternately acting pushers operating to move said bottle-seats through said guide-way to the extent of the diameter of one seat between successive deliveries of bottles to said seats.

5. In a bottle-handling device, the combination with a table and means for arranging in a row a plurality of bottles successively received at a fixed point thereon, of means for successively delivering bottles from a bottle-forming machine to said table comprising a tiltable pan in which the bottles are received from the bottle-forming machine, a guide connected to a fixed point on said table and to which the bottles are delivered bottom foremost by said pan, and a cradle receiving the bottles from said pan and advancing them over said guide onto said table.

[Claims 6 to 11 not printed in the Gazette.]

1,064,747. LIQUID-METER. JOHN W. LEDOUX, Swarthmore, Pa. Filed Dec. 9, 1909. Serial No. 532,181. (Cl. 73—167.)



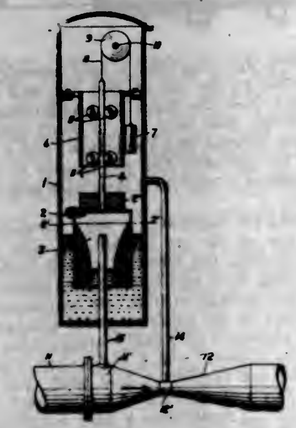
1. In a liquid meter, a revoluble cam, means comprising a fluid conduit having a contracted section whereby said cam is turned to a position which is a function of the flow of fluid in said conduit, said cam having a curvature which is a function of the rate of flow in said conduit, a device revoluble at a regular rate, revoluble and oscillatable means comprising a disk adapted to make contact with and be revolved by said device, and mechanism whereby said cam oscillates said last named means.

2. In a liquid meter, differential pressure mechanism comprising a fluid conduit, a revoluble cam having a curvature which is a function of the flow in said conduit, means whereby the position of said cam is determined by said differential pressure mechanism, a journaled shaft, means whereby said cam determines the position of said shaft, a second shaft, means whereby said second shaft is journaled in relation to and oscillated by said shaft first named, a disk carried by said second named shaft, and a constantly revolving device with which said disk makes contact.

3. In a liquid meter, a stand pipe, a journaled shaft extending into said pipe, a sheave fixed on said shaft in said pipe, a float in said pipe, means connecting said float and sheave, counter-balancing mechanism connected with said shaft, cam mechanism connected with and operated by said shaft, a second revoluble shaft, means whereby said second shaft is operated by said cam mechanism, a third revoluble shaft having a journaled connection with said second shaft, a gear loose on said second shaft, a gear fixed on said third shaft and engaging said gear first named, an indicating mechanism operated by said gear first named, and means for revolving said third shaft.

4. In a liquid meter, a chamber, a float in said chamber, a revoluble sheave, means connecting said float and sheave, a cam connected and revoluble with said sheave, a second sheave, means whereby said second sheave operates under control of said cam, gear mechanism revolved by said last named sheave, a disk moved in an orbit by said gear mechanism, means for revolving said disk on its axis, and indicating means operated by said disk.

1,064,748. FLUID-METER. JOHN W. LEDOUX, Swarthmore, Pa. Filed Nov. 16, 1910. Serial No. 592,609. (Cl. 73—167.)



1. In a fluid meter, a conduit for carrying a liquid to be measured, a casing containing a liquid heavier than that to be measured, a displacing device of variable cross section movable in said casing and containing a chamber of variable cross section sealed by said heavier liquid, and means for communicating differential pressures from the liquid in said conduit to the surface of the heavier liquid in said casing within and without said chamber.

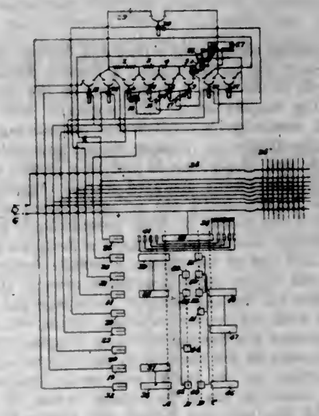
2. In a fluid meter, a conduit for carrying a liquid to be measured, a casing containing a liquid heavier than that to be measured, a displacing device movable in said casing and containing a chamber sealed by said heavier liquid, and means for communicating differential pressures from the liquid in said conduit to the surface of said heavier liquid within and without said chamber, said displacing device and chamber having variable cross sections whereby the movement of said displacing device is in a simple ratio to changes in the flow of the liquid in said conduit.

3. In a fluid meter, a conduit for carrying a liquid to be measured, a casing containing a liquid heavier than that to be measured, a displacing device movable in said casing and containing a chamber sealed by said heavier liquid, and means for communicating differential pressures from the liquid in said conduit to the surface of said heavier liquid within and without said chamber, said displacing device increasing upwardly in cross sectional area and said chamber decreasing upwardly in cross sectional area so that the movement of said displacing device shall be in constant ratio to changes in the flow of said liquid in said conduit.

4. In a fluid meter, a conduit for carrying a liquid to be measured, a casing containing a liquid heavier than that to be measured, a displacing device movable in said casing and containing a chamber sealed by said heavier liquid, and means for communicating differential pressures from said liquid in said conduit to the surface of said heavier liquid within and without said chamber, said displacing device having straight exterior elements and a variable cross sectional area whereby its movement is regulated to a simple ratio with relation to changes in flow of said liquid in said conduit.

5. In a fluid meter, a conduit for carrying a liquid to be measured, a casing containing a liquid heavier than that to be measured, a displacing device of variable cross section movable in said casing and containing a chamber of variable cross section sealed by said heavier liquid, said device having straight exterior elements, a counterbalancing displacing device of constant cross-section in said heavier liquid, and means for communicating differential pressures from said liquid in said conduit to the surface of said heavier liquid within and without said chamber.

1,064,749. ELECTRIC-CURRENT CONTROLLER. HARRY WARD LEONARD, Bronxville, N. Y. Filed Dec. 12, 1904. Serial No. 236,439. (Cl. 172—179.)



1. The combination of an electric motor, supply conductors of constant electromotive force, means for varying the potential at one terminal of the motor relatively to that of said supply conductors, and means dependent upon the difference between said potential and the potential of one of the supply conductors for automatically accelerating the motor and dependent upon the difference between said potential and that of the other supply conductor for automatically retarding the motor.

2. The combination of an electric motor, and means for automatically accelerating and retarding the motor, said means comprising one or more automatic switches closed by the counter electromotive force of the motor, the same switch contacts being employed and closed for controlling both the acceleration and retardation of the motor.

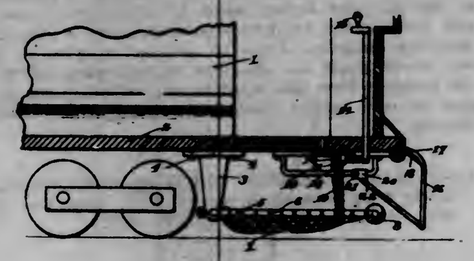
3. The combination of an electric motor, and a common means for automatically accelerating and automatically retarding the motor, said means being dependent upon the counter electromotive force of the motor for its automatic action during the automatic acceleration and automatic retardation.

4. The combination of an electric motor, means for automatically accelerating the motor comprising one or more responsive devices connected across the motor terminals and responding to changes in the counter electromotive force of the motor, means for further accelerating the motor by varying the field strength, means for electrically braking the motor by automatically reducing a rheostatic resistance in circuit with the motor armature, and means controlled by the operator for reversing the motor.

5. The combination of an electric motor, means controlled by the counter electromotive force of the motor for automatically accelerating the motor and for automatically retarding the motor controlled by the difference between the source of electromotive force and the counter electromotive force of the motor.

[Claims 6 to 64 not printed in the Gazette.]

1,064,750. CAR-FENDER. FREDERICK LILLICH, Philadelphia, Pa. Filed Mar. 22, 1912. Serial No. 685,485. (Cl. 105—130.)



1. A fender comprising a frame, a flexible slack drag at the forward end of the frame, a flexible device connected at its ends to the drag, a sliding bolt on the car adapted to engage the flexible device and normally hold the fender elevated, manually operated means for moving the bolt to release the fender, a tripping fender pivotally connected to the car and in position to engage a person or object on the track, and means operated by the tripping fender to move the flexible device out of engagement with the bolt and permit the fender to drop, substantially as described.

2. A fender comprising a frame, a flexible slack drag at the forward end of the frame, a flexible device connected at its ends to the drag positioned around the frame, a sliding bolt on the car adapted to engage the flexible device and hold the fender elevated, means for moving the bolt to release the flexible device, a tripping fender pivotally connected to the car and in position to engage a person or object on the track, and means operated by the tripping fender to move the flexible device out of engagement with the bolt and permit the fender to drop, substantially as described.

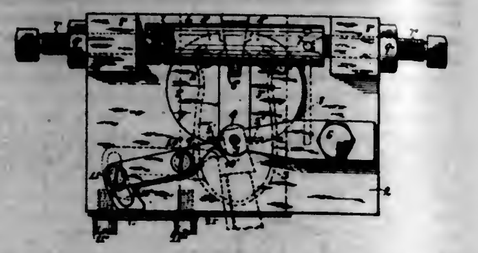
3. A fender comprising a frame, a flexible slack drag at the forward end of the frame, a flexible device connected at its ends to the drag positioned around the frame, a sliding bolt on the car adapted to engage the flexible device and hold the fender elevated, means for moving the bolt to release the flexible device, means for moving the flexible device off the bolt, said last-mentioned means comprising a trip fender pivotally connected to the end of the car, a guide rod, a sliding sleeve on the guide rod, a pin on the sleeve adapted to engage the flexible device, and a link pivotally connecting the sliding sleeve and the trip fender, substantially as described.

4. The combination with a car, brackets depending from the car, a fender pivoted at its rear end to said brackets, a slack drag at the forward end of said fender, a guide bracket secured to the bottom of the car, a bolt mounted in said guide bracket and movable longitudinally of the car, a ring connected to said flexible drag and adapted to be supported on the rear end of said bolt, a tripping fender pivotally connected to the car and in position to engage a person or object on the track, and means operated by the tripping fender to move the ring off the bolt and permit the fender to drop, substantially as described.

5. The combination with a car, brackets depending from the car, a fender pivoted at its rear end to said brackets, a slack drag at the forward end of said fender, a guide bracket secured to the bottom of the car, a bolt mounted in said guide bracket and movable longitudinally of the car, a ring connected to said flexible drag and adapted to be supported on the rear end of said bolt, a guide bar secured to the bottom of the car, a sleeve mounted to slide on said guide bar, a tripping fender, and a link connecting said tripping fender with said sleeve, whereby the movement of the sleeve moves the ring off of the bolt and permits the first-mentioned fender to drop, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,064,751. DRILLING-JIG. CARL H. LINDSTEDT, Hotchkissville, Conn. Filed Apr. 2, 1912. Serial No. 687,977. (Cl. 77—63.)



1. A drilling jig comprising a bed; normally-separated jaws, operating at the top of said bed, and adapted to clamp between them the shank of a knife-blade; opposite stanchions rising from said bed; a shaft rotatably supported by and between said stanchions; and a wedge, the latter more or less encircling and carried by said shaft, and being adapted to close said jaws upon said shaft being duly rotated.

2. A drilling jig comprising a bed; normally-separated jaws, operating at the top of said bed, and adapted to clamp between them the shank of a knife-blade; opposite stanchions rising from said bed; bearing-pivots projecting adjustably, one through each of said stanchions and each in the direction of the other; a shaft arranged between and in axial alinement with said bearing-pivots, and pivotably supported thereby; and a wedge, the latter more or less encircling and carried by said shaft, and, upon the latter being duly rotated, adapted to close said jaws.

3. A drilling jig comprising a bed; normally-separated jaws, operating at the top of said bed; means for closing said jaws; a flat stop, having a foot, at one end thereof, projecting suitably into the plane of said jaws in advance thereof, and an elongated opening at the opposite end thereof, and having an axis of movement between said foot and said opening; and a fastening-screw, the latter extending downwardly through said opening and having a threaded engagement with said bed, and said opening being formed concentric to the axis of movement of said stop.

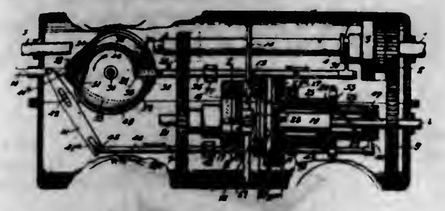
4. A drilling jig comprising a bed; normally-separated jaws, operating at the top of said bed and adapted to clamp between them the shank of a knife-blade; means for closing said jaws; and a slide, the latter disposed forwardly of said bed, adjustable to and fro laterally thereabout, and having a detent rising therefrom for engagement by the back edge of a knife-blade when held by the jaws aforenamed.

5. A drilling jig comprising a bed; jaws operating at the top thereof; an elastic element for yieldingly holding said jaws duly separated; a shaft rotatably disposed above the shanks of said jaws and provided with a lever-opening; and a wedge, the latter carried by said shaft, more or less encircling the same, and operating between the shanks aforenamed of said jaws, for closing the latter, upon the shaft aforenamed being duly rotated.

1,064,752. POWER-TRANSMISSION MECHANISM. FREDERICK E. LUEBKERT, New York, N. Y. Filed June 22, 1912. Serial No. 705,174. (Cl. 74—53.)

1. In change speed mechanism, a shaft having a head, an adjustable crank connected to said shaft, said crank comprising an arm mounted to slide in a slot in said head, a wrist extending from one side of said crank and a pin extending from the other side of said crank through a slot in the head, means for engaging said pin for varying the throw of said wrist and mechanism operated by said crank.

2. In change speed mechanism, a shaft having a head, an adjustable crank connected to said shaft, said crank comprising an arm mounted to slide in a slot in said head, a wrist extending from one side of said crank and a pin extending from the other side of said crank through a slot in the head, a disk having a spiral slot for engaging said pin to actuate the same to vary the throw of the wrist and mechanism operated by said crank.



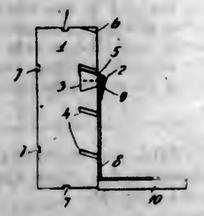
3. In change speed mechanism, a shaft having a head, an adjustable crank connected to said shaft, said crank comprising an arm mounted to slide in a slot in said head, a wrist extending from one side of said crank and a pin extending from the other side of said crank through a slot in the head, a disk having a spiral slot on its side face engaging said pin to actuate it to vary the throw of the wrist, means slidable on the shaft for giving the disk a partial rotation relative to the shaft and mechanism operated by said crank.

4. In change speed mechanism, a shaft having a head, a crank comprising an arm mounted to slide in a slot in said head, a wrist extending from one side of said crank and a pin extending from the other side of said crank through a slot in the head, a disk having a spiral slot on its side face engaging said pin to actuate it to vary the throw of the wrist, means slidable on the shaft for giving the disk a partial rotation relative to the shaft, said means comprising a sleeve splined upon the intermediate shaft and having a spiral peripheral slot engaging a pin connected to said disk and mechanism operated by said crank.

5. In change speed mechainsm, a shaft, a crank slidably mounted thereon, means for adjusting said crank to vary its throw, said means comprising a disk having a spiral slot on its side face engaging a projection extending from the crank, a sleeve integral with said disk, a pin extending inwardly from said sleeve, and a second sleeve splined upon the intermediate shaft and sliding within said first sleeve, said second sleeve having a spiral peripheral slot adapted to engage said pin and mechanism operated by said crank.

[Claims 6 and 7 not printed in the Gazette.]

1,064,753. WALL-BLOCK WITH FLASHING. RALPH R. MABIE, New Rochelle, N. Y. Filed Mar. 18, 1912. Serial No. 684,654. (Cl. 108—26.)



1. As a new article of manufacture, a flashing part inserted in and combined with the mass of plastic material in process of forming a building block therefrom, and constituting an inseparable part thereof when the same has hardened.

2. As a new article of manufacture, a building block including a flashing part inserted in and inseparably connected with such block, the ends of such flashing part projecting beyond the ends of the block, and adapted to form overlapping connections with adjoining blocks.

3. As a new article of manufacture, a building block including a flashing part inserted in and inseparably connected with such block, the ends of such flashing part projecting beyond the ends of the block, and adapted to form overlapping connections with adjoining blocks, such blocks provided with slots adapted to take in the projecting ends of such flashing parts.

4. As a new article of manufacture, a building block including a flashing part inserted in and inseparably connected with such block, the ends of such flashing part projecting beyond the ends of the block, and adapted to form overlapping connections with adjoining blocks, such blocks provided with a series of slots adapted to take in the projecting ends of such flashing parts upon different levels.

5. The combination with a wall of a series of composite building blocks each provided with a flashing part inseparably connected with the same and incorporated in the plastic mass thereof before the same has set, such flashing parts extending beyond the ends of such blocks, and such blocks provided with suitable slots adapted to take in the projecting ends of said flashing parts.

[Claim 6 not printed in the Gazette.]

1,064,754. RESERVOIR-PEN. PAUL MACGAHAN, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Aug. 2, 1909. Serial No. 510,853. (Cl. 120—43.)



1. A pen comprising a substantially hooked-shaped tube containing a column of ink sustained by external air pressure, a pen point fed therefrom and a capillary tube projecting from said pen point to the bottom of said column.

2. A pen comprising a U-shaped tube having arms of unequal length, the longer arm being closed to constitute a reservoir in which the ink is sustained by external air pressure and a short arm which is opened, a pen point and a capillary tube forming communication between the bend of the U-shaped tube and the pen point.

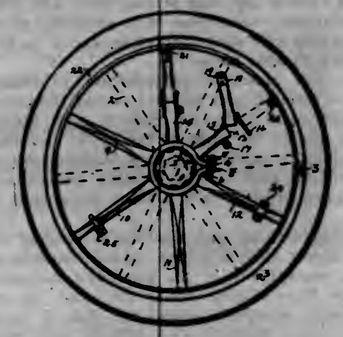
3. A pen comprising a substantially U-shaped tube having arms of unequal length, a protuberance in the longer arm approximately opposite the end of the short arm, a capillary tube terminating at the bend of the U-shaped tube and sealed into the protuberance, and a metal tube of small bore sealed into the end of the capillary tube to constitute a pen point.

1,064,755. AUXILIARY WHEEL. CHARLES I. MANER, New York, N. Y. Filed June 28, 1912. Serial No. 706,341. (Cl. 21—69.)

1. A device of the character described comprising a hollow and slitted hub and a rim, a plurality of solid spokes between said hub and said rim and a plurality of articulated spokes between said hub and said rim as specified.

2. An auxiliary wheel comprising a slitted ring having its ends out-turned, an obliquely slitted ring of larger

diameter, and a plurality of articulated spokes between said rings and adapted to forcibly retain said rings pre-



determined distances apart as herein specified and for the purpose set forth.

1,064,756. WIRE FENCING. DANIEL EARLE MCALISTER, Surrey, N. D. Filed Dec. 20, 1911. Serial No. 666,978. (Cl. 39—1.)



The combination with a fence line wire, a pair of lozenge-shaped members, end pieces formed integrally therewith holding said members in parallel spaced relation by the inbending of said members upon said end pieces, fingers formed with said members bent about the line wire, a rigid member centrally of the lozenge-shaped members adapted to bind them in assembled position, a double pointed barb rotatably and vertically mounted on said rigid member adapted to prevent the passage of an animal between parallel line wires.

1,064,757. GAGE FOR LOOMS. JAMES MCMAHON, Paterson, N. J. Filed Nov. 11, 1912. Serial No. 730,538. (Cl. 139—18.)



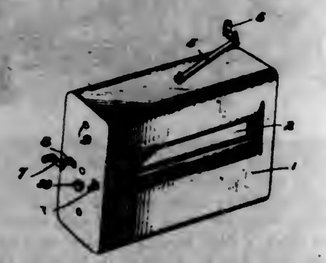
1. In a loom, the combination, with a fixed supporting means, a fell-gage carried by said supporting means and having its gaging portion parallel with the fell of the fabric.

2. In a loom, the combination, with suitable supporting means over which extend the warp and fabric, a fell-gage carried by said supporting means and having its gaging portion parallel with the fell of the fabric and being adjustable longitudinally of the warp.

3. In a loom, the combination, with suitable supporting means over which extend the warp and fabric, a fell-gage carried by said supporting means and having its gaging portion parallel with the fell of the fabric and being shiftable transversely of the warp and fabric.

4. In a loom, the combination, with the breast-beam and the batten movable toward and from the breast-beam, a fell-gage pivotally supported between the breast-beam and batten on an axis extending transversely of the warp and fabric and having its gaging portion parallel with the fell of the fabric.

1,064,758. STREET-INDICATOR. JAMES MEANY, Philadelphia, Pa. Filed Feb. 11, 1913. Serial No. 747,590. (Cl. 40—87.)



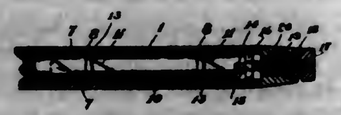
1. An indicator of the character described, comprising a casing having windows in both sides, links pivotally connected at one end to a fixed support, and at their free ends to the upper and lower faces of said casing, a movable tape in the casing movable between the windows and containing printed matter on both sides thereof, and means at both ends of said casing for securing the same with either of its windows outermost, substantially as described.

2. An indicator of the character described, comprising a casing having windows in both sides, links pivotally connected at one end to a fixed support, and at their free ends to the upper and lower faces of said casing, a movable tape in the casing movable between the windows and containing printed matter on both sides thereof, means at both ends of said casing for securing the same with either of its windows outermost, said means comprising hooks on the ends of the casing, and spring catches adapted to engage said hooks, substantially as described.

3. An indicator of the character described, comprising a rectangular casing having windows in its front and rear faces, a tape movable between the windows and containing printed matter on both sides thereof, means within the casing for moving the tape, fixed brackets, links pivotally connected at one end to the brackets, and at their other ends to the top and bottom respectively of the casing at the center thereof, and means for locking the casing with either of its window faces outermost, substantially as described.

4. An indicator of the character described, comprising a rectangular casing having windows in its front and rear faces, a tape movable between the windows and containing printed matter on both sides thereof, means within the casing for moving the tape, fixed brackets, links pivotally connected at one end to the brackets, and at their other ends to the top and bottom respectively of the casing at the center thereof, two lugs on each end of the casing, and spring catches adapted to engage the lugs and hold the casing with either of its windows outermost, substantially as described.

1,064,759. SELF-FILLING FOUNTAIN-PEN. ADOLPH MUEHLMATT, Newport, Ky. Filed Apr. 5, 1912. Serial No. 688,668. (Cl. 120—46.)



1. In a self-filling fountain pen, a flexible sac ink reservoir, a hinged plate for deflating the sac, a screw with a nonrotatable disk mounted thereon, the disk adapted to slide back and forth to swing the plate on its hinges to deflate the sac, and an inside and outside screwthreaded

sleeve with the disk screw mounted therein whereby the rotation of the sleeve will advance and withdraw the disk.

2. In a self-filling fountain pen, a flexible sac ink reservoir, an inner tube in the pen barrel flush with the inner surface thereof, a plate for deflating the sac, annular grooves in the inner tube, with transverse slots therein, a plurality of links between the plate and the tube, with the ends of the links projecting into said slots, and rings in the grooves to engage the links and provide a hinge connection between the tube and the plate.

1,064,760. DOOR-RETAINER. LAURITZ B. NIELSEN, Newburgh, N. Y. Filed Aug. 10, 1911. Serial No. 643,357. (Cl. 16—79.)



As a new article of manufacture, a door retainer consisting of a continuous piece of broad, flat sheet metal having downwardly bent legs provided with frictional contact feet and with a rigid central permanently depressed portion, intermediate said legs, of a height adapting it to slip readily beneath the door and having portions on each side of the center thereof inclined at a sufficiently small angle to allow the door to ride up the same and become wedged thereby.

1,064,761. FRUIT-PICKER'S RECEPTACLE. CORNELIUS J. O'RIELY, Los Angeles, Cal. Filed June 17, 1912. Serial No. 704,235. (Cl. 150—2.)

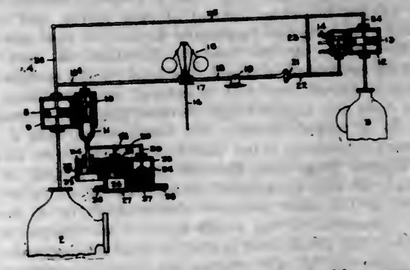


1. A fruit-picker's receptacle of flexible material and formed open at the top and bottom and with a rod on its upper end portion to spread its sides, and provided with padding and having stiffening strips at its lower end portion, a cord attached to the lower end portion, rings on the cord, a hook on which said rings may be fitted, and a strip of less width than the mouth of the receptacle arranged in the upper end portion of the receptacle and attached to the rod, substantially as set forth.

2. A fruit-picker's receptacle of flexible material and formed open at the top and bottom and with a rod on its upper end portion to spread its sides and having its sides arranged sufficiently close together to retard the movement of fruit as it falls toward the bottom of the receptacle and provided with padding to prevent damage to the fruit, and having stiffening strips arranged at its lower end portion, a cord attached to the lower end portion, rings on the cord, a hook on which said rings may be fitted, and a flexible strip of less width than the mouth of the receptacle arranged in the upper end portion of the receptacle and attached to the rod, substantially as set forth.

3. A fruit-picker's receptacle formed of flexible material open at the top and with a rod on its upper end portion to spread its sides, and having a flexible strip of less width than the mouth of the receptacle arranged in the upper part of the receptacle and attached to said rod, substantially as described.

1,064,762. GOVERNING MECHANISM FOR MIXED-PRESSURE TURBINES. WILHELM PAPE, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Dec. 27, 1911. Serial No. 668,129. (Cl. 121—118.)



1. In combination, a mixed pressure turbine, conduits admitting low and high pressure motive fluid thereto, valve means controlling the passage of fluid therethrough, a governor controlling the action of both valve means, a pressure regulator that modifies the action of the governor on said means, and a second pressure governor that under certain conditions modifies the action of the first.

2. In combination, a mixed pressure turbine, conduits admitting low and high pressure motive fluid thereto, valve means controlling the passage of fluid therethrough, a condenser receiving the exhaust of the turbine, a governor controlling the valve means, a regulator responsive to the pressure of the low pressure source, and a second regulator responsive to exhaust pressure, both of said regulators modifying the action of the governor on said valve means.

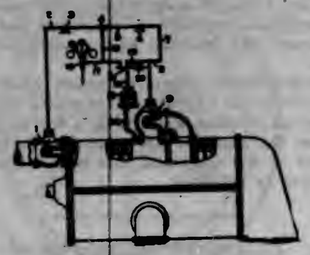
3. In combination, a mixed pressure turbine, conduits admitting low and high pressure motive fluid thereto, valve means controlling the passage of fluid therethrough, a speed governor driven by the turbine for controlling the valve means, a regulator responsive to the pressure of fluid supplied to the turbine, and a second regulator responsive to the exhaust pressure of the turbine, both of said regulators modifying the action of the speed governor.

4. In combination, a mixed pressure turbine, conduits admitting low and high pressure motive fluid thereto, valve means controlling the passage of fluid therethrough, the valve means for the low pressure source tending to open when high pressure fluid is admitted for the purpose of starting, and a regulator that overcomes said tendency and temporarily holds said valve means closed.

5. In combination, a mixed pressure turbine, conduits admitting low and high pressure motive fluid thereto, valve means controlling the passage of fluid therethrough, a governor controlling both of said valve means, a motor for actuating the low pressure valve means, a controller for the motor comprising two principal parts, one of said parts being actuated by the governor, means responsive to pressure for actuating the second part, and a regulator that under certain conditions assumes control of the second part to the exclusion of the said means.

[Claims 6 and 7 not printed in the Gazette.]

1,064,768. REGULATOR FOR TAPPED TURBINES. WILHELM PAPE, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 21, 1911. Serial No. 743,886. (Cl. 121—118.)



1. In a tapped turbine, the combination with a high pressure admission valve, and an overlow valve between the tapped stage and the low pressure portion of the turbine, of a speed governor arranged to open and close said valves simultaneously, and a pressure-responsive device having the same control of said valves, and means whereby the pressure-responsive device can also move the overflow valve in the opposite direction, so that with variable extraction of steam the load on the turbine may remain constant, and with a varying load the steam supplied from the tapped stage remains practically constant.

2. In a tapped turbine, the combination with a high pressure admission valve and an overflow valve between the tapped stage and the low pressure portion of the turbine, of two articulated levers, one of which is connected to the high pressure admission valve, a floating lever connected to the overflow valve and linked to the other of the articulated levers, a pressure-responsive device connected to said floating lever, an adjustable lever pivoted to the rod of the pressure-responsive device, a speed governor, a second floating lever actuated by the speed governor and pivoted to said adjustable lever, and connections between said second floating lever and the joint between the articulated levers.

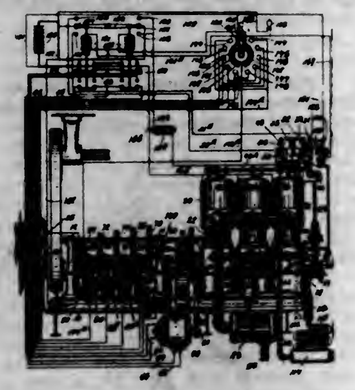
1,064,764. SUCKER-ROD COUPLING. CLARENCE LYMAN PARKER, Los Angeles, Cal. Filed June 25, 1912. Serial No. 705,830. (Cl. 285—31.)



1. A sucker rod comprising two sections, each of substantially even diameter throughout with the ends threaded, an extension for each end of the sucker rod provided at one end with a laterally enlarged portion having an axial socket therein threaded to receive the corresponding end of the sucker rod section with the threads related to receive solder when the sucker rod is seated in the socket by sweating the joint so formed, said socket having a counterbore at its entering end to receive the unthreaded portion of the sucker rod adjacent the threaded end, and said extension being of larger diameter than the sucker rod and squared for a portion of its length between its ends with the end remote from the socketed end externally screw threaded, and a straight coupling for the externally threaded ends of the extensions of adjoining sucker rod sections, the socketed end of the extension being separated from the externally threaded end of the extension by the squared portion.

2. A sucker rod comprising two sections, each of substantially even diameter throughout with the ends threaded, an extension for each end of the sucker rod provided at one end with a laterally enlarged portion having an axial socket therein threaded to receive the corresponding end of the sucker rod section with the threads related to receive solder when the sucker rod is seated in the socket by sweating the joint so formed, said socket having a counterbore at its entering end to receive the unthreaded portion of the sucker rod adjacent the threaded end, and said extension being of larger diameter than the sucker rod and squared for a portion of its length between its ends with the end remote from the socketed end externally screw threaded, and a straight coupling for the externally threaded ends of the extensions of adjoining sucker rod sections, the socketed end of the extension being separated from the externally threaded end of the extension by the squared portion, and the externally threaded portion of each extension being of greater length than sufficient to enter the coupling and there provided with a nut of harder material than the rest of the structure and constituting a wear member for protecting the external surface of the coupling.

1,064,765. ELECTRIC CONTROLLER FOR EXPLOSIVE-ENGINES AND ASSOCIATED MECHANISMS. CHARLES O. PEARSON, New York, N. Y. Filed Aug. 17, 1908. Serial No. 448,878. (Cl. 123—102.)



1. A reversible internal combustion engine, a sparking device therefor, an electrodynamic machine driven by the engine and arranged to generate an electrical supply, a storage battery, a single manually controlled device for directing said electrical supply to cause said supply to energize the electrodynamic machine to start the engine in either direction and to connect and disconnect said electrical supply with and from the sparking device.

2. An internal combustion engine, an electrodynamic machine connected therewith and arranged to generate an electrical supply, a storage battery, circuits for said electrodynamic machine, a manually operated switch for controlling said circuits and causing the electrical supply to run the electrodynamic machine as a motor until the engine attains its speed, a spark-advancing means, circuits therefor, an automatic switch in said circuits, and a centrifugal governor driven by the engine and arranged to control the automatic switch to thereby increase the speed of the engine.

3. An internal combustion engine, a sparking device therefor, an electrodynamic machine driven by the engine and arranged to generate a supply of electrical energy, a manually operated switch, and an electrically actuated reversing switch controlled thereby and arranged to connect said battery with the electrodynamic machine to cause said supply to run the electrodynamic machine in either direction as a motor, said reversing switch being also arranged to control the supply to the sparking device.

4. An internal combustion engine, an electrodynamic machine driven thereby, electromagnetically actuated devices for controlling the starting, stopping and speed of the engine, a manual switch for controlling said devices, and a storage battery arranged to be charged from the electrodynamic machine and to supply current for the electromagnetically actuated devices and the manual switch.

5. A reversible internal combustion engine, an electrodynamic machine connected therewith and arranged to start the engine in either direction, an electrical control system for the engine comprising means for controlling the speed of the engine, said machine being arranged to generate an electrical supply for energizing the control system, a storage battery, and means for connecting the battery with the electrodynamic machine to charge the battery when said machine is running in either direction.

[Claims 6 to 43 not printed in the Gazette.]

1,064,766. VEHICLE-TIRE. LEROY S. PROUTS, Canton, Ohio. Filed Nov. 20, 1911. Serial No. 661,340. (Cl. 152—10.)



In combination with the rim of a wheel, a tire of the character described, comprising a casing having a rim attaching portion and an inner, annular cushion-receiving cavity, an annular, elastic cushion in said cavity, said cushion provided with an inwardly open, relative deep and narrow annular slot having substantially parallel side walls and an inner wall connecting said side walls substantially in the center of the cushion body, each of said side walls being of greater area than said inner wall, and an inflatable tube in said slot and adapted, when inflated, to bear against said rim, the walls of said casing and the side walls and inner wall of said slot and to expand said cushion by an angular outward movement of said side walls with reference to each other and a simultaneous sliding movement of said cushion over the inner surface of said casing away from said rim.

1,064,767. BEVERAGE EXTRACT. WILLIS H. POST, Battle Creek, Mich., assignor to Postum Cereal Co., Limited, Battle Creek, Mich., a Partnership. Filed Sept. 19, 1912. Serial No. 721,279. (Cl. 99—11.)

1. A solid soluble extract for preparing beverages, consisting of extractive matter in soluble form of roasted figs.

2. A solid soluble extract for preparing beverages, consisting of extractive matter in soluble form of figs roasted to a degree sufficient to caramelize the sugar content.

3. A solid soluble extract for preparing beverages, consisting of soluble extractive matter in comminuted form derived from roasted figs.

4. A solid soluble extract for preparing beverages consisting of extractive matter in soluble form of partially carbonized figs.

1,064,768. BEVERAGE EXTRACT. WILLIS H. POST, Battle Creek, Mich., assignor to Postum Cereal Co., Limited, Battle Creek, Mich., a Partnership. Filed Sept. 19, 1912. Serial No. 721,280. (Cl. 99—11.)

1. A solid soluble extract for preparing beverages, consisting of extractive matter in soluble form from dandelion roots and a saccharine body roasted to caramelize the sugar content.

2. A solid soluble extract for preparing beverages, consisting of soluble extractive matter in comminuted form derived from roasted dandelion roots and a caramelized saccharine body.

3. A solid soluble extract for preparing beverages, consisting of soluble extractive matter of roasted dandelion roots and caramelized molasses.

4. A solid soluble extract for preparing beverages consisting of soluble extractive matter of dandelion roots and a saccharine body roasted to partial carbonization.

5. A solid soluble extract for preparing beverages, consisting of soluble extractive matter in comminuted form of dandelion roots in molasses roasted to partial carbonization.

1,064,769. PREPARATION FOR AUTOMATICALLY SEALING PUNCTURES IN PNEUMATIC TIRES. GEORGE HERBERT PRICE, Queenstown, Cape Colony. Filed Aug. 14, 1911. Serial No. 643,947. (Cl. 152—25.)

1. A preparation comprising the milk or sap of plants of the genus *Euphorbia* and glycerin.

2. A preparation comprising the milk or sap of *Euphorbia pulvinata* and glycerin.

3. A preparation comprising the milk or sap of plants of the genus *Euphorbia*, glycerin and a preservative.

4. A preparation comprising the milk or sap of *Euphorbia pulvinata*, glyverin and a preservative.

5. A preparation comprising the milk or sap of plants of the genus *Euphorbia*, glycerin and formalin.

[Claim 6 not printed in the Gazette.]

1,064,770. SCHEDULE-INDICATOR. RICHARD QUINN, Newark, N. J. Filed Feb. 5, 1912. Serial No. 675,530. (Cl. 58—91.)



1. In combination with the ordinary open-faced watch, a split bezel provided with a plurality of spring clips extending therefrom, and a movable dial secured in said bezel, said dial having inscribed upon it the names of different stations and streets.

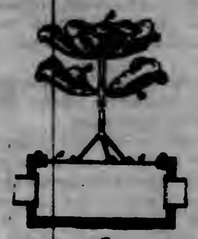
2. In combination with the ordinary open-faced watch, a split spring bezel provided with spring clips extending from the outer circumferential edge thereof, and a movable transparent dial secured in said bezel, said dial having inscribed upon it the names of different stations and streets.

1,064,771. APPARATUS FOR THE RECEPTION AND REPRODUCTION OF SOUND-WAVES. OSWALD REINHARDT, Dessau, Germany. Filed Aug. 22, 1911. Serial No. 645,373. (Cl. 181—5.)

1. An apparatus of the character described having a suitably supported membrane; and suitably curved sound-transmitting irregular bodies which are bent irregularly and are mounted lever-like upon said membrane and which are arranged and adapted to receive sound vibrations and to transmit the same with reinforced strength and with the secondary sounds suppressed.

2. An apparatus of the character described having a suitably supported membrane; and ear-like sound-trans-

mitting irregular bodies which are bent irregularly into a shape resembling that of the human external ear and are mounted lever-like upon and at an acute angle to said membrane and which are arranged and adapted to receive sound vibrations and to transmit the same with reinforced strength and with the secondary sounds suppressed.



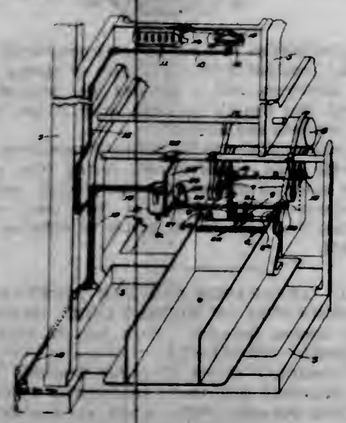
3. An apparatus of the character described having a suitably supported membrane; and ear-like sound-transmitting bodies which are provided with an attaching base and are mounted lever-like upon said membrane and which are arranged and adapted to receive sound vibrations and to transmit the same with reinforced strength and with the secondary sounds suppressed.

4. An apparatus of the character described having a suitably supported membrane; and ear-like sound-transmitting bodies which are mounted lever-like upon said membrane and which are arranged symmetrically and adapted to receive sound vibrations and to transmit the same with reinforced strength and with the secondary sounds depressed.

5. An apparatus of the character described having a suitably supported membrane; and ear-like sound-transmitting bodies which are provided with a centrally-disposed attaching base and are mounted lever-like upon said membrane and which are arranged and adapted to receive sound vibrations and to transmit the same with reinforced strength and with the secondary sounds suppressed.

[Claim 6 not printed in the Gazette.]

1,064,772. COUNTING ATTACHMENT FOR PRINTING-PRESSES. ERNST R. RICHARDS, Chicago, Ill., assignor to Sears, Roebuck and Co., Chicago, Ill., a Corporation of New York. Filed Sept. 9, 1912. Serial No. 719,278. (Cl. 235—98.)



1. The combination of a register; a member arranged to be operated by the articles to be counted; fluid-pressure-operated means for actuating said register; and a valve device operable by said member for controlling the actuation of said fluid-pressure means.

2. The combination of a register; a fluid-pressure-actuated device for operating said register; a valve for controlling the flow of pressure fluid to said device; and means operable when material is being acted upon for operating said valve.

3. The combination of a register; a diaphragm structure operatively connected with said register; pipes for conveying pressure fluid to said diaphragm structure; a valve device in said pipes for controlling the flow of pressure fluid; and means actuated by the articles to be counted for controlling said valve device.

4. In a printing press, the combination with means for pushing signatures, of a register, fluid-pressure-actuated means for operating said register; a valve device controlling the flow of pressure fluid to said fluid-pressure-actuated means; and means for operating said valve device, including a part adjacent to said pushing means adapted to be engaged by each signature as it it advanced.

5. In a printing press, the combination with means for pushing signatures of a register, fluid-pressure-actuated means adapted to operate said register; a valve controlling the flow of pressure fluid to said fluid-actuated means; a rock shaft mounted adjacent to said pushing means and operatively connected to said valve device; and a member on said rock shaft adapted to be engaged by the signatures for rocking said shaft.

[Claims 6 to 8 not printed in the Gazette.]

1,064,773. PROCESS OF DRAINING AND UTILIZING SLIME. FELIX RICHTER, Frankfort-on-the-Main, Germany. Filed Nov. 22, 1910. Serial No. 593,954. (Cl. 71—8.)

1. The process of dewatering slime, which comprises mixing the slime with the finely-divided residue of the heat treatment of carbon-containing material, and then subjecting the mixture to the action of an oxygen-containing gas.

2. The process of dewatering slime, which comprises mixing the slime with the finely-divided residue of the dry distillation of carbon-containing material, and then subjecting the mixture to the action of an oxygen-containing gas.

3. The process of dewatering slime, which comprises mixing the slime with the finely-divided residue of the dry distillation of a mixture of finely-divided carbon-containing material and mineral matter, and then subjecting the mixture to the action of an oxygen-containing gas.

4. The process of treating slime, which comprises treating the slime with the finely-divided residue of the heat-treatment of carbon-containing materials, subjecting the mixture to the action of an oxygen-containing gas, and then pressing the residue, without previous drying, into solid pieces.

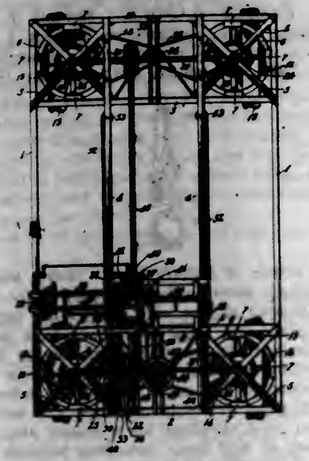
5. The process of treating slime, which comprises mixing the slime with a residue of the dry distillation of carbon-containing material, subjecting the mixture to the action of an oxygen-containing gas, and then subjecting the mixture to pressure, without previous drying, to form it into solid pieces.

[Claim 6 not printed in the Gazette.]

1,064,774. TRACTOR. JOHN W. ROMINE, Monroe, Mich., assignor of one-half to The Greening Nursery Company, Monroe, Mich., a Corporation. Filed Sept. 25, 1912. Serial No. 722,200. (Cl. 21—114.)

1. A tractor comprising a frame, a pair of bearing members rotatable in the plane of the frame at each end thereof, upright shafts each rotatable in and in axial alinement with a bearing member, a traction bearing wheel journaled on the horizontal extension of each shaft, mechanism for driving each wheel coupled to afford differential movement of the wheels of each pair, a motor on the frame for driving the mechanism, and means for turning the wheels of each pair in unison independently of the other pair.

2. A tractor comprising a frame, a pair of depending upright shafts journaled near each end of the frame and provided with lateral extensions near their lower ends, traction bearing wheels mounted each on a lateral extension, manually operable means for turning the shaft on each pair in unison independently of the other pair, differential mechanism coupling the traction bearing wheels on each pair and driving the latter when in any position, a motor, and mechanism operatively connecting the motor to the differential coupling means of each pair for driving said coupling means differentially.



3. A tractor comprising a main frame, a pair of upright shafts depending from each end portion thereof, and each having a lateral extension, a circle plate secured to each shaft and rotatably secured in the frame, a steering wheel for each pair of circle plates, means operatively connecting each steering wheel and the companion circle plates to turn the latter in unison, a motor, and differential and change speed transmission mechanism operatively connecting the motor to each traction wheel.

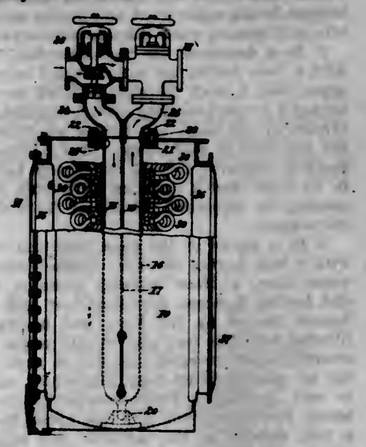
4. A tractor comprising a main frame, a pair of upright shafts depending from each end portion thereof, and each having a lateral extension, a circle plate secured to each shaft and rotatably secured in the frame, a steering wheel for each pair of circle plates, means operatively connecting each steering wheel and the companion circle plates to turn the latter in unison, a motor, and differential and change speed transmission mechanism operatively connecting the motor to each traction wheel, the steering wheels of the pairs being mounted for simultaneous manipulation by an operator.

5. A tractor comprising a main frame, a pair of circle plates rotatably secured near each end thereof, upright shafts secured to turn with the circle plates and provided with lateral extensions near the lower ends thereof, a traction bearing wheel on each extension, a beveled gear on each traction wheel, a sleeve journaled on each shaft, a beveled pinion on each sleeve meshing with the wheel gear, a two-part differential shaft for each pair of circle plates, a pinion secured on each part near the adjacent circle plate, a beveled gear on each sleeve in mesh with a differential shaft pinion, gearing differentially connecting the two parts of each shaft, a motor on the frame, and mechanism operatively connecting the motor to the shaft differential mechanisms for driving the latter differentially relative to each other.

[Claims 6 to 8 not printed in the Gazette.]

1,064,775. HEAT-TRANSFERRING APPARATUS. REUBEN R. ROW, Jersey City, N. J. Filed Oct. 29, 1907, Serial No. 399,735. Renewed Dec. 30, 1911. Serial No. 668,763. (Cl. 62—30.)

1. An exterior casing having a door in its side and an inlet and an outlet, longitudinal inlet and outlet conduits centrally within said casing, and transverse parallel segmental coils within said casing and connecting said conduits; substantially as set forth.



2. An exterior casing having a door in its side and an inlet and an outlet, longitudinal inlet and outlet conduits centrally within said casing, and transverse parallel segmental coils at opposite sides of and connecting said conduits; substantially as set forth.

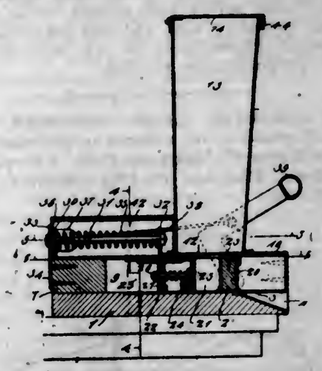
3. An exterior casing having a door in its side and an inlet and an outlet, longitudinal inlet and outlet conduits centrally within said casing, and banks of transverse parallel segmental coils at opposite sides of and connecting said conduits, the alternate coils describing smaller arcs than the other coils; substantially as set forth.

4. An exterior casing having an inlet and an outlet, longitudinal inlet and outlet conduits extending lengthwise of and rotatably mounted within said casing, and a series of transverse parallel segmental coils connecting said conduits, said casing having a door in its side; substantially as set forth.

5. An exterior casing having an inlet and an outlet, longitudinal inlet and outlet conduits extending lengthwise of and rotatably mounted within said casing, and a series of transverse parallel segmental coils at opposite sides of and connecting said conduits, said casing having a door in its side; substantially as set forth.

[Claims 6 to 15 not printed in the Gazette.]

1,064,776. SUGAR-DISPENSING MACHINE. GEORGE W. ROWELL, Portales, N. Mex. Filed June 20, 1912. Serial No. 704,857. (Cl. 73—134.)



1. In a device of the class described, the combination with a base block having a channel opening through its upper face and out its front end, and a plate secured upon said block and having an opening registering with the upper end of said channel; of a second block overlying the first and having a recess in its body, a hinge connection between the blocks at one side, a latch connection between

them at the other side, a hand-operated plunger movable within said recess and having an opening, and a hopper carried by the upper block and having an outlet delivering into said opening when the plunger is moved to the rear.

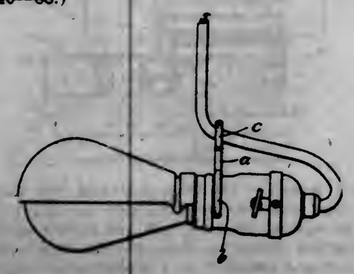
2. In a device of the class described, the combination with a base having an outlet chanel opening through its upper face, a block movably mounted upon said base and having a recess extending over said channel, and a hopper carried by the block and having an outlet delivered into the rear end of said recess; of a hand-operated plunger movably mounted in said recess and having an opening in its body, and a partition adjustably mounted in said opening for regulating the size of the charge delivered by the plunger.

3. In a device of the class described, the combination with a base having an outlet channel opening through its upper face, a block movably mounted upon said base and having a recess extending over said channel, and a hopper carried by the block and having an outlet delivering into the rear end of said recess; of a hand-operated plunger movably mounted in said recess and having an opening in its body, a partition movably mounted in said opening, a brush carried by the partition and whose bristles contact with the upper face of said base, a bolt secured to the partition and projecting through the rear end of the plunger, a thumb-nut on the projecting end of said bolt, and a spring between said rear end and partition.

4. In a device of the class described, the combination with a base having an outlet chanel opening through its upper face, a block movably mounted upon said base and having a recess extending over said channel, and a hopper carried by the block and having an outlet delivering into the rear end of said recess; of a plunger movable in said recess and having a charge opening, a plate projecting to the rear from said plunger and provided with a perforated ear, a spring pressing said ear normally to the rear, a yoke engaged with the ear, a handle pivoted to the block and having a hand-piece, and connections between said handle and yoke.

5. In a device of the class described, the combination with a base having an outlet channel opening through its upper face, a block movably mounted upon said base and having a recess extending over said channel, and a hopper carried by the block and having an outlet delivering into the rear end of said recess; of a plunger movable within said recess and having a charge-opening through its body, a plate projecting to the rear from said plunger and having an upturned perforated ear, supports rising from said block at either side of said perforated ear, a guide rod connecting said supports and passing through the perforation in said ear, an expansive spring between the forward support and said ear, a yoke slidable on the rod in rear of said ear and having its extremities turned forward, a U-shaped lever having arms pivoted astride the block and a hand hold in its bend, and rods connecting the forwardly turned extremities of the yoke with the arms of said lever, for the purpose set forth.

1,064,777. **ELECTRIC-LAMP ADJUSTER.** JOSEPH SACHS, Hartford, Conn., assignor to The Sachs Laboratories, Incorporated, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 17, 1912. Serial No. 691,295. (Cl. 240—88.)



1. The combination with an incandescent lamp socket and its supporting cord, of an adjuster therefor comprising a flat body of insulating material having an aperture therein adapted to fit closely the socket, an opening into said aperture less in width than the diameter of the aperture forming spring arms to permit of passing the socket therebetween, and a cord engaging projection from the body arranged in the plane of the body.

2. The herein described article of manufacture comprising a flat body of insulating material, cord-engaging means and yielding socket engaging means formed integrally with the body and arranged in the plane thereof.

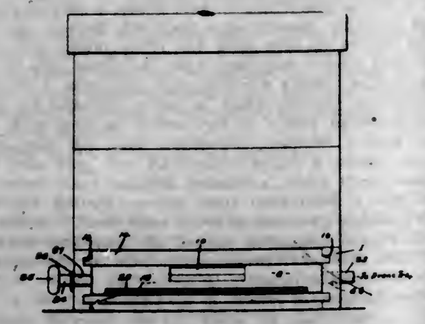
1,064,778. **CASKET-HANDLE.** EDWARD R. SARGENT, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Sept. 25, 1911. Serial No. 651,184. (Cl. 16—103.)



1. As an article of manufacture, a casket handle member comprising a plate having openings at the respective ends for fastening screws, said plate lying substantially in a single plane and being continuous from end to end, separate substantially parallel arms having shanks or bearing portions extending substantially across the intermediate portion of the plate, said arms intersecting a line connecting the aforesaid openings, and having oppositely located pivot openings for a hanger arm, and lugs on the shanks of said arms extending through the plate and clenched on the opposite face thereof; substantially as described.

2. As an article of manufacture, a casket handle member comprising a plate having openings at the respective ends and having a solid portion extending continuously in substantially a single plane from one of said openings to the other, an integral lug or extension on the intermediate portion of said plate, lying in the plane of the plate and substantially in line with said openings, separate parallel arms having shanks or bearing portions extending substantially across said lug or extension and the intermediate portion of the plate, and lugs on said arms extending through the plate and clenched on the opposite face thereof, said arms having suitable pivot openings for a hanger arm; substantially as described.

1,064,779. **BEEHIVE.** CHARLES G. SCHAMU, Liverpool, N. Y. Filed May 1, 1912. Serial No. 694,411. (Cl. 6—4.)



1. A beehive having a gate opening and a gate provided with an entrance and exit passage, the gate being adjustable to different positions whereby said passage partly opens the gate opening or whereby the gate opening is closed, substantially as and for the purpose described.

2. A beehive having a gate opening and an adjustable gate having a passage, the gate being movable about an axis to different positions for locating the passage to partly open the gate opening or for entirely closing said opening, substantially as and for the purpose specified.

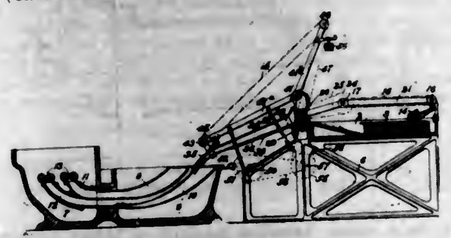
3. An adjustable gate for beehives having passages of different sizes, the gate being adjustable for locating any one of the passages in effective position and removing the other passages out of effective position, substantially as and for the purpose described.

4. An adjustable gate for beehives having passages of different sizes, the gate being adjustable for locating any one of the passages in effective position and removing the other passages out of effective position, or for moving all of the passages out of effective position so that the gate is entirely closed, substantially as and for the purpose specified.

5. An adjustable gate for beehives having a passage of sufficient size to accommodate the workers only, another passage large enough to accommodate the drones and the queen, the gate being adjustable for locating any one of said passages in effective position and moving the others out of effective position, and the gate being also adjustable into an entirely closed position, substantially as and for the purpose set forth.

[Claims 6 to 15 not printed in the Gazette.]

1,064,780. **AUTOMATIC FEEDING MECHANISM FOR TINNING APPARATUS.** RALPH S. SCHRUMN, Tarentum, Pa. Filed Oct. 22, 1909. Serial No. 524,034. (Cl. 91—12.6.)



1. In a tinning apparatus, a flux-box, means for automatically and successively feeding sheets from a pile to the flux-box comprising a cross-rod, means for moving said rod in an orbital path, a frictionally engaging pusher carried by the cross rod and arranged to travel over the pile of sheets and to frictionally engage the top sheet, and mechanically operative means for grasping a sheet and passing it through the flux-box.

2. In a tinning apparatus having a flux-box and a tinning-pot, means for automatically feeding sheets to the tinning-pot comprising a traveling pusher, a traveling rod on which the pusher is loosely hung and adapted to impart a reciprocatory movement to the pusher, an inclined platform, and an automatically operative fork adapted to engage a sheet on the platform and pass it through the flux-box.

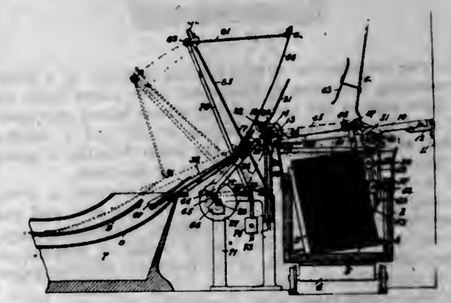
3. In a tinning apparatus having a flux-box and a tinning-pot, means for automatically feeding sheets to the tinning-pot comprising a traveling frictionally engaging pusher, an inclined platform, drying-rolls placed between the platform and said pusher, a "fork" adapted to engage a sheet on the platform, and means for moving the "fork" into and out of the flux-box.

4. In a tinning apparatus having a tinning-pot and a flux-box provided with upper and lower guide-ways, of means for automatically feeding sheets to the tinning-pot comprising a pusher, a rocking-platform for directing a sheet to the guide-ways of the flux-box, a "fork" arranged to engage a sheet on the platform and pass it through the flux-box, and means for moving the platform and "fork."

5. In a tinning apparatus having a tinning-pot and a flux-box provided with upper and lower guide-ways, means for automatically feeding sheets from a pile comprising a traveling pusher arranged to frictionally engage a sheet, an inclined movable platform adapted to direct a sheet to a guide-way of the flux-box, drying-rolls between the platform and the pusher, a movable "fork" arranged to engage a sheet on the platform and adapted to pass the sheet through the flux-box.

[Claims 6 to 9 not printed in the Gazette.]

1,064,781. **FEEDING MECHANISM FOR TINNING-MACHINES.** RALPH S. SCHRUMN, Tarentum, Pa., assignor of one-third to Charles Biehl and one-third to Guy W. Battles, Tarentum, Pa. Filed Aug. 17, 1910. Serial No. 577,717. (Cl. 91—12.6.)



1. The combination with a tinning pot, of means for automatically moving plates one by one from a pile to the pot comprising a rotative friction roller, means for moving the roller away from the pile and causing it to engage a succeeding plate at a predetermined interval, an inclined movable platform, means for raising and lowering the platform, a plate engaging member operable to engage a plate on the platform and pass it forward to the tinning pot, and means operable to move the last mentioned member toward and away from the tinning pot.

2. The combination with a tinning pot, of means for automatically moving plates one by one from a pile to the pot comprising a rotative friction roller, means for moving the roller away from the pile and causing it to engage a succeeding plate at a predetermined interval, an inclined movable platform, means for raising and lowering the platform, plate conveying means between the friction roller and the platform, a plate engaging member operable to engage a plate on the platform and pass it forward to the tinning pot, and means operable to move the last mentioned member toward and away from the tinning pot.

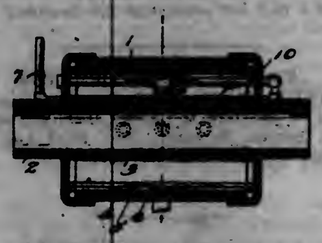
3. In a tinning machine feeding apparatus, means for automatically moving plates one by one from a pile comprising a movable carrier, an inclined track on which the carrier moves, a rotative friction roller movable with the carrier, and means movable with the carrier for moving the roller away from the pile and causing it to engage a succeeding plate at a predetermined interval.

4. The combination with a tinning pot, of means for automatically moving plates one by one from a pile to the pot comprising a rotative friction roller, means for moving the roller away from the pile and causing it to engage a succeeding plate at a predetermined interval including a cam and means coacting with the cam, an inclined movable platform, means for raising and lowering the platform, plate conveying means between the friction roller and the platform, a plate engaging member operable to engage a plate on the platform and pass it forward to the tinning pot, and means operable to move the last mentioned member toward and away from the tinning pot.

5. In a tinning machine feeding apparatus, means for automatically moving plates one by one from a pile comprising a movable carrier, a rotative and bodily movable shaft supported by the carrier, a friction roller on the shaft, a second shaft supported by the carrier, a cam on the second shaft, and means coacting with the cam for moving the roller away from the pile and causing it to engage a succeeding plate at a predetermined interval.

[Claims 6 to 19 not printed in the Gazette.]

1,064,782. VAPORIZER. RICHARD E. SHERMAN, Chicago, Ill., assignor of two-thirds to William C. Lawson, Chicago, Ill. Filed Aug. 12, 1912. Serial No. 714,604. (Cl. 48—107.)



1. The combination with a heating member, of a drum surrounding the same and provided with closed ends, an oil inlet pipe to the drum, a foraminous screen surrounding said member for distribution of oil, and a similar screen adjacent the walls of the drum forming a space for filtered gas to pass to the outlet of the drum.

2. A vaporizer comprising a heating member, a drum incasing said member and provided with oil inlet and gas outlet, a foraminous screen surrounding the heating member for distribution of oil, and a series of foraminous screens adjacent the walls of the drum for filtering vapor in its passage to the outlet.

3. The combination with a vaporizing drum having an oil inlet pipe passing therethrough with a return bend and provided with a spray nozzle, of a heating member within the drum, a foraminous screen inclosing said member for distribution of oil, and a series of screens adjacent the walls of the drum forming a filtered gas space provided with a gas outlet.

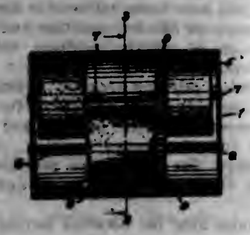
1,064,783. PNEUMATIC CLEANING DEVICE. JAMES M. SPANGLER, Canton, Ohio, assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio, a Corporation of Ohio. Filed July 24, 1911. Serial No. 640,262. (Cl. 15—60.)



A pneumatic cleaning device of the character described comprising a hollow casing, a pair of driving wheels and a brush, said casing provided on its under side with an elongated inlet slot having front and rear edges lying in a common plane, said brush rotatably mounted within said casing upon an axis parallel with said slot, said brush having bristles adapted to sweep across said slot, said driving wheels rotatably connected to said casing and having a common axis parallel with the axis of said brush and to the rear of said slot, the peripheries of said driving wheels extending below the said plane and means operatively connecting said driving wheels with said brush, whereby said brush may be rotated by the rotation of said driving wheels in moving the device over the surface to be cleaned, and the front edge of said slot is moved into engagement with or away from said surface when said casing is tilted.

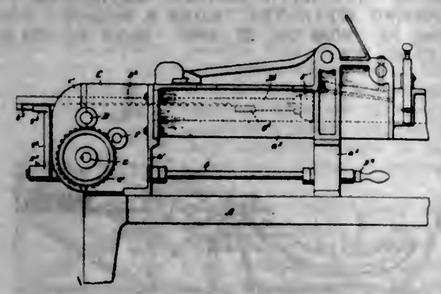
1,064,784. CLOTH-RUBBING DEVICE. WALTER A. STEBBINS and MATTHEW R. BERGER, Philadelphia, Pa. Filed Apr. 10, 1912. Serial No. 689,927. (Cl. 26—4.)

As a new article of manufacture, a gloss or polish removing device for woven fabrics consisting of a casing having openings in its bottom, a large centrally disposed roller and a pair of smaller side rollers projecting through said openings and having friction material on their peripheries, and gears connecting said rollers, whereby the



movement of the rollers over the surface to be treated causes one roller to turn in one direction and through the medium of the gears, compel the other roller to move in the opposite direction, substantially as described.

1,064,785. PLUNGER-OPERATING MECHANISM FOR BUTTER-HANDLING MACHINES. RICHARD F. STEWART, Briar Cliff Manor, N. Y. Filed Mar. 5, 1913. Serial No. 752,066. (Cl. 31—25.)



1. In a butter handling machine, a butter receiving chamber, a plunger in the chamber having inclined blocks near its opposite ends, a driven shaft connected to said plunger for actuating the same, a drive shaft, gears between the drive and driven shafts, a clutch for automatically connecting said gears whereby to actuate said driven shaft in opposite directions, spaced apart abutments connected to said clutch and arranged at the opposite sides of the plunger and means for moving either one of said abutments into the path of the plunger whereby one of said blocks is adapted to strike the corresponding abutment and throw the same out of the path of the plunger to shift the clutch out of engagement with said gears.

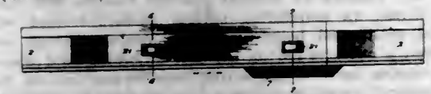
2. In a butter handling machine, a butter receiving chamber, a plunger in said chamber, a driven shaft connected to the plunger for moving the same, a drive shaft, a train of gears connecting the drive and driven shafts to move the plunger in one direction, a second train of gears between said drive and driven shafts to move the plunger in the opposite direction, a clutch disposed between said drive shaft and said trains of gears, manually operable means connected to the clutch for shifting the same into engagement with one of the trains of gears, and automatically operating means in the path of said plunger adapted to be engaged whereby to throw said clutch out of engagement with said train of gears.

3. In a butter handling machine, a butter receiving chamber, a plunger in said chamber, a driving element, a driven element, means disposed between said elements for moving the plunger in one direction, a second means disposed between said elements for driving the plunger in the opposite direction, a trip mechanism disposed between the driving element and said means and adapted to connect one of the means operatively to said driving element, said tripping mechanism being located in the path of the plunger and adapted to be actuated thereby at predetermined times to release said means from said driving element, and a manually controlled device connected to said tripping mechanism whereby to connect the same to said second means.

4. In a butter handling machine, a butter receiving chamber, a plunger in said chamber, a driven shaft connected to said plunger, a drive shaft, a train of gears connecting said drive and driven shafts, a clutch connecting said drive shaft to said train of gears, means controlled by the plunger for releasing said clutch and freeing said train of gears, a second train of gears, manually operated means connected to the clutch adapted to move said clutch into engagement with said second set of gears, and automatically controlled means adapted for engagement with the plunger to release said clutch from said second train of gears, said trains of gears being adapted to operate said plunger in opposite directions.

5. In a butter handling machine, a table, a butter receiving chamber mounted on the table, a gear box mounted on the table, a plunger operable in said chamber and projecting through the gear box, a driven shaft arranged transversely in the gear box, a pinion keyed to said driven shaft, a rack on said plunger meshing with said pinion, a drive shaft journaled in said gear box, a train of gears carried on said drive and driven shafts, the gear of said train on the driven shaft being free to turn thereon and having clutch teeth, a second train of gears on said shafts the gear of said second train on the drive shaft being free to turn thereon and having clutch teeth, a clutch member on said drive shaft for movement between the clutch teeth of both of said gears, a rock shaft journaled in the box and arranged in parallelism with said plunger, the rock shaft having connection with said clutch member, and spaced apart arms carried on said rock shaft and lying in the path of said plunger for engagement therewith at the ends of the strokes of the plunger whereby to move said rock shaft and shift said clutch member.

1,064,786. RAIL-JOINT. FERDINAND STOCK, Little Rock, Ark. Filed Sept. 6, 1912. Serial No. 719,017. (Cl. 239—8.)



In a rail joint, the combination with a rail end having a tenon which flares downwardly and is provided with a beveled base and with a baseless end which is reduced in thickness, said rail end being thickened where it joins the tenon, and a truss being provided on the base of the rail end and the base of the tenon, of another rail end provided with a downwardly flared mortise and beveled lower parts respectively receiving and fitting the tenon and the base thereof, said mortise being provided with a constricted inner end portion receiving the reduced end portion of the tenon.

1,064,787. PAPER RECEPTACLE. ELMER ZEBLEY TAYLOR, London, England, assignor to American Mono Service Company, Atlantic City, N. J., a Corporation of New Jersey. Filed July 3, 1911. Serial No. 636,784. (Cl. 229—13.)



1. A conical paper vessel having its upper margin folded inwardly and downwardly in flat parallel relation with the body portion of said vessel to form an interior rim shouldered portion therefor, the wall of said vessel having an annular outwardly projecting interiorly concave shouldered portion adjacent said rim shoulder, and a lid having an exteriorly convex shouldered portion fitting in the concave shouldered portion of said vessel and engaging the rim shoulder of said vessel, said lid having a marginal rim lying against the inner face of the downwardly folded margin of the vessel and extending upwardly and outwardly over the top of the vessel, substantially as described.

1,064,788. DEVICE FOR DETACHABLY SECURING ARTICLES IN POSITION. ALFRED ERNEST TERRY, Redditch, England. Filed Jan. 6, 1911. Serial No. 601,189. (Cl. 24—257.)



As an article of manufacture, a holder comprising an elongated tubular member composed of a coil of resilient wire formed into a plurality of elongated loops having inner portions adapted to embrace the article to be held when expanded thereby throughout a distance substantially equal to the length of the interior of said tubular member, said coil having outer portions disposed out of engagement with the article to be held and joined to the inner portions by end connecting portions of the coil, and securing means attached to said tubular member and located wholly on one side of the longitudinal axis of said member, said resilient coil being stiffened by the elongation of said loops to thereby project from said means and inherently maintain its tubular form during and subsequent to insertion therein of the article to be held, substantially as described.

1,064,789. VENEERING PROCESS. FRANK V. TISCHER, Dayton, Ohio. Filed Sept. 12, 1912. Serial No. 719,915. (Cl. 144—309.)

1. The process of veneering consisting of applying a coat of glue to the core and permitting it to dry, after which the veneer is served with a coat of glue, its glue coated side then being placed in contact with the glue coated side of the core, the veneer and core being then pressed together and kept under pressure till the glue dries.

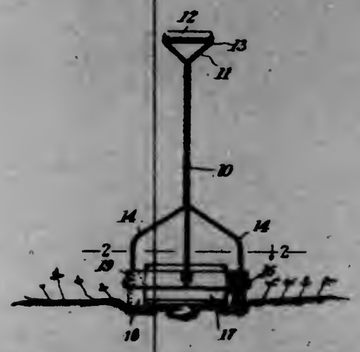
2. The process of veneering consisting of applying a coat of liquid adhesive substance to the core and permitting it to dry, after which the under side of the veneer is served with a coat of liquid adhesive substance, placed in contact with the prepared side of the core and subjected to pressure; the substance applied to the core being such that when it is in a sufficiently liquid state it is capable of amalgamating with the substance on the veneer and causing adhesion of the veneer to the core, the substance applied to the veneer containing an agent capable of acting upon the substance on the core and rendering it capable of amalgamating as and for the purpose aforesaid.

1,064,790. STRAWBERRY-RUNNER CUTTER. MARY E. TUCKER, Sweet, Idaho. Filed Nov. 3, 1911. Serial No. 658,396. (Cl. 55—64.)

1. A device of the class described, comprising a vertical handle, a plurality of radial arms carried thereby, an annular head carried thereby including a plurality of concentric trimming blades, certain of the blades being removable to form opposed openings to receive plant portions without cutting thereof, for the formation of a row of foliage as described.

2. In a garden implement of the class described, a handle formed of a plurality of metal strands bent angularly at their middle parts to form a handle loop, their intermediate end portions being intertwined to form a rigid

handle shank, their outer end portions being extended laterally and divergently for resilient movement longitudinally of the shank, and an annular trimmer device including blade sections carried respectively on the extremities of the arms.



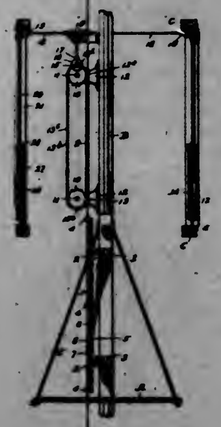
3. A trimmer comprising a handle, a plurality of resilient metal strands carried thereby having their outer end portions curved outwardly and then downwardly in respective radial planes to form resilient arms, and a trimmer device carried at their extremities comprising an annulus, bolt elements movable therein and blade sections secured to the bolts and arms.

4. A trimmer comprising a handle, a plurality of resilient radial arms carried at the lower end thereof, the arms having apertured end portions, an annulus, bolts carried by certain of the arms engaged through the annulus and concentric blade members secured pivotally to the annulus by the bolts.

5. A trimmer comprising a handle, a plurality of resilient metal strands carried thereby having their outer end portions curved outwardly and then downwardly in respective radial planes, an annulus, bolt members movable therein and engaged with the arms, blade sections secured to the bolts and arms, certain of said bolts being pivoted in the annulus, the annulus having vertical slots intermediately of the pivoted bolts, other of said bolts being slidably held in the slots.

[Claim 6 not printed in the Gazette.]

1,064,791. SAFETY-GATE FOR FREIGHT-ELEVATORS. GEORGE W. UNDERWOOD, Kansas City, Mo. Filed July 5, 1912. Serial No. 707,698. (Cl. 187—60.)



1. In combination with an elevator gate and an elevator car, a counterweight to assist in raising said gate to open position, a suitably-guided cable attached at its ends to the gate and said counterweight, a propelling chain carrying said counterweight, lugs suitably-spaced on said chain, a manually-operable bar mounted on the elevator car, means on said bar to engage certain of the lugs and move the chain in one direction to open the elevator gate and engage the other lugs to move the chain in a reverse direction to close the gate, a handle on said bar to actuate the same, and a detent carried by the car and adapted to engage said handle to lock the bar when in position for the elements thereon to engage the lugs, substantially as described.

2. In combination with an elevator gate and an elevator car, a counterweight to assist in raising said gate to open position, a suitably-guided cable attached at its ends to the gate and said counterweight, a propelling chain carrying said counterweight, lugs suitably-spaced on said chain, a manually-operable bar, links operably-connecting said bar to the elevator car, and forks carried by said bar to engage certain of the lugs and move the propelling chain in one direction to open the elevator gate and engage the other lugs to move the propelling chain in a reverse direction to close the gate, substantially as described.

3. In combination with an elevator car and hatchway, a collapsible gate at the hatchway, cables attached to opposite sides of the hatchway and the lower portion of the gate, and means attached to the upper portion of the gate and controlled by the car, which coacts with said cables in raising and collapsing the gate.

1,064,792. BOLT AND NUT RETAINING MEANS. DAN VANCE, Missouri Valley, Iowa, assignor of nineteen one-hundredths to John W. Thomas, Kansas City, Kans. Filed Sept. 18, 1911. Serial No. 650,039. (Cl. 151—33.)



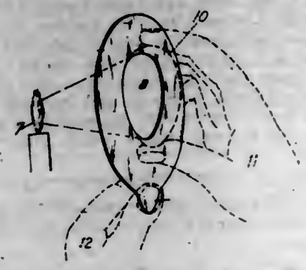
1. In a device of the class described, a washer having a projecting portion on one face and means on the opposite face forming an annular channel therein, said channel having an undulating bottom surface formed with radial crests and hollows, a bolt passing through said washer, a nut screwed on the bolt adjoining said washer and having pairs of projecting lugs formed on the face adjoining the washer, the said lugs adapted to engage the undulating surface of the said washer and straddle the crests and hollows thereof, and one of the projecting portions of said washer being adapted for engagement with the inner face of the nut, when screwed thereagainst.

2. In a device of the class described, a washer having an oblong projecting portion on one face and annular projecting portions on the opposite face forming an annular channel between them, said channel having an undulating bottom surface provided with radial crests and hollows, a bolt passing through said washer, a nut adapted to be screwed on the bolt and having pairs of lugs formed on the face adjoining the said washer, the said lugs being adapted to straddle and bind against the said crests and one of the annular projecting portions of said washer adapted for engagement with the inner face of the nut.

1,064,793. EGG-TESTER. GARRY P. VAN WYE, New York, N. Y. Filed Aug. 28, 1911. Serial No. 646,301. (Cl. 99—6.)

1. As an article of manufacture, an egg tester comprising a single piece of sheet material having a part formed into a handle whereby said shield may be held before a light, and having a single elongated opening therein so positioned that a part of the long axis thereof will have at least a point in common with the axis of the handle portion, for the purpose set forth.

2. An egg tester comprising a plate or shield having an elongated opening centrally thereof and a handle with the axis of the shield and handle coincident with the long axis of said opening; and an egg holder comprising a wire frame secured to said shield adjacent to said handle and having a loop extending over said opening in the shield, said frame being proportioned and disposed to



hold an egg with a spring action, for the purpose set forth.

1,064,794. PLUNGER MECHANISM. FRANK L. O. WADSWORTH, Sewickley, Pa. Filed Feb. 3, 1912. Serial No. 675,366. (Cl. 138—8.)



1. An elevator mechanism comprising a car, a cylinder, a lifting plunger therefor, and means supported and moved independently of the car for supporting said plunger intermediate the car and the cylinder, said means being governed so as to move uniformly as the car moves and at a slower rate of speed.

2. An elevator mechanism comprising a car, a plunger, a cylinder, and means supported independently of the car for guiding said plunger intermediate the car and cylinder, with mechanism for moving said guide means at a fraction of the speed of the car to position to provide lateral support for said plunger as the car is elevated.

3. An elevator mechanism comprising a car, a plunger, a cylinder, and means supported independently of the car for guiding said plunger intermediate the car and the cylinder, and mechanism for moving said guide means at a speed proportional to or less than that of the car.

4. An elevator mechanism comprising a car, a plunger, a cylinder, means for guiding said plunger intermediate the car and the cylinder and a rack and pinion device for controlling the movement of said guide means whereby the desired relative movement of the guide means with respect to the car is secured.

5. A plunger elevator comprising in combination, a car, a plunger, and a guide constructed with actuating means independent of the car whereby it is moved at one-half the speed of the car.

[Claims 6 to 8 not printed in the Gazette.]

1,064,795. MINE-CAR APPLIANCE. WILLIAM H. WALKER, Johnstown, Pa. Filed May 24, 1912. Serial No. 699,365. (Cl. 40—15.)

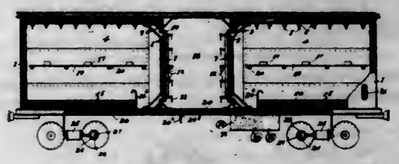
1. A mine car appliance comprising a bolt or pin having a cylindrical body portion, a pair of projections spaced apart longitudinally, located on opposite sides thereof, in combination with a check provided with a perforation substantially conforming to the cross sectional outline of said body portion and one of said projections.



2. A mine car appliance comprising a bolt or pin having a substantially cylindrical body portion, a pair of projections spaced apart longitudinally and located on opposite sides near one end thereof, in combination with a check provided with a perforation of approximately key-hole form, said key-hole being located diagonally near one end of the check and approximately conforming to the cross sectional outline of the said body portion and one of the projections thereof.

3. An appliance of the character described comprising a bolt having a substantially cylindrical body portion, a pair of projections spaced apart longitudinally and located on opposite sides near one end thereof, the opposite end being provided with a screw thread adapted to secure the same in place, in combination with a check provided with a diagonally disposed perforation of approximately key-hole form near one end thereof, said perforation conforming approximately to the cross sectional outline of said body portion and one of its said projections.

1,064,796. APPARATUS FOR PRESERVING PERISHABLE ARTICLES. CHARLES W. WALLER, Chicago, Ill., assignor of one-fifth to Clyde M. Peterman, Chicago, Ill. Filed Mar. 14, 1912. Serial No. 683,684. (Cl. 99—9.)



1. An apparatus for preserving perishable articles, comprising a fluid or air tight receptacle, a supply of sulfur therein, a supply of liquid, means for producing a partial vacuum in said receptacle, and electrical means for igniting said sulfur whereby the sulfur fumes given off by the latter absorb the oxygen in said receptacle and are dissolved in said liquid supply.

2. A car for preserving perishable articles, comprising a fluid tight car body provided with door openings intermediate the ends, liquid container tanks within said car body, removable doors for hermetically sealing said door openings, a supply of sulfur therein, means for electrically igniting said supply of sulfur, an axle actuated pump exhaust mechanism communicating with the interior of said car body and adapted to form a partial vacuum therein.

3. A car for preserving perishable articles, comprising a fluid tight car body provided with hermetically sealed doors, a supply of sulfur arranged within said car body, means for igniting said sulfur therein, a supply of liquid within said car body, and axle actuated vacuum pump mechanism and valved conduits communicating with the interior of said car body.

4. A car for preserving perishable articles, comprising a fluid tight car body, means within the latter for supplying sulfur fumes therein, means for hermetically sealing said car body, and axle actuated means for exhausting the fluid therefrom.

5. A car for preserving perishable articles, comprising a heat insulated rectangular car body, flange members

forming door openings within the intermediate portions of said car body, sealing plates removably connected to said flange members forming end compartments, means for generating sulfer fumes within the latter after sealing, and exhaust mechanism communicating with said compartments and adapted to form and maintain a vacuum in said compartments.

1,064,797. ATTACHMENT FOR VEHICLES. WILLIAM WALSH, Jr., Avoca, Pa. Filed Jan. 25, 1913. Serial No. 744,081. (Cl. 105—19.)



1. An attachment for vehicles comprising a pair of blocks, a bolt connecting the blocks and a prop pivotally supported on the bolt and freely swinging thereupon, substantially as described.

2. An attachment for vehicles comprising a pair of blocks, means rigidly connecting the blocks, a freely swinging prop, and a bolt connecting said prop to the support, substantially as described.

3. An attachment for vehicles comprising two blocks, a bolt connecting the blocks, a prop pivotally supported on the bolt, and means limiting the pivotal movement of the prop, substantially as described.

4. An attachment for vehicles comprising parallel blocks, a prop pivoted between the blocks, and a cross bar secured to the blocks and limiting the pivotal movement of the prop, substantially as described.

5. An attachment for vehicles comprising parallel blocks, a prop pivoted between the blocks, a cross bar secured to the blocks and limiting the pivotal movement of the prop, and said cross bar on its inner face at its ends having teeth positioned in recesses in the blocks, substantially as described.

1,064,798. TRIPOD. CHARLES WALTS, Louisville, Ky. Filed Mar. 28, 1912. Serial No. 686,912. (Cl. 88—61.)



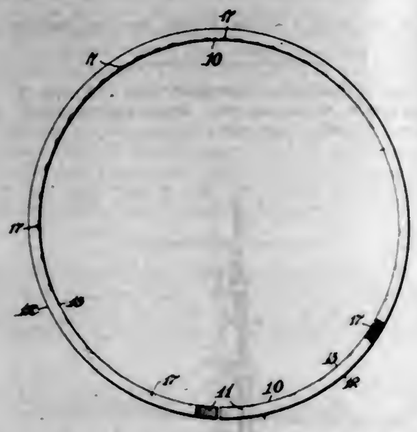
1. A tripod comprising a plurality of annular members, legs pivotally supported by each of said members, the free terminals of said legs being pivotally connected, one set of legs housing the other set of legs, and means connecting the terminals of said legs for holding the same together.

2. A tripod comprising a plurality of annular members, legs supported by each of said members, the legs supported by one of said members being housed by the legs of the other member when the tripod is folded, the free terminals of said legs being pivotally connected, and means supported adjacent the terminals of said legs for holding the legs in their folded position.

3. A tripod, comprising two sets of legs, the upper terminals of which are connected to a supporting mechanism, and an eccentrically mounted member connecting the lower terminals of the legs, said member being pivotally supported by said legs and disposed to contact with the legs to hold the same together.

4. A tripod comprising a plurality of annular members, legs pivotally supported by each of said members, and disposed in an inner and outer series, said legs being substantially U-shaped in cross section, the legs of the outer series embracing the legs of the inner series when the tripod is in its folded position, the free terminals of the legs being pivotally connected, a disk pivotally supported eccentrically adjacent said connected terminals, said disk being formed with an apertured lug, said lug receiving the securing device which connects the free terminals.

1,064,799. PACKING-RING. ALBERT WENZEL, Newark, N. J. Filed Aug. 14, 1912. Serial No. 714,942. (Cl. 121—108.)



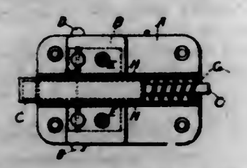
1. A split piston ring having indentations on its inner face, the indentations being closest together opposite the split portion and disposed farther apart as they approach the ends, the indentations terminating short of the sides of the ring.

2. A split piston ring having indentations arranged on its inner face within its side edges, the indentations being closest together opposite the split portion and being gradually spaced farther apart toward the ends, the indentations being of uniform depth.

3. A split piston ring having indentations on its inner face, the indentations being of uniform depth and being unevenly disposed to regulate the spring pressure of different portions of the ring.

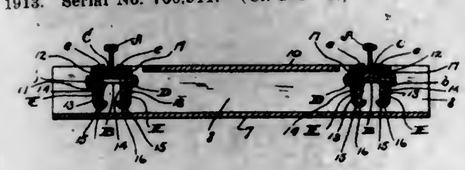
4. A split piston ring having an inner and outer face and opposite sides, and indentations of uniform depth close together opposite the split portion and gradually spaced farther apart toward the ends of the ring, the indentations not extending to the sides of the ring whereby the transverse measurement on all sides is uniform throughout the entire ring.

1,064,800. SHOP-DOOR LATCH. HARRIS M. WHITCOMB, Albany, Wis. Filed July 27, 1911. Serial No. 640,971. (Cl. 70—42.)



In a device of the kind described, a stationary member or casing having a bolt race, two apertures, two slots and means for attaching it to a door, a sliding plate, two handles, a fulcrum plate, and a spring actuated bolt, the sliding plate slidably disposed within the slots in the casing and engaging the bolt and the two handles, the two handles extending through the door from opposite sides and terminating in sliding the plate and fulcrum plate respectively, the fulcrum plate rigidly attached to the opposite side of the door from the casing and through which both handles pass, and to which the two handles are loosely connected, the spring actuated bolt within the bolt race in the casing operatively connected to the sliding plate.

1,064,801. RAIL-SUPPORT. ERNEST E. WIESE and HENRY F. WIESE, Brecksville, Ohio. Filed Apr. 14, 1913. Serial No. 760,911. (Cl. 238—5.)

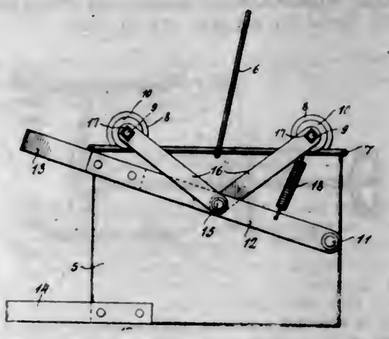


1. In a rail-support, the combination, with a hollow metal tie having two sides spaced transversely of the tie, said tie being provided internally of each end-portion thereof with an inverted-U-shaped brace extending between and being rigid with said sides, which brace has its side members extending into proximity to the bottom of the tie, each side member of said brace being provided with a bolt-hole which extends laterally through said side member and is arranged in line endwise with the corresponding bolt-hole in the other side member of the brace, said side members of said brace having the bottom edges thereof rounded in cross-section, of two clamps arranged at the outer side of the opposite side members respectively of said brace, each clamp terminating at its lower end in a member contoured to embrace and grip the rounded bottom edge of the adjacent side member of the brace, said clamp terminating at its upper end in a member arranged to overlap the top of the adjacent portion of the base of the rail to be seated on said brace; a bolt extending through the aforesaid bolt-holes and loosely through the clamps, which bolt has a head arranged at the outer side of one clamp, and a nut screwed onto the bolt at the outer side of the other clamp.

2. In a rail-support, the combination, with a hollow metal tie having two sides spaced transversely of the tie, said tie being provided internally of each end-portion of the tie with an inverted-U-shaped brace extending between and being rigid with the aforesaid sides, which brace has each side member thereof provided with a bolt-hole which extends laterally through said side member and is arranged in line endwise with the corresponding bolt-hole in the other side member of the brace, of two clamps arranged at the outer side of the opposite side members respectively of said brace, each clamp terminating at its lower end in a curved member arranged to embrace and grip the bottom edge of the adjacent side member of the brace, said clamp terminating at its upper end in a member arranged to overlap the top of the adjacent portion of the base of the rail to be seated on said brace, the clamps diverging at their inner sides from the bottom edges of the side members of the brace to the rail-overlapping members of the clamps; a bolt extending through the aforesaid bolt-holes and loosely through the clamps, which bolt has a head arranged at the outer side of one clamp, and a nut screwed onto the bolt at the outer side of the other clamp, the bolt-holes in the clamps extending somewhat above and below the bolt.

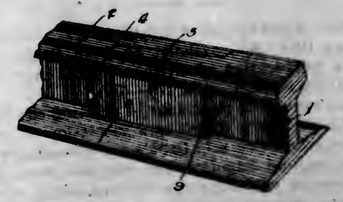
3. The combination, with a hollow metal tie having two sides spaced transversely of the tie, said tie being provided internally of each end-portion of the tie with an inverted-U-shaped brace extending between and being rigid with the aforesaid sides, and the rail resting on said brace, each side member of said brace being provided next below the top portion or central member of the brace with a bolt-hole which extends laterally through said side member and is arranged in line endwise with the corresponding bolt-hole in the other side member of the brace, of two clamps arranged at the outer side of the opposite side members respectively of said brace, each clamp terminating at its lower end in a curved member gripping the bottom edge of the adjacent side member of the brace, and said clamp terminating at its upper end in a member overlapping the top of the adjacent portion of the base of the aforesaid rail and gripping said base, the clamps diverging at their inner sides from the bottom edges of the side members of the brace to the rail-overlapping members of the clamps; a bolt extending through the aforesaid bolt-holes and loosely through the clamps, which bolt has a head arranged at the outer side of one clamp, and a nut screwed onto the bolt at the outer side of the other clamp.

1,064,802. MOP-WRINGER. FRANK B. WILDE, Boston, Mass. Filed May 31, 1912. Serial No. 700,746. (Cl. 15—12.)



In combination with a receptacle having parallel top edges, levers fulcrumed to the sides of the receptacle, links pivoted to the levers and arranged in pairs disposed approximately in opposite directions, a shaft carried by each pair of links and disposed transversely across the parallel edges of the receptacle, rollers journaled upon the shafts and arranged to travel along the parallel edges of the receptacle whereby the shaft is supported at its ends upon the edges of the receptacle, and wringer rollers journaled upon the shafts between the first mentioned rollers, and arranged to rotate independent of the first mentioned rollers.

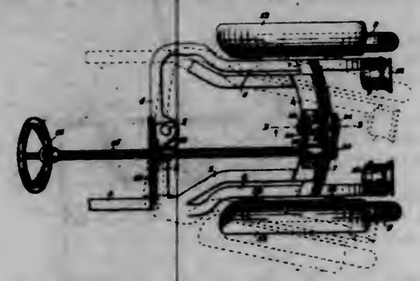
1,064,803. RAILROAD-JOINT. ERNEST WINKSTERN, Medina, N. Y., assignor of two-thirds to Peter Yordon, one-twelfth to Edward Gallagher, one-twelfth to George S. Foster, and two-twelfths to William Miller and Michael Littlebetter, Medina, N. Y. Filed Nov. 13, 1911, Serial No. 660,074. Renewed Nov. 12, 1912. Serial No. 731,038. (Cl. 239—8.)



A rail joint comprising a pair of similarly constructed interchangeable rails, each rail being provided with a short reinforcing portion upon one side thereof, and a long reinforcing portion upon the other side, each rail being provided with a tapering end upon one side thereof, constituting a pocket upon one side thereof, the tapering end of one rail fitting in the pocket of the other rail, the long reinforcing portion of one rail abutting against the

short reinforcing portion of the other rail for constituting a continuous reinforcing web at the joint of the rails, a pair of fish plates fitting upon the sides of said rails and being provided with socket portions fitting over said reinforcing portions, shoulders formed at the ends of said sockets and being adapted to limit the longitudinal movement of said rails, said rails being each provided with a plurality of transversely extending apertures through their long reinforcing portions and an aperture formed adjacent the outer end of said short reinforcing portion, the end of each of said short reinforcing portions being provided with a transversely extending groove communicating with said aperture formed adjacent the outer end of said short reinforcing portion, bolts passing through said apertures, and said transversely extending grooves in said short reinforcing portions constituting bearings for said bolts seated therein.

1,064,804. STEERING MECHANISM FOR AUTOMOBILES. ELBERT L. WOOD, Nevada, Iowa. Filed July 28, 1911. Serial No. 641,183. (Cl. 21—90.)



1. In a steering gear for automobiles, a main frame provided with a head member and a depending bolster bar at the rear and below the plane of the head member thereof, a truck frame consisting of a bolster bar pivotally connected to said bolster bar and provided with forwardly extending curved side members below the plane of the front end of said main frame, elliptical springs secured to said curved side members, an axle member secured beneath said elliptical springs in front of the pivoted connection between said bolster bars, and steering mechanisms carried by said main frame and operatively connected to said curved side members.

2. In a steering mechanism for automobiles, a main frame provided with a bolster bar and a head member, a truck frame consisting of a truck bolster pivoted to said bolster bar and provided with forwardly extending upwardly curved side members below the plane of said main frame, a cross member connected to said curved side members, elliptical springs mounted beneath and secured to said curved side members, and an axle carried beneath said springs in substantially the same plane with the pivoted portion of said truck bolster.

1,064,805. SYSTEM OF TELEGRAPHY. GEORGE WOOD, Kansas City, Mo., assignor to Dean Rapid Telegraph Co., a Corporation of Arizona. Filed Apr. 29, 1909. Serial No. 498,020. (Cl. 178—54.)

1. In a system of telegraphy, a printing circuit adapted to be intermittently closed by a succession of impulses, a line wire over which said impulses are transmitted, means for sending said impulses over the line wire, a reciprocably-mounted stylus, a stylus controlling circuit communicating with said printing circuit to control the movement of the stylus in one direction, means for interrupting said stylus controlling circuit during a long pause between impulses, and means for restoring the stylus to normal position during the interruption of its controlling circuit.

2. In a system of telegraphy, a printing circuit adapted to be intermittently closed by a succession of impulses, a line wire over which said impulses are transmitted, means for sending said impulses over the line wire, a reciprocably-mounted stylus, a stylus controlling circuit communicating with said printing circuit to control the movement of the stylus in one direction, electrically-controlled means for interrupting said stylus controlling circuit during a long pause between impulses, and means for restoring the stylus to normal position during the interruption of its controling circuit.

4. In a system of telegraphy, a printing circuit adapted to be intermittently closed by a succession of impulses, a line wire over which said impulses are transmitted, means for sending said impulses over the line wire, a reciprocably-mounted stylus, a stylus controlling circuit communicating with said printing circuit to control the movement of the stylus in one direction, mechanism for interrupting said stylus controlling circuit during a long pause between impulses, means controlled by the impulses for holding said mechanism inoperative, and means for restoring the stylus to normal position during the interruption of its controlling circuit.

5. In a system of telegraphy, a printing circuit adapted to be intermittently closed by a succession of impulses, means for transmitting impulses to said printing circuit, a reciprocably-mounted stylus, a stylus controlling circuit communicating with said printing circuit to control the movement of the stylus in one direction, a constantly driven clutch-member, a second clutch-member adapted to be actuated by the first clutch-member to interrupt the stylus controlling circuit, an electromagnet energized by the impulses to hold the second clutch-member inoperative, and means for restoring the stylus to normal position during the interruption of its controlling circuit.

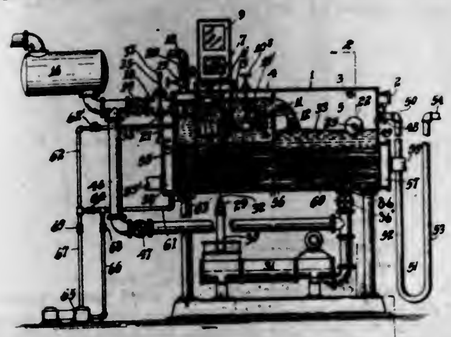
[Claims 6 to 40 not printed in the Gazette.]

1,064,806. APPARATUS FOR HEATING AND MEASURING WATER. DAVID ROBERT YARNALL, Philadelphia, Pa. Filed Apr. 8, 1912. Serial No. 689,144. (Cl. 62—30.)

1. In an apparatus for heating and measuring water, a water receiving meter compartment, a water storage compartment, means for measuring gravity flow of water from the receiving to the storage compartment and a continuously operative closed water heater entering the water space of the storage compartment.

2. In an apparatus for heating and measuring water, a water receiving meter compartment, a water storage compartment, extending beneath the receiving compartment, means for measuring gravity flow of water from the receiving to the storage compartment and continuously operative closed water heating means located in the storage compartment.

3. In an apparatus for heating and measuring water, a water receiving meter compartment, a water storage compartment extending beneath the receiving compartment, means for measuring gravity flow of water from the receiving to the storage compartment, continuously operative closed water heating means located in the lower part of the storage compartment and connections for conducting steam to said water heating means.

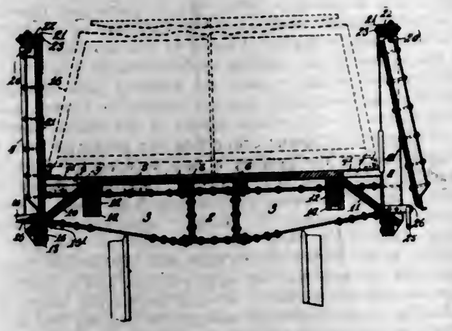


4. In an apparatus for heating and measuring water, a water receiving meter compartment, a water storage compartment, means for measuring gravity flow of water between the compartments, steam tubing entering said storage compartment beneath the water surface and connections for continuously supplying steam to said tubing.

5. In an apparatus for heating and measuring water, a water receiving meter compartment, an intake water connection for said compartment, a water storage compartment, a discharge connection from said storage compartment, means for measuring gravity flow of water between the compartments, continuously operative closed water heating means in the bottom of the storage compartment and automatic intake and discharge regulation for maintaining a substantially uniform height of water in the storage compartment.

[Claims 6 to 10 not printed in the Gazette.]

1,064,807. BALLAST-CAR. WINFIELD HANCOCK YOST, Montreal, Quebec, Canada, assignor to Rodger Ballast Car Company, Chicago, Ill., a Corporation of Maine. Filed May 18, 1912. Serial No. 698,213. (Cl. 105—186.)



1. In a ballast car, a floor, an understructure supporting such floor and projecting laterally beyond the edges of same, and plow runways presented by such laterally projecting portions of the understructure.

2. A ballast car provided with side stakes and side wall members and adapted for the passage of a plow therethrough, such car having a horizontal floor of less width than the transverse space between the stakes extending the full length of the car to provide discharge openings throughout the length of the car between the edges of said floor and the side wall members, and a plow runway at each side of the car between said floor and the side wall members.

3. In a ballast car, an understructure, plow runways presented thereby, and a floor formed to present gravity discharge spaces adjacent such runways.

4. In a ballast car, a fixed horizontal floor portion proper, an understructure supporting such floor portion and projecting laterally beyond the edges of same, plow runways presented by such laterally projecting portions of the understructure, and side floor portions inclining downwardly and outwardly from the edges of said floor portion proper between the laterally projecting portions of the understructure.

5. A ballast car provided with side stakes and side wall members and adapted for the passage of a plow therethrough, such car having a horizontal floor of less width than the space between the side wall members, extending the full length of the car to provide discharge openings throughout the length of the car between the edges of said floor and the side wall members.

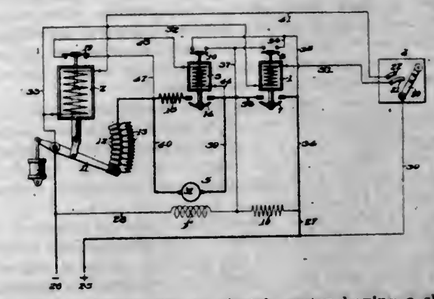
[Claims 6 to 19 not printed in the Gazette.]

1,064,808. HAT-PIN GUARD. LAWRENCE G. ZESBAUGH, Minneapolis, Minn. Filed May 23, 1912. Serial No. 699,170. (Cl. 24—155.)



The combination with a pin, of a guard cap having a straight non-elastic tubular stem, the internal diameter of said stem being materially larger than the diameter of said pin and adapted to telescopically receive the pointed end of said pin, alternated three point contacts pressed from opposite sides of and projecting into said stem and adapted to frictionally engage and bend said pin, and a longitudinally extended slot in the receiving end of said stem, extending over the outermost of said contacts and toward the intermediate of said contacts, said slot being adapted to receive the intermediate portion of said pin and guide the same during the application of the guard thereto, substantially as described.

1,064,809. MOTOR-CONTROLLER. THOMAS E. BARNUM, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed July 26, 1909. Serial No. 509,538. (Cl. 172—179.)



1. In a controller for an electric motor having a shunt field winding, in combination, a resistance adapted to be included in the shunt field circuit, and automatic means controlling said resistance, said means insuring the exclusion of said resistance from circuit while the motor is supplied with electrical power and rendering subsequent inclusion of said resistance subject to the electrical conditions in the motor.

2. In a controller for an electric motor having a shunt field winding, in combination, a resistance included in the shunt field circuit and means insuring the exclusion of said resistance from the shunt field circuit upon closure

of the motor circuit and during operation of the motor as a dynamic brake.

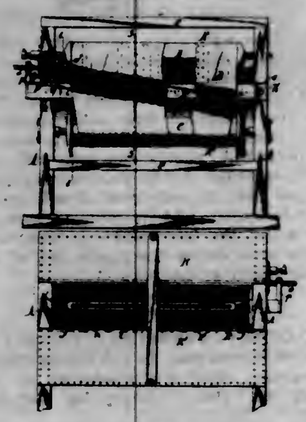
3. In a controller for an electric motor having a shunt field winding, in combination, automatic means tending to weaken the excitation of the shunt field winding without interruption of its circuit upon opening of the motor armature circuit and automatic means rendering said first mentioned means ineffective to weaken the excitation of the shunt field winding under predetermined conditions.

4. In a controller for an electric motor having a shunt field winding, in combination, means for establishing a dynamic braking circuit for the motor, a resistance, and means for automatically inserting said resistance in circuit with the shunt field winding of the motor when the motor is brought to rest.

5. In a controller for an electric motor having a shunt field winding, in combination, a resistance, means tending to insert said resistance in the shunt field circuit of the motor when the motor armature is disconnected from circuit, and means for establishing a dynamic braking circuit for the motor and maintaining the shunt field winding substantially fully energized until the motor is stopped.

[Claims 6 to 14 not printed in the Gazette.]

1,064,810. TRACKER-BOX. WILLIAM F. BAYER, Buffalo, N. Y., assignor to Chase & Baker Company, Buffalo, N. Y., a Corporation of New York. Filed Sept. 28, 1908. Serial No. 455,096. (Cl. 84—161.)



1. A tracker box, comprising cheeks or uprights provided in their front edges with notches, a transverse guide-rail secured in said notches, a tracker-bar slidable lengthwise on said guide rail and extending at one end beyond the adjacent cheek, and adjusting means connected with the extended end of the tracker bar.

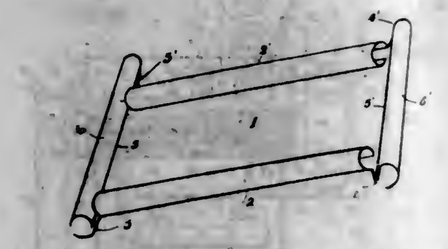
2. A tracker box, comprising cheeks or supports, a transverse guide-rail secured to said supports and having a longitudinal slot, a tracker-bar adjustable lengthwise on said guide-rail and having a row of ducts, and tubes communicating with said ducts and extending through the slot of the guide-rail.

3. A tracker box, comprising cheeks or supports, a transverse guide-rail secured to said supports and having a main longitudinal slot and auxiliary slots at opposite ends of the main slot, a tracker-bar adjustable lengthwise on said rail and having tubes communicating with its ducts and extending through said main slot, and screws passing through said auxiliary slots into the tracker-bar.

4. A tracker-box, comprising cheeks or supports, a transverse guide-rail secured to said supports and having a longitudinal slot and longitudinal ribs on the face thereof above and below said slot, a tracker-bar having ducts and provided on its rear side with grooves which receive said ribs, and tubes communicating with said ducts and extending through said slot.

5. A tracker box, comprising cheeks or uprights, upper and lower cross pieces connecting said uprights, a transverse rail secured to said uprights between said cross pieces and provided in its back with longitudinal grooves, and panels extending upwardly and downwardly from said rail and having their adjacent edges seated in said grooves.

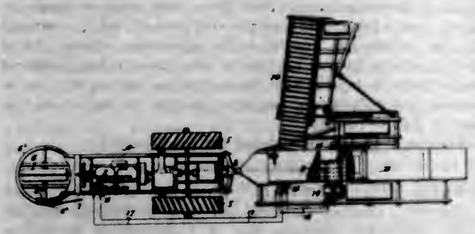
1,064,811. BRICK-PALLET. ANSON J. BENTLEY, Niles, and FRANK BENTLEY, Warren, Ohio. Filed Jan. 29, 1912. Serial No. 674,019. (Cl. 34—17.)



1. A pallet comprising a metallic sheet having projecting end portions, and said end portions being rolled transversely of the sheet and providing hand gripping devices, substantially as described.

2. A pallet comprising a metallic sheet having projecting end portions, said end portions and the sides of the metallic sheet being rolled and disposed to one side of the surface of the sheet, substantially as described.

1,064,812. HARVESTER. CLARENCE LEO BEST, San Leandro, Cal. Filed Oct. 28, 1911. Serial No. 657,261. (Cl. 56—33.)



In a combined traction and harvesting machine of the character described, the combination with harvesting apparatus including a cutter bar or sickle and threshing instrumentalities, and a vehicle therefor, of a separate traction vehicle flexibly coupled to the harvester vehicle, a gas engine on the traction vehicle directly operating the traction mechanism, means for coupling and uncoupling the traction mechanism and the engine, an electric generator on the traction vehicle driven by the engine, separate and independent means connecting the generator with the engine so that the generator may be operated when the traction mechanism is inoperative, an electric motor supported on the harvester vehicle and from which the said harvester apparatus is directly operated, conducting means extending from the generator on the traction vehicle to the motor on the harvester vehicle and flexibly spanning the gap between said vehicles, and a controller for the motor interposed in said conducting means and mounted on the harvester vehicle for varying the action of the cutter, substantially as described.

1,064,813. CARTON FOR DISPLAY OF MERCHANDISE. HERBERT L. BLOOMBERG, Richmond, Va. Filed Mar. 20. 1913. Serial No. 755,662. (Cl. 211—34.)

1. A paper display base, rows of opposed stiffened tongues struck up therefrom, the meeting free ends of said tongues in one row being arranged in staggered relations with the meeting ends of the tongues in the adjacent row.

2. A paper display base for cartons comprising a plurality of thicknesses of paper adhesively secured together,

rows of opposed tongues struck up therefrom, the meeting free ends of the tongues of one row being arranged in staggered relations with the meeting ends of the tongues of the adjacent row, and wire stiffening members embedded in said tongues.



3. In combination, a fiber base therein comprising two thicknesses adhesively secured together, rows of opposed tongues struck up therefrom, the meeting free ends of the tongues of one row being arranged to break joints with the meeting free ends of the tongues of the adjacent row, and stiffening members having a fabric covering embedded in said tongues, the break joint arrangement of the tongues constituting means whereby one pair of tongues in one row is adapted to be bent to encircle the stems of a spray of artificial flowers, while each tongue of another pair of tongues in another row is adapted to clamp each stem of said spray.

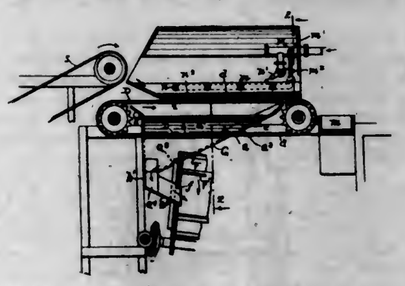
1,064,814. BRACES, SUSPENDERS, AND THE LIKE. RUDOLF BORBERG, Elberfeld, Germany. Filed Aug. 21, 1912. Serial No. 716,255. (Cl. 241—18.)



1. A fastening member comprising a wire link, a plate pivotally secured thereto and provided with slots and an integral hook between said slots, said hook having an inwardly presented resilient tip, in combination with a strap of flexible material passed through said slots and said wire link, and a slotted keeper carried by said strap and having a raised bar adapted to be passed over said hook, the distance between the tip of said hook and said plate being less than the thickness of said bar, substantially as set forth.

2. In a fastening member, the combination of an attaching link of suitable material and a plate pivotally connected thereto and provided with a resilient hook, with a strap of flexible material passed through said link and attached to said plate, and a keeper carried by said strap and having a part adapted to be passed over said hook, said hook having a tip which is inwardly presented and at a less distance from said plate than the thickness of said part, substantially as set forth.

1,064,815. CONVEYER-CHUTE. OSCAR H. BRIGGS, Providence, R. I. Filed May 7, 1912. Serial No. 695,657. (Cl. 57—37.)



1. As an improved article of manufacture, a conveyer chute of the general character described, consisting of oppositely disposed longitudinally extending sides diverging downwardly from a common ridge or apex, an inclined outer trough located at the lower edge of each of said sides in open communication therewith, inwardly facing lateral troughs into which said side troughs discharge located at the lower end of the conveyer, and a common outlet in open communication with said lateral troughs.

2. The improved conveyer chute substantially as herein described, the same comprising a pair of longitudinally extending downwardly divergent sides united at the top, each of said sides having its lower edge provided with a trough parallel therewith, inwardly facing transverse shorter troughs leading, respectively, from the lower ends of said side troughs, and a discharge outlet intersecting the transverse troughs, constructed and arranged whereby, when mounted and positioned as in use, disintegrated material, as clay, &c., continuously collected in the longitudinal troughs, flow downwardly therein and are deflected into said transverse troughs in open communication with the discharge outlet.

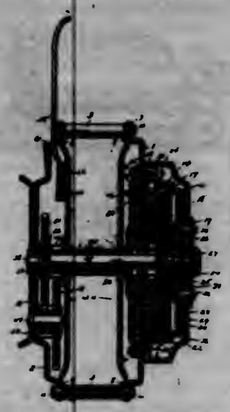
3. An integral conveyer chute consisting of a pair of downwardly divergent imperforate sides connected together at the top, the lower edge of each side being inclined downwardly toward the lower end of the device, side troughs in open communication with the imperforate sides at their lower edges, means terminating in a common discharge outlet communicating with said side troughs arranged to conduct material from the latter by gravity, and means for securing the conveyer chute in a normally stationary position.

1,064,816. AUTOMATIC FISHING-REEL. PLINY CATUCCI, Newark, N. J., assignor to A. F. Meisselbach & Brother, a Corporation of New Jersey. Filed Sept. 16, 1911. Serial No. 649,707. Cl. 43—33.)

1. In a fishing reel, the combination of a motor spring, a spring cup within which said motor spring is mounted, a spindle driven by said motor spring, a spool rotatably mounted upon said spindle, a multiplying gear train connecting said spindle and said spool, a winding mechanism consisting of a pair of friction disks and a spring disk for frictionally engaging said spring cup with a resilient pressure for winding up said spring.

2. In a fishing reel, the combination of a spool, a spindle upon which said spool is rotatably mounted, a multiplying gear train connecting said spindle and said spool, a coil spring mounted upon said spindle for driving the same, a spring cup inclosing and secured to the outer end of said spring, said spring cup having a friction disk associated therewith, a series of slipping friction disks and a spring disk for frictionally engaging said spring cup, with a resilient pressure for winding up said spring and to prevent overwinding the same.

3. In a fishing reel, the combination of a spool, a spindle upon which said spool is rotatably mounted, a multiplying gear train connecting said spindle and said spool, a coil spring for driving said spindle, and a winding device for winding up said spring, said winding device having a series of slipping friction disks including a spring disk interposed between the winding element and said spring, to prevent the overwinding of the latter.

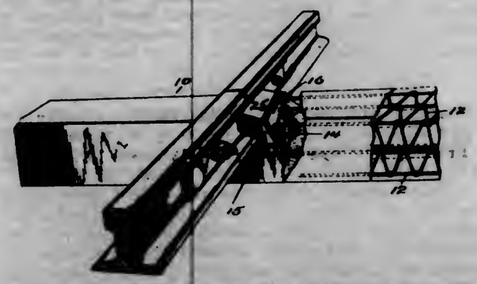


4. In a fishing reel, the combination of a spool, a spindle upon which said spool is rotatably mounted, gear connections between said spindle and said spool, whereby the one may be rotated from the other, a spring having one of its ends connected to said spindle, a spring cup inclosing said spring and to which the other end of said spring is connected, and a winding device having resilient frictional engagement with said spring cup to permit said spring to be wound up and to prevent overwinding the same.

5. In an automatic fishing reel, the combination of a spool, a spindle upon which said spool is mounted, a spring cup, a coil spring within said cup, said spring having its outer end connected to said cup and its inner end connected to said spindle, a winding cap, and a series of friction disks including a spring disk for connecting said cap to said cup.

[Claims 6 to 14 not printed in the Gazette.]

1,064,817. MEANS FOR FASTENING RAILS TO TIES. WILLIAM G. CHIPLEY, Atlanta, Ga. Filed Aug. 17, 1912. Serial No. 715,655. (Cl. 238—3.)



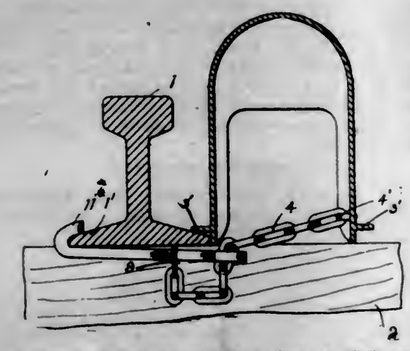
1. In a device of the class described, a body portion provided with a transverse recess, a chair located within said recess and adapted to be retained therein by frictional contact with the walls of the recess, said chair being arranged to receive the flange of a rail, and wedging devices disposed within the chair between the web of the rail and the sides of said chair.

2. In a device of the class described, a tie provided with a transverse recess, a chair of wedge formation in transverse section disposed within the recess and having frictional contact with the walls thereof, said chair being adapted to receive the flange of a rail, means for securing the rail to the chair by frictional contact, and a reinforcing structure for the tie, portions of said structure lying adjacent to the walls of the recess and conforming to the sides of the chair for retaining the latter in position in coöperation with the frictional surface afforded by the concrete body portion.

3. In a device of the class described, a tie, a chair connected therewith, a cushioning device located between the tie and chair, said chair being adapted for receiving a rail and being wedge shaped in vertical transverse section, and having its sides tapering longitudinally, and means for insertion within the chair and contacting with the sides thereof and with the rails.

4. In a device of the class described, a tie, a chair connected therewith and arranged to receive the flange and web of a rail, said chair having upwardly extending sides tending to converge toward one end, means for securing the chair to the tie and additional means for embracing the sides of the chair and transmitting strain from said sides to various portions of the tie, and wedge blocks within the chair and disposed respectively on opposite sides of the rail, said blocks engaging the web, the top of the flange and the edge thereof.

1,064,818. CAR-REPLACER. JOSEPH CLEMENT, Proctor, Minn., assignor of one-fourth to Joseph Reneaud, Proctor, Minn. Filed Mar. 6, 1911. Serial No. 612,699. (Cl. 104—163.)



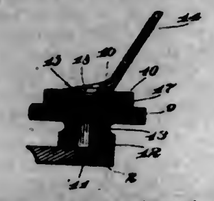
1. A car replacer comprising a frog, a chain secured to the frog, a grab-hook adapted to extend under the rail and having one end adapted to engage the upper face of the base of the rail and its opposite end having a key-hole slot through which the chain passes, whereby the chain may be adjustably held so as to lock the frog to the rail.

2. A car replacer, comprising a frog, a flange carried by the side of the frog above its lower end and adapted to engage the upper face of the base of the rail, a chain secured to the frog, a grab-hook adapted to extend under the rail and having one end adapted to engage the upper face of the base of the rail on the opposite side from the flange, said hook having a key-hole slot in its opposite end through which the chain passes, whereby the chain may be adjustably held so as to lock the frog to the rail.

3. A car replacer, comprising a hollow frog, a flange carried by the inner face of the frog above its lower end and adapted to engage the upper face of the base of the rail, a chain secured within the frog above the lower edge thereof, a grab-hook adapted to extend under the rail and to engage the upper face of the base of the rail and to which is secured the free end of the chain, said grab-hook having a key-hole slot through which the chain passes, whereby the chain may be adjustably held so as to lock the frog against the rail.

1,064,819. TELEGRAPH-KEY. HENRY CLEMENT DAUPHINAIS, Fargo, N. D. Filed Nov. 27, 1912. Serial No. 733,820. (Cl. 178—29.)

1. The combination with a telegraph key lever, of a knob secured to said lever and having a flat finger piece set oblique and forming a continuous extension of said knob.



2. The combination with a telegraph key lever, of a knob secured to said lever, an upwardly projecting flat finger piece set oblique to and forming a continuous extension of said knob, and common means for securing said finger piece to said knob and in different adjustments thereto.

3. The combination with a telegraph key lever, of a knob secured to said lever and having an upwardly projecting reduced hub extension, a nut block seated in said hub extension, and an upwardly and rearwardly projecting flat finger piece, having a foot section resting on said hub extension, and a set screw passed through said foot section and having screw threaded engagement with said nut block, said set screw being adapted to hold said finger piece in different pivoted adjustments with respect to said knob, substantially as described.

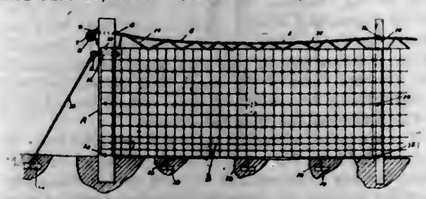
1,064,820. GRATE-BAR. DANIEL DEE, Kansas City, Mo., assignor, by direct and mesne assignments, to Dee Manufacturing Compnay, Pocatello, Idaho, a Corporation. Filed Nov. 9, 1912. Serial No. 730,450. (Cl. 126—179.)



1. A grate bar, composed of a plurality of spaced rings and a plurality of longitudinal ribs connected to and holding such rings in spaced relation, one end of the bar being provided with a solid disk having a centrally disposed journaling stud, a removable journaling stud mounted in the opposite open end of the bar, and means carried upon the inner end of the removable journaling stud for engagement with the ribs and rings to retain the journaling stud against longitudinal and circumferential movement independently of the grate bar.

2. A grate bar, composed of a plurality of integral longitudinally spaced rings and circumferentially disposed ribs, one end being sealed by a disk carrying a centrally disposed journaling stud; a removable journaling stud for the opposite end of the grate bar, insertible in said end, said stud being provided with a cross head to fit between the longitudinal ribs to retain the stud against independent rotation; and means carried by the stud for disposition between adjacent rings to prevent independent longitudinal movement of the stud.

1,064,821. FENCE. JOHN J. DUN, Columbus, Ohio. Filed Jan. 11, 1911. Serial No. 601,952. (Cl. 39—9.)



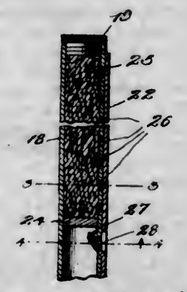
1. In a wire fence, a plurality of posts, a strip of wire mesh longitudinally stretched and secured to said posts, an independent wire stretched between said posts and above said wire mesh, and means for uniformly stretching said wire mesh transversely throughout its length between said posts upon tautening of said independent wire.

2. In a wire fence, a plurality of posts, a strip of wire mesh longitudinally stretched between said posts, an independent wire stretched between said posts and above said wire mesh, and a continuous wire looped about the upper portion of said wire mesh and said independent wire at repeated intervals throughout the distance between said posts.

3. In a wire fence, a plurality of posts, a strip of wire mesh longitudinally stretched between said posts, an independent wire stretched between said posts and above said wire mesh, a continuous wire looped about the upper portion of said wire mesh and said independent wire at repeated intervals throughout the distance between said posts, and means mounted on one of said posts for drawing said independent wire taut.

4. In a wire mesh fence, a plurality of posts, a strip of wire mesh longitudinally stretched and secured to said posts, means for maintaining a constant relation of the bottom of said strip to the ground, a continuous wire looped around the upper strand of the said wire mesh strip, and a cable loosely extending through the loops formed by said continuous wire and adapted to be tautened.

1,064,822. SELF-HEATING CURLING-IRON. GODFREY D. EGGEMAN, Glenwood Springs, Colo. Filed Oct. 14, 1912. Serial No. 725,747. (Cl. 158—21.)



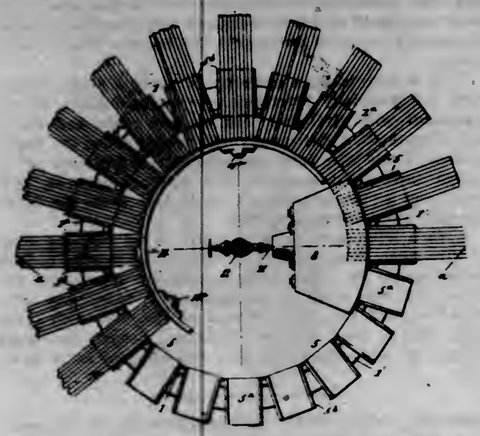
1. A curling iron comprising a pair of pivoted jaws, the one being tubular and having a fuel chamber at one end thereof, said jaw being also provided with a plurality of openings communicating with the chamber, the other jaw being concavo-convex in design and adapted to normally contact with the aforesaid jaw, a lug struck inwardly on said first mentioned jaw immediately below said chamber, said lug having a sparking substance on the face thereof, means formed on the other jaw in normal contact with said sparking substance, and handle members carried on said jaws.

2. A curling iron of the class described comprising a pair of pivoted jaws, the one being tubular in design and provided with a fuel chamber in the ends thereof, said jaw being also provided with a plurality of openings leading to said chamber, the other jaw being concavo-convex in design and adapted to normally contact with the aforesaid jaw to cover the openings therein, an inwardly struck lug formed on the first mentioned jaw immediately below the chamber therein, the face of said lug being provided with a sparking substance, an additional lug struck inwardly from the last mentioned jaw adapted for normal contact with the sparking substance on the aforesaid lug, and handle members carried on the ends of said jaws.

1,064,823. SPOKE-HEATING FURNACE. EMIL EINFELDT, Davenport, Iowa, assignor to G. Watson French, Nathaniel French, and Joseph L. Hecht, Davenport, Iowa, composing the firm of French and Hecht, Davenport, Iowa. Filed Nov. 11, 1909. Serial No. 527,499. (Cl. 75—40.)

1. In combination with a heating chamber provided with a horizontal opening for the passage of blanks to be

heated, a horizontally arranged rotary blank holder surrounding said chamber and having a horizontal sustaining surface adapted to support the blanks in a pile in radial positions, so that by the rotation of the holder, the inner ends of the blanks may be introduced into the heating chamber.



2. In combination with a heating chamber provided with a horizontal side opening for the passage of blanks to be heated, a carrier adapted to support the blanks in a pile and provided with means for separating the piles into groups, said carrier being movable in proximity to the heating chamber to cause the ends of the blanks to pass horizontally into the opening in the chamber.

3. In combination with a heating chamber formed with a horizontal side opening for the passage of the blanks to be heated, a carrier for the blanks provided with a series of trays for dividing the blanks into horizontal radial groups and adapted to be rotated in proximity to the heating chamber to cause the groups of blanks to pass horizontally into the side opening in said chamber.

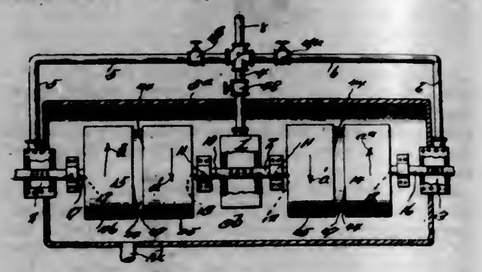
4. In combination with a heating means, a blank carrier movable relatively thereto and adapted to support the blanks loosely thereon so that one of their ends may be presented to the action of the heating means, and means acting automatically on said ends during the movement of the carrier, for evening the ends up, so that they will be presented to the heating means in predetermined uniform positions.

5. In combination with a heating chamber having a horizontal opening to receive the ends of blanks to be heated, a circular blank carrier surrounding said heating chamber and movable about a vertical axis, said carrier being adapted to support the blanks loosely with their inner ends in position to be entered into the opening in the chamber, and a horizontal circumferentially arranged fixed gage, extending from the entrance-side of the opening in the heating chamber some distance circumferentially and being arranged in position to engage and act on the inner ends of the blanks as they are advanced by the carrier toward the heating chamber.

[Claim 6 not printed in the Gazette.]

1,064,824. TWIN-CYLINDER REVERSIBLE TURBINE. HENRY E. FLEDDERJOHANN, New Knoxville, Ohio. Filed Mar. 13, 1913. Serial No. 754,069. (Cl. 121—57.)

1. In an engine, a hollow revoluble cylinder body comprising a shell having spiral steam passages, said steam passages having inlet mouths at each end of the cylinder, from which mouths the passages merge and extend spirally about the shell and terminate in exhaust ports substantially centrally of the shell, jackets shrunk upon the shell to cover said passages and having a space between the shells, said cylinder body having steam chambers or spaces, one at each end in communication with said passages, a steam pipe or spindle to convey steam into one of said chambers from whence it passes into one of said passages to rotate the cylinder in one direction, and a second steam pipe or spindle to convey steam in the other steam chamber and thence into the passages at the other end of the cylinder to rotate the same in the opposite direction when the steam in the first pipe or spindle is cut off, and abutment blades having apertures arranged in said passages adjacent their inlet mouths against which the steam acts, said shell having annular passages, one at each end of the cylinder body communicating between the spiral passages and the steam chamber at each end, and a steam chest from which each steam spindle extends.



2. In an engine, a hollow revoluble cylinder body comprising a shell having spiral steam passages, said steam passages having inlet mouths at each end of the cylinder, from which mouths the passages merge and extend spirally about the shell and terminate in exhaust ports substantially centrally of the shell, jackets shrunk upon the shell to cover said passages and having a space between the shells, said cylinder body having steam chambers or spaces, one at each end in communication with said passages, a steam pipe or spindle to convey steam into one of said chambers from whence it passes into one of said passages to rotate the cylinder in one direction, and a second steam pipe or spindle to convey steam in the other steam chamber and thence into the passages at the other end of the cylinder to rotate the same in the opposite direction when the steam in the first pipe or spindle is cut off, and abutment blades having apertures arranged in said passages adjacent their inlet mouths against which the steam acts, said shell having annular passages, one at each end of the cylinder body communicating between the spiral passages and the steam chamber at each end, and a steam chest from which each steam spindle extends.

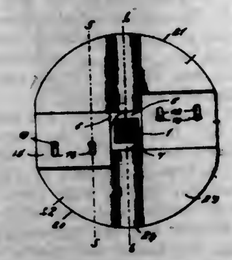
3. In an engine, a hollow revoluble cylinder body comprising a shell having spiral steam passages, said steam passages having inlet mouths at each end of the cylinder, from which mouths the passages merge and extend spirally about the shell and terminate in exhaust ports substantially centrally of the shell, jackets shrunk upon the shell to cover said passages and having a space between the shells, said cylinder body having steam chamber or spaces, one at each end in communication with said passages, a steam pipe or spindle to convey steam into one of said chambers from whence it passes into one of said passages to rotate the cylinder in one direction, and a second steam pipe or spindle to convey steam in the other steam chamber and thence into the passages at the other end of the cylinder to rotate the same in the opposite direction when the steam in the first pipe or spindle is cut off, and abutment blades having apertures in said passages adjacent their inlet mouths against which the steam acts, said shell on its interior having annular shoulders adjacent the ends thereof, second annular shoulders formed at the extreme outer ends of said shell, annular plates two arranged against said shoulders at each end of the shell, between which steam chambers are formed, devices for securing two of said plates against the shoulders of the extreme ends of the shell, and perforated sleeves, one connecting the plates at each end of the shell, and into which sleeves the spindles extend.

4. In an engine, a hollow revoluble cylinder body comprising a shell having spiral steam passages, said steam passages having inlet mouths at each end of the cylinder, from which mouths the passages merge and extend spirally about the shell and terminate in exhaust ports substantially centrally of the shell, jackets shrunk upon the shell to cover said passages and having a space between the

shells, said cylinder body having steam chamber or spaces, one at each end in communication with said passages, a steam pipe or spindle to convey steam into one of said chambers from whence it passes into one of said passages to rotate the cylinder in one direction, and a second steam pipe or spindle to convey steam in the other steam chamber and thence into the passages at the other end of the cylinder to rotate the same in the opposite direction when the steam in the first pipe or spindle is cut off, and abutment blades having apertures in said passages adjacent their inlet mouths against which the steam acts, said shell on its interior having annular shoulders adjacent the ends thereof, second annular shoulders formed at the extreme outer ends of said shell, annular plates two arranged against said shoulders at each end of the shell, between which steam chamber are formed, devices for securing two of said plates against the shoulders of the extreme ends of the shell, and perforated sleeves, one connecting the plates at each end of the shell, and into which sleeves the spindles extend, said shell having annular passages, one at each end of the cylinder body communicating between the spiral passages and the steam chamber at each end, and a steam chest from which each steam spindle extends.

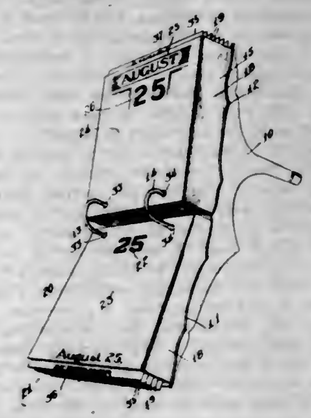
5. In a multiple cylinder engine, a multiple of hollow revoluble cylinder bodies, each comprising a shell having spiral steam passages, said steam passages having inlet mouths at each end of said shell, from which mouths the passages merge and extend spirally about the shell and terminating in exhaust ports substantially centrally of the shell, said shell at each end having an annular passage into which said mouths open, cylindrical jackets shrunk upon the shell to cover the annular passages and the spiral passages and having a space left between said jackets, said shell upon its interior having two annular shoulders at each end, spaced apart annular plates fixed against said shoulders at each end of the shell, steam chambers or spaces between said pintes in communication with the annular passages, sleeves connecting the plates at the ends of said shell and provided with perforations, transversely disposed blades arranged in the spiral passages adjacent the inlet mouths and provided with perforations, said blades acting as steam abutment members, a steam chest located between the multiple cylinder bodies and having a steam spindle extending into the sleeves of the adjacent ends of the multiple cylinders and communicating with the steam chambers to convey steam thereinto and thence into the spiral passages against said blades to rotate the cylinders in one direction, steam chests arranged at the outer ends of the multiple of cylinders and having steam spindles extending into the sleeves of the outer ends of said cylinders to convey steam in the outer end steam chambers, from whence the steam passes into the spiral passages extending from the outer ends of said cylinders to rotate the cylinders in the opposite direction when the steam is cut off in the first steam spindle.

1,064,825. POST-HOLE AUGER. WILLIAM C. GIBSON, Shawnee, Okla. Filed Jan. 19, 1912. Serial No. 672,055. (Cl. 166—12.)



An auger of the character described comprising a shaft, a bit, arms projecting diametrically from the shaft and having upper and lower sloping faces, the lower sloping faces terminating in advance of the rear edges of the arms, cutters secured to the upper sloping faces of the arms and projecting rearwardly therefrom, and plates arranged at the opposite sides of the arms and secured to the sloping lower faces thereof, each of said plates being formed to provide a shelf extending in rear of said sloping face and beneath the superposed portion of the arm and the rearwardly projecting portion of one cutter, and having an extension secured to the adjacent arm, and also formed to provide a guard arranged above and in advance of the other cutter, said shelf and guard being connected by an offset portion elevating the guard above the plane of the shelf.

1,064,826. PERPETUAL MEMORANDUM-CALENDAR. FRANK A. HALE, Chicago, Ill. Filed Apr. 8, 1912. Serial No. 689,261. (Cl. 40—119.)



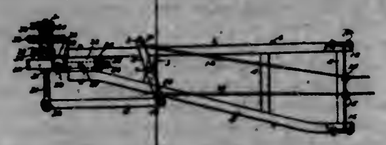
1. A calendar pad comprising two sets of leaves, the leaves of one set being equal in number to the number of days in the year and each of such leaves being printed with calendar information comprising only the name of a month and the numerical designation of a day of the month and the leaves of the other set being equal in number to the number of months in the year and each of such last mentioned leaves being printed with a complete calendar for a different month of the year.

2. A calendar pad comprising two sets of leaves, the leaves of one set being of uniform size and being equal in number to the number of days in the year and each of such leaves being printed with calendar information comprising only the name of a month and the numerical designation of a day of the month and the leaves of the other set being separable from the leaves of the first described set and of larger size and equal in number to the number of months in the year, the said larger leaves being each printed with a complete calendar for a month of the year and that part of the same which projects beyond the margins of the first described leaves when all of the leaves are arranged in a pile being printed with the name of such month.

1,064,827. AUTOMATIC GUIDING MEANS FOR TRACTORS. JOHN A. HARNER, Cedar Falls, Iowa. Filed May 28, 1912. Serial No. 700,219. (Cl. 21—114.)

1. Automatic guiding means for a tractor, comprising a supporting bracket pivotally connected to the pivotal axle of a tractor for vertical oscillations, a body seated adjustably in the outer end of said bracket for transverse adjustment relative thereto, means for securing said body in an adjusted position, a bearing block pivoted in said adjustable body for horizontal oscillations, a shaft fixed in said bearing-block transversely to said bracket, a guide-wheel rotatably mounted on one end of said shaft, and

operative connections between the other end of said shaft and the ends of said axle adapted to rock said axle when said wheel is rocked.



2. Automatic guiding means for a tractor, comprising a supporting bracket pivotally connected to the pivotal axle of a tractor for vertical oscillations, a body seated removably and adjustably in the outer end of said bracket and adapted to be rocked on a horizontal axis longitudinal to said bracket, means for securing said body in an adjusted position to said bracket, a bearing pivoted to said body for horizontal oscillations, a shaft fixed in said bearing transversely to said bracket, a guide-wheel rotatably mounted on one end of said shaft, a detachable shoe secured longitudinally about said oscillatory bearing, and operative connections between the other end of said shaft and said axle adapted to rock said axle in the same direction as the said shaft is rocked.

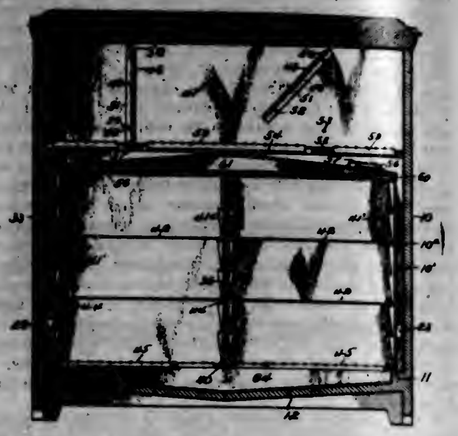
3. Automatic guiding means for a tractor, comprising a supporting bracket connected pivotally to the ends of the pivotal axle of a tractor for vertical oscillations, a body adjustably seated in the other end of said bracket and adapted to be turned on its horizontal axis, means for securing said body to said bracket in an adjusted position, a bearing-block pivotally connected to said adjustable body for horizontal oscillations, a shaft fixed transversely in said bearing block, a guide-wheel rotatably mounted on one end of said shaft, a cross-bar medially pivoted to said bracket, a link pivotally connected between one end of said cross-bar and the end of said shaft opposite to said guide-wheel, and cables connected between the ends of said cross-bar and the directive means of the tractor which are secured to the ends of said axle on the same sides.

4. Automatic guiding means for a tractor, comprising a supporting bracket pivotally connected to the pivotal axle of a tractor for vertical oscillations, a body removably seated in the outer end of said bracket and provided with clamping means on its forward face, another body having similar clamping-means on its face abutting upon the said forward face of the first-mentioned body and secured to the latter for adjustment on a longitudinal axis relative thereto and to said bracket, a bearing-block pivotally connected to said second-mentioned body for horizontal oscillations, a shaft fixed in said bearing block, a guide-wheel rotatably mounted on one end of said shaft, and operative connections between the opposite end of said shaft and the ends of said axle adapted to rock the latter in the same direction as said shaft is rocked by the movement transversely of said guide-wheel.

5. Antomatic guiding means for a tractor, comprising a supporting bracket composed of rigidly connected spaced apart longitudinal bars converging toward their forward ends to one side and having their rear ends pivotally connected to the pivotal axle of a tractor for vertical oscillations, a body removably seated between the forward spaced-apart ends of said longitudinal bars and having a plurality of engaging-means on its forward face, another body alined longitudinally with and pivoted to said first mentioned body for rocking adjustment relative thereto on a longitudinal axis, means for securing said bodies together with a desired adjustment of the second-mentioned body relative to the first, a bearing-block pivoted to the second mentioned body for horizontal oscillations, a shaft fixed in said bearing-block, a guide-wheel rotatably mounted on one end of said shaft, and operative connections between the other end of said shaft and the ends of said axle adapted to rock the axle when the shaft is rocked.

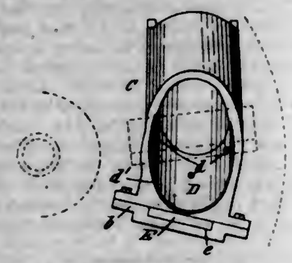
[Claims 6 and 7 not printed in the Gazette.]

1,064,828. REFRIGERATOR. VICTOR S. HELLSTROM, Dubois, Pa. Filed Aug. 19, 1912. Serial No. 715,855. (Cl. 62—10.)



In a refrigerator, a casing having a container receiving chamber and an ice chamber thereabove, removable ice-supporting trays separating the chambers, a container removably-mounted in the container receiving chamber and spaced from the casing walls, and a water-shedding pan supported on said container to lie beneath the ice supporting trays and receive the drippings from the melting ice, said pan having downwardly extending flanges fitting over the upper end of the container to direct the water from the pan over the side and end walls of the container, said pan also acting to prevent withdrawal of the container while the pan is positioned thereon.

1,064,829. WOOD-CHIPPING MACHINE. FREDERICK ELMER HEMINGS, Carthage, N. Y., assignor to Carthage Machine Company, Carthage, N. Y. Filed Jan. 3, 1911. Serial No. 600,384. (Cl. 83—75.)



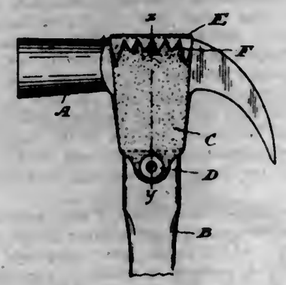
1. In a wood chipping machine, the combination with a rotary vertical cutter provided with knives on one of its vertical faces, of a feed box for the wood located at that side of the cutter having the knives, said feed box being of substantially circular cross-section and having a lower end of elliptical form substantially parallel with said cutter and having a removable curved wear plate in the lower end of said box which extends across the curved bottom and part way up the curved side walls of said feed box, substantially as set forth.

2. In a wood chipping machine, the combination with a rotary cutter, of a feed box for the wood which inclines downwardly toward the cutter and has curved bottom and side walls and is provided interiorly in a seat at its lower end with a removable curved wear plate which extends across the curved bottom and part way up the curved side walls of the feed box, the inner edge of said wear plate intersecting the lower end face of said box in a plane substantially at right angles to the axis of said box, substantially as set forth.

3. In a wood chipping machine, the combination with a rotary disk cutter having a knife in one side thereof, of a feed box for feeding wood to said cutter, said feed box comprising a tube of substantially circular cross-section mounted at one side of the cutter at an inclination to the plane of the latter and having a recess in the lower part of its inner surface adjacent to its mouth and extending away from the cutter and part way up the sides of the tube, and a removable curved wear plate mounted in said recess and having its inner surface flush with the inner surface of the tube, substantially as set forth.

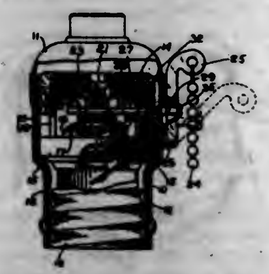
4. In a wood chipping machine, the combination with a rotary disk cutter having a knife in one side thereof, of a feed box of substantially circular cross-section mounted at one side of said cutter with the axis inclined to the plane of the cutter, said box having an open end of elliptical shape adjacent to the side of the cutter, the major axis of said ellipse being inclined at an acute angle to a radius of the cutter tangent to the lowest point of the opening, and a removable curved wear plate mounted in the bottom of said box adjacent to the open end thereof and extending up the sides of said box, substantially as set forth.

1,064,830. HAMMER. JETHRO HOSKYN, Calgary, Alberta, Canada. Filed Apr. 6, 1911. Serial No. 619,383. (Cl. 145—29.)



A hammer in combination with a pad applied to the side of the hammer head; means for securing the pad to the handle of the hammer below the eye of the hammer; metal fastening means engaged with the upper edge of the pad; and securing means for the metal fastening means passing through the said fastening means into the handle within the eye of the hammer.

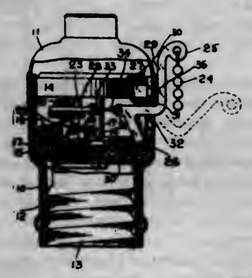
1,064,831. PULL-SOCKET. HARVEY HUBBELL, Bridgeport, Conn. Filed Oct. 3, 1911. Serial No. 652,670. (Cl. 173—354.)



1. The combination with the operating plate of a switch mechanism, a socket shell and an operating lever lying wholly outside the socket shell and having an opening through it enlarged at its inner end of a connecting rod loosely engaging the lever and extending through said opening and an insulating link pivoted to the operating plate and to the connecting rod.

2. The combination with a socket shell, insulating blocks and a switch mechanism, of a reversible plate having tongues adapted to pass between the insulating blocks, for the purpose set forth, a bracket carried by said plate, an operating lever pivoted to said bracket outside the shell and an insulating connection intermediate said lever and the switch.

1,064,832. PULL-SOCKET. HARVEY HUBBELL, Bridgeport, Conn. Filed Oct. 3, 1911. Serial No. 652,671. (Cl. 173—354.)



1. In a pull socket, the combination with spaced apart insulating blocks, a switch mechanism at one side of the space and a shell, of a reversible operating lever pivoted within the shell and extending outside thereof and means for connecting said lever and the switch mechanism.

2. In a pull socket, the combination with spaced apart insulating blocks, a switch mechanism at one side of the space and a shell having a slot, of an operating lever pivoted within the shell and having an arm extending through the slot and a link having a swiveled connection with said lever and also connected with said switch mechanism.

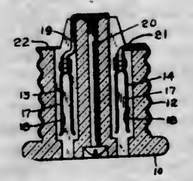
3. In a pull socket, the combination with insulating blocks, a shell and a reversible operating lever, of a switch mechanism placed at one side of the space between said blocks so as to permit the operating lever to be pivoted within the shell and a link connecting the operating lever and the switch mechanism.

4. In a pull socket, the combination with insulating blocks, a shell and switch mechanism, of an operating lever, a reversible plate to which said lever is pivoted within the shell and an insulating connection between said lever and the switch mechanism.

5. In a pull socket, the combination with insulating blocks, a shell and switch mechanism, of an operating lever, a reversible plate to which said lever is pivoted within the shell and a connection between the lever and the switch mechanism consisting of an insulating link, a yoke pivoted thereto, and a hook swiveled in the yoke and engaging the operating lever.

[Claims 6 to 8 not printed in the Gazette.]

1,064,833. SEPARABLE ATTACHMENT-PLUG. HARVEY HUBBELL, Bridgeport, Conn. Filed Jan. 2, 1912. Serial No. 669,253. (Cl. 173—343.)



1. A separable attachment plug comprising a base, a cap, flat contact blades carried by said cap and having their opposite edges cut away to form recesses, and flat contact blades carried by said base the opposite edges of the last mentioned blades being provided with lugs or indentations adapted to enter the recesses of the first mentioned blades when the cap and base are united.

2. A separable attachment plug comprising a base, a cap, flat contact blades carried by said cap and having

their opposite edges cut away to form recesses, and flat contact blades carried by said base and arranged in pairs, the opposite edges of one of the plates of each pair being provided with lugs or indentations adapted to enter the recesses of the first mentioned blades when the cap and base are united.

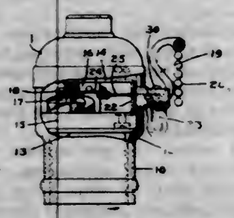
3. An attachment plug cap formed of insulating material and provided with spaced apart recesses, contact blades provided with base plates embedded within said insulating material, and each having a portion projecting into one of said recesses, and binding screws located in said recesses and engaging the projecting portion of the respective base plates.

4. An attachment plug cap formed of insulating material provided with a central bore and spaced apart recesses, said cap being provided with holes extending from said bore to said recesses, contact blades provided with base plates embedded within said insulating material and each having a portion projecting into one of said recesses, and binding screws located in said recesses and engaging the projecting portions of the respective base plates.

5. An attachment plug base provided with recesses, brackets carrying contacts which extend into said recesses, a center screw engaging one bracket to retain the latter in position, a screw shell having an overlying flange engaging the other bracket to retain the same in place, and means independent of said center screw for retaining said shell in position.

[Claims 6 to 10 not printed in the Gazette.]

1,064,834. PULL-SOCKET. HARVEY HUBBELL, Bridgeport, Conn. Filed May 6, 1912. Serial No. 695,474. (Cl. 173—354.)



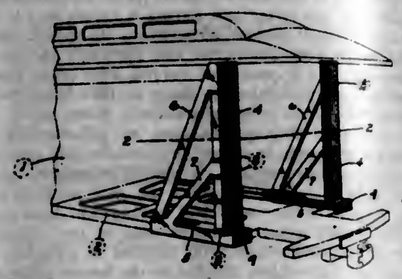
1. In a pull socket, the combination with a switch operating member having a T-shaped lug, of an insulating operating bar having a slot normally lying obliquely to said lug whereby the parts are detachably connected and an operating lever to which the other end of the bar is detachably connected.

2. In a pull socket, the combination with a switch operating member and a switch operating lever, of a two-part operating bar, one of said parts having a slot, insulation in said slot and on opposite sides of the part and lugs passing through the insulation by which the parts are secured together.

3. An operating bar of the character described comprising two members, one of which is provided with a slot, insulation in said slot and on opposite sides of said member, and lugs integral with the other member and passing through the insulation by which the parts are rigidly secured together.

1,064,835. REINFORCING CORNER-POST AND END-FRAME BRACE FOR CARS. BOONE V. H. JOHNSON, St. Louis, Mo., assignor to Double Body Bolster Co., a Corporation of New Jersey. Filed Apr. 29, 1911. Serial No. 624,166. (Cl. 105—201.)

1. A reinforcing corner post for car bodies comprising a vertically disposed, flanged member adapted to engage the end framing at the corner of a car body, a horizontally disposed, flanged member extending inwardly from the lower portion of the vertically disposed member, which horizontally disposed member is adapted to engage the underframe of the car body, a brace between the vertically disposed and horizontally disposed members, and a shelf projecting outwardly from the lower portion of the vertically disposed member.



2. The combination with a car body and its end frame, of a reinforcing corner post applied to the end corner of the car body, which corner post comprises a vertically disposed, flanged member, a portion of which is adapted to be positioned between the car end frame and the car body, a horizontally disposed, flanged member at the lower end of said vertically disposed member, and means projecting from the lower portion of the vertically disposed member for supporting the car end frame.

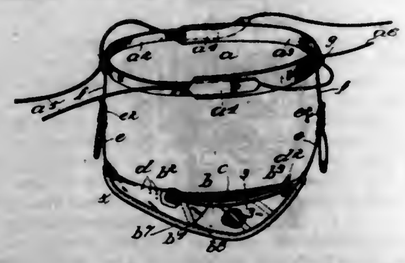
3. The combination with a car body and its end frame, of a reinforcing corner post applied to the end corner of the car body, which corner post comprises a vertically disposed, flanged member, a portion of which is adapted to be positioned between the car end frame and the car body, a horizontally disposed, flanged member at the lower end of said vertically disposed member, means projecting from the lower portion of the vertically disposed member for supporting the car end frame, and a brace between the vertically disposed and horizontally disposed members.

4. The combination with a car body and its end frame, of a reinforcing corner post applied to the end corner of the car body, which corner post comprises a braced upright member a portion of which is adapted to be positioned between the end frame and the car body, and a shelf projecting outwardly from the lower portion of the corner post for supporting the car end frame.

5. The combination with a car body and its end frame, of a reinforcing corner post applied to the corner of the car body, an end frame support projecting from the lower end of said corner post, and a horizontally disposed, flanged member projecting inwardly from the lower portion of the corner post for engaging the car underframe.

[Claims 6 to 10 not printed in the Gazette.]

1,064,836. CATAMENIAL DEVICE. ABRAHAM I. JORDAN, New York, N. Y. Filed Mar. 15, 1909. Serial No. 483,356. (Cl. 128—5.)



1. A catamenial device comprising an oblong bag open longitudinally at the top and provided at its rear end with laterally directed pockets, and an absorption pad adapted to be placed in said bag and provided at its rear end with laterally directed projections adapted to enter said pockets.

2. A catamenial device comprising an oblong bag open longitudinally at the top and provided at its rear end with laterally directed pockets, and an absorption pad adapted to be placed in said bag and provided at its rear end with laterally directed projections adapted to enter said pockets, said bag being also provided at its front and rear ends with extensions having perforations, and with side flaps having transverse stays.

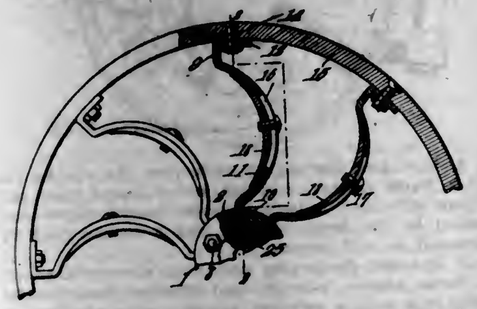
3. A catamenial device comprising an oblong bag open longitudinally at the top and provided at its rear end with laterally directed pockets, and an absorption pad adapted to be placed in said bag and provided at its rear end with laterally directed projections adapted to enter said pockets, said bag being also provided at its front and rear ends with extensions having perforations, and with side flaps having transverse stays, said end extensions being also provided with straps.

4. In a catamenial device, a waist belt or band composed of separate parts, the end portions of one part being provided with keepers through which the end portions of the other part are passed, tapes or cords connected with the said end portions of both parts, and a bag suspended from the central portions of said parts.

5. In a catamenial device, a waste belt or band composed of separate parts, the end portions of one part being provided with keepers through which the end portions of the other part are passed, tapes or cords connected with the said end portions of both parts, and a bag suspended from the central portions of said parts by means of straps connected with said parts and straps connected with the end portions of the bag, one set of said straps being provided with buckles.

[Claim 6 not printed in the Gazette.]

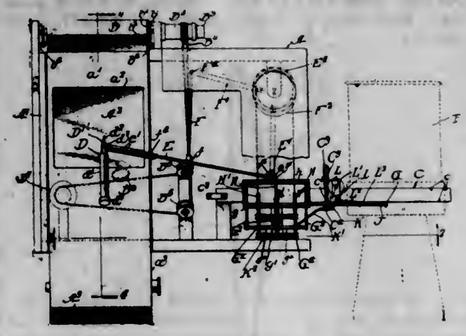
1,064,837. SPRING-WHEEL. THOMAS N. JORDAN, Long Beach, Miss. Filed May 18, 1912. Serial No. 698,278. (Cl. 152—50.)



In a device of the class described, a curved spring spoke; a curved reinforcing plate adjustable longitudinally of the spoke and fitting in the concavity of the spoke; and a securing element connecting the plate with the spoke, the ends of the plate bearing on the spoke on each side of the securing element; the securing element being adjustable transversely of the spoke to draw the plate into the concavity of the spoke; the plate being tapered from its middle portion toward its ends.

1,064,838. STEREOPTIGRAPH. GEORGE W. KAUSER, Chicago, Ill. Filed Aug. 3, 1910. Serial No. 575,305. (Cl. 33—6.)

1. In combination, a sending platen, a sending pen adapted to write or trace thereon, a pair of carrying arms connected to said sending pen, said carrying arms having pivotal connection with each other, a pair of secondary carrying arms each pivotally connected to one of said primary carrying arms, pulleys located in planes parallel to said sending platen, one pulley for each secondary arm, rigidly connected to said secondary arms, a receiving platen, a receiving pen adapted to write or trace thereon, a second pair of primary carrying arms connected to said receiving pen, said second pair of primary carrying arms being pivotally connected together, a second pair of secondary arms each pivotally connected to one of said last named primary arms, pulleys, one for each of said last-named secondary arms, located in planes parallel to said receiving platen, rigidly secured to said second pair of secondary arms, each pulley of the first pair being equal in diameter to the corresponding pulley of the second set, and belts connecting corresponding pulleys.



2. A stereoptigraph embracing a main frame, a sending platen supported thereon, a sending pen adapted to write on said sending platen, a guide frame projecting from the main frame of said stereoptigraph, a slide movably mounted in said guide frame, a receiving pen adapted to trace on said slide, means intermediate said receiving pen and said sending pen adapted to reproduce on the slide pen or pencil effects produced or traced on the sending platen by the sending pen, and means located in the path of movement of said slide for inking the same.

3. A stereoptigraph embracing a main frame, a sending platen supported thereon, a sending pen adapted to write on said sending platen, a guide frame projecting from the main frame of said stereoptigraph, a slide frame movably mounted in said guide frame, a plate secured to said slide frame, a receiving pen adapted to trace on said plate, means intermediate said receiving pen and said sending pen adapted to reproduce on the plate pen or pencil effects produced or traced on the sending platen by the sending pen, an inking roll located in the path of movement of said slide frame, a disk rotatably mounted on said slide frame, and means carried by said guide frame adapted to rotate said disk upon the movement of said slide frame.

4. A stereoptigraph embracing a main frame, a sending platen supported thereon, feed rolls for feeding a strip of paper over said platen, a sending pen adapted to write on said sending platen, a guide frame projecting from the main frame of said stereoptigraph, a slide frame movably mounted in said guide frame, a plate carried by said slide frame, a receiving pen adapted to trace on said plate, means intermediate said receiving pen and said sending pen adapted to reproduce on the plate pen or pencil effects produced or traced on the sending platen by the sending pen, an ink roll located in the path of said slide frame, and means for moving the slide to ink it and for operating the feed rolls by the same movement.

5. In combination with a sending platen, a receiving platen, a receiving pen, and means including an electro-magnet for raising said receiving pen from said receiving platen, a sending pen movable to and from its platen comprising an elongated hollow holder, laterally separated conductor bars located in said holder and projecting from the lower end thereof, a pencil of lead or the like located in said holder and projecting from the lower end thereof, a pencil feeding member movable in said holder, brushes carried by said pencil feeding member in contact with said laterally separated conductor bars, a contact adapted to engage one of said brushes, a movable pencil support for the upper end of said pencil electrically connected with said other brush, and flexibly connected with said pencil feeding member, said pencil support being electrically connected with said contact and being movable therewith,

said pencil feeding member being adjustable in said holder, and electrical connections between said magnet and said conductor bars.

[Claims 6 and 7 not printed in the Gazette.]

1,064,839. SPECTACLE-CASE. GEORGE W. KEENE, Adel, Ga. Filed May 11, 1912. Serial No. 696,677. (Cl. 24—3.)



A guard for spectacle cases, comprising a broad concavo-convex body presenting a large area of surface for frictional contact with the outer convex surface of the case, a narrow guard finger extending away from the body and provided with a knob at its free end, and a shank projecting from the back of said body and adapted to be inserted through a slot in the spectacle case and moved lengthwise of said slot.

1,064,840. CAP. ALFRED KNOWLES, Manchester, England. Filed Feb. 13, 1911. Serial No. 608,326. (Cl. 2—106.)

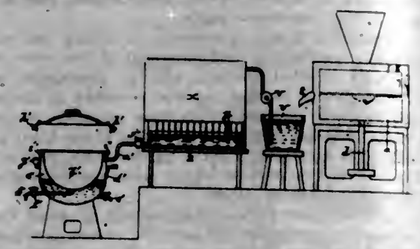


1. The combination, with an unlined cap of textile material formed of segments united by seams which radiate from a common center, said cap being provided with a sweat band at its lower part and having a bulging front portion which overlaps the sweat band; of a relatively narrow stiffening band formed of textile material impregnated with stiffening material and secured in the crown portion of the cap above the level of the lower portions of its sides and the sweat band and conforming to the contour of the said bulging portion.

2. The combination, with an unlined cap of textile material formed of segments united by seams which radiate from a common center, said cap being provided with a sweat band at its lower part and having a bulging front portion which overlaps the sweat band; of stiffening stripe formed of textile material impregnated with stiffening material and secured inside the cap over the said radiating seams and extending from the said center to the sweat band, and a relatively narrow stiffening band also formed of textile material impregnated with stiffening material and secured in the crown portion of the cap above the level of the lower portions of its sides and the sweat band and conforming to the contour of the said bulging portion.

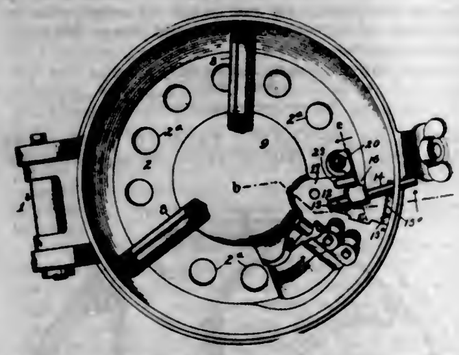
1,064,841. METHOD OF MANUFACTURING PRODUCTS FROM SOJA. YU YING LI, Vallées, France. Filed Oct. 10, 1911. Serial No. 653,820. (Cl. 99—11.)

The hereindescribed method of producing a product from soja beans which consists in cleaning and decorticating the beans, grinding the beans previously mixed with water, subjecting the ground product to pressing and



filtering operations, and then heating the filtered liquid to a temperature necessary to effect pasteurization or sterilization.

1,064,842. SEED-DISCHARGING MECHANISM. ALEXUS C. LINDGREN, Moline, Ill., assignor to Moline Plow Company, a Corporation of Illinois. Filed Nov. 13, 1912. Serial No. 731,158. (Cl. 111—6.)



1. In a seed discharging mechanism, the combination of a frame member, a rotary seed dropping plate provided with seed cells, a movable knocker-carrier sustained by the frame member, and a knocker movably mounted on said carrier.

2. In a seed discharging mechanism, the combination of a frame member, a rotary seed dropping plate provided with seed cells, a swinging knocker-carrier sustained by the frame member, and a knocker movably mounted on said carrier.

3. In a seed discharging mechanism, the combination of a frame member, a rotary seed dropping plate provided with seed cells, an adjustable knocker-carrier sustained by the frame member, and a knocker mounted on said carrier.

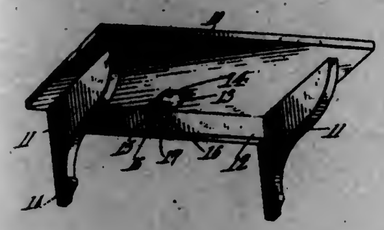
4. In a seed discharging mechanism, the combination of interchangeable rotary seed dropping plates provided with seed cells, a knocker movable toward and from the edges of the plates, and means for retaining the knocker in its different positions relative to the edges of the plates.

5. In a seed discharging mechanism, the combination of a frame member, interchangeable rotary seed dropping plates provided with seed cells, a knocker shiftable toward and from the edges of the plates, and shifting means connected with the knocker and exposed on the outer side of the frame member.

[Claims 6 and 7 not printed in the Gazette.]

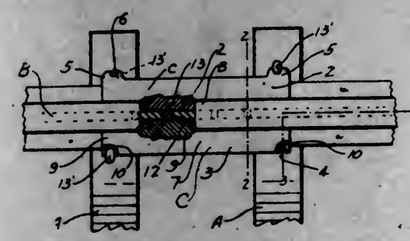
1,064,843. SHELF. CLIDE MARSH, Fort Dodge, Kans. Filed Nov. 4, 1912. Serial No. 729,533. (Cl. 248—19.)

1. A shelf comprising a shelf proper, brackets attached thereto, a brace rod extending between said brackets and provided with a centrally located hole, a metallic plate attached to the shelf proper, said plate having a downwardly extending flange, a triangular notch at the lower end of said flange, said notch lying in front of said hole.



2. A shelf comprising a shelf proper, brackets attached thereto, said brackets being provided at their lower ends with concealed weights, a brace rod extending between said brackets and provided with a centrally located hole, means for rotatably supporting said shelf upon a nail or screw, said supporting means being located well above the center of gravity of the entire shelf.

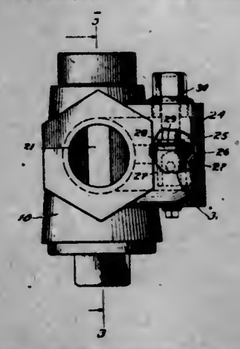
1,064,844. JOINT-CHAIR. MICHAEL MCHALE, Columbus, Kans. Filed Apr. 3, 1913. Serial No. 758,693. (Cl. 239—6.)



1. In combination with the meeting ends of a pair of rails, a joint chair comprising a base plate having a fish plate thereon for engagement with the base flanges on one side of the rails, said base plate also having an upstanding flange formed on one longitudinal edge, said flange terminating short of the ends of the base plate, said base plate being formed with notches between the extremities of said flange and the ends of the base plate, a clamping member comprising a base plate adapted for slidable engagement between the first mentioned base plate and the bases of said rails, said clamping member being formed with a fish plate adapted for engagement with the base flanges on the opposite side of the rails, the base plate of said clamping member being also provided with notches for registration with the notches in the first mentioned base plate, as and for the purpose described.

2. In combination with the meeting ends of a pair of rails, a joint chair comprising a base plate having a fish plate on one longitudinal edge for engagement with the base flanges on one side of the rails, said base plate also having an upstanding flange formed on its opposite longitudinal edge, said flange terminating short of the ends of the base plate, the base plate being formed with notches between the extremities of the flange and the ends of the base plate, a clamping member comprising a base plate adapted for slidable engagement between the first mentioned base plate and the bases of said rails, said clamping plate being formed on one longitudinal edge with a fish plate adapted for engagement with the base flanges on the opposite side of said rails, the lower edge of the second mentioned fish plate being cut away at its opposite ends, said second mentioned base plate being formed with notches below the cut away portions of said fish plate for registration with the notches in the first mentioned base plate, as and for the purpose described.

1,064,845. DUMP-CAR. THOMAS R. MCKNIGHT, Aurora, Ill., assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed Mar. 17, 1911. Serial No. 615,061. (Cl. 105—190.)



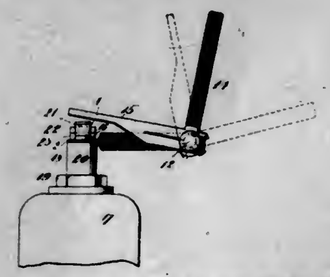
1. A dump-car having compressed-air-operated dumping mechanism comprising a cylinder and an inlet-valve for admitting compressed-air thereto, said valve having means operated by back-pressure of the compressed-air in the cylinder after the closure of the inlet-valve and independently thereof for permitting the compressed-air in the cylinder to be exhausted into the atmosphere.

2. A dump-car having compressed-air-operated dumping mechanism, comprising an inlet valve for compressed air, said valve having a check-valve operating after the closure of the inlet valve to permit the compressed air to be exhausted into the atmosphere.

3. A dump-car having compressed-air-operated dumping mechanism, means for admitting compressed air thereto for actuating the same and for shutting off the compressed air supply, and means operated by back-pressure for exhausting the compressed air from said dumping mechanism into the atmosphere.

4. In a dump-car system, comprising a plurality of cars equipped with compressed-air-operated dumping mechanism, the combination with a train-pipe for supplying compressed air to the dumping mechanism of said cars, of means operated by back-pressure when the train-pipe pressure is cut off for separately exhausting the compressed air from the dumping mechanism of the several cars into the atmosphere.

1,064,846. ACCESSORY FOR THE IGNITION SYSTEMS OF INTERNAL-COMBUSTION ENGINES. MELDON H. MERRILL, Boston, Mass. Filed May 10, 1911. Serial No. 626,215. (Cl. 175—183.)

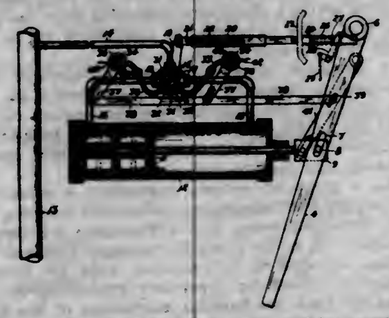


1. The combination with a spark plug having an attaching body, of a device having a body of some insulating material and at one end thereof secured thereto means consisting of some conducting material attached to said spark plug to have electrical connection therewith, said means being provided with a contact adjacent the line of the side of said plug, a member comprising a switch support of some conducting material in communication with a wire of an electrical system attached to the other end of said insulated body of the device, and a switch

mounted to turn upon said support, said switch having a blade of some conducting material in contact with said support, said switch also being adapted and arranged to the end that as the switch is turned the blade thereof may be moved to engage said contact or upwardly past the same or downwardly into engagement with the body of said plug or into positions just adjacent said plug or contact.

2. A device of the character specified having a body of some insulating material and at one end thereof secured thereto means consisting of some conducting material attachable to a spark plug to have electrical connection therewith, said means being provided with a contact at one side thereof, a member comprising a switch support of some conducting material secured to the other end of said insulated body of the device, said support being adapted to have electrical connection with a wire of an electrical system, and a switch mounted to turn upon said support, said switch having a blade of some conducting material in contact with said support, said switch also being adapted and arranged to the end that as the switch is turned the blade thereof may be moved to engage said contact or upwardly or downwardly past the same.

1,064,847. PNEUMATIC ELEVATOR-DOOR CONTROLLER. EDWARD N. MILLS, San Francisco, Cal., assignor, by direct and mesne assignments, to Western Door Control Company, Brentwood, Cal., a Corporation of California. Filed July 3, 1912. Serial No. 707,495. (Cl. 187—54.)



1. A controller for elevator doors comprising a cylinder, a piston reciprocable therein, and operatively connected to the elevator door to reciprocate the same, an exhaust air pipe, means for placing said latter pipe in communication with either end of the cylinder selectively and the other in communication with atmospheric air, and means for shutting off the atmospheric air after the piston has moved through a portion only of its stroke.

2. In combination with a door, a cylinder, a piston therein operatively connected to said door, an air-exhaust pipe, pipes leading to opposite terminal portions of the cylinder and either adapted to be selectively connected to said air-exhaust pipe, their connections with the cylinder being such that communication between said cylinder and either pipe is shut off before the piston arrives at the end of the cylinder.

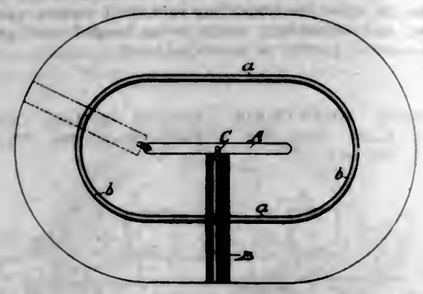
3. In combination with a door, a cylinder, a piston therein, operatively connected to said door, an air exhaust pipe, and means for placing said air exhaust pipe in communication with either end of the cylinder selectively, and for closing said communication before the piston arrives at the end of its stroke.

4. In combination with a door, a cylinder, a piston therein, operatively connected to said door, an air exhaust pipe, means for placing said air exhaust pipe in communication with either end of the cylinder selectively, and for closing said communication before the piston arrives at the end of its stroke, and means for opening communication between the other end of the cylinder and atmospheric air, said means being adapted to close automatically before the piston has arrived at the ends of its stroke.

5. In combination with a door, a cylinder, a piston therein, operatively connected to said door, an air exhaust pipe, means for placing said air exhaust pipe in communication with either end of the cylinder selectively, and for closing said communication before the piston arrives at the end of its stroke, and means for opening communication between the other end of the cylinder and atmospheric air, said means being adapted to close automatically when the piston has completed two thirds of its stroke.

[Claims 6 and 7 not printed in the Gazette.]

1,064,848. APPARATUS FOR DISTRIBUTING SEWAGE OR SEWAGE EFFLUENT UPON THE SURFACES OF FILTER-BEDS. SAMUEL JOHN SIGISMUND MILLS, Stourbridge, England, assignor to Jones and Attwood Limited, Stourbridge, England. Filed Jan. 4, 1911. Serial No. 600,810. (Cl. 210—18.)



1. Apparatus for distributing sewage or sewage effluent upon the surface of a filter bed, which comprises a continuous mono-rail as the track for the distributer, a water-wheel distributer which is substantially balanced upon the rail, said distributer having a conduit through which sewage or effluent is delivered to the buckets of the water-wheel continuously on the same side thereof, whereby the water-wheel is caused to travel along the mono-rail continuously, said mono-rail running lengthwise of a filter bed which is longer one way than the other, at a distance from one outer edge thereof equal to about half the length of the distributer, then over one end thereof at the said distance from the outer edge of such end, then back lengthwise of the bed at the said distance from the other side edge of the bed, and then over the other end of the bed at the said distance from the edge of such end, arms pivotally connected at their inner ends to the frame of the apparatus and wheels connected through the medium of swivels with the outer ends of the arms and bearing against the mono-rail, said arms reversely engaging with one another whereby as either arm turns in a direction inward or outward the other arm correspondingly turns.

2. Apparatus for distributing sewage or sewage effluent upon the surface of a filter bed, which comprises a continuous mono-rail as the track for the distributer, and a water-wheel distributer which is substantially balanced upon the rail, said distributer having a conduit through which sewage or effluent is delivered to the buckets of the water-wheel continuously on the same side thereof, whereby the water-wheel is caused to travel along the mono-rail continuously, said mono-rail running lengthwise of a filter bed which is longer one way than the other at a distance from one outer edge thereof equal to about half the length of the distributer, then over one end thereof at the said distance from the outer edge of such end, then back lengthwise of the bed at the said distance from the other side edge of the bed, and then over the other end of the bed at the said distance from the edge of such end, arms pivotally connected at their inner ends to the frame of the apparatus, frames pivoted to the outer ends of the arms, wheels mounted to the outer ends of the arms, wheels mounted in the said frames and running upon the mono-rail, and guide wheels mounted in said frames and bearing against the sides of the rail, said arms reversely engaging with one another whereby as either arm turns in a direction inward or outward the other arm correspondingly turns.

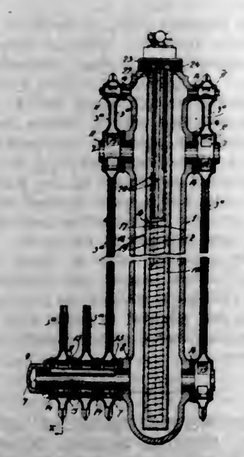
3. Apparatus for distributing sewage or sewage effluent upon the surface of a filter bed which comprises, a continuous mono-rail as the track for the distributer, and a water-wheel distributer which is substantially balanced upon the rail, said distributer having a conduit through which sewage or effluent is delivered to the buckets of the water-wheel continuously on the same side thereof, whereby the water-wheel is caused to travel along the mono-rail continuously, a driving wheel which runs upon the mono-rail and supports the middle of the water-wheel, and a frame which is independently supported at its middle upon the mono-rail and at its ends supports the water-wheel, said frame being slidingly mounted in relation to the driving wheel.

4. Apparatus for distributing sewage or sewage effluent upon the surface of a filter bed which comprises, a continuous mono-rail as the track for the distributer, and a water-wheel distributer which is substantially balanced upon the rail, said distributer having a conduit through which sewage or effluent is delivered to the buckets of the water-wheel continuously at the same side thereof, whereby the water-wheel is caused to travel along the mono-rail continuously, a driving wheel which runs upon the mono-rail and supports the middle of the water-wheel, and a frame which is independently supported at its middle upon the mono-rail and at its ends supports the water-wheel, said frame being slidingly mounted in relation to the water-wheel.

5. Apparatus for distributing sewage or sewage effluent upon the surface of a filter bed which comprises, a continuous mono-rail as the track for the distributer, a water-wheel distributer which is substantially balanced upon the rail, said distributer having a conduit through which the sewage or effluent is delivered to the buckets of the water-wheel continuously at the same side thereof, whereby the water-wheel is caused to travel along the mono-rail continuously, an axle which carries the water-wheel and is itself supported independently at its middle upon the mono-rail, and a frame which is independently supported at its middle upon the mono-rail and at its ends supports the ends of said axle.

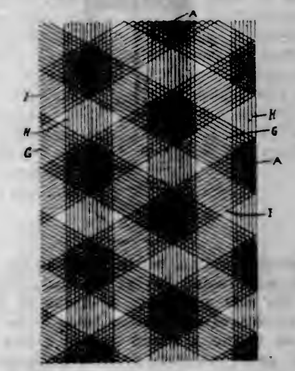
[Claims 6 to 9 not printed in the Gazette.]

1,064,849. RADIATOR. JOHN F. MONNOT, Paris, France. Filed Dec. 10, 1910. Serial No. 596,707. (Cl. 237—8.)



A sectional radiator comprising in combination a vertical column provided with heating means therein and a plurality of vertical radiator sections, said column and sections being provided with lower intercommunicating circulation ports near their lower ends and with upper intercommunicating circulation ports near their upper ends, and also provided with intercommunicating air and vapor circulation ports above said upper ports and above the normal water level of the radiator, whereby communication between the column and the sections above the upper circulation ports is provided for, substantially as described.

1,064,850. REINFORCED CONCRETE CONSTRUCTION. DAVID W. MORROW, Cleveland, Ohio, assignor of one-half to James P. Cross, Cleveland, Ohio. Filed May 18, 1912. Serial No. 698,096. (Cl. 72—15.)



1. In a monolithic concrete construction, the combination with a reinforced flat slab and a plurality of reinforced columns, the said columns being arranged in rows and the columns of adjacent rows being staggered with respect to each other, any group of three adjacent columns in two adjacent rows forming the apices of a substantially equilateral triangle, said slab having groups of reinforcing rods passing over the columns in the directions of the three sides of the triangle.

2. In a monolithic concrete construction, a floor slab, a plurality of reinforced columns arranged in rows, the columns in adjacent rows being staggered with respect to each other, any four adjacent columns which form the apices of a parallelogram being substantially equidistant apart in the directions of the four sides and short diagonal of the parallelogram, and groups of reinforcing rods extending over the columns in the directions of the four sides and of the short diagonal.

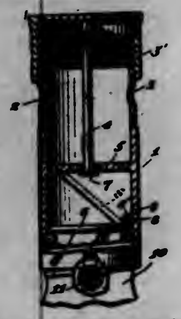
3. In a monolithic concrete construction, a floor slab, a plurality of reinforced columns arranged in rows, the columns in adjacent rows being staggered with respect to each other, any four adjacent columns which form the apices of a parallelogram being substantially equidistant apart in the directions of the four sides and short diagonal of the parallelogram, and groups of reinforcing rods extending over the columns in the directions of the four sides and of the short diagonal, the said rods being near the lower face of the slab midway between the columns, and near the upper face of the slab over the columns.

4. In a monolithic concrete construction, a floor slab, a plurality of reinforced columns arranged in rows, the columns in adjacent rows being staggered with respect to each other and any four adjacent columns of which form the apices of a parallelogram being substantially equidistant apart in the directions of the four sides and short diagonal of the parallelogram, and groups of reinforcing rods extending over the columns in the direction of the four sides and short diagonal, the said reinforcing rods substantially covering the area between said columns.

5. In a monolithic concrete construction, a floor slab, a plurality of reinforced columns arranged in rows, the columns in adjacent rows being staggered with respect to each other and any four adjacent columns which form the apices of a parallelogram being substantially equidistant apart in the directions of the four sides and short diagonal of the parallelogram, and belts of reinforcing rods extending over the columns in the directions of the

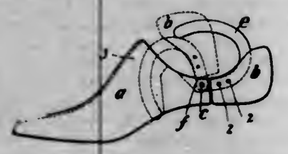
four sides and short diagonal, the said belts being of but one thickness of reinforcement midway between the columns and three thicknesses of reinforcement over the columns.

1,064,851. NON-REFILLABLE BOTTLE. TOKUTARO NISHIDA, Seattle, Wash. Filed Mar. 25, 1912. Serial No. 685,994. (Cl. 215—66.)



In combination with a bottle, a casing on the neck of said bottle, said casing having its outer end open and formed in its side wall with a discharge opening, the outer end portion of said casing being screw-threaded, a valve in said casing, a guard in said casing above said valve, said guard consisting of a perforated plate, a closure for the open outer end of said casing, said closure having a screw-threaded flange engaged with the threaded outer end portion of said casing and normally extending over the discharge opening of the latter to close the same, and means within said casing connected to said closure for preventing removal of the latter from the casing, for the purpose specified.

1,064,852. BOOT-TREE. JOSEF NOLL, Alfeld, Germany. Filed Jan. 6, 1912. Serial No. 669,783. (Cl. 12—128.)



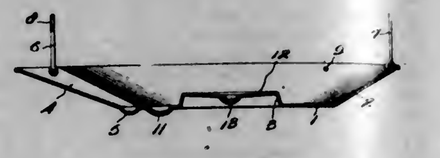
1. In a shoe tree, the combination, with a toe portion provided with a chamber having an opening at its top, and a heel portion having its lower part pivoted to the lower part of the toe portion; of a handle having its lower part rigidly secured to the heel portion and extending longitudinally of the shoe tree and being slightly curved around the pivot of the joint and arranged in the space between the upper parts of its toe and heel portions, a space for the knuckles of the hand being formed between the handle and the lower parts of the toe and heel portions, and the handle being arranged to pass through the said opening into the said chamber when the heel portion is raised pivotally.

2. In a shoe tree, the combination, with a toe portion provided with a chamber, of a heel portion, and a handle having its lower part secured to the heel portion and provided with a projection which is pivoted to the said toe portion, the upper portion of the said handle being normally arranged between the heel portion and the toe portion and being adapted to pass into the said chamber of the toe portion when the heel portion is raised.

1,064,853. MINER'S GOLD-PAN. EDWARD O. C. ORD, Los Angeles, Cal. Filed Oct. 7, 1912. Serial No. 724,464. (Cl. 83—88.)

1. A gold pan provided with an inclined spout constituting a shallow pocket in its peripheral wall, and a central bottom boss formed with a concave top.

2. A gold pan provided with an inclined spout constituting a shallow pocket in its peripheral wall, and a central bottom boss formed with a central recess or trap.



3. A gold pan provided with an inclined spout constituting a shallow pocket in its peripheral wall and formed with a bottom recess or trap, a central bottom boss formed with a concave top, and means for suspending the pan for swing about a fixed point in the central vertical plane of said spout.

4. A gold pan having an upwardly flaring peripheral wall provided with a spout constituting a shallow pocket, and a central bottom boss having an upwardly converging peripheral wall and a concave top.

1,064,854. MINER'S GOLD-PAN. EDWARD O. C. ORD, Florence, Ariz. Filed Apr. 8, 1912, Serial No. 689,135. Renewed Nov. 14, 1912. Serial No. 731,430. (Cl. 83—88.)



1. A gold pan provided with a spout inclined outwardly from the bottom thereof, and abruptly projecting outwardly from the peripheral wall of the pan to constitute a wide and relatively shallow pocket throughout its length

2. A gold pan provided with an inclined spout having a bottom formed with a recess or trap, and abruptly projecting outwardly from the peripheral wall of the pan to constitute a wide and relatively shallow pocket throughout its length.

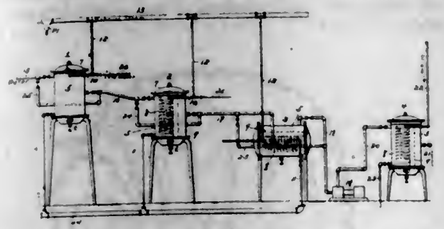
3. A gold pan provided with an inclined spout having a depressed bottom extending laterally from the base of the pan, and abruptly projecting outwardly from the peripheral wall of the pan to constitute a wide and relatively shallow pocket throughout its length.

4. A gold pan provided with a bottom boss projecting upwardly concentrically with the peripheral wall of the pan to provide a narrow annular way for the heavier materials and prevent settlement of the lighter waste at the center of the pan, and a spout inclined upwardly from the bottom of the pan, such narrow annular way being formed with a recess adjacent to the spout.

5. A gold pan provided with a spout inclined outwardly from the bottom thereof and constituting a continuation of the peripheral wall of the pan, a bail pivoted within said spout and adapted to swing into close engagement with the walls thereof, and a diametrically opposite bail pivoted to the pan.

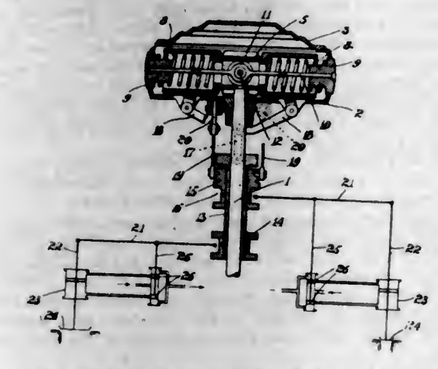
1,064,855. FEED-WATER HEATING AND PURIFYING MEANS. RICHARD WILLIAM PARRY, Columbus, Ohio. Filed Jan. 12, 1911. Serial No. 602,335. (Cl. 62—30.)

In a feed water heater, the combination with a cylinder and feed water supply and discharge pipes therefor, of a heating coil within the cylinder, pipes for conducting steam through the coil, and suitable valves for cutting off the supply of steam to the coil and independent pipes for conducting cold water through said heating coil for



removing the scale formed on its exterior surface, substantially as set forth.

1,064,856. CENTRIFUGAL GOVERNOR. PER ARVID PETERSON, Trenton, N. J., assignor to De Laval Steam Turbine Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 8, 1912. Serial No. 682,456. (Cl. 121—112.)



1. A centrifugal governor comprising a rotary weight-carrier, a plurality of independent weights mounted thereon to move toward and from the center of rotation thereof, independent governor-springs for said independent weights, independent valve-control means for said independent weights, and means for transmitting motion from each of such independent weights to the corresponding valve-control means.

2. A centrifugal governor comprising a rotary weight-carrier, a plurality of independent weight-structures mounted thereon to move toward and from the center of rotation thereof, each such weight structure comprising a plurality of weights in rotative balance with respect to one another, independent governor-springs for said separate weight-structures, independent valve-control means for said independent weight-structures, and means for transmitting motion from each of such independent weight-structures to the corresponding valve-control means.

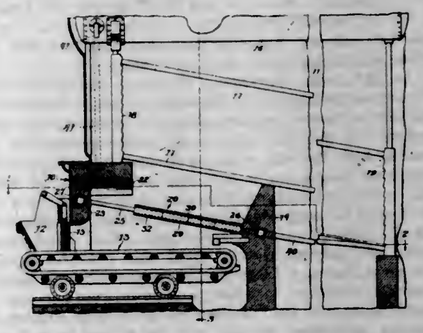
3. A centrifugal governor comprising a rotary weight-carrier, a plurality of independent weight-structures, said weight structures each comprising a plurality of oppositely-disposed weights in rotative balance, spacing means on said carrier adapted to space the weights apart, independent governor springs for said independent weight-structures, independent valve-control means for said independent weight-structures, and means for transmitting motion from each of such independent weight-structures to the corresponding valve-control means.

4. A centrifugal governor comprising a rotary weight-carrier, spacing means carried thereby, a plurality of sets of governor weights, each set comprising two weights located respectively on opposite sides of said spacing means, a separate spring for each such weight, abutments for said weights, each spring acting against one of said weights and against one of said abutments, a tension rod, for each such set of weights, each such tension rod having a screw-thread connection with one of said abutments, for the adjustment of spring-action, one of said tension rods having, near the center of rotation, an aperture through which passes the tension rod of another of said sets of weights, and means for transmitting inward and outward motion of the weights of each set to valve-control means.

5. A centrifugal governor comprising a rotary weight-carrier, hollow spacing means carried thereby, a plurality of sets of governor weights arranged about said spacing means, each such set comprising two governor weights located respectively on opposite sides of said spacing means, each such weight having a spring-chamber within it, abutments for said weights, located in proximity to the outer ends of such spring chambers, a spring for each such weight, located within the spring chamber of that weight, and acting against said weight and against the corresponding abutment, tension rods connecting the abutments of corresponding weights, and means for transmitting inward and outward motion of the weights of each such set to valve control means.

[Claim 6 not printed in the Gazette.]

1,064,857. STEAM-BOILER FURNACE. HERMAN A. POPPENHUSEN, Evanston, and JOSEPH HARRINGTON, Riverside, Ill. Filed Apr. 3, 1909. Serial No. 487,630. (Cl. 110—98.)



1. A furnace embracing a grate and a deflecting partition over the grate, comprising a plurality of tubular, metal, water cooled supporting members, fire brick coverings on said supporting members, the covering for each member comprising lateral sections interlocked with each other at the upper sides of the members, and fire brick members extending between and supported at their side margins upon said fire brick coverings.

2. A furnace provided with a deflecting partition, embracing a plurality of tubular, metal, water cooled supporting members, fire brick coverings on said supporting members, the covering for each member comprising lateral sections interlocked with each other, and fire brick arch members spanning the spaces between and supported on said coverings, said arch members having inclined side edges and the coverings being provided with inclined supporting seats which are engaged by the inclined side edges of the arch members.

3. A furnace provided with a deflecting partition embracing a plurality of tubular, metal, water cooled supporting members, fire brick coverings on said supporting members comprising laterally separable parts which are fitted to the supporting members, said lateral parts being provided at their upper margins above the supporting members with overlapping, interlocking extensions, and fire brick arch members spanning the spaces between and supported on said coverings.

4. A furnace provided with a deflecting partition embracing a plurality of tubular, metal, water cooled supporting members, fire brick coverings upon said supporting members and fire brick arch members spanning the

four sides and short diagonal, the said belts being of but one thickness of reinforcement midway between the columns and three thicknesses of reinforcement over the columns.

1,064,851. NON-REFILLABLE BOTTLE. TOKUTARO NISHIDA, Seattle, Wash. Filed Mar. 25, 1912. Serial No. 685,994. (Cl. 215—66.)



In combination with a bottle, a casing on the neck of said bottle, said casing having its outer end open and formed in its side wall with a discharge opening, the outer end portion of said casing being screw-threaded, a valve in said casing, a guard in said casing above said valve, said guard consisting of a perforated plate, a closure for the open outer end of said casing, said closure having a screw-threaded flange engaged with the threaded outer end portion of said casing and normally extending over the discharge opening of the latter to close the same, and means within said casing connected to said closure for preventing removal of the latter from the casing, for the purpose specified.

1,064,852. BOOT-TREE. JOSEF NOLL, Alfeld, Germany. Filed Jan. 6, 1912. Serial No. 669,783. (Cl. 12—128.)



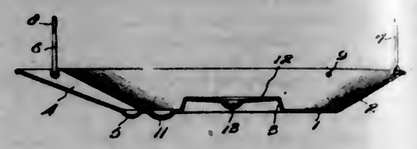
1. In a shoe tree, the combination, with a toe portion provided with a chamber having an opening at its top, and a heel portion having its lower part pivoted to the lower part of the toe portion; of a handle having its lower part rigidly secured to the heel portion and extending longitudinally of the shoe tree and being slightly curved around the pivot of the joint and arranged in the space between the upper parts of its toe and heel portions, a space for the knuckles of the hand being formed between the handle and the lower parts of the toe and heel portions, and the handle being arranged to pass through the said opening into the said chamber when the heel portion is raised pivotally.

2. In a shoe tree, the combination, with a toe portion provided with a chamber, of a heel portion, and a handle having its lower part secured to the heel portion and provided with a projection which is pivoted to the said toe portion, the upper portion of the said handle being normally arranged between the heel portion and the toe portion and being adapted to pass into the said chamber of the toe portion when the heel portion is raised.

1,064,853. MINER'S GOLD-PAN. EDWARD O. C. ORD, Los Angeles, Cal. Filed Oct. 7, 1912. Serial No. 724,464. (Cl. 83—88.)

1. A gold pan provided with an inclined spout constituting a shallow pocket in its peripheral wall, and a central bottom boss formed with a concave top.

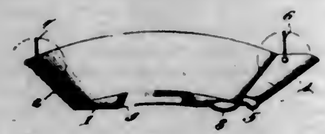
2. A gold pan provided with an inclined spout constituting a shallow pocket in its peripheral wall, and a central bottom boss formed with a concave top provided with a central recess or trap.



3. A gold pan provided with an inclined spout constituting a shallow pocket in its peripheral wall and formed with a bottom recess or trap, a central bottom boss formed with a concave top, and means for suspending the pan for swing about a fixed point in the central vertical plane of said spout.

4. A gold pan having an upwardly flaring peripheral wall provided with a spout constituting a shallow pocket, and a central bottom boss having an upwardly converging peripheral wall and a concave top.

1,064,854. MINER'S GOLD-PAN. EDWARD O. C. ORD, Florence, Ariz. Filed Apr. 8, 1912, Serial No. 689,135. Renewed Nov. 14, 1912. Serial No. 731,430. (Cl. 83—88.)



1. A gold pan provided with a spout inclined outwardly from the bottom thereof, and abruptly projecting outwardly from the peripheral wall of the pan to constitute a wide and relatively shallow pocket throughout its length

2. A gold pan provided with an inclined spout having a bottom formed with a recess or trap, and abruptly projecting outwardly from the peripheral wall of the pan to constitute a wide and relatively shallow pocket throughout its length.

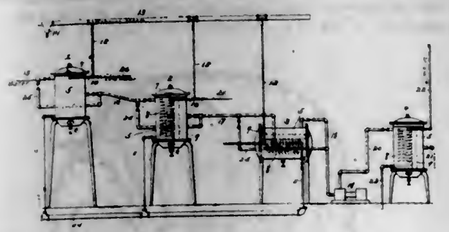
3. A gold pan provided with an inclined spout having a depressed bottom extending laterally from the base of the pan, and abruptly projecting outwardly from the peripheral wall of the pan to constitute a wide and relatively shallow pocket throughout its length.

4. A gold pan provided with a bottom boss projecting upwardly concentrically with the peripheral wall of the pan to provide a narrow annular way for the heavier materials and prevent settlement of the lighter waste at the center of the pan, and a spout inclined upwardly from the bottom of the pan, such narrow annular way being formed with a recess adjacent to the spout.

5. A gold pan provided with a spout inclined outwardly from the bottom thereof and constituting a continuation of the peripheral wall of the pan, a bail pivoted within said spout and adapted to swing into close engagement with the walls thereof, and a diametrically opposite bail pivoted to the pan.

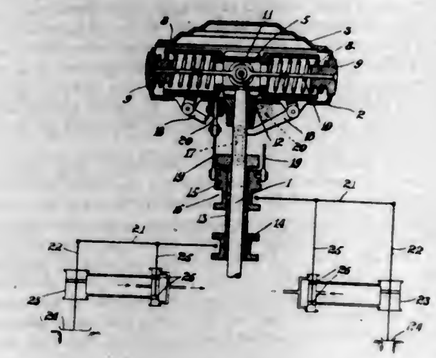
1,064,855. FEED-WATER HEATING AND PURIFYING MEANS. RICHARD WILLIAM PARRY, Columbus, Ohio. Filed Jan. 12, 1911. Serial No. 602,335. (Cl. 62—30.)

In a feed water heater, the combination with a cylinder and feed water supply and discharge pipes therefor, of a heating coil within the cylinder, pipes for conducting steam through the coil, and suitable valves for cutting off the supply of steam to the coil and independent pipes for conducting cold water through said heating coil for



removing the scale formed on its exterior surface, substantially as set forth.

1,064,856. CENTRIFUGAL GOVERNOR. PER ARVID PETERSON, Trenton, N. J., assignor to De Laval Steam Turbine Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 8, 1912. Serial No. 682,456. (Cl. 121—112.)



1. A centrifugal governor comprising a rotary weight-carrier, a plurality of independent weights mounted thereon to move toward and from the center of rotation thereof, independent governor-springs for said independent weights, independent valve-control means for said independent weights, and means for transmitting motion from each of such independent weights to the corresponding valve-control means.

2. A centrifugal governor comprising a rotary weight-carrier, a plurality of independent weight-structures mounted thereon to move toward and from the center of rotation thereof, each such weight structure comprising a plurality of weights in rotative balance with respect to one another, independent governor-springs for said separate weight-structures, independent valve-control means for said independent weight-structures, and means for transmitting motion from each of such independent weight-structures to the corresponding valve-control means.

3. A centrifugal governor comprising a rotary weight-carrier, a plurality of independent weight-structures, said weight structures each comprising a plurality of oppositely-disposed weights in rotative balance, spacing means on said carrier adapted to space the weights apart, independent governor springs for said independent weight-structures, independent valve-control means for said independent weight-structures, and means for transmitting motion from each of such independent weight-structures to the corresponding valve-control means.

4. A centrifugal governor comprising a rotary weight-carrier, spacing means carried thereby, a plurality of sets of governor weights, each set comprising two weights located respectively on opposite sides of said spacing means, a separate spring for each such weight, abutments for said weights, each spring acting against one of said weights and against one of said abutments, a tension rod, for each such set of weights, each such tension rod having a screw-thread connection with one of said abutments, for the adjustment of spring-action, one of said tension rods having, near the center of rotation, an aperture through which passes the tension rod of another of said sets of weights, and means for transmitting inward and outward motion of the weights of each set to valve-control means.

5. A centrifugal governor comprising a rotary weight-carrier, hollow spacing means carried thereby, a plurality of sets of governor weights arranged about said spacing means, each such set comprising two governor weights located respectively on opposite sides of said spacing means, each such weight having a spring-chamber within it, abutments for said weights, located in proximity to the outer ends of such spring chambers, a spring for each such weight, located within the spring chamber of that weight, and acting against said weight and against the corresponding abutment, tension rods connecting the abutments of corresponding weights, and means for transmitting inward and outward motion of the weights of each such set to valve control means.

[Claim 6 not printed in the Gazette.]

1,064,857. STEAM-BOILER FURNACE. HERMAN A. POPPENHUSEN, Evanston, and JOSEPH HARRINGTON, Riverside, Ill. Filed Apr. 3, 1909. Serial No. 487,630. (Cl. 110—98.)

1. A furnace embracing a grate and a deflecting partition over the grate, comprising a plurality of tubular, metal, water cooled supporting members, fire brick coverings on said supporting members, the covering for each member comprising lateral sections interlocked with each other at the upper sides of the members, and fire brick members extending between and supported at their side margins upon said fire brick coverings.

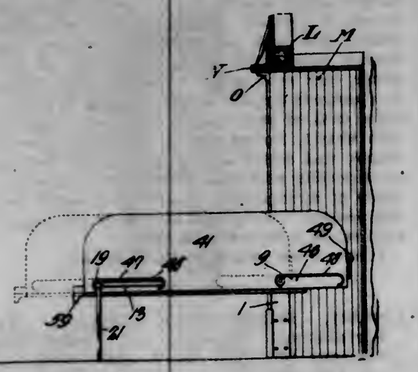
2. A furnace provided with a deflecting partition, embracing a plurality of tubular, metal, water cooled supporting members, fire brick coverings on said supporting members, the covering for each member comprising lateral sections interlocked with each other, and fire brick arch members spanning the spaces between and supported on said coverings, said arch members having inclined side edges and the coverings being provided with inclined supporting seats which are engaged by the inclined side edges of the arch members.

3. A furnace provided with a deflecting partition embracing a plurality of tubular, metal, water cooled supporting members, fire brick coverings on said supporting members comprising laterally separable parts which are fitted to the supporting members, said lateral parts being provided at their upper margins above the supporting members with overlapping, interlocking extensions, and fire brick arch members spanning the spaces between and supported on said coverings.

4. A furnace provided with a deflecting partition embracing a plurality of tubular, metal, water cooled supporting members, fire brick coverings upon said supporting members and fire brick arch members spanning the

spaces between and supported on said coverings, the said coverings embracing a plurality of laterally separable tiles which are interlocked at their margins at the upper sides of the supporting members.

1,064,858. BED. MORGAN W. RUNDEL, Birmingham, Mich. Filed Feb. 12, 1912. Serial No. 676,968. (Cl. 5—18.)



1. A bed body supporting structure having longitudinally adjustable side and end rails, means for supporting one of the side rails within a housing, pivotal connections between the end rails and said side rail, and supporting means carried by said end rails.

2. A bed body supporting structure including a side rail, means for supporting the same within a housing, end rails pivotally connected to said side rails, legs pivotally connected to the end rails, a side rail connected to and movable with the end rails, said side and end rails constituting a frame, and a bed body mounted on the frame.

3. A bed body supporting structure including a side rail, means for supporting the same within a housing, end rails pivotally connected to the side rail, a side rail connecting and movable with the end rails, said side and end rails constituting a frame, a leg carried by and mounted to swing relative to each end rail, and means for maintaining the leg vertical at all times during the swinging movement of the end rails, and a bed body mounted on the frame, said legs being supported beyond the ends of the bed body.

4. A bed body supporting structure for use in a housing and including longitudinally adjustable side rails, an end rail, pivotally connected to each end portion of one side rail, means for supporting said side rail at its ends within the housing, legs carried by and adapted to swing relative to the end rails, and coöperating means connected to one of the side rails and to the legs for maintaining said legs constantly vertical during the swinging of the frame.

5. A bed body supporting structure including supporting members fixedly mounted, brackets detachably engaging the same, a side rail connecting the brackets, end rails pivotally connected to the brackets, a side rail connecting and movable with the end rails, a bed body supported by the frame, means located beyond the ends of the bed body for supporting the end rails at points remote from the pivots, and means between the ends of the bed body for maintaining said supporting means vertical.

[Claims 6 to 26 not printed in the Gazette.]

1,064,859. BASE-BALL MITT. BENJAMIN M. SARGENT, St. Louis, Mo., assignor to Rawlings Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 25, 1911. Serial No. 651,308. (Cl. 2—195.)

1. In a baseball mitt, a palm section, a back section, an edge strip connecting the edges of the palm and back sections, that portion of said edge strip between the front portions of the palm and back sections being substantially narrower in width than the portion connecting the rear edges of said palm and back sections, and a body of padding within the space between the palm and back sections, which body of padding gradually decreases in thickness toward the front portions of the palm and back sections.



2. In a baseball mitt, the combination with a palm section and a back section, of an edge strip connecting the edges of said sections, which edge strip is formed in a single piece with its ends located between the thumb and hand portions of said sections, the end portions of which edge strip are narrower than the central portion and a body of padding located between the palm section and back section, which body of padding decreases in thickness toward the front of the mitt.

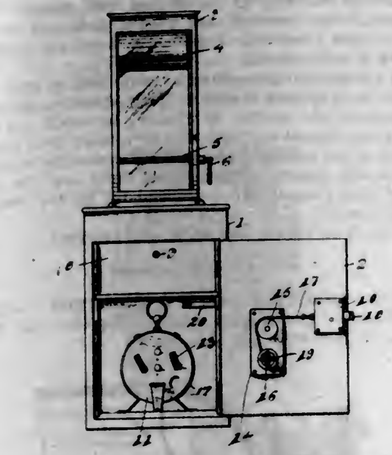
3. In a baseball mitt, a palm section, a back section, an edge strip connecting the edges of the palm and back sections, that portion of said edge strip between the front portions of the palm and back sections being substantially narrower in width than the portion connecting the rear edges of said palm and back sections, a body of padding within the space between the palm and back sections, which body of padding gradually decreases in thickness toward the front portions of the palm and back sections and a finger and thumb section applied to the back section.

4. In a baseball mitt, a padded body, a finger and thumb back section attached to the rear side of said padded body, parts of which finger and thumb back section are extended at the rear corners to form sections having their outer edges attached directly to the edge binding of the padded body portion, a pair of ears on the rear end portion of the finger and thumb back section between the rear corner extensions, one of which ears is padded, a buckle on the padded ear, and a strap attached at one end to the opposite ear.

5. In a baseball mitt, the combination with a padded body, of a finger and thumb back section attached to the rear side of said padded body, there being an opening between the padded body and the rear edge of said finger and thumb back section for the passage of the hand and wrist of the wearer of the mitt, integral extensions on the finger and thumb back section at the rear corners thereof, which extensions extend and are attached to the edge binding of the padded body, and rows of stitching extending across said extensions for attaching the same to the back of the padded body, which rows of stitching are arranged so as to resist pulling strains imparted to the rear portions of the finger and thumb back section by the wearer of the mitt.

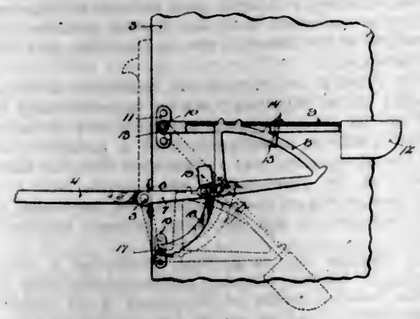
1,064,860. TIME-LOCK FOR CASH-RECEPTACLES. WILLIAM SCHACK, St. Louis, Mo. Filed Nov. 30, 1912. Serial No. 734,373. (Cl. 70—26.)

The combination with a housing having a hinged door thereon, a cash receptacle arranged within the housing and a time piece within the housing having a winding key thereon, of a lock for the door adapted to be affected when said door is in a closed position, a winding drum rotatably mounted upon said door, a pulley also rotatably mounted upon the door and disposed above the winding drum, a yielding flexible connection between said winding drum and the locking bolt of said lock, the said connection being extended over the pulley, a plurality of studs



extending at right angles from the peripheral side edge of said drum and adapted for engagement with the key on the time piece to rotate the drum at a predetermined time and correspondingly retract said locking bolt whereby the door may be opened.

1,064,861. SELF-CLOSING OVEN-DOOR. JAMES SCANLAN, Adell, Wis. Filed Dec. 30, 1912. Serial No. 739,176. (Cl. 126—91.)



1. The combination of an oven door, a crank in connection with the door, a single lifting member coupled to the crank, a pivotal counterweighted member opposing the lifting member, and a gravity latch engageable with a stop with which said lifting member is provided.

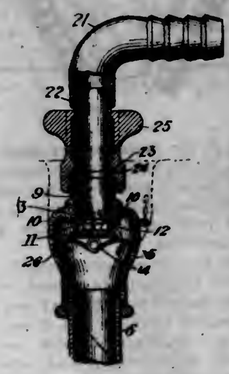
2. The combination of an oven door, a crank in connection with the door, a single lifting member coupled to the crank, a pivotal counterweighted member opposing the lifting-member, and a guard loop in hinge-connection with the counterweighted member and engaged by said lifting member.

3. The combination of an oven door, a crank in connection with the door, a segmental rack coupled to the crank, a pivotal counterweighted bar with which the rack-teeth engage, and a guard loop hung in connection with the bar and engaged by the rack.

4. The combination of an oven door, a crank in connection with the door, a segmental rack coupled to the crank, a pivotal counterweighted bar with which the rack teeth engage, and a gravity latch engageable with a stop with which the rack is provided.

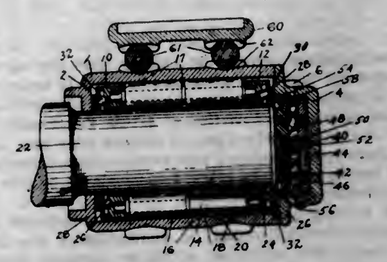
5. The combination of an oven door, a crank in connection with the door, a segmental rack coupled to the crank, a pivotal counterweighted bar with which the rack teeth engage, a pivotal counterweighted arm, and a stop on the rack engageable with a notch provided in said arm.

1,064,862. HOSE CONNECTION FOR LAWNS. JAMES STUART SHARP, Honolulu, Hawaii. Filed May 26, 1910. Serial No. 563,474. (Cl. 137—80.)



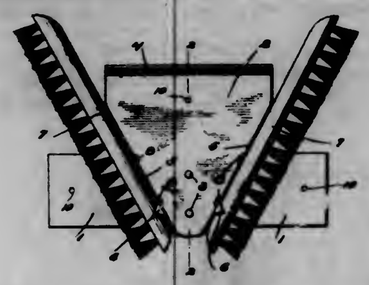
The combination with a valve casing having an exteriorly threaded nozzle at the top, of a sleeve-like valve guided throughout its length in said nozzle, and provided with a bottom plate engageable with a shoulder in said casing, said sleeve-like valve projecting out of said nozzle when the valve is seated, a spring in said casing normally holding said bottom plate in engagement with the shoulder to close the valve, said spring extending across the casing above the bottom of the latter with its intermediate portion in engagement with the lower surface of the valve bottom and its ends supported by the side wall of the casing, and a hose attaching device comprising a rotary interiorly threaded nipple to screw on said nozzle and a fixed inner sleeve on which said nipple rotates, said sleeve adapted to engage the extremity of the sleeve-like valve when the nipple is secured on the nozzle to thereby unseat the valve.

1,064,863. ANTIFRICTION-BEARING. ELIEL L. SHARPNECK, Winthrop, Mass. Filed Feb. 28, 1910. Serial No. 546,426. (Cl. 64—62.)



In an antifriction bearing, the combination of a cage comprising end rings each provided with a ball-race on its outer face, pins connecting said end rings, hollow rollers on said pins, antifriction bushings and washers within said rollers mounted to rotate freely on said pins, washers separating the rollers longitudinally on the pins, auxiliary rings held within said end rings, and each having a ball-race opposed to the ball-race on the end ring, and balls coöperating with said races, substantially as described.

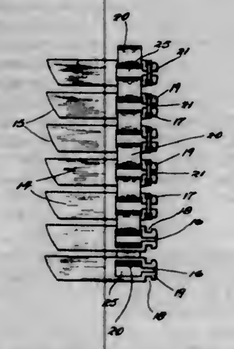
1,064,864. SHOE-CLEANING DEVICE. JOSEPH J. SLEEPER, Moores, Pa. Filed Apr. 16, 1912. Serial No. 691,286. (Cl. 15—2.)



1. In a device of the character described, comprising a flat base plate, a brush holding plate secured to the base plate, said brush holding plate bent upwardly at one end forming a scraper, and brushes secured to said last-mentioned plate and positioned at an angle to each other, substantially as described.

2. A device of the character described, comprising a base plate, a brush holding plate secured to the center of the base plate and having one end bent upwardly forming a scraper, said plate at the other end at both corners bent upwardly forming extensions, brushes secured to said extensions, and the upper ends of said extensions bent at an angle forming lugs positioned over the brushes, substantially as described.

1,064,865. CUTTING-TOOL. ADOLPH SPIELMAN, Philadelphia, Pa. Filed Jan. 24, 1911. Serial No. 604,301. (Cl. 164—74.)



1. A cutting tool comprising a multiplicity of interchangeable knives forming an endless band the knives of the respective bights of which are adapted to travel upon their flat sides and the knives of the runs of which travel endwise, each knife consisting of a thin flat member having at one of its ends a single cutting edge and having its opposite end apertured and tubular links between adjacent knives said links being accommodated by the apertured portions of said knives.

2. A cutting tool comprising a multiplicity of interchangeable knives forming an endless band, the knives of the respective bights of which are adapted to travel upon their flat sides and the knives of the runs of which travel endwise, each knife consisting of a narrow elongated thin flat member having at one of its ends a single cutting edge and having at its opposite end a rectangular aperture and tubular links between adjacent knives said links being accommodated by the apertured portions of said knives.

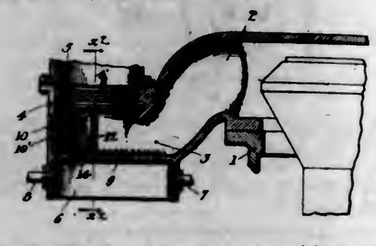
3. A cutting tool comprising a multiplicity of knife-like elements interchangeably linked one with another to form an endless band, the knives of the respective bights of which are adapted to travel upon their flat sides and the knives of the runs of which travel endwise, said elements having apertured and slotted ends and tubular links removably accommadated by the apertured portions of each element.

4. A cutting tool comprising a multiplicity of knife like elements interchangeably linked one with another said elements having recessed and slotted ends and unsplit tubular links removably accommodated by the recessed portions of each element.

5. A cutting tool comprising a multiplicity of knife like elements each element having an inclined cutting edge and an apertured rear portion terminating in a split end said end having recessed portions, unsplit tubular links accommodated by the apertured portions and connecting adjacent elements and unsplit tubular pieces fitted over the split ends of each element and accommodated by the recessed portions thereof.

[Claims 6 to 10 not printed in the Gazette.]

1,064,866. THROTTLE FOR CARBURETERS. ALFRED C. STEWART, Los Angeles, Cal. Filed Oct. 10, 1910. Serial No. 586,378. (Cl. 48—155.1.)



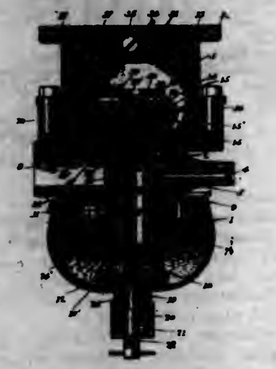
1. A throttle for carbureters comprising a throttle chamber, a heating chamber communicating with said throttle chamber, means for connection of the carbureter to said heating chamber, means for applying heat to said heating chamber, a throttle valve in said throttle chamber, and a connection from the throttle chamber on the outlet side of the throttle valve to the lower part of the heating chamber.

2. A throttle for carbureters comprising a throttle chamber, an oil collecting chamber communicating with said throttle chamber, means for connection of the carbureter to said oil collecting chamber, a throttle valve in said throttle chamber, and a connection from the throttle chamber on the outlet side of the throttle valve to the lower part of the oil collecting chamber, consisting of a tube connected to and extending through the throttle valve.

3. A throttle for carbureters comprising a throttle chamber, a heating chamber communicating with said throttle chamber, means for connection of the carbureter to said heating chamber, means for applying heat to said heating chamber, a throttle valve in said throttle chamber, and a connection from the throttle chamber on the outlet side of the throttle valve to the lower part of the heating chamber, said heating chamber having corrugations in its bottom for the purpose set forth.

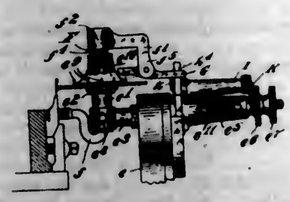
1,064,867. CARBURETER. ALFRED C. STEWART, Los Angeles, Cal. Filed June 28, 1911. Serial No. 635,890. (Cl. 48—154.1.)

1. In a carbureter, the combination with a mixing chamber and an air inlet chamber provided with a seat, of a valve head movable vertically to coöperate with said seat, and having a stem, a vertical tubular guide for said stem, said stem being provided with an interior well in its lower portion and with an oil inlet at the bottom of said well and being interiorly screw-threaded above said well, a plug screwed in said screw-threaded portion of said stem, a tubular portion extending upwardly from said plug and provided with a top plate extending outwardly therefrom at its upper end, said tubular portion being perforated at its lower end, said plug having a perforation for restricted passage of air therethrough and said valve having flanges engaged between the upper end of said stem and the said plate, and provided with passages communicating at their lower ends with the air inlet chamber and communicating at their upper ends with the space between the interior of the stem and said tubular portion on said plug, an aspirating tube extending through said plug and communicating at its lower end with said well in the stem and extending at its upper end with the said tubular portion on said plug, and means for supplying oil to the inlet at the bottom of said well.



2. In a carbureter, the combination with a mixing chamber and air inlet chamber provided with a seat, of a valve head movable vertically to coöperate with said seat, and having a stem, a vertical tubular guide for said stem, said stem being provided with an interior well in its lower portion, with a recess in its upper portion and with a partition between said well and recess, said partition being perforated, a tubular member extending within said recess and separated from the walls of the recess to form an intervening space, said head being provided with passages communicating at their upper ends with said space and at their lower ends with the air inlet chamber, an aspirating tube extending through said partition in the valve stem and communicating at its upper end with the interior of said tubular member, said tubular member being separated from said aspirating tube and perforated for passage of air from the space around said tubular member upwardly around said aspirating tube.

1,064,868. QUARTER-SAVER FOR CIRCULAR SPRING-NEEDLE KNITTING-MACHINES. DANIEL F. SULLIVAN, Lowell, Mass., assignor of two-thirds to John J. Sullivan, Lowell, Mass., and Thomas Addison Collins, Lawrence, Mass. Filed Dec. 11, 1912. Serial No. 736,060. (Cl. 66—7.)



1. The combination with the cylinder of a circular spring-needle knitting-machine, its needles, a presser-wheel, normally in engagement with said needle, a yielding support for said presser-wheel, a drop-wire normally sustained by an unbroken yarn, and a rock-shaft journaled in said movable support and having arms, means for engaging said presser-wheel and one of said arms with each other, the other of said arms being adapted to engage said cylinder and to crowd said presser-wheel away from said needles.

2. The combination of the needle-cylinder, needles, a yielding spindle, a vertical hollow stand supported thereby, a presser-wheel turning thereon and having pins, a rock-shaft journaled in said hollow spindle and having arms above and below said presser-wheel, the upper of said arms carrying a latch normally out of the path of said pins, a drop-wire sustained by an unbroken yarn, and moving said latch into the path of said pins when said yarn breaks or is exhausted, to rock said shaft and to bring the lower arm of said rock-shaft into engagement with said cylinder.

3. The combination of a spindle, a hollow stud, a rock-shaft journaled therein and having an arm at each end thereof, a presser-wheel revolving on said stud, and a spring surrounding said shaft and compressed between the top of said stud and the upper arm of said shaft, to create a friction on said shaft and prevent the accidental turning of the same.

1,064,869. INDICATING AND ALARM MECHANISM FOR THE MOVEMENTS OF GASES IN MINES. ANTONY SZABODOS and HELLENA MUELLER, New Michel, British Columbia, Canada. Filed Jan. 9, 1912. Serial No. 670,256. (Cl. 73—51.)



1. In a device of the character described, a support having a vertical shaft extending into adjacent strata of air or gas or a mixture thereof, a float mounted to move longitudinally of said shaft and supported by said adjacent strata to indicate the boundary therebetween, a take-up device, a connection between said device and said float, an indicating member mounted on said connection and adapted to move in correspondence with the movements of said float, and alarm mechanism mounted in the path of said indicating member and adapted to be tripped at a predetermined point in the length of movement of said member.

2. In a device of the character described, a vertical shaft open to atmospheric pressure, and a float mounted in said shaft, said float comprising connected shells or containers movable in similar directions as a unit and having contents adapted to support the float at a predetermined position with respect to particular strata, said float being adjustable as to specific gravity and free to move in correspondence with the vertical movements of such stratum.

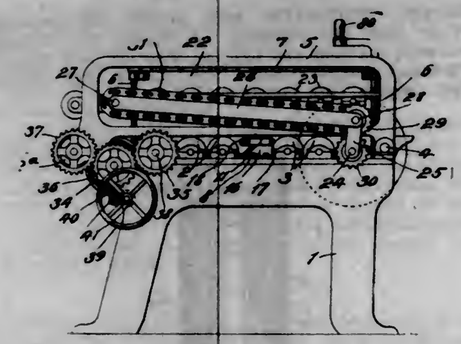
3. In a device of the character described, a pair of vertical shafts, a float in each shaft, each float being capable of adjustment as to specific gravity, said floats being movable independently of each other and having different flotation qualities to permit them to combinedly indicate the opposite boundaries of a predetermined stratum or zone.

4. In a device of the character described, a pair of vertical shafts, a float in each shaft, each float being capable of adjustment as to specific gravity, said floats being movable independently of each other and having different flotation qualities to permit them to combinedly

indicate the opposite boundaries of a predetermined stratum or zone, and an independent indicating member movable in correspondence with the movements of each float.

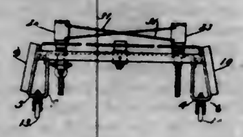
5. In a device of the character described, a pair of vertical shafts, a float in each shaft, each float being capable of adjustment as to specific gravity, said floats being movable independently of each other and having different flotation qualities to permit them to combinedly indicate the opposite boundaries of a predetermined stratum or zone, an independent indicating member movable in correspondence with the movements of each float, and alarm mechanism operative by the movements of one of said members.

1,064,870. WOOD PLANING AND DRESSING MACHINE. HERMANN TROTMEYER, Wennigsen, Germany. Filed Nov. 7, 1912. Serial No. 730,066. (Cl. 144—120.)



A device of the character described, comprising a cutter box, a cutter, a supporting block for said cutter fixed in said box and having an inclined surface whereby the edge of the cutter is supported over a cavity in the box, and a cover for said cutter having arms pivoted to said box, the top surface of said box and cover being flush with each other.

1,064,871. ELEVATING-TRUCK FOR VEHICLES. ALFRED THOMAS, Bainbridge, Ohio. Filed May 8, 1911. Serial No. 625,846. (Cl. 57—15.)

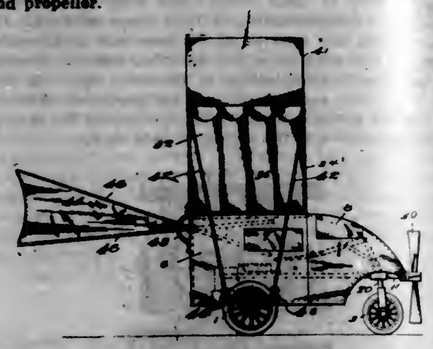


A portable elevating truck for vehicles comprising transverse base members, downwardly and outwardly inclined side boards carried by said members and extending longitudinally of the truck, a superstructure spanning the distance between said transverse members, vertically offset elongated extensions on the ends of said superstructure, and means for vertically adjusting said superstructure.

1,064,872. AIRSHIP. DAVID S. THOMAS, North Platte, Nebr. Filed Jan. 23, 1913. Serial No. 743,822. (Cl. 244—17.)

1. The combination with a car having a rear axle and driving wheels, a hollow bracket, a steering post supported in the bracket and a wheel in said post, a sleeve retained on the bracket and a link pivoted on the sleeve, and a lever pivoted to the link and post, whereby the forward part of the car may be moved relatively to the steer wheel with the rear axle as the center of motion.

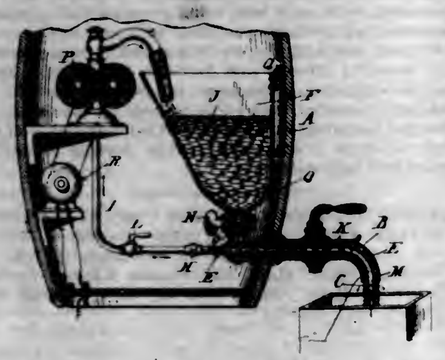
2. The combination with a car having a driving shaft and driving wheels with crank heads thereon, of a pair of flexible wings loosely connected to the car and projecting upwardly and outwardly therefrom, a front propeller wheel and a rear rudder, rods connecting the wings and crank heads, and means for actuating the shaft and propeller.



3. The combination with a car having a driving shaft and wheels, of a pair of flexible wings having their inner lower ends loosely connected to the car and projecting upwardly and outwardly from the car, connecting rods extending from each wheel to a wing, and a flexible fly sheet located centrally of the car and extending in a curve from one wing to the other.

4. The combination with a car having a driving shaft, propeller, rudder, and driving wheels, wings loosely connected to the car, connecting rods from the drive wheels to said wings, means for actuating the shaft and propeller, and a flexible fly sheet located above the wings and fastened at each end to one of the wings.

1,064,873. EXHIBITION ILLUSION. ARTHUR J. THOWLESS, Newark, N. J. Filed July 28, 1911. Serial No. 641,143. (Cl. 46—70.)



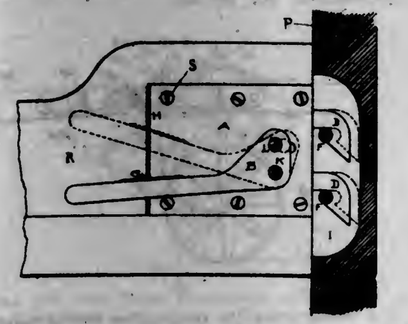
In an exhibition illusion the combination of a liquid receptacle having an outlet, a tube entering said outlet, a receiving vessel into which the lower end of the said tube enters with a pump, connected with the upper part of said tube, for drawing liquid from said vessel and means for discharging the liquid into the receptacle.

1,064,874. BED-LOCK, &c. HOMER H. TIBBS, Nashville, Tenn. Filed Oct. 11, 1912. Serial No. 725,137. (Cl. 5—55.)

1. A lock for bedsteads, comprising transverse holding members on one part, a reciprocating plate carrying locking members on the other part, a lever pivoted adjacent to said reciprocating plate and connected thereto for reciprocating the same, and means for securing said lever to hold said plate in adjusted position, substantially as set forth.

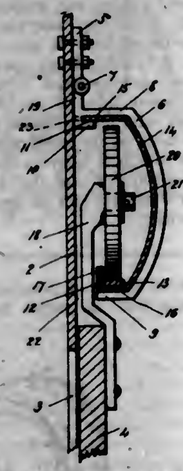
2. A lock for bedsteads, etc., comprising holding members on one part, a plate carrying locking members

mounted on the other part, said locking members, a lever pivoted on said plate for operating said locking members,



and a notched flange on said plate adapted to engage said lever for securing it in adjusted position, substantially as set forth.

1,064,875. DOOR-HANGER. LUTHER TRABUE, Girard, Ill. Filed Apr. 2, 1913. Serial No. 758,390. (Cl. 16—7.)

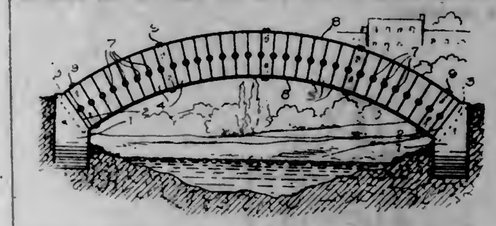


1. In a door hanger, the combination, with a hanger bracket provided at its upper part with means for securing it against a building and having also a horizontal channel, said hanger bracket having also a vertical tongue at its lower part; of a cover plate supported by the said bracket and having a horizontal top portion which engages with the said channel, said cover plate having also a horizontal track portion at its lower part and a flange arranged in line with the said tongue; and an arm for supporting the door, said arm having a wheel which runs in the said track portion.

2. In a door hanger, the combination, with a stationary hinge plate, and a hanger bracket pivoted to the hinge plate and provided at its upper part with a horizontal channel and means for holding it in position, said hanger bracket having also a vertical tongue at its lower part; of a cover plate supported by the said bracket and having a horizontal top portion which engages with the said channel, said cover plate having also a horizontal track portion at its lower part and a flange arranged in line with the said tongue, and an arm for supporting the door, said arm having a wheel which runs in the said track portion.

1,064,876. BRIDGE. JOSE T. TRUJILLO, Malachite, Colo. Filed Jan. 8, 1913. Serial No. 740,887. (Cl. 72—56.)

In combination with an abutment provided with spaced tapering recesses, of arched stringers comprising substantially wedge shaped blocks having inclined side walls extending from one end of the block to the other, said blocks having semicircular recesses formed in their inclined walls upon each side thereof, said blocks being arranged in parallel relation whereby the recesses will



form circular openings, transverse pins arranged within said openings to prevent lateral movement of the blocks, said pins having their ends terminating at the outer edges of the blocks, and arcuate metallic bands secured to the top and bottom ends of said blocks.

1,064,877. GOVERNING MECHANISM. CARL RICHARD WALLER, Trenton, N. J., assignor to De Laval Steam Turbine Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 8, 1912. Serial No. 682,436. (Cl. 121—118.)



Governor-controlled valve mechanism comprising a plurality of valves, a slidable cam provided with a crooked cam-groove having rises and dwells corresponding to the desired manner of opening and closing of the valves, followers for the several valves, in said grooves, lever mechanism connecting each follower to a corresponding valve, a governor, a pressure cylinder and piston, the latter arranged to shift said cam, pilot valve mechanism arranged to admit fluid to said cylinder, on one side or the other of said piston, according to circumstances, a lever pivotally connected to said piston, and also connected to said governor to be moved in one direction or the other thereby, and a valve rod connected to said lever and to the pilot valve mechanism.

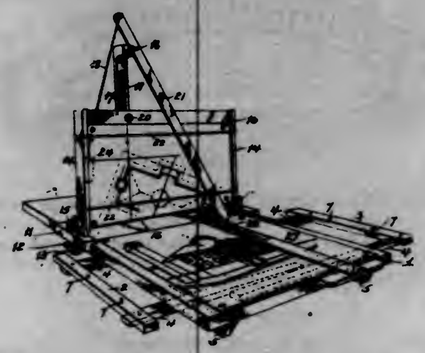
1,064,878. DRAFTING APPLIANCE. JOSEPH D. C. YOUNG, Salt Lake City, Utah. Filed Apr. 20, 1912. Serial No. 692,054. (Cl. 33—16.)

1. Perspective delineating appliances comprising a drawing board, centro-lineal devices associated therewith, a vertical support for a plan drawing, a T-square movable on the drawing board and an upright straight edge movable over the plan drawing, said straight edge cooperating with and movable by said T-square.

2. In perspective delineating appliances, the combination with a drawing board and centro-lineal devices associated therewith, of an upright support for a plan drawing, a standard adjustably secured to said upright support and provided with a pin representing a sight point, a T-square movable over the drawing board, and a straight edge movable over the plan drawing on said upright support, said straight edge coöperating with the sight pin on the standard, and also coöperating with and movable by said T-square.

3. In perspective delineating appliances, the combination with a drawing board, of an upright support for a

plan drawing, devices adjustably connecting said upright support with the drawing board, a sight pin carried by said upright support, a T-square movable over the drawing board, and a straight edge movable over the plan drawing on the upright support, said straight edge coöperating with the sight pin and with the T-square and movable by the latter.

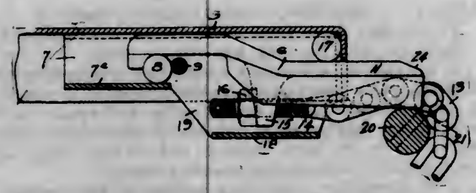


4. In perspective delineating appliances, the combination with a drawing board, and slides movable at side edges thereof, of an upright support for a plan drawing, attached to said slides, a standard adjustably secured to and projecting above said upright support, said standard carrying a sight pin, a T-square movable over the drawing board, an upright straight edge coöperating with the sight pin and provided at its lower end with a pin cooperating with the T-square, whereby movement of the T-square over the drawing board will cause movement of the straight edge over the plan drawing on the upright support.

5. In perspective delineating appliances, the combination with a drawing board, and a T-square movable over the same, of an upright support for a plan drawing disposed above the drawing board, a sight pin carried by the upright support, an upright straight-edge passing over the front of the upright support, said straight edge provided at its lower end with a pin coöperating with the T-square, and flexible strips attached to said vertical support for retaining the upright straight-edge close to the plan drawing on the upright support.

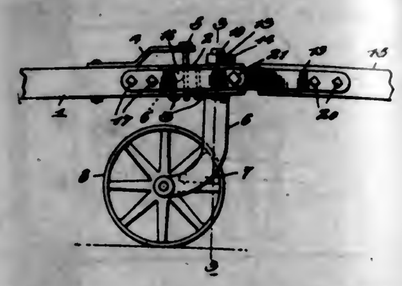
[Claims 6 and 7 not printed in the Gazette.]

1,064,879. DOOR-OPERATING MECHANISM. HARRY T. ANDERSON, Butler, Pa., assignor to Standard Steel Car Co., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 23, 1912. Serial No. 679,316. (Cl. 105—14.)



In door-operating mechanism, the combination with a car-body, of a downwardly swinging door, a casing secured to the lower side of said door, said casing having bottoms at different levels with an opening formed between same, a movable latch-member in said casing, a roller interposed between said latch-member and the upper bottom of said casing, a roller interposed between the upper face of said latch-member and the lower face of said door, a winding-shaft upon which said latch-member rests, a chain connected to said latch-member, and means carried by said shaft for moving said latch-member backward.

1,064,880. JOINTED TONGUE AND TRUCK. JOHN D. APMANN, Stillwater, Minn. Filed May 23, 1912. Serial No. 699,294. (Cl. 21—63.)



In a tongue truck, the combination with a beam, a supporting wheel rotatably supported below said beam, a pair of straps secured to the sides of said beam and flared outwardly, the outer free ends of said straps being bifurcated and extended to the plane of the outer end of said beam; of a tongue, a pair of additional straps secured to the sides thereof and also flared outwardly, the free ends of said additional straps being extended to a plane beyond the inner end of said tongue and disposed respectively in the bifurcated ends of the first mentioned straps to space the outer end of said beam and the inner end of the tongue from one another, a bracing strap secured to the inner end of said tongue and engaged with said additional straps, a bolt extended through the free ends of said first mentioned and additional straps and also through said beam to pivotally secure said tongue to the beam, collars disposed on said bolt between the bifurcated ends of the first mentioned straps and the sides of said beam, and means engaged with said bolt to secure the latter and said collars in position.

1,064,881. FRUIT-PICKER. ALBERTUS W. AYER, Lawrence, Kans. Filed Nov. 23, 1912. Serial No. 733,161. (Cl. 56—99.)

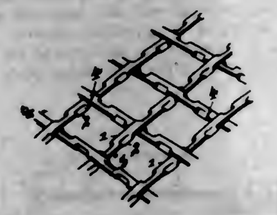


In a fruit picker, the combination with a handle member, a frame carried thereby, said frame formed from a single strand of wire, a fruit container carried by the frame, the opposite ends of the frame being converged, of a clip connecting the converged strand sections at one end of the frame, the edges of said clip embracing said converging strand sections, a knife blade formed at one end of the clip, and a spring locking tongue formed upon the opposite end of the clip and engaging the frame.

1,064,882. GRILLE-WORK. WILLIAM J. BAKER, Newport, Ky. Filed Dec. 21, 1911. Serial No. 667,188. (Cl. 189—82.)

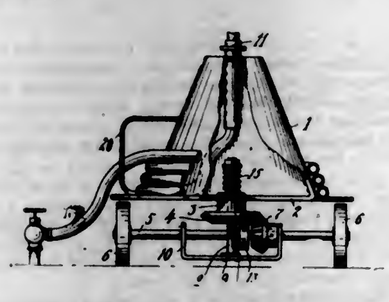
A grille work composed of interwoven strips, each consisting of a flat body having projections stamped up from the sides thereof, those at one side bearing a staggered

relation to those at the other side, said projections extending all in the same direction to leave one side of the



grille flat and free from projections, substantially as shown and described.

1,064,883. HOSE-REEL. ENGBRET BERGLAND, Madras, Oreg. Filed July 31, 1912. Serial No. 712,583. (Cl. 137—31.)



1. In combination; a hose reel mounted for rotation on a wheel-truck; means on the truck for rotating the reel; and means actuated by the forward travel of the truck for releasing the reel from the said rotating means.

2. In a hose-reel mechanism, the combination with a wheel-truck and a reel mounted for rotation on said truck; of means for operatively connecting the reel with the truck wheels for simultaneous rotation; and means, operative only during the forward travel of the truck, for releasing said reel from operative connection with the truck-wheels, said means also acting as a brake on the reel when operatively disconnected.

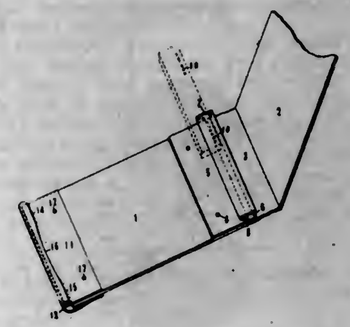
3. In a hose truck, the combination with the truck-wheel shaft and a reel mounted for rotation on the truck; of a driving gear rigid on said shaft meshing with a gear of the reel for the purpose of imparting rotatory movement to said reel during the travel of the truck; and means on said shaft, operative only during the forward travel of the truck, for raising said reel clear of the said driving gear so as to position the reel for independent rotation.

4. In a device of the character described, the combination with a wheel-truck and a reel mounted for simultaneous rotation with the truck wheels; of an eccentric pawl loosely hung on the shaft of the truck wheels, said pawl operated by the forward rotation of the said shaft to raise the reel so as to disengage the rotating mechanism, thereby permitting the reel to become independently rotated.

5. In a device of the character described, the combination with a wheel-truck and a reel mounted for simultaneous rotation with the truck wheels; of a pawl loosely hung on the shaft of the truck wheels, said pawl having an eccentric cam surface engaging the bottom surface of the reel and operated by the forward rotation of said shaft to disengage the reel from the said shaft.

[Claims 6 to 9 not printed in the Gazette.]

1,064,884. MANIFOLDING SALES-BOOK. EDWARD KIRBY BOTTLE, Niagara Falls, N. Y., assignor to The Carter-Crume Company, Limited, Niagara Falls, N. Y., a Corporation of Canada. Filed Feb. 7, 1910. Serial No. 542,381. (Cl. 11—36.)



1. In a sales-book, in combination, a back for supporting a pad, a member at one end for holding the bound edges of the pad, a member secured to the under surface of the other end of said back adjacent one edge and extending beyond said edge and upwardly and thence downwardly toward the plane of the upper surface of said back, and a member secured to the upper surface of said back and extending beyond the end thereof and beneath and in engagement with the down-turned portion of said first member, one of said members being resilient and spaced from the other member whereby said second member is moved relatively out of engagement with said first member upon being depressed.

2. In a sales-book, in combination, pad-supporting means, a device at one end for engaging an edge of a pad and a resilient member secured at the other end to the under surface of said pad-supporting means adjacent one edge thereof and extending below the under surface of said means and thence around said edge and downwardly into engagement with the upper surface of said means.

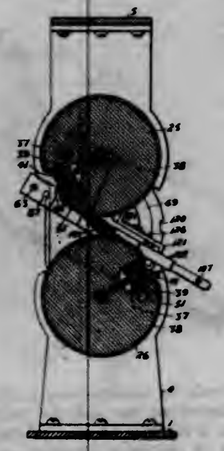
3. In a sales-book, in combination, pad-supporting means, a device adapted to hold a pad secured along one edge of said means, and a resilient member secured to the under surface of said pad-supporting means adjacent another edge thereof and extending below the under surface of said means and thence upwardly around said edge and downwardly into engagement with the upper surface of said means, said member being substantially co-extensive in width with said means whereby a leaf may be firmly secured therein.

4. In a sales-book, in combination, pad-supporting means, a device for securing a pad thereto, and a resilient member secured to the under surface of said pad-supporting means adjacent an end edge thereof and extending below the under surface of said means and thence upwardly around said edge and downwardly into engagement with the upper surface of said means at two points respectively adjacent the side edges thereof.

5. In a sales-book, in combination, a back, a member secured to said back adjacent one edge thereof and extending beyond said edge and upwardly and thence downwardly toward the plane of the upper surface of said back, a member secured to the upper surface of said back and extending beyond the edge of said back and beneath and in engagement with the down-turned edge of said first member, one of said members being resilient and spaced from the other member whereby said second member is moved relatively out of engagement with said first member upon being depressed, and means adapted to secure a pad to said back adjacent another edge thereof.

[Claims 6 to 9 not printed in the Gazette.]

1,064,885. MACHINE FOR SHARPENING RAZOR-BLADES. JOHN A. CARDINELL, San Francisco, Cal. Filed Nov. 4, 1912. Serial No. 729,213. (Cl. 51—16.)



1. The combination of a rack, means for reciprocating the rack, two rolls, means for oscillating the rolls with the reciprocation of the rack, abrading material around the rolls, a blade-carrying frame movably mounted on an axis parallel with the rolls and midway between them, means operated with the reciprocation of the rack and the corresponding oscillation of the rolls for oscillating said frame into one or the other of two positions in which opposite sides of the two edges of the blade are moved into contact with said abrading material thereon, and means for pressing said opposite sides toward the two rolls respectively.

2. The combination of parallel rolls having cylindrical abrading surfaces, a shaft operative connections from the shaft to the rolls, whereby the latter are oscillated from a continuous rotation of the former, a blade-holding frame mounted to oscillate between said rolls, means for oscillating said frame at each oscillation of said rolls, and means for removably holding a blade in said frame.

3. The combination of parallel rolls having cylindrical abrading surfaces, means for oscillating said rolls, a blade-holding frame mounted to oscillate between said rolls, means for oscillating said frame at each oscillation of said rolls, means for removably holding a blade in said frame, and a double-acting spring arranged to press the blade in either terminal position of said oscillation toward the surface of the adjacent roll.

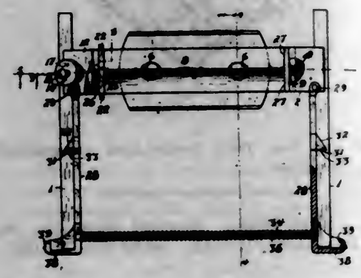
4. The combination of parallel rolls having cylindrical abrading surfaces, a shaft, operative connections from the shaft to the rolls, whereby the latter are oscillated from a continuous rotation of the former, a blade-holding frame mounted to oscillate between said rolls, means for oscillating said frame at each oscillation of said rolls, means for removably holding a blade in said frame, and means for pressing the blade in either terminal position of said oscillation against the surface of its adjacent roll.

5. The combination of parallel rolls having cylindrical abrading surfaces, means for oscillating said rolls, a blade-holding frame mounted to oscillate between said rolls, means for oscillating said frame at each oscillation of said rolls, means for removably holding a blade in said frame, and springs acting on opposite sides of the blade-holding frame and arranged by the pressure upon said frame to press said blade in either terminal position of the oscillation of the frame toward the adjacent roll.

[Claims 6 to 15 not printed in the Gazette.]

1,064,886. RAZOR-BLADE HOLDER. JOHN A. CARDINELL, San Francisco, Cal. Filed Mar. 12, 1913. Serial No. 753,739. (Cl. 51—16.)

1. A blade holder comprising side bars, upper and lower clamping plates between said side bars, one of said clamping plates having a longitudinal groove, blade-holding pins slidable in said groove, and means for securing the other clamping plate to the first-named plate.



2. A blade holder comprising side bars, upper and lower clamping plates between said side bars, one of said clamping plates having an undercut longitudinal groove, a blade-holding pin slidable in said groove having an enlarged base engaging the undercut portion of the groove to be retained therein, and means for securing the other clamping plate to the first-named plate.

3. A blade holder comprising side bars, a lower clamping plate connecting said side bars and having a longitudinal groove, blade-holding pins slidable in said groove, a removable upper clamping plate having a longitudinal groove arranged to receive the pins, and means for securing said upper clamping plate to the lower.

4. A blade holder comprising side bars, a lower clamping plate connecting said side bars and having a longitudinal undercut groove, a blade-holding pin slidable in said groove having an enlarged base engaging the undercut sides of the groove to be retained therein, a removable upper clamping plate having a longitudinal groove arranged to receive the head of the pin, and means for securing said upper clamping plate to the lower.

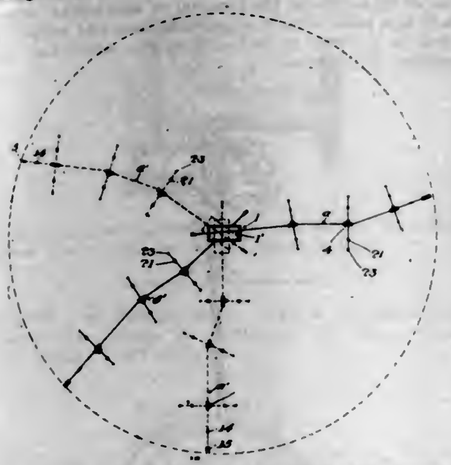
5. A blade holder comprising side bars, a lower clamping plate connecting said side bars, means carried thereby for engaging a razor blade, a removable upper clamping plate said lower clamping plate having an undercut terminal portion, and the upper clamping plate having downwardly and outwardly sloping terminal portions, one of them adapted to engage said undercut terminal portion, a movable clamp having a part adapted to engage the other downwardly and outwardly sloping portion of the upper clamping plate, and means for pressing said clamp thereon.

[Claims 6 to 14 not printed in the Gazette.]

1,064,887. CABLEWAY. JOSEPH F. CLAPP, Los Angeles, Cal. Filed Jan. 29, 1912. Serial No. 674,192. (Cl. 104—146.)

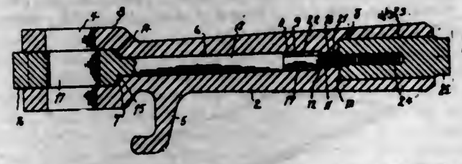
1. A cableway comprising a cable, fixed means for supporting one end of said cable, means connected to the other end of the cable for holding it taut, guy means extending transversely to said cable, and anchored at both ends, and posts supporting said cable and movably engaging said guy means to be movable along the guy means while maintaining engagement therewith.

2. A cableway comprising a cable, fixed means for supporting one end of said cable, means connected to the other end of the cable for holding it taut, guy means extending transversely to said cable, and anchored at both ends, and posts supporting said cable and movably engaging said guy means to be movable along the guy means while maintaining engagement therewith, and means for holding the post from movement along the guy means.



3. A cableway comprising a cable, posts for supporting said cable, a wheel on each post, a guy line extending around said wheel, means for holding the ends of said guy lines in fixed position, and means for locking said wheel in different positions to provide for adjustment of the post along the guy line.

1,064,888. HANDLE OR LEVER FOR AIR-BRAKE VALVES. CHARLES J. DALY, Philadelphia, Pa. Filed July 3, 1911. Serial No. 636,690. (Cl. 74—33.)

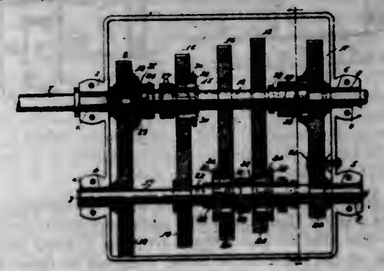


1. In a device of the character described, a handle having an integral head through which passes a valve stem opening, said head and handle having a longitudinal opening formed therein running entirely from one end to the other, said opening being enlarged at its ends and reduced between its central portion and one of the enlarged portions, said enlargements and reductions forming shoulders, a clutch member comprising a body, a reduced shank and a greater reduced threaded stem, a shoulder being formed between the stem and shank, said clutch member adapted to be inserted in the longitudinal opening from the head end of the handle, a helical spring coiled about the stem and resting against the shoulder on the clutch member and one of the shoulders in the handle, said spring normally forcing the clutch member outward, and means mounted in the handle for drawing the clutch member inward.

2. In a device of the character described, a handle having an integral head through which passes a valve stem opening, said head and handle having a longitudinal opening formed therein running entirely from one end to the other, said opening being enlarged at its ends and reduced between its central portion and one of the enlarged portions, said enlargements and reductions forming shoulders, a clutch member comprising a body, a reduced shank and a greater reduced threaded stem, a shoulder being formed between the stem and shank, said clutch member adapted to be inserted in the longitudinal opening from the head end of the handle, a helical spring coiled about the stem and resting against the shoulder on the clutch member and one of the shoulders in the handle, said spring normally forcing the clutch member outward, and an adjusting member having a central threaded opening and provided with a wrench hold, said adjusting member being mounted in one of the enlarged openings and threaded upon the stem, the wrench hold projecting from the end of the handle by which the adjusting member may be revolved and when so revolved drawing the clutch member inward or unthreading it therefrom to permit the spring to force said clutch member outward.

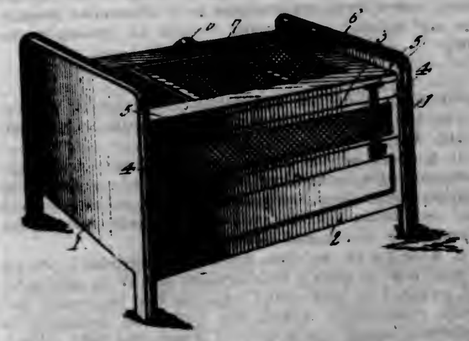
3. In combination with an air brake handle having a valve stem opening through the head thereof and a slot in said head at right angles to said opening, a clutch member fitted to slide in said slot, said clutch member having an opening therethrough registering with the valve stem opening in the head, a shank formed with the clutch member and passing through a longitudinal central opening in the handle, a threaded extension formed with the shank, an adjusting member threaded on said extension and a spring adapted to force the shank outward.

1,064,889. TRANSMISSION-GEARING. FRANÇOIS DEVES, New York, N. Y. Filed July 17, 1911. Serial No. 638,958. (Cl. 74—59.)



In transmission gearing, a power shaft and a transmission shaft in alinement therewith, in combination with a jack shaft parallel with the first said shafts, a single pair of intermeshing gears fixed to said power shaft and said jack shaft respectively, sleeves rotatably fixed but slidably mounted on said transmission shaft and said jack shaft, gears rotatably mounted on said sleeves, gears fixed to the transmission shaft and jack shaft respectively and meshing with the gears on the sleeves of the opposite shafts, means for shifting said sleeves, the gears on said sleeves each being provided with a recess and an enlarged hub formed with a peripheral groove, a stationary arcuate member engaging each of said grooves to prevent longitudinal movement of the gears and there being a projection on each of said sleeves adapted to engage in said recesses when said sleeve is shifted, substantially as described.

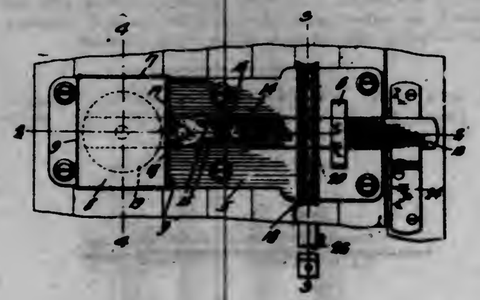
1,064,890. BED. JACOB DIEHL, Sheboygan, Wis. Filed Aug. 5, 1912. Serial No. 713,350. (Cl. 5—58.)



A device of the class described including side panels, screen frames thereon, a top panel normally resting on

the screen frames, arms hingedly connected to one of the side panels and to one side of the top panel, said arms extending across the adjacent screen frame and constituting means for supporting the top panel vertically at one side of the device, a lift secured to the top panel, and means integral with the lift and extending beyond the top panel for engaging the upper edge of one of the screen frames to hold the top panel in vertical position while supported by the arms.

1,064,891. DOOR-LATCH. JACOB DIEHL, Sheboygan, Wis. Filed Sept. 26, 1912. Serial No. 722,546. (Cl. 70—44.)



1. A device of the character described embodying a pair of levers having their adjoining ends operatively connected, the free arm of one lever serving as a latch and the free arm of the other lever being weighted to depress the latch.

2. A device of the character described embodying a pair of levers having intermeshing members at their adjoining ends, the free arm of one lever serving as a latch and the free arm of the other lever being weighted to depress the latch.

3. A device of the character described embodying a base plate having a housing at its inner end, a pair of levers fulcrumed on the base plate and having intermeshing members at the adjoining ends, the free arm of one lever projecting beyond the plate to form a latch and the free arm of the other lever projecting into the housing, and a weight secured to the free arm of the latter lever within the housing.

4. A device of the character described embodying a base plate designed to be secured to one face of a door, a member designed to be secured to the other face of the door, a pair of levers fulcrumed on the said plate having their adjoining ends operatively connected, the free end of one lever projecting beyond the plate to form a latch and the free end of the other lever being weighted to depress the latch, and a latch lift designed to be fulcrumed through the said member and engaged through an opening in the latch.

1,064,892. FLOWER-STEMMER. WILLET B. DRAKE, Trenton, N. J. Filed Feb. 29, 1912. Serial No. 680,666. (Cl. 47—17.)

1. A device of the class described formed of a single strand of wire, said strand adjacent one of its ends being bent to form a loop, the terminal of the strand adjacent said loop being bent to embrace the strand and extend transversely across said loop.

2. A device of the class described comprising a strand of wire bent to form a loop adjacent one of its terminals, the terminal of said strand adjacent said loop being disposed transversely across the loop, and arranged to resiliently engage the stem of a flower, the body portion of the strand being disposed to extend parallel with said stem.

3. A device of the class described comprising a strand of wire, said strand being formed with a loop adjacent one of its terminals, the terminal of said strand adjacent said loop being bent to engage the loop and support the stem of a flower in contact with the upper and lower portions of the same.



4. A device of the class described comprising a stem, a loop formed at one end of the stem, and an integral finger disposed to extend across the loop to hold the stem of a flower in contact with the same, the finger being disposed across one side of the loop.

1,064,893. INSULATING COMPOUND AND PROCESS OF MAKING THE SAME. GUSTAVE F. DREHER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 29, 1908. Serial No. 469,767. Renewed Jan. 12, 1911. Serial No. 602,278. (Cl. 106—12.)

1. An insulating compound comprising a refractory earth in powdered state, asbestos and silicate of soda compressed and fired under pressure at high temperature.

2. An insulating compound composed of refractory earth, lime, asbestos and silicate of soda compressed and fired under pressure at high temperature.

3. An insulating compound composed of kaolin, glass, silko, asbestos and silicate of soda, compressed and fired at high temperature.

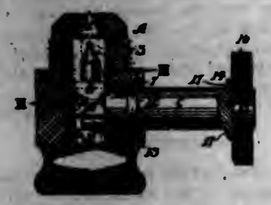
4. An insulating compound composed of about 46 per cent. of kaolin, 7 per cent. of powdered glass, 17 per cent. of powdered slate and 30 per cent. of asbestos staple, soaked in silicate of soda, compressed and fired.

5. The process of making an insulating material which consists in mixing together dry kaolin, powdered glass, powdered slate (silko) and asbestos staple, forming into sheets, soaking in silicate of soda, compressing, and firing.

[Claim 6 not printed in the Gazette.]

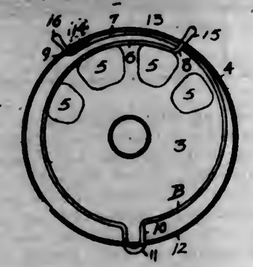
1,064,894. NEEDLE-VALVE STRUCTURE. EDWIN E. FREDERICK, Bridgeville borough, Pa., assignor to The Frederick-Elder Company, Bridgeville, Pa., a Corporation of Pennsylvania. Filed June 16, 1911. Serial No. 633,551. (Cl. 137—4.)

In a gas-valve, a valve-casing, a valve-operating shaft projecting through said casing, a valve disposed in said casing and controlled by said shaft, an annular collar carried by said shaft, and an annular lip carried by said



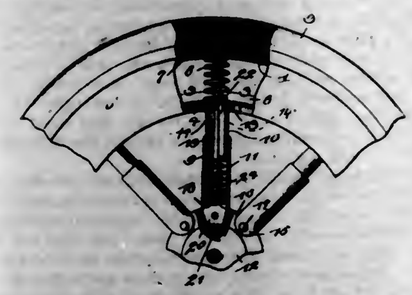
casing and upset against said collar, holding the shaft against removal and providing a gas-tight joint.

1,064,895. GLOBE-HOLDER. EDWIN E. FREDERICK, Bridgeville borough, Pa. Filed Dec. 31, 1912. Serial No. 739,478. (Cl. 240—115.)



In a globe-holder, an annular flange provided with slots, a resilient wire bent into an annulus with overlapping and outward-bent ends, one of said ends being projected through said flange, a knob secured to said projecting end and holding the same against movement, the other of said ends extending through and being slidable in one of said slots, said last-mentioned end being movable in its slot toward said first end to expand the annulus, and a radial loop formed in the intermediate portion of said annulus and extending through the other of said slots, said loop moving laterally in its slot toward the movable end of said annulus when the latter is expanded and moving in its slot toward the fixed end when said annulus contracts to its normal diameter, whereby said annulus expands and contracts uniformly.

1,064,896. SPRING-WHEEL. CLIFFORD D. FREEMAN and RICHARD W. CHEESBROUGH, Bogus, Cal. Filed June 12, 1912. Serial No. 703,284. (Cl. 152—28.)



1. A spring wheel comprising an outer rim, an inner rim, a plurality of spiral springs radially disposed between said inner and outer rims, a hub, a plurality of telescopic tubular spokes pivotally secured to the inner rim and to the hub, a plurality of spiral springs placed within said tubular spokes and tending to normally hold the hub concentrically within the inner rim, and a plurality of supplemental spokes rigidly secured at their inner ends to the hub and projecting through the tubular spokes and the inner rim.

2. In a spring wheel, the combination of an outer rim, an inner rim, a plurality of spiral springs disposed in radial alinement between the inner and outer rims, a hub, a plurality of telescopic spokes pivotally connected to the inner rim and to the hub, said telescopic spokes comprising outer tubular sections and inner tubular sections, a spiral spring positioned within each inner tubular section and bearing against the periphery of the hub and the inner end of the outer tubular section, a plurality of radially disposed supplemental spokes rigidly connected at their inner ends to the hub, each supplemental spoke projecting through a telescopic spoke and a longitudinal slot formed in the inner rim, said supplemental spokes preventing lateral movement of the inner rim relative to the hub.

3. A spring wheel comprising an outer rim, an inner rim, a plurality of radially disposed spiral springs positioned between the inner and outer rims, a hub, a plurality of radially disposed tubular telescopic spokes comprising outer sections pivotally secured to the inner rim and inner sections overlapping said outer sections and pivotally connected to the hub, a spiral spring positioned within each inner tubular section and bearing against the periphery of the hub and the inner end of the corresponding outer section, and a plurality of supplemental spokes rigidly secured at their inner ends to the hub, each supplemental spoke projecting through a telescopic spoke and through a longitudinal slot formed in the inner rim, said tubular spokes preventing undue rotational movement of the rims relative to the hub and also preventing lateral movement of the rims relative to the hub, the inner ends of the first mentioned spiral springs being held in position by the said supplemental spokes.

1,064,897. SIGN FOR ADVERTISING. GUSTAVE GARET, Paris, France. Filed May 22, 1911. Serial No. 628,725. (Cl. 40—28.)



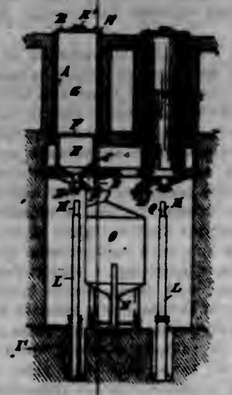
1. In a sign for advertising, the combination with a net of metallic wire, of a frame carrying the same; movable blocks having a head part with specular facets of glass, the said blocks provided with their own means of fixation consisting of springs having outwardly bowed blades, and adapted to be inserted directly into the said net to form letters and words, the specular facets of said blocks being visible in daylight when not illuminated, substantially as described and shown and set forth for the purpose.

2. In a sign for advertising the combination of a net of metallic wire with movable blocks provided with their own means of fixation, the said means consisting of elastic springs having outwardly bowed blades adapted to be inserted directly into one opening of the net and to cooperate with the retaining face of said opening to maintain the said block in proper position upon said net; the said outwardly bowed blades of the springs pressing laterally into engagement with said retaining face, substantially as described.

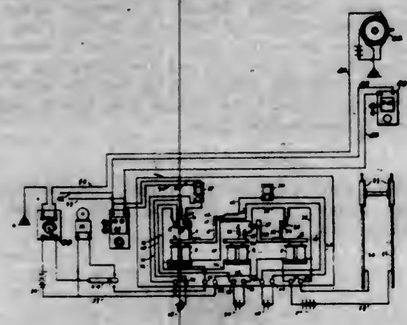
1,064,898. CEMENTATION-FURNACE. FEDERICO GIOLITTI, Turin, Italy, assignor to Societa Anonima Italiana Gio. Ansaldo Armstrong & Co., Genoa, Italy. Filed Nov. 17, 1911. Serial No. 660,878. (Cl. 148—40.)

In a cementation furnace, a muffle in which the articles to be cemented are packed in a solid carbureting medium, a hollow casing upon which the articles to be cemented

are placed, means adapted to raise and lower the hollow casing, a gas distributing device within said hollow casing, and a perforated plate forming the top of said hollow casing.



1,064,899. TRAIN-ANNUNCIATOR. LESLIE W. GIVAN, Spring Lick, Ky. Filed May 13, 1911. Serial No. 626,950. (Cl. 246—21.)



1. In a train annunciator, a main circuit normally open at two points, means controlled by the train despatcher for closing it at one point, means adapted to be operated by a passing train for closing it at the other point, and means for holding it closed, at said last named point, after the passage of the train.

2. In a train annunciator, a signal circuit including an audible signal, a circuit including a transmitter, a main circuit normally open at two points and including means for closing the aforesaid circuits, means whereby said main circuit is closed at one point by a passing train and selective means under the control of the train despatcher for closing said main circuit at the other point.

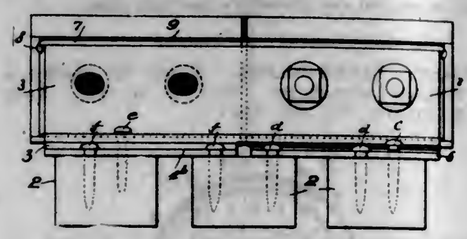
3. In a train annunciator, a main circuit normally open at two points, a second circuit adapted to be closed by a passing train, means included in said second circuit for closing the main circuit at one of said points, means for retaining the main circuit closed after the passage of the train, and means controlled by the main circuit for releasing said retaining means.

4. In a train annunciator, a main circuit normally open at two points, a second circuit adapted to be closed by a passing train, means included in said second circuit for closing the main circuit at one of said points, means for retaining the main circuit closed at said point after the passing of the train, a signal circuit including an audible signal, a transmission circuit including a transmitter, a release circuit including means for releasing the aforesaid retaining means, means controlled by the main circuit for closing said release circuit, and means included in the main circuit for closing said signal and transmission circuits.

5. In a train annunciator, a main circuit normally open at two points, means controlled by the train despatcher for closing it at one point, means adapted to be operated by a passing train for closing it at the other point, and means for holding it closed, at said last named point, after the passage of the train, a circuit including an audible signal, and means included in the main circuit for closing said signal circuit.

[Claims 6 to 10 not printed in the Gazette.]

1,064,900. INSULATED RAIL-JOINT. LAWRENCE GRIFFITH, Yonkers, N. Y. Filed Feb. 3, 1913. Serial No. 745,823. (Cl. 239—5.)



1. An insulated rail joint comprising the meeting ends of two rails, splice-bars, insulation between the splice-bars and the rails, an independent rail support under each rail end and in electric contact therewith, said rail supports being electrically disconnected from each other, one of said rail supports being connected to one splice-bar and unconnected with the other splice-bar, and each of said rail supports extending outwardly beyond the splice-bar to which it is not connected.

2. An insulated rail joint comprising the meeting ends of two rails, splice-bars, insulation between the splice-bars and the rails and an inwardly extending rail supporting base flange formed at one end of each splice-bar, each of said flanges directly contacting with and supporting one rail and out of electrical connection with the splice-bar on the opposite side of said supported rail, each of said flanges extending outwardly beyond the splice-bar to which it is not connected.

3. An insulated rail joint comprising the meeting ends of two rails, splice-bars, insulation between the splice-bars and the rails and an inwardly extending rail supporting base flange formed at one end of each splice-bar, each of said flanges directly contacting with and supporting one rail and out of electrical connection with the splice-bar on the opposite side of said supported rail, each of said flanges extending outwardly beyond the splice-bar to which it is not connected, and means for securing said outwardly projecting portion of each rail supporting flange to a tie, said means being independent and out of electric contact with the unconnected splice-bar.

4. An insulated rail joint comprising the meeting ends of two rails, splice-bars, insulation between the splice-bars and the rails, an independent rail support under each rail end and in electric contact therewith, said rail supports being electrically disconnected from each other, one of said rail supports being connected to one splice-bar and unconnected with the other splice-bar, and each of said rail supports extending outwardly beyond the splice-bar to which it is not connected.

5. An insulated rail joint comprising the meeting ends of two rails, splice-bars, insulation between the splice-bars and the rails, an independent rail support under each rail end and in electric contact therewith, said rail supports being electrically disconnected from each other, one of said rail supports being connected to one splice-bar and unconnected with the other splice-bar, and each of said rail supports extending outwardly beyond the splice-bar to which it is not connected, and means for securing said outwardly projecting portion of each rail support to a tie, said means being independent and out of electric contact with the unconnected splice-bar.

1,064,901. COMPOSITION FOR USE IN WAVING OR CURLING HAIR. THOMAS GROSZET, New York, N. Y., assignor of one-half to Ernst Unger, New York, N. Y. Filed Aug. 2, 1912. Serial No. 712,977. (Cl. 167—5.)

1. A composition for use in waving hair comprising a mixture of sodium tetraborate and sodium hyposulfite.

2. A composition for use in hair dressing comprising sodium tetraborate 48 parts, sodium hyposulfite 3 parts and water 17 parts.

1,064,902. ARCH-SUPPORT. MASON W. HALL, Schenectady, N. Y. Filed June 30, 1911. Serial No. 636,206. (Cl. 36—71.)

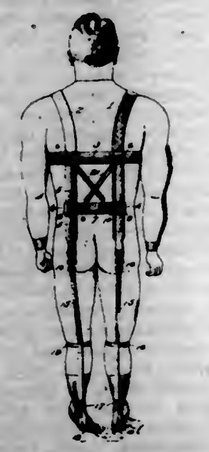


1. In an arch support, an elongated flexible pneumatic envelop shaped to conform to the arch of the foot, and a rigid arch-shaped support located immediately beneath the envelop and extending longitudinally thereof to which the envelop closely conforms.

2. In an arch support, an elongated flexible pneumatic envelop shaped to conform to the arch of the foot and provided with a valve by which the envelop may be inflated, and a rigid metallic arch-shaped support located immediately beneath the envelop and extending longitudinally thereof to which the envelop closely conforms.

3. In an arch support, an elongated flexible pneumatic envelop shaped to conform to the arch of the foot and provided with a valve by which the envelop may be inflated, a protective covering for said envelop, and a rigid arch-shaped support located immediately beneath the envelop to which the envelop conforms.

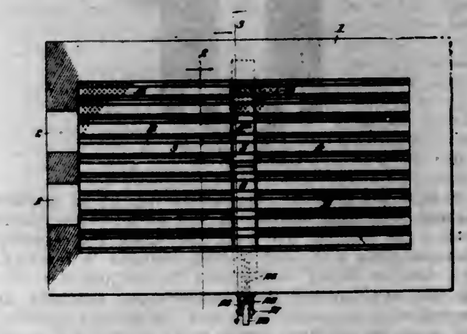
1,064,903. BODY-BRACE WITH SUSPENDER ATTACHMENT. THOMAS B. HARDIMAN, Patoka, Ind. Filed May 25, 1912. Serial No. 699,724. (Cl. 2—93.)



1. A device of the character specified comprising a pair of shoulder straps, a body band encircling the body under the arms and secured to the shoulder straps at the back and front, a back brace adjustably connected with the shoulder straps beneath the body band and adapted to be adjusted to the weakest part of the back, elastic straps detachably connected at their upper ends with the lower ends of the shoulder straps, non-elastic loop-shaped heel straps connected with the lower ends of sail elastic straps and receiving the heels, and U-shaped metal heel plates secured to said heel straps to prevent the latter from slipping out of place.

2. A device of the class described comprising a pair of shoulder straps, a body band encircling the body under the arms and connected with the shoulder straps at the front and rear, and a vertically adjustable back brace arranged beneath the body band at the back and adapted to be adjusted to the weakest part of the back, said brace consisting of a single strap of non-elastic material having its inner and outer layers stitched together to form lops to receive the shoulder straps and a pair of steel spring stays to brace the back, said stays disposed longitudinally of the brace and arranged between the two layers thereof with their ends bent inwardly to engage and clamp the back faces of the shoulder straps.

1,064,904. TRANSVERSE DUMPING-GRATE. OLIVER D. HAVARD, Scranton, Pa. Filed Jan. 27, 1913. Serial No. 744,447. (Cl. 126—177.)



1. A grate comprising front and rear fixed portions, and an intermediate movable portion all lying in the same plane, said movable portion being made up of a plurality of laterally tilting sections.

2. A grate comprising front, intermediate, and rear portions, all lying in the same plane, said front and rear portions being fixed, and comparatively long, while said intermediate portion is movable, and comparatively short, said intermediate portion comprising a plurality of pivotally mounted sections transversely tilting.

3. A grate comprising front and rear fixed portions of relatively large area, and an intermediate movable portion of relatively small area, all of said portions lying in the same plane said intermediate portion comprising a pair of pivoted transversely tilting sections, and means for simultaneously swinging both said sections on their pivots.

1,064,905. GAS-PRODUCER. JULES H. HIRT, Nashua, N. H., assignor, by mesne assignments, to Allis-Chalmers Company, Milwaukee, Wis., a Corporation of New Jersey. Filed Apr. 29, 1907. Serial No. 370,757. (Cl. 48—74.)

1. In an apparatus of the class described, a structure having an ignition chamber at one end said chamber having a fuel inlet and an air inlet, a gas chamber located adjacent to said ignition chamber and communicating therewith through a central restricted outlet, a regenerative chamber surrounding said gas chamber and communicating therewith near that end of said gas chamber opposite its communication with the ignition chamber said regenerative chamber having an outlet, and means for supplying steam to said gas chamber.

2. In an apparatus of the class described, a structure having an ignition chamber at its upper end said chamber having a fuel inlet and an air inlet, a gas chamber located below said ignition chamber and communicating therewith through a central restricted outlet, a regenerative chamber surrounding said gas chamber and communicating therewith near the bottom of said gas chamber and having a gas outlet, and means for supplying steam to said gas chamber.

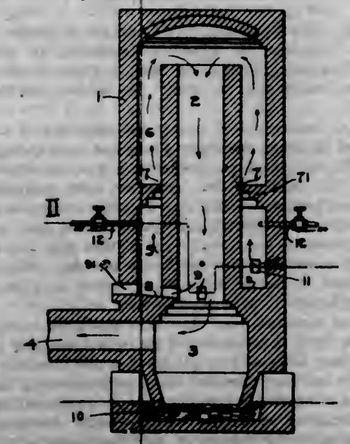
3. In an apparatus of the class described, a structure provided with an ignition chamber at its upper end having an inlet for fuel and another for air located in the side of said chamber, an upright wall within said structure having its upper end forming the bottom of said ignition chamber and provided with an opening forming an outlet for said ignition chamber, said upright wall forming a gas chamber communicating with the ignition chamber through said outlet, and also forming with the said side walls a chamber having a gas outlet.



4. In a gas producer, the combination of an ignition chamber free from obstruction and having a tangential inlet, a gas chamber free from obstruction and centrally communicating with said ignition chamber, a regenerative chamber having checkerwork therein and surrounding said gas chamber and communicating therewith at the bottom, a gas outlet from said regenerative chamber, and means for admitting steam to the ignition and to the gas chamber.

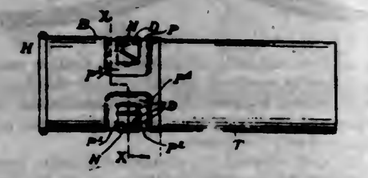
5. In an apparatus of the class described, a structure having an ignition chamber at its upper end said chamber having a fuel inlet and an air inlet, a gas chamber located below said ignition chamber and communicating therewith through a central restricted outlet, and a regenerative chamber surrounding said gas chamber and communicating therewith near the bottom of said gas chamber and having a gas outlet.

1,064,906. GAS-PRODUCER. JULES H. HIRT, El Paso, Tex., assignor, by mesne assignments, to Allis-Chalmers Company, Milwaukee, Wis., a Corporation of New Jersey. Filed Feb. 14, 1910. Serial No. 543,725. (Cl. 48—74.)



The combination in a gas producer, of a central column within said producer forming an annular vertically disposed gas generating chamber free of obstruction by heat-retaining substance, an obliquely directed inlet to said chamber, an annular ledge projecting from the wall of said chamber, said ledge leaving a centrally disposed outlet passage from said chamber and said column being in line with and obstructing said passage, a moisture inlet to said chamber at a point adjacent said obstructed passage, a second chamber with which said obstructed passage communicates and an outlet passage from said second chamber.

1,064,907. PAPER-TUBE SHOT-SHELL. FRANK O. HOAGLAND, Bridgeport, Conn., assignor to Union Metallic Cartridge Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 4, 1913. Serial No. 758,771. (Cl. 102—17.)



1. In a paper-tube shot-shell, the combination with a head having a metal tube extension for inclosing the paper-tube, of the paper-tube fixed at one end in the head and extending within and beyond the head-tube, and a compound interlocking construction comprising a continuous circuit-form depressed panel formed in and extending around the head tube less than one circumference thereof, and inclosing an undepressed zone of the head tube located between two circumferentially-disposed panel-portions which are located in different positions longitudinally of the head-tube, and also comprising a plurality of paper-engaging projections extending inwardly from said inclosed head-tube zone and located in positions separated from each other and also separated from said depressed panel, whereby said projections engage in and interlock with the paper-tube within a zone of the paper-tube which is inclosed within a compressed circuit-form zone which engages with said depressed circuit-form panel of the head-tube, and whereby this panel has two circumferentially-disposed zones of compressive engagement with the paper-tube located, respectively, at two different and separate positions longitudinally of the head-tube, substantially as described.

2. In a paper-tube shot-shell, the combination with a head having a metal tube extension for inclosing one end of the paper-tube, of the paper-tube fixed in the head and extending within and beyond the head-tube, and a compound interlocking construction comprising a depressed zone-inclosing paper-compressing panel formed in the head tube and inclosing an undepressed zone of the head tube between two circumferentially-disposed panel-portions which are located in different positions longitudinally of the head-tube, and also comprising a plurality of paper-gripping interlocking-projections extending inwardly from said inclosed head-tube zone and located in distributed positions separate from each other and also separate from said depressed panel, for engaging in and positively interlocking with the paper-tube within one zone which is located between two circumferentially-disposed zones of compressive engagement located, respectively, at two different and separated positions longitudinally of the paper-tube and within the head-tube, substantially as described.

3. In a shot shell, the combination with a paper-tube, of a head having fixed therein one end of the paper tube, and having a tubular extension surrounding the paper tube and having a depressed panel formed in and extending around the said head tube less than one circumference thereof, and having an undepressed intermediate zone of the head tube located between two circumferentially-disposed panel-positions which are located in different positions longitudinally of the head-tube, and also having a plurality of paper-engaging projections extending inwardly from said head-tube intermediate zone and located in distributed positions separated from each other and also separated from said panel, substantially as described.

1,064,908. OUTLET-GATE. TIMOTHY F. HORNUNG, Sacramento, Cal. Filed Dec. 26, 1912. Serial No. 738,554. (Cl. 61—46.)



1. The combination with an irrigation outlet lateral, of a guide secured over the discharge end thereof, a slide gate slidably mounted in said guide and adapted for controlling the volume of water issuing from said lateral, locked means associated with said slide gate for locking the same in a predetermined open position, and an auxiliary cut-off gate for controlling the opening afforded by said slide gate.

2. The combination with an irrigation outlet lateral, of a guide secured over the discharge end thereof, a slide gate slidably mounted in said guide and adapted for controlling the volume of water issuing from said lateral, locked means associated with said slide gate for locking the same in a predetermined open position, and an auxiliary cut-off gate slidably mounted in said guide for controlling the opening afforded by said slide gate.

3. The combination with an irrigation outlet lateral, of a guide secured over the discharge end thereof, a slide gate slidably mounted in said guide and adapted for controlling the volume of water issuing from said lateral, lock controlled means associated with said slide gate and said guide for locking said gate in a predetermined open position, and an auxiliary cut-off gate slidably mounted in said guide and positioned adjacent said slide gate for controlling the opening afforded by said slide gate.

4. The combination with an irrigation outlet lateral, of a face plate secured over the discharge end thereof and provided with a suitable outlet opening therein, a guide secured thereto and extending above and below said opening, a slide gate slidably mounted in said guide and adapted for controlling the volume of water issuing from said lateral, lock controlled means associated with said slide gate and said guide for locking said slide gate in a predetermined open position, and an auxiliary cut-off gate slidably mounted in said guide and positioned adjacent said slide gate for controlling the opening afforded by said slide gate.

5. The combination with an irrigation outlet lateral, of a face plate secured over the discharge end thereof and provided with an outlet opening therein, a guide plate secured to said face plate adjacent said opening and formed with a guide therein, portions of which extend above and below said opening, an outwardly projecting flange extending from one side edge of the opening in said plate, an outwardly projecting flange extending from the lower edge of the opening in said plate, a slide gate slidably mounted in said guide and adapted for controlling the volume of water issuing from said lateral, lock controlled means associated with said slide gate and said guide plate for locking said slide gate in a predetermined open position, an auxiliary cut-off gate slidably mounted in said guide adjacent said slide gate for controlling the opening afforded by said slide gate, and an outwardly projecting flange extending from the forward end of said auxiliary cut-off, the three mentioned outwardly projecting flanges coöperating to form an outlet trough for said opening.

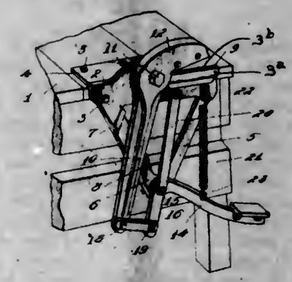
1,064,909. SPOKE-FASTENER. FREDERICK HOWS and FREDERICK BURNOR, Deerfield, Mich. Filed Mar. 13, 1911. Serial No. 614,110. (Cl. 21—49.)



1. In combination a rim, a tire, a spoke for the rim, a metallic fastener comprising a socket plate, the socket of which receives the full sized portion of the spoke, the socket plate having lateral extensions, which together with the plate surround the rim, said extensions having means to engage the opposite edges of the tire.

2. In combination a rim, a tire, a spoke for the rim, a metallic fastener comprising a socket plate, the socket of which receives the full sized portion of the spoke, the fastener having lateral extensions extending outwardly upon the sides of the rim, the rim having a recess, said extensions being reduced half in width at their end portions, said reduced portions being bent across said rim and arranged in said recess, said reduced portions terminating at their extremities in outturned lugs to engage the opposite edges of the tire.

1,064,910. FOOT BENCH-SHEARS. PEYTON L. HOWLETT, Brownwood, Tex. Filed Dec. 10, 1912. Serial No. 736,040. (Cl. 164—46.)



1. In foot bench shears, the combination with a frame and a shearing knife rigidly secured to said frame, of an arm pivotally mounted on said frame, a shearing edge carried by said arm, a foot lever pivotally mounted on said frame and having pivotal connection with said pivoted arm, a tension spring connected to said frame and to said foot lever, and stops on said frame to limit the movement of said pivoted arm.

2. In foot bench shears, the combination with a frame, stops on said frame, and a shearing edge rigidly secured to said frame, of a shear arm pivotally mounted on said frame limited in its movement by said stops, a shearing blade carried by said arm, a foot lever pivotally secured to said frame, a tension spring connected to said lever and to said frame, a link connecting the foot lever with said shear arm.

3. In foot bench shears, the combination with a frame, stops on said frame, and a shearing edge rigidly secured to said frame, of a shear arm pivotally mounted on said frame limited in its movement by said stops, a shearing blade carried by said arm, a foot lever pivotally secured to said frame, a tension spring connected to said lever and to said frame, a link connecting the foot lever with said shear arm, and a bar connected at one end to the pivot of the foot lever and at the other end to the said frame.

4. In foot bench shears, the combination with a frame, and a shearing edge rigidly secured to said frame, of a shear arm pivotally mounted on said frame, a shearing blade carried by said arm, and an oil cup secured to the frame and a wick mounted in said cup in such position that the shearing blade comes in contact therewith when closed.

1,064,911. ILLUMINATED SIGN. RUBEN PALMER JARVIS, Smith Center, Kans., assignor of two-thirds to Aloytious Fred Lutz, Beloit, Kans., and one-third to The Many Colored Electric Company, Beloit, Kan., a Corporation. Filed June 5, 1909. Serial No. 500,332. (Cl. 40—130.)



In an electric sign, a sign panel, two reflectors disposed one at each end thereof, said reflectors inclined toward the sign panel; rotatable cylinders disposed adjacent said reflectors, light sources in said cylinders each cylinder having longitudinal bands of the primary colors and adapted to illuminate the sign panel for its entire length, said reflectors assisting the intermixing of the three primary colors, means for rotating said cylinders to produce a constantly shifting continuous spectrum upon said sign panel.

1,064,912. ELASTIC BALL-BEARING FOR NECK-JOURNALS. JOHAN PETTER JOHANSSON, Euköping, Sweden. Filed Sept. 28, 1912. Serial No. 722,827. (Cl. 64—48.)



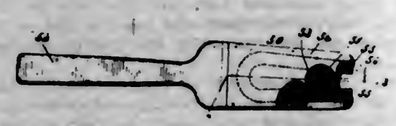
In centrifugal separators with vertical shafts, an elastic neck-and-thrust bearing supporting the whole weight of the shaft, a sleeve surrounding the shaft and supporting said neck-bearing, a guide-bushing for the lower end of the shaft supporting said sleeve, and a screw adjustable from the outside of the machine and arranged in a fixed part thereof so as to support said guide-bushing but not being in contact with the shaft.

1,064,913. CUFF-BUTTON. HAROLD R. JOHNSON, Providence, R. I. Filed Mar. 23, 1912. Serial No. 685,697. (Cl. 24—102.)

In a cuff button, a shank consisting of a central stem, a pair of prongs at each end of the stem, and heads having their edges rolled over the outer edges of prongs throughout the lengths of the prongs, the prongs of each pair of prongs being bent in opposite directions to each other and extending on but one side of the stem, the prongs on the same side of the stem extending in opposite directions from each other, one of the two arms of each pair of arms extending from the stem toward one end of the head on one side of the latter, and the other arm extending from the opposite side of the stem toward the opposite end of said head on the opposite side of the latter, whereby two arms engage each head, said prongs extending along portions of the peripheries of the heads.



1,064,914. MAGNETIC BASKET-BALL GAME. LENORA H. JONES, Wichita, Kans., assignor of one-fourth to John Clark Brown, Sedgwick, Kans. Filed July 12, 1911. Serial No. 638,179. (Cl. 46—59.)



1. A game apparatus comprising a bat provided with a magnetic body, and a projectile adapted for magnetic engagement with said bat.

2. A game apparatus comprising a bat provided with a magnetic body and a protective handle, and a projectile adapted for magnetic engagement with said bat.

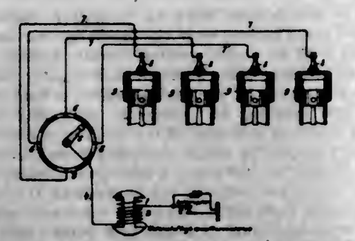
3. A bat consisting of a handle and a magnetic body composed of a magnet and a protective casing provided with an opening forming a magnetic projectile pocket.

4. A bat consisting of a handle and a magnetic body composed of a magnet and a protective casing provided with an opening in its face forming a magnetic projectile pocket.

5. A bat consisting of a handle and a magnetic body composed of a magnet and a protective casing provided with an opening at one end forming a magnetic projectile pocket.

[Claims 6 to 8 not printed in the Gazette.]

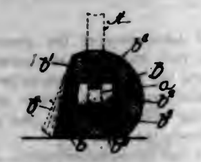
1,064,915. MEANS FOR PRODUCING IGNITION-SPARKS. AUGUST KAZENMAIER, Stuttgart, Germany, assignor to The Firm of Robert Bosch, Stuttgart, Germany. Filed Jan. 17, 1913. Serial No. 742,659. (Cl. 123—148.)



1. Means for shortening the spark duration in high-tension electric ignition systems for internal combustion engines having a sparking circuit including a spark gap and an inducing winding for generating voltages sufficient to establish arc streams across said gap, said means comprising an added conductive resistance in the sparking circuit sufficient to substantially reduce the absolute value of the ratio of inductance to resistance in said circuit and thereby quickly suppress the current flowing in the circuit to avoid the adverse influence of said current on the generation of the next succeeding sparking voltage, substantially as described.

2. A high tension electric ignition system for internal combustion engines having a sparking circuit including a spark gap and an inducing winding of wire having high specific resistance for generating voltages sufficient to establish arc streams across said gap, the resistance of said winding being sufficient to substantially reduce the absolute value of the ratio of inductance to resistance in said circuit and thereby quickly suppress the current flowing in the circuit to avoid the adverse influence of said current on the generation of the next succeeding sparking voltage, substantially as described.

1,064,916. GOLF-CLUB. JOHN L. KELLY and PATRICK L. MCARDLE, Chicago, Ill. Filed June 13, 1910. Serial No. 566,478. (Cl. 46—4.)



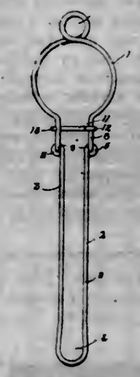
1. A golf club comprising a shaft and a spherical head, the center of the sphere being substantially co-incident with the central axis of the shaft and said sphere being cut away on one side in a plane, a removable face piece parallel to said plane, a stud formed on the rear of said face piece, the head being provided with a socket to receive said stud, and means for removably securing said shaft to the head and for interlocking the end of said shaft with said stud.

2. A golf club comprising a shaft provided with a thread near its end, a spherical head, a radial socket in said head adapted to receive the end of said shaft, part of said socket being internally screw-threaded, the center of the sphere being substantially coincident with the central axis of the shaft and said sphere being cut away on one side in a plane, a removable face piece adapted to engage the plane side of said head, and a stud formed on the rear of said face piece, said head having a transverse socket to receive said stud, and said stud being interlocked with said shaft end.

3. A golf club comprising a shaft and a head, the center of the head being substantially in alinement with the central axis of the shaft, and said head being cut away on one side in a plane, a removable face piece parallel to said plane, a stud formed on the rear of said face piece, the head being provided with a socket to receive said stud, and means for removably securing said shaft to the head and for interlocking the end of said shaft with said stud.

1,064,917. GAME-CARRIER. LOUIS J. KORTER, Fort Townsend, Wash. Filed Dec. 11, 1912. Serial No. 736,189. (Cl. 224—7.)

In a device of the character described, the combination of a single length of wire bent at its intermediate portion to form two spaced parallel portions, a second length of wire bent to form a finger loop and then bent to form an open loop arranged adjacent the finger loop, the ends of said second wire being disposed in spaced parallel relation and the extreme ends pivotally connected with the ends of the first wire, a hook member having one end bent to form an eye and pivotally mounted upon one of the parallel portions of the second wire and the other end of said hook member being bent to form a hook adapted to engage



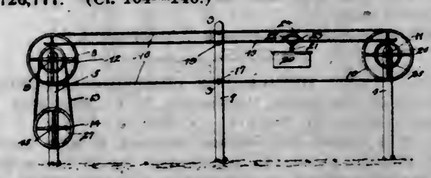
with the other parallel portion to retain the device in a closed position.

1,064,918. BURNER. EMIL H. KUHR, Cincinnati, Ohio, assignor to The Daylight Burner Co., Cincinnati, Ohio, a Corporation of Ohio. Filed Sept. 25, 1912. Serial No. 722,184. (Cl. 67—72.)



In a burner of the kind described, the combination of a wick-tube, a perforated base, a top seated upon this base provided with a flame slot above the upper end of the wick-tube and with two upright slots in its side located diametrically opposite each other and in a plane coincident with a plane passing longitudinally through the center of the wick-tube and of the flame slot respectively, a four-sided internal deflector adapted to direct air admitted through the perforated base against the upper edge of the wick-tube and positioned between this latter and the inner side of the top and so as to be spaced from each, said deflector being composed of two complementary sections, which are fitted to each other so as to meet in the plane above referred to and each of which sections has two flanges, the flanges being adapted to contact when the sections are juxtaposed, those of one section with the flanges of the other section so that, when said contacting flanges occupy the slots in the top in the manner shown, the deflector sections are held properly assembled with relation to each other to form the deflector complete, holding this latter also in proper position within the wick-tube.

1,064,919. MAIL-TRANSPORTING DEVICE. BEN W. LAMB, Adolphus, Ky. Filed Oct. 19, 1912. Serial No. 726,777. (Cl. 104—146.)



1. In a transporting device, an elevated track supported at its center, a carrier to travel upon said track, means for moving said carrier including spaced wheels and an endless belt connecting the same, a connection

4. In foot bench shears, the combination with a frame, and a shearing edge rigidly secured to said frame, of a shear arm pivotally mounted on said frame, a shearing blade carried by said arm, and an oil cup secured to the frame and a wick mounted in said cup in such position that the shearing blade comes in contact therewith when closed.

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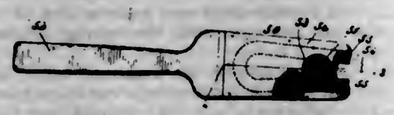
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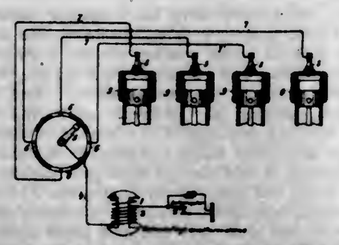
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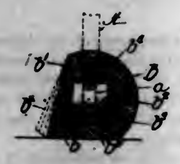
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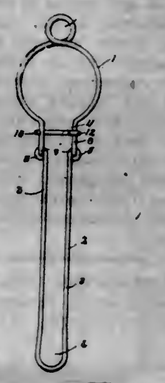
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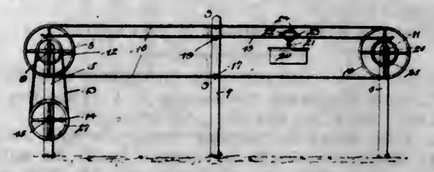
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In a burner of the kind described, the combination of a wick-tube, a perforated base, a top seated upon this base provided with a flame slot above the upper end of the wick-tube and with two upright slots in its side located diametrically opposite each other and in a plane coincident with a plane passing longitudinally through the center of the wick-tube and of the flame slot respectively, a four-sided internal deflector adapted to direct air admitted through the perforated base against the upper edge of the wick-tube and positioned between this latter and the inner side of the top and so as to be spaced from each, said deflector being composed of two complementary sections, which are fitted to each other so as to meet in the plane above referred to and each of which sections has two flanges, the flanges being adapted to contact when the sections are juxtaposed, those of one section with the flanges of the other section so that, when said contacting flanges occupy the slots in the top in the manner shown, the deflector sections are held properly assembled with relation to each other to form the deflector complete, holding this latter also in proper position within the wick-tube.

1,064,919. MAIL-TRANSPORTING DEVICE. BEN W. LAMB, Adolphus, Ky. Filed Oct. 19, 1912. Serial No. 726,777. (Cl. 104—146.)

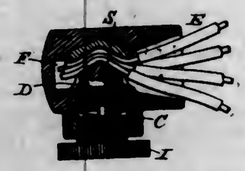


1. In a transporting device, an elevated track supported at its center, a carrier to travel upon said track, means for moving said carrier including spaced wheels and an endless belt connecting the same, a connection

between the carrier and one stretch of said belt, and means to be engaged by the free ends of the track under the weight of the carrier when disposed thereon to limit the movement of said carrier in either direction.

2. In a transporting device, a centrally supported elevated track, a carrier mounted for movement on said track, spaced wheels and an endless belt connecting the same, a flexible connection between the carrier and one stretch of said belt, smaller wheels carried by said belt wheels, a driving belt extending around one of said smaller wheels, and a friction peripheral face on the other of said small wheels, the ends of said track bar being forced into engagement with the driving belt and the friction face of said latter wheel by the weight of the carrier to check the movement of the carrier in either direction.

1,064,920. CONNECTOR FOR ELECTRIC WIRES. DIMMITT ROSS LOVEJOY, Freneau, N. J. Filed Sept. 27, 1912. Serial No. 722,676. (Cl. 173—263.)



1. A connector for electric wires comprising an internally threaded shell and a screw adapted to play therein, said shell having a hole for receiving wires and the bottom of said shell having concentric grooves formed thereon and said screw having concentric grooves formed on the point thereof.

2. A connector for electric wires comprising an internally threaded shell and a screw adapted to play therein, said shell having a hole for receiving wires and the bottom of said shell being concave and having concentric grooves formed thereon, and said screw having a convex point and having concentric grooves formed thereon.

3. A connector for electric wires comprising an internally threaded shell, a clamping screw adapted to play therein and a follower screw also adapted to play therein, said shell having a hole for receiving wires and the bottom of said shell being concave and having concentric grooves, said clamping screw having a convex point provided with concentric grooves and said follower screw being adapted to lock said clamping screw in place.

4. A connector for electric wires comprising an internally threaded shell, a clamping screw adapted to play therein, and insulation covering the exterior thereof, said shell having a hole for receiving wires and said insulation having a mouth in alinement with said hole, said insulation also having an internal recess in alinement with said hole, said shell having concentric grooves formed in the bottom thereof and said clamping screw having concentric grooves on the point thereof.

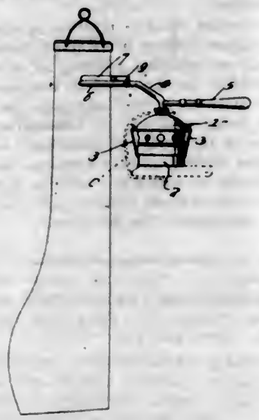
5. A connector for electric wires comprising an internally threaded shell, a clamping screw adapted to play therein, a follower screw adapted to play therein, and insulation covering the exterior thereof, said shell having a hole for receiving wires and said insulation having a mouth in line with said hole and an internal recess in line with said hole, and said follower screw having an insulated head.

[Claims 6 and 7 not printed in the Gazette.]

1,064,921. DEVICE FOR CREASING TROUSERS. ISAAC B. MACOMBER, Portsmouth, R. I. Filed Mar. 13, 1912. Serial No. 683,517. (Cl. 68—9.)

1. In a device for pressing trousers, a split tubular part adapted to receive the trousers leg in the split, a presser plate carried by said part on each side of the split, and means to supply steam to said tubular part.

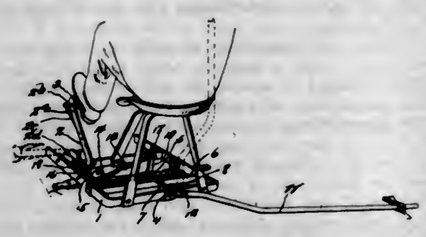
2. In a device for creasing trousers, a pipe having a bifurcated end, the furcations of said end being each provided with a presser plate, a substantially U-shaped spring the sides of which engage the outer sides of said presser plates at one end thereof, and means to supply steam to said pipe.



3. A portable hand device for pressing trousers consisting of a pipe that has one end thereof bifurcated to receive the trousers leg in the space between the furcations, a steam generator connected to the opposite end of the pipe for supplying steam thereto, and a handle connected to the pipe between its ends.

4. In a device for pressing trousers, a pipe having a bifurcated end, a presser plate secured to each furcation of said end, means connected to the pipe to supply steam thereto, and means engaging the presser plates to force same toward each other.

1,064,922. CORN-PLANTER ATTACHMENT. PETER J. MAYER, Montrose, Mo. Filed Mar. 22, 1913. Serial No. 756,163. (Cl. 111—24.)



In combination with a corn planter frame, a rock shaft journaled in bearings of said frame, said rock shaft having arms at its ends extending at right angles to one another, a marker bar secured to one of the arms, a pulley connected to said frame, a lever adapted to be manually actuated pivoted to said frame, a chain passing over said pulley with one end connected to said lever, while its other end is connected to the other arm of said rock shaft, and a catch device to be engaged by said lever, said lever together with the rock shaft and its right angle extending arms constituting means for disposing the marker bar either upon the left or right side of the corn planter.

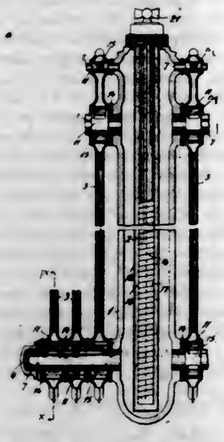
1,064,923. METALLIC SHOE-COUNTER. BENJAMIN F. MCCOY, St. Louis, Mo., assignor of one-third to James J. Scannell, St. Louis, Mo. Filed Aug. 26, 1912. Serial No. 717,112. (Cl. 36—68.)

In combination with a shoe counter, constructed of a single piece of metal having throughout a portion of the length of its lower margin a plurality of integral projections and adjacent each end of its lower margin integral hinge members formed by slitting and alternately depressing the material bounded by said strips in opposite directions, and a fabric covering for the entire counter, flexible fabric sewing flaps, each consisting of doubled pieces of material having at their joined margins hinge



members conforming in shape with the hinge members of the counter proper, and pins for uniting said flaps with the counter, substantially as shown and for the purposes stated.

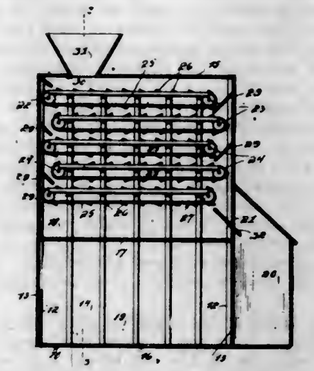
1,064,924. RADIATOR. JOHN F. MONNOT, Paris, France. Original application filed Dec. 10, 1910, Serial No. 596,707. Divided and this application filed Apr. 14, 1911. Serial No. 621,084. (Cl. 237—18.)



1. A radiator comprising in combination a plurality of radiating sections, the said radiating sections having registering apertures for the flow of fluid from one one to another, and means for holding said sections together, comprising rods provided with circulation passages in their sides, said rods passing through said registering apertures and substantially filling same, except for said side passages, clamping means on said rods for forcing the radiating sections together, and ported spacing bushings of an interior diameter greater than that of said rods within said radiating sections and surrounding said rods, and serving to prevent collapse of the radiating sections.

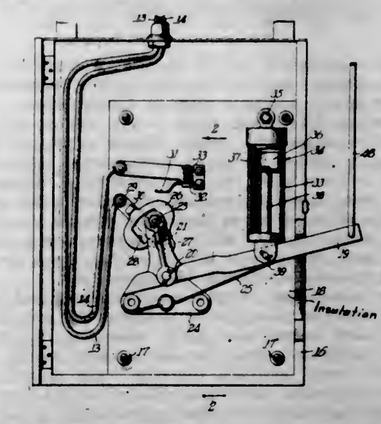
2. A radiator comprising in combination a column and a plurality of radiating sections, the said column and radiating sections having registering apertures for the flow of fluid from one to another, and means for holding said column and sections together, comprising rods provided with circulation passages in their sides, said rods passing through said registering apertures and substantially filling same, except for said side passages, the inner end of each rod secured to the said column, the outer end of each rod provided with means to force the radiating sections together, and ported spacing bushings of an internal diameter greater than the diameter of said rods within said radiating sections and surrounding said rods and spaced away therefrom, whereby free circulation of the fluid within the radiator between the column and the said radiating sections is permitted, said bushings serving to prevent collapse of the radiating sections.

1,064,925. FRUIT-EVAPORATOR. THOMAS D. MORGAN, Rogers, Ark. Filed Apr. 18, 1912. Serial No. 691,553. (Cl. 34—13.)



The combination in an evaporator such as described of a housing, a partition disposed within said housing dividing the same into upper and lower compartments, shafts journaled in staggered relation in the opposite ends of the upper compartment, sprocket wheels keyed to said shafts, conveyer chains passing over said sprocket wheels, slats connecting the conveyer chains and extending transversely of the compartment, longitudinal slats disposed beneath the upper laps of the conveyer chains for preventing the displacement of the fruit from the conveyer chains and transverse slats which constitute aprons, baffle plates secured to the opposite ends of the upper compartment for deflecting the fruit upon the conveyer aprons in alternate succession, a bin attached to one end of the lower compartment and lower end of the upper compartment, said bin communicating with the upper compartment through a longitudinal opening, a baffle plate secured to the lower edge of the opening, and having its opposite end disposed beneath the lower conveyer apron, a sprocket wheel keyed to the shaft at one end of the housing, a chain passing over the upper and lower of these last mentioned sprocket wheels and engaging the alternate sides of the remaining sprocket wheels and means for rotating one of said shafts, and operating the aprons in opposite directions.

1,064,926. SIGNALING MEANS. JULIAN J. NIELSEN, Chicago, Ill. Filed Mar. 16, 1912. Serial No. 684,099. (Cl. 161—25.)



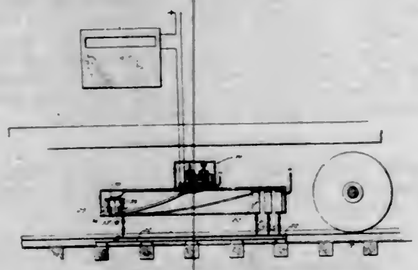
1. The combination of a movable member, a single arm connected with said movable member, means to maintain said movable member and arm in one position yieldable to

permit movement thereof to another position, and signaling means including a switch and connections between said switch and said arm including a pivoted arm (46) normally spring-pressed into engagement with the first said arm and means to retard the return of said second arm (46) after spring returned of said first mentioned arm subsequent to the movement of said movable member.

2. In a device of the character described, a movable member, a switch device comprising a stationary contact, a movable contact, a pivoted lever having an arm extension associated with said movable contact, and connections between the end of said lever and said movable member of the door-opening mechanism comprising a pivoted arm spring-pressed against said movable member, a dash pot the piston whereof is connected to the said switch lever, and a spring normally retaining said lever in position with the contacts separated, the piston of the dash-pot unretracted and said pivoted arm in abutment against said movable member of the door-opening mechanism.

3. In a device of the character described, a bell crank lever having a long and a short arm, operating means therefor connected to the end of the long arm thereof, retard means connected thereto between the end of said long arm and the pivot point of said bell crank lever, a stationary contact mounted above the short arm of said bell crank lever and a movable contact for coaction therewith comprising a switch arm pivoted at a point between said stationary contact and the pivotal point of said bell crank lever, the short arm of said short bell crank lever having at its end a pin engaging said block of the switch lever, and a spring normally holding said bell crank lever in position ready for operation.

1,064,927. INDICATOR-OPERATING MECHANISM. EDGAR J. PACE, Los Angeles, Cal., assignor to National Street and Station Indicator Company, Los Angeles, Cal., a Corporation of California. Filed May 29, 1912. Serial No. 700,442. (Cl. 246—25.)



1. In combination, switch mechanism mounted on a moving object, said switch mechanism comprising a primary switch having a normally closed position, magnetic means for opening said switch, electro magnetic means for causing the return of said switch to closed position, a limited movement electro-motor, means controlled by the primary switch to electrically energize the motor when the switch is opened, means controlled by the operation of the motor to electrically energize the switch closing means together with a stationary means located in the path of movement of the moving object for controlling the magnetic switch opening means.

2. In combination, switch mechanism mounted on a moving object, a track member located in the path of said object, said switch mechanism comprising a primary switch, magnetic means for moving said switch, said magnetic means becoming operative when passing over said track member, electro-magnetic means for returning said switch, a limited movement electro-motor, means controlled by the movement of the primary switch to electrically energize the motor and means controlled by the motor to electrically energize said switch returning means.

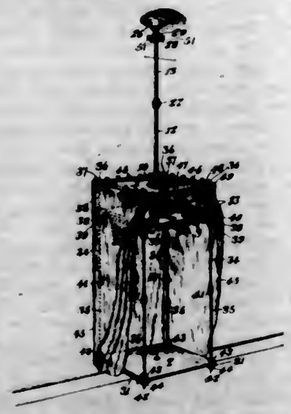
3. In combination, switch mechanism mounted on a moving object, said switch mechanism comprising a primary switch having a normally closed position, a limitedly movable magnetic needle adapted to remain in either of its extreme positions and coöperating with the primary switch to close it when in one extreme position and to open it when in the other, magnetic means to move the needle from one position to the other, electro-magnetic means for returning the needle, a limited movement electro-motor controlled by the primary switch to electrically energize said needle returning means and a stationary member over which and in spaced relation to which said magnetic means moves and by which said magnetic means is controlled.

4. In combination, a switch mechanism mounted upon a moving object and comprising a primary switch, a limitedly movable magnetic needle adapted to remain in either of its extreme positions and coöperating with the primary switch to close it when in one extreme position and to open it when in the other, electro-magnetic means for returning the needle, a limited movement electro-motor controlled by the primary switch and a switch operated by the electro-motor at the end of its movement, said switch controlling the needle returning means together with a stationary member over which and in spaced relation to which said movable magnetic needle moves and by which the same is actuated to open the primary switch.

5. In combination, a primary switch, a limitedly movable magnetic needle adapted to remain in either of its extreme positions coöperating with the primary switch to close it when in one extreme position and to open it when in the other, magnetic means acting through a relatively short time period to move the needle from its position in which the primary switch is closed to its position in which the primary switch is open, electro-magnetic means for returning the needle to its position in which the primary switch is closed, a limited movement electro-motor requiring time for its operation, a normally closed switch opened by the electro-motor at the end of its movement, a series circuit including the electro-motor and the electro-magnetic needle returning means, a shunt circuit from said series circuit around the electro-motor and including the primary switch, and a shunt circuit from said series circuit around the electro-magnetic needle returning means and including said normally closed motor operated switch.

[Claims 6 to 12 not printed in the Gazette.]

1,064,928. WARDROBE. BRUNO L. PAPE, New Braunfels, Tex. Filed May 23, 1912. Serial No. 699,198. (Cl. 45—118.)



1. A wardrobe comprising a top, a bottom and a shelf arranged in spaced relation with the top and bottom, and a standard consisting of a permanently attached section connecting the top and shelf and rigidly secured to the same, and a reversible portion, said standard having means for coupling the reversible portion to either the upper or the lower end of the permanently attached section and the said reversible portion being of a length to extend through the bottom of the wardrobe for supporting the latter upon the floor and adapted when connected to the upper end of the permanent section to suspend the wardrobe from the ceiling.

2. A wardrobe provided with a vertical standard including a permanently attached section and a reversible portion provided with means for connecting it with the permanently attached portion at either end thereof to project at either the bottom or top of the wardrobe to form either a support to enable the wardrobe to be arranged upon the floor or a hanger for permitting the wardrobe to be suspended from a ceiling, and a combined base and attaching plate secured to the outer end of the reversible portion of the standard and presenting a flat outer face to fit against the floor or ceiling.

3. A wardrobe comprising a body including a top, a bottom, and a shelf arranged in spaced relation with the top and bottom, and a standard consisting of a permanently attached section connecting the top and the shelf and rigidly secured to the same and provided with upper and lower coupling means located at the outer face of the top and the lower face of the shelf, and a reversible portion provided at the outer end with a combined base and attaching plate and adapted to be connected with the lower coupling means and extended through the bottom and projected below the same to support the wardrobe upon the floor and capable of being also connected to the upper coupling means and to project above the top of the wardrobe to form a hanger for suspending the same from the ceiling.

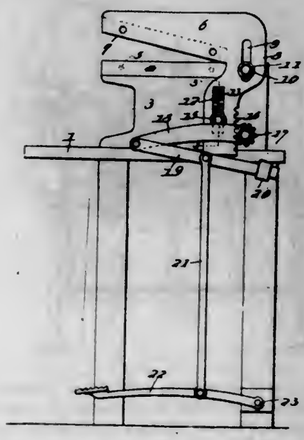
4. A wardrobe comprising a body including a top, a bottom, and a shelf arranged in spaced relation with the top and bottom, and a standard consisting of a permanently attached section connecting the top and the shelf and rigidly secured to the same and provided with upper and lower coupling means located at the outer face of the top and the lower face of the shelf, a reversible portion provided at the outer end with a combined base and attaching plate and adapted to be connected to the lower coupling means and extending through and projecting below the bottom to support the wardrobe upon the floor and capable also of being connected to the upper coupling means and project from the top of the wardrobe to form a hanger for suspending the same from the ceiling, and a collar carried by the reversible section and arranged to support the bottom of the wardrobe when the latter is mounted upon the floor.

5. A wardrobe comprising a body including a top, a bottom, and a shelf arranged in spaced relation with the top and body, a vertical standard consisting of a permanently attached section connected at its terminals to the top and the shelf and provided with upper and lower coupling means, and intermediate and end detachable sections constituting a reversible portion and adapted to be connected with the lower coupling means and extended through the bottom and project below the same to form a support or to be connected with the upper coupling means and project above the top of the wardrobe to form a hanger for the same, a combined base and attaching plate connected with the outer end of the reversible portion of the standard, and rods connecting the bottom with the shelf.

[Claims 6 and 7 not printed in the Gazette.]

1,064,929. SHEARING DEVICE. WILLIAM H. POND, Providence, R. I., assignor to Theodore W. Foster & Bro. Co., Providence, R. I., a Corporation of Maine. Filed Dec. 26, 1912. Serial No. 738,656. (Cl. 164—57.)

1. In a shearing device, a base having a bed plate thereon, a horizontal arm carrying a cutter blade and having a depending portion provided with a pair of slots located one above the other, a bolt in one of the slots connected to the base, a block in the other slot, a coiled spring seating on the block and abutting the top end wall formed by the last named slot, a rack on said depending portion, a gear in mesh with the rack, an arm rigidly connected to the gear, a second downwardly inclined arm connected to the first named arm, a rod connected to the last named arm, and a foot operated lever connected to the rod.



2. In a shearing device, a base, a cutter arm having a depending portion which is provided with a plurality of slots, a projection in each slot, a spring between one projection and the upper end of the slot of said projection, a rack on the depending portion, a gear meshing with the rack, and means to actuate the gear.

3. In a shearing device, a base, a cutter arm having a depending portion which is provided with a plurality of slots, a projection in each slot, a spring between one projection and the upper end of the slot of said projection, and means to actuate the cutter arm.

4. In a shearing device, a base, a sliding cutter arm on the base formed with a slot, a projection carried by the base and extending in said slot to guide the sliding movements of the cutter arm, a spring engaging said projection at one end and having its opposite end engaged with one of the end walls formed by the slot, and means to actuate the arm.

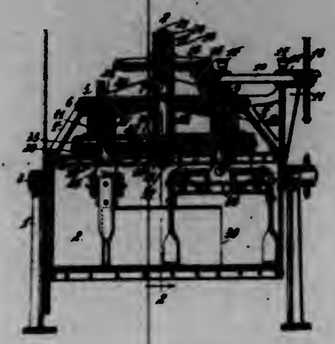
5. In a shearing device, a base, a sliding cutter arm on the base having a rack, a gear in mesh with the rack, an arm rigidly connected at one end to the gear, a second arm pivotally connected to the first named arm at the opposite end of the latter, a guide for the last named arm, and a foot operated lever connected to the second named arm between the ends of the latter.

1,064,930. GEARING. HENRY U. PRINDLE, San Francisco, Cal., assignor to Planetary Machinery Company, San Francisco, Cal., Incorporated. Original application filed July 18, 1911, Serial No. 639,214. Divided and this application filed Oct. 2, 1912. Serial No. 723,486. (Cl. 74—34.)

1. Supporting brackets, an internal head gear rigidly mounted on said brackets and having a shaft bearing, a driven shaft rotatable in the said bearing, a gear carrier, a master gear on the said shaft, bearings on the said gear carrier, a driven element carrying shaft rotatable in the said carrier-held bearings, a gear on the said driven element shaft that meshes with the master gear, and a pinion on the said driven element shaft that meshes with the head gear, and a driven element on said carrying shaft.

2. Supporting brackets, an internal head gear rigidly mounted on said brackets and having a shaft bearing, a driven shaft rotatable in the said bearing, a gear carrier, a master gear on the said shaft, bearings on the said gear carrier, a driven element carrying shaft rotatable

in the said carrier-held bearings, a gear on the said driven element shaft that meshes with the master gear, a pinion on the said driven element shaft that meshes with the head gear, bearing rollers carried by the said gear carrier, the head gear having a frame on which the said rollers run, and a driven element on said carrying shaft.



3. In a machine, standards, supporting brackets mounted on the bearings, a head gear rigidly mounted on the brackets, the said gear receiving a shaft bearing, a driven shaft rotatable in the said bearings, a gear carriage having bearings, a master gear on the driven shaft, a driven element carrying shaft mounted in the gear carrier bearings, a driven element on the carrying shaft, a pinion on one end of said carrying shaft that meshes with the head gear and a gear on the said shaft that meshes with the master gear.

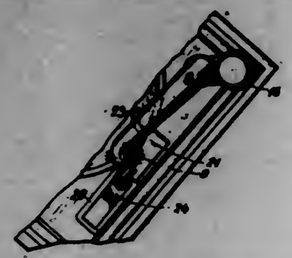
4. In a machine, standards, supporting brackets mounted on the bearings, a head gear rigidly mounted on the brackets, the said gear receiving a shaft bearing, a driven shaft rotatable in the said bearings, a gear carrier having bearings, a master gear on the driven shaft, a driven element carrying shaft mounted in the gear carrier bearings, a driven element on the driven element carrying shaft, a pinion on one end of said driven element carrying shaft that meshes with the head gear and the gear on the said shaft that meshes with the master gear, said supporting brackets being tiltably mounted on the standards.

5. In a machine, standards, supporting brackets mounted in the standards, a head gear rigidly mounted on the supporting brackets, and having a central shaft bearing, a driven shaft rotatable in the said shaft bearing, a gear casing comprising upper and lower yoke plates rotatable with the shaft, said casing having upper and lower alining bearings, a master gear on the driven shaft located within the said casing, a driven element carrying shaft mounted in the alining bearings of the yoke members, a driven element carried on the lower end of the said shaft, a pinion on the upper end of the shaft that engages the head gear, a gear on said carrying shaft that engages the master gear on the driven shaft, and means mounted on the standards for imparting motion to the driven shaft.

1,064,931. TALKING-MACHINE. JAMES ALOYSIUS RABBITT, Yokohama, Japan. Filed Feb. 8, 1910. Serial No. 542,709. (Cl. 181—3.)

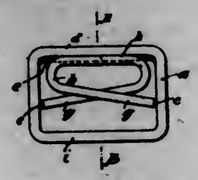
1. A talking machine having a motor-box, a rotatable turntable supported above the same, a pivoted tone-arm, a sound-box and stylus carried thereby, a stylus receptacle mounted on the motor-box, and a cover for said receipacle movable into position to support said tone-arm with the stylus of the sound-box over the receptacle, substantially as set forth.

2. A talking machine having a motor-box, a rotatable turntable supported above the same, a pivoted tone-arm, a sound-box and stylus carried thereby, a stylus receptacle mounted on the motor-box and having two compartments therein, and a cover for said receptacle hinged at one end thereof and movable into position to support said tone-



arm with the stylus of the sound-box over one of said compartments, substantially as set forth.

1,064,932. CLAMPING BUCKLE OR CLASP. KARL RODE, Crefeld, Germany. Filed Jan. 29, 1913. Serial No. 744,944. (Cl. 24—170.)



1. A buckle for belts and the like consisting of a frame having a groove on the inner side of its front edge, a clamping member journaled in said frame and having a clamping side loosely fitting in said groove the journaled ends of said member consisting of portions crossing one another and each inclined to said clamping side.

2. A buckle for belts and the like consisting of a frame having a groove on the inner side of its front edge, a clamping member journaled in said frame and consisting of a resilient wire, the central portion of which loosely fits in said groove and outer portions which cross each other and terminate in straight portions each inclined to said central portion and forming at their ends the journals of said member.

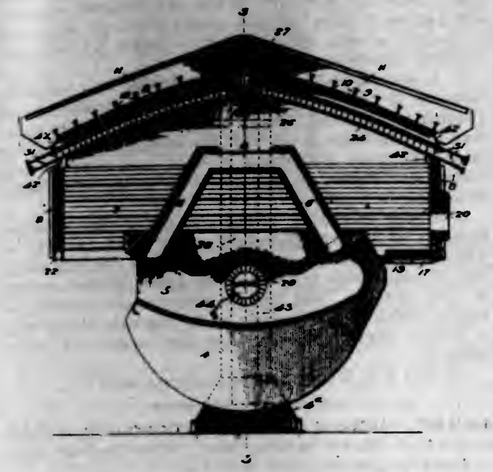
3. A buckle for belts and the like consisting of a frame having a groove on the inner side of its front edge, the lower edge of the said groove projecting somewhat inwardly of the frame, a clamping member journaled in said frame and consisting of a resilient wire, the central portion of which loosely fits in said groove and outer portions which cross each other and terminate in straight portions each inclined to said central portion and forming at their ends the journals of said member.

4. A buckle for belts and the like consisting of a frame having a groove on the inner side of its front edge, the said groove roughened by corrugations and having a lower edge which projects somewhat inwardly of the frame, a clamping member journaled in said frame and consisting of a resilient wire, the central portion of which loosely fits in said groove and outer portions which cross each other and terminate in straight portions each inclined to said central portion and forming at their ends the journals of said member.

1,064,933. RECUPERATOR FOR OSCILLATING FURNACES. JAMES PETER ROE, Pottstown, Pa. Filed Sept. 9, 1910. Serial No. 581,299. (Cl. 75—95.)

1. An apparatus for recovering heat from the waste gases of oscillating furnaces, comprising a chamber having a bottom opening to receive and permit the oscillation of the stack of the furnace therein, hollow arches for the air to be heated, and an outlet at a point below the center of the chamber for the escape of the cooled gases.

2. An apparatus for recovering heat from the waste gases of oscillating furnaces, comprising a chamber receiving the products of combustion from the furnace, hollow arches arranged in said chamber and having their crown ends fixed and their outer or springer ends free to respond to the expansion and contraction of the arches.

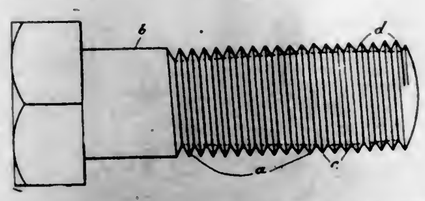


3. An apparatus for recovering heat from the waste gases of oscillating furnaces, comprising a chamber receiving the products of combustion from the furnace, hollow arches arranged in said chamber, and hollow skewbacks from which said arches spring and with which they communicate, said skewbacks being free to respond to the expansion and contraction of the arches.

4. An apparatus for recovering heat from the waste gases of oscillating furnaces, comprising a chamber to receive the products of combustion from the furnace, arches arranged in said chamber, and skewbacks in equilibrium and suspended in equilibrium and free to move as the arches resting on them expand and contract.

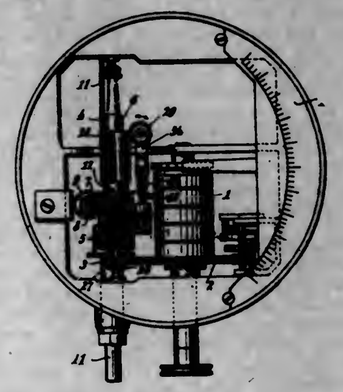
5. An apparatus for recovering heat from the waste gases of oscillating furnaces, comprising a chamber to receive the products of combustion from the furnace, arches arranged in said chamber, skewbacks for supporting said arches, and means for suspending said skewbacks, whereby they are free to move as the arches expand and contract.

1,064,934. NUT-LOCK. CATHERINE RYAN, St. Paul, Minn. Filed Sept. 30, 1912. Serial No. 723,103. (Cl. 151—22.)



A bolt having a series of threads growing progressively deeper toward the unthreaded portion of the bolt, in combination with a closed nut having a thread or threads so formed in relation to the shallowest threads of the bolt that said nut thread or threads will sink into and clasp the material of the bolt as the same is turned over the bank formed by the shallow threads, said nut tending to turn toward the unthreaded portion of the bolt after passing said bank of shallowest threads and said bank of shallowest threads acting as a lock to hold the nut upon the bolt.

1,064,935. SPEEDOMETER. ERNEST SCHNEIDER, Vienna, Austria-Hungary. Filed Dec. 10, 1912. Serial No. 735,960. (Cl. 235—104.)



1. A speedometer comprising driving means, weighted means formed with a plurality of interrupted teeth on the periphery thereof, means for rotating said weighted means at a constant speed, means to establish an intermittent connection between said driving means and said weighted means by the engagement of said connecting means with said interrupted peripheral teeth, to move said weighted means a determined distance in accordance with the speed for the time being, indicating means controlled by the movement of said weighted means, and means comprising a ratchet wheel engaging with said interrupted peripheral teeth normally to retain said weighted means in position until the positioning of said indicating means and to allow said weighted means to move in the opposite direction to re-occupy its initial position.

2. A speedometer comprising driving means, weighted means, means to rotate said weighted means continuously at a uniform speed, means to establish an intermittent connection between said driving means and said weighted means to move said weighted means into a position corresponding with the speed for the time being, means to lock said weighted means upon the completion of such movement, indicating means controlled by said weighted means, means to lock said indicating means upon the positioning thereof to indicate the speed for the time being, said means comprising a rack in engagement with said indicating means, a wheel formed with a plurality of recesses, means to rotate said wheel at a speed corresponding to that of said weighted means, and a pawl member having one end engaging with said rack and its other end engaging the periphery of said wheel and becoming temporarily disengaged from said rack upon entering said recesses, and means to release said weighted means to enable said weighted means to re-occupy its initial position.

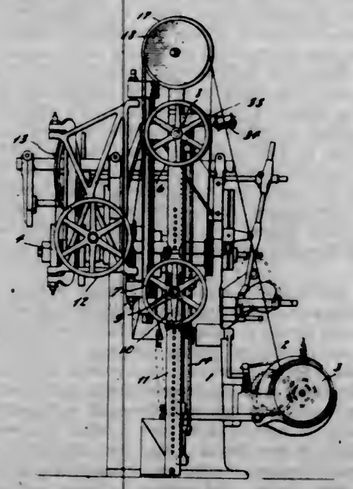
3. A speedometer comprising driving means, weighted means, means for rotating said weighted means at a constant speed, means to establish an intermittent connection between said weighted means and said driving means to move said weighted means a determined distance in the axial direction, a spring-pressed index controlled by said weighted means during its aforesaid movement, means temporarily to release said index to place the same under the action of its spring upon the completion of said movement, to occupy a position corresponding to the speed for the time being, and means to allow said weighted means upon such positioning of said index to move in the opposite direction to re-occupy its initial position for the next following operation.

4. A speedometer comprising driving means the speed of which is to be measured, weighted means, means to rotate said weighted means continuously at a constant speed, means to establish an intermittent connection between said weighted means and said driving means to move said weighted means for a determined distance in an

axial direction in accordance with the magnitude of the speed for the time being, indicating means controlled by said weighted means during such axial movement thereof, means to lock said weighted means in position at the completion of such axial movement, means temporarily to release said indicating means, means upon such release to move said indicating means to take up a determined position to indicate the speed for the time being as determined by the movement of said weighted means, means to lock said speed indicating means temporarily in position upon the positioning thereof to indicate the speed for the time being, a releasing means for said weighted means to allow the latter to move axially in the opposite direction to re-occupy its initial position.

5. A speedometer comprising driving means the speed of which is to be measured, a shaft, weighted means mounted on said shaft and rotated thereby continuously at a uniform speed, means to establish an intermittent connection between said weighted means and said driving means to move said weighted means along said shaft for a determined distance according to the speed for the time being, a spring-pressed speed indicator, means to connect said weighted means with said indicator to control the movement of said speed indicator, means to lock said weighted means in position upon the completion of its movement, releasing means to cause said speed indicator and said connecting means therefor by the action of said spring to take up a position according to the speed for the time being so that if the speed of the preceding operation is greater than that for the time being, said speed indicator and connecting means therefor can move under the action of the spring of said speed indicator to take up a position corresponding with that of the weighted means, means to lock said speed indicator in such adjusted position, and means to release said weighted means to allow same to move axially in the opposite direction to re-occupy its initial position preparatory to the next operation.

1,064,936. WIRE-STRETCHING DEVICE. ARCHIBALD DOUGLAS SCOTT, Jersey City, N. J., assignor to Varley Duplex Magnet Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 23, 1911. Serial No. 645,578. (Cl. 29—1.)



1. In a winding machine in combination a supply spool, a winding mandrel, wire-stretching means between the mandrel and the supply spool operating to stretch the wire as it passes to the mandrel, and means whereby the wire on the mandrel may be unwound therefrom and pass the stretching means and then be rewound on the mandrel without being restretched.

2. In a winding machine in combination with a winding mandrel and a supply spool, of a wire stretching means between the said mandrel and supply spool and operating to stretch the wire as it passes from the supply spool to the mandrel, and means whereby the direction of travel of the wire may be reversed and again rewound on the mandrel without being again stretched.

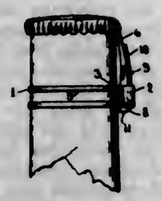
3. A wire stretching means comprising two revoluble members of different diameters mounted on the same shaft, connected to revolve at the same angular velocity, and adapted to have the wire wound about the same, and a member around which the wire passes between said revoluble members.

4. A wire stretching means comprising two revoluble members of different diameters, about which the wire is adapted to be wound, means for coupling the said members to cause them to move at the same angular velocity in one direction, and means whereby said members may revolve at different angular velocities in the other direction.

5. A wire stretching means comprising two revoluble members of different diameters, about which the wire is adapted to be wound, means for coupling the said members to cause them to move at the same angular velocity in one direction, and means whereby the member of smaller diameter may revolve in the opposite direction at a greater angular velocity than the member of larger diameter.

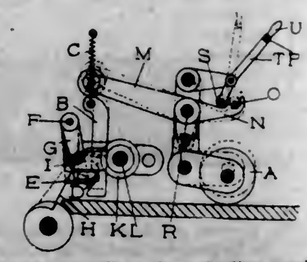
[Claims 6 to 32 not printed in the Gazette.]

1,064,937. DEVICE FOR REMOVING BOTTLE-CAPS. EDWIN J. SHAUT, Jackson, Mich. Filed Dec. 27, 1912. Serial No. 738,945. (Cl. 215—1.)



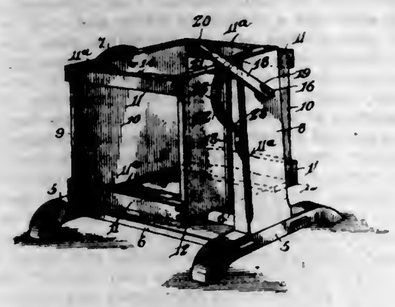
The herein described bottle cap remover comprising a band adapted to encircle the neck of a bottle and having outturned lugs formed with alined slots and rivet holes, a bolt passing through the slots, a finger having one end standing between the lugs and pivotally mounted on the bolt and its other end adapted to engage the bottle cap, an L-shaped lever having its short arm normally underlying the pivoted end of the finger, and a rivet through its angle and the rivet-holes of said lugs, the whole operating substantially as described.

1,064,938. PAPER-SHEET-FEEDING MACHINE. GEORG SPIESS, Leipzig-Reudnitz, Germany. Filed May 22, 1912. Serial No. 698,999. (Cl. 101—39.)



In the herein described sheet feeding mechanism, the combination with the combing roll and the carrier thereof, of a notched rocking carrier for said combing roll, a manually operated double-armed lever, one arm of which carries a roll freely resting in the notch of said carrier and which arm is adapted on its manipulation to swing the said carrier so as to release the combing roll without affecting the continuous operation of the other parts of the mechanism.

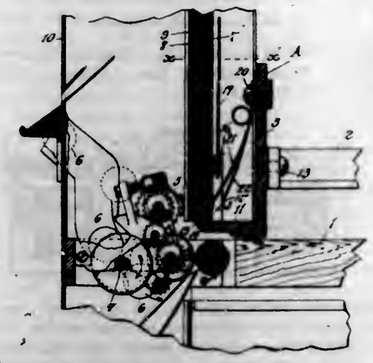
1,064,939. ADJUSTABLE STAND FOR BARRELS, &c. JOHN SUNKLER, Monterey, Cal. Filed Nov. 30, 1912. Serial No. 734,361. (Cl. 248—16.)



1. In a device of the class described, a stand comprising a pair of spaced-apart standards, a receptacle, trunnions carried by said receptacle and pivoted in the standards, the end of one of said trunnions being extended beyond the outer face of the standard in which it is pivoted, a resilient handle rigidly secured to the projecting end of said trunnion, a curved rack secured to the side of said standard adjacent the handle, and a lug carried by the handle and extending inwardly to bear against said rack to place said resilient handle under tension, whereby when the handle is moved to adjust the position of the receptacle the same will be firmly held in its adjusted position.

2. In a device of the class described, a stand comprising a pair of spaced-apart standards, a receptacle having an open upper end, trunnions carried by said receptacle and pivotally mounted in the standards, the end of one of the trunnions extending beyond the outer face of the standard in which it is pivoted, a resilient radially movable handle rigidly secured to the projecting end of said trunnion, said handle being formed of a flat bar of metal set with its flat side toward the standard, a curved rack bar secured to the side and top of said standard and having its rack face extending out beyond the outer face of said standard and in the path of movement of said handle, and a lug carried by said handle and extending inwardly to bear constantly against said rack face and to place said resilient handle under tension, whereby when the handle is moved to alter the position of said receptacle the handle will be firmly held in the adjusted position.

1,064,940. POST-CARD-VENDING MACHINE. JOSEPH W. THOMPSON, New York, N. Y. Filed Apr. 5, 1911. Serial No. 619,114. (Cl. 211—33.)



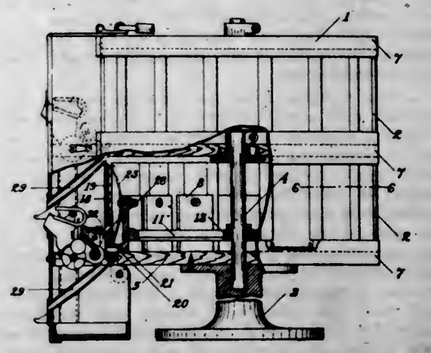
1. In a post card vending machine, a card carrier having a front plate and a base plate mounted at right angles to the front plate and spaced therefrom to permit the passage of one card, said base plate being cut away toward its edges, leaving the center portion thereof to support the main body of the pack of cards, means for applying a yielding pressure to the pack in a vertical central line near its base, separate means for applying yielding pressure to the pack adjacent to either edge and near the base thereof, and means to expel the card adjacent to the front plate consisting of a plurality of friction wheels, means for rotating them and means for pressing them against the pack near the edges of the cards with a pressure opposed to the spring, pressure also applied adjacent the edges of the pack.

2. In a post card vending machine, a card carrier having a front plate against which the cards are held by an elastic pressure and a base plate mounted at right angles to the front plate and spaced from the front plate to permit the passage of one card, said base plate being cut away toward its edges, leaving the central portion thereof to support all of the cards, except the card immediately adjacent to the front plate, in combination with a block cut away at the center, the same being interposed behind the pack, three springs anchored to the back wall of the carrier, one of which bears directly on the pack of cards through the aperture in the block contacting with the pack centrally, and near the base of the pack, while the other two springs bear on the block with their tension directed to keep the pack in contact with the face plate, and means consisting of a plurality of friction wheels operating on the sides of the card adjacent to the front plate against the pressure of the springs above referred to, to bow the pack and remove the card next adjacent the front plate.

3. In a card dispensing machine, a carrier consisting of an abutment for positioning the card, a support transverse to the abutment and projecting centrally toward the same, means for pressing the center of the pack toward the abutment, side presser members tending to press the side portions of the pack in the direction of the abutment, extractor members movably mounted, and means for pressing them against the top card of the pack near its edges, so that the tendency of the side presser members is overcome and the pack is bowed with its center toward the abutment, whereby the top card only is released from the support and permitted to move from the pack in response to the action of the extractor mechanism.

4. In a dispensing machine, means for positioning a pack of cards, a support projecting toward the plane of the positioning member beneath the lateral center of the pack, and means consisting of ejector members at each side of the pack and pressing means at the center of the pack for bowing the pack so that the top card avoids the support, and feeding it from the machine.

1,064,941. VENDING-MACHINE. JOSEPH W. THOMPSON, New York, N. Y., assignor to Universal Vending Machine Company, a Corporation of Arizona. Original application filed Nov. 28, 1910, Serial No. 594,494. Divided and this application filed May 1, 1911. Serial No. 624,416. (Cl. 211—8.)

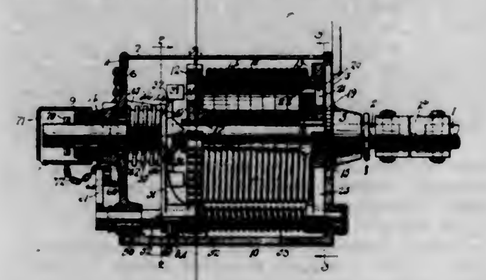


1. In a card vending apparatus, a dispensing cylinder consisting of a plurality of rotary carrier rings, each ring

consisting of card containers, each container having an exhibition pocket and a chamber for a pack of cards, each pocket having a transparent window, said window forming the cylindrical surface of the ring overlying the corresponding container, means for pressing a pack of cards toward one wall of the container, the container being slotted adjacent the wall to release the front card of the pack and an extractor mechanism with which each container may be brought into operative relation, the container being apertured to admit the operative portion of the extractor.

2. In a card vending apparatus, a dispensing cylinder consisting of a plurality of rotary carrier rings all mounted to rotate about a common axis, of substantially the same diameter and placed adjacent each other, each ring consisting of card containers, each container having an exhibition pocket having a transparent window, said window forming the cylindrical surface of the ring overlying the corresponding container, and a spring to press a pack of cards toward one wall of the container, the container being slotted adjacent the wall to release the front card of the pack, and an extractor mechanism with which each container may be brought into operative relation, the container being apertured to admit the operative portion of the extractor.

1,064,942. STARTING DEVICE FOR EXPLOSION-ENGINES. WEBESTER F. TRAVES, Cleveland, Ohio, assignor to William H. Becker, Cleveland, Ohio. Filed Feb. 2, 1911. Serial No. 606,227. (Cl. 123—187.)



1. In a starting device for explosion engines, the combination, with a shaft adapted to be connected to the engine shaft and a support in which said shaft is journaled, of a winding and an unwinding plate independently sleeved upon said shaft, means connecting said plates and adapted for the storage of potential energy of rotation, means for connecting said unwinding plate to said shaft so as to drive the same in one direction, a trigger carried by said support and governing the operation of said unwinding plate, means carried by said support and preventing retrograde rotation of said winding plate, a clutch device carried by said shaft and adapted to engage said winding plate, and means carried by said support and operated simultaneously with said trigger for disengaging said clutch and winding plate at a predetermined number of turns after the engagement of said unwinding plate by said trigger.

2. In a starting device for explosion engines, the combination, with a shaft connected to the engine shaft, and a support in which said shaft is journaled, of a winding and an unwinding plate independently sleeved upon said shaft, means connecting said plates and adapted for the storage of potential energy of rotation, means for connecting said unwinding plate to said shaft so as to drive the same in one direction, a trigger carried by said support and governing the operation of said unwinding plate, means carried by said support and preventing retrograde rotation of said winding plate, a clutch device carried by said shaft and adapted to engage said winding plate, means for holding said clutch away from said winding plate during the operation of said unwinding plate, and means carried by said support and operated simultaneously with said trigger for disengaging said clutch and winding plate at a predetermined number of turns after the engagement of said unwinding plate by said trigger.

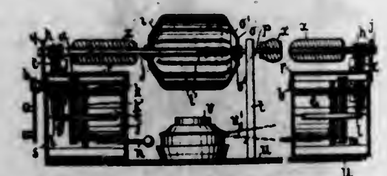
3. In a starting device for explosion engines, the combination, with a shaft adapted to be connected to the engine shaft and a support in which said shaft is journaled, of a winding and an unwinding plate independently sleeved upon said shaft, means connecting said plates and adapted for the storage of potential energy of rotation, means for connecting said unwinding plate to said shaft so as to drive the same in one direction, means carried by said support and engaging said winding plate to prevent rotation thereof in the opposite direction, a clutch device carried by said shaft and adapted to engage said winding plate, means for releasing said unwinding plate to give an initial rotation to said shaft and for locking said unwinding plate against further forward rotation after such impulse, means for causing said clutch to engage said winding plate between said time of releasing and locking, and means for disengaging said clutch a predetermined number of turns after said locking.

4. In a starting device for explosion engines, in combination, an unwinding plate adapted to be connected in driving relation to the engine shaft, a winding plate, means connecting said plates and adapted for the storage of potential energy of rotation, a shaft adapted to be driven by the rotation of said engine, a clutch device on said shaft and adapted to engage said winding plate, means for locking said unwinding plate against operation, means for normally holding said clutch device out of engagement with said winding plate, means operative after the release of said unwinding plate for causing said clutch device to engage said winding plate, means operative after the engagement of said clutch device for relocking said unwinding plate, and means operative at a predetermined number of turns after the relocking of said unwinding plate to cause said clutch to disengage said winding plate.

5. In a starting device for explosion engines, the combination, with a shaft connected in driving relation with the engine shaft and a support in which said shaft is journaled, of a winding plate sleeved upon said shaft, means whereby the forward rotation of said plate may be caused to store up potential energy of rotation, means whereby said potential energy can be released to cause an initial rotation of said shaft, a clutch member slidably but non-rotatably mounted on said shaft and adapted to engage said winding plate, a spring tending to project said clutch into such engagement, means normally holding said clutch out of engagement against the tension of said spring, the body of said clutch being formed with a helical groove, means for releasing said holding means after the release of the potential energy to permit said clutch to engage said winding plate, and a finger adapted to engage said groove to draw said clutch out of engagement after a predetermined number of rotations.

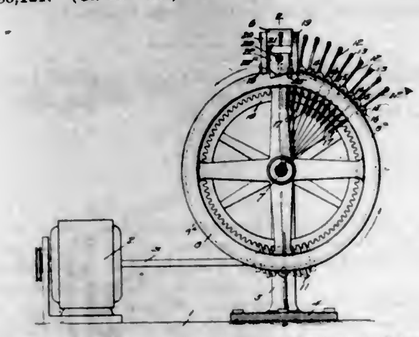
[Claims 6 to 11 not printed in the Gazette.]

1,064,943. COFFEE-ROASTER. JOSEPH TREMOULHAC, St.-Étienne, France. Filed May 3, 1911. Serial No. 624,764. (Cl. 34—5.)



An improved coffee roaster for household use with automatic operation comprising in combination a casing having a base plate, a heating device upon the base plate of said casing, a roasting drum removably mounted in the casing above said heating device, a standard upon said base plate having a bearing at its top, the shaft of said roasting drum composed of two removably connected parts mounted in the bearing of said standard, a removable lid of said roasting drum fixed to one of said parts of the shaft, a clockwork mounted in said casing and serving for driving said shaft of the roasting drum, blades movable on their hub mounted upon the shaft of the clockwork, a centrifugal governor for regulating the speed of the shaft of the roasting drum, and adjustable means for regulating the speed of said governor, substantially as described and shown and for the purpose set forth.

1,064,944. VIEW-CHANGING DEVICE. WILLIAM C. UPP, Baltimore, Md. Filed Mar. 11, 1912. Serial No. 683,121. (Cl. 40—36.)



1. In an automatic view shifting device, a frame, a shaft carried thereby, a pair of wheels carried by said shaft, a series of carriers arranged to travel on the peripheries of the wheels, and means for retaining each of said carriers successively in a fixed position for a predetermined period.

2. In an automatic view shifting device, a frame, a shaft carried thereby, a pair of wheels carried by said shaft, a series of carriers arranged to travel on the peripheries of the wheels, means for retaining each of said carriers in radial positions with respect to the axis of the shaft, and means for retaining each of said carriers successively in a fixed position for a predetermined period.

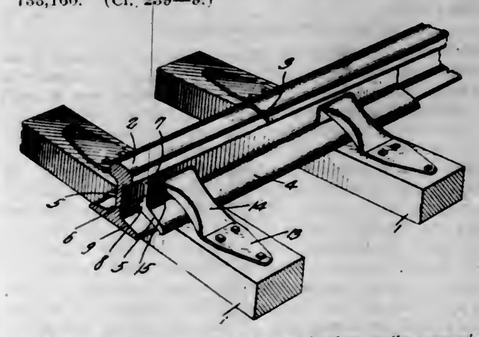
3. In an automatic view shifting device, a frame, a main shaft carried thereby, a pair of wheels carried by said shaft, each of said wheels being provided with a peripheral groove, a series of carriers, each carrier being provided with an auxiliary shaft, an anti-friction member rotatably carried by said auxiliary shaft at each end thereof and arranged to travel in the groove on one of said wheels, spring means connecting said carrier with said main shaft, and means for retaining each of said carriers successively in a fixed position for a predetermined period.

4. In an automatic view shifting device, a frame, a main shaft carried thereby, a pair of wheels carried by said shaft, each of said wheels being provided with a peripheral groove, a series of carriers, each carrier being provided with an auxiliary shaft, an anti-friction member rotatably carried by said auxiliary shaft at each end thereof and arranged to travel in the groove on one of said wheels, spring means connecting said carrier with said main shaft, means for retaining each of said carriers successively in a fixed position for a predetermined period, said means comprising a movable cam member, a stop carried by said member for engaging the auxiliary shafts of said carriers, and pins carried by said wheels for moving said cam, thereby causing the withdrawal of the stop member from the auxiliary shaft.

5. In an automatic view shifting device, a frame, a main shaft rotatably carried thereby, means for rotating the shaft, a pair of grooved wheels mounted on said shaft, a series of carriers, each carrier comprising a view retaining member, an auxiliary shaft secured to the view retaining member, antifriction members rotatably carried by said auxiliary shaft and arranged to travel in the grooves in said wheels, springs secured to the inner portions of said carriers and being connected with the main shaft, arms secured at the upper ends of said frame, runways secured to each of said arms, a cam member for each wheel slidably disposed in said runways, each of said cam members being disposed between its individual wheel and its supporting frame member, an L-shaped stop member carried by said cam member and having a portion arranged to engage said auxiliary shafts, and a pin carried by each of said wheels on the outer sides thereof for engaging said cam members.

[Claims 6 and 7 not printed in the Gazette.]

1,064,945. RAIL-JOINT SPLICE. NELS P. WALTERS, Fort Madison, Iowa. Filed Nov. 23, 1912. Serial No. 733,160. (Cl. 239—9.)

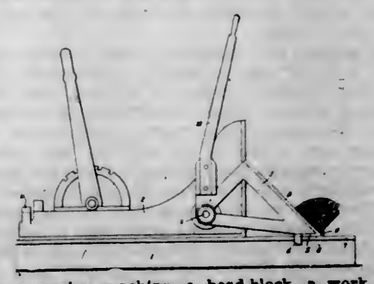


1. Means for temporarily splicing broken rails comprising, splice plates formed with outstanding flanges, vertical side walls formed integral therewith and having longitudinal lugs formed at the upper and lower edges thereof, said splice plates being adapted to embrace said rail with the fracture intermediate the ends thereof, and brackets with lugs at the upper ends thereof adapted to engage said splice plates to hold the latter securely in position.

2. In a device of the class described, a splice plate formed with an outlying flange, vertical side walls integral with said flange, said side walls being provided with apertures therein, brackets formed each with a base plate, and an upwardly extending member formed integral therewith and provided at its end with an outstanding lug adapted to engage said apertures in said splice plate to thereby hold said splice plate securely in position in contact with the rail web and beneath the rail head.

3. In a device of the class described, a splice plate formed with an outlying flange, a vertical side wall integral with said flange, longitudinal lugs formed integral with said side wall at the upper and lower edges thereof, said side wall being provided with apertures therein, brackets formed with a base plate, and an upwardly extending member formed integral therewith and provided at its end with an outstanding lug adapted to engage said apertures in said splice plate to thereby hold said splice plate securely in position in contact with the rail web and beneath the rail head.

1,064,946. ATTACHMENT FOR SAWING-MACHINES. JOHN P. WEIDEMEYER, Coal Grove, Ohio. Filed Sept. 9, 1912. Serial No. 719,292. (Cl. 143—124.)

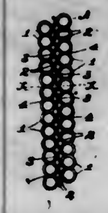


1. In a sawing machine, a head-block, a work holder knee movably mounted therein, said knee having inter-

secting angular work receiving surfaces to receive and support the radii surfaces of a log sector, with the bisecting vertex line of the sector parallel with the cutting plane of the saw.

2. In a sawing machine, a head-block, a main knee movable on said head-block, a supplemental knee pivotally mounted on said main knee adapted to be swung into an operative position and engage with the head-block and slide thereon, said supplemental slide having angular work receiving surfaces of definite predetermined angle coördinate with surfaces of the work to present the same to the saw with the bisecting line parallel with the cutting plane.

1,064,947. CORSET-STAY. JAMES M. WELSH, Meadville, Pa., assignor to The Spirella Company, Meadville, Pa., a Corporation of Pennsylvania. Filed Apr. 6, 1908. Serial No. 425,333. (Cl. 2—76.)



1. A garment stay consisting of wire bent at intervals into a series of loops arranged alternately in two parallel rows forming the edges of the stay, with the loop connecting portions disposed alternately on opposite side faces of the stay in substantially parallel planes extending from edge to edge of the stay, the loop connecting portions on one side face crossing those on the other side face, and each loop connecting portion extending in its plane from edge to edge of the stay, thereby producing a uniform passage extending from edge to edge of the stay for its entire length.

2. A garment stay consisting of wire bent at intervals into a series of loops arranged alternately in two parallel rows forming the edges of the stay, with the loop connecting portions disposed alternately on opposite side faces of the stay in substantially parallel planes extending from edge to edge of the stay, the loop connecting portions on one side face crossing those on the other side face, with two contiguous oppositely arranged loops forming substantially a figure 8, and each loop connecting portion extending in its plane from edge to edge of the stay, thereby producing a uniform passage extending from edge to edge of the stay for its entire length.

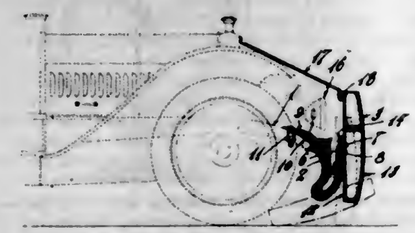
3. A garment stay consisting of wire bent at intervals into a series of loops arranged alternately in two parallel rows forming the edges of the stay, with the loop connecting portions extending diagonally from edge to edge of the stay and disposed alternately on opposite side faces of the stay in substantially parallel planes extending from edge to edge of the stay, the loop connecting portions on one side face crossing those on the other side face, and each loop connecting portion extending in its plane from edge to edge of the stay, thereby producing a uniform passage extending from edge to edge of the stay for its entire length.

4. A garment stay consisting of wire bent at intervals into a series of loops arranged alternately in two parallel rows forming the edges of the stay, with the loop connecting portions disposed alternately on opposite side faces of the stay in substantially parallel planes extending from edge to edge of the stay, the loop connecting portions on one side face crossing those on the other side face, and each loop connecting portion extending in its plane from edge to edge of the stay, thereby producing a uniform passage extending from edge to edge of the stay for its entire length, each side of a loop overlapping the adjacent side of an adjoining loop.

5. A garment stay consisting of wire bent at intervals into a series of loops arranged alternately in two parallel rows forming the edges of the stay, with the loop connecting portions disposed alternately on opposite side faces of the stay in substantially parallel planes extending from edge to edge of the stay, the loop connecting portions on one side face crossing those on the other side face, and each loop connecting portion extending in its plane from edge to edge of the stay, thereby producing a uniform passage extending from edge to edge of the stay for its entire length, the loops of each row overlapping successively and each loop being free from an adjoining loop to permit movement of the loops over one another when the stay is flexed.

[Claims 6 to 10 not printed in the Gazette.]

1,064,948. AUTOMOBILE AND CAR FENDER. GEORGE L. WHEELER, St. Louis, Mo. Filed Sept. 16, 1912. Serial No. 720,570. (Cl. 21—90.)



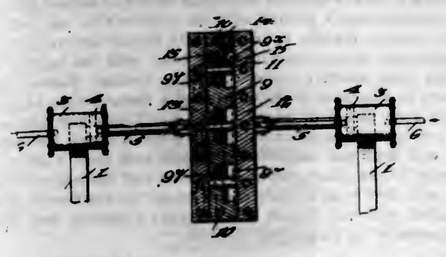
1. The improved impact cushion and fender for wheeled vehicles, comprising a suitable fender-supporting bracket provided with means whereby it is adapted to be attached to the vehicle frame, a suitable pad having a soft front impact face, means for temporarily suspending said pad from said bracket in front of the vehicle wheel, means whereby said pad will be automatically dropped to the ground and extended beneath and be run upon by the vehicle wheel and act as a brake to block said wheel whenever said pad accidentally strikes a pedestrian, and suitable means for connecting said pad to said bracket after said pad has been dropped and run upon by the vehicle wheel.

2. The improved impact cushion and fender, comprising a suitable bracket having a pad-supporting seat and arranged to be attached to the front of a vehicle frame, a rectangular body in the form of a large soft pad having a front impact vertical face of a height approximately equal to the diameter of the vehicle front wheels, means for temporarily suspending said pad on edge from said bracket seat in front of the vehicle wheel, suitable means for guiding said pad downwardly and rearwardly from said seat so that said pad will have its lower edge automatically dropped to the ground and extended beneath and be run upon by the vehicle wheel to block the same, and means to retain a practical connection of said pad to said bracket after said pad has been dropped and run upon by said wheel.

3. The improved impact cushion and fender, comprising suitable brackets to be attached to the vehicle frame and having vertical slots curved rearwardly at their lower ends and intersected near their upper ends by bar-seats opening rearwardly into said slots, a supporting-bar normally located in said bar-seats, and an impact body in the form of a large soft cushion temporarily suspended from said supporting-bar in front of the vehicle wheel, and constructed of sufficient size to be automatically dropped to the ground when accidentally brought into contact with a pedestrian and to extend beneath and be run upon by the vehicle wheel to block the same.

4. The combination with a vehicle of a series of impact cushions in the form of wide pads supported abreast of each other at the front of the vehicle with their flat sides in a vertical position and with their lower edges near the ground, in combination with suitable brackets, and means for temporarily suspending said pads so that the lower edge of said pads will be automatically dropped to the ground when any pad is accidentally brought into contact with a pedestrian, and said lower edge will thereupon extend beneath and be run upon by the vehicle wheel to block the same.

1,064,949. CASTING APPARATUS. EDWIN COOPER WILLS, Frederick, Md. Filed Feb. 4, 1913. Serial No. 746,102. (Cl. 22—153.)



1. A casting apparatus comprising a core supporting section, and removable sections carried by said core supporting section and arranged to be removed for permitting the withdrawal of the casting.

2. A casting apparatus comprising a core supporting section, and wedge-shaped removable sections carried by said core supporting section and arranged to be removed for permitting the withdrawal of the casting.

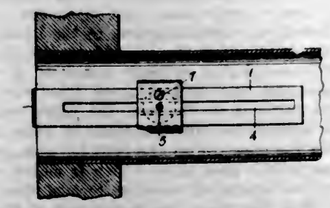
3. In a casting apparatus, a stationary mold section, means for supporting a core on said stationary mold section, a movable section adapted to abut said stationary mold section, and a wedge-shaped removable section carried by said stationary mold section.

4. In a casting apparatus, a stationary mold section, means for supporting a core on said mold section, a movable section adapted to abut said stationary mold section, a wedge-shaped removable section carried by said main section, and means for cooling said main section and said movable section.

5. In a casting apparatus, a main mold section, cores carried by said main mold section, a plurality of movable mold sections arranged to abut said mold section, means for moving said movable sections toward and away from said main mold section, and a plurality of wedge-shaped removable sections carried by said main mold section.

[Claim 6 not printed in the Gazette.]

1,064,950. STOVEPIPE-FASTENER. ROBERT WITMER, Vernal, Utah. Filed Dec. 16, 1912. Serial No. 737,066. (Cl. 126—318.)

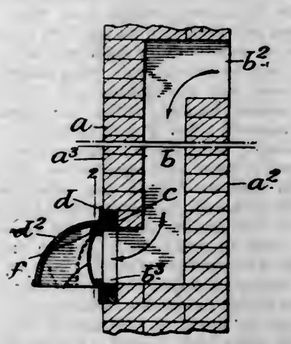


1. A stove pipe fastener comprising a flue engaging member, a clamping member having a sliding engagement with said flue engaging member, means to fasten said clamping member in its adjusted position on the flue engaging member, and a clamping screw adapted to be forced through a stove pipe and having a threaded engagement with said clamping member whereby the latter and the flue engaging member are clamped to the stove pipe in position for operatively engaging the flue member of the device with the inner side of a flue.

2. A stove pipe fastener comprising a flue engaging member having therein a longitudinal slot, and a flue engaging lug formed on one end of said flue engaging member, a clamping member comprising a clip having a sliding engagement with said flue engaging member and having therein a screw hole, means to adjustably fasten the clamping member to the flue engaging member, and a clamping screw adapted to be forced through one side of a stove pipe and to be engaged with the screw hole in said clamping member whereby the latter and the flue engaging member are fastened to the stove pipe in position for engaging the lug on the flue member with the inner side of the flue.

3. In a stove pipe fastener a flue engaging member comprising a bar having therein a longitudinal slot and having on one end a right angularly formed flue engaging lug, a clamping member comprising a plate having its ends bent inwardly to form guide lugs between which and said plate the bar of the flue member is slidably engaged, said plate having therein a centrally disposed screw hole, a set screw arranged in the plate and adapted to be screwed into engagement with the inner side of the bar of the flue member whereby the clamping member is adjustably secured to the latter and a clamping screw having a head provided with a flat pipe engaging surface and a pointed end whereby said screw may be forced through one side of a stove pipe and screwed into engagement with the screw hole in said clamping member thereby drawing the latter and the flue member into engagement with the inner side of the pipe in which position the lug on the end of the flue member is brought into engagement with the inner side of a flue, said screw having a greater length than said flue engaging lug whereby the latter may be disengaged from the flue without entirely disengaging the screw from said clamping member.

1,064,951. AUTOMATIC DAMPER-CONTROLLED OUTLET OR FLUE FOR DRYING-KILNS. HOSEA E. WOFFORD, New York, N. Y. Filed Feb. 29, 1912. Serial No. 680,607. (Cl. 98—27.)



The combination with a frame plate provided with an opening, an outwardly and downwardly extending shield secured to said plate and provided with end walls connecting said shield and plate, a pivot rod mounted in said end walls, a vertically disposed damper pivotally mounted on said rod for normally closing the opening in the frame plate, a shoulder on said rod engaging one end of said damper, and a securing nut on said rod outside of the end wall of said shield for clamping the damper in adjusted positions when desired.

1,064,952. HANGER FOR SPRING-CLAMPS. LOUISE S. ALLEN, Circleville, Ohio. Filed Jan. 6, 1912. Serial No. 669,833. (Cl. 24—73.)

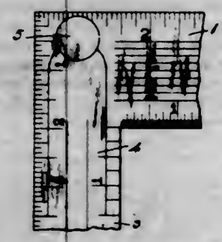
A hanger for clamping members comprising a strand of resilient material bent upon itself, the ends of said strand being disposed at right angles to the body portion, the strand being crossed to resiliently extend its offset ends within the article to be supported, there being

a loop pressed out from the strand with which the oppositely disposed portion of the strand contacts to maintain



the offset terminals in spaced relation in order that the hanger may be applied to the device to be supported.

1,064,953. SEPARABLE SQUARE. OSCAR R. ALTWEIN, Southington, Conn., assignor to Peck, Stow & Wilcox Company, Southington, Conn., a Corporation of Connecticut. Filed Aug. 14, 1911. Serial No. 643,836. (Cl. 73—116.)



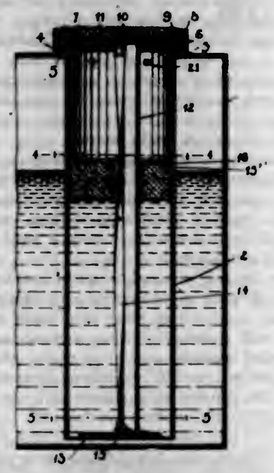
1. In a separable square, the combination of two blades adapted to detachably engage each other, one of said blades being provided with an aperture extending through said blade at substantially right angles to the plane of the same, said apertured blade being formed with a main recess on one face surrounding said aperture, and with smaller recesses located within such first-named main recess on opposite sides of such aperture, a locking member reciprocably mounted in such aperture and having a disk adapted to enter such main recess, said member being adapted to securely engage said other blade upon its engagement with said apertured blade, and helical springs disposed in such smaller recesses and adapted to contact said disk and to retain said locking member in such engagement with said other blade.

2. In a separable square the combination of two blades, one of said blades having an undercut groove on one side thereof and an aperture adjacent to one end of such groove, said other blade having a tongue adapted to enter said groove, such tongue having a projecting rib adjacent to the engaging end thereof; and a reciprocable locking member disposed in said aperture and including a disk adapted to engage such projecting rib on said second blade, a second disk normally flush with the other side of said first-named blade, a shank connecting said two disks, and resilient means adapted to retain said member in its normal position, whereby said two disks are flush respectively with the two sides of said first named blade.

3. In a separable square the combination of two blades, one of said blades having an undercut groove on one side thereof and an aperture adjacent to one end of such groove, said other blade having a tongue adapted to enter said groove, such tongue having a projecting rib adjacent to the engaging end thereof; and a reciprocable locking member disposed in said aperture and normally contained wholly within said first-named blade, said member comprising a disk adapted to engage such projecting rib on said other blade, a second disk normally flush with the other side of said first-named blade, a shank connecting said two disks, and a plurality of springs between said first named blade and said second disk adapted to retain said member in its normal position, whereby said two disks are flush respectively with the two sides of said first-named blade.

4. In a separable square, the combination of two blades, one of said blades having an undercut groove on one face, and a circular hole at the inner end of said groove, a projecting rib extending partially around said hole, and a second groove extending around said rib, said other blade having a tongue adapted to engage said first-named groove, a complementary groove and rib adjacent to one end of said tongue, thereby extending said second groove and rib completely around said circular hole, said rib having its inner wall slightly beveled; and a locking member disposed in this hole, and comprising a flanged disk adapted with such flange to encircle said complementary ribs and to engage said complementary grooves, a shank connected to said disk and extending through said hole, a disk attached to the other end of said shank and springs mounted in said first-named blade and adapted to resiliently press against said last named disk, thereby retaining said locking member in its normal position.

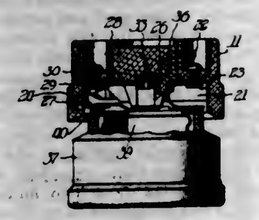
1,064,954. INDICATOR. ANDER PETER ANDERSEN, Akron, Ohio. Filed Oct. 7, 1912. Serial No. 724,473. (Cl. 73—82.)



1. An indicator for liquid containing tanks comprising a cylinder removably attached to said tank, an indicating dial secured to the upper portion of said cylinder and exposed to view, a guide post secured to the dial and depending therefrom, a plate secured to the lower end of said post, an outstanding lug secured to the plate and provided with an opening, a shaft composed of a strip of flexible material and twisted along its entire length and arranged adjacent to the post, the latter being substantially V-shaped in cross section, a float slidably mounted upon the post within the cylinder and prevented from rotating by the same upon which it moves, a guide plate having an elongated opening formed therein for engagement with the shaft, the lower end of the latter being rotatably mounted in the opening formed in the outstanding lug, and means forming a part of said plate for securing the same rigidly to the float.

2. In combination with a device of the character described, a plate having an elongated opening formed therein, a float having an opening formed therein, an extension forming an integral part of said plate with its free end normally out of contact with the plate, whereby the plate together with its extension is adapted to be forced into a correspondingly shaped opening in the float and the plate held therein by frictional engagement, the elongated opening in the plate being adapted to engage a shaft for rotating the same and with the extension of the plate embracing the shaft of the device, whereby the float is prevented from rotating when the shaft is operated.

1,064,955. CONNECTING DEVICE. ERNST G. K. ANDERSON, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Filed July 29, 1910. Serial No. 574,454. (Cl. 173—344.)



1. A separable device comprising a member having a bayonet slot, a second member having a bayonet projection adapted to enter said slot when the members are connected together and means, located in said slot in the path of said projection, for locking said projection against withdrawal from said slot, said locking means being releasable upon a pull being exerted upon one of the members.

2. A separable device comprising a member having a bayonet projection, a second member consisting of two relatively movable parts having a slot between them adapted to receive said bayonet projection, a spring interposed between the parts of said second-named member and arranged to hold the said parts together, and an extension projecting from said spring and closing said slot except when the parts are moved away from each other against the action of the spring.

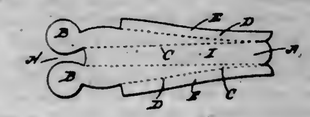
3. A separable device comprising a member having a bayonet projection, a second member consisting of two relatively movable parts having a slot between them adapted to receive said bayonet projection, a spring interposed between the parts of said second-named member and arranged to hold them together, and an extension projecting from said spring and closing the end of said slot except when the parts are moved away from each other against the action of the spring, said extension being provided with a foot adapted to be engaged by said bayonet projection when the members are connected together whereby said extension may be depressed to enable said projection to enter said slot.

4. An electric lamp socket consisting of a base having a bayonet projection thereon, and a lamp receiver comprising an insulating member, a lamp receiving shell mounted in said insulating member so as to be movable relatively thereto, said shell and insulating member being arranged to form a bayonet slot between them a spring interposed between said shell and said insulating member and having an extension projecting across the end of said bayonet slot and said extension having a foot adapted to be engaged by said bayonet projection when the lamp receiver is connected to said insulating base.

5. A separable device comprising a member having a projection; a second member consisting of two relatively movable parts having a slot between them adapted to receive the projection of said first named member; said first named member and said second named member being provided with corresponding parts arranged to engage each other when the parts of said second named member are together, and thereby prevent a turning movement of one of said members relatively to the other; and a spring interposed between the parts of said second named member and arranged to hold said parts together, except when a pull is exercised upon one of said parts.

[Claims 6 and 7 not printed in the Gazette.]

1,064,956. PROCESS FOR FORMING SHEET-METAL HANDLES. WILLIAM A. BERNARD, New Haven, Conn., assignor to the William Schollhorn Company, New Haven, Conn., a Corporation of Connecticut. Filed Mar. 20, 1907. Serial No. 363,439. (Cl. 113—51.)



The method of forming longitudinally curved sheet metal handles of a closed cross-section which decreases in area from one end of the handle to the other, which comprises cutting a sheet metal blank of suitable tapering form, bending such blank about its longitudinal axis into substantially U-shaped cross section and curving it longitudinally to give the necessary longitudinal curve to the handle, supporting the U-shaped blank thus formed in a die or anvil to prevent the spreading of the bent up sides, then engaging with a suitable tool the lateral edges of the blank and bending such edges inward without the use of a mandrel or core, on a curve diverging from the longitudinal curve of the die bottom substantially throughout that portion of the blank which is to be of closed cross-section and corresponding approximately to the curve defined by such edges immediately prior to the inward bending thereof, until such edges substantially meet each other and form a substantially continuous surface; substantially as described.

1,064,957. ELECTRICAL CONNECTING APPARATUS. GOTTHILF ANSGARIUS BETULANDER, Södertörns Villastad, Sweden. Filed Jan. 4, 1912. Serial No. 669,403. (Cl. 179—27.5.)



1. In an electrical connecting apparatus operated from a distance the combination with a movable connecting member (1) carrying one or more line contacts and two actuating members (13, 18) acting to move the line contacts in two corresponding directions, of a common driving device (6, 9) alternately operating the said actuating members and a controlling device (7, 41, 51, 34) adapted to put the actuating members alternately out of action, so that in moving the line contacts in one direction the actuating member corresponding to the other direction of movement is inactive.

2. In an electrical connecting apparatus operated from a distance the combination with a movable connecting member (1) carrying one or more line contacts and two actuating members (13, 18) acting to move the line contacts in two corresponding directions, of a common driving device (6, 9) alternately operating the said actuating members and a controlling device comprising a member (34) to be put in engagement alternately with the said actuating members (13, 18), thereby putting the same out of action, so that in moving the line contacts in one

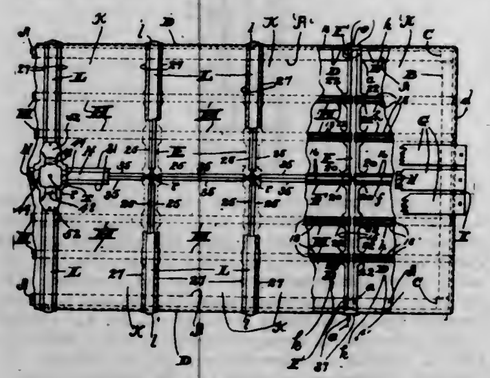
direction the actuating member corresponding to the other direction of movement is inactive.

3. In an electrical connecting apparatus operated from a distance the combination with a movable connecting member (1) carrying one or more line contacts and two actuating members (13, 18) acting to move the line contacts in two corresponding directions, of a common driving device (6, 9) alternately operating the said actuating members and a controlling device comprising a member (34) to be put in engagement alternately with members of transmission coupled with the said actuating members (13, 18) thereby putting the latter out of action so that in moving the line contacts in one direction the actuating member corresponding to the other direction of movement is inactive.

4. In an electrical connecting apparatus operated from a distance the combination with a movable connecting member (1) carrying one or more line contacts and two actuating members (13, 18) acting to move the line contacts in two corresponding directions, of a common driving device (6, 9) alternately operating the said actuating members (13, 18) and a movable controlling member (34) acting to put the actuating members alternately out of action and coöperating with the said connecting member (1) in such a manner, that it is put into its initial position by the connecting member (1) being removed to its position of rest.

5. In an electrical connecting apparatus operated from a distance the combination with a movable connecting member (1) carrying one or more line contacts and two actuating members (13, 18) acting to move the line contacts in two corresponding directions, of a common driving device (6, 9) alternately operating the said actuating members, a controlling device acting to put the actuating members (13, 18) alternately out of action, a member of transmission (24) interposed between the connecting member (1) and one of the actuating members (13, or 18) and a spring (28) connected to the said member of transmission (24) and tending to remove the line contacts to their initial position.

1,064,958. CAR-ROOF CONSTRUCTION. WILLIAM S. BIDLE and JOSEPH A. COSTELLO, Cleveland, Ohio, assignors to Cleveland Car Specialty Company, Cleveland, Ohio, a Corporation of West Virginia. Filed July 17, 1911. Serial No. 638,857. (Cl. 108—5.)



1. In car-roof construction, the two laterally spaced side plates; an end beam at each end of the roof, which beam connects the side plates together; metal carlines spaced longitudinally of the roof and comprising each a trough which bridges the space between and is supported from the side plates; several bars arranged longitudinally of the roof at several points between the side plates and spaced endwise, and metal roofing covering the said bars, the carlines, the end beams and the side plates and extending from end to end of the roof, each bar being provided with two end flanges formed on opposite ends respectively, each end bar extending between and being supported from the adjacent end beam and the adjacent carline and having its outer end flange arranged at the outer side of the said beam and having its inner end flange overlapping the inner surface of the adjacent side portion of the trough of the said carline, and each intermediate bar extending between and being supported from two adjacent carlines and having its end flanges overlapping the inner surfaces of the adjacent side portions of the troughs of the said carlines.

2. In car-roof construction, the two laterally spaced side plates; an end beam at each end of the roof, which beam extends between the side plates; metal carlines spaced longitudinally of the roof and bridging the space between and supported from the side plates; metal ridge-bars arranged centrally between the side plates and longitudinally of the roof and spaced endwise, and metal roofing covering the ridge-bars, the carlines, the end beams and the side plates and extending from end to end of the roof, each end ridge-bar extending between and being supported from the adjacent end beam and the adjacent carline, and each intermediate ridge-bar extending between and being supported from two adjacent carlines and said bars being free to expand endwise and free to be removed upwardly when uncovered.

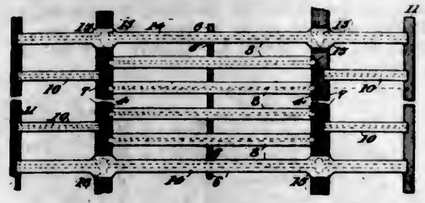
3. In car-roof construction, the two laterally spaced side plates; end beams connecting the side plates together at opposite ends respectively of the roof; metal carlines spaced longitudinally of the side plates and comprising each a trough which bridges the space between and is supported from the side plates; metal ridge-bars arranged centrally between and substantially parallel with the side plates and spaced endwise, and metal roofing covering the ridge-bars, the carlines, the end beams and the side plates and extending from end to end of the roof, each ridge-bar being provided at each end with a flange which extends transversely of the ridge-bar, each end ridge-bar extending between and being seated in the adjacent end beam and the adjacent carline and having its outer end flange arranged at the outer side of the said beam and having the inner end flange depending into the trough of the adjacent carline, and each intermediate ridge-bar extending between and being supported from two adjacent carlines and having its end flanges depending into the troughs of the said carlines.

4. In car-roof construction, the two laterally spaced side plates; an end beam at each end of the roof, which beam extends between the side plates; metal carlines spaced longitudinally of the roof and comprising each a trough which bridges the space between and is supported from the side plates; metal ridge-bars arranged centrally between the side plates and longitudinally of the roof and spaced endwise; metal purlin-bars arranged longitudinally of the roof between the ridge of the roof and the side plates and spaced endwise, and metal roofing covering the purlin-bars, the ridge-bars, the end beams, the side plates and the intervening spaces, each end ridge-bar and each end purlin-bar extending between and being supported from the adjacent end beam and the adjacent carline and having each a flange at the outer side of the said beam and another flange overlapping the inner surface of the adjacent side portion of the trough of the said carline, and each intermediate ridge-bar and each intermediate purlin-bar extending between and being supported from two adjacent carlines and having flanges overlapping the inner surfaces of the side portions of the troughs of the said carlines.

5. In car-roof construction the combination, with the two laterally spaced side plates; car-siding overlapping the outer sides of the side plates; an end beam at each end of the roof, which beam extends between the side plates, and metal carlines spaced longitudinally of the roof and comprising each a trough which bridges the space between and is supported from the side plates and placed in communication with the external atmosphere at the outer side of the aforesaid car-siding, of several metal bars arranged longitudinally of the roof at several points between the side plates and spaced endwise, which bars are each shaped in cross-section to form troughs extending longitudinally of the roof, and metal roofing covering the bars, the carlines, the end beams and the side plates and extending from end to end of the roof, each end bar extending between and being supported from the adjacent end beam and the adjacent carline and having its outer end flange arranged at the outer side of the said beam and having its inner end flange overlapping the inner surface of the adjacent side portion of the trough of the said carline, and each intermediate bar extending between and being supported from two adjacent carlines and having its end flanges overlapping the inner surfaces of the adjacent side portions of the troughs of the said carlines.

[Claims 6 to 19 not printed in the Gazette.]

1,064,959. MINING-SLUICE. PIERRE BOJERY, Weaverville, Cal. Filed Mar. 10, 1913. Serial No. 753,259. (Cl. 83—89.)

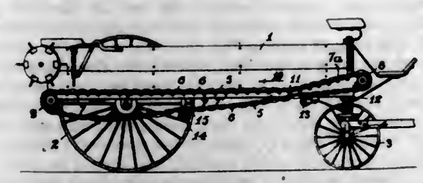


1. The combination with a sluice, of a series of spaced T-bars, vertical projections on the ends of said bars, bars formed with notches adapted to be placed over the projections of the T-bars to engage the latter and hold the T-bars against upward movement, and transverse locking bars engageable with the ends of the notched bars to hold the latter in place on the T-bars.

2. In a sluice, a series of spaced transverse T-bars, a pair of longitudinally parallel bars; means for connecting the longitudinal bars to the ends of the T-bars from above to hold the latter against movement, transverse locking bars adapted to be engaged with the ends of the longitudinal bars from above, and means for securing the ends of the locking bars to the sluice.

3. A grating for sluices, comprising transverse bars, projections on the ends of said bars, spacing members on the sides of the bars engageable with spacing members on adjacent bars, longitudinal bars having notches engageable with the projections on the transverse bars from above, said notches and projections shaped to prevent the transverse bars being lifted out of engagement with the longitudinal bars, transverse locking bars, projections thereon engageable with notches on the longitudinal bars from above, flanges on the transverse locking bars projecting over the ends of the longitudinal bars, and means for securing the transverse locking bars to a sluice.

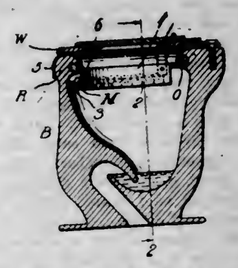
1,064,960. MANURE-SPREADER. THEOPHILUS BROWN, Worcester, Mass., assignor to Richardson Manufacturing Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 6, 1909. Serial No. 526,623. (Cl. 111—40.)



1. In a manure spreader, a body, a movable bottom, a pair of parallel rows of rolls extending lengthwise the body, with the forward ends of said rows upwardly extended at an oblique angle to the remaining portion of said rows and forming a support for said movable bottom.

2. In a manure spreader, a body having a transverse cross bar at its forward end, a movable bottom for said body, sprocket wheels for supporting said movable bottom at the opposite ends of the body, with the foremost sprocket wheel elevated to carry said movable bottom above said forward cross bar, and supporting means for said movable bottom between said sprocket wheels, having an oblique angle near the foremost sprocket wheel, whereby the foreward part of said movable bottom is elevated.

1,064,961. DISINFECTANT-HOLDER. FRANK WALTER CARMELICH, Mobile, Ala. Filed Aug. 14, 1912. Serial No. 715,107. (Cl. 4—30.)



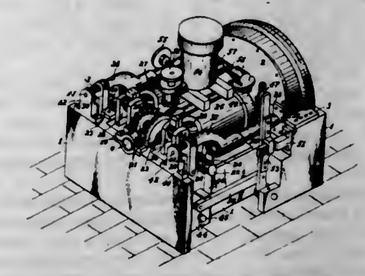
1. The herein described disinfectant holder for water closet bowls and the like, comprising a channeled member horse-shoe shaped in plan view underlying the front and the two sides of the rim of the bowl and having the rear extremities of its channel closed, and supports rising from said member and adapted to pass over the rim for suspending the channeled member in position.

2. The herein described disinfectant holder for water closet bowls and the like, comprising a sheet metal strip bent into horse-shoe shape and slitted transversely along one side so as to produce a series of tongues, the latter being upbent to form a channel surrounding the member and the endmost tongues being upbent to a greater degree to close the ends of the channel; combined with means for suspending said member beneath the rim of the bowl as described.

3. The herein described disinfectant holder for water closet bowls and the like comprising a sheet metal strip bent into horse-shoe shape and slitted transversely along one side so as to produce a series of tongues, the latter being upbent to form a channel surrounding the member; combined with means for suspending said member beneath the rim of the bowl, as described.

4. The herein described disinfectant holder for water closet bowls and the like, the same comprising a channeled member of horse-shoe shape in plan view, means for closing the extremities of the channel therein, and supports for said member consisting each of a pliable hook whose shank is pivoted to the inner wall of said channel so that it may be turned down into the same or stood upright, and whose bill is adapted when the hook is stood upright to be passed over the rim of the bowl.

1,064,962. INTERNAL-COMBUSTION TURBINE-ENGINE. WILLIAM CARL COOPER, Perry, Mich. Filed Apr. 13, 1911. Serial No. 620,733. (Cl. 123—9.)



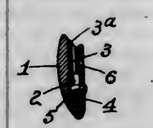
1. A turbine engine, comprising a frame, a rotor casing mounted thereon and provided with oppositely ar-

ranged expansion and exhaust ports, a rotor mounted in said casing and provided with blades diagonally disposed between said ports, a rotor shaft, crank shafts geared to said rotor shaft so as to revolve in opposite directions, combustion chambers communicating with said expansion ports, compression cylinders provided with pistons connected to said crank shafts, valved conduit pipes leading from said compression cylinders to said combustion chambers, plunger valves in said combustion chambers, means for operating said valves in coöperative relation to said pistons, ignition mechanism communicating with said combustion chambers, and timer mechanism operatively connected with said crank shafts.

2. A turbine engine, comprising a rotor casing provided with oppositely arranged expansion and exhaust ports at its front and rear, respectively, a rotor mounted therein and having blades extending between said ports, a rotor shaft provided with a pinion gear, crank shafts provided with bevel gears meshing with said pinion gear, oppositely arranged combustion chambers communicating with said expansion ports, compression cylinders provided with pistons connected to said crank shafts, valved conduit pipes leading from said compression cylinders to said combustion chambers, plunger valves in said combustion chambers adapted to open and close said expansion ports, and means for operating said valves from said crank shafts in coöperative relation to said pistons.

3. A turbine engine, comprising a rotor casing including front and rear disk plates provided with oppositely arranged expansion and exhaust ports, respectively, a rotor mounted therein and having blades extending at an angle between said ports, a pair of crank shafts geared to said rotor, combustion chambers communicating with said expansion ports, a pair of compression cylinders provided with pistons connected to said crank shafts and communicating with said compression chambers by means of valved conduit pipes, and plunger valves in said combustion chambers operatively connected to said crank shafts and adapted to open and close said expansion ports to coöperative relation to said pistons.

1,064,963. INTERCHANGEABLE FLAT-BACK FRONT TOOTH. HARRY C. DANCE, York, Pa. Filed Nov. 19, 1912. Serial No. 732,325. (Cl. 32—9.)



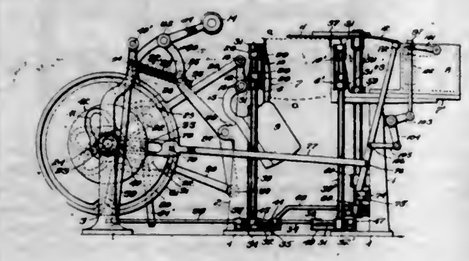
1. In combination a flat back front tooth having a longitudinal bore extending from near the cutting edge through to the ridge lap, and substantially parallel with the flat back face, and an enlarged recess lying above the lower end of the bore extending from the back face and communicating with the bore, a backing plate and a pin of substantially right angular form, the down-turned end of which is substantially parallel with the face of the backing plate, said pin resting at its end in the bottom of the bore and bearing with its shank on the lower edge of the recess, a portion of the recess and of the bore lying above the shank of the pin when said pin is inserted, substantially as described.

2. A flat back front tooth having a bore extending parallel with the flat back and having a recess communicating therewith and opening at the back at a point above the lower end of the bore, the width of said back opening being greater than the diameter of the bore, substantially as described.

3. A flat back front tooth having a bore extending parallel with the flat back and having a recess communicating therewith and opening at the back at a point above the lower end of the bore, the said bore extending to and opening at the ridge lap, the said recess terminating at a point below the ridge lap leaving a portion of the porcelain bridging the bore, the length of said recess vertically being greater than the distance from the bottom of the bore to the lower edge of the recess, substantially as described.

4. In combination a flat back front tooth having a longitudinal bore with a recess communicating therewith at an intermediate point of said bore, leaving bridging portions of the porcelain above and below the recess, said bore extending parallel with the back flat face and opening through the ridge lap, and a backing plate having a right angular pin to pass through said intermediate recess and enter said bore, said pin having its depending portion parallel substantially with the front face of the backing plate, substantially as described.

1,064,964. BREAD-WRAPPING MACHINE. THOMAS B. DOOLEY and HENRI A. SÉVIGNÉ, Boston, Mass.; said Dooley assignor to B. A. Ball, Boston, Mass. Filed Sept. 11, 1908. Serial No. 452,651. (Cl. 93—2.)



1. A machine for wrapping articles, comprising a receptacle having two confronting sides but otherwise open, a folder at each end thereof movable in a vertical plane so aa to cover the end of the receptacle, pairs of folders at each end of the receptacle movable against the ends of the receptacle, a folder at each end of the receptacle at its top movable in a horizontal plane over the top of the receptacle at its ends, a folder movable above the top of the receptacle from one side, and a folder movable above the top of the receptacle from the other side.

2. A machine for wrapping articles, comprising a receptacle having confronting side walls but open at its bottom and ends, swinging folders, one at each end of the receptacle, said folders being arranged to swing edgewise in vertical planes so as to fold portions of the wrapper into the ends of the receptacle, pairs of swinging folders at the ends of the receptacle, each pair movable successively horizontally to fold portions of the wrapper into the ends of the receptacle after the movement of the vertically movable folders, a swinging folder at each end of the receptacle movable simultaneously over the top of the receptacle adjacent to its ends after the movement of the horizontally movable end folders, folders successively movable over the top of the receptacle to finally fold the wrapper, and mechanism which successively operates said several folders in timed relation to each other.

3. A bread wrapping machine having means for folding a rectangular wrapper across the top of the loaf and against the two sides thereof, and a series of successively operating folders for bending end portions of the wrapper against the ends of the loaf, leaving the side edges of the wrapper un-folded, then turning doubled portions of the wrapper toward each other and overlapping them against the ends of the loaf, and then overlapping the side edges of the wrapper and the edges of the previously folded end portions upon each other against the bottom of the loaf.

4. A bread wrapping machine having means for folding a rectangular wrapper across the top of the loaf and against the two sides thereof, and a series of successively operating folders for bending end portions of the wrapper against the ends of the loaf, leaving the side edges of the wrapper un-folded, then turning doubled portions of the wrapper toward each other and overlapping them against the ends of the loaf, then tucking the last mentioned portions toward each other across the bottom of the loaf, and then successively folding the side edges of the wrapper and overlapping them against the bottom of the loaf and upon the previously in-turned end folds.

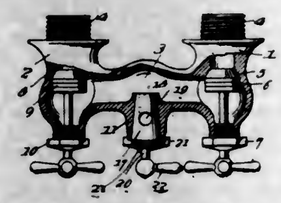
5. A bread wrapping machine having means for folding a rectangular wrapper across the top of the loaf and against the two sides thereof, and a series of successively operating folders for bending end portions of the wrapper against the ends of the loaf, leaving the side edges of the wrapper un-folded, then turning doubled portions of the wrapper toward each other and overlapping them against the ends of the loaf, then tucking the last mentioned portions toward each other across the bottom of the loaf, and then successively folding the side edges of the wrapper and overlapping them against the bottom of the loaf and upon the previously in-turned end folds, means being provided for applying an adhesive to that portion of the wrapper which constitutes the final fold.

1,064,965. COMBUSTION-NOZZLE. JOHN L. FUNK, San Bernardino, Cal. Filed Apr. 16, 1913. Serial No. 761,646. (Cl. 158—78.)



In a heating system, a combined mixer and burner consisting of an elbow having a slot therein, means for supplying air to one end of the elbow, and means for supplying fuel to the other end thereof, the said slot in the elbow having one of its walls standing at an angle to the axis of the air inlet end of the elbow.

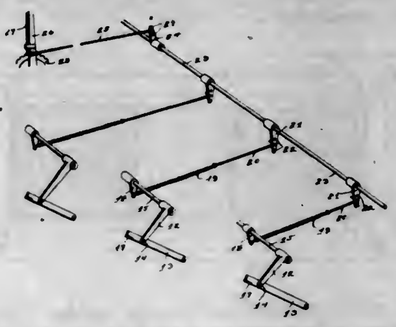
1,064,966. COMBINED BATH AND SHOWER COCK. CHARLES L. GLASS, Brooklyn, N. Y. Filed May 11, 1912. Serial No. 696,648. (Cl. 137—26.)



A combined bath and shower cock apparatus, comprising cold and hot water valve casings having valves arranged therein to open and close the same, a mixing chamber connecting said casings and having an arched portion, a discharge valve casing connected with said mixing chamber and having a tapered wall, a valve arranged in said discharge valve casing and having therein a discharge port, the water receiving end of the valve being located opposite the arched portion of the mixing chamber and terminating flush with the end of the tapered wall of the said discharge casing, and means to limit the movement of said valve.

1,064,967. PLOW-ADJUSTING DEVICE FOR GANG-PLOWS. LESLIE S. HACKNEY, St. Paul, Minn. Original application filed Aug. 14, 1911, Serial No. 643,922. Divided and this application filed May 31, 1912. Serial No. 700,657. (Cl. 97—30.)

1. In a device of the class described, the combination of a frame, plow beams attached to said frame, plow bodies on said beams, folding supports between the frame and each plow beam, springs for operating said supports to yieldingly hold the plows in their operative positions and means for regulating the tension of said springs severally and collectively.



2. In a device of the class described, the combination of a frame, plow beams attached to said frame, plow bodies on said beams, folding supports between the frame and each plow beam, each support comprising an upper and lower link and a spring between one of said links and said frame for extending the support to yieldingly hold the plows in their operative positions and means for simultaneously adjusting the tension of said springs.

3. In a device of the class described, the combination of a frame, plow beams attached to said frame, a shaft revoluble on said frame, arms on said shaft, means for rotating the shaft and locking the same in different positions, a support between the frame and each plow beam, said support comprising an upper link, a shaft revoluble on the frame and forming a mounting for said upper link, a lower link pivotally attached at one end to a plow beam and pivotally connected to the free end of said upper link, an arm on said shaft, and a spring attached at one end to said arm and its other end to one of said first mentioned arms.

4. In a device of the class described, the combination of a frame, plow beams attached to the frame and furnished with plow bodies, a shaft revoluble on the frame, perforated arms on said shaft, means for rotating the shaft and locking the same in different positions, a support between the frame and each plow beam for yieldingly holding the plows in operative position, each of said supports comprising an upper link, a shaft revoluble on the frame and forming a mounting for said upper link, a lower link pivotally attached at one end to a plow beam and pivotally connected to the free end of said upper link, an arm on said shaft, a spring attached at one end to said arm, a rod connected at one end to said spring and attached at its other end in one of the perforations in one of said first mentioned arms.

5. In a device of the class described, the combination of a frame, plow beams pivotally attached to the frame and furnished with plow bodies, a shaft revoluble on the frame, arms on said shaft, a hand lever connected with one of said arms for rotating said shaft, a folding support between the frame and each plow beam, said support comprising an upper link, a shaft revoluble on the frame and forming a mounting for said upper link, a lower link pivotally attached at one end to a plow beam and pivotally connected to the free end of said upper link, an arm on said shaft, a spring attached at one end to said arm and at the other end to one of said first mentioned arms.

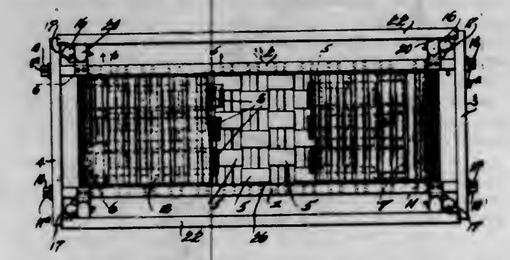
[Claim 6 not printed in the Gazette.]

1,064,968. TRAINING-MACHINE. CLAUDE LAURAINE HAGEN, New York, N. Y. Filed Oct. 20, 1911. Serial No. 655,827. (Cl. 46—69.)

1. The herein described training machine, comprising a frame, rollers therein, a treadmill belt passing over said rollers, a toe gripped belt superposed and inclosing the rollers and treadmill belt.

2. The herein described training machine, comprising a frame, rollers therein, a tread mill belt passing over said rollers, a toe gripped belt superposed and inclosing

the rollers and treadmill belt, the treadmill belt passing around a roller intermediate of the ends of the apparatus, and take-up means for adjusting the tension on each belt independently of the other.



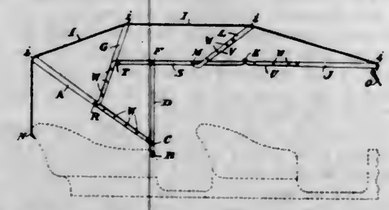
3. The herein described training machine, comprising a frame, rollers therein, a treadmill belt passing over said rollers, a toe gripped belt superposed and inclosing the rollers and tread mill belt, the treadmill belt passing around a roller intermediate of the ends of the apparatus, and take-up means for adjusting the tension on each belt independently of the other, and take-up mechanism consisting of guide blocks, a screw take-up means, a pin sliding in the head thereof, and a staple adapted to be interlocked by said pin.

4. The herein described training apparatus consisting of a frame, a treadmill apparatus, oblique posts extending upwardly and outwardly from said frame, adjustable side rails carried thereby adapted to be secured in adjustable positions on said oblique posts.

5. The herein described training apparatus consisting of a frame, a treadmill apparatus, and oblique posts extending upwardly and outwardly from said frame, adjustable posts and side rails carried thereby adapted to be secured in adjustable positions on said oblique posts, the bottom ends of said oblique posts having a removable bolt and a pivot bolt, whereby the oblique posts may be turned inwardly one on the other.

[Claims 6 to 8 not printed in the Gazette.]

1,064,969. HOOD FOR VEHICLES. AUSTIN HENNESSY, London, England. Filed Apr. 24, 1912. Serial No. 692,913. (Cl. 21—62.)

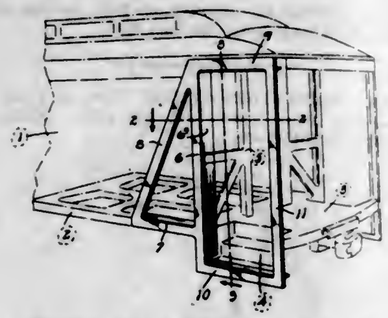


1. In a hood for motor vehicles, the combination of a rear hoop-stick, a pair of vertical rods pivoted thereto, members substantially horizontal pivoted to the upper ends of said vertical rods, members hinged to said horizontal members and pivoted to the rear-hoop-stick at points intermediate of its length, and a hoop-stick pivoted at its ends to the ends of said horizontal members.

2. In a hood for motor vehicles the combination of a rear hoop-stick, a pair of vertical rods pivoted thereto, members substantially horizontal pivoted to the upper ends of the rods at points intermediate along their length, a second hoop-stick connected to the rear ends of said horizontal members and pivoted to intermediate points along the rear hoop-stick, and a front hoop-stick having its ends pivoted to the front ends of the horizontal members.

3. In a hood for motor vehicles the combination of a rear hoop-stick, a pair of vertical rods pivoted thereto, a pair of members substantially horizontal pivoted at intermediate points to the upper ends of said vertical rods, a-hoop-stick pivoted at its ends to the rear hoop-stick and pivoted also at intermediate points to the horizontal rods, a front hoop-stick pivoted at its ends to the ends of the horizontal rods, and an auxiliary hoop stick pivoted at its ends to points intermediate along the horizontal rods.

1,064,970. COMBINED CAR-BODY CORNER-POST AND DOOR-FRAME. BOONE V. H. JOHNSON, St. Louis, Mo., assignor to Double Body Bolster Company, St. Louis, Mo., a Corporation of New Jersey. Original application filed Apr. 29, 1911, Serial No. 624,166. Divided and this application filed Apr. 11, 1912. Serial No. 689,959. (Cl. 105—201.)



1. A combined car body corner post and door frame comprising a vertically disposed flanged member adapted to be positioned behind the car end frame at the corner of the car body, a horizontally disposed flanged member extending inwardly from the lower portion of the vertically disposed member, which horizontally disposed member is adapted to engage the underframe of the car body, horizontally disposed rails integral with the ends of the vertically disposed member, and a platform side door post connecting the outer ends of the last mentioned horizontally disposed members.

2. A combined car body corner post and door frame comprising a vertically disposed flanged member adapted to be positioned behind the car end frame at the corner of the car body, a horizontally disposed flanged member extending inwardly from the lower portion of the vertically disposed member, which horizontally disposed member is adapted to engage the underframe of the car body, a brace between the vertically disposed and horizontally disposed members, horizontally disposed rails integral with the ends of the vertically disposed member, and a platform side door post connecting the outer ends of the last mentioned horizontally disposed members.

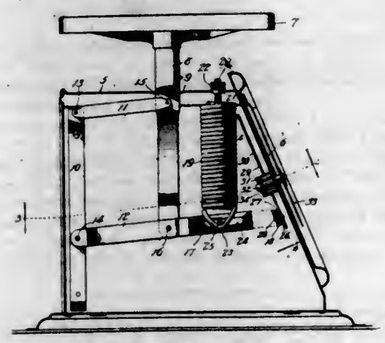
3. A combined car body door post and door frame comprising an upright member adapted to be positioned behind the end frame at the corner of the car body, an inwardly projecting flange integral with said member, which flange is adapted to engage the end frame of the car body, a horizontally disposed rail integral with the lower portion of the vertically disposed member for engaging the underframe of the car body top and bottom rails integral with the ends of the vertically disposed member, and a vertically disposed member integral with the outer ends of the horizontally disposed top and bottom members.

4. A combined car body door post and door frame comprising an upright member adapted to engage the end framing at the corner of a car body, an inwardly projecting flange integral with said member, which flange is adapted to be positioned behind the end frame of the car body, a horizontally disposed rail integral with the lower portion of the vertically disposed member for engaging the underframe of the car body, an integral brace disposed between the vertical and horizontal members, top and bottom rails integral with the ends of the vertically disposed members, and a vertically disposed member integral with the outer ends of the horizontally disposed top and bottom members.

5. The combination with a car body and its end frame, of a reinforcing corner post applied to the corner of the car body, a portion of which post is positined behind the car body end frame, a horizontally disposed flanged member at the lower end of said reinforcing corner post, top and bottom rails integral with the corner post, and a platform side door post integral with the top and bottom rails.

[Claims 6 to 14 not printed in the Gazette.]

1,064,971. WEIGHING-SCALE. BURTON M. KENT, Chicago, Ill., assignor to American Cutlery Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 4, 1911. Serial No. 642,345. (Cl. 73—46.)



1. In a weighing-scale, the combination of a casing provided with a dial, a support for the article to be weighed formed at its lower end with spaced members, pivotally-supported lever-mechanism in said casing formed of a single upper link pivotally connected with said casing and with said support, and a lower link formed at its rear portion with spaced members, said lower link being pivoted at its spaced members to said casing and pivotally connected at its spaced members with the spaced members of said support, a coiled spring connected at its upper end with said casing, and at its lower end with said lower link between said support and said dial, and means pivotally connected with the forward end of said lower link, for moving the indicator for indicating on said dial the weight of the article on said support.

2. In a weighing scale, the combination of a casing provided with a dial, a support for the article to be weighed formed at its lower end with spaced members, pivotally-supported lever-mechanism in said casing formed of a single upper link pivotally connected with said casing and with said support medially of the said spaced members of the support, and a lower link formed of a frame-section at its rear end, affording spaced members, and a bar-section at its forward end extending centrally of said frame-section, said lower link being pivoted at its rear end to said casing at its spaced members and pivotally connected at its spaced members intermediate its ends with the spaced member of said support, a coiled spring connected at its upper end with said casing and at its lower end with the bar-section of said lower link medially of the spaced members of the latter and between said support and said dial, and means operatively connected with the forward end of said bar-section, for indicating on said dial the weight of the article on said support.

3. In a weighing-scale, the combination of a casing provided with a dial, a support for the article to be weighed, lever-mechanism pivoted on said casing and having pivotal connection with said support, means for yieldingly holding said support and lever-mechanism in raised position, a shaft, a pinion and pointer on said shaft, a rack pivoted loosely to said lever-mechanism to permit said rack to tilt on said lever-mechanism forwardly, backwardly and sidewise and engaging with said pinion, and means tending to rock said rack on its pivot toward said pinion to hold the rack in engagement with said pinion throughout the movements of said rack, for the purpose set forth.

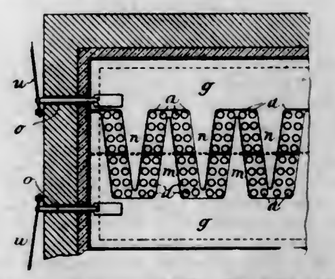
4. In a spring-scale, the combination of a supporting member, lever-mechanism pivoted on said member, a support for the articles to be weighed pivoted to said lever-mechanism, means for yieldingly holding said lever-mechanism and support in raised position, a dial, a shaft, a pinion and pointer on said shaft, a rack pivoted loosely to said lever-mechanism to permit said rack to tilt on said lever mechanism forwardly; backwardly and sidewise and meshing with said pinion and supported to normally tilt rearwardly, a guide-member against which said rack bears in its movements, said rack being weighted at the side thereof relative to its pivot, opposite to that carrying the teeth of the rack to cause said rack to be held at all times in engagement with the teeth on the pinion.

1,064,972. MAGNET TOY. WILLIAM JAMES KERR, Smethport, Pa. Filed Mar. 25, 1909. Serial No. 485,765. (Cl. 46—49.)



A magnetic toy comprising the combination of a magnet, a figure of magnetic metal having a plurality of radiating arms, and a spindle pointed at each end and composed of magnetic metal interposed between the magnet and the figure and provided with radiating vanes, substantially as set forth.

1,064,973. WATER-TUBE BOILER. PAUL KESTNER, Lille, France. Filed Sept. 23, 1909. Serial No. 519,146. (Cl. 122—345.)



1. A water tube boiler having its tubes arranged to form in cross section approximately the letter W, and baffles projecting alternately from opposite sides of the tubes and fitting into the spaces formed by said tube arrangement, baffle portions fitting into the spaces on one side of the tubes alternating with and extending at their apices beyond the apices of similar baffle portions fitting into the spaces on the other side of the tubes.

2. A water tube boiler having its tubes arranged to form in cross section approximately the letter W, and movable baffles projecting alternately from opposite sides of and fitting into the spaces formed by said arrangement of tubes, baffle portions fitting into the spaces on one side of the tubes alternating with and extending at their apices beyond the apices of similar baffle portions fitting into the spaces on the other side of the tubes.

3. A water tube boiler having its tubes arranged in a flue to form in sectional plan view approximately the

letter W, movable baffles to fit into the two series of spaces formed by the said arrangement of tubes and projecting alternately from opposite sides of the flue into said spaces, the baffle portions in one series of spaces alternating with and extending at their apices beyond the apices of the baffle portions in the other series of spaces, and means operable from a point outside the flue to move said baffles.

4. A water tube boiler comprising a combined steam and water reservoir, steam generating tubes suspended in a flue in a zig-zag row from and opening into said reservoir, baffles which project alternately from opposite sides of the flue into the two series of oppositely disposed and alternating V-shaped spaces formed by the zig-zag arrangement of the tubes, and a water collecting chamber suspended from said tubes and communicating therethrough with said reservoir, the apices of the baffles in the spaces of one series extending beyond the apices of and alternating with the baffles in the spaces of the other series.

5. A water tube boiler comprising two sets of straight steam generating tubes suspended in a flue in zig-zag rows, a vertical partition disposed between said sets of tubes and dividing said flue, means affording communication between the upper ends of said tubes, a water collecting chamber suspended from each set of tubes, and horizontal baffles projecting alternately from opposite sides of the flue into the two series of oppositely disposed and alternating V-shaped spaces formed by the zig-zag arrangement of the tubes, the extremities of a baffle entering the spaces of one series extending beyond and alternating with the extremities of the baffle entering the spaces of the other series.

[Claims 6 to 12 not printed in the Gazette.]

1,064,974. DOUBLE CAGE FOR ROLLER-BEARINGS. CHARLES S. LOCKWOOD, Newark, N. J., assignor to Hyatt Roller Bearing Company, Harrison, N. J., a Corporation of New Jersey. Filed Jan. 2, 1912. Serial No. 668,832. (Cl. 64—62.)

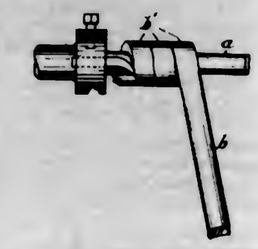


In a roller bearing, the combination, with a hub having conical seats with their bases adjacent, of two sets of rolls fitted to the seat, and a cage for guiding the two sets of rolls consisting of two similar dish-shaped sections each having the ring *f* fitted to turn upon one end of the hub, prongs *h* inclined outwardly from the rings toward one another forming partitions between the said rolls, lugs bent outwardly upon the adjacent free ends of the prongs and provided with rivet-holes, and rivets inserted through the said holes for securing the sections together after the sections are fitted over the rolls upon the hub, as and for the purpose set forth.

1,064,975. PROCESS OF MAKING HELICAL ROLLS. CHARLES S. LOCKWOOD, Newark, N. J., assignor to Hyatt Roller Bearing Company, Harrison, N. J., a Corporation of New Jersey. Filed Sept. 25, 1912. Serial No. 722,186. (Cl. 153—64.)

1. The process of forming helical rolls, which consists in applying a strip of arc-shaped section progressively to a mandrel with its concave side resting thereon, winding the strip upon the mandrel and drawing the inner side of the strip into conformity with the mandrel as it is bent thereon.

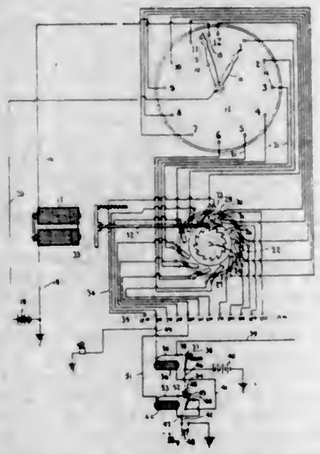
2. The process of forming helical rolls, which consists in applying a strip of arc-shaped section progressively to a mandrel with its concave side resting thereon, winding the strip upon the mandrel and pressing and drawing the strip into conformity with the cylindrical surface of the mandrel.



3. The process of forming cylindrical helical rolls, which consists in winding a strip of arc-shaped section upon a cylindrical mandrel with its concave side next the mandrel, and the convexity of the strip being proportioned to automatically bring the outer corners of the strip even with the middle portion when wound.

4. The process of making helical rolls which consists in forming a strip of arc-shaped section with flaring edges B^3, applying the strip to a mandrel with its concave side resting thereon, and winding the strip upon the mandrel and pressing and drawing the strip into conformity with the cylindrical surface of the mandrel.

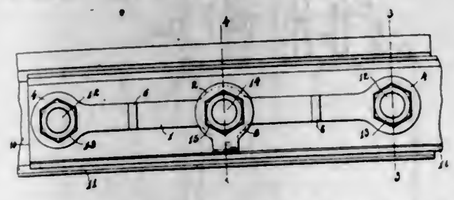
1,064,976. ELECTRIC SIGNALING SYSTEM. ERIC R. LUNDIUS, Seattle, Wash. Filed Mar. 9, 1911. Serial No. 613,299. (Cl. 161—2.)



1. In an electric signaling system, a clock having a circular series of spring pressed dial plugs, a supplemental spring pressed dial plug inserted between two of the first named plugs, an intermittently revoluble circuit closing cylinder, signal actuating conductor wires leading from each of the first named plugs, said wires being intercepted by said cylinder, a conductor wire leading from said supplemental plug to the minute hand and including in its circuit a source of electricity and an electromagnet, and means operated by said electromagnet upon contact of said minute hand with said supplemental plug for actuating said cylinder one step.

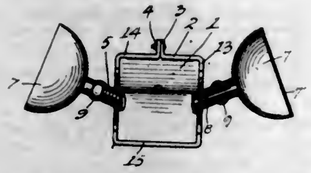
2. In an electric signaling system, a clock having a circular series of spring pressed dial plugs, a supplemental spring pressed dial plug inserted between two of the first named plugs, an intermittently revoluble circuit closing cylinder, signal actuating conductor wires leading from each of the first named plugs, said wires being intercepted by said cylinder, a conductor wire leading from said supplemental plug to the minute hand and including in its circuit a source of electricity and an electromagnet, means operated by said electromagnet upon contact of said minute hand with said supplemental plug for actuating said cylinder one step, and means selectively engageable with said signal actuating conductor wires for maintaining a signal a predetermined length of time.

1,064,977. NUT-LOCKING DEVICE. VICTORINO MARTINEZ, Habana, Cuba. Filed Feb. 14, 1912. Serial No. 677,515. (Cl. 151—54.)



A nut locking device consisting of a straight and narrow plate provided with an extension at its central portion and an extension at each end thereof, these last mentioned extensions being in the form of washers, and the central extension provided with a circular hole adapted for the reception of a bolt, and each end extension having an angular aperture adapted for the incasing of a nut, the central extension being also provided with a lug adapted to be bent upon itself which terminates in a washer-like extension provided with a hole of an angular formation adapted to receive the nut which is to be screwed on the bolt passing through the circular hole of said central extension, and said plate having undulating rigid portions at points intermediate between central and end portions of same to produce a predetermined lengthening or shortening of said plate.

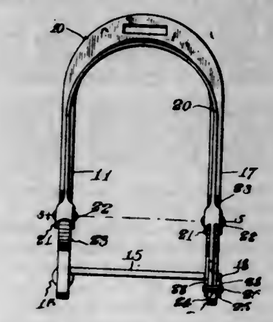
1,064,978. JOURNAL-BOX COOLER. JEFFERSON D. METCALF, Gloster, Miss., assignor of one-half to William L. Jackson, Gloster, Miss. Filed Feb. 24, 1913. Serial No. 750,397. (Cl. 64—28.)



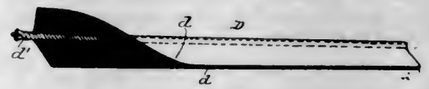
In combination with a journal box, a cooling device, comprising, a frame comprising two substantially L-shaped members and one substantially U-shaped member having sleeves extending therefrom, flanges extending from the sides of said sleeves and adapted to be clamped firmly together, rings intermediate the ends of said sleeves and communicating with the interior thereof, threads internally of said rings, funnels having externally threaded stems adapted to coöperate with the aforesaid internally threaded rings whereby said funnels may be adjusted with relation to the journal box, and means for clamping the whole firmly to the sides of a journal box.

1,064,979. SAFETY-STIRRUP. CLYDE S. MORAN, Irvine, Alberta, Canada. Filed June 27, 1912. Serial No. 706,303. (Cl. 54—49.)

In a safety stirrup, the combination with an outer bow having its leg portions increased in width, one leg portion being provided with a bottom recess and an adjacent opening forming a cross strip, a foot piece having an extension coiled around said strip for pivoting the foot piece thereto, the bottom edge of the opposite leg forming a recess and the free extremity having an extension engageable in said recess, catches pivoted upon opposite sides of the first named leg member and engageable across the last named recess to hold the foot piece in a raised position and an inner bow pivoted to the leg portions of the first named bow and constructed to engage the free extremities of the catches and hold the latter in raised position and automatically release the same to permit the foot piece to swing to an open position by pressure against the inner bow.

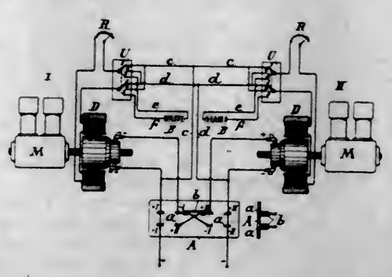


1,064,980. WELT-STRIP. JAMES N. MOULTON, Haverhill, Mass., assignor to Massachusetts Chemical Company, Walpole, Mass., a Corporation of Maine. Filed June 27, 1908, Serial No. 440,6[illegible]. Renewed Oct. 15, 1912. Serial No. 725,931. (Cl. 36—78.)



As a new article of manufacture, a welt of indeterminate length, consisting of an elongated narrow strip composed of an outer layer of rubber, an intermediate layer of fabric and an inner layer of tacky adhesive material, said strip being folded along a longitudinal line to bring the adhesive layers so as to adhere to each other, and a non-elastic cord placed between the said folds at the folded edge and confined by the adherence of the tacky adhesive layer.

1,064,981. SYSTEM AND METHOD OF PRODUCING, BY MEANS OF COMBUSTION-ENGINES, ELECTRIC CURRENT. WILHELM ADOLF THEODOR MÜLLER, Berlin-Steglitz, Germany. Filed Mar. 29, 1909. Serial No. 486,407. (Cl. 171—315.)



1. A method of operating a current producing system or installation comprising a plurality of units each consisting of a dynamo and an internal combustion engine coupled therewith, which consists in first starting one unit, exciting the fields of the successive dynamos to cause them to act as motors and thereby start their respective engines, and then reversing the field excitations of said units when a predetermined speed is attained, substantially as described.

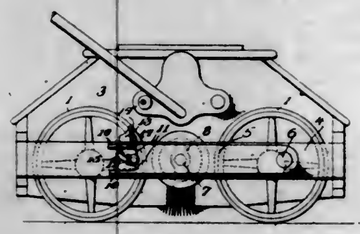
2. A method of operating a current generating installation comprising a plurality of units each consisting of a

dynamo and a prime mover coupled therewith, which consists in first starting one unit, then exciting the field of another unit in such a direction as to cause the dynamo of said unit to act as a motor and start its engine, reversing the field excitation of said unit after starting, to supply current to the line, and regulating the field excitations of said units in accordance with the amount of energy to be supplied by each unit, substantially as described.

3. In a traveling dynamo system of electric traction, a current generating installation for the train comprising a plurality of generating units each of which consists of a dynamo and a prime mover coupled thereto, means to start one of the prime movers by temporarily using the dynamo of such prime mover as a motor by exciting its field from a suitable source, means to connect the dynamos in series or in parallel, means to reverse the field excitations of the dynamos, and means to regulate the field of each dynamo to vary the energy supplied by the corresponding unit, substantially as described.

4. In a traveling dynamo system of electric traction, a current generating installation for the train comprising a plurality of generating units each consisting of dynamo and internal combustion engine directly coupled together, said dynamos being of the shunt-wound type, means to start one of said engines by exciting the field of its dynamo and thereby causing said dynamo to act as a motor, means to connect the armatures of the dynamos in series or in parallel, means to connect the field of an inactive dynamo to a dynamo already set in operation, in order to excite such field in either direction, and means to regulate the excitation of each dynamo field to vary the amount of energy supplied by the corresponding unit, substantially as described.

1,064,982. CARPET-SWEEPER. EVERETT C. MURDICK, Newark, N. J., assignor to National Sweeper Company, Newsrk, N. J., a Corporation of New Jersey. Filed July 26, 1911. Serial No. 640,673. (Cl. 15—60.)

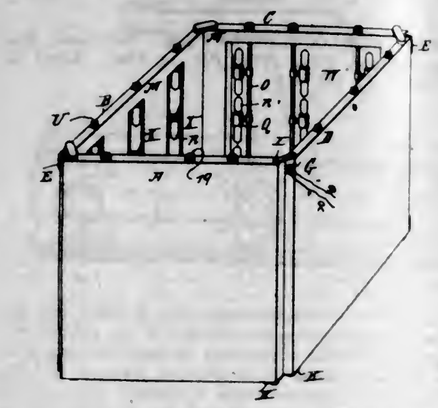


1. In a carpet sweeper the combination of a case, a brush with an end socket, a member mounted on the case and carrying a pin to be received into said socket, said member being supported so as to swing vertically and having a series of slots formed adjacent the free end thereof, a pin adapted to engage one of said slots for holding said member in adjusted position, and means for moving the pin from one slot to another.

2. In a carpet sweeper, the combination of a case with an end band, a brush with an end socket, and a member lying along the end band carrying a pin to be received into such socket, said member being supported so as to swing vertically, and having a series of slots formed adjacent its free end, and a swinging lever having a pin adapted to engage said slots.

3. In a carpet sweeper, the combination of a case with an end band, a brush with an end socket, and a member lying along the end band carrying a pin to be received into such socket, said member being supported so as to swing vertically and having a series of slots formed adjacent its free end with outwardly turned side walls, and a swinging lever having a pin engaging said slots, said pin being headed to frictionally engage the outwardly turned side walls.

1,064,983. ELECTRIC-BATH CABINET. THOMAS E. MURRAY and GEORGE K. JESSUP, New York, N. Y.; said Jessup assignor to said Murray. Filed Dec. 30, 1912. Serial No. 739,220. (Cl. 174—177.)



1. A wall section for a folding bath cabinet, comprising a flat closed box having a recess formed in one side thereof, and electric lamps supported in said recess.

2. A wall section for a folding bath cabinet, comprising a flat closed box having one side angularly indented to form a plurality of recesses, and electric lamps supported in said recesses.

3. An electric bath cabinet, comprising a plurality of homogeneous sections, each in the form of a flat closed box, and connecting straps pivoted at their ends to the upper and lower edges of the members of each adjacent pair of sections.

4. An electric bath cabinet, comprising a plurality of homogeneous sections, each in the form of a flat closed box, hollow connecting straps pivoted at their ends to the upper and lower edges of the members of each adjacent pair of sections and communicating with the interior of said sections, electric lamps on the inner sides of said sections, and circuit leads for said lamps within said sections and passing through said hollow connecting bars.

5. An electric bath cabinet, comprising a series of flexibly connected sections, each section having on its inner side a tube, a fuse plug at one end of said tube, electric lamps supported on said tube, and leads extending from said fuse plug through said tube to said lamps.

[Claims 6 to 10 not printed in the Gazette.]

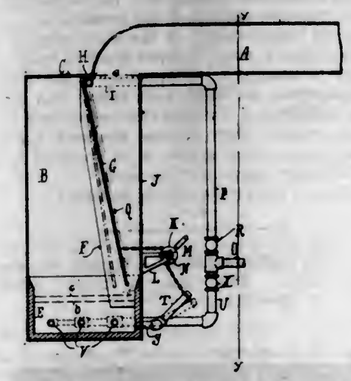
1,064,984. APPARATUS FOR TRAPPING PARTICLES IN SUSPENSION IN GAS-CURRENTS. THOMAS E. MURRAY and CHARLES B. GRADY, New York, N. Y.; said Grady assignor to said Murray. Filed Jan. 9, 1913. Serial No. 740,947. (Cl. 110—144.)

1. A device for trapping particles in suspension in a gas current, comprising a duct receiving said current and tapering downwardly to an outlet, means for varying the cross sectional area of said outlet, and a tank containing liquid disposed below said outlet and receiving the particles projected therefrom.

2. A device for trapping particles in suspension in a gas current, comprising a tank, and a duct delivering said particles vertically downward upon the liquid in said tank; a portion of the wall of said duct being movable to vary the cross sectional area of the outlet of said duct.

3. A device for trapping particles in suspension in a gas current, comprising a tank, and a duct delivering said particles vertically downward upon the liquid in said tank; a portion of the wall of said duct being suspended to swing and movable to vary the cross sectional area of the outlet of said duct.

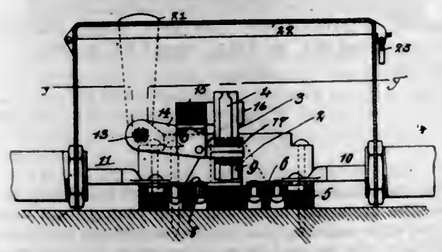
4. A device for trapping particles in suspension in a gas current, comprising a horizontal flue, closed at one end, a partition extending partly across said flue, a swinging plate suspended from the top of said flue at a distance from a longitudinal wall thereof and interposed between said partition and the closed end of said flue, a tank disposed in said flue below the space between said plate and said longitudinal wall, means for delivering the gas current into said space at the upper part thereof, and means for moving said plate to vary the distance of the lower edge thereof from said longitudinal wall.



5. A device for trapping particles in suspension in a gas current, comprising a tank, a duct delivering said particles downward upon the liquid in said tank and having one wall inclined toward the outlet, and means for delivering a liquid stream upon the surface of said inclined side.

[Claims 6 to 12 not printed in the Gazette.]

1,064,985. ELECTRIC CUT-OUT. THOMAS E. MURRAY, Jr., New York, N. Y., assignor to Thomas E. Murray, New York, N. Y. Filed Feb. 4, 1913. Serial No. 746,097. (Cl. 175—292.)



1. An electric cut-out, comprising a base, separated contacts thereon, a two-armed fuse strip, a carrier interposed between the arms of said strip and a support for said carrier pivoted on said base for moving said fuse arms into and out of coöperation with said contacts.

2. An electric cut-out, comprising a base, separated contacts thereon, a two-armed fuse strip, a carrier interposed between the arms of said strip, a support for said carrier pivoted on said base for moving said fuse arms into and out of coöperation with said contacts, and means for detachably connecting said carrier to said support.

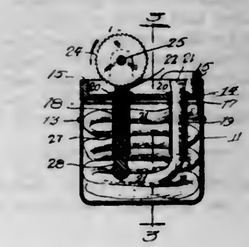
3. An electric cut-out, comprising a base, separated contacts thereon, a fuse carrier provided with an opening and having an exposed fuse strip upon its opposite sides coöperating with said contacts, a support for said carrier pivoted on said base for moving said carrier into and out of coöperation with said contacts, and an arm on said support extending between said contacts and received in said opening in said carrier.

4. An electric cut-out, comprising a base, separated contacts thereon, a two-armed fuse strip, a carrier interposed between the arms of said strip, a support for said carrier pivoted on said base for moving said fuse arms into and out of coöperation with said contacts, a casing wholly inclosing said parts, and means external to said casing for operating said support without opening said casing.

5. An electric cut-out, comprising a base, separated contacts thereon, a fuse carrier provided with an opening and having an exposed fuse strip upon its opposite sides, the said fuse strip coöperating with said contacts, and a bell crank lever pivoted on said base and having one arm entering said opening in said fuse carrier, to move the same into and out of coöperation with said contacts.

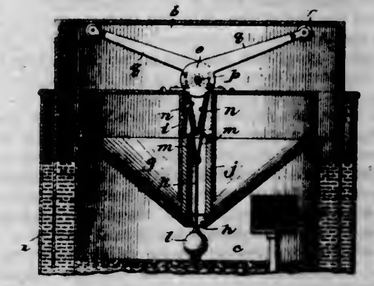
[Claims 6 to 10 not printed in the Gazette.]

1,064,986. CIGAR-LIGHTER. PETER NEUKIRCHEN, Chicago, Ill., assignor to Isidor Heidenreich, Chicago, Ill. Filed Feb. 17, 1912. Serial No. 678,426. (Cl. 67—8.)



The combination of a receptacle open at one end, a cover plate removably secured in the open end of said receptacle, a thumb operated toothed wheel pivotally carried by said cover plate, a pair of tubes carried by said cover plate and extending into said receptacle, a block of igniting material supported in one of said tubes and yieldingly pressed against said toothed wheel, and a wick extending through the other tube substantially filling the interior of the receptacle and adapted to be saturated with a volatile liquid, as and for the purpose set forth.

1,064,987. ACETYLENE-GAS GENERATOR. THOMAS MARTIN NUNN, Martinsville, Va. Filed Feb. 25, 1913. Serial No. 750,599. (Cl. 48—53.1.)



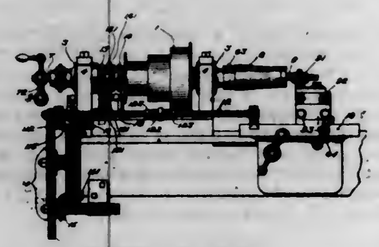
1. In an acetylene gas generator, the combination of a tank and a bell, a generating tank therein, a carbid holder above this latter tank and provided with a discharge opening leading into said tank, a depending tube in the carbid chamber having its upper end in communication with the bell, a weighted valve mounted in said tube and consisting of a tube having a passage extending through it from end to end, a gas valve supported below said discharge opening of the carbid chamber, and means whereby the fall of the bell opens both said valves and whereby the weight of the tubular valve closes itself as well as the gas valve.

2. In an acetylene gas generator, the combination of a tank and a bell, a generating tank therein, a carbid holder above this latter tank provided with a discharge opening

leading into said tank, a weighted tubular valve open from end to end and means on the carbid chamber for guiding the valve vertically, a gas valve supported below the discharge opening of the carbid chamber, and means whereby the fall of the bell opens both said valves and whereby the weight of the tubular valve not only closes itself but also closes the gas valve, said means embodying oscillating members mounted on the carbid chamber and connected to the respective valves by means of depending rods.

3. In an acetylene gas generator, the combination of a tank and a bell, a generating tank therein, a carbid holder above this latter tank provided with a discharge opening leading into said tank, a weighted tubular valve open from end to end and means on the carbid chamber for guiding the valve vertically, a gas valve supported below the discharge opening of the carbid chamber, and means whereby the fall of the bell opens both said valves and whereby the weight of the tubular valve not only closes itself but also closes the gas valve, said means consisting of a pair of oppositely extending arms oscillatingly mounted on the carbid chamber and each provided with a disk, a pair of depending rods connected to each of said valves, the upper ends of each pair of rods being pivotally connected to opposite disks at opposite sides of the point of oscillation.

1,064,988. ENGINE-LATHE. ISAAC OSGOOD, Amesbury, Mass. Filed Dec. 6, 1901. Serial No. 84,921. (Cl. 82—18.)



1. In a lathe, in combination, means for revolving a cylindrical piece of work on its longitudinal axis, a tool having a cutting position substantially radial with respect to the said axis, means for causing a relative traverse lengthwise of the longitudinal axis of the work first in the direction toward one end of the work and then reversely toward the other end, and thereby cutting a continuous or endless reverse spiral groove in the work, winding around the length of the latter spirally first in one direction and then reversely.

2. In a lathe, in combination, a work-holder for a cylindriform bearing or other like article, a tool-holder, means for producing a slow relative go-and-return traverse of the work-holder and tool lengthwise of the axis of rotation of the work, means for causing one or more complete rotations of the work-holder to each complete go-and-return traverse and thereby producing in the said bearing a longitudinally-winding endless or return spiral oil-groove, and means for suspending action of said traverse mechanism temporarily to secure a rotary shift of the work and tool relative to each other and cause a succeeding oil-groove to be produced in a different portion of the work.

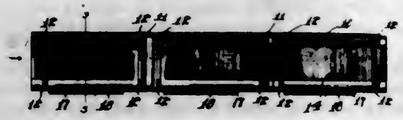
3. In a lathe, in combination, a work-holder for a cylindriform bearing or other like article, a tool-holder, a crank, connections through which said crank produces a slow relative go-and-return traverse of the work-holder and tool lengthwise of the axis of rotation of the work, means for causing one or more complete rotations of the work-holder to each complete go-and-return traverse and thereby producing in the said bearing a longitudinally-winding endless or return spiral oil-groove, and means to occasion a relative rotary shift of the work and tool to cause a succeeding endless spiral oil-groove to be produced in a predetermined different portion circumferentially of the work.

4. In a lathe, in combination, a chuck having an open socket which receives one end of an axle-box or other hollow piece of work, a center for the other end of said piece, means for rotating the said chuck, a tool-support, a tool carried thereby which passes through the opening of said socket into the interior of the work, and means for causing a relative traverse of the chuck and tool-support and thereby producing an internal spiral groove in the work.

5. A lathe comprising, essentially, the work-holder, the tool-support, traverse-mechanism for occasioning a go-and-return traverse longitudinally of the work whereby a continuous spiral groove returning upon itself at each extreme of its length is adapted to be produced in the work, and driving connections for said work-holder and traverse-mechanism, including a clutch-device constructed to occasion a rotary relative shift between the work and tool to enable a succeeding spiral groove to be produced in a predetermined different portion of the work.

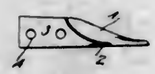
[Claims 6 to 11 not printed in the Gazette.]

1,064,989. COTTON-CLEANER. WYATT F. PALMER, Comanche, Okla. Filed May 8, 1912. Serial No. 696,007. (Cl. 13—19.)



In a cotton cleaner a cylindrical lint flue made in sections joined together after the manner of stove pipes, spaced supporting rings within said flue, the cylindrical screen supported on said rings and having its walls in spaced relation to said lint flue, a clean out opening in the lower side of said lint flue, a closure for said opening and a flue leading diagonally through said lint flue into said screen as described.

1,064,990. PLOW-POINT. EDWARD V. POSEY, Clarkston, Wash. Filed Oct. 30, 1911. Serial No. 657,607. (Cl. 97—22.)



The combination with the mold board and share of a plow, of a protecting detachable point comprising a tapering top plate engaging the forward end of the mold board and share, and inclined from its rear end to the forward end thereof, a bottom plate forming an integral part of the point, and shorter than the top plate, a landside flat plate projecting beyond the rear ends of the top and bottom plates, terminating on a line with the upper and lower straight edges of the said plate, the width of the landside of the point corresponding in width to the width of the connecting edge of the landside of the plow and tapering therefrom, and bolts passing through the projecting landside plate and similar side of the plow, whereby the point is detachably secured in position to the share of the plow, with the lower projecting edge of the landside plate on a line with the lower edge of the share.

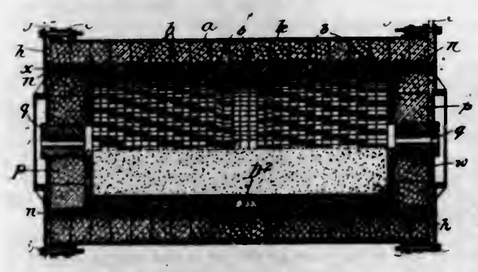
1,064,991. ELECTRODE-HOLDER. HILLARD J. POTTS, Kansas City, Mo. Filed June 20, 1912. Serial No. 704,926. (Cl. 176—119.)

An electrode holder comprising a fixed jaw, a laterally extending lug thereon, a movable jaw carried by said lug, an opening extended longitudinally in said lug, an electrode adjusting screw extending through said lug and having a longitudinal flat face registering with said opening, and a helical spring confined under tension in said opening and bearing against said flat face and against



said movable jaw and yieldably holding said screw and said movable jaw in operative position.

1,064,992. METALLURGY OF ZINC. AUGUSTIN LEON JEAN QUENEAU, Philadelphia, Pa., assignor to Queneau Electric Zinc Furnace Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 7, 1909. Serial No. 488,399. (Cl. 204—64.)



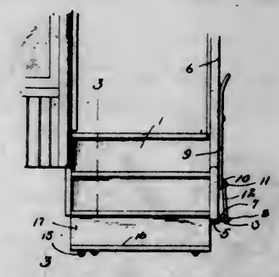
1. An electric furnace, having an interior lining made up of longitudinal courses consisting of the same number of conducting and non-conducting blocks, so as to equalize expansion, the conducting blocks of the adjacent courses overlapping so as to conduct the electric current from one to the other.

2. An electric furnace, having a rotatory main body chamber, provided with an interior peripheral lining having a series of longitudinal courses of solid peripheral conductors forming a part of said lining and separated from each other by longitudinal courses of solid peripheral non-conductors, said conductors having a break in their electric conductivity and being bridged successively at the bottom of the chamber and across said break by molten resisting material.

3. An electric furnace, having a rotatory main body chamber, provided with an interior peripheral lining, having solid peripheral conductors forming a part of said lining, said conductors having a break in their electric continuity, across which break they are bridged at the bottom of the chamber by molten resisting material.

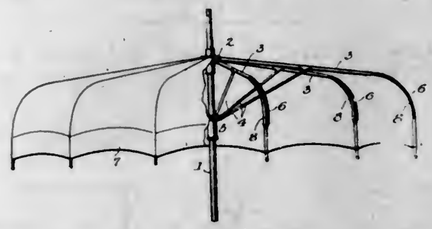
1,064,993. CAR-STEP. ILIE I. RADULESCU, Ellwood City, Pa. Filed Dec. 12, 1912. Serial No. 736,356. (Cl. 105—86.)

The combination with the usual steps of a railway car, of a rod pivotally supported by the lowermost step, said rod having an arm arranged at right angles thereto, said arm terminating in an arm arranged at right angles to the first named arm, an auxiliary step including a riser, said step and riser being secured to the respective arms, eyes carried by the riser and connected to the rod, said rod having its outer end terminating in an arm, an eye formed upon said arm, a lever having its lower end provided with a loop, said loop being pivotally connected to the vestibule end of the car, said loop terminating in a curved arm having an eye formed therewith adapted to



interlock with the eye formed upon the short arm, and means carried by the vestibule end to engage the lever to hold the auxiliary step in its raised or lowered position.

1,064,994. UMBRELLA-RIB. JAMES ROSE, Lancaster, Pa. Filed Mar. 11, 1911. Serial No. 613,741. (Cl. 135—31.)



1. An umbrella rib having a flattened portion rendering it yielding, and a reinforcing bar or strip attached to the rib and extending along such flattened portion.

2. An umbrella frame comprising ribs each having a flattened portion rendering it yielding, reinforcing bars or strips extending along such flattened portions, and a cover having a contracted portion located adjacent to the yielding parts of the ribs.

3. An umbrella rib of the groove or paragon type having a flattened portion rendering it yielding, and a reinforcing bar or strip confined between the walls of the rib adjacent to the flattened portion and extending along such section.

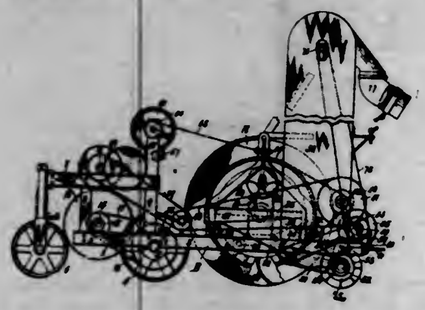
1,064,995. SAND-TEMPERING MACHINE. CHARLES F. ROUSH and HERBERT GARNETT, Toledo, Ohio, assignors of one-third to Joseph J. Valiquett, one-third to Edward J. O'Donnell, and one-third to Charles F. Roush, Toledo, Ohio. Filed June 5, 1912. Serial No. 701,874. (Cl. 22—89.)

1. In a machine of the class described, a wheeled frame having a vertically adjustable part, and an elevating wheel and a mixing member carried by said part for adjustment therewith.

2. In a machine of the class described, a frame having a vertically adjustable part, a hollow elevating wheel carried by said part for adjustment therewith, and screening means carried within the wheel and operable to screen and deliver material to a predetermined point.

3. In a machine of the class described, a frame having a wheeled section and a section attached to the wheeled section for vertical adjustment, means carried by the adjustable section, for elevating and cleaning sand or similar material, and means carried by the wheeled section and operable to vertically adjust the adjustable section.

4. In a machine of the class described, a frame having a wheeled section and a vertically adjustable section in hinged connection, a rotatable material elevating wheel carried by the adjustable section, and means carried by the wheeled section and operable to effect an adjustment of the adjustable section.



5. In a machine of the class described, a set of rotatable members arranged one in advance of the other and rotatable in opposite directions, one member serving to mix sand over which it passes and the other serving to elevate the mixed sand, and means for adjusting one of said members relative to the other.

[Claims 6 to 12 not printed in the Gazette.]

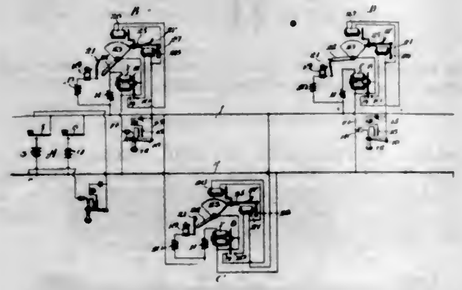
1,064,996. BUCKLE. MAX RUBIN, East Orange, N. J. Filed Mar. 14, 1912. Serial No. 683,733. (Cl. 24—191).



1. In a buckle, the combination with a body plate, having wings at the ends, of an L-shaped clamping lever pivoted at the front of the body plate to form a shoulder extending lengthwise of the body plate and below the upper edge of the body plate, said clamping lever having a handle portion extending toward the bottom edge of the body plate, a locking lever pivoted at the front of the body plate, which locking lever is provided at its upper end with a rearwardly extending flange and an additional flange on the free edge of said rearwardly extending flange, said additional flange extending toward the inner face of the locking lever whereby when the locking lever is swung down toward the face of the body plate the free edge of the additional flange on the locking lever presses the fabric toward the surface of a shoulder formed by the flange of the clamping lever, substantially as set forth.

2. The combination with a buckle body plate having wings at its ends, which are substantially at right angles to the face of the body plate, an L-shaped clamping lever pivoted at the front of the body plate to form a shoulder extending lengthwise of the body plate below the upper edge of the body plate, part of said L-shaped clamping lever forming a handle lever extending toward the bottom edge of the body plate, a locking lever pivoted at the front of the body plate above the pivotal connection between the clamping lever and the body plate, which locking lever also extends in downward direction and is provided at its upper end with a flange extending toward the face of the body plate, a web having its end part resting against the front surface of the body plate, passed over the upper edge of the body plate then downward to form a loop, then over the clamping lever and then up beyond the upper edge of the body plate, the end part of the web resting on the outer surface of the body plate being clamped by said clamping lever, substantially as set forth.

1,064,997. SIGNALING SYSTEM. HARRY O. RUGH, Sandwich, Ill., assignor, by mesne assignments, to Hall Switch & Signal Company, a Corporation of Maine. Filed Jan. 20, 1910. Serial No. 539,164. (Cl. 177—343.)



1. A selective signaling system comprising a central station and substations united by a common line circuit, a step-by-step selector mechanism at each substation, a plurality of magnets at each mechanism for controlling same, a controlling relay at each mechanism to connect either magnet to the line circuit, and switching devices and a source of current at the central station for operating said magnets and said controlling relay.

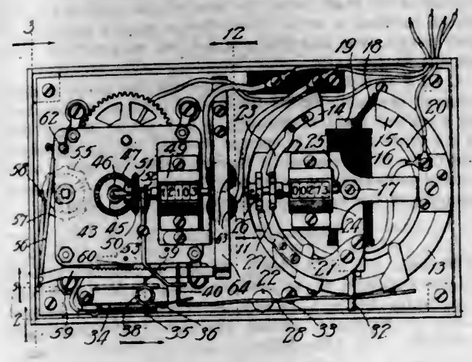
2. A selective signaling system comprising a central station and substations united by a line circuit, a step-by-step selector mechanism at each substation, a step-up magnet for same, a release magnet for same, a controlling relay for associating either of said magnets with said line circuit, and switching devices and a source of current at the central station for selectively operating said controlling relay and said magnets.

3. A selective signaling system comprising a central station and substations united by a common line circuit, a step-by-step selector mechanism at each substation, a step-up magnet for same, a release magnet for same, a local signal for each selector mechanism and controlled thereby, a controlling relay for associating either of said magnets with said line circuit, and switching devices and a source of current at the central station for selectively operating said controlling relay, said signal and said magnets over said common line circuit.

4. A selective signaling system comprising a central station and substations united by a common line circuit, a step-by-step selector mechanism at each substation, a step-up magnet for same, a release magnet for same, a polarized, two-position controlling relay for associating either of said magnets with said line circuit, and switching devices and a source of current at the central station for selectively operating said controlling relay and said magnets over said common line circuit.

5. A selective signaling system comprising a central station and substations united by a common line circuit, a step-by-step selector mechanism at each substation, a plurality of magnets for controlling same, a local signal for each selector mechanism and controlled thereby, a controlling relay for associating either of said magnets with said line circuit, and switching devices and a source of current at the central station for selectively operating said controlling relay, said signal and said magnets over said common line circuit.

1,064,998. TELEPHONE-CALL RECORDER. HENRY K. SANDELL, Chicago, Ill., assignor to Herbert S. Mills, Chicago, Ill. Filed Mar. 22, 1911. Serial No. 616,166. (Cl. 161—19.)



1. In combination a clock-movement, means for starting the clock at the beginning of a call, an overtime-register, a lost-motion connection between the clock-movement and the overtime-register whereby the clock-movement can run for a definite period before moving the overtime-register and means to stop the clock-movement a predetermined time, after each call.

2. In combination a clock-movement, means for starting the clock at the beginning of a call, an overtime-register, a lost-motion connection between the clock-movement and the overtime-register whereby the clock-movement can run for a definite period before moving the overtime-register, means to stop the clock-movement a predetermined time after each call, and means for setting the lost-motion connection to normal position after each call.

3. In combination a clock-movement, means for starting the clock at the beginning of each call, an overtime-register, a pinion on the overtime-register shaft, the pinion meshing therewith and connected with the clock-movement by a pin and slot connection whereby lost-motion is permitted, a spring holding said second pinion in a normal position with reference to the clock movement, and means operated after each call for moving the first named pinion to throw the two out of mesh whereby said spring may return said second pinion to normal position.

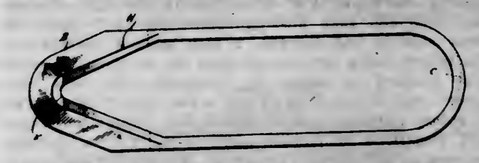
4. In combination a clock-movement, means for starting the clock-movement at the beginning of a call, an overtime-register, a pinion movable on the overtime-register shaft, a second pinion meshing therewith and carried by the clock-movement and connected therewith by a pin and slot connection whereby lost-motion is permitted, a spring holding said second pinion in a normal position with reference to the clock-movement, and means operated after each call for moving said first pinion upon its shaft to throw it out of mesh with the second pinion, whereby the spring may return the second pinion to normal position.

5. In combination a clock-movement, a call-register, means controlled by the central operator for advancing the call-register, means operated by the register-advancing means for starting the clock-movement, an overtime-register, a lost-motion connection between the clock-movement and the overtime-register whereby the clock-movement can run for a definite period before moving the overtime-register and means to stop the clock-movement after each call.

[Claims 6 to 19 not printed in the Gazette.]

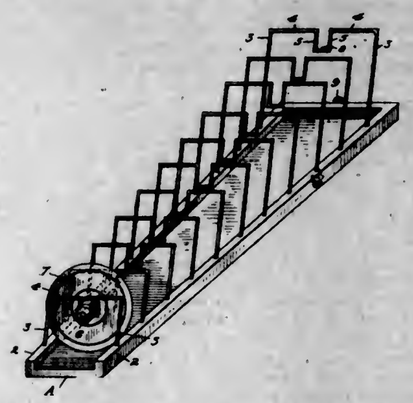
1,064,999. ART OF MANUFACTURING POCKET STRAPS OR YOKES. AUGUST G. SANDMAN, Baltimore, Md. Filed Jan. 13, 1913. Serial No. 741,683. (Cl. 29—164.)

The art of manufacturing a pocket strap, consisting in taking a bar of metal, displacing the metal intermediate the ends of the bar, thus simultaneously forming a slot and flanges, bending the bar to form parallel arms, then uniting the free ends, and finally forging the slotted end of the



blank and spreading the parts each side of the slot to form spaced arms.

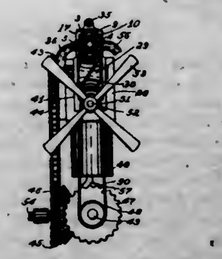
1,065,000. UTENSIL-COVER HOLDER OR RACK. NICKOLAUS SARTER and OTTO J. BEHM, San Francisco, Cal. Filed Aug. 15, 1911. Serial No. 644,171. (Cl. 141—11.)



1. An improved utensil cover holder and rack having in combination a base member, a series of parallel inclined wire standards mounted on the base member, said standards arranged in pairs of graduated height from one end of the base to the other in the direction of their inclination, and each of said standards being provided with centrally located knob engaging means arranged in a stepped-up manner in relation to each other.

2. In a utensil cover holder and rack, the combination of a base member having divergent sides, upwardly extending flanges on the divergent sides of said base member, a series of parallel inclined wire standards mounted on said flanges, said standards arranged in pairs of graduated heights from one end of the base to the other in the direction of their inclination, and means carried by each pair of standards for engaging the knobs on utensil covers, said knobs engaging means arranged in a stepped up manner in relation to each other.

1,065,001. VALVE-ACTUATING MEANS FOR INTERNAL-COMBUSTION ENGINES. JOSEPH SCHEITLER, Waterloo, Iowa. Filed Mar. 5, 1912. Serial No. 681,700. (Cl. 123—90.)

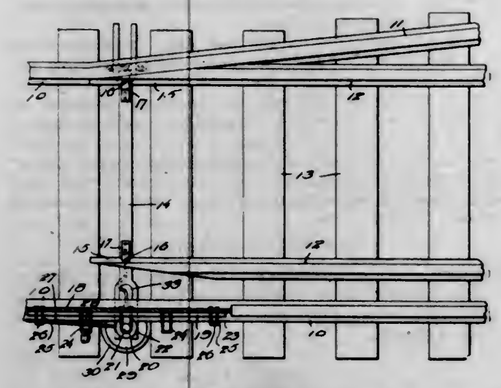


1. The combination with the rotary valve of an internal-combustion engine, of means adapted to intermittently

rotate the valve, comprising a rotary cam-wheel having a circumferential groove beginning at or near one side, passing therealong and then crossing the edge abruptly and obliquely, then passing therealong at or near the other side to end thereon, a disk secured coaxially to the rotary valve and having pins on its circumferential edge adapted to project in succession into said cam-groove and be actuated by the walls thereof in rotation to rotate the disk intermittently with abrupt beginnings and cessations of motion while either pin is entering, traversing and leaving the oblique part only of the groove, the disk remaining quiescent while a pin is traversing the other parts of the groove, and means for rotating said cam wheel adapted to cause it to rotate said disk a one-half rotation during one rotation of the crank-shaft of the engine.

2. The combination with the rotary valve of an internal-combustion engine, of means adapted to rotate the valve with alternate partial rotations and cessations of movement, begun and ended abruptly, comprising a rotary cam-wheel with concaved circumferential edge, and having in said edge a cam-groove beginning at one side, then carried straight along and adjacent to that side for a distance, then carried abruptly and obliquely across the edge to the other side, then carried abruptly and into a straight course along and adjacent to the other side to end at a point opposite the point of ending of the oblique part thereof, a body coaxially mounted on said rotary valve and having four equally-spaced radial pins projecting from its circumferential edge, said pins being adapted to enter said cam groove in succession to permit the cam-wheel to rotate the said body and valve only while a stud is traversing the oblique part of the cam-groove, and operative connections between said cam-wheel and the crank-shaft of the engine adapted to rotate the cam-wheel twice during each rotation of the crank-shaft to cause a one-half rotation to said body and rotary valve during one rotation of the crank-shaft, and actuate said valve only during the passage of the crank on said shaft through its dead-centers.

1,065,002. RAILWAY-SWITCH. AUGUST SCHULTZ, San Diego, Cal. Filed May 2, 1912. Serial No. 694,751. (Cl. 104—25.)



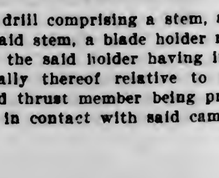
1. A switch control mechanism adapted to be attached to a railroad rail comprising a base plate attachable to the web, of a rail, a vertical shaft journaled thereon outwardly of the flange of the rail, an operating lever engaged with the shaft means on the plate on each side of the shaft to hold the lever at opposite limits of its movement, and a crank element carried at the lower part of the shaft adapted for link connection with a switch.

2. In a switch mechanism, a track, a support means, a vertical shaft carried thereby, a switch lever for operating the shaft, the lower end of the shaft being disposed below the level of the track, pivoted switch rails, a disk on the lower end of the shaft, a wrist spaced inwardly of the periphery of the disk and located on its upper side, and link connections between the wrist and switch rails.

3. In a switch mechanism, a track, switch rails, a support means, a vertical shaft carried thereby, means for operating the shaft, superposed disks secured on the lower portion of the shaft below the level of the track in parallel spaced relation, a wrist therebetween spaced inwardly of their peripheries, and link connections between the wrist and the switch rails.

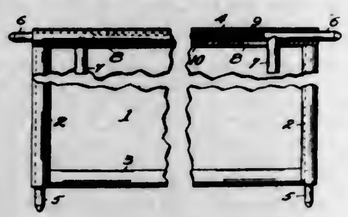
4. In a switch mechanism, a supporting plate, a shaft mounted revolubly across its central portion, a lever having a central eye therethrough, a lock staple on each side of the shaft adapted to engage through the eye at respective limits of movement of the lever slidably, and a billed element outwardly of each staple in the path of the lever, inwardly of the end of the staple toward the plate.

1,065,003. DEVICE FOR CLOSING STOVE-DOORS. LOYD SCRUGGS, St. Louis, Mo., assignor to Copper Clad Malleable Range Company, St. Louis, Mo., a Corporation of Nebraska. Filed Dec. 30, 1911. Serial No. 668,621. (Cl. 126—91.)



A stove provided with a grate, ash-deflecting guides arranged under the grate, an oven door, an operating weight for the oven door arranged intermediate said guides and grate, and means for guiding said weight so that it never travels above the grate or below said guides or sways from side to side.

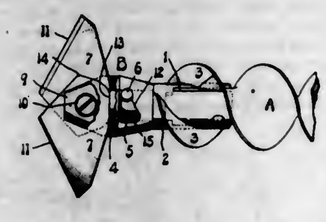
1,065,004. ADJUSTABLE SHELF. LIBORIUS SENGE, Crescent Springs, Ky., assignor to The Globe-Wernicke Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Nov. 30, 1910. Serial No. 594,987. (Cl. 45—54.)



In an adjustable shelf of the character described, rearwardly extending pins 5 securely held in place by means of the rolled over side edges 2 of the shelf, pins 6 provided with operating handles 7, movably attached to said shelf by means of the rolled over front edge 4, said pins 6 being provided with springs 9, serving to normally hold the pins in their extended positions beyond the edges of the shelf, all of said pins being adapted to engage openings in any suitable structure.

1,065,005. MINER'S DRILL. SAMUEL T. SKEEN, Sandoval, Ill. Filed June 20, 1912. Serial No. 704,811. (Cl. 125—10.)

1. A miner's drill comprising a stem, a thrust member at the end of said stem, a blade holder rotatable on said thrust member, the said holder having inclined cams extending diagonally thereof relative to the axis of the holder, and said thrust member being provided with elements operable in contact with said cams to impart longitudinal movement to said blade holder, and blades pivoted to said holder, said blades being positioned to be engaged by said thrust member during the operation of the drill.



2. A miner's drill comprising a stem, a thrust member at the end of said stem, a blade holder rotatable on said thrust member, the said holder having inclined slots extending diagonally thereof relative to the axis of the holder, and said thrust member being provided with elements operable in said slots, and blades pivoted to said holder, said blades having flat faces adapted to be engaged by the end of said thrust member.

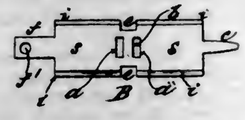
3. A miner's drill comprising a stem, a thrust rod at the end of said stem, a blade holder slidably fitted to said thrust rod, said blade holder having a slot provided with a cam wall, a pin on said thrust rod extending into said slot, and blades pivoted to said blade holder, each of said blades having a flat face adapted to be engaged by said thrust rod.

4. A miner's drill comprising a stem, a thrust rod at the end of said stem, a blade holder slidably fitted to said thrust rod, said blade holder having a slot provided with a cam wall, a pin on said thrust rod extending into said slot and adapted to ride along said cam wall to a point beyond the end of its cam face, and blades pivoted to said blade holder, each of said blades having a face adapted to be firmly engaged by the end of said thrust rod when said pin is located beyond said cam face.

5. A miner's drill comprising a stem, a thrust member at the end of said stem, a blade holder having a slot and pin connection with said thrust member, and blades pivoted to said holder, said blades being positioned to be engaged by said thrust member during the operation of the drill; one of said pivoted blades having an offset portion adapted to frictionally engage said blade holder for the purpose described.

[Claims 6 and 7 not printed in the Gazette.]

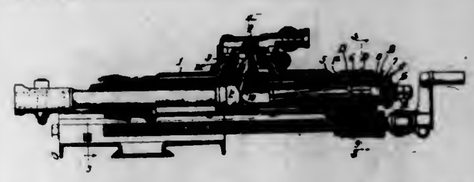
1,065,006. CHAIN JEWELRY. JOHN J. SOMMER, North Attleboro, Mass. Filed Mar. 25, 1913. Serial No. 756,651. (Cl. 59—80.)



A chain of the character designated, comprising a series of links articularly connected, each link consisting of a blank of sheet metal formed with a coupling bar and openings adjacent thereto, with interlocking tongues for coupling with a preceding link, and with inturned longitudinal edge flanges contacting with each other in the manner and for the purpose set forth.

1,065,007. ROCK-DRILL. JAMES A. THOMPSON and EDWIN M. MACKIE, Chicago, Ill., assignors to Chicago Pneumatic Tool Company, Chicago, Ill., a Corporation of New Jersey. Filed Nov. 22, 1906. Serial No. 344,568. (Cl. 121—10.)

1. In a rock drill, the combination, with the cylinder and the piston thereof, of a central rotating bar coöperating with the piston and having ratchets at its outer end, a ring arranged concentric of the bar adjacent the ratchets thereof, said ring having an internal circumferential groove and transverse bearing sockets, and a series of spring-pressed pawls having bearing portions received by the sockets.



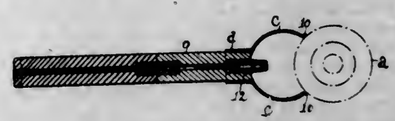
2. In a rock drill, the combination, with the cylinder and the piston thereof, of a central rotating bar coöperating with the piston and having ratchets at its outer end, a ring arranged concentric of the bar adjacent the ratchets thereof, said ring having an internal circumferential groove and transverse bearing sockets, a series of reversible pawls having bearing portions received by the sockets, and springs located in said groove and bearing against the pawls.

3. In a rock drill, the combination, with the cylinder and the piston thereof, of a central rotating bar coöperating with the piston, and ratchet and pawl mechanism co-operating with the bar and comprising a ring fitted to slip within one end of the cylinder and having a series of oscillating pawls having bearing portions received by said sockets and adapted to engage the ratchet teeth, and means for applying a predetermined degree of spring pressure to the ring to normally prevent slipping thereof.

4. In a rock drill, the combination, with the cylinder and the piston thereof, of a central rotating bar coöperating with the piston, ratchet and pawl mechanism co-operating with the bar and comprising a ring fitted to slip within one end of the cylinder and arranged concentric of the bar, ratchets on the bar within the ring, a series of pawls bearing within the ring and coöperating with the ratchets, an end head received within the outer end of the cylinder and bearing against the outer face of the ring, and means for applying spring pressure to said head.

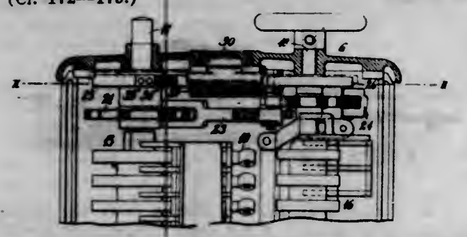
5. In a rock drill, the combination, with the cylinder and the piston thereof, of a central rotating bar coöperating with the piston, ratchet and pawl mechanism co-operating with the bar and comprising a ring fitted to slip within one end of the cylinder and arranged concentric of the bar, ratchets on the bar within the ring, a series of pawls bearing within the ring and coöperating with the ratchets, an end head 8 fitting within the outer end of the cylinder and bearing against the ring, bolts 15 connected with the cylinder, a cross bar 16, springs 17 strung on the bolts and interposed between the cross bar and the head, and nuts 14 on the end of the bolts.

1,065,008. SMOKER'S PIPE. LEONARD TUFTS, Center Harbor, N. H. Filed Sept. 21, 1911. Serial No. 650,537. (Cl. 131—12.)



In a smoker's pipe, in combination, a bowl having a smoke outlet opening, a stem, a collar mounted on said stem at one end and having clamping arms extended from it to engage the bowl and detachably secure said stem to said bowl, said collar being removable from the bowl with said stem, and a nipple coöperating with said stem, and bowl and projecting beyond said stem a distance substantially equal to the length of the smoke outlet opening and having its inner end substantially flush with the inner surface of the bowl, substantially as described.

1,065,009. CONTROLLER. PERCY STUART TURNER, Chorlton-cum-Hardy, England, assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 15, 1913. Serial No. 742,214. (Cl. 172—179.)



1. An electric control system embodying a motor provided with a field magnet winding and an armature, independent resistances respectively adapted to be connected in series with the motor and in shunt to the armature, switching devices for manipulating said resistances, and means dependent upon the relative position of said devices for rendering certain of said devices temporarily inoperative.

2. An electric control system embodying a motor provided with a field magnet winding and an armature, independent resistances respectively adapted to be connected in series with the motor and in shunt to the armature, separate controller drums adapted to be employed in regulating said resistances for controlling the operation of the motor, and means adapted to allow the use of said shunt resistance only when a predetermined amount of said series resistance is included in the circuit.

3. In an electric control system, a motor provided with a field magnet winding and an armature, independent resistances respectively adapted to be connected in series with the motor and in shunt to the armature, a controller provided with a plurality of drums adapted to be employed in regulating said series and shunt resistances for controlling the operation of the motor, cams severally attached to said drums, and mechanical interlocking means adapted to engage said cams and prevent the operation of said shunt drum when the series drum is in certain predetermined positions.

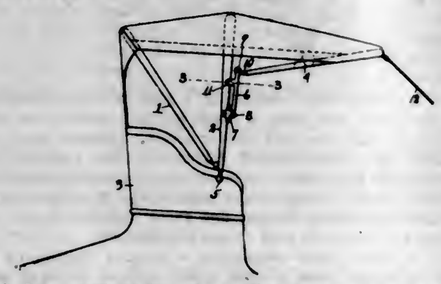
4. The combination with a plurality of movable switch members having position-accentuating devices, of interlocking mechanism comprising cams on the respective movable switch members, an interposed stationary guide member, and a rod and resilient-actuating means therefor disposed entirely within said guide member, said rod being actuated by either cam to lock the other against movement when the switch member having the actuating cam is in certain predetermined positions.

5. In an electric controller, an inclosing case, a plurality of rotatable drums disposed therein and provided with coöperating stationary and movable contact members, mechanical position-accentuating devices for said drums comprising notched disks severally attached to the drum shafts and independently-mounted spring-actuated pawls maintained in engagement with said disks, cams severally affixed to the shafts of said drums and mechanical interlocking means disposed between said drums, said means comprising an independently-mounted casing, a rod provided with a roller at one end and adapted to move longitudinally within said casing, and a helical spring associated with said rod and disposed within said casing and adapted to maintain said rod in selective engagement with said cams for preventing the operation of each drum when the other is in certain predetermined positions.

[Claims 6 and 7 not printed in the Gazette.]

1,065,010. VEHICLE TOP CONSTRUCTION. DAVID E. VANDERVEER, Detroit, Mich., assignor to The Cleveland Hardware Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 1, 1910. Serial No. 574,905. (Cl. 21—62.)

1. In a carriage top, the vertical bow sockets, the front bow sockets lying in a substantially horizontal plane, vertically disposed links pivotally connected at their ends to the vertical bow sockets, the other ends of said links being pivoted to the inner ends of the horizontal bow sockets, which when the top is extended project from the upper ends of said links at substantially right angles thereto, said links serving wholly to support the inner ends of said sockets at a point well above the pivotal point of attachment of the lower ends of said links, and means for locking the upper ends of said links to the vertical bow sockets to hold them against lateral movement when supporting the pivoted ends of the horizontal bow sockets.



2. In a carriage top, the vertical bow sockets, the substantially horizontal bow sockets, vertically disposed links, said links being pivoted at their ends to the central portion of the vertical bow sockets to swing in either direction into parallel relation therewith, the other ends of said links being pivoted to the inner ends of the horizontal bow sockets to wholly support and carry the pivoted ends of said horizontal bow sockets when the top is extended, and means carried by said links engaging the vertical bow sockets and coöperating therewith to hold the upper ends of the links against lateral movement when supporting the pivoted ends of said horizontal bow sockets with the top extended, said holding means also serving to lock the parts against lateral movement when the top is folded.

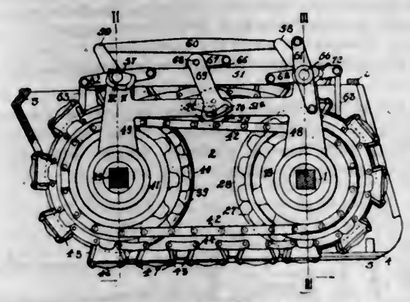
3. In a carriage top, the vertical bow sockets, the front bow sockets lying in a substantially horizontal plane, vertically disposed links, pivotally connected at their lower ends to the vertical bow sockets to normally lie substantially parallel thereto, the upper ends of said links being pivoted to the inner ends of the horizontal bow sockets, which, when the top is extended project from the upper ends of said links at substantially right angles thereto, said links serving wholly to support the inner ends of said horizontal sockets at a point well above the pivotal point of attachment of the lower ends of said links, means for securing the upper ends of said links to the vertical bow sockets to hold them against lateral movement when supporting the pivoted ends of the horizontal bow sockets, and a strap connected with the front ends of the horizontal bow sockets to exert a downward strain thereon.

4. In a carriage top, the vertical bow sockets, the front bow sockets lying in a substantially horizontal plane, vertically disposed links pivotally connected at their ends to the vertical bow sockets, the other ends of said links being pivoted to the inner ends of the horizontal bow sockets, which when the top is extended project from the upper ends of said links at substantially right angles thereto, said links serving wholly to support the inner ends of said sockets at a point well above the pivotal point of attachment of the lower ends of said links, and means for preventing lateral movement of the links relative to the bows when the top is in either its extended or collapsed position.

5. In a vehicle top having a vertically-disposed bow and a diagonal or brace bow, a shortening device connecting said bows and comprising a lever pivotally connected at one end to said vertically-disposed bow and at its other end to said diagonal or brace bow, said lever having a U-shaped extension at its outer end adapted to embrace said vertically-disposed bow when the top is raised and to embrace said diagonal or brace bow when the top is folded.

[Claims 6 to 11 not printed in the Gazette.]

1,065,011. SLEIGH ATTACHMENT FOR POWER-DRIVEN VEHICLES. ANDREW VETTEL, Jr., Sandusky, Ohio. Filed May 10, 1912. Serial No. 696,483. (Cl. 21—114.)



1. In combination with the driving axle of a power-driven vehicle, a runner adapted to be mounted on said axle as a substitute for the driving-wheel, and an eccentric interposed between said axle and said runner.

2. In combination with the driving-axle of a power-driven vehicle, a runner adapted to be mounted on said axle as a substitute for the driving-wheel, an eccentric interposed between said axle and said runner, and means for limiting the rotary movement of said eccentric.

3. In combination with the driving-axle of a power-driven vehicle, a runner adapted to be mounted on said axle as a substitute for the driving-wheel, an eccentric interposed between said axle and said runner, and means for locking said eccentric against rotation.

4. In combination with the driving-axle of a power-driven vehicle, a runner adapted to be mounted on said axle as a substitute for the driving-wheel, an eccentric interposed between said axle and said runner, means for limiting the rotary movement of said eccentric, and means for locking said eccentric against rotation.

5. In combination with the driving-axle of a power-driven vehicle, a runner adapted to be mounted on said axle as a substitute for the driving-wheel, a tractor mounted on said axle and receiving power therefrom, and means for shifting said runner in relation to said axle.

[Claims 6 to 12 not printed in the Gazette.]

1,065,012. PROTECTIVE DEVICE FOR ENVELOPS. TETSUSABURO WATANABE, New York, N. Y. Filed Sept. 23, 1911. Serial No. 650,950. (Cl. 229—80.)

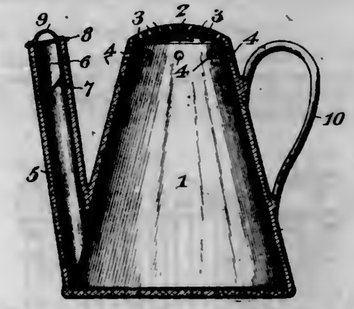


1. A paper envelop, having a section of thinner material formed in and integrally with the overlapping portion of its sealing flap.

2. A paper envelop, having a section of thinner material formed in and integrally with the overlapping portion of its sealing flap, and a coating of adhesive material on said flap and section.

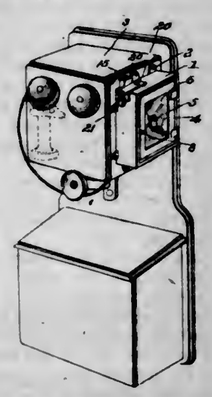
1,065,013. FUMIGATING APPARATUS. CICERO POWEL WILKINSON, Riverside, Cal. Filed Feb. 27, 1912. Serial No. 680,241. (Cl. 43—5.)

1. A fumigating apparatus comprising a vessel with an interior chamber for the reception of fumigating materials, said vessel having a top portion in one piece with the body of the vessel and provided with perforations of a size and each directed at an angle with respect to the longitudinal axis of the vessel to intercept liquids projected against the inner wall of the top, said vessel being provided with a duct rising from one side thereof near its basic end and there opening into the vessel and having the upper end provided with a removable closure adapted to prevent accidental escape of material therefrom.



2. A fumigating apparatus comprising a frusto conical vessel having a top provided with perforations in outwardly inclined relation to the longitudinal axis of the vessel at an angle and of a length to intercept liquids projected against the inner wall of the top of the vessel by ebullition of such liquids, and also provided adjacent the top with a series of perforations extending through the frusto conical walls substantially perpendicular to the longitudinal axis of the vessel, the latter being also provided with a duct rising from one side thereof near its basic end and there opening into the vessel and having the upper end provided with a removable closure adapted to prevent accidental escape of liquid therefrom.

1,065,014. COIN-ACTUATED TELEPHONE ATTACHMENT. GEORGE P. WRIBORG, Athelstane, Wis. Filed Dec. 14, 1911. Serial No. 665,705. (Cl. 194—1.)

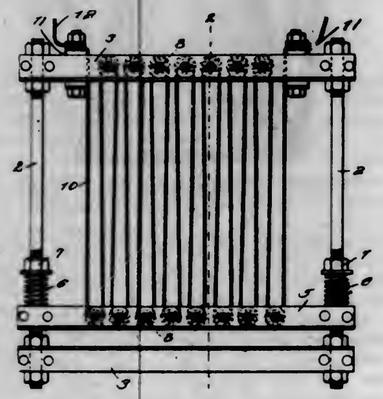


1. A device of the character described including a casing having a coin slot formed at the rear thereof, a door closing the front end of the casing and provided with an inwardly projecting keeper, a gravity actuated latch pivoted at its middle in said casing, the forward end of said latch normally engaging over the keeper, the rear end of the latch projecting beneath said coin chute, manually operable means for lifting the forward end of the latch from its engagement with the keeper, and a pivoted guard carried by the casing and locking over the said manually operable latch releasing means.

2. A device of the character described comprising a casing, a coin chute disposed in the rear end of the casing, a door controlling access to the casing, a latch pivoted at its middle in said casing, a keeper, the forward end of the latch normally engaging said keeper, the rear end of the latch projecting beneath the opening of the coin chute, a box secured to the top of the casing, a releasing rod en-

gaging the latch forward of the pivot and having its upper end extending into said box and there formed with an enlarged head, the top of the casing being formed above the box with an opening leading thereinto, and a guard plate shiftable into or out of position into said opening, and means for locking said guard plate in its closed position.

1,065,015. RESISTANCE. WILLIAM R. YOUMANS, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, a Corporation of Ohio. Filed Oct. 21, 1909. Serial No. 523,895. (Cl. 219—74.)



1. In a resistance device, the combination of two parallel frame parts, resilient means tending to hold the said parts in substantial parallelism and to force one of said parts away from the other, two parallel series of rotatable rollers, one on each of the said frame parts, the axis of each roller being perpendicular to the corresponding frame part and a continuous flexible resistance element extending over the said rollers and back and forth between the said two frame parts, substantially as set forth.

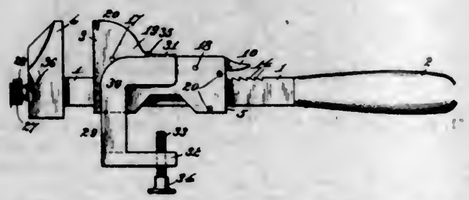
2. In a resistance device, the combination of two frame parts, each part consisting of two parallel connected bars, resilient means tending to force the two parts away from one another, a series of insulated flanged rollers rotatably mounted between the bars comprising one frame part, a second series of insulated flanged rollers rotatably mounted between the bars comprising the second frame part, and a continuous flexible resistance element extending over said rollers and in a zigzag manner between the two frame parts, substantially as set forth.

3. In a resistance device, the combination of three parallel frame-parts lying in the same plane, rigid connecting members between the outer two of the said frame parts, the middle of the said frame parts being slidable on the connecting members, resistance elements between the middle frame part and one of the end frame parts, and means for moving the middle frame part to tension the resistance elements, substantially as set forth.

4. In a resistance device, the combination of three frame elements each comprising two parallel connected bars, connecting rods between the outer two of the said frame elements, the middle of the said elements being slidable on the bars, a series of insulated flanged rollers between the bars comprising one of the outer frame elements, a second series of insulated flanged rollers between the bars comprising the middle frame element, a continuous flexible resistance element extending over said rollers and back and forth between the two series, and resilient means for forcing the middle frame element in one direction to tension the resistance element, substantially as set forth.

5. The combination in a resistance device of two stationary frame parts, two tie-bolts rigidly connecting the said stationary frame parts, a movable frame part between the two stationary frame parts and slidably engaging the said tie-bolts, a series of insulating rollers rotatably mounted upon one of the stationary frame parts, a similar series of insulating rollers rotatably mounted upon the movable frame part, a continuous flexible resistance element extending over said rollers in a zigzag manner between the two frame parts, nuts in adjustable threaded engagement with the tie-bolts, and coil springs on the tie-bolts between the said nuts and the said movable frame parts, the said springs tending to move the movable frame part to tension the said resistance element, substantially as set forth.

1,065,016. COMBINATION WRENCH AND VISE. HENRY A. ANDERSON, Spokane, Wash., assignor of one-half to Nels Benson, Spokane, Wash. Filed Nov. 17, 1911. Serial No. 660,759. (Cl. 81—41.)



A wrench comprising a shank, a sliding jaw adjustably mounted thereon, means for clamping said sliding jaw to a bench, and a second jaw on said shank, said means comprising a pair of U-shaped members connected at one end by a plate and at the other end by a block and a screw threaded through said block in axial alinement with said plate, substantially as described.

1,065,017. LIFE-SAVING DEVICE. THOMAS EDGAR AUD, Herndon, Va. Filed Sept. 23, 1912. Serial No. 721,905. (Cl. 9—20.)



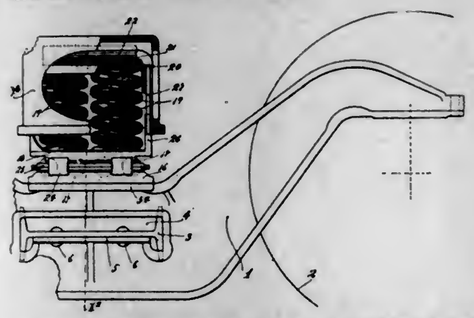
1. A life preserving device comprising a water-proof union garment having at its top an adjustable opening for the passage of the head, an entrance tube of the same width as the waist portion of the body of the garment and having its open inner end secured transversely across the waist, the communication of the tube with the garment being independent of the opening at the top of the garment, said tube being of sufficient length to permit its open outer end to be flattened and rolled upon itself up to the waist to render it water-tight, and means for securing the rolled portion of the tube around the waist.

2. A life preserving device comprising a water-proof union garment having a neck portion for insertion of the head therethrough and provided with suitable closures, a flexible and substantially cylindrical entrance tube extending from and communicating with the waist portion of the body of the garment, said tube having its open inner end secured transversely across the waist, the communication of the tube with the garment being independent of the opening at the top of the garment, said tube being of sufficient length to permit its open outer end to be flattened transversely and rolled inwardly upon itself up to the waist line to render it water-tight, a casing extending halfway around the outer end of the tube, a strap passed through the casing to provide a stiffening element on which the tube may be rolled, the ends of the strap being extended, and means for adjustably fastening the strap to secure the rolled portion of the tube around the waist of the wearer.

3. A life preserving device comprising a water-proof union garment having water wings secured to the upper portion of the garment and communicating with the interior thereof whereby air may be forced into said wings from the body of the garment when pressure is exerted from below.

4. A water-proof union garment having an opening at its upper end provided with an adjustable closure, a yieldable collar encircling said closure and a protecting storm collar arranged over said yieldable collar, and a buoyant element carried by said garment.

1,065,018. CAR-TRUCK. JOHN C. BARBER, Chicago, Ill., assignor to Standard Car Truck Company, Chicago, Ill., a Corporation of New Jersey. Filed Apr. 12, 1913. Serial No. 760,612. (Cl. 105—243.)



1. A truck having its side frames connected by a transom rigidly attached thereto below the tops and above the bottoms thereof, and antifriction bearing devices directly applied on top of said side frames immediately over the ends of the said transom.

2. The combination with side frames and a transom having its ends rigidly connected thereto below the tops and above the bottoms thereof, of a body bolster intermediately pivoted to said transom with freedom for sliding movements longitudinally thereof, and combined radial and lateral motion bearing devices directly and vertically interposed between said side frames and body bolster.

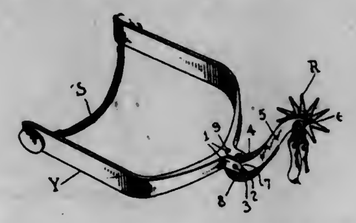
3. The combination with truck side frames and a transom having its ends rigidly connected thereto below the tops and above the bottoms thereof, of a body bolster intermediately pivoted to said transom with freedom for limited sliding movements, and for vertical movements, and combined radial and lateral motion bearing devices and truck springs vertically and directly interposed between said side frames and body bolster.

4. The combination with truck side frames and a transom connecting the same, of a body bolster intermediately pivoted to said transom with freedom for endwise and vertical movements, radial motion roller bearing devices applied directly on top of said side frames, springs supported on the upper member of said radial motion devices, and lateral motion roller bearing devices supported by said springs directly over said side frames and supporting said body bolster at its ends.

5. The combination with truck side frames and a transom having its ends rigidly connected to said side frames at points below the top and above the bottoms thereof, roller bearing plates secured on said side frames directly above the ends of said transom, radial motion bearing rollers on said roller bases, combined roller caps and spring bases seated on said rollers, truck springs seated on said combined roller caps and spring bases, combined spring caps and roller bases seated on said springs, connections permitting said combined spring caps and roller bases to move vertically, but to partake of the common movements of said combined roller caps and spring bases, and lateral motion bearing rollers interposed between said combined spring caps and roller bases and the ends of said body bolster.

[Claim 6 not printed in the Gazette.]

1,065,019. SPUR. WILLIAM ALVA BARR, Silverton, Oreg. Filed June 13, 1912. Serial No. 703,474. (Cl. 54—83.)

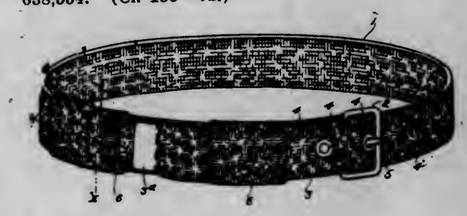


1. The herein described spur comprising a yoke, means for fastening it to the heel, an arm bifurcated at its rear end, a rowel wheel pivoted in the bifurcation, a pivotal connection between the front end of the arm and the rear end of the yoke, and a spring having one end connected with and supported by the yoke and the other bearing said arm upward with yielding force.

2. The herein described spur comprising a yoke, a pair of spaced lugs projecting rigidly from the yoke to the rear and having their upper corners rounded, a transverse pivot through said lugs, an arm having its front end mounted on said pivot, a rowel carried by the rear end of the arm, a spring connected at one end to said yoke and its other end normally raising said arm around its pivot, and means for limiting the descent of the arm.

3. The herein described spur comprising a yoke having at its rear a pair of spaced lugs with their upper corners rounded and a channeled projection extending to the rear from their lower corners, an arm having its front end inserted between said lugs and its body extending over said channeled projection, a pivot through its front end and said lugs, a rowel carried by its rear end, and an expansive spring seated at its lower end in said channel with its upper end normally raising said arm, for the purpose set forth.

1,065,020. WOVEN STRAP. FRANK ROE BATCHELDER, Worcester, Mass. Filed July 14, 1911. Serial No. 638,554. (Cl. 139—72.)



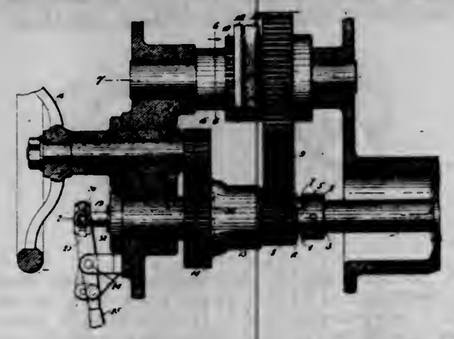
1. A web comprising a longitudinal body and a transverse keeper-loop woven integral therewith, receiving within it a portion of the length of the body, and of greater width than such portion.

2. A web comprising a body, and a loop woven integral therewith, said loop composed of a loop-ply longer than the loop itself and having a projecting portion thereof turned in, producing thereby a finished edge.

3. A web comprising a body, and a loop woven integral therewith, said loop composed of a loop-ply longer than the loop itself and having projecting end-portions thereof turned inwardly within the loop, thereby producing finished edges to the loop.

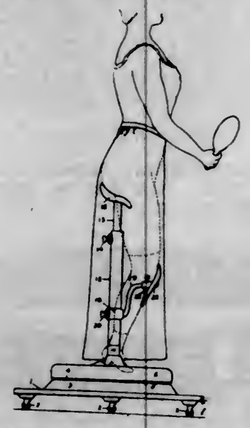
4. A web comprising a longitudinal body and a transverse keeper-loop woven therewith, of greater width than the portion of the body upon which it is formed.

1,065,021. CLUTCH. FENNIMORE G. BATCHELOR, New Bedford, Mass., assignor to Morse Twist Drill & Machine Company, New Bedford, Mass., a Corporation of Massachusetts. Filed Oct. 7, 1910. Serial No. 585,809. (Cl. 51—12.)



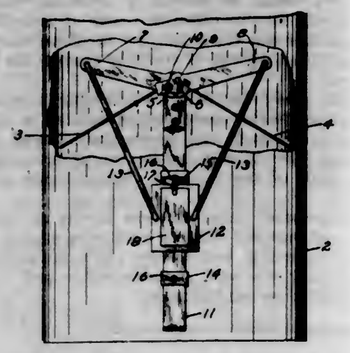
In combination, a reversibly-rotatable drive-shaft bored at its outer end, a reciprocatory member, means for transmitting motion from said drive-shaft to said member, said means comprising a gear and a lost-motion clutch having its members secured to said gear and shaft, respectively, a rod in the bore of said drive-shaft, a manually-operated lever arranged to move said rod longitudinally in said bore and means secured to said rod for locking said drive-shaft to said gear.

1,065,022. SUPPORTING DEVICE. HELEN M. BELL, San Francisco, Cal. Filed Mar. 14, 1912. Serial No. 683,689. (Cl. 155—22.)



In a fitting stand, a base, an annular rib integral with said base having a groove in its upper surface, an upper plate, having a groove in its under side and an annular overhanging flange extending around its periphery, balls interposed between the base and plate within the grooves, a central pivot fixed to the upper plate and projecting through the base, means at the lower end of said pivot to prevent the same from being accidentally removed from the base plate, a tubular member secured to the upper end of the said pivot, a rod adapted to telescope in said tubular member, said rod carrying a seat, a collar adjustable on the tubular member, said collar carrying an arm, and means for holding the collar in its positions of adjustment.

1,065,023. DAMPER. JOSEPH W. BLOOD, Minneapolis, Minn. Filed Oct. 14, 1912. Serial No. 725,609. (Cl. 236—2.)

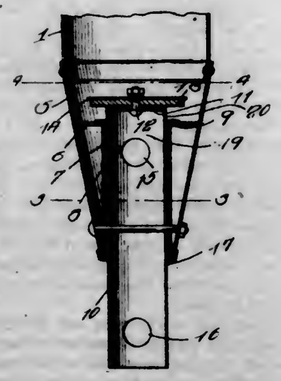


1. A damper comprising blades or wings, parallel spindles whereon said blades are mounted, arms mounted on the outer adjacent ends of said spindles, each of said arms having a transverse slot therein near its spindle to receive the projecting end of the other spindle, a guide disposed at right angles substantially to said spindles, a slide on said guide, links connecting said slide with the outer portions of said arms, and means for regulating the travel of said slide on said guide.

2. The combination, with a flue, of parallel spindles journaled therein, damper blades mounted on said spindles, said spindles projecting beyond said flue, arms secured on said spindles, a guide bar secured to said flue at right angles substantially to said spindles, a slide mounted on said guide, adjustable stops carried by said guide above and below said slide for regulating the movement of said slide, and links pivotally connecting said slide with the outer portions of said arms.

3. The combination, with a pipe, of damper spindles journaled therein, blades carried by said spindles, arms secured to the projecting ends of said spindles, a guide bar secured to said pipe and extending vertically thereon, stops adjustably mounted on said guide bar, a slide interposed between said stops on said guide bar, links pivotally connecting said slide with the outer portions of said arms, said slide having a hook thereon adapted to support a weight, whereby said damper blades may be balanced.

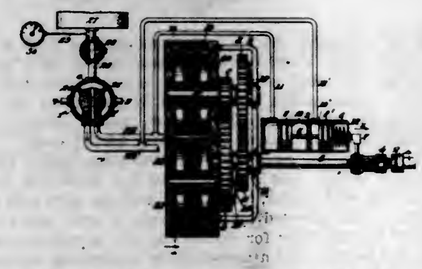
1,065,024. WELL-BUCKET. HENRY A. BOTT, McCurtain, Okla. Filed Dec. 19, 1912. Serial No. 737,702. (Cl. 103—35.)



1. A well bucket comprising a body, a sleeve connected to the lower end of said body, a bottom mounted in the sleeve, a valve tube having its upper end connected to the bottom and its lower end to the sleeve, a valve stem slidably mounted in the tube and having a valve disk secured to its upper end, ports formed near the upper end of the valve stem and being closed by the valve tube when the valve disk is seated upon the bottom.

2. A well bucket comprising a body having a tapered sleeve secured to its lower end, a bottom mounted in the sleeve, said bottom having an aperture formed centrally thereof, a valve tube having its upper end secured in the aperture and its lower end secured to the lower end of the sleeve, a hollow valve stem slidably mounted in the tube, a plate closing the upper end of the stem, a valve disk connected to the plate, ports formed in the stem and below the plate, said ports being closed by the tube when the valve disk is seated upon the bottom, said ports being adapted to disengage the valve tube when the bucket is lowered in the well and the valve disk disengages the bottom.

1,065,025. GAS-ENGINE STARTER. BARNET NIXON BOTTS, Paso Robles, Cal., assignor of one-half to Verne Exline, Paso Robles, Cal. Filed Dec. 7, 1911. Serial No. 664,813. (Cl. 123—179.)



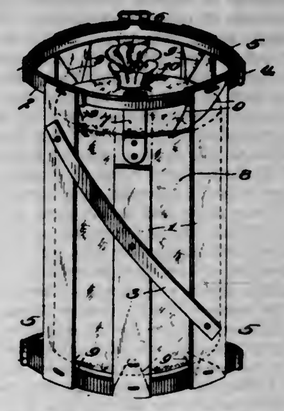
1. A gas engine starter having in combination a closed casing and a pair of intermeshing rotors operating therein, an engine shaft and a shaft alined therewith; gearing connecting the last-named shaft to one of the rotors; connecting means between the adjacent ends of said shafts, including a clutch member slidable on said alined shaft; a compressed-air supply connecting with said casing; a cylinder, means for conducting compressed-air thereto; a piston having a rod connected to the slidable clutch member and actuated in one direction by air pressure; means for actuating the piston in the other direction when the pressure of air in the cylinder is reduced; and means whereby the rotors may be operated from the engine shaft to replenish the compressed air supply.

2. An engine starter comprising a motor, consisting of a pair of geared wheels, a casing in which the gears are mounted and a shaft rotatable by one of said gears, means for connecting this shaft to the crank shaft of an engine, means for delivering air under pressure to the casing to rotate the gears in one direction to drive said crank shaft, said first named means comprising a clutch, one member of which is slidable on the first-named shaft, a cylinder and a piston therein connected to the slidable clutch member and actuated in one direction by air pressure, and means whereby the crank shaft may be caused to rotate the motor to compress air.

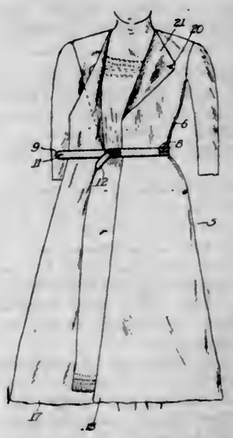
1,065,026. COLLAPSIBLE SHIPPING-CRATE. ARTHUR BOYER, Biggsville, Ill. Filed July 31, 1912. Serial No. 712,416. (Cl. 217—44.)

1. In a collapsible crate, the combination with circular folding ends and staves attached thereto, of a ring for and hinged at each end of the crate and adapted to swing bodily within the crate to hold the same expanded, means for holding the rings within the crate, and means for securing said rings on the outside of the crate when the same is collapsed.

2. The combination in a collapsible crate, of a pair of hinged end rings and staves connecting them, a solid ring hinged at each end of the crate with its hinge joint at right angles to the joint of the hinged rings, spring hooks on the end rings for holding the solid rings within the crate to expand the end rings, and spring hooks at the outside of the crate for holding said solid rings when the crate is in folded position.



1,065,027. REVERSIBLE-FRONT GARMENT. BERNHARD BUDWEISER, Chicago, Ill. Filed Nov. 11, 1912. Serial No. 730,587. (Cl. 2—145.)



1. In a garment of the class described, a skirt, having two overlapping apron extensions, which overlap across the front of the wearer, with their edges terminating at the sides; tabs projecting from said extensions, at the waist line; a plurality of exterior buttons, spaced apart at each side and secured at the waist line, for adjustable fastening engagement with said tabs; longer tabs, secured on the inside, of the garment, at the waist line near the location of said buttons, each longer tab adapted for fastening association with the shorter tab of the opposite side, whereby either overlapping extension may be secured in place on the outside or inside as desired.

2. In a garment of the class described, a skirt, having two overlapping apron extensions, which overlap across the front of the wearer, with their edges terminating at the sides, a belt member extending from edge to edge of the skirt, the ends of said belt, adjacent the edges, being formed to receive an engaging means, a tab secured upon the interior of said skirt at the belt line, upon each side thereof, a tab-engaging member adapted for removable engagement of the belt at either end thereof and for adjustable engagement of the tab connected to the opposite interior side of the skirt, and means upon the exterior of the skirt at the belt line for engagement of that end of the

belt which is not engaged by said tab-engaging means, said belt-engaging means upon the exterior of the skirt comprising a plurality of slightly spaced-apart members.

3. In a garment of the class described, a skirt, having two overlapping apron extensions, which overlap across the front of the wearer, with their edges terminating at the sides, a belt member extending from edge to edge of the skirt, the ends of said belt, adjacent the edges, being formed to receive an engaging means, a tab secured upon the interior of said skirt at the belt line, upon each side thereof, a tab-engaging member adapted for removable engagement of the belt at either end thereof and for adjustable engagement of the tab connected to the opposite interior side of the skirt, and means upon the exterior of the skirt at the belt line for engagement of that end of the belt which is not engaged by said tab-engaging means.

4. In a garment of the class described, a skirt having two overlapping apron extensions which overlap across the front of the wearer with their edges terminating at the sides, means adjacent each edge of said skirt at the belt line for removable engagement of a tab-engaging means, a tab carried by said skirt upon the interior thereof, one on each side, a buckle having means for detachable engagement of the skirt where the skirt is formed to receive the tab-engaging means, and said buckle having also means for adjustable engagement of that tab which is secured to the interior side of the skirt which is opposite to the edge in which said buckle is detachably engaged, and means upon the exterior of the skirt for engagement of that edge of the skirt which is left free after engagement of said buckle to connect one edge of the skirt and one tab, said buckle adapted and arranged to be left upon the tab after adjustment and disengaged from the edge of the skirt in which it was initially engaged.

1,065,028. COMPOSITE LEATHER OR LEATHER SUBSTITUTE AND PROCESS OF PRODUCING SAME. ALBERT L. CLAPP, Braintree, Mass., assignor to Hide-Ite Leather Company, Brockton, Mass., a Corporation of Maine. Filed May 15, 1912. Serial No. 697,440. (Cl. 92—3.)

1. The process of producing long-fiber stock for leather-substitute, which consists in charging skeletonized scrap leather, having the fibers thereof in a substantially unbroken condition, with a waterproof soap compound.

2. The process of producing stock for leather-substitute, which consists in softening and skeletonizing leather-scrap with an alkali; and, while still maintaining it in its fibrous condition as regards the length of fiber, charging it with an insoluble soap.

3. The process of producing long-fiber stock for leather-substitute, which consists in treating leather-scrap with an alkali of such strength as to soften the fibers and dissolve the contained gelatin; and thereafter adding an oil capable of being saponified by the free alkali present in the mass.

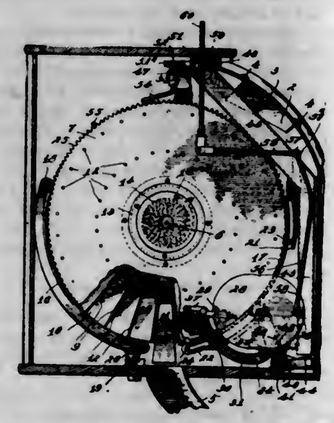
4. The process of producing long-fiber stock for leather-substitute, which consists in treating leather-scrap with an alkali of such strength as to soften the fibers and dissolve the contained gelatin; adding an oil capable of being saponified by the free alkali present in the mass; and finally rendering the soap insoluble.

5. The process of producing stock for leather-substitute, which consists in agitating scrap leather with ammonia; thereafter, when the scrap is softened, treating it with oil in the presence of a portion of the ammonia and finally treating the soap compound, which is formed in the mass, with a substance capable of rendering such compound waterproof.

[Claims 6 to 11 not printed in the Gazette.]

1,065,029. AUTOMATIC VENDING-MACHINE. ROBERT B. CRAIG and ALBERT L. COFFMAN, Kansas City, Mo., assignors to The Automatic Scale Vending Company, Santa Fe, N. Mex., a Corporation of New Mexico. Filed Dec. 22, 1911. Serial No. 667,891. (Cl. 211—8.)

1. In a vending machine, the combination with a carrier, and a gear wheel carried by said carrier, of a pinion meshing with said gear wheel, a cam operated by said pinion, a stop for said cam and a lever controlling said stop.



2. In a vending machine, the combination with a carrier and a gear wheel carried by said carrier, of a pinion meshing with said gear wheel, a cam operated by said pinion, a lever and a stop carried by said lever for controlling the movement of the cam, and a second lever controlling the movement of the first named lever.

3. In a vending machine, the combination with a spring impelled carrier, and a gear wheel for imparting movement from said carrier, of a pinion meshing with said gear wheel, a cam operated by said pinion, a lever and a stop carried by said lever for controlling the movement of the cam and carrier, and a second lever controlling the movement of the first named lever.

4. In a vending machine, the combination with a carrier, and a gear wheel, of a pinion meshing with said wheel, a cam disk mounted on the shaft of said pinion, a lever, a stop mounted on said lever to limit the movement of said cam, a second lever controlling the movement of the first named lever, and a pin on the first named lever in the path of the cam, whereby the stop is reset after each operation of the cam.

5. In a vending machine, the combination with a carrier and a gear wheel moved by said carrier, of a pinion meshing with said gear wheel, a cam disk mounted on the shaft of said pinion, stops on said disk, a lever, a dog carried by one end of said lever in the path of the cam stops, a pin carried by the other end of said lever in the path of said cam, whereby the lever is reset after each movement of the cam, and a second lever controlling the movement of the first named lever.

[Claims 6 to 8 not printed in the Gazette.]

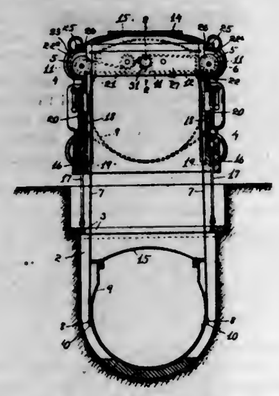
1,065,030. BURIAL APPARATUS. HENRY J. CULP, Goshen, Ind. Filed Dec. 28, 1912. Serial No. 739,075. (Cl. 27—6.)

1. A double casket comprising an exterior transportation case having an open bottom and removable lid, an inner burial case also having a lid, lateral rollers journaled in the exterior case, flexible means for detachably connecting the exterior case and the burial case, and means for operating the rollers.

2. An outer transportation casket having an open bottom, upper and lower lateral recesses, a removable lid, rollers in the upper recesses, winding straps on said rollers, folding caster legs in the lower recesses, and means for operating said rollers.

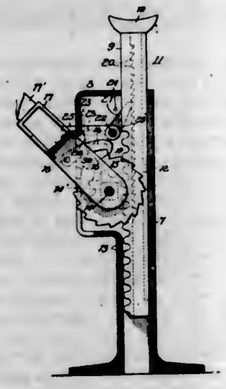
3. An outer transportation casket having an open bottom, lateral recesses, a removable lid, rollers in said recesses, sprockets on said rollers, winding straps, catches on said straps, a drive sprocket, a frictional control for said drive sprocket, and sprocket chains connecting the roller sprockets and the drive sprocket.

4. An outer casket having an open bottom and removable lid, an inner burial case having a removable lid, revoluble devices in connection with the outer casket, detachable connections for the revoluble devices and the



inner burial case, operating means for the revoluble devices, and means of frictional control for said operating means.

1,065,031. LIFTING-JACK. EDWARD J. CUMMINGS, Chicago, Ill. Filed July 30, 1912. Serial No. 712,298. (Cl. 57—102.)



1. In a lifting-jack, the combination of a standard, a lifting-bar provided with a rack, a rack-engaging pinion, an operating-lever, a pawl-and-ratchet device operated by said lever, and having a cam on the pawl, a detent for engaging said bar, and mechanism between said lever and detent acting on the cam to trip the pawl when the lever is lowered and actuated by the cam when the lever is raised to free the detent to permit it to engage the bar.

2. In a lifting-jack, the combination of a standard, a lifting-bar provided on its face with a series of rack-teeth and a depressed series of ratchet-teeth to one side of the center of said face, a rack-engaging pinion, an operating-lever, a pawl-and-ratchet device operated by said lever and having a cam on the pawl, a gravity-detent for engaging said ratchet-teeth, and mechanism between said lever and detent normally tending to hold the detent out of engagement wih said ratchet-teeth and acting on the cam to trip the pawl when the lever is lowered and actuated by the cam when the lever is raised to free the detent to permit it to engage the bar.

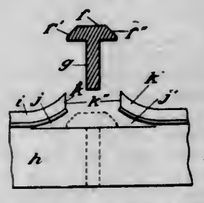
3. In a lifting-jack, the combination of a standard, a lifting-bar provided with a rack, a rack-engaging pinion, an operating-lever, a pawl-and-ratchet device operated by said lever and having a cam on the pawl, a detent for engaging said bar, mechanism between said lever and detent acting on the cam to trip the pawl when the lever is lowered and actuated by the cam when the lever is raised to free the detent to permit it to engage the bar, and means for releasably holding said mechanism out of the path of said cam when the lifting-bar is to be raised.

4. In a lifting-jack, the combination of a standard, a lifting-bar provided with a rack, a rack-engaging pinion, an operating-lever, a pawl-and-ratchet device operated by said lever and having a cam on the pawl, a detent for engaging said bar, provided with a tail-piece, and a gravity arm normally bearing against said tail-piece and provided with a depending shoe extending into the path of said cam, whereby, in lowering the lever to release the detent from the load, the cam trips the pawl, and in raising the lever the cam raises said arm off said tail-piece to permit the detent to engage the lifting-bar.

5. In a lifting-jack, the combination of a standard, a lifting-bar provided with a rack, a rack-engaging pinion, an operating-lever, a pawl-and-ratchet device operated by said lever and having a cam on the pawl, a detent for engaging said bar, provided with a tail-piece, and a gravity-arm having a pin projecting from it to bear upon said tail-piece, said arm having a depending shoe with a pin projecting therefrom into the path of the cam, whereby, in lowering the lever to release the detent from the load, the cam rides over the shoe-pin to trip the pawl, and in raising the lever the cam engages the shoe-pin to lift the weight of said arm off the tail-piece to permit the detent to engage the lifting-bar.

[Claim 6 not printed in the Gazette.]

1,065,032. SASH. CHARLES F. DECK, Toronto, Ontario, Canada. Filed July 29, 1912. Serial No. 712,140. (Cl. 189—36.)



1. A sash, comprising a horizontal bar and a vertical bar, one of the bars being provided with a dovetail groove with flexible members at the sides thereof, the other bar having a substantially dovetail table seated within the dovetail groove and engaged by the flexible members.

2. A sash, comprising a set of horizontal bars and a set of vertical bars intersecting therewith, one set of bars provided with dovetail grooves at the intersections, said bars being sheared laterally from the sides of the dovetail grooves to provide flexible members, the other set of bars having dovetail tables seated in the dovetail grooves and engaged by the flexible members.

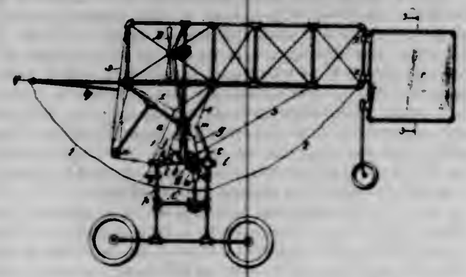
3. A sash, comprising a set of horizontal bars having dovetail grooves therein, said bars being sheared laterally from the sides of the dovetail grooves, and a set of vertical bars having slotted stems embracing and interlocking with the horizontal bars and substantially dovetail tables seated in the dovetail grooves and engaged by the flexible members.

1,065,033. DEVICE FOR MAINTAINING THE EQUILIBRIUM OF FLYING-MACHINES. FREDERICK WILLIAM DUFWA, Mexico, Mexico. Filed Aug. 12, 1908. Serial No. 448,258. (Cl. 244—29.)

1. In a flying machine, provided with a rudder mounted to swing sidewise, and a swinging car, a flexible connection between the swinging car and the rudder, whereby a side dip or inclination of the machine will automatically swing the rudder, so as to reëstablish the equilibrium; substantially as described.

2. In a flying machine, the combination of a main body portion, a car suspended freely therefrom, a vertically

swinging rudder, a horizontally swinging rudder, and automatically operated connections between both of said rudders and the car by which the former are actuated to maintain the equilibrium of the body portion in both a vertical and a horizontal plane; substantially as described.



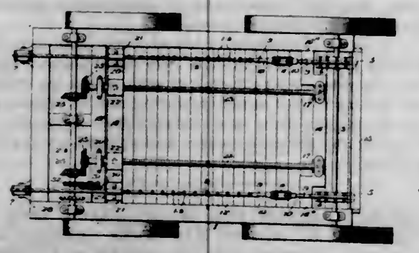
3. In a flying machine, the combination with the lifting surfaces, of a balancing mechanism consisting of a depending hanger, an upper axle supporting the balancing mechanism, a lower axle at right-angles to the upper axle, a car having rigidly supported bearings suspended from the lower axle, and bearings rigidly supported from the hanger for the upper and lower axles; substantially as described.

4. In a flying machine, the combination with the main body portion, of a rigid fore and aft swinging hanger supported rigidly therefrom, a sidewise swinging car or carrier frame supported from the hanger and having an upwardly directed arm, the upper end of which comes close to the upper axle of the hanger, a vertical rudder for directing the horizontal course of the flying-machine, and connections by means of cords or wires and blocks or sheaves from said rudder to the upper end of the arm on the car frame, so that a side dip or inclination of the flying-machine will automatically swing the rudder over to the lower wing; substantially as described.

5. In a flying machine, the combination with the main body portion, of a fore and aft swinging hanger supported therefrom, a sidewise swinging car or carrier frame supported on the hanger, fore and aft rudders respectively, for directing the course of the car both laterally and vertically, and connections from said rudders to the swinging hanger and swinging car frame for automatically reëstablishing equilibrium of the machine; substantially as described.

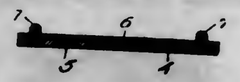
[Claims 6 to 20 not printed in the Gazette.]

1,065,034. FERTILIZER-DISTRIBUTER. WILLIAM J. EHLERT, Huntley, Ill. Filed June 3, 1911. Serial No. 631,159. (Cl. 214—1.)



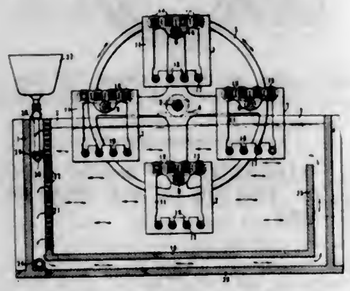
In a fertilizer distributer, a traveling slatted apron having only a single stretch, flexible endless cables, hook-shaped bolts connecting each and every slat of the apron independently to the upper stretches of said cables, the lower stretches of the cables being entirely disconnected from the slats, and grooved wheels over which the slats pass, said wheels being provided with transverse notches to receive the hooked parts of the bolts, the grooves in the wheels receiving the cables aforesaid.

1,065,035. INSOLE. CHARLES V. EMMONS, Chicago, Ill. Filed Jan. 22, 1913. Serial No. 743,466. (Cl. 36—22.)



An insole comprising a body-portion and two layers respectively of coarsely-woven fabric and finely-woven fabric cemented together and formed with a lip composed of the two thicknesses of fabric, said layers forming a covering cemented at the under layer of coarsely-woven fabric to a surface of said body-portion.

1,065,036. DYEING-MACHINE. JOHN C. EVENDEN, Amsterdam, N. Y., assignor, by mesne assignments, to Klauder-Weldon Dyeing Machine Company, Amsterdam, N. Y., a Corporation of New York. Filed Dec. 4, 1908. Serial No. 465,903. (Cl. 8—19.)



1. In a dyeing apparatus the combination with a tank of means adapted to circulate a liquor within said tank in a closed path from one side to another, means adapted to move an article laterally in said tank against the flow of said liquor comprising a shaft extending transversely of and above the tank and suitably journaled upon the side walls thereof, a structure mounted upon said shaft comprising spaced rotary carriers which extend downwardly into the liquor, frames carried by said carriers and interposed between the same, the construction being such that said frames will be progressively dipped into the liquor and withdrawn therefrom during the rotation of said carriers, a plurality of sticks supported in the upper portion of each of said frames, intermeshing gear wheels operatively associated with said sticks for rotating the same, and a gear wheel fixed upon one of the carriers and meshing with said first-mentioned gear wheels to drive the same simultaneously with the rotation of said carriers.

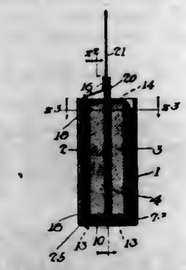
2. In a dyeing apparatus, the combination with a tank adapted to hold a dye liquor, of a rotary carrier positioned above said tank so that its periphery passes through said dye liquor for carrying the material to be dyed into and out of the tank, and means within said tank for compelling the dye liquor contained therein to circulate in a closed path from one side to another opposite in direction to the movement of the material to be dyed as it passes laterally through said tank on said rotary carrier.

3. In a dyeing apparatus, the combination with a tank adapted to hold the dye liquor, of a rotary carrier for the material to be dyed operatively positioned with respect to the tank and adapted to immerse said material in the dye liquor during the rotation thereof, and means for compelling a circulation of the dye liquor, comprising a false floor in the lower portion, a perforated partition extending transversely of the tank and spaced from the end wall thereof adjacent the end of said false floor, an imperforate partition extending transversely of the tank at the opposite end thereof, and spaced from the end wall of the tank, and means for delivering the steam into the tank beneath said false floor in such direction as will cause the dye liquor to flow between said floor and the bottom wall of the tank, thence upward and over said imperforate partition, thence longitudinally of the tank in a direction opposite to that of the movement of said material through the tank whence it flows through said perforated partition.

4. In a dyeing apparatus, the combination with a tank adapted to hold the dye liquor, of a rotary carrier for the material to be dyed supported above the tank and partly immersed in the dye liquor so that when said carrier is rotated the material to be dyed will be progressively immersed and withdrawn from the liquor, and means for compelling a circulation of the dye liquor through said tank, comprising a false floor arranged in the lower portion of the tank and spaced from the bottom wall thereof, said floor terminating short of the end walls of the tank, a transverse perforated partition extending upwardly through the tank from one end of said floor and an imperforate partition extending transversely of the tank at the opposite end of said floor, said partition terminating below the surface of the liquor, and a steam pipe extending transversely of the tank at one end thereof and having jets for delivering the steam beneath said floor, the direction of said jets being such that the dye liquor is compelled to flow first between said floor to the bottom wall of said tank, thence upward and over said imperforate partition, thence longitudinally of the tank in a direction opposite to the movement of the material to be treated, thence through said perforated partition, whence it returns to be again circulated through said tank.

5. In a dyeing apparatus, in combination a tank, means adapted to circulate a liquid within said tank in a closed path from one side to another and means adapted to move an article laterally in said tank against the flow of said liquid.

1,065,037. HEATING UNIT. BJARNE FALKENBURG, Ontario, Cal. Filed May 27, 1912. Serial No. 700,099. (Cl. 219—68.)



1. A heating unit comprising a tubular casing, a core therein consisting of two substantially semi-cylindrical members of heat conducting material, a sheet of insulation between said members, and wire wound on said insulating sheet between said core members.

2. A heating unit comprising a tubular casing, a core therein consisting of two substantially semi-cylindrical members of heat conducting material, a sheet of insulation between said members, and wire wound on said insulating sheet between said core members, there being a conduit formed between the wall of the casing and said core, and a conductor passed through said conduit at the top and connected to the lower end of said resistance wire.

3. A heating unit comprising a tubular casing, a core therein consisting of two members of heat conducting material, a sheet of insulating material between said members, resistance wire wound on said insulating material, said insulating material extending above said members, one of said members being formed with a longitudinal groove, and a conductor lying in said groove and insulated therefrom and connected with lower end of said wire, the upper end of said wire being extended inwardly and connected with said resistance sheet.

4. A heating unit comprising a tubular casing of heat conducting material, a pair of semi-cylindrical members within said casing consisting of a heat conducting material, resistance wire arranged between said members and insulated therefrom, one of said members having a longitudinal groove, a conductor extending through said groove, a connection between said conductor and the lower end of said resistance wire extending across the bottom of one of said members, and a disk of insulating material between said latter member and said connection and another disk of insulating material between said connection and the bottom of said casing.

5. A heating unit comprising a tubular casing, a pair of semi-cylindrical members within said casing, resistance wire arranged between said members and insulated therefrom, one of said members having a longitudinal groove, strips of insulating material of the width of said groove lying therein, and a conductor of less width than said groove secured to said insulating strips and extending along the groove, the lower end of said conductor being connected with said resistance wire, the upper end of said conductor forming one terminal and the upper end of the resistance wire forming another terminal.

[Claims 6 to 8 not printed in the Gazette.]

1,065,038. ANTILEAK TIRE COMPOUND. MILES FRANKLIN FETTY, Kansas City, Mo., assignor to Charles F. Hutchings, Jr., Kansas City, Kans. Filed Sept. 28, 1912. Serial No. 721,966. (Cl. 152—25.)

1. The herein-described composition of matter for sealing punctures in pneumatic tires and the like, consisting of asbestos fiber eighty pounds, glucose one gallon, corn starch five pounds, bulk starch five pounds, water fifty-four gallons.

2. The herein-described composition of matter for sealing punctures in pneumatic tires and the like, consisting of asbestos fiber eighty pounds, glucose one gallon, corn starch five pounds, bulk starch five pounds, glycerin three and one-third gallons, alcohol sixteen and two-thirds gallons, water fifty-four gallons.

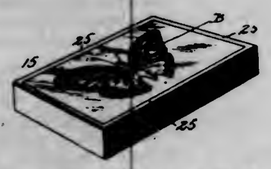
1,065,039. STEADYING-STRIP FOR HATS. ELIZABETH M. FORMAN, Mount Clemens, Mich. Filed July 5, 1912. Serial No. 707,672. (Cl. 2—108.)



1. The combination with a lady's hat, of a pair of steadying strips attached to the rear of the hat and reaching from a point at or near the sides around to near the mid-point at the rear of the hat, the said strips being spaced from each other at such mid-point by a distance just sufficient to allow the strips to straddle the knob of hair worn by the user, and receive lateral support from merely resting upon and about the said knob of hair, substantially as described.

2. The combination with a lady's hat of a pair of steadying strips comprising substantially triangular strips of fabric or similar material that are fastened to the hat with the acute angle of the strips near the centers of the sides, while the long edges of the triangular pieces are fastened to the interior of the hat and substantially parallel the edge, the obtuse angles of the strips being thereby subtended below the hat and the rear edges of the two strips being somewhat spaced for the purpose of just straddling the hair knob, substantially as described.

1,065,040. BUTTERFLY-MOUNT. EDWARD GARNER, Quincy, Cal. Filed Sept. 5, 1912. Serial No. 718,699. (Cl. 35—12.)



1. A mount for entomological and other natural history specimens comprising a substantially rigid plate having an opening therethrough, a sheet of textile material covering said plate and opening and cemented to said plate forming a display area of uniform appearance, having a yielding portion for the body or thickened parts of a specimen and unyielding portions surrounding said yielding portion to support the thin parts of the specimen, and a transparent plate covering the specimen and display area and secured at its edges to the mount.

2. A mount for entomological and other natural history specimens comprising a hollow body made of substantially rigid material having an opening in one side, a sheet of textile material covering said side and the opening therein and cemented to the side to form a display area which shall be smooth and of uniform appearance having a yielding portion and a rigid portion surrounding the same, said yielding portion adapted to be depressed by the body and thicker parts of a specimen while the wings and thinner parts of said specimen are supported by the substantially rigid side of the body of the mount, a filling of soft fibrous material within the mount body, and a cover plate of transparent material overlying the specimen and display area and secured at its edges to the mount.

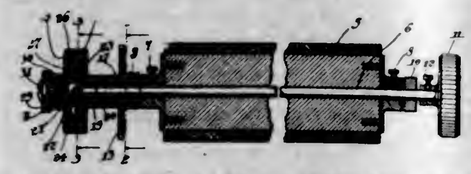
3. A mount for entomological and other natural history specimens comprising a substantially rigid plate having an opening therethrough, a sheet of textile material covering said plate and opening and cemented to said plate forming a display area of uniform appearance, having a yielding portion for the body or thickened parts of a specimen and unyielding portions surrounding said yielding portion to support the thin parts of the specimen, said textile material having a slit therein above said opening in the plate to accommodate specimens having large parts, and a transparent cover plate covering the specimen and display area and secured at its edges to the mount.

4. A mount for entomological and other natural history specimens comprising a hollow body made of a single sheet of thin material folded, and the folded edges fastened together, said body having an opening through one side, a sheet of textile material covering said side and the opening therein and cemented to the side to form a display area which shall be smooth and of uniform appearance having a yielding portion and a rigid portion surrounding the same, said yielding portion adapted to be depressed by the body and thicker parts of a specimen while the wings and thinner parts of said specimen are supported by the substantially rigid side of the body of the mount, a filling of soft fibrous material within the mount body, and a cover plate of transparent material overlying the specimen and display area and secured at its edges to the mount.

1,065,041. TYPE-WRITER. EDWARD J. GOLDBLATT, Chicago, Ill., assignor of one-half to Arthur R. Ames, La Grange, Ill. Filed Apr. 27, 1912. Serial No. 693,511. (Cl. 197—123.)

1. In a typewriter, a platen, a twirling knob connected therewith at one end of the platen, a hollow knob at the other end of said platen, a line-spacing ratchet rigidly secured thereto for rotation therewith, and a friction clutch between the last mentioned knob and platen and within the hollow knob.

2. In a typewriter, a platen, a twirler knob secured to the platen for rotation therewith, a second twirler knob rotatable with respect to the platen and first twirler knob, a ratchet wheel secured to said second twirler knob for rotation therewith, and means to rotate one of said rotatable knobs by the other comprising friction means having coacting parts adjusted to contact for frictional resistance continuously effective against resistance of the rotated part and at the same adjustment ineffectual against intentional forcible rotation of the twirler knobs in opposite directions.



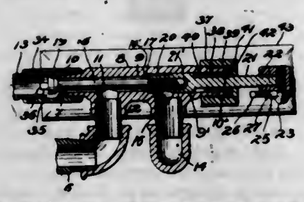
3. In a typewriter, a platen, a twirler knob rotatable relative thereto having a counter-bored part supporting and carrying rotatably connected therewith the line-spacing ratchet of the platen, and a friction member connected with the platen and lying within said counter-bored part of the knob for coaction with said counter-bored part to connect the relatively rotatable platen and twirler knob.

4. In a typewriter, a shaft, a platen mounted on the shaft, a twirler knob carrying a ratchet wheel rigidly connected therewith and loosely rotatable on said shaft, a part within the twirler knob secured to said shaft, and friction-engaging means for yieldingly uniting said knob and the part within the knob.

5. The combination of a twirler-knob having a hub, loose on the platen shaft of a typewriter, a ratchet wheel secured on said hub, a disk member secured to said shaft for rotation therewith, a spring for pressing said disk and knob into frictional engagement, a cap for varying the tension of the spring, and a screw for fixing the cap in adjusted position.

[Claims 6 and 7 not printed in the Gazette.]

1,065,042. VALVE FOR AUTOMATIC HYDRAULIC AIR-COMPRESSOR-OPERATING SYSTEMS. ARTHUR GRANDJEAN, San Diego, Cal. Filed Dec. 20, 1910. Serial No. 598,436. (Cl. 230—17.)

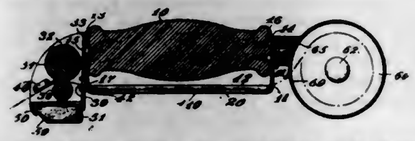


A valve device comprising a barrel having two bores of different diameters, inlet and exhaust valve seats at the ends respectively of the smaller bore, inlet and exhaust valve plugs to alternately seat in said valve seats, a valve stem detachably connecting the valve plugs and having a smaller diameter than the valve bores, a bushing fitting in and seated against the end of the barrel, removable means to hold the bushing in place, a power port adjacent the smaller valve bore, an exhaust port adjacent the larger valve bore, and a valve rod connected to the exhaust valve plug and guided by the bushing.

1,065,043. STAMP-AFFIXER. ALFRED HALL, Cleveland, Ohio. Filed Nov. 28, 1910. Serial No. 594,439. (Cl. 216—33.)

1. In a stamp affixer, the combination of a handle, a frame at the forward end thereof, a pair of feeding rolls carried by the frame, a moistening device carried by the frame below the feeding rolls, and a stamp support beneath the handle and adapted to support a row of stamps passing between the feeding rolls.

2. In a stamp affixer, the combination of a handle, a stamp support beneath the same, a roll holder at the rear end of the handle, a feeding device at the forward end of the handle, and a moistening device below the feeding device and in front thereof.



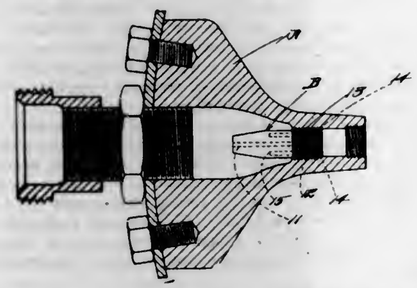
3. In a stamp affixer, the combination of a handle, a stamp support extending lengthwise of the same, a roll support at the rear of the handle, a pair of feeding rolls at the forward end of the handle, and a moistening device below the feeding rolls and exposed at its front end.

4. The combination of a handle, a stamp support along the same, a pair of feeding rolls adjacent to the forward end of the handle, a wick receptacle below the rolls, a wick exposed at its front edge in said receptacle, and a reservoir for said receptacle.

5. In a stamp affixer, the combination of a handle, a plate secured to the ends thereof and extending intermediately lengthwise of the handle and flanged at its edges to provide a stamp trough, a sheet metal frame at the forward end of such device having a pair of feeding rolls, one above the other, and a wick receptacle having a drawer-like engagement with said forward frame beneath the rolls.

[Claims 6 to 9 not printed in the Gazette.]

1,065,044. TRACK-SANDER. JOHN H. HANLON, Somerville, Mass. Filed Aug. 7, 1912. Serial No. 713,777. (Cl. 105—263.)



1. The air nozzle for track sanders having a central longitudinal air passage, and an auxiliary air passage entering through the rear face and intercepting said central passage, said auxiliary passage being located eccentrically of the central passage.

2. The air nozzle for track sanders having a central longitudinal air passage, and a plurality of auxiliary air passages entering through the rear face and intercepting said central passage, said auxiliary passages being located eccentrically of said central passage and symmetrically about it.

3. The air nozzle for track sanders having a plurality of air passages entering through the rear face and uniting with the passage to the nozzle orifice and having their rear orifices arranged near the periphery of the rear face of the nozzle.

4. The air nozzle for track sanders having a central longitudinal air passage, a cross air passage intercepting it, and a side air passage intercepting said cross air passage.

5. The air nozzle for track sanders having a central longitudinal air passage, a cross air passage intercepting it, and a side air passage intercepting said cross air passage and having a blind end beyond the point of interception with said cross passage.

[Claim 6 not printed in the Gazette.]

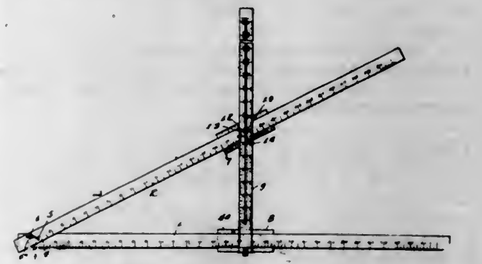
1,065,045. SHELF-FRAME. JOHN HARTMANN, Jersey City, N. J. Filed Mar. 25, 1913. Serial No. 756,780. (Cl. 211—27.)



1. In a shelf frame, the combination with a front frame post, of a rear frame post connected therewith, two rows of ratchet teeth formed upon each of the facing surfaces of said frame posts, a shelf support provided with notches in its ends accommodating said ratchet teeth, two clamping levers pivotally attached to each end of said shelf support provided at their outer ends with jaws, and springs upon said shelf support for causing said jaws to project into said notches and to engage said ratchet teeth.

2. In a shelf frame, the combination with a front frame post, of a rear frame post connected therewith, longitudinal strips upon the facing surfaces of said frame posts, a row of ratchet teeth formed upon each side of said strips, a band extending throughout the whole length and width of each of said strips, a shelf support provided with notches in its ends accommodating said strips and said bands, two clamping levers pivotally attached to each end of said shelf support provided at their outer ends with jaws, and springs upon said shelf support for causing said jaws to project into said notches and to engage said ratchet teeth.

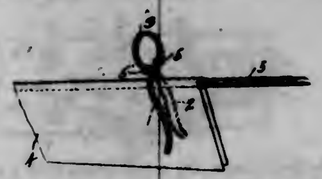
1,065,046. FRAMING-SQUARE. FRANCIS S. HIGGINS, Pasadena, Cal. Filed Sept. 19, 1911. Serial No. 650,212. (Cl. 73—80.)



1. An instrument of the character described, comprising graduated members pivotally connected together, means for adjustably fixing said members with respect to each other, channeled slidable members arranged on the pivotally connected members and graduated correspondingly thereto; one of said slidable members having a recess disposed at a right angle to its length, an intermediate member disposed in said recess and fixed to said slidable member and extending across the other slidable member; said intermediate member being graduated correspondingly to the other members and being provided with a longitudinal slot, a post on such other slidable member disposed in said slot of the intermediate member, and means on said post for adjustably fixing the intermediate member to such other slidable member.

2. An instrument of the character described comprising graduated members pivotally connected together, means for adjustably fixing said members with respect to each other, channeled slidable members arranged on the pivotally connected members and graduated correspondingly thereto, one of said slidable members having a recess disposed at right angles to its length, an intermediate member disposed in said recess and fixed to said slidable member and extending across the other slidable member, said intermediate member being graduated correspondingly to the other members, and means for connecting said intermediate member to the other slidable member.

1,065,047. WIRE CLOTHES-PIN. JOHN K. HOVSTAD, Hanson, Saskatchewan, Canada. Filed May 2, 1912. Serial No. 694,603. (Cl. 24—261.)



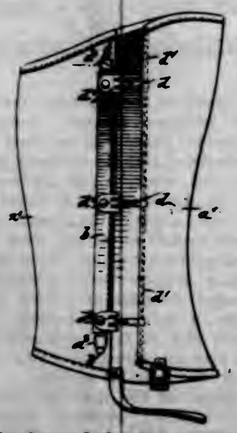
A clothes pin comprising a spring wire bent into a spring coil and having the terminal portions projecting in loops from the coil and one of said terminal loops extending through the other and the end portions of said terminal loops being formed into eyes inclosing parts of the coil, the eye of each terminal loop being disposed beyond the opposite terminal loop in position for moving into contact therewith when the terminal loops are spread apart and thus limiting the extent of spread of the terminal loops.

1,065,048. BINDING. WILLIAM HOLLMANN, Mount Vernon, and PAUL SELLHAST, New York, N. Y. Filed Oct. 7, 1911. Serial No. 653,381. (Cl. 2—124.)



A binding comprising a strip of textile fabric having a portion extending longitudinally thereof and remote from its edges, compressed to less than the thickness of the material at said edges.

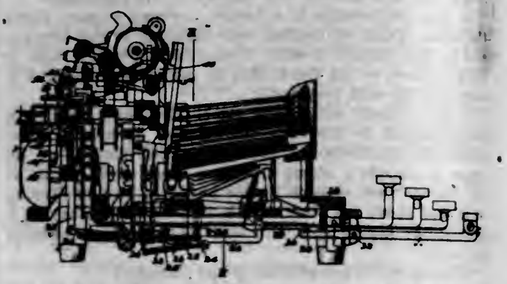
1,065,049. LEGGING. MOE JACOB, New York, N. Y. Filed Jan. 29, 1913. Serial No. 744,881. (Cl. 36—2.)



1. A legging having underlapping and overlapping edges, the underlapping edge being provided with a stay having fixed keepers at its upper and lower ends, a detachable overlapping stay the ends of which are adapted to be inserted into said keepers, a reinforcing wire at the edge of the overlapping portion of the legging, and locking spring-clasps connecting the overlapping portion of the legging with the detachable stay on the underlapping edge for permitting the swinging over and locking of the spring-clasps over said stay or the swinging back and extending of the clasps for opening the legging.

2. A legging having underlapping and overlapping edges, the underlapping edge being provided with a stay, keepers at the upper and lower ends of said stay, a detachable stay inserted in said keepers and provided with ears, a reinforcing wire at the edge of the overlapping portion of the legging, and folding spring-clasps hinged at one end to the ears on the detachable stay and at their opposite ends to the reinforcing wire of the overlapping edge of the legging for permitting the clasps to be swung into locked position over the detachable stay or into extended or open position.

1,065,050. TYPE-WRITER CARRIAGE-ACTUATING MECHANISM. WILLIAM J. KAUFFMAN, Cleveland, Ohio. Filed July 7, 1906. Serial No. 325,118. (Cl. 197—88.)



1. In a typewriter, a pair of spacing pawls carried by a tilting frame, means to actuate said frame, a lever for locking the tilting frame at the end of the line, said lever having a plurality of projections, a pivoted rod for engaging the projections to shift the locking lever to lock the frame, the rod being arranged to engage the first projection to lock the frame, means to rock said rod to disengage it from the first projection to release the frame, said rod being arranged to engage the second projection when moved in a predetermined distance to again lock the frame; substantially as described.

2. In a typewriter, a pair of spacing pawls carried by a tilting frame, means to actuate said frame, a lever for locking the tilting frame, said lever having a plurality of stops, a pivoted rod for engaging the stops to shift the locking lever to lock the tilting frame, said rod being arranged to be rotated to clear the first stop to release the frame, and arranged to engage the next stop to lock the carriage after it has again been operated; substantially as described.

3. In a typewriter, a tilting frame, spacing pawls carried thereby, a pivoted lever connected thereto, a hook on the end of said lever, and a spacing lever having a hooked end arranged to engage the hook on the pivoted lever, to actuate the tilting frame; substantially as described.

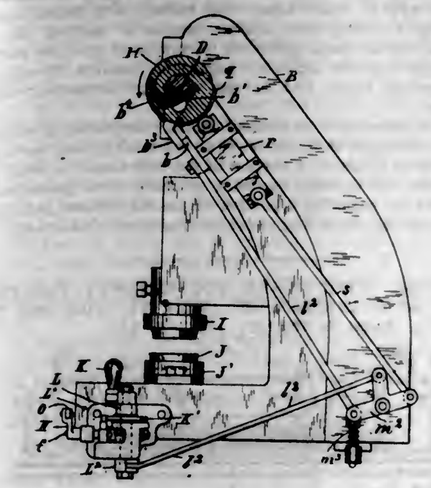
4. In a typewriter, a tilting frame, a fixed pawl carried thereby, a second pawl pivotally mounted at both ends to the first pawl, a spacing lever, operating connection between the spacing lever and the tilting frame, and a universal key-operated bar arranged to operate said connections; substantially as described.

5. In a typewriter, a tilting frame, a pawl rigidly secured thereto, a shifting fulcrum pawl pivoted to the rigid pawl and having a fulcrum at each end, a spacing lever, and connections operated thereby and arranged to actuate the tilting frame; substantially as described.

[Claims 6 to 13 not printed in the Gazette.]

1,065,051. SAFETY DEVICE FOR POWER-PRESSES. CONRAD KNOTH, Newark, N. J., assignor to Hyatt Roller Bearing Company, Harrison, N. J., a Corporation of New Jersey. Filed Apr. 1, 1912. Serial No. 687,802. (Cl. 164—107.)

1. In a power press, a safety device for actuating the press-clutch, comprising a clutch-handle with connections to operate the clutch, a locking-bolt to prevent the movement of the handle, an arm to disengage the bolt, a releasing-handle, and a coupler for connecting it detachably with the said arm.



2. In a power press, a safety device for actuating the press-clutch, comprising a cam-shaft, a clutch-handle and a cam thereon, a locking-bolt to prevent the movement of the handle, an arm to disengage the bolt, a releasing-handle, a coupler for connecting it detachably with the said arm, and a tripping-arm actuated by the cam for shifting the coupler and operating to disconnect the releasing-handle from the locking-bolt at each actuation of the clutch-handle.

3. In a power press, a safety device for actuating the press-clutch, comprising a cam-shaft at one side of the press, a clutch-handle and a cam on said shaft with a bolt-hole in the said cam, a locking-bolt for automatically engaging the said hole, a rock-shaft with arm fitted movably thereto to retract the locking-bolt, a releasing-handle at the opposite side of the press with connections to oscillate the rock-shaft, a coupler movable with the rock-shaft to engage the arm, and a tripping-arm connected with the coupler and actuated by the cam to disconnect the releasing-handle from the locking-bolt at each movement of the clutch-handle.

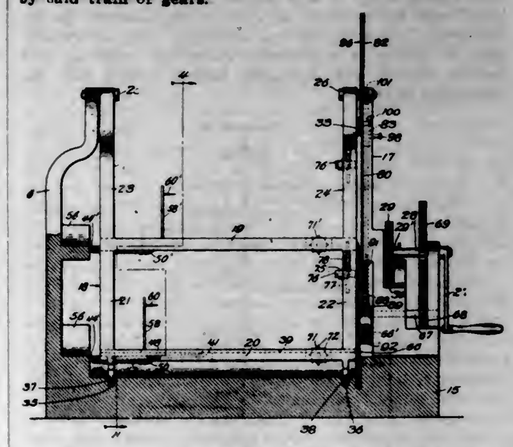
4. A safety clutch for a power press comprising a clutch and means for automatically throwing out the same at each stroke of the press, a clutch-handle movable from its normal position for reëngaging the clutch, a cam rotated once at each stroke of the press, the connections arranged and operated to throw the clutch-handle back to its normal position.

5. A safety clutch for a power press comprising a clutch and means for automatically throwing out the same at each stroke of the press, a clutch-handle movable from its normal position for reëngaging the clutch, a cam rotated once at each stroke of the press, with connections arranged and operated to throw the clutch-handle back to its normal position, a locking-bolt operating automatically to secure the said handle in its normal position, and a releasing-handle for disengaging the locking-bolt.

[Claims 6 and 7 not printed in the Gazette.]

1,065,052. MEAT-SLICING MACHINE. GEORGE W. KONE, Rock Island, Ill., assignor of one-fourth to William M. Ohlweiler, Rock Island, Ill. Filed Dec. 18, 1911. Serial No. 666,325. (Cl. 17—24.)

1. In a machine of the class described, a stationary frame, an oscillatable meat-carrying frame pivotally mounted therein, a movable knife mounted on the stationary frame, a train of gears, a pitman rod between said gears and said oscillatable frame, a cam movable with said train of gears, and a rod associated with said knife and abutting against said cam for movement of the knife by said train of gears.



2. In a machine of the character described, a stationary frame provided with a standard at each end, an oscillatable meat-carrying frame hinged to the upper ends of said standards, a knife located at one end of the stationary frame near the path of the oscillatable frame, means for supporting meat on the oscillatable frame, means for feeding the meat toward said knife, guiding means for said swinging frame, and means for operating said meat-carrying frame.

3. In a machine of the character described, a stationary frame, an oscillatable meat-carrying frame hinged thereto, means for feeding meat toward one end of said frame, a vertically reciprocable frame carrying a saw and a knife in vertical alinement, and means for vertically moving and securing said saw and knife with respect to said frame to bring either the knife or the saw into cutting position with respect to the meat-carrying part.

4. In a machine of the character described, a stationary frame, a reciprocable knife, and a saw in vertical alinement, a reciprocable frame guided in said stationary frame for reciprocating said knife and saw, means for longitudinally moving said knife and saw with respect to said reciprocable frame and securing same thereto at selected points to place either the knife or the saw in operative position with respect to a meat-carrying frame, and a meat-carrying frame for moving meat across the path of said knife or saw.

5. In a machine of the class described, a stationary frame, a meat-carrying frame hinged thereto, a reciprocable frame guided in said stationary frame, a knife and a saw in the same longitudinal plane carried by said reciprocable frame, means for moving said knife and saw to and securing same at selected positions on said frame, means for oscillating said meat-carrying frame for cooperation with said knife, means for disconnecting said frame, oscillatable means for coöperation with said saw, and for reciprocating said knife and saw-carrying means.

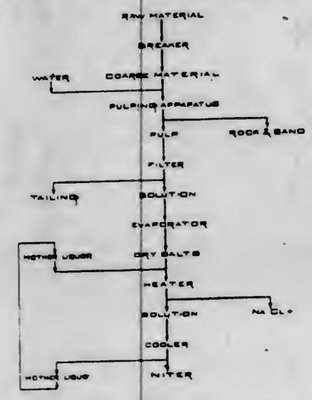
[Claims 6 to 8 not printed in the Gazette.]

1,065,053. PROCESS OF EXTRACTING SODIUM NITRATE FROM RAW MATERIAL. MARK R. LAMB, Milwaukee, Wis., assignor to Allis-Chalmers Company, Milwaukee, Wis., a Corporation of New Jersey. Filed Aug. 15, 1910. Serial No. 577,284. (Cl. 23—13.)

1. The process of extracting sodium nitrate from raw material which consists in adding water thereto and of removing the rock and sand from the mixture whereby a pulp remains, separating the insoluble matter therefrom, evaporating the remaining solution, adding liquor to and heating the product of said evaporation, removing sodium chlorid, and separating sodium nitrate from the remaining product.

2. The process of extracting sodium nitrate from raw

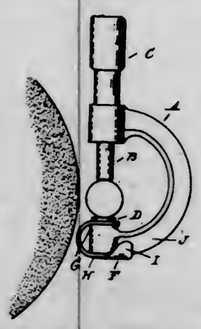
material which consists of coarse breaking the raw material, adding water to said broken material, separating the pulp from the mixture, separating the insoluble matter therefrom, concentrating the remaining solution whereby sodium chlorid is crystallized therefrom, removing said sodium chlorid, and separating sodium nitrate from the remaining product.



3. The process of extracting sodium nitrate from raw material which consists of coarse breaking the raw material, adding water to said broken material to form a pulp, separating the insoluble matter therefrom, concentrating the remaining solution whereby sodium chlorid is crystallized therefrom, removing said sodium chlorid, and separating sodium nitrate from the remaining product.

4. The process of extracting sodium nitrate from raw material which consists of disintegrating the raw material, adding water to said disintegrating material and removing the pulp therefrom, separating the insoluble matter therefrom, spontaneously evaporating the remaining solution substantially to dryness, mixing the product of evaporation with mother liquor, heating the mixture, removing sodium chlorid, and separating sodium nitrate from the mixture.

1,065,054. INSTRUMENT-GUARD. HARLEY H. LA VERCOMBE, Highland Park, Mich., assignor of one-half to Julius V. Gudmand-Hoyer, Highland Park, Mich. Filed Jan. 9, 1912. Serial No. 670,195. (Cl. 73—16.)



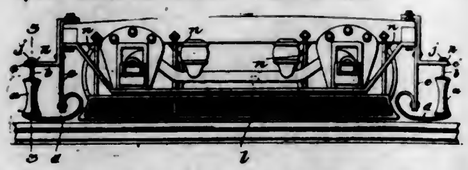
1. The combination with a micrometer gage having an anvil and an anvil supporting frame, of a guard comprising a return bent sheet metal member having one leg apertured for engaging the anvil of the micrometer, the opposite leg embracing the base of the anvil supporting frame and the bend shielding said frame.

2. The combination with a micrometer gage having an anvil and an anvil supporting frame, of a guard comprising a return bent member of sheet metal apertured in one leg to be sleeved upon the anvil of the instrument, the opposite leg embracing the lower edge of the anvil supporting frame and provided with upstanding flanges embracing said frame.

3. The combination with a micrometer gage having an anvil and an anvil supporting frame, of a guard comprising a return bent member formed of resilient sheet metal, one leg being apertured to be sleeved upon the anvil and the opposite leg being engageable beneath the anvil supporting frame and having ears for embracing said frame.

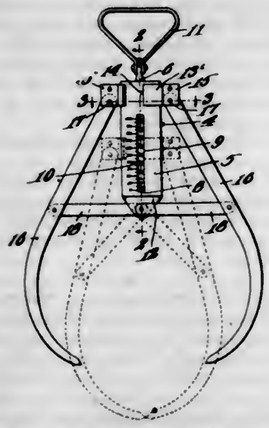
4. A detachable instrument guard, comprising a single piece U-shaped shield of resilient material having one leg apertured to permit a portion of the instrument to project through, the opposite leg being provided with upstanding flanges for engaging a portion of the instrument and the bend portion projecting to protect the portion embraced.

1,065,055. LIFE-GUARD FOR RAILWAY-TRUCKS. HOMER H. LAWRENCE, St. Albans, Vt. Filed Mar. 5, 1913. Serial No. 752,167. (Cl. 105—131.)



The combination with a truck of a fender or life guard device consisting of a dished spool and means for yieldingly supporting the same in a vertical position in front of the truck wheel, said means consisting of a spring supporting the lower end of the spool, a rod on which the spool is journaled for free rotation and for a free sliding action, and a device at the upper end of the rod for suspending the rod and allowing it to yield in all directions.

1,065,056. ICE-TONGS. OBED I. LAWRENCE, Wynne Wood, Okla. Filed July 29, 1912. Serial No. 712,195. (Cl. 57—9.)



1. A device of the class described, embodying a scale including a body and a spring rod passing through the upper end of the body and provided with a handle, and a pair of tongs slidably and pivotally connected to the body at one end and having their intermediate portions linked to the body.

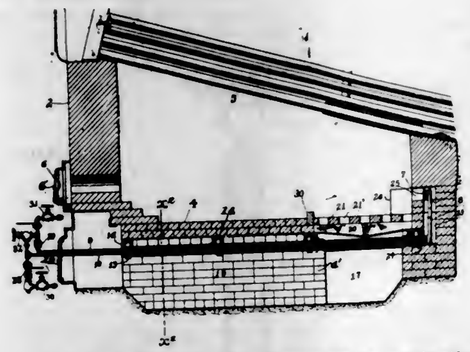
2. A device of the class described embodying a scale including a body and a spring rod passing through the upper end of the body and provided with a handle, a slide on the body, a pair of tongs pivoted to the slide, and links connecting intermediate points of the tongs and the lower end of the body.

3. A device of the class described embodying a scale including a hollow cylindrical body having a longitudinal slot therein and graduations along the slot, a spring rod passing slidably through the upper end of the body and having a head at its lower end provided with a pointer passing through the slot and coöperating with the graduations, and a spring compressibly disposed between the head and the upper end of the body; a handle attached to the upper end of the spring rod, and a pair of tongs operatively connected to the body.

4. A device of the class described embodying a scale including a hollow cylindrical body having a longitudinal slot therein and graduations along the slot, a spring rod passing slidably through the upper end of the body and having a head at its lower end provided with a pointer passing through the slot and coöperating with the graduations, and a spring compressibly disposed between the head and the upper end of the body; a handle attached to the upper end of the spring rod, a slide on the body, a pair of tongs pivoted to the slide, and links connecting intermediate points of the tongs and the lower end of the body.

5. A device of the class described embodying a scale including a hollow cylindrical body having a longitudinal slot therein and graduations along the slot, the body having a depending ear at its lower end, a spring rod passing slidably through the upper end of the body and having a head at its lower end provided with a pointer passing through the slot and coöperating with the graduations, and a coiled wire spring compressibly disposed between the head and the upper end of the body; a handle attached to the upper end of the spring rod, a slide mounted on the body including two sections having ears at their ends and one section being cut away at an intermediate portion to permit of the passage of the pointer, tongs pivoted between the respective ears, and links connecting intermediate points of the tongs and the former ears.

1,065,057. OIL-BURNING FURNACE. HERBERT V LEAHY, Los Angeles, Cal. Filed Aug. 28, 1911. Serial No. 646,535. (Cl. 158—1.)



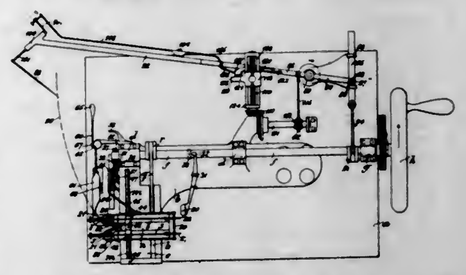
1. An oil burning furnace comprising a combustion chamber having its floor provided with a longitudinal passage and having its rear wall formed with an upright channel with a horizontal passage at the bottom of said upright channel communicating with said longitudinal passage and with an opening at the top of said upright channel communicating with the combustion chamber, and an oil burner comprising supply piping extending longitudinally in said passage in the floor of the chamber, and a shank extending at right angles to said piping, upwardly within said vertical channel in the rear wall of the chamber, and a burner head at the upper end of said shank opposite the opening between said vertical channel and combustion chamber the rear wall of the chamber extending in front of said shank when in upright position.

2. An oil burning furnace comprising a combustion chamber having its floor provided with a longitudinal passage and having its rear wall formed with an upright channel with a horizontal passage at the bottom of said upright channel communicating with said longitudinal passage and with an opening at the top of said upright channel communicating with the combustion chamber, and an oil burner comprising supply piping extending longitudinally in said passage in the floor of the chamber, said supply pipe being provided with a shank extending within said vertical channel in the rear wall of the chamber, and a burner head at the upper end of said shank opposite the opening between said vertical channel and combustion chamber, and supports mounted in said longitudinal channel in the base of the combustion chamber, said piping resting on said supports and being rotatable thereon to enable the burner shank to be inserted flatwise through the passage and then turned up into the upright channel and stop means on said rear wall to limit the turning movement of said shank, the rear wall of the chamber extending in front of said shank when in upright position.

3. An oil burning furnace comprising front, side and rear walls forming a combustion chamber, a base extending beneath said combustion chamber and provided with a plurality of longitudinal passages, an air distributing chamber extending across the rear ends of said passages and communicating with all of said passages, a grate extending over said air chamber, a refractory covering for said gate having perforations for passage of air, and a burner in the rear wall of the furnace, the supply pipe for said burner extending longitudinally of each of said longitudinal passages and a shank connected to each supply pipe and to the burner and extending transversely to the supply pipe, said wall having an opening in front of said burner, the rear wall of the chamber extending in front of said shank when in upright position.

4. An oil burning furnace comprising a base and walls forming a combustion chamber, said base having longitudinal passages extending beneath said combustion chamber and formed with an air distributing chamber at the rear of said passages and connecting with all of said passages, a grate above said air distributing chamber and burners in the rear wall of the combustion chamber corresponding in position to the respective passages, said rear walls having vertical channels connecting with said air distrubuting chamber and with openings from said channels into the combustion chamber, the burners being located back of said openings and supply means for the burners extending through the longitudinal passages and upwardly within said vertical channels.

1,065,058. MACHINE FOR SEWING LININGS TO ARTICLES OF CLOTHING. JENS FREDERIK JOHNSEN LENLER, Copenhagen, Denmark. Filed Apr. 22, 1911. Serial No. 622,739. (Cl. 112—21.)



1. A machine for sewing linings to articles of clothing, which comprises a reciprocating carriage, two pairs of fingers supported on the same and adapted to grip the sewing-needle singly or jointly, means for opening the fingers in pairs and lowering and closing them around the needle during the forward motion of the carriage, means for raising and lowering both pairs of fingers when the carriage is moved backward, and an oscillating and upwardly and downwardly-rotating hook, adapted to engage the sewing-thread between the needle and the material and impart the proper tension for pulling the thread through the material and tightening the stitch.

2. A machine for sewing linings to articles of clothing, which comprises a reciprocating carriage, two pairs of fingers supported on the carriage, finger-carriers for the fingers, guides for said finger-carriers, a driving shaft, a lever-mechanism operated by the driving-shaft for opening the pairs of fingers, a spring for closing them for gripping the needle, a tension-hook, and means between the driving shaft and said hook for imparting an oscillating motion and simultaneously therewith an up and down rotating motion to said hook for engaging the sewing-thread between the needle and the material and tightening the stitch.

3. In a machine for sewing linings to articles of clothing, the combination of a reciprocating carriage, two pairs of fingers supported thereon, one finger of each pair being fixed and the other movable and spring-actuated, a pin at the upper end of each movable finger, spring-actuated angle-levers adapted to engage said pins and hold the fingers in open position, a fixed stop for actuating said angle-levers and closing the pair of fingers at the proper time.

4. In a machine for sewing linings to articles of clothing, the combination, with the stitch-forming instrumentalities, of a tension-hook, a fulcrumed lever-arm supporting said hook, means for oscillating said arm, means for imparting simultaneously an up and down rotating motion to said hook, and means for moving the fulcrumed arm successively nearer to the innermost limit of position of the arm as the sewing-thread is shortened during the sewing operation.

5. In a machine for sewing linings to articles of clothing, the combination, with the stitch-forming instrumentalities, of a tension-hook, a fulcrumed lever-arm carrying said hook at its front end, means for imparting an oscillating motion to said lever-arm, a second lever fulcrumed to the oscillating lever-arm and adapted to impart an up and down rotary motion to the hook for producing the disconnection of the tension-hook from the sewing-thread after the stitch has been tightened.

[Claims 6 and 7 not printed in the Gazette.]

1,065,059. PNEUMATIC FEEDING DEVICE FOR STOPING-DRILLS. JOHN GEORGE LEYNER, Denver, Colo. Filed Oct. 23, 1911. Serial No. 656,267. (Cl. 121—10.)



1. In a feeding device for stoping drills, the combination of the cylinder, its front cylinder head and drill holding cap and its rear sleeve and cylinder head portions and the air feed tube connected to said sleeve portion, said sleeve and air feed tube and cylinder and front cylinder head and cap portions being arranged in axial alinement and fitted to bear end to end together and provided on their opposite sides with laterally projecting lugs provided with bolt receiving apertures, recesses in the cap arranged and adapted to receive the heads of bolts and prevent them from turning, a spanner washer mounted loosely on said air feed tube and provided with bolt receiving apertures in alinement with the bolt receiving apertures of said cylinder and sleeve, bolts extending through all of said lugs and having their heads fitting in the said bolt head receiving recesses of said cap, expanding coiled springs mounted on said bolts between said spanner washer and the lugs of said sleeve, keyways across the outside surface of said spanner washer and arranged in a diametrical path across its bolt receiving apertures, and nuts threaded on the ends of said bolts and arranged to screw against the outer surface of said spanner washer and having their washer engaging ends provided with projecting keys arranged and adapted to fit into the keyways in the lugs of said sleeve, whereby the resilient expansive tension of said springs locks said nuts to said spanner washer against accidental displacement and clampingly binds said sleeve and air feed tube and cylinder and cylinder head and cap together with a resiliently yielding pressure.

2. In a feeding device for stoping drills, the combination of the cylinder and front and rear heads, the front cap, the air feed tube's supporting sleeve, the air feed tube and the spanner washer mounted slidably on said air feed tube with the bolts extending loosely through said cylinder and its heads, the front cap and the sleeve and the spanner washer, said spanner washer being provided with keyways extending across its rear surfaces in diametric alinement with the center of the bolts extending through it, nuts on the ends of said bolts provided with key portions adapted to fit into the keyways of said spanner washer and the expansive coiled springs mounted on said bolts between said spanner washer and said sleeve, whereby said cylinder parts are locked together with a resiliently clamping yielding pressure of any predetermined tension to stand the operation of drilling holes in rock.

3. A stoping drill, comprising an engine cylinder having a rear head, a feed pisten, a tubular casing for the feed piston, and means connecting said cylinder and said casing for resiliently holding said casing against the rear cylinder head.

4. A stoping-drill comprising an engine having a rear cylinder head, a sleeve adjacent said rear cylinder head, a feed-piston, and a tubular casing for the feed-piston secured within the sleeve, and means for yieldingly clamping said tubular casing and said sleeve to said engine.

5. A stoping-drill comprising an engine, front and rear cylinder heads on said engine, a sleeve adjacent said rear cylinder head, a feeding mechanism comprising a feed-piston, a tubular casing for said feed-piston secured within said sleeve, and means for yieldingly clamping the feeding mechanism through said sleeve to the rear cylinder head.

[Claims 6 to 8 not printed in the Gazette.]

1,065,060. FLEXIBLE-FOOT SUPPORTING-COLUMN FOR ROCK-DRILLING ENGINES. JOHN GEORGE LEYNER, Denver, Colo. Filed Dec. 12, 1911. Serial No. 665,330. (Cl. 255—53.)



1. A column for supporting rock drilling engines, comprising a piece of pipe, and an abutment engaging portion adjustably secured within one end of said pipe, said pipe having its opposite end provided with a convergingly tapering polygonal form of end terminating in a flat faced end provided with an axial aperture, a bolt within the tapered end of said pipe extending through and beyond the aperture in the end of said pipe, and an expansive spring mounted on said bolt within the end of said pipe and with a foot plate provided with a polygonal recess and a clearance space and arranged to fit slidably over and against the sides of the polygonal shaped end of said pipe and to tilt and rock thereon, and provided with an aperture extending through the bottom of said foot plate from the bottom of said recess and extending over the projecting end of said bolt, and a nut threaded to the end of said bolt and arranged to bolt said foot plate under an expansive tension pressure of said spring against the end of said pipe.

2. In a column for supporting rock drilling engines, a supporting bar, having an adjustable abutment engaging portion at one end, said bar being provided with a convergingly tapering polygonal shaped end portion at its opposite end, a bolt within said polygonal shaped end projecting loosely through said end, and an expansion spring mounted on said bolt, with an abutment engaging foot plate provided with a polygonal recess and a clearance space, the upper edges of the side walls of said recess adapted to engage the sides of the convergingly tapering polygonal end of said bar in such a manner as to tilt or rock thereon, said foot plate being bolted by said bolt to said bar in such a manner that the expansive force of the spring on said bolt holds said foot plate against the end of said bar and permits it to automatically tilt when it is placed against abutment surfaces that are at an angle to the direction of said bar.

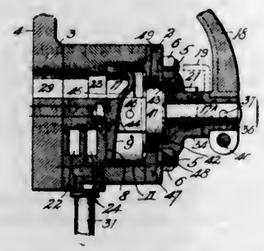
3. In a column for supporting rock drilling engines, the combination of a pipe bar provided with an adjustable abutment engaging portion at one end, said pipe bar being provided with a four sided square convergingly tapering hollow end portion at its opposite end from said screw, having a flat terminal end provided with an aperture through it into its interior, a bolt within said tapering hollow end afranged to extend through and beyond the same, and an expansive spring on said bolt between said hollow end and the head of said bolt, an abutment engaging foot-plate, a nut threaded to the bolt beyond said abutment engaging foot plate, said foot-plate being provided with a socket recess and a clearance space in which said pipe-bar is tiltably seated.

4. A column for rock-drilling engines, comprising a supporting tube having a converging lower portion, a foot-plate having a converging recess into which the converging portion of said tube is seated, said lower portion consisting of angularly arranged sides and the walls of said recess being correspondingly shaped to prevent axial rotation of the tube, and resilient means for maintaining said tube in engagement with said foot-plate.

5. A column for rock-drilling engines, comprising a supporting tube having a converging lower portion, a foot-plate having a converging recess into which the converging portion of said tube extends and along the upper edge of which said tube is seated, said recess being enlarged beneath the seat to allow movement of the end of the tube and thus permit tilting of said tube, and resilient means for maintaining said tube in engagement with said foot-plate.

[Claims 6 to 8 not printed in the Gazette.]

1,065,061. MULTIPLE-FUNCTION CONTROLLING THROTTLE-VALVE. JOHN GEORGE LEYNER, Denver, Colo. Filed Mar. 25, 1912. Serial No. 686,134. (Cl. 137—26.)



1. A multiple function controlling throttle valve, comprising a valve chest casing arranged to be connected to a multiple function machine, and provided with a valve seat containing a plurality of ports extending through it in different directions, a removable cover for said chest, and an oscillating valve in said valve chest fitting said valve seat and provided with ports adapted to register in successive order with the ports of said valve chest as said valve is turned, a stem connected to said valve projecting through said cover, a stop-engaging finger on said stem, stop-lugs on said cover arranged to be engaged by said stop-engaging finger to define the extent of the opening and closing movement of said valve, and means adjustable with respect to said stop-engaging finger for rotating said stem and valve.

2. A multiple port containing and controlling throttle valve, comprising the valve chest casing provided with a valve seat containing a plurality of ports, and having a cover, a valve pivotally mounted on said seat and provided with a plurality of ports adapted to register with the ports of said valve chest, a valve stem pinned to said valve and extending through and beyond said cover, a stop-engaging finger provided with a split hub portion fitting loosely over said stem, a handle provided with a split hub portion fitting over the split hub of said other split hub portion and arranged to clamp said stop-engaging finger and said handle to said stem in different but predetermined positions relative to each other, and means for limiting the extent of movement of said finger.

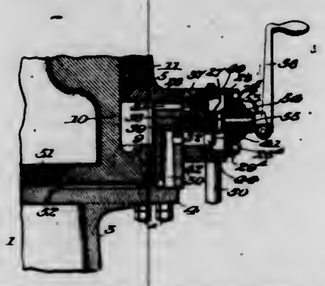
3. In a multiple port containing and controlling valve, the combination of the valve chest casing provided with an actuating fluid inlet aperture and with a circular valve seat portion, said valve seat being provided with a plurality of ports arranged in radial order concentrically to a common center and at a predetermined distance apart, said casing being also provided with a removable cover, with a disk-shaped valve having a pair of substantially oppositely arranged inlet ports, and an exhaust port on one side of said valve between said inlet ports, and a seat portion on its opposite side between said inlet ports, said valve being pivotally centered on said seat and arranged to open as it is rotatably turned in one direction the ports of said valve seat, and to close said ports when turned back in the opposite direction, and means including a valve stem secured to said valve and extending through and beyond the cover of said casing for turning the valve, means including a packing material for packing said stem in said cover, the split stop-engaging finger member secured to said valve stem outside of said cover and arranged to be clamped to said stem, the split handle arranged to fit over said finger-member and provided with a clamping bolt arranged to clamp both the finger-member and the handle to said valve stem in different relative positions to each other.

4. A valve-mechanism, comprising a valve-casing provided with a wall having rearwardly extending passages, and a forward valve-chamber; a rotatable disk-shaped valve in said valve-chamber having diametrically opposite sector-shaped cut-out portions forming fluid-passages extending through the circumference of said valve and adapted to be made to register with said rearwardly extending passages, a rearwardly opening exhaust-pocket in said valve between said cut-out portions, and a flat seat-portion opposite said exhaust-pocket; and means outside the casing for rotating said valve.

5. A multiple function throttle-valve, comprising a valve-chest provided with an air entrance chamber and with a valve-seat containing air conduit ports, a valve seated in said valve-chest against its seat portion, a removable cover on said valve-chest, a valve-stem loosely connected at one end to said valve and extending rotatably through and beyond said cover, stop-lugs on the outside of said cover positioned to define the oscillatory movement of said valve when opening and closing the ports in said valve-chest, a split hub mounted on said valve-stem outside of said cover and provided with a stop-engaging finger and arranged to be clamped to said valve-stem, and a pin extending through said hub and through said valve-stem, said finger indicating the position of the ports of said valve relative to the ports of said valve-chest, said stop finger being arranged to engage said stop-lugs on said cover, and a crank handle provided with a split hub portion arranged to fit over the hub of said stop finger and provided with a clamping bolt arranged and adapted to

clamp said crank handle and the hub of said stop finger to said valve-stem, whereby said crank handle can be clamped to said valve-stem in any desired position independent of the position of said stop engaging finger of said valve-stem.

1,065,062. TRIPLE-PURPOSE VALVE FOR DRILL-BIT-SHARPENING MACHINES. JOHN GEORGE LEYNER, Denver, Colo., assignor to The J. Geo. Leyner Engineering Works Company, Littleton, Colo., a Corporation of Colorado. Original application filed Oct. 18, 1910, Serial No. 587,650. Divided and this application filed May 6, 1912. Serial No. 695,540. (Cl. 137—26.)



1. In a valve-mechanism for drill-sharpening machines; a valve-casing provided with a side-passage, a wall having rearwardly extending passages, and a forward valve-chamber; a rotatable disk-shaped valve in said valve-chamber, having diametrically opposite cut-out portions, and intermediate, radial, oppositely-faced pockets, forming passages for conveying fluid to and from the passages of said valve-casing; and means for rotating said valve.

2. In a valve-mechanism for drill-sharpening machines; a valve-casing provided with a side-passage, a wall having rearwardly extending passages, and a forward valve-chamber; an inwardly extending lug integral with said casing; a rotatable disk-shaped valve in said valve-chamber, having diametrically opposite cut-out portions, and intermediate, radial, oppositely-faced pockets, forming passages for conveying fluid to and from the passages of said valve-casing; a stop-lug integral with said valve and arranged to engage the inwardly extending lug of the casing; and means for rotating said valve.

3. In a valve-mechanism for drill-sharpening machines; a valve-casing provided with a side-passage, a wall having rearwardly extending passages, and a forward valve-chamber; a rotatable disk-shaped valve in said valve-chamber having a rim-portion, a sector-shaped cut-out portion extending through said rim, and a diametrically opposite sector-shaped cut-out portion within said rim, and intermediate, radial, oppositely-faced pockets, forming passages for conveying fluid to and from the passages of said valve-casing; and means for rotating said valve.

4. In a valve-mechanism for drill-sharpening machines, a circular valve-casing provided with fluid-passages and a forward valve-chamber; a rotatable disk-shaped valve in said valve-chamber having a rim-portion, two sector-shaped cut-out portions, one extending through said rim, and the other lying within said rim, and oppositely-faced pockets intermediate said cut-out portions, forming passages for conveying fluid to and from the passages of said casing; and means for rotating said valve.

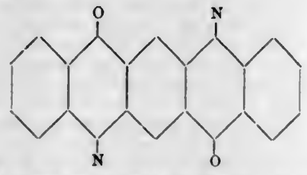
1,065,063. BENZOQUINONE DERIVATIVES AND PROCESS OF MAKING SAME. RUDOLF MAAG, Sindlingen, near Höchst-on-the-Main, and PAUL JÖRG, Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, a Corporation of Germany. Filed May 1, 1912, Serial No. 694,542. Renewed Mar. 1, 1913. Serial No. 751,646. (Cl. 8—1.)

1. The process of manufacturing dye-stuffs, which consists in heating diarylamino-halogenbenzoquinone derivatives, wherein "aryl" means a benzene residue which may be substituted, in a solvent of high boiling point.

2. The process of manufacturing dye-stuffs, which consists in heating diarylamino-halogen-benzoquinone derivatives, wherein "aryl" means a benzene residue which may be substituted, in a solvent of a high boiling point, in the presence of a metal chlorid.

3. The process of manufacturing a dye-stuff, which consists in heating di-paraphenetidino-dichlorbenzoquinone with ferric chlorid in nitrobenzene.

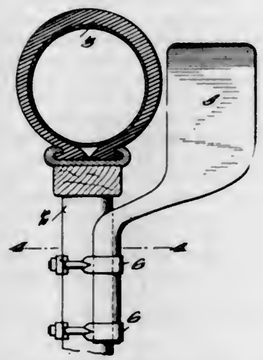
4. As new products, the dyestuffs being inner condensation-products of di-arylamino-halogen-benzoquinone derivatives, and very probably being derivatives of the triphendioxazin



forming red powders, insoluble in water and alcohol, soluble in concentrated sulfuric acid with a blue color and in boiling xylene with a yellow fluorescence.

5. As a new product, the dyestuff being an inner condensation-product of di-paraphenetidino-dichlorbenzoquinone, very probably being a derivative of the triphendioxazin, forming a red powder which when crystallized in nitrobenzene, turns into small red needles of a greenish luster, soluble in concentrated sulfuric acid with a blue color and in boiling xylene with an intense yellow fluorescence.

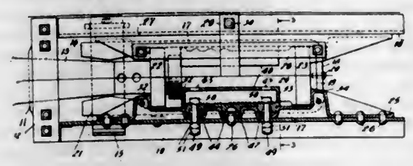
1,065,064. MUD-HOOK. RIEMAN A. MACDONELL, Fernandina, Fla. Filed Sept. 17, 1912. Serial No. 720,812. (Cl. 21—215.)



The combination with a wheel provided with a tire, of an anti-skidding device comprising an integral piece of metal having extremities disposed substantially in parallelism and an intermediate connecting portion arranged approximately at right angles to said extremities, one of said extremities being concave and the other extremity being flat and lying in a plane at right angles to the plane of rotation of the wheel, said last mentioned extremity also being spaced from the adjacent side of the tire and terminating short of the periphery of the tire in active position, and means for fastening the concave extremity to a spoke of said wheel.

1,065,065. DRAFT-RIGGING FOR RAILWAY-CARS. WILLIAM H. MINER, Chicago, Ill. Filed Dec. 26, 1911. Serial No. 667,622. (Cl. 213—42.)

1. In a draft rigging for railway cars, the combination with the draw bar, draft yoke, followers and compression resisting device, of side plates each provided with upper and lower main and intermediate stops, the lower intermediate stops comprising a substantially rectangular block, each of said blocks being removable.

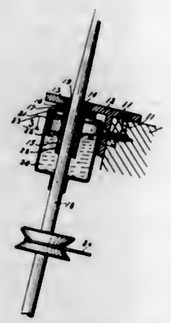


2. In a draft rigging for railway cars the combination with the draw bar, horizontal draft yoke, followers, side plates and cushioning member, of a cradle supporting the cushioning member, the side plates being provided with upper and lower front and rear main stops for the followers to abut against and having upper intermediate stops, the cradle forming lower intermediate stops to limit the travel of the draw bar, said side plates being also each provided with longitudinal median grooves to receive the draft yoke.

3. In a draft rigging for railway cars, side plates provided with removable limiting stops, and means for securing said stops to the side plates, each stop comprising a hollow member outwardly provided with perforated bosses, said hollow member having openings to receive said means within the hollow portion thereof, and the side plates being provided with sockets adapted to receive said bosses therein.

4. In a draft rigging for railway cars, the combination of side plates provided with quadrilateral tapered sockets with removable stops for said side plates, said stops having quadrilateral tapering bosses adapted to be received within said sockets.

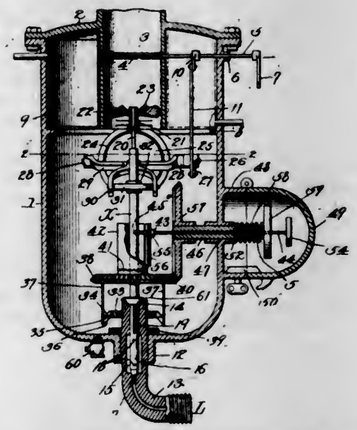
1,065,066. SPINDLE-BEARING. MAX MUELLER, Clifton, N. J. Filed Dec. 26, 1911. Serial No. 667,901. (Cl. 118—25.)



1. In a device of the character described, the combination with a bolster rail provided with a conical aperture, of a bolster bearing having a conical head seated in said conical aperture and extending downwardly, means engaging said bearing for attaching the same rigidly to said rail, the upper portion of the bore in said bearing being enlarged in diameter, said bearing being provided with ducts which extend through the lower portion of the same and with a downwardly inclined passage which leads from the enlarged portion of the bore to the outer portion of said bearing, a spindle rotatably mounted in said bearing, and an oil cup concentrically attached to said spindle below said rail extending upward toward said rail and being provided at its upper end with an inwardly and downwardly extending flange, said bearing attaching means permitting said spindle and the oil cup attached thereto to be lifted without first changing the position of said bearing upon said bolster rail.

2. In a device of the character described, the combination with a bolster rail provided with a conical aperture and a slot leading from said aperture to the outer edge of said rail, of a bolster bearing having a conical head seated in said conical aperture and extending downwardly, said bolster bearing having a portion reduced in diameter adapted to be accommodated by said slot, means engaging said bearing for attaching the same rigidly to said rail, the upper portion of the bore in said bearing being enlarged in diameter, said bearing being provided with ducts which extend through the lower portion of the same and with a downwardly inclined passage which leads from the enlarged portion of said bore to the outer portion of said bearing, a spindle rotatably mounted in said bearing, and an oil cup concentrically attached to said spindle below said rail extending upward toward said rail and being provided at its upper end with an inwardly and downwardly extending flange, substantially as and for the purpose specified.

1,065,067. CARBURETER. JOHN B. NACZEK, Milwaukee, Wis.; Joseph Naczek administrator of said John B. Naczek, deceased. Filed Aug. 7, 1911. Serial No. 642,625. (Cl. 48—155.1.)



1. A carbureter having a carbureting chamber provided with an oil inlet passage and an outlet passage, valves for closing said passages, means for simultaneously operating said valves, and means for automatically locking said valves when in their closed position.

2. A carbureter having a carbureting chamber provided with an oil inlet at its lower end, and an outlet at its upper end, an air passage disposed between said inlet and outlet, valves for closing said inlet and outlet, and means for locking said valves in closed position.

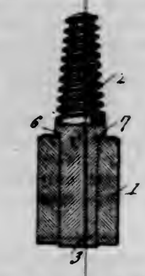
3. A carbureter having a carbureting chamber provided with an outlet passage at its upper end, a spray nozzle movably mounted within said carbureter, a fan mounted to move simultaneously with said spray nozzle within said outlet passage, a throttle valve mounted within said outlet passage having a connection with said spray nozzle, and means for locking said throttle valve when moved into closed position.

4. A carbureter having a carbureting chamber provided with an air inlet passage, an outlet passage, an oil inlet pipe, a spray nozzle working in said inlet pipe having a valve for controlling the supply of oil thereto, valve for controlling said passages, means for simultaneously operating said valve, and means for locking said valve when moved into closed position.

5. A carbureter having an oil inlet pipe at its lower end provided with a chamber, and an outlet provided with a throttle valve, a tube arranged within said inlet pipe having a valve at its lower end for controlling the supply of oil to said chamber through said pipe, said tube having a spray nozzle, and means for raising said spray nozzle above said inlet pipe, said means being controlled by the throttle valve.

[Claims 6 to 18 not printed in the Gazette.]

1,065,068. PROTECTOR FOR TELEGRAPH AND TELEPHONE CROSS-ARMS AND PINS. HENRY G. NEWELL, Le Raysville, Pa. Filed Oct. 7, 1912. Serial No. 724,411. (Cl. 173—321.)

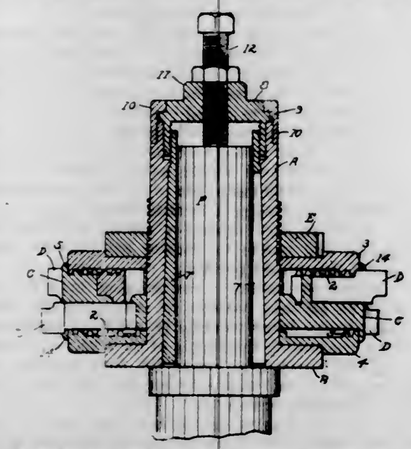


1. A joint protector comprising a flat thin body portion provided with a centrally located aperture therein, a downwardly extending flange formed integral therewith and at the outer periphery thereof, an upwardly extending flange formed integral with said body portion and at the inner periphery thereof, the extremities of said flanges formed with knife-like edges.

2. A joint protector comprising a flat relatively thin body portion with an aperture located centrally therein, a downwardly extending flange formed integral therewith and at the outer periphery thereof and provided with a knife-like edge, an upwardly extending flange formed integral with said body portion and at the inner periphery thereof and provided with a serrated knife-like edge.

3. A joint protector comprising a circular relatively thin flat body portion, a flange formed at the outer periphery thereof and extending downwardly therefrom and provided with a knife-like edge, said body portion provided with a circular aperture located centrally thereof, an upstanding flange formed integral with said body portion at the inner periphery thereof, the upper extremity of said last mentioned flange bent inward and provided with a knife-like edge at its extremity.

1,065,069. CUTTER-HEAD. WILLARD M. NOBLE, Gates, N. Y., assignor to American Wood Working Machinery Co., Rochester, N. Y., a Corporation of Pennsylvania. Filed Apr. 2, 1912. Serial No. 688,005. (Cl. 144—231.)



1. In a cutter head for wood planers, a circular knife holding body slotted approximately tangentially on its opposite faces, the slots on one side being intermediate those on the other, knives in said slots, suitable means for simultaneously adjusting said knives to or from the work, and means for clamping said knives firmly into said slotted body for the purposes set forth.

2. In a cutter head for a wood planer, a circular knife holder slotted approximately tangentially on opposite faces, the slots on one side being intermediate those on the other side, knives having teeth thereon in the slots, movable disks spirally threaded to engage said knife teeth, means to retain the disks in concentricity with the holder, and means for clamping the disks and knives to said holder.

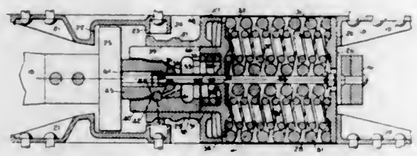
3. In a matching cutter head, a circular knife holding body slotted approximately tangentially on opposite faces to receive two sets of cutting members, such cutting members, each member having teeth on a face thereof angularly disposed with respect to right transverse lines, revoluble disks on opposite sides of the holder, each disk having a spiral thread on its inner face acting on said teeth on the cutting members, clamping means for locking both sets of cutting members to a supporting hub, and such hub.

4. In a matching cutter head, a circular knife holding body slotted approximately tangentially on opposite faces to receive two sets of cutting members, such cutting members, said slots being intermediately disposed in relation to each other on the opposite faces, whereby the cutting planes of the two sets of knives may meet or pass each other without unduly weakening the holding body by the slots, in combination with revoluble disks having spiral threads on faces thereof for adjusting said cutting members to the cut, substantially as set forth.

5. In a cutter head for a wood planer, a circular knife holder, slotted on one or both faces to receive suitable projecting knives, teeth on said knives, a concentrically movable disk or disks having a spiral thread on the inner face to engage said teeth, a projecting rim or rims on the circular holder embracing the periphery of the disk or disks whereby the interior of the head is kept clear of chips and dirt.

[Claim 6 not printed in the Gazette.]

1,065,070. RAILWAY DRAFT-RIGGING. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chicago, Ill. Filed Dec. 9, 1911. Serial No. 664,755. (Cl. 213—64.)



1. In a friction draft rigging the combination with a draw bar, draft yoke, stop members, and a longitudinally movable shell, of friction members within the shell, a supplemental spring engaging the friction members, main springs and a spring seat connecting them with the supplemental spring, the movement of the draw bar being cushioned first by the supplemental spring in connection with the friction members, and secondly by the main springs in connection with the friction members.

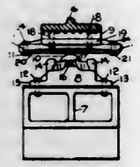
2. In a friction draft rigging the combination with a draw bar, draft yoke, stop members and a shell, of friction shoes and wedge within the shell, a spring seat engaging therewith, a supplemental spring device contacting with the friction shoes, main springs and a double faced spring seat between the same and the supplemental spring device, the said spring seat being provided with means contacting with the friction shoes upon the compression of the supplemental spring device.

3. In a friction draft rigging the combination with a draw bar, draft yoke, stop members and a shell, of friction shoes within the shell, a supplemental spring in contact with the friction shoes, main springs, and a double faced spring seat between the same and the supplemental spring, the said spring seat being provided with a collar within which the supplemental spring compresses, and which contacts with the friction shoes upon such compression.

4. In a friction draft rigging the combination with a draw bar, draft yoke and stop members, of a longitudinally movable friction shell, friction shoes and spreading device within said friction shell, a spring cage connected with said friction shell, springs within said spring cage, a double faced spring seat and supplemental spring, the said double faced spring seat being provided with a forwardly extending collar, the said spring devices re-acting at one end against the spring cage, and at the other end against the double faced spring seat, the said supplemental spring being interposed between the double faced spring seat and the ends of the friction shoes, and the collar of the spring seat engaging the ends of the friction shoes upon full compression of the supplemental spring.

5. In a friction draft rigging, a compression resisting device comprising a friction cylinder, a spring cage connected thereto, friction members within the friction cylinder, main springs within the spring cage, a supplemental spring contacting with the friction members, and a movable spring seat interposed between the main springs and the supplemental spring.

1,065,071. SIDE BEARING FOR RAILWAY-CARS. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chicago, Ill. Filed Apr. 25, 1912. Serial No. 693,022. (Cl. 64—6 .)



1. In a side bearing for railway cars, in combination an upper and a lower base-casting, an anti-friction roller secured to one of said castings, a flat spring secured to the other of said castings providing a tread member for said roller, said last mentioned casting being provided with a hollowed out face adapted for the flexure of said spring therein on pressure of the roller thereon.

2. In a side bearing for railway cars, the combination of an upper and a lower base casting with a flat plate of resilient metal interposed between them, and an anti-friction roller secured to one of said castings, the other base casting being provided with a curved surface within which the spring may bend under pressure.

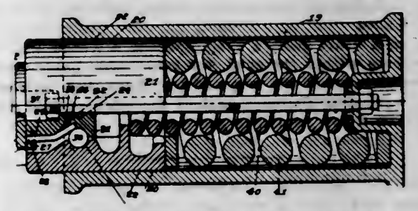
3. In a side bearing for railway cars, the combination of an upper and a lower base casting with a flat plate of resilient metal interposed between the base castings, and an anti-friction roller secured to one of said castings, the other base casting being provided with seats for either end of the said spring, and a space between said seats within which the said spring may bend.

4. In a side bearing for railway cars, the combination of an upper and a lower base casting with a flat plate of resilient metal interposed between them, and an anti-friction roller secured to one of said castings, the other base casting being provided with seats for either end of the said spring, and a space between said seats within which the said spring may bend, the said spring being held in position by flanges extending over said seats, each of said flanges being perforated to receive a rivet, and the said spring being notched at either end to engage said rivets.

1,065,072. FRICTION DRAFT-RIGGING FOR RAILWAY-CARS. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chicago, Ill. Filed July 22, 1912. Serial No. 710,818. (Cl. 213—64.)

1. In a railway friction draft rigging, a wedge comprising a block and resilient plates connected therewith, the said block being provided with depressions into which the resilient plates may be flexed.

2. In a friction draft rigging, a wedge comprising a pyramidal block and resilient bearing plates, the block being provided with slots to receive said bearing plates.



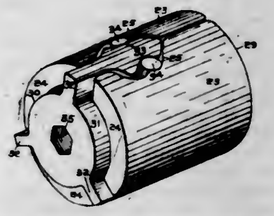
3. In a railway friction draft rigging, segmental friction shoes, a wedge and friction rollers between the wedge and the shoes, the said wedge having faces for the rollers to bear against, the angle of said faces to the friction shoes being changeable under load.

4. In a railway friction draft rigging, the combination of the draw bar, draft sills, stop members, followers, draft yoke, friction shell and friction rollers, and friction shoes within the shell, with a wedge provided with resilient plates for the rollers to bear against, the said plates being arranged to adjust their bearing surfaces at varying angles to the friction shoes upon the variation of the frictional pressure between the shoes and the shell.

5. In a railway friction draft rigging, the combination with the draw bar, draft sills, stop members, followers, draft yoke, friction shell and friction shoes, and friction rollers within the shell, of a wedge comprising a block provided with depressions, and resilient plates extending into said depressions and capable of being flexed therein, the rolls bearing between the friction shoes and the wedge, and the spreading force of the wedge varying with variations in the frictional pressure between the friction shoes and the shell.

[Claims 6 and 7 not printed in the Gazette.]

1,065,073. FRICTION DRAFT-RIGGING FOR RAILWAY-CARS. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chicago, Ill. Filed Mar. 17, 1913. Serial No. 754,748. (Cl. 213—64.)



1. In a draft rigging for railway cars, a draft gear comprising a shell, springs, and friction devices within the shell, the friction devices comprising a plurality of friction shoes, and a wedge to spread said shoes, the said wedge having radial lugs disposed between the edges of the friction shoes.

2. In a draft gear, a shell, springs, and friction devices within the shell, the friction devices comprising shoes, a wedge, and antifriction rolls, the wedge having a central member and radially extended lugs, the antifriction rolls being interposed between the sides of said lugs and the edges of the friction shoes.

3. In a draft gear, a shell, friction devices, and springs within the shell; the friction devices comprising a plurality of shoes, a wedge within said shoes, the wedge having radially arranged lugs extended outwardly between the shoes.

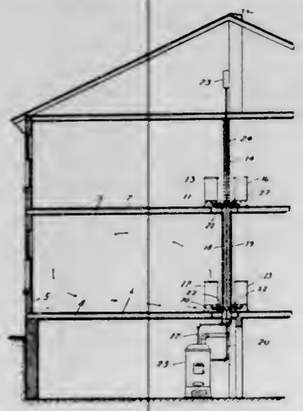
4. In a draft gear, a shell, springs, and friction devices within the shell, the friction devices comprising a plurality of friction shoes, a wedge within said shoes, and antifriction rolls, the wedge being provided with radial

lugs extended between said shoes, the sides of said lugs being each provided with an antifriction roll seat, and the sides of said shoes being each provided with an antifriction roll seat, and an antifriction roll interposed between each roll seat of the wedge and the roll seat of the adjacent shoe.

5. In a draft gear, a shell, springs, a wedge, and friction shoes within the shell, the said wedge having means extended between the edges of the shoes, and adapted to exert spreading pressure against the sides of said shoes.

[Claim 6 not printed in the Gazette.]

1,065,074. HEATING SYSTEM. JOHN O. OLSON, St. Paul, and CARL S. CARLBERG, Minneapolis, Minn., assignors to Spiral Radiator Company, St. Paul, Minn., a Corporation of Arizona. Filed Apr. 10, 1911. Serial No. 620,103. (Cl. 237—15.)



1. A gravity heating system comprising a furnace and a circulating system extending therethrough for a heat-conveying medium, said circulating system including means for constraining said medium to flow in a relatively wide and thin sheet within the furnace for absorbing heat units rapidly, said means causing said sheet to be of great length and being adapted to be surrounded at all points by the hot gases of combustion, said circulating system also including heat delivering means in each room to be heated, said heat delivering means constraining said medium to flow in a relatively wide and thin sheet and causing said sheet to be of great length and being surrounded at all points by unobstructed ascending passages through which the colder air of the room may rise and extract the heat units from said medium and convey the same uniformly throughout the room.

2. A gravity heating system comprising a furnace and a circulating system extending therethrough for a heat-conveying medium, said circulating system including means for constraining said medium to flow in a relatively wide and thin sheet within the furnace for absorbing heat units rapidly, said means causing said sheet to be of great length and being adapted to be surrounded at all points by the hot gases of combustion, said circulating system also including heat delivering means in each room to be heated, said heat delivering means constraining said medium to flow in a relatively wide and thin sheet and causing said sheet to be of great length and being surrounded at all points by unobstructed ascending passages through which the colder air of the room may rise and extract the heat units from said medium and convey the same uniformly throughout the room, said circulating system and the heat absorbing and heat delivering means therein being constructed and connected so that the flow of the heat-conveying medium therethrough will be effected by gravity.

3. A gravity heating system comprising a furnace and a circulating system extending therethrough for a heat-conveying medium, said circulating system including within the furnace a continuous spiral chamber formed of thin sheets of metal and surrounded at all points by passages for the hot gases of combustion, said sheets of metal being connected and spaced apart so as cause the heat-conveying medium to flow in a relatively wide and thin sheet of great length within said furnace for absorbing heat units rapidly, said circulating system also including in each room to be heated a heat delivering member provided with a closed continuous spiral chamber formed of thin sheets of metal spaced apart and secured together so as to cause said heat-conveying medium to flow in a relatively wide and thin sheet, the walls of said spiral chamber being surrounded at all points by unobstructed ascending passages through which the colder air of the room may rise and extract the heat units from said medium and distribute the same uniformly through the room.

4. A gravity heating system comprising a heat-generator and a circulating system extending through said generator, through all parts of which all of the heat-conveying medium is constrained to flow in a continuous stream, said circulating system including a heat delivering member consisting of thin sheets of metal secured together at the edges thereof and bent to form a vertically positioned spiral chamber of uniform cross-section opening into expanded vertical passages through the whole extent of each end of said spiral chamber, said passages connecting said chamber with said circulating system, the coils of said spiral being spaced apart and the whole being inclosed within an outer casing so that said chamber is surrounded at all points with unobstructed ascending passages through which the colder air of the room may rise and extract the heat units from said medium and convey the same uniformly throughout the room.

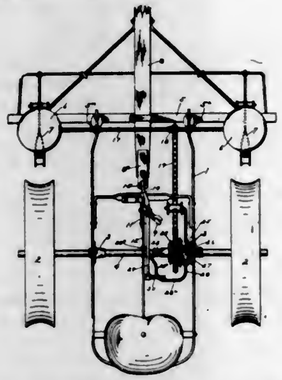
5. A gravity heating system comprising a heat-generator and a circulating system extending through said generator, through all parts of which all of the heat-conveying medium is constrained to flow in a continuous stream, said circulating system including a heat delivering member consisting of a pair of thin sheets of metal secured together at the edges thereof and bent to form a spiral chamber of uniform cross-section opening into vertical enlarged passages through the whole extent of each end of said spiral chamber, said vertical passages being connected with said circulating system so as to make said spiral chamber a part thereof, and the coils of said spiral being held spaced apart to form between said coils unobstructed ascending passages through which the colder air of the room may rise and extract the heat units from said medium and convey the same uniformly throughout the room.

[Claim 6 not printed in the Gazette.]

1,065,075. CORN-PLANTER. FRANK R. PACKHAM and WILLIAM L. BRALEY, Springfield, Ohio, assignors to The American Seeding Machine Company, Springfield, Ohio, a Corporation of Ohio. Filed Sept. 16, 1912. Serial No. 720,607. (Cl. 111—6.)

1. In a corn planter, a main frame, an auxiliary frame pivotally connected to said main frame, seeding mechanism and furrow openers carried by said auxiliary frame, a rotatable axle journaled in said main frame, a sprocket wheel loosely mounted on said axle and having a driving connection with said seeding mechanism, clutch members between said sprocket wheel and axle together with means for normally holding the same in driving relation with each other, a lever on said main frame for raising and lowering said auxiliary frame, throw-out devices for disengaging said clutch members including a projecting finger one end of which is supported by said axle, and a projection on said lever coöperating with said finger to disengage said clutch members when said auxiliary frame is raised.

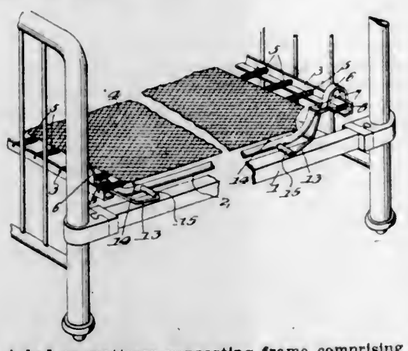
2. In a corn planter, a main frame, furrow openers pivotally connected with said main frame, seeding mechanism, a rotatable axle journaled in said main frame, a sprocket wheel loosely mounted on said axle and having a driving connection with said seeding mechanism, clutch members between said sprocket wheel and axle together with means for normally holding the same in driving relation with each other, a lever on said main frame for raising and lowering said furrow openers, throw-out devices for disengaging said clutch members including a projecting finger, one end of which is supported by said axle, and a projection on said lever coöperating with said finger to disengage said clutch mechanism when said furrow openers are raised.



3. In a corn planter, a frame, seeding mechanism, furrow openers pivotally connected with said frame, a rotatable axle journaled in said frame, a spring-pressed sprocket wheel loosely mounted on said axle and having a driving connection to said seeding mechanism, a clutch between said sprocket wheel and axle, a stationary cam connected with said frame, a movable cam on said axle coöperating with said stationary cam to unclutch said sprocket wheel, a projecting finger connected with said movable cam, a lever on said frame for raising and lowering said furrow openers, and a projection on said lever coöperating with said finger to disengage said sprocket wheel from said axle when the furrow openers are raised.

4. In a corn planter, a frame, furrow openers pivotally connected with said frame, a lever for raising and lowering said furrow openers, seeding mechanism, a rotatable axle journaled in said frame, a spring-pressed sprocket wheel mounted loosely upon said axle and having a driving connection to said seeding mechanism, clutch faces between said sprocket wheel and frame whereby said wheel is normally in driving relation with said axle, a movable cam ring, a finger projecting from said cam ring, the free end of said finger having a bearing on said axle, and a projection on said lever coöperating with said finger to disengage said clutch faces.

1,065,076. MATTRESS-SUPPORTING FRAME. FREDERICK A. PALMER, Middletown, Conn. Filed Nov. 8, 1912. Serial No. 730,176. (Cl. 5—63.)



1. A bed or mattress supporting frame comprising side rails, end rails, and resilient standards forming the connections between said side and end rails and supporting said end rails.

2. A bed or mattress supporting frame comprising side rails having their ends upturned, spring standards rising from said upturned ends, and end rails supported by said standards.

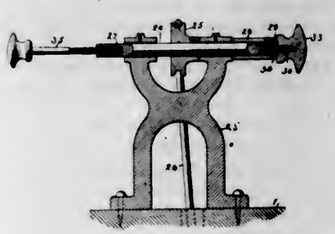
3. A bed or mattress supporting frame comprising side rails having their ends upturned, arched spring standards supported by the ends of the side rails, and end rails supported by the free ends of said standards.

4. A bed or mattress supporting frame comprising side rails having upturned ends, arched spring standards supported on the ends of the side rails, and end rails secured to said standards and supported beneath the arches thereof.

5. A bed or mattress supporting frame comprising side rails having upturned ends, arched spring standards supported by the ends of the side rails and having means for supporting the end rails, and braces at the corners of the frame adapted to rest upon the side rails of a bedstead.

[Claims 6 and 7 not printed in the Gazette.]

1,065,077. DRAWER-KNOB-POLISHING MACHINE. WILLIAM PEARSON, Rockford, Ill., assignor to Rockford Cabinet Company, Rockford, Ill., a Corporation of Illinois. Filed Apr. 17, 1912. Serial No. 691,523. (Cl. 51—5.)



An article holding device, comprising a rotatable carrying member, holding means carried thereby, comprising, a screw mounted concentrically at the center of said carrying member, the head of the screw being fixedly secured therein and having its tapered screw body projecting beyond the end of said member; a recess extending into the face of said member, disposed concentrically with the center thereof and positioned circularly about the screw, leaving an outer peripheral rim on said carrying member against which a knob carried by the projecting screw may contact to allow radially disposed studs carried by the knobs to locate in said recess.

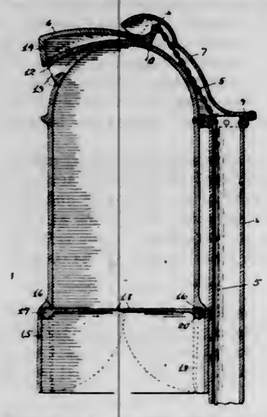
1,065,078. STREET LETTER-BOX. EDWARD L. PHIPPS, Detroit, Mich., assignor of one-half to William B. Anderson, Pontiac, Mich. Filed July 2, 1912. Serial No. 707,301. (Cl. 232—45.)

1. A mail box having a front letter slot, a hollow post for said box, a conduit extending upward from said post centrally of the top of said box, a cover for said slot having a rear hinge and a rear upward extending lever arm located within said conduit, a pedal lever mounted upon said post, and a chain having connection with said lever arm and extending upward through said post and said conduit and having connection with the upper end of said arm.

2. A mail box having a front letter slot, a top extending over said slot, a rear conduit attached to said top, a cover for said slot pivoted in rear and having a rear upward projecting arm located within said conduit, a hollow post support connected to said conduit, a pedal lever mounted upon said post support, and a chain engaging said pedal lever and said lever arm and extending through the top conduit and the post support.

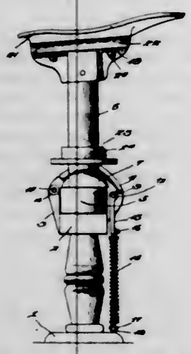
3. A mail box comprising sides having arcuate upper edges, a front terminating below the top of said upper

edges, a top wall having an overhanging guard portion projecting over and separated from the upper edge of said front to leave a letter slot, said guard portion having downward projecting sides to close said slot at the sides, a cover normally parallel to and resting upon said guard portion, said cover having a downward projecting front end to normally close the front of said slot, a hollow post



support for said box, a conduit extending upward from said post centrally over said box, said cover having a rear hinge and a rear upward extending lever arm located within said conduit, a pedal lever mounted upon said post, and a chain having connection with said lever and extending upward through said post and conduit and having connection with the upper end of said arm.

1,065,079. BOOT AND SHOE JACK. JOHN D. PREWETT, Joplin, Mo. Filed Mar. 20, 1912. Serial No. 685,006. (Cl. 12—123.)



1. A boot and shoe jack, comprising a support, a shank resting thereon, a block through which the shank passes and in which it is mounted to turn about its longitudinal axis, the block being formed with a convex upper surface, and yieldingly held plates embracing said block and formed with inwardly projecting flanges engaging the convex surface of said block.

2. A boot and shoe jack, comprising a support, a shank resting thereon, a block through which the shank passes and in which it is mounted to turn about its longitudinal axis, plates pivotally connected at one end to the support and embracing said block, and formed with inwardly projecting flanges engaging the upper surface of the block, and means for yieldingly holding said plates with the flanges pressing down upon the block.

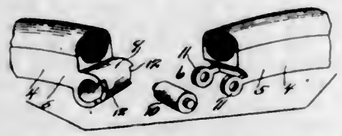
3. A device of the class described comprising a support, having a block formed at the upper end thereof, a wall formed on one side face of said block, a shank having a head formed at the lower end thereof and resting on said block, an arcuate block loosely mounted on said shank, plates pivotally carried on said wall, the upper edges of said plates being provided with arcuate flanges, and means yieldingly coöperating with said plates to normally retain said flanges in engagement with the arcuate block on said shank.

4. A device of the class described comprising a support having a block formed at the upper end thereof, a wall formed on one side face of said block, a shank having a head formed at the lower end thereof, and resting on said block, an arcuate block loosely mounted on said shank, a pair of plates pivotally carried on said wall, said plates being each provided with an inwardly extending arcuate flange adapted for engagement with the upper surface of said arcuate block, an additional plate pivotally carried between said side plates on the side of said first mentioned block opposite that having the wall formed thereon, and spring means engaged with said latter plate and the support.

5. A device of the class described comprising a support having a flat block formed at the upper end thereof, a wall formed on one side face of said block, a shank provided with a cylindrical head at the lower end thereof adapted to rest on said block, a block loosely carried on said shank and having a convex upper surface, a pair of side plates pivotally carried on said wall and contacting with the side faces of said blocks, said plates being provided with inwardly extending arcuate flanges adapted to contact with the curved upper face of the second named block, an additional plate pivotally carried between said side plates on the side of said first mentioned block opposite that having the wall formed thereon, spring means engaged with said latter plate, and the support, and a last removably carried on said shank.

[Claim 6 not printed in the Gazette.]

1,065,080. RESILIENT WHEEL. EMIL RADKE, Blue Earth, Minn. Filed Dec. 16, 1911. Serial No. 666,131. (Cl. 152—29.)

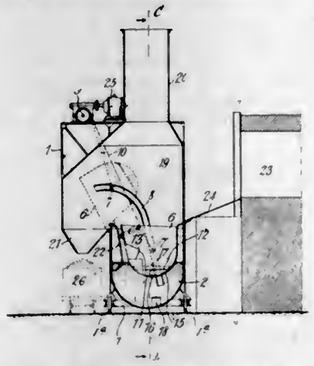


In a resilient wheel having a hub provided with spring spokes semi-circular in elevation, a rim to which the spokes are secured, said rim comprising a plurality of sections arranged in sequence, one end of each section having diametrically opposite apertured circular ears, said ears having narrow neck portions connecting to each section, the other end of each section terminating in a sleeve roll disposed axially in the ends of which the circular ears are snugly but movably fitted, the ends of the sleeve roll are provided with segmental recesses, in which narrow neck portions have limit movement, and a roll pin fitting the sleeve roll and provided with reduced ends to enter the apertures of said ears.

1,065,081. APPARATUS FOR QUENCHING COKE. WILHELM REUBOLD, Charlottenburg, Germany, assignor to Berlin-Anhaltische Maschinenbau-Aktien-Gesellschaft, Berlin, Germany, a Corporation of Germany. Filed June 1, 1912. Serial No. 700,966. (Cl. 202—5.)

1. In a quenching apparatus, a tank adapted to contain a quenching liquid, a trough movable into and out of said liquid and adapted to contain the material to be quenched, said trough being provided with an opening at its lower portion, movable means for closing said opening, and mechanism for opening said movable means when the trough reaches its lower position.

2. In a quenching apparatus, a tank adapted to contain a quenching liquid, a trough movable into and out of said liquid and adapted to contain the material to be quenched, said trough being provided with an inlet at a sufficient distance above its bottom to cause the trough to float before it has received its charge of material, the trough being freely movable in the liquid in response to the weight of the charge, and means for controlling the raising and lowering of said trough out of and into the liquid.



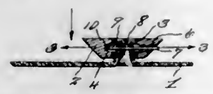
3. In a quenching apparatus, a tank adapted to contain a quenching liquid, and a trough having a perforated support on which the material to be quenched may rest and through which the quenching liquid may rise into said material, the trough being provided with a passage for conducting the quenching liquid below said perforated support, the inlet of said passage being above said support.

4. In a quenching apparatus, a tank adapted to contain a quenching liquid, and a trough movable into and out of said liquid and adapted to contain the material to be quenched, said trough being provided with a perforated false bottom above its bottom proper, with a compartment intervening between the two bottoms, and a liquid inlet communicating with said compartment and located above the level of the false bottom.

5. In a quenching apparatus, a tank adapted to contain a quenching liquid, and a trough movable into and out of said liquid and adapted to contain the material to be quenched, said trough being provided with a perforated false bottom, above its bottom proper, with a compartment intervening between the two bottoms, lateral chambers communicating with said compartment and extending upwardly therefrom, and liquid inlets located at the upper ends of said chambers.

[Claims 6 to 12 not printed in the Gazette.]

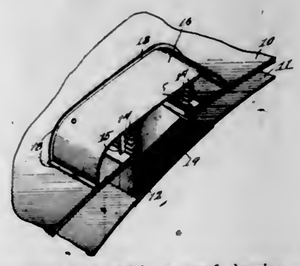
1,065,082. GARMENT-BUTTON. WADE HAMPTON SAUNDERS, Roanoke, Va. Filed Apr. 29, 1912. Serial No. 693,995. (Cl. 24—103.)



In combination, a garment button comprising an annular body having a central unobstructed perforation or opening extending entirely therethrough adapted to receive a fold or loop in a piece of fabric, the wall of the opening or perforation having an annular groove, the body having a second opening at right angles to the first opening and communicating with said opening and groove, an attaching means, adapted to enter the second opening and penetrate the fold or loop of the fabric and enter that portion of the groove opposite the second opening for securing the button to the garment.

1,065,083. VENTILATOR. RALPH T. SENTER, Buffalo, N. Y., and LOUIS A. KLING, Elizabeth, N. J., assignors, by mesne assignments, to The Near-Side Car Company, New York, N. Y., a Corporation of New York. Filed Aug. 2, 1911. Serial No. 641,963. (Cl. 98—22.)

1. The combination with a roof having an opening therein, and a flue communicating with said opening, of a hood having parallel side walls and open ends arranged above the opening and having its walls secured to the roof in spaced relation to the sides of the opening, and walls extending from the ends of the opening to the hood, the spaces between the side walls of the hood and the end walls of the opening constituting straight unobstructed air passages having communication with the flue between said end walls.



2. The combination with a roof having an opening therein, and a flue communicating with said opening, of a hood forming parallel side walls and open ends arranged above the opening and having its walls secured to the roof in spaced relation to the sides of the opening, walls extending from the ends of the opening to the hood, the spaces between the side walls of the hood and the end walls of the opening constituting straight unobstructed air passages having communication with the flue between said end walls, said end walls constituting baffles, and intermediate baffles arranged on each side of said opening between said end walls.

1,065,084. CHAIN MAT FOR WHEEL-TIRES. CHARLES E. SMITH, Bridgeport, Conn., assignor to The Walker Tire Chain Company, Toledo, Ohio, a Corporation of Ohio. Filed Feb. 11, 1913. Serial No. 747,601. (Cl. 152—14.)



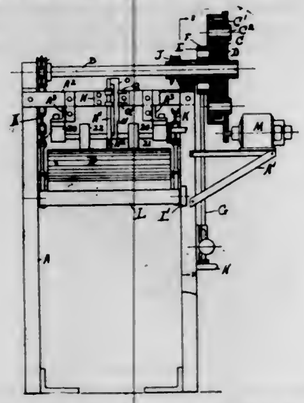
In a tire mat, the combination with side chains, of tread pieces including a base conforming to the transverse contour of and adapted to interlock with a tire, said base having a central outstanding ring-shaped roadway engaging portion, said base having end extensions that conform to the contour of and lie on the tire out of contact with the roadway, said end extensions each having anchor openings therein adjacent the corners of the free ends thereof, and securing chains lying in contact with the sides of the tire and having one of their ends fixed to the anchor openings and their other ends connected with the side chains.

1,065,085. PAPER-LIFTING DEVICE. CLARENCE E. STEERE, Chicago, Ill. Filed Feb. 15, 1909. Serial No. 477,999. (Cl. 101—36.)

1. The combination with a platform, and a source of power for raising it, of a connection between the power and the platform consisting of a planetary gearing consisting of gears revolving about two central gears on a common axis, a brake by which one of the central gears is held in a fixed position while the power is raising the platform, and means for releasing the brake so as to permit the last named gear to turn.

2. The combination with a platform, and a source of power for raising it, of a connection between the power and the platform consisting of a planetary gear-

ing having movable central and revolving gears, and a brake associated with one of the central gears and provided with means by which such gear may be held stationary or be permitted to slip.



3. A detached and independently movable frame, a platform supported in and guided by said frame and upon which paper may be piled, a motor carried on said frame, connections from said motor to said platform for raising the latter, a planetary gearing involving a fixed and a movable gear in said connections and forming a part thereof, a shaft secured to the movable gear and forming another part of said connection, a brake by which the fixed gear is held in position, and means by which said brake may be released to permit the fixed gear to become a movable gear so that the platform may descend without operation of the motor.

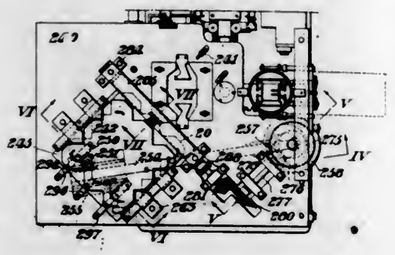
4. A detached and independently movable frame, a platform supported in and guided by said frame and upon which paper may be piled, an electric motor carried on said frame, connections from the motor to the platform for raising the latter, electrical devices automatically controlled by the height of the pile of paper for starting and stopping the motor, adjustable devices for offsetting the top of the pile of paper any desired amount, and an anti-friction roller between the top of the pile of paper and the electrical device.

5. In a detached and independently movable device of the character described, the combination with a frame, a platform upon which paper is to be piled, a motor carried by the frame, connections from the motor to the platform for raising it, and automatically operating means for controlling the operation of the motor by the height of the pile of paper on the platform, of a shaft and wheels for offsetting the top of the pile of paper, connections for driving said shaft from an intermediate point in the connections between the motor and the platform, and means by which said shaft may be shifted so as to vary the amount of offset given to the top of the pile of paper.

[Claims 6 to 8 not printed in the Gazette.]

1,065,086. BLANK-FEEDING MECHANISM. GEORGE W. SWIFT, Jr., Bordentown, N. J. Original application filed Sept. 21, 1911, Serial No. 650,492. Divided and this application filed Nov. 13, 1911. Serial No. 660,085. (Cl. 101—39.)

1. In mechanism of the class described, a horizontal plane table; a stack holder arranged to hold a stack of plane sheet blanks having marginal flaps, including opposite vertical angle bars fitted between said flaps and having brackets at their lower ends connecting them with said table; a reciprocatory feed plate extending between the lower ends of said bars and the top of said table, arranged to support said stack which gravitates thereon, and having abutments upon its upper surface arranged to engage and feed only the bottom blank in said stack, said plate and the bottom ends of said bars being so spaced as to permit passage of but a single blank between them; gear racks on said feed plate; gears engaging said racks; vertical shafts in said gears, having other gears beneath said table; a rack engaging said lower gears and having a cam roller; a cam engaging said roller; a pair of feed rollers extending horizontally transversely to the direction of movement of said feed plate; a vertically adjustable gate bar between said feed rollers and said stack holder bars, preventing feeding movement of more than one blank at a time; and, means coöperatively connecting said plate and feed rollers, whereby, blanks are delivered from said stack singly, in succession.



2. In mechanism of the class described, a horizontal plane table; a stack holder arranged to hold a stack of plane sheet blanks having marginal flaps, including opposite vertical angle bars fitted between said flaps and having brackets at their lower ends connecting them with said table; a reciprocatory feed plate extending between the lower ends of said bars and the top of said table, arranged to support said stack which gravitates thereon, and having means arranged to engage and feed only the bottom blank in said stack; gear racks on said feed plate; gears engaging said racks; vertical shafts in said gears, having other gears beneath said table; a rack engaging said lower gears and having a cam roller, a cam engaging said roller; a pair of feed rollers extending horizontally transversely to the direction of movement of said feed plate; a vertically adjustable gate bar between said feed rollers and said stack holder bars, preventing feeding movement of more than one blank at a time; and, means coöperatively connecting said plate and feed rollers, whereby, blanks are delivered from said stack singly, in succession.

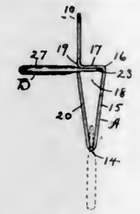
3. In mechanism of the class described, a horizontal plane table; a stack holder arranged to hold a stack of plane sheet blanks having marginal flaps, including opposite vertical angle bars fitted to extend between said flaps in marginal recesses in said blanks, whereby all of said blanks above the bottom one are prevented from feeding movement, and having brackets at their lower ends connecting them with said table; a reciprocatory feed plate extending between the lower ends of said bars and the top of said table, arranged to support said stack which gravitates thereon, and having means arranged to engage and feed only the bottom blank in said stack; a pair of feed rollers extending horizontally transversely to the direction of movement of said feed plate; a vertically adjustable gate bar between said feed rollers and said stack holder bars, preventing feeding movement of more than one blank at a time; and, means coöperatively connecting said plate and feed rollers, whereby, blanks are delivered from said stack singly, in succession.

4. In mechanism of the class described, a horizontal plane table; a stack holder arranged to hold a stack of plane sheet blanks, including opposite vertical bars having brackets at their lower ends connecting them with said table; a reciprocatory feed plate extending between the lower ends of said bars and the top of said table, arranged to support said stack which gravitates thereon, and having abutments upon its upper surface arranged to engage and feed only the bottom blank in said stack, said plate and the bottom ends of said bars being so spaced as to permit passage of but a single blank between them; gear racks on said feed plate; gears engaging said racks; vertical shafts in said gears, having other gears beneath said table; a rack engaging said lower gears and having a cam roller; a cam engaging said roller; a pair of feed rollers extending horizontally transversely to the direction of movement of said feed plate; a vertically adjustable gate bar between said feed rollers and said stack holder bars, preventing feeding movement of more than one blank at a time; and, means coöperatively connecting said plate and feed rollers, whereby, blanks are delivered from said stack singly, in succession.

5. In mechanism of the class described, a horizontal plane table; a stack holder arranged to hold a stack of plane sheet blanks, including opposite vertical bars having brackets at their lower ends connecting them with said table; a reciprocatory feed plate extending between the lower ends of said bars and the top of said table, arranged to support said stack which gravitates thereon, and having means arranged to engage and feed only the bottom blank in said stack; gear racks on said feed plate; gears engaging said racks; vertical shafts in said gears, having other gears beneath said table; a rack engaging said lower gears and having a cam roller; a cam engaging said roller; a pair of feed rollers extending horizontally transversely to the direction of movement of said feed plate; a vertically adjustable gate bar between said feed rollers and said stack holder bars, preventing feeding movement of more than one blank at a time; and, means coöperatively connecting said plate and feed rollers, whereby, blanks are delivered from said stack singly, in succession.

[Claims 6 to 11 not printed in the Gazette.]

1,065,087. GARMENT CAST-OFF. ADELE W. TAYLOR, New Britain, Conn., assignor of one-half to Louis M. Schmidt, New Britain, Conn. Filed May 9, 1910. Serial No. 560,371. (Cl. 241—18.)



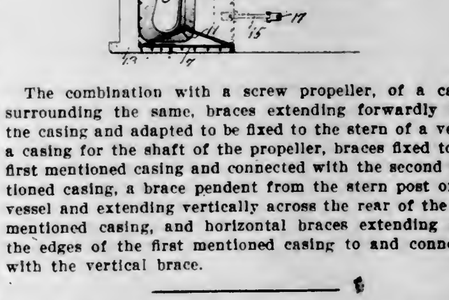
In a garment cast off, a body member comprising a hook having upwardly directed arms having upper ends, an overhanging wall above the said ends and attached to one of the same, the other of the said ends separated from the said overhanging wall by an entrance space, the said arms adjacent said ends separated by a turning space and a loop member having an engaging bar, the said bar of essentially rectangular cross-section, and the width of the said entering space a fit for the smaller rectangular dimensions of the said bar and the said turning space such as to permit the turning of the said bar therein.

1,065,088. MAGAZINE FOR AUTOMATIC MACHINES. WILLIAM VICTORY and WILLIAM J. PARSONS, Montague, Mass., assignors to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Dec. 20, 1912. Serial No. 737,843. (Cl. 29—1.)

1. A machine of the character described having a swinging rest or magazine for the stock to be acted upon by said machine, the end of said rest nearest the machine being laterally movable, and means for supporting said laterally movable end when swung aside.

2. A machine of the character described having a stock rest comprising a pair of disks and tubes connecting them, one of said disks having a pivotal support and the other disk having a support to permit it to be shifted laterally.

3. A machine of the character described having a swinging rest or magazine for the stock to be acted on by said machine, the end of said rest nearest the machine being laterally movable, and an elongated platform for supporting the laterally movable end.



4. A stock rest or magazine for machines of the character described having a pivotal support for one end and and an elongated platform for supporting its other end, means being provided for locking the last-mentioned end in position relatively to the machine.

5. A stock rest or magazine for machines of the character described having a pivotal support for one end and an elongated platform for supporting its other end, means being provided for locking the last-mentioned end in position relatively to the machine, the locking means being constructed to permit lateral play of the front end of the stock rest or magazine.

[Claims 6 to 9 not printed in the Gazette.]

1,065,089. SPEED-ACCELERATOR AND PROPELLER-GUARD. LOUIS S. WABO, West Hoboken, N. J. Filed Apr. 3, 1912. Serial No. 688,220. (Cl. 115—42.)

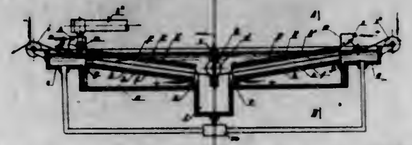
The combination with a screw propeller, of a casing surrounding the same, braces extending forwardly from the casing and adapted to be fixed to the stern of a vessel, a casing for the shaft of the propeller, braces fixed to the first mentioned casing and connected with the second mentioned casing, a brace pendent from the stern post of the vessel and extending vertically across the rear of the first mentioned casing, and horizontal braces extending from the edges of the first mentioned casing to and connected with the vertical brace.

1,065,090. APPARATUS FOR UNIFORMLY COATING STRIPS OF METAL, WIRE, AND THE LIKE UNDER CONTINUOUS ACTION. FEDERICO WERTH, Milan, Italy. Filed Sept. 4, 1912. Serial No. 718,549. (Cl. 204—5.)

1. An apparatus for coating metal, comprising an electrolytic bath, an anode supported at an angle of inclination in said bath and consisting of a plurality of lower channeled members and a plurality of upper removable channeled members, and means for moving the metal to be coated through the channels formed by said anode.

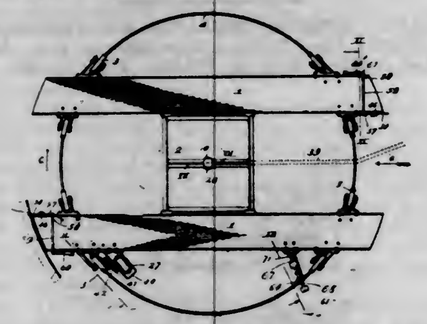
2. An apparatus for coating metal, comprising an electrolytic bath, two sets of anodes supported at an angle of

inclination to the center-line of the bath, each anode consisting of a plurality of lower channeled perforated members and a plurality of upper removable channeled and perforated members, means for moving the metal to be coated through the channels of said anodes, and means located between the lower ends of the pairs of anodes for guiding the metal to be coated.



3. In an apparatus for coating metal, the combination of an electrolytic bath having extensions, two sets of anodes supported in inclined position in the bath, said anodes consisting of a plurality of lower and upper channeled and perforated members, means for moving the metal to be coated through the channels of said anodes, an adjustable guide-wheel located between the lower ends of the pairs of anodes, a well at the center of the electrolytic bath, and means for pumping the electrolyte from said well to the extensions at opposite ends of the electrolytic bath.

1,065,091. AUTOMATIC TURN-TABLE. JOSEPH H. WITTMANN, Kansas City, Mo., assignor to Pitless Auto Turntable Company, of Missouri. Filed Jan. 16, 1911. Serial No. 602,985. (Cl. 104—19.)



1. In combination, a turntable, a motor for actuating the same, a latch to hold the turntable in position to receive a vehicle and vehicle-controlled means for actuating said motor permanently mounted thereon and geared thereto.

2. In combination, a turntable, an electric motor for actuating the same, a motor circuit, and vehicle-controlled means for controlling said circuit.

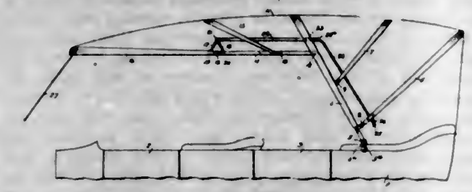
3. In combination, a turntable, an electric motor for actuating the same, a motor circuit, circuit-breakers in said motor circuit, means at opposite ends of the turntable adapted to be alternately closed by a vehicle running upon said turntable, and means alternately engaged by the circuit-breakers to open the same to interrupt the motor circuit.

4. In combination, a turntable, an electric motor for actuating the same, a motor circuit, circuit-breakers in said motor circuit, provided with latches, said circuit-breakers being near opposite ends of the turntable and adapted to be alternately closed by a vehicle running upon said turntable, and an element alternately engaged by the circuit-breakers to throw the same open to interrupt the motor circuit, said element being adjacent that end of the turntable most remote from the approach thereto and provided with a notch to alternately receive the circuit breaker latches and thus stop the turntable.

5. In combination, a turntable, an electric motor for actuating the same, a motor circuit, circuit-breakers in said motor circuit, near opposite ends of the turntable and provided with latches, an element alternately engaged by said latches to open their respective circuit-breakers and stop the turntable, and means to disengage the latches from said element and close the circuit-breakers.

[Claims 6 to 17 not printed in the Gazette.]

1,065,092. FOLDING TOP FOR VEHICLES. CARL WOLFERMANN, New York, N. Y. Filed Aug. 7, 1912. Serial No. 713,788. (Cl. 21—62.)



1. A folding top for vehicles comprising a main section movably connected with said vehicle, an articulated auxiliary section movably connected with said main section and adapted to extend horizontally over said vehicle, means carried by said main section having a portion extending lengthwise of and parallel to said auxiliary section in its extended position and connected with said auxiliary on opposite sides of and in close proximity to a joint thereof for suspending the auxiliary section in operative position and a flexible cover connected with said sections.

2. A folding top for vehicles comprising a main bow, a peak bow, rods pivotally connected at one end with said main bow and at the other end with said peak bow, a brace movably carried by said main bow and extending parallel to said peak bow in its extended condition, connections from the one end of said brace to a rod and to said peak bow respectively and means for maintaining said brace in operative position whereby said peak is suspended in its extended condition over said vehicle.

3. A folding top for vehicles comprising a main bow pivotally secured to said vehicle a rearwardly extending bow pivotally connected with said main bow, forwardly extending rods pivotally connected with said main bow, a front bow pivotally connected with the free ends of said rods, braces pivotally mounted on said main bow, links pivotally connected with the one end of said braces and themselves pivotally connected with said rods and said forward bows respectively at opposite sides of the pivotal connection between said forward bow and said rods, links pivotally connected at one end with the opposite ends of said braces and having their other ends pivotally connected with said rearwardly extending bow whereby said forward bow and said rods are rigidly supported in operative position and a cover connected with all of said bows and with said vehicle.

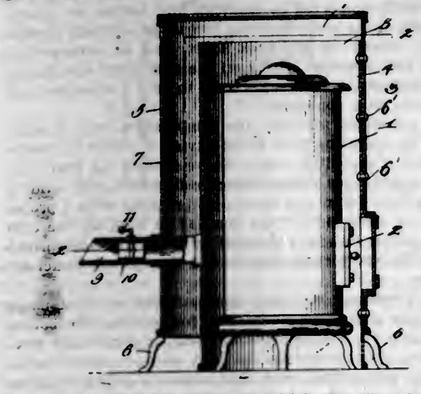
4. A folding top for vehicles comprising a main bow, a peak bow, rods pivotally connected with said main bow and with said peak bow, means pivotally mounted on said main bow and connections diverging from said means to a rod and said peak bow respectively whereby said peak bow is suspended over said vehicle.

5. A folding top for vehicles comprising a main bow pivotally mounted thereon, an auxiliary bow pivotally connected with said main bow, a peak bow, rods having one end pivotally secured to said peak bow and the other end pivotally connected to said main bow, a brace pivotally mounted on said main bow and extending parallel to said peak bow in its extended condition, connections from one end of said brace to a rod and said peak bow respectively, and a link connected with the opposite end of said brace and with said auxiliary bow.

[Claim 6 not printed in the Gazette.]

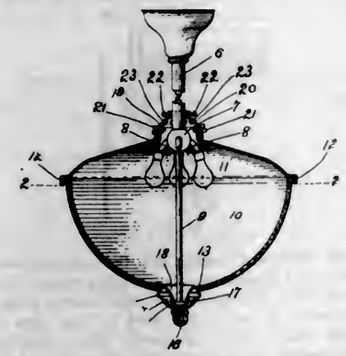
1,065,093. HEATING-STOVE. FLOYD B. YOUNG, Ludlow, Ill. Filed June 1, 1912. Serial No. 701,069. (Cl. 126—58.)

The combination with a stove, of a jacket comprising an outer casing closed at its upper end, legs supporting said outer casing and spacing the same from the floor, an inner casing of smaller diameter and equal in length to that of the outer casing, said inner casing being located adjacent to one side of the outer casing and secured thereto, said inner casing resting upon the floor and open at the top thereof, an air duct extending in from



the exterior of the building in which the stove is located and communicating with the interior of the inner casing at its lower portion, and means for controlling the flow of cool air into the inner casing where it is heated and then passes out of the top and down through the outer casing into the room.

1,065,094. LIGHTING-FIXTURE. LORIN W. YOUNG, New York, N. Y. Filed Oct. 31, 1912. Serial No. 728,855. (Cl. 240—78.)

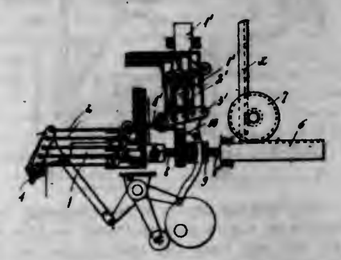


1. A lighting fixture comprising a central lamp-supporting stem, a globe supported by the stem and comprising upper and lower sections, the upper section having an opening through which the stem extends, a collar movable up and down on said stem, to raise and lower the upper section, and a holder fitting within said opening and attached to the collar and clamping the edge of the upper section around said opening.

2. A lighting fixture comprising a central lamp-supporting stem, a globe comprising upper and lower sections having openings through which said members extend, and a supporting member between said stem and the lower section of the globe, located at the opening in said lower section and provided with vent holes, a spreader located in said member above the vent holes, to deflect air entering through said holes, toward the inner surface of the globe, and an upper vented supporting member located between the stem and the upper section of the globe, in the opening in the latter.

3. A lighting fixture comprising a central lamp-supporting hanger, a globe surrounding the same and comprising upper and lower sections, having central openings through which said hanger extends, a shell fixed to the lower end of the hanger, and supporting said globe, the shell having vent openings to the interior of the globe, and a spacing member fitting between the top of the upper section and the hanger and provided with vents.

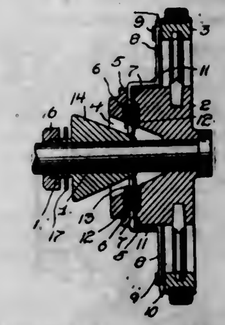
1,065,095. JACQUARD EMBROIDERING-MACHINE. ROBERT ZAHN, Plauen, Germany. Original application filed Feb. 5, 1910, Serial No. 542,305. Divided and this application filed June 17, 1912. Serial No. 704,107. (Cl. 112—7.)



1. In an automatic embroidering machine, the combination with jacquard controlled horizontal and vertical allotting members and a driven member, of a mechanism for combining the different movements of said allotting members and comprising oppositely threaded parts on one of said allotting members and a pinion working as a nut on said threaded parts and connecting the same and means on the other allotting member operatively connected to said nut to feed the latter.

2. In an automatic embroidering machine, the combination with jacquard controlled horizontal and vertical allotting members and a driven member, of a mechanism for combining the different movements of said allotting members and comprising oppositely threaded parts on one of said allotting members and a pinion working as a nut on said threaded parts and connecting the same and a rack formed on the other allotting member and coöperating with said nut to feed the latter.

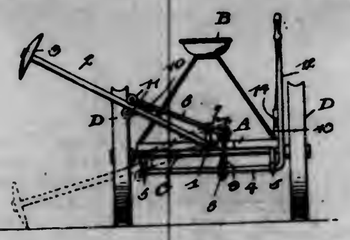
1,065,096. ANTISKIDDING DEVICE. PORTER D. ALBERT, New Bethlehem, Pa. Filed Oct. 11, 1912. Serial No. 725,183. (Cl. 21—209.)



In an anti-skidding device for wheels, the combination with a wheel having its hub extended inwardly and with the extended portion annularly formed with a beveled inner face, said extended portion further provided with a series of inwardly opening sockets and vertically disposed openings communicating with the sockets, spaced bearings secured to the inner side of the felly of the wheel, radially disposed gripping arms extending through said bearings and having L-shaped inner ends seated upon said extended portion and further projecting through said openings and sockets, the vertical arm of said L-shaped ends provided with pins, springs surrounding the vertical arms of the L-shaped ends and interposed between said pins

and the bottoms of said sockets, and means adapted to engage in the inner termini of the vertical arms of said L-shaped ends for shifting said gripping members outwardly and beyond the periphery of the wheel.

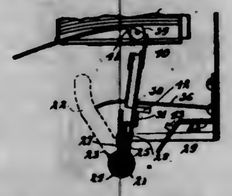
1,065,097. LAND-MARKER. WILLIAM R. ALLEN, Goldengate, Ill. Filed July 22, 1912. Serial No. 710,998. (Cl. 111—24.)



1. In a land marking device of the character described, the combination of a corn planter frame, an arm pivotally mounted at one end upon the rear portion of the said frame, a marking element mounted on the opposite end of said arm, a crank lever mounted upon the said frame and extending longitudinally thereof, one arm of said crank lever being bifurcated, concave rollers mounted within said bifurcated portion and connected to the arm of the marker, an L-shaped lever, one arm thereof extending transversely of the said frame and journaled therein, an extension formed upon said last mentioned arm, a link connecting said extension with one arm of the crank lever, an operating arm extending from said L-shaped arm, a rack mounted upon the said frame, and a spring actuated pawl mounted upon the operating arm of the L-shaped lever for engagement with said rack, substantially as and for the purpose described.

2. In combination with a planter frame, of a marker comprising an arm pivotally secured at one end to the said frame, a marking device carried by the opposite end of said arm, a crank lever extending longitudinally of the frame and journaled thereupon, laterally disposed rollers extending from one end of said crank lever and partly encircling the medial portion of the said marker arm, and means for operating the opposite end of said crank lever whereby the said marker may be raised and lowered, substantially as described.

1,065,098. VENDING-MACHINE. EDWARD C. ANGELL, New York, N. Y., assignor to United States Stamp Book Company, Inc., New York, N. Y., a Corporation. Filed Sept. 18, 1912. Serial No. 720,910. (Cl. 194—85.)



1. In a vending machine, the combination with a magazine, of an operating shaft rockable forward and backward and having a recess to receive the edge of a deposited coin, a swinging ejector supported loosely on the shaft, and a sleeve also loose on the shaft and having means coöperating with said recess to grip a deposited coin so that the shaft, sleeve and coin turn together, the sleeve also having a projection extending behind and spaced from the ejector so as to actuate the latter after the coin has been tilted forward a distance.

2. In a vending machine, the combination with a magazine, of an operating rock shaft having a recess to receive the edge of a deposited coin, a swinging ejector coaxial with the shaft, and a member separate from the ejector and also coaxial with the shaft, said member having means whereby it is coupled to the shaft by a deposited coin and means whereby it actuates the ejector after a period of lost motion.

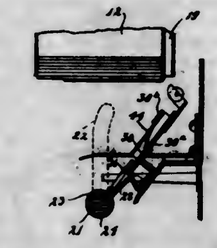
3. In a vending machine, ejecting mechanism comprising a rock shaft supported in bearings and having an operating handle and a coin-receiving recess, an ejecting member mounted loosely on the rock shaft, and an intermediate member also mounted loosely on the rock shaft and having means coöperating with said recess to grip a deposited coin which acts as a connector.

4. In a vending machine, the combination with a magazine, of an operating rock shaft having a recess to receive the edge of a deposited coin, a sleeve around the shaft having an opening one side of which coöperates with said recess to grip the coin and being also provided with a projection at the other side of the opening to back up the coin, and an ejector loosely supported by the shaft, said projection on the sleeve extending behind the ejector to actuate the same.

5. In a vending machine, the combination of a magazine, a coin chute and mechanism for ejecting the bottom article from the magazine, comprising a rock shaft member having a coin-receiving recess, a sleeve member having means for coöperating with said recess to grip a deposited coin, and a swinging ejecting member conaxial with and separate from the foregoing members and formed as a section of the coin chute to guide a deposited coin to said recess.

[Claims 6 to 8 not printed in the Gazette.]

1,065,099. VENDING-MACHINE. EDWARD C. ANGELL, New York, N. Y., assignor to United States Stamp Book Company, Inc., New York, N. Y., a Corporation. Filed Oct. 4, 1912. Serial No. 723,832. (Cl. 194—102.)

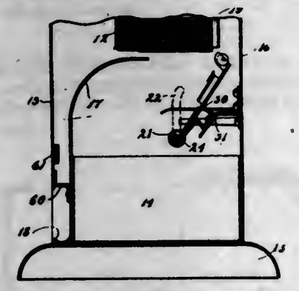


In a coin-controlled mechanism, the combination with a coin chute and a magazine, of a tiltable ejector below and coöperating with the magazine and having coin-guiding means arranged to receive the coins as they pass from the chute, said ejector being normally tilted backward and having an opening in its lower side proportioned to permit coins of insufficient diameter to pass through, the front of the ejector being open, and a light deflecting spring carried by the front of the ejector opposite said coin opening.

1,065,100. VENDING-MACHINE. EDWARD C. ANGELL, New York, N. Y., assignor to United States Stamp Book Company, Inc., New York, N. Y., a Corporation. Filed Oct. 5, 1912. Serial No. 724,012. (Cl. 164—1.)

1. In a vending machine, the combination with a case having a delivery opening, a magazine, a coin chute, and coin-controlled article-ejecting mechanism, of a removable coin box to receive the coins and an article-guide leading from the magazine to said delivery opening, being secured to and extending upward from the front of said coin box and curved backward beneath the magazine.

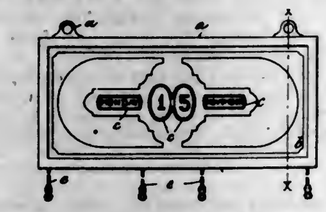
2. In a vending machine, the combination of a magazine, coin-controlled article-ejecting mechanism below the magazine, a coin box movable in and out below the coin-controlled mechanism, and a curved wall extended upward from the front of said coin box in front of said mechanism and terminating adjacent the lower part of the magazine, constituting a guide for the ejected article and a guard covering the coin-controlled mechanism in front.



3. In a vending machine, the combination of a case having a front door terminating above its bottom to form a delivery opening, a magazine in the case, coin-controlled mechanism below the magazine, a coin box movable in and out below the coin-controlled mechanism, and a front wall on the coin box extending upward at a short distance behind said front door to form a delivery chute and having its upper part curved backward and terminating adjacent the lower part of the magazine to constitute a guide for the ejected article, said wall covering the coin-controlled mechanism in front to prevent tampering therewith.

4. In a vending machine, the combination of a case having a front door, a magazine in the case, coin-controlled ejecting mechanism below the magazine, a removable coin box below the coin-controlled magazine, a front wall on the coin box extending upward at a short distance behind said front door to form a delivery chute from the magazine and covering the coin-controlled mechanism in front, and spacing members on the front of said coin box contacting with said front door to position the box and determine the width of the delivery chute when the door is closed.

1,065,101. PERPETUAL CALENDAR. LOUIS V. ARONSON, Newark, N. J. Filed Sept. 2, 1909. Serial No. 515,863. (Cl. 40—112.)



1. In a calendar, the combination with a case, the under side of said case being provided with apertures, a front plate provided with apertures located in said case, a front and rear tray located in said case, the under side of said trays provided with apertures registering with the apertures in the under side of the case, a day name and a month name disk rotatably secured to the front tray, disks containing numerals rotatably secured to the rear tray and in alinement with the said disks on the front tray, a ratchet wheel for each disk rotatably secured to the tray and provided with means for securing the disk to the ratchet, a lever for each ratchet wheel extending beyond the periphery of said wheel, and spring actuated pawls pivotally secured to each lever at a point beyond the periphery of said ratchet wheels, a spring-actuated retaining pawl for each ratchet wheel pivotally secured to the tray and means secured to one end of each of said levers passing through the apertures in the under side of said case and trays for actuating said ratchet wheels and disks.

2. In a calendar, the combination with a case, the under side of said case being provided with apertures, a front plate provided with apertures located in said case, a front and rear tray located in said case, the under side of said trays provided with apertures registering with the apertures in the under side of the case, a day name and a month name disk rotatably secured to the front tray, disks containing numerals rotatably secured to the rear tray and in alinement with the said disks on the front tray, a ratchet wheel for each disk rotatably secured to the tray and provided with means for securing the disk to the ratchet, projections in said front and rear trays designed to give lateral support to said ratchet wheels, a lever for each ratchet wheel extending beyond the periphery of said wheel, stops for said levers formed integral with the front tray, and spring actuated pawls pivotally secured to each lever at a point beyond the periphery of said ratchet wheels, spring-actuated retaining pawls for each ratchet wheel pivotally secured to the trays, spiral springs secured to the trays, one end of each spring being secured to the actuating pawl and one end to the retaining pawl, and means secured to one end of each of said levers passing through the apertures in the under side of said case and trays for actuating said ratchet wheels and disks.

1,065,102. ANTHRACENE COMPOUNDS AND COLORING-MATTERS AND PROCESS OF MAKING SAME. OSCAR BALLY, Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Original application filed Mar. 5, 1910, Serial No. 547,414. Divided and this application filed Nov. 3, 1910. Serial No. 590,541. (Cl. 8—1.)

1. In the production of anthraquinone thioxanthones the process which consists in producing compounds of the anthracene series possessing a constitution corresponding to the formula $A(S\text{-}R\text{-}COOH)_n$ in which A represents an anthraquinone residue, R represents an aromatic residue, n represents a number, by causing an acid-substituted anthraquinone derivative to react upon an ortho-thiophenolcarboxylic acid body.

2. In the production of anthraquinone-dithioxanthones the process which consists in producing condensation products of the anthraquinone series by causing halogenated anthraquinone to react upon thiophenol-ortho-carboxylic acid.

3. In the production of anthraquinone-dithioxanthone the process which consists in producing anthraquinone-1.5-bis-thiosalicylic acid by acting upon 1.5-dichlor-anthraquinone with thiosalicylic acid.

4. The process of producing anthraquinone-thioxanthones by causing an acid-substituted anthraquinone derivative to react upon an ortho-thiophenol-carboxylic acid body and then subjecting the product thus obtained to the action of a condensing agent.

5. The process of producing coloring matters of the anthracene series being anthraquinone-thioxanthones by causing a halogenated anthraquinone to react upon thiophenol-ortho-carboxylic acid and then subjecting the product thus obtained to the action of a condensing agent.

[Claims 6 to 8 not printed in the Gazette.]

1,065,103. LOCK FOR AUTOMOBILES. LIPPMAN BAUM and CHARLES SANDLER, Washington, D. C. Filed June 11, 1912. Serial No. 703,050. (Cl. 70—90.)



1. The combination with a stationary tubular member and a rotatable member therewithin, said members having openings therein adapted for registration; of a sleeve formed of hinged sections, means to secure said sections together on the stationary member to permit rotation thereon, means to guide and limit said sleeve in its rotative movement, and a yielding projection on the inner face

of said sleeve adapted to enter the registering openings of said members.

2. The combination with a stationary tubular member and a rotatable member therewithin, said members having openings therein adapted for alinement; of a sleeve formed in sections hinged one to the other, one of said sections being provided with a slot therein, means extending through said slot and engaged with said stationary member to adjustably retain said sleeve on the latter, a yielding projection extending from the inner face of the other section of said sleeve and adapted to enter the alining openings, and means to lock the sections of said sleeve together.

3. The combination with a stationary tubular member and a rotatable member therewithin, said members each having an opening therein adapted for alinement; of a sleeve comprising a pair of hinged sections, means to lock said sections together, means to movably retain said sleeve on the stationary member, and a spring held stud projecting beyond the inner face of one of the sections of said sleeve and adapted to enter the alined openings of said members.

4. The combination with a stationary tubular member and a rotatable member therewithin, said members each having an opening therein adapted for alinement; of a sleeve comprising a pair of hinged sections, means to lock said sections together, means to retain said sleeve on the stationary member and permit a partial rotation thereon, a tubular extension carried on one of said sections, and a spring forced stud in said extension adapted to project beyond the inner face of said section and enter the alining openings of said members.

5. In a device of the class described, the combination with stationary and movable members, each having an opening therein adapted for registration with one another; of a sleeve member loosely applied to said stationary member, means to limit the movement of said sleeve member, and means yieldingly carried on said sleeve member and adapted for engagement with the registering openings of the first mentioned members upon movement of said sleeve member.

[Claim 6 not printed in the Gazette.]

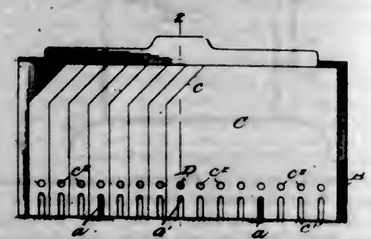
1,065,104. FOLLOWER FOR FILING APPARATUS. JOHN AUSTIN BEST, Augusta, Ga. Filed July 27, 1912. Serial No. 711,912. (Cl. 129—29.)



1. A follower for filing apparatus, comprising the combination with a guide or holding member, of a follower block movable on said member, a locking rod having an upright portion and an angular end portion, the extremity of which latter end portion is pivoted in substantially the same horizontal plane with the said guide or holding member whereby lateral movement of the upright portion will cause the said angular portion to bear against the said guide or holding member and frictionally engage therewith, and a keeper mounted on the follower block and with which the said upright rod portion is engageable to maintain the rod in engaged position against the guide or holding member.

2. A follower for filing apparatus, comprising the combination with a pair of guide or holding members in horizontal alinement, of a follower block movable on both of said members, a locking rod having an upright portion and a lower angular end portion, the extremity of which latter is loosely bent around one of the guide members whereby lateral movement of the upright rod portion will cause the said angular portion to frictionally engage the other guide member, and a keeper mounted on the follower block and with which the said upright rod portion is engageable to hold its said angular portion against the said guide member.

1,065,105. LOCKING DEVICE FOR FILING APPARATUS. JOHN AUSTIN BEST, Augusta, Ga. Filed July 27, 1912. Serial No. 711,913. (Cl. 129—16.)



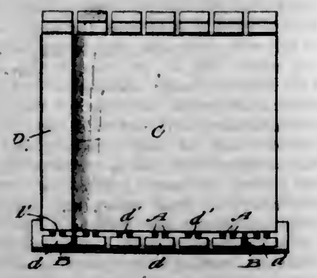
1. The combination of a holder having one or more card supporting and holding members, cards having means whereby to engage said supporting members in a non-alined series, and a locking member engageable with each of the cards of the non-alined series whereby to prevent their removal, the said locking member having positive engagement with each card of the series whereby to prevent lateral displacement irrespective of the supporting members.

2. The combination of a holder having one or more card supporting members, cards having means whereby to engage said supporting members in a non-alined series, and each being provided with a plurality of openings adjacent one edge, and a locking rod adapted to pass through those openings which are alined through the series of cards.

3. The combination of a holder having one or more card supporting members, cards having means whereby to engage said supporting members in a non-alined series, and each being provided with a plurality of openings, equidistantly spaced from one another and arranged in a line adjacent one edge of the card, a rod movable through the holder and engageable through the card-openings which are alined through the series, and means for normally locking the said rod against removal.

4. A file card having a plurality of equidistantly spaced recesses along one edge, and a plurality of equidistantly spaced openings, each of which openings is in alinement with one of said recesses adjacent the inner end thereof.

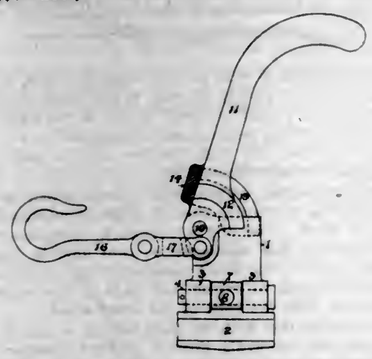
1,065,106. FILING APPARATUS. JOHN AUSTIN BEST, Augusta, Ga. Filed July 27, 1912. Serial No. 711,914. (Cl. 129—16.)



1. The combination of a holder having a plurality of spaced supporting members, and cards having extension heads of greater width than the spaces between said members, and also having portions connecting said extension heads thereto, said connecting portions being at least as narrow as the spaces between said members.

2. The combination of a holder having a plurality of spaced supporting members, and cards having T-shaped extensions at their lower edges for engagement with a selected pair of said members.

1,065,107. CABLE-CLIP. HENRY ARTHUR BETTNEY, deceased, Nottingham, England, by Sarah Ann Bettney, administratrix. Filed Nov. 6, 1912. Serial No. 729,837. Cl. 104—130.)



1. In a cable clip the combination of a pair of cheeks, jaws at the lower ends of such cheeks, an axle upon which the cheeks are mounted and arranged parallel to the jaws, an axle at right angles to the jaws, a handle mounted upon such axle and a wedge carried by the handle for separating the cheeks and closing the jaws substantially as herein set forth.

2. In a cable clip the combination of a pair of cheeks, jaws at the lower ends of such cheeks, an axle upon which the cheeks are mounted and arranged parallel to the jaws, bearings for the said axle, an axle at right angles to the jaws and carried by bearings in the cheeks, a handle mounted upon such axle, a wedge carried by the handle and adapted to operate between the cheeks for closing the jaws, and wedges carried by the handle and adapted to operate upon the outsides of the cheeks for opening the jaws substantially as herein set forth.

3. In a cable clip the combination of a pair of cheeks with jaws at the lower ends of such cheeks, an axle at right angles to the cheeks, a handle upon such an axle, means carried by the handle for closing the jaws, other means carried by the handle for opening the jaws, a handle lever below the handle axle, a coupling hook, and connections between the coupling hook and the handle lever substantially as herein set forth.

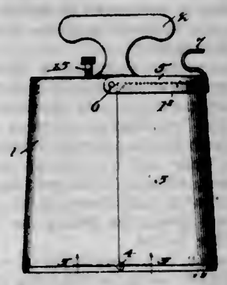
4. In a cable clip the combination of a pair of cheeks, jaws upon such cheeks, an axle upon which such cheeks are mounted, fixed bearings upon one cheek for such axle, an axle at right angles to the cheeks, a handle upon such axle, means upon the handle for closing the jaws, other means upon the handle for opening the jaws, means by which the distance between the jaws can be varied, the coupling hook, and connections between the said hook and the handle substantially as herein set forth.

5. In a cable clip the combination of a pair of cheeks with jaws, an axle upon which the cheeks are mounted, an axle at right angles to the cheeks, a handle upon such axle, loose levers upon the same axle, ratchet mechanism for coupling the handle to the loose levers, means operated by the handle for closing the jaws, other means for opening the jaws, and means for varying the jaw opening substantially as herein set forth.

[Claims 6 and 7 not printed in the Gazette.]

1,065,108. LARD-CUTTER. AUGUST W. BLAUL and LEO HARMISON, Cumberland, Md. Filed Mar. 25, 1913. Serial No. 756,755. (Cl. 31—65.)

1. In a cutting device for plastic material, a casing having an open end, an inwardly extending flange arranged to support an open ended receptacle, a cutter carried by the casing at its open end, and means for locking the receptacle in the casing.



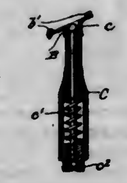
2. In a cutting device for plastic material, a casing having an open end and an inwardly extending flange for supporting one end of an open receptacle, a cutter carried by the casing at its open end, means for locking the receptacle in the casing, an adjustable follower carried by the casing for holding the receptacle against the flange.

3. In a cutting device for plastic material, a casing having a body portion and a hinged portion arranged to permit the entrance of a receptacle, a flange carried by said body portion and said hinged portion near the open end of the casing for supporting the receptacle, means for locking the hinged portion to the body portion, and means carried by the casing for forcing the receptacle into close engagement with said supporting flange.

4. In a cutting device for plastic material, a casing having a body portion and a hinged portion arranged to permit the entrance of a receptacle, a flange carried by said body portion and said hinged portion near the open end of the casing for supporting the receptacle, a semicircular locking member pivotally secured to said body portion, and arranged to engage said hinged portion for locking the receptacle within the casing, and means carried by the casing for forcing the receptacle into close engagement with said supporting flange.

5. In a cutting device for plastic material, a casing having a body portion, a cutting rod or wire carried by said body portion at one end thereof, a movable portion of the casing hinged upon said cutting rod or wire and adapted to move to permit the entrance of a receptacle, a flange carried by said body portion and said hinged portion near the open end of the casing for supporting said receptacle, a semicircular locking member pivotally carried by said body portion and arranged to engage the free end of said movable portion for locking the latter in position, and means carried by the casing for forcing the receptacle into close engagement with said supporting flange.

1,065,109. SAFETY-RAZOR. MORTON G. BUNNELL, Porter, Ind., assignor, by mesne assignments, to Gillette Safety Razor Company, a Corporation of Massachusetts. Filed May 11, 1906. Serial No. 316,387. (Cl. 30—12.)



1. In a safety razor, the combination with a flexible blade, of a holder comprising a blade-seat, a guard, and holding means rigidly mounted on said blade-seat for holding the blade firmly in position when inserted and from which the blade is disengaged by flexing the same and means for flexing said blade.

of said sleeve adapted to enter the registering openings of said members.

2. The combination with a stationary tubular member and a rotatable member therewithin, said members having openings therein adapted for alinement; of a sleeve formed in sections hinged one to the other, one of said sections being provided with a slot therein, means extending through said slot and engaged with said stationary member to adjustably retain said sleeve on the latter, a yielding projection extending from the inner face of the other section of said sleeve and adapted to enter the alining openings, and means to lock the sections of said sleeve together.

3. The combination with a stationary tubular member and a rotatable member therewithin, said members each having an opening therein adapted for alinement; of a sleeve comprising a pair of hinged sections, means to lock said sections together, means to movably retain said sleeve on the stationary member, and a spring held stud projecting beyond the inner face of one of the sections of said sleeve and adapted to enter the alined openings of said members.

4. The combination with a stationary tubular member and a rotatable member therewithin, said members each having an opening therein adapted for alinement; of a sleeve comprising a pair of hinged sections, means to lock said sections together, means to retain said sleeve on the stationary member and permit a partial rotation thereon, a tubular extension carried on one of said sections, and a spring forced stud in said extension adapted to project beyond the inner face of said section and enter the alining openings of said members.

5. In a device of the class described, the combination with stationary and movable members, each having an opening therein adapted for registration with one another; of a sleeve member loosely applied to said stationary member, means to limit the movement of said sleeve member, and means yieldingly carried on said sleeve member and adapted for engagement with the registering openings of the first mentioned members upon movement of said sleeve member.

[Claim 6 not printed in the Gazette.]

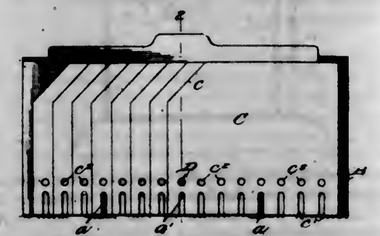
1,065,104. FOLLOWER FOR FILING APPARATUS. JOHN AUSTIN BEST, Augusta, Ga. Filed July 27, 1912. Serial No. 711,912. (Cl. 129—29.)



1. A follower for filing apparatus, comprising the combination with a guide or holding member, of a follower block movable on said member, a locking rod having an upright portion and an angular end portion, the extremity of which latter end portion is pivoted in substantially the same horizontal plane with the said guide or holding member whereby lateral movement of the upright portion will cause the said angular portion to bear against the said guide or holding member and frictionally engage therewith, and a keeper mounted on the follower block and with which the said upright rod portion is engageable to maintain the rod in engaged position against the guide or holding member.

2. A follower for filing apparatus, comprising the combination with a pair of guide or holding members in horizontal alinement, of a follower block movable on both of said members, a locking rod having an upright portion and a lower angular end portion, the extremity of which latter is loosely bent around one of the guide members whereby lateral movement of the upright rod portion will cause the said angular portion to frictionally engage the other guide member, and a keeper mounted on the follower block and with which the said upright rod portion is engageable to hold its said angular portion against the said guide member.

1,065,105. LOCKING DEVICE FOR FILING APPARATUS. JOHN AUSTIN BEST, Augusta, Ga. Filed July 27, 1912. Serial No. 711,913. (Cl. 129—16.)



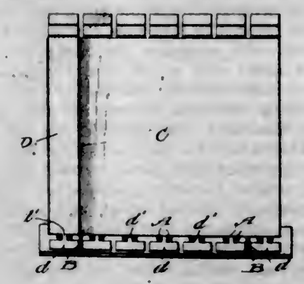
1. The combination of a holder having one or more card supporting and holding members, cards having means whereby to engage said supporting members in a non-alined series, and a locking member engageable with each of the cards of the non-alined series whereby to prevent their removal, the said locking member having positive engagement with each card of the series whereby to prevent lateral displacement irrespective of the supporting members.

2. The combination of a holder having one or more card supporting members, cards having means whereby to engage said supporting members in a non-alined series, and each being provided with a plurality of openings adjacent one edge, and a locking rod adapted to pass through those openings which are alined through the series of cards.

3. The combination of a holder having one or more card supporting members, cards having means whereby to engage said supporting members in a non-alined series, and each being provided with a plurality of openings, equidistantly spaced from one another and arranged in a line adjacent one edge of the card, a rod movable through the holder and engageable through the card-openings which are alined through the series, and means for normally locking the said rod against removal.

4. A file card having a plurality of equidistantly spaced recesses along one edge, and a plurality of equidistantly spaced openings, each of which openings is in alinement with one of said recesses adjacent the inner end thereof.

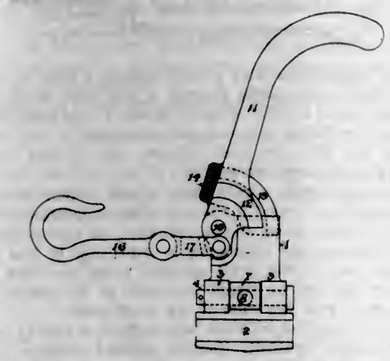
1,065,106. FILING APPARATUS. JOHN AUSTIN BEST, Augusta, Ga. Filed July 27, 1912. Serial No. 711,914. (Cl. 129—16.)



1. The combination of a holder having a plurality of spaced supporting members, and cards having extension heads of greater width than the spaces between said members, and also having portions connecting said extension heads thereto, said connecting portions being at least as narrow as the spaces between said members.

2. The combination of a holder having a plurality of spaced supporting members, and cards having T-shaped extensions at their lower edges for engagement with a selected pair of said members.

1,065,107. CABLE-CLIP. HENRY ARTHUR BETTNEY, deceased, Nottingham, England, by Sarah Ann Bettney, administratrix. Filed Nov. 6, 1912. Serial No. 729,837. Cl. 104—130.)



1. In a cable clip the combination of a pair of cheeks, jaws at the lower ends of such cheeks, an axle upon which the cheeks are mounted and arranged parallel to the jaws, an axle at right angles to the jaws, a handle mounted upon such axle and a wedge carried by the handle for separating the cheeks and closing the jaws substantially as herein set forth.

2. In a cable clip the combination of a pair of cheeks, jaws at the lower ends of such cheeks, an axle upon which the cheeks are mounted and arranged parallel to the jaws, bearings for the said axle, an axle at right angles to the jaws and carried by bearings in the cheeks, a handle mounted upon such axle, a wedge carried by the handle and adapted to operate between the cheeks for closing the jaws, and wedges carried by the handle and adapted to operate upon the outsides of the cheeks for opening the jaws substantially as herein set forth.

3. In a cable clip the combination of a pair of cheeks with jaws at the lower ends of such cheeks, an axle at right angles to the cheeks, a handle upon such an axle, means carried by the handle for closing the jaws, other means carried by the handle for opening the jaws, a handle lever below the handle axle, a coupling hook, and connections between the coupling hook and the handle lever substantially as herein set forth.

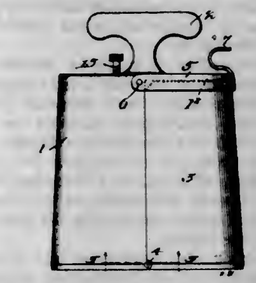
4. In a cable clip the combination of a pair of cheeks, jaws upon such cheeks, an axle upon which such cheeks are mounted, fixed bearings upon one cheek for such axle, an axle at right angles to the cheeks, a handle upon such axle, means upon the handle for closing the jaws, other means upon the handle for opening the jaws, means by which the distance between the jaws can be varied, the coupling hook, and connections between the said hook and the handle substantially as herein set forth.

5. In a cable clip the combination of a pair of cheeks with jaws, an axle upon which the cheeks are mounted, an axle at right angles to the cheeks, a handle upon such axle, loose levers upon the same axle, ratchet mechanism for coupling the handle to the loose levers, means operated by the handle for closing the jaws, other means for opening the jaws, and means for varying the jaw opening substantially as herein set forth.

[Claims 6 and 7 not printed in the Gazette.]

1,065,108. LARD-CUTTER. AUGUST W. BLAUL and LEO HARMISON, Cumberland, Md. Filed Mar. 25, 1913. Serial No. 756,755. (Cl. 31—65.)

1. In a cutting device for plastic material, a casing having an open end, an inwardly extending flange arranged to support an open ended receptacle, a cutter carried by the casing at its open end, and means for locking the receptacle in the casing.



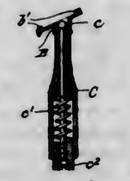
2. In a cutting device for plastic material, a casing having an open end and an inwardly extending flange for supporting one end of an open receptacle, a cutter carried by the casing at its open end, means for locking the receptacle in the casing, an adjustable follower carried by the casing for holding the receptacle against the flange.

3. In a cutting device for plastic material, a casing having a body portion and a hinged portion arranged to permit the entrance of a receptacle, a flange carried by said body portion and said hinged portion near the open end of the casing for supporting the receptacle, means for locking the hinged portion to the body portion, and means carried by the casing for forcing the receptacle into close engagement with said supporting flange.

4. In a cutting device for plastic material, a casing having a body portion and a hinged portion arranged to permit the entrance of a receptacle, a flange carried by said body portion and said hinged portion near the open end of the casing for supporting the receptacle, a semicircular locking member pivotally secured to said body portion, and arranged to engage said hinged portion for locking the receptacle within the casing, and means carried by the casing for forcing the receptacle into close engagement with said supporting flange.

5. In a cutting device for plastic material, a casing having a body portion, a cutting rod or wire carried by said body portion at one end thereof, a movable portion of the casing hinged upon said cutting rod or wire and adapted to move to permit the entrance of a receptacle, a flange carried by said body portion and said hinged portion near the open end of the casing for supporting said receptacle, a semicircular locking member pivotally carried by said body portion and arranged to engage the free end of said movable portion for locking the latter in position, and means carried by the casing for forcing the receptacle into close engagement with said supporting flange.

1,065,109. SAFETY-RAZOR. MORTON G. BUNNELL, Porter, Ind., assignor, by mesne assignments, to Gillette Safety Razor Company, a Corporation of Massachusetts. Filed May 11, 1906. Serial No. 316,387. (Cl. 30—12.)



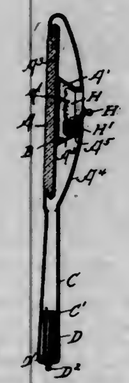
1. In a safety razor, the combination with a flexible blade, of a holder comprising a blade-seat, a guard, and holding means rigidly mounted on said blade-seat for holding the blade firmly in position when inserted and from which the blade is disengaged by flexing the same and means for flexing said blade.

2. In a safety razor, the combination with a flexible blade, of a holder comprising a blade-seat, a guard, and holding means rigidly mounted on said blade-seat for holding the blade firmly in position when inserted and from which the blade is disengaged by flexing the same, and means for flexing the blade while in the holder for effecting its removal therefrom.

3. A razor comprising a guard, a flexible blade, a holder, and a plurality of securing means rigidly carried by the holder and provided with portions for overlapping the blade, the overlapping portions on each side being separated one from the other by a distance less than the length of the blade and overlapping the ends of the blade at its corners, whereby it is necessary to flex the blade to engage it with and disengage it from the said securing means, and means for flexing the blade to effect its removal from the holder.

4. In a safety razor, the combination of a flexible blade, a holder provided with means for engaging the ends of the blade, leaving the blade free to be flexed, and a plunger for flexing and lifting the middle of said blade, to draw its two ends toward each other, for the purpose set forth.

1,065,110. HAND-MIRROR. JACQUES BUSTANOBY, New York, N. Y. Filed Aug. 17, 1910. Serial No. 577,552. (Cl. 132—11.)



1. As a new article of manufacture, a frame having a back and a handle extending from said back at one side and substantially in the same plane with the back, the said back comprising a curved shell and a conical wall connected with said shell, the axis of the cone being perpendicular to the plane of the back and the narrow open end of the cone being at the rear so as to form a rearwardly contracted receptacle open at the rear, the back also comprising a wall which forms a bottom for said receptacle; and means for closing the open end of said receptacle.

2. As a new article of manufacture, a frame having a back and a handle extending from said back at one side and substantially in the same plane with the back, the said back being provided with a rearwardly open receptacle, that wall of said receptacle which is nearest the handle, being inclined forwardly and toward the handle, so as to prevent the contents of said receptacle from dropping out when the frame is held upright, and means for closing the open rear end of said receptacle.

1,065,111. UNDERFRAME FOR RAILWAY-CARS. ARGYLE CAMPBELL, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill. Filed Feb. 19, 1912. Serial No. 678,554. (Cl. 105—76.)

1. In combination with a body bolster, a pair of center sills extending forwardly thereof, a draft member having a rearward extension thereon, said extension fitting between and connected to said sills in line with said body bolster and the rear end of the said draft member abutting against the front ends of the center sills.

2. In combination with a body bolster, a pair of center sills extending forwardly thereof, a draft member having a rearward extension thereon, said extension fitting between and connected to said sill in line with said body bolster, and a body bolster center brace integral with said rearward extension.



3. In combination with a body bolster, a pair of center sills extending forwardly thereof, a one piece draft member comprising a pair of draft arms, a rearward extension thereon fitting between and connected to the center sills in line with the body bolster, and a body bolster center plate integral therewith.

4. In combination with a body bolster, a pair of center sills extending forwardly thereof, a draft member having a pair of draft arms and a rearward extension thereon fitting between and connected to said sills in line with the body bolster, the draft member being provided with shoulders adapted to engage the ends of the center sills in abutment with the ends of the draft arms.

5. In combination with the body bolster, a pair of center sills extending forwardly thereof, a draft member having a rearward extension thereon, said extension fitting between and connected to said sills in line with said body bolster, said draft member being further provided with a flange extending underneath the body bolster, and having a bolsted center plate integral therewith.

1,065,112. LABEL-HOLDER. THOMAS JAMES CLARKE, Jamestown, N. Y. Filed Apr. 6, 1912. Serial No. 688,848. (Cl. 211—37.)



1. In a label holder, a receptacle having an opening at its front end, a stop at the lower end of the opening to engage the lower ends of the labels, a smooth roller rotatably carried by the receptacle and disposed above the upper end of the stop in spaced relation to the latter and located below the upper ends of the labels to allow said upper ends of the labels to extend forwardly in a slightly curved plane, and means to force the labels against the stop and roller.

2. In a label holder, a receptacle having a front opening, a stop adjacent said opening for the labels, feeding means in the rear of the labels engaging the latter, means to engage the tops of the front labels, and unitary resilient means to exert pressure simultaneously against both of said means.

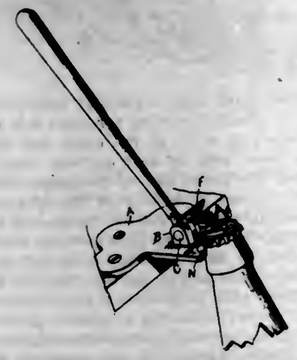
3. A label holder comprising a receptacle having an opening in the front end for withdrawing the labels, a plunger to press the labels against said front end, a spring to actuate said plunger, and an angular plate hinged in said receptacle to hold said spring against said plunger and press said angular plate against the top of the front labels.

4. A label holder comprising a receptacle having an opening in the front end for withdrawing the labels, a roller revolubly mounted across said opening to aid in withdrawing the labels, a plunger to hold the labels against said front end and roller, an angular plate hinged in said receptacle above the labels and having one end extended forward and pressed against the top of the front labels and the other end extending down in the rear of the labels, and a spring between said plunger and downward extension of said angular plate to baisnce the action of the above parts.

5. A label holder comprising a receptacle having a partial closure of the front end to provide an opening for withdrawing the labels, a roller revolubly mounted across said opening, a plunger to press the labels against said front end and roller, a vertical partition in said receptacle, a rod extending from said plunger through said partition to guide the same, an angular plate hinged in said receptacle above the labels having one end extending forward to press against the top of the front labels and the other end extending down behind the labels, said downward end having an opening therethrough to receive said rod of said plunger, a beveled washer on said plunger rod, and a coil spring on said plunger between said washer and the plunger plate, substantially as and for the purpose specified.

[Claims 6 to 9 not printed in the Gazette.]

1,065,113. BOTTLE-STOPPER REMOVER. WILLIAM F. CLAYTON, Arden, N. C. Filed Feb. 1, 1913. Serial No. 745,682. (Cl. 65—46.)



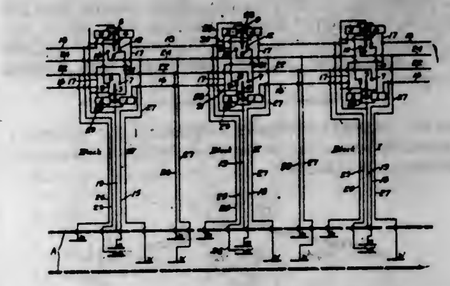
1. A device for removing stoppers from bottles comprising a plate having a recess in one end with a tapering flange about the marginal edge thereof and adapted to fit underneath the flange of a crown to be removed from a bottle, and means for pressing the crown so that said inclined flange will spread the flange of the stopper, as set forth.

2. A device for removing stoppers from bottles comprising a plate adapted to be fastened to a fixed object and provided with a semi-circular groove formed in one end, said groove having an inclined flange about the marginal edge thereof, a lever pivoted to the plate and adapted to bear against said crown to spread the flange thereof and loosening the same from the neck of a bottle, as set forth.

3. A device for removing stoppers from bottles comprising a plate adapted to be fastened to a fixed object and provided with a semi-circular groove formed in one end, said groove having an inclined flange about the marginal edge thereof, a lever pivotally mounted upon said plate and having an angled end which is semi-circular in outline and adapted to be forced against the top of a crown, as set forth.

1,065,114. ELECTRIC RAILWAY SIGNALING SYSTEM. FRANK P. CREMONA, Baltimore, Md. Filed Apr. 11, 1910. Serial No. 554,738. (Cl. 246—27.)

1. In a block signaling system two pairs of wires one wire of each pair being divided at each station, switches at each station one for the divided wire of each pair, a series of means each connected with the other wire of one pair between two neighboring stations for actuating the switches pertaining to one pair of wires, a corresponding series of means each connected with the other wire of the other pair between two neighboring stations for actuating the switches pertaining to the other pair of wires, means on the train for energising each of first named means in turn through its connected wire, the wire connected with the energised means being a member of one pair when the train approaches a given station from the one direction and of the other pair when the train approaches said station from the opposite direction, a partial circuit on the train including a ground a signal a source of current and a brush, stationary contacts connected to the wires containing switches and in the path of said brush, said switches each being adapted to connect one of said sections of wire either to the neighboring section of the same wire or to the ground, the said neighboring section extending in one direction in one pair and in the opposite direction in the other pair, and suitable connections, whereby the signal on the train will be operated at a given distance from another train either to the front or to the rear of the given train, substantially as set forth.



2. An electric block signaling system comprising two pairs of wires one wire of each pair being divided at each block or station, a switch for each divided wire of each pair at each station, grounded electromagnets at each station connected in the other wire of each pair for operating said switches, stationary contacts at each station connected to the respective wires of each pair which are connected with said magnets, other stationary contacts arranged in two lines those in one line connected with the divided wire of one pair and those in the other line connected with the divided wire of the other pair, each switch connecting a section of the divided wire either to the ground or to the adjacent section, a train carried operating means for energising said switch operating magnets including a grounded battery and a brush in the path of the stationary contacts connected with the magnets in the second named wire of one pair, a signal, a grounded source of current for said signal, suitable connections, and a brush located in the path of the stationary contacts connected to the divided wire of the same pair all located on the train, whereby said switches will be operated to connect each section of said respective divided wires in turn either to the neighboring section of the same wire or to the ground, substantially as set forth.

3. An electric block signaling system comprising two pairs of wires one wire of each pair being divided at each station, a switch for each divided wire at each station, grounded means including the other wire of each pair for operating said switches in turn, stationary contacts at each station one connected to the switch operating means of one pair and one to the switch operating means of the other pair, other stationary contacts connected to the sections of the divided wire of the respective pairs, an appropriate ground for each section of the divided wires of the respective pairs at each station and removed from the connection with said stationary contact, each of said switches connecting a section of the divided wire either to the ground or to the adjacent section, the section so connected extending from the switch in one direction for one pair and in the opposite direction for the other pair, means on the train for energising said switch operating means, said means including appropriate connections and a brush arranged in the path of the stationary contacts connected to said switch operating means, and a signaling apparatus on the train including a ground, a source of current, and brushes located in the path of the respective stationary contacts connected with the respective divided

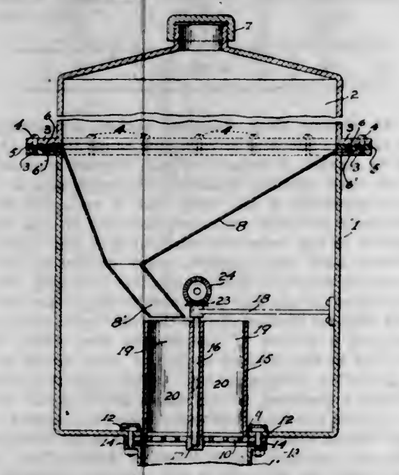
wires, and suitable connections, whereby said signaling apparatus will be operated at a given distance from another train either in front or in the rear of the given train, substantially as set forth.

1,065,115. PROCESS FOR RECOVERING THE MATERIAL OF THE SUPPORT OF KINEMATOGRAPHIC FILMS AND WASTE PORTIONS OF THE SAME. HENRY DANZER, Paris, France. Filed July 6, 1909. Serial No. 506,105. (Cl. 87—5.)

1. A process for removing the gelatin coating from the support of a developed kinematographic film, which consists in subjecting said film to the action of a solution containing a proteolytic ferment, in order to convert said insoluble gelatin coating into a soluble peptone, and then washing said support.

2. The process of removing the gelatin coating from the support of a developed kinematographic film, which consists in placing said film in a dilute solution of trypsin heated to about forty degrees Celsius, and then washing said support.

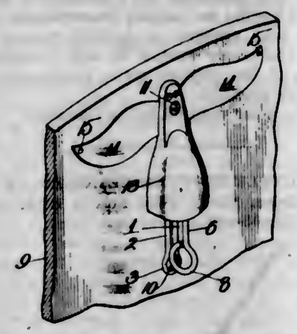
1,065,116. ACETYLENE-GAS APPARATUS. MARTIN J. DETMER, Chicago, Ill. Filed June 26, 1912. Serial No. 705,924. (Cl. 48—48.)



1. A feeding device for acetylene-gas apparatus comprising a hopper having a discharge opening at its lower end; a rotatable cylinder arranged below said hopper, the interior of said cylinder being divided into a plurality of upwardly opening compartments adapted to be successively brought into registration with said discharge opening when said cylinder is rotated; closures for said compartments hingedly secured to the lower ends thereof; and a foraminated plate upon which said closures are adapted to ride during the rotation of said cylinder, said plate serving to hold said closures in closing position, there being an opening in said plate communicating with said gas generator, said closures being adapted, when said cylinder is rotated, to successively register with said opening to permit of downward swinging of said closures, substantially as described.

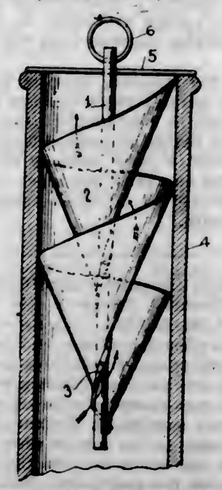
2. A feeding mechanism for acetylene gas apparatus comprising a hopper having a discharge opening at its lower end, a rotatable cylinder arranged below said hopper, and having a series of vertically extending walls forming a plurality of upwardly opening compartments adapted to be successively brought into registration with the discharge opening of said hopper when said cylinder is rotated, the said cylinder being provided with closures hingedly mounted on the lower ends of said cylinder walls, and a foraminated plate upon which said closures are adapted to ride during the rotation of said cylinder, said plate serving to hold said closures in closing position, and being provided with an opening communicating with said gas generator, said closures adapted when said cylinder is rotated, to successively register with said opening to permit the downward swinging of said closures, substantially as described.

1,065,117. HAT-HOLDER. GEORGE P. DEWEES, Kansas City, Mo. Filed Feb. 12, 1912. Serial No. 677,160. (Cl. 24—261.)



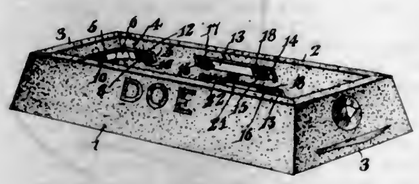
A hat holder made from a piece of spring wire bent to form a pair of parallel portions arranged side by side, one portion terminating short of the upper end of the other portion, the lower ends of said portions being connected by an eye and the upper end of the longer portion being bent to form an eye parallel with the first eye, a third portion extending downward from the second eye parallel with said longer portion and in alinement with the other parallel portion, a lower portion disposed opposite the adjacent sides of said pair of parallel portions and extending substantially parallel therewith and terminating at its lower end in an eye extending at right angles to the first eye and normally bearing against the adjacent sides of said pair of parallel portions at the upper side of said first eye, and a bent portion connecting the lower end of said third portion and the upper end of said lower portion; in combination with a guard secured against said second eye, said third portion and the upper end of said longer portion, and embodying a hollow portion fitting over and inclosing the bent portion and the upper parts of said lower portion and said pair of parallel portions.

1,065,118. FLAME AND SPARK ARRESTER. ALBERT B. DOERING, Woodstock, Minn. Filed May 23, 1912. Serial No. 699,218. (Cl. 110—138.)



A flame and spark arrester for smoke stacks comprising a supporting shaft, a plate arranged spirally around said shaft and provided with an inner flange, means for securing the flange to the shaft, said spirally wound plate having its outer edge adapted for engagement with the inner surface of the stack, a supporting rod arranged in the upper projecting end of the shaft and adapted for movable engagement with the upper edge of the stack, whereby the arrester is adapted to be turned and suspended in the latter, and a ring arranged in said upper end of the shaft above the rod, whereby the arrester may be conveniently inserted or removed from the stack and turned and reciprocated therein without being removed.

1,065,119. GRAVE-MOUND. WILLIAM J. EARLY, Catawissa, Mo., assignor of one-half to Bernard Scheve, Jr., Catawissa, Mo. Filed Sept. 10, 1912. Serial No. 719,688. (Cl. 72—87.)

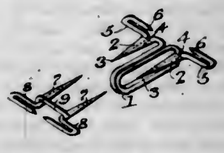


1. A grave mound including side and end slabs set at an inclination and fitted together to form an oblong frame, bolts projecting from the inner faces of the side and end slabs and having their heads embedded in the same, corner braces composed of spaced side portions arranged at an angle to each other and set in oppositely inclined planes and fitted against the inner faces of the side and end slabs, an intermediate angularly disposed upwardly tapered portion spanning the corner joints and connecting the said spaced side portions, the latter being also provided with longitudinal slots to receive the projecting inner portions of the bolts and having grooves or corrugations located above and below the slots and disposed transversely of the corner braces, and nuts arranged on the inner ends of the bolts and having grooves or corrugations engaging with the grooves or corrugations of the side portions of the braces, whereby the nuts are adjustably interlocked with the braces and are held against rotary movement while the bolts are being tightened.

2. A grave mound consisting of an oblong frame and including a side slab composed of two sections having abutting inner end edges provided with registering grooves, one of the sections being also provided with a recess extending from the said grooves, spaced upper and lower splice plates fitting against the inner face of the said side slab and spanning the joint formed by the sections thereof and secured to the same, and a transverse brace extending across the grave mound and having one of its terminals arranged between the abutting ends of the said section and fitting in the registering grooves and bent at an angle to engage with the said recess.

3. A grave mound consisting of an oblong frame and including a side slab composed of sections having abutting end edges, bolts embedded in the said sections and projecting from the inner faces of the same, spaced upper and lower splice plates fitted against the inner faces of the said sections and provided with longitudinal slots through which the projecting portions of the bolts extend, said splice plates having upper and lower grooves or corrugations disposed transversely of the splice plates, nuts arranged on the inner ends of the bolts and provided with grooves or corrugations engaging with the grooves or corrugations of the splice plates and adjustably interlocking the nuts with the splice plates, and a transverse brace extending across the grave mound and passing between the splice plates and secured to the said sections in the joint formed by the same.

1,065,120. HOOK AND EYE. LILLIAN K. ENGLE, Philadelphia, Pa. Filed June 25, 1912. Serial No. 705,701. (Cl. 24—88.)



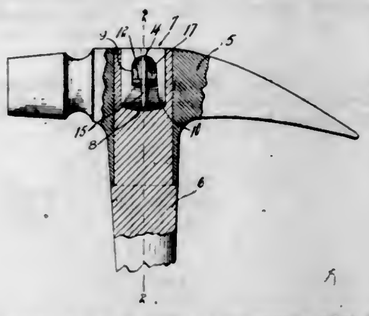
A fastener comprising a hook, pointed piercing prongs at opposite sides and immediately adjoining said hook and of approximately the same length, and doubled hooks extending laterally at the inner ends of said prongs at approximately right angles to the same and having their inwardly directed ends pointed, whereby the pulling strain upon the hook when the fastener is secured in fabric is directly borne by the prongs and lateral strain is borne by the pointed hooks inserted through the fabric.

1,065,121. HOOK AND EYE. LILLIAN K. ENGLE, Philadelphia, Pa. Original application filed June 25, 1912, Serial No. 705,701. Divided and this application filed May 2, 1913. Serial No. 765,123. (Cl. 24—88.)



A garment fastener comprising an engaging portion, pointed piercing prongs at opposite ends of said portion and pointing beyond said engaging portion and in the direction of the strain upon the fastener and in a plane below said engaging portion, and doubled hooks extending laterally at the inner ends of said prongs at approximately right angles to the same and having their inwardly directed ends pointed, whereby the pulling strain upon the engaging portion is borne at the inner ends of the prongs and lateral strain is borne at the bends of the lateral hooks inserted in the fabric.

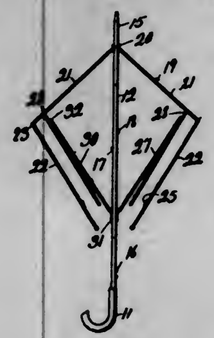
1,065,122. WEDGE. HARRY E. FRASHER, Denver, Colo. Filed Mar. 8, 1912. Serial No.682,498. (Cl. 145—81.)



1. A metal wedge including an entering edge and a butt end having a lateral opening centrally formed therein, said wedge being further formed at its butt end with a longitudinal opening communicating with said lateral opening; in combination with a locking element including opposed spring arms for engagement in the longitudinal opening of the wedge and having beveled inner ends for engagement with the wall of the lateral opening to force said arms outwardly under the influence of hammer blows, whereby the outer end of the arms will frictionally engage the wall of the longitudinal opening and retain said element against movement.

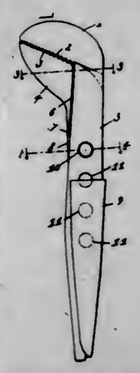
2. A metal wedge including an arcuate entering edge and a butt end having a lateral opening centrally formed therein, the wall of said opening adjacent the entering edge being oppositely beveled to form a central edge, said wedge being further formed at its butt end with a centrally disposed longitudinal opening communicating with said lateral opening; in combination with a locking element formed from a single length of spring metal centrally bent to form opposed arms for engagement in the longitudinal opening of the wedge, the inner faces of the inner ends of said arms being outwardly beveled for engagement with the beveled wall of the lateral opening to spread said arms whereby the outer ends of said arms will frictionally engage the wall of the longitudinal opening and retain the element against movement.

1,065,123. FOLDING UMBRELLA. ARTHUR A. GABRIELSON, Portland, Me. Filed Feb. 19, 1913. Serial No. 749,446. (Cl. 135—25.)



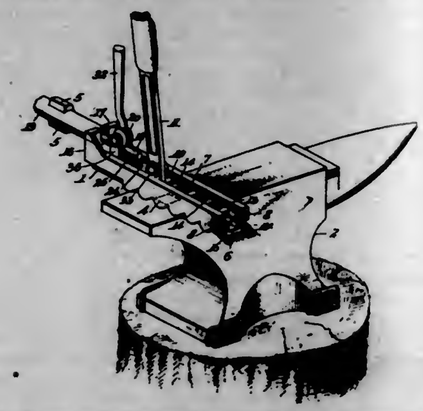
A knock-down umbrella including a stick, a plurality of ribs each comprising an inner section hinged to said stick and an outer section pivotally connected to the end of said inner section, a plurality of locking ribs each connected at the inner end to one of said inner rib sections and normally extending along the corresponding outer rib section, and serving to hold said outer and inner rib sections extended, rings hinged to said outer rib sections and normally engaged in notches formed in said locking ribs to hold said locking ribs in operative position, a ferrule on said stick, and braces hinged to said ferrule and pivoted at the outer ends to said locking ribs.

1,065,124. TOOL. TRANQUILLO P. GIOVANOLA and FRANCESCO CERRATO, Los Angeles, Cal. Filed Jan. 9, 1913. Serial No. 741,033. (Cl. 81—79.)



A tool comprising two members having gripping jaws, the handle of one of said jaws being provided with a plurality of openings formed along the length thereof, the jaw of the other member having a tapering portion terminating in a cam-shaped inner end, an overlapping portion forming a part of the handle of said last named member for receiving the handle of the other member, whereby said handles are properly engaged and held in operative engagement with one another, and a lug projecting from the member having the overlapping portion for removable engagement with any one of the openings in the other handle, the outer edge of said overlapping portion being positioned a suitable distance below the lug and cam end, whereby the members of the tool may be readily separated and adjusted in respect to one another.

1,065,125. PIN-PULLING MACHINE FOR USE IN FORGING THE SHANK ENDS OF DRILL-STEEL. JOHN Q. GRANT, Denver, Colo. Filed Aug. 30, 1912. Serial No. 717,902. (Cl. 29—86.1.)



1. A pin puller comprising a supporting frame, having one closed end containing a slot adapted to receive the pin and provided with a channel slot extending from its closed end portion throughout its length, said channel being arranged to form a slideway, a ratchet toothed rack portion in said channel, a block slidably mounted in said slideway, means including a hand gripping cam connected to said block for gripping said pin, and a hand operating lever provided with a pin portion arranged to engage the ratchet teeth of said rack and reciprocally connected by a link connection to said block, whereby said block is caused to grip a pin and to be moved in successive step by step order along said rack as said hand grasping lever is operatively reciprocated.

2. In a pin puller as specified, the combination of the pin supporting frame provided with a depending lug adapted to fit the tool receiving aperture of an anvil, said pin supporting frame being provided with an end wall containing a recess through which the pin is adapted to extend, a ratchet toothed rack in said channel, a block slidingly mounted in said channel, said block being provided with a vertically arranged pair of ears, a hand gripping cam pivoted between said ears, said block being provided with a recess between said ears, a steel grip block in said recess, provided with a knurled surface, said grip being adapted to receive a pin, and said hand gripping cam being arranged to grip said pin against said grip block.

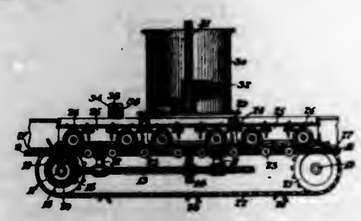
3. In a pin puller as specified, the combination of the frame provided with the slideway, the sliding block reciprocally mounted in the slideway of said frame, the hand gripping cam mounted on said block, and the pin gripping block in said sliding block below said cam, said gripping block and cam being arranged to receive and grip a pin between them, with a pair of links secured at one end to said sliding block, a hand pull lever secured intermediate of its ends to the opposite ends of said links, and an abutment for the hand pull lever on said frame, whereby when said pull lever is reciprocated said sliding block is moved on the slideway of said frame.

4. In a pin pulling machine for pulling the pins from hollow drill steel as specified, the combination of the pin supporting frame provided with a T-shaped slideway and with two oppositely arranged ratchet toothed racks in said slideway, an upwardly projecting partition at one end of said frame against which the ends of said drill steel are placed, said partition being provided with a slot through which the pin to be pulled projects, a block slidably mounted in said T-shaped slideway, a grip block in said slideway block, a cam disk pivoted in said block in operative pin gripping relation to said grip block, a hand gripping handle extending from said cam block, said cam and grip block being arranged to receive a pin between them, a hand grasping lever provided with a pin portion extending transversely across its lower end at right angles to its hand grasping portion, and on opposite sides of it, loosely in said T-slot, and to mesh in the ratchet teeth of said ratchet toothed racks, and a pair of links pivotally secured to the opposite sides of said hand grasping lever at one of their ends and pivotally secured at their opposite ends to said sliding block, said links being arranged and adapted to permit said hand grasping lever to be reciprocated and its lower end to be raised out of engagement with one ratchet tooth and moved forward into engagement with the next ratchet tooth, as it is reciprocated, and to thus move said sliding block step by step in the slideway of said frame.

5. In a pin puller as specified, a stationary support, a pin gripping device slidably mounted in the support, a lever in swinging connection with the pin gripping device, and a series of abutments in the support adapted to be successively engaged by the lower end of the lever in sliding the pin gripping device.

[Claims 6 to 9 not printed in the Gazette.]

1,065,126. MOLDING-MACHINE. GEORGE A. HARDER, New York, N. Y. Filed Dec. 4, 1912. Serial No. 734,812. (Cl. 22—40.)



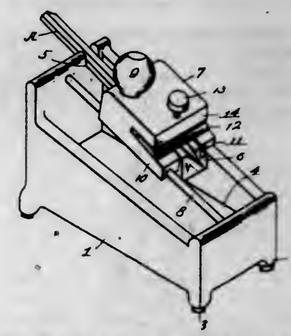
1. In a molding machine, the combination with a platform and endless chain, a plurality of cars, each adapted to support and carry a molding flask, and means for moving the cars across the platform through and by the endless chain, of means for feeding sand and compacting the same in the flasks as the cars cross the platform, and means operative thereafter for further compacting the sand in those portions of the flasks in which the sand is the thickest.

2. In a molding machine, the combination with a platform and endless chain, a plurality of cars, each adapted to support and carry a molding flask, and means for moving the cars across the platform through and by the endless chain, a hopper mounted above the said platform and beneath which the cars travel, means for feeding sand through the said hopper and compacting the same in the flasks as the cars pass beneath the hopper, and means operative thereafter for further compacting the sand in those portions of the flasks in which the sand is the thickest.

3. In a molding machine, the combination with a platform and endless chain, a plurality of cars, each adapted to support and carry a molding flask, a hopper mounted on the said platform and beneath which the cars pass in traveling across the same, a feed and compacting screw operative within the said hopper for feeding the sand to the flasks and compacting the same therein as the cars pass beneath the hopper, and means operative thereafter for further compacting the sand in those portions of the flasks in which the sand is the thickest.

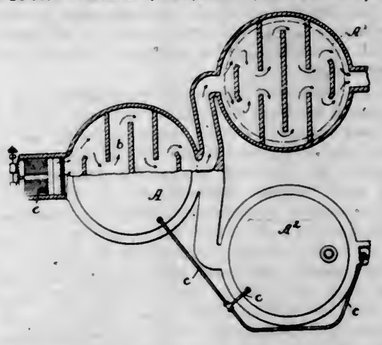
4. In a molding machine, the combination with a platform and endless chain, a plurality of cars, each adapted to support and carry a molding flask, a hopper mounted on the said platform and beneath which the cars pass in traveling across the same, a feed and compacting screw operative within the said hopper for feeding the sand to the flasks and compacting the same therein as the cars pass beneath the hopper, a shaft and rolls mounted thereon beneath which the cars pass after leaving the hopper, and by which rolls the sand is further compacted in those portions of the flasks in which the sand is the thickest.

1,065,127. COMBINED PAPER-WEIGHT AND PENCIL-SHARPENER. EDWIN F. HARDEY, Kansas City, Mo. Filed Oct. 23, 1912. Serial No. 727,341. (Cl. 120—94.)



A device of the character described, consisting of a receptacle having a chamber, a side wall of said chamber being inclined and an end wall having a pencil rest, a pencil support extending inward from the inclined wall and having a notched portion in alinement with the pencil rest, a rod supported by the end walls of the receptacle and having the same pitch as the inclined side wall, a carrier reciprocally-mounted upon the inclined side wall and said rod, upon which latter it is also swiveled, and a blade secured to said carrier.

1,065,128. METHOD OF PRECIPITATING SALT. JAMES HODGKINSON, Manchester, England, assignor to James Francis Seacombe, East Ham, Essex, England. Filed Apr. 1, 1910, Serial No. 552,938. Renewed Jan. 18, 1913. Serial No. 742,977. (Cl. 127—16.)



1. The method herein described of producing a fine quality of salt by direct precipitation and without grinding, consisting in subjecting the brine in a closed pan to an abnormally high temperature uniformly maintained, substantially as described.

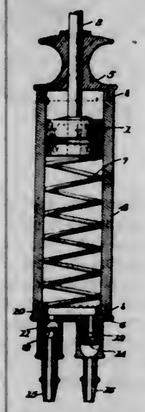
2. The herein described method of evaporating brine to form salt, consisting in subjecting the brine in a closed pan to an abnormally high temperature uniformly maintained, and in conducting the heat from the first pan to

a second pan and maintaining the heat at a uniform high temperature but lower than that in the first pan so as to obtain a precipitation of crystals of a different grade from that in the first pan, substantially as described.

3. The herein described method of evaporating brine to form salt consisting in subjecting the brine in a closed pan to the products of combustion of a uniformly regulated furnace, and in conducting the products of combustion and the steam of the first pan to a second pan or pans, substantially as described.

4. The method herein described of treating brine for the production of salt consisting in subjecting the brine held in a series of closed pans to the products of combustion of a uniformly regulated furnace applied to the series in succession and in conducting the steam from the closed pans in succession from each to the next throughout the series, substantially as described.

1,065,129. EMBALMING-PUMP. RICHARD J. HOLZHAUSEN, Westport, Conn., assignor to The Embalmers' Supply Company, Westport, Conn., a Corporation of Connecticut. Filed Jan. 11, 1913. Serial No. 741,430. (Cl. 103—59.)

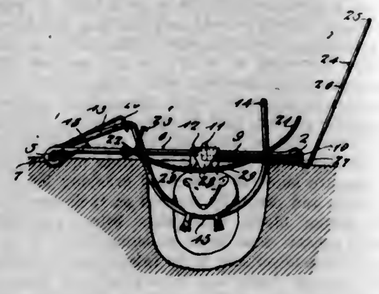


1. In an embalming pump, a barrel of fiber board, having a reduced and threaded end; in combination with a head having an interiorly threaded portion receiving the reduced and threaded end of the barrel; and an annulus arranged immediately against the reduced and threaded end of the barrel and at the opposite side of said end, with reference to the threaded portion of the head, said head and annulus being of stronger material than the fiber-board barrel.

2. In an embalming pump, the combination of a barrel, of fiber board having a reduced and threaded forward end, a rear head attached to said barrel, a piston movable in the barrel and having a rod movable through said head, a head having an interiorly threaded portion receiving the reduced and threaded forward end of the barrel, an annulus arranged immediately against the reduced and threaded forward end of the barrel and at the opposite side of said end, with reference to the threaded portion of the second-named head, said second-named head and the annulus being of stronger material than the fiber-board barrel, and the second-named head having a port positioned within the annulus, and a convolute spring disposed in the barrel and interposed between and bearing against the forward side of the piston and the said annulus.

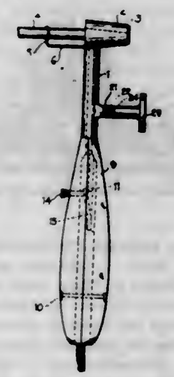
1,065,130. ANIMAL-TRAP. WALTER W. HOOVER, Liberal, Kans. Filed Nov. 21, 1912. Serial No. 732,725. (Cl. 43—27.)

In a trap of the character described, a main frame having parallel side bars, a treadle frame secured in said main frame and having side bars spaced from and disposed in parallel relation to said side bars of the main frame, impaling teeth comprising bail-shaped plates engaged with and spanning the side bars of said main and treadle supporting frames and having depending V-shaped points, clips formed on the ends of said treadle frame and adapted to fasten said impaling teeth in engagement with



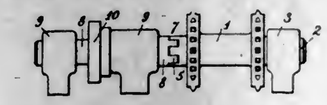
the side bars of said main and treadle frames, a choking jaw adapted to work between the parallel side bars of said main and treadle frames and to co-act therewith and with said impaling teeth, a treadle pivoted in said treadle frame, and a trigger engaged with said treadle and adapted to hold said jaw in a set position.

1,065,131. SEALING-TOOL. LA VERGNE V. HULL and HARRY B. MOOREHEAD, McComb, Ohio. Filed Mar. 8, 1913. Serial No. 753,019. (Cl. 219—21.)



In a device of the character described, the combination of an elongated body having a hollow sectional handle member upon one end thereof, an electric heater formed upon the other end of the body and provided with a central opening to receive a stick of sealing material, a guide to support the sealing material in an upright position, said guide comprising an upright having a loop at its upper end to receive the sealing material, a switch member arranged within the handle, means for connecting said switch with the heater and means for connecting the switch with the circuit whereby a current may be supplied to the heater, means for actuating the switch to close and open the same, a lever pivotally mounted upon one side of the body, a closure plate formed at one end of the lever and adapted to normally close the lower end of the opening in the heater, said plate being actuated by pressure upon the opposite end of the lever and a spring member disposed between the lever and the body to hold said plate in its normal position.

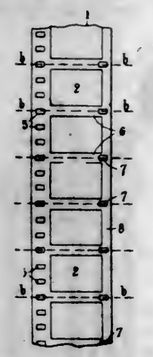
1,065,132. TOOTHED FILM-OPERATING DRUM OF KINEMATOGRAPHIC APPARATUS. ERNEST ALBERT IVATTS, Paris, France, assignor to Society: Compagnie Generale de Phonographes, Cinematographes et Appareils de Precision, Paris, France. Filed Oct. 18, 1911. Serial No. 655,340. (Cl. 88—18.)



1. In a kinematograph, a bodily shiftable film operating drum, in combination with a disconnectable driving connection therefor.

2. In a kinematograph, a bodily shiftable film operating drum, in combination with driving means, and a releasable clutch adapted for coupling said drum to said driving means.

1,065,133. MIXED METHOD OF PERFORATION FOR KINEMATOGRAPHIC FILMS. ERNEST ALBERT IVATTS, Paris, France, assignor to Society: Compagnie Generale de Phonographes, Cinematographes et Appareils de Precision, Paris, France. Filed Jan. 31, 1912. Serial No. 674,592. (Cl. 88—19.5.)



1. A kinematographic film having a series of openings along each side, the openings of one series being spaced differently to the openings of the other series.

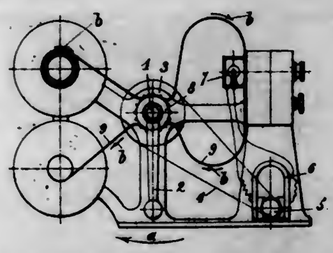
2. A kinematographic film bearing a succession of pictures thereon and having a series of openings along each side, the openings of one series being spaced differently to the openings of the other series of openings, the two series being so located relatively to each other that for every picture one opening of each series occurs on the same transverse line of the film.

3. A kinematographic film bearing a succession of spaced pictures thereon and having a series of respectively equidistant perforations along each side, the openings of one series, being spaced differently to the openings of the other series and encroaching on the space between the pictures, and are each on the same transverse line of the film as one of the openings of the said other series.

4. A kinematographic film bearing a succession of pictures thereon and having a series of openings along each side, the openings of one series being spaced differently to the openings of the other series and at least one opening of each series being provided for each picture on the film.

1,065,134. SELF-LIGHTING KINEMATOGRAPHIC APPARATUS. ERNEST ALBERT IVATTS, Paris, France, assignor to Society: Compagnie Generale de Phonographes, Cinematographes et Appareils de Precision, Paris, France. Filed Apr. 8, 1912. Serial No. 689,313. (Cl. 88—17.)

1. In kinematographic projecting apparatus, an electric generator, a film-actuating shaft arranged to drive said generator, an electric light for illuminating the film, electric connections between the light and generator, and means for enabling the movement of said film to be temporarily arrested by reversing the direction of rotation of said shaft, with but momentary interruption of the generation of lighting current.

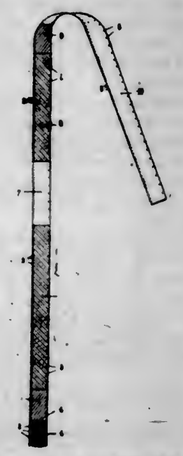


2. In kinematographic projecting apparatus, an electric generator, a shaft for driving it, an electric light for illuminating the film, electric connections between the light and generator, a film-actuating element, and means whereby said shaft will actuate said element when rotated in one direction only.

3. In kinematographic projecting apparatus, an electric generator, a shaft for driving it, an electric light for illuminating the film, electric connections between the light and generator, a film-actuating element, and a clutch between said shaft and said element adapted to be engaged when said shaft is rotated in one direction only, and to be disengaged when it is turned backward.

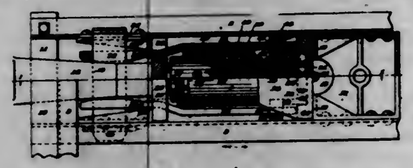
4. In kinematographic projecting apparatus, an electric generator, a shaft for driving it, an electric light for illuminating the film, electric connections between the light and generator, a film-actuating drum loosely mounted on said shaft, and a clutch engaging with said drum to rotate it in one direction only, and to allow it to remain stationary when said shaft is turned backward.

1,065,135. INDICATING DEVICE FOR THE INSERTION OF FILMS IN KINEMATOGRAPHIC PROJECTING APPARATUS. ERNEST ALBERT IVATTS, Paris, France, assignor to Society: Compagnie Generales des Etablissements Pathe Freres, Phonographes et Cinematographes, Paris, France. Filed Sept. 17, 1912. Serial No. 720,877. (Cl. 88—19.5.)



In a kinematographic apparatus having means for the generation of its own electric light, the combination with a film operating drum, and a film trap, of a film provided with differently colored sections which are respectively adapted to indicate the parts of the film which engage the drum, the film trap, and form the loops, when the film is threaded into the kinematographic apparatus.

1,065,136. DRAFT-RIGGING FOR RAILWAY-CARS. GEORGE A. JOHNSON, Chicago, Ill., assignor to William H. Miner, Chicago, Ill. Filed Oct. 14, 1912. Serial No. 725,603. (Cl. 213—64.)



1. In a draft rigging for railway cars, a shell, friction compression resisting elements and spring compression resisting elements within the shell, and in operative engagement with each other, stop members, a follower engaging the friction compression resisting elements, and a follower engaging the spring compression resisting elements, means for slidingly connecting the last mentioned follower with the draw bar, said means with the follower being adapted to compress the spring elements between the friction elements and the rear follower on forward movement of the draw bar without bringing into action the friction compression resisting elements.

2. In a draft rigging for railway cars, a draw bar, followers, stop members, a cushioning member comprising a shell, and friction members and spring members within the shell, all in operative relation and adapted to actuate the spring members and friction members throughout rearward movement of the draw bar, the said spring members being forwardly seated through means engaging the front follower and being rearwardly seated against the rear follower, the said rear follower being provided with means slidably connecting it to the draw bar, and adapted to compress the spring members on forward movement of the draw bar without bringing the friction members into action.

3. In a draft rigging for railway cars, a draw bar, a stationary cushioning member comprising a shell and friction members, and springs within the shell, in combination with means of fully compressing the springs without actuating the friction members on the draw bar's forward movement, said means comprising stop members, a front follower and means of seating, said springs adapted to stop the same by means of the front follower and a rear follower engaging said springs and adapted to compress the same, said rear follower being provided with means slidably connecting the same to the draw bar; all the said parts being adapted to bring both the spring and friction members into action throughout rearward movement of the draw bar.

4. In a draft rigging for railway cars, the combination with a cushioning member comprising a stationary shell, friction shoes and springs within the shell, of a rear follower, a draw bar and means slidably connecting the rear follower and draw bar, adapted on forward movement of the draw bar to compress the spring without frictional movement of the shoes.

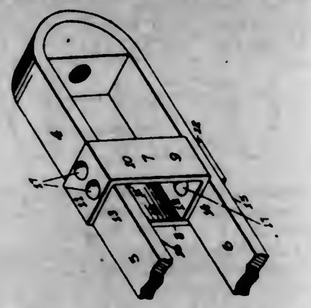
5. In a draft rigging for railway cars, a draw bar, a front follower, stop members, a stationary shell, friction members comprising friction shoes and spreading means therefor and springs within the shell, said springs being forwardly seated against the friction shoes, a rear follower against which the springs are rearwardly seated, and means of slidably connecting the rear follower to the draw bar.

[Claims 6 to 14 not printed in the Gazette.]

1,065,137. DRAFT-RIGGING FOR RAILWAY-CARS. GEORGE A. JOHNSON, Chicago, Ill., assignor to William H. Miner, Chicago, Ill. Filed Jan. 13, 1913. Serial No. 741,702. (Cl. 213—42.)

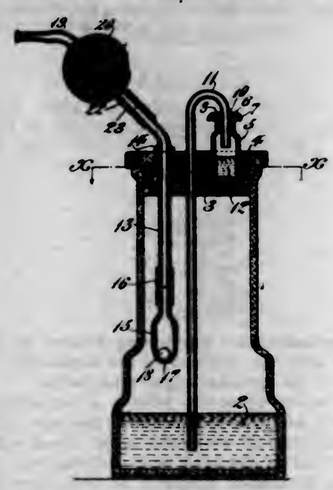
1. In combination with a draft yoke, a connecting thimble comprising two U-shaped members, each secured to both limbs of the yoke.

2. In combination with a draft yoke, a connecting thimble comprising two counterpart U-shaped members, one of said members secured to the outer face of one limb of the



yoke and the inner face of the other limb of the yoke, the other member secured to the outer face of the last named limb of the yoke and to the inner face of the other yoke limb, substantially as specified.

1,065,138. VAPORIZER. ALVA D. JONES, Philadelphia, Pa., assignor to Edmund B. Nelson, Philadelphia, Pa. Filed Sept. 6, 1912. Serial No. 718,814. (Cl. 128—13.)

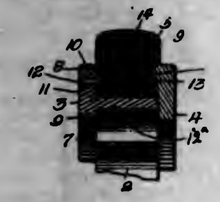


1. In a vaporizer, a container, a stopper therefor, a vial carried by said stopper, a closure for said vial having its outer edges downwardly deflected, and provided with grooves on its under face, a tube extending through said closure and into the liquid in said container, and a mouth-piece in communication with said container.

2. In a vaporizer, a container, a stopper therefor, provided with a chamber, a vial seated in said chamber, a closure for said vial, having ribs on its under face and its outer edges downwardly deflected, a tube extending into said vial and into the liquid in said container, a valve controlled casing in said container and out of engagement with the liquid therein, a mouth-piece communicating with said casing and provided with a chamber, and a sponge in the chamber of said mouth-piece.

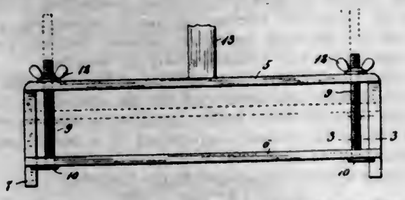
1,065,139. TIRE-FASTENING DEVICE. JAMES J. KELLY, Crafton, Pa. Filed Nov. 6, 1911. Serial No. 658,705. (Cl. 152—7.)

1. A wheel rim comprising an annular body T-shaped in cross section and including a web terminating in an outwardly projecting flange, said outer flange formed with spaced transverse openings and further having its inner face inclined to overhang the outer face of the web, a ring positioned intermediate of its outer and inner edges against the other side edge of said web and having a portion thereof opposing said flange, means for connecting the ring to the web, said flange, ring and web providing a channel for connecting a resilient tire in position, and pins including shanks and heads, said shanks seated in the openings of said flange and said heads arranged inwardly with respect to said flange and adapted to engage in the tire to prevent circumferential creeping thereof.



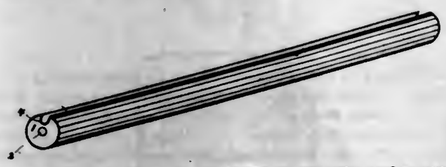
2. A wheel rim comprising an annular body provided with a channel for the reception of a tire, one side of the channel being detachably secured in position and the other side being fixed, said fixed side formed with spaced openings, and pins including shanks and heads, said shanks seated in the openings of said fixed side and said heads arranged inwardly with respect to said fixed side and adapted to engage in the tire to prevent circumferential creeping thereof.

1,065,140. MOP-HEAD. GEORGE WASHINGTON KEMP, Tallapoosa, Ga. Filed Aug. 19, 1912. Serial No. 715,805. (Cl. 15—56.)



A mop-head comprising stationary and movable jaws, guide-stems extending from the stationary jaw, between which guide-stems the movable jaw extends, said movable jaw having notches in its ends in which the guide-stems fit, bolts connecting the jaws, the heads of the bolts being enlarged on one side and having therein notches in which the guide-stems fit, and nuts screwed on the bolts against one of the jaws.

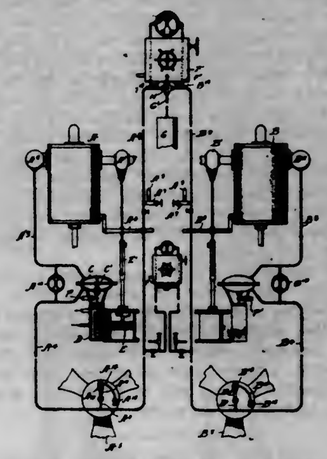
1,065,141. PROJECTOR-CARBON. JOHN F. KERLIN, Lakewood, Ohio, assignor to The National Carbon Co., Cleveland, Ohio, a Corporation of New Jersey. Filed Jan. 8, 1912. Serial No. 670,077. (Cl. 176—121.)



An arc light carbon having a core therein and a groove or furrow in the carbon extending parallel to the core, said groove or furrow having a rounded bottom whereby the carbon will not crack when baked.

1,065,142. METHOD OF AND APPARATUS FOR STEERING VESSELS. JAMES FRANCIS KEY, Manila, Philippine Islands. Filed Sept. 19, 1911. Serial No. 650,148. (Cl. 115—37.)

1. The herein described method of steering vessels which consists in opposing fluid pressures to the pressures of twin engines, simultaneously varying said fluid pressures relatively, automatically maintaining a balance of pressure between the engine pressures and their respective controlling pressures and utilizing the variations in pressures for governing the powers of the engines.



2. The herein described method of steering vessels consisting in controlling the operation of twin engines by opposing fluid pressures to the pressures of the engines, varying said fluid pressures relatively, and utilizing the variations in pressures for governing the powers of the engines.

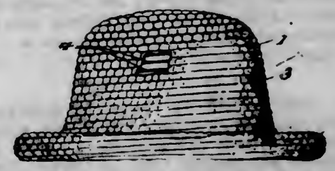
3. The combination of twin engines, means for opposing fluid pressures to the pressures of the engines, means for varying said fluid pressures relatively, and means for utilizing the variations in fluid pressures for governing the powers of the engines.

4. The combination with twin engines of regulators, pilot valves connected with the regulators of their respective engines, connections between the pilot valves and their respective engine throttles, means for delivering engine pressures on one side of the respective regulators, means for delivering pressures from an independent source to the other side of the regulators, and means for varying said delivered pressures relatively whereby to cause the regulators to operate the pilot valves controlling the throttles, substantially as set forth.

5. The combination of a pair of twin engines having throttles, regulators corresponding to their respective engines, intermediate devices between said regulators and their engine throttles, means for conducting the pressure of the engines to one side of their respective regulators, an independent source of pressure, and means connecting the same with the other sides of the regulators, and means for varying the latter pressures relatively, substantially as set forth.

[Claims 6 to 13 not printed in the Gazette.]

1,065,143. ARTICLE OF WEARING-APPAREL. LUELLA STILWELL KINNARD, Anderson, Ind. Filed Dec. 27, 1912. Serial No. 738,887. (Cl. 2—108.)



1. An article of wearing apparel comprising a body portion formed by a spirally laid knitted or crocheted chain, adjacent rows interlooping with one another, and a pliable core located within and concealed by the loops of said spiral chain and extending substantially throughout the entire length thereof, whereby said body portion when

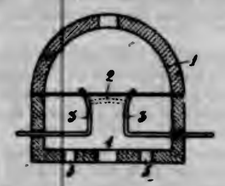
bent or shaped as desired will be retained in said shaped position by said pliable core.

2. An article of wearing apparel comprising a body portion formed by a spirally laid knitted or crocheted chain, adjacent rows interlooping with one another, and a continuous pliable wire core located within and concealed by the loops of said spiral chain and extending substantially throughout the entire length thereof, whereby said body portion when bent or shaped as desired will be retained in said shaped position by said wire core.

3. A hat comprising a crown portion and a brim formed by a spirally laid knitted or crocheted chain, adjacent rows interlooping with one another, and a pliable core located within and concealed by the loops of said spiral chain and extending substantially throughout the entire length thereof, whereby said crown and said brim when bent or shaped as desired will be retained in said shaped position by said pliable core.

4. A hat comprising a crown portion and a brim formed by a spirally laid knitted or crocheted chain, adjacent rows interlooping with one another, and a pliable wire core located within and concealed by the loops of said spiral chain and extending substantially throughout the entire length thereof, whereby said crown and said brim when bent or shaped as desired will be retained in said shaped position by said pliable wire core.

1,065,144. METHOD OF AND MEANS FOR HEATING GASES TO HIGH TEMPERATURES. CARL FABIAN RICHERT VON KOCH, Stockholm, Sweden. Filed June 10, 1911. Serial No. 632,463. (Cl. 204—31.)



1. The process of heating gas to a high temperature, which consists in preheating the gas, inclosing said preheated gas in an envelop of comparatively cool gas, and advancing said preheated gas and its inclosing envelop in the same direction past a further source of heat, meanwhile subjecting the said preheated gas to said further source of heat.

2. The process of heating gas to a high temperature, which consists in preheating the gas, inclosing said preheated gas in a rotating envelop of comparatively cool gas, and subjecting the said inclosed preheated gas to a further source of heat.

3. A furnace for heating gases having openings for introducing hot gas and openings surrounding the former for introducing cool gas, and comprising means for raising the temperature of the hot gas supplied through the first-mentioned opening.

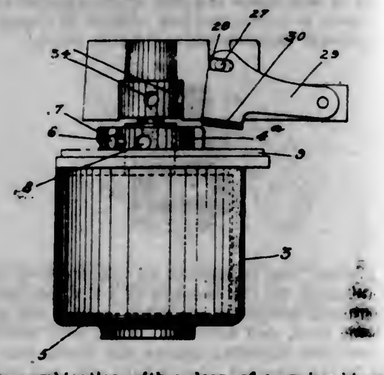
4. A furnace for heating gases having a supply opening for hot gas and obliquely placed supply opening for cool gas, and comprising means for raising the temperature of the hot gas supplied through the first-mentioned opening.

5. The process of heating gas to a high temperature, which consists in preheating the gas, inclosing said preheated gas in an envelop of comparatively cool gas, and then subjecting the inclosed preheated gas to a further source of heat.

1,065,145. SPRING-HINGE. JOHN W. KOERNER, Syracuse, N. Y., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed July 14, 1911. Serial No. 638,463. (Cl. 16—25.)

1. The combination with a door, of a spring hinge to normally hold the same closed, having a member connected positively with the door but reversible therefrom, and fixed means beneath the lower edge of the door to prevent the re-connection of said parts when the door is open; substantially as described.

2. The combination with a door, of a spring hinge having a spring pressed rotatable member mounted in the door, means to connect said member positively but releasably with the door to hold the same closed, and means to prevent the reconnection of said parts when the door is open; substantially as described.



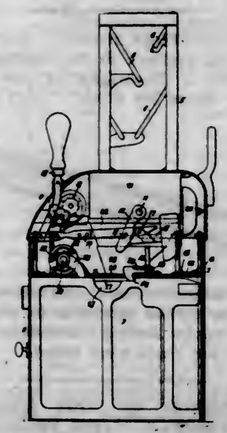
3. The combination with a door, of a spring hinge having a spring pressed rotatably mounted member, means to connect said member releasably to the door to hold the same closed, an operating device for said means, and a fixed controlling device for said operating device, over which the latter travels; substantially as described.

4. The combination with a door, of a spring hinge at the lower edge of the door to normally hold the same closed, having a releasable locking connection with the door, an operating member for said connection, and a stop device for said operating member located beneath the edge of the door; substantially as described.

5. In a spring hinge, an actuating member, and a releasable positive locking device for the connection of said member with the door, which engages the door yieldingly as the latter is released and opened to a certain extent; substantially as described.

[Claims 6 to 21 not printed in the Gazette.]

1,065,146. FARE-BOX. GEORGE B. KOHLER, Philadelphia, Pa., assignor to The J. G. Brill Company, Philadelphia, Pa., a Corporation of Pennsylvania. Original application filed Feb. 28, 1910, Serial No. 546,371. Divided and this application filed Apr. 14, 1911. Serial No. 621,003. (Cl. 232—15.)



1. The combination in a fare box, of a drawer mounted in the bottom of the box; a fare receptacle in the drawer; a sliding cover for the receptacle; said cover having a projection; a toothed wheel mounted in fixed bearings and arranged in the path of the projection; means for preventing the rotation of the wheel in one direction, yet allowing it to turn freely in the opposite direction; and means extending into the path of the receptacle so that upon opening the drawer the wheel will be prevented from moving in one direction and will block the movement of the projection so that the sliding cover will be closed during the first portion of the opening movement of the drawer; the wheel being released from the control of the receptacle during the last movement of the drawer in order to allow the pin to pass the wheel.

2. The combination in a fare box, of a body portion having a transverse partition; a drawer mounted under the partition; a fare receptacle in the drawer; a sliding cover for said receptacle having a lug; a shaft on the body portion; a toothed wheel mounted on the shaft in the path of the said lug; a dog secured to the shaft projecting rearwardly and resting upon the receptacle; a pawl and ratchet mechanism between the shaft and the toothed wheel so as to prevent the wheel moving independently of the dog in one direction, yet allowing free movement of the wheel in the opposite direction so that on opening the drawer, the cover of the fare receptacle will be automatically closed; the lug being released when the dog drops back of the end of the receptacle so as to allow the drawer to be opened to its full extent for the removal of the fare receptacle.

3. The combination in a fare box, of a body portion having a transverse partition, a drawer mounted under the partition, a fare receptacle in the drawer, a sliding cover for said receptacle having a lug, a toothed wheel arranged to hold the lug until the cover is closed and locked, a shaft on which the wheel is mounted, a dog on the shaft arranged to drop back of the receptacle when the drawer is opened, and pawl and ratchet mechanism between the shaft and the toothed wheel.

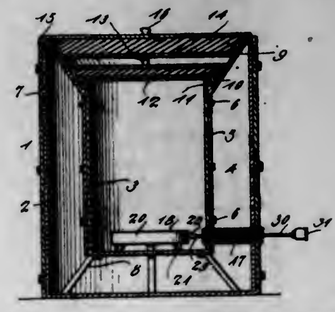
1,065,147. MINER'S LAMP. STEVE KOHOLY, Smithdale, Pa. Filed Jan. 9, 1913. Serial No. 741,087. (Cl. 240—8.4.)



In a miner's lamp in combination, a cap, a lamp holder carried thereby provided with terminals, one of which projects from one side to the holder, an incandescent lamp supported by said holder and electrically connected to said terminals, a battery positioned at one side of the cap, a wire leading from said battery and under the holder and connected to said projecting terminal, a pair of annular members for connecting the battery to the cap, a switch secured to the other side of the holder opposite said battery, a wire leading from the battery to the switch, and a wire leading from the switch and extending under the holder and connected to the other terminals.

1,065,148. ELECTRIC COOKER. CURTIS C. LILLIBRIDGE, Hutchinson, Kans. Filed Aug. 12, 1912. Serial No. 714,721. (Cl. 219—35.)

1. A cooker comprising a casing consisting of inner and outer members, air tight covers for the casing, an electric radiator arranged in said inner member of the casing and comprising a base member having in its upper side series of concentric segmental grooves closed at one end with a radially disposed rib and at their opposite ends with a radial passage opening through the side of the base, and an insulating block arranged in the outer end of said passage, coil connecting wires extending through said block and passage, insulated electric heating coils arranged in said grooves and connected at one end with said wires, sockets arranged on the outer ends of the wires, a sheet metal cap engaged with said base member to cover said grooves and the coils therein, current conducting wires arranged through one side of said casing and having on their inner ends plugs to engage the sockets on the ends of the wires in said radiator and an electrical connector a socket on the outer end of said current conducting wires.



2. A cooker comprising a casing consisting of inner and outer members spaced apart to form a surrounding dead air space, heat retaining coverings arranged around said members, a water seal formed at the upper end of the inner member, an inner cover having a flange adapted to engage said water seal, an outer cover arranged above said inner cover, said covers forming an air tight closure for the cooker and an electric radiator arranged in the inner member of the casing and comprising a base member having arranged therein series of heating coils, a thin metal cap adapted to be engaged with said base member to cover said coils, and electric conducting wires arranged through the casing of the cooker and adapted to be connected with the coils in the radiator whereby the latter is heated.

3. A cooker of the character described, comprising a solid circular base member, said member having formed in its upper side a plurality of concentric segmental grooves, a radially disposed web constituting one end of the grooves, the opposite ends being in communication with a radial channel which opens through the side of said base member, an insulating block arranged in the outer end of said channel, coil connecting wires extending radially through said block and channel, insulated electric heating coils vertically arranged and transversely folded in said grooves, whereby the ends of said coils are engaged with the connecting wires, sockets arranged on the outer ends of said connecting wires to receive the ends of the current conducting wires, a sheet metal cap to cover said base member and formed with a surrounding depending flange having a notch to receive said block, and a fastening passed centrally through the cap and into the base member to detachably fasten the cap thereto.

1,065,149. NUT-LOCK. CYRUS H. LOUTREL, South Orange, N. J., assignor to The National Lock Washer Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 27, 1912. Serial No. 738,880. (Cl. 151—36.)

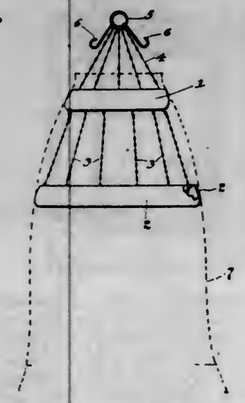
1. A nut lock, consisting of a segment of a spiral coil having transverse portions, including the side faces and the edges and located remote from its ends, curved laterally into concavo-convex compressible spring portions of gradual curvature which extend out of the line of said spiral.

2. A nut lock, consisting of a segment of a spiral coil whose transverse extremities including the side faces and the edges are each gradually curved laterally out of the line of the spiral, a transverse part of said segment also



including the side faces and the edges intermediate said extremities being also curved laterally out of the line of the spiral, said curved parts all forming concavo-convex compressible spring portions of gradual curvature.

1,065,150. SKIRT-SUPPORTER. LUCY LYNCH, Chicago, Ill. Filed Sept. 12, 1910. Serial No. 581,517. (Cl. 211—13.)



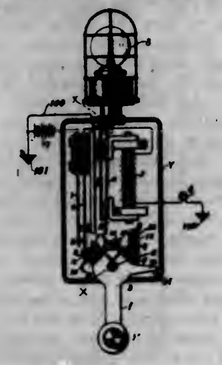
1. A skirt supporter comprising an upper small and a lower large ring, the former being adapted to fit within the latter when the device is collapsed, both of said rings being comparatively high and wide in cross section; flexible elements connecting said rings at points well within their outer peripheries whereby said elements will not contact with a garment suspended on said rings; and means for suspending said upper ring, substantially as described.

2. A skirt supporter comprising a small and large ring, the former being adapted to fit within the latter, said rings being substantially U-shaped in cross section and arranged with their open sides up; hooks on the bottom of said smaller ring at a distance from the periphery; chains connected with said hooks and with the upper portion of the inner side of said larger ring; chains secured at their lower ends to the upper portion of the inner side of the upper ring; and a ring secured to the upper ends of said last mentioned chains, substantially as described.

1,065,151. ELECTRIC SIGNALING SYSTEM. RAY H. MANSON, Elyria, Ohio, assignor to The Dean Electric Company, Elyria, Ohio, a Corporation of Ohio. Original application filed Dec. 27, 1909, Serial No. 535,187. Divided and this application filed Nov. 17, 1910. Serial No. 592,771. (Cl. 177—311.)

1. In a vehicle signaling system, the combination of a signal, an electric circuit including said signal, a second signal in a branch of said circuit, means in the main circuit controlling the branch to open said branch when the first named signal is operated and to close the same to operate said second named signal when the first named signal is inoperative, separate means to close said branch to operate said second signal, a normally open switch in said main circuit and a device common to said switch and second named means controlling said switch and said second named means.

2. In a vehicle signaling system, the combination of a signal, an electric circuit including said signal, a second signal in a branch of said circuit, means in said circuit controlling said second signal and separate means to remove said signal from the control of said first named means without retiring said first signal.



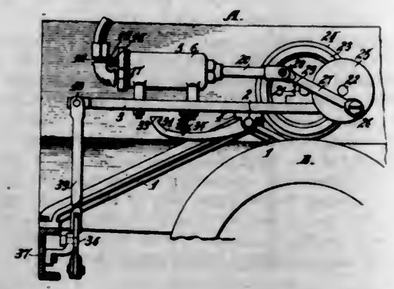
3. In a vehicle signaling system, the combination of a signal, a source of electric current, circuit conductors associating said source and said signal whereby electric current is supplied from said source to control said signal, a second signal electrically associated with said source of current whereby said signal is supplied with controlling current over said conductors, a switch in the circuit of said second signal, an electromagnet in the circuit of the first signal controlling said switch and a lever controlling said switch for removing it from the control of said magnet.

4. In a vehicle signaling system, the combination of a signal, asecond signal associated therewith, a main circuit in which said first named signal is connected, a branch of said main circuit in which said second named signal is connected, a switch in said branch, an electromagnet in the main circuit controlling said switch and manually controlled means for closing said switch, said last named means being operable independent of said magnet.

5. In a signaling system, the combination of a signal, a source of current, conductors connecting said source and said signal in an electric circuit, a branch of said circuit, a second signal connected in said branch, means to close the circuit of the first signal, means in said circuit to open the branch circuit and retire the second signal when the first signal is operating, said means adapted to permit the operation of the second signal when the first is retired, and means to close the branch and operate the second signal when the first signal is operating.

[Claims 6 to 8 not printed in the Gazette.]

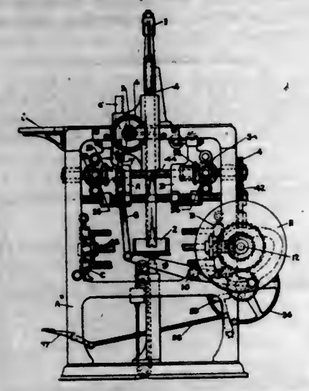
1,065,152. PUMP. EDWARD W. MARBLE and OTIS E. DINGLEY, West Farmington, Me. Filed July 10, 1912. Serial No. 708,627. (Cl. 230—27.)



The combination with a motor driven vehicle, of a pump carried by the vehicle and comprising a pivot shaft secured to an appropriate part of the vehicle, a horizontal base plate pivoted upon said shaft between its ends, a cylinder fast upon the base plate at one side of the pivot

thereof, a piston within said cylinder and adapted for reciprocation therein, a driving wheel journaled upon the base plate at the opposite side of the pivot, connections between said driving wheel and piston whereby the latter may be reciprocated, means normally holding the driving wheel out of driving engagement with the fly wheel of the motor, said means comprising an arcuate shaped arm rigidly secured to the pivot shaft adjacent the base plate and lying in a horizontal plane and having the free end thereof terminating in a bearing lug disposed in the path of movement of said plate, and a spring interposed between said arm and base plate and connecting the same and acting to hold the driving wheel normally out of engagement with the fly wheel of the motor, and means for swinging the base plate about its pivot to place the driving wheel in engagement with the motor fly wheel against the action of said spring.

1,065,153. BOX-COVERING MACHINE. JOHN P. MARKERT, Brooklyn, and ROBERT S. BOLGER, Morris Park, N. Y.; said Bolger assignor to said Markert. Filed Aug. 28, 1909. Serial No. 515,119. (Cl. 93—54.)



1. A box covering machine comprising cover-affixing mechanism, and means for directing the box in a rectilinear path past the cover-affixing mechanism embodying a sectional telescopic plunger, a plunger-operating weight, and a plurality of flexible plunger-operating connections each operated by said weight, and attached to the plunger sections.

2. A box covering machine comprising a cover-affixing mechanism, and means for directing the box in a rectilinear path past the cover-affixing mechanism embodying a sectional telescopic plunger, a weight-operated chain connected to one plunger section, and a wheel-actuated chain connected to the adjacent plunger section.

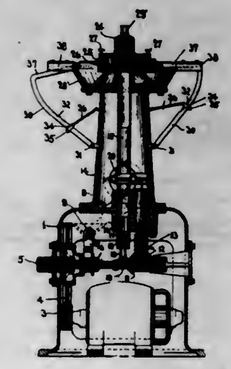
3. A box-covering machine comprising cover-affixing mechanism, and means for directing the box in a rectilinear path past the cover-affixing mechanism embodying a sectional telescopic plunger, a traveling plunger-operating weight, a flexible connection between said weight and one plunger section, a wheel on the last-named plunger section, and a flexible connection having one end attached to said plunger section and the other end attached to a fixed point.

4. A box-covering machine comprising cover-affixing mechanism, and means for directing the box in a rectilinear path past the cover-affixing mechanism embodying a sectional telescopic channeled plunger, a traveling weight, a chain working in a channel in one plunger section and connecting the weight to one of the telescopic sections, and a second chain working in a channel in another telescopic section and attached to one of the telescopic sections and also to a fixed point.

5. A box covering machine comprising cover-affixing mechanism, and means for directing the box in a rectilinear path past said mechanism embodying a sectional telescopic plunger consisting of a stationary section and a plurality of movable sections housing within the stationary section, and means for protracting the movable sections comprising a movable weight, a sprocket chain attached to one point to the weight and at another point to a movable plunger section, a second chain attached to the adjoining movable section and to a fixed point, and wheels for said chains, one of said wheels being carried by one of the movable sections.

[Claims 6 to 69 not printed in the Gazette.]

1,065,154. TORIC-LENS-GRINDING MACHINE. ERNEST OTTO MATTERN, Portland, Oreg., assignor of one-half to Otto Henrichsen Mattern, Portland, Oreg. Filed Oct. 3, 1912. Serial No. 723,808. (Cl. 51—3.)



1. In a lens grinding machine, the combination with an upright main shaft, and means for reciprocating it vertically and oscillating it horizontally; of a hollow standard inclosing said shaft and having bearings therefor, a lap-carrying head mounted on the shaft and having a flange depending from its periphery, an annular trough carried by the standard beneath said flange, and work-holders movably mounted on said trough.

2. In a lens grinding machine, the combination with an upright main shaft, and means for reciprocating it vertically and oscillating it horizontally; of a hollow standard inclosing said shaft and having bearings therefor, a lap-carrying head mounted on the shaft and having a flange depending from its periphery, an annular trough carried by the standard beneath said flange, slotted guides carried by the outer wall of said trough, supporting bars pivoted at their lower ends to said standard and having their upper ends moving through the slots in said guides, disks pivotally connected with their inner ends, and means for drawing said bars inward with yielding force.

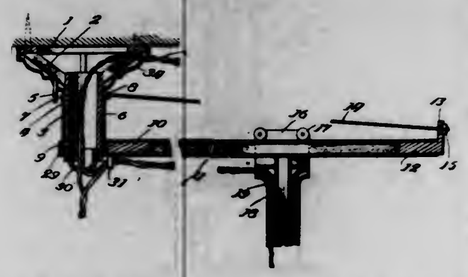
3. In a lens grinding machine, the combination with an upright main shaft, and means for reciprocating it vertically and oscillating it horizontally; of a hollow standard surrounding said shaft, a lap-carrying head mounted on the upper end of the shaft, and a work-holder consisting of a supporting bar comprising a lower arm pivoted to said standard and an upper arm projecting from the upper end of the lower arm inward toward said head, a disk carried by the inner extremity of said upper arm, and means for drawing the lower arm inward with spring force to move the disk toward said lap.

4. In a lens grinding machine, the combination with an upright main shaft, and means for reciprocating it vertically and oscillating it horizontally; of a hollow standard surrounding said shaft, a lap-carrying head mounted on the upper end of the shaft, and a work-holder consisting of a supporting bar comprising a lower arm pivoted to said standard and an upper arm projecting from the upper end of the lower arm inward toward said head, a disk carried by the inner extremity of said upper arm, the lower arm having ratchet teeth, a dog adjustably mounted on said arm and engaging said teeth, and a contractile spring connecting said dog with the standard

5. In a lens grinding machine, the combination with a hollow base containing the driving mechanism including a horizontal shaft having a crank and a driving gear, a hollow standard rising from said base, and the work-holders carried by said standard; of an upright main shaft mounted in journals within said standard, a lap-carrying head secured to the upper end of said shaft, a pitman mounted on the crank of the power shaft, a ball-and-socket connection between the upper end of the pitman and the lower end of the main shaft, and means connected with said power gear for giving the main shaft an oscillation in a horizontal plane while said pitman gives it a reciprocation in a vertical line.

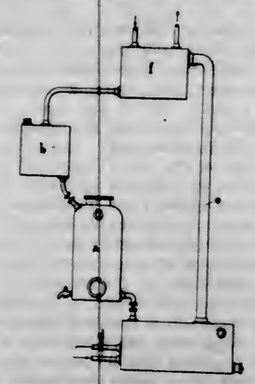
[Claims 6 to 9 not printed in the Gazette.]

1,065,155. ELECTRIC FIXTURE. WILLIAM MCCANSE, Hobart, Okla. Filed Jan. 16, 1912. Serial No. 671,539. (Cl. 248—10.)



A fixture including a sustaining member, a ring mounted for rotation about the sustaining member and carrying a laterally directed bar, a tubular arm receiving said bar at one end, a second bar mounted in the free end of said arm and having an upwardly directed perforated lug, a second ring rotatably mounted about the sustaining member and having a perforated ear, a brace rod engaging through the perforation of said ear by one end and having its opposite end threaded and passed through the perforation of the lug, a nut threaded upon said latter end, a carrier mounted for longitudinal movement on said arm and held against swinging movement thereon, a lamp supported by said carrier, and wires carried by the sustaining member, arm and carrier and connected to the lamp.

1,065,156. INSECTICIDE, SHEEP-DIP, VERMIFUGE, &C. ISAAC SHIMWELL MCDOUGALL, ISAAC MCDOUGALL, and SIDNEY MCDOUGALL, Manchester, England. Filed Sept. 8, 1911. Serial No. 648,328. (Cl. 167—6.)



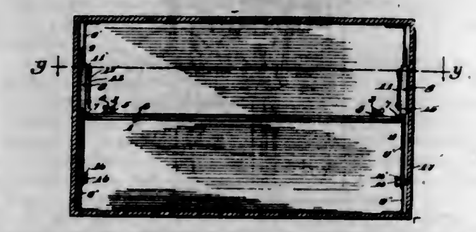
1. The herein described composition for use as an ingredient for animal washes, insecticides and vermifuges, comprising a concentrated extract of trees of the Derris family, said extract giving a red color when treated with concentrated sulfuric and nitric acids and a fugitive brilliant green color on the further addition of concentrated ammonia solution, as described.

2. The herein described composition for use as an ingredient for animal washes, insecticides and vermifuges, comprising a concentrated extract of Derris elliptica, said extract giving a red color when treated with concentrated sulfuric and nitric acids and a fugitive brilliant green color on the further addition of concentrated ammonia solution, as described.

3. The herein described composition for use as an ingredient for animal washes, insecticides and vermifuges comprising a concentrated extract of trees of the Derris family, said extract giving a red color when treated with concentrated sulfuric and nitric acids and a fugitive brilliant green color on the further addition of concentrated ammonia solution, and carrying agents, as described.

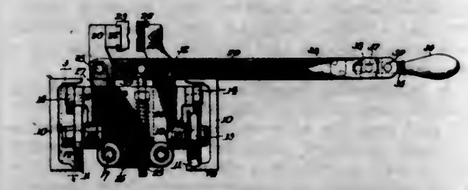
4. The herein described composition for use as an ingredient for animal washes, insecticides and vermifuges, comprising a concentrated extract of trees of the Derris family, said extract giving a red color when treated with concentrated sulfuric and nitric acids and a fugitive brilliant green color on the further addition of concentrated ammonia solution, and carrying and emulsifying agents, as described.

1,065,157. PARTITION FOR SHIPPING-PACKAGES. ROY J. MCGHEE and CHARLES E. ANDERSON, Chicago, Ill. Filed Dec. 1, 1911. Serial No. 663,384. (Cl. 190—36.)



A partition for shipping packages comprising a flat body; bars carried at opposite ends of said body and extending substantially perpendicular thereto, the extremities of said bars being adapted to engage the interior walls of said package to space said body between opposing walls of said package; holders at the ends of said body, said bars being slidably mounted in said holders; teeth on said bars engageable by said holders for locking said bars in positions of adjustment in said holders; and cam members for forcing said holders into engagement with said teeth, substantially as described.

1,065,158. STRAIGHTENING-PRESS. ELLIS H. MEAD, Western Springs, Ill., assignor to The Mieble Printing Press & Mfg. Co., Chicago, Ill., a Corporation of Illinois. Filed Sept. 30, 1912. Serial No. 723,059. (Cl. 153—38.)



1. In a straightening-press, the combination of a pair of intergeared movable jaws having staggered work-contacting points, links connected to said jaws, said links being of different lengths, and means for pivitally securing together the free ends of said links, the movement of said jaws being produced by the oscillation of said links, substantially as described.

2. In a straightening-press, the combination of jaws having staggered work-contacting points, links connected to said jaws, said links being of different lengths, means for pivotally securing together the free ends of said links, and means for changing the relation of the pivotal points of the free ends of the links, whereby to change the initial degree of separation of the jaws, substantially as described.

3. In a straightening-press, the combination of jaws having staggered work-contacting points, means for causing the movement of said jaws in unison, links pivoted to one jaw, and shorter links pivoted to another jaw, the free ends of said links being adjustably pivoted to each other, substantially as described.

4. In a straightening-press, the combination of a wheeled-frame, jaws mounted in said frame, links pivoted to said jaws, the links of one jaw being shorter than the links of the other jaw, the free ends of said links being pivotally secured to each other, and means for changing the point of pivotal attachment of the free end of one set of links to the free end of the other set of links, substantially as described.

5. In a straightening-press, the combination of a wheeled-frame, jaws mounted in said frame, means for causing the movement of said jaws in unison, links pivoted to one set of jaws, other links pivoted to the other set of jaws, said latter links being of less length than the first links, means for pivotally uniting the free ends of both of said links, a handle, and means associated with said links and handle adapted to change the relative longitudinal position of said two set of links and the jaws attached thereto, substantially as described.

[Claims 6 to 16 not printed in the Gazette.]

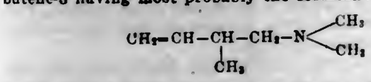
1,065,159. PROCESS OF PRODUCING 1-DIMETHYLAMINO-2-METHYLBUTENE-3. GEORG MERLING, Elberfeld, and HUGO KÖHLER, Leverkusen, near Cologne, Germany, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Nov. 7, 1912. Serial No. 730,018. (Cl. 28—24.)

1. Process for producing 1-dimethylamino-2-methylbutene-3 which comprises dehydrating 2-methyl-3-oxybutyldimethylamin.

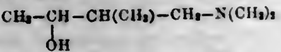
2. Process for producing 1-dimethylamino-2-methylbutene-3 which comprises heating 2-methyl-3-oxybutyldimethylamin with a dehydrating agent.

3. Process for producing 1-dimethylamino-2-methylbutene-3 which comprises heating 2-methyl-3-oxybutyldimethylamin with concentrated sulfuric acid.

4. Process for producing 1-dimethylamino-2-methylbutene-3 having most probably the formula:

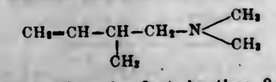


which process consists in first heating 2-methyl-3-oxybutyldimethylamin:

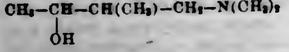


with sulfuric acid and then isolating the resulting base, substantially as described.

5. Process for producing 1-dimethylamino-2-methylbutene-3 having most probably the formula:



which process consists in first heating 2-methyl-3-oxybutyldimethylamin:



with concentrated sulfuric acid and then isolating the resulting base, substantially as described.

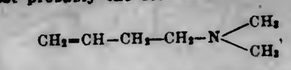
1,065,160. 1-DIMETHYLAMINOBUTENE-3 AND PROCESS OF MAKING SAME. GEORG MERLING, Elberfeld, and HUGO KÖHLER, Leverkusen, near Cologne, Germany, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Nov. 7, 1912. Serial No. 730,019. (Cl. 23—24.)

1. Process for producing 1-dimethylaminobutene-3 which comprises dehydrating 3-oxybutyldimethyl-amin.

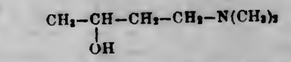
2. Process for producing 1-dimethylaminobutene-3 which comprises heating 3-oxybutyldimethylamin with a dehydrating agent.

3. Process for producing 1-dimethylaminobutene-3 which comprises heating 3-oxybutyldimethylamin with concentrated sulfuric acid.

4. Process for producing 1-dimethylaminobutene-3 having most probably the formula:

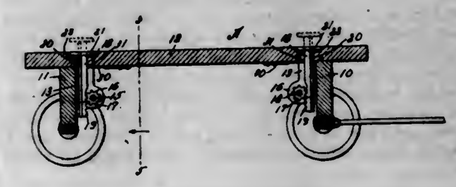


which process consists in first heating 3-oxybutyldimethylamin:



with sulfuric acid and secondly isolating the resulting base, substantially as described.

1,065,161. ELEVATING-TRUCK. WALTER R. MEYS, Washington, D. C., assignor of one-half to William F. Mahony, Washington, D. C. Filed June 10, 1912. Serial No. 702,815. (Cl. 21—118.)

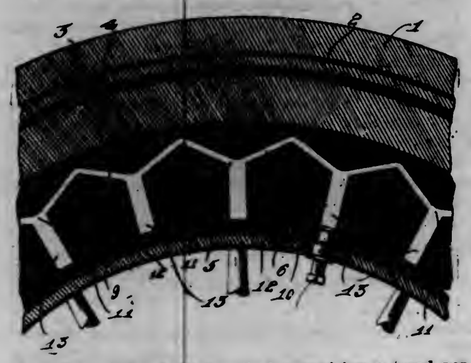


1. Combined with a truck having a flat top, a plurality of standards adapted to be moved in a vertical longitudinal direction above the top of the truck from a position flush with said top, means for raising and lowering said standards simultaneously, said means being automatically disconnected from the standards when the latter reach their lowest position, and means for engaging said standards with the elevating mechanism.

2. Combined with a truck having a flat top, a plurality of vertically disposed standards each having a load supporting end adapted to lie flush with the top of the truck and be raised above said top, a rack on each standard, a pinion adapted to engage each rack, means for simultaneously rotating said pinions to raise and lower the standards uniformly, said racks becoming disengaged from the pinions when fully lowered, and resilient means for engaging said racks with their pinions to raise the standards.

3. Combined with a truck having a platform top, a plurality of standards movable longitudinally and vertically through openings therein, each standard having an enlarged upper end arranged to seat in a depression in said platform flush with its upper surface, a short rack on each standard, a transverse shaft mounted in bearings at the front and rear of the platform, pinions on said shafts adapted to engage said racks to raise and lower the standards but normally disengaged from the racks when said standards are in their lowermost position, a longitudinal operating shaft, worm gearing between the longitudinal and transverse shafts, a projection on each standard, and a spring finger engaging said projection to raise the standard and engage the rack with its pinion.

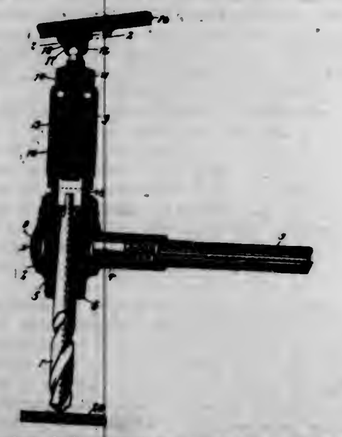
1,065,162. AIRLESS AND PUNCTURELESS AUTOMOBILE-TIRE. CORWIN E. MILLER, Peru, Ind. Filed Dec. 14, 1912. Serial No. 736,833. (Cl. 152—5.)



1. A tire of the class described comprising a tread portion, reinforced fabric strips carried thereby, a transversely extending stay strip carried by said tread, said tread provided with a cushion compartment, a soft rubber cushion positioned within said cushion compartment and adapted to add resiliency to said tire, said cushion provided with a circumferentially extending channel being formed to constitute a plurality of communicating substantially V-shaped channel portions, each substantially V-shaped channel portion terminating in a diverging air pocket, and outlet means coöperating with some of said air pockets for permitting the exhaust of hot air contained within said air channel.

2. A tire of the class described comprising a body provided with a cushion compartment, a cushion tube carried by said cushion compartment and constituting an air passage channel casing, said cushion being formed on a substantially zigzag shape comprising a plurality of substantially V-shaped integrally connected hump portions, an air chamber connected to the lower portion of each pair of hump portions and constituting an air reservoir, and a discharge tube communicating with some of said air reservoirs.

1,065,163. RATCHET. EDWIN S. MILLER, Buffalo, N. Y. Filed July 24, 1911. Serial No. 640,119. (Cl. 77—54.)



1. A ratchet drill comprising a head provided with a bearing, a tool holder journaled in said bearing and provided with a sleeve, an adjusting screw working in said sleeve and provided at its outer end with a spherical knuckle, a presser foot which has a bottom and a side wall forming a recess which receives said knuckle and which has the edge of its wall bent inwardly for preventing the knuckle from moving out of said recess, said bottom and wall being formed integrally and balls interposed between the outer end of said knuckle and the bottom of said recess.

2. A ratchet drill comprising a head provided with a bearing, a tool holder journaled in said bearing and provided with a sleeve, an adjusting screw working in a threaded opening in said sleeve and provided at its outer end with an outwardly tapering shank and with a spherical knuckle at the outer end of said shank which is no larger in diameter than the small end of said shank, a cup-shaped handle surrounding the adjusting sleeve and provided in its bottom with an opening through which said knuckle is passed and in which said shank is secured, a presser foot which is adapted to bear at its outer side against a backing and which has a bottom plate and a side wall forming a circular recess receiving said knuckle and which has its side wall turned inwardly for confining said knuckle in said recess, said bottom plate and side wall being formed of one piece, and a row of balls interposed between the bottom of said recess and the outer end of said knuckle.

1,065,164. DOOR-HANGER. MICHAEL MOCK, Beeville, Tex., assignor of one-half to David B. Saffold, Beeville, Tex. Filed Mar. 23, 1912. Serial No. 685,731. (Cl. 16—7.)

1. The combination with a door frame having supporting members above and at opposite sides of its door opening, and provided with a movable carriage above its door opening and between said supporting members, of a door having upper supporting stirrups, guide members secured to and projecting outwardly from said stirrups and through the supporting members, and a guide member connecting said stirrups and extending through said carriage.

2. The combination with a door frame and the like having roller brackets above its door opening and juxtaposed tracks mounted between said brackets, of a carriage mounted to travel on said tracks, a door having supporting stirrups, guide members extending outwardly from said stirrups and movable through said roller brackets, and a guide member connecting the said stirrups and movable through said movable carriage.

3. The combination with a door frame and the like having rigid brackets above its door opening and on opposite sides thereof, each of said brackets having superposed rollers, brackets between said first named brackets and juxtaposed tracks carried by the last mentioned brackets and each comprising superposed rods, of a carriage having side rollers mounted between the said track rods and having central superposed rollers, a door having supporting stirrups and movable between the superposed rollers of the first mentioned brackets, and a guide rod connecting the said stirrups and movable between the superposed central rollers of the carriage.

1,065,165. GAS WATER-HEATER. CHARLES MUNZNER, Chicago, Ill., assignor to American Stove Company, St. Louis, Mo., a Corporation of New Jersey. Filed Aug. 7, 1911. Serial No. 642,667. (Cl. 122—250.)

1. A water heater comprising a casing, a coil vertically disposed in said casing, a chamber connected to the coil at one side below the central portion of the coil, a water supply for the chamber opposite the connection with the coil and a burner below said chamber.

2. A water heater comprising a casing, a coil vertically disposed in the casing, a circular flat chamber in communication at one side with the coil below the central portion of the coil, a water supply for said chamber on the opposite side from the communication with the coil and a gas burner below said chamber and coil, substantially as shown and described.



3. A water heater comprising a casing, a coil vertically disposed within the casing, a chamber secured at one side to the lower end of the coil directly below the center of the coil, a water supply connected to the chamber at the opposite side from the connection with the coil, a burner below said chamber, and the casing having an insulating space surrounding the lower end of the coil.

4. A water heater comprising a casing, made in two sections and hinged together, a coil supported by one section, a chamber secured to the lower end of the coil and of a circular form arranged directly below the open center of the coil, spiral baffle plates carried by the two sections of the casing and extending inwardly to the coil and a burner below the chamber carried by the coil.

5. A water heater comprising a casing, a coil vertically disposed in said casing, a burner below the lower end of the coil and a spiral baffle plate carried by the upper end of the casing and extending inwardly to the coil whereby the products of combustion are caused to travel inwardly through the coil.

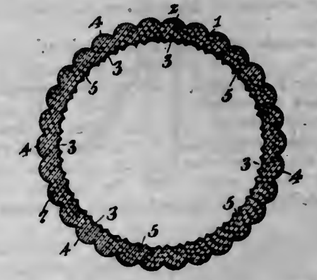
[Claims 6 to 16 not printed in the Gazette.]

1,065,166. FOLDING LADDER. MICHAEL T. MURPHY, New Britain, Conn. Filed Nov. 23, 1911. Serial No. 662,018. (Cl. 228—31.)



In a device of the character set forth, the combination with a ladder having a plurality of foldable sections, of a ladder attaching device comprising an inverted U-shaped member having an inwardly offset support-engaging pivot eye at its top and inwardly extending spacing arms projecting from the spaced depending lower ends of said U-shaped member, said arms and eye coöperating to hold the U-shaped member in spaced relation to its support when applied, a cross bar arranged in said U-shaped member, a horizontal lever pivoted intermediately of its ends to said cross bar and having at its outer end means to engage the folded ladder and at its inner end ladder releasing means, said inner end being slightly shorter than said spacing arms.

1,065,167. LIGHT-DIFFUSIVE INCLOSURE FOR LIGHT SOURCES. CHARLES H. MYERS, Buffalo, N. Y. Filed Mar. 1, 1912, Serial No. 680,797. Renewed Mar. 8, 1913. Serial No. 753,077. (Cl. 290—100.)

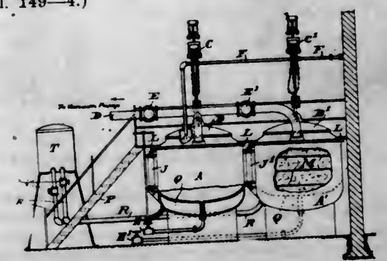


1. A diffusive inclosure for a light source having an exterior wall formed of a succession or arcs and the interior wall formed of a succession of arcs in reëntrant relation to the first named arcs, the second named arcs being of shorter length and curved on a shorter radius than the first named arcs.

2. A light diffusive inclosure for a source of light comprising a series of elongated lens-like elements arranged successively and integrally connected, the outer wall of the structure being composed of a succession of arcs each curved on a radius within the confines of the thickness of the structure and the inner wall being formed as a series of reëntrant arcs shorter than the first named arcs and each curved on a radius shorter than the first named arcs and outside the confines of the thickness of the structure.

3. A light diffusive inclosure for a light source comprising a circular series of lens-like elements integrally connected to form a hollow structure made up of elongated parts, the outer wall of the structure being formed of a connected series of arcs each curved on a radius within the confines of the inner and outer walls of the connected series, and the inner wall containing a like series of reëntrant arcs shorter than the first named arcs and spaced one from the other, and also curved on a shorter radius than the first named arcs.

1,065,168. TANNING. CHARLES WESLEY NANCE, London, England. Filed Dec. 27, 1909. Serial No. 535,185. (Cl. 149—4.)



1. The process of tanning hides, which consists in placing depilated hides in a tank containing a tanning liquor, the hides being separated by permeable bodies incapable of injuring or being injured by the solution, producing and maintaining in this chamber a vacuum equal to about ½ lb. per square inch absolute pressure, and maintaining normally in said chamber a temperature below the boiling point but occasionally raising the temperature for brief periods to the boiling point in such vacuum.

2. The improvement in the process of tanning hides, which consists in placing the hides in a vacuum tank,

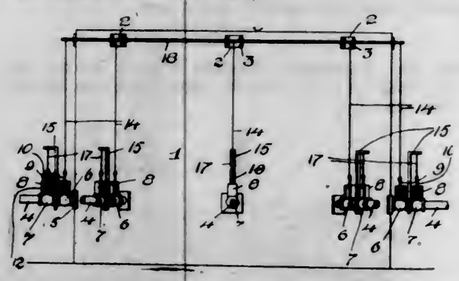
sealing the same against the atmosphere, producing a high vacuum in said tank, introducing tanning solution in the form of a fine divergent spray at a point above the level of the solution until the hides are completely immersed, whereby the air contained in the fresh liquor is liberated, and occasionally for a brief period bringing the temperature to a degree at which the solution will boil in the high vacuum in the exhaust tank, but at no time permitting it to rise sufficiently high to injure the hides or the resultant leather, but keeping it at or below the ordinary normal temperature.

3. The process of tanning hides, which consists in immersing the hides in a tanning solution in a chamber sealed to the atmosphere, reducing the pressure in such chamber, and maintaining it at about ½ lb. per square inch absolute pressure, and from time to time so proportioning the temperature of the liquid and the degree of vacuum that water contained in the hides will be converted into steam, while under the tanning liquor, but without permitting the temperature to rise above 65 to 70 degrees Fahr.

4. The process of tanning hides, which consists in placing the depilated hides in tanning solution in a chamber closed to the atmosphere, producing in the chamber a vacuum of about ½ lb. per square inch absolute pressure, and periodically raising the temperature of the tanning solution at this vacuum to a point at which the water will boil, the intervals between such elevations of temperature serving to permit the tannin of the tanning solution in the pores to separate from the water of the solution and unite with the gelatin of the hides, and the successive elevations of temperature serving to convert the free water in the pores into steam and thus to remove the water from the pores of the hides.

5. The process of tanning hides, which consists in immersing the depilated hides in a tanning solution of moderate strength in a chamber closed to the atmosphere, producing and maintaining in said chamber a vacuum of about ½ lb. to the square inch absolute pressure, periodically raising the temperature of the solution to a point at which the water will boil under that vacuum, and permitting it to fall again below such point, and from time to time adding fresh tanning solution.

1,065,169. AUTOMATIC OIL-RELEASE. LUTE D. OWREY, Pittsburgh, Pa. Filed Oct. 28, 1912. Serial No. 728,120. (Cl. 220—121.)



In an automatic release for oil tanks, a tank, release pipes adjacent to the bottom thereof, valves supported by said pipes, a bracket supported by said pipes, spring actuated valve stems in connection with said valves, outriggers carried by said tank, fuses connecting some of said valve stems to said outriggers and fuses connecting the other of said stems to said bracket.

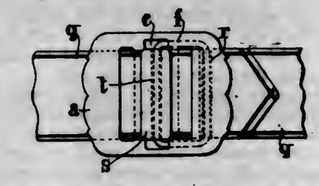
1,065,170. COMBINED KNIFE, FORK, AND SPOON. HENRY PONTTICH, New Bedford, Mass. Filed Jan. 10, 1911. Serial No. 601,006. (Cl. 30—22.)

In a combined knife, fork and spoon, a body portion comprising a handle having one side straight and the other side bulged intermediate its ends approximately at the center thereof, a knife blade pivoted within one end of the handle, a fork pivoted within the same end, said knife blade adapted to fold within the handle parallel with the straight side thereof, said fork adapted to be folded to lie parallel with the bulged portion, a spoon pivoted within the other end of the handle and adapted to be folded to lie



parallel with the bulged portion above the fork in its folded position and the pivot plane of the spoon arranged intermediate the pivot planes of knife blade and fork at the opposite end of the handle so that the several parts may be readily folded into the handle.

1,065,171. BUCKLE AND THE LIKE. WILLIAM GEORGE RICHARDSON, London, England. Filed June 6, 1911. Serial No. 631,619. (Cl. 24—168.)



A buckle for straps or the like comprising a sheet metal body portion having two parallel slots and an integral and parallel elongated depressed portion therebetween, said depressed portion forming openings in the plate at the respective ends of said depressed portion, and said slots and the depressed portion adapted to have laced therethrough the free end of the strap; a plate co-extensive in length with the length of the depressed portion and overlying the same, said plate provided with a shank fitting within the depressed portion; and a link engaging with the shank of the plate and passing through the openings at the ends of the depressed plate portion, said link adapted to have connected thereto the fixed end of the strap and thereby hold the plate in contact with the immediately adjacent curved portions of the laced end of the strap to prevent said strap end from slipping, substantially as described.

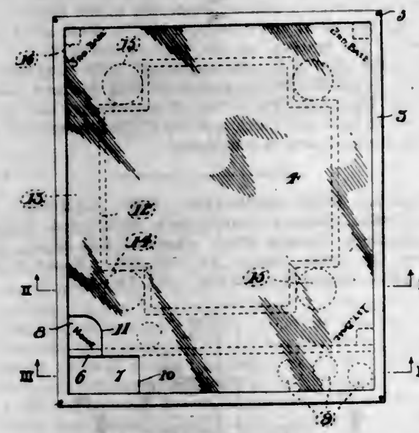
1,065,172. LATCH. JAMES W. RIGGS, Bonnieville, Ky. Filed Aug. 21, 1912. Serial No. 716,319. (Cl. 70—45.)



1. In a locking device for doors, the combination with a door having an elongated opening, brackets upon one of the faces of the door, hooks pivotally connected with the brackets, keeper lugs arranged coöperatively with the hooks, rods pivotally connected with the hooks, one of said rods having an angular portion extending through the door opening, a clamp member secured to the said rod, adjustable means for securing the second rod to the clamp member, a stop member connected with the door and adapted to coöperate with the clamp, a hasp secured to the angular arm of the rod which extends through the opening of the door, and a staple for the hasp, all substantially as and for the purpose set forth.

2. A locking device for doors comprising in combination with a door, a staple upon one face of the door, a hasp adapted to coact with the staple, oppositely disposed rods arranged for vertical movement upon the opposite face of the door, said hasp being connected with one of the rods, adjustable means for securing the rods together, a guide for one of the rods, and arranged within the path of contact of the connecting means to provide a stop for the rods to limit the movement thereof in one direction, hook members pivotally connected with the door and pivotally connected with the rods, and keeper lugs upon the door casing adapted to co-act with the hooks.

1,065,173. GAME APPARATUS. WILLIAM E. ROBB, Oil City, Pa. Filed Feb. 24, 1913. Serial No. 750,458. (Cl. 46—41.)

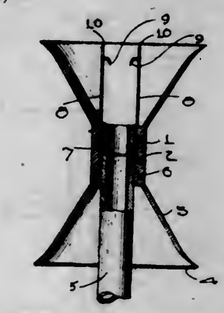


1. A game apparatus comprising a box, a transparent plate forming the top of said box, a transverse partition arranged at one end of said box and providing two compartments, said top plate having openings formed therein whereby easy access is had to the compartments of said box, spherical bodies in one of said compartments, a housing arranged in the other of said compartments and having vertical walls providing a runway, said housing having pockets at the juncture of the walls thereof, and spherical bodies movably arranged in the pockets of said housing and a greater diameter than the first mentioned spherical bodies.

2. A game apparatus and puzzle comprising a box, a partition arranged in said box and dividing said box into a small and a large compartment, spherical bodies arranged in said small compartment and adapted to be placed in said large compartment, a housing arranged in the large compartment of said box and having vertical walls providing a runway, said housing having the walls thereof provided with pockets, and spherical bodies movably arranged in the pockets of said housing and adapted to be retained therein during a movement of the first mentioned spherical bodies in said runway.

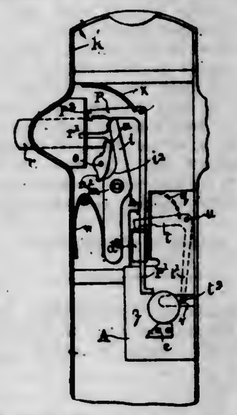
3. A game apparatus comprising a box, a housing arranged in said box and having vertical walls providing pockets and a runway in proximity to the walls of said box, spherical bodies movably arranged in the pockets of said housing and adapted to be retained therein, and spherical bodies adapted to be moved throughout said runway.

1,065,174. SEWER-CLEANER. CHARLES SCHICK, Davenport, Iowa. Filed Nov. 12, 1912. Serial No. 730,942. (Cl. 137—70.)



In a device of the class described the combination with a plurality of conical rubber members provided with a connecting body, a gripping member comprising a cylindrical threaded member engaging said body, oppositely disposed arms carried by said threaded member, hooks struck from said arms and bent inwardly, one of said arms constituting a protector for the other of said arms, said arms positioned within one of said conical members and means for reciprocating said cleaner.

1,065,175. CLOTHES-HANGING HOOK. RUDOLF SCHRÖDER, Leipzig, Germany. Filed May 14, 1912. Serial No. 697,315. (Cl. 194—64.)

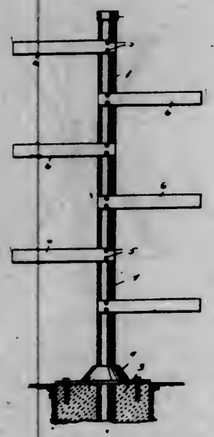


In combination, a case having a key-hole and a slot; a clothes hook fixed to said case; a movable hook-closing member having a projection adapted to enter said slot; a locking lever in said case arranged to be disabled by insertion of a key through said key-hole; a spring whereby said locking lever is normally held in the path of said projection and prevents movement of the hook-closing member to its inoperative position; a coin-chute; a key-retaining lever having one arm in said coin-chute and one arm arranged to engage a key inserted through said key-hole; and a bell-crank having one arm in said coin-chute and one arm in the path traversed by said projection during the movement of the hook-closing member to its operative position, the bell-crank arm in the coin-chute being adapted to actuate the key retaining lever by means of an inserted coin, for the purpose set forth.

1,065,176. DANGER-SIGNAL. WILLIAM SCHWAB, Sacramento, Cal. Filed Jan. 2, 1913. Serial No. 739,874. (Cl. 246—1.)

1. A danger signal of the character described consisting of a vertical support and a plurality of laterally extending resilient arms rigidly secured to said support and adapted

to strike against the person of a trainman upon the side ladder or steps of a car.



2. A danger signal of the character described consisting of a vertical support and a plurality of laterally extending resilient arms rigidly secured to said support and tapering to their free ends.

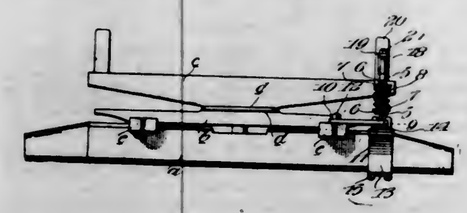
3. A danger signal of the character described consisting of a vertical support adjacent a railroad track and fixed in the ground, and a plurality of laterally extending resilient arms rigidly secured upon said support, said arms being wedge-shaped longitudinally.

4. A danger signal of the character described consisting of a vertical support secured rigidly upon the ground adjacent a railroad track, and a plurality of resilient arms rigidly connected to said support and extending horizontally therefrom on both sides of said support.

5. A danger signal of the character described consisting of a vertical support and a plurality of resilient arms rigidly secured to said support at one of their ends, at a right angle to said support, and tapering toward their free ends.

[Claim 6 not printed in the Gazette.]

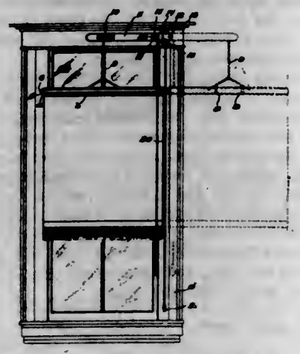
1,065,177. WAGON ATTACHMENT. MATTHEW C. SHARPNECK, Prescott, and JOHN H. LEE, Cornville, Ariz. Filed Apr. 24, 1912. Serial No. 693,011. (Cl. 21—39.)



1. A device of the class described comprising a coupling made up of U-shaped elements connected for relative longitudinal movement, plates carried by the elements, a spring interposed between said plates, a connection between one of said elements and the axle of a vehicle, and a connection between the other element and the body of the vehicle.

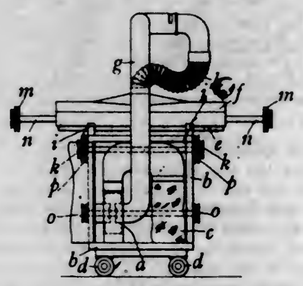
2. A device of the class described comprising a coupling made up of U-shaped elements connected for relative longitudinal movement, plates carried by the elements, a spring interposed between said plates, a connection between one of said elements and the axle of a vehicle, and adjustable means between the other element and the body of the vehicle for tensioning said spring.

1,065,178. WINDOW-SHADE HOLDER. ALBERT L. SHEFFIELD, Mobile, Ala. Filed Feb. 16, 1912. Serial No. 677,981. (Cl. 156—27.)



A shade holder comprising a section adapted to be applied to a window frame, an arm hinged to the section, sheaves journaled upon the arm, a flexible member trained over the sheaves, a bracket connected to the flexible member and having at one corner an eye, a shade roller journaled in the bracket, an eye fixed to the section to one side of the point of hinged connection of the arm with the section, a guide wire connected to said eye and passing through the eye at the corner of the bracket and an eye located at the lower portion of the window frame and with which the said wire is connected.

1,065,179. DUST-REMOVER FOR CARDING-MACHINES. HERBERT SMETHURST, Hollinwood, England, assignor to William Firth, Chestnut Hill Mass. Filed Dec. 27, 1910, Serial No. 599,359. Renewed May 5, 1913. Serial No. 765,685. (Cl. 19—15.)



1. Apparatus for removing dust from cotton and like carding engines comprising a stripping brush, a fan, a suction pipe leading from the fan to the stripping brush, a portable carrier whereby the apparatus may be moved from engine to engine, and means for driving the brush and fan from the machine operated on, said means being detachable to permit the apparatus to be shifted from engine to engine and be driven therefrom, substantially as described.

2. Apparatus of the class described comprising a stripping brush, a fan, a suction pipe leading from the fan to the stripping brush, a portable carrier, means for driving the brush from the machine to be stripped and means for driving the fan from the brush, substantially as described.

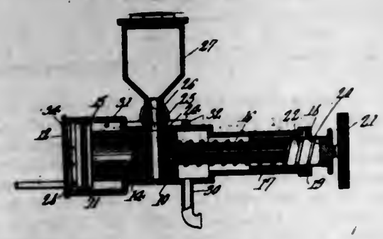
3. Apparatus of the class described, comprising a stripping brush, a fan, a portable carrier whereby the apparatus may be moved from engine to engine, a flexible connection between the brush and the fan whereby said brush may be adjusted to proper position on the engine and in relation to the portable carrier, and means for driving the brush and fan from the engine operated on, substantially as described.

4. In combination in apparatus of the class described, a portable carrier, a fan mounted therein, a stripping brush, an adjustable suction connection between the fan casing and the brush, a pulley at each end of the brush, a pulley at each end of the fan shaft, means for driving the brush from the carding engine being operated on, and means for driving the fan shaft at either end thereof from the pulley at the corresponding end of the brush, substantially as described.

5. In apparatus of the class described, a portable casing, a fan mounted therein, a dust collector connected with the fan, filter screen inclosing the dust collector and the fan and forming the sides of the portable casing, and a stripping brush having a conduit connecting the same with the fan and means for operating the brush and fan from a part of the fixed machinery, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,065,180. GRAPHITE LUBRICATOR. LELAND D. SMITH, Louisville, Ky. Filed Sept. 18, 1911. Serial No. 649,842. (Cl. 184—56.)



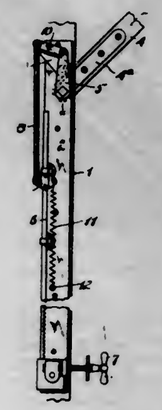
1. In a device of the class described, a cylinder and cylinder head, a piston and piston head located therein, a pocket within said piston, said cylinder being provided with a lubricant inlet opening, with a lubricant outlet opening, said cylinder head provided with a presure supply opening, a pipe communicating with said cylinder, and terminating at a point adapted to register with said cylinder pocket when said pocket is in register with said outlet opening, resilient means for holding said piston with said pocket and lubricant inlet opening in alinement.

2. In a device of the class described, a cylinder and cylinder head, a piston and piston head arranged therein, a pressure inlet opening provided in said cylinder head, a pressure release opening provided in said cylinder head, a pocket located within said piston, a lubricant inlet opening provided in said cylinder adapted to register with said pocket when said piston is in normal position, an outlet lubricant opening in said cylinder adapted to register with said pocket when said piston is at the extremity of its forward stroke, and means for supplying pressure to said pocket when the latter is in register with said outlet lubricant opening.

3. In a device of the class described, a cylinder, a piston arranged within said cylinder, said cylinder being formed with an enlarged portion, a cylinder arranged within the first mentioned cylinder, a coiled spring housed by said cylinder, said spring being coiled around said piston, a pocket arranged within said piston, means for supplying graphite to said pocket and means for causing said pocket to register with an outlet opening, said means forcing the material arranged in said pocket through said outlet opening.

1,065,181. TRANSOM-OPERATOR. LOUIS B. SMYSER, New Britain, Conn., assignor to The American Hardware Corporation, New Britain, Conn., a Corporation of Connecticut. Filed Apr. 21, 1913. Serial No. 762,482. (Cl. 16—28.)

1. Operating means for swinging closures comprising a crank adapted for connection to and operation of a swinging closure, an actuating lever pivoted adjacent to and on a center different from but within the radius of said crank, the center line of said lever being arranged to cross the center line of said crank between the ends of said crank, a link connection between said crank and lever arranged to actuate said crank on the turning of said lever, and manually controlled means for turning said lever.



2. Operating means for swinging closures comprising a crank adapted for connection to and operation of a swinging closure, an actuating lever pivoted adjacent to and on a center different from that of said crank, a link pivotally connecting said lever with said crank at a point located a greater distance from its pivotal center than the pivotal center of said lever, and manually controlled means for operating said lever.

3. Operating means for swinging closures comprising a crank adapted for connection to and operation of a swinging closure, an actuating lever pivoted adjacent to and on a center different from that of said crank, a link pivotally connecting said crank and lever at points adjacent their free ends and maintaining said parts at all times at an angular relation to each other, and manually controlled means for operating said lever connected thereto at a point outside of its pivotal center.

4. Operating means for swinging closures comprising a crank arranged for connection to and operation of a swinging closure, a lever pivoted adjacent to and on a center different from that of said crank and extending at an angle thereto at all times, a link pivotally carried by said lever and operatively connected to said crank at a point located at a greater distance from its pivotal center than the pivot for said lever, and manually controlled means in operative connection with said lever.

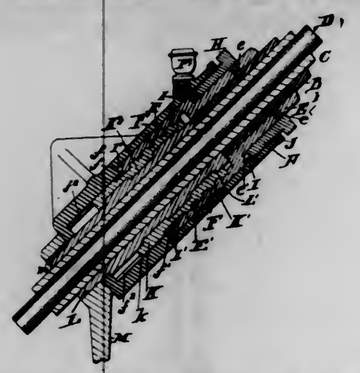
5. Operating means for swinging closures comprising a crank arranged for connection to and operation of a swinging closure, a lever pivoted adjacent one end on a center adjacent to and different from that of said crank and extending at an angle relative to said crank, a link pivotally interconnecting said lever and crank, a manually controlled operating means in connection with said lever at a point removed from its pivotal center, and a compensating spring connected to said operating means and arranged to assist the same proportionately with the load thereon.

1,065,182. PRODUCING ISOPRENE. HERMANN A. F. STAUDINGER, Karlsruhe, Germany, assignor to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Aug. 25, 1911. Serial No. 645,982. (Cl. 23—24.)

1. The process of producing isoprene by heating vaporized dipentene in a state of attenuation at a temperature above 350° C.

2. The process of producing isoprene by heating vaporized dipentene under reduced pressure at a temperature above 350° C.

1,065,183. STEERING-GEAR FOR AUTOMOBILES. THEODORE D. STANLEY, Detroit, Mich. Filed Aug. 24, 1912. Serial No. 716,818. (Cl. 74—79.)



1. In a device of the character described, a stationary casing, a reciprocating sleeve disposed within the casing, said sleeve being externally and internally threaded the external and internal threads being of different pitch but disposed on the same transverse axis, a steering post entering the casing at one end, an internally threaded member on the end of the steering post for engagement with the external threads on the reciprocating sleeve, and a crank shaft having a bearing within the reciprocating sleeve and having external threads in engagement with the internal threads of said sleeve.

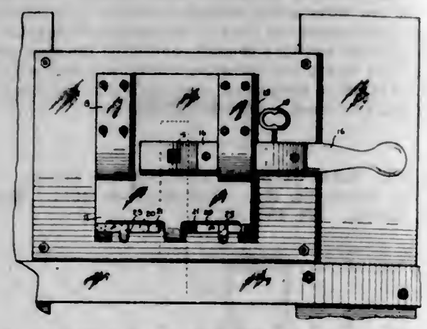
2. In a device of the character described, a steering post, means for rotating said post, a tubular fitting carried by said post provided with an internal spiral thread, a concentrically arranged sleeve to receive the fitting provided with keyways, an adjustable thimble having a screw-threaded engagement with the sleeve to secure said fitting against displacement along the line of its axis, a reciprocating sleeve housed within the fitting provided with a spiral thread in mesh with the internal spiral thread of the fitting and with projecting keys adapted to reciprocate in the co-acting keyways of the sleeve, a shaft concentrically arranged within the reciprocating sleeve provided with a spiral thread in mesh with the internal spiral thread of the reciprocating sleeve.

3. In a device of the character described, a steering post, a stationary casing provided with a key-way at one end, a tubular fitting carried by the post and disposed within the stationary casing, said tubular fitting being provided with an internal spiral gear, a reciprocating sleeve threaded exteriorly at one end for engagement with the internal spiral gear of the tubular fitting and provided at its other end with a spline for engagement with the key-way of the casing, said reciprocating sleeve being internally threaded, a crank shaft housed within the reciprocating sleeve and threaded for engagement with the internal threads of said sleeve, and a crank arm secured to said crank shaft.

1,065,184. RAILROAD-SWITCH STAND. HENRY L. STEINMANN, Argyle, Mo. Filed Aug. 27, 1912. Serial No. 717,319. (Cl. 104—25.)

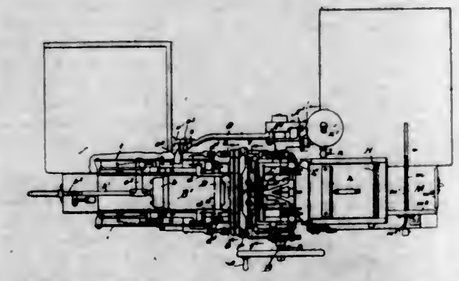
1. In a device of the kind described, a stand including a platform, a shaft journaled vertically in said platform, a switch lever fixed to said shaft and movable over said platform, abutments fixed upon said platform in the path of said switch lever, a lock having openings therein carried by the switch lever, lock bows carried by the abutments, and means to releasably engage and hold said switch lever when moved to a position intermediate said lock bows.

2. In a device of the kind described, a stand including a platform, a shaft journaled vertically in said platform, a switch lever fixed to said shaft and movable over said platform, abutments fixed upon said platform in the path of said switch lever, a lock having openings therein carried by the switch lever, lock bows carried by the abutments, and means to releasably engage and hold said switch lever when moved to a position intermediate said lock bows, said means comprising a pair of springs each having one end fixed to said platform and the other end bent upward to provide a cam surface and downward to provide a stop shoulder, said springs having their stop shoulders arranged to abut opposite sides of the switch lever when the latter is positioned therebetween.



3. In a device of the kind described, a stand including a platform, a shaft journaled vertically in said platform, a switch lever fixed to said shaft and movable over said platform, abutments fixed upon said platform in the path of said switch lever, a lock having openings therein carried by the switch lever, lock bows carried by the abutments, means to releasably engage and hold said switch lever when moved to a position intermediate said lock bows, said means comprising a pair of springs each having one end fixed to said platform and the other end bent upward to provide a cam surface and downward to provide a stop shoulder, said springs having their stop shoulders arranged to abut opposite sides of the switch lever when the latter is positioned therebetween, and thumb pieces fixed upon said springs.

1,065,185. BUTTER PRINTING AND CUTTING MACHINE. RICHARD F. STEWART, New York, N. Y. Filed Mar. 10, 1911. Serial No. 613,653. (Cl. 31—65.)



1. In a machine of the class described and in combination; means for feeding the material, printing means automatically operated by the material as it advances, means for normally holding said printing means out of the path of the material, and means for positioning said printing means in the path of the material at pre-determined times.

2. In a machine of the class described and in combination; means for feeding the material, normally inactive printing means adapted to be actuated by the material as it advances, and means for moving said printing means into the path of the material at pre-determined times.

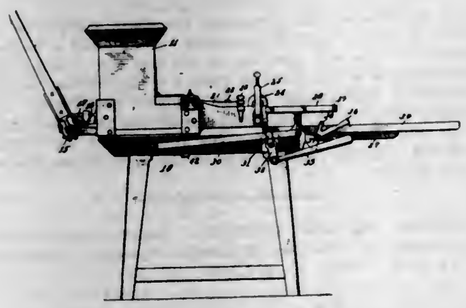
3. In a machine of the class described and in combination; means for feeding the material, a reciprocating printing device normally inactive and adapted to be actuated by the material as it advances, means for moving said printing device into the path of the material at pre-determined times whereby said device is rocked by the material as it advances, and means for releasing said printing device from said material whereby said printing device is adapted to automatically rock back into normal position.

4. In a machine of the class described and in combination; means for feeding the material, rocking printing means actuated by the material as it advances, means for positioning said printing means in the path of the material, and means for returning said printing means to its normal position after a printing operation.

5. In a machine of the class described and in combination; means for feeding the material, rocking printing means normally out of the path of the material, means for dropping said printing means into the path of the material at predetermined intervals, and means for returning the rocking printer to its normal position after it has printed the material.

[Claims 6 to 15 not printed in the Gazette.]

1,065,186. BUTTER MOLDING AND PRINT-FORMING MACHINE. RICHARD F. STEWART, Briarcliff Manor, N. Y. Filed Jan. 5, 1912. Serial No. 669,607. (Cl. 31—65.)



1. In a machine of the class described, the combination of the following instrumentalities; a butter-receiving chamber, means for advancing the butter-mass in said chamber, means for dividing the mass into a plurality of strips, and spacing such strips an appreciable distance apart, a top plate adjustable over the strips, and individual plates adjustable on the top plate for gaging each strip individually.

2. In a machine of the class described, the combination of the following instrumentalities; a butter-receiving chamber, means for advancing the butter-mass, means for dividing the mass into a plurality of strips, an individual gage plate for each strip, and means for collectively adjusting said gage plates.

3. In a machine of the class described, the combination of the following instrumentalities; a butter-receiving chamber, means for advancing the butter-mass, means for dividing the mass into a plurality of strips, an individually adjustable gage plate for each strip, and means for collectively adjusting said gage plates.

4. In a machine of the class described, the combination of the following instrumentalities; a butter-receiving chamber, means for advancing the butter-mass, means for dividing the mass into a plurality of strips, an individual gage plate for each strip, and an adjustable cover plate for the chamber to which said gage plates are secured.

5. In a machine of the class described, the combination of the following instrumentalities; a butter-receiving chamber, a plunger for forcing the butter-mass through said chamber, and a downwardly flaring hopper delivering to said chamber.

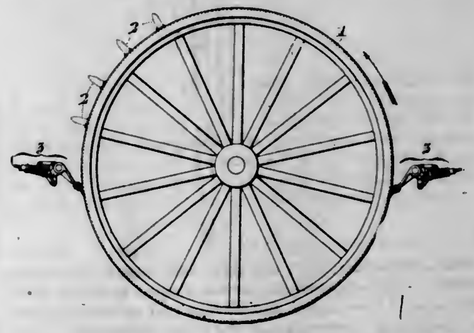
[Claims 6 to 19 not printed in the Gazette.]

1,065,187. ELBOW-PROTECTOR. WILLIAM O. TATE, Ashland, Oreg. Filed June 29, 1912. Serial No. 706,678. (Cl. 2—190.)



The herein described elbow protector having downwardly converging sides and a central portion and comprising a pad having a lining, a cover, and a filling between the lining and the cover, a holder of flexible material in the pad at the center thereof and secured at its corners on the cover, a cushioning ring also in the pad and on the center of the holder, and a disk in the lower side of the cushioning ring.

1,065,188. SCRAPING DEVICE FOR ROAD MACHINERY. WATSON T. THOMPSON, Buffalo, N. Y., assignor to The Barber Asphalt Paving Company, Philadelphia, Pa., a Corporation of West Virginia. Filed Jan. 11, 1910. Serial No. 537,414. (Cl. 21—23.)



1. A scraper for the wheels of heavy vehicles, comprising in combination a supporting bracket, a shaft clamped in said bracket, a scraper frame pivotally supported on said shaft, a scraper blade carried by said frame, an arm projecting laterally from said scraper frame, a rod pivotally connected to said arm, means carried by the bracket for slidingly supporting said rod, a spring bearing at one end against said arm, and an abutment carried by the bracket for engaging the other end of the spring whereby said spring exerts a pressure at one end against the abutment, and at the other end against said arm said rod and said arm being so proportioned that the pivotal connection between the same may be moved to either side of a line passing through said abutment and pivotal support for the blade, whereby said blade may be held against the wheel, or against the supporting bracket.

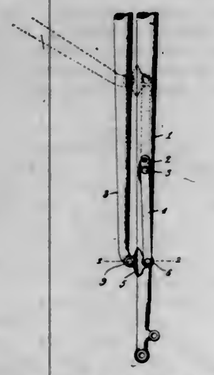
2. A scraper for the wheels of heavy vehicles, comprising in combination a supporting bracket, a shaft clamped in said bracket, a scraper frame pivotally supported on said shaft, a scraper blade carried by said frame, an arm projecting laterally from said scraper frame, a rod pivotally connected to said arm, a block pivotally supported by said bracket, and having an opening to receive freely said rod, and a spring encircling said rod, and exerting pressure at one end against said block, and at the other end against said arm.

3. A scraper for the wheels of heavy vehicles, comprising in combination, a supporting bracket, a shaft clamped in said bracket, a scraper frame pivotally supported on said shaft, a scraper blade carried by said frame, an arm projecting laterally from said scraper frame, a rod pivotally connected to said arm, a block

pivotally supported by said bracket and having an opening to receive freely said rod, a bearing cup carried by said rod, and engaging the rod adjacent its pivotal point, a second bearing cup engaging the rod and resting against said block, a coil spring encircling said rod, and having its outer ends resting in said cups.

4. In a scraping device for the two wheels of vehicles, the combination of a horizontal arm, a scraper frame with blade tapered to said arm, a spring guide rod tapered to a projection upon said scraper frame, a swiveled guide block through which said guide rod freely passes, and an adjustable spring encircling said guide rod, and exerting pressure upon the projection of the scraper frame to thrust the scraper toward or away from the wheel according to the angular relation of the projection to the horizontal arm upon which the scraper frame is swiveled.

1,065,189. SHIFTING BOW FOR VEHICLE-TOPS. CHARLES E. TITCHENER, Binghamton, N. Y. Filed Dec. 27, 1911. Serial No. 668,173. (Cl. 21—62.)



The combination with the main bow socket of a vehicle top, of a clip comprising a portion shaped to fit the front edge of said bow socket and having two perforated arms, one projecting forwardly and the other backwardly, a link pivoted to the inner side of said bow socket and to the backwardly projecting arm of said clip, and a front bow pivoted to the forwardly projecting arm of said clip.

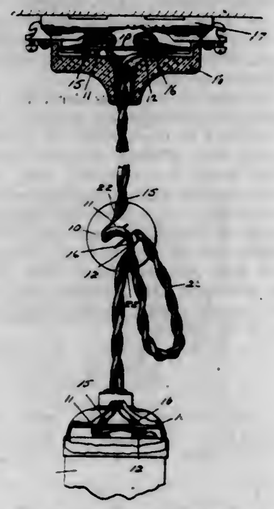
1,065,190. STRAIN-RELIEF DEVICE. THOMAS J. TOBIN, Albany, N. Y., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 16, 1912. Serial No. 731,816. (Cl. 173—322.)

1. A device of the character described comprising a substantially flat plate of slightly flexible insulating material such as fiber, adapted to loosely fit within the cap of an electrical fitting, said plate being cut to form independent wire passages, the opposed edges of each cut so closely approaching each other as to effect a gripping action upon the wire in adjusted position under strain conditions.

2. A device of the character described comprising a plate of slightly flexible insulating material and a pair of gripping tongues formed in the body thereof, said body having independent apertures formed therein adjacent the free end of each tongue, for the purpose described.

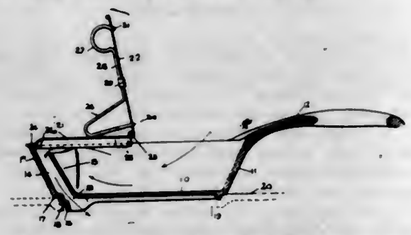
3. A device of the character described, comprising a plate of slightly flexible insulating material and a pair of oppositely faced gripping tongues formed in the body thereof, said body having independent apertures formed therein adjacent the free end of each tongue, for the purpose described.

4. A device of the character described, comprising a plate of insulating material and an insulating tongue formed therein and abutting at its free end a relatively rigid portion of the body of the plate, the latter being apertured to one side of the free end of said tongue to permit the insertion of a wire and the lateral movement of the latter to engaged position between the end of the tongue and said rigid portion of the plate, substantially as described.



5. A device of the character described, comprising a plate of slightly flexible insulating material and a tongue formed therein and abutting at its free end a relatively rigid portion of the plate, to form a clamp for an electric conductor, said tongue in the adjusted position of the device, being flexed from the plane of the plate and gripping said conductor between the free end of the tongue and the abutting rigid portion of the plate, substantially as described.

1,065,191. COOKING UTENSIL. ALBERT EDWIN TRENTOWSKY, St. John, New Brunswick, Canada. Filed May 14, 1912. Serial No. 697,248. (Cl. 53—7.)

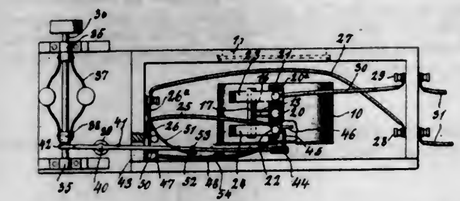


1. A cooking utensil for stove-top cooking, comprising a container having a passage extending from near the top of the utensil through the bottom thereof, and a removable cover consisting of hinged sections, one of which extends from a side of the pan over and beyond the mentioned passage, and spaced vertically from the top of said passage, the remaining section of the cover completing the closure of the utensil and being movable on the hinge of the sections to an open position, the first mentioned cover section having means around its edge to prevent escape of smoke and fumes.

2. A cooking utensil for stove-top cooking, comprising a pan provided with a lateral handle at the back, and a cover, the pan at the opposite side from the handle having a passage extending from near the top of the pan, through the bottom thereof, the inner wall of the passage being formed by a curved partition terminating short of the top edge of the pan and being integral with the bottom of the pan and integral with the opposite sides of the pan, and the outer wall of the passage being formed by the adjacent portion of the pan body, said outer wall extending at the bottom of the pan below the remaining side wall and below the bottom of the pan and the inner wall of the passage, and the lower end of the said outer wall of the passage having a plurality of steps below the remainder of the pan, and the cover of the pan being formed in two hinged sections, one section being located above the mentioned passage and having a lateral edge flange, and a depending flange fitting within the pan, the other hinge section being unflanged and being movable on its hinge to a raised position.

3. A cooking utensil, comprising a pan having a passage extending from near the top of the pan downwardly through the bottom thereof, said passage being formed by an inner partition and the adjacent side wall of the pan, and a cover formed of two hinged sections, one section being located above the passage and having a lateral edge flange, and a depending flange fitting within the pan, the other section being movable on its hinge to a raised position.

1,065,192. ENGINE STOP AND RECORDING DEVICE. ASA F. TYLER, Merlin, Oreg. Filed June 1, 1912. Serial No. 701,002. (Cl. 161—27.)



1. The combination of an internal-combustion engine and its ignition circuit, a clock, a speed governor driven by the engine, and a governor-controlled means for breaking the ignition circuit and stopping the clock.

2. The combination of an internal-combustion engine and its ignition circuit, a speed governor driven by the engine, a clock, a lever actuated by the governor and having means for stopping the clock when swung in one direction, said lever being in electrical connection with the ignition circuit, and a contact in said circuit engageable by the lever.

3. The combination of an internal-combustion engine and its ignition circuit, a shaft driven from the engine, a speed governor on said shaft, a sleeve carried by the governor and slidable on the shaft, a clock, a lever engageable with the sleeve and having means for stopping the clock when swung in one direction, said lever being in electrical connection with the ignition circuit, and a contact in said circuit engageable by the lever.

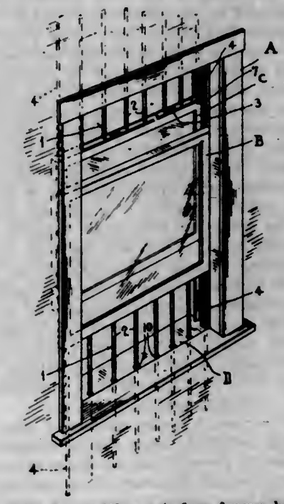
4. The combination of an internal-combustion engine and its ignition circuit, a speed-governor driven by the engine, an alarm clock, a contact carried by the hammer stem of the alarm train of the clock, contacts in the ignition circuit, said contacts being engageable by the first-mentioned contact, a lever actuated by the governor and having means for stopping the clock when swung in one direction, said lever being in electrical connection with the ignition circuit, and a contact in said circuit engageable by the lever.

5. The combination of an internal combustion engine and its ignition circuit, a speed-governor driven by the engine, an alarm clock, a contact carried by the hammer stem of the alarm train of the clock, contacts in the ignition circuit, said contacts being engageable by the first-mentioned contact, a lever actuated by the governor and having means for stopping the clock when swung in one direction, said lever being in electrical connection with the ignition circuit, and a contact connected to one of the second-mentioned contacts and engageable by the lever.

[Claims 6 to 9 not printed in the Gazette.]

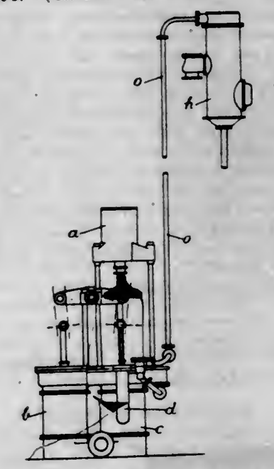
1,065,193. WINDOW-GUARD. JAMES S. VAN DEVENTER and EBBETT M. BROWN, Gary, Ind. Filed May 27, 1912. Serial No. 699,942. (Cl. 21—23.)

1. In combination with a vertically movable window sash, a guard adapted to be secured to one rail thereof and comprising a plate having a plurality of longitudinally spaced apertures therein with seats formed on its inner face, rods inserted through said apertures and provided with heads adapted to fit in said seats, the end rods having flanges thereon adapted to engage the outer face of said plate, and means for securing the ends of said end rods to the window sash.



2. The combination with a window frame having a sliding sash, of a guard secured to said sash comprising a plate having a plurality of longitudinally spaced rods extending at right angles from its outer face, some of said bars having means for preventing the withdrawal of the plate from the sash rail to which it is applied, and means for securing the end bars to said sash beyond said plate.

1,065,194. PUMPING CONDENSED-STEAM WATER TO ELEVATED FEED-HEATERS. WILLIAM WEIR, Cathcart, Glasgow, Scotland. Filed Jan. 2, 1913. Serial No. 739,596. (Cl. 103—79.)



1. In combination, a steam cylinder, an air pump cylinder situated below and in axial alinement with and adapted to be directly driven by the said steam cylinder, a hot well adapted to receive the water discharged by said air pump cylinder, a pair of hot-well pumps situated on opposite sides of said air pump cylinder and adapted to be driven by said steam cylinder, and a feed heater situated a considerable height above said hot-well pumps, the said hot-well pumps being adapted to withdraw the whole of the water from the said hot-well and discharge it against gravity into the said feed heater.

2. In combination, a steam cylinder, a beam adapted to oscillate about a fixed fulcrum and to be actuated by said steam cylinder, an air pump cylinder situated below and in axial alinement with and adapted to be directly driven by the said steam cylinder, a second air pump cylinder adapted to be driven by said steam cylinder through the agency of said beam, a hot well adapted to receive the water discharged by said first-mentioned air pump cylinder, an elevated feed heater, and a pair of hot-well pumps situated on opposite sides of the first-mentioned air pump cylinder and adapted to be driven by said steam cylinder and adapted to withdraw the whole of the water from said hot well and discharge it into said elevated feed heater.

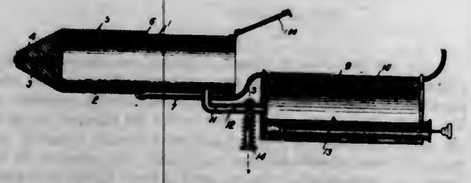
3. In combination, a steam cylinder, a beam adapted to oscillate about a fixed fulcrum and to be actuated by said steam cylinder, an air pump cylinder situated below and in axial alinement with and adapted to be directly driven by the said steam cylinder, a second air pump cylinder adapted to be driven by said steam cylinder through the agency of said beam, a hot well adapted to receive the water discharged by said first-mentioned air pump cylinder, a pair of hot-well pumps situated on opposite sides of the first-mentioned air pump cylinder and adapted to be driven by said steam cylinder, and a feed heater situated a considerable height above the said hot-well pumps, the said hot-well pumps being adapted to withdraw the whole of the water from said hot-well and discharge it against gravity into said feed heater.

4. In combination, a steam cylinder, a beam adapted to oscillate about a fixed fulcrum and to be actuated by said steam cylinder, a hot-well, an air pump cylinder provided with head valves and situated below and in axial alinement with and adapted to be driven by said steam cylinder, and adapted to suck water and to discharge it through said head valves into said hot-well, a second air pump cylinder adapted to be driven by said steam cylinder through the agency of said beam and adapted to suck air with water-vapor, and to discharge the air into said first-mentioned air pump cylinder below the head valves of the same, an elevated feed heater, and a pair of hot-well pumps situated on opposite sides of the first-mentioned air pump cylinder and adapted to be driven by said steam cylinder and adapted to withdraw the whole of the water from said hot-well and discharge it into said elevated feed heater.

5. In combination, a steam cylinder, an air pump cylinder situated below and in alinement with said steam cylinder, a piston rod for said steam cylinder, a pump rod for said air pump cylinder in alinement with said piston rod, a crosshead pin carried by said piston rod and said pump rod, a pair of hot-well pumps situated on opposite sides of said air pump cylinder, rods for said hot-well pumps pivoted to and adapted to be driven from said crosshead pin, a hot well adapted to receive the water discharged by said air pump cylinder, and a feed heater situated a considerable height above said hot-well pumps, the said hot-well pumps being adapted to withdraw the whole of the water from the said hot well and discharge it against gravity into said feed heater.

[Claim 6 not printed in the Gazette.]

1,065,195. SOLDERING-IRON. JAMES WHITE, Philadelphia, Pa. Filed Oct. 17, 1912. Serial No. 726,241. (Cl. 219—27.)

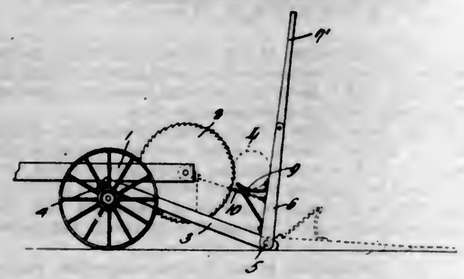


1. A soldering iron comprising a chambered element adapted to hold a quantity of solder, means for maintaining the solder in molten condition, a passageway between the chamber and the soldering end of the said element, a chambered handle communicating with the first chamber, the handle being adapted to contain a supply of compressed air, and a valve for regulating the communication between the handle and the said first chamber.

2. A soldering iron comprising a chambered element adapted to contain a quantity of solder, a heating device for maintaining the solder in molten condition, a passageway extending between the chamber and the soldering end of the said element, a handle, the handle being chambered and forming a receptacle for compressed air, a passageway between the solder-carrying chamber and the handle, and a valve for controlling communication between the interior of the handle and the said solder-carrying chamber, the pressure of the air forcing the solder through the said passageway.

3. A soldering iron comprising a chambered element adapted to hold a quantity of solder, means for maintaining the solder in molten condition, a passageway between the chamber and the soldering end of the said element, an extension carried by the said chambered element, the extension being provided with a passageway communicating with the interior of said element, the said passageway serving to conduct air pressure to the solder within the chambered element, whereby it may be forced through the first mentioned passageway.

1,065,196. JACK. FRED A. WINDUS, Portage, Wis. Filed Sept. 25, 1912. Serial No. 722,343. (Cl. 143—59.)



1. In a log handling jack, an inclined supporting member, a pivoted member consisting of a short and a long lever pivoted to the lower end of the inclined supporting member, the long lever constituting the hand lever and log guide, and a log carrying bracket connected to each lever.

2. In a log handling device including two spaced plates, a short and a long tapered lever pivotally connected to one end of the spaced plates, the long lever being provided with a handle extension, a cross-bar connecting the free end of the short lever to the long lever, and a log receiving bracket connected to each lever.

3. In a log handling device including two spaced plates, a short and a long tapered lever pivotally connected to one end of the spaced plates, the long lever being provided with a handle extension, a cross bar connecting the free end of the short lever to the long lever, a log receiving bracket connected to each lever, and a flexible connection connected to the two levers for supporting the same in elevated position when presenting a log to a saw.

1,065,197. HAT-PIN-POINT PROTECTOR. WILLIAM WINKLMANN and EDWARD MILLER, Pittsburgh, Pa. Filed July 15, 1912. Serial No. 709,502. (Cl. 24—155.)

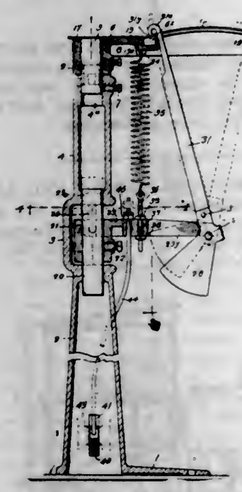
A hat pin point protecting device consisting of a body bent upon itself to provide a pair of resilient arms tending to spring in opposite directions with respect to each other, each of said arms in proximity to its free end formed with an opening and further provided in its outer face with a longitudinally extending depressed portion extending from the upper edge of an opening to a point in proximity to the free terminus of the arm, one of said arms being of greater length than the other, that arm of greater length

projecting over the free terminus of the arm of shorter length whereby said depressed portion will be positioned



in alinement to facilitate the passage of a pin through said openings.

1,065,198. BUTTONHOLE-MARKING MACHINE. EARL T. ADAMS, Portsmouth, Ohio. Filed June 3, 1912. Serial No. 701,179. (Cl. 12—56.)



1. In a marking machine, a standard, a casting secured at the top of said standard and having radial extensions, the ends of said radial extensions being connected by an arc-shaped angle iron, a series of marker arm guide segments disposed between the outer angle iron and the main body of the casting, and means for retaining the guide segments in position.

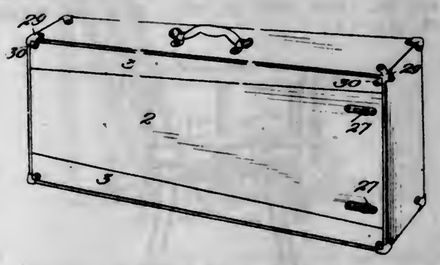
2. In a marking machine, a standard, a casting secured at the top of said standard and having integral radial extensions, the ends of said integral radial extensions being connected by an integral arc-shaped angle iron, a series of curved marker arm guide segments disposed between the outer angle iron and the main body of the casting, said guide segments being spaced apart to provide radial slots, and means for retaining the guide segments in position.

3. In a marking machine, a standard, a movable frame carried by said standard, means for causing a vertical reciprocation of said frame, an arc-shaped pivot rod carried by said frame, a slotted table carried at the top of said standard, and a series of marking arms carried by said arc-shaped pivot rod, each of said arms consisting of a weighted portion having an integral U-shaped extension, said extension and said weighted portion being provided with alined openings arranged to receive the rod, the upper end of each arm being bent over into the form of a hook, the end of the hook constituting a marking device, and each of said hooks being aranged to enter one of the slots in said table.

4. In a marking machine, a slotted table, an arc-shaped pivot rod, and a series of marking arms carried by said arc-shaped pivot rod, each of said arms comprising a main body portion, a lower weighted portion secured thereto, the axis of said weighted portion being at an angle to that of the arm, an integral U-shaped extension carried by said weighted portion, said extension and said weighted portion being provided with alined openings arranged to receive the rod, the upper part of the arm being reduced in width and being bent into a hook lying in the plane of the main body portion, each of said hooks being disposed in one of said slots.

5. In a marking machine, a standard having a cylindrical bore, a cylindrical rod mounted in said bore at the top of said standard, a casting having a cylindrical bore arranged to receive said cylindrical rod, means for securing the casting to the rod, said casting having a groove concentric with said rod and being provided with extensions constituting a frame, a series of guide segments carried by said frame, said guide segments being spaced apart to provide radial slots, a series of marking arms, the upper ends of said marking arms projecting through said radial slots and being provided with hook-like points, an inking pad disposed in the groove in said casting, and means for simultaneously moving said arms downwardly to bring the points into engagement with the inking pad.

1,065,199. OPERATING OR ADJUSTING TABLE. EDGAR C. ADAMS, Davenport, Iowa, assignor of one-half to Bartlett J. Palmer, Davenport, Iowa. Filed Apr. 23, 1909. Serial No. 491,816. (Cl. 45—50.)



1. An operating table for chiropractics formed of two sections, each section provided with folding legs, one section being adapted to fit within the other section and comprising a central portion provided with hinged side members which in connection with the central portion form when extended one side of a casing inclosing the legs of both sections, substantially as described.

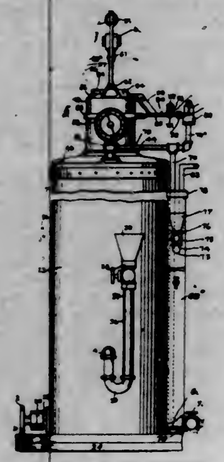
2. The operating table for chiropractics comprising two separable sections, one of the sections having its central top portion converging and provided with converging hinged side wings which when raised together with the central portion constitute a cover or one side of the telescoped sections and when lowered convert the central portion into a top converging toward the other section placed at the end thereof for operating purposes, substantially as described.

1,065,200. ACETYLENE-GENERATOR. NEWTON J. ANDERSON, Coffeyville, Kans. Filed May 13, 1911. Serial No. 627,018. (Cl. 48—36.)

1. An acetylene gas generator including a tank, a gas outlet therefor, a safety valve carried by said outlet, a carbid receptacle carried by said tank and provided with a filling opening, a plug sealing said opening, a supporting arm carried by said tank, an operating lever pivotally connected to said arm, means for connecting one end of said lever to said safety valve, a cap carried by the other end of said arm and normally inclosing said plug, and means for locking said lever to said arm.

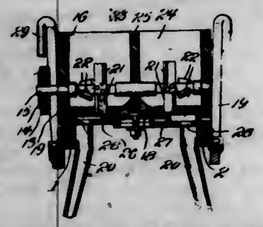
2. An acetylene generator including a tank and carbid receptacle, a safety valve for said tank, said receptacle

being provided with a filling opening, a plug for sealing said opening, a supporting arm carried by said tank, a valve-operating lever pivotally conected to said arm, means



connecting one end of said lever to said valve, plug inclosing means carried by the other end of said lever, and a locking bolt carried by said lever for engaging said arm.

1,065,201. SEED-DRILL. JOHN V. AVRET, Gresham-ville, Ga. Filed Mar. 25, 1911. Serial No. 616,904. (Cl. 111—7.)

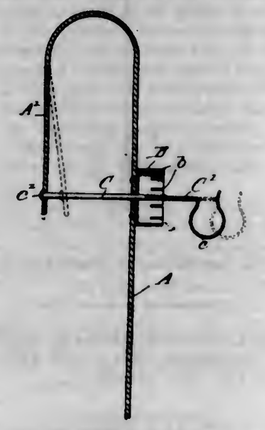


A seeder comprising a wheeled frame, a hopper supported thereby, said hopper being formed with seed discharge opening, a shaft mounted in the hopper above the opening and two sets of diametrically opposed blades secured to the shaft within the hopper, one set of said blades operating in a plane wholly within the plane of the opening and the second set operating in a plane partly within the plane of the opening and partly beyond the opening plane, said latter set having blades set at opposite angles of inclination with respect to each other whereby one of the blades of such set will feed grain toward the opening and the other blade of such set will feed said grain from said opening, the first set of blades operating as lifting blades with respect to the opening and the second set operating as feeding blades with respect to the opening.

1,065,202. ADJUSTABLE HOSE-HOLDER. LAWRENCE PERCY BAILEY, Mountain View, Cal. Filed Oct. 1, 1912. Serial No. 723,285. (Cl. 248—29.)

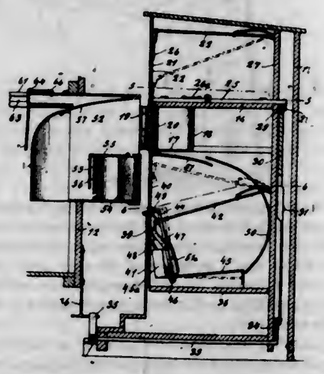
1. An adjustable hose holder comprising a single upright forming a supporting stand, and a pair of relatively engageable members, one of which is stationary, and the other of which is adjustable, and one of which members is carried by the supporting stand, the said upright having a downturned upper end forming a spring arm and connected to the other member whereby to hold the said members in engagement, one of the said members being also provided with the hose engaging clip.

2. An adjustable hose holder comprising a supporting staff having its upper end bent to form a spaced downwardly extending arm, a circular guide flange secured on the staff and provided with a series of slots, a hose holding member comprising a shank slidably and rotatably mounted through the staff centrally of the said guide flange, a substantially flat head at one end of the shank,



provided with a hose engaging clip and having its flat portion adapted for engagement within selected slots of the guide flange, the opposite end of said shank being headed and extended through the lower free end of the said staff arm, for the purpose described.

1,065,203. MAIL-BAG DELIVERING AND RECEIVING APPARATUS. EDWARD BAKER, Sims, Ill., assignor of one-third to Charles F. Dezonche and five-eighteenths to James A. Gaston, Sims, Ill. Filed Mar. 29, 1913. Serial No. 757,548. (Cl. 105—261.)



1. In a mail bag delivery apparatus, a bag-containing receptacle, a sweep working in the receptacle to throw the bag therefrom, a slidable gate straddling the sweep, gate opening means, a latch for holding the gate closed, means for retracting the latch, a tappet for actuating said latch retracting means, and a car-carried trip into the path of which the tappet extends.

2. In a mail bag delivery apparatus, a bag-containing receptacle, means for throwing the bag therefrom, a gate closing the receptacle, gate opening means, a slidable latch for holding the gate closed, a roller carried by the latch, a lever carrying a cross-bar having a depression in which the aforesaid roller seats when the latch is in holding position, a tappet operatively connected to the lever, and a car-carried trip into the path of which the tappet extends.

3. In a mail bag delivery apparatus, a bag-containing receptacle, means for throwing the bag therefrom, a gate

closing the receptacle, gate opening means, a slidable latch for holding the gate closed, a roller carried by the latch, a lever carrying a cross-bar having a depression in which the aforesaid roller seats when the latch is in holding position, a rock-shaft operatively connected to the lever, a tappet connected to the rock-shaft, and a car-carried trip into the path of which the tappet extends.

4. In a mail bag delivery apparatus, a bag-containing receptacle, means for throwing the bag therefrom, a gate closing the receptacle, gate opening means, a latch for holding the gate closed, means for retracting the latch, a tappet for actuating said latch retracting means, and a car-carried trip into the path of which the tappet extends.

5. In a mail bag receiving apparatus, a receptacle, a gate for closing the receptacle, gate opening means, a tiltable platform in the receptacle, a detent engageable with the gate when the same is open, and a trigger carried by the platform and engageable with the detent.

[Claims 6 to 14 not printed in the Gazette.]

1,065,204. FLOAT FOR FISHING. JOHN E. L. BEALS, New York, N. Y., assignor of one-half to Henry A. Hart, New York, N. Y., (Flushing.) Filed Apr. 17, 1912. Serial No. 691,344. (Cl. 43—4.)



1. A straight bodied float, having a butt end portion of uniform cross section, diminishing in cross section from said butt end portion to the other end, and having line attaching means at the butt end portion.

2. A straight bodied float, having a butt end portion of uniform cross section, tapered from said butt end portion to the other end, and having line attaching means at the butt end portion.

3. A straight bodied float comprising a square sectioned butt end portion, a tapered portion adjacent to said butt end portion, and having line attaching means at the end of the butt opposite said tapered portion.

4. A straight bodied float having a smooth surface impervious to water, comprising a butt end portion of uniform cross section, a tapered portion adjacent to said butt, and having line attaching means at the end of the butt opposite said tapered portion.

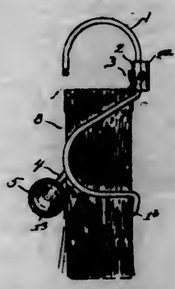
5. A straight bodied float comprising one portion, the weight of which increases from a minimum at its end to a maximum adjacent the butt, and a butt end portion of uniform section which section is at least as great as any section of said first named portion, said butt end portion being provided with line attaching means.

[Claims 6 to 10 not printed in the Gazette.]

1,065,205. TOILET-PAPER HOLDER. SAMUEL J. BENS, Berkeley, and ALBERT B. HUBBARD, Fruitvale, Cal. Filed July 11, 1910, Serial No. 571,480. Renewed July 27, 1912. Serial No. 711,917. (Cl. 211—8.)

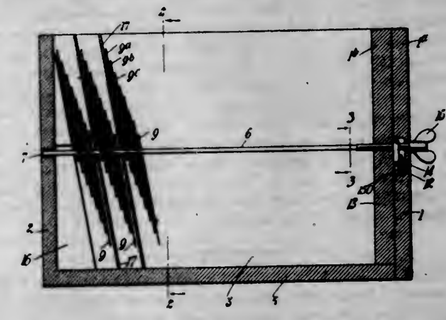
1. A toilet paper holder comprising a U-shaped frame having its legs intermediate their ends bent up to form retaining walls, a cross piece connecting the legs together above the bent portions, a clip on said cross member for holding a package of paper, a swinging arm mounted on said cross member and extending beyond the bent portions of the legs, and a roller on said arm.

2. A toilet paper holder comprising a main frame having a device for suspending a package of paper from its upper end, and forwardly extending guard portions for receiving the paper package between them, a roller to bear on said package and a ⊏ shaped frame carrying said roller on its lower laterally extending arm and pivotally mounted on the main frame by its upper laterally extending arm, substantially as described.



3. A toilet paper holder comprising a base having a device for suspending a paper pack from its upper end, and a ⊏ shaped frame having its upper laterally extending arm journaled on the base and its lower laterally extending arm carrying a roller to bear on the paper pack, substantially as described.

1,065,206. FILING SYSTEM. JOHN AUSTIN BEST, Augusta, Ga. Filed Dec. 5, 1911. Serial No. 664,058. (Cl. 129—16.)



1. The combination of a plurality of cards having similar apertures along one side thereof, with a fastening means engaging an aperture in each card, the aperture in each successive card so engaged being nearer one end of the card than in the adjacent card.

2. The combination of a plurality of cards having a number of similar apertures along opposite sides thereof, with a fastening device for holding the cards together, the said device passing through an aperture in each card, the apertures so engaged in successive cards being at different distances spaced from the ends thereof than those in the adjacent cards.

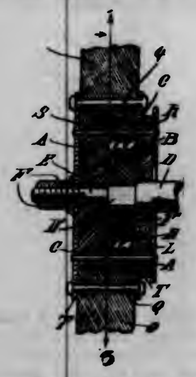
3. The combination of a plurality of cards having apertures along one side thereof, with a fastening device engaging one aperture in each card, whereby they are held together, the apertures so engaged being at different distances from the ends of the cards, whereby a portion of each card is visible.

4. The combination of a plurality of cards having apertures along one side thereof, the apertures being equally spaced, with a fastening device engaging all of the cards and passing through an aperture in each card, the said device being at unequal distances from the ends of the said cards.

5. The combination of a suitable cabinet having a rod therein, with a plurality of cards each having a number of apertures along one side, one of said apertures in each card engaging the rod, the said cards being arranged successively with the end portion of one card extending beyond the end portion of the preceding card, whereby the end portions of all the cards are visible.

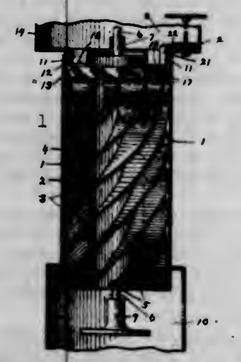
[Claims 6 to 9 not printed in the Gazette.]

1,065,207. RESILIENT MOUNTING FOR WHEELS. HENRY W. BOWMAN, Barbourville, Ky. Filed Sept. 9, 1912. Serial No. 719,422. (Cl. 21—187.)



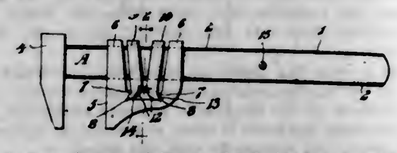
A spring mounting for a wheel comprising a circular-outlined, centrally apertured hub portion with a recess in one face thereof, a circular-outlined plate mounted centrally within said recess and having a radial slot formed therein communicating with a central opening, a spring seated in said slot and extended into the central opening of the circular plate, an axle having an angular outlined portion extending through said opening in the plate and resting upon said spring and provided with a cylindrical contracted end extending through the hub portion, apertured plates fastened to the opposite faces of the hub portion, one of said plates confining the circular-outlined plate, roller bearings interposed between the latter and the circumferential wall of the recess in which the plate is mounted, an apertured disk fastened to one of said plates, and a sprocket wheel fastened to the outer face of the disk and of larger diameter than said disk and through which disk and sprocket wheel the axle is adapted to pass, as set forth.

1,065,208. WATER TURBINE-WHEEL. ERNST H. BRAUER, Lancaster, Pa., assignor of four-ninths to Charles G. Strickler, Lancaster, Pa. Filed Apr. 14, 1911. Serial No. 621,010. (Cl. 138—7.)



The combination with a head-box having a central bearing in its bottom and a concentric outlet passage, of a well having an opening in its upper end and a bearing located therein, a pair of spaced cylinders disposed one within the other and having their ends flush, helical blades disposed between the cylinders and secured thereto, a shaft secured within the inner cylinder and mounted in said bearings, said helical blades terminating below the upper edge of the cylinder, thus producing a channel surrounding the walls of the outlet, a ring disposed at the lower end of said outlet, said ring having openings and inclined chutes leading therefrom, a gate resting upon said ring and having openings for the purpose set forth, a lateral extension upon the ring and engaging one wall of the outlet, a segment upon the extension and resting upon the bottom of the head-box, a pinion engaging the segment and means to actuate it, the helical blades being curved backward at their opposite ends for the purpose set forth.

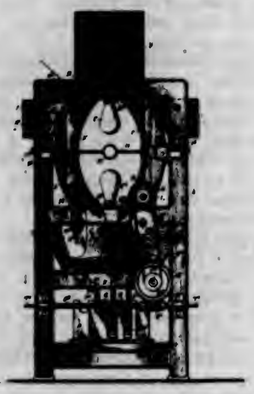
1,065,209. WRENCH. ROBERT W. BRITTSAN and ALVA L. VAN HORN, Klamathon, Cal. Filed Aug. 26, 1911. Serial No. 646,086. (Cl. 81—152.)



1. A wrench comprising a shank having a stationary jaw at one end, a movable jaw slidable upon said wrench, two clamping members provided with longitudinal slots for the passage of the shank of the wrench having ribs formed at the front ends thereof adapted to engage with recesses in the movable jaw, and a spring connecting the adjacent front ends of the clamping members.

2. A wrench comprising a shank having the longitudinal edges thereof rounded, a stationary jaw at one end of said shank, a movable jaw slidably mounted upon the shank, shoulders on the movable jaw with recesses formed beneath the same, two clamping bars mounted upon the shank of the wrench at the movable jaw and having the front ends thereof outwardly curved or rounded and terminating in rods adapted to lie in the recesses in the movable jaw, the coiled spring connecting the front end of the clamping members, and a stop for limiting the sliding movement of the movable jaw toward the handle.

1,065,210. ARTIFICIAL-LIGHT PRINTING-MACHINE. EDWARD JOHN BROGAN, Yonkers, N. Y., assignor of one-third to John D. Reilly, Yonkers, N. Y. Filed Jan. 24, 1911. Serial No. 604,330. (Cl. 95—75.)



1. An artificial light printing machine, comprising a source of artificial light, a transparent plate arranged vertically adjacent to the source of light, a single traveling apron for pressing the superimposed sheets of tracing and sensitive paper in contact with the plate, rollers arranged one above the other and over which passes the apron, a winding up roller arranged below the lower apron roller for the exposed sheet of sensitive paper, a motor, means for operating one of the apron rollers from the motor, means for operating the winding up roller from one of the apron rollers, and a speed controlling device for the apron roller operating means.

2. An artificial light printing machine, comprising a source of artificial light, a vertically arranged transparent plate adjacent the said source of artificial light, a single endless traveling apron for pressing the superimposed sheets of tracing paper and sensitive paper in contact with the plate at the other side of the artificial light, rollers arranged one above the other and over which passes the said apron, means for rotating one of the rollers to impart a traveling motion to the said apron, a winding up roller below the lower apron roller for the exposed sheet of sensitive paper, a receptacle below the winding up roller for the sheet of tracing rotary motion to the said winding up roller from one of the apron rollers.

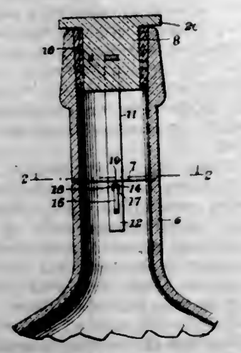
3. An artificial light printing machine, comprising a frame, electric lamps mounted thereon, outwardly curved glass plates arranged vertically on opposite sides of the said lamps for the superimposed sheets of tracing paper and sensitive paper to pass over the outer face of each glass plate, a single endless apron adjacent the outside of each glass plate, a set of rollers journaled in the frame adjacent to each glass plate and over which passes an endless apron to press the corresponding superimposed sheets in contact with the adjacent glass plate, a winding up roller below a roller of each set of rollers for the exposed sensitive sheet to wind on, a motor, a shaft at each end of the frame, means for operating the shafts from the motor, means for operating one of the apron rollers from each shaft, and means for operating the winding up rollers from one of the apron rollers of each set.

4. An artificial light printing machine, comprising a frame, electric lamps mounted thereon, outwardly curved glass plates arranged vertically on opposite sides of the said lamps for the superimposed sheets of tracing paper and sensitive paper to pass over the outer face of each glass plate, a single endless apron adjacent the outside of each glass plate, a set of rollers journaled in the frame adjacent to each glass plate and over which passes an endless apron to press the corresponding superimposed sheets in contact with the adjacent glass plate, a box for containing a roll of sensitive paper arranged adjacent to the upper roller of each set of rollers and having an outlet slit leading to the corresponding apron, a winding up roller below the lower roller of each set of rollers for the exposed sensitive sheet to wind on, a driving gear for driving the said apron rollers, and gearing between the winding up rollers and one of the apron rollers.

5. In an artificial light printing machine, a frame, a transparent plate, a source of artificial light adjacent to the plate, rollers mounted in the frame at one side of the plate, an apron on said rollers, a winding up roller for the exposed sensitive paper, mounted in the frame adjacent one of the apron rollers and geared therewith, a shaft mounted in the frame, means for operating one of the apron rollers from the shaft, a motor, and means for operating the shaft from the motor, said means including a speed governing device.

[Claim 6 not printed in the Gazette.]

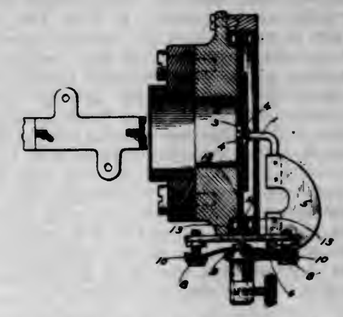
1,065,211. BOTTLE-STOPPER. WILLIAM T. BROOK, Arlington, Ga. Filed Aug. 3, 1912. Serial No. 713,064. (Cl. 215—20.)



1. The combination with a bottle neck of a stopper inserted therein, a yoke carried by the inner end of the stopper and projected within the neck, a frangible cross wire anchored within the neck and passed between the limbs of the yoke, and a displaceable spring latch carried by one arm of the yoke and normally lying within the path of the frangible wire the other limb of said yoke being formed with a notch for the engagement therein of the latch.

2. The combination with a bottle neck of a stopper inserted therein, a yoke carried by the inner end of the stopper and projected within the neck, a frangible cross wire anchored within the neck and passed between the limbs of the yoke, a displaceable spring latch carried by one arm of the yoke and normally lying within the path of the frangible wire the other limb of said yoke being formed with a notch for the engagement therein of the latch, and a knife edge formed on the latch for severing the frangible wire on extracting the stopper from the bottle neck.

1,065,212. PHONOGRAPH-REPRODUCER. ABRAHAM L. BURKE, Chicago, Ill., assignor to Walter A. Scott, trustee. Filed Apr. 4, 1913. Serial No. 758,827. (Cl. 181—11.)



1. In a phonograph, a diaphragm, and a needle arm, said needle arm comprising parts of metal and of celluloid, through which the vibrations are transmitted.

2. In a phonograph, a diaphragm, a needle arm, said needle arm comprising a metallic outer part secured to said diaphragm, a celluloid intermediate part secured to said outer part, and a metallic inner part secured to said intermediate part.

3. In a phonograph, a diaphragm, and a needle arm, said needle arm comprising a celluloid portion through which the vibrations are transmitted.

1,065,213. COAL-WASHER AND ORE-CONCENTRATOR. ALONZO C. CAMPBELL, Asheville, N. C. Filed June 5, 1912. Serial No. 701,788. (Cl. 83—88.)



1. A machine of the class described provided with a pan, and means for oscillating the pan and imparting percussive action to the same, the said pan being provided on its bottom with pockets having jig screens at the tops, and transversely-extending swinging riffles inclined forwardly and downwardly and fulcrumed at their rear elevated ends, the free forward ends of the swinging riffles resting on the said screens intermediate the ends thereof.

2. A machine of the class described provided with a pan, and means for oscillating the pan and imparting percussive action to the same, the said pan being provided on its bottom with pockets having jig screens at the tops, the forward end of each of the pockets being in the form of a barrier, and transversely-extending swinging riffles inclined forwardly and downwardly and fulcrumed at their rear elevated ends, the free forward ends of the swinging riffles resting on the said screens intermediate the ends thereof.

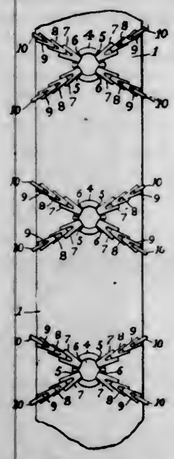
3. A machine of the class described provided with a pan, and means for oscillating the pan and imparting percussive action to the same, the said pan being provided on its bottom with pockets having jig screens at the tops, the bottoms of the pockets and their overlying screens being inclined forwardly and downwardly and the forward end of each pocket being in the form of a barrier, and transversely-extending swinging riffles inclined forwardly and downwardly and fulcrumed at their rear elevated ends, the free forward ends of the swinging riffles resting on the said screens intermediate the ends thereof.

4. A machine of the class described provided with a pan and means for oscillating the pan and imparting percussive action to the same, the said pan being provided on its bottom with pockets having jig screens at the tops, the bottom of the head pocket having an approximately horizontal bottom and the screen of this head pocket being inclined rearwardly and downwardly, and the bottoms of the remaining pockets and the overlying screens of these pockets being inclined forwardly and downwardly, the forward ends of the several pockets being in the form of transverse barriers having openings, and transversely-extending swinging riffles inclined forwardly and downwardly and fulcrumed at their rear elevated ends, the free forward ends of the swinging riffles resting on the said screens intermediate the ends thereof.

5. A machine of the class described provided with a pan and means for oscillating the pan and imparting percussive action to the same, the said pan being provided on its bottom with pockets having jig screens at the tops, transversely-extending swinging riffles inclined forwardly and downwardly and fulcrumed at their rear elevated ends, the free forward ends of the swinging riffles resting on the said screens intermediate the ends thereof, the riffles being supported by aid of side rods, said side rods having rear ends terminating in eyes, and pivots secured to the sides of the pan and engaged by the said eyes.

[Claims 6 to 9 not printed in the Gazette.]

1,065,214. CHAIN MAT FOR RESILIENT TIRES. MAURICE A. CARTER, Granville, N. Y., assignor to The Walker Tire Chain Company, Toledo, Ohio. Filed Nov. 7, 1912. Serial No. 730,004. (Cl. 152—14.)

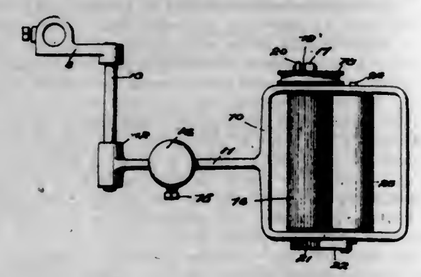


1. A chain mat for resilient tires comprising side chains, tread pieces presenting closed open-centered outlines to the tire, and securing chains for each tread piece secured to either side chain at remote points and to each tread piece at fixed locations.

2. A chain mat for resilient tires comprising side chains, ring shaped tread pieces having opposite portions thereof reduced to provide two pairs of anchor seats, the members of each pair of seats being arranged in spaced relation, and securing chains having one of their ends fixed to said seats to prevent movement on the tread pieces and their other ends connected to the side chains at remote locations.

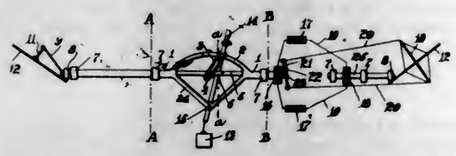
3. A chain mat for resilient tires comprising side chains, tread pieces presenting closed open-centered outlines to the tire, and securing chains formed of flat links for each tread piece secured to either side chain at remote points and to each tread piece at fixed locations.

1,065,215. WEB-TAKE-UP DEVICE FOR KNITTING-MACHINES. WILLIAM H. CHILDREY, Haw River, N. C. Filed Sept. 12, 1912. Serial No. 720,042. (Cl. 66—9.)



The combination with the operating shaft of a knitting machine, of a web take-up device comprising a friction roller to engage the web and provided with stub shafts at its opposite ends, a frame within which the stud shafts of said roller are mounted, a band wheel loosely mounted upon one of the stub shafts, a pin projecting from the outer face of the band wheel and extending in the longitudinal plane of said roller, a pin transversely disposed through one of the stub shafts and extending at right angles to the pin projecting from said band wheel, the pin in said stub shaft adapted to engage said first mentioned pin when said roller is rotated, and a driving connection between said band wheel and the operating shaft whereby the roller is rotated during the rotation of the operating shaft, but such rotation of the roller is discontinued when the rotary movement of said shaft is converted into an oscillatory movement.

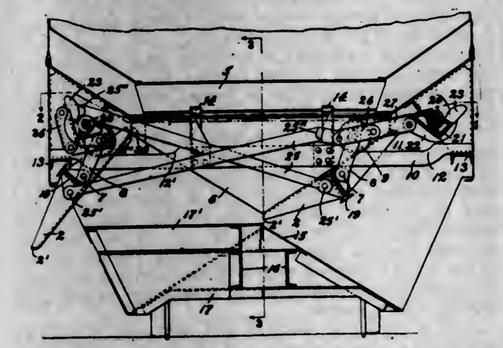
1,065,216. REGULATING DEVICE. JULIUS C. CHRISTIANSEN, New York, N. Y. Filed Dec. 14, 1911. Serial No. 665,673. (Cl. 244—29.)



1. In combination concentric members, the one rotatable and the other movable longitudinally, a cross bar attached to the rotatable member, a swinging member pivotally connected to the cross bar, connecting means between the swinging member and the longitudinally movable member, an operating lever having connection with the two members to effect independent or simultaneous movement thereof, and means for securing the operating lever in the adjusted position.

2. In combination concentric members, the one being rotatable and the other movable longitudinally, an operating lever having connection with such members and adapted to move them independently of each other, a second shaft rotatably mounted, a member hingedly connected to the second shaft, connecting means between the second shaft and the before mentioned rotatable member for causing both to turn together, a lever connected with the longitudinally movable member, and connecting means between such lever and the member hingedly connected to the before mentioned second shaft.

1,065,217. DUMP-CAR. CHARLES H. CLARK, Crafton, Pa., assignor to Clark Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Apr. 26, 1912. Serial No. 693,378. (Cl. 105—185.)



1. A dump car having a bottom discharge opening, two doors adapted respectively to open toward opposite sides of the discharge opening, two door operating mechanisms located at opposite sides of the discharge opening with a door adapted to open toward each of said mechanisms, and connections between each door actuating mechanism and the door at the side of the discharge opening opposite such mechanism.

2. A dump car having a bottom discharge opening, two doors adapted respectively to open toward opposite sides of the discharge opening, independently operating door actuating means at opposite sides of the opening, and connecting devices between the respective door operating means and doors, the door which opens toward one side of the discharge opening being connected to the operating mechanism located at the opposite side of the opening.

3. A dump car having a bottom discharge opening, depending V-shaped plates at opposite ends of the opening, opposite doors adapted to close against said plates and open toward opposite sides of the opening, door operating mechanisms located at opposite sides of the discharge opening, and connecting devices interposed between each mechanism and the door which opens toward that side of the discharge opening opposite such mechanism.

4. A dump car having a bottom discharge opening, a pair of doors for said opening adapted respectively to open toward opposite sides of the car, door operating mechanisms located at opposite sides of the car outwardly from the respective doors, and operative connections between each door operating mechanism and the door which opens away from such mechanism.

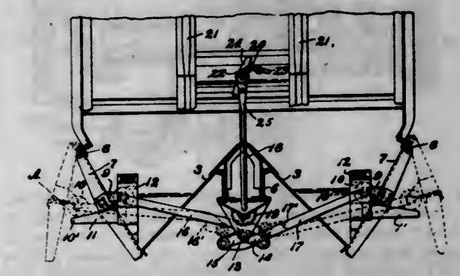
5. A dump car having a bottom discharge opening, a pair of doors for said opening adapted to close together at the center line of the car and open respectively toward opposite sides thereof, door operating mechanisms located at opposite sides of the car outwardly from the respective doors, and operative connections between each door operating mechanism and the door which opens away from such mechanism.

[Claims 6 to 27 not printed in the Gazette.]

1,065,218. SIDE-DUMP CAR. CHARLES H. CLARK, Crafton, Pa., assignor to Clark Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Aug. 12, 1912. Serial No. 714,639. (Cl. 105—186.)

1. The combination of a dump car having a discharge opening, a door, links pivotally connected to the door and also pivotally connected to the car body above the discharge opening, tracks, rollers on the door movable on the tracks, an operating shaft extending longitudinally of the car inwardly from the discharge opening and provided with cranks, and arms connecting said cranks to the door.

2. The combination of a dump car having a discharge opening, a door, links pivotally connected to the door and also pivotally connected to the car body above the discharge opening, tracks, rollers on the door movable on the tracks, an operating shaft extending longitudinally of the car inwardly from the discharge opening and provided with cranks, and arms pivoted to said cranks and also pivotally connected to the door coincidentally with the roller axes.



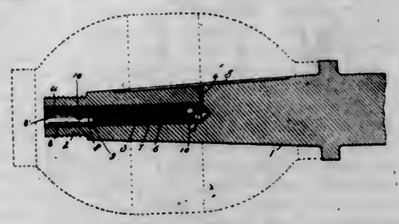
3. The combination of a dump car having a discharge opening, a door, links pivotally connected to the door and also pivotally connected to the car body above the discharge opening, tracks, rollers on the door movable on the tracks, an operating shaft extending longitudinally of the car inwardly from the discharge opening and provided with cranks, and arms connected at their outer ends to the doors and with the inner ends of the arms offset to extend partially around the operating shaft with said offset ends pivoted to the shaft cranks.

4. The combination of a dump car having discharge openings at opposite sides thereof, a door for each opening with each door having swinging connection with the car body above its opening, tracks, rollers on each door movable on the tracks, an operating shaft extending longitudinally of the car between the openings and provided with cranks, and arms extending from the shaft cranks to the doors.

5. The combination of a dump car having a discharge opening, a door mounted to swing at its top edge, tracks, rollers on the door for moving on the tracks, an operating shaft located inwardly from the opening and provided with cranks, arms connecting the cranks and door with the arms pivotally secured to the door, and means causing the shaft to hold the door in closed position.

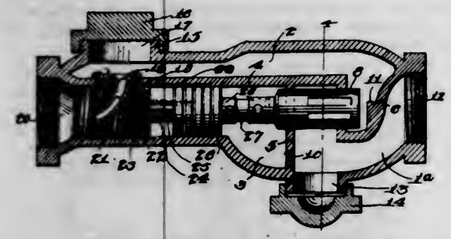
[Claims 6 to 11 not printed in the Gazette.]

1,065,219. LUBRICATOR. HUGH T. CLARK, Vallejo, Cal. Filed Sept. 16, 1911. Serial No. 649,644. (Cl. 64—27.)



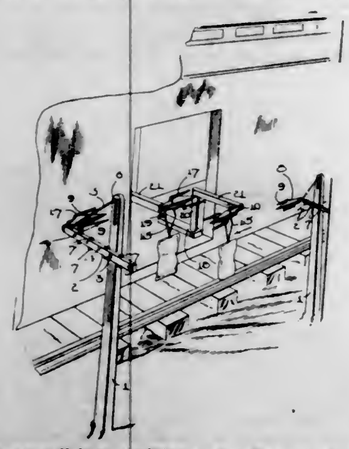
In combination with an axle having a central bore, a tubular casing in said bore, the said axle having a port communicating with the casing and with the outer face of the axle, a partition within the casing, a stem passing through the partition and having one of its ends provided with an eye, the opposite end of the stem being provided with a piston, a spring surrounding the stem and adapted to exert pressure between the partition and the piston, and a substantially J-shaped hook within the casing, the said eye on the stem, being adapted to be passed over the curved portion of the J-shaped hook and retained in the pocket formed thereby, so that said stem may be held against the tension of the spring.

1,065,220. IMPULSE-VALVE. JOSEPH D. CLAY, Enola, Pa. Filed Oct. 24, 1912. Serial No. 727,613. (Cl. 188—8.)



A valve of the class described comprising a casing, said casing comprising a primary compartment and an auxiliary compartment, a valve containing compartment adjacent said primary and auxiliary compartments, a valve slidably mounted within said primary compartment and said valve containing compartment, a partition separating said primary and auxiliary compartments and also separating said auxiliary compartment from said valve containing compartment and provided with a longitudinally extending groove upon its under face, said valve provided with a plunger head, spring means exerting a rearward pressure upon said plunger head, a guiding pin, a washer adjustably secured within said valve containing compartment and provided with a rearwardly extending sleeve, said pin working within said sleeve, said longitudinally extending groove being longer than the relative length of said plunger head for facilitating the passage of air through said groove when said plunger head is brought to a position centrally of said groove, said valve provided with longitudinally extending slots for normally facilitating the passage of air through said slots from said primary compartment to said auxiliary compartment, and a discharge funnel communicating with said auxiliary compartment and said valve containing compartment for allowing the passage of air in ordinary circumstances from said auxiliary compartment to the discharge end of said casing.

1,065,221. MAIL DELIVERING AND RECEIVING DEVICE. FRANKLIN CONAWAY, Harper, Kans. Filed Dec. 31, 1912. Serial No. 739,495. (Cl. 105—231.)



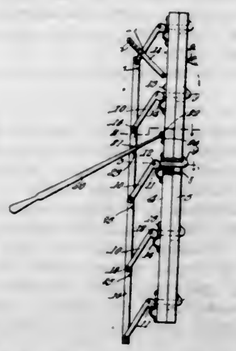
1. In a mail bag receiving and delivering device of the class described comprising a standard, a laterally swinging adjustable arm carried by said standard, adjustable mail bag receiving or delivering jaws carried upon the inner end of said laterally swinging arm, a car, a pivotally mounted crane carried within said car and extending beyond the sides thereof, and mail bag delivering or receiving jaws carried by said crane and adapted to co-act with the mail bag delivering or receiving jaws carried by said laterally swinging arm whereby mail sacks may be transferred to and from rapidly moving trains.

2. In a mail receiving and delivering device of the class described, standards, each of said standards provided with a laterally swinging adjustable arm, each of said arms provided with a plurality of apertures, each of said standards provided with a pivot member, the arm carried by each standard adapted to be moved whereby said pivot member may rest within any one of said apertures for adjusting the length of said laterally swinging arm, said arm provided with squared receiving eyes, means carried by one of said eyes for adjustably holding said arm at any desired height, mail bag receiving or delivering jaws carried by the inner end of said laterally swinging arm, cranes adapted to be carried by the car and pivotally mounted thereon, said cranes extending beyond the side of the car and provided with mail bag receiving or delivering jaws whereby mail may be transferred to and from rapidly moving trains.

3. In a mail bag receiving and delivering device, the combination with a plurality of standards, each of said standards provided with a laterally extending adjustably swinging arm, said arm provided upon its inner end with mail bag receiving or delivering jaws, said jaws comprising a diamond shaped finger member, spring arms positioned on each side of said finger member and carried thereby, said spring arms provided with a bowed pocket portion, the end of said pocket portion extending outwardly for forming a guiding means whereby a link carried by the mail sack will be guided into said pocket portion and held therein by means of said diamond shaped finger and said spring arms, a secondary crane adapted to be carried by the car and pivotally secured thereto, said last mentioned crane being provided with mail bag receiving and delivering jaws upon its outer end which are adapted to co-act with the mail bag receiving and delivering jaws carried by said swinging arm.

4. In a mail bag receiving and delivering device, the combination with a plurality of standards, each of said standards provided with a laterally swinging arm, means for adjusting the height of said arm, said arm provided upon its inner end with mail bag receiving or delivering jaws, secondary crane members adapted to be carried by the car and pivotally secured thereto, said crane provided with a base portion, an upright carried by said base portion, said upright carrying a laterally extending arm upon its upper end, said arm extending beyond the side of the car and provided upon its outer end with mail bag receiving and delivering jaws which are adapted to co-act with the mail bag receiving and delivering jaws carried by said laterally swinging arm.

1,065,222. WIRE-CLAMP. JOHN M. CONLEY, Golconda, Ill. Filed Sept. 26, 1912. Serial No. 722,550. (Cl. 39—53.)



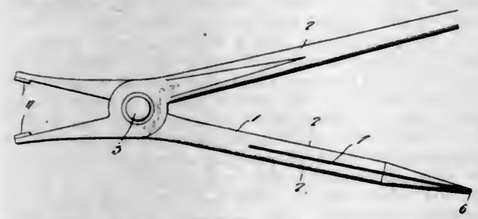
1. A clamp embodying two clamping bars, a series of members slidable through one bar and engageable with the other, a lever pivoted to the outer end of each of the said members and having an eccentric engaging the former bar, an actuating bar pivoted to the free ends of the levers, and a stay pivoted to the former bar and adjustably attachable to one of the said levers.

2. A clamp embodying two clamping bars, a series of bearing plates secured to the outer face of one bar and each having an outstruck corrugation, a hook slidable through each plate above the corrugation, and through the said bar to engage the other bar, a lever pivoted to the outer end of each hook and having an eccentric bearing against the corresponding corrugation, and an actuating bar pivoted to the free ends of the levers.

3. A clamp embodying two clamping bars, one having a series of openings therethrough, a series of bearing plates secured to the outer face of the other bar and each having an outstruck corrugation, a hook slidable through each bearing plate above the corrugation and through the said bar, the hooks being adapted to engage through the said openings of the former bar, a pair of levers pivoted to the sides of the outer end of each hook and having eccentrics bearing against the corresponding corrugation, and an actuating bar pivoted between the free ends of the respective levers.

4. A clamp embodying two clamping bars, one having a series of openings therethrough, a series of bearing plates secured to the outer face of the other bar and each having an outstruck corrugation, a hook slidable through each bearing plate above the corrugation and through the said bar, the hooks being adapted to engage through the said openings of the former bar, a pair of levers pivoted to the sides of the outer end of each hook and having eccentrics bearing against the corresponding corrugation, an actuating bar pivoted between the free ends of the respective levers, a loop secured on the latter bar, a pin carried by the actuating bar, a handle having a fork adapted to straddle the actuating bar and seat on the said pin, the ends of the fork having hooks to engage the said loop, and a stay pivoted to the latter clamper bar and adjustably attachable with one of the said levers.

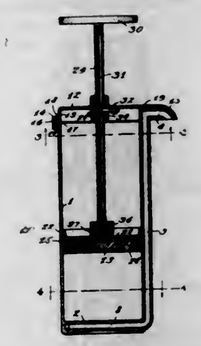
1,065,223. TINNER'S TOOL. THOMAS LEO CONROY, McLean, Ill. Filed Mar. 29, 1912. Serial No. 687,169. (Cl. 81—15.)



A bead spreading tool, comprising a cylindrical body, one end of which is tapered to a point forming a bead opening or spreading wedge, the cylindrical and tapered portions both being formed with a longitudinal groove which opens out at the extremity of the tapered portion.

1,065,224. NON-REFILLABLE RECEPTACLE. CLARENCE L. COX, Cleveland, Ohio. Filed Apr. 10, 1911. Serial No. 619,958. (Cl. 215—104.)

1. A non-refillable receptacle for liquids, comprising, in combination, a container having a bore of uniform cross section and a closed end and a discharge duct communicating with said closed end, a cover member irremovably secured to the other end of said container and having a threaded aperture therethrough, a piston slidably mounted in said container and closely fitting therewithin, a threaded push rod adapted to be introduced through said aperture and to advance said piston so as to eject the liquid, said push rod having a longitudinal groove in its side, and a pawl pivoted to the inner surface of said cover member and adapted to coöperate with said groove for preventing the withdrawal of said push rod and the rearward movement of said piston.



2. A non-refillable receptacle for liquids, comprising, in combination, a container having a bore of uniform cross section and a closed end and a laterally projecting discharge spout adjacent the other end, said discharge spout communicating with the interior of said container by means of a duct formed in the wall thereof and opening thereinto adjacent its closed end, a cover member secured to said other end of said container and having a laterally projecting shield overlying said spout and protecting the same, and a piston slidably mounted in said container and closely engaging the walls thereof and adapted when advanced to eject liquid through said discharge spout.

3. A receptacle for liquids, comprising, in combination, a container having a bore of uniform cross section and a closed end and a discharge duct communicating with said closed end, a cover member irremovably secured to the other end of said container and having an inwardly projecting externally threaded boss, said boss having a perforation therethrough, an impervious disk in said container and making tight contact with the walls thereof, a push plate between said cover and disk and adapted to press said disk forwardly, said plate being rotatable in said container and having an axial internally threaded recess adapted to engage said boss, and a member adapted to be inserted through said perforation to unscrew said plate from said boss and to advance the same so as to press said disk forwardly and eject the liquid through said discharge duct.

4. A receptacle for liquids, comprising, in combination, a container having a bore of uniform cross section and a closed end and a discharge duct communicating with said closed end, a cover member irremovably secured to the other end of said container and having an externally threaded internal axial boss, said boss having a threaded perforation therethrough, a piston in said container and closely fitting against the walls thereof and having an axial internally threaded recess adapted to engage said boss and also having a recess of substantially the same size as the perforation through said boss and having internal threads of the same pitch as the threads in said perforation, and a threaded member adapted to be introduced through said perforation and to engage the piston for unscrewing the same from said boss and for advancing the same so as to eject the liquid through said discharge duct.

5. A receptacle for liquids, comprising, in combination, a cylindrical container having a closed end and a discharge duct communicating with said closed end, a cover member irremovably secured to the other end of said container and having an externally threaded internal axial boss, said boss having a perforation therethrough, a piston in said container and closely fitting against the walls thereof and having an axial internally threaded recess adapted to engage said boss, and a member adapted to be introduced through said perforation and to engage the piston for unscrewing the same from said boss and for advancing the same so as to eject the liquid through said discharge duct.

[Claim 6 not printed in the Gazette.]

1,065,225. DEEP-WELL PUMP. WILLIAM STANTON CUNNINGHAM, Springfield, Mo. Filed Dec. 14, 1912. Serial No. 736,786. (Cl. 103—70.)



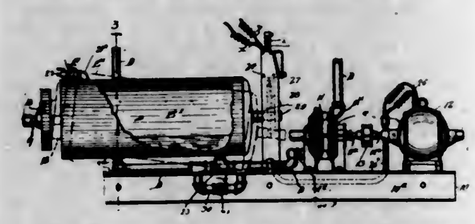
1. A fluid pumping apparatus comprising a pump delivery pipe, a cylinder having contracted ends suspended from said delivery pipe, a valve seat positioned in the lower contraction of said cylinder, a removable cylindrical unit positioned in said cylinder, means on said cylindrical unit co-acting with the upper contracted end of said cylinder and said valve seat in the lower contracted end of same and thereby keeping said cylindrical unit concentric within said cylinder, a predetermined voluminal clearance defined by said cylinder and cylindrical unit, and closed at the extremities by the above-mentioned means on said removable unit, a reciprocating plunger within said removable unit, and inlet and outlet valves associated with said removable unit and plunger and co-acting with said valve seat in the lower contracted end of said cylinder.

2. A fluid pumping apparatus comprising a pump delivery pipe, a cylinder suspended from said delivery pipe having a foot valve seat positioned in its lower end, a removable cylindrical unit positioned in said cylinder, means on said cylindrical unit, co-acting with the upper end of said cylinder and with the said foot valve in same, thereby defining a voluminal clearance closed at its extremities by said means on said removable unit, a reciprocating plunger within said removable unit, and inlet and outlet valves associated with said removable unit and plunger and co-acting with said foot valve in said cylinder.

3. A pump comprising a pump delivery pipe, a cylinder suspended from said delivery pipe and a foot valve fitting at its lower end, a removable unit having at its lower end a removable seat on the said foot valve fitting and having a head at its upper end fitting liquid tight in the upper end of the mentioned cylinder, said removable unit having a body constituting a cylinder, forming with the first-mentioned cylinder a working barrel, there being a clearance space between the two cylinders having an inlet thereto through the mentioned foot valve fitting, a hollow plunger in the cylinder of the removable unit dividing said cylinder into upper and lower chambers, a hollow pump rod carrying said plunger and having an outlet to the delivery pipe above the working barrel, the above mentioned member of the unit forming a delivery pipe leading through the foot valve fitting of the outer cylinder to the lower chamber of the inner cylinder, a valve in the hollow plunger commanding the passage from the lower chamber through the hollow plunger and pump rod, the upper chamber of the inner cylinder communicating with the said mentioned clearance space and having a valve outlet passage through the said head of the removable unit into the delivery pipe independently of the hollow plunger rod.

4. A pumping apparatus comprising a pump delivery pipe, a cylinder suspended at the foot of said pipe, a removable unit positioned in said cylinder and comprising a cylinder concentrically positioned in said first cylinder and defining a clearance space between said cylinders, the upper end of said clearance space being closed, a plunger in the inner cylinder, dividing same into upper and lower chambers, means establishing communication between the upper chamber and the said clearance space, said cylinders constituting the working barrel, there being a liquid passage that leads from below of said working barrel into the lower chamber of the inner cylinder, through the plunger up into the said delivery pipe, and another independent liquid passage also leading from below the working barrel into the clearance space through the means in the upper chamber of the inner cylinder and up into the delivery pipe, and valves automatically controlling these passages.

1,065,226. STEAM-HEATING SYSTEM. AUGUSTUS C. DURDIN, Jr., Chicago, Ill., assignor to Chicago Pump Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 21, 1910. Serial No. 593,326. (Cl. 103—86.)



1. The combination of an oscillatory counter-balanced receiver adapted for communication with the return pipe of a steam heating plant and arranged to be moved from one position to another by the accumulation of water therein above a predetermined limit, said receiver having an air vent controlled by a check valve opening toward the outer atmosphere, pumping mechanism, the intake of which communicates with said receiver, said pumping mechanism operating to intermittently empty said receiver, and a controlling device actuated by the receiver for starting and stopping said pumping mechanism.

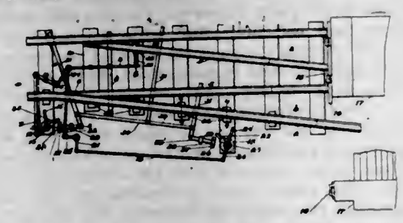
2. The combination with a counterbalanced oscillatory receiver having an air vent and a check valve therefor opening out to the atmosphere, said receiver being adapted for connection with the return pipe of a steam heating plant and being arranged to be moved from one position to another by the accumulation of water therein above a predetermined limit, of pumping mechanism, the intake of which communicates with said receiver through a part of said return pipe, a check valve opening toward the pumping mechanism, and interposed in the return pipe between the receiver and pumping mechanism, and a controlling device actuated by the receiver for starting and stopping said pumping mechanism.

3. The combination of an oscillatory counterbalanced receiver, having an outwardly opening air vent and arranged to be moved from one position to another by the accumulation of water therein beyond a predetermined limit, a return pipe communicating with said receiver through a branch, an intermittently operating pump communicating with said return pipe, and operating to empty the receiver, and a controlling device actuated by said receiver for starting and stopping said pump; said return pipe having check valves opening toward the pump and located on each side of its point of communication with the receiver, said return pipe having also a valve controlled bypass around the check valve between the receiver and pump.

4. The combination of a receiver, arranged to receive water of condensation, and having an air vent controlled by an outwardly opening check valve, a return pipe communicating with said receiver, and having two sections out of direct communication with each other, one section continuously opening directly into said receiver, and arranged to deliver water to the same and the other section continuously opening directly out from the receiver and arranged to conduct water away therefrom, pumping mechanism interposed in the second named section of the return pipe and operating to intermittently empty said receiver, and controlling mechanism actuated by the rise and fall of water in said receiver for starting and stopping said pumping mechanism.

5. The combination with a receiver, arranged to receive water of condensation, and having an air vent controlled by an outwardly opening check valve, a return pipe communicating with said receiver, and having a section for delivering water to said receiver and a section for conducting water away from said receiver, pumping mechanism interposed in the second named section of said return pipe and operating to intermittently empty said receiver, said pumping mechanism having associated therewith a check valve opening away from the receiver, a valve controlled bypass included in the return pipe and extending around said check valve, and controlling mechanism actuated by the rise and fall of the water in the receiver for starting and stopping the pumping mechanism.

1,065,227. SWITCH-THROWING DEVICE. JAMES A. EASON, Calhoun City, Miss. Filed Nov. 22, 1911. Serial No. 661,771. (Cl. 104—77.)



1. In a switch operating mechanism, the combination with a member projecting from a car; of movable switch points, mechanism for throwing switch points and arranged to be operated by the member projecting from the car, yieldingly supported switch member, and keepers connected to the rail elements and movable into position to engage with the operating mechanism after the same has been operated by the member projecting from the car.

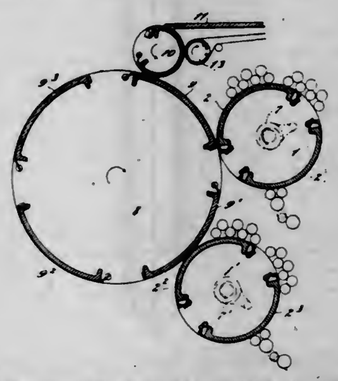
2. In a switch operating mechanism, the combination with a member projecting from a car; of movable switch points, mechanism for throwing switch points and arranged to be operated by the member projecting from the car, yieldingly supported switch member, pivoted keepers, and means connected to the rail members for moving the keepers into engagement with the throwing mechanism after the latter has been operated by the member projecting from the car.

1,065,228. ROTARY PRINTING-MACHINE. THOMAS FRANK ELSWORTH, Leeds, England. Filed Apr. 30, 1913. Serial No. 764,555. (Cl. 101—100.)

1. A rotary printing machine comprising a rotary impression cylinder, a rotary transfer cylinder having a plurality of printing surfaces adapted for printing contact therewith, a plurality of rotary design cylinders adapted to hold design surfaces equal in number to the number of printing surfaces, and means for bodily moving said design cylinders for impressing each design surface upon a surface of the transfer cylinder, respectively.

2. A rotary printing machine comprising a rotary impression cylinder, a rotary transfer cylinder having a plurality of printing surfaces in printing contact therewith, a plurality of rotary design cylinders each having a design surface, and means for bodily moving said design cylinders toward and away from said transfer cylinder to impress each design surface upon a surface of the transfer cylinder, respectively.

3. A rotary printing machine comprising an impression cylinder, a transfer cylinder having a plurality of printing surfaces on its periphery adapted for printing contact with said impression cylinder, a plurality of rotary design surfaces each movable toward and away from the peripheral surface of said transfer cylinder, and means for moving each of said design surfaces into contact with one of said printing surfaces, respectively, whereby each design surface is impressed on a surface of the cylinder without super-printing.



4. A rotary printing machine comprising a continuously rotating first cylinder, a plurality of printing surfaces on its periphery, a plurality of continuously rotating cylinders of different diameter than the first cylinder, printing surfaces on said second named cylinders adapted for contact with the surfaces of the first cylinder, a continuously rotating third cylinder of a diameter which is a submultiple of that of the first cylinder, a single printing surface on said third cylinder, and means carried by the third cylinder for retaining a sheet to be printed when fed thereto.

5. A rotary printing machine comprising a continuously rotating transfer cylinder, a plurality of printing surfaces on its periphery, a corresponding number of continuously rotating design cylinders each of a diameter which is a submultiple of that of the transfer cylinder, the printing surfaces on said design cylinders being equal in number to those on the transfer cylinder, a continuously rotating third cylinder of a diameter which is a submultiple of that of the transfer cylinder, a single printing surface on said third cylinder, and means carried by the third cylinder for retaining a sheet to be printed when fed thereto.

[Claims 6 and 7 not printed in the Gazette.]

1,065,229. BORING OR EXCAVATING APPARATUS. ELMER F. ESTES, Lincoln, Nebr. Filed Aug. 31, 1912. Serial No. 718,075. (Cl. 61—41.)

1. A hydraulic excavating apparatus comprising a conductor, and an excavating nozzle carried by said conductor and provided with a spur for detachably engaging the object to be embedded.

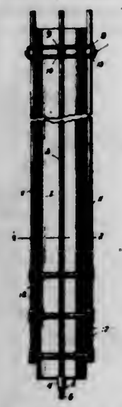
2. A hydraulic excavating apparatus comprising a conductor, an excavating nozzle carried by said conductor and provided with a spur for detachably engaging the object to be embedded, and means auxiliary to said spur for externally and detachably connecting the conductor to said object.

3. A hydraulic excavator comprising a conductor adapted to be arranged exteriorly of and parallel with a pile or other object to be embedded, a nozzle carried by said conductor and provided with means for detachably retaining and centering it upon the object, and means for detachably securing said conductor to the object.

4. A hydraulic excavator comprising a conductor adapted to be arranged exteriorly of and parallel with a pile or other object to be embedded, a nozzle carried by said conductor and provided with means for detaining and centering it upon an object, a retaining element adjustably mounted upon the conductor, and fastening means for cooperation therewith to secure the conductor to said object.

5. A hydraulic excavator comprising a conductor adapted to be arranged exteriorly of and parallel with a pile or

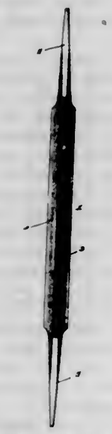
other object to be embedded, a nozzle carried by said conductor and provided with means for retaining and centering it upon an object, a sleeve adjustable along the con-



ductor and provided with fastening means, and a lashing for coöperation with said sleeve to secure the conductor to the object.

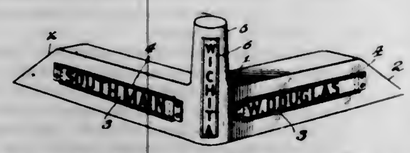
[Claims 6 to 10 not printed in the Gazette.]

1,065,230. BEARING-SCRAPER. CHARLES L. FAWCETT, Smith Center, Kans. Filed July 10, 1912. Serial No. 708,664. (Cl. 29—95.)



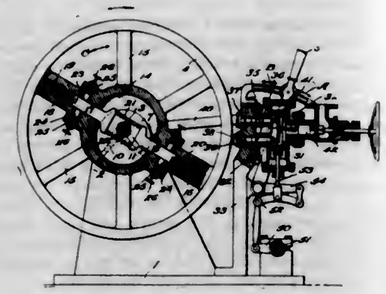
A bearing scraper having the form of an isosceles triangle in cross section and having the three faces thereof of different widths, each hollow ground and bounded at opposite sides by parallel cutting edges, and shanks extending longitudinally beyond the opposite extremities of the body.

1,065,231. STREET-MARKER. WILLIAM P. FINGER, Wichita, Kans. Filed Oct. 31, 1911. Serial No. 657,797. (Cl. 40—125.)



A street marker comprising a pair of integral diverging legs having their outer terminals downwardly inclined, an integral supporting post rising from the junction of said legs and panels carried by the legs and post, said panels having street indicating indicia.

1,065,232. ROTARY ENGINE. CESARE FRANCO, New York, N. Y. Filed Oct. 25, 1912. Serial No. 727,766. (Cl. 121—65.)

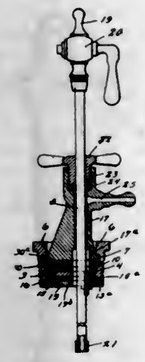


1. In a rotary engine having a suitable base, journal bearings provided upon said base, a stationary shaft suitably supported in said bearings, an eccentrically held cylindrical head rigidly mounted upon the shaft, steam ports in the ends of the shaft and steam ports in said eccentric cylindrical head communicating with the ports in the shaft, a rotor having a cylindrical chamber adapted to admit said cylindrical head mounted upon the shaft, reciprocal pistons upon the rotor adapted to contact with the surface of the eccentric head, suitable packing plates yieldingly impinging the pistons, a steam chest and valve chamber having a suitable reciprocal valve suitably seated therein and ports connected with the steam ports of the shaft by radial steam pipes, in combination with means for controlling the valve and reversing the engine, comprising a gear rigidly secured upon the rotor and meshing with a gear wheel held upon a bearing provided upon the base adapted to rotate an eccentric having a drive rod thereon, the drive rod being connected with the arm of a crank shaft, said arm being connected by a link with the arm of a lever adapted for reciprocating the valve of the engine, said lever having its fulcrum connected by a link with the arm of a hand lever, said hand lever being pivotally mounted upon the frame and having one arm suitably supported upon a segmental guide, substantially as and for the purposes set forth.

2. In a rotary engine having a suitable base, journal bearings provided in said base, a shaft rigidly held in said bearings, an eccentrically held cylindrical head rigidly mounted upon the shaft, a rotor having a cylindrical chamber centrally disposed therein adapted for admitting the cylindrical head, spring controlled reciprocal pistons adapted to contact with the surface of the head with suitable inlet and outlet ports for steam, and a steam chest having a valve seat therein, a valve seated in said seat and a rod provided upon said valve, said rod extending through the wall of the valve chamber, the combination of suitable means for controlling the admission of steam to the engine whereby the engine may be reversed, comprising a rocking lever having its central portion pivotally connected to the end of said valve rod, its fulcrum end connected by a link to one arm of a hand lever pivotally mounted upon the base of the engine, said lever having its other arm adjustably secured to a segment supported upon the wall of the steam chest and the opposite arm of the rocking lever being secured by a link to the arm of an eccentrically controlled crank shaft, whereby the valve is reciprocated, said hand lever serving as means for shifting the position of the reciprocating valve whereby the rotary movement of the engine may be reversed.

3. In a rotary engine having a suitable base, journal bearings, shaft, rotor and pistons adapted to propel the rotor, suitable steam pipes, and inlet and outlet ports communicating with the steam pipes, and a steam chest having a suitable supply pipe connected therewith, a suitable valve for admitting steam from the supply pipe and a suitable exhaust pipe, the combination of a reciprocable valve disposed within a valve seat provided within the steam chest, said valve having a valve rod rigidly secured to the valve and disposed through suitable bearings in the wall of said steam chest, said valve being adapted for reciprocal movement whereby the inlet and outlet ports of the steam chest communicating with the steam pipes communicating with the piston chamber and the rotor, are alternately opened and closed, said valve having a chamber provided in the central portion thereof whereby communication may be established with the exhaust pipe and either one of the ports communicating with the pipes leading to the chamber of the rotor and pistons, said valve and ports being so disposed within the valve seat that the supply pipe is in communication with the other of said ports at such times whereby the steam may be admitted to the engine through either port, said valve rod being suitably connected with a rocking lever adapted for reciprocating the valve, said lever being connected by a link to the end of one arm of an adjustable hand lever whereby the position of the rocking lever may be changed as required to reverse the movement of the engine, substantially as and for the purposes set forth.

1,065,233. KEG-TAPPING DEVICE. FRIEDRICK GITTINGER, Jersey City Heights, N. J. Filed Nov. 11, 1912. Serial No. 730,757. (Cl. 137—27.)



1. In a tapping device for kegs and barrels, a bung member adapted to engage the keg or barrel, an integral web in said bung member intermediate of the ends thereof and provided with a delivery opening and segmental slots, a valve member revolubly mounted on said web and comprising plates located on the two sides thereof, one of said plates being provided with pins engaging the slots in the web, the other of said plates being secured to said pins, said plates being formed with alined openings that are adapted to be moved into and out of alinement with the opening in the web, the uppermost plate being provided with sockets, and a nozzle member having pins adapted to engage said sockets when said nozzle member is in engagement with the bung member to rotate said valve member, said nozzle member provided with a longitudinal opening, a delivery pipe extending through said opening in the nozzle member and adapted to be inserted through the openings in the web and valve members, and into the keg or barrel, an air vent nozzle formed on said nozzle member and communicating with said longitudinal opening in the nozzle, and the diameter of the opening in said nozzle being greater than the diameter of the said delivery pipe so as to allow the air to pass into said barrel or keg.

2. In a tapping device for kegs and barrels, a bung member adapted to engage the keg or barrel, an integral web in said bung member intermediate of the ends thereof and provided with a delivery opening and segmental slots, a valve member revolubly mounted on said web and comprising plates located on the two sides thereof, said plates being secured together for simultaneous revolution over the segmental slots in the web, and provided with alined openings adapted to move into and out of alinement with the opening in the web, and a nozzle member adapted to coöperate with the bung member and provided with means to rotate the valve member aforesaid, the bung member being provided with interior flanges having their adjacent ends spaced apart and their lower edges inclined, and the nozzle member provided with lugs adapted to enter between the ends of said flanges and to seat under the lower edge thereof, and said nozzle member provided with a longitudinal opening terminating in an enlarged opening at the lower terminal of said nozzle member, a delivery pipe having a wear ring upon its inner terminal, and inserted through said longitudinal opening, and said wear ring adapted to fit within the enlarged opening at the lower terminal of said delivery pipe, and said delivery pipe adapted to extend through the opening in the valve members and into the keg or barrel.

3. A tapping device for kegs and barrels comprising a cylindrical bung member adapted to be removably secured in the keg or barrel, a web within said bung member intermediate of its ends, said web being provided with an opening and segmental slots, a plate rotatably mounted within said bung member and having an opening adapted to aline at times with the opening in the web, pins mounted on said plate and slidably engaging said segmental slots, the upper surface of said plate being provided with sockets, a plate mounted on the lower ends of said pins and having an opening in alinement with the opening in the first mentioned plate, a packing gasket between the web and the last mentioned plate and mounted on the pins aforesaid, said packing gasket being provided with an opening in alinement with the opening in the last mentioned plate, the upper terminal of said bung member having its inner portion provided with flanges, said flanges having their ends spaced apart and their lower edges inclined, a nozzle member adapted to coöperate with said bung member and having diametrically opposed lugs or projections adapted to enter between the ends of the flanges on the bung member aforesaid to engage the lower edges of said flanges, integral pins formed on the lower terminal of said nozzle member adapted to engage the sockets in the uppermost plate aforesaid, and a packing gasket mounted on the lower surface of said nozzle and adapted to seat upon said plate, said nozzle being formed with a delivery opening adapted to aline with the openings in the web and plates within the bung member aforesaid, and said nozzle member having a longitudinal opening formed therethrough, a delivery pipe mounted therein and adapted to extend through the openings in said valve members, and the web and packing members, and into the keg or barrel.

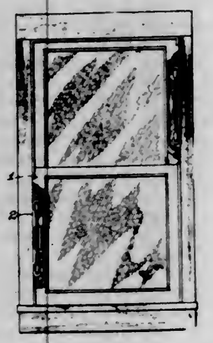
1,065,234. RESILIENT POSITIONING DEVICE FOR WINDOWS. JOHN B. GLOWACKI, Chicago, Ill. Filed July 5, 1912. Serial No. 707,756. (Cl. 189—74.)

1. In a device of the class described an attaching plate bent outwardly at a point near its center to afford a raised portion thereon, oppositely directed leaf springs secured upon the raised portion of the attaching plate, friction rollers journaled on the free ends of one of said leaf springs and normally forced outwardly by the same, and a fusible member positioned intermediate the attaching plate and the leaf springs.

2. A device of the class described embracing a back plate adapted to fit closely in a recess in the side rail of a sash and having a raised portion at a point near the center of the same, a fusible member, a plurality of leaf springs, friction rollers journaled thereon and forced outwardly thereby, a spacing member, and bolts extending through said spacing members, leaf springs, fusible member and attaching plate to securely bind the same together to afford a rigid construction.

3. A device of the class described embracing a back plate adapted to fit closely in a recess in the side rail of a sash and having a raised portion at a point near the center of

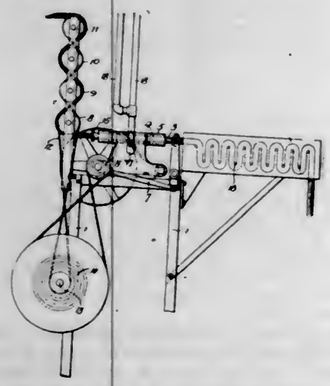
the same, a fusible member, a leaf spring, friction rollers journaled thereon and forced outwardly thereby, and means rigidly securing said leaf spring, fusible member and attaching plate together.



4. A device of the class described embracing a back plate, having a raised portion at a point near the center of the same, a fusible member, a plurality of leaf springs, friction rollers journaled thereon and forced outwardly thereby, a spacing member, and means rigidly securing said spacing member, leaf springs, fusible member and attaching plate together.

5. A device of the class described embracing a back plate, having a raised portion at a point near the center of the same, a plurality of leaf springs, a fusible spacing member disposed between the same and said raised portion, friction rollers journaled thereon and forced outwardly thereby, a spacing plate, and bolts extending through said spacing plate, leaf springs, fusible spacing member and attaching plate and binding the same together to afford a rigid construction.

1,065,235. APPARATUS FOR MAKING CHENILLE TRIMMING. LEON GOODMAN, Philadelphia, Pa., assignor to Isaac H. Goodman, Leon Goodman, and Joseph Hinlein, trading as Goodman Bros. & Hinlein, Philadelphia, Pa. Filed Jan. 9, 1912. Serial No. 670,192. (Cl. 28—7.)



1. The combination, in a machine for treating or transforming chenille, of means for feeding chenille, a plurality of elements for acting upon the chenille, one of said elements imparting tension thereto and the other element effecting an ironing operation, and means for imparting movement to one of said elements independently of the normal feed of the chenille.

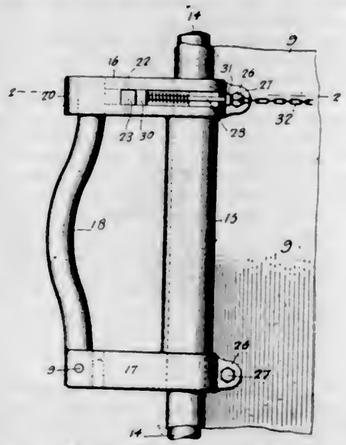
2. The combination, in a machine for treating or transforming chenille, of a frame, a chenille tension device, a tubular guideway for the chenille, means for heating the guideway, and means for reciprocating said guideway during the feed of the chenille.

3. In a machine for treating or transforming chenille, a tubular guideway having a flaring delivery end through which the chenille is passed, means for heating said guideway, and means for effecting movement relatively between said chenille and guideway.

4. The combination, in a machine for treating or transforming chenille, of means for feeding the chenille, a tubular guideway therefor, means for heating the latter, means for effecting movement relatively between said chenille and the tubular guideway independently of the normal feed of the chenille, and means for continuously drawing off the finished product from the tubular guideway.

5. The combination, in a machine for treating or transforming chenille, of a frame, tension means for the chenille, a tubular guideway through which the chenille is passed, means for heating the chenille while in said guideway, means for reciprocating said guideway during the feed of the chenille, and a plurality of tension or friction rolls for continuously drawing off the finished product from the tubular guideway and imparting the desired feed to the chenille.

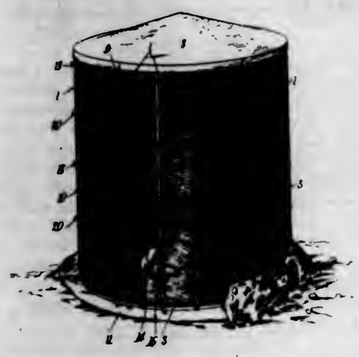
1,065,236. RELEASING DEVICE FOR CAR-CURTAINS. FRANK C. GOW and SAMUEL T. CLUTTER, Monett, Mo. Filed Feb. 16, 1912. Serial No. 677,992. (Cl. 105—266.)



1. The combination with a curtain adapted to be mounted on one end of a car, of a pole fastened in one end of said curtain, a hand-hold comprising a semi-cylindrical body receiving the said pole and having outwardly projecting ears, a trip handle pivoted in one of said ears, swinging clamps pivoted to the body and engageable with the pole for detachably mounting said body upon the curtain, a jaw pivoted to the other ear for normally engaging the trip handle and having a laterally extending nose, a sliding bolt mounted in said body and normally engaging said nose, and flexible means engaged with said bolt and adapted to be connected with the end of such car whereby on the separation of the end of another car the bolt will be retracted for disengaging the nose of the jaw to free the trip handle.

2. The combination with a curtain adapted to be mounted on one end of a car, of a pole fastened in one end of said curtain, a hand-hold comprising a semi-cylindrical body receiving the said pole and having outwardly projecting ears, a trip handle pivoted in one of said ears, swinging clamps pivoted to the body and engageable with the pole for detachably mounting said body upon the curtain, a jaw pivoted to the other ear for normally engaging the trip handle and having a laterally extending nose, a sliding bolt mounted in said body and normally engaging said nose, flexible means engaged with said bolt and adapted to be connected with the end of such car whereby on the separation of the end of another car the bolt will be retracted for disengaging the nose of the jaw to free the trip handle, and a stationary keeper fixed to the end of said adjacent car and engageable with the trip handle when in locked position.

1,065,237. GRAIN-BIN. JOHN TWEDDLE GRAHAM, Belfry, Mont. Filed Oct. 30, 1911. Serial No. 657,597. (Cl. 20—1.2.)



1. A storehouse of the kind described comprising a plurality of upright supports arranged in pairs, the members of each pair occupying inner and outer positions with respect to each other, said uprights being connected together at their lower ends by means of a hoop received between the members of said pairs, means forming the side walls of said storehouse, received between said pairs and supported in position thereby, and a flap of fabric, the inner edge of which extends inward and the outer edge of which is received between the lower ends of said uprights to form a closure for the bottom of said storehouse.

2. A storehouse of the kind described comprising a plurality of upright stays arranged in pairs, hoops connecting said pairs together at their upper and lower ends, means received between said stays forming the side walls of said storehouse, a fabric floor for said storehouse projecting beyond the periphery thereof, and a flap of fabric, the inner edge of which extends inward into said storehouse and rests upon said floor, and the outer edge of which is received between said stays to be secured in position, whereby, when the earth is heaped upon the outer edge of said fabric floor around said storehouse, access to the interior of the storehouse through the bottom from without will be closed.

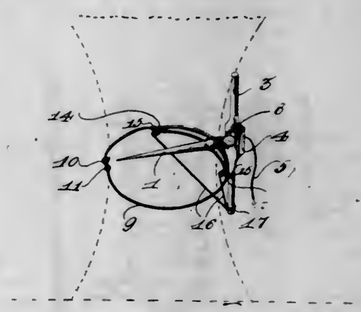
3. In a storehouse of the kind described, the combination of a plurality of upright stays, means received between said stays to form the side walls of said storehouse, hoops connecting said stays together at their upper and lower ends, and upright strips connecting the ends of said hoops together, said strips being received between a pair of said stays to form a tight joint for the overlapping ends of the cloth forming the side walls of the bin.

4. A storehouse of the kind described comprising a plurality of inner and outer stays arranged in pairs, hoops connecting said pairs together at their upper and lower ends and arranged between the same, means forming the side walls of said storehouse, received between said stays and supported thereby, upright strips joining the ends of said hoops together, said strips lying between a pair of said stays, the edges of said means forming the side walls of the storehouse being joined to said hoops and to said strips, and a plurality of bolts passing through said pair of stays and said strips to form a tight joint for the overlapping edges of the means forming the said side walls.

5. A storehouse of the kind described comprising a plurality of upright stays arranged in pairs, the members of each pair occupying inner and outer positions with respect to each other, means forming the side walls of said storehouse supported by said stays, and a flap of fabric, the inner edge of which extends inward and the outer edge of which is received between the lower ends of said stays to form a closure for the bottom of said storehouse.

[Claims 6 and 7 not printed in the Gazette.]

1,065,238. CORN-SHOCK COMPRESSOR. ALBERT M. GRINDER, Mount Horeb, Wis. Filed Dec. 31, 1912. Serial No. 739,501. (Cl. 100—31.)



1. In a device of the class described the combination with a spindle, a handle mounted upon said spindle, means carried by said spindle for encircling a shock for compressing the same, a frame carried by said spindle and adapted to be slid along the same and downward extending locking means carried by said frame for engaging said handle whereby the spindle will be held against rotation after the shock has been compressed.

2. In a device of the class described, the combination of a spindle, a handle mounted upon said spindle, means carried by said spindle for encircling a shock for compressing the same, a frame carried by said spindle, said frame comprising a pair of bowed arms, one of said arms provided with a centrally located loop whereby the frame is supported upon the spindle, said last mentioned arm provided at its end portion with a pair of eyes which terminate in a pair of guiding eyes, the means carried by said spindle for engaging said shock passing through said guiding eyes for holding the same in a central position upon the shock and downward extending locking means carried by said eyes for engaging said handle whereby said spindle is held against rotation after the shock has been compresesed

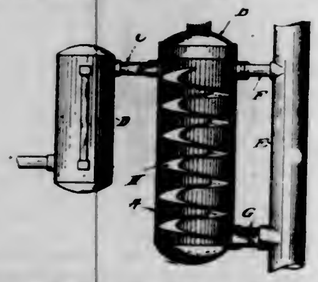
3. A shock compressor comprising a spindle, a handle carried by said spindle, a rope carried by said spindle and adapted to be passed around a shock whereby the shock may be compressed by rotating said spindle, a frame mounted upon said spindle, said frame comprising a pair of bowed arms, one of said arms provided with a centrally located loop whereby said frame is supported upon said spindle, said last mentioned arm provided at its end portion with a plurality of eye portions, said rope passing through said eye portions, said arms provided with a bowed portion whereby to prevent corn stalks from winding upon the spindle and at the same time forming a means for preventing said frame from rotation since said frame will conform to the contour of a shock, downwardly extending locking means carried by said eyes, said locking means comprising a pair of downwardly extending converging strands, said strands terminating in a laterally extending U-shaped yoke and said yoke adapted to fit upon said handle whereby said spindle will be held against rotation after the shock has been compressed.

4. A shock compressor comprising a spindle, a handle carried by said spindle, a frame, said frame comprising a body bowed throughout its entire length, said body provided with a central eye and with an eye at each end thereof, said central eye adapted to receive said spindle, and means carried by said end eyes for engaging said

handle for holding the same against rotation, said bowed body adapted to fit upon a shock for holding the same against rotation.

5. A shock compressor comprising a spindle, a handle carried thereby, means carried by said spindle for compressing a shock, a frame carried by said spindle adapted to engage a shock, a locking means carried by said frame, said locking means provided with a U-shaped yoke having inwardly bent ends, said yoke adapted to fit upon said handle for holding the same against rotation.

1,065,239. VAPORIZING DEVICE FOR LUBRICATORS. EZRA R. GUDEMAN, Pekin, and ALDO E. REYNOLDS and ROBERT E. WELKER, Peoria, Ill. Filed Feb. 24, 1911. Serial No. 610,591. (Cl. 184—55.)



1. In an oil vaporizing device the combination with a steam-pressure pipe, of a closed vessel having at its top and bottom an inlet and an outlet opening respectively connected with said pipe, and provided interiorly with a spirally arranged downwardly extending shelf-like member formed with the wall of said vessel and having a central vertical opening extending down through the same communicating with the upper and lower portions of the vessel, there being an opening in the top of the latter for the introduction of a lubricant, said member terminating at its upper end substantially at said opening, and at its lower end substantially at the outlet opening of the vessel at its bottom.

2. In combination with a steam-pressure pipe, of a vessel having openings communicating at its top and bottom with said pipe, a broad flat spirally arranged shelf-like member disposed in said vessel and lying against its wall, and having an opening extending vertically therethrough communicating with the upper and lower portions of the vessel, there being an opening in the top of said vessel for the introduction of a lubricant upon the member, said member terminating at one end substantially at the said opening and at its other end substantially at the opening at the bottom.

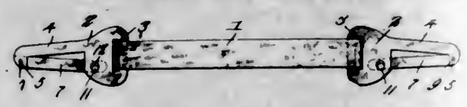
3. The combination with a steam-supply conduit, of a vessel communicating therewith, a spirally arranged member in said vessel adjacent its wall, and having an open passage at its center extending longitudinally through said vessel, said member having a broad substantially flat surface forming a continuous downwardly slanting shelf-like oil receiving part, the said passage substantially centrally thereof communicating with the upper and lower portions of the vessel, there being an opening in the wall of the vessel for the introduction of the oil to be vaporized and disposed above a portion of the said member for the deposit of oil thereon.

4. As a new article of manufacture, in an oil vaporizing device, a single casting comprising a closed vessel for confining steam under pressure provided with an inlet opening and an outlet opening for steam, and an inlet for oil opposite one of said openings, and a continuous spirally arranged portion at the wall of the vessel and provided with a central opening communicating with the closed interior of said vessel.

5. As a new article of manufacture, in an oil vaporizing device, a single casting comprising a closed vessel for confining steam under pressure provided with an inlet opening and an outlet opening for steam, and an inlet for oil and a continuous spirally arranged portion at the wall of the vessel and provided with a central opening communicating with the closed interior of said vessel.

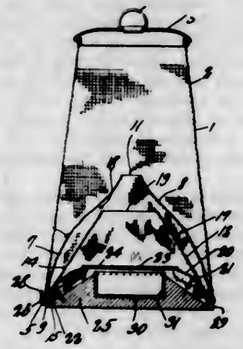
[Claim 6 not printed in the Gazette.]

1,065,240. CLASP. EDWARD L. GUNDLACH, St. Louis, Mo. Filed Sept. 22, 1909. Serial No. 518,896. (Cl. 24—264.)



A clasp for garment supporters comprising a base plate, a rigid shank integral with the base plate and projecting therefrom at an angle relatively to the longitudinal center line thereof, a rigid jaw member pivotally secured at one end to the free extremity of said shank and to one side thereof, said base plate being provided with an opening, and a headed stud carried by the free end of the jaw member and adapted to be disposed within said opening, the relative positions of the jaw member and shank forming a tapering slot, whereby the pressure of the material between said jaw member and shank will engage the head of the stud with the upper surface of the base plate to lock the jaw member with relation to the base.

1,065,241. FLY-TRAP. JAMES GUY, Paola, Kans. Filed Oct. 24, 1912. Serial No. 727,635. (Cl. 43—22.)



1. An insect trap comprising a receptacle; outer and intermediate conical leaders connected at their lower ends and frictionally held removably at their lower ends in contact with the lower end of the receptacle, the intermediate leader being of less height than the outer leader; a conical inner leader of less height than the intermediate leader, the inner leader being in frictional engagement at its lower end with the lower end of the intermediate leader; a frusto-conical base extended into the inner leader; and means for supporting all of the leaders upon the base and for spacing all of the leaders at their lower ends from the base.

2. An insect trap comprising a straight walled, conical, intermediate leader; a conical, outer leader located around the intermediate leader, the leaders defining a compartment, the wall of the outer leader being curved to bring the lower ends of the leaders into contact, and to bring the upper end of the wall of the intermediate leader close to the wall of the outer leader, thereby to define a reduced outlet for the compartment; a frusto-conical base; an inner leader located within the intermediate leader, the inner leader and the frusto-conical face of the base defining a compartment, the inner leader being curved to bring the upper end of the inner leader close to the upper end of the base and thereby to define a reduced outlet for the last specified compartment; a receptacle in which all of the leaders are inclosed; and means for maintaining the lower ends of the leaders in spaced relation to the base.

1,065,242. KNOCKDOWN CARPENTER'S SQUARE. FRED B. HARDSOCG, Ottumwa, Iowa. Filed Mar. 2, 1912. Serial No. 681,140. (Cl. 73—116.)



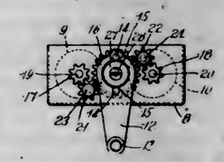
1. In a knock down carpenter's square, the combination of a blade having a tapering channel formed in one of its faces, the taper of the channel extending from side to side of the blade, and the side walls of the channel being undercut, a tongue, the end portion of the tongue tapering longitudinally thereof and having its side faces beveled to engage the undercut side walls of the channel of the blade, there being a notch formed in one side of the tapered portion of the tongue, and a locking member eccentrically mounted on the blade and eccentric to said notch when the tongue is seated in the channel of the blade and adapted to engage the notch of the tongue, whereby the rotation of the locking member causes the same to engage the notch of the tongue for the purpose of drawing the tapered portion thereof firmly into the channel of the blade and whereby a side pressure is exerted on the tapered portion of the tongue, substantially as described.

2. In a knock down carpenter's square, the combination of a blade having a tapered channel formed in one of its faces, the taper of the channel extending from side to side of the blade and the side walls of the channel being undercut, a tongue having a tapered end portion adapted to engage the tapered channel of the blade, the side edges of the tapered portion of the tongue being beveled to engage the undercut side walls of the channel, there being a notch formed in one side of the upper face of the tongue, and a locking member eccentrically mounted on the blade adjacent one side of the channel, said locking member being adapted to engage the notch of the tongue for locking purposes, and said locking member being eccentric to said notch when the tongue is seated in the channel of the blade and having a flattened portion lying substantially parallel to its major axis, whereby when the locking member is rotated to bring its major axis substantially parallel to the tongue said flattened portion will permit disengagement of the tongue from the channel of the blade, substantially as described.

1,065,243. STROPPING DEVICE. JOSEPH A. HARRINGTON, South Boston, Mass., assignor of one-half to Michael J. Lydon, Boston, Mass. Filed June 1, 1911. Serial No. 630,573. (Cl. 51—16.)

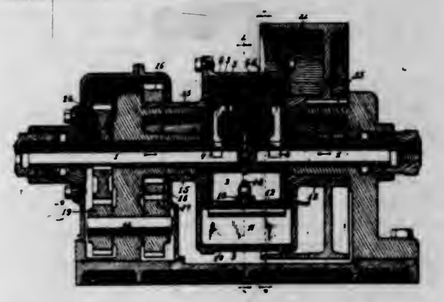
1. A stropping device having, in combination, a pair of journaled drums, a holder for a two-edged blade mounted to rock about an axis intermediate said drums and adapted to carry the opposite edges of said blade into and out of contact with said drums alternately, a rotary actuating element rotatably mounted upon said holder, means forming a slipping driving connection between said element and said holder and means forming a positive driving connection between said element and said drums.

2. A stropping device having, in combination, a pair of journaled drums, a holder for a two-edged blade mounted to rock about an axis intermediate said drums and adapted to carry the opposite edges of said blade into and out of contact with said drums alternately, means arranged to rotate about the axis of said holder adapted to impart a positive rotation to said drums and frictional driving means interposed between said rotating means and said holder adapted to impart a rocking motion to said holder, whereby said drums may be positively rotated and the opposite edges of said blade may be simultaneously held with a yielding pressure against the peripheries of said drums.



3. A stropping device having, in combination, a pair of journaled drums, a blade-holder mounted to rock about an axis between and located in the plane containing the axis of the said drums to carry the blade into and out of contact with said drums alternately, a wheel adapted to rotate about the axis of said holder having frictional rotary driving connection with said holder, manually operable driving means for said wheel and gearing connecting said wheel to said drums, said gearing including intermediate gears whereby the peripheries of said drums travel away from the cutting edge of said blade.

1,065,244. ROTARY PUMP. WILLIAM A. HATCHER, Grand Rapids, Mich. Filed June 15, 1912. Serial No. 703,943. (Cl. 230—30.)



1. A rotary pump, comprising a rotative shaft, a cylindrical piston concentric with the shaft and fixed thereon the shaft and piston having inlet and outlet passages therethrough, check valves in the piston to control the flow of fluid through said passages, a case inclosing the piston and having bearings surrounding the shaft and eccentric thereto, radially sliding vanes extending between the piston and case, and gearing connecting the case and shaft and adapted to rotate the same at the same angular velocity.

2. A rotary pump, comprising a rotative shaft and a cylindrical piston fixed thereon, said shaft and piston having separate inlet and outlet passages therethrough, check valves to control the flow of fluid through said passages, a case inclosing said piston and arranged eccentric thereto, tubular bearings for the case surrounding the shaft, radially disposed chambers in the case, vanes slidable in the chambers, segments slidable on the surface of the piston and pivotally attached to the vanes and means for rotating the piston and case at the same angular velocity.

3. A rotary pump, comprising a shaft having axial inlet and outlet openings, a cylindrical piston fixed on the shaft and having radial inlet and outlet openings communicating with the respective openings in the shaft, check valves in the piston to control the flow of fluid through said openings, a rotative case inclosing the piston and arranged eccentric thereto, vanes slidable radially

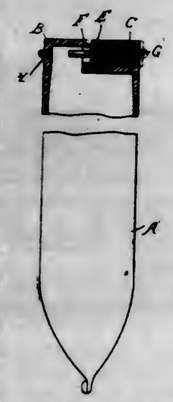
in the case and segments slidable circumferentially on the piston and pivotally attached to the inner edges of the vanes.

4. A rotary pump, comprising a rotative shaft, a cylindrical piston fixed on the shaft, separate inlet and outlet passages in the shaft and piston, check valves to control the flow of fluid through said passages, a case inclosing said piston and arranged eccentric thereto, radially movable vanes extending between the case and piston and a train of gears connecting the shaft and case to rotate the same at the same angular velocity.

5. A rotary pump, comprising a rotative shaft having an inlet passage in one end and an outlet passage in the other end, a cylindrical piston fixed on the shaft and having radial inlet passages near one end and radial outlet passages near the other end, said passages in the piston communicating with a like passage in the shaft, check valves in the piston to control the flow of fluid through the passages, a rotative case inclosing the piston and eccentric thereto, radial chambers in the case, vanes radially slidable in the chambers, circumferential slots in the middle of the piston, inner and outer segments slidable circumferentially on the shell of the piston, studs connecting the segments and slidable in the slots, the outer segment also being pivotally connected to the respective inner edges of the respective vanes.

[Claims 6 and 7 not printed in the Gazette.]

1,065,245. AUTOMATICALLY-CLOSING COLLAPSIBLE CONTAINER. CHARLES J. W. HAYES, Detroit, Mich., assignor of four-fifths to Thomas S. Sprague, Detroit, Mich. Filed Feb. 25, 1911. Serial No. 610,914. (Cl. 221—60.)



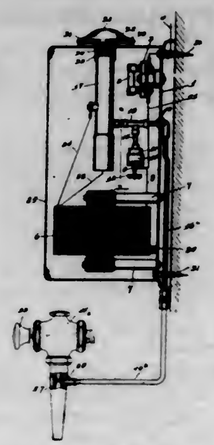
1. The combination with a collapsible container for plastic substances having a discharge orifice, of a closure for said orifice exposed to the internal pressure within the tube and movable laterally from its seat, and a resilient band surrounding said container and yieldably holding said closure to its seat.

2. The combination with a collapsible container for plastic materials having a recessed head, and a lateral discharge orifice, of a closure for said orifice engaging said recess, and a resilient band surrounding said container and engaging said closure.

1,065,246. WATER-PURIFYING APPARATUS. SIEGFRIED HELD, Chicago, Ill., assignor to The Held Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 29, 1912. Serial No. 717,727. (Cl. 210—1.)

1. A water purifying apparatus including a nozzle connected to a source of water supply, an aerating pipe terminating in a faucet past which pipe the nozzle projects a stream of water, a circuit-closer for the ozonizer, said circuit-closer being actuated by the suction of air through the aerating pipe, and an ozonizer connected to the aerating pipe.

2. A water purifying apparatus including a nozzle connected to a source of water supply, an aerating pipe terminating in a faucet past which pipe the nozzle projects a stream of water, and an ozonizer connected to the aerating pipe, a valve operated by the suction of air through the aerating pipe, and a circuit-closer actuated by the valve.



3. A water purifying apparatus including a nozzle connected to a source of water supply, an aerating pipe terminating in a faucet past which the nozzle projects a stream of water, and an ozonizer connected to the aerating pipe, a valve operated by the suction of air through the aerating pipe, and a circuit-closer actuated by the valve, the valve being returned by gravity upon discontinuance of the suction, thereby opening the circuit of the ozonizer.

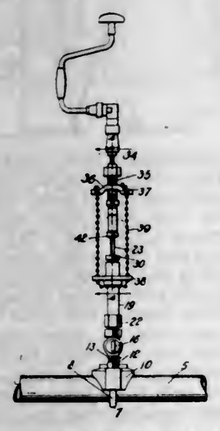
4. A water purifying apparatus including an air inlet passage for aerating the water, means for creating a suction of air through the said passage into the water, an ozonizer within the said passage, a source of electric current, a valve adjacent to the passage and actuated by the suction of air through the passage, a contact member carried by the valve, terminals with which the said member will contact when the valve is actuated, thereby connecting the ozonizer with the source of current.

1,065,247. STROPPING-MACHINE. GEORGE J. HELY, Seattle, Wash. Filed June 25, 1912. Serial No. 705,850. (Cl. 51—16.)



A razor stropping device comprising end plates, one of said plates being provided with a longitudinally extending slot, a bar extending between the lower end portions of said plates and rigidly connected therewith, an oscillating bar mounted between the upper end portions of said plate, a depending razor clamp carried by said oscillating bar and positioned in alinement with said slot, a disk rigidly mounted upon one end of said oscillating bar and having arms extending therefrom, a rocker shaft extending between said plates beneath said oscillating bar and having its end portions extending through the same, a retaining bead at one end of said shaft, a finger rigidly mounted upon the opposite end of said shaft and extending between the arms of said disk whereby rotation of said shaft will rock said finger to move said oscillating bar, and upper and lower guiding rollers rotatably mounted between said plates whereby a stropping strip may be passed around said shaft and up to and around the upper guiding rollers and carried downwardly between said lower rollers and inner flights of said strip.

1,065,248. TAPPING DEVICE. ORLIN H. HINMAN, Kensington, Kans. Filed Oct. 18, 1912. Serial No. 726,420. (Cl. 77—41.)



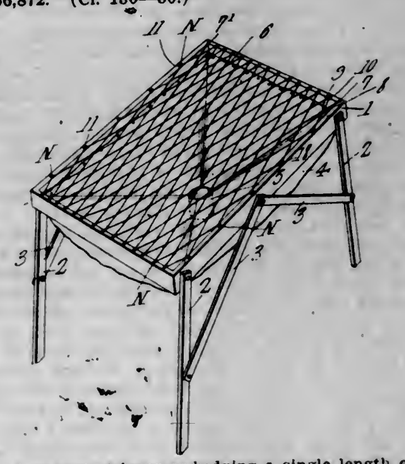
1. In a tapping device, a member having a drill chamber and an outwardly extending flange, a brace having a flange plate, means connecting the flange and flange plate to limit the movement of the brace away from the member having the drill chamber, and a drill extending into the drill chamber and connected with the brace to be operated thereby.

2. In a tapping device, a pipe saddle having an opening, a valve secured to the pipe saddle and having an opening connected with the first opening, a member having a drill chamber secured to the valve with its chamber in communication with the opening in the valve, a drill extending into the drill chamber and adapted to extend through the openings in the valve and in the pipe saddle, and a flange on the member, a brace having a flange plate, means connecting the flange and flange plate to limit the movement of the brace away from the drill chamber, and means connecting the brace with the drill for operating the latter.

3. In a tapping device, a member having a drill chamber and a flange, a brace having a threaded member, a flange plate having an opening through which the threaded member extends, a nut on the threaded member for pressing against the flange plate to move the flange into desired position, means connecting the flange and flange plate to limit the movement of the brace away from the member having the drill chamber, and a drill extending into the drill chamber and connected with the brace to be operated thereby.

4. In a tapping device, a member having a drill chamber and a flange, a brace, a flange plate, means by which the last-mentioned flange may be adjusted and held in position relatively to the brace, means connecting the flange and flange plate to limit the movement of the brace away from the member having the drill chamber, and a drill extending into the drill chamber and connected with the brace to be operated thereby.

1,065,249. PEANUT-STRIPPER. JOHN MILLARD HOLLOWAY, Graymont, Ga. Filed Oct. 26, 1911. Serial No. 656,872. (Cl. 130—30.)



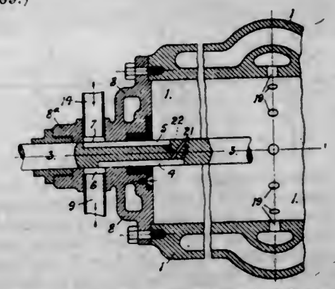
1. A peanut stripper embodying a single length of wire bent to form a plurality of diamond meshes, each mesh being provided, at one end, with an open neck for receiving peanut stems.

2. A peanut stripper embodying a single length of wire bent to form a wire fabric having a plurality of diamond meshes, each mesh being provided, at one end, with an open neck for receiving peanut stems and at its opposed end with a loop for engaging the neck of the adjoining mesh.

3. A peanut stripper including a wire fabric having a diamond mesh, each mesh being provided, at one end, with an open substantially horizontal neck for receiving peanut stems, and at its opposed end, with a substantially vertical loop for engaging the neck of the adjoining mesh.

4. A peanut stripper including a fabric made in a single length of wire bent to form a plurality of diamond meshes, each mesh being provided at one end with an open neck for receiving peanut stems, and at its opposed end with a loop for engaging the neck of the adjoining mesh, and fastener receiving eyes integral with the marginal meshes of the fabric.

1,065,250. TWO-STROKE-CYCLE INTERNAL-COMBUSTION ENGINE. PERCY HUNTINGTON, Liverpool, England. Filed Feb. 24, 1912. Serial No. 679,752. (Cl. 123—69.)



1. A two stroke cycle internal combustion engine, comprising a working cylinder; air and fuel inlet ports; a piston rod and piston; slots in the piston rod so arranged that air and fuel are admitted separately to said cylinder through the piston rod, the air being admitted in advance of the fuel; and discharge ports in said cylinder adapted to be uncovered by the piston.

2. A two stroke cycle internal combustion engine, comprising a working cylinder; air and fuel inlet ports; a piston rod and piston; slots in the piston rod so arranged that air and fuel are admitted separately to said cylinder at each end thereof through the piston rod, the air being admitted in advance of the fuel; and discharge ports in the middle of said cylinder adapted to be uncovered by the piston toward the end of each stroke.

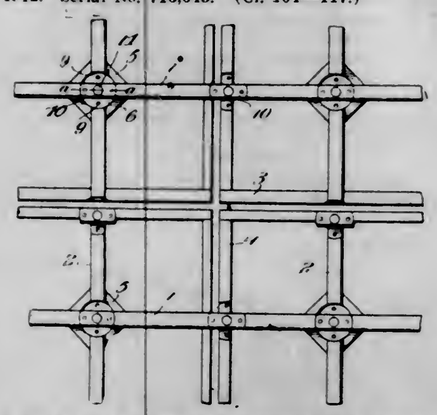
3. A two stroke cycle internal combustion engine, comprising a working cylinder; air and fuel inlet ports; a piston rod and piston; slots in the piston rod so arranged that air and fuel are admitted separately to said cylinder through the piston rod, the air being admitted in advance of the fuel; discharge ports in said cylinder adapted to be uncovered by the piston; air and fuel compressors operated through the reciprocation of the piston rod; and means whereby said compressed air and fuel are conveyed from said compressors to said working cylinder.

4. A two stroke cycle internal combustion engine, comprising a working cylinder; air and fuel inlet ports; a piston rod and piston; slots in the piston rod so arranged that air and fuel are admitted separately to said cylinder at each end thereof, through the piston rod, the air being admitted in advance of the fuel; discharge ports in the middle of said cylinder adapted to be uncovered by the piston toward the end of each stroke; air and fuel compressors operated through the reciprocation of the piston rod; and means whereby said compressed air and fuel are conveyed from said compressors to said working cylinder.

5. A two stroke cycle internal combustion engine, comprising a working cylinder; air and fuel inlet ports; a piston rod and piston; slots in the piston rod so arranged that air and fuel are admitted separately to said cylinder through the piston rod, the air being admitted in advance of the fuel; a passage through said piston rod which communicates with the air slot therein and a passage through said piston rod which communicates with the gas slot therein; and discharge ports in said cylinder adapted to be uncovered by the piston.

[Claims 6 to 8 not printed in the Gazette.]

1,065,251. RAILROAD-CROSSING. ANTHONY JACKULVIC and CHARLES E. HART, Trenton, N. J. Filed Aug. 20, 1912. Serial No. 716,043. (Cl. 104—117.)



1. In a railway crossing, intersecting rails providing a seat at the point of intersection and locking recesses in the bottom of the seat, and a bridge member pivotally mounted in the said seat and also for slight vertical movement, the said bridge member being provided on its under side with locking points to engage the recesses in the bottom of the seat at the limit of the pivotal movement of said bridge member.

2. In a railway crossing, intersecting track members having a circular seat at the point of intersection and recesses in the bottom of said seat in line with the respective track rails, in combination with a pivot pin located in the center of the said recess and having an enlarged head at its upper end, and a bridge member fitted in said seat for pivotal movement, having a countersink in its upper side for the head of said pivot pin and provided on its lower side with locking points which depend therefrom and serve by camming action with the said recesses in the bottom of the seat to raise said bridge member at the beginning of each pivotal movement thereof and thereby release the same.

1,065,252. COMBINATION COATSHIRT AND DRAWERS. GUSTAVE JACOBY, Baltimore, Md. Filed Aug. 3, 1912. Serial No. 713,074. (Cl. 2—144.)



A one-piece combination article of wearing apparel comprising a coatshirt and drawers, the same comprising a back piece having a cut in its lower end, front quarters having fastenings along their edges, and leg pieces, each leg piece comprising a gore and a flap, the gores being stitched together along their inner edges and having their outer edges stitched to the back along the cut formed in the lower end thereof and the flaps having their inner ends tapered and stitched together and to the lower ends of the gores and the back, said leg pieces extending along the inner sides of the legs and having their free edges provided with fastenings to engage fastenings along the inner edges of the lower ends of the front quarters to secure the leg portions about the limbs when the article is worn.

1,065,253. HOUSING-CAP. WILLIAM JOHNSON, Anderson, Ind. Filed Mar. 14, 1912. Serial No. 683,894. (Cl. 80—55.)

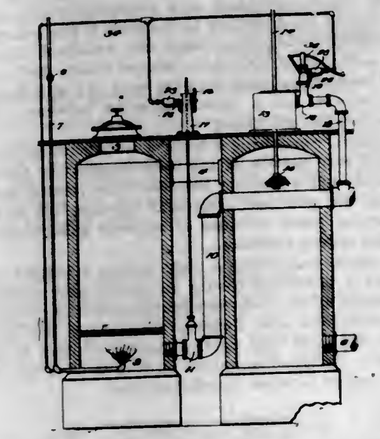


In a housing of the class described, a pair of spaced legs, said legs being provided with vertical extensions at their upper ends and on their outer sides with upwardly and inwardly inclined recesses, a cap fitted on the upper end of said legs, there being recesses in said cap to fit over said extensions on said legs, there being vertical slots in the ends of said cap above said inclined recesses, bolts in said slots and engaging in said recesses, and bolts having nuts passing through said legs and extensions into their said caps, for the purpose specified.

1,065,254. SAFETY DEVICE FOR WATER-GAS APPARATUS. WILLIAM M. KILEY and WILLIAM J. BUSTLE, Grand Rapids, Mich. Filed Feb. 17, 1912. Serial No. 678,197. (Cl. 48—83.)

1. In a device for the purpose set forth, the combination with a valve stem, of a locking bar, means tending to hold the said locking bar normally out of engagement with the valve stem, and means acting in opposition thereto to hold the locking bar in engagement with the valve stem.

2. The combination with an air blast pipe, of a valve in the air blast pipe having a stem rising therefrom, a locking bar arranged to engage the said stem, means for supplying steam pressure to said bar to hold it in engagement with the valve stem, and means for withdrawing the locking bar from said engagement when the steam pressure is withdrawn.



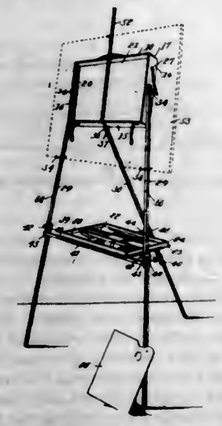
3. The combination of a steam supply pipe, an air blast pipe, a cut-off valve in the air blast pipe, and means controlled by the steam pressure to prevent opening of said valve until the steam pressure is cut off.

4. The combination with a valve stem, of a locking bar arranged to engage the same, a piston on the said bar, means for supplying fluid pressure to said system, and a spring acting on said piston in opposition to the fluid pressure.

5. The combination with a valve stem support, of a bracket secured thereto, a cylinder secured upon said bracket, a valve stem rising through the said support, a piston rod mounted within the cylinder and projecting through the same to engage the valve stem, a piston on said rod, means to supply fluid pressure to the piston, and a spring coiled around the rod between the piston and the end of the cylinder to act on the piston in opposition to the fluid pressure.

[Claim 6 not printed in the Gazette.]

1,065,255. ARTIST'S COLOR-BOX AND EASEL. LEON EMIL KUHRT, New York, N. Y. Filed Sept. 30, 1912. Serial No. 723,094. (Cl. 45—129.)



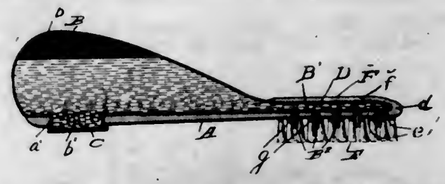
1. An artist's color box and easel, comprising a box frame; a plurality of collapsible legs for supporting said frame, each of said legs being provided with a screw for engagement with said frame, the screws in two of said legs engaging said frame at opposite sides thereof and co-axially to form a pivot for swinging said frame; a plurality of brace rods operatively connecting all of said legs; and a rigid rectangular member operatively connecting each of said rods to prevent relative movement thereof.

2. An artist's color box and easel, comprising a box frame; a plurality of collaspible legs for supporting said frame, each of said legs being provided with a screw for engagement with said frame, the screws in two of said legs engaging said frame at opposite sides thereof and co-axially to form a pivot for swinging said frame; a plurality of brace rods operatively connecting all of said legs; and a color tray having means for operatively connecting said brace rods to prevent relative movement thereof.

3. An artist's color box and easel, comprising a box frame; a supporting leg pivotally connected with said frame to extend behind the same; two side legs, each having an attaching screw adjacent the upper end thereof for securing said legs to the sides of said box frame, the attaching ends of said legs being beveled to flare said legs from the sides of said frame, said legs being constructed of a plurality of members slidable each on the other; clamps mounted on certain of said members to hold said members in adjusted position; a supporting mast removably mounted in vertical relation upon said frame; supporting pins adjustably mounted upon said side legs; and a hook-like member slidable on said mast to engage the top of a canvas when supported on said pins.

4. An artist's color box and easel, comprising a box frame; a supporting leg pivotally connected with said frame to extend behind the same; two side legs, each having an attaching screw adjacent the upper end thereof for securing said legs to the sides of said box frame, the attaching ends of said legs being beveled to flare said legs from the sides of said frame, said legs being constructed of a plurality of members slidable each on the other; clamps mounted on certain of said members to hold said members in adjusted position; a supporting mast removably mounted in vertical relation upon said frame; supporting pins adjustably mounted upon said side legs; a hook-like member slidable on said mast to engage the top of a canvas when supported on said pins; and a plurality of strap sections mounted upon said frame, adapted to hold said legs and said mast upon said frame.

1,065,256. FOUNTAIN TOOTH-BRUSH. HATTIE CHEESMAN LA MAR, Harrison, Ohio. Filed July 12, 1911. Serial No. 638,228. (Cl. 15—52.)



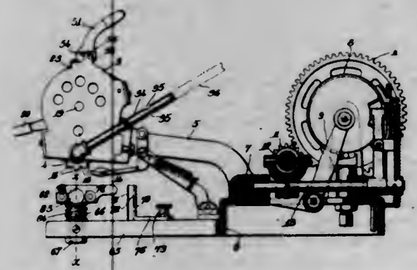
As a new article of manufacture, a fountain tooth brush consisting essentially of a handle provided with a head having a pocket formed therein substantially as shown and described, collapsible reservoir mounted upon said handle and provided with a discharging chamber, said discharging chamber being fitted within the pocket of said head, a plurality of nozzles integral with the discharging chamber and communicating with a brushing element, the top and side walls of said reservoir gradually converging to a point near the head of said brush, and means for charging said reservoir.

1,065,257. LEATHER-MARKING MACHINE. GEORGE H. LANG, Boston, Mass. Filed June 28, 1909. Serial No. 504,668. (Cl. 101—83.)

1. In a machine for marking leather, the combination with a bed or platen, of a printing head having a plurality

of type-disks, each having a burner opening, and a burner pipe having ports communicating with the burner openings.

2. In a machine for marking leather, the combination with a bed or platen, of a printing head having a plurality of adjustable type-disks, each having radial burner openings, a burner pipe on which said disks are rotatably mounted and which is provided with ports to deliver gas to the burner openings.



3. In a machine for marking leather, the combination with a bed or platen, of a printing head having a plurality of adjustable type-disks, each having radial burner openings, a burner pipe on which said disks are rotatably mounted and which is provided with ports on its under side to deliver gas to those burner openings in the lower half of each type-disk.

4. In a machine of the class described, the combination with a shaft, of two disks rotatably mounted thereon, an operating handle interposed between the disks and capable of both an oscillatory and a radial movement and having provision to move one of said disks in both directions as it oscillates, the other disk having notches in its periphery, and a tooth carried by said handle and adapted to engage the notches successively as the handle oscillates thereby to advance said disk step by step.

5. In a machine of the class described, the combination with a half-size marker having a half-size printing character thereon, of an adjacent type wheel, two setting disks, one connected to the marker and the other to said type wheel, an operating handle having engagement with the setting disk for the half-size marker by which said disk may be moved to bring the half-size printing character into printing position and retract it therefrom, and means carried by said handle to engage the other setting disk and move the latter in one direction only.

[Claims 6 to 10 not printed in the Gazette.]

1,065,258. SKIRT. HENRY LEIBHOLZ, New York, N. Y. Filed Oct. 9, 1912. Serial No. 724,686. (Cl. 2—143.)



1. A skirt, comprising a body and a waistband having an elastic rear portion, the said body having the upper edge of its rear portion terminating below the said elastic waistband portion and the said rear body portion having elastic portions independent of the waistband.

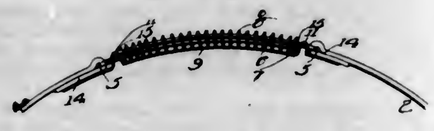
2. A skirt, comprising a body having a placket at one side, a waistband having a front non-elastic portion and a rear elastic portion, the said front waistband portion being integral with the upper front part of the body, and the said elastic waistband portion being secured at one end to one end of the front waistband portion, connecting means for detachably connecting the free end of the elastic waistband portion to the other end of the non-elastic front waistband portion at the placket, the rear upper portion of the said body terminating below the elastic waistband portion and having elastic portions independent of the waistband.

3. A skirt, comprising a body having front and rear portions and a waistband, said waistband having connection with the front portion at the sides of the wearer, said rear portion terminating below the waistband, and having at each side of the center thereof elastic portions, one side of said rear portion forming with the said front portion a placket, and a loose connection between the rear portion and the waistband.

4. A skirt, comprising a body, a waistband for the said body, the rear portion of the body terminating below the waistband, and a loop on the rear body portion slidingly engaging the said rear waistband portion, the said rear body portion being provided at opposite sides of the said loop with elastic portions.

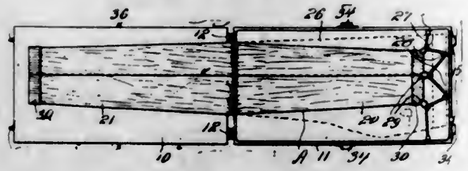
5. A skirt, comprising a body having a placket at one side, and a waistband having an elastic rear portion, the rear portion of the body terminating below the waistband and having one side forming the closing flap for the placket, the said rear portion having a piece of elastic while in a stretched condition secured to each side of the center thereof to form elastic portions.

1,065,259. BODY-BELT. GEORGE B. LINNEY, Osceola, Mo. Filed Oct. 3, 1911. Serial No. 652,517. (Cl. 241—101.)



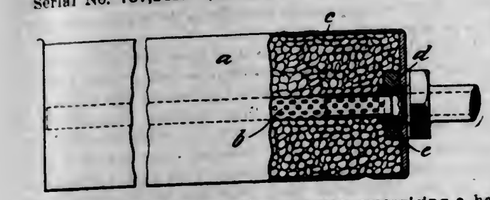
In a belt the combination with a plurality of belt sections, a tension device comprising a pair of frames, a protector plate, said frames extending through portions of said protector plate, said protector plate constituting a guide for one of said frames and provided with extending ends engaging the connecting ends of said sections of said belt and constituting a track therefore, and spring means connecting said frames.

1,065,260. TROUSERS-PRESS. WILLIAM T. LUCKEY, Richmond, Va. Filed Sept. 13, 1912. Serial No. 720,262. (Cl. 100—57.)



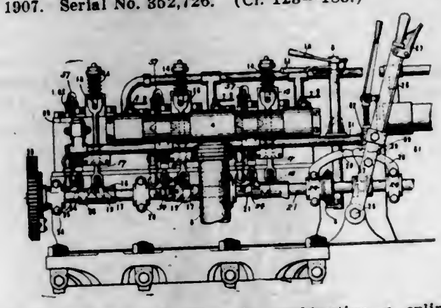
A trousers presser comprising swingingly connected board-like sections, detachable clamping members mounted upon one of the sections and adapted to engage the waist band of the trousers, removable smoothing boards adapted to be interposed between the folded portions of said trousers and also between the swinging sections, means carried by one of the sections and engageable with the other for locking the said sections in clamping relation to each other, and resiliently held clips carried by a pair of the smoothing boards for engaging the free ends of the said trousers to sustain the same taut and in smooth condition upon the boards.

1,065,261. LIME CARTRIDGE FOR MINING PURPOSES. HERBERT LUSHINGTON STOREY and JOSEPH PARKINSON, Lancaster, England. Filed Mar. 27, 1913. Serial No. 757,142. (Cl. 102—6.)



A lime cartridge for mining purposes, comprising a hermetically closed outer tube capable of withstanding a high pressure, an inner perforated pipe extending into the said tube, quicklime filling the space between the said tube and the said pipe and means for hermetically closing the tube around the said pipe.

1,065,262. INTERNAL-COMBUSTION ENGINE. WILLIAM R. MCKEEN, Jr., Omaha, Nebr., assignor, by mesne assignments, to McKeen Motor Car Company, Omaha, Nebr., a Corporation of New Jersey. Filed Jan. 17, 1907. Serial No. 352,726. (Cl. 123—185.)



1. In engine construction, in combination, a cylinder; valves and valve gearing adapted to run said cylinder under the internal combustion principle; a source of fluid pressure; a passage connecting said source with the cylinder; means adapted to render operative or inoperative the valve gearing; and means controlled from said valve gearing, adapted to open the pressure fluid passage in the act of rendering inoperative the valve gearing, and to close said passage in the act of rendering said gearing operative.

2. In engine construction, in combination, a cylinder, valve mechanism adapted to run said cylinder from a source of compressed fluid supply, valve mechanism independent of the same adapted to run said cylinder as an internal combustion engine, cams adapted respectively to actuate said valve mechanisms, and means adapted alternatively to throw said cams into operative position.

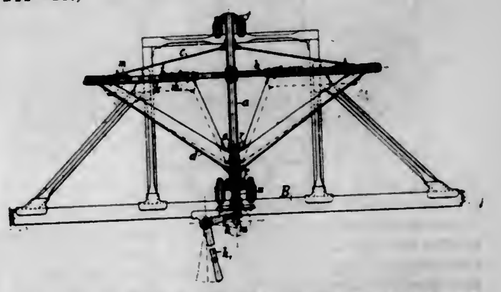
3. In engine construction, in combination, a cylinder, valve gearing adapted to run said cylinder under the internal combustion principle, means comprising a valve controlling a passage to said cylinder independent of said valve gearing, means comprising cam surfaces adapted to operate said valve gearing and said valve, and means adapted to shift said last mentioned means alternatively to open said valve and render inoperative said valve gearing, and to close said valve and render operative said valve gearing.

4. In engine construction, in combination, a cylinder, valve mechanism adapted to run said cylinder from a source of compressed fluid supply, means comprising a valve controlling a passage leading from said valve mechanism to said cylinder, valve mechanism independent of said first valve mechanism adapted to run said cylinder as an internal combustion engine, and means adapted substantially simultaneously to render inoperative said first valve mechanism and close said valve, and to render operative said second valve mechanism, said last mentioned means comprising a plurality of cam surfaces and operative connections leading therefrom.

5. In engine construction, in combination, a cylinder, valve mechanism adapted to run said cylinder from a source of compressed fluid supply, means comprising a valve controlling a passage leading from said valve mechanism to said cylinder, valve mechanism adapted to run said cylinder as an internal combustion engine, and means adapted substantially simultaneously to render inoperative said first valve mechanism and close said valve, and to render operative said second valve mechanism, said last mentioned means comprising a plurality of cam surfaces and operative connections leading therefrom.

[Claims 6 to 17 not printed in the Gazette.]

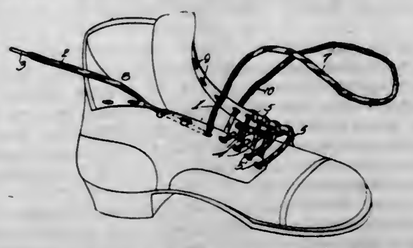
1,065,263. AEROPLANE STEERING AND STABILIZING MECHANISM. GUSTAV MEES, Dusseldorf, Germany. Filed Jan. 18, 1910. Serial No. 538,686. (Cl. 244—15.)



1. Aeroplane steering and stabilizing mechanism comprising a hollow shaft, spokes radiating from said shaft, blades rotatably mounted on said spokes, consisting of an outer and an inner frame and a flexible sheet and being held in their position against the centrifugal force by means of rings or bearings and, springs engaging said blades and tending to maintain them in their horizontal position, a sleeve slidable on the shaft and operatively connected to the blades, and means for setting said sleeve at the will of the driver.

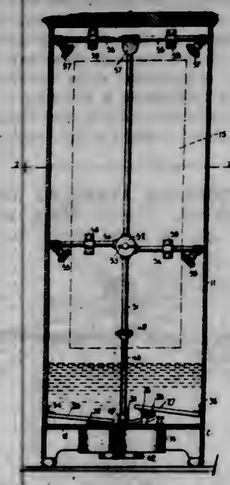
2. Aeroplane steering and stabilizing mechanism comprising a hollow shaft, spokes radiating from said shaft, blades rotatably mounted on said spokes, consisting of an outer and an inner frame and a flexible sheet and being held in their position against the centrifugal force by means of rings or bearings and springs engaging said blades and tending to maintain them in their horizontal position, a sleeve slidable on the shaft and operatively connected to the blades, means for setting said sleeve at the will of the driver, and a gyroscopically acting wheel rim.

1,065,264. SHOE-LACE AND MANNER OF TYING SAME. WILLIAM J. A. MUIRHEAD, Seattle, Wash. Filed Apr. 24, 1911. Serial No. 623,087. (Cl. 24—140.)



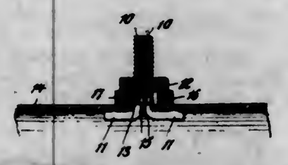
The combination with a shoe having spaced lace receiving eyelets, of a lace led through said eyelets and provided with an end having spaced eyelets, the spacing between the eyelets on the lace being equal to the spacing between the eyelets of the shoe and the lace being led alternately through the eyelets in the shoe and its own eyelets whereby the portions between the eyelets in the shoe are held without flexure between successive eyelets.

1,065,265. PORTABLE SHOWER-BATH. CARL F. NORDMARK, Lynn, Mass., assignor of one-half to Carl S. Carlson, Providence, R. I. Filed Feb. 6, 1913. Serial No. 746,546. (Cl. 4—26.)



In a device of the class described, a water tight inclosure formed of side walls and a floor; a door in one of said side walls; a pump, operable by the feet of the bather, in said floor; a substantially horizontal series of sprinklers at different levels in said inclosure; a supply pipe from said pump and said series; means in said supply pipe to exclude one or more of said horizontal spinklers, said means comprising a casing having a bore, a pair of facing openings central with the bore and a pair of opposite openings at right angles to the above said openings and at each side of the center; and a cylinder in said casing having a pair of unequal opposite openings on the lateral surface thereof, said cylinder having means whereby said opening can be so placed as to establish communication between facing openings only or between one of the facing openings and the two center openings.

1,065,266. BOLT. FREDRIC D. OGDEN, Bayonne, N. J.; J. Edward Ogden, administrator of said Fredric D. Ogden, deceased, assignor, by mesne assignments, to The Patent Appliance Company, a Corporation of New York. Filed Jan. 28, 1910. Serial No. 540,485. (Cl. 85—1.)



1. A fastener comprising two complementary members each comprising a stem portion and a head portion, and provided with a lateral projection upon the stem in proximity to the head portion, but spaced therefrom, whereby the said projection and head portion may engage opposite sides of a structure with which the bolt is to be employed when it is so employed.

2. A bolt comprising two complementary members each comprising a threaded stem portion and a head portion, and provided with a lateral projection upon the stem in proximity to the head portion, but spaced therefrom, whereby the said projection and head portion may engage opposite sides of a structure with which the bolt is to be employed when it is so employed.

3. A fastener comprising two L-shaped members, one arm of each member adapted to lie side by side with the corresponding arm of the other member to constitute a stem, and the other arm adapted to project oppositely to form a head, the first said arms being provided each with a lateral projection in proximity to, but spaced apart from, the arms constituting the head, whereby the said projections and the said head may engage opposite sides of a structure with which the bolt is to be employed when it is so employed.

4. A bolt comprising two L-shaped members of semicircular contour in cross section, one arm of each member adapted to lie with its flat side against the flat side of the corresponding arm of the other member, the said arms being screw-threaded on their curved sides whereby they together constitute a screw threaded stem the other arms being arranged to project oppositely to form a head, each of the first said arms being provided with a lateral projection in proximity to but spaced apart from, the arms constituting the head, whereby the said projection and the arms constituting the head may engage opposite sides of a structure with which the bolt is to be employed when it is so employed.

5. A fastener comprising two complementary members each comprising a stem portion and a head portion, and provided with a lateral projection upon the stem in proximity to the head portion, but spaced therefrom, whereby the said projection and head portion may engage opposite sides of a structure with which the bolt is to be employed when it is so employed, the stems having recessed portions corresponding to the laterally projecting portions.

[Claims 6 to 8 not printed in the Gazette.]

1,065,267. PROCESS FOR PRODUCING BRAKE-SHOE KEYS. HENRY C. OSTERBIND, Richmond, VA. Filed Aug. 21, 1912. Serial No. 716,248. (Cl. 29—164.)



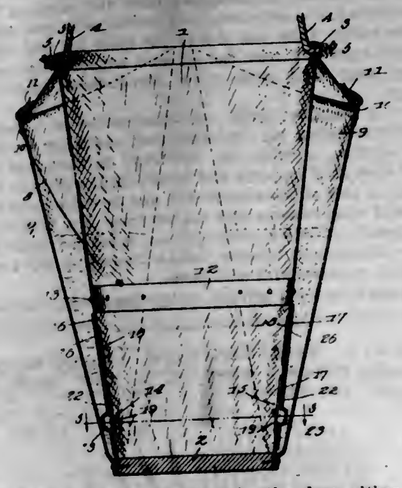
1. The process of forming brake shoe keys which consists in tapering the bar from the center toward both ends in a direction of its width, simultaneously forming said bar into a staple, and tapering the legs thereof in a direction of their thickness, curving the legs of the staple outwardly in opposite directions, and finally severing the staple centrally of the connecting portion of the legs.

2. The method of forming brake shoe keys which consists in forming a staple tapered toward the end of its legs in a direction of its width, and simultaneously tapering the legs toward the ends in a direction at right angles to the original taper.

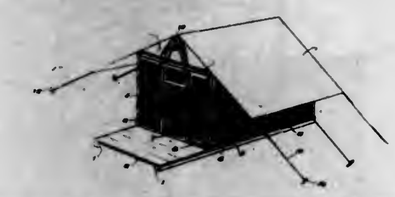
3. The process of forming brake shoe keys which consists in tapering the bar toward both ends in the direction of its width and simultaneously rounding the edges thereof, forming the bar into staple form, and simultaneously tapering the legs of the staple in the direction of their thickness, and simultaneously spreading the legs on a curve, and severing the staple into equal parts.

1,065,268. NOSE-BAG. ELMER PHILLIPS, Atlantic City, N. J. Filed Dec. 16, 1911. Serial No. 666,095. (Cl. 119—65.)

A feed bag provided with a compartment, said bag having an opening communicating with the compartment, a rectangular plate filling the opening and secured to the bag, said plate being constructed of resilient material and having an opening communicating with the opening of the bag, the plate adjacent its vertical edges being provided with slits arranged in pairs, the metal formed therebetween exerting a tension in one direction, the said metal being further provided with projections, and a sliding plate providing a door having offset fingers formed with indentations arranged between the slits providing the ways, the said projections and depressions adapted to engage with each other to sustain the door either in its open or closed position substantially as and for the purpose set forth.

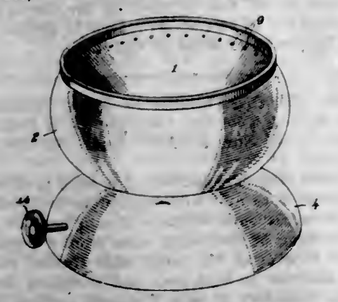


1,065,269. PORTABLE HOUSE. SIDNEY ALLAN POE and ALVIN F. J. WORSTMAN, Cairo, Ill. Filed Jan. 23, 1912. Serial No. 672,964. (Cl. 20—2.)



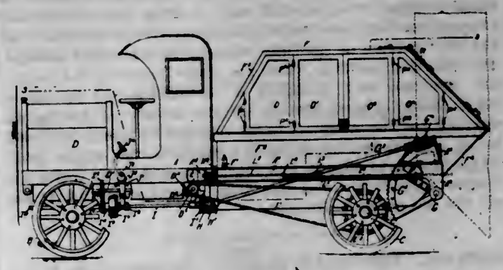
In a portable structure the combination of a ridge pole for supporting the cover, and braces for the ridge pole, one of the braces having a laterally extending eye and the other brace having a pendent projection to enter the eye and forming connecting means for the braces, the upper ends of which grip the ridge pole.

1,065,270. CUSPIDOR. WINSLOW A. POWER, Poughkeepsie, N. Y. Filed Apr. 20, 1912. Serial No. 692,060. (Cl. 4—40.)



A cuspidor comprising an integral member having an inner wall decreasing in diameter downwardly, and outer walls, and a straight bottom wall, the bottom wall being connected with the said inner and outer walls and said inner and outer walls being connected with each other at their upper ends, and relatively arranged so as to define therebetween a chamber of an upwardly decreased width and terminating at a point slight above a series of perforations formed in the inner walls, and perforations opening into the chamber at the restricted portion thereof, a water supply pipe entering the chamber through the bottom wall thereof, a base curved downwardly from the bottom, a valve in the pipe having its stem portion extended through the base and provided with a manipulator.

1,065,271. POWER DUMPING-WAGON. JOHN P. POWERS, Ossining, N. Y. Filed Sept. 27, 1912. Serial No. 722,601. (Cl. 21—20.)



1. A power-dumping wagon comprising a truck, a wagon body pivoted on the truck, a segmental worm wheel on each side of the said wagon body, worm shafts journaled on opposite sides of the truck, one of which worm shafts carries a right hand worm in mesh with one of the worm wheels, and the other of which worm shafts carries a left hand worm in mesh with the other worm wheel, a transverse shaft geared with the said worm shafts, a pair of bevel gear wheels mounted to rotate loosely on the said transverse shaft and provided with clutch members, a driven shaft provided with a bevel gear wheel in mesh with the said pair of loose gear wheels, a shifting clutch member rotating with the said transverse shaft and adapted to engage either of the said loose gear wheels, and a hand shifting lever for the said shifting clutch member.

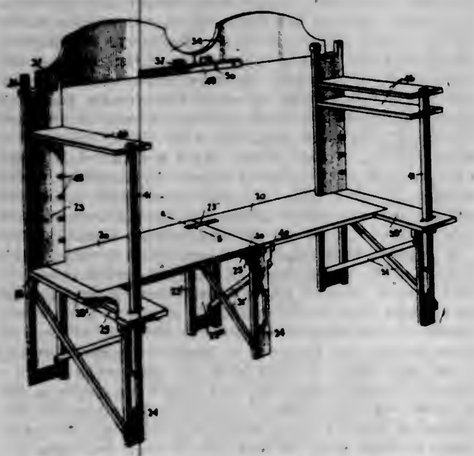
2. A power-dumping wagon comprising a truck, a wagon body pivoted on the truck, a segmental worm wheel on each side of the said wagon body, worm shafts journaled on opposite sides of the truck, one of which worm shafts carries a right hand worm in mesh with one of the said worm wheels, and the other of which worm shafts carries a left hand worm in mesh with the other worm wheel, a transverse shaft geared with the said worm shafts, a pair of bevel gear wheels mounted to rotate loosely on the said transverse shaft, a driven shaft provided with a bevel gear wheel in mesh with the said pair of loose gear wheels, a shifting clutch member rotating with the transverse shaft and adapted to engage either of the said loose gear wheels, a shifting lever for the said clutch member, and means mounted on the said truck and having connection with the said lever and actuated by the wagon body to automatically move the lever and the clutch member into inactive position at the time the wagon body reaches its extreme position in either direction.

3. A power dumping wagon, comprising a truck, a wagon body pivoted on the truck, a segmental worm wheel on the said wagon body, a worm shaft journaled on the truck and carrying a worm to mesh with the said worm wheel, a transverse shaft geared with the said worm shaft, a pair of beveled gear wheels mounted to rotate loosely on the said transverse shaft and provided with clutch members, a driven shaft provided with a beveled gear wheel in mesh with the said pair of loose gear wheels, a shifting clutch member rotating with the said transverse shaft and adapted to engage either of the said loose gear wheels, a hand shifting lever for the said shifting clutch member, a pair of longitudinal movable rods disposed alongside the wagon body and having a slidable connection at their contiguous ends whereby to permit of limited relative movement, the outer end of the rear rod being pivotally connected to the wagon body, a bell crank lever to which the inner end of the forward rod is connected, and a rod con-

necting the bell crank lever with the said shifting clutch member, all for the purpose described.

4. A power dumping wagon, comprising a truck, a wagon body pivoted on the truck, a segmental worm wheel on the said wagon body, a worm shaft journaled on the truck and carrying a worm in mesh with the said worm wheel, a transverse shaft geared to the said shaft, a pair of beveled gear wheels mounted to rotate loosely on the said transverse shaft and provided with clutch members, a driven shaft provided with a beveled gear wheel in mesh with the said pair of loose gear wheels, a shifting clutch member rotating with the said transverse shaft and adapted to engage either of the said loose gear wheels, a hand shifting lever for the said shifting clutch member, connections between the said shifting clutch member and the rear portion of the body whereby to move said member into inactive position when the wagon reaches the dumping position, and including a connecting rod having a rigid collar, a lever pivoted on the truck and having an angular portion adapted to be engaged by the collar, and a lug carried by the forward portion of the wagon body and adapted to engage and move the said lever when the wagon body is lowered to normal position on the truck, all for the purpose described.

1,065,272. PORTABLE BOOTH. WILLARD JAMES PRICE, New York, N. Y. Filed Dec. 13, 1912. Serial No. 736,518. (Cl. 211—11.)



1. The herein described portable booth construction comprising a series of table tops adapted to be joined end to end, each top having an end notch, a series of supports for said table tops, each support coöperating with the adjacent ends of a pair of table tops and extending through the alined pair of notches, and means coöperating with said supports to prevent longitudinal separation of adjacent table tops.

2. The herein described portable booth construction comprising a series of interchangeable table tops, a plurality of foldable supports, each support coöperating with and supporting the abutting ends of adjacent table tops, means included in each support to prevent the same from folding when in use, a side table at the end of each booth and coöperating with the adjacent table top end to secure the same in place, and means to lock the side table to the support.

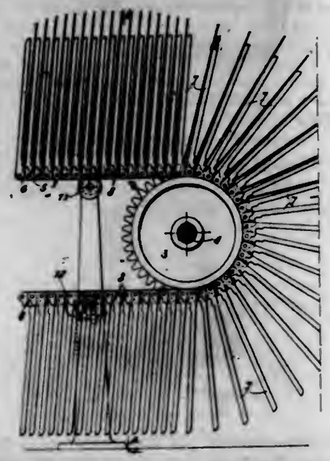
3. The herein described portable booth construction comprising a plurality of table tops adapted to abut each to each, supports for the adjacent abutting ends of the table tops, said supports including rear columns and upwardly extending front columns, a series of side tables breaking joints with the main table tops, locking means to secure the side tables to the supports, said locking means including a post secured to each rear column, and bracing means extending between said post and said front column above the table tops.

4. In a portable booth, the combination of a pair of supports, a table top extending between and supported upon said supports, said table top being provided with means to prevent displacement from the supports, said means including a side table coöperating with and extending rearwardly from one end of the table top and resting squarely upon the rear end of said support, and means locking said side table from displacement upon the support.

5. In a portable booth, the combination of a pair of supports including rear columns and upwardly extending front columns, a table top extending between and supported upon said supports and interlocking with said front columns, a pair of posts secured to and extending upwardly from said rear columns and spaced from said table top, a head panel extending between and supported upon said front columns, and bracing means connecting the respective front columns with said posts.

[Claims 6 to 8 not printed in the Gazette.]

1,065,273. SHEET-CONVEYER. CHARLES RAYNALY, Brussels, Belgium. Filed Oct. 2, 1912. Serial No. 723,626. (Cl. 193—2.)



In an apparatus of the class described, the combination of a conveyer chain comprising a series of inside links, a series of outside links, pintles connecting the said series of inside and outside links, elongated portions formed on the outermost links of the inside series of links to form extensions, elongated portions formed on the outermost links of the outer series of links to form extensions, and means including pins arranged to abut against the extensions upon the links to hold the same in a position approximately at right angles to the line of travel of the chain, whereby to form a plurality of extensions placed in upright staggered relation on the outer sides of the chain.

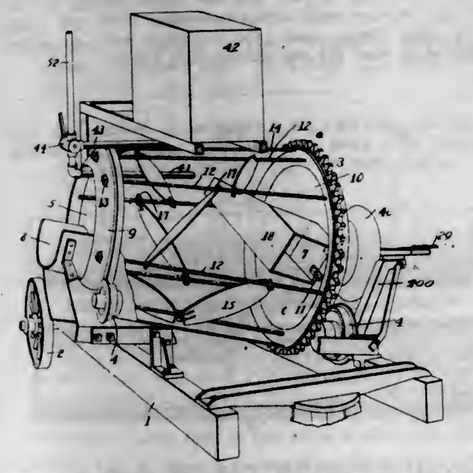
1,065,274. CHUCK. GEORGE R. RICH, Chicago, Ill., assignor to Rich Tool Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1910. Serial No. 590,840. (Cl. 29—119.)

In a chuck, the combination of a head provided with a lower central bore and with oppositely disposed slots extending from the outer surface of said head to said bore, said slots being of increasing area from a point adjacent the inner termini to the outer edge thereof giving a T-shaped formation to such area and providing vertical and horizontal shoulders in said T-shaped portion, a jaw for each of said slots formed to provide a T-shaped head at the upper end thereof, the horizontal portion of said head being cut away to provide thin oppositely disposed outer shoulders, said shoulders resting against the horizontal shoulders in said slots when the parts are assembled producing an edge-like engagement between the jaws and chuck, the mass of weight of said jaws lying to the inside

of said point of engagement, whereby the jaws tend normally to swing outwardly, surfaces on the jaws for engaging the tool, and means for forcing and retaining the jaws in engagement with the tool, substantially as described.



1,065,275. MIXING-MACHINE. KIM ROSHOLT, Eau Claire, Wis., assignor to Northwestern Steel & Iron Works, Eau Claire, Wis. Filed Nov. 8, 1912. Serial No. 730,174. (Cl. 83—73.)



1. A substantially cylindrical mixer comprising end pieces, a shell engaging the pieces, longitudinally extending members engaging the pieces for holding the parts together, and a number of independently movable paddles carried by the said members, the ends of the paddles being connected to different members.

2. A substantially cylindrical mixer comprising ends, a shell, members engaging the ends for holding the parts secured together, and a plurality of independent paddles carried by the said members the ends of each paddle being secured to different members, the paddles being provided with means whereby they may be secured in various positions on the said members.

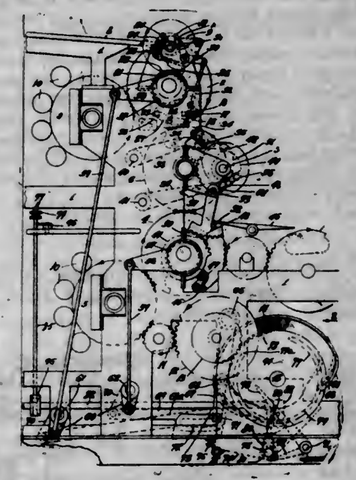
3. A mixing machine, comprising a rotary drum provided with an open end, a transversely extending trough fixed in position within the drum and turning therewith, the ends of the trough being open and both ends opening within the mixer, the trough communicating with the opening in the said end, receiving the mixture contained in the drum as the machine operates and serving to conduct the same to said opening.

4. A mixing machine, comprising a rotary drum provided with an end piece having a discharge opening, a trough fixed within the drum and turning therewith, the said trough having its ends opening within the drum, the trough being arranged transversely of the axis of the drum and having an opening in its side communicating with the discharge opening in the end piece, and a movable member for closing said discharge opening and the opening in the side of the trough to retain the material being mixed within the drum and cause the same to pass freely through the trough as the drum is turned, the said member being adapted to be brought to different positions in order to permit varying amounts of the mixture to pass from the trough through the said discharge opening.

5. A concrete mixer, comprising a rotary drum provided with an end piece having a rectangular discharge opening, a door for closing the opening, a trough fixed in position within the drum, the ends of the trough being open, the said trough communicating between its ends with the said opening in the end of the drum, and means connected with the door, whereby as the machine operates the door may be moved various distances, whereby various amounts of mixture may be permitted to leave the drum.

[Claim 6 not printed in the Gazette.]

1,065,276. MULTICOUPLE MULTIREVOLUTION PRINTING-MACHINE. WALTER SCOTT, Plainfield, N. J.; Isabella Scott and David John Scott executors of said Walter Scott, deceased. Filed Dec. 19, 1905. Serial No. 292,437. (Cl. 101—90.)



1. In a multi-couple, multi-revolution printing machine, the members of which are adapted to print on the same side of the sheet, the combination with the members of two adjacent printing couples, of automatic means for periodically tripping and untripping the members of each couple, interrupting means for the automatic means of each couple normally inactive but adapted to act sequentially during successive cycles of the machine, when properly positioned, and means for positioning both of said interrupting means during the same cycle of the machine.

2. In a multi-couple, multi-revolution printing machine, the combination with the members of two adjacent printing couples, of automatic means for periodically tripping and untripping the members of each couple, interrupting means for the automatic means normally inactive but adapted to act sequentially during successive cycles, when properly positioned, means for positioning both of the said interrupting means during the same cycle of the machine, and means for locking the interrupting means of the second couple, when properly positioned, adapted to be released after the automatic means of the first printing couple have regained control of the same.

3. In a multi-couple, multi-revolution printing machine, the members of which are adapted to print on the same side of the sheet, the combination with the members of two adjacent printing couples, of automatic means for periodically tripping and untripping the members of each couple, interrupting means for the automatic means normally inactive but adapted to act sequentially during successive cycles, when properly positioned, means for positioning both of the said interrupting means during the

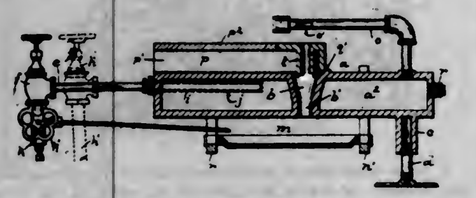
same cycle of the machine, and means for locking the interrupting means of the second couple, when properly positioned, adapted to be released after the automatic means of the first printing couple have regained control of the same.

4. In a multi-couple, multi-revolution printing machine, the combination with the members of two adjacent printing couples, of automatic means for periodically tripping and untripping the members of each couple, interrupting means for the automatic means normally inactive but adapted to act sequentially during successive cycles, when properly positioned, means for positioning both of the said interrupting means during the same cycle of the machine, and means for locking the interrupting means of the second couple, when properly positioned, adapted to be released after the automatic means of the first printing couple have regained control of the same, and means for restoring the interrupting means of both printing couples to their original position.

5. In a multi-couple, multi-revolution printing machine, the members of which are adapted to print on the same side of the sheet, the combination with the members of two adjacent printing couples, of automatic means for periodically tripping and untripping the members of each couple, interrupting means for the automatic means normally inactive but adapted to act sequentially during successive cycles, when properly positioned, means for positioning both of the said interrupting means during the same cycle of the machine, and means for locking the interrupting means of the second couple, when properly positioned, adapted to be released after the automatic means of the first printing couple have regained control of the same, and means for restoring the interrupting means of both printing couples to their original position.

[Claims 6 to 17 not printed in the Gazette.]

1,065,277. HYDROCARBON-OIL BURNER. GEORGE R. SHANKLIN, Portland, Oreg. Filed Jan. 8, 1912. Serial No. 670,096. (Cl. 158—64.)



1. In a hydro-carbon burner of the type described, including a spreader-pan, the combination of a longitudinally extending retort, a funnel-shaped mixing chamber provided in said retort; a dome mounted on the retort constituting an air intake; a gas and air mixing nipple extending from the exterior through said dome, and entering centrally the upper portion of said mixing chamber; said dome adapted to take in air at a point distant from said gas and air mixing nipple, and a pipe extending from said retort over said nipple, said pipe provided with an orifice adapted to eject the gas through said nipple.

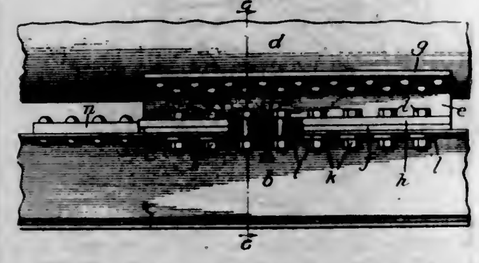
2. In a hydro-carbon burner of the type described, including a spreader-pan, the combination of a longitudinally extending retort having a bottom made convex in cross section on the exterior; a funnel-shaped mixing chamber provided in said retort; a dome mounted on the retort constituting an air intake; a gas and air mixing nipple extending from the exterior through said dome, and entering centrally the upper portion of said mixing chamber; said dome adapted to take in air at a point distant from said gas and air mixing nipple, and a pipe extending from said retort over said nipple, said pipe provided with an orifice adapted to eject the gas through said nipple.

3. In a hydro-carbon burner of the type described, including a spreader-pan, the combination of a longitudinally extending retort having a bottom made convex in cross section on the exterior; a funnel-shaped mixing chamber provided in said retort; a dome removably mounted on the retort constituting an air intake; a gas and air mixing nipple extending from the exterior through said dome, and entering centrally the upper portion of said mixing chamber; said dome adapted to take in air at a point distant from said gas and air mixing nipple, and a pipe extending from said retort over said nipple, said pipe provided with an orifice adapted to eject the gas through said nipple.

4. In a hydro-carbon burner of the type described, including a spreader-pan, the combination of a longitudinally extending retort; a funnel-shaped mixing chamber provided in said retort; a dome mounted on the retort constituting an air intake; said dome extending longitudinally to one end of the retort and formed with a gas and air mixing nipple entering centrally from the exterior into the upper portion of said mixing chamber, and a pipe extending from said retort over said nipple, said pipe provided with an orifice adapted to eject the gas through said nipple.

5. In a hydro-carbon burner of the type described, including a spreader-pan, the combination of a longitudinally extending retort having a bottom made convex in cross section on the exterior; a funnel-shaped mixing chamber provided in said retort; a dome removably mounted on the retort constituting an air intake; said dome extending longitudinally to one end of the retort and formed with a gas and air mixing nipple entering centrally from the exterior into the upper portion of said mixing chamber, and a pipe extending from said retort over said nipple, said pipe provided with an orifice adapted to eject the gas through said nipple.

1,065,278. TANK-CAR. CHARLES A. SHOEMAKER, Chicago, Ill. Filed Mar. 26, 1913. Serial No. 756,900. (Cl. 105—264.)



1. A car structure including a tank; a pair of center sills for supporting the tank; pedestals carrying the tank at their upper ends and in sliding relation to and slidable longitudinally of the center sills, said pedestals being provided with feet whose lower surfaces engage the tops of the center sills; friction plates engaging the upper surfaces of the feet; and means for holding said friction plates and center sills simultaneously in frictional engagement with the pedestal feet.

2. A car structure including a tank; a pair of center sills for supporting the tank; pedestals carrying the tank at their upper ends and in sliding relation to and slidable longitudinally of the center sills, said pedestals being provided with feet whose lower surfaces engage the tops of the center sills; friction plates engaging the upper surfaces of the feet; and means for holding said friction plates and center sills simultaneously in frictional engagement with the pedestal feet in substantially fixed relation with each other.

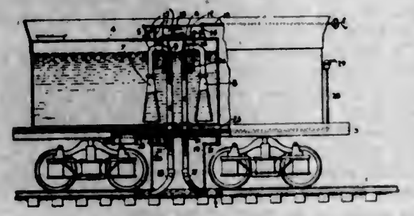
3. A car structure including a tank; a pair of center sills for supporting the tank and provided with top flanges; pedestals supporting the tank at their upper ends and in sliding relation to and slidable longitudinally of the center sills, said pedestals being provided with feet whose lower surfaces frictionally engage said center sill flanges; friction plates engaging the upper surfaces of the pedestal feet; and bolts passing through the center sills and operating to hold the friction plates and center sill flanges simultaneously in frictional engagement with the pedestal feet.

4. A car structure including a tank; a pair of center sills for supporting the tank and provided with top flanges; pedestals supporting the tank at their upper ends and in sliding relation to and slidable longitudinally of the center sills, said pedestals being provided with feet whose lower surfaces frictionally engage said center sill flanges; friction plates engaging the upper surfaces of the pedestal feet; and bolts passing through the center sills and operating to hold the friction plates and center sill flanges simultaneously in frictional engagement with the pedestal feet, said bolts being in substantially fixed relation with the center sills and friction plates.

5. A car structure including a tank; a pair of center sills for supporting the tank and provided with top flanges; pedestals supporting the tank at their upper ends and in sliding relation to and slidable longitudinally of the center sills, said pedestals being provided with feet whose lower surfaces frictionally engage said center sill flanges; friction plates engaging the upper surfaces of the pedestal feet; bolts passing through the center sills and operating to hold the friction plates and center sill flanges simultaneously in frictional engagement with the pedestal feet; and means for limiting the movement of the tank independently of said bolts to relieve the bolts of shearing strain.

[Claims 6 and 7 not printed in the Gazette.]

1,065,279. DOUBLE WATER-SCOOP. WILLIAM B. SMITH, Gardena, Cal. Filed Dec. 17, 1912. Serial No. 737,280. (Cl. 103—51.)



1. In a scoop structure of the class described, a pair of pipes, a scoop connected with the bottom of each of said pipes extending in opposite directions, a tank for receiving water from one of said pipes, and means for directing water out of said tank to the other of said pipes and its scoop.

2. In a scoop structure of the class described, the combination with a tank, of a pair of pipes arranged with one end in said tank and one end projecting below said tank, the end of said pipe in said tank being bent over so as to extend toward the bottom of the tank, a discharge nozzle secured to each of said pipes at the end in said tank, each of said nozzles being tapered from a point contacting with the pipes to their discharge ends, a pivotally mounted scoop connected with the end of each of said pipes extending below said tank, and means for raising said scoops and means for lowering said scoops.

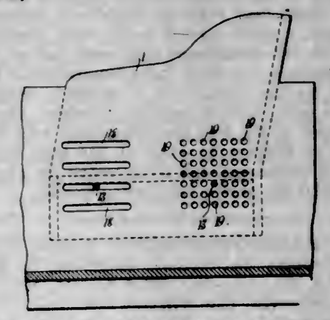
3. In a scoop structure of the class described, a pair of pivotally mounted scoops, means for raising said scoops, means for lowering said scoops, a discharge pipe connected with each of said scoops, a tank for receiving water from said discharge pipe, means connected with said discharge pipes for distributing water at the bottom of said tank, a valve structure arranged near the upper end of said pipes and the upper part of said tank, and manually operated means for opening and closing said valves.

4. In a scoop structure of the class described, a pair of pipes, a pump structure arranged in each of said pipes, means for operating said pump structure, a scoop connected with the bottom of each of said pipes extending in opposite directions, a tank for receiving water from one of said pipes, and means for directing water out of said tank to the other of said pipes and their scoops, said pumps causing said water to positively move in the direction desired.

5. In a scoop structure of the class described, a pair of pipes, a scoop structure arranged at the lower end of each of said pipes, a pump arranged interiorly of each of said pipes, and means for actuating said pumps.

[Claim 6 not printed in the Gazette.]

1,065,280. ADJUSTABLE SEAT. IRA L. STANGER, Pennsauken, N. J., and CHARLES B. FITHIAN, Philadelphia, Pa. Filed Mar. 8, 1912. Serial No. 682,346. (Cl. 155—39.)



1. The combination of a seat and a support, the support embodying side members, the sides being provided with a plurality of slots and also provided with a plurality of sockets, the said sockets being positioned at different distances from the ends of the said sides and also at different heights from the bottoms of the said sides, the said slots being positioned at different heights from the bottoms of the said sides, the seat being provided with oppositely movable extensions adapted for engagement in some of the slots and movable therein, whereby the seat may be moved relatively to the support, the seat being also provided with other oppositely movable extensions adapted for engagement in some of the sockets, whereby the position of the seat is finally determined within the support.

2. The combination of a seat and a support, the seat being provided with a plurality of movable members adapted to be extended beyond the sides of the seat into engagement with the support in order to hold the seat in position, a shaft carried by the seat, the said movable members embodying racks, pinions carried by the said shaft for engagement with the racks, the shaft being movable in order to carry either pinion out of engagement with some of the racks, whereby the members actuated by the said racks may be left in engagement with the said support, the seat being thereby adjustable about the said supporting members, the shaft being provided with a plurality of recesses, the seat being provided with a plurality of resilient members for engagement in some of the recesses whereby, when the shaft is moved to a given position, the engagement of the said resilient members in the said recesses will hold it in such position.

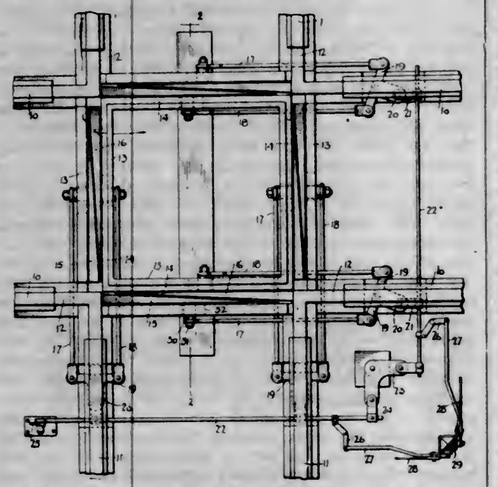
3. The combination of a seat and a support, the seat being provided with a plurality of pairs of movable members adapted to be extended beyond the sides of the seat into engagement with the support, in order to hold the seat in position, a shaft carried by the seat and movable longitudinally, the said pairs of movable members embodying racks, means carried by the said shaft for engagement with the said racks, movement of the shaft carrying one of the said means out of engagement with some of the racks, movement in an opposite direction carrying the said means out of engagement with the other racks, whereby either pair of racks is independently movable in order to permit one pair of the said members to remain in engagement with the said support, whereby the seat may be moved relatively to the support, the final position of the seat being determined by movement of the other pair of racks in order to bring the other pair of members into engagement with the said support.

4. The combination of a seat and a support, the seat being provided with a plurality of pairs of movable members, each pair adapted to be extended beyond opposite

sides of the seat into engagement with the support, a shaft carried by the seat, the shaft being provided with means for engagement with each pair of movable members, the shaft being longitudinally movable in order to carry the means thereon out of engagement with one pair of the said movable members, together with means carried by the seat for engagement with the shaft to hold the shaft in position to which it has been brought.

5. The combination of a seat and a support, the seat being provided with a plurality of pairs of movable members adapted to be extended beyond opposite sides of the seat into engagement with the support in order to position the seat, a shaft carried by the seat, means carried by the shaft for engagement with each pair of the said movable members, the shaft being longitudinally movable, whereby it may be brought out of operative relation with one of the said pairs of movable members, there being means carried by the seat for engagement with the shaft to hold it in position to which it has been brought by longitudinal movement, and other means for engagement with the shaft for preventing turning thereof.

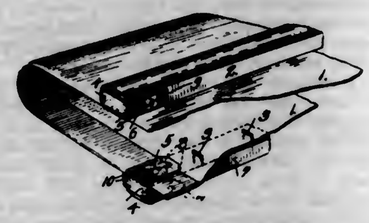
1,065,281. RAILROAD-CROSSING. JOSEPH H. STRICKLAND, Hortense, Ga., assignor of one-half to Moses M. Strickland, Hortense, Ga. Filed Jan. 15, 1913. Serial No. 742,200. (Cl. 104—116.)



In a railway crossing, the combination of crossing-rail sections interposed between the separated ends of the respective rails of the transecting tracks, the sections of each pair being oppositely beveled and lying in sliding contact with each other, a frame having a beveled surface and each crossing-rail section having a beveled rib contacting with the beveled surface of the frame and oppositely disposed to said beveled surface of the frame, the said frame having horizontal slots at opposite sides of the crossing-rail sections, studs on the crossing-rail sections, oppositely reciprocating bridles connected with the rail sections of each pair to slide the latter in opposite directions, the bridles of two parallel pairs of rail sections operating to close the tread surface between separated rails of one track and form passages for the wheel flanges through the transecting track, a T-lever connected with each pair of bridles, reciprocating rods at an angle to each other, one of said rods being connected with a pair of T-levers, and the other rod with the opposite pair of T-levers, and means for reciprocating said rods.

1,065,282. CONVEYER APPARATUS. PETER E. TALL, Niobe, N. D. Filed Nov. 19, 1912. Serial No. 732,228. (Cl. 198—4.)

1. In a conveyer apparatus, the combination with a conveyer belt and a slat therefor, of a plate extending across the end of the slat and having a portion lapping the belt and the inner face of the slat, lateral arms extending from the plate longitudinally of the respective edges of the slat, each of said arms being spaced outwardly from the lapping portion for accommodating the material of the belt therebetween, and means for securing said arms to the slat.



2. In a conveyer apparatus, the combination with a belt and a slat therefor, of a plate extending across the end of the slat and having a portion bent to substantially right angles with respect to the faces of the plate and disposed to lap the material of the belt and the inner face of the slat, means for securing said lapping portion to the slat, and arms extending laterally from the end plate and bent to position substantially at right angles thereto with the faces of the arms substantially at right angles to the lapping portion, the said arms being disposed to extend longitudinally of the slat along opposite edges thereof and each arm being spaced outwardly from the lapping portion a distance sufficient for accommodating the material of the belt therebetween.

3. A clip for conveyer belt apparatus comprising a body of sheet material adapted to engage the end of a slat of a conveyer, lateral arms extending from said body and bent substantially at right angles thereto and a lapping portion bent substantially at right angles to the body along a line spaced from the arms, the lapping portion being bent to a position substantially at right angles to the plate with its faces disposed in planes substantially at right angles to the planes of the faces of the arms.

4. A clip for conveyer belt apparatus comprising a body of sheet material adapted to engage the end of a slat of a conveyer, arms extending from the body and adapted to be bent substantially at right angles thereto to extend longitudinally of the edges of the slat, and a lapping portion bent to substantially right angles with respect to the body and having its faces lying in a plane substantially at right angles to the planes of the faces of the arms, the line of the bend between the body and lapping portion being spaced from the adjacent line of the arms.

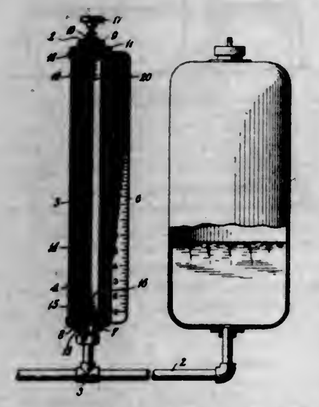
1,065,283. TANK-GAGE. GEORGE H. TREADGOLD, Port Huron, Mich. Filed July 25, 1912. Serial No. 711,454. (Cl. 73—54.)

1. The combination with a tank and a discharge pipe therefrom, of a gage glass in operative relation to the tank and in communication with the pipe, provided with an air vent, and manually operable means controlling both the vent and communication between the glass and pipe adapted to normally shut off communication and to close the vent.

2. The combination with a tank and a discharge pipe therefrom, of a gage glass in operative relation to the tank and in communication with the pipe having an air vent, a valve closure controlling the flow between the pipe and glass, a valve closure controlling the vent, and means for simultaneously moving both to open position.

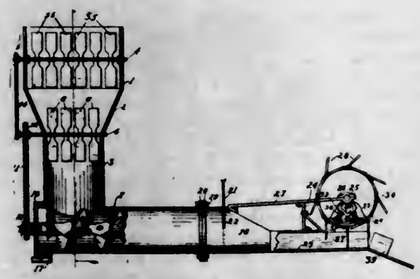
3. The combination with a tank and a discharge pipe therefrom, of a gage glass in operative relation to the tank and in communication with the pipe having an air vent, means normally closing the vent and cutting off such communication, and means for manually moving said means to open position.

4. The combination with a tank and a discharge pipe therefrom, of a gage glass in operative relation to the tank and in communication with the pipe provided with an air vent, a normally closed valve controlling communication between the pipe and glass, a normally closed valve controlling the air vent from the glass, and manually operable means for simultaneously opening both valves.



5. The combination with a tank and a discharge pipe therefrom, of a frame, a gage glass, bushings with apertured valve seats clamping the glass in the frame, a sleeve reciprocable in the upper bushing, a stem reciprocable in the upper bushing, a stem reciprocable in the sleeve and lower bushing, a closure on the stem for the lower seat, the upper bushing having an air vent, a closure reciprocable on the stem adapted to seal an air vent through the upper bushing into the glass, a spring holding the stem projected and the lower closure seated, a spring for projecting the upper closure to seat, a head on the stem adapted to operate the sleeve to unseat the upper closure when the stem is depressed and fittings connecting the pipe with the glass through the lower bushing.

1,065,284. BUTTER MAKING AND MOLDING MACHINE. CHARLES VOLKMANN, Chicago, Ill., assignor to Universal Butter Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 23, 1911. Serial No. 656,161. (Cl. 31—25.)



1. A device of the character described comprising the combination with a cylinder having an expression screw therein, means to rotate said screw, a wheel rotatably mounted on suitable bearings having cut-off knives pivotally attached to the periphery thereof, which operate to divide the material forced out of the cylinder into predetermined sizes, said wheel being rotated by the outcoming material, a plurality of stamps intermediate the cutoff knives, said stamps having a stem extending inwardly, a roller mounted in the end thereof, a cam which coacts with said roller to project the stamp outwardly, at a predetermined time, a coil spring which holds the stamp normally in a retracted position.

2. A device of the character described comprising the combination with a cylinder having an expression screw therein, means to rotate said screw, a wheel rotatably mounted on suitable bearings having cutoff knives pivotally attached to the periphery thereof, which operate to divide the material forced out of the cylinder into predetermined sizes, said wheel being operated by the outcoming material.

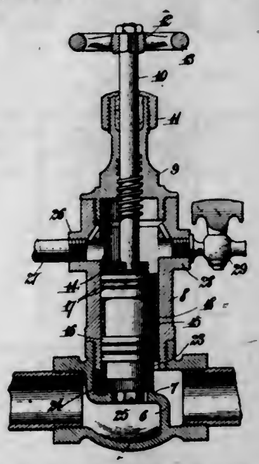
3. The combination with a churn of a cylinder extending laterally therefrom, a screw conveyer in said cylinder, means to rotate said conveyer, a nozzle on said cylinder, a wheel rotatably mounted on a shaft, bearings for said shaft, supports for said bearings, cutoff knives pivotally attached to the periphery of said wheel, a plurality of stamps intermediate each of the cutoff knives normally held in a retracted position, means to project said stamps outwardly at a predetermined time.

4. The combination with a churn of a cylinder extending laterally therefrom, a screw conveyer, a nozzle on said cylinder, a wheel rotatably mounted on a shaft, bearings for said shaft, supports for said bearings, cutoff knives pivotally attached to the periphery of said wheel, a plurality of stamps intermediate each of the cutoff knives normally held in a retracted position, means to project said stamps outwardly at a predetermined time, said means comprising a cam suitably secured to the axle of the wheel, said cam operating to project the stamp before any pressure is exerted on the cutoff knife.

5. A butter molding machine comprising the combination with a churn, of a cylinder, a screw conveyer in said cylinder, means to rotate said conveyer, a nozzle on said cylinder, means operated by the butter as it leaves the nozzle to cut it into a predetermined size, means operated by the movement of said cutting means to imprint characters upon the surface of the cut-off portion of butter.

[Claims 6 and 7 not printed in the Gazette.]

1,065,285. FLUID-PRESSURE VALVE. HARRY WALKER, Jr., Modena, Pa. Filed Sept. 27, 1912. Serial No. 722,772. (Cl. 103—92.)



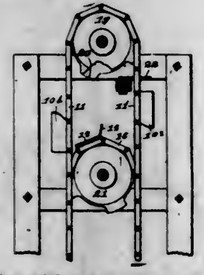
1. A valve of the class described comprising a casing having a valve seat interiorly thereof, a plunger cylinder mounted upon the valve casing, a plunger working within said cylinder and having a chamber opening through one end thereof, a valve stem adjustably mounted in the plunger cylinder and having a headed end projected into the chamber in the plunger, compression means arranged within the chamber in the plunger and acting upon the head on the valve stem, means adjustably engaged in the chamber in the plunger and acting upon the compression means to regulate the same, a valve carried by the plunger and adapted to engage the valve seat, and means for admitting fluid to the cylinder for acting upon the plunger against the resistance of the compression means whereby the valve will be automatically engaged with the seat.

2. A valve of the class described comprising a casing having a valve seat interiorly thereof, a plunger cylinder

mounted upon the valve casing, a plunger working within said cylinder and having a chamber opening through one end thereof, a valve stem adjustably mounted in the plunger cylinder and having a headed end projected into the chamber in the plunger, compression means arranged within the chamber in the plunger and acting upon the head on the valve stem, means adjustably engaged in the chamber in the plunger and acting upon the compression means to regulate the same, a valve carried by the plunger and adapted to engage the valve seat, means for admitting fluid to the cylinder for acting upon the plunger against the resistance of the compression means whereby the valve will be automatically engaged with the seat, and means for admitting fluid pressure within the cylinder.

8. A valve of the class described comprising a casing having a valve seat interiorly thereof, a plunger cylinder mounted upon the valve casing, a plunger working within said cylinder and having a chamber opening through one end thereof, a valve stem adjustably mounted in the plunger cylinder and having a headed end projected into the chamber in the plunger, compression means arranged within the chamber in the plunger and acting upon the head on the valve stem, means adjustably engaged in the chamber in the plunger and acting upon the compression means to regulate the same, a valve carried by the plunger and adapted to engage the valve seat, means for admitting fluid to the cylinder for acting upon the plunger against the resistance of the compression means whereby the valve will be automatically engaged with the seat, means for admitting fluid pressure within the cylinder, a detachable bonnet mounted upon the said cylinder and surrounding the valve stem and having screw threads therein, and screw threads formed on the valve stem and engaging the screw threads in the bonnet whereby on turning the valve stem the said plunger can be moved toward or away from the valve seat.

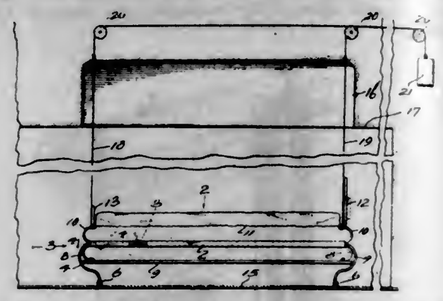
1,065,286. BUCKET FOR EXCAVATING-MACHINES. JAMES P. WALSH, Marengo, Iowa. Filed Jan. 14, 1911. Serial No. 602,662. (Cl. 193—6.)



1. In combination with a pair of spaced endless sprocket chains, a bucket having the free ends of the sides of its outer wall secured to said chains, a third endless chain located in the space between said pair of chains, a rear wall for the bucket having a flange at one end which forms the bucket bottom, an upper and a lower pair of right angular lugs rigidly secured at one end to the center of said rear wall and having their opposite ends extending on and secured to the opposite sides of said third chain, the upper end of the third chain being located below the upper ends of the said pair of chains, and a horizontal scraper located between the upper ends of said chains and the upper end of said third chain to engage on the interior of the bucket.

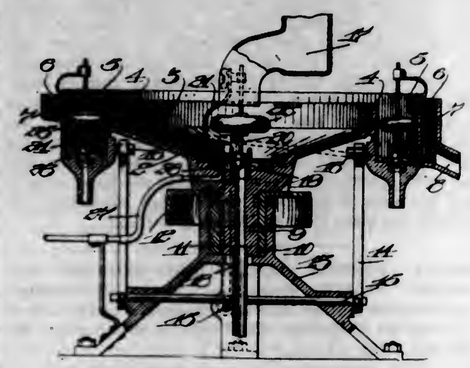
2. In combination with a pair of spaced endless sprocket chains, a bucket having the free ends of the sides of its outer wall secured to said chains, a third endless chain located in the space between said pair of chains, a rear wall for the bucket having a flange at one end which forms the bucket bottom, means to secure said rear wall to the third chain, the upper end of the third chain extending below the upper ends of the pair of chains, and a scraper arranged in the space between the upper end of the third chain and the upper ends of the pair of chains to engage on the interior of the bucket.

1,065,287. DISAPPEARING BED. NORMAN E. WELCH, Los Angeles, Cal. Filed Feb. 8, 1913. Serial No. 747,199. (Cl. 5—18.)



In a bed, channeled side bars with their open sides facing each other, bearing blocks mounted in the channels, a pair of legs fixed together and fitting between the side bars, and pintles connecting the legs to the bearing blocks.

1,065,288. CONCENTRATOR. WILLIAM W. WHITTON, Goldfield, Nev. Filed Nov. 23, 1911. Serial No. 661,951. (Cl. 83—88.)

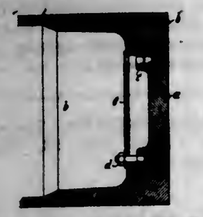


1. A concentrator consisting in the combination of a pan mounted to have a gyratory motion about a central vertical axis, means to prevent the pan having a rotary motion yet permitting said gyratory movement, said pan having a central discharge for the concentrates and a peripheral discharge for the tailings, a central discharge automatically opened and closed by the rise and fall of the body of concentrates in the pan, and means for introducing wash water into the pan and beneath the body of concentrates adjacent to said central discharge.

2. A concentrator consisting in the combination of a pan mounted to have a gyratory motion about a central vertical axis, means to prevent the pan having a rotary motion yet permitting said gyratory movement, said pan having a central discharge for the concentrates and a peripheral discharge for the tailings, and a trough carried by and partaking of the motions of the pan into which said slimes discharge, said central discharge and said trough having means for automatically controlling the outflow of the solids.

1,065,289. PISTON FOR INTERNAL-COMBUSTION ENGINES. ARNOLD WILLMER, Hanover-Kleefeld, Germany. Filed Dec. 14, 1912. Serial No. 736,863. (Cl. 121—104.)

1. A piston having a cylindrical body and an end part having a central opening, a cover plate loosely fitting in said opening, and means between the cover plate and the interior of the piston to hold the cover plate in position, said means and the loose fitting of the cover plate permitting relative radial expansion of the cover plate and the end part.



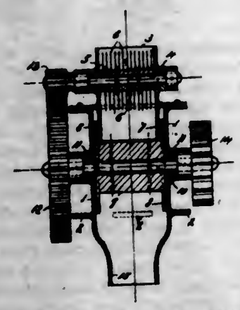
2. A piston having a cylindrical body and an end part formed with a central opening, a cover plate loosely fitting in said opening, lugs extending from the inner surface of the cover plate, said lugs being wholly inside the piston, interlocking means between said lugs and the piston, the interlocking means fitting loosely in the lugs, whereby to permit a relative radial expansion between the cover plate and the end part of the piston.

3. A piston having a cylindrical body and an end part formed with an opening, a cover plate fitting in the opening, lugs extending from the inside of the cover plate, each of said lugs having a T shaped slot, and T shaped bolts fitting loosely in the T shaped slots for securing the cover plate to the piston, the loose fitting bolts and cover plate permitting of relative radial expansion between the end part of the piston and the end plate.

4. A piston having a cylindrical body an end part having an opening therein, a cover on said opening, means located near the periphery and allowing of relative expansion of said cover and end part for fixing said cover to said end part comprising lugs on the cover, T-headed bolts engaging in said lugs and a plate located within the piston.

5. A piston having a cylindrical body, an end part having an opening approximately in the center thereof, an annular shoulder within the piston body adapted to receive said cover, depending lugs upon said cover, bolts in said lugs, a plate within the piston body adapted to receive the bolts, and a shoulder in the said piston body adapted to receive said plate.

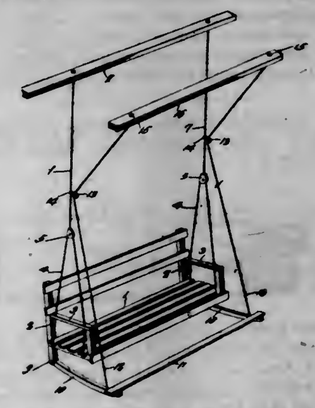
1,065,290. SANDER. ALFRED EDWARD ADAMS, Hamilton, Ontario, Canada. Filed Apr. 18, 1913. Serial No. 762,079. (Cl. 105—180.)



1. A sander comprising a casing, having a discharge opening, means for fixing said casing in position, a longitudinal fluted drum revolubly mounted transversely in said casing, end flanges carried by said drum, a feed hopper superposed on said casing and having its bottom depending between said flanges, an agitator mounted transversely of said hopper, means for operating said distributing drum and agitator simultaneously, for the purpose set forth.

2. A sander comprising a casing having a discharge opening, means for fixing said casing in position, a longitudinally fluted drum revolubly mounted transversely in said casing and having end flanges, a feed hopper superposed on said casing and extending downwardly between the aforesaid flanges, an agitator revolubly mounted transversely of said hopper and having radially disposed arms, gear wheels connecting said distributer and agitator, and a ratchet and pawl mechanism for operating the device step by step, substantially as described for the purpose set forth.

1,065,291. SWING. WILLIAM B. ATKINSON, Bowling Green, Ky. Filed Nov. 9, 1912. Serial No. 730,472. (Cl. 155—35.)



In a swing, a seat; a looped cable secured at its ends to the seat; a primary pulley block mounted to ride along the cable; a suspension cable secured to the pulley block; a secondary pulley block secured to the suspension cable above the primary pulley blocks; a treadle pivotally supported by the seat; an actuating cable secured to the treadle and rove through the secondary block; and means for supporting the suspension cable and the actuating cable; the actuating cable constituting means for flexing the suspension cable, thus to cause the primary block to traverse the looped cable and to advance the point of pull with respect to the seat.

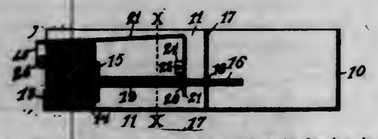
1,065,292. ATTACHMENT FOR GARMENT-SUPPORTERS. ARNOLD V. BROWN, Chicago, Ill., assignor to Kabo Corset Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 3, 1911. Serial No. 600,516. (Cl. 241—1.)



A suspending strap for hose supporters, comprising an upper section and a lower section of non-elastic material, and an intermediate section of elastic material, said sections being arranged in vertical alinement, a link secured to the lower end of the upper non-elastic section, a slotted retainer for the upper free end of the elastic section, an adjusting buckle attached to said retaining member, said upper end of the elastic section being woven through slots

in said retainer and held in non-adjustable fixed relation thereto solely by friction, the body of the elastic section extending upwardly from said retainer and through said link and thence back upon itself and between the retainer and buckle, whereby a loop is formed in said elastic section, adjustable in length solely by manipulation of the buckle, a second slotted retainer having its lower slot of increased depth, the lower free end of the elastic section being woven through the slots of said retainer and held in non-adjustable fixed relation thereto solely by friction, the lower non-elastic section passing through the lower slot of the last named slotted retainer, whereby it is held suspended by said retainer, substantially as described.

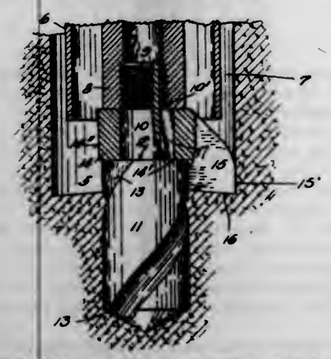
1,065,293. LABEL-HOLDER. THOMAS J. CLARKE, Jamestown, N. Y. Filed Oct. 23, 1912. Serial No. 727,358. (Cl. 211—37.)



1. A label holder comprising a receptacle having an opening across its front end, a strip across the lower portion of said front end to receive the lower edge of the labels thereagainst, a spring in said receptacle to press the labels against said strip, a top plate pivotally mounted in said receptacle to press upon the tops of the front labels, and a roller revolubly mounted on said top plate a spaced distance beneath the front end thereof to withdraw the labels thereover.

2. A label holder comprising a receptacle having an open front end, a strip across the lower part of said open front end to receive the lower edge of the labels thereagainst, a spring pressed plunger to press the labels against said strip in said front end, a top plate hinged in said receptacle in the rear of said labels to press upon the tops of the front labels, a downward projection upon said top plate having a slot therein to receive said spring pressed plunger therethrough, downwardly extending lugs on each side of the front end of said top plate, and a roller revolubly supported on said lugs a spaced distance below said front end of said top plate and the tops of the labels, substantially as and for the purpose specified.

1,065,294. WELL-BORING TOOL. ASA G. COLLINS, Everett, Wash., assignor to Hydraulic Drilling Company, Seattle, Wash., a Corporation. Filed Nov. 15, 1911. Serial No. 660,409. (Cl. 166—6.)



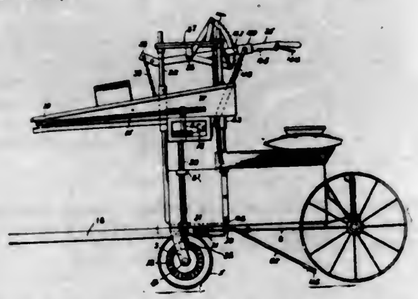
In a well boring tool, the combination with an internally-threaded hollow tool stock, of a drill provided in its periphery with spiral grooves and having a terminal threaded and an intermediate smooth shank portion, a reamer having a collar of greater diameter than the drill, said reamer being provided with a key-way and seated about the smooth portion of the drill shank, a cutter arm extending laterally from the collar and below the top of the grooved portion of the drill and contacting the periphery of the latter, said threaded and smooth shank having a longitudinal key groove extending their entire lengths, and a key seated within said groove of the smooth shank adapted for securing the reamer against independent rotation with respect to said drill.

1,065,295. ROAD-MAP HOLDER. THOMAS H. CONNORS, Seaforth, Minn. Filed Mar. 28, 1912. Serial No. 686,816. (Cl. 40—85.)



A map holder of the class described comprising a tubular casing having a longitudinal opening in one side through which a map may extend, the said casing being provided at one end with a fixed bearing bar and at the opposite end with keepers, a removable bearing bar mounted in the keepers, and a map roller arranged in the casing and having spindles at its ends for engagement with the said fixed and removable bearing bars.

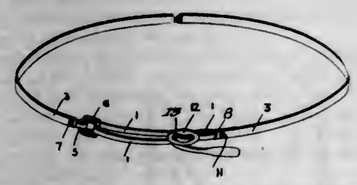
1,065,296. MAIZE, KAFIR-CORN, AND CANE HEADING MACHINE. WALACE ALEXANDER COZART, Caps, Tex. Filed Sept. 26, 1911. Serial No. 651,427. (Cl. 56—131.)



In a cane heading machine, a body portion, vertical posts on said body portion, traction wheels having gear teeth thereon, a pair of feed belts at each side of the machine, casings for said belts having sleeves mounted upon said posts, a laterally extending boxing connecting said casings together and movable therewith, short shafts connected at their upper ends to said feed belts and having their lower ends extending into said boxing, sprockets on the lower end of the inner short shaft of each pair, additional short shafts in said boxing having sprockets on their lower ends, transverse belts connecting the sprockets of said additional short shafts with the sprocket on the innermost first mentioned short shaft of each pair, gears connecting said additional short shafts respectively with the outermost first mentioned short shaft of each pair, vertical shafts carrying cutters, said vertical shafts having beveled gears on one end in mesh with the teeth on said traction wheels and sprockets normally engaging said transversely extending belts, and means for raising and lowering said casings with the mechanism therein contained.

1,065,297. WAIST-GRIP. GUY H. CRAWFORD, New York, N. Y., assignor, by mesne assignments, to Neva Slip Shirt Waist Grip Co., (Inc.,) a Corporation of New York. Filed July 9, 1912. Serial No. 708,402. (Cl. 241—8.)

1. A waist grip made of a tubular piece of tape folded on itself for a portion of its length, whereby a reinforced portion is provided, the end of the tape beyond the reinforced portion having a fastener secured thereto, the folded end of the reinforced portion being provided with a ring, the said piece of tape beyond the reinforced portion being adapted to be entered into the ring and brought into engagement with the said fastener, whereby it is held in position for use.



2. A waist grip made of a length of tubular tape folded on itself for a part of its length whereby a reinforced portion is provided, a fastener having openings therein, the end of the tape beyond the reinforced portion passing through the openings in the said fastener and being secured to one end of the reinforced portion, the other end of the reinforced portion being provided with a ring, that portion of the tape beyond the fastener being adapted to be passed through the said ring and brought into engagement with itself adjacent the fastener, whereby the device is held in position for use.

3. A waist grip made of tubular tape folded back on itself for a part of its length, whereby a reinforced portion is provided, the folded end of the reinforced portion being provided with a ring, a fastener having openings therein, that part of the tape beyond the other end of the reinforced portion being folded and passed through the openings in the said fastener and then secured in position to the reinforced portion, the said end of the tape beyond the reinforced portion being adapted to be entered through the said ring and wrapped around that portion of itself adjacent the said fastener, whereby the frictional engagement between the fastener and the said end of the tape holds the article in position for use.

4. A waist grip made of tubular tape folded upon itself for a part of its length whereby a reinforced portion is provided and an unfolded end portion is also provided, one end of the folded portion being provided with a ring, a fastener, the said unfolded end engaging the fastener and also engaging the other end of the reinforced portion, the said unfolded end beyond the fastener being adapted to be passed through the said ring and wrapped around that portion of the tape adjacent the fastener, whereby the frictional engagement of the fastener and the tape secures the article in position for use.

5. A waist grip comprising a reinforced portion, a piece of tape extending from one end of the reinforced portion, a ring secured to the other end of the reinforced portion, a fastener, the said tape intermediate of its length being folded and brought into engagement with the fastener, the said folded portion being secured to the first end of the reinforced portion, said tape being adapted to be passed through the ring and secured to that portion of the tape adjacent the fastener, whereby the frictional engagement of the fastener with the tape holds the article in condition for use.

[Claims 6 and 7 not printed in the Gazette.]

1,065,298. WELL-DRILL. JAMES M. CURRELL, Paso Robles, Cal. Filed Aug. 28, 1912. Serial No. 717,604. (Cl. 166—3.)

1. In a hydraulic drill the combination of a member having an opening therethrough and a lateral discharge, a body slidably mounted upon the said member and having upper and lower outlets, said body adapted to receive a tool, means for yieldingly pressing the said body upwardly upon the said member to throw the upper outlet out of register with the lateral discharge of the said member, and a valve carried by the said body and arranged between the lower outlet thereof and the lower end of the said tubular member.

2. In a hydraulic tool the combination of a member having an opening therethrough and a lateral discharge leading from said opening, a hollow body slidably mounted upon the said member and having relative upper and lower outlets, means for limiting the movements of the body upon the member, a helical expansible spring interposed between the member and body to hold the latter relatively elevated, and a valve arranged within the hollow body below the before mentioned member and above the lower outlet of the body and normally held unseated and adapted to close when the momentum of the water passing through the said member has acquired a pressure sufficient to seat the valve to press the body downwardly.



3. In a hydraulic tool of the character set forth, the combination of a tubular member having an outer shoulder and formed with a lateral opening, a hollow body slidably mounted upon the tubular member and having upper and lower lateral outlets and an intermediate valve seat, an expansible helical spring located within the body and confined between an inner shoulder thereof and the shoulder of the tubular member to normally hold the body relatively elevated, a valve arranged within the body to close downwardly upon the said valve seat, and a spring for normally holding said valve unseated.

4. In a hydraulic tool of the character set forth, the combination of a tubular member having an outer shoulder and a lateral opening, a hollow body comprising two sections connected by a screwthread joint slidably mounted upon said tubular member, an expansible helical spring arranged within the upper section of the hollow body and confined between the shoulder of the tubular member, and an inner shoulder of the body, the lower section of the latter having upper and lower lateral openings and an intermediate valve seat, a valve for closing downwardly upon said valve seat, and a spring for normally holding the valve unseated.

1,065,299. MANUFACTURE OF STEREOTYPE-PLATES. ARTHUR DUTTON, Runcorn, England. Filed Dec. 13, 1909. Serial No. 532,868. (Cl. 22—5.)

1. A gage for stereotype-block casting apparatus provided upon its under face with means for producing centering impressions upon the matrix.

2. A gage for stereotype-block casting apparatus provided upon its under face with recesses for producing centering projections upon the matrix.

3. A gage for stereotype-block casting apparatus having its back provided with air vents and its under face provided with means for producing centering impressions upon the matrix.

4. A gage for stereotype-block casting apparatus constructed of standard lengths according to the point system and having its under face provided with recesses for producing centering projections upon the matrix.

5. A gage for stereotype-block casting apparatus con-

structed of standard lengths according to the point system and provided with a pouring opening, said gage having



its under face provided with means for producing centering impressions upon the matrix.

[Claim 6 not printed in the Gazette.]

1,065,300. MATRIX FOR THE MANUFACTURE OF STEREOTYPE AND LIKE BLOCKS FOR PRINTING. ARTHUR DUTTON, Runcorn, England. Filed Dec. 13, 1909. Serial No. 532,869. (Cl. 198—7.)

1. A matrix for stereotype-printing consisting of a plurality of thin sheets of abbestos cemented together and treated with precipitated barium sulfate.

2. A matrix for stereotype-printing consisting of a plurality of extremely thin sheets of asbestos cemented together and treated with precipitated barium sulfate, and then subjected to pressure to increase the firmness and durability of the matrix.

3. A matrix for stereotype printing consisting of a plurality of thin sheets of asbestos cemented together, coated with precipitated barium sulfate and faced with thin metallic foil.

4. A matrix for stereotype printing consisting of a plurality of thin sheets of asbestos cemented together, coated with precipitated barium sulfate, subjected to pressure to increase the firmness and stability of the matrix and faced with thin metallic foil.

5. A matrix for stereotype printing consisting of a plurality of thin sheets of asbestos cemented together, and treated with a mixture of heat-resisting materials including precipitated barium sulfate.

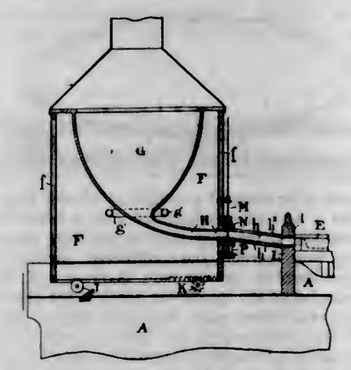
[Claims 6 to 8 not printed in the Gazette.]

1,065,301. APPARATUS FOR MAKING STEREOTYPE AND LIKE BLOCKS. ARTHUR DUTTON, Runcorn, England. Filed Dec. 13, 1909. Serial No. 532,870. (Cl. 22—2.)

1. The combination of a melting pot; a pourer leading from said pot; and a valve mechanism associated with said pourer, said mechanism comprising a slotted head having an opening formed therein with which the mouth of the pourer directly communicates and having a second opening located below the first-named opening, a cut-off plate slidable in the slot in said head and formed with an opening, and means for moving said plate bodily, to bring the opening therein into registration with either the first or the second named opening.

2. The combination of a melting pot having a pourer leading therefrom; a head wherein the mouth of said pourer is formed; a bridge constituting a continuation of said pourer and having one of its ends fitted in said mouth; means for supporting the other end of said bridge; and a valve movable in said head for opening and closing communication between said pourer and said bridge.

3. The combination of a melting pot having a pourer leading therefrom; a head wherein the mouth of said pourer is formed; a bridge constituting a continuation of said pourer and having one of its ends fitted in said mouth, said bridge comprising upper and lower portions removably connected together; means for supporting the other end of said bridge; and a valve movable in said head for opening and closing communication between said pourer and said bridge.

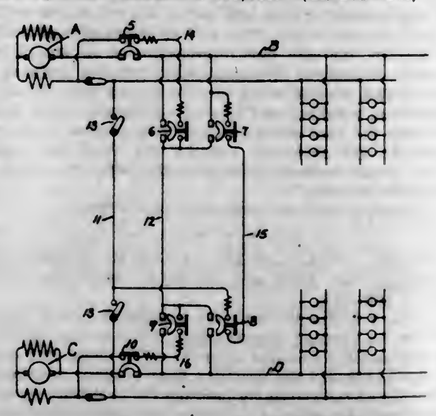


4. The combination of a melting pot having a pourer leading therefrom; a head wherein the mouth of said pourer is formed, said head having an opening formed therein below said mouth; a bridge constituting a continuation of said pourer and having one of its ends fitted in said mouth; means for supporting the other end of said bridge; a cut-off plate slidable in said head and formed with an opening; and means for moving said plate bodily to bring the opening therein into and out of registration with either said mouth or said first-named opening.

5. The combination, with a table and a track thereon; of a heating chamber arranged to travel bodily on said track; a melting pot located within said chamber and provided with a pourer terminating in a mouth located exteriorly of said chamber; a bridge supported upon said table and having one of its ends arranged to fit in said mouth; and means for moving said chamber toward and from said bridge.

[Claim 6 not printed in the Gazette.]

1,065,302. MEANS FOR TRANSFERRING LOAD FROM ONE GENERATOR-STATION TO ANOTHER. EDGAR F. DUTTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 2, 1911. Serial No. 659,669. (Cl. 171—97.)



1. In combination, a plurality of generator stations, a plurality of load circuits, an automatic circuit breaker between each generator station and a load circuit, a plurality of switches for connecting a plurality of said load

circuits together and a plurality of control circuits controlled by said switches for selectively tripping the circuit breakers for the generator stations upon the closing of said switches.

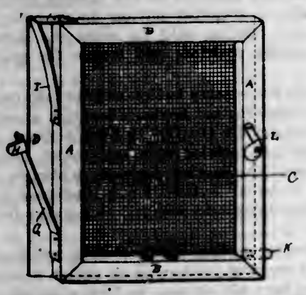
2. In combination, a plurality of generator stations, a plurality of load circuits, an automatic circuit breaker between each generator station and a load circuit, switching means for connecting a plurality of said load circuits together and means controlled by said switching means controlling one of said circuit breakers.

3. In combination, a plurality of generator stations, a plurality of load circuits, an automatic circuit breaker between one of said generator stations and a load circuit, switching means for connecting a plurality of said load circuits together and for disconnecting the same, and means controlled by said circuit breaker for controlling said switching means.

4. In combination, a plurality of generator stations, a plurality of load circuits, automatic circuit breakers between said generator stations and their respective load circuits, automatic switches for connecting said load circuits together and disconnecting the same, and means connecting the circuit breakers and switches in pairs, each means being controlled by its circuit breaker and switch for controlling its switch and circuit breakers respectively.

5. In combination, a plurality of generator stations, a plurality of load circuits, an automatic circuit breaker between each generator station and a load circuit, other automatic circuit breakers for connecting a plurality of said load circuits together and for disconnecting the same, and selective interlocking means between the two sets of circuit breakers.

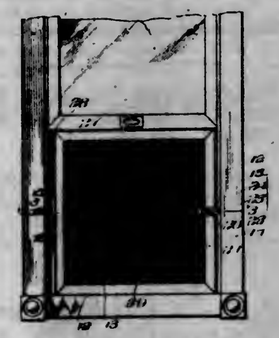
1,065,303. WINDOW-SCREEN. JOSEPH DYER and GEORGE H. LEONARD, Fairfield, Me., assignors to Maine Screen and Ventilator Company, Fairfield, Me., a Corporation of Maine. Filed Sept. 7, 1909. Serial No. 516,603. (Cl. 156—14.)



1. The herein described window screen adapted of use in connection with the outside band strip of a window which comprises a frame having sides and ends and a mesh secured thereto, a plate secured to the outside of one of the sides of the frame and projecting beyond said outer edge thereof, and a first spring, one end secured to the edge of the side adjacent said plate, the other end being free and adapted to have sliding engagement with the edge of said band strip, said plate being adapted to overlap upon the outside face of said band strip and said spring being wholly contained between said band strip and the edge of the screen, said spring being provided on the edge opposite said plate with an outwardly extended offset positioned below the top of the screen and adapted to have sliding engagement with the inside of said band strip and coöperating with said plate to hold the screen against lateral displacement when the screen is in position, whereby the screen is free to slide up and down on said band strip.

2. A screen comprising a frame having screen wire thereon, a leaf spring having one end thereof rigid on the frame and a portion of the leaf spring normally spaced from the frame, a guide lug projecting from the spring, a guide plate projecting beyond one side of the frame, and locking means mounted on the other side of the said frame for locking the frame on a window casing.

1,065,304. SCREEN. JOSEPH DYER and GEORGE H. LEONARD, Fairfield, Me., assignors to Maine Screen and Ventilator Company, Fairfield, Me., a Corporation of Maine. Filed Sept. 10, 1912. Serial No. 719,670. (Cl. 156—14.)



1. In a screen, the combination with a frame, of a leaf spring having one end thereof secured to the frame and the other end thereof slidable on the frame with the medial portion of the spring adapted to engage one of the strips of a window casing, a guide lug projecting from the spring to engage the said strip, an auxiliary spring secured to the frame and provided with a laterally extending portion projecting around the upper end of the frame with the medial portion of the auxiliary spring abutting against the said strip, a guide plate secured to the frame and projecting from one side thereof to extend across a portion of the window casing, and a locking member slidable on the said frame to engage an opposite strip of the said window casing.

2. In a screen, the combination with a frame, of a leaf spring having one end thereof secured to the frame and the other end thereof slidable on the frame with the medial portion of the spring adapted to engage one of the strips of a window casing, a guide lug projecting from the spring to engage the said strip, an auxiliary leaf spring secured to the frame and provided with a laterally extending portion projecting around the upper end of the frame with the medial portion of the auxiliary spring abutting against the said strip, a guide plate secured to the frame and projecting from one side thereof to extend across a portion of the window casing, a slotted locking member, pins extending through the slot of the locking member to slidably connect the same with the said frame with an end of the locking member projecting over an opposite strip of the said window casing, a handle for the locking member, and a spring on the said frame and engaging the said locking member to normally retain the same in locked position and in engagement with the said opposite strip.

3. A screen comprising a frame having screen wire thereon, a leaf spring having one end thereof rigid on the frame and the other end thereof slidable on the frame with the medial portion of the leaf spring normally spaced from the frame, a guide lug projecting from the said spring, a guide plate projecting beyond one side of the said frame, and a spring-engaged locking member mounted on the other side of the said frame for locking the said frame on a window casing.

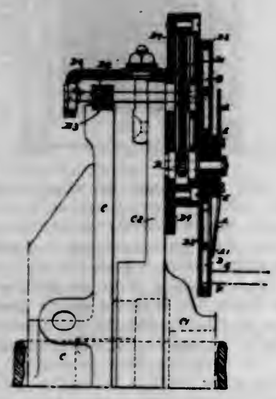
4. A screen comprising a frame having screen wire thereon, a leaf spring having one end thereof rigid on the frame and the other end thereof slidable on the frame with the medial portion of the leaf spring normally spaced from the frame, a guide lug projecting from the said spring, a guide plate projecting beyond one side of the said frame, a spring-engaged locking member on the other side of the said frame for locking the said frame on a window casing, and an auxiliary spring having one end thereof rigidly secured to the frame and the medial portion thereof normally spaced from the frame to engage the window casing.

5. In a screen, the combination with a rectangular frame for slidable engagement with a window casing, of a guide plate projecting from one side of the frame, a leaf

spring mounted on the frame and having a medial portion thereof normally spaced therefrom, the said leaf spring being arranged adjacent the said guide plate, a lug on the said leaf spring and spaced from the guide plate, and a spring-engaged locking member mounted on the other side of the said frame and adapted to engage the window casing.

[Claim 6 not printed in the Gazette.]

1,065,305. TORSIOMETER. FREDERICK THOMAS EDGECOMBE, Dumbarton, Scotland. Filed Apr. 17, 1912. Serial No. 691,417. (Cl. 73—15.)



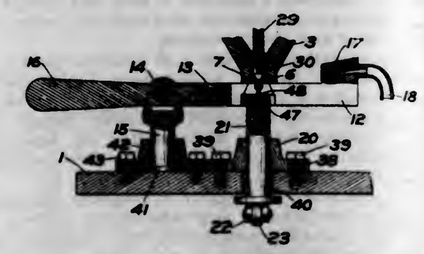
1. In a torsiometer for shafts, a pair of adjacent members operatively connected to the shaft at points spaced remotely apart, means for multiplying the relative motion of said members, an indicator mechanically actuated by said multiplying means in combination with an electrically operated indicator comprising a resistance element and means in connection with said multiplying mechanism for varying the resistance of said element upon a variation of the torque.

2. In a torsiometer for shafts, a pair of adjacent members operatively connected to the shaft at points spaced remotely apart, means for multiplying the relative motion of said members, an indicator arm mechanically actuated by said multiplying means, in combination with an electrically operated indicator comprising a rheostat, a contact on said indicator arm coöperating with said rheostat to vary the resistance thereof upon a variation of the torque, together with an electrical instrument at a distance in the rheostat circuit for indicating such variations in resistance.

3. In a torsiometer for shafts, a pair of adjacent members operatively connected to the shaft at points spaced remotely apart, means for multiplying the relative motion of said members, an indicator arm mechanically actuated by said multiplying means, in combination with an electrically operated indicator comprising a rheostat, a contact on said indicator arm coöperating with said rheostat to vary the resistance thereof upon a variation of the torque, together with an ammeter in the rheostat circuit for indicating the variations in the current caused by the variation of resistance in said rheostat.

4. In a torsiometer for shafts, a pair of adjacent members operatively connected to the shaft at points spaced remotely apart, means for multiplying the relative motion of said members, an indicator arm mechanically actuated by said multiplying means, in combination with an electrically operated indicator comprising a rheostat with two arcs of contact thereon, contacts on said indicator arm coöperating with said rheostat contacts, a double scale ammeter and means for putting said ammeter in circuit alternately with either arc of contacts, substantially as described.

1,065,306. MACHINE FOR MAKING AND ATTACHING BUTTON-SHANKS. SAMUEL H. ESHLEMAN, Rochester, N. Y., assignor, by mesne assignments, to Joseph H. Lawless, Thomas D. Lawless, and Elizabeth M. Lawless, Brooklyn, N. Y., a Copartnership doing business as Firm of Union Pearl Works, New York, N. Y. Filed June 19, 1905. Serial No. 265,872. (Cl. 22—58.)



1. A device for casting button shanks into button blanks comprising a melting pot having an outlet, a valve for said outlet, a two-part die adapted to form a shank and having a gate adapted to register with said outlet, means for setting said die in the casting position, means for supporting a socketed button blank underneath said die, and means for operating said valve.

2. A device for casting button shanks into button blanks comprising a melting pot having an outlet, a valve for said outlet, a movable two-part die adapted to form a shank and having a gate adapted to register with said outlet, means for setting said die in the casting position, means for supporting a socketed button blank underneath said die, and means for operating said valve.

3. A device for casting button shanks into button blanks comprising a melting pot having an outlet, a valve for said outlet, a movable two-part die adapted to form a shank and having a gate adapted to register with said outlet, means for setting said die in the casting position, means for supporting a socketed button blank underneath said die, means for opening said die when the same is moved from the casting position, and means for operating said valve.

4. A device for casting button shanks into button blanks comprising a melting pot having an outlet, a valve for said outlet, a two-part die adapted to form a shank and having a gate adapted to register with said outlet, means for setting said die in the casting position, a plunger adapted to support a socketed button blank underneath said die, means for operating said plunger, and means for operating said valve.

5. A device for casting button shanks into button blanks comprising a melting pot having an outlet, a valve for said outlet, a two-part die adapted to form a shank and having a gate adapted to register with said outlet, means for setting said die in the casting position, a plunger adapted to support a socketed button blank underneath said die, a treadle and connections therefrom for operating said plunger and for operating said valve.

[Claims 6 to 30 not printed in the Gazette.]

1,065,307. VACUUM STICKER OR ATTACHING DEVICE. JAMES P. EVERTTS, Sayre, Pa. Filed Feb. 2, 1912. Serial No. 675,097. (Cl. 248—39.)

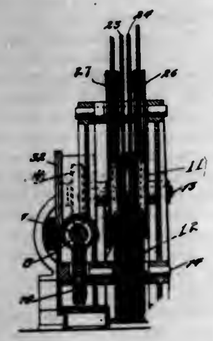


1. A vacuum sticker comprising spaced rubber vacuum cups arranged to engage a surface and be retained in position by vacuum, and a member connecting said cups comprising an elongated integral extension of said cups, and said member being relatively thin and yieldable, whereby the cups may be positioned out of alinement to engage different surfaces, substantially as and for the purpose described.

2. An integral rubber structure for the described purpose comprising an elongated body terminating at opposite ends in enlarged portions projecting at substantially right angles to the body portion and recessed to form vacuum cups, the space to the side of the body portion and between the enlarged portions being unobstructed and forming a receiving pocket substantially as and for the purpose described.

3. An integral rubber structure comprising a relatively thin elongated bendable body portion terminating at opposite ends in enlarged portions recessed to form vacuum cups, operating in the manner and for the purpose described, and a metal member embedded in the bendable part of said structure.

1,065,308. ELEVATOR. HUGO W. FORSLUND and JOSEPH RICE, Chicago, Ill., assignors to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Aug. 24, 1904. Serial No. 221,942. (Cl. 187—20.)



1. The combination of two scored or grooved drums arranged on noncoincident axes, some of the groove of one drum being offset with respect to grooves in the other drum a distance of one half of the width of a groove in one direction along the axis and other grooves of the former drum being offset one half the width of a groove in the other direction and the end grooves of said former drum being disposed beyond the end grooves of the other drum, two cables wound on said drums from the outer ends of both drums inwardly toward their mid lengths, and means for rotating said drums.

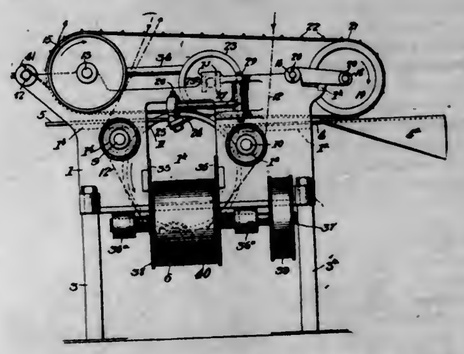
2. The combination of two scored or grooved drums arranged on noncoincident axes, the grooves of one drum being offset in both directions under the axis with relation to the grooves of the other drum a distance less than the width of the groove, and having the end grooves offset beyond the end grooves of the other drum, two cables wound on said drums from the outer ends of both drums inwardly toward their mid lengths, and means for rotating said drums.

3. In an elevator, the combination of two drums arranged one above the other with their axes in an inclined plane, the elevator shaft or hatchway and car therein and two sheaves arranged over the lower one of said drums with their peripheries in a vertical plane lying between the elevator shaft and the periphery of the upper one of said drums, two cables counterweighted at one end and descending substantially parallel with the elevator shaft and passing under said sheaves respectively and thence over the upper drum and under the lower drum, and from the side of the lower drum which is adjacent to the elevator shaft upwardly substantially parallel with the shaft and supporting the car at their extremities, both of said drums having peripheral grooves receiving said cables, and some of the grooves of the lower drum being off-set in one direction along its axis, with respect to the grooves of the upper drum, while others of the grooves of the lower drum are offset in the opposite direction.

4. The combination of two scored or grooved drums arranged on non-coincident axes, the grooves of one drum being offset in both directions from a medial point in the length of its axis, with respect to the grooves in the other drum, the end grooves extending a distance equal to one-half the width of a groove beyond each of the end grooves of the other drum, cables wound on said drums from the outer ends of both drums inwardly toward their medial points, and means for rotating the drums.

5. The combination of two scored or grooved drums, one of said drums extending beyond the outer grooves of the other drum a distance at each end equal to one-half of a groove, cables wound upon said drums from their outer edges toward their centers, and means for rotating the drums.

1,065,309. FRUIT-TRIMMING MACHINE. HENRY GABRIEL GINACA, Honolulu, Hawaii, assignor to Hawaiian Pineapple Company, Ltd., Honolulu, Hawaii, a Corporation of Hawaii. Filed Jan. 23, 1913. Serial No. 743,693. (Cl. 146—7.)



1. In a machine for trimming fruit, rigid rings forming a grid, and a reciprocating knife operating adjacent thereto, for the purpose specified.

2. In a machine for trimming fruit, a plurality of rigid rings, a flexible belt coöperating with said rings to grip the fruit, and a reciprocating knife for trimming off the good portion of the fruit from the rind while the fruit is thus gripped.

3. In a machine for trimming fruit, a plurality of rigid rings, a flexible belt coöperating with said rings to grip the fruit, a reciprocating knife for trimming off the good portion of the fruit from the rind while the fruit is thus gripped, and means passing through said rings for removing the fruit thus cut.

4. In a machine for trimming fruit, a plurality of rigid rings forming a grid, means to press the fruit on said grid, and a reciprocating knife operating within the rings to trim the good portion of the fruit from the rind.

5. In a machine for trimming fruit, a plurality of rigid rings forming a grid, means to press the fruit on said grid, and a reciprocating knife extending transversely of the machine and operating within the rings to trim the good portion of the fruit from the rind.

[Claims 6 to 10 not printed in the Gazette.]

1,065,310. GARMENT. AARON GOLDSCHMIDT and CHARLES M. HOLLANDER, New York, N. Y. Filed Mar. 21, 1912. Serial No. 685,259. (Cl. 2—60.)

1. A lady's long outer garment having an outer part and a lining terminating adjacent the lower edge of said outer part, said lining being secured transversely to the outer part at a substantial distance above the lower edge of the outer part and lining, whereby a free flap of the lining is provided capable of being turned upward and secured against the inner side of the garment.

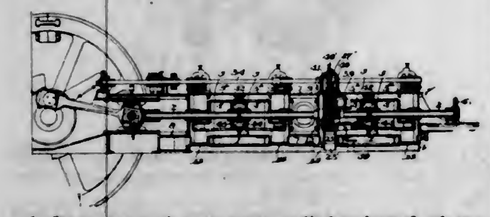
2. A lady's long outer garment having an outer part and a lining terminating adjacent the lower edge of said outer part, said lining being secured transversely to the outer part at a substantial distance above the lower edge

of the outer part and lining, whereby a free flap of the lining is provided capable of being turned upward, a



facing exposed when said flap is turned up, and means for fastening the flap up.

1,065,311. GAS-ENGINE. EDWARD GRAY, Oil City, Pa., assignor to Riverside Engine Company, Oil City, Pa., a Corporation of Pennsylvania. Filed Apr. 8, 1907. Serial No. 366,896. (Cl. 121—105.)



1. In a gas engine, a power cylinder formed of several sections, a base for supporting said sections, and a guide on said base for the sections arranged to permit longitudinal movement of the sections and to prevent lateral movement thereof, and screw devices for securing the sections to the base; substantially as described.

2. A gas engine having a cylinder base, a flange guide on said base, tandem power cylinders each constructed in sections supported on said base and seated within the guide, a removable distance piece between the cylinders, said guides being arranged to permit the cylinder sections to be moved longitudinally along the base and to prevent lateral movement thereof, so as to retain the sections of the cylinders in line with each other, and means to secure the cylinder sections and the removable distance pieces together; substantially as described.

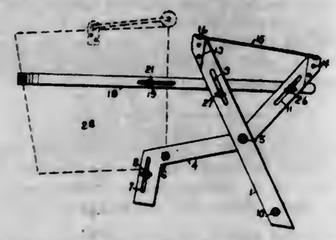
3. A gas engine having a bed, a power cylinder constructed in sections, a piston within said cylinder, and tie bars for securing the sections to the engine bed to transmit the strain between the cylinder and piston to the bed through said bars; substantially as described.

4. A gas engine having a base, a cylinder-supporting seat on said base, a power cylinder made in sections supported on said seat, and guide connections between said seat and cylinder sections, said guide connections being arranged to permit an endwise movement of the cylinder sections to give access to the piston, or to entirely remove the piston without displacing the piston rod from its working position and without removing the cylinder sections from the seat; substantially as described.

5. A gas engine having a cylinder base, a guide having projections on said base, tandem power cylinders supported thereon between the projections, a sectional distance piece between the cylinders, said projections and guide being arranged to permit the cylinders to be moved longitudinally along the base and to prevent lateral movement thereof, so as to retain the cylinders in line with each other, means to secure the cylinders to said base, and means for securing the cylinders and distance pieces to each other; substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

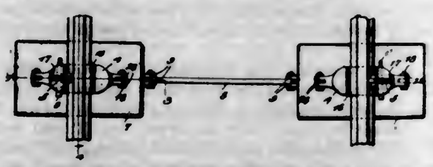
1,065,312. MILKING STOOL AND PAIL HOLDER. AUGUST W. LAABS, Appleton, Wis. Filed Jan. 13, 1913. Serial No. 741,679. (Cl. 31—13.)



1. A folding milking stool and pail holder, comprising two similar pairs of legs formed of band metal, suitable feet for the legs, the two pairs of legs being hinged together intermediate the ends of the legs and each leg being provided with a slot lengthwise thereof near their upper ends, a slot extending from each forward foot upward, a pail supporting rod adjustably secured from one of said slots to the other, suitable tie and spacing rods between each, the two front and two rear legs, a seat carrying member connecting the upper ends of both, the front and rear legs, a fabric seat secured to said members and limiting the spreading apart of the front and rear legs, a pail holder formed of band metal and arranged below and in front of the seat, bent for encircling a pail and adapted for supporting pails of different diameter, its straight ends being provided with slots longitudinally thereof and hinged through said slots to the aforesaid longitudinally arranged leg slots under the seat at its rear, and suitable members arranged in the forward leg slots for adjustably supporting the forward end of the pail holder.

2. In a milking stool, a pail holder therefor, consisting of two similar arms of band metal, hinged to the rear part of the stool and longitudinally adjustable upon their hinge members, a rod connecting and spacing apart said arms intermediate their ends and their forward ends being curved, slotted and lapped one upon the other, means for securing said lapped ends together at different points in their length, and means for increasing or diminishing the pail holding space between said curved ends and the aforesaid connecting rod.

1,065,313. CEMENT TIE WITH METAL RAIL-FASTENINGS. LEVI H. LUCABAUGH, Bluffton, Ind. Filed Apr. 16, 1913. Serial No. 761,562. (Cl. 238—6.)



1. The combination of reinforced tie blocks of cementitious material, anchor members embedded in the tie blocks, protruding arms secured to the anchor members, a cross bar secured to the protruding arms of opposite tie blocks; and, in each tie block, a crown member having an anchoring rim embedded in the tie block, a shock-absorbing member disposed within the crown member, a channeled and grooved hood member shaped to correspond with and positioned over the crown member and adjustably secured to the anchor member, a rail-fastening tongue on the hood member, an oppositely positioned rail dog adjustably secured in the grooved hood member, and means for locking the rail dog firmly against the rail, substantially as set forth.

2. The combination, in roadbed equipment, of opposite reinforced cement tie blocks, stirrup members anchored in the tie blocks and having protruding stirrup arms, a cross bar member secured to protruding arms of opposite tie blocks, and rail-fastening means adjustably secured to the anchor members.

3. Rail-fastening mechanism comprising a substantially elliptical hood member having a rail channel, a rail-fastening tongue, a groove disposed opposite to and at right angles to the aforesaid tongue, and a transverse key channel, in combination with an adjustable rail-fastening dog having a key groove and mounted on the hood member, and a key to lock the rail-fastening dog to the rail, substantially as described.

4. A plastic reinforced tie block having a crown member embedded therein, a cushion member positioned within the crown member, a hood member supported by the cushion member and secured over the crown member, mechanism embedded in the cement to which the crown member is secured, a laterally-adjustable rail-fastening member mounted on the hood member and means for locking the rail-fastening member, in combination with means disposed between and fastening opposite tie blocks.

5. The combination, in a roadbed equipment, of opposite cement tie blocks, each having a longitudinally-disposed substantially M-shaped reinforcing member, a transversely-disposed substantially M-shaped reinforcing member, and a stirrup spirally formed in part and having protruding stirrup arms; a cross-bar member secured to protruding arms of opposite tie blocks; and rail-fastening means adjustably secured to the anchored stirrup members, substantially as described.

1,065,314. MOUNT FOR EYEGLASSES. JOHN MCMULLEN, Attleboro, Mass. Filed Feb. 19, 1912. Serial No. 678,682. (Cl. 88—50.)



1. In an eyeglass mount, the combination with a bridge and a pivoted nose guard lever supported thereby, of a pivotal stud for said lever having a flanged head provided with a bearing surface for said lever, a shank passing through a hole in the bridge and having a shoulder adapted to be rotatively brought into engagement with cam surfaces on the bridge.

2. In an eyeglass mount, a bridge, a nose guard lever, a pivotal stud for said lever provided with a cylindrical head forming a bearing for said lever, a shank rotatable in said bridge, a radial projection adapted to engage the surface of the bridge, and a stop to limit the rotation of the stud.

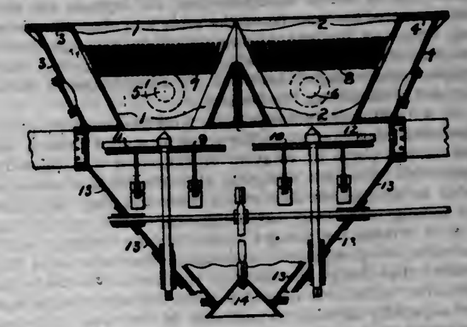
3. In an eyeglass mount, a bridge having an elongated hole, a pivotal stud having a shank passing through said hole, means adapted by a rotative movement imparted to said stud to hold the stud from endwise movement, and a nose guard lever pivotally held on said stud.

4. In an eyeglass mount, a bridge having a hole therethrough, a pivotal stud provided with a shoulder bearing against one side of the bridge, a shank passing through the hole in the bridge and having a radial projection adapted by a rotative movement of said stud to be brought into engagement with the opposite side of said bridge, and a nose guard lever pivoted on said stud.

5. In an eyeglass mount, a bridge having a hole therethrough, a pivotal stud held in said hole provided with a cylindrical surface forming a bearing for a nose guard lever, a shank passing through the hole in the bridge, means carried by the stud to hold it from endwise movement, and means carried by the bridge to hold the stud from rotative movement in one direction, and a nose guard lever pivoted on said stud.

[Claims 6 to 10 not printed in the Gazette.]

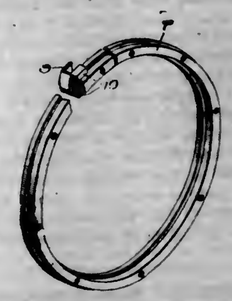
1,065,315. GAS-PRODUCER. QUINTIN MOORE, Glasgow, Scotland. Filed Jan. 28, 1913. Serial No. 744,774. (Cl. 48—87.)



1. In a dry bottom gas producer, a series of inverted truncated conical grates the walls of which are apertured in their upper portions to admit an air blast to a superposed producer casing, said assembled grates being, in plan, of considerably greater length than width, those portions of the grates adjacent the ends of the longer sides of the producer being fitted and jointed thereto while the parts of the grates adjacent one another merge into one another, in combination with independent fire supporting bottoms arranged beneath each grate cone, scrapers for removing the ash therefrom and an outlet for the ash, substantially as described.

2. In a dry bottom gas producer, a series of inverted truncated conical grates the walls of which are apertured in their upper portions to admit an air blast to a superposed producer casing, blast supply casings surrounding the grates, the grates and casing conforming to the rounded ends of the producer at their remote parts, while at their adjacent parts the casings abut each other and the grates merge one into the other, in combination with independent free supporting bottoms arranged beneath each grate cone, scrapers for removing the ash therefrom and an outlet for the ash, substantially as described.

1,065,316. FLUID-TURBINE. MARK A. ROSS, Chicago, Ill., assignor of one-half to Harry P. Bayley, Chicago, Ill. Filed Jan. 20, 1913. Serial No. 743,006. (Cl. 121—60.)



1. A turbine including a turbine wheel; buckets for the turbine wheel; and a mounting ring separably secured to the turbine wheel and to which mounting ring the buckets are separably secured, said buckets having rearwardly extending ears embracing the ring.

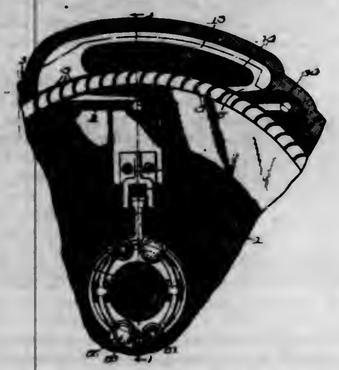
2. A turbine including a rotor; turbine buckets; and a mounting ring separably secured to the rotor at a face thereof that lies in the plane of rotation of the rotor and upon which mounting ring the buckets are separably secured to one side of the rotor, the mounting ring and buckets having interconnection permitting the buckets to be moved along the mounting ring, while supportingly engaged therewith, for the purpose of mounting and demounting the buckets.

3. A turbine including a rotor; turbine buckets; and a mounting ring carried by the rotor at a face thereof that lies in the plane of rotation of the rotor and upon the outer side of which mounting ring the buckets are separably secured to one side of the rotor and ring, the mounting ring and buckets having interconnection permitting the buckets to be moved along the mounting ring, while supportingly engaged therewith, for the purpose of mounting and demounting the buckets.

4. A turbine including a rotor; turbine buckets; and a mounting ring carried by the rotor at a face thereof that lies in the plane of rotation of the rotor and upon the outer side of which mounting ring the buckets are separably secured to one side of the rotor and ring, said buckets having rearwardly extending ears embracing the ring.

5. A turbine including a rotor; turbine buckets; and a mounting ring separably secured to the rotor at a face thereof that lies in the plane of rotation of the rotor and upon the outer side of which mounting ring the buckets are separably secured to one side of the rotor and ring, said buckets having rearwardly extending ears embracing the ring.

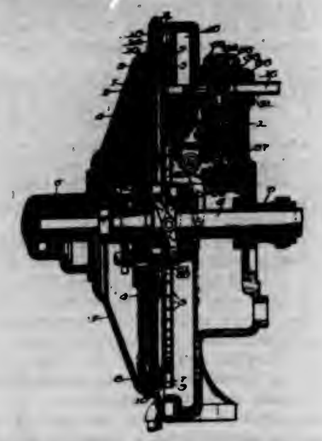
1,065,317. TURBINE. MARK A. ROSS, Chicago, Ill., assignor of one-half to Harry P. Bayley, Chicago, Ill. Original application filed Jan. 20, 1913, Serial No. 743,006. Divided and this application filed Feb. 26, 1913. Serial No. 750,850. (Cl. 121—60.)



A turbine including a turbine wheel; a primary nozzle for directing driving fluid upon the turbine wheel; a secondary nozzle whose receiving end is in position to receive the fluid passing from the primary nozzle after such fluid has been discharged from the turbine wheel and whose discharge end again directs the driving fluid upon the turbine wheel; a fluid receiving portion closely approximating the position of the secondary nozzle and in communication with the source of driving fluid whereby the temperature of the secondary nozzle may be modified by the temperature of the driving fluid; and a supporting frame for the turbine wheel, in which supporting frame the passage way of the secondary nozzle and the fluid receiving space of the fluid receiving portion are formed.

1,065,318. TURBINE. MARK A. ROSS, Chicago, Ill., assignor of one-half to Harry P. Bayley, Chicago, Ill. Original application filed Jan. 20, 1913, Serial No. 743,006. Divided and this application filed Feb. 26, 1913. Serial No. 750,851. (Cl. 121—118.)

1. A turbine including a turbine wheel; a primary nozzle for directing driving fluid upon the turbine wheel buckets; an auxiliary nozzle for also directing driving fluid upon the aforesaid turbine wheel buckets; and valve mechanism operating to permit the passage of driving fluid through the auxiliary nozzle when the pressure of such fluid is below a predetermined value, and operated upon by the driving fluid, when the pressure of such driving fluid is in excess of a predetermined value, to cut off the flow of driving fluid to the auxiliary nozzle to occasion the passage of driving fluid solely through the primary nozzle upon said buckets.



2. A turbine including a turbine wheel; a primary nozzle for directing driving fluid upon the turbine wheel buckets; an auxiliary nozzle for also directing driving fluid upon the aforesaid turbine wheel buckets; and valve mechanism operating to permit the passage of driving fluid through the auxiliary nozzle when the pressure of such fluid is below a predetermined value and operated upon by the driving fluid, when the pressure of such driving fluid is in excess of a predetermined value, to cut off the flow of driving fluid to the auxiliary nozzle to occasion the passage of driving fluid solely through the primary nozzle upon said buckets, said valving mechanism including a spring that operates to open the valve of the valving mechanism when the pressure of the driving fluid is below a predetermined value thereby to permit of the passage of driving fluid to the auxiliary nozzle.

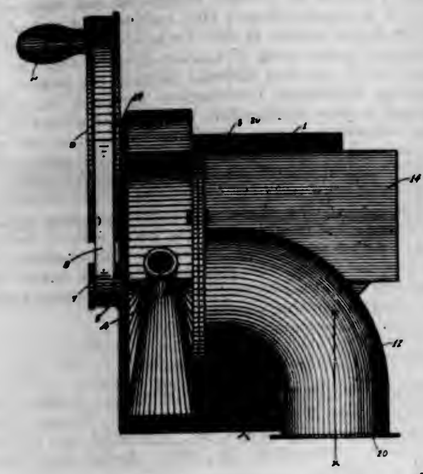
3. A turbine including a fluid passage for directing operating fluid to the turbine wheel; a governing plunger valve operating transversely of such passage, said valve having a valve opening adapted to be positioned to permit or cut off the flow of driving fluid and having portions upon each side of said opening for guiding the valve in its travel; and a guiding structure engaging the portions of the valve between which the valve opening is disposed, said guiding structure having a tapering seat for the valve and engaged by the valve when the valve is in a closed position, the portion of the valve engageable with said seat being also tapered.

4. A turbine including a fluid passage for directing operating fluid to the turbine wheel; a governing plunger valve operating transversely of such passage, said valve having a valve opening adapted to be positioned to permit or cut off the flow of driving fluid and having portions upon each side of said opening for guiding the valve in its travel; and a guiding structure engaging the portions of the valve between which the valve opening is disposed, said guiding structure having a tapering seat for the valve and engaged by the valve when the valve is in a closed position, the portion of the valve engageable with said seat being also tapered, the guiding structure for the valve being apertured where said seat is located for the passage of driving fluid to the turbine wheel.

5. A turbine including a fluid passage for directing operating fluid to the turbine wheel; a governing plunger valve operating transversely of such passage, said valve having a valve opening adapted to be positioned to permit or cut off the flow of driving fluid and having portions upon each side of said opening for guiding the valve in its travel; and a guiding structure engaging the portions of the valve between which the valve opening is disposed, there being a tapering seat for the valve and engaged by the valve when the valve is in a closed position, the portion of the valve engageable with said seat being also tapered.

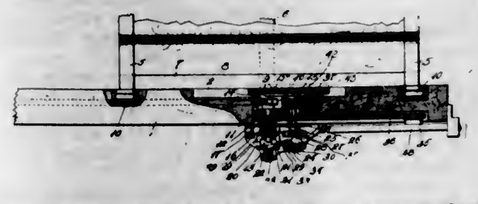
[Claims 6 to 8 not printed in the Gazette.]

1,065,319. SULFUR-VAPORIZER. HARRY D. STARR, Santa Cruz, Cal. Filed May 15, 1912. Serial No. 697,528. (Cl. 48—5.)



A device of the character described comprising an impeller casing provided with a discharge outlet, an impeller mounted in said casing and provided with a shaft, a pulley on said shaft, another shaft mounted independently of said first named shaft, a pulley on said second named shaft, a belt connecting said pulleys, a handle member on one of said pulleys, a chambered member communicating with said impeller casing, a receptacle communicating with said chambered member, a cup removably projected into the bottom of such chambered member, said cup being provided with an air inlet, a cap mounted over the top of said air inlet and disposed a slight distance therefrom at the top and sides leaving an intervening air passageway, and a supporting plate secured to said members, as described.

1,065,320. STREET-CAR ADVERTISING DEVICE. WELCOME F. SWEET, St. Louis, Mo. Filed Jan. 17, 1910. Serial No. 538,468. (Cl. 40—78.)



1. In a street car advertising apparatus, a support, there being grooves formed therein, and endless carrier operating in said grooves, a double row of card carrying frames arranged to travel upon the support, pins on the endless carrier for engaging the frames, and moving the same upon the support, means adapted to be actuated by the pins on the endless carrier for moving the frames from one row to the other at the ends of the carrier, and means whereby the endless carrier can be continuously or intermittently driven.

2. In an advertising apparatus, a pair of supports, an endless carrier arranged for operation on one of said suports, a double row of card-carrying frames arranged to move between the supports, pins on the endless carrier for engaging the frames to move the same with the carrier, and means mounted on the support for the carrier and adapted to be actuated by the pins on said carrier for shifting the frames from one row to the other at the ends of the apparatus.

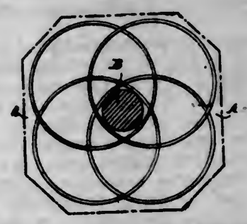
3. In a street car advertising apparatus, a support, a double row of independent and unattached card carrying frames arranged to travel upon said support, an endless carrier on the support for moving the frames, and a member arranged for lateral movement at each end of the carrier and actuated thereby for successively engaging the frames and shifting the same from one row to the other.

4. In a street car advertising apparatus, a support, a double row of card carrying frames arranged for movement thereon, an endless carrier for moving the frames, pins on the endless carrier which engage the frames, and shifting means arranged at the ends of the carrier and arranged to be actuated by the pins carried thereby for moving the frames from one row to the other.

5. In a street car advertising apparatus, a support, a double row of card carrying frames arranged for movement thereon, an endless carrier for moving the frames, pins on the endless carrier which engage the frames, shifting means arranged at the ends of the carrier and arranged to be actuated by the pins carried thereby for moving the frames from one row to the other, driving means for the endless carrier, and means whereby the operation of said driving means can be rendered continuous or intermittent.

[Claims 6 and 7 not printed in the Gazette.]

1,065,321. REINFORCEMENT OF COLUMNS, FERROCONCRETE PILLARS, AND THE LIKE. ROBERT THOMSON and WILLIAM AFFLECK THOMSON, Pollokshields, Glasgow, Scotland. Filed Oct. 12, 1911. Serial No. 654,336. (Cl. 72—76.)



1. Reinforcing means for concrete columns and the like, comprising ring-like members arranged radially and eccentrically about the axis of the column and of such figure and so disposed that the areas embraced by them are reduced by the radial extension of the figures, in combination with a core interconnected with said ring-like members and axial to the column.

2. Reinforcing means for concrete columns and the like, comprising ring-like members arranged radially and eccentrically about the axis of the column and of such figure and so disposed that the areas embraced by them are reduced by the radial extension of the figures, in combination with a core interconnected with said ring-like members, said core comprising a plurality of sub-cores the mean center of the area embraced by which is axial to the column.

3. Reinforcing means for concrete columns and the like, comprising ring-like members arranged radially and eccentrically about the axis of the column and of such figure and so disposed that the areas embraced by them are reduced by the radial extension of the figures, in combination with a core interconnected with said ring-like members and axial to the column, said core comprising at least one metal core element extending longitudinally of the column.

4. Reinforcing means for concrete columns and the like, comprising a series of figures consisting of round section rods bent to ring-like form and of such length that their ends overlap, the figures being arranged radially and eccentrically about the axis of the column, and interconnected therewith a core the mean center of which is axial.

5. Reinforcing means for concrete columns and the like, comprising a series of figures consisting of round section rods bent to ring-like form and of such length that their ends overlap with one end upturned and the other down-

turned, the figures being arranged radially and eccentrically about the axis of the column and interconnected therewith a core the mean center of which is axial.

[Claims 6 to 8 not printed in the Gazette.]

1,065,322. METAL-CONCRETE REINFORCED FLOOR. ROBERT THOMSON, Pollokshields, Glasgow, Scotland. Filed Apr. 5, 1913. Serial No. 759,054. (Cl. 72—15.)



1. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, and subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor and some extending radially inward and downward from that point to the central supporting device.

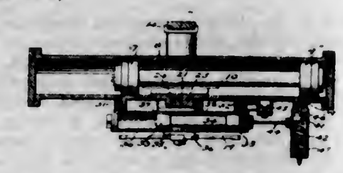
2. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members, some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor, and some extending radially inward and downward from that point to the central supporting device, and ring supporting means enmeshed between the primary rod-members and the outer ends of the subsidiary rod-members.

3. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, and subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members, some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor, and some extending radially inward and downward from that point to the central supporting device, the pairs of outwardly and inwardly extending subsidiary rod members being joined at their outer ends.

4. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members, some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor, and some extending radially inward and downward from that point to the central supporting device, ring supporting means enmeshed between the primary rod-members and the outer ends of the subsidiary rod-members, and additional compressional rod members in groups and extending radially inward and downward from the ring supporting means to abut against the central supporting device.

[Claim 6 not printed in the Gazette.]

1,065,323. DOOR-OPERATING DEVICE. ALBERT GOTTSCHALK, New York, N. Y., assignor to National Pneumatic Company, Chicago, Ill., a Corporation of West Virginia. Filed Sept. 24, 1909. Serial No. 519,432. (Cl. 39—94.)



1. In a door operating apparatus, the combination, with a fluid pressure motor for operating the door, of means governed by the fluid pressure for automatically cutting off the supply of fluid to the motor when the door is stopped during its closing movement.

2. In a door operating apparatus, the combination with a door, a fluid pressure motor and connecting mechanism for operating the door, of means operated by a predetermined degree of pressure upon the admission side of the motor to open an exhaust therefrom.

3. In a door operating apparatus, the combination, with a fluid pressure motor for operating the door, of means governed by the fluid pressure for automatically releasing the pressure from the closing side of the motor when the door is stopped in its movement.

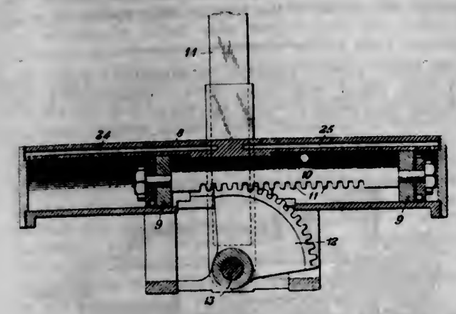
4. In a door operating apparatus, the combination, with a fluid pressure motor for operating the door, of means governed by the fluid pressure for automatically cutting off the supply of fluid to the motor and releasing the pressure therefrom when the door is stopped during its closing movement.

5. In a door operating apparatus, the combination with a door, a fluid pressure motor and connecting mechanism for operating the door, of a valve for controlling the supply of fluid to said motor to close the door, and means governed by the fluid pressure for automatically closing said valve when the door is stopped during its closing movement.

[Claims 6 to 12 not printed in the Gazette.]

1,065,324. MOTOR APPARATUS FOR OPERATING DOORS AND THE LIKE. ALBERT GOTTSCHALK, New York, N. Y., assignor to National Pneumatic Company, Chicago, Ill., a Corporation of West Virginia. Original application filed Sept. 24, 1909, Serial No. 519,432. Divided and this application filed Aug. 2, 1912. Serial No. 712,849. (Cl. 121—45.)

1. In an apparatus of the character described, the combination with a fluid pressure motor and connecting mechanism, of means governed by the movement of said motor at the end of its stroke for automatically cutting off all supply of fluid to the motor, and opening the exhaust therefrom.



2. In an apparatus of the character described, the combination with a fluid pressure motor and connecting mechanism, of valve means for controlling the supply of fluid to the motor, and means governed by the movement of the motor at the end of its stroke, but moving independently of the movement of said motor, for positively cutting off all supply of fluid to the motor.

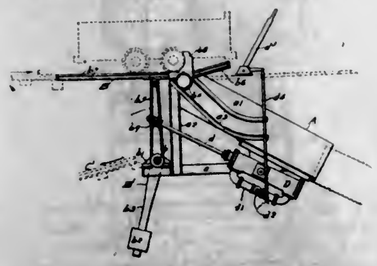
3. In an apparatus of the character described, the combination with a fluid pressure motor and connecting mechanism, of valve means for controlling the supply of fluid to the motor, and means governed by the movement of the motor at the end of its stroke, but moving independently of the movement of said motor, for shifting said valve means to cut off all supply of fluid to the motor.

4. In an apparatus of the character described, the combination with a cylinder, piston and connecting mechanism, of manually operated valve for controlling the supply of fluid to the cylinder, and means governed by the movement of the piston at the end of its stroke for opening an exhaust and for cutting off all supply of fluid to the cylinder.

5. In an apparatus of the character described, the combination with a fluid pressure motor and connecting mechanism, of additional fluid pressure actuated means operating upon movement of said motor to the end of its stroke for automatically cutting off the supply of fluid to the motor.

[Claims 6 to 17 not printed in the Gazette.]

1,065,325. AUTOMATIC TRANSFER-DUMP. FRANK C. GREENE, Cleveland, Ohio. Filed Apr. 5, 1909. Serial No. 487,863. (Cl. 214—9.)



1. In mechanism of the class described, the combination of a support of unvarying length oscillatory about a fixed axis, a track-section pivotally attached at one point to said support, and a relatively fixed guide engaging said track-section at another point.

2. In mechanism of the class described, the combination of a support of unvarying length oscillatory about a fixed axis, a track-section pivotally attached at one point to said support, means normally positioning said support and track-section, and a relatively fixed guide engaging said track-section at another point.

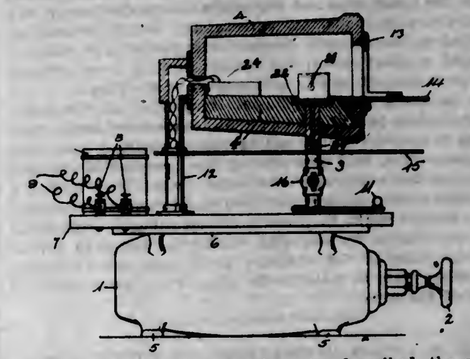
3. In mechanism of the class described, the combination of a lever arm of unvarying length oscillatory about a fixed axis, a track-section pivotally attached at one point to said lever arm and a relatively fixed, inclined guide engaging said track-section at another point.

4. In mechanism of the class described, the combination of a lever arm of unvarying length oscillatory about a fixed axis, a counter-weight normally positioning said lever arm and track-section, and a relatively fixed, inclined guide engaging said track-section at another point.

5. In mechanism of the class described, the combination of a floating track-section, a pivotally mounted counter-weighted lever arm pivotally connected with said track-section between the ends of said section, said lever arm being adapted to maintain said track-section in normal position and to oscillate the same upon its being moved from such position, and means connected with said lever arm and adapted to regulate oscillation thereof.

[Claims 6 to 41 not printed in the Gazette.]

1,065,326. APPARATUS FOR MAKING CASTINGS. HARRY P. MARSHALL, Glen Ridge, N. J. Filed Dec. 5, 1911. Serial No. 663,988. (Cl. 22—73.)



1. In an apparatus of the character described, the combination of a furnace, a sunken or depressed seat in the floor of the furnace having a peripheral flange projecting upward substantially flush at its top with the floor of the furnace, said seat adapted to receive a mold ring inside said flange, a vacuum pump, a duct leading from said pump to said seat, and a valve in said duct.

2. In an apparatus of the character described, the combination of a vacuum pump having a suitable base, a plate on the top of said pump, a suction pipe leading upward through said plate from the pump and having at its upper end a seat for a mold ring, a tubular support on said plate, an electrical furnace mounted on said support and pipe with said seat in its chamber, binding posts on said plate, and a valve in said pipe.

3. In an apparatus of the character described, the combination of a furnace, an air exhaust duct opening through the floor of the furnace chamber, and a sunken seat in the floor of the furnace chamber around said air exhaust duct adapted to receive a mold and position the same with respect to said air exhaust duct.

1,065,327. SPARK-PLUG CONNECTOR AND SWITCH. CHARLES E. SEMPLE, Jr., Youngstown, Ohio. Filed Apr. 27, 1911. Serial No. 623,699. (Cl. 175—183.)

1. A spark plug attachment comprising a pair of spaced insulated conductor plates, and a switch element arranged to metallically connect the two plates, and also adapted to metallically connect one of said plates with the spark plug base.

2. A spark plug attachment comprising a pair of spaced insulated conductor plates having an auxiliary spark gap between them, and a switch element arranged to metallically connect the two plates, and also arranged to singly engage either of the plates to respectively permit the oper-

turned, the figures being arranged radially and eccentrically about the axis of the column and interconnected therewith a core the mean center of which is axial.

[Claims 6 to 8 not printed in the Gazette.]

1,065,322. METAL-CONCRETE REINFORCED FLOOR. ROBERT THOMSON, Pollokshields, Glasgow, Scotland. Filed Apr. 5, 1913. Serial No. 759,054. (Cl. 72—15.)



1. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, and subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor and some extending radially inward and downward from that point to the central supporting device.

2. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members, some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor, and some extending radially inward and downward from that point to the central supporting device, and ring supporting means enmeshed between the primary rod-members and the outer ends of the subsidiary rod-members.

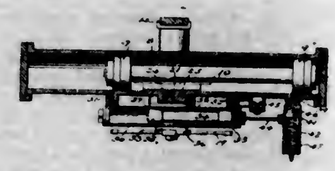
3. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, and subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members, some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor, and some extending radially inward and downward from that point to the central supporting device, the pairs of outwardly and inwardly extending subsidiary rod members being joined at their outer ends.

4. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members, some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor, and some extending radially inward and downward from that point to the central supporting device, the pairs of outwardly and inwardly extending subsidiary rod members being joined at their outer ends, and ring supporting means enmeshed between the primary rod-members and the outer ends of the subsidiary rod-members.

5. In a metal-concrete reinforced floor having radially disposed groups of primary reinforcing rod members secured to a primary anchor ring carried on a central supporting device carried in turn on a column; a second and subsidiary anchor ring of greater diameter than the primary anchor ring and disposed beneath the primary rod-members, subsidiary rod-members arranged in radially disposed groups intermediate between the groups of primary rod-members, some extending horizontally and radially outward from the secondary ring to the point of contraflexure of the floor, and some extending radially inward and downward from that point to the central supporting device, ring supporting means enmeshed between the primary rod-members and the outer ends of the subsidiary rod-members and additional compressional rod members in groups and extending radially inward and downward from the ring supporting means to abut against the central supporting device.

[Claim 6 not printed in the Gazette.]

1,065,323. DOOR-OPERATING DEVICE. ALBERT GOTTSCHALK, New York, N. Y., assignor to National Pneumatic Company, Chicago, Ill., a Corporation of West Virginia. Filed Sept. 24, 1909. Serial No. 519,432. (Cl. 39—94.)



1. In a door operating apparatus, the combination, with a fluid pressure motor for operating the door, of means governed by the fluid pressure for automatically cutting off the supply of fluid to the motor when the door is stopped during its closing movement.

2. In a door operating apparatus, the combination with a door, a fluid pressure motor and connecting mechanism for operating the door, of means operated by a predetermined degree of pressure upon the admission side of the motor to open an exhaust therefrom.

3. In a door operating apparatus, the combination, with a fluid pressure motor for operating the door, of means governed by the fluid pressure for automatically releasing the pressure from the closing side of the motor when the door is stopped in its movement.

4. In a door operating apparatus, the combination, with a fluid pressure motor for operating the door, of means governed by the fluid pressure for automatically cutting off the supply of fluid to the motor and releasing the pressure therefrom when the door is stopped during its closing movement.

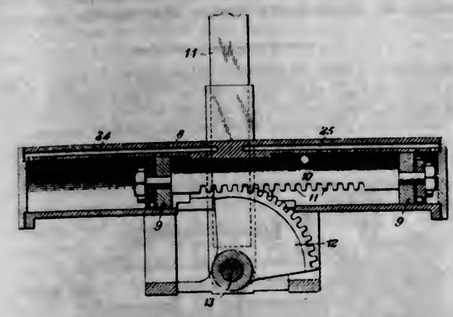
5. In a door operating apparatus, the combination with a door, a fluid pressure motor and connecting mechanism for operating the door, of a valve for controlling the supply of fluid to said motor to close the door, and means governed by the fluid pressure for automatically closing said valve when the door is stopped during its closing movement.

[Claims 6 to 12 not printed in the Gazette.]

1,065,324. MOTOR APPARATUS FOR OPERATING DOORS AND THE LIKE. ALBERT GOTTSCHALK, New York, N. Y., assignor to National Pneumatic Company, Chicago, Ill., a Corporation of West Virginia. Original application filed Sept. 24, 1909, Serial No. 519,432. Divided and this application filed Aug. 2, 1912. Serial No. 712,849. (Cl. 121—45.)

1. In an apparatus of the character described, the combination with a fluid pressure motor and connecting mechanism, of means governed by the movement of said motor

at the end of its stroke for automatically cutting off all supply of fluid to the motor, and opening the exhaust therefrom.



2. In an apparatus of the character described, the combination with a fluid pressure motor and connecting mechanism, of valve means for controlling the supply of fluid to the motor, and means governed by the movement of the motor at the end of its stroke, but moving independently of the movement of said motor, for positively cutting off all supply of fluid to the motor.

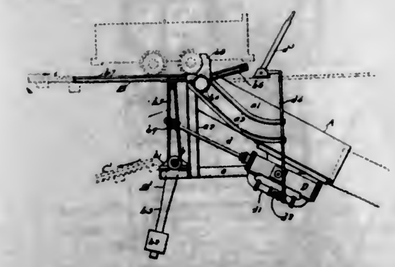
3. In an apparatus of the character described, the combination with a fluid pressure motor and connecting mechanism, of valve means for controlling the supply of fluid to the motor, and means governed by the movement of the motor at the end of its stroke, but moving independently of the movement of said motor, for shifting said valve means to cut off all supply of fluid to the motor.

4. In an apparatus of the character described, the combination with a cylinder, piston and connecting mechanism, of manually operated valve for controlling the supply of fluid to the cylinder, and means governed by the movement of the piston at the end of its stroke for opening an exhaust and for cutting off all supply of fluid to the cylinder.

5. In an apparatus of the character described, the combination with a fluid pressure motor and connecting mechanism, of additional fluid pressure actuated means operating upon movement of said motor to the end of its stroke for automatically cutting off the supply of fluid to the motor.

[Claims 6 to 17 not printed in the Gazette.]

1,065,325. AUTOMATIC TRANSFER-DUMP. FRANK C. GREENE, Cleveland, Ohio. Filed Apr. 5, 1909. Serial No. 487,863. (Cl. 214—9.)



1. In mechanism of the class described, the combination of a support of unvarying length oscillatory about a fixed axis, a track-section pivotally attached at one point to said support, and a relatively fixed guide engaging said track-section at another point.

2. In mechanism of the class described, the combination of a support of unvarying length oscillatory about a fixed axis, a track-section pivotally attached at one point to said support, means normally positioning said support and track-section, and a relatively fixed guide engaging said track-section at another point.

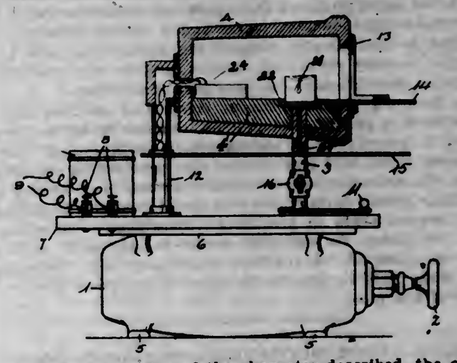
3. In mechanism of the class described, the combination of a lever arm of unvarying length oscillatory about a fixed axis, a track-section pivotally attached at one point to said lever arm and a relatively fixed, inclined guide engaging said track-section at another point.

4. In mechanism of the class described, the combination of a lever arm of unvarying length oscillatory about a fixed axis, a counter-weight normally positioning said lever arm and track-section, and a relatively fixed, inclined guide engaging said track-section at another point.

5. In mechanism of the class described, the combination of a floating track-section, a pivotally mounted counter-weighted lever arm pivotally connected with said track-section between the ends of said section, said lever arm being adapted to maintain said track-section in normal position and to oscillate the same upon its being moved from such position, and means connected with said lever arm and adapted to regulate oscillation thereof.

[Claims 6 to 41 not printed in the Gazette.]

1,065,326. APPARATUS FOR MAKING CASTINGS. HARRY P. MARSHALL, Glen Ridge, N. J. Filed Dec. 5, 1911. Serial No. 663,988. (Cl. 22—73.)



1. In an apparatus of the character described, the combination of a furnace, a sunken or depressed seat in the floor of the furnace having a peripheral flange projecting upward substantially flush at its top with the floor of the furnace, said seat adapted to receive a mold ring inside said flange, a vacuum pump, a duct leading from said pump to said seat, and a valve in said duct.

2. In an apparatus of the character described, the combination of a vacuum pump having a suitable base, a plate on the top of said pump, a suction pipe leading upward through said plate from the pump and having at its upper end a seat for a mold ring, a tubular support on said plate, an electrical furnace mounted on said support and pipe with said seat in its chamber, binding posts on said plate, and a valve in said pipe.

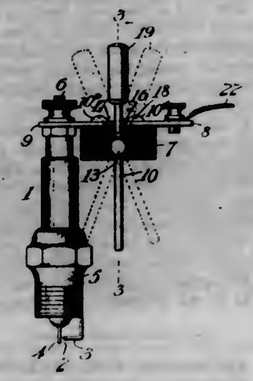
3. In an apparatus of the character described, the combination of a furnace, an air exhaust duct opening through the floor of the furnace chamber, and a sunken seat in the floor of the furnace chamber around said air exhaust duct adapted to receive a mold and position the same with respect to said air exhaust duct.

1,065,327. SPARK-PLUG CONNECTOR AND SWITCH. CHARLES E. SEMPLE, Jr., Youngstown, Ohio. Filed Apr. 27, 1911. Serial No. 623,699. (Cl. 175—183.)

1. A spark plug attachment comprising a pair of spaced insulated conductor plates, and a switch element arranged to metallically connect the two plates, and also adapted to metallically connect one of said plates with the spark plug base.

2. A spark plug attachment comprising a pair of spaced insulated conductor plates having an auxiliary spark gap between them, and a switch element arranged to metallically connect the two plates, and also arranged to singly engage either of the plates to respectively permit the oper-

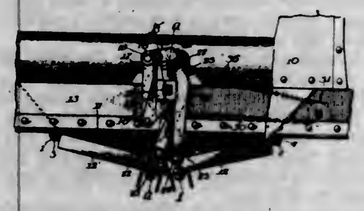
ation of the auxiliary spark gap and to metallically connect one of the conductor plates with the base of the spark plug.



3. In an attachment for spark plugs, the combination with the spark plug and the central electrode thereof, of a device having conductor plates and a switch element arranged to metallically connect the plates, and also arranged to short circuit the current directly from the supply wire connection to the base part of the plug.

4. A spark plug attachment comprising an insulating base block, a pair of conductor plates mounted on the base block in spaced relation and having an auxiliary spark gap between them, said plates being also provided at one side with contact seats, and a swinging switch lever having a yielding pivotal support and arranged to separately engage said several seats to provide for metallically connecting the two plates, for engaging one of the plates to permit the operation of the auxiliary spark gap, and to engage the other plate to metallically connect the latter with the base of the plug.

1,065,328. DOOR MECHANISM FOR HOPPER-DOORS. ALBERT EDWARD ZIMMER, Chicago, Ill., assignor to Enterprise Railway Equipment Company, Chicago, Ill. Filed June 12, 1911. Serial No. 632,542. (Cl. 105—185.)

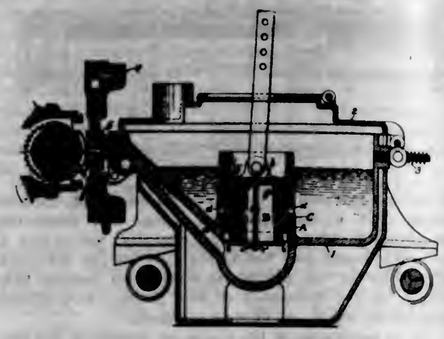


1. The combination of a hopper, a pair of twin doors, a bearing shaft above the doors, a lever arm thereon, a locking block, link mechanism associated with said locking block, connecting rods leading from said locking block to both doors, said connecting rods transferring the load of the doors to the shaft so that the load is carried on said shaft without tendency to rotate said shaft toward its unlocked position, said twin doors being individually locked through said locking block.

2. The combination of a hopper, a pair of twin doors, a bearing shaft above the doors, a lever arm thereon, a locking block, link mechanism associated with said locking block, connecting rods leading from said locking block to both doors, said connecting rods transferring the load to the shaft in such a manner that the shaft tends to rotate in its door closing direction when said doors are closed, said twin doors being independently locked through said locking block.

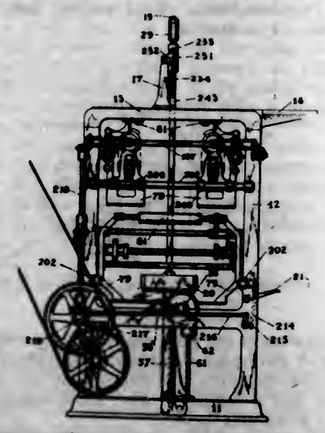
3. The combination of a hopper, a door, a bar connected therewith, a locking block to which said bar is attached, a link to which said locking block is attached, a lever to which said link is pivoted, a bearing shaft above said door, a pivotal point of the locking block being rotated around the bearing shaft to a point beyond the lines of force through the center of the bearing shaft for the said door.

1,065,329. LINE-CASTING MACHINE. FRITZ CARL LUCKS D'AIX, New York, N. Y. Filed Oct. 8, 1912. Serial No. 724,638. (Cl. 22—70.)



In a linotype machine, the combination of a melting pot; a pump cylinder contained within said pot, and provided with an ejecting spout; a tubular plunger within the cylinder, closed at top and open at bottom; a packing sleeve interposed between the plunger and cylinder, mounted on and carried by said plunger and slidable lengthwise thereof; means on the plunger for confining the sliding movement of the sleeve within prescribed limits; and air and liquid ports in the plunger and cylinder respectively, controlled by said packing sleeve, communicating the one with the air space in the melting pot above the level of the molten metal therein, and the other with the space containing the charge of molten metal, said ports being, by the action of the packing sleeve, closed during the ejecting stroke, and opened during the return stroke, of the plunger, substantially as and for the purposes hereinbefore set forth.

1,065,330. BOX-COVERING MACHINE. JOHN P. MARKERT, Brooklyn, and ROBERT STANLEY BOLGER, Morris Park, N. Y.; said Bolger assignor to said Markert. Filed Nov. 28, 1908. Serial No. 464,899. (Cl. 93—54.)



1. A box covering machine comprising means for causing movement of the box in a rectilinear path, cover affixing presser pads operating to press the covering material on the box, endless carriers by which said presser pads are carried and caused to travel along and in contact with the box in planes parallel to the direction of the box's movement, and other cover-affixing members at right angles to the first affixing members.

2. A box covering machine comprising means for causing movement of the box in a rectilinear path, presser pads for affixing the covering material to the box, endless carriers by which said presser pads are carried and caused to travel in the direction of the box's movement, and other affixing presser pads at right angles to the first affixing presser pads operating on the cover after the box has passed beyond the first affixing presser pads, the cover affixing presser pads remaining in contact with the box while traveling along with the box.

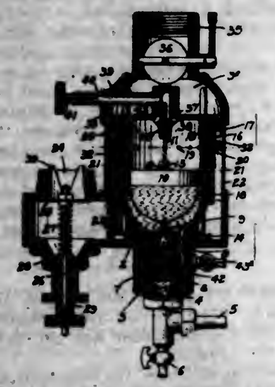
3. A box covering machine comprising means for causing movement of the box, cover-affixing presser pads for pressing the covering material on the box, means for causing said pads to travel in the direction of the box's movement, other cover-affixing presser pads traveling also in the direction of the box's movement but at right angles to the first affixing members, and endless carriers for the pads.

4. A box covering machine comprising oppositely arranged presser pads for affixing the covering material to the box, means for causing said pads to travel in the direction of the box's movement while pressing the covering material in full contact therewith, means for positioning the presser pads with relation to the box, and means controlling the operation of the machine adapted to feed the box along in a rectilinear path and move the presser pads through one cycle of operation.

5. A box covering machine comprising oppositely arranged presser pads for affixing the covering material to the box, means for causing said presser pads to travel in planes parallel to the direction of the box's movement while remaining in contact therewith, and means for feeding the box along in a rectilinear path in contact with said presser pads while the latter press the covering material upon the box.

[Claims 6 to 112 not printed in the Gazette.]

1,065,331. CARBURETER. WILLIAM J. RUBESKY, Minneapolis, Minn. Filed Aug. 17, 1908. Serial No. 448,942. (Cl. 48—158.)



1. A carbureter, comprising a cup having a connection with a source of oil supply, sleeves mounted on said cup and one within the other and having a space between them, said inner sleeve having ports normally below the level of the liquid in the cup, and both said sleeves having ports in their upper walls above the level of the liquid in the cup, a series of wicks and metallic coverings therefor arranged between said sleeves, the lower ends of said wicks being below the level of the liquid in the cup and the upper ends thereof extending above the ports in the upper walls of said sleeves, means for regulating the admission of oil to said cup, a casing inclosing said sleeves and spaced therefrom and forming an air chamber, an inlet valve communicating with said air chamber, said chamber having means for connection with an engine cylinder, and means for admitting fresh air to the space inclosed by said inner sleeve, substantially as described.

2. A carbureter, comprising a cup having a connection with a source of oil supply, sleeves concentrically mounted on said cup, the inner sleeve having ports in its lower walls below the level of the liquid in the cup, and both of said sleeves having ports in their upper walls extending therethrough, a series of wicks having metallic surfaces arranged between said sleeves, the lower ends of said wicks being below the level of the liquid in said cup and the upper ends of said wicks being above the ports in the upper walls of said sleeves, a casing inclosing said sleeves, means for admitting air to said cup, the suction in said casing establishing a circulation through said ports and across said wicks.

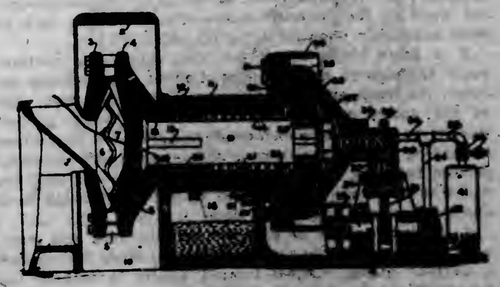
3. A carbureter, comprising a cup having a connection with a source of oil supply, a series of wicks having their lower ends below the level of the oil in said cup, walls between which said wicks are arranged, said inner wall having ports leading into said cup and both said walls having ports extending therethrough above the level of the liquid in the cup and said wicks extending above said last named ports, and being composed of a core of fibrous material and metallic strands inclosing the same, a casing inclosing said walls, means for admitting air to said cup, the suction in said casing establishing a circulation through said ports and across said wicks.

4. A carbureter, comprising a cup having a connection with a source of oil supply and having a wick chamber mounted thereon, said chamber being provided with inner and outer walls with a space between them and wicks within said space, said wicks being composed of a fibrous core and wire strands coiled about the same, and the inner wall of said chamber having ports below the level of the liquid in the cup and communicating with said wick chamber, and the upper walls of said chamber having ports extending therethrough, a casing inclosing said walls, means for admitting air to said cup, the suction in said casing establishing a circulation through said ports and across said wicks.

5. In a carbureter, an oil cup, sleeves therein and spaced apart and a series of oil feeding wicks between said sleeves, the lower ends of said wicks being below the normal level of the liquid in the cup, and the upper ends of said wicks being above said normal level, said wicks consisting of a fibrous core and a series of wire strands inclosing the same, the oil carried upward by said core being distributed over the surfaces of said wires, said sleeves having ports therein, and an air chamber communicating with said ports, the circulation in said air chamber causing the passage of currents of air through said ports and across said wicks.

[Claims 6 to 19 not printed in the Gazette.]

1,065,332. CRUSHER. RAY C. NEWHOUSE, Milwaukee, Wis., assignor to Allis-Chalmers Company, Milwaukee, Wis., a Corporation of New Jersey. Filed July 22, 1912. Serial No. 711,333. (Cl. 83—10.)



1. A crusher comprising a pair of rigid crushing members symmetrically disposed about a common axis and

having crushing surfaces, said members being rotatable to feed material along the crushing surfaces thereof, means for permitting fluid pressure to act directly between said members for taking up the reactive thrust induced by crushing and for causing said crushing surfaces to relatively approach each other.

2. A crusher comprising a pair of rigid crushing members symmetrically disposed about a common axis and having crushing surfaces, said members being rotatable to feed material along the crushing surfaces thereof, means for permitting fluid pressure to act directly between said members for taking up the reactive thrust induced by crushing and for causing at least one of said members to move along said axis to crush material.

3. A crusher comprising a pair of rigid co-axial members symmetrically disposed about their common axis and having crushing surfaces, said members being rotatable only in the same direction to feed material along the crushing surfaces thereof, and means for effecting the relative approach of such crushing surfaces to crush material.

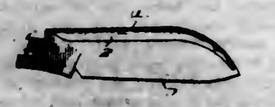
4. A crusher comprising a pair of rigid co-axial members symmetrically disposed about their common axis and having crushing surfaces, said members being rotatable only in the same direction to feed material along the crushing surfaces thereof, and means for effecting the relative approach of said members along their axes to crush material.

5. A crusher comprising a pair of rigid crushing members symmetrically disposed about a common axis and having crushing surfaces, said members being rotatable to feed material along the crushing surfaces thereof, and means for permitting liquid under pressure to act directly between said members for moving one of said members toward the other to crush material.

[Claims 6 to 10 not printed in the Gazette.]

REISSUES.

13,577. KNIFE-BLADE SCRAPER. CHESTER G. DOOLEY and GEORGE W. DOOLEY, San Bernardino, Cal. Filed Jan. 24, 1913. Serial No. 744,033. Original No. 1,002,045, dated Aug. 29, 1911, Serial No. 626,905. (Cl. 30—10.)



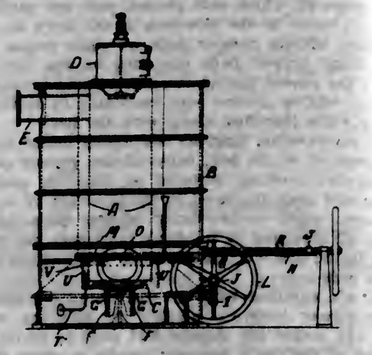
1. A knife blade having the usual keen cutting edge and having channels in opposite sides adjacent the back and having the walls of the channels intersecting with the back to form oppositely disposed scraping edges.

2. A knife blade having its opposite sides inclined and intersecting to form a keen cutting edge, and having one end rounded to a point, said blade having channels in opposite sides extending from the point to the heel thereof, the walls of the channels intersecting with the back to form oppositely disposed scraping edges.

3. A knife blade having its sides converging continuously throughout the major portion of the distance between its front and back to present a keen cutting edge at the front, and having a lateral cut-away portion wholly contiguous to and intersecting the back to produce a scraping edge at the point of intersection, said cut-away portion being of less transverse extent than one half the width of the blade and disposed wholly between the back and longitudinal axis of the blade.

4. A blade having its opposite sides inclined and intersecting to form a keen cutting edge, said blade having also a narrow lateral channel located wholly in rear of the longitudinal axis of the blade and forming a scraping edge at the intersection of the back and one of the said inclined sides of the blade.

13,578. GAS-PRODUCER. REGINALD VANDEZEE FARNHAM, Skelmorlie, Scotland, assignor to Farnham Patents Limited, Glasgow, Scotland. Filed Apr. 30, 1913. Serial No. 764,606. Original No. 993,180, dated May 23, 1911, Serial No. 630,128. (Cl. 48—86.)



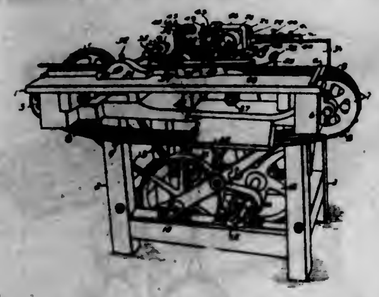
1. A gas producer comprising a combustion chamber formed with continuous walls and having an outlet for producer gas near its upper end, a vertically movable grate fitted within the chamber near its bottom for normally supporting all of the fuel in the producer and constituting the sole means through which air may be supplied to the latter, said grate being of an area equal to that of the lower portion of the chamber and the latter portion being of uniform cross sectional area from the uppermost position of the grate to the lowermost position of such grate, in combination with mechanism, below the grate, for raising the latter to compress the fuel into the combustion chamber; a transversely movable plate in said chamber at a point above the grate for temporarily supporting the fuel when the grate is lowered, and mechanism for operating said plate.

2. A gas producer comprising a combustion chamber having an outlet for producer gas near its upper end and having a hollow extension from its lower end of uniform cross sectional area equal to that of said end, said extension constituting a water-jacket, a vertically movable grate fitted within the said extension, for normally supporting all of the fuel in the producer and constituting the sole means through which air may be supplied to the latter, said grate being of an area equal to that of said extension; in combination with mechanism, below the grate, for raising the latter to compress the fuel in the combustion chamber; a transversely movable plate in said chamber at a point above the grate for temporarily supporting the fuel when the grate is lowered, and mechanism for operating said plate; the said water-jacket having outlets in the combustion chamber below the movable plate.

13,579. TIE-PLUG MACHINE. HARRY G. SMART, St. Cloud, Minn. Filed Nov. 25, 1910. Serial No. 594,229. Original No. 956,207, dated Apr. 26, 1910, Serial No. 393,871. (Cl. 144—12.)

1. In a tie plug machine, the combination with a suitable table, of an endless conveyer traversing said table, cutter head located above said conveyer, a pressure bar mounted upon a pivotal support above said table and extending across the same substantially parallel to the line of movement of said conveyer, said pivotal support being in front of the cutter head, and spring-actuated means engaging the pressure bar adjacent to said cutter head, substantially as described.

2. In a tie plug machine, the combination with a suitable table, of an endless conveyer traversing said table, cutter heads located above and below said conveyer, a pressure bar mounted upon a pivotal support above said table and extending across the same substantially parallel to the line of movement of said conveyer, said pivotal support being located in front of the cutter heads, and spring-actuated means engaging said pressure bar adjacent to the lower cutter head, to hold said pressure bar firmly against a tie plug blank, being moved forward by said conveyer while it is being operated upon by said lower cutter head, substantially as described.



3. In a tie plug machine, the combination with a suitable table, of an endless conveyer traversing said table, a guide plate extending parallel to said conveyer for a portion of its length, a saw arranged to cut blanks being moved forward by said conveyer with the ends of the blanks in engagement with said guide plate, a pressure bar extending above and substantially parallel with said conveyer, means for pivotally supporting said pressure bar at a point in front of the saw, cutter heads arranged above and below the conveyer, and positioned to operate upon the blanks being carried forward by the conveyer, and yielding means engaging said pressure bar adjacent to said cutter heads for forcing said pressure bar toward the table while being operated upon by the cutter heads, substantially as described.

4. In a tie-plug machine, a table, an endless conveyer traversing said table, a saw located adjacent to the feeding end of the table, cutter-heads located above and below said conveyer, a pressure bar pivotally secured to a pin mounted on the table in front of said saw, said pressure bar being located above the conveyer aforesaid, upright rods arranged above said pressure bar adjacent to the cutter-heads aforesaid, and slidably mounted in supports carried by the table, and coil springs engaging said supports and forcing said pressure bar toward said table, substantially as described.

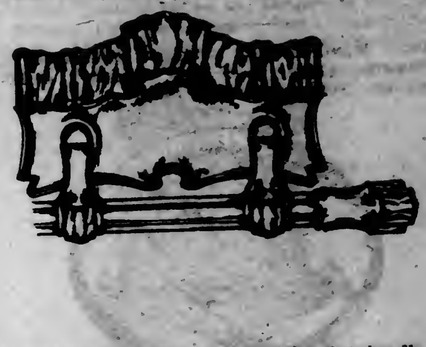
5. In a tie-plug machine, a table, an endless conveyer traversing said table, a saw located adjacent to the feeding end of the table, cutter-heads located above and below said conveyer, a pressure bar pivotally secured to a pin mounted on the table in front of said saw, said pressure bar being located above the conveyer aforesaid, upright rods secured to said pressure bar adjacent to the cutter-heads aforesaid, and slidably mounted in supports carried by the table, and coil springs engaging said supports and forcing said pressure bar toward said table, substantially as described.

6. In a tie-plug machine, a table, an endless conveyer traversing said table, a saw located adjacent to the feeding end of the table, cutter-heads located above and below said conveyer, a pressure bar secured to a pin mounted on the table, the said pressure bar being located above the conveyer aforesaid, upright rods secured to said pressure bar adjacent to the cutter-heads aforesaid, and slidably mounted in sleeves supported by the table, and expansible coil springs engaging said sleeves and pressure bar, spring bars adjustably mounted on the table and ending adjacent to the cutter-heads aforesaid, spring arms adjustably mounted on the table, and a spur wheel journaled on said arms above the cutter head beneath the table, substantially as shown and described.

7. A tie-plug machine comprising a table, an endless conveyer traversing said table, a saw located adjacent to the feeding end of the table, cutter-heads located above and below said conveyer, a pressure bar secured at one end to the table and located above said conveyer, upright supports secured to the table and having laterally extending arms, sleeves pivotally secured to the free ends of said arms, rods secured to the pressure bar and slidably mounted in said sleeves, coil springs mounted on said rods and engaging the pressure bar and sleeves to normally depress the pressure bar, spring bars adjustably secured to the table and ending adjacent to the cutter-head above the table, spring arms adjustably mounted on the table, and a spur wheel journaled on said arms above the cutter-head located under the table, substantially as shown and described.

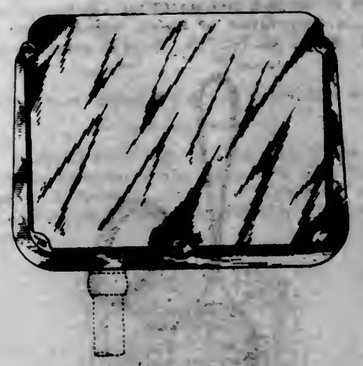
DESIGNS.

44,189. BURIAL-CASKET HANDLE. CHARLES BLESCH, Newport, Ky., assignor to The Crane & Brand Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 21, 1913. Serial No. 762,738. Term of patent 7 years.



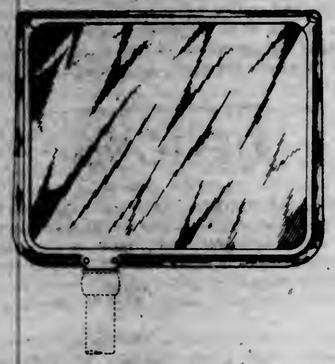
The ornamental design for a burial-casket handle, as shown.

44,190. WIND-SHIELD. CHARLES ROCKNELL CLARK, Plainville, Conn. Filed Apr. 14, 1913. Serial No. 761,064. Term of patent 14 years.



The ornamental design for a wind shield, as shown.

44,191. WIND-SHIELD. CHARLES ROCKNELL CLARK, Plainville, Conn. Filed Apr. 14, 1913. Serial No. 761,065. Term of patent 14 years.



The ornamental design for a wind shield, as shown.

44,192. WIND-SHIELD. CHARLES ROCKNELL CLARK, Plainville, Conn. Filed Apr. 14, 1913. Serial No. 761,066. Term of patent 14 years.



The ornamental design for a wind shield, as shown.

44,193. HANDLE FOR SPOONS, FORKS, OR SIMILAR ARTICLES. WILLIAM C. CODMAN, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 21, 1913. Serial No. 762,735. Term of patent 14 years.



The ornamental design for a handle for spoons, forks or similar articles.

44,194. HANDLE FOR SPOONS, FORKS, OR SIMILAR ARTICLES. WILLIAM C. CODMAN, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 21, 1913. Serial No. 762,736. Term of patent 14 years.

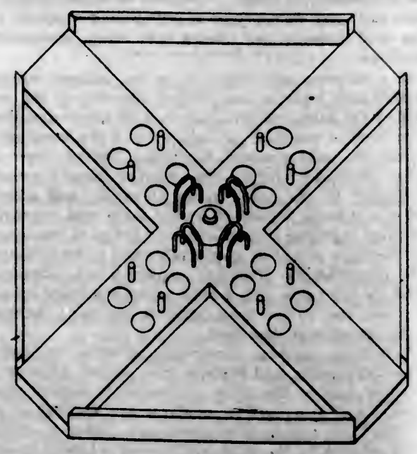


The ornamental design for a handle for spoons, forks or similar articles.

44,195. WALL-COVERING. RUDOLPH EULER, East Orange, N. J., assignor to Fr. Beck & Co., New York, N. Y., a Corporation of New York. Filed Jan. 21, 1913. Serial No. 743,415. Term of patent 7 years.

The ornamental design for a wall covering, as shown.

44,196. GAME-BOARD. PETER GALLAGHER, Philadelphia, Pa. Filed Apr. 22, 1913. Serial No. 762,939. Term of patent 7 years.



The ornamental design for a game board as shown.

44,197. STOVE. WILLIAM A. GRISWOLD, Nashville, Tenn., assignor to Gray & Dudley Hardware Company, Nashville, Tenn., a Corporation of Tennessee. Filed Apr. 4, 1913. Serial No. 758,927. Term of patent 7 years.



The ornamental design for a stove, as shown.

44,198. STOVE. WILLIAM A. GRISWOLD, Nashville, Tenn., assignor to Gray & Dudley Hardware Company, Nashville, Tenn., a Corporation of Tennessee. Filed Apr. 4, 1913. Serial No. 758,928. Term of patent 7 years.



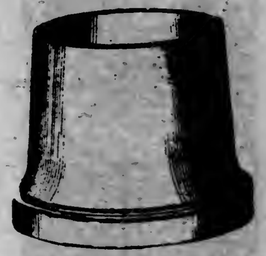
The ornamental design for a stove, as shown.

44,199. STOVE. WILLIAM A. GRISWOLD, Nashville, Tenn., assignor to Gray & Dudley Hardware Company, Nashville, Tenn. Filed Apr. 4, 1913. Serial No. 758,929. Term of patent 7 years.



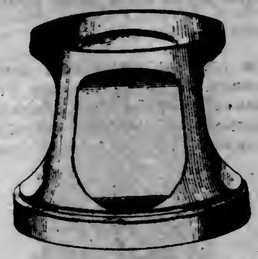
The ornamental design for a stove, as shown.

44,200. BASE FOR AUTOMOBILE-LAMPS. WILLIAM S. HAMM, Hubbard Woods, Ill., assignor to The Adams & Westlake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 14 1912. Serial No. 677,632. Term of patent 14 years.



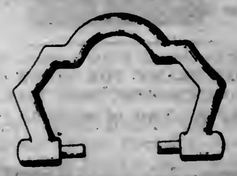
The ornamental design for a base for automobile lamps, as shown and described.

44,201. BASE FOR AUTOMOBILE-LAMPS. WILLIAM S. HAMM, Hubbard Woods, Ill., assignor to The Adams & Westlake Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 14, 1912. Serial No. 677,633. Term of patent 14 years.



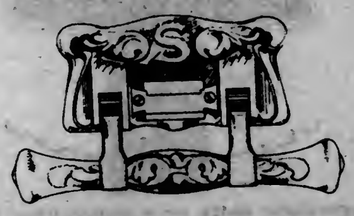
The ornamental design for a base for automobile lamps, as shown and described.

44,202. WATCHCASE-BOW. CHARLES W. HARMAN, New Rochelle, N. Y., assignor to Joseph Fahys & Co., New York, N. Y., a Corporation of New York. Filed Mar. 11, 1913. Serial No. 753,642. Term of patent 3½ years.



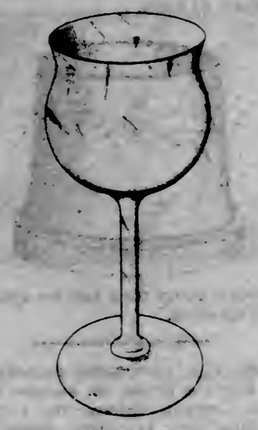
The ornamental design for a watch case bow as shown.

44,203. CASKET-HANDLE. CHARLES H. HISER, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Apr. 12, 1913. Serial No. 760,824. Term of patent 7 years.



The ornamental design for a casket handle, as shown.

44,204. GOBLET. WILLIAM H. HOWES, Morgantown, W. Va. Filed Feb. 24, 1913. Serial No. 750,422. Term of patent 7 years.



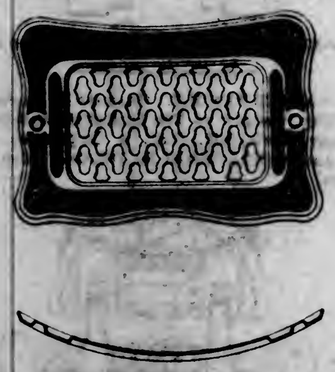
The ornamental design for a goblet as shown.

44,205. STEM AND MOUTHPIECE FOR SMOKING-PIPES. ANDREW J. JACKSON, Jersey City, N. J., assignor to Manhattan Briar Pipe Company, New York, N. Y., a Corporation of New York. Filed Mar. 13, 1913. Serial No. 754,159. Term of patent 7 years.



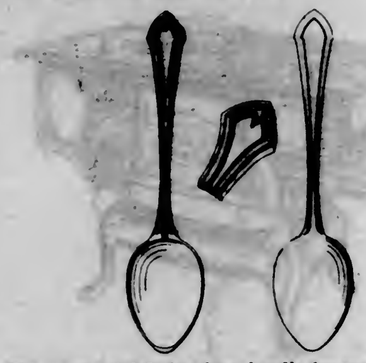
The ornamental design for a stem and mouth-piece for smoking pipes, as shown.

44,206. WINDOW-FRAME FOR STOVE-DRUMS. WILLIAM R. JEAVONS, Cleveland, Ohio. Filed Apr. 10, 1913. Serial No. 760,318. Term of patent 14 years.



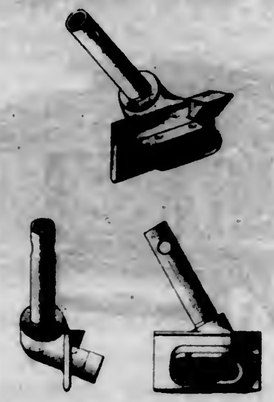
The ornamental design for a window frame for stove drums, as shown.

44,207. HANDLE FOR SPOONS, FORKS, OR SIMILAR ARTICLES. BARTON P. JENKS, Concord, N. H., assignor to Wm. B. Durgin Co., Concord, N. H., a Corporation of New Hampshire. Filed Apr. 15, 1913. Serial No. 761,349. Term of patent 14 years.



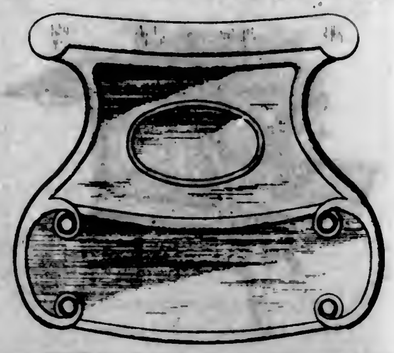
The ornamental design for a handle for spoons, forks or similar articles, as shown.

44,208. BURNER FOR GAS-IRONS. BENNET JOYCE, Philadelphia, Pa. Filed Dec. 28, 1912. Serial No. 739,123. Term of patent 14 years.



The ornamental design for a burner for gas irons, as shown.

44,209. SEAT END. JOHN EDWIN KILBURN, Philadelphia, Pa., assignor to Hale and Kilburn Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 8, 1913. Serial No. 759,780. Term of patent 7 years.



The ornamental design for a seat-end as shown.

44,210. COFFEE OR TEA POT. WALTER LUTTRINGHAUS, Chicago, Ill. Filed Apr. 5, 1913. Serial No. 759,222. Term of patent 3½ years.



The ornamental design for a coffee or tea pot as shown and described.

44,211. FRUIT-KNIFE. ERNEST B. LYDICK, Pittsburgh, Pa. Filed Apr. 26, 1913. Serial No. 763,906. Term of patent 14 years.



The ornamental design for a fruit knife, as shown.

44,212. CARPET. JOHN MERRY, New York, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 18, 1913. Serial No. 762,117. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,213. CARPET. JOHN MERRY, New York, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 18, 1913. Serial No. 762,118. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,214. CARPET. JOHN MERRY, New York, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 18, 1913. Serial No. 762,119. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,215. CARPET. JOHN MERRY, New York, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 18, 1913. Serial No. 762,120. Term of patent 3½ years.



The ornamental design for a carpet, as shown.

44,216. LIGHTING-FIXTURE. OTTO H. MOHR, Kentfield, Cal. Filed Apr. 7, 1913. Serial No. 759,550. Term of patent 3½ years.



The ornamental design for a lighting fixture, substantially as shown.

44,217. BOTTLE. EDWIN H. NELSON, Detroit, Mich., assignor to Nelson, Baker & Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 18, 1913. Serial No. 762,127. Term of patent 14 years.



The ornamental design for a bottle, as shown.

44,218. LUFFA SPONGE. ELIZABETH H. PUSEY, New York, N. Y. Filed Feb. 27, 1912. Serial No. 680,328. Term of patent 3½ years.



The ornamental design for a sponge as shown and described.

44,219. CARPET. ROBERT F. RIDDELL, Flushing, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 18, 1913. Serial No. 762,125. Term of patent 3½ years.



The ornamental design for a carpet as shown.

44,220. RUG. EMIL G. SAUER, Richmond Hill, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 18, 1913. Serial No. 762,124. Term of patent 3½ years.



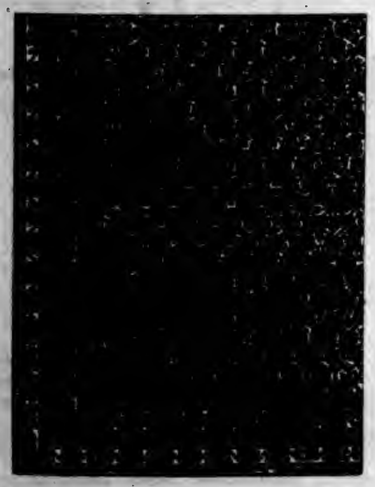
The ornamental design for a rug, as shown.

44,221. VEHICLE-TOP. FRANK J. SHAW, Leominster, Mass., assignor to F. A. Whitney Carriage Co., Leominster, Mass., a Corporation of Massachusetts. Filed Mar. 14, 1913. Serial No. 754,393. Term of patent 7 years.



The ornamental design for a vehicle top, as shown.

44,222. RUG. JOHN SPRING, New York, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 18, 1913. Serial No. 762,123. Term of patent 3½ years.



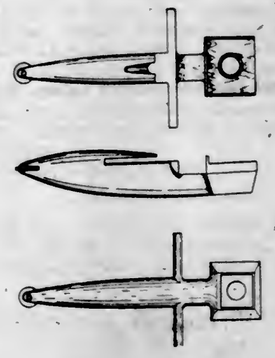
The ornamental design for a rug, as shown.

44,223. CARPET. WILLIAM A. SPRING, Brooklyn, N. Y., assignor to Bigelow Carpet Company, a Corporation of Massachusetts. Filed Apr. 18, 1913. Serial No. 762,126. Term of patent 3½ years.



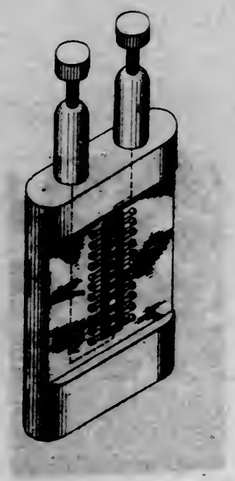
The ornamental design for a carpet, as shown.

44,224. GUARD FOR CUTTER-BARS. RUDOLF J. SUHR, Emerson, Nebr. Filed Jan. 29, 1913. Serial No. 745,013. Term of patent 14 years.



The ornamental design for a guard for a cutter bar, as shown.

44,225. THERMOPILE. FRANK TWYMAN, London, England. Filed Apr. 10, 1913. Serial No. 760,822. Term of patent 7 years.



The ornamental design for a thermopile, as shown.

44,226. BOTTLE-OPENER. HARRY L. VAUGHAN, Chicago, Ill., assignor to Crown Throat & Opener Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 7, 1913. Serial No. 759,551. Term of patent 7 years.



The ornamental design for a bottle opener, as shown.

44,227. GOLF-BALL. ALEXANDER C. WOOD, New York, N. Y., assignor to St. Mungo Manufacturing Company of America, Newark, N. J., a Corporation of New Jersey. Filed June 17, 1912. Serial No. 704,244. Term of patent 14 years.



The ornamental design for a golf ball, as shown.

44,228. POISON-BOTTLE. JOHN WUNDER, Sandusky, Ohio. Filed Apr. 19, 1913. Serial No. 762,411. Term of patent 14 years.



The ornamental design for a poison bottle, as shown.

TRADE-MARKS

PUBLISHED JUNE 17, 1913.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 38,378. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COLUMBIA RIVER PACKERS ASSOCIATION, Astoria, Oreg. Filed Oct. 30, 1908.

WHITE STAR

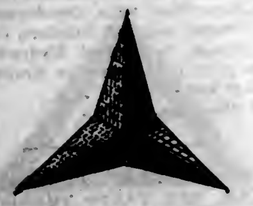
Particular description of goods.—Canned Salmon.
Claims use since 1895.

Ser. No. 55,775. (CLASS 39. CLOTHING.) REGAL SHOE COMPANY, Boston, Mass. Filed Apr. 15, 1911.

COST PLUS 3 65/100 FIVE PER CENT.

No claim being made to the exclusive use of the words "Cost Plus 3 65/100 Five Per Cent."
Particular description of goods.—Leather Boots and Shoes.
Claims use since the early part of December, 1910.

Ser. No. 56,473. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany. Filed May 13, 1911.



Particular description of goods.—Hammers, Chisels, Spanners, Screw-Drivers, Boring-Braces, Screw-Jacks, Punches, Axes, Gimlets, Gouges, Cramps, Clamps, Files, Rasps, Mallets, Pincers, Picks, Pipe and Rod Cutters, Wood-Planes, Spokeshaves, Wood-Scrapers, Pliers, Scissors, Vises, Garden-Engines, Crop-Sprayers, Bill-Hooks, Agricultural Forks, Hoes, Horticultural Knives, Lawn-Mowers, Planting-Tools, Rakes, Land-Rollers, Shears, Scythes, Sickles, Sifting and Screening Apparatus, Spades, Shovels, Scoops, Bedding and Potting Appliances, Chaff-Cutters, Diggers, Harrows, Vegetable-Slicers, Excavators, Hay-Knives, Hay-Loaders, Hedge-Cutters, Tines, Clod-Crushers, Mechanically-Operated Clutches for Conveying Rotary Motion, Pivots, Stuffing-Boxes, Cocks for Joints, Shackles, Universal Joints, Claw-Clutches, Friction-Clutches, Pneumatic Lifts, Printing-Machines, Road-Sweeping Machines, Grinding and Polishing Machines, Winches, Centrifugal Machines, and Air, Feed, Manure, Iron and Brass, Hand and Power Oil-Well, Artesian-Well, and Steam Pumps, Water, Steam, and Gasolene Motors for Automobile Vehicles, Fire-Extinguishers, Levers and Connecting-Rods, Cranks and Crank-Shafts, Lubricating-Oil Rings, Pressed Gear-Wheels, Cams and Cam-Shafts, Fly-Wheels, Governors and Parts Thereof, Floats for the Float-Chambers of Internal-Combustion Engines, Spindles and Toggles for Said Floats, Ignition-Plugs and Operating Mechanism, Sleeves for Ignition-Spindles, Clamp-Fastenings, Ball-Bearings and Sliding Bearings, Chain-Tighteners, Exhaust-Openers, Reversing Mechanism, and Change-Speed-Operating Rods, Air-Admission Chambers for Explosion-Motors, Reamers, Wheel-Removers, Spring-Driven Fans, Motors Whose Valves are Spring-Operated, Starting Mechanism for Explosion-Motors, Exhaust-Boxes, Soldering-Tools, Lubricators, and Sight-Glasses Thereof, Ignition-Timing Apparatus, Friction-Disks, Metal Wedges for Actuating Friction-Clutches, Toothed Rack-Bars, Ratchet-Bars, Wrought Chain-Wheels and Hubs, Pawls, Ratchet-Wheels, Sight-Glass Holders, Guide-Blocks, Adjustment-Rings, Bearing-Slides, Shafts, Clutch-Casings, Chain-Wheels, Treadle-Levers, Hand-Actuated Levers, Governor-Rings, Forked Joints, Forks for Shifting Belts, Forks for Shifting the Collars of Clutch and Brake Mechanism, Pedestal-Bearings, Plumber-Blocks, Bearing-Hangers, Valve-Spindles, Steam-Whistles, Photograph-Print Cutters and Trimmers, Snow-Plows, and Traction-Engines.
Claims use since June 24, 1909.

Ser. No. 58,244. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE A. SANDER PACKING COMPANY, Cincinnati, Ohio. Filed Aug. 17, 1911.



Particular description of goods.—Hams, Shoulders, Skinned Shoulders, Breakfast-Bacon, Skinned Hams, Pic-

nics, Dried Beef, Sausages, Beef-Tongues, Pig-Tongues, Lard, Kettle-Rendered Lard, Smoked Hams, Smoked Bacon, Smoked Sausages, Summer-Sausages, Butts, Jowl-Butts, Bacon-Bellies, Fancy Bacon-Bellies, Strips, Bellies, Bacon, Bacon Strips, Bacon Clear Sides, Bacon Loin-Backs, Clear Sides, Loin-Backs, Pigs' Feet, Spiced Pigs' Feet, and Family Clear Pork.

Claims use since 1873.

Ser. No. 58,451. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany. Filed Aug. 30, 1911.

G. Daimler

A facsimile of the signature of Gottlieb Daimler, deceased, the originator of the applicant corporation.

Particular description of goods.—Mechanical, Pneumatic, and Manually-Actuated Call-Bells, Funnels, Metal Valves, Valve-Rods, and Valve Caps or Covers, Metal Tubes, Exhaust-Valves and Exhaust-Openers, Wrought-Iron and Steel Brackets for Tanks and Pipe Connections and Pipe-Couplings, Hinges, Table-Forks, Sprinklers, Sprinkler-Nozzles, Watering-Cans, Wire-Couplings, Metal Pipes, Pipe and Tube Joints, Rod Couplings and Joints, Permanent Way-Couplings, Riveted Joints, Shaft-Couplings, Fluid-Tight Joints, Rope Connections, Flexible Couplings, Metal Locking-Rings and Washers, Metal Rings and Collars for Clutch, Steering, and Brake Mechanism, Gear-Chains, Haulage-Chains, Chain-Couplings, Conveyer-Chains, Valve-Chains, Valve-Casings, Valve-Linings, Valve-Nozzles, Valve-Seats, Spittoons of Metal, Door-Knobs, Benzin-Nozzles, and Seed and Plant Protectors.

Claims use since Jan. 31, 1913.

Ser. No. 59,003. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) KÖRTING & MATHIESEN AKTIENGESELLSCHAFT, Leutzsch-Leipzig, Germany. Filed Oct. 5, 1911.

Dia

Particular description of goods.—Arc-Lamps, Electric Lamps, and Supplies Therefor—Namely, Fittings, Resistances, Switches, Current-Indicators, Throttling-Coils, Transformers, Couplings, Carbon Pencils.

Claims use since July, 1910.

Ser. No. 59,330. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HENRY COPLESTON, Denver, Colo., assignor to The Arborol Chemical Company, Denver, Colo., a Corporation of Colorado. Filed Oct. 23, 1911.

ARBOROL
ANTI-SEPTIC
VASO-CONSTRICTOR

No claim is made to the words "Anti-Septic Vaso Constrictor."

Particular description of goods.—A Medicinal Preparation for the Treatment of Catarrh, Hay-Fever, and other Diseases of the Nasal Passages, Mucous Membranes, and Skin Affections, Such Medicinal Preparation Being in the Form of an Ointment.

Claims use since Oct. 4, 1911.

Ser. No. 59,979½. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) DAIMLER-MOTOREN-GESELLSCHAFT, Untertürkheim, near Stuttgart, Germany. Filed Nov. 28, 1911.

G. Daimler

Being a facsimile of the signature of Gottlieb Daimler, deceased.

Particular description of goods.—Saws, Hammers, Chisels, Spanners, Wrenches, Screw-Drivers, Boring-Braces, Hydraulic Jacks, Screw-Jacks, Punches, Axes, Gimlets, Gouges, Cramps, Clamps, Tube-Expanders, Planes, Spokeshaves, Scrapers, Pliers, Scissors, Pocket-Knives, Steel Table-Knives, Vises, Garden-Engines, Crop-Sprayers, Bill-Hooks, Agricultural Forks, Hoes, Horticultural Knives, Lawn-Mowers, Planting-Tools, Rakes, Land-Rollers, Shears, Scythes, Sickles, Sifting and Screening Apparatus, Spades, Shovels, Scoops, Bedding and Potting Appliances, Chaff-Cutters, Diggers, Harrows, Vegetable-Slicers, Excavators, Plows, Cultivators, Hay-Knives, Hedge-Cutters, Tines, Clod-Crushers, Clutches for Conveying Rotary Motion, Pivots, Stuffing-Boxes, Calks for Joints, Shackles, Universal Joints, Claw-Clutches, Friction-Clutches, Pneumatic Lifts, Printing-Machines, Road-Sweeping Machines, Threshing-Machines, Sawing-Machines, Winches, Air, Feed, Manure, Iron and Brass, Hand and Power Oil-Well, Artesian-Well, and Steam Pumps, Water, Steam, and Gasolene Motors, Fire-Extinguishers, Levers and Connecting-Rods, Cranks and Crank-Shafts, Lubricating-Oil Rings, Pressed Gear-Wheels, Cams and Cam-Shafts, Fly-Wheels, Governors and Parts Thereof, Floats for the Float-Chambers of Internal-Combustion Engines, Spindles and Toggles for Said Floats, Ignition-Spindles, Clamp-Fastenings, Ball-Bearings, Sliding Bearings, Chain-Tighteners, Exhaust-Openers, Reversing Mechanism and Change-Speed-Operating Rods, Air-Admission Chambers for Explosion-Motors, Reamers, Wheel-Removers, Spring-Driven Fans, Motors Whose Valves are Spring-Operated, Starting Mechanism for Explosion-Motors, Exhaust-Boxes, Soldering-Tools, Lubricators and Sight-Glasses Thereof, Ignition-Timing Apparatus, Friction-Disks, Metal Wedges for Actuating Friction-Clutches, Toothed Rack-Bars, Ratchet-Bars, Wrought Chain-Wheels and Hubs, Pawls, Ratchet-Wheels, Sight-Glass Holders, Guide-Blocks, Adjustment-Rings, Beating-Slides, Machine-Shafts, Clutch-Casings, Chain-Wheels, Treadle-Levers, Hand-Actuated Levers, Spiral Springs for Friction-Clutches, Governor-Rings, Forked Joints, Forks for Shifting Belts, Forks for Shifting the Collars of Clutch and Brake Mechanism, Pedestal Bearings, Plumber-Blocks, Bearing-Hangers, Valve-Spindles, Steam-Whistles, Saw-Filing Machines, Knife and Fork Cleaning and Polishing Machines, Steel-Ball Grinding and Polishing Machines, Knife and Razor Grinding Machines, Lens Grinding and Polishing Machines, Machines for Grinding and Polishing Nails, Ball-Mills, Ball and Ring Mills, Conical Mills, Disk Mills, Stone-Mills, Mortar-Mills, Roller-Mills, Sugar-Cane Mills, Ore-Stamps, Sugar-Crushers, Asphalt, Cement, and Coal Grinders, Centrifugal Fans, Centrifugal Pumps, Centrifugal Hydro-Extractors, Centrifugal Separators for Gaseous or Granular Substances, Print Trimmers and Cutters.

Claims use since Jan. 3, 1911.

Ser. No. 61,078. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE NATIONAL SAW COMPANY, Newport, Ky. Filed Jan. 27, 1912. Under ten-year proviso.

HANDY SAW

Particular description of goods.—Saws.

Claims use since December, 1872.

Ser. No. 61,728. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) UNITED AUTOGRAPHIC REGISTER COMPANY, Chicago, Ill. Filed Feb. 26, 1912.

UARCO

Particular description of goods.—Type-Writers, Autographic Registers, Paper Holders and Guides, Ribbon Holders and Guides for Type-Writers and Autographic Registers.

Claims use since Nov. 15, 1911.

Ser. No. 62,556. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) BENJAMIN B. BIENHOFF, Minneapolis, Minn. Filed Apr. 1, 1912.

THE DISPLAYOGRAPH

Particular description of goods.—Machines for Displaying Advertising-Posters and Merchandise as Defined.

Claims use since Mar. 1, 1912.

Ser. No. 63,101. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE ELECTRIC LAUNCH CO., Bayonne, N. J. Filed Apr. 24, 1912.

Elco-plane

Particular description of goods.—Boats.

Claims use since Oct. 1, 1911.

Ser. No. 63,318. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE VICK CHEMICAL CO., Greensboro, N. C. Filed May 4, 1912.



The pictures shown being fanciful.

Particular description of goods.—A Medicinal Salve for Use by External Treatment and Internal Vapors as a Remedy for Croup, Pneumonia, Head-Colds, Chest-Colds, Bronchitis, Tonsilitis, Pleurisy, Sore Throat, Whooping-Cough, Catarrh, Sprains, Bruises, Itchings, Sunburn, Burns, Boils, Neuralgia, Muscular Rheumatism, and Insect-Bites.

Claims use since April, 1898.

Ser. No. 63,838. (CLASS 38. PRINTS AND PUBLICATIONS.) ALBRECHT & MEISTER AKTIENGESELLSCHAFT, Berlin-Reinickendorf-Ost, Germany. Filed May 27, 1912.

Amag

Particular description of goods.—Picture Post-Cards, Chromos, Pictorial Backs or Mounts of Paper or Cardboard for Calendars, Pictorial Posters, Pictorial Box Covers or Tops of Paper or Cardboard, Reliefs of Paper or Cardboard.

Claims use since Feb. 10, 1912.

Ser. No. 63,914. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) FISCHER & PRUEFER, Providence, R. I. Filed May 31, 1912.

THE BEST F.P.

No claim is made to the words "The Best."

Particular description of goods.—Precious-Metal Collar-Buttons, Cuff-Buttons, Bracelets, Ornamental Pins and Brooches, Tie-Clasps, and Ornamental Buckles.

Claims use since June, 1908.

Ser. No. 63,987. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) BOONTON RUBBER MANUFACTURING COMPANY, Boonton, N. J. Filed June 5, 1912.

BB

Particular description of goods.—Molded Electrical Insulators.

Claims use since Feb. 9, 1912.

Ser. No. 64,028. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THEODOR TEICHGRAEBER, Berlin, Germany. Filed June 6, 1912.

Trivalin

Particular description of goods.—Isovalerianic Salts of Caffein, Morphin, and Cocaine, in the Form of Solutions or in Solid Form.

Claims use since October, 1911.

Ser. No. 64,062. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRANKLIN MACVEAGH & COMPANY, Chicago, Ill. Filed June 8, 1912. Under ten-year proviso.

PANAMA

Particular description of goods.—Coffee.

Claims use since April, A. D. 1882.

Ser. No. 64,481. (CLASS 15. OILS AND GREASES.) STANDARD OIL COMPANY OF NEW YORK, New York, N. Y. Filed June 29, 1912.



No claim is made to the words "Standard Oil Company of New York," "Illumination," "Heat," "Power," or "Lubrication."

Particular description of goods.—Benzin, Naphtha, Gasolene, Lubricating-Oil, and Refined Oil for Illuminating, Heating, and Power Purposes.

Claims use since May 17, 1912.

Ser. No. 64,778. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FELTEN & GUILLEAUME CARLSWERK ACTIEN-GESELLSCHAFT, Mulheim-on-the-Rhine, Germany. Filed July 17, 1912.



Particular description of goods.—Heddles, Tackle, Hooks, Thread-Dividers, Reeds and Harness for Looms; Flexible Shafts; Metal Balls for Use in Bearings; Machines for Making Cables and Ropes; Circular-Braiding Machines; Rolling-Mills; Drawing-Mills for Wire, Tubes, Rods, and Sheets; Wire-Netting Machines; Barb-Wire Machines; Machines for Making Wire Goods; Chain-Making Machines; Lathes; Machines for Working India-Rubber and Gutta-Percha; Machines for Turning, Boring, Drilling, Planing, Shaping, Slotting, Punching, or Shearing and Parts of Such Machines; Reels and Bobbins; Gear-Wheels, Centrifugal Pumps; Cranes; Turbines; Air-Compressors; Cable-Winches; Clamps.

Claims use since 1870.

Ser. No. 64,792. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) STANDARD CHARCOAL COMPANY, Bradford, Pa. Filed July 17, 1912.



No claim being made for the words "Standard Hardwood Charcoal."

Particular description of goods.—Charcoal.

Claims use since Mar. 1, 1909.

Ser. No. 65,554. (CLASS 37. PAPER AND STATIONERY.) ALVIN L. BAUMAN, St. Louis, Mo. Filed Sept. 3, 1912.

MBROYD

Particular description of goods.—Manually-Operated Marking Devices and Marking-Rolls for Decorative Purposes.

Claims use since July 1, 1912.

Ser. No. 65,980. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) UNION CHEMICAL COMPANY, Providence, R. I. Filed Sept. 25, 1912.



No claim is made to the words "Trade Mark."

Particular description of goods.—A Chemical for the Extermination of Insects and Germs.

Claims use since Sept. 14, 1912.

Ser. No. 66,261. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J. Filed Oct. 12, 1912. Under ten-year proviso.

ЗИНГЕРЪ

Particular description of goods.—Family and Manufacturing Sewing-Machines, Parts Thereof, and the Following Attachments: Ruffling and Shirring Attachments, Guides, Quilting-Guides, Edge-Guides, Tuck-Markers, Hemmers, Presser-Feet, Braiders and Corders, Needle-Cases, Bobbins, and Bobbin-Winders.

Claims use since about the year 1877.

Ser. No. 66,262. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE SINGER MANUFACTURING COMPANY, Elizabeth, N. J. Filed Oct. 12, 1912. Under ten-year proviso.

СИНГЕРЪ

Particular description of goods.—Family and Manufacturing Sewing-Machines, Parts Thereof, and the Following Attachments: Ruffling and Shirring Attachments, Guides, Quilting-Guides, Edge-Guides, Tuck-Markers, Hemmers, Presser-Feet, Braiders and Corders, Needle-Cases, Bobbins, and Bobbin-Winders.

Claims use since about the year 1885.

Ser. No. 66,280. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE BITURINE COMPANY OF AMERICA, San Francisco, Cal. Filed Oct. 14, 1912.

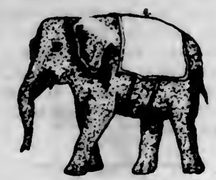
BITURINE

Particular description of goods.—Paints, Dry, Paste, Ready-Mixed, and in Solid Form, Applied by Heat.

Claims use since May, 1906.

Ser. No. 66,668. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) INDEPENDENT CHEMICAL COMPANY, New York, N. Y. Filed Nov. 4, 1912.

ELEPHANT



Particular description of goods.—Acids, as Follows: Acetic, Arsenic, Arsenous, Benzoic, Boric, Butyric, Camphoric, Carbolic, Chromic, Cinnamic, Citric, Formic, Gallic, Hydriodic, Hydrobromic, Hydrochloric, Hydrocyanic, Hydrofluoric, Hydrofluosilic, Hyphophosphorous, Lactic, Molybdic, Monochloracetic, Nitric, Nitrohydrochloric, Nitrous, Oleic, Oxalic, Phosphoric, Picric, Pyrogallic, Pyroligneous, Salicylic, Stearic, Succinic, Sulfonilic, Sulfuric, Sulfurous, Tannic, Tartaric, Trichloracetic, and Valeric; Alum, (Ammonia, Chrome, Potash;) Aluminum, (Acetate, Chlorid, Sulfate, Bronze Powder, and Foil;) Ammonia; Ammonium, (Acetate, Arsenate, Benzoate, Bromid, Carbonate, Chlorid, Nitrate, Oxalate, Phosphate, Sulfate;) Antimony, (Chlorid, Oxid, Sulfid, Potassium Tartrate—Tartar Emetic;) Arsenic, (White, Red;) Barium, (Acetate, Carbonate, Chlorid, Nitrate, Oxid, Sulfate, Sulfid;) Bismuth, (Acetate, Benzoate, Chlorid, Citrate, Nitrate, Oxalate, Phosphate, Subnitrate, Sulfate;) Borax, Calcium, (Acetate, Carbonate, Chlorid, Phosphate;) Carbon, (Bisulfid, Tetrachlorid;) Copper, (Acetate, Arsenate, Carbonate, Chlorid, Nitrate, Sulfate;) Creosote; Formaldehyde; Hydrogen Peroxid; Indigo Extract; Iron, (Acetate, Carbonate, Chlorid, Nitrate, Oxalate, Pyrolignate, Sulfate;) Lead, (Acetate, Arsenate, Carbonate, Chlorid, Nitrate, Sulfate;) Magnesium, (Carbonate, Chlorid, Sulfate;) Manganese, (Chlorid, Oxid, Sulfate;) Nickel, (Salts, Single, Double;) Olive-Oil; Phosphorus; Potassium, (Acetate, Bicarbonate, Bichromate, Bisulfate, Bitartrate, Bromid, Carbonate, Caustic, Chlorate, Chlorid, Cyanid, Ferricyanid, Red; Ferrocyanid, Yellow; Hydrate, Nitrate, Oxalate, Permanganate, Phosphate, Sulfate, Tartrate;) Rochelle Salt; Sal-Soda; Sal-Tartar; Soda, (Acetate, Arsenate, Ash, Benzoate, Bicarbonate, Bichromate, Bisulfate, Bisulfite, Carbonate, Caustic, Chlorate, Chlorid, Hyposulfite, Nitrate, Nitrite, Oxalate, Permanganate, Phosphate, Silicate, Succinate, Sulfate, Sulfid, Sulfite;) Soldering Fluid; Sulfur, (Chlorid, Tetrachlorid;) Tin, (Bichlorid, Chlorid, Oxid;) Zinc, (Acetate, Carbonate, Nitrate, Oxid, Phosphate, Sulfate;) Rat-Exterminators, and other Chemicals and Compounds.

Claims use since Jan. 1, 1909.

Ser. No. 66,862. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) E. M. & F. WALDO, New York, N. Y. Filed Nov. 12, 1912.

BASOFOR

Particular description of goods.—A Chemical, Principally Sulfate of Barium, Used as a Base for Paints and Enamels.

Claims use since July 6, 1912.

Ser. No. 66,887. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) SILICA PRODUCTS COMPANY, Spokane, Wash. Filed Nov. 13, 1912.

-|S.S.P.P|-

Particular description of goods.—A Cleaning Compound.

Claims use since June 1, 1912.

Ser. No. 66,930. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WARD BAKING COMPANY, New York, N. Y. Filed Nov. 16, 1912.

DAINTYMAID

Particular description of goods.—Bread, Rolls, Biscuits, Cakes, Cookies, and Crackers.

Claims use since July 1, 1912.

Ser. No. 67,674. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) ILLINOIS IRON & BOLT CO., Carpentersville, Ill. Filed Jan. 2, 1913.



Particular description of goods.—Anvils.

Claims use since May, 1908.

Ser. No. 67,824. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE MANNEN & ESTERLY CO., Cleveland, Ohio. Filed Jan. 10, 1913.

"MANEST"

Particular description of goods.—Hot-Air Furnaces, Gas-Heaters, Clothes-Driers, and Radiator-Shields.
Claims use since about Apr. 25, 1905.

Ser. No. 67,840. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE COLLINS COMPANY, Collinsville, Conn. Filed Jan. 11, 1913. Under ten-year proviso.

COLLINS & CO.
HARTFORD

Particular description of goods.—Axes, Hatchets, Adzes, Bush-Hooks, Machetes, Saws, Chisels, Knives, Swords, Sickles, Mattocks, Pickaxes, Shovels, Spades, Crowbars, Picks, Hoes, Mill-Picks, Sledges, Hammers, Wedges, Wrenches, Augers, Boring-Bits, Earth and Rock Drills, Cavadores, Barretones, Tarpalas, Palas, Tercados, Jincolas, Barras, Lanzas, Lancitas, Arpones, Cleavers, Bayonets, and Plows and Parts Thereof.
Claims use since 1826.

Ser. No. 67,841. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE COLLINS COMPANY, Collinsville, Conn. Filed Jan. 11, 1913. Under ten-year proviso.

COLLINS & CO.

Particular description of goods.—Axes, Hatchets, Adzes, Bush-Hooks, Machetes, Saws, Chisels, Knives, Swords, Sickles, Mattocks, Pickaxes, Shovels, Spades, Crowbars, Picks, Hoes, Mill-Picks, Sledges, Hammers, Wedges, Wrenches, Augers, Boring-Bits, Earth and Rock Drills, Cavadores, Barretones, Tarpalas, Palas, Tercados, Jincolas, Barras, Lanzas, Lancitas, Arpones, Cleavers, Bayonets, and Plows and Parts Thereof.
Claims use since 1826.

Ser. No. 67,852. (CLASS 32. FURNITURE AND UPHOLSTERY.) PACIFIC NOVELTY COMPANY, New York, N. Y. Filed Jan. 11, 1913.



Particular description of goods.—Mirrors, Mirror-Frames, and Picture-Frames.
Claims use since on or about July 15, 1912.

Ser. No. 68,157. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) TURPSENE MANUFACTURING COMPANY, Philadelphia, Pa. Filed Jan. 27, 1913.

OX-I-DO

Particular description of goods.—A Compound Oil for Reducing of Varnishes, Fillers, Oils, &c., in the Manufacture of Patent and Enamel Leathers.
Claims use since the 21st day of February, 1908.

Ser. No. 68,173. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) CARL H. ARWE, Brooklyn, N. Y. Filed Jan. 29, 1913.

CHAMCO

Particular description of goods.—The Following Mentioned Metal-Ware Specialtites, (Not Precious-Metal Ware:) Bottle and Glass Holders, Bottling-Tubes, Bowls, Cuspidors, Dish and Jar Covers, Dishers, Dippers, Double Boilers, Flour, Coffee, Ice, and Sugar Scoops, Frankfurter-Steamers, Funnels, Graters, Inserts for Coffee-Urns and Steam-Tables, Kettles, Liquor-Jiggers, Liquor-Thieves, Ladles, Pans, Percolators, Pitchers, Pots, Spouts, Steam-Cookers, Steam-Tables, Strainers, Siphons, Taps, Towel-Holders, Trays, Urns, and Enameled Metal Ware.
Claims use since Jan. 1, 1912.

Ser. No. 68,253. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) ZENITE METAL COMPANY, Indianapolis, Ind. Filed Jan. 31, 1913.

ALITE

Particular description of goods.—Metal Sheets and Strips Principally Used for Binding and Covering Members to Protect the Same from Wear.
Claims use since Dec. 31, 1912.

Ser. No. 68,272. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. MOISE SASVILLE, Marlboro, Mass. Filed Feb. 1, 1913.



Particular description of goods.—A Cough Remedy.
Claims use since Dec. 1, 1912.

Ser. No. 68,294. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE W. SANBORN & SON, Astoria, Oreg. Filed Feb. 3, 1913.

Ole Reliable



The picture is fanciful. No exclusive rights are claimed in the words "Ole Reliable."
Particular description of goods.—Canned Salmon.
Claims use since June 20, 1912.

Ser. No. 68,302. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) C. M. C. MANUFACTURING CO., Philadelphia, Pa. Filed Feb. 4, 1913.



No claim being made to the representation of the dead roach.
Particular description of goods.—Roach-Powder.
Claims use since Jan. 18, 1913.

Ser. No. 68,346. (CLASS 37. PAPER AND STATIONERY.) EATON, CRANE & PIKE COMPANY, Pittsfield, Mass. Filed Feb. 6, 1913.

Raveledge

Particular description of goods.—Writing-Paper, Printing-Paper, Envelops, Tablets, Writing-Cards, and Cardboard.
Claims use since Nov. 16, 1912.

Ser. No. 68,365. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE PORTAGE RUBBER COMPANY, Barberton, Ohio. Filed Feb. 6, 1913.

DAISY

Particular description of goods.—Rubber Vehicle-Tires.
Claims use since about Jan. 1, 1912.

Ser. No. 68,410. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOSEPH PETROCELLI & COMPANY, New York, N. Y. Filed Feb 8, 1913.



Particular description of goods.—Olive-Oil.
Claims use since Sept. 1, 1908.

Ser. No. 68,540. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) AKTIEBOLAGET GRUMME & SON, Stockholm, Sweden. Filed Feb. 14, 1913.



The word "Stomatol" being hereby disclaimed.
Particular description of goods.—Mouth-Wash.
Claims use since April, 1906.

Ser. No. 68,899. (CLASS 39. CLOTHING.) L. & W. SHOE COMPANY, New York, N. Y. Filed Mar. 7, 1913.

L&W

Particular description of goods.—Leather Shoes.
Claims use since Jan. 27, 1913.

Ser. No. 68,930. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TONNER AND BORLAND, Citra, Fla. Filed Mar. 8, 1913.

TONNER & BORLAND CITRA, FLA.

No claim being made for the firm-name or the words "Citra, Fla."

Particular description of goods.—Oranges.

Claims use since July, 1883.

Ser. No. 68,964. (CLASS 38. PRINTS AND PUBLICATIONS.) HERMAN H. HAEGER, Chicago, Ill. Filed Mar. 11, 1913.

DOWN PAT

Particular description of goods.—Coupon-Books.

Claims use since about Jan. 15, 1913.

Ser. No. 68,992. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CLARENCE ARTHUR CRANE, Cleveland, Ohio. Filed Mar. 13, 1913.

LIFE SAVERS

Particular description of goods.—Candy.

Claims use since Feb. 28, 1913.

Ser. No. 68,996. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. DAUSSA & Co., Brooklyn, N. Y. Filed Mar. 13, 1913.

LITTLE BOY BLUE

Comprising the words "Little Boy Blue" and the representation of Little Boy Blue.

Particular description of goods.—Macaroni, Vermicelli, Spaghetti, and Noodles.

Claims use since Dec. 1, 1912.

Ser. No. 69,021. (CLASS 12. CONSTRUCTION MATERIALS.) THE AMIES ASPHALT CO., Huron, S. D., and Philadelphia, Pa. Filed Mar. 14, 1913.

Fibramies

Particular description of goods.—A Paving Composition Comprising Crushed Stones and Fibers Coated with Asphaltic or other Bituminous, Resinous, or Carbonaceous Matter.

Claims use since Oct. 1, 1912.

Ser. No. 69,025. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) ROBERT COANE, Philadelphia, Pa. Filed Mar 14, 1913. Under ten-year proviso.

CHESTNUT GROVE

Particular description of goods.—Whisky.

Claims use since about November, 1881.

Ser. No. 69,061. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) J. W. SPEAR & SONS, Nuremberg-Doos, Germany. Filed Mar. 15, 1913.

TINY TOWN

Particular description of goods.—Children's Toys and Games.

Claims use since during the year 1904.

Ser. No. 69,215. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) UNITED STATES GUTTA PERCHA PAINT COMPANY, Saco, Me., and Providence, R. I. Filed Mar. 20, 1913.

COPALITE

Particular description of goods.—Varnishes.

Claims use since Mar. 9, 1897.

Ser. No. 69,242. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) WILLIAM J. SHEEHY, Chicago, Ill. Filed Mar. 21, 1913.



No claim being made for the exclusive use of the needle-threading device.

Particular description of goods.—Needle-Threading Devices.

Claims use since Feb. 1, 1913.

Ser. No. 69,258. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MOORE DROP FORGING COMPANY, Springfield, Mass. Filed Mar. 22, 1913.

"MORCO"

Particular description of goods.—Wrenches.

Claims use since on or about Dec. 10, 1912.

Ser. No. 69,328. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MAILOMETER COMPANY, Detroit, Mich. Filed Mar. 25, 1913.

MAIL-OM-ETER

Particular description of goods.—Combined Sealing and Stamping Machines and Sealing-Machines.

Claims use since about June 8, 1909.

Ser. No. 69,332. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) J. M. SELZER CARRIAGE & BUSINESS WAGON MFG. CO., St. Louis, Mo. Filed Mar. 25, 1913.



The word "Selzer" being disclaimed. The said trade-mark consists of a disk in red bearing the word "Selzer" and the letters "J. M. S." Projecting from the said disk on opposite sides thereof are upwardly and downwardly turned hooked figures in blue.

Particular description of goods.—Carriages, Wagons, and Auto-Bodies.

Claims use since about December, 1912.

Ser. No. 69,357. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) INECTO, LIMITED, London, England. Filed Mar. 26, 1913.

INECTO

Particular description of goods.—A Preparation for Dyeing the Hair, for Human Use.

Claims use since Feb. 18, 1911.

Ser. No. 69,361. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARY LE BAR, West Bingham, Pa. Filed Mar. 26, 1913.



Particular description of goods.—Blood-Purifiers, Salves, and Remedies for Catarrh, Liver and Stomach Troubles.

Claims use since Feb. 20, 1913.

Ser. No. 69,485. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.

Manitha

Particular description of goods.—Fruit-Jar Rings.

Claims use since about Jan. 1, 1907.

Ser. No. 69,491. (CLASS 24. LAUNDRY APPLIANCES AND MACHINES.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.

Wanpun

Particular description of goods.—Washboards.

Claims use since about Jan. 1, 1905.

Ser. No. 69,518. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THORNLEY & BOOTH LIMITED, Hyde, England. Filed Apr. 1, 1913.



The picture of the woman being fanciful, no claim being made to the exclusive right to the word "Fitzall," the representation of the bandeau, and the representation of the hat showing the bandeau in place.

Particular description of goods.—Bandeaux for Ladies' Hats.

Claims use since about September, 1911.

Ser. No. 69,547. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE ANTIKAMNIA CHEMICAL COMPANY, St. Louis, Mo. Filed Apr. 3, 1913.

TUPANOIDS

Particular description of goods.—A Remedy for Hoarseness, Coughs, Colds, and Laryngeal and Bronchial Irritations.

Claims use since Apr. 10, 1912.

Ser. No. 69,553. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.

QUI VIVE

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 8, 1902.

Ser. No. 69,555. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.



Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 21, 1906.

Ser. No. 69,559. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.



Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 12, 1908.

Ser. No. 69,617. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN E. ESPEY, Chicago, Ill. Filed Apr. 5, 1913. Under ten-year proviso.



Particular description of goods.—Toilet Creams and Lotions for Chapped, Tanned, and Sunburned Skin.
Claims use since the year 1878.

Ser. No. 69,644. (CLASS 37. PAPER AND STATIONERY.) STONE & ANDREW INC., Boston, Mass. Filed Apr. 7, 1913.



Particular description of goods.—Coated Book, Bond, Ledger, Blotting, Envelop, Cover, Text, Glazed, Jute, Wedding, Kraft, Linen, Manila, News, Printing, Index Bristol, Onion-Skin, French Folio, Railroad-Folder, Rope, Chemical Manila, Lithograph, Writing, and Cardboard Paper.
Claims use since Nov. 1, 1906.

Ser. No. 69,676. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN H. HAYDON, New York, N. Y. Filed Apr. 9, 1913.

VILOXINE

Particular description of goods.—A Toilet Cream for the Skin.
Claims use since May 23, 1912.

Ser. No. 69,690. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BADGER OIL & SPECIALTY CO., Milwaukee, Wis. Filed Apr. 3, 1913.

SHAKER AMMONIA

The word "Ammonia" being disclaimed.
Particular description of goods.—Ammonia for Household Uses.
Claims use since Dec. 20, 1912.

Ser. No. 69,727. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE SANAX CO., INC., New York, N. Y. Filed Apr. 11, 1913.

Sanax

Particular description of goods.—Electric Vibratory Massage Apparatus.
Claims use since November, 1912.

Ser. No. 69,792. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) COLGATE & CO., Jersey City, N. J., and New York, N. Y. Filed Apr. 15, 1913.

GLADIA

Particular description of goods.—Soaps and Soap Powders.
Claims use since Apr. 11, 1913.

Ser. No. 69,892. (CLASS 33. GLASSWARE.) GLEASON-TIEBOUT GLASS COMPANY, New York, N. Y. Filed April 18, 1913.

POLYCASE

Particular description of goods.—Glass Shades, Glass Globes, and Glass Reflectors for Artificial Illumination.
Claims use since Mar. 15, 1910.

Ser. No. 69,902. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MICHAEL PEETZ, London, England. Filed Apr. 18, 1913.

KRASKA

Particular description of goods.—A Liquid Nail-Polish.
Claims use since February, 1912.

Ser. No. 69,960. (CLASS 32. FURNITURE AND UPHOLSTERY.) JOHN L. MUELLER, St. Louis, Mo. Filed Apr. 21, 1913.

MAGNET

Particular description of goods.—Oil-Cloth-Display Stands.
Claims use since Mar. 12, 1913.

Ser. No. 69,987. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FLATAU & STEINER, New York, N. Y. Filed Apr. 22, 1913.



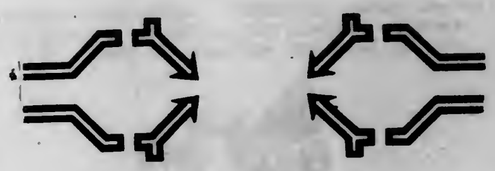
Particular description of goods.—Veilings, Dress-Nettings, Veils, and Chiffons.
Claims use since Dec. 1, 1912.

Ser. No. 70,010. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE HOLTZER-CABOT ELECTRIC COMPANY, Brookline, Mass. Filed Apr. 23, 1913.

REACTO

Particular description of goods.—Electric Horns.
Claims use since about Dec. 1, 1911.

Ser. No. 70,017. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) L. REMSEN MELICK & CO., New York, N. Y. Filed Apr. 23, 1913.



Particular description of goods.—Furniture or Wood Polishes.
Claims use since Mar. 10, 1913.

Ser. No. 70,018. (CLASS 39. CLOTHING.) THE MERIT UNDERWEAR CO., Shoemakersville, Pa. Filed Apr. 23, 1913.



Particular description of goods.—Knitted Underwear—Namely, Shirts, Drawers, and Union Suits.
Claims use since Feb. 15, 1913.

Ser. No. 70,029. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HUMPHREYS, CANNON & Co., Memphis, Tenn. Filed Apr. 24, 1913.

BOOSTER



Particular description of goods.—Baking-Powder.
Claims use since Dec. 1, 1912.

Ser. No. 70,051. (CLASS 33. GLASSWARE.) EDOUARD BENEDICTUS, Paris, France. Filed Apr. 25, 1913.

TRIPLEX

Particular description of goods.—Reinforced Glass.
Claims use since Dec. 9, 1910.

Ser. No. 70,064. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE PROSPECT MANUFACTURING COMPANY, Prospect, Ohio. Filed Apr. 25, 1913.

DELUGE

Particular description of goods.—Chemical Fire-Extinguisher and the Like.
Claims use since about Apr. 20, 1906.

Ser. No. 70,086. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) C. F. BLANKE TEA & COFFEE COMPANY, St. Louis, Mo. Filed Apr. 28, 1913.



Particular description of goods.—Spices.
Claims use since July 28, 1906.

Ser. No. 70,117. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE SOUTHERN MANUFACTURING CO., Richmond, Va. Filed Apr. 29, 1913.

BOOSTER

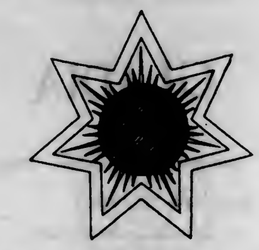
Particular description of goods.—Baking-Powder.
Claims use since Nov. 10, 1911.

Ser. No. 70,175. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) CORBITT & BROWN, Memphis, Tenn. Filed May 2, 1913.

SWIG

Particular description of goods.—Non-Alcoholic Fruit-Cider Consisting of Sugar, Water, and Fruit-Juices.
Claims use since Apr. 2, 1913.

Ser. No. 70,205. (CLASS 48. MALT EXTRACTS AND LIQUORS.) THE HENRY ELIAS BREWING COMPANY, New York, N. Y. Filed May 3, 1913.



Particular description of goods.—Beer.
Claims use since on or about Apr. 19, 1913.

Ser. No. 70,223. (CLASS 17. TOBACCO PRODUCTS.) THE TABARD CIGARETTE AND TOBACCO COMPANY, LTD., London, England, and New York, N. Y. Filed May 3, 1913.

Tabard

Particular description of goods.—Cigarettes.
Claims use since 1905.

Ser. No. 70,238. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE FLEXITYPE CO., Cleveland, Ohio. Filed May 5, 1913.

Flexitype

Particular description of goods.—Prepared Dry Stereotype-Matrix.
Claims use since May 1, 1913.

Ser. No. 70,322. (CLASS 37. PAPER AND STATIONERY.) NAVE-MCCORD MERCANTILE CO., St. Joseph, Mo. Filed May 9, 1913.

FRONTIER

Particular description of goods.—Writing-Paper.
Claims use since Feb. 1, 1905.

Ser. No. 70,325. (CLASS 37. PAPER AND STATIONERY.) NAVE-MCCORD MERCANTILE CO., St. Joseph, Mo. Filed May 9, 1913.

ACROPOLIS

Particular description of goods.—Writing-Paper.
Claims use since Mar. 12, 1906.

Ser. No. 70,354. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JAMES S. KIRK & COMPANY, Chicago, Ill. Filed May 10, 1913.

TESORO

Particular description of goods.—Castile Soap.
Claims use since Mar. 5, 1913.

Ser. No. 70,389. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THOMAS P. BURKE, New Albany, Ind. Filed May 13, 1913.

QUEEN

Particular description of goods.—Textile Rugs.
Claims use since about Nov. 2, 1912.

Ser. No. 70,392. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) J. W. BUCKLEY RUBBER CO., New York, N. Y. Filed May 13, 1913. Under ten-year proviso.

HYDRAULIC

Particular description of goods.—Rubber Tubing, Rubber Hose, Rubber and Cotton Fire-Hose, Rubber and Cotton Mill-Hose, Belting, and Machinery Packing.
Claims use since January, 1894.

Ser. No. 70,399. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FRANK H. CATHCART, Baltimore, Md. Filed May 13, 1913.



Particular description of goods.—Machine-Shaft Couplings.
Claims use since about Apr. 5, 1913.

Ser. No. 70,403. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) MARSHALL FIELD & COMPANY, Chicago, Ill. Filed May 13, 1913.

CAR-MEN

Particular description of goods.—Dress-Shields and Kid Curlers.
Claims use since about Jan. 1, 1913.

Ser. No. 70,408. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ELMO L. REYNOLDS, Grand Forks, N. D. Filed May 13, 1913.

B. L. Reynolds

Consists of a facsimile of my signature.
Particular description of goods.—A Remedy for All Scalp and Skin Diseases.
Claims use since Apr. 15, 1913.

Ser. No. 70,446. (CLASS 15. OILS AND GREASES.) GRAPHITES-MASKAR SOCIÉTÉ ANONYME, Paris, France. Filed May 16, 1913.

MASKAR

Particular description of goods.—Plumbago for Lubricating.
Claims use since about the commencement of November, 1912.

Ser. No. 70,474. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) PACIFIC NOVELTY COMPANY, New York, N. Y. Filed May 17, 1913.



Particular description of goods.—Manicure-Files, Cuticle-Knives, and Corn-Knives and Manicure-Buffers.
Claims use since on or about July 15, 1912.

Ser. No. 70,487. (CLASS 37. PAPER AND STATIONERY.) CHAPIN & GOULD PAPER COMPANY, Springfield, Mass. Filed May 19, 1913.

Selena

Particular description of goods.—Writing-Paper.
Claims use since Apr. 10, 1913.

Ser. No. 70,506. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) B. HART & BRO., San Francisco, Cal. Filed May 20, 1913.



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Particular description of goods.—Cotton and Silk Goods in the Piece.
Claims use since Nov. 15, 1912.

Ser. No. 70,541. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed May 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Jan. 22, 1911.

Ser. No. 70,542. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed May 21, 1913.

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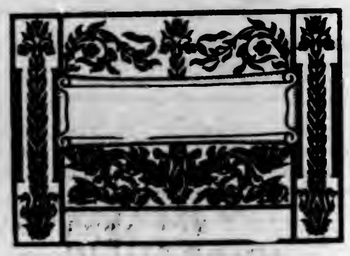
Particular description of goods.—Toilet-Paper.
Claims use since May 1, 1913.

Ser. No. 70,543. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed May 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Jan. 30, 1911.

Ser. No. 70,545. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO., INC., New Hartford, N. Y. Filed May 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Jan. 1, 1913.

Ser. No. 70,621. (CLASS 37. PAPER AND STATIONERY.) KNOX & WOLCOTT PAPER CO., Chicago, Ill. Filed May 24, 1913.

PUBLICITY

Particular description of goods.—Bond-Paper.
Claims use since December, 1908.

TRADE-MARKS

REGISTERED JUNE 17, 1913.

92,026. MATCHES. JUNEBRO AKTIEBOLAG, Jönköping, Sweden.
Filed January 3, 1913. Serial No. 67,691. PUBLISHED APRIL 8, 1913.

92,027. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed June 29, 1912. Serial No. 64,468. PUBLISHED APRIL 8, 1913.

92,028. WOVEN AND KNITTED GOODS, PIECE GOODS, SHIRTINGS, SHEETINGS, AND BLANKETS. ALDEN MILLS, New Orleans, La.
Filed February 19, 1913. Serial No. 68,622. PUBLISHED APRIL 15, 1913.

92,029. CHEMICAL COMPOUND FOR CERTAIN NAMED PURPOSES. ALLEN CHEMICAL CO., New York, N. Y.
Filed February 28, 1913. Serial No. 68,768. PUBLISHED APRIL 15, 1913.

92,030. BUTTER. AMMON & PERSON, Jersey City, N. J.
Filed February 8, 1912. Serial No. 61,376. PUBLISHED APRIL 15, 1913.

92,031. [WITHDRAWN.]

92,032. BOTTLED SPRING-WATER. DAVID WILEY ANDERSON, Richmond, Va.
Filed March 19, 1913. Serial No. 69,176. PUBLISHED APRIL 15, 1913.

92,033. CERTAIN CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. E. C. ATKINS & COMPANY, Indianapolis, Ind.
Filed January 13, 1913. Serial No. 67,858. PUBLISHED APRIL 15, 1913.

92,034. NECKTIES, SASHES, AND HATBANDS. GEORGE M. BAKER, Bath, N. Y.
Filed March 15, 1913. Serial No. 69,046. PUBLISHED APRIL 22, 1913.

92,035. TEXTILE RUGS. BEATTIE MANUFACTURING COMPANY, Little Falls, N. J.; New York, N. Y., and Chicago, Ill.
Filed February 24, 1913. Serial No. 68,676. PUBLISHED APRIL 15, 1913.

92,036. CELLULOSE SHEETS OBTAINED BY CERTAIN PROCESS. BLANCHISSERIE ET TEINTURERIE DE THAON, Thaon, France.
Filed August 2, 1912. Serial No. 65,080. PUBLISHED APRIL 15, 1913.

92,037. CANDY. BOLDEMANN CHOCOLATE CO., INC., San Francisco, Cal.
Filed January 13, 1913. Serial No. 67,860. PUBLISHED APRIL 8, 1913.

92,038. ICE-CREAM. BORDEN'S CONDENSED MILK CO., New York, N. Y.
Filed February 6, 1913. Serial No. 68,339. PUBLISHED APRIL 15, 1913.

92,039. MACARONI. FRANK BOWMAN, Habana, Cuba.
Filed December 11, 1911. Serial No. 60,162. PUBLISHED APRIL 15, 1913.

92,040. CAKES, CRACKERS, WAFERS, AND BISCUITS. BREMNER BROS., Chicago, Ill.
Filed November 29, 1912. Serial No. 67,167. PUBLISHED APRIL 8, 1913.

92,041. LOTION FOR TREATING THE SKIN. J. W. BROOKS & CO. INCORPORATED, Portland, Me.
Filed February 5, 1913. Serial No. 68,323. PUBLISHED APRIL 15, 1913.

92,042. BREAD. LEONARD W. BROWN, Camden, N. J.
Filed December 30, 1912. Serial No. 67,641. PUBLISHED APRIL 15, 1913.

92,043. CERTAIN MACHINERY AND TOOLS AND PARTS THEREOF. BUFFALO STEAM ROLLER COMPANY, Buffalo, N. Y.
Filed March 5, 1913. Serial No. 68,838. PUBLISHED APRIL 15, 1913.

92,044. CANNED FISH. CALIFORNIA TUNNY CANNING CO., San Francisco and San Pedro, Cal.
Filed January 29, 1913. Serial No. 68,176. PUBLISHED APRIL 8, 1913.

92,045. CERTAIN NAMED HARDWARE ARTICLES. COLUMBIAN ENAMELING & STAMPING CO., Terre Haute, Ind.
Filed January 13, 1913. Serial No. 67,863. PUBLISHED APRIL 15, 1913.

92,046. CANDIES. COX CONFECTIONERY COMPANY, Boston, Mass.
Filed February 7, 1913. Serial No. 68,386. PUBLISHED APRIL 15, 1913.

92,047. LIQUID SPRAY FOR EXTERMINATING INSECTS, A DEODORIZER, AND DISINFECTANT. HORACE M. CREAMER, Brockton, Mass.
Filed February 10, 1913. Serial No. 68,422. PUBLISHED APRIL 15, 1913.

92,048. STOKERS FOR FURNACES AND CHAIN-GRATES FOR FURNACES. PAUL L. CROWE, Jersey City, N. J.
Filed October 9, 1909. Serial No. 45,212. PUBLISHED APRIL 15, 1913.

92,049. PLOWS, MARKERS, POTATO-COVERERS, AND ROOT-CUTTERS. W. EDDY PLOW CO., Greenwich N. Y.
Filed February 1, 1913. Serial No. 68,257. PUBLISHED APRIL 15, 1913.

92,050. BAKING-POWDER. DWIGHT EDWARDS COMPANY, Portland, Oreg.
Filed February 28, 1913. Serial No. 68,775. PUBLISHED APRIL 15, 1913.

92,051. REMEDY FOR CHILLS AND MALARIA. ELLIS-LILLYBECK DRUG CO., Memphis, Tenn.
Filed February 4, 1913. Serial No. 68,304. PUBLISHED APRIL 15, 1913.

92,052. THRESHING-MACHINES. EMERSON-BRANTINGHAM COMPANY, Rockford, Ill.
Filed January 27, 1913. Serial No. 68,138. PUBLISHED APRIL 15, 1913.

92,053. THRESHING-MACHINES. EMERSON-BRANTINGHAM COMPANY, Rockford, Ill.
Filed February 28, 1913. Serial No. 68,778. PUBLISHED APRIL 15, 1913.

92,054. TRACTION-ENGINES. EMERSON-BRANTINGHAM COMPANY, Rockford, Ill.
Filed February 28, 1913. Serial No. 68,779. PUBLISHED APRIL 15, 1913.

92,055. THRESHING-MACHINES. EMERSON-BRANTINGHAM COMPANY, Rockford, Ill.
Filed February 28, 1913. Serial No. 68,780. PUBLISHED APRIL 15, 1913.

92,056. STEEL PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MFG. CO., Camden, N. J.
Filed February 27, 1913. Serial No. 68,759. PUBLISHED APRIL 15, 1913.

92,057. STEEL PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MFG. CO., Camden, N. J.
Filed February 27, 1913. Serial No. 68,760. PUBLISHED APRIL 15, 1913.

92,058. QUININ POMADE, LINIMENT, AND SKIN LOTION. EXELENTO MEDICINE CO., Atlanta, Ga.
Filed November 11, 1912. Serial No. 66,809. PUBLISHED APRIL 15, 1913.

92,059. CRACKERS. R. FABIEN & CO., New York, N. Y.
Filed October 13, 1911. Serial No. 59,136. PUBLISHED APRIL 8, 1913.

92,060. PURGATIVE. FARBENFABRIKEN OF ELBERFELD COMPANY, New York, N. Y.
Filed February 24, 1913. Serial No. 68,682. PUBLISHED APRIL 15, 1913.

92,061. NECKTIES. FRANKLIN KNITTING MILLS, New York, N. Y.
Filed September 14, 1912. Serial No. 65,751. PUBLISHED APRIL 22, 1913.

92,062. COCOA. J. S. FRY AND SONS, LIMITED, Bristol, England.
Filed May 14, 1912. Serial No. 63,526. PUBLISHED APRIL 15, 1913.

92,063. TOILET-POWDER. LEON GAWURIN, New York, N. Y.
Filed January 17, 1913. Serial No. 67,967. PUBLISHED APRIL 15, 1913.

92,064. SAUSAGE. A. GÖBEL, Brooklyn, N. Y.
Filed September 12, 1912. Serial No. 65,718. PUBLISHED APRIL 15, 1913.

92,065. CERTAIN NAMED WINES. ISAAC GOLDBERG, New York, N. Y.
Filed March 7, 1913. Serial No. 68,896. PUBLISHED APRIL 15, 1913.

92,066. CERTAIN NAMED WINES. ISAAC GOLDBERG, New York, N. Y.
Filed March 7, 1913. Serial No. 68,897. PUBLISHED APRIL 15, 1913.

92,067. CERTAIN NAMED DISTILLED ALCOHOLIC LIQUORS. ISAAC GOLDBERG, New York, N. Y.
Filed March 7, 1913. Serial No. 68,898. PUBLISHED APRIL 15, 1913.

92,068. WHEAT-FLOUR. THE GRAFTON ROLLER MILL CO., Grafton, N. D.
Filed January 11, 1912. Serial No. 60,736. PUBLISHED APRIL 8, 1913.

92,069. LARD. THE W. J. WILCOX LARD AND REFINING COMPANY, New York, N. Y.
Filed November 25, 1912. Serial No. 67,117. PUBLISHED APRIL 15, 1913.

92,070. MUCILAGINOUS PRODUCTS OF VEGETABLE ORIGIN. THE GUM TRAGASOL SUPPLY COMPANY LIMITED, Hooton, county of Chester, England.
Filed February 9, 1912. Serial No. 61,390. PUBLISHED SEPTEMBER 10, 1912.

92,071. LEATHER DRESSINGS AND POLISHES. THE GUM TRAGASOL SUPPLY COMPANY LIMITED, Hooton, county of Chester, England.
Filed November 8, 1912. Serial No. 66,762. PUBLISHED APRIL 15, 1913.

92,072. LEATHER DRESSINGS AND POLISHES. THE GUM TRAGASOL SUPPLY COMPANY LIMITED, Hooton, county of Chester, England.
Filed November 23, 1912. Serial No. 67,067. PUBLISHED APRIL 15, 1913.

92,073. LINIMENTS FOR EXTERNAL PURPOSES AND AS AN EXTERNAL REMEDY. IESEL HARTSTEIN, Houston, Tex.
Filed March 4, 1912. Serial No. 61,918. PUBLISHED APRIL 15, 1913.

92,074. SILK RIBBONS. HELVETIA SILK MILL, Paterson, N. J., and New York, N. Y.
Filed April 25, 1912. Serial No. 63,123. PUBLISHED APRIL 22, 1913.

92,075. BLENDED COFFEE. J. F. HUMPHREYS AND CO., Bloomington, Ill.
Filed February 6, 1913. Serial No. 68,349. PUBLISHED APRIL 15, 1913.

92,076. GIN. HUMPHREY TAYLOR & COMPANY LIMITED, London, England.
Filed December 28, 1912. Serial No. 67,627. PUBLISHED APRIL 15, 1913.

92,077. WHEAT-FLOUR. HUNTER MILLING COMPANY, Wellington, Kans.
Filed April 4, 1911. Serial No. 55,530. PUBLISHED APRIL 8, 1913.

92,078. GLASS BOTTLES AND FLASKS. ILLINOIS-PACIFIC GLASS COMPANY, San Francisco, Cal.
Filed January 21, 1913. Serial No. 68,038. PUBLISHED APRIL 15, 1913.

92,079. CONDENSED MILK. IMPERIAL CONDENSED MILK COMPANY, Seattle, Wash.
Filed August 14, 1912. Serial No. 65,268. PUBLISHED APRIL 8, 1913.

92,080. CERTAIN BELTING, HOSE, AND MACHINERY PACKING. IMPERIAL RUBBER CO., New York, N. Y.
Filed November 24, 1911. Serial No. 59,904. PUBLISHED NOVEMBER 5, 1912.

92,081. SALT. INLAND CRYSTAL SALT CO., Salt Lake City, Utah.
Filed October 7, 1912. Serial No. 66,168. PUBLISHED APRIL 15, 1913.

92,082. EYEGLASS-GUARDS. E. KIRSTEIN SONS COMPANY, Rochester, N. Y.
Filed March 14, 1913. Serial No. 69,033. PUBLISHED APRIL 8, 1913.

92,083. MINERAL WATERS. KOENIGL. MINERALBRUNNEN SIEMENS ERBEN, Berlin, Germany.
Filed January 7, 1913. Serial No. 67,774. PUBLISHED APRIL 15, 1913.

92,084. CIGARETTES AND PIPE-TOBACCO. MORRIS KOPPELMAN, New York, N. Y.
Filed September 7, 1912. Serial No. 65,624. PUBLISHED NOVEMBER 19, 1912.

92,085. WASHING-POWDER. ROBERT A. LAND, Stringer, Miss.
Filed January 30, 1913. Serial No. 68,207. PUBLISHED APRIL 15, 1913.

92,086. CERTAIN NAMED FANCY GOODS, FURNISHINGS, AND NOTIONS. LIBERTY & CO. LIMITED, London, England.
Filed July 12, 1912. Serial No. 64,692. PUBLISHED APRIL 22, 1913.

92,087. FRESH APPLES, CHERRIES, PLUMS, APRICOTS, STRAWBERRIES, RASPBERRIES, CURRANTS, AND POTATOES. MACKINTOSH MANOR, Missoula and Superior, Mont., and New York, N. Y.
Filed May 20, 1912. Serial No. 63,653. PUBLISHED APRIL 8, 1913.

92,088. CHOLAGOGUE. THE MARCY COMPANY, Boston, Mass.
Filed February 6, 1913. Serial No. 68,355. PUBLISHED APRIL 15, 1913.

92,089. CIGARS AND CIGARETTES. MARIA CRISTINA COMPAÑIA MANUFACTURERA DE TABACOS Y CIGARRILLOS, LD., Manila, Philippine Islands.
Filed June 22, 1910. Serial No. 50,494. PUBLISHED APRIL 15, 1913.

92,090. CIGARS AND CIGARETTES. MARIA CRISTINA COMPAÑIA MANUFACTURERA DE TABACOS Y CIGARRILLOS, LD., Manila, Philippine Islands.
Filed June 22, 1910. Serial No. 50,495. PUBLISHED APRIL 15, 1913.

92,091. CIGARS AND CIGARETTES. MARIA CRISTINA COMPAÑIA MANUFACTURERA, DE TABACOS Y CIGARRILLOS, LD., Manila, Philippine Islands.
Filed June 22, 1910. Serial No. 50,497. PUBLISHED APRIL 15, 1913.

92,092. WINE. F. T. MARTENS, San Francisco, Cal.
Filed January 21, 1913. Serial No. 68,040. PUBLISHED APRIL 15, 1913.

92,093. CERTAIN NAMED FANCY GOODS, FURNISHINGS AND NOTIONS. F. W. MAURER & SONS CO., Philadelphia, Pa.
Filed October 1, 1912. Serial No. 66,084. PUBLISHED APRIL 22, 1913.

92,094. PERFORATED NOTE-SHEETS FOR AUTOMATIC MUSICAL INSTRUMENTS. MELVILLE CLARK PIANO COMPANY, Chicago, Ill.
Filed February 21, 1912. Serial No. 61,647. PUBLISHED APRIL 15, 1913.

92,095. PERFORATED NOTE-SHEETS FOR AUTOMATIC MUSICAL INSTRUMENTS. MELVILLE CLARK PIANO COMPANY, Chicago, Ill.
Filed February 21, 1912. Serial No. 61,649. PUBLISHED APRIL 15, 1913.

92,096. MATRICES. MERGENTHALER LINOTYPE COMPANY, New York, N. Y.
Filed March 5, 1913. Serial No. 68,886. PUBLISHED APRIL 15, 1913.

92,097. NECKTIES AND NECKSCARFS. ZIOCK & SAMPLINER, Cleveland, Ohio.
Filed March 8, 1913. Serial No. 68,934. PUBLISHED APRIL 22, 1913.

92,098. ENAMELED WARE. MICHIGAN ENAMELING WORKS, Kalamazoo, Mich.
Filed February 3, 1913. Serial No. 68,286. PUBLISHED APRIL 15, 1913.

92,099. NUMBERING-MACHINE INK. MITTAG & VOLGER, INCORPORATED, Park Ridge, N. J.
Filed February 19, 1913. Serial No. 68,623. PUBLISHED APRIL 8, 1913.

92,100. CERTAIN PAPER AND STATIONERY. MITTINEAGUE PAPER COMPANY, Mittineague, Mass.
Filed May 11, 1911. Serial No. 56,307. PUBLISHED APRIL 8, 1913.

92,101. METAL VALVES, PIPE-COUPLINGS, PIPE-FITTINGS, AND CLOSET-TANKS. JOHN A. MURPHY, New York, N. Y.
Filed December 31, 1912. Serial No. 67,651. PUBLISHED APRIL 15, 1913.

92,102. TEXTILE RUGS. MCCLEARY, WALLIN & CROUSE, Amsterdam, N. Y.
Filed February 19, 1912. Serial No. 61,610. PUBLISHED APRIL 15, 1913.

92,103. CAR-MOVERS. WM. MCLEISH, Appleton, Wis.
Filed March 3, 1913. Serial No. 68,820. PUBLISHED APRIL 15, 1913.

92,104. FLOOR-OIL. JOHN MCQUADE, Brooklyn, N. Y.
Filed March 19, 1913. Serial No. 69,188. PUBLISHED APRIL 15, 1913.

92,105. CANNED FRUITS AND CANNED VEGETABLES. NALLEY GROCERY CO., Austin, Tex.
Filed November 29, 1912. Serial No. 67,165. PUBLISHED APRIL 15, 1913.

92,106. CERTAIN CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. NASH HARDWARE COMPANY, Fort Worth, Tex.
Filed February 10, 1913. Serial No. 68,443. PUBLISHED APRIL 15, 1913.

92,107. BISCUIT. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y.
Filed January 25, 1912. Serial No. 61,015. PUBLISHED APRIL 8, 1913.

92,108. CANDY. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y.
Filed August 22, 1912. Serial No. 65,376. PUBLISHED APRIL 8, 1913.

92,109. FLOOR-COVERING OF FIBROUS FELT RENDERED WATERPROOF AND PLIABLE BY TREATMENT. NATIONAL WOOD REPRODUCING COMPANY, Augusta, Me.
Filed February 10, 1913. Serial No. 68,442. PUBLISHED APRIL 22, 1913.

92,110. GAS-ENGINES, FEED-GRINDERS, AND PUMP-JACKS. NELSON BROS. CO., Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,445. PUBLISHED APRIL 15, 1913.

92,111. SCOURING-POWDER. THE NEW SPAR PRODUCTS COMPANY, Baltimore, Md.
Filed December 27, 1912. Serial No. 67,605. PUBLISHED APRIL 15, 1913.

92,112. CERTAIN NAMED CANNED FOODS AND CERTAIN FOODS IN BULK. ONALASKA PICKLE & CANNING CO., Onalaska, Wis.
Filed February 6, 1913. Serial No. 68,364. PUBLISHED APRIL 15, 1913.

92,113. CHLORATE BLASTING-EXPLOSIVES. JAMES F. O'BRIEN, Los Angeles, Cal.
Filed April 1, 1912. Serial No. 62,585. PUBLISHED APRIL 1, 1913.

92,114. WASHING COMPOUND. PARAGON WASHING COMPOUND CO., Portland, Me.
Filed February 24, 1913. Serial No. 68,701. PUBLISHED APRIL 15, 1913.

92,115. REMEDY FOR RHEUMATIC AFFECTIONS. PARKE, DAVIS & CO., Detroit, Mich.
Filed January 27, 1913. Serial No. 68,152. PUBLISHED APRIL 15, 1913.

92,116. BUTTONS. THE PHILADELPHIA BUTTON COMPANY, Philadelphia, Pa.
Filed March 6, 1913. Serial No. 68,871. PUBLISHED APRIL 15, 1913.

92,117. LIQUID HUMAN-HAIR DESTROYER. PILGRIM MANUFACTURING CO., New York, N. Y.
Filed March 1, 1913. Serial No. 68,806. PUBLISHED APRIL 15, 1913.

92,118. PEELED GREEN CHILLI. PIONEER GREEN CHILE PACKING CO., Los Angeles, Cal.
Filed March 19, 1908. Serial No. 33,458. PUBLISHED APRIL 15, 1913.

92,119. PERFUMERIES, ESSENCES FOR PERFUMERY, AND FACE-POWDER. L. T. PIVER & CIE., Paris, France.
Filed November 26, 1912. Serial No. 67,130. PUBLISHED APRIL 15, 1913.

92,120. STOVE-POLISH, METAL-POLISH, SHOE-POLISH, AND ENAMEL-POLISH. A-B POLISH CO., Chicago, Ill.
Filed September 16, 1912. Serial No. 65,812. PUBLISHED DECEMBER 10, 1912.

92,121. CARBONATED BEVERAGES. C. C. PORTER, Holdrege, Nebr.
Filed February 24, 1913. Serial No. 68,688. PUBLISHED APRIL 15, 1913.

92,122. ARTIFICIAL FLOWERS AND PLANTS AND FEATHERS. L. PRAGER, New York, N. Y.
Filed March 6, 1913. Serial No. 68,872. PUBLISHED APRIL 15, 1913.

92,123. CERTAIN CHEMICALS AND PHARMACEUTICAL PREPARATIONS. PRICHARD & CONSTANCE (WHOLESALE) LTD., London, England.
Filed February 6, 1912. Serial No. 61,316. PUBLISHED APRIL 15, 1913.

92,124. MAGNETOS. REMY ELECTRIC CO., Anderson, Ind.
Filed August 20, 1912. Serial No. 65,348. PUBLISHED APRIL 15, 1913.

92,125. CANNED SWEET RED PEPPERS. ROYAL PACKING COMPANY, Los Angeles, Cal.
Filed December 14, 1912. Serial No. 67,401. PUBLISHED APRIL 8, 1913.

92,126. ESSENTIAL OILS FOR USE IN MANUFACTURE OF SOAPS AND PERFUMES. ADOLPHE SAALFELD, Manchester, England.
Filed November 12, 1912. Serial No. 66,872. PUBLISHED APRIL 15, 1913.

92,127. REMEDIES FOR CERTAIN NAMED DISEASES. SALIXIS CHEMICAL COMPANY, Boston, Mass.
Filed January 27, 1913. Serial No. 68,156. PUBLISHED APRIL 1, 1913.

92,128. CIGARS. SANCHEZ & HAYA CO., Tampa, Fla.
Filed May 29, 1905. Serial No. 6,917. PUBLISHED APRIL 15, 1913.

92,129. TOOL-STEEL. SANDERSON BROTHERS AND NEWBOULD, LTD., Sheffield, England.
Filed December 5, 1912. Serial No. 67,250. PUBLISHED APRIL 15, 1913.

92,130. CERTAIN CUTLERY, MACHINERY, AND TOOLS. AND PARTS THEREOF. SANDERSON BROTHERS AND NEWBOULD, LTD., Sheffield, England.
Filed December 5, 1912. Serial No. 67,251. PUBLISHED APRIL 15, 1913.

92,131. CIGARS. SAN MARTIN & LEON CO., Tampa, Fla.
Filed January 11, 1913. Serial No. 67,857. PUBLISHED APRIL 15, 1913.

92,132. TEAS, BLENDED TEAS, AND SPICES. WILLIAM S. SCULL COMPANY, Camden, N. J.
Filed February 16, 1912. Serial No. 61,551. PUBLISHED APRIL 15, 1913.

92,133. CERTAIN NAMED DENTAL, MEDICAL, AND SURGICAL APPLIANCES. THE SEAMLESS RUBBER COMPANY, New Haven, Conn.
Filed January 18, 1913. Serial No. 68,000. PUBLISHED APRIL 15, 1913.

92,134. RUBBER TIRES FOR AUTOMOBILES. SEARS, ROEBUCK AND CO., Chicago, Ill.
Filed February 6, 1913. Serial No. 68,376. PUBLISHED APRIL 15, 1913.

92,135. WALL-PAPERS. SOCIETE ANONYME DES USINES PETERS-LACROIX, Haren, Brussels, Belgium.
Filed March 5, 1913. Serial No. 68,854. PUBLISHED APRIL 15, 1913.

92,136. BRANDY, GIN, AND STRAIGHT WHISKY. MARY A. SNOW, Boston, Mass.
Filed February 17, 1913. Serial No. 68,585. PUBLISHED APRIL 15, 1913.

92,137. METAL TANKS FOR USE WITH WATER-CLOSETS. STANDARD SANITARY MFG. CO., Pittsburgh, Pa.
Filed February 6, 1913. Serial No. 68,374. PUBLISHED APRIL 15, 1913.

92,138. BORAX. STAUFFER CHEMICAL CO., San Francisco, Cal.
Filed February 26, 1913. Serial No. 68,754. PUBLISHED APRIL 15, 1913.

92,139. CANNED VEGETABLES. STETSON & ELLISON CO., Camden, Del., and New York, N. Y.
Filed February 6, 1913. Serial No. 68,375. PUBLISHED APRIL 15, 1913.

92,140. APPAREL-BELTS. STRAUSS BROS. & COMPANY, New York, N. Y.
Filed November 4, 1912. Serial No. 66,679. PUBLISHED APRIL 15, 1913.

92,141. CANNED SALMON. SUNNY POINT PACKING COMPANY, INC., Seattle, Wash.
Filed December 30, 1912. Serial No. 67,649. PUBLISHED APRIL 15, 1913.

92,142. REMEDIES FOR CERTAIN NAMED DISEASES. THE E. E. SUTHERLAND MEDICINE CO., Paducah, Ky.
Filed June 7, 1912. Serial No. 64,041. PUBLISHED APRIL 15, 1913.

92,143. WORKMEN'S TIME-RECORDERS. TAYLOR, TAYLOR & HOBSON, LTD., Leicester, England.
Filed December 11, 1912. Serial No. 67,346. PUBLISHED APRIL 8, 1913.

92,144. TRACING-CLOTH. TECHNICAL SUPPLY COMPANY, Scranton, Pa.
Filed March 17, 1913. Serial No. 69,126. PUBLISHED APRIL 15, 1913.

92,145. KEROSENE. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y.
Filed March 17, 1913. Serial No. 69,128. PUBLISHED APRIL 15, 1913.

92,146. LUBRICATING-OIL. THE TEXAS COMPANY, Houston and Port Arthur, Tex., and New York, N. Y.
Filed March 17, 1913. Serial No. 69,129. PUBLISHED APRIL 15, 1913.

92,147. MACHINES, KNOWN AS CHECK-PROTECTORS, FOR PRINTING CERTAIN FORMS. G. W. TODD & COMPANY, Rochester, N, Y.
Filed February 21, 1912. Serial No. 61,661. PUBLISHED APRIL 15, 1913.

92,148. CANNED SARDINES. WILLIAM UNDERWOOD COMPANY, Boston, Mass.
Filed June 7, 1909. Serial No. 42,873. PUBLISHED AUGUST 20, 1912.

92,149. STENCIL-PAPER USED IN DUPLICATING AND STENCILING MACHINES. UNDERWOOD TYPEWRITER COMPANY, New York, N. Y.
Filed January 9, 1913. Serial No. 67,807. PUBLISHED APRIL 8, 1913.

92,150. SNAP-BUTTONS USED AS GARMENT-FASTENERS. WALDES & Co., Prague-Wrschowitz, Austria-Hungary.
Filed February 17, 1913. Serial No. 68,594. PUBLISHED APRIL 22, 1913.

92,151. SNAP-BUTTONS USED AS GARMENT-FASTENERS. WALDES & Co., Prague-Wrschowitz, Austria-Hungary.
Filed February 17, 1913. Serial No. 68,595. PUBLISHED APRIL 15, 1913.

92,152. LIQUID REMEDY FOR CATARRH. HENRY STEEL WATERS, Carthage, Mo.
Filed March 9, 1910. Serial No. 48,313. PUBLISHED APRIL 15, 1913.

92,153. TAPS. WELLS BROTHERS COMPANY, Greenfield, Mass.
Filed February 27, 1913. Serial No. 68,766. PUBLISHED APRIL 22, 1913.

LABELS

REGISTERED JUNE 17, 1913.

17,058.—*Title:* "THE AMERICAN MODEL BUILDER." (For Mechanical Parts.) THE AMERICAN MECHANICAL TOY COMPANY, Dayton, Ohio. Filed May 26, 1913.

17,059.—*Title:* "QUICK SALE." (For a Polish and Cleanser.) REGINALD B. CALCUTT, Chicago, Ill. Filed May 9, 1913.

17,060.—*Title:* "DE LUXE." (For Fruit-Cake.) COLLIN STREET BAKERY, Corsicana, Tex. Filed April 28, 1913.

17,061.—*Title:* "TAILFER." (For Cigars.) THE CREST CIGAR CO., INC., New York, N. Y. Filed May 19, 1913.

17,062.—*Title:* "QUEEN QUALITY." (For Beer.) THE DEPPEN BREWING CO., Reading, Pa. Filed May 3, 1913.

17,063.—*Title:* "VAL DONA VIOLET TALCUM POWDER." (For Talcum Powder.) DRUGGISTS' CO-OPERATIVE ASSN., Detroit, Mich. Filed April 8, 1913.

17,064.—*Title:* "VAL DONA TALCUM POWDER." (For Talcum Powder.) DRUGGISTS' CO-OPERATIVE ASSN., Detroit, Mich. Filed April 8, 1913.

17,065.—*Title:* "VAL DONA HONEYSUCKLE CREAM." (For Honeysuckle Cream.) DRUGGISTS' CO-OPERATIVE ASSOCIATION, INC., Jersey City, N. J., and Detroit, Mich. Filed May 24, 1913.

17,066.—*Title:* "SEVEN-ELEVEN." (For a Remedy for Chills and Fever.) WILLIAM EDWARD FROST, Augusta, Ga. Filed April 17, 1913.

17,067.—*Title:* "SAPSAGO CHEESE SALT." (For Pulverized Sapsago-Cheese.) H. D. GARDY, Philadelphia, Pa. Filed March 7, 1913.

17,068.—*Title:* "CUBAN STOCK." (For Cigars.) A. C. HENSCHEL & Co., Chicago, Ill. Filed April 5, 1913.

17,069.—*Title:* "SHREWSBURY CLUB." (For Blended Whisky.) AL HIRSCHFELD, Long Branch, N. J. Filed May 6, 1913.

17,070.—*Title:* "NU-BO-KAY SANITARY BATH SALTS." (For Medicinal Preparations.) HOT SPRINGS CHEMICAL COMPANY, Chicago, Ill. Filed March 31, 1913.

17,071.—*Title:* "IMPERIAL HEALTH BRACE." (For Body-Braces.) ROBERT F. MACCLEMMY, New Haven, Conn. Filed May 10, 1913.

17,072.—*Title:* "SYRINGA BLOSSOM CANDY." (For Candies.) THE MODE, LTD., Boise, Idaho. Filed March 1, 1913.

17,073.—*Title:* "VICTOR." (For Shirts.) NEELY, HARWELL & Co., Nashville, Tenn. Filed June 4, 1913

17,074.—*Title:* "THE RELIABLE." (For Insecticides.) MARY E. PHILLIPS, Madison, Ill. Filed March 31, 1913.

17,075.—*Title:* "OUR NEW DRINK." (For Vegetable Compound with Coffee.) POTTER, SLOAN, O'DONOHUE Co., New York, N. Y. Filed May 26, 1913.

17,076.—*Title:* "SECULA." (For Cigars.) THE PUTNAM CIGAR COMPANY, Ottawa, Ohio. Filed June 3, 1913.

17,077.—*Title:* "KING KOLE." (For Shirts.) SALANT & SALANT, New York, N. Y. Filed May 2, 1913.

17,078.—*Title:* "OLD SAXON BRÄU." (For Beer.) STORZ BREWING CO., Omaha, Nebr. Filed February 7, 1912.

17,079.—*Title:* "SWEET-HEART-CHERRY." (For a Beverage.) R. L. WHARTON, Baltimore, Md. Filed May 16, 1913.

17,080.—*Title:* "LIXALL." (For Piano and Furniture Polish.) FREDERICK J. WOLPE, Quincy, Mass. Filed June 5, 1913.

PRINTS

REGISTERED JUNE 17, 1913.

3,292.—*Title:* "DAY & NIGHT, AUTO. SIGNAL. DEVICE." (For Auto Signal Device.) GEORGE WASHINGTON BARRINGER, Lawrence, N. Y. Filed May 10, 1913.

3,293.—*Title:* "BIEN JOLIE BRASSIERES." (For Brassières.) BENJAMIN & JOHNES, Newark, N. J. Filed May 24, 1913.

3,294.—*Title:* "MARY ANN! YOU CAN JUST WAIT." (For Wheat Breakfast Food.) CREAM OF WHEAT CO., Minneapolis, Minn. Filed May 31, 1913.

3,295.—*Title:* "EAT MORE BREAD." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 28, 1913.

3,296.—*Title:* "GOOD BAKERS." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 28, 1913.

3,297.—*Title:* "EAT BREAD MADE WITH FLEISCHMANN'S YEAST." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 28, 1913.

3,298.—*Title:* "WHAT IS THE BEST FOOD?" (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 28, 1913.

3,299.—*Title:* "HE'S A GOOD BAKER." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 28, 1913.

3,300.—*Title:* "GOOD THINGS TO EAT." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 28, 1913.

3,301.—*Title:* "MORE BREAD—LESS MEAT." (For Bread and Yeast.) THE FLEISCHMANN COMPANY, Cincinnati, Ohio, and New York, N. Y. Filed May 28, 1913.

3,302.—*Title:* "GARAGE 1 M". (For Oils.) ABRAHAM WALTER HARRIS, Providence, R. I. Filed May 29, 1912.

3,303.—*Title:* "THE CLIMAX ANTI FREEZING HOPPER." (For Hoppers for Water-Closets.) WILLIAM WALLACE KEMP, Baltimore, Md. Filed May 15, 1913.

3,304.—*Title:* "LIKE THE JUICY FRUIT." (For Chewing-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 23, 1913.

3,305.—*Title:* "KICKING FOR BROWN'S MULE." (For Chewing-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 23, 1913.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS

EX PARTE PARKS.

Decided May 15, 1913.

APPLICATION—DRAWING—CONSTRUCTION NOT COVERED BY THE CLAIM—CANCELATION.

Where the claims are limited to a chain composed of links of a certain specified construction, *Held* that the Examiner properly required cancelation of a figure which is described as showing "a modified form of construction to illustrate the applicability to other than chain construction."

ON PETITION.

CHAIN CONSTRUCTION.

Mr. Ithiel J. Cilley for the applicant.

MOORE, *Commissioner:*

This is a petition from the action of the Examiner requiring the cancelation of Figure 6 of the drawing and the description thereof in the specification.

Applicant's invention is entitled "Chain Construction," and the figures other than Fig. 6 show a complete chain or the links thereof. Fig. 6 is described as showing—

> a modified form of construction to illustrate the applicability to other than chain construction.

In an amendment filed April 4, 1912, applicant, after stating that the short link was shown in Fig. 6 secured to a handle by the same sort of a joint that is used in securing the links of a chain to each other, says that this device is—

> * * * for use upon other constructions than the chain links hereinbefore described, as for instance, in the construction of the plug inserting tool described and claimed in my application No. 470,260, and other like constructions.

The claims are all limited to a chain composed of links of a certain specified construction. It is very clear, therefore, that these claims do not cover the construction shown in Fig. 6. That being the case, the Examiner's requirement that this figure and the description in the specification of the construction shown therein be canceled is right. (*Ex parte Anderson*, 113 O. G., 2504; *ex parte Orecelius*, 115 O. G., 1849, and *ex parte Engel*, 121 O. G., 1011.)

In the first of the above-cited cases it is said:

> As Figs. 1, 2, 3, 5, and 9 of the drawing illustrate features which are not claimed these figures and that part of the specification to which they relate are unnecessary and ineffective for a clear understanding of the invention defined in the claims.

The petition is denied.

UNDERWOOD TYPEWRITER CO. *v.* THE UNIVERSAL STENOTYPE CO.

Decided May 20, 1913.

TRADE-MARKS—AMENDMENT AFTER ADVERSE DECISION IN OPPOSITION—AUTHORITY OF COMMISSIONER TO ADMIT.

After an adverse decision in an opposition applicant filed an amendment changing the particular description of his goods. *Held* that the Commissioner had authority to permit such amendment and allow the application if, in his opinion, the amendment was such as to avoid the judgment in the opposition.

ON MOTION.

TRADE-MARK FOR TYPE-WRITING MACHINES.

Messrs. Briesen & Knauth for Underwood Typewriter Company.

Mr. Henry A. Seymour for The Universal Stenotype Co.

MOORE, *Commissioner:*

This is a motion by the Underwood Typewriter Company, the opposer in the above-entitled proceeding, that my decision rendered March 29, 1913, in the application of The Universal Stenotype Co., holding that applicant is entitled to register its mark as limited by its amendment to "stenographic writing machines," be recalled and revoked.

The application of The Universal Stenotype Co. as originally filed requested the registration of a certain mark for "typewriting machines." Notice of opposition was filed by the Underwood Typewriter Company, in which it was alleged that applicant's mark so nearly resembled the mark used by opposer upon its type-writers, that it would cause confusion in trade and damage the opposer. In said proceeding the opposition was sustained and judgment rendered that The Universal Stenotype Co. was not entitled to register the trade-mark for which it had made application. Thereafter applicant filed a petition for leave to amend its application by changing the particular description of its goods. This petition was granted upon the ground that "stenographic writing machines" and "typewriting machines" are goods of different descriptive properties.

It appears to be the contention of the opposer that after the decision sustaining the opposition had become final the Commissioner was without

power to permit the amendment of the application and to allow the same as amended.

The contention of the opposer is contrary to the well-established practice of the Office. (*Ex parte The Vi-Stix Products Company*, 175 O. G., 846; *ex parte Oakford and Fahnestock*, 190 O. G., 793.) In the last-mentioned case, where the losing party to an interference filed an amendment canceling from its statement of goods the particular goods involved in the issue of the interference, it was held:

When an interference involving applications for patent is terminated, the Primary Examiner advises the defeated party, in accordance with Rule 132, that his claims involved in the interference stand finally rejected. Following this notice the applicant is permitted to amend, so as to avoid the issue of the interference, if possible. If his claims as amended are finally rejected, his remedy is by appeal. It is believed that a similar practice should prevail concerning applications for the registration of trade-marks and that when a defeated applicant in an interference or opposition proceeding files an amendment in an endeavor to eliminate the subject-matter involved in said proceeding the Examiner should enter the amendment, and if of the opinion that the amendment is not sufficient and does not eliminate the matter in controversy he should refuse registration, specifying his reasons therefor. Applicant may then further amend his case or ask the Examiner for a reconsideration of his action. If the Examiner adheres to his position and makes his action final, the applicant may file an appeal to the Commissioner, accompanied by the legal appeal fee, and from an adverse decision of the Commissioner an appeal will lie to the Court of Appeals of the District of Columbia.

Had The Universal Stenotype Co. filed a new application seeking the registration of its mark for "stenographic writing machines" it would clearly have been entitled to have its application examined. After amending its present application substituting "stenographic writing machines" in place of "typewriting machines" in an endeavor to eliminate the subject-matter involved in the opposition proceeding it is believed that applicant was equally entitled to a reëxamination of its application. By republishing the mark the Underwood Typewriter Company is given an opportunity to oppose the registration of the mark if it deems that it would be damaged by the registration of the mark for the amended class of goods.

The motion is denied.

BROWN *v.* GILLETT.

Decided June 4, 1913.

INTERFERENCE—TESTIMONY—NOT PRINTED—NEED NOT BE CONSIDERED.

Where testimony was filed on behalf of both parties, but the junior party did not print his testimony, *Held* that the Examiner of Interferences properly awarded priority to the senior party without considering the testimony.

ON PETITION.

FAUCET.

Mr. Charles W. Hills for Brown.
Mr. John G. Elliott for Gillett.

MOORE, *Commissioner:*

This is a petition by Gillett that the Examiner of Interferences be directed to render an opinion in the above-entitled interference, based upon the testimony taken.

Testimony was taken and filed by both parties. The decision of the Examiner of Interferences awarded priority in favor of the petitioner, Gillett, upon the record in view of the fact that the junior party, Brown, failed to print his testimony or to be excused from said printing.

The Examiner has followed the well-established practice under the circumstances mentioned. Rule 162 requires that the testimony be printed unless the party is excused from printing, upon motion duly made, supported by satisfactory proof of inability, by reason of poverty, to print his record. In the case of *Dow* v. *Des Jardins* (119 O. G., 1923) the Commissioner set forth the reasons for the practice as follows:

• • • Rule 162 was clearly not intended to permit the filing of type-written copies of the record in place of printed copies under circumstances such as appear in this case. That rule was made in the interest of those inventors who are, in fact, so poor that it is impossible for them to bear the expense of printing their testimony. The rule is not to be extended, in view of the great burden which would be placed upon the tribunals of this Office and upon the opposing party in considering type-written testimony in place of printed testimony. An additional consideration and one of much force, referred to by the Examiner of Interferences, is that it will be necessary to print the testimony if an appeal is taken to the Court of Appeals of the District of Columbia, and if it should happen that Des Jardins was the one compelled to take that appeal it would be necessary for him to bear the expense of printing Dow's testimony.

The petition is denied.

EX PARTE THOMAS.

Decided April 23, 1913.

APPLICATION—NEW MATTER—REJECTION—REVIEWABLE ON APPEAL.

Where the Examiner rejected claims on the ground that they cover an inoperative device and thereafter refused to permit a change in the drawing on the ground that the proposed change included an entirely different organization from that originally disclosed, *Held* that his action is reviewable on appeal and not on petition to the Commissioner.

ON PETITION.

SOUND-REPRODUCING ATTACHMENT FOR MOVING-PICTURE MACHINES.

Messrs. C. A. Snow & Co. for the applicant.

BILLINGS, *First Assistant Commissioner.*

This is a petition from the action of the Examiner refusing to admit a certain amendment.

The record shows that the Examiner rejected the claims on the ground that they cover an inoperative device, pointing out fully his reasons for this holding.

The applicant sought thereafter to amend the drawing by substituting for the machine shown in the drawing for moving the record-strips an apparatus such as is shown in the patent to Bianchi. The Examiner refused to allow this change on the ground that the mechanism shown in the proposed drawing was of an entirely different organization from that originally disclosed and on the further ground that if admitted it would not remedy the inoperativeness of the device.

The Examiner's letters and his statements in answer to the petition show clearly that he has refused to permit the change because it did not fall within the scope of the original disclosure—in other words, because such change would constitute new matter. This amendment clearly affects the claim, since if it is admissible and renders the device operative it would avoid one of the grounds upon

which the Examiner has rejected the claims. The Examiner's action therefore is reviewable in the first instance by the Examiners-in-Chief, on appeal. (*Ex parte Baptist*, 97 O. G., 191; *ex parte Davidson*, 120 O. G., 2753, and *ex parte Nenninger*, 122 O. G., 1397.)

The applicant having mistaken his remedy in bringing the case before me at this time, the petition is dismissed.

EX PARTE WEATHERLY.

Decided December 19, 1912.

DESIGN—PATENTABILITY—FONT OF TYPE.

When a design for a font of type differs from the references principally in that the heavier lines are heavier and the lighter lines lighter and the ceriphs sharper, but the change on the whole gives the type a more pronounced or bolder effect, and it being shown by affidavits that the type has been recognized by the trade as having a distinctive face, *Held* that such design is new and ornamental and that its production required the exercise of the inventive faculties, (citing *ex parte Smith*, 130 O. G., 1688; *in re Schraubstadter*, 120 O. G., 1167; 26 App. D. C., 331, distinguished.)

Appeal from Examiners-in-Chief.

DESIGN FOR A FONT OF TYPE.

Mr. Ernest W. Bradford for the applicant.

TENNANT, *Assistant Commissioner:*

This is an appeal from the decision of the Examiners-in-Chief affirming the decision of the Primary Examiner refusing to grant to this appellant a patent for an ornamental design for a font of type, as shown in the drawing accompanying this application. The rejection is based upon the ground that the design shown possesses no patentable novelty over the design disclosed in the patent to Nadall, No. 35,319.

In support of this decision the Examiner relies upon the decision of the court of appeals in *in re Schraubstadter*, (120 O. G., 1167; 26 App. D. C., 331.) The Examiners-in-Chief affirmed the decision of the Examiner, holding the font of type produced required no invention for its creation over what was old and well known in the prior art.

The font of type upon which a patent is sought is said to be known to the trade as the "Caslon bold" character of roman type. It is pointed out by the Examiners-in-Chief that—

the essential differences are in the size of the individual characters, which in applicant's case are slightly larger than those of the reference, and in the weight of the heavy lines of the individual characters, in applicant's case such lines being heavier than corresponding lines in the references. It may also be possible that in applicant's case the ceriphs are slightly sharper than in the case of the reference, but this difference, if it exists, is not material.

In brief, it may be stated that the most apparent differences between appellant's font of type and that of the reference resides in the fact that the heavier lines are heavier, the lighter lines lighter, and the ceriphs sharper than in the font of type shown in the reference of record. This change, however, in the font of type, when observed as a whole, gives the effect of a more pronounced or bolder type. This characteristic runs through the font as a whole and produces an individuality, which, as shown by the affidavits filed in this case, is generally recognized by the printing trade. It is further shown by these affidavits that the "Caslon bold" type has acquired a distinct status in the printing art as an advertising type. For example, Robert W. Nelson, president of the American Type Founders Company, states, *inter alia*, that—

• • • he is familiar with the popular type faces of the various type foundries and that the said "Caslon bold" design, which is the design forming the subject matter of the above mentioned application for patent, is clearly recognized in the trade everywhere as a distinct face, of individual character, and easily distinguished from any other face on the market prior to the time of its introduction; that it has its own individual place and reputation in the trade as distinguished from all other designs; that so far as he knows the face design shown in the Nadall patent is unknown and has never been in use in the printing trade anywhere; that a comparison of the design of said application with the design of said patent shows a difference between the form and character of each letter and character in the entire font of the respective designs; that the distinguishing characteristics of the design of the application run through the entire font as a whole, and that neither he, nor the American Type Founders Company, are financially interested in the Keystone Type Foundry, or said Weatherly application for patent, but that said two type foundries are rivals and competitors in business and that this affidavit and the affidavits of other officers of his company are made only in the interest of truth and justice.

The affidavit of William F. Capitan, superintendent of the American Type Founders Company, is to the same effect, as is also that of Linn Boyd Benton, manager of the same company.

William A. Vitty, of New York, states in his affidavit that for more than twenty-five years he has been in the business of making and selling type and that—

• • • said design of type face is known in the trade under the name "Caslon bold," having been widely advertised and introduced under said name by the Keystone Type Foundry; • • • that he is familiar with the popular type faces of the various type foundries and that the said "Caslon bold" design, which is the design forming the subject matter of the above mentioned application for patent, is clearly recognized in the trade everywhere as a distinct face, of individual character, and easily distinguished from any other face on the market prior to the time of its introduction.

John B. Stratton, foreman of the composing-room of the Thomson Printing Company, of Philadelphia, Pa., states that—

• • • he has had twenty-five years' experience as a printer and foreman of printing in different printing establishments; • • • that he is familiar with the popular type faces of the various type foundries and that the said "Caslon bold" design, which is the design forming the subject matter of the above mentioned application for patent, is well recognized in the trade everywhere as a distinct face, of individual character, and easily distinguished from any other face on the market prior to the time of its introduction; that it has its own well established place and reputation in the trade as distinguished from all other designs.

Similar affidavits are made by Frank B. Barrett, superintendent mechanical departments, Alfred M. Slocum Company, printers, of Philadelphia, Pa., and Lee R. Smith, foreman of the printing department of A. Pomerantz & Company, of Philadelphia, Pa.

It thus appears from the statements of these persons, who are experts in the art of printing, that the design forming the subject-matter of this application has not only acquired an established status in the printing trade, but, according to this evidence, was recognized at the time of its introduction as a novel font of type. There is no doubt, in my opinion, that the same is ornamental in the sense in which that term must be applied to type-faces. Samples of printing from this type have a neat appearance, and certainly its adoption by the trade justifies the belief that it is of an

ornamental character within the meaning of section 4929, Revised Statutes.

The sole question remaining, therefore, is whether the production of this type involved the exercise of the inventive faculty or was merely the product of such mechanical skill as would be expected of those skilled in the art of type-founding. In this connection it was pointed out at the hearing that in the production of a new font of type the designer must first determine the form of type which he desires to produce and, having made one character or letter, produce the remaining letters of the alphabet, numerals, etc., in such a manner that they shall have uniform characteristics, so that when assembled the page will appear as a harmonious whole. It is asserted that the production of a font of type of this character requires considerable skill and ingenuity and that many experiments are to be made before the complete font of type is produced. It is further asserted that of the fonts of type produced by a foundry very many fail of adoption when placed upon the market and that when a successful font of type has been produced it is speedily copied by imitators having type-casting machines and that the just remuneration for the labor spent in production of a new font of type is very much lessened by competition with such imitators. These facts are true, as is clearly borne out by the decisions of the court in certain suits brought by the Keystone Type Foundry, assignor of Weatherly, against alleged imitators for the adoption of this very font of type.

These suits were brought for unfair competition in trade, and the decisions show that one of the grounds for dismissing the bill was that the granting of an injunction to restrain another concern from making, using, or selling such type would be, in effect, to grant a perpetual patent. In the case of *Keystone Type Foundry* v. *Portland Pub. Co.* (130 Fed. Rep., 301) the court said, in part:

* * * The complainant devised a style of printing, using peculiar type therefor, of which the following is an example.

(Here follows a reproduction of the font of type forming the subject-matter of this application.)

For the purpose of doing printing according to the foregoing design, the complainant devised and manufactured type adapted thereto. The whole topic, including the invention of the style of printing shown, and of producing the type to accomplish the printing, involved a very considerable expense, and, undoubtedly, a large degree of ingenuity and care. The type as manufactured by the complainant was known in the market as "Caslon bold." * * *

There is no claim on the part of the complainant to be protected with reference to the style of typography produced by the type. Whether it has a right to maintain a claim of that sort we do not consider. So far as that is concerned, the present case is purely negative. In the same line, the plaintiff does not seek to restrain printing by the respondent, although it is apparent that the printing which we exhibit could not be produced except by type as manufactured and devised by the plaintiff, or something substantially the same.

Upon appeal to the court of appeals the court said, (136 Fed. Rep., 690–692:)

In substance, the case is this: The foundry designed a type which the printing and publishing trades have found desirable. This designing involved expense, and the type so designed became well known to printers and to publishers under the name "Caslon bold." The former were largely guided in their choice by the approval of the latter, while the publishers rested their approval upon the ultimate approval of the general public. The publishing company imitated this type. The foundry treats the case as one of unfair competition, and likens the shape and design of "Caslon bold" type to the mark or label which is used to designate an article as the make of a particular manufacturer. It contends that this is an ordinary case of unfair competition.

So far as this case is concerned, however, the type face is in effect the type itself. The expense incurred by the foundry was concerned only with the design, not with the composition of the material, or with the shape of the metal body which carried the face. The expense of advertising was the expense of advertising the type face.

* * * The defendant has not sought to avail itself of the complainant's reputation as a founder, but of its taste and skill as a designer. This it may do. It may copy the complainant's type, so long as it does not pretend that the copy is an original product of the complainant.

In another suit—*Keystone Type Foundry* v. *National Compositype Co.*, (133 Fed. Rep., 891)—the court said:

On the main question involved it is unnecessary to add anything to what Judge Putnam has said. People buy the particular type face in controversy, not because it is made by the Keystone Type Foundry, but because, as complainant's witnesses themselves say:

"It is a desirable type for a wide range of job work, catalogues, and display advertising."

As another witness of complainant says:

"The form of the letters in a great many cases has been changed to make them more practical in modern printing. * * * The old form varied in form, comparative weight, and didn't allow of the new methods in type-founding."

Another witness says:

"It is one of the most popular type faces today."

Another of complainant's witnesses says:

"Printers, especially the higher class, are constantly looking for some new style of type, so as to be able to furnish to their customers fashionable and up-to-date printing. * * * New and original designs of faces, if they meet with approval of printers, very largely increase the sale, and very largely increase the use, and therefore largely increase the amount of printing."

This type face is not covered by a design or other patent. Every one is therefore free to make and to sell it, provided that when he sells it he does nothing to lead any one to believe that what is made and sold by him was in fact made by some one else.

It seems indisputable from the evidence afforded by the affidavits of record in this case and the learned opinions from which the above quotations have been taken that this applicant has a new and useful design and that the production of the design required "ingenuity," or, in other words, involved the exercise of the inventive faculties. It therefore seems that all the requirements of the statutes providing for the granting of a patent for a design have been complied with. In reaching this conclusion I am not unmindful of the decision of the court of appeals in *re Schraubstadter*, above cited. I have not only read that decision, but have read the briefs before the court of appeals, and do not find that the same considerations obtained in that case as are present in the one under consideration. In my opinion the present case differs from the Schraubstadter case in the same manner, although not to so striking a degree, as the case of *ex parte Smith*, (130 O. G., 1688,) in which case the Commissioner, after comparing the font of type for which application for design patent has been made with the references of record, said:

The "roman" form of type is used both by the appellant and by the patentee. The question of invention is therefore limited to whether the variation in the details of the letters is such as involved the exercise of anything more than mechanical skill.

The style of letter designed by the patentee is uniform in character, but has an individuality which has been recognized to involve patentability. The appellant's font by reason of the open character of the letters, produced more or less by changes in detail, has an individuality which clearly distinguishes it from that of the reference. No confusion would, in my opinion, be likely to exist between these fonts when used upon the printed page, whether found side by side or in separate places.

It is believed that more than ordinary skill of a designer was required to produce the font of type presented by the applicant, which differs not merely in individual

letters but as an entirety from the font disclosed in the reference.

The esthetic value of a new font of type is in a great measure dependent upon the harmonious effect produced upon the eye of the observer by the predominant characteristics of the font. In the decision in *re Schraubstadter* (C. D., 1906, 541; 120 O. G., 1167) the Court of Appeals of the District of Columbia said that "the eye to which the design is to appeal is that of the ordinary man and not the eye of the artist."

In the art of printing, and especially the advertising branch of that art, the measure of the artistic value may often be determined by the extent of use of the font, for if the font does not as a whole commend itself to the purchaser the demand therefor will fail. In the present case there is no doubt that the appellant's font of type is ornamental in appearance, and the fact that it has gone into very extensive use, as shown by affidavits on record in this case, confirms, in my mind, the artistic value of the design.

Where, as in the art of printing, the field of inventive design is limited to modifications of details in predetermined forms of letters and an inventor has succeeded in producing a new font having clearly distinguishing characteristics running through the whole and the esthetic value of his production is confirmed by an extensive demand for the same, it is believed that he should be granted the right to a lawful monopoly of the results of his labors for the limited time provided by the design statutes.

For similar reasons I am of the opinion that a design patent should be granted upon the font of type forming the subject-matter of this application.

The decision of the Examiners-in-Chief is reversed.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

GRABOWSKY *v.* GALLAHER.

Decided February 3, 1913.

1. INTERFERENCE—CLAIMS HAVING SAME MEANING IN BOTH APPLICATIONS—UNIFORM DECISIONS OF THE PATENT OFFICE TRIBUNALS—NOT DISTURBED EXCEPT IN CASE OF CLEAR ERROR.

Where the tribunals of the Patent Office hold uniformly that while the structures of the respective parties to the interference are specifically different the terms of the claims in issue are properly applicable to both, *Held* that such ruling will not be disturbed unless error is clearly apparent.

2. SAME—PRIORITY—DILIGENCE.

It is well settled that where one is the first to conceive but the last to reduce to practice he must show the exercise of diligence at the time the subsequent inventor entered the field. This rule is not affected by the fact that the later inventor was negligent, since he was the first to reduce to practice.

3. SAME—SAME—SAME.

Record reviewed and *Held* that appellant, who was the first to conceive, was not diligent in reducing the invention to practice at the time the appellee entered the field and that priority was properly awarded to the latter.

Mr. L. S. Bacon, *Mr. J. H. Milans*, and *Mr. R. A. Parker* for the appellant.

Mr. Ernest Wilkinson and *Mr. T. H. Witherspoon* for the appellee.

VAN ORSDEL, *J.*:

This is an appeal from the Commissioner of Patents in an interference proceeding awarding priority of invention to appellee. The counts of the issue, upon which this appeal is taken, are as follows:

1. In combination, the frame of a motor car, a transmission mechanism mounted thereon, a sub-frame, a motor mounted thereon, track members on the frame, runners on the sub-frame adapted to engage said track members, means whereby the motor and the transmission automatically engage.

2. In a motor vehicle, the combination of a main frame, a cross member toward the front of said main frame, longitudinal track members supported by said main frame, a movable sub-frame adapted to carry the motor mechanism and arranged to travel on said track members, said cross-member being bent in a vertical plane between its ends to permit the passage of said sub-frame and motor mechanism.

4. In a motor car, an engine adapted to be removed and replaced at the front by a substantially horizontal movement, said engine being provided with a shaft extending horizontally and longitudinally of said vehicle, said shaft being provided with one half of a coupling, a transmission shaft provided with one half of a coupling adapted to be engaged by the half of the coupling on the engine shaft, and means for supporting the transmission shaft in position to be engaged by the engine shaft.

The invention consists of a motor-vehicle so constructed that the power plant, or parts of it, is mounted on a subframe which will slide forward horizontally out of engagement with the other parts of the vehicle. The object of the invention is to remove the motor from the machine proper for repairs and, if necessary, for the substitution of another motor. The subframe in appellant's machine differs in construction from that of appellee's device. The distinction in structure is stated in the opinion of the Commissioner, as follows:

Grabowsky states that Gallaher's object is to remove the entire power plant as a unit from the chassis of his vehicle, while his own object is the removal of the engine but not the accessories thereof. It is true that according to the application of the respective parties they start from somewhat different points of view. Gallaher contemplates the removal of his entire power plant so that the device thus removed is capable of running by itself, either for the purpose of being tested or for operating other machinery. He states, however, that some of the accessories or elements of the complete plant may be secured directly to the main frame, such as the magnetic generator and the oiling device, and that a battery or induction coil secured to the main frame might be substituted for the generator. Grabowsky's application, on the other hand, states that the radiator if desired may be mounted on the front of the sub-frame. Both applicants, however, have the same object in view, namely, the removal of the power plant for ready repair and the substitution, if desired, of a similar apparatus. They differ principally in respect to the number of connected parts or accessories which they contemplate removing with the engine.

Appellant contends that no interference in fact exists, since appellee does not disclose such a subframe as is called for by counts 1 and 2, and that, as the purpose of his invention is to remove only the engine from the chassis of his vehicle, while appellee contemplates the removal of the entire power plant, the inventions are so radically different as to cause the language of count 4 to be given different constructions when applied to the respective devices. All of the tribunals of the Patent Office held that, while the structure of appellee differs from that of appellant, it nevertheless forms a subframe within the meaning of the issue, and that, although the specific purpose of the inventors is somewhat different, their general idea of removing the motor is the same, and hence embraced within the broad language of count 4, there being nothing in the prior art warranting its limitation to the particular construction shown by appellant.

This court has frequently held that the unanimous rulings of the experts of the Patent Office will not be disturbed upon a question of this nature, unless error is clearly apparent. No such error appears in the present case, especially in view of the fact that there is nothing in the record

to show that the claims should be limited to the construction shown by appellant.

We may concede for the purposes of this appeal that appellant conceived the invention, as he contends, in 1897. He, however, failed to exercise diligence in reducing his invention to practice until August, 1907, when he began the building of a vehicle embodying the same. Appellant seeks to excuse this delay by the plea that he was a poor man and did not have the means to actually reduce the invention to practice, which, undoubtedly, would have involved considerable expense. Granting this to be true, the record fails to show that he was unable to pay the cost of preparing and prosecuting an application, which it was his duty to do. (*Wyman* v. *Donnelly*, 21 App. D. C., 81.) At least as early as the summer of 1906, as to which date there seems to be no question, appellee entered the field. He also was negligent, taking no steps toward reducing his invention to practice until September, 1907, one month subsequent to appellant's reëntry into the field, when the preparation of his application for patent was begun. Both parties rely upon their respective filing dates for a reduction to practice, appellee's being November 20, 1907, and appellant's December 18, 1907.

Appellant contends that conception must be connected with reduction to practice by the exercise of reasonable diligence, and, hence, each party can only go back to the date of his reëntry into the field for his date of invention, and that appellee, having reëntered the field at a time when appellant was using due diligence, though the first to reduce to practice, is not entitled to an award of priority. It is a settled rule of law, however, that where one is the first to conceive but the last to reduce to practice, he must show the exercise of diligence at the time the subsequent inventor entered the field. This rule is not affected by the fact that the later inventor was negligent, since he was the first to reduce to practice. No further discussion is necessary, since the case of *Paul* v. *Johnson* (23 App. D. C., 187) is decisive of this question. From a reference to the record in that case, it appears that Paul conceived the invention in 1891, but was inactive until February 28, 1896. Johnson conceived in July, 1895, but was chargeable with negligence until March 24, 1896, a date subsequent to Paul's reëntry into the field. Johnson, however, was the first to reduce to practice. Upon this state of facts, which is precisely the same as in the case at bar, Chief Justice Alvey, referring to a contention similar to the one here advanced, said:

> But this contention, if sustained, would contravene a well-settled principle of patent law. * * * The principle is well and clearly stated by Judge Taft, in delivering the opinion of the Circuit Court of Appeals of the Sixth Circuit, in the case of *Christie* v. *Seybold*, (5 C. C. A., 33.) In that case the judge said: "The diligence of the first reducer to practice is necessarily immaterial. It is not a race of diligence between the two inventors in the sense that the right to the patent is to be determined by comparing the diligence of the two, because the first reducer to practice, no matter what his diligence or want of it, is prior in right, unless the first conceiver was using reasonable diligence at the time of the second conception and the first reduction to practice."

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

Court of Appeals of the District of Columbia.

IN RE TAYLOR.

Decided April 7, 1913.

PATENTABILITY—HAT.

Claims for a hat *Held* unpatentable in view of the prior art.

Mr. T. Walter Fowler for the applicant.

Mr. R. F. Whitehead for the Commissioner of Patents.

ROBB, *J.*:

This is an appeal from a decision of the Commissioner of Patents rejecting three claims. We reproduce claims 1 and 3:

1. The combination of a hat; a sweat band therein; a looped strip attached to and lying immediately adjacent the sweat band between the same and the hat, while being spaced away from said hat; a strip of open work material lying in a plane substantially parallel to the plane of the bottom of the hat, between and directly connecting the hat and the looped strip, and means between the two parts of the looped strip for maintaining the openwork material distended.

3. The combination of a hat; a sweat band; a looped strip attached directly to the lower edge of said sweat band and spaced away from the hat; an elastic cord within the upper looped portion of said strip; with a second strip extending horizontally across the space between the hat and the looped strip and having ventilating openings; said second strip being directly attached to the hat and to the looped strip so as to be maintained under tension by the elastic cord of said looped strip.

The rejection was based upon the disclosures in prior Taylor Patent No. 760,087, May 17, 1904, and the patent to Wildman, No. 611,983, October 4, 1898. In the prior patent to the applicant a tape is used instead of the looped strip or elastic cord of the issue. Wildman shows the same looped elastic cord in a slightly different construction, and we agree with the Patent Office tribunals that it required no invention to substitute the Wildman elastic cord for the tape of the prior Taylor construction, the intended function of each being the same.

The decision is affirmed.

Affirmed.

ADJUDICATED PATENTS.

(U. S. D. C.) The Conley & Conley patent, No. 701,544, for a guide for punching-presses, *Held* valid, but not infringed by the machine of the Thomas patent, No. 908,818. *Conley* v. *Thomas*, 204 Fed. Rep., 93.

(U. S. D. C.) The Weber patents, No. 743,206 and No. 916,812, each for an improvement in incandescent-electric-lamp sockets, *Held* valid and infringed. *Weber Electric Co.* v. *National Gas & Electric Fixture Co.*, 204 Fed. Rep., 79.

(U. S. D. C.) The Schlodt patent, No. 854,670, for a dust-extracting machine, *Held* valid and infringed as to claims 1, 2, 3, 5, and 10. *Patents Selling & Exporting Co., Aktieselskab*, v. *Dunn*, 204 Fed. Rep., 99.

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Arizona	1	.....
Arkansas	5	.....
California	32	7
Colorado	11	.....
Connecticut	23	4
Delaware	2	1
Florida	1	.....
Georgia	3	.....
Idaho	1	.....
Illinois	66	10
Indiana	16	4
Iowa	10	2
Kansas	7	1
Kentucky	5	.....
Louisiana	3	.....
Maine	2	.....
Maryland	5	6
Massachusetts	30	13
Michigan	19	14
Minnesota	9	.....
Mississippi	1	.....
Missouri	17	5
Montana	2	.....
Nebraska	6	1
Nevada	4	.....
New Hampshire	2	.....
New Jersey	31	10
New Mexico	1	.....
New York	76	43
North Carolina	1	.....
North Dakota	2	.....
Ohio	30	9
Oklahoma	4	.....
Oregon	5	.....
Pennsylvania	48	14
Rhode Island	4	.....
South Carolina	1	.....
South Dakota	1	.....
Tennessee	4	1
Texas	8	3
Utah	6	.....
Vermont	2	1
Virginia	1	1
Washington	16	3
West Virginia	5	1
Wisconsin	12	2
Wyoming	1	.....
Alaska, District of	.....	.....
Canal Zone	.....	.....
District of Columbia	3	1
Hawaii Territory	2	1
Philippine Islands	2	.....
Porto Rico	.....	1
U. S. Army	.....	.....
U. S. Navy	.....	.....
Total to residents of the United States	559	159

TO RESIDENTS OF FOREIGN COUNTRIES.

Countries.	Patents and Designs.	Trade-Marks.
Argentina	.....	.....
Austria-Hungary	1	2
Belgium	.....	.....
Bermuda	.....	.....
Brazil	.....	.....
British West Indies	.....	.....
Canada	5	.....
Cape Colony	.....	.....
Chile	.....	.....
China	.....	.....
Costa Rica	.....	.....
Cuba	.....	.....
Denmark	.....	.....
Ecuador	.....	.....
England	8	4
France	6	2
Germany	27	4
Ireland	.....	.....
Italy	1	.....
Japan	1	.....
Mexico	1	.....
Netherlands	.....	.....
Newfoundland	.....	.....
New South Wales	1	.....
New Zealand	2	.....
Norway	.....	.....
Queensland	.....	.....
Roumania	1	.....
Russia	1	.....
Scotland	.....	.....
South Australia	.....	.....
Spain	.....	.....
Sweden	1	1
Switzerland	.....	2
Transvaal, South Africa	.....	.....
Venezuela	.....	.....
Victoria	.....	.....
Wales	1	.....
Total to residents of foreign countries	57	15

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In ordering manuscript copies much time will be saved if the order states specifically what is desired, viz:

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Application as allowed. (Petition, specification, oath, and drawings as passed by the Examiner for issue.)

Original application. (Facsimile petition, specification, oath, and drawings at present time.)

Specification as originally filed. (As received in Office.)

Specification as amended. (With amendments entered.)

Specification as allowed. (As passed by the Examiner for issue.)

Original specification. (Facsimile at present time.)

File-wrapper. (File-wrapper only.)

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Printed publications in possession of the Office. (Give title and date of publication, also page and exact portion to be copied.)

Orders for copies of any other records not mentioned above must state specifically the exact papers to be copied.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business June 21, 1913.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended	No. of applications awaiting action.
313	1. Fences; Harrows and Diggers; Plows; Seeders and Planters; Trees, Plants, and Flowers.	Apr. 14	Apr. 14	671
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Pneumatic Despatch; Pneumatics; Presses; Store-Service; Tobacco.	Mar. 8	Apr. 14	698
178	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Metal-Founding; Metallurgy; Plastic Metal Working.	May 22	June 9	226
232	4. Bridges; Conveyers; Excavating; Hoisting; Hydraulic Engineering; Loading and Unloading; Metallic Building Structures; Traversing Hoists.	Mar. 5	Apr. 30	706
167	5. Bookbinding; Harvesters; Jewelry; Music.	Mar. 15	Apr. 16	544
310	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Medicines; Preserving; Sugar and Salt; Substance Preparation.	Mar. 17	Apr. 16	851
312	7. Educational Appliances; Clutches; Games and Toys; Mechanical Motors; Optics; Velocipedes.	Feb. 10	Apr. 15	1029
131	8. Beds; Chairs; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Mar. 3	May 20	614
142	9. Air and Gas Pumps; Fluid-Pressure Regulators; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Wind-Wheels.	Feb. 7	May 22	656
235	10. Carriages and Wagons.....	Feb. 7	Apr. 6	1248
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Whips and Whip Apparatus.	May 1	May 5	352
322	12. Elevators; Journal-Boxes, Pulleys, and Shafting; Lubrication; Machine Elements.	Mar. 7	Apr. 4	1238
329	13. Arms, Projectiles, and Explosive Charges, Making; Bolt, Nail, Nut, Rivet, and Screw Making; Boring and Drilling; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Mar. 24	May 1	665
307	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Metal-Ornamenting; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 26	May 15	543
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Liquid Coating Compositions; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastic Compositions; Plastics.	Jan. 11	Apr. 16	1331
109	16. Radiant Energy; Telegraphy; Telephony.	Feb. 1	Mar. 24	573
303	17. Matrix-Making; Paper Manufactures; Printing; Type-Bar Making.	May 1	May 16	282
327	18. Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	May 5	May 6	261
236	19. Dampers, Automatic; Furnaces; Heat-Distributing Systems; Stoves and Furnaces.	Mar. 13	May 2	516
179	20. Artificial Limbs; Builders' Hardware; Dentistry; Locks and Latches; Safes; Undertaking.	May 2	May 16	221

Applications Under Examination—Continued.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended	No. of applications awaiting action.
112	21. Brakes and Gins; Carding; Cloth-Finishing; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 13	Mar. 15	665
249	22. Aeronautics; Air Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Firearms; Marine Propulsion; Ordnance; Ships.	Feb. 17	May 19	316
379	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Time-Controlling Mechanism.	Mar. 24	Apr. 12	581
144	24. Apparel; Apparel Apparatus; Sewing-Machines.	Apr. 9	May 9	531
315	25. Butchering; Mills; Threshing; Vegetable Cutters and Crushers.	May 19	May 26	225
106	26. Electricity, Generation; Motive Power.	Feb. 20	Mar. 12	561
372	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus.	Apr. 28	May 6	512
65	28. Internal-Combustion Engines..	Feb. 4	Feb. 7	1140
147	29. Coopering; Fire-Escapes; Ladders; Roofs; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking-Tools.	Dec. 26	Apr. 23	770
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines.	Mar. 11	June 2	382
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue.	Mar. 14	Mar. 17	526
278	32. Carbonating Beverages; Dispensing Beverages; Dispensing-Cans; Ornamentation; Packaging Liquids; Refrigeration.	Mar. 15	May 19	371
71	33. Cutlery; Domestic Cooking Vessels; Masonry and Concrete Structures; Paving; Tents, Canopies, Umbrellas, and Canes.	Jan. 6	Apr. 16	447
304	34. Railways; Railway-Brakes; Railway Rails and Joints; Railway Rolling-Stock; Railway Ties and Fasteners.	May 2	Apr. 18	518
244	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Garment-Supporters; Toilet.	Mar. 24	May 7	804
264	36. Drafting; Driers; Engraving; Measuring Instruments; Photography.	Apr. 19	Apr. 15	914
107	37. Electric Lamps; Electricity, Conductors; Electricity, Conduits; Electricity, General Applications.	Dec. 7	Mar. 7	1059
378	38. Animal Husbandry; Artesian and Oil Wells; Fishing and Trapping; Stationery; Stone-Working.	Feb. 19	Apr. 19	833
321	39. Water Distribution.....	Mar. 24	May 6	435
280	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 12	Apr. 17	833
125	41. Railway Draft Appliances; Resilient Tires and Wheels.	May 14	May 7	589
279	42. Electric Railways; Electric Signaling; Railway Signaling; Signals.	Feb. 25	Mar. 8	811
382	43. Baths and Closets; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Apr. 17	May 8	261

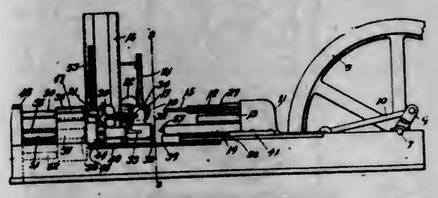
Oldest new case, Dec. 7; oldest amended, Feb. 7.
Total number of applications awaiting action..... 27,390

161	TRADE-MARKS, DESIGNS, LABELS AND PRINTS.			
	Trade-Marks.....	Apr. 18	May 26	1063
	Designs.....	Apr. 18	June 6	247
	Labels and Prints.....	June 12	June 7	68

PATENTS

GRANTED JUNE 24, 1913.

1,065,333. MACHINE FOR MAKING CARTRIDGE-SHELLS. CHARLES A. BAILEY, Cromwell, Conn. Filed July 11, 1911. Serial No. 638,000. (Cl. 86—12.)



1. A chute arranged to receive tubes and having an opening in its wall located to register with the openings in successive tubes as they are fed along the chute, and means for operating through said opening to attach a member to a tube while located in said chute.

2. A chute arranged to receive tubes and having a plural number of openings each arranged to register with the openings in successive tubes as they are fed along the chute, and members movable through said openings to operate upon a tube as it comes into registering position with each of said openings and while located in said chute.

3. A chute arranged to receive tubes and having openings arranged to register with openings in successive tubes that are fed along the chute, a wad-inserting-plunger and a cap-placing-plunger operating through the openings upon tubes while located in the chute, means for supplying wads and caps to said members, and means for operating said members.

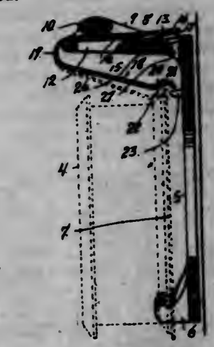
4. A chute arranged to receive tubes and having openings arranged to register with openings in successive tubes that are fed along the chute, a wad-inserting-plunger and a cap-placing-plunger located to operate through said openings upon tubes while located in said chute, means for supplying wads and means for supplying caps to said members, means for operating said plungers, and means for removing the tubes from said chute.

5. A chute arranged to receive a pile of tubes horizontally disposed therein, and said chute having openings each arranged to register with an opening in a tube in said pile, a wad-inserting-plunger, a cap-placing-plunger, and a heading-plunger simultaneously operating each through an opening in the chute upon a tube therein, the heading plunger removing the bottom tube from the pile, and means for operating the plungers.

[Claims 6 to 21 not printed in the Gazette.]

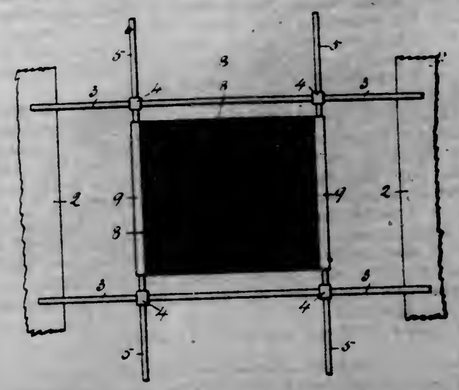
1,065,334. PRESSURE-GAGE HOLDER. GEORGE E. BAILIE, Denver, Colo. Filed July 8, 1912. Serial No. 708,175. (Cl. 248—30.)

1. A gage holder comprising a body member having an arm projecting forwardly from the upper part thereof, and a spring clip composed of upper and lower spring members, the spring clip detachably applied to the arm, the latter being open to receive the upper member of the clip and provided with an offset at its rear extremity, the arm-engaging member of the clip having a hook at its rear end to engage the offset of the arm, the body member of the holder being equipped with means coöperating with the spring clip for gage-holding purposes, substantially as described.



2. A gage holder comprising a body member having a forwardly projecting arm located at its upper extremity, and a spring clip detachably applied to said arm, the clip being composed of upper and lower spring members connected by a bend at the forward extremity of the clip, the arm having an opening adapted to receive the upper member of the clip when inserted from in front, the rear portion of the arm being upwardly inclined and provided at the rear extremity of its inclined part with an offset and the arm-engaging portion of the clip having a hook at its rear extremity adapted to engage said offset, the arm being recessed at its rear extremity to permit the insertion of an instrument to disengage the hooked end of the clip from the offset, substantially as described.

1,065,335. JELLY-STRAINER. FREDRICK W. BARTON and WILLIAM C. MOFFAT, Hamilton, Ontario, Canada. Filed Nov. 29, 1912. Serial No. 734,166. (Cl. 210—16.)

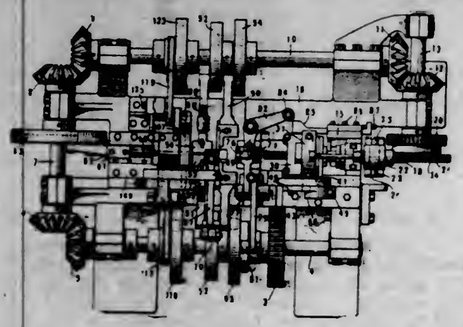


1. In a jelly strainer, supports, longitudinal rods having their end parts resting thereon, blocks adapted to slide on the rods, transverse rods adapted to slide through and supported by the blocks, and a porous bag suspended from the transverse rods.

2. In a jelly strainer, a pair of longitudinal rods, a pair of transverse rods, means on and intersecting the rods adapted to allow each said pair of rods to be brought nearer together and farther away one from the other, a porous bag suspended from the transverse rods, and means to support the end parts of the longitudinal rods.

3. In a jelly strainer, a pair of rods parallel one with the other, a pair of rods rectangular therewith and parallel one with the other, means on and at the intersections of said rods adapted to allow each pair of rods to be brought nearer together and farther away one from the other, a porous bag suspended from one said pair of rods and means to support the end parts of one pair of rods.

1,065,336. COIL-SPRING-FORMING MACHINE. GEORGE E. BIGELOW, Waterbury, Conn., assignor to The Mattatuck Manufacturing Company, Waterbury, Conn., a Corporation of Connecticut. Filed Dec. 20, 1909. Serial No. 534,060. (Cl. 140—103.)



1. In a coil-spring forming machine, jaws for feeding the coil stock, means for severing a blank therefrom, means for retracting the stock, and means for forming hooks on both ends of the blank and mechanism for bringing said means in operation successively, substantially as described.

2. In a coil-spring forming machine, jaws for feeding the coil stock, means for severing a blank therefrom, means for retracting the stock, means for varying the retraction, and means for forming hooks on both ends of the blank and mechanism for bringing the feeding, severing, retracting and forming means into operation successively, substantially as described.

3. In a coil-spring forming machine, jaws for feeding the coil stock, means for severing a blank therefrom, means for retracting the stock, means for forming a hook on the rear end of the blank and mechanism for bringing said means into operation successively; substantially as described.

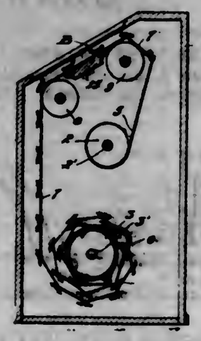
4. In a coil-spring forming machine, jaws for feeding the coil stock, means for severing a blank therefrom, means for retracting the stock, and a pair of mechanically operated dies for forming a hook upon one end of the blank and mechanism for bringing said means into operation successively, substantially as described.

5. In a coil-spring forming machine, jaws for feeding coil stock, means for severing a blank therefrom, and a pair of mechanically operated dies for forming a hook upon the front end of the blank and mechanism for bringing said means into operation successively, substantially as described.

[Claims 6 to 59 not printed in the Gazette.]

1,065,337. CATENATED INDEX AND LEDGER. JOSEPH N. BOSROGGINS, Oakland, Cal. Filed Apr. 10, 1912. Serial No. 690,924. (Cl. 129—2.)

1. In an index and ledger, a chain of memorandum carrying interchangeable links adapted to wind upon drums, each of said links comprising an elongated rectangular plate having grooves formed on the longitudinal edges thereof for the introduction of cards, etc., and means on each plate for hingedly connecting said plate to an adjacent plate, said means consisting of a pair of slightly separated tangs near each end and on one side of the plate, one tang of each pair being formed into a cylindrical tube and the other tang of each pair bent into a hook, and T-shaped tangs on the opposite side of the plate adapted to engage the tubular and hooked tangs on the adjacent plate.



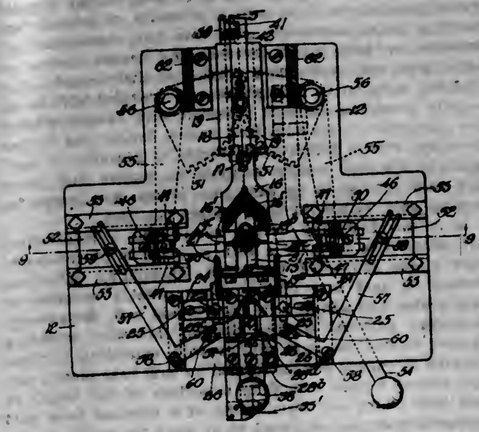
2. In an index and ledger, the combination of a cabinet having an inclined upper end with an opening therein, a pair of drums revolubly mounted therein, a table beneath said opening, a ribbon secured to each drum and windable thereon, a chain of memorandum carrying detachable and interchangeable links connected at each end to said ribbons and windable from one drum to the other, and means for rotating said drums from the exterior of said cabinet.

3. In an index and ledger, the combination of a cabinet having an inclined upper end with an opening therein, a pair of drums revolubly mounted therein, a ribbon secured to each drum and windable thereon, a chain of memorandum carrying interchangeable links connected at each end to said ribbons and windable from one drum to the other, means for rotating said drums from the exterior of said cabinet, a pair of direction rollers in said cabinet over which said chain of links travels to dispose said chain across the opening in said cabinet.

4. In an index and ledger, the combination of a cabinet having an inclined upper end with an opening therein, a pair of drums revolubly mounted therein, a ribbon secured to each drum and windable thereon, a chain of memorandum carrying interchangeable links connected at each end to said ribbons and windable from one drum to the other, means for rotating said drums from the exterior of said cabinet, and a pair of direction rollers in said cabinet over which said chain of links travels to dispose said chain across the opening in said cabinet, each of said links comprising an elongated rectangular inflexible plate having upturned portions on its longitudinal edges, and members on said plate adapted to interlock with members on an adjacent plate to form a hinged connection.

1,065,338. MACHINE FOR BUILDING CEMENTED HEELS FOR BOOTS AND SHOES. WENDELL P. BOSWORTH, Brockton, Mass., assignor to Brockton Heel Company, Brockton, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1912. Serial No. 713,572. (Cl. 12—50.)

1. A heel building machine comprising a bed adapted to support a heel composed of a pile of cement-coated lifts, a presser adapted to compress the heel supported by the bed, the bed and presser being formed to expose parts of the bottom and top surfaces of the heel, and clamps adapted to engage said exposed parts while the heel is under pressure, to maintain the compression of the heel, the compressed heel and the clamps engaged therewith being removable from the bed and adapted to be stored while the cement is setting.



2. A heel building machine comprising a bed adapted to support a heel composed of a pile of cement-coated lifts, a presser adapted to compress the heel supported by the bed, the bed and presser being formed to expose parts of the bottom and top surfaces of the heel, clamps adapted to engage said exposed parts while the heel is under pressure, to maintain the compression of the heel, and mechanism for applying the clamps to the compressed heel.

3. A heel building machine comprising a bed adapted to support a heel composed of a pile of cement-coated lifts, a presser adapted to compress the heel supported by the bed, the bed and presser being formed to expose parts of the bottom and top surfaces of the heel, clamps adapted to engage said exposed parts while the heel is under pressure, to maintain the compression of the heel, and mechanism for applying the clamps to the compressed heel, said mechanism and the clamps being provided with coupling members whereby the clamps may be withdrawn from a heel replaced on the bed.

4. A heel building machine comprising a bed, a presser movable to and from a position over the bed, means for forcing the presser toward the bed to compress an interposed heel, the bed and presser being formed to expose parts of the bottom and top surfaces of the heel, and clamps adapted to engage said exposed parts while the heel is under pressure.

5. A heel building machine comprising a supporting bed, a presser adapted to compress a heel supported by the bed, the bed and presser being formed to expose parts of the bottom and top surfaces of the heel, clamps adapted to engage said exposed parts and provided with coupling members, clamp-applying and removing slides having complemental coupling members, and means for moving the slides longitudinally to apply and remove the clamps.

[Claims 6 to 20 not printed in the Gazette.]

1,065,339. SINGLE-ACTING ENGINE. BENJAMIN BRAZELLE, St. Louis, Mo. Filed May 31, 1912. Serial No. 700,661. (Cl. 121—20.)

1. In a fluid-pressure engine, the combination with a cylinder having an air supply port, an air cut-off port, and an air outlet port, of a sleeve valve controlling said ports, and a solid piston sliding within said valve, the movement of said piston operating to close said cut off port.

2. In a single-acting engine a hollow cylindrical valve having an air inlet port, an air cut-off port, and an air outlet port, said valve reciprocating within a casing to open and close said ports, and a piston arranged for reciprocation within said valve to open and close said cut off port.



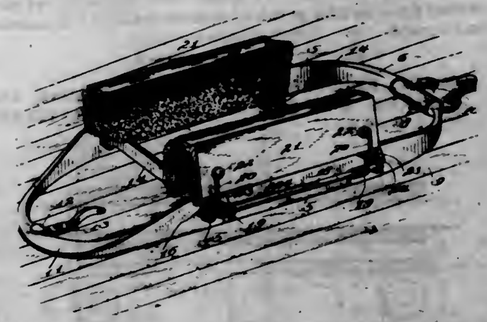
3. In a single acting engine, the combination of a differential cylinder comprising two axially arranged communicating chambers of different diameters, the chamber of larger diameter being closed at one end and provided with an annular extension at its opposite end surrounding the chamber of smaller diameter, a hollow cylindrical valve having a closed end slidably arranged in said larger chamber with its open end arranged within said annular extension, a differential piston reciprocating within said valve and said smaller cylinder chamber, and means for admitting air alternately on each side of said closed end of said valve.

4. In a single acting engine having a differential cylinder comprising two axially arranged communicating chambers of different diameters, one end of the larger chamber being closed, said closed end containing an axial recess forming an extension of said larger chamber, a hollow cylindrical valve slidably arranged in said larger chamber with one end extending into said recess, a diaphragm in said valve, and means for admitting air alternately on each side of said diaphragm.

5. In a single acting engine having a differential cylinder comprising two axially arranged communicating chambers of different diameters, one end of the larger chamber being closed, said closed end containing an axial recess forming an extension of said larger chamber, said cylinder containing an annular groove surrounding the smaller chamber thereof and forming an extension of said larger chamber, a hollow cylindrical valve slidably arranged in said larger chamber with one end extending into said recess and its opposite end extending into said groove, a diaphragm in said valve, and means for admitting air alternately on each side of said diaphragm.

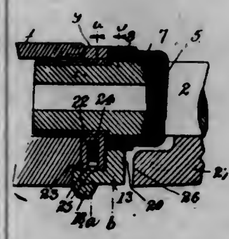
[Claims 6 to 10 not printed in the Gazette.]

1,065,340. SHOE-CLEANER. ROBERT D. BROMLEY, Geneva, Ohio. Filed Oct. 16, 1912. Serial No. 726,004. (Cl. 15—2.)



A cleaner for boots and shoes comprising a supporting frame having spaced side bars, projections on the outer faces of the side bars, pads carried by the projections, spring arms carried by the rods, brushes carried by the spring arms, and cams projecting from the side bars, said cams having guide slots through which the spring arms extend.

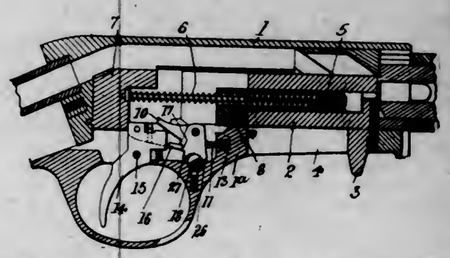
1,065,341. TAKE-DOWN CONSTRUCTION FOR FIREARMS. JOHN M. BROWNING, Ogden, Utah. Filed Mar. 20, 1913. Serial No. 755,645. (Cl. 42—75.)



1. The combination of a barrel, a nut thereon, a barrel-plate, a barrel-lock carried by the plate, and means whereby the barrel-lock engages the nut to lock the same.

2. In a firearm, the combination of a frame, a barrel, a nut screwed on the barrel to take up play between the barrel and frame, a barrel-lock adapted to engage the frame and means whereby the barrel-lock engages the nut to lock the same.

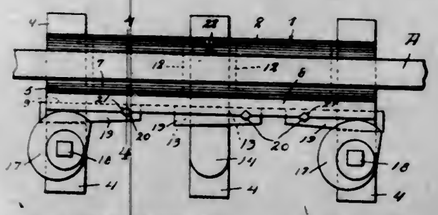
1,065,342. SAFETY DEVICE FOR FIREAMS. JOHN M. BROWNING, Ogden, Utah. Filed Mar. 20, 1913. Serial No. 755,646. (Cl. 42—70.)



1. In a firearm, the combination of a hammer, a sear and a safety pin mounted to move laterally in relation to the sear to lock the same when the hammer is cocked, the sear and pin being provided with coöperating means to prevent the pin from being moved to safety position when the hammer is not cocked.

2. In a firearm, the combination of a frame, a sear, a hammer free from the sear when nucocked, a safety pin mounted to move laterally in the frame, and means by which the safety pin is engaged with the sear and prevented from moving to safety position when the hammer is not cocked.

1,065,343. RAIL-FASTENER. SIMON C. COLLINS, Falmouth, Pa. Filed Sept. 20, 1912. Serial No. 721,437. (Cl. 239—6.)

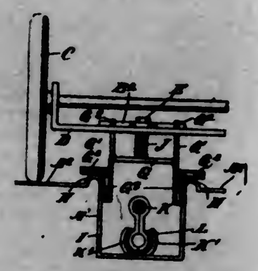


1. A rail fastening device, comprising a longitudinal upstanding member channeled for the reception of the base of a rail, a plurality of laterally extending base plates formed integrally thereon, upstanding projections on said base plates, a member slidably mounted on said base plates and channeled for the reception of the base of a rail and provided with a longitudinal recess, a plurality of wedges adapted to engage said recess and said projections on said base plates, and a plurality of pins passing through said slidable member and said wedges.

2. A rail fastening device, comprising a bar adapted for engagement with a rail, a plurality of laterally extending plates connected with said bar, upstanding extensions on said plates, overhanging flanges formed on said plates and extending a portion of their length, a bar slidably mounted on said plates and provided with downwardly extending portions provided with flanges adapted for engagement with said first named flanges and further provided with a longitudinal recess, a plurality of horizontally disposed wedges adapted to engage said recess and said extensions on said base plates, and means for locking said wedges in their proper position.

3. A rail fastening device, comprising a longitudinal bar adapted to embrace a rail, a plurality of transverse base plates connected therewith, upstanding extensions formed on said base plates, a bar slidably mounted on said plates and adapted to engage said rail, downwardly extending portions formed thereon, laterally extending flanges formed on said downwardly extending portions adapted to engage flanges formed on said base plates, said last named flanges extending a portion of the length of said base plates and terminating at a distance from said upstanding extensions equal to at least the width of said slidable bar, cams rotatively mounted on said extensions and adapted to engage said slidable plate for forcing it into engagement with the rail, and means for locking said plate in its engaging position, said means comprising wedges adapted to engage said slidable plate and the upstanding extensions on said base plates.

1,065,344. TOY CONSTRUCTION. JOSHUA L. COWEN, New York, N. Y. Filed Apr. 22, 1912. Serial No. 692,387. (Cl. 191—29.)



1. A toy construction consisting of a rail and a roadway at each side thereof and a car having a body portion, a truck pivoted to said body portion, means depending from said truck and engaging with the roadway for steering the truck, and means comprising electrical conductors for transmitting electricity through said rail to propel said car.

2. A toy construction consisting of a rail and a roadway at each side thereof and a car having a body portion, a truck pivoted to said body portion, means depending from said truck and engaging with the roadway for steering the truck, and an electrical conductor carried by the car at its rear end and contacting with said rail.

3. A toy construction consisting of a rail and a roadway at each side thereof and a car having a body portion, a truck pivoted to said body portion, means depending from said truck and engaging with the roadway for steering the truck, a bifurcated shoe carried by the car at its rear end and straddling the rail, and means comprising electrical conductors for transmitting electricity through said rail to propel said car.

4. A toy construction comprising a car, an electric motor mounted thereon, a truck located at the forward end of said car and connected in pivotal relation therewith, a guide shoe having depending side wings and laterally projecting shoes carried by said truck, and a bifurcated rear shoe carried by said car.

5. A toy construction comprising a car, an electric motor mounted thereon, a truck located at the forward end of said car and connected in pivotal relation therewith, a guide shoe having depending side wings and laterally projecting shoes carried by said truck, and having upwardly extending arms which loosely engage said truck, a spring interposed between said guide shoe and the under side of said truck, and a bifurcated rear shoe carried by and depending from said car.

[Claims 6 to 10 not printed in the Gazette.]

1,065,345. LUBRICATOR. SAMUEL C. CUTLER and WILLIAM H. BROWN, Cleveland, Ohio. Filed Oct. 4, 1910. Serial No. 585,215. (Cl. 184—48.)



1. A lubricator comprising the combination with a threaded inner member provided with an axial duct, of a complementarily threaded outer member movable thereabout and provided with a lateral filling aperture, said aperture adapted to be closed by such movement.

2. A lubricator comprising the combination of an exteriorly threaded member provided with a duct, a complementary interiorly threaded member movable thereabout and provided with an aperture, said aperture adapted to be closed by such movement, means for impeding the movement in one direction, one such member being provided with means for limitng the movement in the opposite direction.

3. A lubricator comprising the combination of an exteriorly threaded member, a complementary interiorly threaded member movable relatively thereto, said interiorly threaded member being provided with an aperture adapted to be closed by such relative movement, a spring interposed between said members for impeding the movement in one direction, said interiorly threaded member being provided with a projection for limiting the movement in the opposite direction.

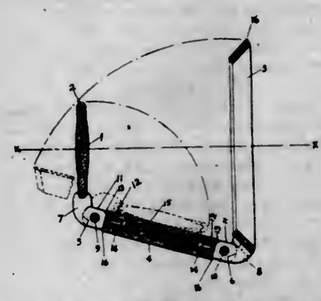
4. A lubricator comprising the combination of two members forming an interior chamber adapted to receive lubricants and provided with an inlet and an outlet opening; one of said members having an outer thread and an inner recess with which said outlets connects; the other of said members being cylindrical in form, having an open bottom, an interior thread adapted to engage said exterior thread, and a top forming, with the cylindrical shell, an integral structure; one of said members having a bent portion lying in the path of movement of the other of said members, whereby the disengagement of said two members is prevented.

5. A lubricator comprising the combination with a threaded interior member provided with an axial duct; of a supplementarily threaded outer member movable about such interior member and provided with a lateral filling aperture adapted to be closed by such movement; such outer member being provided with an inwardly projecting portion lying in the path of relative movement of said interior member.

[Claim 6 not printed in the Gazette.]

1,065,346. WATCHMAKER'S LOUPE. GEORGE H. DAY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Corporation of Massachusetts. Filed Dec. 17, 1910. Serial No. 597,820. (Cl. 88—41.)

1. A watchmaker's loupe comprising a tube having furcated ends, an eye piece and lens holder pivoted between the furcations at opposite ends of the tube, and means contained within and concealed by the tube for locking the eye frame and the lens frame in desired adjusted position.



2. An eye piece for a watch maker's loupe formed as a continuous annulus having a sharp gripping edge adapted, when it is distorted, to engage the facial muscles and retain the loop in position through the natural elasticity of the material from which it is formed.

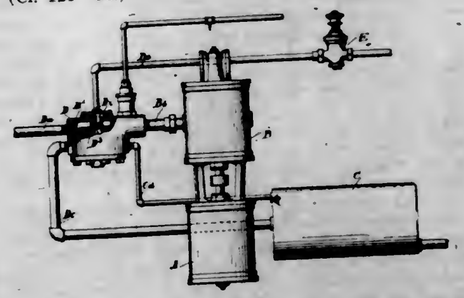
3. An eye piece for a watch maker's loupe formed as a thin elastic continuous annulus whose basal diameter is greater than its top diameter, the exterior of the basal ring presenting a sharp gripping edge, said annulus being distortable and adapted to be brought into engagement with the facial muscles through the natural elasticity of the material from which it is formed.

4. A device of the character described comprising a frusto-conical eye engaging member provided with a sharp basal flesh gripping edge, said member having an offset lug secured thereto and projecting therebeyond a lens bearing tube having a portion pivotally secured to the projecting lug of the eye member, and means contained within and concealed by the tube for locking the tube in adjusted position relative to the eye engaging member.

5. A watchmaker's loupe comprising a tube having furcated ends, an eye frame and a lens frame pivoted at opposite ends of the tube between the furcations in such a manner that the portions thereof pivoted between the furcations will contact with the tube to limit the opening movement of said parts to substantially parallel relation to each other, and means contained in the tube for locking the frames in open or folded position.

[Claim 6 not printed in the Gazette.]

1,065,347. STEAM-CONTROLLING APPARATUS. JOHN F. DEEMS, Burlington, Iowa, assignor to Economy Car Heating Company, Portland, Me., a Corporation of Maine. Filed Dec. 2, 1912. Serial No. 734,582. (Cl. 121—96.)



1. In a locomotive, the combination with the boiler, of an air pump operated by a direct acting engine, a storage tank for receiving steam exhausted from the air pump engine, and a device for automatically controlling the flow of steam from said engine to the atmosphere or to the storage tank, said device being connected to the air pump and storage tank and comprising a differential piston which is subjected on one side to said exhaust steam and on the other side to the pressure of the steam

in the tank and also comprising means for conducting steam from the boiler to a position where it can act upon a member on the differential piston so as to assist in controlling the position of the latter, said last mentioned means being provided with a valve for reducing to a predetermined pressure the steam that flows past the valve.

2. In a steam heating apparatus the combination with an air pump having a direct acting engine, of a casing with a differential piston therein for controlling the flow of steam to the atmosphere or to a storage tank, of the storage tank above referred to and steam conducting means comprising a regulating valve which reduces to a constant pressure the steam that flows past the regulating valve, the casing being provided with an inlet for receiving the steam exhausted from the air pump engine, with an outlet that permits steam to escape to the atmosphere, with an outlet through which steam passes on its way through a conduit leading to the storage tank, with an opening through which steam can pass to the interior thereof after it has flowed through a conduit leading from the storage tank to the casing so as to subject one face of the differential piston to the pressure of steam in the storage chamber, the other face of the piston being directly engaged by steam exhausted from the air pump engine as it flows through the steam controlling device, and with an opening through which steam from the steam conducting means which comprises the pressure regulating valve can flow after it has passed said regulating valve to a position where said steam can engage a portion of the differential piston.

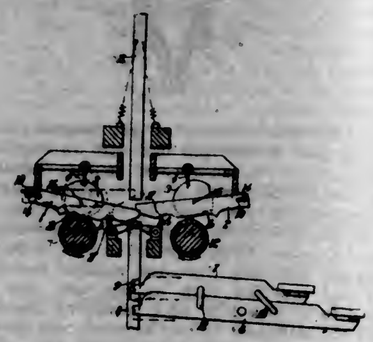
3. The combination of means for diverting the flow of steam and means comprising a pressure regulating valve connected thereto, said steam diverting means comprising a casing having a differential piston therein, said casing being provided with an inlet and two outlet openings through and from one of which the steam can flow dependent upon the position of the differential piston, a return opening and an opening for permitting the steam to enter the interior of the casing after it has passed the reducing or regulating valve, the differential piston being arranged so that the steam entering the casing through the inlet opening can directly engage one face of the differential piston prior to its escape from one of the outlet openings, the return opening being arranged so that steam can flow into the chamber and engage the other side of the differential piston, the differential piston also being provided with a portion movable therewith and directly engaged by the steam which is permitted to enter the casing after it has passed the reducing valve.

4. The combination with an air pump which delivers its exhaust steam to a steam controlling device, of said steam controlling device comprising a differential piston for regulating the flow of steam from either a normal outlet or to a conduit leading to a steam receiving means, and said steam receiving means, said device comprising a reducing valve for supplying steam to the interior thereof after passing the reducing valve, said differential piston being subjected on one side to the exhaust steam flowing through the controlling device and on the other side to the pressure of steam in the receiving means, said piston being also subject to the pressure of the steam which is supplied to the interior of the device after passing the reducing valve.

5. The combination of an air pump engine, a storage tank, means for controlling the flow of steam exhausted from the air pump engine to either the atmosphere or to the storage tank and means comprising a reducing valve for conducting steam from any suitable source of supply to the steam controlling means, said steam controlling means comprising a casing having therein a differential piston which divides the interior of the casing into an upper chamber and a lower chamber, said casing being connected by a pipe or conduit to the air pump engine so that steam can be supplied from the latter to the interior of the upper chamber, said casing also being provided with another pipe or conduit leading from the interior of the upper chamber to the storage tank, a third pipe or conduit leading from the storage tank to the interior of the lower chamber, the differential piston also being provided with a small plunger provided above the same in a chamber for receiving steam from the means comprising the reducing valve, the parts being so constructed and arranged that the steam which enters the casing after it has passed the reducing means, the steam which is flowing from the air pump engine and the steam which is within the reservoir or storage tank can operate on the differential piston whereby the latter can regulate the flow of steam directly to the atmosphere or to the storage tank.

[Claims 6 and 7 not printed in the Gazette.]

1,065,348. TYPOGRAPHICAL COMPOSING-MACHINE. ARTUR EICHLER, Zossen, near Berlin, Germany, assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Apr. 8, 1911. Serial No. 619,663. (Cl. 199—7.)



1. In a typographical composing machine, two escapement-actuating devices comprising cam yokes and means for acting thereon simultaneously, the said cam yokes being arranged to operate alternately.

2. In a typographical machine, two escapement-actuating devices comprising cam yokes and means for acting thereon simultaneously, the said cam yokes being arranged so that one operates and the other is prevented from operating at the same time.

3. In a typographical composing machine, the combination of two escapement-actuating devices each comprising a cam yoke, and a common selecting means connected thereto, the actuating devices being so arranged that the action of the selecting means causes the operation of one of the cam yokes and moves it to inoperative position.

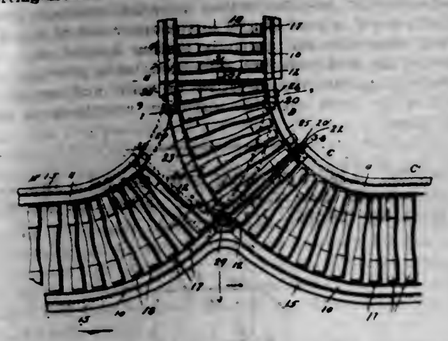
4. In a typographical composing machine, the combination of two escapement-actuating devices each comprising a cam yoke, and a common selecting means connected thereto, the actuating devices being so arranged that the action of the selecting means causes the operation of one of the cam yokes and moves it to inoperative position and simultaneously moves the other cam yoke to operative position.

5. In a typographical composing machine, the combination of two escapement actuating devices, two separate and distinct sets of operating mechanisms therefor, and selecting means, the said mechanisms comprising means whereby they will be caused to operate alternately by the repeated actuations of the selecting means.

[Claims 6 to 24 not printed in the Gazette.]

1,065,349. CONVEYER. RANDELL HOWARD FLETCHER, Llanishen, Wales, assignor, by mesne assignments, to The Alvey-Ferguson Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 3, 1910. Serial No. 547,098. (Cl. 193—1.)

1. A package conveyer, comprising a reversible run or section which is mounted so that it may be turned on an approximately horizontal axis disposed off the center of the run or section, said run or section having opposite conveying surfaces, and package-supporting members relatively arranged to be joined by the respective conveying surfaces of the reversible section or run, the package-supporting members comprising package-feeding means.



2. A package-conveyer comprisng package-supporting members extending toward a common point, and a reversible run or section which is mounted to turn from an operative relation with one of said members into operative relation with the other, on an approximately horizontal axis disposed off of the line of the transverse center of the reversible run or section and in a line which bisects the space between adjacent sides of said members at the ends of the latter contiguous to the reversible run or section.

3. A package-conveyer comprising a series of package-supporting members, two of which have their sides which confront each other arranged contiguous to a place which is opposite the transverse center of the third member, said third member being spaced from the ends of the other two members, and a reversible section or run mounted to turn on an approximately horizontal axis in said space to operatively connect either of the first two members with the third member, said reversible section or run having its axis in line with the transverse center of the third member and the space separating the sides of the first two members from each other.

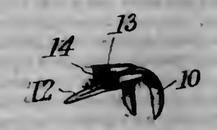
4. A package conveyer comprising a pair of members having ends which are arranged side by side, a third member spaced from said pair of members and having the transverse center of its ends arranged in a line which bisects the space separating contiguous sides of the first two members from each other, and a fourth member mounted to turn on an approximately horizontal axis and adapted to convey packages between the third member and either of the first two members, said fourth member being pivoted at one end in line with the transverse center of the third member and having its other end pivoted at a place which is off of its transverse center and bisects the space between adjacent sides of the first two members.

5. A package conveyer comprising two package conveying sections each comprising a bed or way, the ends of said sections being spaced apart and disposed in such relative positions that their transverse centers will be out of line with each other, and a switch section which is mounted to turn on an approximately horizontal axis between said ends and has a bed or way which forms a continuation of the beds or ways of the latter when it is in one position of its adjustment, the axis of turning movement of the switch section being off the line of the transverse center of its bed or way and in a line which bisects the end of the bed or way of one member and is adjacent to an edge of the bed or way of the other member.

[Claims 6 to 21 not printed in the Gazette.]

1,065,350. PICTURE-HANGER. CHARLES KENNETH FULLER, Lynn, Mass. Filed July 17, 1911. Serial No. 638,900. (Cl. 40—145.1.)

1. A device of the class described comprising a bifurcated head, a shank portion having a strengthening and buttress rib formed longitudinally thereof and terminating in a lateral foot, and a point portion extended outwardly of the rib, the foot being adapted to abut a surface into which the point portion is driven.

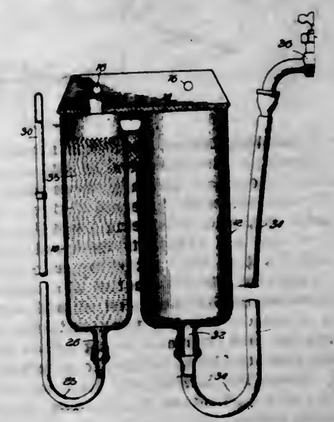


2. As an improved article of manufacture, a headed support of the class described formed integrally from sheet metal and comprising a head, a shank having integral lateral extensions, increasing in width rearwardly from the head and having rear edges at right angles to the shank, and a point portion projecting rearwardly from the shank adjacent the said rear edges of the extensions, said extensions being bent laterally from the plane of the shank to form strengthening and buttressing ribs, their rear edges forming foot portions adapted to abut against a surface into which the point portion is driven.

3. As an improved article of manufacture, a headed support of the class described formed integrally from sheet metal and comprising a head, a shank extended therefrom having integral rear lateral extensions, their major portions disposed outwardly of the head and having rear edges at right angles to the shank, and a point portion extending rearwardly from adjacent the bases of the extensions, said extensions being bent laterally from the plane of the shank, the immediately adjacent portions of the shank and point portion being partly bent therewith, the said rear edges of the extensions being adapted to abut a surface into which the point portion is driven.

4. As an improved article of manufacture from sheet metal, adapted for use as a push pin, picture hanging nail, and the like—a broad head adapted for engagement by the thumb for emplacement of the device, a shank stamped integrally with, extending from the perimeter of, and at right angles to the plane of, the head; said shank having edge extensions bent toward the side of the shank opposite the head to form strengthening and buttressing elements adapted to engage a surface into which the device is driven, and a point portion on the shank outwardly of said extensions.

1,065,351. MACHINE FOR SURGICAL AND ORAL CLEANING. SAMUEL G. FYFE, Waukegan, Ill., assignor of one-half to Otto B. Smith, Waukegan, Ill. Filed Apr. 4, 1912. Serial No. 688,502. (Cl. 128—25.)



1. In a device of the class described, the combination of two adjacent receptacles connected together near their tops by a passageway of a less diameter than the diameter of either of the two receptacles, one of said receptacles being provided with a discharge port near its bottom and a closable port near its top through which antiseptic liquid may be inserted, the other of said receptacles being provided with an entrance port near its bottom, the whole in

combination with means for supporting the device and for supplying liquid under pressure to the last mentioned entrance port for the purposes set forth.

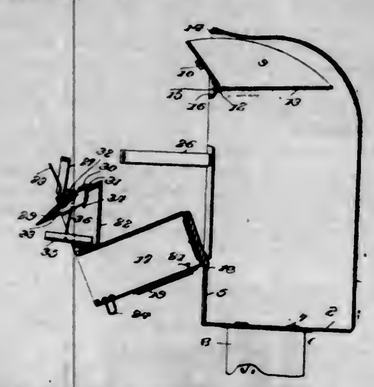
2. In a device of the class described, a bracket adapted to be secured to a fixed support, two adjacent receptacles suspended from said bracket connected together near their tops by a passageway, a discharge port near the bottom of one of the receptacles, an entrance port near the bottom of the other receptacle, and means for conducting liquid under pressure into said entrance port, for the purposes specified.

1,065,352. SHOE-NAIL. JOHN J. GILSENAN, Newark, N. J. Filed Sept. 11, 1912. Serial No. 719,738. (Cl. 85—16.)



A shoe-nail consisting of two arms substantially at right-angles to each other, one arm forming a shank, the second arm being substantially wedge-shaped in cross-section having a flat face outermost and having its inner edge pointed, the sides of the second arm being convex to give a maximum surface of wear.

1,065,353. MAIL-BOX. ODIORNE J. W. GLEASON, Worcester, Mass. Filed Mar. 13, 1912. Serial No. 683,466. (Cl. 232—24.)



1. In a mail box, the combination of a main receptacle, a chute pivoted to the upper end of said receptacle, and an auxiliary receptacle pivotally mounted in the main receptacle below the said chute and having a hood hinged to its upper end, said hood being adapted to permit the insertion of mail and having its upper end normally resting against a stop at the front of the main receptacle.

2. In a mail box, the combination of a main receptacle, a chute pivoted to the upper end of said receptacle, an auxiliary receptacle pivotally mounted in the main receptacle below the said chute and having a hood hinged to its upper end, said hood being adapted to permit the insertion of mail, means for locking the hood to the auxiliary receptacle, and a shield on the front of the hood above said locking means.

3. In a mail box, the combination of a main receptacle, an auxiliary receptacle pivotally mounted therein and having its front disposed to form the front wall of the main receptacle, a hood hinged upon the upper end of the auxiliary receptacle and provided in its front side with a mail-receiving opening, a tray pivotally mounted within the hood and adapted to normally close the said mail-receiving opening, and means whereby when the auxiliary receptacle is swung forward the hood will swing to the rear thereof.

4. In a mail box, the combination of a main receptacle, a rigid cross bar at the front thereof, an auxiliary receptacle pivotally mounted within the main receptacle at the front thereof, a hood hinged to the upper end of said auxiliary receptacle and normally resting against the inner face of the said cross bar, said hood being provided with means to permit the insertion of mail, and means for locking the hood over the auxiliary receptacle to close the same.

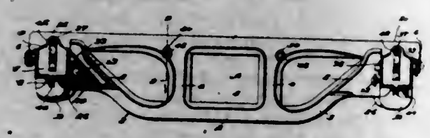
1,065,354. LEG AND ARM FOR DOLLS. BENJAMIN GOLDENBERG, New York, N. Y. Filed Oct. 30, 1912. Serial No. 728,598. (Cl. 46—40.)



1. In a device of the class described, a thigh 2 with a cap 5 with a flat portion and a flange on three sides only of said flat portion placed therein and a lower part 3 of the leg pivotally mounted in said cap.

2. In a device of the class described, a thigh 2 composed of a cloth 6, a cap 5 with a flat portion and a flange on three sides only of said flat portion and a stuffing over the cap and in the cloth and a lower part of the leg pivotally mounted in said cap.

1,065,355. JOURNAL-BOX. EDMOND R. GROVE, Arkansas City, Kans. Filed Apr. 22, 1913. Serial No. 762,881. (Cl. 105—248.)



1. The combination of a truck side embodying top and bottom horizontal bars and strut braces connecting said bars, the said top horizontal bar being extended at both ends beyond the bottom bar, depending brace lugs at the extremities of said top bar, journal boxes held in the spaces under the extended ends of said top bar and between said brace lugs and main body of the truck side and demountable in a downward direction relatively to the truck side, an attaching lug on the side of each journal box, the truck side being formed with a downwardly opening socket for the reception of said lug, and a detachable pin inserted through said lug and the truck side and serving to fasten the box and truck side together.

2. The combination of a truck side embodying top and bottom horizontal bars and strut braces connecting said bars, the said top horizontal bar being extended at both ends beyond the bottom bar, depending brace lugs at the extremities of said top bar, journal boxes held in the spaces under the extended ends of said top bar and between said brace lugs and main body of the truck side and demountable in a downward direction relatively to the truck side, an attaching lug on the side of each journal box, the truck side being formed with a downwardly opening socket for the reception of said lug, and a detachable pin inserted through said lug and the truck side and serving to fasten the box and truck side together, said pin

and the holes therefor in the truck side and attaching lug being square in cross section.

3. The combination of a truck side formed with a downwardly opening lug socket and journal box space, a journal box located in said space and demountable in a downward and longitudinal direction relatively to the truck side, an attaching lug on said journal box fitting in said socket, and a pin detachably inserted through the truck side and said lug and serving to fasten the journal box and truck side together.

4. The combination of a truck side, and a journal box having a vertical movement relatively to each other, a detachable top for said box slidable horizontally, and locking means for fastening said top in a closed position.

5. The combination of a truck side, and a journal box having a vertical movement relatively to each other, a detachable top for said box slidable horizontally, and locking means for fastening said top in a closed position, including a keeper on the underside of said top, and a detachable key inserted through the journal box and engaging said keeper.

[Claims 6 to 8 not printed in the Gazette.]

1,065,356. FIRE-EXTINGUISHING APPARATUS. KARL GRÜNWALD, Hamburg, Germany. Filed Mar. 29, 1911. Serial No. 617,734. (Cl. 196—7.)



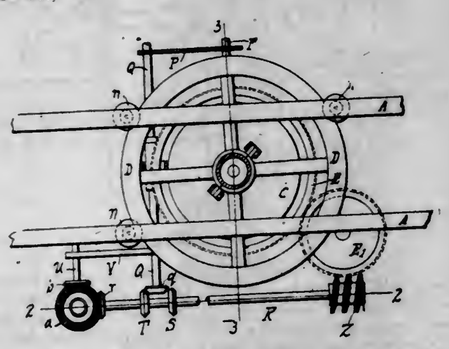
1. In a fire extinguishing apparatus, the combination of an entirely closed water-tight holder adapted to hold a suitable liquid and having an end wall; a crank shaft passing through said end wall in a water-tight manner; a crank and a star wheel on said shaft on the outside of the end wall; a spring engaging between the teeth of the star wheel; a circular plate mounted on the shaft and contacting the inner face of the end wall; a series of perforated receptacles mounted on the periphery of said plate, parallel to the shaft; a frame spanning said series of receptacles and secured at opposite ends to said end wall; a puncturing device mounted on said frame, and into alinement with which the receptacles may be successively brought; and a pushing rod in alinement with said puncturing device and passing through the end wall in a water-tight manner.

2. In a fire extinguishing apparatus, the combination of an entirely closed water-tight holder adapted to hold a suitable liquid and having an end wall provided with a wide annular groove on its inner face and an opening in the floor of said groove; a crank shaft perpendicularly passing through said end wall in a water-tight manner concentric with said groove; a crank and a star wheel on said shaft on the outside of said end wall; a spring engaging between the teeth of the star wheel; a circular plate mounted on the shaft and contacting the inner face of the end wall; a series of perforated horizontal receptacles mounted on the periphery of said plate and having one end engaging in said groove; a threaded boss on the outside of said end wall in alinement with said opening; a cap on said boss; a pushing rod passing through said cap and having a knob on the outer end and a piston on its inner end; a spiral spring around said rod between said cap and knob; a frame spanning said series of receptacles and mounted on said frame in alinement with the pushing rod.

3. In a fire extinguishing apparatus, the combination of an entirely closed water-tight holder; a movable frame mounted entirely within the water holder and comprising a plurality of receptacles adapted to hold cartridges; a supporting frame mounted on a wall of the holder; a stationary puncturing device supported in said supporting frame and into alinement with which all of the receptacles are adapted to be brought; means operable on the outside of the water holder for consecutively bringing the receptacles into said alinement; and means movable in said alinement and operable from the outside of the water-holder for pushing said cartridges and pressing the same into puncturing engagement with said stationary puncturing device.

4. In a fire extinguishing apparatus, the combination of an entirely closed water-tight water holder adapted to hold a suitable liquid; a movable frame entirely within said holder and comprising longitudinal receptacles adapted to contain cartridges; a supporting frame mounted on an end wall of said holder; a stationary puncturing device mounted on said holder; a movable pusher passing in a water-tight manner through said end wall of the holder in alinement with the puncturing device, between and in alinement with which and the puncturing device the said receptacles are adapted to be successively moved, in which successive positions the cartridges may be pushed by the pusher into puncturing contact with the stationary puncturing device; a crank entirely on the outside of said holder and having a crank shaft passing in a water-tight manner through the wall of the holder into operative engagement with said frame whereby the frame may be moved into said positions; a toothed wheel on said crank shaft; and yieldable means engaging between the teeth of the wheel for holding said frame in said successive positions.

1,065,357. AUTOMOBILE. JESSE H. HAND, Ann Arbor, Mich. Filed Apr. 1, 1912. Serial No. 687,670. (Cl. 21—90.)



1. In an automobile, having an axle adapted to turn about a vertical axis at its center, a segment connected with said axle so as to turn the same, a shaft connected with said segment by gearing, a power shaft, a third shaft adapted to be actuated by said power shaft, wheels S and T on the first mentioned shaft, a wheel q on the shaft driven from the power shaft, and means for moving the last named shaft between said wheels to engage one or the other to turn the shaft connected with said shaft in one direction or the other at will.

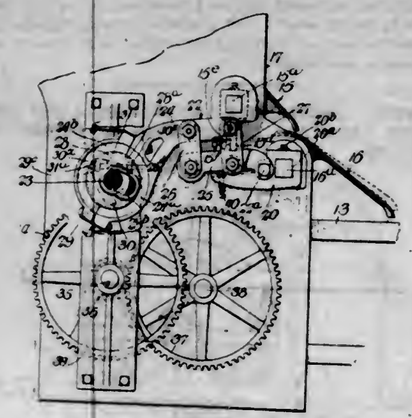
2. In an automobile, an axle adapted to turn about a vertical axis at its center, a segment connected with said axle to turn the same, a shaft R geared to said segment to actuate the same, a gear wheel r on the shaft R, a steering post, a shaft Q, wheels S and T on the shaft R, a wheel q on the shaft Q located between the wheels S and T, the shaft Q being adapted to be actuated to engage the wheel S or the wheel T by means of the wheel Q, a shaft U adapted to actuate the shaft Q to cause the engagement with the wheels S and T, a wheel b on the shaft U and a wheel a on said steering post adapted to be moved to engage the wheel r on the wheel b, and means for connecting the shaft Q with the power shaft.

1,065,358. LOCK FOR DECK-PLATES. HENRY HANSON, Middletown, Conn. Filed May 18, 1912. Serial No. 698,133. (Cl. 70—27.)



A lock for deck plates and the like comprising a bolt, means carried by the deck plate cap for guiding the bolt, a spring for normally maintaining the bolt projected to locking position, a projection carried by the bolt cooperating with one of the guiding means to limit the movement of the bolt toward locking position, a lug extending at right angles from the bolt intermediate its guiding means, a tumbler pivotally mounted upon the cap and formed at its free end with a notch to receive the lug for locking the bolt against retraction, the forward edge of the tumbler in advance of the notch being inclined with respect to the adjacent face of the lug to present an angular aperture between said inclined edge of the tumbler and adjacent face of the lug, whereby through a suitably formed key, pressure upon said inclined surface will swing the tumbler in a direction from the bolt to release the latter for retraction.

1,065,359. FURNACE. JOSEPH HARRINGTON, Riverside, Ill. Filed Aug. 3, 1911. Serial No. 642,058. (Cl. 110—40.)



1. In a device of the character described, in combination with a furnace provided with a traveling grate, and an inclined fuel support at the forward end of said grate, said support including a transversely extending plate and a rock shaft upon which said plate is mounted, mechanism for imparting continuous oscillatory movement to said rock-shaft including a rock-arm secured to said rock-shaft, a rotative eccentric located substantially in longitudinal alinement with the said rock-arm, an operating arm having operative connection with said eccentric, and means connecting said operating arm with said rock-arm, permitting endwise movement of the former with respect to the latter.

2. In a device of the character described, in combination with a furnace provided with a traveling grate, and an inclined fuel support at the forward end of said grate, said support including a transversely extending pivotally supported plate, mechanism for imparting continuous oscillatory movement to said plate including an eccentric having operative connection with said plate, a shaft upon which said eccentric is mounted, and means for connecting said eccentric with said shaft, permitting the adjustment of said eccentric in a direction substantially at right angles to a line passing through the said shaft and the axis of oscillation of said plate.

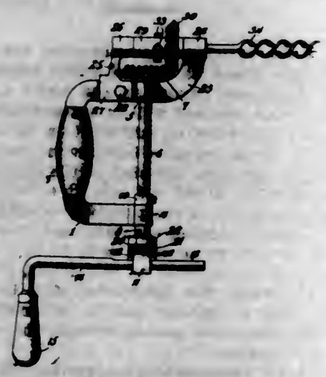
3. In a device of the character described, in combination with a furnace provided with a traveling grate, and an inclined fuel support at the forward end of said grate, said support including a transversely extending pivotally supported plate, mechanism for imparting continuous oscillatory movement to said plate including a rock-arm having operative connection with said plate, a rotative eccentric, an operating arm having operative connection with said eccentric, means connecting said operating arm with said rock-arm, permitting endwise movement of the former with respect to the latter, and means for adjusting the mean inclination of said plate for any amplitude of oscillation of said plate.

4. In a device of the character described, in combination with a furnace provided with a traveling grate, and an inclined fuel support at the forward end of said grate, said support including a transversely extending plate and a rock shaft upon which said plate is mounted, mechanism for imparting continuous oscillatory movement to said rock-shaft including an eccentric, an operating arm having operative connection with said eccentric, a rock-arm secured to said rock-shaft, and means connecting said operating arm with said rock-arm, permitting endwise movement of the former with respect to the latter.

5. In a device of the character described, in combination with a furnace provided with a traveling grate, and an inclined fuel support at the forward end of said grate, said support including a transversely extending plate and a rock-shaft upon which said plate is mounted, mechanism for imparting continuous oscillatory movement to said rock shaft including an eccentric, an operating arm having operative connection with said eccentric, a rock-arm secured to said rock-shaft, and two parallel links affording a connection between said operating arm and said rock-arm, adapted to permit endwise movement of the former with respect to the latter.

[Claims 6 to 10 not printed in the Gazette.]

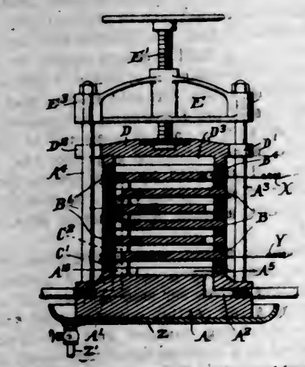
1,065,360. BIT-STOCK. HARRY HARRIS, Tyrone, Pa. Filed Aug. 13, 1912. Serial No. 714,869. (Cl. 145—67.)



1. In a device for the purpose described, a U-shaped frame having the legs of unequal length and the yoke portion formed into a handle or grip, with a bearing at the end of the shorter leg and another bearing at the corresponding portion of the longer leg, said bearings being in alinement with the longer axis parallel with the yoke portion, and the longer leg having the outer end portion bent into substantial parallelism with the yoke portion and terminating in a bearing with its longitudinal axis at substantially right angles to the longitudinal axis of the first-named bearings, and spaced therefrom in a direction away from the shorter leg of the frame, a bearing removably mounted on the longer leg on the side of the first-named bearing thereon toward the handle or grip portion of the frame, said removable bearing and the second-named bearing on the longer leg being in alinement, a hollow shaft mounted in the last-named alined bearings, a shaft mounted in the first named alined bearing, a crank for the last-named shaft, and gearing connections between the two shafts, said hollow shaft having means for receiving and holding the butt end of a bit.

2. In a device for the purpose described, a U-shaped frame having the legs of unequal length and the yoke portion formed into a handle or grip, with a bearing at the end of the shorter leg and another bearing at the corresponding portion of the longer leg, said bearings being in alinement with the longer axis parallel with the yoke portion, and the longer leg having the outer end portion bent into substantial parallelism with the yoke portion and terminating in a bearing with its longitudinal axis at substantially right angles to the longitudinal axis of the first-named bearings, and spaced therefrom in a direction away from the shorter leg of the frame, a bearing removably mounted on the longer leg on the side of the first-named bearing thereon toward the handle or grip portion of the frame, said removable bearing and the second-named bearing on the longer leg being in alinement, a hollow shaft mounted in the last named alined bearings, a shaft mounted in the first named alined bearing, a crank for the last named shaft, and gearing connections between the two shafts, the hollow shaft having its bore in the main of cylindrical cross section and adjacent to the end mounted in the removable bearing having the bore of non-circular crosa section and of reduced diameter, and between such reduced portion and the other bearing being provided with set screws positioned to engage the round shank of a taper-butt boring bit with the taper end seated in the non-circular portion of the bore of the shaft.

1,065,361. ELECTRODE-BOX. HARRY B. HARTMAN, Philadelphia, Pa., assignor of one-half to himself and one-half to George A. Dunning, Philadelphia, Pa. Filed Aug. 11, 1911. Serial No. 643,474. (Cl. 204—25.)



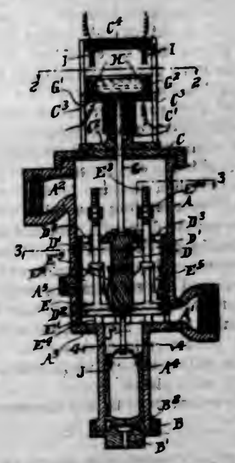
1. An electrode box comprising in combination a stack of spaced apart electrode plates, each of which is formed with an elongated aperture extending along and adjacent to one of its edges, insulating material interposed between each adjacent pair of plates at their margins to close the edges of the spaces between the plates, said plates being arranged with said apertures extending through adjacent plates at opposite sides of said stack, whereby said apertures unite with the interplate spaces to form a zig-zag channel through said stack, and means for clamping said plates and insulating material together.

2. An electrode box comprising a stack of spaced apart electrode plates formed with a series of registering apertures, insulating material interposed between said electrodes at their margins and formed with apertures registering with said electrode apertures whereby the edges of the spaces between the plates are closed and the walls of said apertures unite to form a passage through said stack of electrodes, said electrodes having other and non-registering ports extending through them which connect the spaces between the electrodes and unite with said spaces to provide a zigzag channel through the electrode stack, with provisions at one end of the stack connecting said passage and channel, and conduit connections to said passage and channel at the opposite end of said stack and means for clamping said electrodes and interposed insulating material together.

3. An electrode box comprising a stack of spaced apart electrode plates formed with a series of registering apertures, insulating material interposed between said electrodes at their margins and formed with apertures registering with said electrode apertures whereby the edges of the spaces between the plates are closed and the walls of said apertures unite to form a passage through said stack of electrodes, said electrodes having other and non-registering ports extending through them which connect the spaces between the electrodes and unite with said spaces to provide a zigzag channel through the electrode stack, a base member formed with inlet and outlet ports on which said electrode stack is placed with one of said ports communicating with said passage and the other with said channel, standards at the sides of said stack and connected at their lower ends to said base member, a crosshead secured to the other ends of said standards, a clamping screw working in said standard and an end member for said stack engaged by said screw and formed with a chamber connecting the corresponding ends of said passage and channel.

4. An electrode box comprising a stack of spaced apart electrode plates formed with a series of registering apertures, insulating material interposed between said electrodes at their margins and formed with apertures registering with said electrode apertures whereby the edges of the spaces between the plates are closed and said apertures unite to form a passage through said stack of electrodes, said electrodes having other and non-registering ports extending through them which connect the spaces between the electrodes and unite with said spaces to provide a zigzag channel through the electrode stack, end members between which said electrodes and insulations are clamped, one of said end members being formed with inlet and outlet ports, one communicating with one end of said passage and the other with the corresponding end of said channel, and provisions at the opposite end of said stack from the last mentioned end member for connecting said passage and channel.

1,065,362. FLOW-RESPONSIVE CIRCUIT-CONTROLLER. HARRY B. HARTMAN, Philadelphia, Pa., assignor of one-half to himself and one-half to George A. Dunning, Philadelphia, Pa. Filed Aug. 11, 1911. Serial No. 643,475. (Cl. 204—25.)



1. A flow responsive circuit controlling device comprising in combination a cylinder having an inlet connection at one end and an outlet connection at the other end, a piston working in said cylinder and provisions tending to hold it at the inlet end of said cylinder when the pressure at the opposite ends of said cylinder are substantially alike, said piston being formed with a passage leading through it, a valve controlling said passage, provisions

for closing said valve when the piston is adjacent the inlet end of the cylinder and for opening said valve on a predetermined movement of the piston toward the outlet end of the cylinder, and a switch mechanism actuated by said piston.

2. A flow responsive circuit controlling device comprising in combination a cylinder having an outlet connection at one end and at the other end an inlet connection and a cylindrical extension of reduced cross section, the latter being provided with a vent at its outer end, a main piston working in said cylinder, a loading piston working in said extension and connected to said main piston and tending to keep the latter at the inlet end of said cylinder when the pressure at the opposite ends of said cylinder are substantially alike, said loading piston being adapted to close said vent when the main piston is at the inlet end of said cylinder, said main piston being formed with a passage leading through it, means for closing said passage when said main piston is at the inlet end of the cylinder and means for opening said passage on a predetermined movement of the piston toward the outlet end of the cylinder, and a switch mechanism actuated by said piston.

3. A flow responsive circuit controlling device comprising in combination a cylinder having an outlet connection at one end and an inlet connection at the other end, a piston working in said cylinder and provisions tending to hold it at the inlet end of said cylinder when the pressures at the opposite ends of the cylinder are substantially alike, said piston being formed with a passage leading through it, a valve carried by said piston and engaging said cylinder and being shifted thereby to close said passage as said piston approaches the inlet end of the cylinder and to open said passage after a predetermined movement of the piston toward the outlet end of the cylinder, and a switch mechanism actuated by said piston.

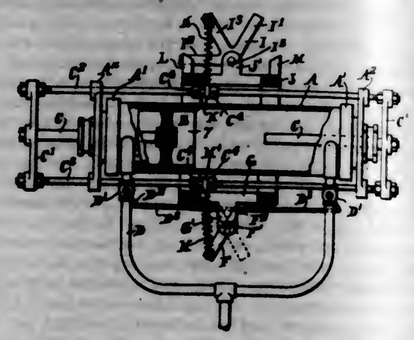
4. A flow responsive circuit controlling device comprising in a combination a cylinder having an inlet connection at one end and an outlet connection at the other end, a piston working in said cylinder and provisions tending to hold it at the inlet end of said cylinder when the pressures at the opposite ends of the cylinder are substantially alike, said piston being formed with a passage leading through it, a valve carried by said piston, and engaging said cylinder and being shifted thereby to close said passage as said piston approaches the inlet end of the cylinder and to open said passage after a predetermined movement of the piston toward the outlet end of the cylinder, a switch mechanism actuated by said piston, and means tending to maintain said valve in any position relative to said piston into which it may be moved.

5. A flow responsive circuit controlling device comprising a cylinder having an inlet connection at one end and an outlet connection at the other end, a piston mounted in said cylinder and provisions tending to hold it at the inlet end of said cylinder when the pressures at the opposite ends of said cylinder are substantially alike, said piston being formed with a passage leading through it and with a valve seat surrounding the inlet end of said passage and a valve mounted in said piston and formed with a valve seat engaging portion and a short portion immediately adjacent thereto adapted to enter and substantially fill said passage, said valve engaging said cylinder and being shifted thereby to close said passage as said piston approaches the inlet end of the cylinder and to open said passage after a predetermined movement of the piston toward the outlet end of the cylinder, and a switch mechanism actuated by said piston.

[Claims 6 to 9 not printed in the Gazette.]

1,065,363. REVERSING-SWITCH MECHANISM. HARRY B. HARTMAN, Philadelphia, Pa., assignor of one-half to himself and one-half to George A. Dunning, Philadelphia, Pa. Filed Aug. 11, 1911. Serial No. 643,476. (Cl. 204—25.)

1. In a reversing switch mechanism the combination of a fluid pressure motor comprising a cylinder, a piston working therein, and controlling valves for said motor, movable switch members, and mechanism for moving them comprising an element mounted to rock about an axis a spring connected at one end to said rocking element and means engaging the other end of said spring and actuated by said piston for shifting the line of action of said spring from one side to the other of said pivotal axis as the piston moves back and forth in said cylinder.



2. In a reversing switch mechanism the combination of a fluid pressure motor comprising a cylinder, a piston working therein, and controlling valves for said motor, movable switch members, mechanism for moving the said members and for operating said valves comprising one or more elements mounted to rock about an axis, a spring connected at one end to each such rocking element and means for engaging the other end of said spring and actuated by said piston for shifting the line of action of said spring from one side to the other of said pivotal axis as the piston moves back and forth in said cylinder.

3. In a reversing switch, the combination with movable switch members, of a fluid pressure motor for actuating them, said motor comprising a cylinder, a piston working therein, controlling valves for said motor, and operating mechanism for the latter comprising an element mounted to rock about an axis, a spring connected at one end to said rocking element and means engaging the other end of said spring and actuated by said piston for shifting the line of action of said spring from one side to the other of said pivotal axis, as said piston moves back and forth in said cylinder.

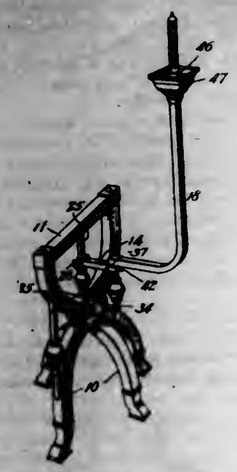
4. In a reversing switch, the combination of a fluid pressure motor comprising a cylinder, a piston working therein, controlling valves for said motor, and a movable frame comprising a rod portion entering each end of said cylinder, each rod being engaged and the frame correspondingly moved on a predetermined movement of the piston toward the corresponding end of the cylinder, and circuit controlling provisions actuated by said frame.

5. In a reversing switch the combination of a fluid pressure motor comprising a cylinder, a piston working therein and controlling valves for said motor, movable switch members, and mechanism for moving them comprising an element mounted to rock about an axis, a spring connected at one end to said rocking element and means engaging the other end of said spring for shifting the line of action of said spring from one side to the other of said pivotal axis as the piston moves back and forth in said cylinder, said means including a member reciprocated by said piston and a slide mounted thereon and having a limited movement with respect thereto in the direction of movement of said piston.

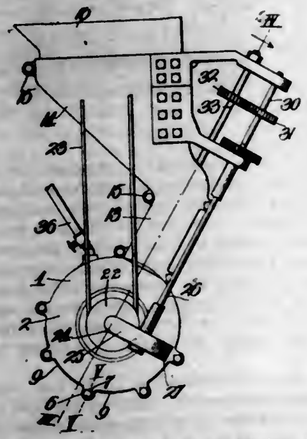
[Claims 6 and 7 not printed in the Gazette.]

1,065,364. UNDERTAKER'S FIXTURE. WALTER P. HENN, Chicago, Ill. Filed Aug. 16, 1911. Serial No. 644,288. (Cl. 248—3.)

The combination with a fixed support including an upright post, of a bracket member having a clamp designed for engagement with such post, a folding brace supporting such bracket member and having its lower end adapted for engagement with such post, a swinging arm engaging with such bracket member, means for securing such bracket member and such arm in rigid engagement, emblematic devices adapted for detachable engagement with such arm, and means for securing one of such devices in engagement therewith.



1,065,365. CONCRETE APPARATUS. ALBERT G. HIGGINS, Kansas City, Mo. Filed Aug. 14, 1911. Serial No. 644,058. (Cl. 91—44.)

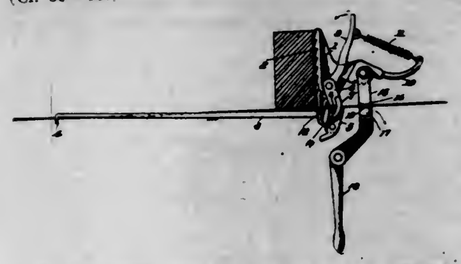


1. The combination of a casing having a discharge opening and a feed opening and a rotary brush arranged within the casing and adapted to receive concrete material on its periphery from said feed opening and discharge it through said discharge opening, a driven conveyer for forcing concrete material into the casing and against the periphery of said driven brush through said feed opening, and means for supplying water to the casing at the periphery of said brush to wet the concrete material thereon.

2. The combination of a casing having a discharge opening and a feed opening, a rotary brush arranged within the casing and adapted to receive concrete material on its periphery from said feed opening and discharge it from said discharge opening, a pair of driven conveyers, one for forcing sand and the other for forcing cement through said feed opening against the periphery of said rotary brush, and means for supplying water to the casing at the periphery of said brush to wet the sand and cement upon the latter.

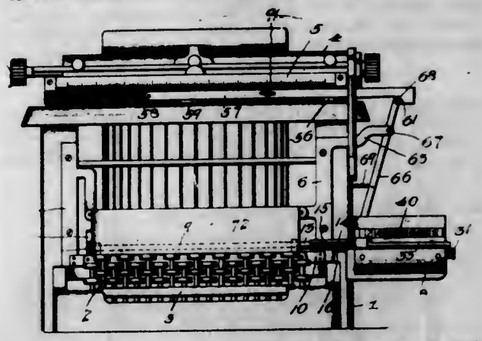
3. The combination of a circular casing having a feed opening and a discharge opening, a conveyer casing communicating with the feed opening, a hopper to supply material to said conveyer casing, a valve-controlled pipe for supplying water to the casing through the circumferential wall at a point in advance of the feed opening thereof, a spiral conveyer in the conveyer casing, a circular brush fitting snugly in the casing, means to revolve said brush, and means for transmitting power from the shaft of the brush to the said spiral conveyer.

1,065,366. WIRE-STRETCHER. CHARLES F. HURD, Reno, Nev. Filed Mar. 28, 1912. Serial No. 686,729. (Cl. 39—55.)



A wire stretcher comprising a head, pawls pivoted on the head, resilient means for holding the pawls toward each other, one of the pawls having at its opposite sides spaced lugs, the other pawl having at its opposite sides fingers which project through the spaces between the lugs, one of the pawls having at its edge fingers located in the vicinity of the upper and lower sides of the pawl, said fingers extending beyond the inner end of the pawl opposite to the pawl to which they are attached.

1,065,367. ADDING-MACHINE. OSCAR L. INGRAM, Walla Walla, Wash., assignor to Gertrude Ingram, Walla Walla county, Wash. Filed Feb. 25, 1905. Serial No. 247,371. (Cl. 235—59.)



1. The combination of a series of counter-wheels with internal gear cuts, of a series of partitions, one between each pair of wheels, each partition having an internal gear cut corresponding with the gear cut of the adjoining counter-wheels, and a selecting and operating device moving through the gear cuts of the counter-wheels and the partitions.

2. The combination of a series of counter wheels, an operating device to operate the counter wheels, a series of partitions between the counter wheels formed to engage the operating device, a selecting device, and a key bar to actuate the operating device and control the movements of the selecting device.

3. The combination with typewriter mechanisms, of a series of counter-wheels, a selecting and operating device, means to prevent the operation of the operating device during the selecting movement, a series of retarding devices and a releasing device to release the retarding devices during the operating movement.

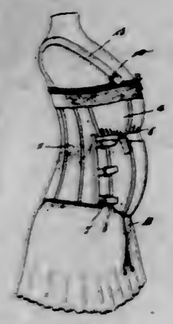
4. The combination with typewriter mechanisms, of a series of counter wheels, a corresponding series of brakes,

indicating means, a selecting and operating device, means to prevent the operating device from operating during the selecting movement, and a brake releasing device to release a counter-wind during the operating movement.

5. The combination of a series of counter-wheels and operating levers, of connecting operating means comprising a gear shaft, a rack, a switch, and means operating in connection with the switch to put the rack into and out of the line of engagement with the gear shaft.

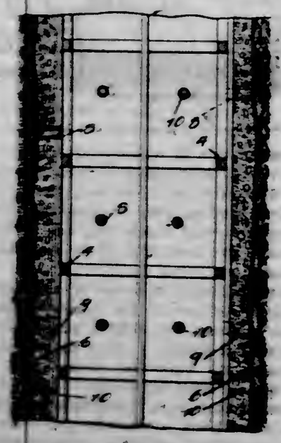
[Claims 6 to 38 not printed in the Gazette.]

1,065,366. MATERNITY-CORSET. MAY WHITE JAMES, Everett, Wash. Filed Sept. 17, 1910. Serial No. 582,469. (Cl. 2—73.)



A maternity corset comprising a pair of laced sections, each of said sections being cut away at their lower end for the major portion of their width to provide relatively flexible breast supports, a draw-string for constricting the lower edges of said supports, an abdominal support comprising a single section vertically and horizontally adjustably connected with the edges of the cut away portion of one of the said sections, straps secured to the edges of the cut away portion of the other of said sections and adapted to vertically and horizontally adjustably connect the free end of the said abdominal support, and garter tabs centrally depending from said support.

1,065,368. METHOD FOR SEALING SHAFTS, TUNNELS, AND THE LIKE. RALPH G. JOHNSON, Pittsburgh, Pa. Filed Nov. 14, 1912. Serial No. 731,404. (Cl. 61—3.)

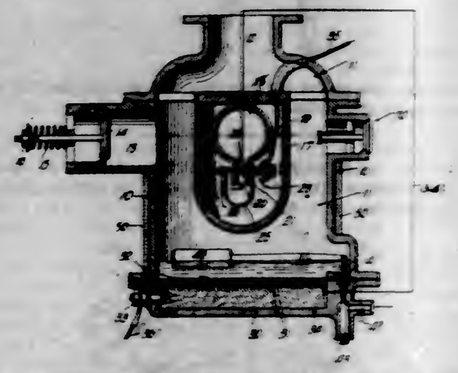


1. The herein described method which consists in providing a lined shaft with a concrete wall back of the lining and forcing sealing material under pressure through passageways formed through the wall to seal the shaft against the entrance of water.

2. The herein described method which consists in providing a timber lined shaft with a concrete wall back of the lining, forming drainage channels between the wall and the surrounding ground, extending water conducting pipes through the lining and wall into communication with the channels, and forcing a sealing material under pressure through certain of said pipes to seal the shaft against the entrance of water.

3. The herein described method which consists in providing a timber lined shaft with a concrete wall back of the lining, forming drainage channels between the wall and the surrounding ground, extending water conducting pipes through the lining and wall and into communication with the channels, to draw water into the shaft, then plugging certain of said pipes, and subsequently forcing cement grout through certain other of the pipes to seal the shaft against entrance of water.

1,065,370. CARBURETER. FRED JOHNSTON, Los Angeles, and ORLANDO E. KELLUM, Long Beach, Cal. Filed Dec. 9, 1912. Serial No. 735,832. (Cl. 48—163.)



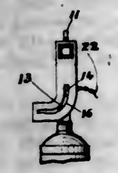
1. A carbureter, comprising a chamber for containing liquid fuel, a heat conducting bottom for said chamber, an electrical heating element immediately beneath the heat conducting bottom, a float controlled valve for maintaining a constant amount of liquid fuel in the lower part of the chamber, a thermostat chamber situated entirely within the liquid fuel chamber above the liquid level therein, a thermostat in the chamber, and a switch operated by the thermostat and electrically connected with the electrical heating element to control the supply of current thereto.

2. A carbureter, comprising a liquid fuel chamber, an electric heating element in proximity thereto, means for introducing liquid fuel to said chamber, outlet means for vapors from the liquid fuel, a thermostat within said chamber, and a switch operated by the thermostat and electrically connected to the heating element to control supply of current thereto.

3. A carbureter, comprising a liquid fuel chamber, means for passing air through the chamber over the fuel therein, a heat conducting bottom for the chamber, an electric heating element below the heat conducting bottom, a thermostat chamber within the fuel chamber, a thermostat therein, an electric switch operated by the thermostat, and an electrical circuit including the heating element and the switch in series.

1,065,371. SUPPORT FOR ELECTRIC LIGHTS. JOHN H. KELLOGG, Battle Creek, Mich., assignor to Sanitarium Equipment Company, Battle Creek, Mich. Filed July 8, 1912. Serial No. 708,183. (Cl. 248—1.)

1. In a structure of the class described, the combination of,—an upright; a cross bar mounted on said upright for vertical adjustment thereon; arms mounted on said cross bar for adjustment longitudinally thereof, said arms being adapted to be arranged in a vertical or in a horizontal position on said cross bar; lamp brackets mounted on said arms for adjustment longitudinally thereof, said brackets being adapted to be arranged in vertical or in horizontal positions on said arms and cross bar; laps on said brackets; and reflectors for said lamps adjustably mounted thereon.



2. In a structure of the class described, the combination of an upright; a cross bar; arms mounted on said cross bar to be adjusted longitudinally thereon, said arms being arranged to be adjusted in a vertical or horizontal position on said cross bar; lamp brackets mounted on said arms for adjustment longitudinally thereon and adapted to be arranged in vertical or horizontal positions on said arms; and lamps adjustably mounted on said brackets.

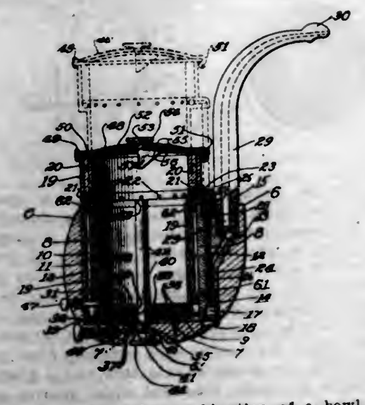
3. In a structure of the class described, the combination of an upright; a cross bar; arms mounted on said cross bar to be adjusted longitudinally thereon, said arms being arranged to be adjusted in a vertical or horizontal position on said cross bar; lamp brackets mounted on said arms for adjustment longitudinally thereon and adapted to be arranged in vertical or horizontal positions on said arms; and lamps mounted on said brackets.

4. In a structure of the class described, the combination with a supporting arm, of forked lamp brackets adjustably mounted on said arm, the bracket forks being angularly slotted, and lamp sockets having T-arms engaging said bracket slots, the slots being notched to engage said socket arms to adjustably support the same.

5. In a structure of the class described, the combination of an upright, a horizontal cross bar mounted on said upright for vertical adjustment thereon, arms mounted on said cross bar to be adjusted longitudinally thereon and adapted to be independently adjusted to vertical or horizontal positions on said cross bar, and a plurality of lamps mounted on each of said arms to be independently adjusted longitudinally thereon and adapted to be arranged thereon in vertical or horizontal positions when said arms are in horizontal positions or in horizontal positions in the plane of said cross bar when said arms are in a vertical or in horizontal positions at right angles to the plane of said cross bar.

[Claims 6 to 9 not printed in the Gazette.]

1,065,372. TOBACCO-PIPE. FREDERICK J. KIESER, Chicago, Ill. Filed Nov. 10, 1911. Serial No. 659,478. (Cl. 131—12.)



1. In tobacco-pipes the combination of a bowl having a firechamber at its upper end, and a smoke exhaust from the circumference of the firechamber, with a cover and a vertical rotatable stem penetrating the center of the cover, provided at its upper end with a knob, and at its lower end with an eccentric wing, substantially as and for the purpose described.

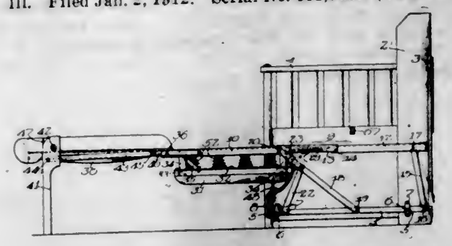
2. In tobacco-pipes, the combination of a bowl with a false bottom, springs interposed between such false bottom and the real bottom of the bowl; a vertical stem slidably mounted in the center of said bottoms and provided with a projection adapted to engage the upper face of the false bottom; means to lock said stem in raised position; and means to lock said false bottom in lowered position; substantially as and for the purpose described.

3. In tobacco-pipes, the combination of a bowl having a firechamber at its upper end, a smoke exhaust from the circumference of such firechamber, and a false bottom; with spiral compression springs interposed between such false bottom and the real bottom of the bowl; a flanged disk interposed between said springs; a vertical stem slidably mounted in the center of said bottoms and disk, and provided with a projection to engage the upper face of the false bottom; means to lock said stem in raised position; and means to lock said false bottom in lowered position; substantially as and for the purpose described.

4. In tobacco-pipes, the combination of a bowl comprising two telescoping portions with a firechamber located in the upper end of the upper portion of the bowl; a smoke exhaust from the circumference of the fire chamber; a false bottom in the lower portion of the bowl; springs interposed between such false bottom and the real bottom of the bowl; a vertical stem slidably mounted in the center of said bottoms and provided with a projection to engage the upper face of the false bottom; means to lock said stem in raised position; and means to lock said false bottom in lowered position; substantially as and for the purpose described.

5. In tobacco-pipes, the combination of a bowl comprising two telescoping portions with a firechamber located in the upper end of the upper portion of the bowl; a smoke exhaust located immediately below the firechamber; a telescoping pipe leading from the smoke exhaust to a telescoping chamber attached to the lower portion of the bowl; and a stem having an opening connecting with the lower end of the telescoping chamber.

1,065,373. SETTEE-BED. CHARLES J. KINDEL, Wilmette, Ill. Filed Jan. 2, 1912. Serial No. 668,945. (Cl. 5—48.)



1. In an article of the class described having a frame and a plurality of sections, and means for supporting said sections, one of said sections on said frame comprising a supporting frame for upholstery or the like, said frame having means whereby to resist distortion along one plane but permit it in a direction at right angles thereto.

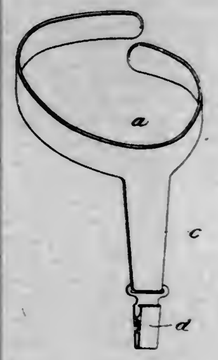
2. In a sofa bed, the combination with a frame, a main section, a seat section, a back section, said sections being pivotally secured together in such a way as to open into a horizontal alinement forming a bed surface; means mounted within said back section to permit vertical movement thereof and to resist horizontal movement when the section is used as a bed, said means comprising a back bar, a divided front bar, the members of which are spring connected and rearwardly extending members rigidly connected to the back bar.

3. As a new article of manufacture, a furniture frame section comprising a divided front bar, springs uniting the

ends of said divisions, side bars, a rear bar, rearwardly extending bars connecting the inner ends of said divided bars with the section back of said front member.

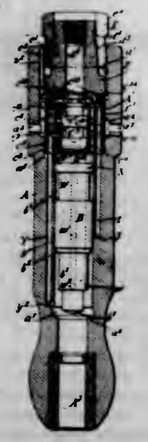
4. In a sofa bed, the combination with a frame, a main section, a seat section, a back section, said sections being pivotally secured together to open into a horizontal alinement, and means for easing the lowering of said main section when the bed is being closed, said means comprising a spring member, one end of which is secured to said seat section and the other end to the main section.

1,065,374. HOSE-SUPPORTER. JOHN C. LEE, Brookline, Mass., assignor of one-fourth to Henry N. Sweet, Boston, Mass. Filed June 6, 1911. Serial No. 631,544. (Cl. 241—6.)



A hose supporter comprising a curved band made of a single strip of thin resilient metal disconnected at its ends adapted to partly embrace the leg in such manner that the said ends will be spaced apart in the median line at the back of the leg, a depending finger integral with the band adapted to lie against one side of the median line of the leg at the front, and a gripping member connected to the free end of said depending finger.

1,065,375. PNEUMATIC TOOL. HENRY E. LE GENDRE, Cresskill, N. J., and GEORGE LEICH, New York, N. Y., assignors to E. W. Bliss Company, Brooklyn, N. Y., a Corporation of West Virginia. Filed Nov. 3, 1910. Serial No. 590,493. (Cl. 121—20.)



1. In a pneumatic tool, a valve mechanism comprising a boxing, a valve-proper and a cap, said boxing having a series of longitudinal passages therein communicating with the interior of the casing, and said cap having radial ports and passages therein communicating with said longitudinal passages, controlled by said valve-proper.

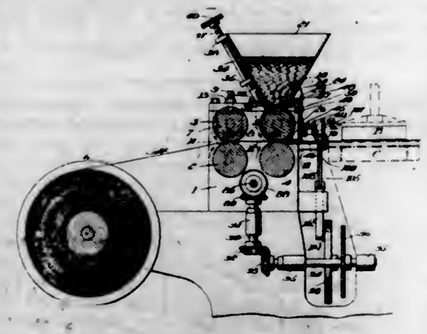
2. In a pneumatic tool, a valve mechanism comprising a boxing, a valve-proper, and a cap, said boxing having longitudinal passages therein, said cap having a longitudinal bore, radial passages passing from said bore to its exterior, and communicating with said longitudinal passages in said boxing, and said boxing having a recess in which said cap fits.

3. In a pneumatic tool, a valve mechanism comprising a boxing, a valve-proper, and a cap, said boxing having longitudinal passages therein, said cap having a longitudinal bore, radial passages passing from said bore to its exterior, and communicating with said longitudinal passages in said boxing, said boxing having a flange adapted to cover the exterior ends of said radial passages of said cap.

4. In a pneumatic tool, a valve mechanism comprising a boxing, a valve-proper, and a cap, said valve proper having a body portion and an extension of less diameter than said body portion, said boxing having passages therein and a bore in which the body portion of said valve proper is adapted to fit, and said cap having a bore in which the extension on said valve is adapted to fit and radial passages extending from said bore to the exterior of said cap, said radial passages communicating with said passages in said boxing.

5. In a pneumatic tool, a valve mechanism comprising a boxing, a valve-proper, and a cap, said valve-proper having a body portion and an extension of less diameter than said body portion, said boxing having passages therein and a bore in which the body portion of said valve-proper is adapted to fit, and said cap having a bore in which the extension on said valve is adapted to fit and radial passages extending from said bore to the exterior of said cap, said radial passages communicating with said passages in said boxing, and said boxing having a flange thereon covering the exterior ends of said radial passages in said cap.

1,065,376. PASTE-APPLYING DEVICE. HANS LEITGEB, Flushing, N. Y., assignor to Heinrich Franck Sohne and Company, Flushing, N. Y., a Firm. Filed June 15, 1911. Serial No. 633,379. (Cl. 91—14.)



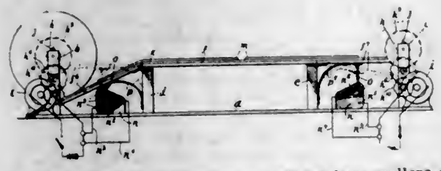
A device for spreading adhesive substance upon sheet wrappers comprising a container for the adhesive substance, a transferring roll provided with a plurality of narrow annular grooves, and a plurality of relatively wider annular grooves arranged closely together throughout substantially the entire length of the roll to receive the adhesive substance from the container and transfer said substance to substantially the entire surface of the wrappers, means for feeding said wrappers from said roll after receiving the adhesive substance and a plurality of guide fingers projecting into said wider grooves to guide the wrappers away from said transferring roll as the wrappers are fed from said roll.

1,065,377. GARMENT-FORM. ISAAC LEVIN, Brooklyn, N. Y. Filed Aug. 31, 1912. Serial No. 718,013. (Cl. 223—18.)



A garment form comprising a bust-form and a separable and independent skirt portion, the latter including upper and lower margin bands, and means secured to the lower portion of the bust-form to receive either of said margin bands to arrange the form in extended or collapsed condition.

1,065,378. MACHINE FOR EXHIBITING RUGS. JOHN LUTZ and CHARLES J. LEYES, Jersey City, N. J. Filed Jan. 22, 1913. Serial No. 743,506. (Cl. 211—23.)



A rug displaying machine comprising a base, rollers supported above the end portions of said base, a horizontal table supported between said rollers and provided with movable end members adapted to bear on the bottom thereof, a display strip or sheet of predetermined length passed longitudinally over said table and the end members thereof, and the ends of which are connected with said rollers, motors geared in connection with said rollers, clutch devices whereby said rollers may be alternately thrown into or out of operation so as to wind said strip or sheet first on one and then on the other, and devices operated by the movable end members of the table and in connection with the motors for reducing the speed of each of said rollers as said strip or sheet is wound thereon.

1,065,379. TREATMENT OF STEEL, IRON, &c. ADOLPH W. MACHLET, Elizabeth, N. J. Filed Mar. 19, 1908. Serial No. 422,046. (Cl. 148—26.)

1. The process of treating iron or steel, consisting in heating the metal in an atmosphere of ammonia.

2. The process of treating iron or steel, consisting in heating the metal to at least 900 degrees Fahrenheit and below the melting point in an atmosphere of ammonia.

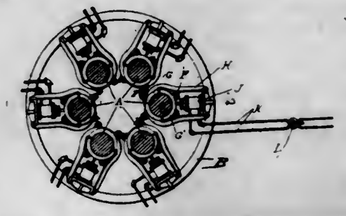
3. The herein described process, consisting of exposing iron or steel articles when heated, to an atmosphere of ammonia.

4. The process of treating steel of either low or high carbon, consisting in exposing the same when heated above redness, to an atmosphere of ammonia alone.

5. The process of passing a current of ammonia slowly over iron or steel articles while the latter are maintained in a heated condition, to form the described shell or coating upon the articles.

[Claims 6 to 17 not printed in the Gazette.]

1,065,380. ELECTRODE CONTACT-CLAMP. JAMES G. MARSHALL, Niagara Falls, N. Y., assignor to Union Carbide Company, Niagara Falls, N. Y., a Corporation of Virginia. Filed Jan. 8, 1913. Serial No. 740,871. (Cl. 204—64.)



1. In an electric furnace, the combination with an electrode, of a contact clamp, electrical connections to said clamp, a power-actuated device for operating said clamp, and means, located at a distance from the furnace, for controlling said power-actuated device.

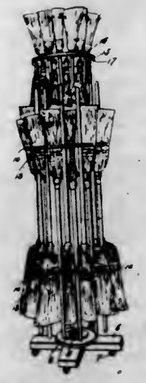
2. In an electric furnace, the combination with an electrode, of a contact clamp, electrical connections to said clamp, and a fluid-pressure-actuated device for causing said clamp to engage with and disengage from said electrode.

3. In an electric furnace, the combination with an electrode, of a contact clamping-device, means for connecting said clamping-device to a source of current, and means comprising power-actuated clamp-operating devices for changing the position of the clamping-device without stopping the operation of the furnace.

4. In an electric furnace, the combination with an electrode, of a contact clamp and electrical connections thereto, said clamp comprising jaws adapted to engage the electrode, a motor connected to one of the jaws, and means for operating said motor.

5. In an electric furnace, the combination with an electrode, of a contact clamp comprising a supporting member, a frame having one end sharped to engage one portion of the electrode, a jaw shaped to fit another portion of the electrode, a motor carried by said frame and connected to said jaw, and means for supporting the frame and jaw from the supporting member.

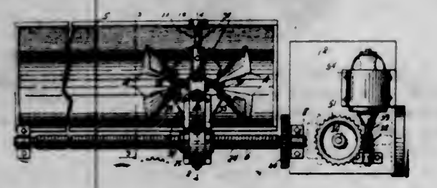
1,065,381. DISPLAY-STAND. TOUSSAINT J. MARTIN, Escanaba, Mich. Filed Apr. 15, 1913. Serial No. 761,305. (Cl. 211—14.)



1. A display stand comprising a supporting standard, and vertically spaced disks mounted on the standard, said disks having radial slots extending inward from their edges, and apertures between said slots, the apertures of the upper disk being in vertical alinement with the slots of the lower disk, and the apertures of the lower disk being in vertical alinement with the slots of the upper disk.

2. A display stand comprising a supporting standard, and vertically spaced disks mounted on the standard, said disks having radial slots extending inward from their edges and apertures between the slots, the disks being rotatable about the standard to bring the apertures of the upper disk in vertical alinement with the slots of the lower disk, and the apertures of the lower disk in vertical alinement with the slots of the upper disk.

1,065,382. DOUGH-MIXING MACHINE. WILLIAM J. MEIKLEHAM, Denver, Colo. Filed Apr. 29, 1912. Serial No. 693,811. (Cl. 107—30.)



1. In a dough-mixing machine, the combination of a trough, and a rotary mixing device movable longitudinally in the trough and including cone-shaped members having their larger extremities pointed in opposite directions, the said members having openings to make room for the dough as the mixing device travels through the trough and acts on the dough.

2. The combination of a trough, and a mixing device rotatably mounted and longitudinally movable, means for imparting both rotary and longitudinal travel to the mixer in reverse directions, the said mixer having oppositely-disposed cone-shaped members open to allow the dough to pass through the longitudinal travel of the mixing device.

3. In a dough-mixing machine, the combination with a trough, of a carriage mounted to travel longitudinally thereon, and a mixing device mounted on the carriage, the said device including two cone-shaped members having their larger extremities pointed in opposite directions, the said members having openings to allow the dough to pass therethrough, and means for imparting rotary movement to the mixing device, simultaneously with the longitudinal travel of the carriage.

4. The combination of a trough, a mixing device mounted to rotate therein and travel longitudinally thereon, the said device including two cone-shaped members whose larger extremities are disposed in opposite directions, the said members being longitudinally separated and equipped with fingers projecting into the space between them.

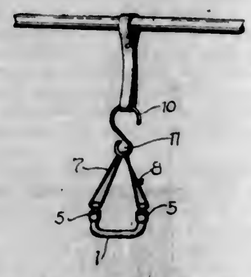
5. The combination with a trough, of a carriage mounted to travel longitudinally thereon, a short shaft journaled in the carriage and projecting therefrom on opposite sides, mixing cones having their smaller extremities respectively secured to the opposite ends of the said shaft, the larger extremities of the cones projecting in opposite directions, the cones having openings to permit the passage of the material, and means for simultaneously imparting rotary longitudinal travel to the carriage and mixing cones, substantially as described.

[Claims 6 to 11 not printed in the Gazette.]

1,065,383. INDIVIDUAL CAR-STRAP. AUGUST MILLER, Berkeley, Cal. Filed Apr. 7, 1913. Serial No. 759,509. (Cl. 105—35.)

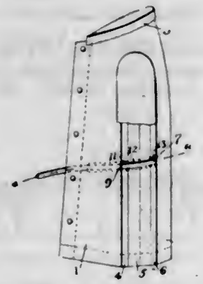
1. A device of the character described comprising a supporting hook, a U-shaped hand hold, and a flexible cord connected to the opposite ends of said hand hold and to said hook, as and for the purpose described.

2. A device of the character described comprising a supporting hook, a U-shaped hand hold, a flexible cord slidably connected to the opposite ends of said hand hold and to said hook, and means for adjusting the length of said flexible cord, as and for the purpose described.



3. A device of the character described comprising a supporting hook, a U-shaped hand hold, a flexible cord slidably and adjustably connecting the opposite ends of said hand hold to said supporting hook, said hand hold comprising a leather casing, a stiffening rod centrally arranged in said casing, and a soft packing arranged about said stiffening rod, as and for the purpose described.

1,065,384. COAT. EDWIN B. NATHAN, New York, N. Y. Filed Dec. 2, 1911. Serial No. 663,640. (Cl. 2—61.)



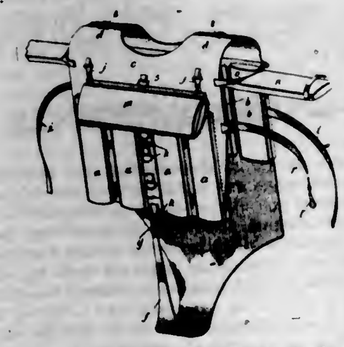
1. A coat having front sections and a back section, plaits between the front sections and back section, and a strap fastened at the exterior of the back section adjacent each plait, and passing through a slit formed in the front section adjacent the plait and into the interior of the coat, said straps being adapted to be fastened together at the front interiorly of the coat.

2. A coat having an adjustable waist comprising a plait on each side, a strap fastened on the exterior of the coat at the waist line adjacent to one edge of the plait and passing through the interior of the coat at a point adjacent to the other edge of the plait, and stiffening means for each portion of the plait arranged adjacent to the strap.

3. A coat having an adjustable waist comprising a plait at each side, and a strap fastened to the exterior of the coat and passing through to the interior and adapted to adjust the plaits, stiffening means for the portions of the plaits, and a guide in the interior of the coat and extending longitudinally of the stiffening means and adapted to have the strap passed therethrough.

1,065,385. LIFE-PRESERVER. ANNA DEANE BAILEY, New York, N. Y. Filed Aug. 17, 1912. Serial No. 715,675. (Cl. 9—17.)

1. In an appliance of the class set forth, a front member adapted to extend across the chest of the wearer, a buoyant back member adapted to extend across the back of the wearer, and means for removably and adjustably securing these members respectively against the chest and the back of the wearer, said means consisting of adjustable means connecting the upper ends of the members and extending over the shoulders of the wearer and also an adjustable device connecting the lower edges of the members, said device consisting of a broad flexible sheet of fabric attached to the lower edge of the back member and depending therethrough, the lower end of this fabric sheet having attached to it a strap which is adapted to be folded upwardly and adjustably connected to the front member.



2. In an appliance of the class set forth, a buoyant member adapted to extend across the back of the wearer, and means for removably and adjustably securing these members respectively against the chest and the back of the wearer, said means consisting of adjustable means connecting the upper ends of the members and extending over the shoulders of the wearer and also an adjustable device connecting the lower edges of the members, said device consisting of a flexible fabric sheet having a width approximately equal to said back member and depending from the lower edge of said back member and being provided at its lower end with a flexible strap, said strap being adapted to be extended upwardly for adjustable connection to the front member.

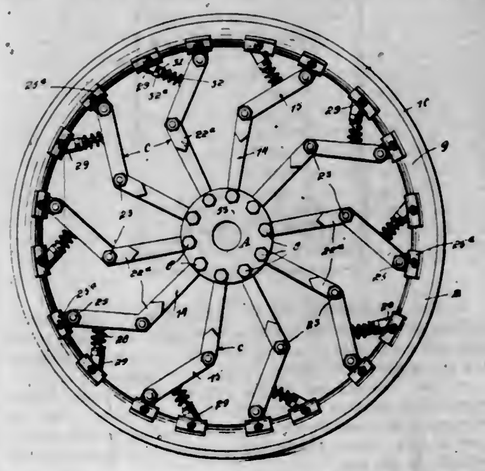
3. In a device of the class set forth, vertical buoyant body members and means for connecting them together and for fastening them to the body of the wearer, said means embodying adjustable shoulder straps and a depending flexible seat apron attached to the back member and having a width approximating the same and a strap connected to the free end of said apron, means being provided for adjustably attaching this strap to the face of a front body member, buoyant pillows connected to the front and back members, and a buoyant arm pillow member flexibly connecting the front and back members and provided each with a loop at its outer end for engagement with the hand or arm of the wearer, whereby the wearer may maintain himself in a sitting position in the water and use the arm pillows to assist in balancing and propelling himself in the water.

4. In a device of the class set forth, vertical buoyant body members and means for connecting them together, and for fastening them to the body of the wearer, and a buoyant pillow or float flexibly connected to the front member and extending across the front and at the upper edge thereof, and a flexible object holding strap connected at one end to one edge of the front member and means for connecting its other end to the front member at a point above said pillow.

5. In a device of the class set forth, the combination of a buoyant back member, a buoyant front member, and means for attaching said members adjustably to the body of the wearer, and a buoyant arm member attached to each side of the appliance, each arm member being flexibly attached to both the front and the back members so as to be capable of a vertical swinging movement, and each arm member being elongated and provided at its outer end on its upper side with a loop for engagement with the hand or arm of the wearer.

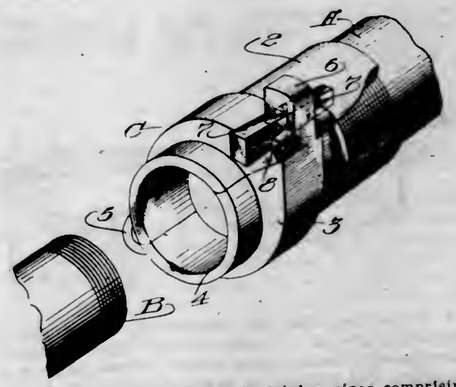
1,065,386. SPRING-WHEEL. FRANK J. NICOLET, Stockdale, Ohio. Filed June 19, 1912. Serial No. 704,700. (Cl. 152—28.)

In a spring wheel, the combination with a hub and rim, of a plurality of spokes pivotally connected at their ends to the hub and rim and consisting of inner and outer pivotally connected sections, the outer section of each spoke being disposed at a tangent to the hub and formed with a transverse opening, a guide rod disposed at right angles to the outer section and having its outer end connected to



the rim, the inner end of said rod operating in the opening of the outer section, a coil spring disposed around the rod and bearing against the outer section, and tensioning means carried by the rod and engageable with the other end of the spring.

1,065,387. PIPE-FITTING TOOL. JAMES OGG, Pahala, Hawaii. Filed Jan. 4, 1912. Serial No. 669,448. (Cl. 29—88.2.)

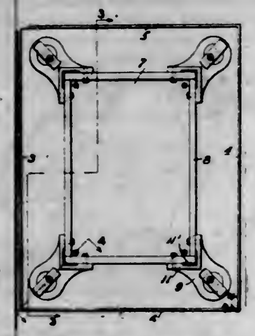


A pipe fitting tool for use in joining pipes comprising, two semi-cylindrical sections hinged together, said sections being provided with a clamping face adapted to fit the flange of a pipe, a guiding portion adapted to guide the end of a pipe into the said flange, an annular shoulder formed upon said sections between said clamping face and said guiding portion and an annular groove adjacent said shoulder and said clamping face, the outer end of said clamping portion being beveled outwardly, and locking means for clamping said clamping face upon a pipe flange.

1,065,388. PANEL-BOARD SUPPORT FOR OUTLET-BOXES. WILLIAM F. O'NEILL, Wilkinsburg, Pa. Filed June 28, 1912. Serial No. 706,422. (Cl. 247—13.)

1. The combination of an outlet box, a panel board, and rotatable devices operatively connected to the box and to the board and adapted when rotated to adjust the board relatively to the box.

2. The combination of an outlet box, a panel board, movable supports for securing the board to the box, and eccentric devices for adjusting the supports.



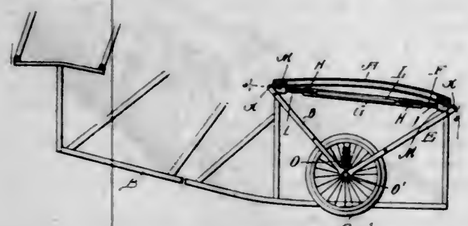
3. The combination of an outlet box, a panel board, devices secured to the board and movable relatively to the box, and eccentrics rotatably secured to the box and engaging the supports for moving and for securing the latter.

4. The combination of an outlet box, a panel board, supporting devices secured to and projecting from the corners of the board with a circular opening in each device, and circular heads within the openings and secured eccentrically to the box.

5. The combination of an outlet box, a panel board, supporting devices secured to and projecting from the corners of the board with a circular opening in each device, a circular head within each opening and flanged to engage the outer face of the supporting device with openings formed eccentrically through the heads, and screws securing the heads to the box with the heads rotatable on the screws.

[Claims 6 to 9 not printed in the Gazette.]

1,065,389. AEROPLANE. HARRY A. ORME, Wesley Heights, D. C. Filed Oct. 8, 1910. Serial No. 585,996. (Cl. 244—2.)



1. In an aeroplane, the combination with a pair of supporting wheels, of frames in which said wheels are mounted, said frames being pivoted to the plane of an aeroplane, and adapted to swing outwardly in opposite directions.

2. In an aeroplane, the combination with a supporting wheel, of a yielding frame in which said supporting wheel is mounted, said frame being connected to the plane of the aeroplane, means for normally holding the wheel frame in a perpendicular position together with means for elevating said wheel frame outwardly and laterally, for the purpose specified.

3. In an aeroplane, the combination with supporting wheels, frames carrying said wheels, said frames being pivotally connected to a plane of the aeroplane, means for normally holding said wheeled frames in parallel relation, means for releasing said frames, and means for swinging said frames upwardly and outwardly.

4. The combination with a wheel, of the forks in which said wheel is mounted, rods to which the upper ends of the forks are connected, a tubular member into which the rods slide and a spring connection between said sliding rods, as set forth.

5. The combination with a supporting wheel, of a triangular shaped frame in which said wheel is mounted, the upper member of said frame being capable of expansion and contraction longitudinally, as set forth.

1,065,390. STRAP-LOCK. HENRY J. PALMER, Greensboro, N. C. Filed Oct. 18, 1911. Serial No. 655,351. (Cl. 24—19.)



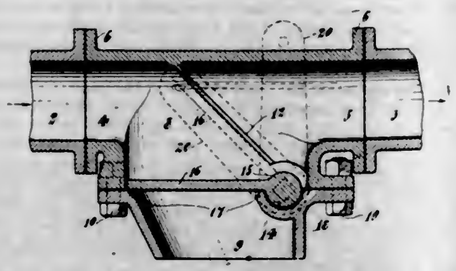
1. A device as described consisting of a channel member having side walls and a bottom wall the entire length thereof, a strap one end of which is adapted to project through said channel member, pins projecting inwardly from said bottom, a hinge lever top having a longitudinal opening therein, a series of opposing lugs on said top projecting inwardly and adapted to prevent the disengagement of said strap from said pins, and a bar on the opposite end of said strap adapted to be held by said lugs.

2. A device as described consisting of a rectangular member having a bottom wall extending its entire length, and side walls projecting from said bottom, a hinged lever top having a cam thereon, a strap adapted to be held against said bottom by said cam, said strap having a bar on one end thereof adapted to be engaged by said top, said top having a longitudinal slot therein, a series of opposing inclined lugs projecting from said top whereby said bar may be adjustably held, said strap adapted to project entirely through said device and lie flat against said bottom its entire length, pins projecting upwardly from said bottom adjacent said lugs to engage openings in said strap, said lugs adapted to hold said strap from rising out of contact with said pins.

3. A device as described consisting of a channel member having bottom and side walls and a strap adapted to be engaged by said device, pins projecting from said bottom, a hinged top having inwardly projecting lugs adapted to hold said strap in engagement with said pins, a cam and a lock carried by said top adapted to hold said strap.

4. A device as described consisting of a channel member having bottom and side walls and a strap member adapted to be engaged by said device, pins projecting from said bottom, a hinged top having inwardly projecting lugs adapted to hold said strap in engagement with said pins, a cam and a lock carried by said top adapted to hold strap member, a bar at one end of said strap adapted to engage said top, said lugs being inclined to hold said bar.

1,065,391. MUFFLER CUT-OUT. ARTHUR PIEL, New York, N. Y. Filed Jan. 17, 1911. Serial No. 603,130. (Cl. 137—26.)



1. In a muffler cutout the combination with the exhaust pipe, of a drum secured in the line of said pipe, and having a circumferential inclined valve seat formed integral therewith, a by-pass detachably secured to said drum and communicating therewith, a valve mounted on said by-pass and normally engaging a seat provided on said by-pass, and means for causing said valve to engage with said circumferential valve seat and completely close the passage through the exhaust pipe.

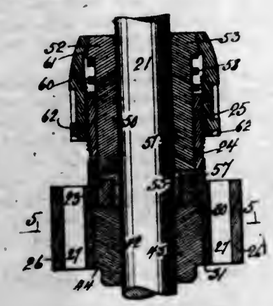
2. In a muffler cutout the combination with an exhaust pipe, a drum secured in line therewith, a by-pass secured to said drum and having a larger cross-sectional area than the exhaust pipe, and means adapted to be arranged at an angle to the normal path of the gases through said exhaust pipe to deflect said gases into the by-pass through a passage having a constantly increasing cross-sectional area substantially as described.

3. In a muffler cutout the combination with the exhaust pipe, of a drum in said exhaust pipe in line therewith, a by-pass secured at an angle to said drum and having a greater cross-sectional area than said drum, a valve adapted to seat on the end of the by-pass and close the same in its lowered position and to seat against the inner wall of the drum and close the passage therethrough in its raised position; said valve in its raised position being arranged at an angle to the axis of the exhaust pipe and in a plane approximately parallel to the opposing wall of the by-pass.

4. In a muffler cutout the combination with the exhaust pipe, of a central section detachably secured to the exhaust pipe line and having a larger cross-sectional area than the exhaust pipe, a circumferential inclined valve seat formed integral with said central section, a by-pass secured to said central section and having a greater cross-sectional area than said central section, a valve adapted to engage said valve seat in the central section and completely close the passage through the exhaust pipe, whereby the exhaust gases may be deflected through a constantly enlarging passage.

5. A muffler cutout comprising a central section adapted to be detachably secured in an exhaust pipe line and having a circumferential internal flange integral therewith and angularly arranged with respect to the exhaust pipe line, a by-pass pipe detachably secured at an angle to said central section and having its end forming a valve seat symmetrical with respect to said internal flange, a valve in said cutout adapted to engage said seat and close the by-pass in its lowered position and to engage said flange and close the exhaust line in its raised position, said valve in its raised position forming one wall of a continuous passage from the exhaust pipe to the by-pass of a gradually increasing cross-sectional area.

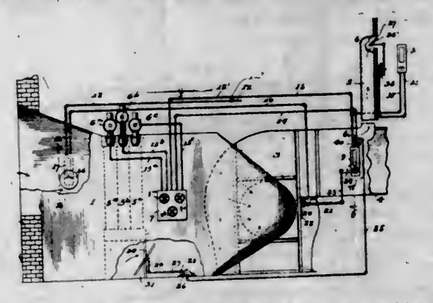
1,065,392. FRONT HEAD FOR DRILL-CYLINDERS. GEORGE S. POWER, Nutley, N. J. Filed Dec. 8, 1910. Serial No. 596,202. (Cl. 121—109.)



1. In a front end for a cylinder the combination of a head, a threaded neck formed with said head, a packing nut having a tapered opening at one end and indentations on the other end thereof in threaded engagement with said neck, a split bushing in said head, separated halves for the bushing, a packing between said halves, tapered shouldered ends for the members of one of said halves, the said tapered ends registering with the tapered opening of the packing nut, a spring bearing between the outer edge of said neck and the shoulders of said packing, a latch bolt supported in a pocket in said head, a spring between the bottom end of the bolt and the bottom of said pocket, said bolt located so that its upper end will lock with any one of said indentations of the packing nut with the latter in proper position.

2. In a front end for a cylinder the combination of a head, a threaded neck formed with said head, a packing nut having a tapered opening at one end and spherical shaped indentations at the other end thereof in engagement with said neck, a split bushing in said head, separated halves for the bushing, tapered shouldered ends for the members of one of said halves registering with the tapered opening of the packing nut, the members of the other half bearing against a shoulder formed in the head, packing between the halves of the bushing, a spring bearing between the outer edges of said neck and the shoulders of said bushing, a cylindrical latch bolt supported in a pocket in said head and having a semi-spherical outer end, the said end of the bolt being in the path of said indentations, and a spring between the bottom end of the bolt and the bottom of said pocket.

1,065,393. AUTOMATICALLY-REGULATED HEATING SYSTEM. DONALD J. POWERS, New York, N. Y. Filed June 16, 1910. Serial No. 567,205. (Cl. 236—8.)



1. In a heating and ventilating system, the combination of means for heating air, means for delivering the heated air, a controlling thermostat affected by the heat of the delivered air, connected to control the heat thereof and adjustable to raise and lower the range of temperatures over which it is effective, and a master thermostat located to be affected by the temperature of the out-door air to be heated and serving to effect the adjustment of the controlling thermostat.

2. In a heating and ventilating system, the combination of an intake chute communicating at its inlet with outside air, means at the outlet end of said chute for drawing air through said chute, heaters interposed in said chute between the inlet and outlet ends thereof for heating the air flowing through said chute, an adjustable controlling thermostat influenced by the temperature of the outflowing air, pressure-controlled mechanism for regulating said heating mechanism, the pressure in said pressure-controlled mechanism being controlled by said adjustable thermostat in accordance with the temperature of the outflowing air, and thermostatic mechanism, controlled by the temperature of the inflowing air, arranged to automatically control the adjustment of said adjustable controlling thermostat.

3. In a heating and ventilating system, the combination of heating mechanism for heating air, means for delivering the heated air, a controlling thermostat influenced by the temperature of the delivered air, means controlled by said thermostat for regulating the heating mechanism, said thermostat being adapted to be set for operating through varying ranges of temperature, and means controlled by the temperature of the air to be heated for automatically controlling the setting of said thermostat.

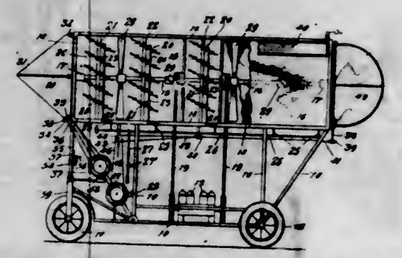
4. In a heating and ventilating system, the combination of heating mechanism for heating air, means for delivering the heated air, a thermostat influenced by the temperature of the delivered air, means controlled by said thermostat for regulating the heating mechanism, said thermostat

being adapted to be set for operating through varying ranges of temperature, and a master thermostat mechanism for automatically controlling the setting of said first mentioned thermostat in accordance with the temperature of the air to be heated.

5. In a heating and ventilating system, the combination of a structure forming an inlet passageway, heater mechanism in said passageway, means for drawing outside air through said passageway to be heated by said heating mechanism and for delivering the heated air, pressure-controlled valve mechanism for said heating mechanism, a source of pressure, a pressure-controlled relay for determining the connection of each pressure controlled valve with said source of pressure, a secondary thermostat controlled by the temperature of the delivered air, valve mechanism controlled by said thermostat for gaging the pressure of said relays, said thermostat being adapted to be set to operate through varying ranges of temperature, and master thermostatic mechanism for controlling the setting of said first mentioned thermostat in accordance with the temperature of the outside air to be heated.

[Claims 6 to 10 not printed in the Gazette.]

1,065,394. FLYING-MACHINE. WILLIAM RABSILBER, New York, N. Y. Filed Sept. 19, 1912. Serial No. 721,113. (Cl. 244—14.)



1. A flying machine of the heavier-than-air type, including an open-ended tubular body; tiltable sustaining planes mounted therein; propellers mounted between said planes; and driving mechanism for actuating said propellers.

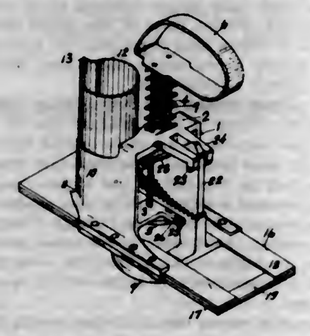
2. A flying machine of the heavier-than-air type, including an open-ended tubular body; a plurality of sets of tiltable sustaining planes mounted transversely of said body, each set of said planes consisting of a series of planes arranged one above the other; a plurality of propellers which alternate with said sets of sustaining planes from front to rear of said body and direct the air passing therethrough against said planes; and driving mechanism for actuating said propellers.

3. A flying machine of the heavier-than-air type, including a vehicle; an open-ended tubular body carried thereby; tiltable sustaining planes mounted in said tubular body; propellers mounted between said planes; and driving mechanism for actuating said propellers.

4. A flying machine of the heavier-than-air type, including an open-ended tubular body; tiltable sustaining planes mounted in said tubular body; propellers mounted between said planes; driving mechanism for actuating said propellers; and foldable wings carried by said tubular body.

1,065,395. BOTTLE-CAPPING MACHINE. JOHN H. RASE, Pittsburgh, Pa. Filed Jan. 31, 1911. Serial No. 605,747. (Cl. 226—5.)

1. A bottle capping machine comprising upper and lower plates spaced apart vertically and respectively provided with openings spaced apart horizontally, a pair of standards secured to said plates and supporting a magazine over the opening in the upper plate, a slide movable between said plates and adapted to receive a bottle cap from the magazine and carry it to position over the opening in the lower plate, a cross bar connecting said standards, a plunger slidably mounted in said cross bar over the opening in the lower plate and arranged to force a bottle cap from said slide into a bottle mouth, a rack bar connected to said slide, a gear segment pivotally supported on said cross bar and engaging said rack bar and operatively connected to said plunger, and a spring engaging the upper cross bar and plunger and arranged to move said slide to position with its opening beneath the magazine.



2. In a bottle capping machine, the combination with a frame, of a plunger movable vertically therein and having a circular head, a magazine adjacent to the plunger, a slide to receive the caps and transfer them from the magazine to a position underneath the plunger, and operative connections from the plunger to the slide whereby the actuation of the plunger moves the slide, said slide having a notch to receive the integral tab of the cap, and said plunger head arranged to force a cap into a circular bottle mouth and simultaneously bend its tab normal to the cap.

3. In a bottle capping machine, the combination of a frame, a cap feeding member movable therein and having a notch to receive the integral tab of a cap, a movable plunger for transferring caps to the bottle mouth, said plunger being formed with a head corresponding in shape to the body of the cap and arranged to simultaneously seat the same and bend the tab normal to the body.

4. In a bottle capping machine, the combination of a frame, a plunger movably mounted therein, a magazine adjacent to said plunger, a slide arranged to transfer bottle caps from the magazine to a position underneath the plunger, a rack connected to said slide, a gear segment engaging the rack, and a cam and pin connection between the segment and the plunger whereby the movement of the plunger moves said slide, said cam being so shaped as to give full movement to the slide during the first portion of the downward movement of the plunger and hold said slide immovable during the remainder of the downward movement of the plunger and until the plunger in its upward movement has cleared the slide and then return the slide to position with its opening underneath the magazine.

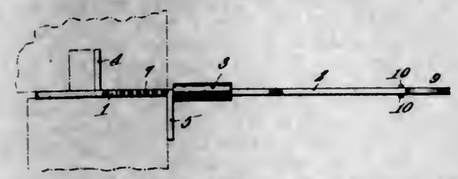
5. In a bottle capping machine, the combination of a frame, a movable plunger comprising two parallel rods or members carrying the plunger head, a slide adapted to transfer bottle caps to a position underneath the plunger, a rack bar connected to said slide and adapted to project above the plunger head between the two rods or members thereof, a gear segment engaging the rack, and a cam and pin connection between said gear segment and plunger, whereby movement of the plunger positively moves the slide.

[Claims 6 to 9 not printed in the Gazette.]

1,065,396. DOOR-SECURER. HOWARD A. ROSE, Fort Scott, Kans. Filed Aug. 1, 1912. Serial No. 712,826. (Cl. 16—8.)

1. A door securer, including two interlocking members, each of which has an outstanding tongue at right angles to the body portion of the member, said members being positioned in such relation that the two tongues are disposed in opposite directions, and a sleeve surrounding the adjacent portions of the members to hold the members together.

2. A device of the type described, including two interlocking bar-members having oppositely extending tongues, respectively, near one, and the corresponding end, and a sleeve slidable upon the bar-members and aiding to produce their interlocking action, said bar-members having intermeshing teeth to effect such interlocking action.

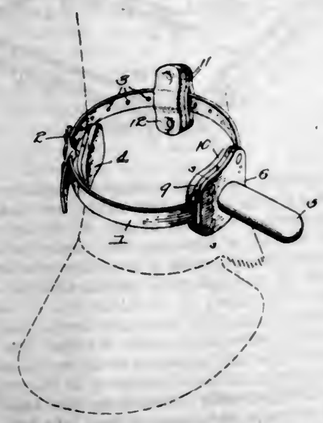


3. A device of the type described, including two interlocking bar-members, with intermeshing teeth therebetween, the teeth of one bar-member extending only through part of its length, and the teeth of the other bar member extending through its entire length, said bar-members having oppositely extending right angled tongues, respectively, arranged with respect to one, and the corresponding end, and a sleeve slidable upon said bar-members for aiding the locking action therebetween.

4. A device of the type described, including two bar-members intermeshed for interlocking action and having oppositely extending right-angled tongues arranged with respect to one, and the corresponding end thereof, a sleeve slidable upon, and aiding to produce the interlocking action between said bar-members, one of said bar-members having a finger-looped end and a cross-stud at said end adapted to form a stop for said sleeve to guard against its casual displacement.

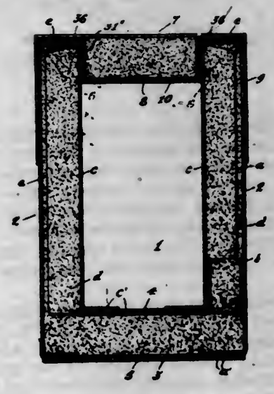
5. A door securer, including two plates, coacting means carried thereby to permit the interlocking of the plates, a tongue formed at right angles to the body of each plate, said tongues when the plates are interlocking extending laterally of the plates and in opposite directions, the tongue of one member being of greater width than its carrying plate, to, when the plates are interlocked, be positioned, at right angles to the other plate, and a sleeve slidable upon said plate to aid in the interlocking action.

1,065,397. INTERFERING-BOOT FOR HORSES. ALBERT SCHWEMBERGER, New Albany, Ind. Filed May 22, 1912. Serial No. 698,877. (Cl. 54—82.)



An interfering boot comprising a strap, means for connecting the ends of the strap, a pad adapted to cover said fastening means, leather plates secured together and arranged upon opposite sides of said strap, a metal washer carried by the inner face of one of said plates, a fender arranged upon the outer face of the same plate, a screw passing through said washer and into said fender, the leather strap covering said washer, a pad carried by the other plate, and a third pad carried by the strap between the last mentioned pad and the free end of the strap, said third pad being adjustable along the strap and having its longer axis arranged at right angles with respect to the longer axes of the previously mentioned pads.

1,065,398. RECEPTACLE. CHARLES SCUDDER, Seattle, Wash., assignor, by direct and mesne assignments, to Scudder-Haas Manufacturing Co., a Corporation of Washington. Filed Feb. 24, 1912. Serial No. 679,782. (Cl. 229—16.)



1. A receptacle comprising a body open at one end portion and having an expansible side wall of relatively movable sections, a closure for said body having a flange for engagement with the outer side face of said body, and means on said closure for relatively moving the sections and expanding the wall of said body outwardly against the flange of the closure.

2. A receptacle comprising a body formed of hollow flexible walls connected at their adjacent side edge portions and having portions separable, said body being open at one end, a closure for the last named end of said body, an edge flange on said closure for engagement over the side walls of said body, and means on said closure for separating the said portion and pressing the side walls of said body outwardly against said flange.

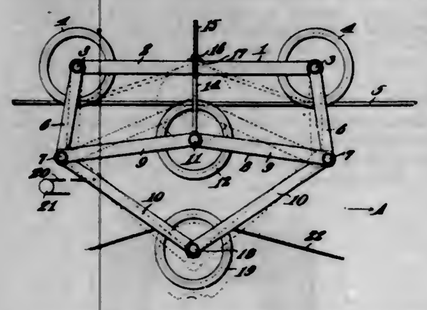
3. A receptacle comprising a body having side walls formed of spaced inner and outer sections connected at the outer edges of their opposing side portions, said body being open at one end, a closure for the last named end of said body having a flange for engagement over the walls thereof, and expanding members on said closure that operate transversely of the inner and outer sections of the side walls of said body during seating of said closure.

4. A receptacle comprising a body formed of hollow flexible walls comprising inner and outer sections connected at the outer edges of their opposing side portions, said body being open at one end, a closure for the last named end of said body having a flange for engagement over the walls thereof, expanding members on said closure that engage between the opposing edges of the inner sections of the walls of said body during seating of said closure, and a projecting filter part for the open end of said body carried by said closure to oppose inward expansion of said body walls by said members.

5. In a receptacle, a body comprising side walls, composed of relatively spaced inner and outer sections, the outer sections of said walls being joined to one another, outwardly folding corner connections joined to the adjacent inner sections of said side walls and normally disposed crosswise of the space between the component wall sections, and means for securing said corner sections in folded condition.

[Claims 6 to 14 not printed in the Gazette.]

1,065,399. OVERHEAD HOISTING-TROLLEY. BENJAMIN SHEPHARD SPAULDING, Arcata, Cal. Filed Jan. 11, 1913. Serial No. 741,599. (Cl. 212—91.)



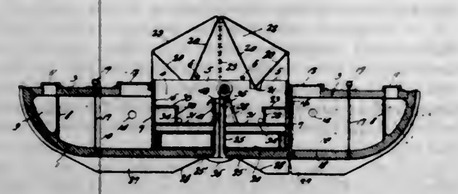
1. In a device of the class described; a support; primary pulleys carried by the support; a yieldable frame located below the support; a secondary pulley carried by the yieldable frame; a sheave carried by the yieldable frame below the secondary pulley; links connecting the yieldable frame with the support; and adjustable means for varying the relative positions of the frame and the support to move the secondary pulley toward and away from the primary pulleys.

2. In a device of the class described, a support; primary pulleys carried by the support; a yieldable frame located below the support; a secondary pulley carried by the yieldable frame; a sheave carried by the yieldable frame below the secondary pulley; links connecting the yieldable frame with the support; a tie connected with the yieldable frame; and adjustable means on the tie for engaging the support to move the secondary pulley toward and away from the primary pulleys.

3. In a device of the class described, a support; primary pulleys carried by the support; a quadrilateral frame located below the support; links connecting the ends of the frame with the support; a secondary pulley located at one angle of the frame; and a sheave located at the opposite angle of the frame.

4. In a device of the class described, a support; primary pulleys carried by the support; a quadrilateral frame located below the support; links connecting the ends of the frame with the support; a secondary pulley located at one angle of the frame; a sheave located at the opposite angle of the frame; and an adjustable connection between the first specified angle of the frame and the support.

1,065,400. SEA-SAFE AND SUPPLY BOAT. BENJAMIN S. SPAULDING, Arcata, Cal. Filed Feb. 24, 1913. Serial No. 750,391. (Cl. 9—4.)



1. A life boat comprising a hull; midship bulkheads extending transversely of the hull and defining a cockpit; a floor connecting the bulkheads; a tank located below the floor; a well extended through the floor and through the tank and constituting means for maintaining the tank in place; an anchor stowed in the well; and means in the cockpit for raising and lowering the anchor.

2. A life boat comprising a hull provided with a cockpit; a well located in the cockpit and provided with an outstanding flange; keels secured to the hull and overlapping the flange to hold the well in place; an anchor stowed in the well and provided with a head engaged between the ends of the keels; and means in the cockpit for raising and lowering the anchor.

1,065,401. PROCESS OF REMOVING ENAMEL FROM ENAMELED GOODS. GUSTAV SPITZ, Brünn, Austria-Hungary, assignor to Goldschmidt Detinning Company, New York, N. Y., a Corporation of New Jersey. Filed May 12, 1910. Serial No. 560,861. (Cl. 87—5.)

1. The process of removing enamel from enameled goods, which consists in first covering such goods with a paste of caustic alkali, heating the articles, and then dissolving the formed soluble compounds.

2. The process of removing enamel from enameled goods, which consists in first covering such goods with a paste of a substance which when heated acts as a custic alkali, heating the articles, and then dissolving the formed soluble compounds.

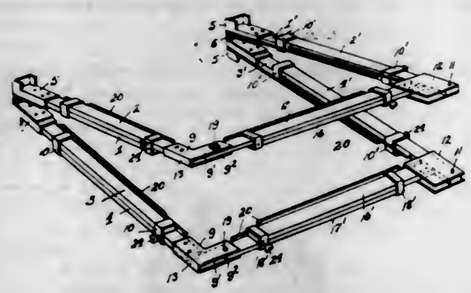
3. The process of removing enamel from enameled goods, which consists in first covering such goods with a paste containing a mixture of caustic alkali and alkali carbonate, heating the articles, and then dissolving the formed soluble compounds.

4. The process of removing enamel from enameled goods, which consists in covering such goods with a paste of caustic soda, heating the mass and dissolving the formed soluble compounds by treating the mass with water.

5. The process of removing enamel from enameled goods, which consists in covering such goods with a paste of a mixture of caustic soda and carbonate of soda, heating the mass and dissolving the formed soluble compounds by treating the mass with water.

[Claim 6 not printed in the Gazette.]

1,065,402. CURTAIN-STRETCHER. WALDO B. STEARNS, Mishawaka, Ind. Filed Dec. 4, 1912. Serial No. 734,809. (Cl. 45—24.)



1. A curtain stretcher comprising side rails hinged intermediate their ends, end rails, one set of corner pieces connecting the ends of one of the side rails with one end of each of the end rails, other sets of corner pieces connecting the ends of the other side rail with the other ends of the end rails, means whereby one of the end rails when folded on its hinge can be swung in an arc of substantially 270° to a position in close proximity with the end rails, and means whereby the other end rail when folded may be swung in an arc of substantially 90° to a position in close proximity to the end rails.

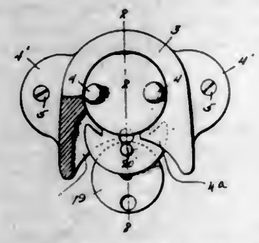
2. A curtain stretcher comprising side rails each composed of two sets of adjustable bars, the sets of bars of each side rail being hingedly connected together, abutting means carried by the hinged ends of each set of adjustable bars, and a clip adapted to straddle said abutting ends for clamping same together.

3. In a curtain stretcher comprising side rails composed of sets of adjustable bars, hinged coupling members between the sets of bars of each side rail, flanges carried by the under surfaces of the coupling members, and adapted to normally abut, and a clip adapted to straddle and hold the flanges in abutting relation.

4. A curtain structure comprising side rails hinged intermediate their ends and composed of a plurality of sliding sections, end rails composed of a plurality of sliding sections, angular corner pieces secured to the ends of one of the side rails, corner plates secured to one of the ends of each end rail, means for pivotally securing the other end of each end rail to the angular corner pieces, and means for pivotally securing the ends of the other side rail to the corner plates.

5. A curtain stretcher comprising side rails, each hinged intermediate their ends, whereby each side rail may be folded upon itself, angular corner pieces secured to the ends of one of the side rails, said angular corner pieces being composed of two L-shaped plates spaced apart and connected together by a web, end rails, substantially rectangular corner pieces secured to one end of each end rail, said rectangular corner pieces being composed of two plates spaced apart and connected by a web along the inner edges of the plates, pivotal means for securing the ends of the other side rail between the plates of the rectangular corner pieces, said pivotal means passing through the outer corners of the plates, and pivotal means for securing the other ends of the end rails between the L-shaped plates of the angular corner pieces.

1,065,403. CHECK-LOCK. SCOTT STEWART, Rivesville, W. Va. Filed Oct. 14, 1911. Serial No. 654,656. (Cl. 40—15.)

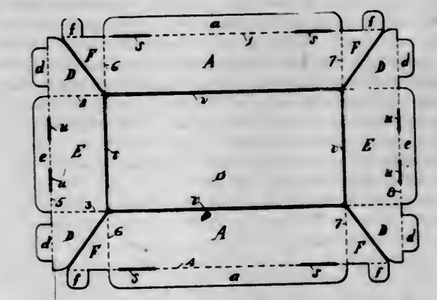


1. A check lock of the character described, comprising a casing provided with an opening extending therein, a check for insertion within the opening and provided with a key-hole opening so arranged thereon that its large portion will be located in the casing when the check is in its locked position, means for locking the check with the casing, and a second check provided with a headed stud, which stud is adapted for insertion within the key-hole opening.

2. The combination with an outer casing having a main recess, of a locking device including a shell mounted in the recess, a check for detachable connection with the locking device and including a large body portion having a reduced shank for insertion within the shell while the large body portion remains exposed exterially of said shells, and ears formed upon the outer casing and over-lapping portions of the shank and large body portion, to protect said shank and body portion and prevent the check from being broken off adjacent the base of the shank.

3. In a check lock, a casing to be attached to a tilting car body for bodily movement therewith and provided with a normally inclined tortuous ball receiving runway, a ball permanently mounted in said tortuous runway, a check having a portion provided with a normally inclined tortuous runway adapted to be moved into and out of perfect registration with the first named tortuous runway when said ball is in both runways, whereby the ball is positively held against movement when said runways are out of perfect registration and prevented from forced rotation by jars or the like when the two runways are in perfect registration and said device is in a vertical position.

1,065,404. METALLIC BOX. JOSEPH B. ST. HELENS, Rochester, N. Y. Filed May 2, 1912. Serial No. 694,614. (Cl. 220—8.)



1. A metallic blank for a box comprising a centrally disposed bottom member having side members extending outwardly therefrom; one of the adjacent ends of adjacent side members carrying an end flap adapted, when said adjacent side members are bent to position to form sides of the box, to be bent to lie against and in a plane parallel with the other side member and having its upper edge extended in a line comprising the upper edge of the box and substantially coincident with the upper edge of the side of the box formed by the other side member and said other side member having a longitudinally extending side flap adapted to be bent down over said first named flap whereby said first named flap operates, by engagement in the line of the fold between the second named side member and the longitudinally extending side flap thereon when folded down over the first named flap, to hold the first named side member against outward movement independently of any frictional engagement of such first named flap against and between the second named side member and the longitudinally extending side flap folded down therefrom, said second named side member having a slit therein approximately at the fold between the same and the longitudinally extending side flap thereon and the end flap on said first named side member carrying an ear or lug adapted to engage through said slit and be folded down against the other side member.

2. A metallic blank for a box comprising a centrally disposed bottom member having side members extending outwardly therefrom; each of the adjacent ends of adjacent side members carrying end flaps adapted when said adjacent side members are bent to position to form sides of the box to be bent to lie against and parallel with the other side member and having its upper edge extended in a line comprising the upper edge of the box and substantially coincident with the upper edge of the side of the box formed by the other side member, each of said side members having also a longitudinally extending side flap adapted to be bent down over the first named flap on the other side member whereby each of said first named flaps operates, by engagement in the line of the fold between the other side member and the longitudinally extending side flap thereon when folded down over the first named flap, to hold the corresponding side member carrying the same against outward movement independently of any frictional engagement of such first named flaps against and between the side members and the longitudinally extending side flaps folded down therefrom, each of said adjacent side members having a slit therein approximately at the line of the fold between the same and the longitudinally extending flap thereon and the end flaps on each of said side members each carrying an ear adapted to engage through the slit on the other side member and be folded down against the other side member, said end flaps on each of the side members adapted to be folded each one of them against the other side member, one on the outside and the other on the inside of the box.

3. A metallic blank for a box having a bottom carry-

ing side members, with one side member of each pair of adjacent ones thereof carrying a flap adapted to lie in a plane parallel and adjacent to the plane of the other one of such adjacent side members and with an ear or lug carried by such other side member of the pair adapted to be bent down over the upper and free edge of the flap carried by the first named one of such adjacent side members, for holding the parts in proper relation, two opposite and parallel ones of the side members each carrying at its upper and free edge, a longitudinally extending flap member adapted to be formed to coöperatively and slidably engage with members carried by a cover for holding the same in place.

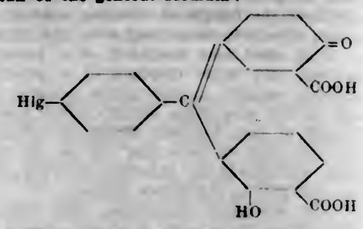
4. A metallic box formed from a blank comprising a centrally disposed bottom member having side members extending outwardly therefrom; one of the adjacent ends of adjacent side members carrying an end flap folded to lie against and in a plane parallel with the other side member and having its upper edge extended in a line comprising the upper edge of the box and substantially coincident with the upper edge of the side of the box formed by the other side member and said other side member having a longitudinally extending side flap bent down over said first named flap whereby said first named flap operates, by engagement in the line of the fold between the second named side member and the longitudinally extending side flap thereon when folded down over the first named flap, to hold the first named side member carrying the same against outward movement independently of any frictional engagement of such first named flap against and between the second named side member and the longitudinally extending side flap folded down therefrom, said second named side member having a slit therein approximately at the fold between the same and the longitudinally extending side flap thereon and the end flap on the first named side member carrying an ear or lug engaging through said slit and folded down against the other side member.

5. A metallic box formed from a blank comprising a centrally disposed bottom member having side members extending outwardly therefrom; each of the adjacent ends of adjacent side members carrying end flaps bent to lie against and parallel with the other side member and having its upper edge extended in a line comprising the upper edge of the box and substantially coincident with the upper edge of the side of the box formed by the other side member each of said side members having also a longitudinally extending side flap bent down over the first named flap on the other side member whereby each of said first named flaps operates, by engagement in the line of the fold between the other side member and the longitudinally extending side flap thereon when folded down over the first named flap, to hold the corresponding side member carrying the same against outward movement independently of any frictional engagement of such first named flaps against and between the side members and the longitudinally extending side flaps folded down therefrom, each of said adjacent side members having a slit therein approximately at the line of the fold between the same and the longitudinally extending flap thereon and the end flaps on each of said side members each carrying an ear engaging through the slit on the other side member and folded down against the other side member said end flaps on each of the side members folded each one of them against the other side member, one on the outside and the other on the inside of the box.

[Claim 6 not printed in the Gazette.]

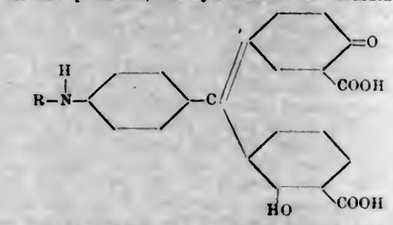
1,065,405. DYESTUFFS OF THE TRIPHENYLMETHANE SERIES AND PROCESS OF MAKING SAME. AUGUST STOCK and FRIEDRICH HEIM, Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, Höchst-on-the-Main, Germany, a Corporation of Germany. Filed July 23, 1912. Serial No. 711,101. (Cl. 8—1.)

1. The process of manufacturing dyestuffs of the triphenylmethane series, capable of being subsequently chromed, which consists in heating with an aromatic base a dyestuff of the general formula:



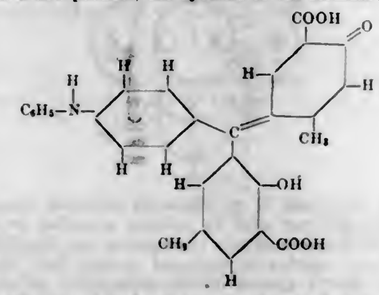
wherein "Hlg" stands for a halogen atom.

2. As new products, the dyestuffs of the formula:



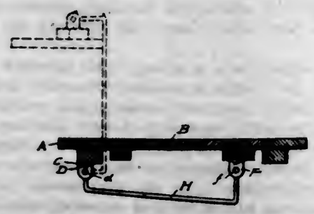
wherein "R" stands for an aryl residue being, when dry, dark powders soluble in caustic alkalis to red to violet-red solutions from which on the addition of acetic acid they are precipitated in violet to blue flakes, their solution in concentrated sulfuric-acid being yellowish-red yielding violet to blue flakes on addition of water, dyeing wool dull violet to blue tints and, on being subsequently chromed, pure violet to blue tints of great fastness.

3. As a new product, the dyestuff of the formula:



being, when dry, a dark powder soluble in caustic alkalis to red solutions from which on the addition of acetic acid it is precipitated in blue flakes; its solution in concentrated sulfuric acid being yellowish-red yielding blue flakes on addition of water; dyeing wool dull blue tints and, on being subsequently chromed, a pure greenish-blue tint of great fastness.

1,065,406. ROTARY HINGED DOOR. DWIGHT SWINFORD, Clyde, Mo. Filed May 16, 1912. Serial No. 697,690. (Cl. 20—1.4.)



1. The combination with a silo having an opening for a door, and door jambs, of a door adapted to be rotated a half turn, swung back and up against the inside of the silo wall into a position permitting silage to be slid out without elevating the same over a door, a single strap pivotally attached at one end to the upper part of a jamb, a plate pivotally secured on the door near its top adjacent the opposite jamb with which the other end of said strap engages to permit rotation and elevation of said door.

2. The combination with a silo having an opening therein and jambs therefor, of a door, a single strap hinged on the upper part of one of said jambs, a plate on the upper part of said door adjacent the upper part of the opposite jamb, a bolt seated in a bearing to secure said plate pivotally on said door permitting the door to clear the jambs, be rotated half way around and reversed up and back against the inside of the silo wall and upper part of a jamb.

1,065,407. CHISEL. CHARLES W. THOMPSON and FREDERICK A. GREARSON, Barre, Vt. Filed Oct. 4, 1912. Serial No. 723,922. (Cl. 125—19.)



1. A bush hammer comprising a stock, substantially wedge like members mounted for rocking movement on the sides of the stock and having bit clamping portions disposed below one end of the stock, bits interposed between the members, second wedge members slidable against the first members and having portions engaged against the bits, and a key extending through the wedge members and having flat head portions frictionally bearing against the outer surfaces of the said second members.

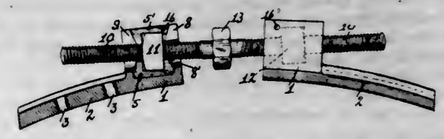
2. A bush hammer comprising a stock, substantially wedge like members mounted for rocking movement on the sides of the stock and having bit clamping portions disposed below one end of the stock, bits interposed between the members, second wedge members slidable against the first members and having portions engaged against the bits, and a key extending through the wedge members and through the bits, and having flat head portions frictionally bearing against the outer surfaces of the said second members.

3. A bush hammer comprising a stock, substantially wedge members mounted for rocking movements on the stock and having bit clamping portions extending beyond the end of the stock, bits interposed between said portions and provided with grooves therein, a key extending through the grooves in the bits and through the said members, second substantially wedge members slidable against the first members and adapted to force the said first members into locking contact with the bits and having portions below the plane of the first members extending in the direction of the bits and contacting therewith, and flat heads formed on the ends of the key and frictionally bearing against the outer surfaces of the said second members.

4. A bush hammer comprising a stock, substantially wedge-like members mounted for rocking movement on the sides of the stock and having bit clamping portions disposed below one end of the stock, bits interposed between the said members, a second set of wedge members slidably mounted against the first set of members and having bit engaging portions, a key extending through the wedge members and having flat head portions frictionally bearing against the outer surfaces of the said second set of wedge members, and means by which the said second set of members may be locked with respect to the stock when in engaging position.

5. A bush hammer comprising a stock, substantially wedge-like members mounted for rocking movement on the sides of the stock and having bit clamping portions disposed below one end of the stock, bits interposed between the said members, a second set of wedge members slidably mounted against the first set of members and having bit engaging portions, a key extending through the wedge members and having flat head portions frictionally bearing against the outer surfaces of the said second set of wedge members, and detachable means for locking the second set of wedge members in engaging position.

1,065,408. JOINT TIGHTENER AND SPREADER FOR CONDUITS. KARL JOHAN THORSBY, Oakland, Cal., assignor to California Corrugated Culvert Company, Oakland, Cal., a Corporation of California. Filed Apr. 12, 1913. Serial No. 760,747. (Cl. 61—9.)



1. A tightening and spreading device of the described class, comprising a pair of lugs provided with means for attaching them to the pipe-section, each of said lugs being formed with a pocket opening downward from its top, the front wall of said lug being formed with a slot opening downward from its top and communicating with the pocket, said slot having a width above to receive the tightening and spreading bolt and an enlarged base, and the back wall of said lug having a slot opening downward from its top and communicating with the pocket, said slot having a width to allow the bolt free play therein; a right and left threaded bolt adapted to enter and seat itself in said slots; and nuts on said bolt seated in the pockets of said lugs.

2. A tightening and spreading device of the described class, comprising a pair of lugs provided with means for attaching them to the pipe-section, each of said lugs being formed with a pocket opening downward from its top, the front wall of said lug being formed with a slot opening downward from its top and communicating with the pocket, said slot having a width above to receive the tightening and spreading bolt and an enlarged base, and the back wall of said lug having a slot opening downward from its top and communicating with the pocket, said slot having a width to allow the bolt free play therein; a right and left threaded bolt adapted to enter and seat itself in said slots; nuts on said bolt seated in the pockets of said lugs; and means for confining the bolt in the lugs.

3. A tightening and spreading device of the described class, comprising a pair of lugs provided with means for attaching them to the pipe-section, each of said lugs being formed with a pocket opening downward from its top, said pocket having a lower portion the front and rear walls of which converge upwardly and an upper mouth portion the front and rear walls of which converge downwardly whereby bearing points are formed in said pocket, said lug having its front wall formed with a slot opening downward from its top and communicating with the pocket, said slot having a width above to receive the tightening and spreading bolt and an enlarged base, and the back wall of said lug having a slot opening downward from its top and communicating with the pocket, said slot having a width to allow the bolt free play therein; a right and left threaded bolt adapted to enter and seat itself in said slots; and nuts on said bolt seated in the pockets of said lugs.

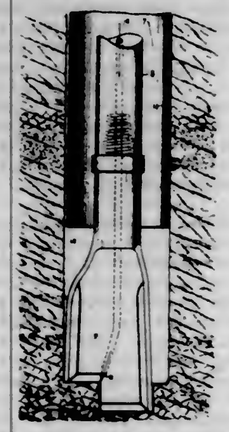
4. A tightening and spreading device of the described class, comprising a pair of lugs provided with means for attaching them to the pipe-section, each of said lugs being formed with a pocket opening downward from its top, said

pocket having a lower portion the front and rear walls of which converge upwardly and an upper mouth portion the front and rear walls of which converge downwardly whereby bearing points are formed in said pocket, said lug having its front wall formed with a slot opening downward from its top and communicating with the pocket, said slot having a width above to receive the tightening and spreading bolt and an enlarged base, and the back wall of said lug having a slot opening downward from its top and communicating with the pocket, said slot having a width to allow the bolt free play therein; a right and left threaded bolt adapted to enter and seat itself in said slots; nuts on said bolt seated in the pockets of said lugs; and means for confining the bolt in the lugs.

5. A tightening and spreading device of the described class, comprising a pair of lugs provided with means for attaching them to the pipe-section, each of said lugs being formed with a pocket opening downward from its top, said pocket having a lower portion the front and rear walls of which converge upwardly and an upper mouth portion the front and rear walls of which converge downwardly whereby bearing points are formed in said pocket, and said lug having openings in its front and rear walls communicating with said pocket; a right and left threaded bolt seated in said openings; and nuts on said bolt seated in the pockets of the lugs.

[Claim 6 not printed in the Gazette.]

1,065,409. BORING PROCESS FOR DEEP WELLS. RICHARD VAN SICKLE, Campina, Roumania. Filed Dec. 16, 1911. Serial No. 666,239. (Cl. 166—3.)



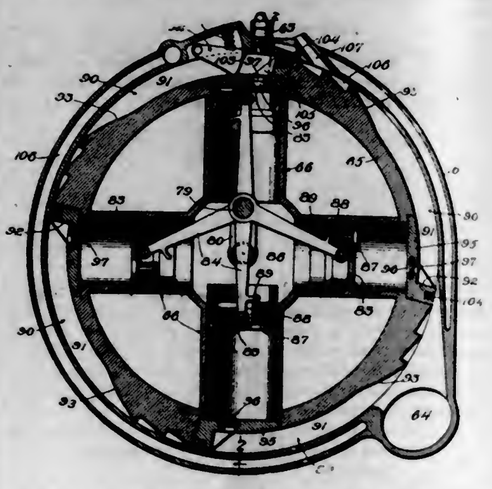
1. A boring process consisting in simultaneously passing compressed air to the extreme bottom of the bore, and water to a point above the bottom of the bore while the boring is uninterrupted, whereby air and water are mixed with the sludge and the sludge is continuously held away from the bottom of the bore during the boring process, the air serving to lighten the sludge and the water serving to entrain the sludge mixture.

2. A process for sinking deep wells, consisting in boring a bore with a suitable tool, whereby sludge is formed, and forcing the sludge away from the working position and the path of the tool and the bottom of the bore while the tool is uninterruptedly working by passing compressed air to the bottom of the bore and water to a point near the bottom of the bore, whereby the air is entrained in and lightens the sludge and the sludge mixture is forced away from the path and working portion of the tool during the uninterrupted working of the tool.

3. A process for sinking deep wells, said process consisting in boring a bore with a suitable tool, whereby sludge is formed, and forcing the sludge away from the working portion and the path of the tool by forcing compressed air to the bottom of the bore and passing water into the bore.

4. A process for sinking deep wells, said process consisting in boring a bore with a suitable tool, whereby sludge is formed, and forcing the sludge away from the working portion and the path of the tool by forcing compressed air to the bottom of the bore and passing water into the bore, said boring, forcing and passing taking place simultaneously.

1,065,410. GAS-TURBINE. FRANK A. VOILES and OSCAR M. VOILES, Chicago, Ill. Filed Aug. 14, 1911. Serial No. 643,944. (Cl. 123—15.)



1. In a machine of the class described, the combination of a stator, a rotor adapted to co-act therewith and provided with a plurality of explosion pockets, a member on the stator adapted to successively seat within the pockets to cut off portions of them, a stationary crank, a cylinder mounted within the rotor corresponding to each pocket of the same, and having its piston connected to the stationary crank, a valve in each piston to permit a transfer of gas through the same, a valve for controlling the transfer of gas from each cylinder to its pocket, means for actuating such valves to effect the transfer of gas under compression to each pocket after the dog has seated therein, and means for firing such charges of gas in the pockets.

2. In a machine of the class described, the combination of a stator, a rotor adapted to co-act therewith and provided in its periphery with an explosion pocket, a member on the stator adapted to seat within the pocket to cut off a portion of the same, a cylinder for introducing charges of gas under compression into the pocket, a valve in the piston of the same, a spring for closing such valve, a finger on the connecting rod of the piston for actuating the valve, a valve for controlling the transfer of gas from the cylinder to the pocket, and means for firing the charges of gas within the pockets.

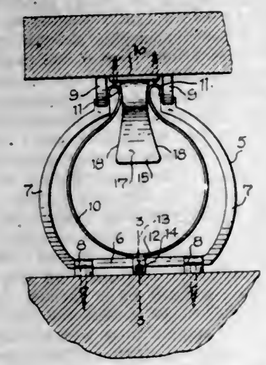
3. In a device of the class described, the combination of a stator, a rotor, provided with a plurality of explosion pockets, a member on the stator adapted to successively seat within the pockets, a cylinder carried by the rotor corresponding to each pocket thereof, a piston within each cylinder, a stationary crank, a connecting rod from each piston to the stationary crank, a valved connection from each cylinder to its pocket, and means for firing the combustible gas in each pocket, substantially as described.

4. In a device of the class described, the combination of a stator, a rotor adapted to coact therewith, and provided with a plurality of explosion pockets, a cylinder on the rotor to correspond with each pocket thereof, a member on the stator adapted to successively seat within the pockets, a stationary crank, a piston within each cylinder, a connecting rod from each piston to the crank, a valved connection from each cylinder to its pocket, and means for successively actuating the valves of such connections to permit a flow of gas from each cylinder to its pocket after the member has seated within such pocket, and means for firing the explosive gas within the pocket, substantially as described.

5. In a machine of the class described, the combination of a stator, a rotor rotatably mounted adjacent the same, and provided with a plurality of explosion pockets, compression cylinders carried by the rotor corresponding to each pocket thereof, there being a valved connection from each cylinder to the corresponding pocket, a stationary crank, a piston with each cylinder, a connecting rod from the stationary crank to each piston, whereby as the rotor rotates the pistons are successively actuated, a member on the stator adapted to successively seat within the pockets to cut off portions of them, and means for successively actuating the valves of the valved connections to successively place the cylinders in communication with their respective pockets after the member is seated within them, substantially as described.

[Claims 6 to 10 not printed in the Gazette.]

1,065,411. DOOR-CHECK. FRANK WILLIAM WEATHERFORD, Temple, Tex., assignor of one-half to Robert L. Weatherford, Temple, Tex. Filed Feb. 17, 1913. Serial No. 748,993. (Cl. 16—78.)



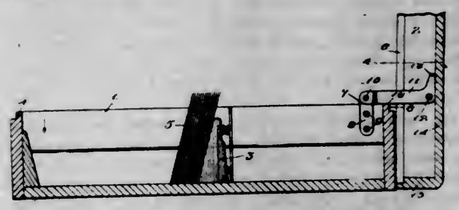
A device of the character described comprising a bar bent to provide oppositely bowed arms connected by an intermediate portion rigidly mounted upon a wall or other support, a substantially circular leaf spring arranged between said arms, means for detachably securing the central portion of said spring to the intermediate portion of said bar, the extremities of said spring being normally engaged and disposed between the ends of said arms, rubber abutments fixed to the ends of said arms with which the ends of the spring are engaged, and a latch member having an enlarged end providing opposite beveled faces thereon adapted to engage between the ends of the spring and force the same in opposite directions, said abutments coöperating with the spring to retain the latch bar in engagement therewith.

1,065,412. COVERED RECEPTACLE. ALBERT T. WEISS, Rochester, N. Y., assignor to Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 14, 1909. Serial No. 522,612. (Cl. 217—57.)

1. The combination with a receptacle and a cover therefor, of a link pivotally connected to each and a stop on the link coöperating with the cover to limit pivotal movement of the latter in one direction relatively to the link when the cover is in an open position.

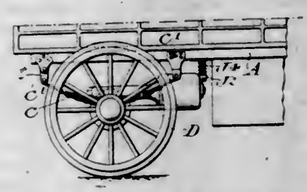
2. The combination with a receptacle and a cover therefor, of a link pivoted to both members to extend through the plane of a wall of the receptacle when the cover is swung upon both pivots to an open position to one side of the latter and an abutment on the link coöperating with the cover for preventing the latter from moving on its own pivot from said position toward the receptacle.

3. The combination with a receptacle and a cover therefor, of a link pivoted to both members to extend through the plane of a wall of the receptacle when the cover is swung upon both pivots to an open position to one side of the latter, in which the link coöperates with the receptacle to support the cover in such position and an abutment on the link coöperating with the cover for preventing the latter from moving on its own pivot from said position toward the receptacle.



4. The combination with a receptacle and a cover therefor movable to an open position substantially parallel with a wall of the receptacle, an extension on the latter, a link pivoted on the extension at a point above the rim of the receptacle and to the cover and adapted to rest upon the rim of the receptacle to support the cover in such open position and an abutment on the link coöperating with the cover preventing a closing movement of the cover on its own pivot.

1,065,413. MOTOR-VEHICLE. EDDY R. WHITNEY, Philadelphia, Pa., assignor to Commercial Truck Company of America, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 26, 1909. Serial No. 480,084. (Cl. 21—90.)



1. In a motor vehicle the combination with the vehicle frame, of a hollow axle, wheels journaled at the ends thereof, driving safts for said wheels mounted within the axle, a differential gear to which the inner ends of said shafts are connected, a driving motor comprising a frame and driving shaft, the latter being geared to said differential gear and the motor frame being rigidly connected to the hollow axle, and connections between the vehicle frame and the axle consisting of a pair of leaf springs, one at each end thereof, and each directly connected at one end to the vehicle frame, a link connection between the second end of each spring and the frame, and a yielding connection at one side of the axle between the motor frame and the vehicle frame, whereby said springs serve as distance pieces, and the motor frame as a torsion member, for holding the axle against longitudinal and rotative movements relative to the vehicle frame.

2. In a motor vehicle the combination with the vehicle frame of a hollow axle enlarged at its center and formed with an opening in its enlarged portion, a cover for said opening, a differential gear mounted on said cover and projecting into the enlarged portion of the axle, wheels journaled on the ends of the axle, driving shafts therefor located within the axle and connected to the differential gear, said cover being formed with a lateral hollow extension, a motor comprising a frame and a driving shaft, said motor frame being directly connected to said extension, a shaft journaled in said hollow extension, and directly geared to said differential gear, and directly connected at one end to the shaft of said motor to turn with the latter, and a connection at one side of the axle be-

tween the motor frame and the vehicle frame whereby said motor frame and casing serve as a torsion member to hold the axle against rotation.

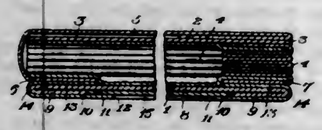
3. In a motor vehicle, a hollow axle formed with an opening in one side between its ends, a removable cover for said opening, a differential gear located in said hollow axle and supported by and removable with said cover, said differential gear including a toothed driving member, a casing rigidly connected to said cover, a shaft journaled in said casing and extending transversely to the axle, and having teeth meshing with the driving member of said differential gear, and a motor comprising a frame and a rotating shaft, said motor having its frame connected to said casing and its shaft coupled to said first mentioned shaft.

4. In a motor vehicle, a hollow axle, comprising two generally conical portions, the axes of which are inclined to each other and the bases of which are rigidly connected by an enlarged portion open at one side, a motor comprising a frame and a rotating shaft, a casing rigidly connecting said frame and said axle with the shaft of the motor extending transversely to said axle, said casing comprising a portion for closing the opening in said enlarged axle portion, a differential gear located in said enlarged axle portion and supported by said casing, a shaft journaled in said casing and coupled at one end to said motor shaft and having teeth meshing with the teeth of the differential gear, vehicle supporting wheels journaled on the ends of said axle, and driving shafts for said wheels, located in said hollow axle in line with each other and connected, each, at its inner end to the differential gear, and at the other end to the corresponding vehicle supporting wheel.

5. In a motor vehicle, a hollow axle, a differential gear mounted therein, a motor, including a frame and a rotatable shaft, a hollow casing open at one end and rigidly connected at its other end to the motor frame and, adjacent its open end, to said axle, said casing being formed with a lateral opening through which the driving member of the differential gear projects into the casing and being provided with bearing seats at opposite sides of the differential gear, and a worm shaft removable through the open end of the casing and having bearings mounted thereon which seat in said seats, and a key and socket connection between said worm shaft and said rotatable shaft, the seat adjacent the open end of the casing being shaped to hold the bearing seated in it against movement toward the motor while permitting the other bearing to move through it.

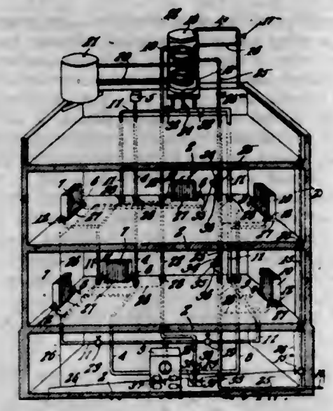
[Claims 6 and 7 not printed in the Gazette.]

1,065,414. CARD OR LABEL HOLDER. MORITZ WIESNER, Rochester, N. Y., assignor to Yawman & Erbe Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 5, 1910. Serial No. 585,471. (Cl. 40—16.)



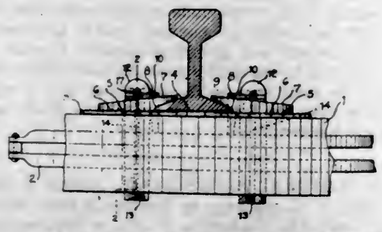
In a card holder, the combination with a backing sheet having opposite side portions doubled over toward each other and their under faces secured to the body portion to present separated exposed edges, of a frame piece provided with a view opening superposed upon the backing and having its opposite side portions similarly doubled over and arranged to embrace the doubled portions of the backing being secured on the back of the latter whereby a removable card slidable between the frame piece and the backing and viewable through the former, will have its edges running in contact with the exposed edges of the backing.

1,065,415. COOLING APPARATUS. MERTON G. WILD and FORREST J. AIKIN, Loveland, Colo. Filed Apr. 10, 1911. Serial No. 620,042. (Cl. 62—11.)



In a device of the class described, a tank located at the top of the building to be cooled; means for cooling the contents of the tank; a heater located at the bottom of the building; a continuous pipe passing from the top of the building to the bottom thereof and in circuit with the heater; a communication between the top of the continuous pipe and the tank; heat interchanging elements; connections between the heat interchanging elements and opposed portions of the continuous pipe; primary return pipes leading from the heat interchanging elements to the heater; a secondary return pipe leading from one of the primary return pipes to the tank; upper valves in the top of the continuous pipe and located on opposite sides of the communication; and lower valves in the continuous pipe on opposite sides of the heater; one of the lower valves being adapted to be closed and the corresponding upper valve being adapted to be opened, the other lower valve being adapted to be opened and the corresponding upper valve being adapted to be partially opened thereby to secure the continuous addition of an increment of cooling medium to a sub-circuit including the heater, one primary return pipe, one portion of the continuous pipe and the heat interchanging element connected therewith.

1,065,416. RAIL TIE AND FASTENER. DANIEL R. WILL, Ava, Ill. Filed Mar. 8, 1913. Serial No. 752,999. (Cl. 238—3.)

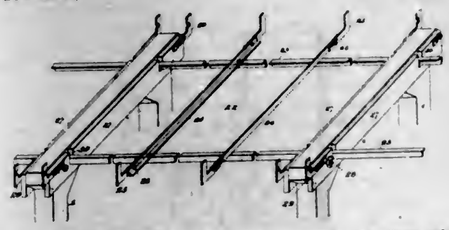


1. In combination with a cement tie having vertically disposed slotted bars embedded therein and projecting beyond the upper and lower face of the tie, the lower end of said bars being formed with oppositely extending lugs disposed out of alinement with each other and bearing against the lower face of the tie, a rail arranged upon the upper face of said tie, and means engaged with the upper end of said slotted bars and longitudinally adjustable with relation to said tie for engagement with the base flanges of the rail, as and for the purpose described.

2. In combination with a tie of the class described, slotted bars embedded in said tie and projecting above the upper face thereof, a plate arranged upon the upper face of said tie, a rail arranged upon said plate, clamping plates disposed upon said plate and adapted to engage the base flanges of the rail, said plate and clamping plates being provided with registering longitudinally extending slots adapted for engagement with the projecting portions of said bars, said slots being of a relatively greater length than the width of said bars whereby the plates are adapted for adjustment longitudinally of the tie, and tapering locking keys disposed through the slots in said bars and bearing against said clamping plates, as and for the purpose described.

3. The combination with a tie of the class described, slotted bars embedded in said tie and projecting above the upper face thereon, a plate arranged upon the upper face of said tie, a rail arranged upon said plate, clamping plate disposed upon said plate and adapted to engage the base flanges of the rail, said plate and clamping plates being provided with registering slots adapted for engagement with the projecting portions of said bars, the base flanges of said rail being provided with recesses, said plate and clamping plates being formed with openings registering with said recesses, spikes disposed through said recesses and said openings into engagement with said tie whereby creeping of the rail is prevented, and locking keys disposed through the slots in said bars and bearing against said clamping plates, as and for the purpose described.

1,065,417. APPARATUS FOR FORMING BENCHES FOR GREENHOUSES. JOHN WILSON, Short Hills, N. J., assignor, by direct and mesne assignments, to Wilson-Hoyt Company, Short Hills, N. J., a Corporation of New Jersey. Filed July 19, 1907. Serial No. 384,635. (Cl. 25—118.)



1. An apparatus for molding concrete benches which comprises boards adjustable to both sides of a bent and having notches, a frame resting within the notches and a mold supported by the frame.

2. In an apparatus for molding the top of concrete benches on bents, molds supported upon the bents, the said molds having sides and additional pieces between the molds covering the ends of the bents.

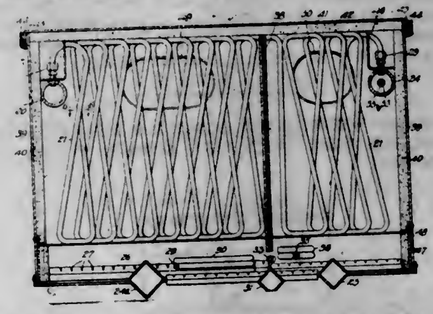
1,065,418. FLASH-BOILER. WILLIAM H. WINSLOW, Chicago, Ill., assignor to The Steam Power Devices Company, Chicago, Ill., a Corporation of Illinois. Filed June 14, 1909. Serial No. 501,980. (Cl. 122—41.)

1. In a boiler, the combination of a water supply connection, a steam connection, and a plurality of looped tubes extending between such water and steam connections, the loops of each tube formed in substantially the same plane in the shape of a figure 8, and similarly disposed loops overlapping each other and fused together at points of crossing.

2. In a boiler, the combination of a water receptacle, and a tube of small bore connected therewith and bent into vertically extending overlapping loops, such tube having sections of larger internal diameter as the distance from the water receptacle increases.

3. In a boiler, the combination of a water receptacle, and a tube of small bore connected therewith and bent into vertically extending overlapping loops, such tube consisting of a plurality of sections of different internal diameters, such diameters increasing for successive sections.

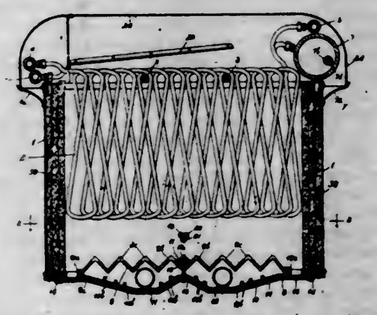
4. In a boiler, the combination of a water receptacle, and a plurality of tubes of small bore connected therewith and extending to a separate steam receptacle and bent into vertically extending overlapping loops, one or more of such tubes consisting of a plurality of sections of different internal diameters.



5. In a boiler, the combination of a water supply connection, a steam connection, and a plurality of looped tubes extending in substantially vertical planes between such water and steam connections, the loops of each tube formed in the shape of a figure 8, and similar loops overlapping each other and fused together at points of crossing, such loops increasing in capacity as the distance from the water connection increases.

[Claims 6 to 16 not printed in the Gazette.]

1,065,419. FLASH-BOILER. WILLIAM H. WINSLOW, River Forest, Ill., assignor to The Steam Power Devices Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 5, 1909. Serial No. 526,331. (Cl. 122—41.)



1. In a boiler, the combination of a water header, a steam header, a plurality of tubes having vertically extending loops between the water header and the steam header, and means connected with such tubes between such headers for redistributing the water and steam contained therein.

2. In a boiler, a water header, a steam header, looped passages extending below the headers from the water header to the steam header, and means between such headers for redistributing the water and steam in such passages, the number of such passages increasing as the steam header is approached.

3. In a boiler, a water header, a steam header, a plurality of looped tubes extending from the water header to the steam header, and means connected with such tubes between such headers for redistributing the water and steam contained therein, the number of such tubes increasing as the steam header is approached.

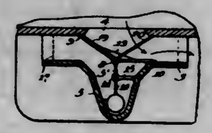
4. In a boiler, the combination of a water header, a steam header, an intermediate header, a first set of looped passages below the water header for the flow of water from the water header to the intermediate header, and a

second set of looped passages of larger number than the first set for the flow of water and steam from the intermediate header to the steam header.

5. In a boiler, the combination of a water header, a steam header, an intermediate header, such headers all located near the top of the boiler, a first set of parallel passages extending from the water header to the intermediate header, and a second set of parallel passages extending from the intermediate header to the steam header.

[Claims 6 to 59 not printed in the Gazette.]

1,065,420. VENTILATOR. CHARLES J. WOLKARTE, Houston, Tex. Filed Jan. 27, 1912. Serial No. 673,830. (Cl. 98—23.)



1. A device of the character described including a car and an air pipe extending down the wall and continuing lengthwise thereof, an inlet chute carried by the top portion of the car and communicating with said pipe, said inlet also communicating with the interior of said car, means carried by said inlet for alternately connecting one end of said chute with said pipe and simultaneously connecting the other end of said chute with the interior of said car.

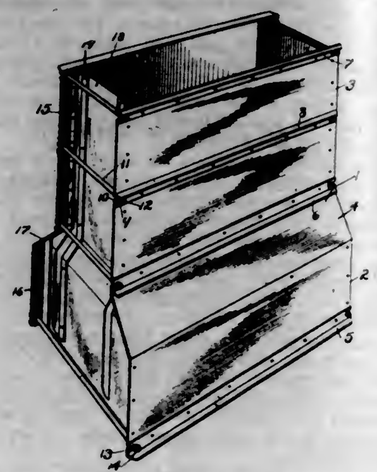
2. In a device of the character described, the combination with a car, of a current conducting pipe extending down the side thereof and continuing lengthwise of the car, an inlet chute carried by the top of the car and arranged to admit air at either end thereof and communicating with said pipe, said chute also having communication with the interior of the car, pivotally mounted valve in said chute arranged to alternately communicate one end of said chute with said pipe and simultaneously connect the interior of the car with the other end of said chute, whereby air is admitted through the first mentioned end into said air pipe and discharged simultaneously from the interior of the car through the other end of said chute.

3. In a device of the character described, the combination with a car, of a suitable air pipe extending from the top of said car and discharging within the car, an oblong chute carried by the top of said car and having a forward and rearward discharge, a laterally extending neck connecting said chute with said pipe, a mechanism carried thereby for alternately blocking one of said discharges and communicating the other of said discharges with said pipe.

4. In a device of the character described, the combination of a car, of a suitable air pipe extending from the top of said car and discharging within the car, an oblong chute carried by the discharge of said car and having a forward and rearward discharge, a laterally extending neck connecting said chute with said pipe, a mechanism carried by the chute for alternately connecting one of said discharges with said pipe and the other of said discharges with the interior of the car, a lengthwise partition in said neck which divides the same into two passageways which connects the respective ends of said chute with said pipe, and a mechanism pivoted in said chute which alternately blocks one of said passageways and connects the other of said passageways with said pipe.

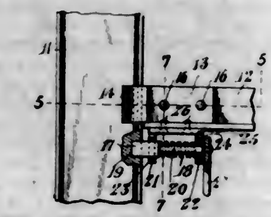
1,065,421. MOLD FOR CASTING PLASTIC MONUMENTS. JAMES P. WORTHINGTON, Kansas City, Mo., assignor to Concrete Monument Company, Kansas City, Mo., a Corporation of Missouri. Filed May 14, 1912. Serial No. 697,123. (Cl. 25—118.)

A mold for forming monuments, comprising side plates, having angle irons at their inner faces, with flanges projecting inwardly therefrom, end members having flanges on their outer faces, in line with the side plate flanges, blocks adapted for projection between the flanges on the



side and end members to space the end members inwardly, and means for binding the side and end plates together.

1,065,422. JAIL. DAVID FRANKLIN YOUNGBLOOD, San Antonio, Tex. Filed Sept. 18, 1911. Serial No. 650,014. (Cl. 5—60.)



1. In combination with one of the rooms of a jail, bunks, spaced vertical fixed guiding columns extending from the floor to the ceiling and arranged in pairs in spaced relation with the walls of the room, horizontal supporting bars extending across the space between the members of each pair of guiding columns, means for connecting the bars to the columns to provide a slidable interlocking connection as well as a permanent union between the said bars and columns, said bars being movable upwardly and downwardly along the columns, means for connecting the bunks with the supporting bars and with the adjacent wall at the upper and lower portions thereof, and means for locking the supporting bars against sliding movement.

2. In combination with one of the rooms of a jail, bunks, spaced vertical fixed guiding columns extending from the floor to the ceiling and arranged in pairs in spaced relation with the walls of the room, horizontal supporting bars extending across the space between the members of each pair of guiding columns, means for connecting the bars to the columns to provide a slidable interlocking connection as well as a permanent union between the said bars and columns, fixed supports permanently mounted on the said walls and adapted to support the bunks at one end thereof, means for connecting the other ends of the bunks to the supporting bars, the latter being adapted to be raised and lowered on the columns, and means for locking the supporting bars against sliding movement.

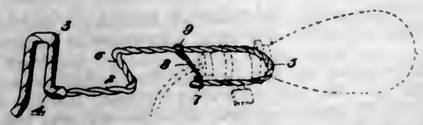
3. In combination with one of the rooms of a jail, bunks, spaced vertical fixed guiding columns extending from the floor to the ceiling and arranged in pairs in spaced relation with the walls of the room, upper and lower supporting brackets permanently mounted on the walls of the room and adapted to support the bunks at one end of the same, horizontal supporting bars extending across the space between the members of each pair of guiding columns, means for connecting the bars to the columns to provide a slidable interlocking connection as well as a permanent union between the said bars and columns, means for connecting the other ends of the bunks to the supporting bars, said supporting bars being adapted to be raised and lowered on the columns to arrange the bunks opposite the lower brackets for use or to elevate the bunks so as to connect them with the upper brackets, and means for securing the supporting bars against sliding movement.

4. In combination with one of the rooms of a jail, bunks, spaced vertical fixed guiding columns arranged in pairs in spaced relation with the walls and extending from the floor to the ceiling, upper and lower fixed supports permanently mounted on the walls of the room for supporting the bunks at one end thereof, horizontal supporting bars provided at their ends with plates having approximately hook-shaped portions and engaging the guiding columns and slidably interlocking and supporting bars with the same and forming a permanent union between the said bars and columns, said horizontal bars being provided with means for supporting the other ends of the bunks and being adapted to be raised and lowered on the columns, and means carried by the supporting bars for locking the same against sliding movement.

5. In combination with one of the rooms of a jail, bunks, spaced vertical I-beams forming guiding columns and extending from the floor to the ceiling and arranged in spaced relation with the walls of the room, fixed supports permanently mounted on the walls of the room and adapted to support the bunks at one end thereof, horizontal supporting bars provided at their ends with plates arranged in pairs and having coacting approximately hook-shaped portions engaging the opposite flanges of the said beams and slidably interlocking the horizontal bars with the same, said horizontal bars being provided with means for supporting the other ends of the bunks and adapted to be raised and lowered, and means for securing the horizontal supporting bars against sliding movement.

[Claims 6 and 7 not printed in the Gazette.]

1,065,423. ELECTRIC-LAMP BRACKET. NELLIE T. ZEIGLER, Reno, Nev. Filed June 24, 1912. Serial No. 705,653. (Cl. 248—20.)

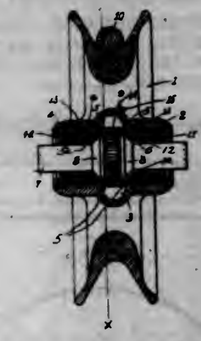


1. An electric lamp bracket consisting of an elongated body having one end formed into an article-engaging hook and the opposite end formed into an open loop adapted to engage an electric lamp, and a retainer slidably mounted on one side of said loop portion and adapted to engage the free end thereof.

2. An electric lamp bracket consisting of an elongated body having one end formed into an article-engaging hook and the opposite end formed into an open loop adapted to engage an electric lamp, and a hook adapted to engage the free end of the loop and having a stem terminating in an eye slidably engaging the main length of the body.

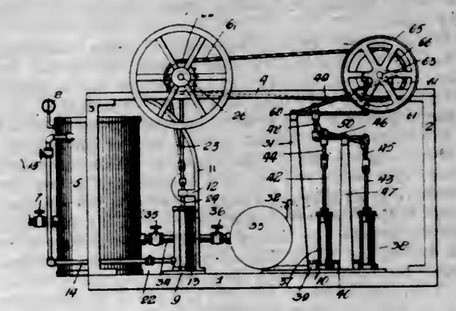
3. An electric lamp bracket formed of a single strand of wire doubled and twisted on itself, one end thereof formed into an article engaging hook and the opposite end formed into an open loop adapted to engage an electric lamp, the intermediate portion of the strand being offset, a cushion covering said hook, and a retainer slidably mounted on one side of said loop and adapted to engage the free end thereof.

1,065,424. WHEEL-BEARING. WILLIAM H. ARNOLD, Stockton, Cal. Filed Mar. 20, 1912. Serial No. 684,976. (Cl. 64—26.)



A device of the character described comprising a wheel, a hub on said wheel, such hub being provided with an annular recess, a casing within said hub, a pin within said casing having two shoulders spaced apart, bushings projecting into said casing and bearing on said shoulders and around said pin, said bushings being provided with recesses, felt disposed in said recesses, and means communicating from said annular recess through said casing to said felt, as described.

1,065,425. COMPRESSED-AIR MOTOR. IGNAC BABINSKI, Chicago, Ill., assignor of one-fourth to Mike Dubish and one-fourth to John Bombis, Chicago, Ill. Filed Feb. 3, 1912. Serial No. 675,269. (Cl. 230—35.)

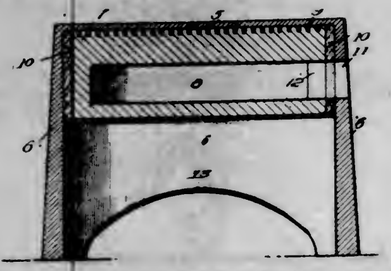


1. In an air motor, the combination of a main tank provided with valved means adapted to communicate with a compressed air supply, a pair of shafts, a drive connection between said shafts, an auxiliary tank having a valved supply means communicating with said main tank, a pair of alternately operating fluid pressure operated devices having valved connections with said main tank, a drive connection with one of said shafts, a pair of alternately operated fluid pressure operating devices having valved supply connections with said auxiliary tank and drive connections with the other of said shafts, said shafts arranged above said tanks and devices, and supporting means for said shafts.

2. In an air motor, the combination of a main tank provided with valved means for establishing communication with a compressed air supply, a pair of shafts and a drive connection between said shafts, an auxiliary tank having a valved supply connection with said main tank, a pair of alternately operating fluid pressure operated devices having valved connections with said main tank and a drive connection with one of said shafts, a pair of alternately operating fluid presspre operated devices having valved supply connections with said auxiliary tank, a pair of arms, links for connecting said arms to said second mentioned pair of devices, and drive connections between

said arms and the other of said shafts, said shafts arranged above said tanks and devices and supporting means for said shafts.

1,065,426. ELECTRIC HEATER. HENRY W. BEERS, Guadalajara, Mexico, assignor of one-half to Roy Epperson, Denver, Colo. Filed Aug. 22, 1912. Serial No. 716,469. (Cl. 219—22.)



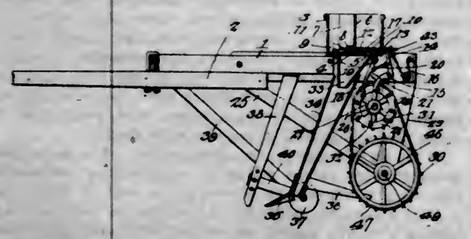
1. An electric heater comprising a casing having an open bottom, and a block mounted within the casing against the under side of the top thereof, the top of the block having grooves to hold a heating element, said block having a hollow space in its interior opening through one side thereof, and the casing having an opening which communicates with said space.

2. An electric heater comprising a casing consisting of a top and side walls, said walls having openings at their base, and a block mounted within the side walls and against the under side of the top of the casing, the top of the block having grooves to hold a heating element, said block having a hollow space in its interior opening through one side thereof, and one of the side walls of the casing having an opening which communicates with said space.

3. An electric heater comprising a casing comprising a top, side walls and an open bottom, one of the side walls having an opening, and a support for a heating coil mounted in the casing above the bottom thereof, said support having a hollow space opening through one side in line with the opening of the side wall of the casing.

4. An electric heater comprising a casing comprising a top, side walls and an open bottom, one of the side walls having an opening, a block mounted in the casing adjacent to the top thereof, said block having a hollow space opening through one side in line with the opening of the side wall of the casing, and a heating coil in the casing between the top thereof and the block.

1,065,427. COMBINED PLANTER AND FERTILIZER-DISTRIBUTER. JOSIAH DAY BLADES, Bracken county, Ky. Filed May 13, 1912. Serial No. 697,028. (Cl. 111—32.)



1. A planter including a seed box having an outlet, a wheel mounted for rotation thereunder, a feed slide, a lever for actuating the same, adjustable means carried by the wheel for engaging and actuating the lever, a pivoted member extending into the path of said means, and a pivotal connection between said lever and member for causing them to move simultaneously in opposite directions.

2. A planter including a seed box having an outlet, a wheel mounted for rotation thereunder, a feed slide, a lever for actuating the same, adjustable means carried by the wheel for engaging and actuating the lever, a pivoted member extending into the path of said means, a pivotal connection between said lever and member for causing them to move simultaneously in opposite directions, and means under the control of the operator for shifting said lever and member toward each other to hold the wheel against rotation.

3. A planter including a seed box having an outlet, a wheel mounted for rotation thereunder, a spring pressed feed slide, a lever for actuating the same, means carried by the wheel for intermittently engaging and actuating the slide, a cut-off slide adjustably mounted on the feed slide, a soil engaging wheel having peripheral teeth, and a power transmitting chain engaging the teeth on the said wheel and the first named wheel.

4. A planter including a seed box having an outlet, a wheel mounted for rotation thereunder, a feed slide, a lever for actuating the same, adjustable means carried by the wheel for engaging and actuating the lever, a pivoted member extending into the path of said means, a pivotal connection between said lever and member for causing them to move simultaneously in opposite directions, a crank engaging the lever, and means for rotating the crank to shift the lever and member toward each other.

1,065,428. MEMBERSHIP-RECORD. BYRON BRADY and SELDON BRADY, Dunmore, Pa. Filed Mar. 29, 1913. Serial No. 757,693. (Cl. 45—2.)



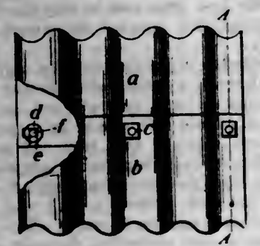
A device of the class described including a case having a front wall and a rear wall; record holders disposed between the walls, there being guides on the front wall only, receiving the front edge of each holder, the holders being upwardly and rearwardly inclined, thereby to expose their upper faces and to permit the rear edges of the holders to rest upon the rear wall against downward movement, the rear edge of each holder being liftable with one guide as a fulcrum to permit the fingers of the operator to grasp the next lower holder for removal.

1,065,429. KNOCKDOWN CULVERT-PIPE. ALEX BRUCE, Fargo, N. D. Filed Mar. 31, 1913. Serial No. 758,029. (Cl. 61—9.)

1. A knock-down culvert pipe made up of sections, the edges of which are adapted to overlap each other, one section being provided with apertures, bolts mounted therein, the overlapping section having angular slots for the reception of said holes, as set forth.

2. A knock-down culvert pipe made up of sections, the edges of which are adapted to overlap each other, one section being provided with apertures, bolts mounted therein, the other section having its opposite edges provided with slots, the inner ends of which have offsets for the reception of said bolts, and nuts fitted to the bolts, as set forth.

3. A knock-down culvert pipe made up of sections, the edges of which are adapted to overlap each other, one section being provided with apertures, bolts mounted therein, the other section having its opposite edges provided with slots each having an offset at its inner end, one edge



of each slot being at an inclination to the other edge of the slot, thereby causing the section to yield slightly as the one having the slots is forced down upon the bolts, the resiliency of the section causing the latter to move so that the bolt will engage the offset, and nuts fitted to the bolt, as set forth.

1,065,430. REINFORCED-CONCRETE TIE. WILLIAM G. CHIPLEY, Atlanta, Ga. Filed Aug. 17, 1912. Serial No. 715,656. (Cl. 238—3.)



1. In a device of the class described, a body portion of concrete provided with transverse recesses and a reinforcement therefor extending longitudinally of the tie and about the several walls of the recesses near the surface thereof the said reinforcements comprising a structure of channel formation folded upon itself to form a cage like structure rectangular in cross section the edges of the channel meeting each other.

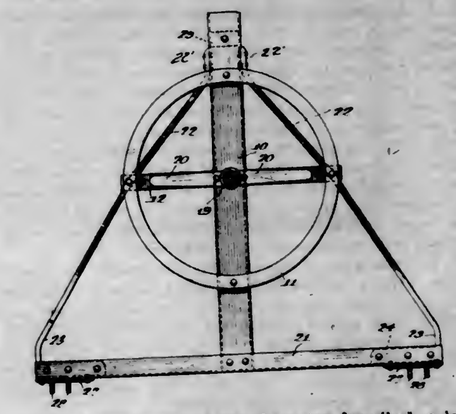
2. In a device of the class described, a body portion of concrete provided with transverse tapering recesses and a reinforcement therefor, portions of which lie adjacent to the various sides of the tie and are disposed within the walls of said recesses near the surface thereof the said reinforcement comprising a structure of channel formation folded upon itself to form a cage like structure rectangular in cross section the edges of the channel meeting each other.

3. In a device of the class described a tie comprising a body portion of concrete provided with transverse recesses, the walls of which are flared and a reinforcement extending longitudinally of the tie and disposed within the upper surface thereof and extending substantially continuously throughout said surface and the end portions, said reinforcement being deflected to conform to the walls of the recesses and the remainder thereof being U-shaped in cross section, the free edges of corresponding sides lying in the same plane and meeting each other along lines extending longitudinally of the tie below the lower walls of the recesses and rail attaching devices mounted within said recesses.

4. In a device of the class described, a body portion of concrete, channel member extending longitudinally thereof and disposed within the central portion, said channel member having cutaway portions and said tie being provided with transverse recesses, the walls of which are substantially coincident with the cutaway portions of the channel member, and an outer reinforcement of trussed wire formation, portions of said reinforcement lying adjacent to the various sides of the tie and the ends thereof and other portions being disposed within the walls of the recesses adjacent to the surface thereof.

5. A reinforcing member for a concrete body comprising a cage-like structure formed with upper and lower channel sections oppositely located, the said structure being bent upon itself at an angle to its main axis and substantially midway between its ends, the free edges of corresponding sides of the channel lying in substantially the same plane, portions of one side of the upper section being deflected to form transverse pockets extending into the cage.

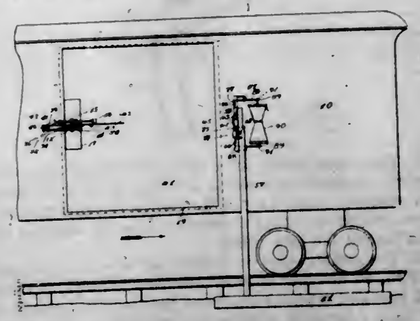
1,065,431. WAGON-GEAR. JOHN H. CRUSE, Jr., and ROBERT COLEMAN, Birmingham, Ala. Filed June 1, 1912. Serial No. 701,012. (Cl. 21—51.)



1. In a wagon gear of the character described, a longitudinally extending beam, a transverse beam carried by said longitudinally extending beam, diagonal braces secured at one end of said longitudinal beam and having their remaining ends bent inwardly and secured to the end portions of said transversely extending beam, and depending lugs carried by the inturned end portions of said braces.

2. In a wagon gear of the character described, a longitudinally extending beam formed from a pair of channel bars having one end portion secured together and the remaining portion held in spaced relation, a spring seat at the connected ends of said channel bars and provided with lugs extending over the edges of said channel bars to hold said seat in engagement with the channel bars, a transversely extending bar secured to said longitudinally extending beam, and braces secured at one end of said longitudinally extending beam and having their remaining ends secured to the end portions of said transversely extending bar.

1,065,432. MAIL-BAG-HANDLING APPARATUS. GEORGE N. DOUTTIEL, Wilkinsburg, Pa. Filed Apr. 22, 1913. Serial No. 762,770. (Cl. 105—231.)



1. In apparatus of the character described, a support, a pair of normally forwardly diverging mail bag catching arms pivotally connected with the support, spring operated

means for swinging the arms toward each other, a latch to normally hold the spring operated separate means against movement, and means to operate the latch including a reciprocatory element arranged near and between the mail bag catching arms.

2. In apparatus of the character described, a support, a pair of normally forwardly diverging mail bag catching arms pivotally connected with the support, a yoke adapted to be moved longitudinally of the mail bag catching arms to swing the same inwardly toward each other, means to effect such movement of the yoke, and means operated by the impact from the mail bag therewith to actuate the first named means.

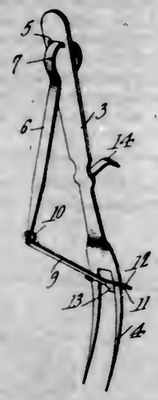
3. In apparatus of the character described, the combination with a support, of a pair of mail bag catching arms pivotally connected therewith, a frame to move longitudinally of the arms to swing the same inwardly toward each other, a reciprocatory rod suitably mounted upon the support and connected with the frame, a spring to move the rod longitudinally in one direction, a latch pivotally connected with the support and normally holding the reciprocatory rod against longitudinal movement in one direction, a second reciprocatory rod suitably mounted upon the support and provided with means to operate the pivoted latch, and a head connected with the second reciprocatory rod and disposed near the pivoted arms.

4. In apparatus of the character described, the combination with a horizontally swinging support connected with a car body adjacent the door opening thereof and adapted to be moved through the door opening, of a sliding door mounted within the car body and adapted to assume a position behind the swinging support to prevent its inward movement, and mail bag handling means mounted upon the swinging support.

5. In apparatus of the character described, the combination with a support, of a pair of normally forwardly diverging pivoted catching arms, and means actuated by the impact from a mail bag to swing the arms inwardly, including an element slidably engaging the pivoted arms to move longitudinally thereof.

[Claim 6 not printed in the Gazette.]

1,065,433. VEGETABLE-FORK. GEORGE B. N. DOW and JAMES F. CAVANAUGH, Manchester, N. H. Filed Feb. 5, 1913. Serial No. 746,404. (Cl. 30—5.)



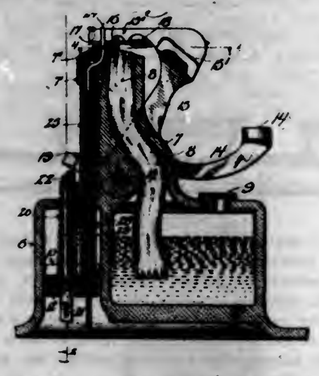
1. The combination of a fork, a resilient arm secured thereto, an ejecting member pivotally secured to said arm and slidably engaging the fork tines, a projection at the lower extremity of said ejecting member adapted to extend beyond the fork tines.

2. The combination of a fork, an arm movably secured thereto, an ejecting member pivotally secured to said arm and provided with apertures at the lower extremity thereof, said apertures adapted to slidably engage the fork tines, a curved projection at the lower extremity of said ejecting member adapted to extend beyond the extreme ends of the fork tines and eject material therefrom.

3. In a device of the class described, a pair of arms, one arm thereof formed as a fork, the other arm resiliently secured thereto and pivotally secured to an ejecting member, said ejecting member slidably engaging the fork tines, a curved projection secured to the lower end of said ejecting member, said ejecting member adapted to move longitudinally of said fork tines and to stop short of the ends thereof, said projection adapted to extend beyond said ends.

4. The combination of a fork, provided with an aperture in the handle thereof, a spring arm secured to said fork and extending through said aperture, an ejecting member pivotally secured to said spring arm, said ejecting member provided with an enlarged end, said end provided with apertures therein, said ejecting member adapted to slidably engage the fork tines and move longitudinally thereof and to stop short the ends thereof, a projection at the said enlarged end of said ejecting member adapted to extend therebeyond and a bent projection disposed at the lower portion of the said handle forming gripping means for the manipulation of the fork.

1,065,434. CIGAR-LIGHTER. CLARKE S. DRAKE, Milwaukee, Wis. Filed July 20, 1912. Serial No. 710,553. (Cl. 175—296.)



1. A cigar-lighter comprising a pivotal switch-blade member of an electric-circuit embodying a contact point for the blade, a sliding stirrup-rod engaged by said blade, a combustible liquid reservoir having a wick-engaged neck, a bell-crank lever fulcrumed in connection with the neck and having an arm thereof terminated in a snuffer-head cover for said neck, a metallic terminal of the electric-circuit projecting adjacent to the ignition end of the wick, a terminal opposing tripper in said circuit having spring-controlled pivotal connection with a finger extension of the snuffer-head, a bar extending from said lever in opposition to said stirrup-rod, and a spring connecting the lever-bar with the aforesaid blade.

2. A cigar-lighter comprising a pivotal switch-blade member of an electric-circuit embodying a contact point for the blade, a sliding stirrup-rod engaged by said blade, a combustible liquid reservoir having a wick-engaged neck, a bell-crank lever fulcrumed in connection with the neck and having an arm thereof terminated in a snuffer-head cover for said neck, a metallic terminal of the electric-circuit projecting adjacent to the ignition end of the wick, a terminal opposing tripper in said circuit having spring-controlled laterally yielding pivotal connection with a finger extension of the snuffer-head, a bar extending from said lever in opposition to said stirrup-rod, and a spring connecting the lever-bar with the aforesaid blade.

3. A cigar-lighter comprising a pivotal switch-blade member of an electric-circuit embodying a contact point for the blade, a sliding stirrup-rod engaged by said blade, a combustible liquid reservoir having a wick-engaged neck, a bell-crank lever fulcrumed in connection with the neck and having an arm thereof terminated in a snuffer-head cover for said neck, a metallic terminal of the electric-circuit projecting adjacent to the ignition end of the wick,

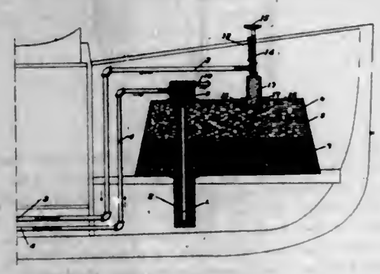
a link in pivotal connection with a finger extension of the snuffer-head, a spring-controlled terminal opposing tripper pivoted on the link and in said circuit, a bar extending from said lever in opposition to said stirrup-rod, and a spring connecting the lever-bar with the aforesaid blade.

4. A cigar-lighter having a wick-tube, a stiff stationary metal terminal of an electric-circuit exposed adjacent to the ignition-end of the wick-tube, a movable support, a link in swing connection with the support, and a horizontally disposed spring-controlled tripper in pivotal connection with the link and constituting another terminal of said circuit carried with said support to contact with and clear the stationary terminal.

5. A cigar-lighter comprising an exposed terminal of an electric-sparking circuit, an insulating base, an insulating-sleeve rising from said base and through which said terminal is extended, a holder engaged by the sleeve, and suitable filling by which the aforesaid terminal is held rigid in the holder outward from the upper end of said sleeve.

[Claims 6 to 8 not printed in the Gazette.]

1,065,435. FUEL-SUPPLY TANK. FREDERICK G. FARR, Detroit, Mich., assignor to E. B. Cadwell & Company, Detroit, Mich., a Copartnership. Filed July 15, 1909. Serial No. 507,863. (Cl. 158—50.2.)



1. The combination with a tank, of a water inlet connection for the tank communicating therewith adjacent its bottom, a separating chamber located on the top of the tank and provided with an inverted frusto conical wall at the lower end of said chamber, and an oil delivery pipe communicating with said separating chamber.

2. The combination with an oil storage tank, of a water separating chamber located on the top of the tank and provided with an inverted frusto conical wall having an opening therein, and a cone-shaped deflecting device disposed within said wall above said opening.

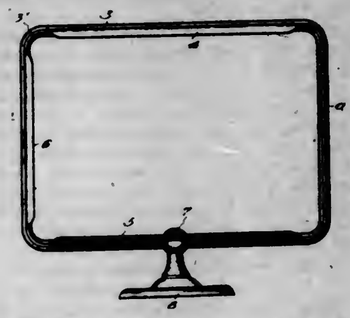
3. The combination with a tank, of a water chamber, means permitting the overflow from said chamber whereby a constant head of water is maintained therein, a water inlet pipe for the tank leading from said chamber to adjacent the bottom of the tank, a separating chamber at the top of the tank and in proximity to the water chamber, and an oil delivery pipe communicating with the separating chamber at a point above the overflow means.

4. The combination with a storage tank, of a water chamber mounted on the top of the tank, a water supply connection for the chamber, an overflow-connection for said chamber, whereby a constant head of water is maintained therein, a water inlet connection for the tank leading from said chamber to adjacent the bottom of the tank, a separating chamber on the top of the tank, and an oil delivery conduit communicating with said separating chamber at a point above the water overflow.

5. The combination with a storage tank, of a closed water chamber, an inlet connection for continuously supplying said chamber with water, a water overflow connection for the chamber whereby a constant head of water is maintained therein, a water inlet connection for the tank leading from said chamber to adjacent the bottom of the tank, a separating chamber extending above the tank, and an oil delivery pipe leading from said separating chamber and communicating therewith at a point above the water overflow.

[Claims 6 and 7 not printed in the Gazette.]

1,065,436. SOAP-HOLDER. GUY W. FERDON, Cresskill, N. J., assignor to Silver & Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 16, 1912. Serial No. 684,188. (Cl. 45—28.)

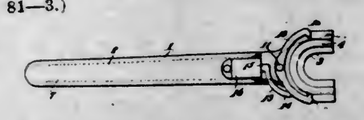


1. The combination, in a soap-holder, of a substantially rectangular rim member of slotted-wire construction having its slot at bottom, substantially rigid flange-forming members fastened in said slot, a post member and escutcheon rigidly united with each other and with said rim member, and a horizontally removable soap-dish having upper edges adapted to slidably interlock with said flanges and normally supported thereby, substantially as hereinbefore specified.

2. A soap holder having, in combination, a metallic frame comprising a rim member substantially rectangular in plan view and of slotted wire construction having its slot at bottom, with downward and inwardly inclined flange-forming members fastened in said slot, and a depending and horizontally removable dish having upper edges adapted to slidably interlock with said flange members and rim and normally supported and secured thereby against accidental vertical displacement, substantially as hereinbefore specified.

3. An improved soap holder for bath rooms and lavatories comprising a metallic frame characterized by a rim member, substantially rectangular in plan view, of slotted wire construction, having its slot at bottom, with downward and inwardly inclined flange-forming members fastened in said slot at opposite sides of the rim, and a depending dish of china or the like, having an upwardly flaring rim the upper edges of which are adapted to slidably interlock with said frame, and horizontally detachable therefrom, substantially as hereinbefore specified.

1,065,437. PACKING-WRENCH. JOHN H. FESLER, Neodesha, Kans. Filed Mar. 19, 1913. Serial No. 755,505. (Cl. 81—3.)



1. A wrench comprising a member with a handle and an enlarged bifurcated end, a second member comprising a handle and a bifurcated end pivotally secured thereto and spaced therefrom, a dog pivotally secured to the first mentioned member and provided with outstanding arms, means at the extremities of said arms for engaging notches.

2. A wrench comprising a member with a handle and an enlarged bifurcated end, a second member with a

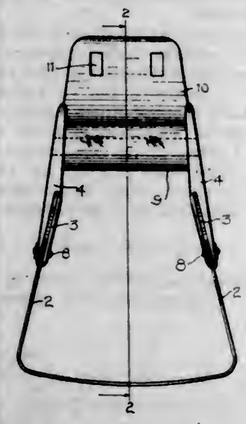
handle and a bifurcated end pivotally secured thereto and spaced a distance therefrom, a dog pivotally secured to the first member, and resilient means for holding one arm thereof in engagement with a nut.

3. A wrench comprising a member with a handle and an enlarged bifurcated end, said bifurcated end provided with a number of steps to engage nuts of varying sizes, a second member comprising a handle and an enlarged bifurcated end pivotally secured to the first mentioned member and spaced a distance therefrom, a dog pivotally secured to the first mentioned member and adapted to extend across the stepped portion thereof, resilient means contacting with said dog.

4, A wrench comprising a member with a handle and an enlarged bifurcated stepped end, a second member pivotally secured to the first mentioned member and spaced a distance therefrom, a dog provided with two outstanding arms pivotally secured to the first mentioned member and said arms provided at their lower extremities with inwardly extending lugs adapted to engage notches formed in the sides of a nut, a pawl member contacting with one of the arms of the said dog and adapted to hold the same in engagement with a nut, said pawl extending within a casing secured to the first mentioned member and rotatably held thereby.

5. A packing wrench comprising a member with a handle and an enlarged bifurcated stepped end, a second member comprising a handle and an enlarged bifurcated end pivotally secured to the first mentioned member and spaced a distance therefrom, said second member provided with a plurality of openings whereby the same is adjustably secured to the first mentioned member, a dog pivotally secured to the first mentioned member and adapted to extend within the stepped portion of said end, a pawl contacting with one of the arms of said dog and adapted to hold the same in engagement with a notch in a nut, said pawl provided with a shaft extending therefrom, a casing rotatably engaging said shaft, and resilient means disposed within said casing adapted to hold said pawl in contact with the said dog.

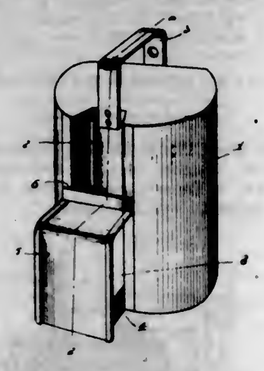
1,065,438. STIRRUP. CHARLES L. FIANDT and WILLIAM L. MEEK, Upton, Wyo. Filed Feb. 3, 1913. Serial No. 746,017. (Cl. 54—49.)



1. In a device of the character described, the combination of side bars having topering recesses formed in the lower ends thereof, a foot rest having side pieces, the upper ends of which are pivotally secured within said recesses for swinging movement, means for preventing the swinging movement of said foot rest in one direction, a central portion integrally connecting said side bars, a web formed on said central portion and provided with openings arranged upon opposite sides of the longitudinal center thereof.

2. In a device of the character described, the combination of side bars, having tapering recesses formed in the lower ends thereof, a foot rest having side pieces, the upper ends of which are pivotally mounted within said recesses for swinging movement, a stop formed at one side of each of said recesses, and against which said side pieces are adapted to abut to prevent the swinging movement thereof in one direction, a central portion integrally connecting said side bars, a web formed on said central portion and provided with openings arranged upon each side of the longitudinal center.

1,065,439. POULTRY-FOUNTAIN. ROBERT B. FORD, Homestead, Pa. Filed Feb. 3, 1912. Serial No. 675,176. (Cl. 119—77.)

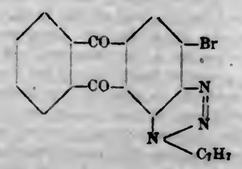


A poultry fountain comprising a reservoir formed of a single sheet of metal having the front wall thereof stamped to provide a vertical inflow groove coextensive with the height of the reservoir and having an opening adjacent to the bottom contiguous the groove, a trough connected with said reservoir in proximity to the groove therein and in open communication therewith through the said opening, and a guard connected to the front of the reservoir and to the front of the trough and partially inclosing the latter and forming with the adjacent wall of the reservoir a lateral opening.

1,065,440. DYES OF THE ANTHRAQUINONE SERIES. HERMANN FRIEDMANN, Elberfeld, Germany, assignor to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Jan. 13, 1913. Serial No. 741,790. (Cl. 8—1.)

1. The new aziminoanthraquinones derivable from orthodiaminoanthraquinones by treating these compounds with nitrous acid, which are from yellow to blue to green compounds soluble in concentrated sulfuric acid generally with a yellow coloration; being converted into wool dyes by treatment with sulfonating agents, substantially as described.

2. The new aziminoanthraquinone having most probably the formula:

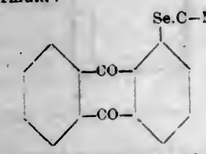


crystallizing from nitrobenzene in yellow needles, soluble in concentrated sulfuric acid with a yellow coloration; dyeing cotton from the hydrosulfite vat yellow shades; its sulfonic acid dyeing wool yellow shades; yielding by condensation with 1-aminoanthraquinone a product which dyes cotton from the hydrosulfite vat scarlet-red shades, substantially as described.

1,065,441. SELENOCYANIDS OF THE ANTHRAQUINONE SERIES. LUDWIG GATTERMANN, Freiburg, Breisgau, Germany, assignor to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Jan. 17, 1913. Serial No. 742,693. (Cl. 23—24.)

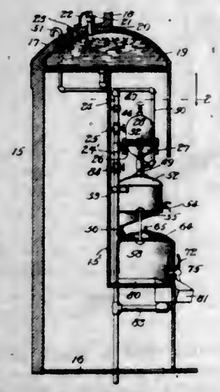
1. The new selenocyanids of the anthraquinone series having most probably the formula A—Se—CN (A being the anthraquinone radical) being obtained from diazoselenocyanids, which are converted into selenophenols by treatment with alkali, substantially as described.

2. The new 1-selenocyananthraquinone having most probably the formula:



which crystallizes from nitrobenzene in yellowish-red needles melting at 249° C., being converted into the 1-anthraquinone-selenophenol by treatment with alkali which selenophenol dyes wool yellowish-red shades, substantially as described.

1,065,442. APPARATUS FOR TREATING AND STORING WATER. HENRY GIESSEL and CHARLES A. SCHROYER, Chicago, Ill. Filed Feb. 7, 1910. Serial No. 542,592. (Cl. 137—79.)



1. In combination, a passenger coach, a water tank fitted closely under the roof thereof, a filling pipe and a vent pipe leading through the roof from said tank, a filter below the tank, a storage tank below the filter, a conduit leading from the water tank to the filter, another conduit leading from the filter to the storage tank, a surface cooler below the storage tank, a conduit leading through the surface cooler from the storage tank, and a faucet terminating said conduit.

2. In combination, a filtering chamber, a filtering stone therein, a water supply conduit leading to the chamber, a discharge conduit leading therefrom, a storage tank beneath the filtering chamber connected to said discharge conduit, an ice chamber below the storage chamber, a cold water tank within the ice chamber, a conduit leading from the storage tank to the cold water tank, a discharge conduit leading from the cold water tank, a drainage pipe from the said ice chamber, a branch pipe connecting the said water supply conduit to the said drainage pipe, and a valve in said branch connection.

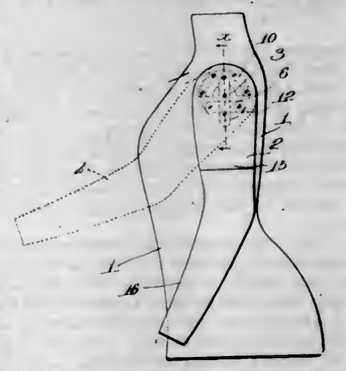
3. In a device of the class described, a support, an ice chamber standing thereon, a side wall adjacent to said chamber, a storage chamber above the ice chamber supported by brackets on said side wall, the bottom of said chamber sloping downwardly toward said wall, a cooling tank within the ice chamber, a conduit leading from the lowest point of said storage chamber through the side walls of the ice chamber to the cooling tank, a discharge conduit leading through the side walls from the cooling tank, a filtering chamber above the storage chamber, an inlet supply conduit to the filtering chamber, an outlet supply pipe directly from the filtering chamber to the storage chamber, said last named pipe serving to support the filtering chamber upon the storage chamber, a valved branch conduit from said inlet supply conduit, and a drainage pipe from said ice chamber.

4. In combination, a passenger coach, a water tank fitted closely under the roof thereof, a filter directly below said tank, a storage tank directly below the filter, a conduit leading from the first named water tank into the filter, another conduit leading from the filter to the storage tank, a surface cooler directly below the storage tank, a conduit leading through the surface cooler from the storage tank, and a faucet terminating said conduit.

5. In a device of the class described, an initial storage tank, a pipe leading downwardly therefrom, a valve in said pipe, a filter casing connected to said pipe, a depending branch pipe connected to said first mentioned pipe at a point below the valve therein, a second valve in said branch pipe, a storage tank below the filter casing, a pipe connecting the filter casing to the last mentioned storage tank, and a branch vent pipe from said last named pipe extending up and having an open end terminating above the top of the initial storage tank.

[Claims 6 to 12 not printed in the Gazette.]

1,065,443. DRESS-FORM. FRANK B. GRANGER, New York, N. Y., assignor to Hall-Borchert Dress Form Co., New York, N. Y., a Corporation of New Jersey. Filed Jan. 31, 1911. Serial No. 605,681. (Cl. 223—18.)



1. The combination with the waist portion of a dress form, of an arm section, a holding finger pivoted to one of the parts to turn about an axis at right angles to the length of said finger, a keeper secured to the other part to detachably receive the finger whereby the arm may be readily removed from the form by a movement in the direction of the length of the finger, said finger having an extension, and means to frictionally engage the extension thereby to hold the arm in different positions.

2. The combination with the waist portion of a dress form, of an arm section, a holding finger pivoted to one of the parts and having an extension provided with a friction face, a keeper on the other part adapted to detachably receive the finger, and a friction plate secured to the part to which the finger is pivoted and adapted to frictionally engage the finger extension thereby to frictionally hold the arm in any adjusted position.

3. The combination with the waist portion of a dress form, of an arm section, a holding finger pivoted to the arm section and having an extension provided with a friction face, a keeper on the waist portion adapted to detachably engage the finger, and an annular friction plate secured to the arm section and frictionally engaging the finger extension whereby the arm will be frictionally held in any adjusted position.

4. The combination with the waist portion of a dress form, of an arm section, a keeper secured to the shoulder of the dress form, a holding finger pivoted to the arm section and adapted to detachably engage the keeper, and a friction plate secured to the arm and engaging the holding finger thereby to provide sufficient frictional resistance to the turning movement thereof to hold the arm in any adjusted position.

5. The combination with the waist portion of a dress form, of an arm section, a keeper secured to the shoulder of the waist portion and provided with a loop, a holding finger pivoted to the arm and having a flat face resting against the end of the arm and an offset portion to detachably engage said loop, and a friction plate engaging said finger and thereby to provide sufficient frictional resistance to the turning movement thereof to hold the arm in any adjusted position.

[Claim 6 not printed in the Gazette.]

1,065,444. VEHICLE-LAMP. GEORGE G. GREENBERG, Chicago, Ill. Filed Apr. 19, 1909. Serial No. 490,668. (Cl. 40—132.)



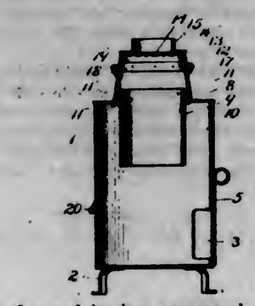
1. In a lamp for vehicles, the combination of a lamp-case, a fixed flat bottom strip and a fixed flat top strip at the front face thereof, a removable flat transparent plate forming the front side of said case and held therein inwardly of and adjacent said strips, a lamp in said case, and identification characters extending between said strips and separately attached thereto to lie across the outer side of said transparent plate, said characters being locked against removal by said transparent plate when the latter is in position.

2. In a lamp for vehicles, the combination of a lamp-case, a fixed flat bottom strip and a fixed flat top strip at the front face thereof, a removable flat transparent plate forming the front side of said case and held therein inwardly of and adjacent said strips, a lamp in said case, and identification characters each provided with tongues adapted to be bent to separately engage in apertures in said strips at the top and bottom of said case, said characters being locked against removal by said transparent plate when the latter is in position.

3. In a lamp for vehicles, the combination of a lamp-case having an open top and face, a fixed flat bottom strip and a fixed flat top strip at the front face thereof, a removable flat transparent plate forming the front side of said case and held therein inwardly of and adjacent said strips, a lamp in said case, identification characters each provided with tongues adapted to be bent to separately engage in apertures in said strips at the top and bottom of said case, said characters being locked against removal by said transparent plate when the latter is in position, and a door for closing the top of said case and preventing the removal of said transparent plate.

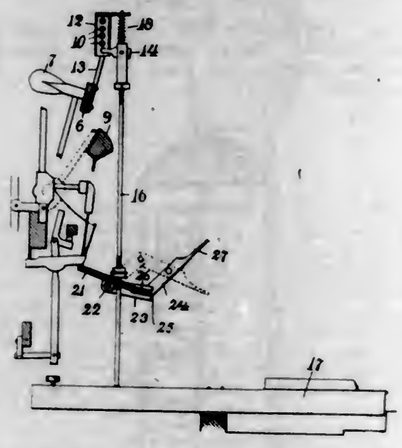
1,065,445. TRASH-BURNER. AMANDA L. HARRIS, Kansas City, Mo. Filed Aug. 13, 1912. Serial No. 714,785. (Cl. 110—18.)

A trash burner comprising a body member having a draft opening in the side, near the bottom, a closed bottom, and an opening in its top; a damper plate for regulating the area of the draft opening; a collar forming an annular space in the upper portion of the body member and projected through the opening in the top of the body to form a flue, and a cap adapted for seating over



the collar flue and having a screened exit opening in its top.

1,065,446. PHRASING ATTACHMENT. HARRY L. HENTZ, West Newton, and JOSEPH W. VINAL, Boston, Mass. Filed June 22, 1908. Serial No. 439,645. (Cl. 84—160.)



1. The combination with a piano provided with the usual strings, hammers, action and keyboard, of an automatic player therefor, means for reducing the effect of said hammers' blows, said means being divided into a moderate number of independent sections, and means whereby the depression of any one of an equal number of keys of said keyboard will affect a corresponding section of said blow-reducing means.

2. The combination with a piano constructed in the customary manner and hence having the usual strings, hammers, action and keyboard, of an automatic player therefor, means for reducing the effect of said hammers' blows, and means in contact with a limited number of the seldom used keys of said keyboard whereby the depression of any one such key will affect a limited section of said blow-reducing means.

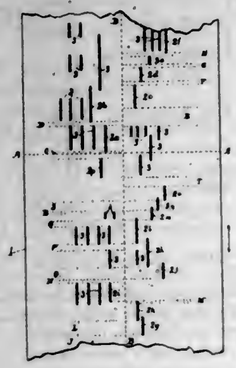
3. The combination with a musical instrument having a keyboard, and an automatic player therefor, of means connected with certain seldom-used keys of the keyboard and operated thereby at will for affecting the action of the player; said means being provided with means to disconnect the said keys from their normal functions.

4. The combination with a piano having the customary strings, hammers, action and keyboard, of an automatic player therefor, means normally acting to reduce the effect of the hammers' blows, and keys located in the said keyboard and similar to the keys in the latter for temporarily withdrawing any one of several sections of said reducing means for the purpose of accenting the melody in the music being played.

5. The combination with a musical instrument having the usual manual, and an automatic player having a perforated music sheet, of an indicator fixed to the instrument in the path of the music sheet and having its face divided into a plurality of spaces each bearing a letter of the musical scale, an equal number of devices for reducing the effect of the hammers' blows each affecting a group of notes in the instrument, and the means connected with certain keys of the manual for operating the respective devices; each key corresponding in name to a character on said spaces.

[Claims 6 to 10 not printed in the Gazette.]

1,065,447. MUSIC-SHEET. HARRY L. HENTZ, West Newton, and JOSEPH W. VINAL, Boston, Mass. Filed Mar. 23, 1911. Serial No. 616,392. (Cl. 84—162.)



1. In an automatically playing and phrasing musical instrument, a perforated music sheet having note-controlling perforations, the notes to be phrased being controlled by note-controlling perforations not associated with said notes to be phrased.

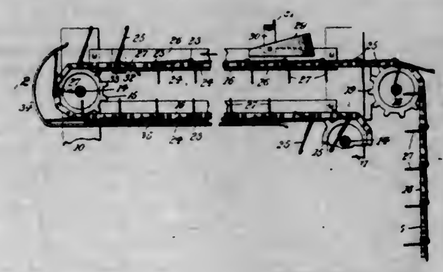
2. A perforated music sheet for mechanically played musical instruments having note-controlling perforations for the notes to be accented, and note-controlling perforations for the notes not to be accented, the subduing of the notes not to be accented being controlled by note-controlling perforations associated with notes being accented.

3. A perforated music sheet for mechanically played musical instruments having note-controlling perforations cut so that the note-coltrolling perforations whose associated notes are to be subdued are overlapped by other note-controlling perforations; said overlapping note-controlling perforations controlling the subduing of the notes to be subdued.

4. A perforated music sheet for mechanically played musical instruments having note-controlling perforations cut to form an imperforate portion or band extending transversely across a specified section of the music sheet and lying in advance of a transverse line cutting the front edges of the note-controlling perforations whose associated notes are to be accented, said imperforate portion or band controlling the accent of the notes to be accented.

5. A perforated music sheet for mechanically played musical instruments having note-controlling peforations cut to form an imperforate portion or band extending transversely across a specified section of the music sheet and lying in advance of a transverse line cutting the front edges of the note-controlling perforations whose associated notes are to be accented, said imperforate portion or band controlling the accent of the notes to be accented, and the front edges of the perforations of the notes to be accented lying slightly in advance of the front edges of the perforations of the notes not to be accented.

1,065,448. COCOA-COOLER. PAUL G. HOLLSTEIN, Carlstadt, N. J., assignor to J. M. Lehmann Company, New York, N. Y., a Corporation. Filed Feb. 19, 1913. Serial No. 749,330. (Cl. 34—12.)



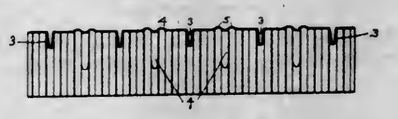
1. In a cocoa cooler, a pair of endless chains having a plurality of zig-zag runs, conveyer blades pivotally suspended between said chains, arms on said blades, supporting rails adapted to be engaged by the blades, and cams adapted to be engaged by the arms.

2. In a cocoa cooler, a pair of endless chains having a plurality of zig-zag runs, axially alined pins projecting inwardly from the chains, conveyer blades turnable on said pins, arms on said blades, supporting rails adapted to be engaged by the blades, and cams adapted to be engaged by the arms.

3. In a cocoa cooler, a pair of endless chains having a plurality of zig-zag runs, axially alined pins projecting inwardly from the chains, conveyer blades turnable on alternating sets of said pins, arms on said blades that are adapted to engage the intermediate pins, supporting rails adapted to be engaged by the blades, and cams adapted to be engaged by the arms.

4. In a cocoa cooler, a pair of endless chains having a plurality of zig-zag runs, horizontal guide rails adapted to be engaged by said chains, conveyer blades pivotally suspended between said chains, arms on said blades, supporting rails adapted to be engaged by said blades for maintaining them in a substantially horizontal position, and cams adapted to be engaged by the blade-arms.

1,065,449. SHEET-METAL FORM FOR FLOORS. THOMAS HENRY KANE, Youngstown, Ohio, assignor to Trussed Concrete Steel Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 3, 1913. Serial No. 745,847. (Cl. 72—70.)



1. A sheet metal form for floor construction of open box-like shape, comprising a top and sides integral therewith, said top having a plurality of depending ribs and corrugated sections between the ribs, the corrugations of said sections being of less depth than the ribs.

2. A sheet metal form for floor construction of open box-like shape comprising a top having depending ribs, sides corrugated at their lower edges, and braces integral with and connecting the top and the sides.

3. A sheet metal form for floor construction comprising a corrugated top having deep, downwardly-projecting ribs alternating with corrugated sections, the ribs extending downward a greater distance than the corrugations, and upright sides integral with the top.

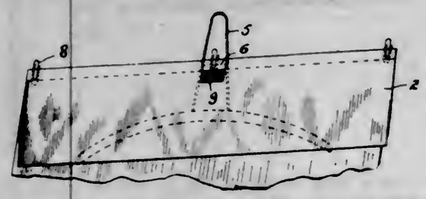
4. A sheet metal form for floor construction, of open box-like shape comprising an arched top having depending ribs and corrugations between and transverse to the ribs, and corrugated sides.

5. A sheet metal form for floor construction of open

box-like shape comprising a longitudinally corrugated top, sides corrugated at their lower edges, and braces integral with the top and sides connecting them.

[Claims 6 and 7 not printed in the Gazette.]

1,065,450. STORAGE-BAG. FRANK EDMOND KLEIN, Louisville, Ky. Filed Sept. 11, 1912. Serial No. 719,861. (Cl. 206—10.)



1. A storage bag, open at one end and provided with a flap; said flap and the side of said bag opposite to the side to which said flap is connected being slotted to register; and means inside said bag for supporting stored material, provided with an extension through said slots holding said flap close against said opposite side.

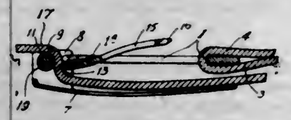
2. A storage bag, open at one end and provided with a flap; said flap and the side of said bag opposite to the side to which said flap is connected being slotted to register; and a clothes hanger inside said bag, provided with a handle extending through said slots and holding said flap close against said opposite side.

3. A storage bag, open at one end and provided with a flap; said flap and the side of said bag opposite to the side to which said flap is connected being slotted to register; a clothes hanger inside said bag provided with a taper wire handle extending through said slots; and clips between the wires of said handle, tightly closing said slots between said wires.

4. A storage bag, open at one end and provided with a flap; said flap and the side of said bag opposite to the side to which said flap is connected being slotted to register; a secondary flap on said first flap, adapted to cover said slots; and an inner supporting mechanism extending through said slots and positioning said flaps.

5. A storage bag provided with a flap; said flap and a side of the bag being slotted to register; a secondary flap covering said slots and extending over the edge of said bag; means for holding said secondary flap in position; and an inner supporting mechanism extending through said slots and positioning said flaps.

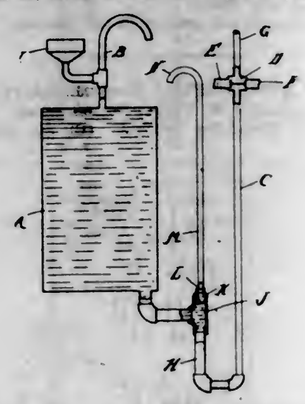
1,065,451. BUCKLE. TAKESHI KONNO, Pasadena, Cal. Filed Oct. 17, 1912. Serial No. 726,252. (Cl. 24—191.)



1. A buckle consisting of a rear member having a gripping edge, a clamping member pivoted to said rear member, and a clamping bar carried by said clamping member to coöperate with said gripping edge, said bar being circumferentially adjustable with relation to said clamping member to vary the width of the space between said bar and gripping edge to adapt the buckle to straps of different thickness, said bar being shaped to fit recesses in said clamping member, said recesses being shaped to hold said bar nonrotatable in the adjusted positions.

2. A buckle consisting of a body having a gripping edge, a clamping member pivoted to said body, and a clamping bar to coöperate with said gripping edge, said clamping member having recesses to receive the end portions of said bar, rotation of said bar being prevented by the shape of the ends thereof and the shape of the recesses in the clamping member, the circumferential reversing of said bar varying the distance of the same from said gripping edge.

1,065,452. APPARATUS FOR HYDRAULICALLY STORING AND DELIVERING HYDROCARBON OILS. WILLIAM G. LATIMER, Detroit, Mich., assignor to E. B. Cadwell & Company, Detroit, Mich., a Copartnership. Filed Jan. 19, 1912. Serial No. 672,182. (Cl. 137—78.)



1. In an apparatus for hydraulically handling oil, the combination with a storage tank, of a water waste conduit connected with said tank, an oil overflow conduit connected with said water waste conduit, a float valve having a specific gravity intermediate that of the water and oil for alternately closing said water waste and oil overflow conduits, being normally sustained by the water to close the oil overflow.

2. In an apparatus for hydraulically handling oil, the combination with a storage tank, of a water waste conduit connected therewith, an oil overflow conduit connected with said water waste conduit, a chamber in said water waste conduit, a float valve in said chamber of a specific gravity intermediate that of the water and oil and normally sustained by the former to cut-off the oil overflow, said float being adapted when said chamber is filled with oil to drop and close said water waste conduit.

3. In an apparatus for hydraulically handling oil, the combination with a storage tank, of a water waste conduit connected with said tank, an oil overflow connected with said water waste conduit, means normally closing said oil overflow adapted to close the water waste conduit and open the oil overflow when the tank is filled with oil.

4. In an apparatus for hydraulically handling oil, the combination with a tank, of a water waste conduit connected thereto having a downwardly extending oil trap therein, an oil overflow conduit connected with said trap, and a float valve in said trap for alternately closing said oil overflow and water waste conduits, said float being of a gravity intermediate that of water and oil.

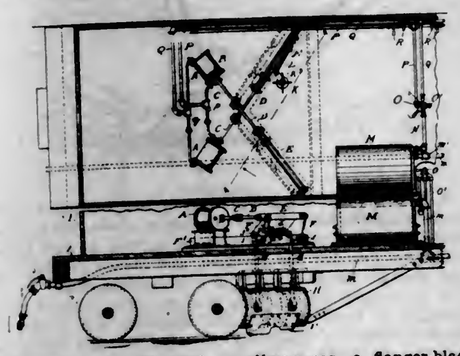
1,065,453. SNOW AND ICE FLANGER. BENJAMIN F. LAWRENCE, Buffalo, N. Y. Filed July 1, 1912. Serial No. 706,929. (Cl. 104—100.)

1. The combination of a railway car, a guide carried thereby and arranged in a substantially upright position, said guide being curved in a plane lengthwise thereof and a flanger-blade slidably mounted on said guide to follow the curvature thereof.

2. The combination of a railway car, a substantially upright guide secured thereto and curved in a plane lengthwise of the guide, and a curved flanger-blade slidably mounted on said guide.

3. The combination of a railway car, a substantially upright guide secured thereto and curved in a plane lengthwise of the guide, and a flanger-blade slidable vertically on said guide and curved concentrically therewith.

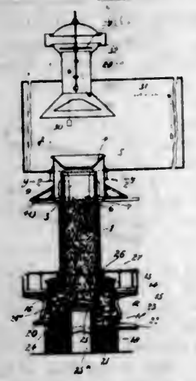
4. The combination of a railway car, a substantially upright guide secured thereto and curved in a plane lengthwise of the guide, a curved flanger-blade mounted to slide vertically on said guide, and means for raising and lowering said blade.



5. The combination of a railway car, a flanger-blade movable substantially vertically thereon, a pressure cylinder and piston, an operative connection between said piston and said blade, an indicator comprising a rotary spindle and a target mounted thereon, and means for transmitting motion from said connection to said spindle.

[Claim 6 not printed in the Gazette.]

1,065,454. CUPOLA. MEREDITH LEITCH, Springfield, Mass. Filed Apr. 4, 1910, Serial No. 553,285. Renewed May 7, 1913. Serial No. 766,205. (Cl. 75—107.)



1. In a cupola, the combination of a stack, a support beneath said stack for the material therein, a fuel chamber for solid fuel having an independent feed opening and having a connection with the interior of said stack, said connection constituting an outlet for the metal in said stack when molten, said fuel chamber extending from above the lower end of said stack to below the upper surface of said support so that molten metal flowing from said stack will pass downward through a mass of burning fuel in said fuel chamber, an outlet for the molten metal situated below said fuel chamber, and means for causing a draft of air through said feed opening and fuel chamber and into said stack.

2. In a cupola, the combination of a stack, a support beneath said stack for the material therein, a fuel chamber for solid fuel having an independent feed opening and surrounding said stack and said support and having a connection with the interior of said stack on a plurality of sides thereof, said connection constituting an outlet for the metal in said stack when molten, said fuel chamber extending from above the lower end of said stack to below the upper surface of said support so that molten metal flowing from said stack will pass downward through a mass of burning fuel in said fuel chamber, an outlet for the molten metal below said fuel chamber, and means for causing a draft of air through said feed opening and fuel chamber and into the lower end of said stack.

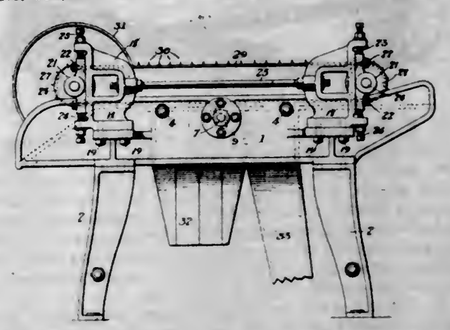
3. In a cupola, the combination of a stack, a projecting stump supported from beneath and in turn supporting the material within said stack, a fuel chamber for solid fuel having an independent feed opening and surrounding said stump and the lower part of said stack and extending below the upper end of said stump so that molten metal flowing from said stack will pass downward through a mass of burning fuel in said fuel chamber, an outlet for the molten metal below said fuel chamber, and means for causing a draft of air through said feed opening and fuel chamber and into the lower end of said stack.

4. In a cupola, the combination of a stack, a support beneath said stack for the material therein, a fuel chamber for solid fuel having an independent feed opening and having a connection with the interior of said stack, said connection constituting an outlet for the iron in said stack when molten, said fuel chamber extending from above the lower end of said stack to below the upper surface of said support so that molten metal flowing from said stack will pass downward through a mass of burning fuel in said fuel chamber, an outlet for the molten metal situated below said fuel chamber, a slag outlet above the outlet for the molten metal, and means for causing a draft of air through said feed opening and fuel chamber and into said stack.

5. In a cupola, the combination of a stack, a support beneath said stack for the material therein, a fuel chamber having an independent feed opening and a connection with the interior of said stack, said connection constituting an outlet for the iron in said stack when molten, said chamber extending from above the lower end of said stack to below the upper surface of said support so that molten metal flowing from said stack will pass downward through burning fuel in said fuel chamber, an outlet for the molten metal situated below said fuel chamber, means for causing a draft through said fuel chamber and into said stack, and twyers located at the base of said fuel chamber and above said outlet.

[Claims 6 to 13 not printed in the Gazette.]

1,065,455. MACHINE FOR TRIMMING FRUIT. ROBERT LISTER, Honolulu, Hawaii. Filed Mar. 4, 1912. Serial No. 681,515. (Cl. 146—11.)



1. In a fruit trimming machine, a stationary grid comprising rigid spaced bars, an endless belt for feeding the segments of fruit to be trimmed along said grid, and a series of knife blades operating between the bars of the grip, said knives adapted to trim the fruit from the rind as the segments pass along the grid.

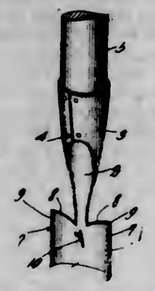
2. In a fruit trimming machine, a stationary grid, knives operating between said grid, an endless feed belt, feed belt pulleys mounted at opposite ends of the machine, and means for adjusting said feed belt pulleys vertically and independent means for adjusting said feed belt pulleys longitudinally of the machine.

3. In a fruit trimming machine, a stationary grid comprising rigid spaced bars, an endless belt for feeding the

segments of fruit to be trimmed along said grid, a revolving shaft mounted below the grid, a plurality of knives carried by said shaft and operating between the bars of the grid, and means for rotating said shaft.

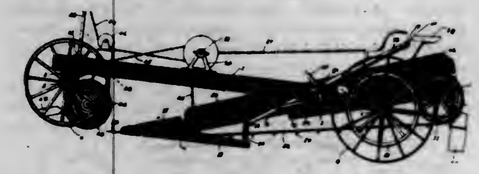
4. In a machine for trimming fruit from rind segments, a rigid grid, means to press the rind segments on the grid to force the good portion of the fruit through the grid, the knives cooperating with said grid to trim the good portion of the fruit from the rind segments, said knives being adjustable for the purpose described.

1,065,456. WEED-EXTRACTING TOOL. SHERMAN L. LOWREY, Pittsburgh, Pa. Filed Nov. 4, 1912. Serial No. 729,530. (Cl. 55—65.)



A tool of the class described comprising a transversely curved blade and a shank projected from the top of the blade, the shank being located close to one side edge of the blade, said side edge merging unbrokenly into the cutter surface of the shank, the other side edge of the blade being spaced from the shank to dispose the major portion of the blade to one side of the axis of the shank, the upper edge of the blade, at one side only of the shank, slanting downwardly from the upper end of the last specified side edge, toward the shank to define a single lifting prong.

1,065,457. DITCHING-MACHINE. HARRY W. LUTZ and WILLIAM HUTCHISON, Antioch, Cal. Filed May 9, 1912. Serial No. 696,126. (Cl. 37—25.)

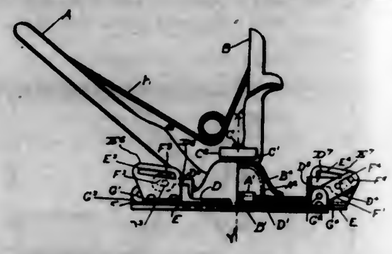


1. A device of the character described comprising a frame mounted on wheels, another frame hinged to said first named frame and pivotally mounted on an axle carrying wheels, a conveyer carried by said second named frame, a digging point carried by said second named frame and adapted to discharge on said conveyer, means for raising and lowering said second named frame and means for tilting said digger point independently of any movement of said second named frame, as described.

2. A device of the character described comprising a main frame mounted on wheels, an independent frame hinged to said main frame, and being journaled on an axle carrying wheels, means for raising and lowering said second named frame, a conveyer disposed in said second named frame, a digging point flexibly journaled on said second named frame, means for inclining said digger point, said digger point discharging upon said conveyer, as described.

1,065,458. POULTRY-PICKER. JAMES G. MACLAREN, Mamaroneck, N. Y. Filed Mar. 28, 1910. Serial No. 551,970. (Cl. 17—30.)

1. A poultry picker comprising in combination means for holding down the fowl, a plurality of movable combs, means for producing relative motion of said combs for gripping the feathers, and means for moving said movable combs in a group with relation to said holding means.

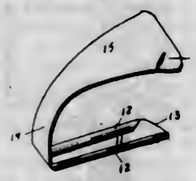


2. A poultry picker comprising in combination a holding comb, a plurality of movable combs above said holding comb, means for producing relative motion of said latter combs for gripping the feathers, and means for drawing said movable combs away from said holding comb.

3. In a device for plucking feathers from fowls, a comb arranged to enter between the feathers, and a pair of plucking members relatively movable to said comb for drawing the feathers through the comb, the movement of one of said plucking members being parallel to the teeth of the comb.

4. In a device for plucking feathers from fowls, a comb arranged to enter between the feathers, and a pair of movable members disposed above said comb in close proximity thereto, one of said members being arranged to engage the other member for frictionally holding the feathers between the two members and both of said movable members having a conjoint movement for pulling the feathers through the comb, the movement of one of said members being parallel to the teeth of the comb.

1,065,459. DEVICE FOR TEACHING YOUNG ANIMALS TO DRINK. MADS H. MADSEN, Kimballton, Iowa. Filed Oct. 14, 1912. Serial No. 725,755. (Cl. 119—51.)



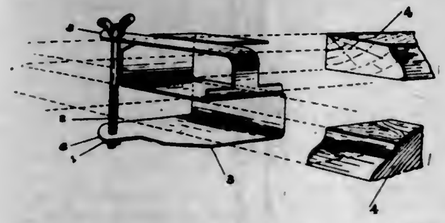
1. In a device of the class described comprising a flat plate having ribs at its edges, thereby forming a groove, designed to rest against the roof of the mouth of the animal, a portion curved upwardly and a portion curved rearwardly and upwardly from said first portion and designed to fit the ridge of the nose of the animal.

2. In a device of the class described comprising a flat plate with raised edges designed to rest against the roof of the mouth of the animal, a portion curved upwardly and a portion curved rearwardly and upwardly from said first portion and designed to fit the ridge of the nose of the animal, said device being so constructed that the lower forward portion thereof extends forwardly leaving a space between the same and the upper lip of the animal.

3. In a device of the class described comprising a plate with its edges rolled at its sides to form a grooved structure designed to rest against the roof of the mouth of the animal, a portion curved upwardly and a portion curved rearwardly and upwardly from said first portion and designed to fit the ridge of the nose of the animal, said last named portion being provided with depressions on each side of its upper end.

1,065,460. CORNER-CLAMP FOR USE WITH FABRIC-STRETCHERS. THOMAS R. MCCLOSKEY, Salt Lake City, Utah. Filed Aug. 13, 1912. Serial No. 714,900. (Cl. 45—24.)

1. A corner clamp consisting of a clamp having its two sides bent upward at right angles to the bottom of the said clamp and inwardly at right angles to the sides; one of the said sides when thus bent projecting laterally beyond the other side and one end being bent downward at right angles to the bottom, and thence inwardly in a parallel plane with the bottom; a thumb screw passing through the exterior end of the said side and of the said end, and adapted to bind the two frame members together when housed in the said clamp by adjusting the said thumb screw.



2. In fabric stretchers in combination with slats forming the four sides of the frame, said slats being secured together at their outer corners by means of the corner clamp, said clamp having the lower portion of the same bent into a loop through which the side member of the said frame passes and having the upper portion bent into a loop at right angles to the aforesaid loop to permit passage of the end slat of the said frame at right angles to the said side member and having means for the rigid securing of the said side and end slats together by a thumb screw passing through the exterior portion of said under and upper loops, adjacent to the said slats, the said clamp being of such construction as to permit the free passage of the side and end members of the said frame when the tension upon the said loops is slackened by means of the said thumb screw.

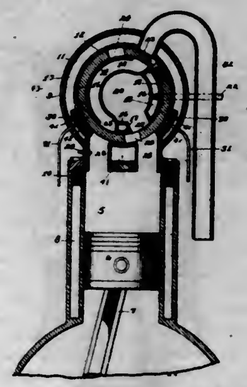
3. In curtain or fabric stretchers the combination of the corner clamps having the upper and lower portions disposed at right angles to each other, both the upper and lower portions having an exterior corner projecting and a thumb screw passing through one of the said exterior corners and threaded into the other, adapted to normally cause the clamp to grip frame members housed in the upper and lower portions, a side frame member housed in one portion of the said clamp and an end frame member housed in the other portion of the said clamp and capable of sliding freely therein when the tension is lessened by the adjustment of the said thumb screw, all substantially as above described.

4. As a new article of manufacture, a duplex clamp, formed of two housings, an upper and a lower, the top of the lower housing forming the bottom of the upper housing, the said upper and lower housings being disposed at right angles to each other, the top of the said upper housing extending exteriorly to the main part of each housing and the bottom of the lower housing extending exteriorly to the main part of the lower housing so that the exterior projection of the upper and lower extensions register with each other, and a thumb screw passed through the said projection at right angles to each of said projections as set forth.

1,065,461. INTERNAL-COMBUSTION ENGINE. CHESTER D. MILLER, San Diego, Cal. Filed July 31, 1912. Serial No. 712,489. (Cl. 123—190.)

1. In a valve structure for explosive engines, a valve casing comprising a core, a wall spaced from said core, a cylindrical valve rotatively mounted between said wall and said core, there being an exhaust channel formed longitudinally through said core and there being an intake passage formed transversely through said core and a water jacket formed in said core upon the side opposite the intake passage, said intake passage lying adjacent the opposite side wall of the core.

2. In a valve structure for explosive engines, the combination with a casing comprising an outer water jacket and an internal core, of a rotative cylindrical valve disposed between said water jacket and said core, said core having a longitudinally extending exhaust channnel formed therethrough, and said core having a transversely extending inlet passage formed therethrough, one wall of which is formed by a wall of the exhaust channel, said core having a water jacket formed therewith which lies upon one side of said core, said inlet passage lying upon the other side of said core.



3. In a valve structure for explosive engines, the combination with a casing comprising an outer water jacket and an internal core, of a rotative cylindrical valve disposed between said water jacket and said core, said core having a longitudinally extending exhaust channel formed therethrough and said core having a transversely extending inlet passage formed therethrough, one wall of which is formed by a wall of the exhaust channel, said core having a water jacket formed therewith which lies upon one side of said core, said inlet passage lying upon the other side of said core, and said exhaust channel lying between said water jacket and said inlet passage.

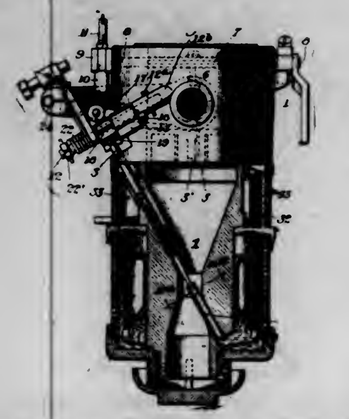
4. In a device of the character described, the combination with a valve casing comprising an outer water jacket and an internal core spaced therefrom, of a cylindrical valve mounted for rotation therebetween, said cylindrical valve having diametrically opposed ports formed therethrough, an inlet passage extending transversely through said core and opening upon opposite sides thereof at diametrically opposed points, a centrally arranged exhaust channel formed longitudinally through said core, said core having a radially extending exhaust port leading from said channel to the periphery of said core, and a water jacket formed with said core and lying upon the side of said core through which said exhaust port passes.

5. In a device of the character described, the combination with a valve casing comprising an outer water jacket and an internal core spaced therefrom, of a cylindrical valve mounted for rotation therebetween, said cylindrical valve having diametrically opposed ports formed therethrough, an inlet passage extending transversely through said core, and opening upon opposite sides thereof at diametrically opposed points, a centrally arranged exhaust channel formed longitudinally through said core, said core having a radially extending exhaust port leading from said channel to the periphery of said core, a water jacket formed with said core and lying upon the side of said core through which said exhaust port passes, said inlet passage being formed between the wall of the exhaust channel and the external wall of said core at the side of said core remote from said radially exhaust port.

1,065,462. CARBURETER. HARRY A. MILLER, Los Angeles, Cal., assignor to New-Miller Manufacturing Company, Los Angeles, Cal., a Corporation of California. Filed June 7, 1911. Serial No. 631,861. (Cl. 48—155.1.)

1. In a carbureter, a carbureting chamber, a nozzle discharging into the carbureting chamber, a needle valve for said nozzle, a throttle valve, means operated by the

throttle valve for operating the needle valve therewith, said means being movable independently of said throttle valve, the side walls of said carbureting chamber having ports, a sliding sleeve in the carbureting chamber for controlling said ports, and a connection between said sliding sleeve and the throttle valve whereby said sleeve is operated with the throttle valve.



2. In a carbureter, a carbureting chamber, a nozzle discharging into the carbureting chamber, a needle valve for said nozzle, a throttle valve, a pivoted head, a spring arm pivoted in said head, and bearing against said needle valve, means operated by the throttle valve for actuating said arm, and means for actuating said arm independently of the last means.

3. In a carbureter, carbureting chamber, a nozzle discharging into the carbureting chamber, a needle valve for said nozzle, a throttle valve, a pivoted head, a spring arm pivoted in said head and bearing against said needle valve, and means for actuating said arm independently of the last means, comprising a cam bearing against said arm, and a lever projecting from said cam.

4. In a carbureter, a carbureting chamber, a nozzle discharging into the carbureting chamber, a needle valve for said nozzle, a throttle valve, a pivoted head, an arm pivoted in said head and bearing against said needle valve, and means for actuating said arm independently of the last means, comprising a cam bearing against said arm, and a lever projecting from said cam, a mixing chamber having ports in its side walls, a sliding sleeve in the mixing chamber for controlling said ports, a connection from said sliding sleeve to the throttle valve.

5. In a carbureter, a carbureting chamber, a nozzle discharging into the carbureting chamber, a needle valve for said nozzle, a throttle valve, a pivoted head, an arm pivoted in said head, and bearing against said needle valve, and means for actuating said arm independently of the last means, comprising a cam bearing against said arm, and a lever projecting from said cam, a mixing chamber having ports in its side walls, a sliding sleeve in the mixing chamber for controlling said ports, a connection from said sliding sleeve to the throttle valve, a tubular valve extending tangentially through the mixing chamber, and intersecting the path of movement of the throttle valve and allowing gasolene and air to pass the throttle valve when the latter is closed.

[Claims 6 to 8 not printed in the Gazette.]

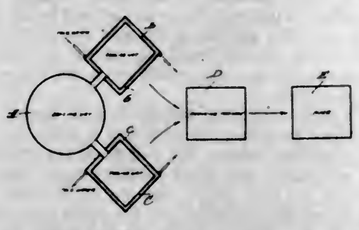
1,065,463. DUMB-WAITER. GUY K. MITCHELL, Baltimore, Md. Filed Apr. 17, 1913. Serial No. 761,716. Cl. 187—6.)

1. In a dumb waiter, the combination with upright guides for the car, of means for holding the guides parallel with one another comprising a bracket consisting of a metal bar having its central portion adapted for attachment to a building, and having its end portions bent substantially at right angles to the central portion and extending outwardly in the same direction from the central portion, cleats secured to said end portions adjacent the bends in the bar, and a sill or shelf secured to said cleats; and means for connecting said guides to said end portions.



2. In a dumb waiter, the combination with upright guides for the car, of means for holding the guides parallel with one another comprising a bracket consisting of a metal bar having its central portion adapted for attachment to a building, and having its end portions bent substantially at right angles to the central portion and extending outwardly in the same direction from the central portion, cleats secured to said end portions adjacent the bends in the bar, and a sill or shelf secured to said cleats; and clamps, adjustable longitudinally on said arms and adapted to grip the guides.

1,065,464. POWDERED-MOLASSES FOOD AND PROCESS OF PRODUCING THE SAME. LA FAYETTE MYERS and ARTHUR A. CARRICK, Glendale, Ariz. Filed Aug. 5, 1912. Serial No. 713,363. (Cl. 99—11.)



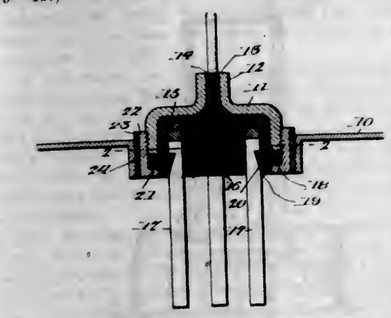
1. The herein described food product which consists of a dry powdered molasses food having a molasses base mixed with an oleaginous substance which congeals at ordinary temperatures, and powdered starch.

2. The herein described food product which consists of a dry powder having as a base molasses mixed with a grease which congeals at ordinary temperatures, and powdered starch.

3. The herein described process for producing powdered molasses food, which consists in adding to liquid molasses an oleaginous substance which congeals at ordinary temperatures boiling the mixture, cooling the boiled mixture, breaking the cooled mixture up into small particles, adding a moisture absorbing agent, and subsequently reducing the mixture to a finely divided state.

4. The herein described process for producing powdered molasses food which consists in adding to liquid molasses a grease which congeals at ordinary temperatures, boiling the mixture, cooling the boiled mixture so as to congeal the mass, breaking the congealed mass up into small particles, adding starch and subsequently reducing the mixture to a finely divided state.

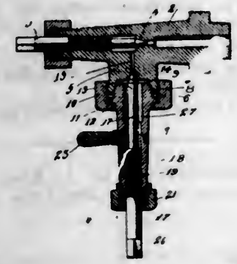
1,065,465. ELECTRIC HEATER. JOHN NATHAN, Coutolenc, Cal. Filed Oct. 2, 1912. Serial No. 723,543. (Cl. 219—41.)



1. In a device of the class described, the combination with a shell having an integral tubular portion, of an insulated holder within the shell and having a tubular end encircled by the tubular portion of the holder, electrodes mounted in openings formed in the said holder and arranged in spaced relation thereon, a collar encircling the said electrodes, flanges on the said collar and projecting into notches in the electrodes, a seat formed on the collar, and a securing member adapted for engagement with the seat of the said collar and having threaded connection with the said shell.

2. In a device of the class described, the combination with a shell, of a holder therein, electrodes mounted on the said holder, wires extending through an opening in the shell and the said holder and having connection with the said electrodes, a collar encircling the electrodes, flanges on the collar extending into notches in the electrodes to secure the electrodes in position on the holder, and a securing member engaging the collar and having threaded connection with the said shell.

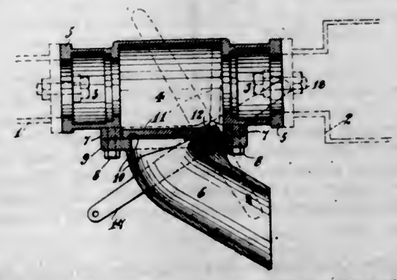
1,065,466. VALVE. LARS L. OIE, San Pedro, Cal. Filed May 14, 1912. Serial No. 697,320. (Cl. 137—4.)



1. The combination of a main valve body formed as an integral member with an inlet and with an outlet passage, a main valve plug controlling communication from said inlet to said outlet passage, said main valve body being provided at the outer end of said outlet passage with a recess having a tapering wall, and with a tapering valve seat in the center of said recess, a regulating valve body having an end portion seating against said tapering wall at the outer end of said outlet passage, a screw ring engaging said regulating valve body and screwing on said screw thread on the main valve body, and a valve plug movably mounted in said regulating valve body and seating on said seat at the outer end of said outlet passage, said regulating valve body having an outlet and said regulating valve plug controlling communication from the outlet passage for the main valve body to the outlet for the regulating valve body.

2. The combination of a main valve body formed as an integral member with an inlet and with an outlet passage, a main valve plug controlling communication from said inlet to said outlet passage, said main valve body being provided at the outer end of said outlet passage with a recess having a tapering wall, and with a tapering valve seat in the center of said recess, a regulating valve body having a convexly, curved, tapering end portion seating against said tapering wall at the outer end of said outlet passage, a screw ring engaging said regulating valve body and screwing on said screw thread on the main valve body, and a valve plug movably mounted in said regulating valve body and seating on said seat at the outer end of said outlet passage, said regulating valve body having an outlet and said regulating valve plug controlling communication from the outlet passage for the main valve body to the outlet for the regulating valve body.

1,065,467. MUFFLER CUT-OUT. ARTHUR PIEL, New York, N. Y. Filed Apr. 13, 1910. Serial No. 555,255. (Cl. 137—26.)



1. In a muffler cut-out the combination with a chamber forming part of the exhaust pipe, of a cut-out pipe detachably secured to and communicating with said chamber and provided with a flange forming a valve seat and a valve mounted in bearings formed partly in said cut-out pipe and adapted to engage said valve seat to close said pipe.

2. In a muffler cut-out the combination with a resonator comprising cylindrical end portions secured to the exhaust pipe and a semi-cylindric central portion having a larger diameter than the end portions and communicating with said end portions through a constricted opening having the same diameter as the exhaust pipe, of a cut off pipe secured to and communicating with the resonator, a valve controlling the opening into said cutoff pipe, said cutoff pipe being provided with a flange whereby the same is secured to the resonator, said flange being provided with a bearing for the valve and forming a seat for said valve in its closed position.

3. In a muffler cut-out the combination with a resonator comprising end portions of a diameter not less than the diameter of the exhaust pipe and a central portion of larger diameter than the exhaust pipe, a cut-off pipe com-

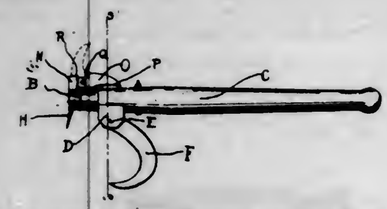
municating with said resonator, a valve in said resonator secured to a stem rotatable in bearings formed partly in said resonator and partly in the wall of said pipe at the junction of said resonator and pipe, means for normally holding said valve in position to close the cut-off pipe, said valve in its closed position being arranged below the line of the exhaust pipe.

4. In a muffler cut-out the combination with a chamber forming part of the exhaust pipe, of a cut-out pipe communicating with said chamber and provided with a flange whereby said pipe may be detachably secured thereto, a valve in said chamber having its stem seated in bearings formed partly in the wall of said chamber and in said flange, and means for securing said cut-out to the exhaust pipe whereby it may be removed without disturbing the adjacent ends of the exhaust pipe, substantially as described.

5. In a muffler cut-out the combination of a cut-out pipe communicating with the exhaust pipe line and having a larger diameter than the exhaust pipe, of a valve seat on said cut-off pipe, a valve comprising a valve plate, and a removable valve stem, a spring secured to said valve stem for normally holding the valve on its seat, means for adjusting the tension of said spring, and a lever for actuating said valve, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,065,468. COMBINED CANT-HOOK AND PICK. JOSEPH PRONOVOST, Polson, Mont., assignor of one-tenth to George Beaulieu and one-tenth to L. S. Ropes, Helena, Mont. Filed Oct. 19, 1912. Serial No. 726,779. (Cl. 145—22.)

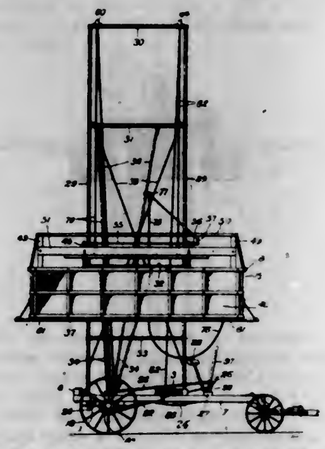


A cant hook comprising a ferrule adapted for the reception of a handle, an integral portion of said ferrule being bent concaved and flush with the inner face of the ferrule, said integral portion having wings which are bent upon themselves and spaced apart, a pin carried by said wings, a cant hook pivotally mounted upon said pin intermediate the parts which are bent upon themselves, an extension of said concaved portion designed to be attached to a handle.

1,065,469. COMBINED GRAIN BARGE AND STACKER. CLEMENS A. ROBBEN and HERMAN H. ROBBEN, Norton, Kans.; said Herman H. Robben assignor to said Clemens A. Robben. Filed May 1, 1912. Serial No. 694,441. (Cl. 57—53.)

1. In a machine of the character described, a frame, a bull-wheel, an axle rotated thereby, a drum loosely-mounted on said axle, means to lock said drum with said axle at will, means to prevent accidental backward rotation of the drum, cables fixed to said drum and adapted to wind thereon, a pair of standards mounted on the frame, pulleys at top of said standards over which said cables run, a barge mounted to travel along the standards, and means to control the descent of the barge.

2. In a machine of the character described, a frame, a bull-wheel, an axle rotated thereby, a drum loosely-mounted on said axle, a clutch-member carried by said drum, a clutch-member splined on said axle, a ratchet on said drum, a pawl for said ratchet, means at a distance for disengaging said pawl, a lever for operating the clutch in one direction, a spring to operate the clutch in the other direction, a vertically traveling barge, vertical guides for said barge, pulleys near the tops of said guides, cables connected to said drum, passing over said pulleys and secured to said barge, and means to control the descent of the barge.



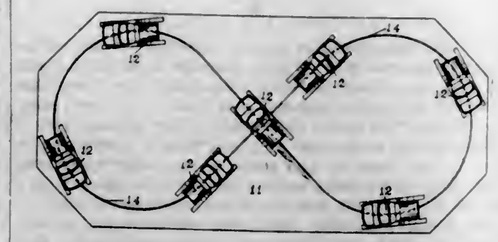
3. In a machine of the character described, a pair of vertical guides, a barge provided with rollers engaging said guides, the uppermost rollers being connected with the barge by means of links, latches mounted on said links, projections on the barge adapted to be engaged by said latches, and means operable at a distance for disengaging said latches to permit the barge to tilt.

4. In a machine of the character described, a pair of vertical guides, a barge provided with rollers engaging said guides, the uppermost rollers being connected with the barge by means of links, a rockable shaft mounted on said links, latches fixedly-mounted on said shaft, projections on the barge adapted for engagement by said latches, an arm on said shaft, and a cord fastened to said arm whereby said latches may be moved by actuation of the cord.

5. In a machine of the character described, a barge, vertical bars rigidly secured to the barge, upwardly-extending links pivoted at their lower ends to said bars, rollers carried by said links, rollers on the barge, vertical guides engaged by all of said rollers, latches mounted on said links and adapted to engage the upper ends of said bars, and means operable at a distance for disengaging said latches.

[Claims 6 to 8 not printed in the Gazette.]

1,065,470. CAROUSEL. OLAF A. ROED, Minneapolis, Minn. Filed Nov. 8, 1912. Serial No. 730,291. (Cl. 104—111.)



1. The combination with a guideway passenger carriers directed by the guideway, a plurality of drive chains arranged in a plane beneath the passenger carriers, releasable connections between the passenger carriers and the drive chains, means for periodically transferring the passenger carriers from one chain to another as and for the purposes described.

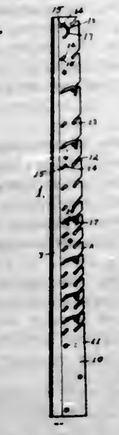
2. The combination with a guideway crossing and recrossing itself at intervals, guides disposed in said guideway and connected to passenger carrier, a plurality of drive chains arranged in a plane beneath the guideway, releasable connections between the passenger carriers and the drive chains, means for periodically transferring the passenger carriers from one chain to another as and for the purposes described.

3. In a carousel, an endless, sinuous guideway, crossing and recrossing itself at intervals, passenger carriers directed by the guideway, a plurality of drive chains arranged in a plane beneath the guideway, releasable connections between the passenger carriers and the drive chains, means for periodically transferring the passenger carriers from one chain to another as and for the purposes described.

4. In a carousel, an endless guideway, crossing and recrossing itself at intervals, passenger carriers directed by said guideway, a series of drive chains arranged in a plane beneath the guideway, means for driving the chains at the same speed and in the same direction, means for periodically connecting the passenger carriers to each drive chain, comprising a plurality of attachments or coupling shoes on each passenger carrier for engagement with suitable catches on chains; the positive transfer of passenger carriers from one chain to another by the catch of one chain engaging the passenger carrier, while the preceding chain is still in engagement with said passenger carrier, substantially as described.

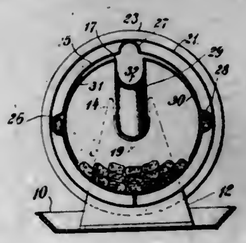
5. In a carousel, an endless sinuous guideway, crossing and recrossing itself at intervals, passenger carriers directed by the guideway, a plurality of drive chains arranged in a plane beneath the guideway, means for periodically connecting the passenger carriers to each drive chain, comprising a series of drive knobs or catches, equally spaced along each drive chain, the distance center to center of catches being a common divisor of the length of guideway and of the total length of the drive chains, a plurality of coupling shoes attached to the passenger carrier and adapted for engagement with the drive knobs; the distance, center to center of coupling shoes being equal to or a multiple of the distance between drive knobs; the positive transfer of passenger carriers from one chain to another by a coupling shoe engaging a drive knob of one chain while another coupling shoe of the same passenger carrier is still in engagement with a drive knob on the preceding chain, as and for the purposes described.

1,065,471. FENCE-POST. JOHN BERNARD ROHE, Templeton, Iowa. Filed June 17, 1912. Serial No. 704,432. (Cl. 256—48.)



In a device of the class described, the combination of a post provided with a plurality of downwardly and inwardly extending slots at its free edge, and with a plurality of holes, each arranged a certain distance from one of said slots, and with slots extending away from said holes, with catch devices mounted in said holes, each comprising a short rod, a hook member on one end thereof, a right angled extension on the other end thereof, designed to be received in said hole and a right angled extension on said first extension designed to engage the side of the post and to prevent the removal of the fastening device therefrom.

1,065,472. DELIVERY-CABINET FOR CIGARETTES AND OTHER ARTICLES. WILLIAM H. ROSS, Redbank, N. J. Filed Oct. 7, 1912. Serial No. 724,295. (Cl. 211—8.)



1. In a device of the kind described, in combination, an inner member having an open-topped delivery chute; a cylindrical carrier rotatable about the inner member and having one or more pockets in its periphery; wings or aprons extending laterally from the top of the chute and conforming to the inner surface of the carrier; and a support on which the inner member is non-rotatably mounted.

2. In a device of the kind described, in combination, an inner member having an open-ended outlet trunnion, an open-topped delivery chute opening at one end into the trunnion, and cylindrically curved wings or aprons extending laterally from the top of said chute; a support on which said member is non-rotatably mounted; and a carrier of cylindrical form encircling the inner member and rotatable about the trunnion thereof, the carrier having in its periphery one or more pockets open to the interior, to select articles contained in the carrier and deliver them to the delivery chute as the carrier is rotated.

3. In a device of the kind described, in combination, an inner member having an open-topped delivery chute and cylindrically curved wings or aprons extending laterally from the top of said chute; an outer member of cylindrical form rotatable about the inner member and having a removable head constituting a closure; an intermediate member of cylindrical form between the outer and inner member, having one or more pockets open to the interior, the intermediate member being engaged by the outer member for rotation thereby, the three members being separable from each other; and a support on which the inner member is non-rotatably mounted.

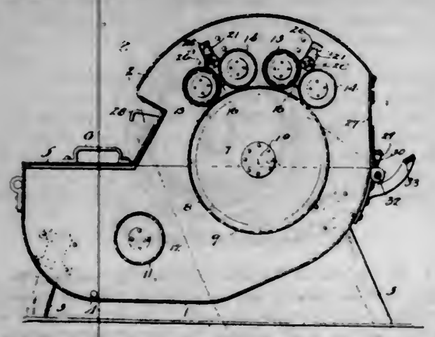
4. In a device of the kind described, in combination, an inner member having a rear trunnion and an open forward trunnion, an open-topped delivery chute opening into the forward trunnion, and cylindrically curved wings or aprons extending laterally from the top of the delivery chute; an outer element of cylindrical form inclosing the inner member and rotatable on the trunnions thereof and having on its inside one or more pockets open to the interior, a head of the outer element being removable to afford access to the interior; and standards for supporting the inner member on its trunnions, said standards and trunnions coöperating to prevent rotation of the inner member as the outer element is rotated.

5. In a device of the kind described, in combination, a rotatable outer member of cylindrical form having centrally apertured heads and having on its inside one or more pockets open to the interior; an inner member having an open-topped inclined delivery chute, wings or aprons extending laterally from the top of the chute and conforming to the inner surface of the outer member, and trunnions extending through the central apertures in said

heads one of said trunnions being open to the delivery chute whereby articles fed to the chute will be delivered through the trunnion; a supporting base for the trunnions; and means to prevent rotation of the inner member when the outer member is rotated on said trunnions.

[Claim 6 not printed in the Gazette.]

1,065,473. CLOTHES-WASHING MACHINE. CHARLES P. SMITH, Leadvale, Tenn., assignor of one-third to William A. Robinson, Leadvale, Tenn. Filed Feb. 27, 1912. Serial No. 680,207. (Cl. 68—23.)



In a washing machine the combination with a tub having a hinged cover, and a perforated hollow rotatable drum therein, of spring pressed rollers supported in pairs in the side walls of the cover and bearing on said drum, said pairs each comprising an imperforate corrugated roller and a hollow perforated roller.

1,065,474. FENCE-END TOOL. ARTHUR W. SPRAGUE, La Grange, and JOHN A. COCKER, Joliet, Ill., assignors to The American Steel and Wire Company of New Jersey, Hoboken, N. J., a Corporation of New Jersey. Filed Jan. 30, 1913. Serial No. 745,273. (Cl. 39—54.)



1. An end tool comprising a handle, means carried thereby to engage the end of a line wire and draw said end around a post, and means for bending the taut line wire toward the center line of the post to receive said end to be connected therewith.

2. An end tool comprising a handle, a pair of curved jaws mounted thereon to engage a post, means carried by said handle for closing the jaws upon a wire, whereby said wire may be drawn around the post by operating said handle, and means carried by said handle whereby the stretched wire may be pulled toward the jaws for connection with the end held by the jaws.

3. An end tool comprising a handle, and a pair of jaws pivotally mounted thereon and pivotally connected together intermediate their ends, said handle being provided with a wedge adapted, upon movement of the handle about the pivotal connection with the jaws, to close said jaws.

4. In an end tool, the combination of a handle, a clamp pivotally mounted thereon, and a wedge carried by the handle for operating said clamp upon relative movement between the handle and clamp.

5. In an end tool, the combination of a handle, a pair of curved clamping jaws pivotally mounted on said handle, a wedge adapted to close said jaws upon relative movement between the handle and jaws, a hook projecting from the handle, and means for moving said hook toward the handle.

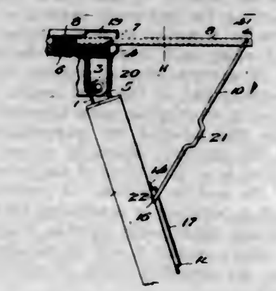
[Claims 6 and 7 not printed in the Gazette.]

1,065,475. METALLIC LABEL. JAMES STEWART, Dunedin, New Zealand. Filed Sept. 26, 1911. Serial No. 651,325. (Cl. 40—2.)



A label or tag comprising a finger gage sheet lead writing surface and a frame of firm material wherein said writing surface is permanently held and by which it is partially incased, said frame providing a backing for said writing surface.

1,065,476. FOLDING TABLE. HARRY A. STONE, Omaha, Nebr. Filed May 27, 1912. Serial No. 699,959. (Cl. 45—74.)



1. In a folding table, the combination with a center member, of supporting legs therefor, and a skeleton top having arms hinged to the center member intermediate their ends, the inner end parts of the arms being adapted to overlap the center member.

2. In a folding table, the combination with a center member, of supporting legs therefor, and a skeleton top having arms hinged to the center member intermediate their ends, the inner end parts of the arms being adapted to overlap the center member, and means for preventing the arms from moving up or down or laterally when in extended position.

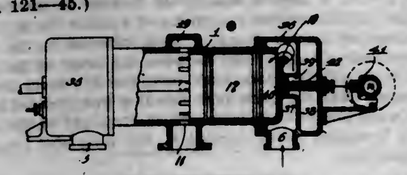
3. In a folding table, the combination with a center member, of legs therefor, a skleton top having arms hinged intermediate their ends to the center member, the inner end parts of the arms overlapping the center member, and arm supporting braces jointed to the arms and engaged with the legs, said braces being adapted to fold with the arms.

4. In a folding table, the combination with a center member, of supporting legs therefor, a skeleton top having arms hinged to the center member intermediate their ends, their inner ends overlapping said center member, and a cap fitting over the center member and over the inner overlapping parts of the arms.

5. In a folding table, the combination with a center member, of supporting legs therefor, a skeleton top having arms hinged to the center member intermediate their ends, their inner ends overlapping said center member, and a cap fitting over the center member and over the inner overlapping parts of the arms, said cap having slots which receive the arms beyond the margin of the center member.

[Claims 6 to 8 not printed in the Gazette.]

1,065,477. STEAM-ENGINE. JOHANN STUMPF, Berlin, Germany. Filed Apr. 7, 1909. Serial No. 488,467. (Cl. 121—45.)



1. In combination with a steam engine cylinder having an inlet port at its end and separate exhaust ports, a steam chest at said end, a piston in said cylinder adapted to overrun and control said exhaust ports at and near the end of its working stroke, an auxiliary chamber at said end, forming a closed extension of said cylinder, and means for opening communication between the piston chamber and auxiliary chamber.

2. In combination in a steam engine, a steam engine cylinder having an inlet port at its end and separate exhaust ports, a piston in said cylinder adapted to overrun and control said exhaust ports at and near the end of its working stroke, a steam inlet chamber at the inlet end of the cylinder, a closed auxiliary chamber upon that side of the inlet chamber opposite the piston chamber and forming an extension thereof, and means for at will opening communication between said extension and said cylinder, whereby said auxiliary chamber assists heat-insulating while providing against undue compression.

3. In combination with a steam cylinder having an inlet port at its end and separate exhaust ports remote therefrom, a steam chest at said end, a relatively cold exhaust chamber into which said exhaust ports open directly, an elongated piston in said cylinder and adapted to overrun and control said exhaust ports at and near the end of its stroke and to cover and protect the interior of said cylinder adjacent to said exhaust ports during expansion and compression, an auxiliary chamber at the inlet end of said cylinder and forming a closed extension thereof, and means for opening communication between the piston chamber and said auxiliary chamber.

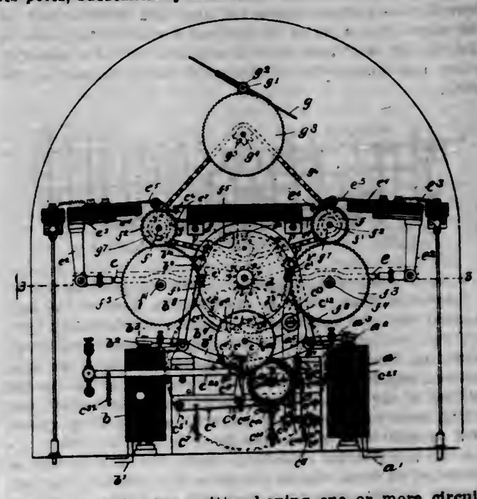
4. In combination with a steam cylinder having an inlet port at its end and separate exhaust ports remote therefrom, a steam chest at said end, a relatively cold exhaust chamber into which said exhaust ports open directly, an elongated piston in said cylinder and adapted to overrun and control said exhaust ports at and near the end of its stroke and to cover and protect the interior of said cylinder adjacent to said exhaust ports during expansion and compression, an auxiliary chamber at the inlet end of said cylinder and forming a closed extension thereof, said auxiliary chamber being located on the side of said inlet chest remote from said cylinder, and means for opening communication between the piston chamber and said auxiliary chamber.

5. In combination in a steam engine, a steam engine cylinder having an inlet port at its end and separate exhaust ports, a hot steam jacket over said inlet end, a piston in said cylinder adapted to overrun and control said exhaust ports at and near the end of its working stroke, a plurality of clearance chambers connected with the inlet end of said cylinder and with one another and means for placing said chambers in communication with the inlet end of said cylinder in series, as described.

[Claim 6 not printed in the Gazette.]

1,065,478. REPEATING-TRANSMITTER FOR FIRE-ALARM TELEGRAPH SYSTEMS. NATHAN H. SUREN, Needham, Mass., assignor to The Gamewell Fire-Alarm Telegraph Company, New York, N. Y., a Corporation of New York. Filed July 22, 1910. Serial No. 573,289. (Cl. 178—165.)

1. A repeating-transmitter having one or more circuit-operating devices, actuating-means therefor, and two separate operating-magnets for said actuating-means, one operating by a movement of its armature toward its poles and the other by a movement of its armature away from its poles, substantially as described.



2. A repeating-transmitter having one or more circuit-operating-devices, actuating-means therefor, two independent operating-devices for said actuating-means, and two electro-magnets for releasing said operating-devices, respectively, one operating by a movement of its armature toward its poles and the other by a movement of its armature away from its poles, substantially as described.

3. A repeating-transmitter having one or more circuit-operating-devices, power-driven actuating-means therefor having two detent-carrying disks connected therewith, a releasing-lever for each disk having two locking-pins adapted to be successively engaged by the detents thereon and two electro-magnets for operating said releasing-levers, respectively, substantially as described.

4. A repeating-transmitter having a circuit-operating-device, a setting-device for said circuit-operating-device, motor-mechanism to operate said setting-device at the beginning of a signal and to restore same at the end of a signal, actuating-means for said circuit-operating-device operated by said motor-mechanism, and two separate magnets to release said motor-mechanism and to control the operation of said actuating-means, one adapted to be operated by repeating-mechanism connected with the signal-circuits and the other by the signal-circuits, substantially as described.

5. A repeating-transmitter having a circuit-operating device, a setting-device for said circuit-operating-device, a motor-driven operating-member therefor, motor-driven actuating-means for said circuit-operating-device, and two separate magnets for releasing said operating-member at the beginning of a signal and for releasing said actuating-means on each signal-impulse, one of said magnets adapted to be operated by repeating-mechanism connected with the signal-circuits and the other by the signal-circuits, substantially as described.

[Claims 6 to 14 not printed in the Gazette.]

1,065,479. PROPELLING MEANS FOR VESSELS. THOMAS B. TAYLOR, New York, N. Y. Filed June 17, 1905. Serial No. 265,658. (Cl. 115—16.)

1. In an apparatus for propelling vessels the combination of a tube of uniform, circular cross-section from end to end, fixed to the hull parallel to the keelson, a propelling shaft extending from end to end of said tube supported at the axis thereof, concentric tube sections, means for supporting each tube section within the main tube and bearings for said shaft, one within each tube section.

2. In a means for propelling vessels, the combination of a main tube of uniform, circular cross-section fixed to the hull parallel with the keelson, a propelling shaft extending from end to end of the tube and supported at the

axis thereof, a plurality of propeller wheels each substantially equal in diameter to the diameter of said tube, concentric tube sections supported upon the interior wall of the main tube, a series of bearings for said shaft, one in the end of each tube section adjacent to each propeller wheel and means for driving said shaft located in the hull.



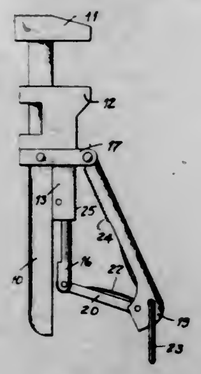
3. In a means for propelling vessels the combination of a tube of uniform, circular cross-section fixed to the hull parallel with the keelson and extending substantially from one end of the keelson to the other, a propelling shaft extending from end to end of the tube, concentric tube sections supported at diametrically opposite points on the interior of the main tube wall, bearings for said shaft, one within each tube section, a plurality of propelling wheels fixed to said shaft and means for driving said shaft.

4. In a means for propelling vessels the combination of a tube of uniform, circular cross section fixed to the hull parallel to the keelson, a sectional propelling shaft extending from end to end of the tube, means for supporting said shaft located at intervals on the interior of said tube, comprising concentric tube sections fixed in position, a series of propelling wheels fixed to said shaft, means for preventing the swirl of water in the tube consisting of plates fixed in position in a fore and aft line, each extending a distance at least equal to half the pitch of the adjacent propeller and means for driving said shaft located in the hull.

5. In a means for propelling vessels, the combination of a tube of substantially uniform, circular cross-section fixed to the hull parallel with the keelson, a propelling shaft extending from end to end of the tube and supported at the axis thereof, a series of propelling wheels fixed to said shaft each substantially equal in diameter to the diameter of said tube, a concentric tube section, means for supporting said section within the main tube and bearings for said shaft within said tube section.

[Claims 6 to 36 not printed in the Gazette.]

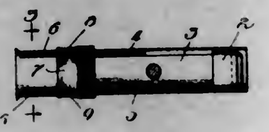
1,065,480. WRENCH. HENRY C. TEUTON, Adamsville, Tenn. Filed Jan. 7, 1913. Serial No. 740,680. (Cl. 81—88.)



1. A wrench comprising a shank, a jaw slidable on the shank, a rearwardly extending stem on the jaw, said stem having a longitudinal bore therein, a spring pressed plunger mounted in the bore, a rack lever pivotally carried by the shank, the said stem being provided with a rack for engagement by the rack lever, and pivoted and spring pressed connections between the lever and said plunger.

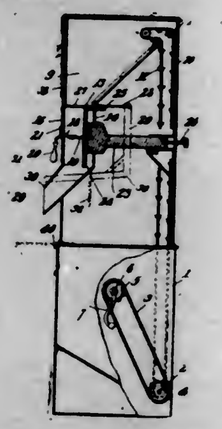
2. A wrench comprising a shank having an outer jaw, a slidable jaw on the shank, a stem on the slidable jaw, said stem having a bore, a coil spring located in the bore, a plunger slidable within the bore and against the spring, a yoke secured to the shank, a lever pivoted to the yoke, the said stem being guided between the arms of the yoke, rack teeth on the stem, rack teeth on the lever for engagement with the stem rack teeth, a link pivoted at its ends respectively to the stem and the free end of the lever, and a V-shaped spring carried by the lever and engaging the said link.

1,065,481. LOCK-SEAT FOR FISH-LINE REELS. FRED E. THOMAS, Brewer, Me. Filed Oct. 23, 1912. Serial No. 727,306. (Cl. 43—37.)



In a device of the character described, a cylinder having thereon a socket adapted to receive one end of a reel base, longitudinal ribs on said cylinder behind and at opposite sides of said socket, ratchet teeth arranged along the top of said ribs with their vertical faces directed toward said socket, and a locking band slidably and revolubly surrounding said cylinder and said ribs, said sleeve having portions partially severed therefrom in the end farthest from said socket to form spring pawls adapted to engage with said ratchet teeth.

1,065,482. COMBINED MEASURING AND DISPENSING ATTACHMENT FOR BINS. LUTHER B. THOMAS, Shreveport, La. Filed Oct. 16, 1911. Serial No. 654,900. (Cl. 73—132.)



1. The combination with an adjustable measuring compartment having an outlet, of a cut-off adjustable longitudinally of and located within the compartment, and means for inclining the cut-off toward the outlet to release the contents of the compartment.

2. The combination with an adjustable measuring compartment, said compartment having an outlet, of a cut-off adjustable longitudinally of the compartment and for closing the outlet, and means for inclining the cut-off for releasing the contents of the compartment.

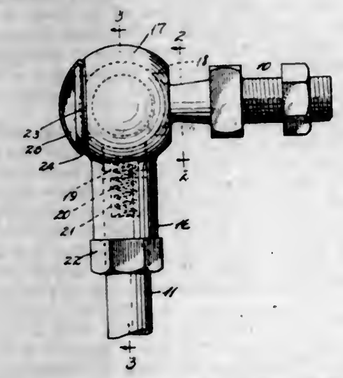
3. The combination with an adjustable measuring compartment, said compartment having an opening in one wall thereof, of a cut-off movably mounted within the opening, means for inclining the cut-off to release the contents of the compartment, and means for maintaining the opening normally closed.

4. The combination with a measuring compartment, of a cut-off movable longitudinally of the compartment, an indicator, and means operated by the cut-off when shifted longitudinally of the compartment, for moving the indicator transversely of the compartment.

5. A bin having a measuring compartment, a cut-off for varying the length of the measuring compartment, an indicator movable transversely of the bin, and means operable by the cut-off when shifted longitudinally of the measuring compartment, for actuating the indicator.

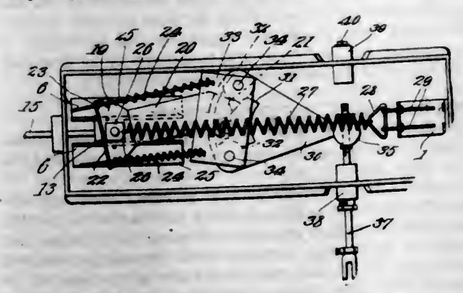
[Claims 6 to 8 not printed in the Gazette.]

1,065,483. BALL-AND-SOCKET JOINT. HARRY C. TURNER, Los Angeles, Cal. Filed Mar. 11, 1912. Serial No. 682,969. (Cl. 74—17.)



An adjustable ball and socket joint, comprising a member having a ball at one end flattened forming oppositely-disposed plane faces parallel with its axis, a coöperating member having a screw threaded end portion with a cylindrical socket, a socket member having a bore, a portion thereof interiorly threaded to be secured and adjusted upon said screw threaded end portion of said coöperating member, a lock nut for locking the same in adjusted position, the said socket member having a spherical socket therein provided with an entrance opening having opposing partially curved surfaces and opposing straight surfaces adapted to permit the entrance of the flattened ball, a recessed bearing block mounted in the said bore, and a spring engaging the recess in said block and the socket in said coöperating member whereby the block resiliently engages the said ball member for taking up wear and slack within the socket member.

1,065,484. AUTOMATIC SWITCH-OPERATING MECHANISM. JOHN B. TURNER, Fort Smith, Ark. Filed Sept. 7, 1912. Serial No. 719,236. (Cl. 104—24.)



1. In an automatic switch the combination with a pivoted member, a switch shifting rod extending therefrom, and a deflecting device extending into said member, said member being adapted to swing relative to said device, of a slide, a wedging element pivotally mounted on the slide, yielding means for holding the wedging element normally projected between the deflecting device and a portion of said pivoted member, means for shifting the slide against the action of the yielding means and yielding connections between the wedging element and said pivoted member for automatically shifting said element from one side to the other of the deflecting device during the movement of the slide out of normal position.

2. An automatic switch including a pivoted member, means for connecting the same to a switch point, a deflecting device extending into said member, the said member being adapted to swing relative to said device, a wedging element mounted to slide and swing, means for shifting said element out of normal position, connections between said element and the pivoted member for shifting said element automatically from one side to the other of the deflecting device, and means for automatically drawing said wedging element, when released, back to normal position and between the deflecting device and a portion of the pivoted member to shift said member.

3. An automatic switch including a pivoted member, means for transmitting motion therefrom to a switch point, a fixed deflecting device extending through said member, a wedging element mounted to slide and swing, said element normally projecting between the deflecting device and one side portion of the pivoted member, yielding means for holding said element in such position and thereby to hold the pivoted member against movement, means for sliding the wedging element into engagement with the pivoted member and against the action of said yielding means, and connections between said wedging element and the pivoted member for shifting the position of the wedging element from one side to the other of the deflecting device, said yielding means operating to return the wedging element into position between the deflecting device and one side of the pivoted member upon the release of the wedging device from its operating means.

4. An automatic switch including a pivoted member, means for transmitting motion therefrom to a switch point, anti-friction devices carried by said member and adjacent the sides thereof, a deflecting device extending between said anti-friction devices, said pivoted member being adapted to swing relative to the deflecting device, a wedging element mounted to slide, yielding means for holding the wedging element normally projected between the deflecting device and one of the anti-friction devices, means for sliding the wedging element out of normal position, connections between the wedging element and the pivoted member for swinging said element to the opposite side of the deflecting device, said yielding means operating to shift the wedging element between said deflecting device and the other anti-friction device upon the release of the wedging element from its operating means.

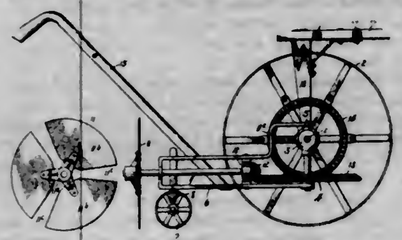
5. An automatic switch including a pivoted member, means for transmitting motion therefrom to a switch point, oppositely disposed engaging devices upon said member, a deflecting device extending between the engaging devices, said pivoted member being adapted to swing relative thereto, a wedging element mounted to slide and swing, said element being normally projected between the deflecting device and one of the engaging devices to hold the pivoted member against movement, a spring for holding the wedging element in normal position, means for sliding said wedging element out of normal position, and connections between the wedging element and pivoted member for shifting said element from one side to the other of the deflecting device during the movement of the wedging element against the action of the spring.

[Claims 6 to 11 not printed in the Gazette.]

1,065,485. BEET-BLOCKER AND COTTON-CHOPPER. CHARLES A. VOLZ, Pigeon, Mich., and CHRISTIAN L. VOLZ, Toledo, Ohio. Filed Aug. 19, 1912. Serial No. 715,777. (Cl. 97—46.)

In a machine of the class described, an axle, wheels carried by and supporting said axle, a cross-head carried for rocking movements by said axle, a substantially U-shaped frame trailing from said cross-head with the

free ends of its legs pivoted thereto for horizontal rocking movements, the upper one of said legs having its free end portion angled upward and forward from its major portion to dispose the major portion of the frame below the horizontal plane of the axle, a shaft journaled in said frame



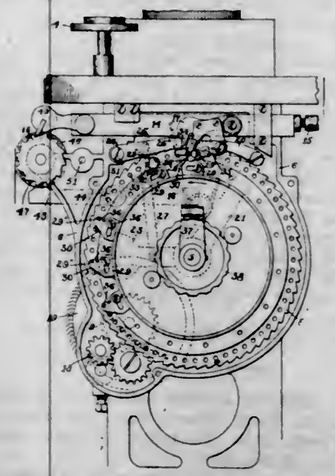
longitudinally thereof, means for communicating rotation from one of said wheels to said shaft, a cutter disk carried by said shaft at the rear of the frame, means for supporting the rear end of the frame, and controlling-handles extending upward and rearward from the frame.

1,065,486. PAPER DRINKING-CUP. SAMUEL D. WASHBURN, Boston, Mass. Filed Sept. 29, 1911. Serial No. 651,921. (Cl. 229—3.)



A cup composed of a single substantially circular blank of paper comprising a flat circular bottom and an upwardly flaring body presenting a plurality of box plaits, said plaited body at and throughout its upper edge turned back outwardly upon itself whereby the plaits are locked, the cup retains its form solely by the relation of its folds and a smooth rim is presented.

1,065,487. PATTERN MECHANISM FOR KNITTING-MACHINES. FRANK B. WILDMAN and GEORGE L. BALLARD, Norristown, Pa., assignors to Wildman Mfg. Co., Norristown, Pa. Filed Apr. 28, 1910. Serial No. 558,266. (Cl. 66—22.)



1. In combination in a pattern mechanism for knitting machines, a fixed frame, a pattern wheel, a pattern ratchet with a pawl for operating the same, a ratchet measuring wheel having segments thereon, a pawl for operating the ratchet measuring wheel, a measuring gear for operating the ratchet measuring wheel, a fabric impelled wheel, connections from the fabric impelled wheel for operating the measuring gear to give it and the measuring ratchet a slow movement, a controller for the pawl of the pattern ratchet and a lever pivoted to the fixed frame and independent of the pawl of the ratchet measuring wheel operated by the segments on the measuring ratchet for operating the controller, substantially as described.

2. In combination in a pattern mechanism for knitting machines, a pattern wheel, a pattern ratchet with a pawl for operating the same, a ratchet measuring wheel having segments thereon, a pawl for operating said ratchet wheel, a controller for the pawl of the pattern ratchet, an arm carrying said controller mounted on the shaft of the pattern wheel, a lever pivoted to the frame independent of the pawl of the ratchet measuring wheel and operated by the segments on the measuring ratchet, and a link connecting said lever with the said arm, substantially as described.

3. In combination, in a pattern mechanism for knitting machines, a pattern wheel, a pattern ratchet and pawl for operating the same, a measuring wheel, means for driving the same, a controller for the pattern ratchet pawl, means for operating the controller differentially, comprising positioning device on the pattern ratchet of different lengths of bearing surface to act on the controller, and segments on the measuring ratchet of different lengths of bearing surface and connections operated by the said segments and connected to the controller, whereby the pattern mechanism will be prevented from starting until a positioning device of long bearing surface and a segment of long bearing surface act simultaneously upon the controller and the controller connections respectively, substantially as described.

4. In combination in a pattern mechanism for knitting machines, a pattern wheel, a pattern ratchet and pawl for operating the same, a measuring ratchet and means for operating the same, a controller for the pattern ratchet pawl, said controller being operated from the pattern ratchet and measuring wheel jointly for the step by step movement of the pattern wheel, and starting means carried partly by the pattern ratchet and partly by the measuring wheel to operate on the controller when said devices are in a certain position relative to each other, substantially as described.

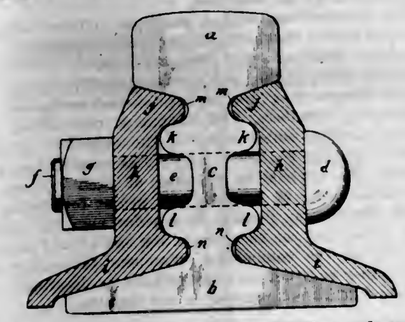
5. In combination in pattern mechanism for knitting machines, a pattern wheel, a pattern ratchet and pawl for operating the same, a controller for the pattern ratchet pawl, positioning pins on the ratchet wheel for holding the controller up in controlling position, a group of said pins being arranged at the point of starting the pattern, a measuring wheel and controlling blocks or segments on the measuring wheel, one of which has an elongated bearing surface to coöperate with the group of pins for controlling the controller, and the other or others of the said segments having shorter bearing surfaces to coact with the single pins, and means for operating the controller by contact with the said segments, substantially as described.

[Claims 6 to 15 not printed in the Gazette.]

1,065,488. RAIL-JOINT. RICHARD P. WILLIAMS, Brooklyn, N. Y. Filed Nov. 25, 1911. Serial No. 662,288. (Cl. 239—9.)

1. In a rail joint, rails having abutting ends and connecting splice bars, said rails being provided with longitudinal web projections immediately below their heads, and the splice bars being provided with projections wedging into the spaces between the lower sides of the head of the rail and the upper sides of the longitudinal web projections, sufficient clearance being provided in said spaces to permit said wedging; substantially as described.

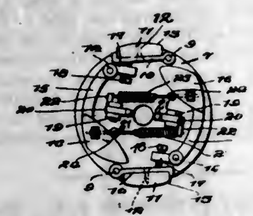
2. In a rail joint, rails having abutting ends and connecting splice bars, said rails being provided with longitudinal web projections immediately above their bases and the splice bars being provided with projections wedging into the spaces between the upper surfaces of the rail base and the lower surfaces of said web projections, sufficient clearance being provided in said spaces to permit said wedging; substantially as described.



3. In a rail joint, rails having abutting ends and connecting splice bars, said rails being provided with longitudinal web projections immediately below their heads and with longitudinal web projections immediately above their bases, and the splice bars being provided with projections wedging into the spaces between the lower side of the heads and the upper sides of the adjacent web projections and between the upper sides of the bases and the lower sides of the adjacent web projections, sufficient clearance being provided in said spaces to permit said wedging; substantially as described.

4. In a rail joint, rails having abutting ends and connecting splice bars, said rails being provided with longitudinal web projections immediately below their heads and with longitudinal web projections immediately above their bases, and the splice bars being provided with projections wedging into the spaces between the lower side of the heads and the upper sides of the adjacent web projections and between the upper sides of the bases and the lower side of the adjacent web projections, sufficient clearance being provided in said spaces to permit said wedging and said splice bars being further provided with a projection intermediate of the upper and lower web projections; substantially as described.

1,065,489. FRICTION-CLUTCH. ROBERT M. WOOD and WALTER R. SARGENT, Randolph, Vt. Filed Oct. 9, 1912. Serial No. 724,897. (Cl. 74—45.)

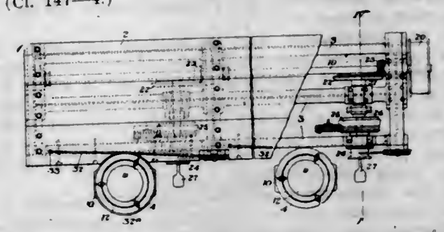


1. In a device of the character described, the combination of a shaft, a driven pulley mounted upon said shaft, a circular plate formed integral with said pulley, shoe holders pivotally mounted upon said plate and arranged at diametrically opposite points, shoes arranged within said holders, curved arms pivotally mounted upon said plate, weights formed integral with said arms at one end thereof, the other end of each arm being bent substantially at right angles and a set screw carried thereby to engage the shoe holder, bell cranks carried by the plate, coil springs connecting one of the ends of the bell cranks to said weights, a band wheel fixed to said shaft, means for moving the shaft axially and means carried by the shaft and adapted to engage the other ends of the bell cranks to actuate the shoes and cause the same to grip said wheel for rotation with the driven pulley.

2. In a device of the character described, the combination of a shaft, a driven pulley mounted upon said shaft, a circular plate formed integral with said pulley, shoe holders pivotally mounted upon said plate and arranged at diametrically opposite points, shoes arranged within said holders, curved arms pivotally mounted upon said plate, weights formed integral with each of said arms at one end thereof, the other end of each of said arms being bent substantially at right angles and a set screw carried thereby to engage the shoe holder, said plate being provided with bifurcated lugs, bell cranks pivotally mounted upon said lugs, outwardly extending lugs formed integral with one of the ends of said bell cranks, coil springs having one of their ends connected to the lugs upon the bell cranks and their other ends adjustably connected to the weights, the inner ends of said bell cranks being turned upwardly at right angles to the body portion thereof, a collar slidably mounted upon the shaft, spaced lugs arranged at diametrically opposite points upon the collar and adapted to engage the upturned ends of the bell cranks, a band wheel fixed to said shaft and engaging said collar, and means for moving the shaft axially to engage the collar with the inner ends of the bell cranks to actuate the shoes and cause the same to grip said wheel for rotation with the driven pulley.

3. In a device of the character described, the combination of standards having bearings at their upper ends, a shaft mounted in said bearings, a driven pulley mounted upon said shaft, a circular plate formed integral with said pulley, pivotally mounted clutch members carried by said plate, curved arms pivotally mounted upon said plate, weights formed integral with one of the ends of said arms, set screws carried by the other ends of said arms and adapted to engage said clutch members, bell cranks pivotally mounted upon said plate, coil springs connecting said bell cranks with the weights, a band wheel fixed to said shaft, a bracket secured to one of said standards, a screw carried by the bracket and adapted to engage one end of the shaft, a hand wheel upon the outer end of the screw whereby the turning movement of the screw will move the shaft axially, and means carried by said band wheel for engaging one end of the bell cranks to actuate the clutch members and cause the same to grip said wheel for rotation with the shaft.

1,065,490. HEADING-UP, SETTING-UP, AND WINDLASSING MACHINE. JACOB E. YOUNG, Cleveland, Ohio, assignor to The American Steel and Wire Company of New Jersey, Hoboken, N. J., a Corporation of New Jersey. Filed Dec. 2, 1909. Serial No. 530,931. (Cl. 147—4.)



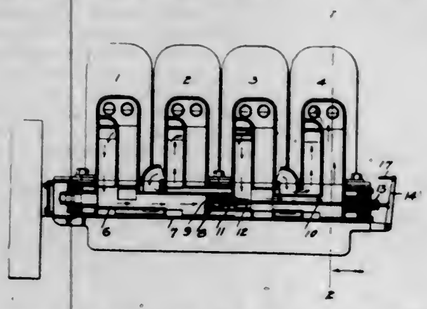
1. In a device of the class described, the combination with a bench, a power driven windlassing cable having frictionally operated driving means and mechanism for releasing said frictional driving means, of a setting-up form, said form comprising a rotatable table plate having a setting-up basket thereon, a frame on which said plate is mounted, means for adjusting the table plate vertically on the frame, a vertically movable head-plate above the table plate, and a counterweight connected thereto whereby the head-plate is lifted vertically.

2. In a device of the class described the combination with a bench, a power driven windlassing cable having frictionally operated driving means and mechanism for releasing said frictional driving means, of a setting-up form, said form comprising a rotatable table plate having a setting-up basket thereon, a frame on which said plate

is mounted, means for adjusting the table plate vertically on the frame, a vertically movable head-plate above the table plate, a counterweight connected thereto whereby the head-plate is lifted vertically, and frictional mechanism for holding said head-plate in lowered position.

3. In a device of the class described the combination with a bench, a power driven windlassing cable having frictionally operated driving means and mechanism for releasing said frictional driving means, of a setting-up form, said form comprising a rotatable table plate having a setting-up basket thereon, a frame on which said plate is mounted, means for adjusting the table plate vertically on the frame, a vertically movable head-plate above the table plate, a counterweight connected thereto whereby the head-plate is lifted vertically, frictional mechanism for holding said head-plate in lowered position, and a treadle for releasing said frictional plate holding mechanism to permit lifting of the plate by the counterweights.

1,065,491. REGULATOR FOR MULTIPLE-CYLINDER ENGINES. EDWARD A. ZOLLE, Minneapolis, Minn., assignor to Moore Carving Machine Company, Minneapolis, Minn., a Corporation of Minnesota. Filed June 3, 1911. Serial No. 631,185. (Cl. 123—59.)



1. The combination, with an internal combustion engine having more than two cylinders, each provided with a combustion and pumping chamber and in which the charge is pumped into the combustion end of each cylinder by the pistons of a plurality of the other cylinders of the series, of means for cutting out at will the passage of the charge to the combustion end of a cylinder from all but one of said other cylinders, whereby each cylinder will receive its charge from the pumping chamber of one of the other cylinders only.

2. The combination, with an internal combustion engine having more than two cylinders, each provided with a combustion and a pumping chamber and in which the charge is pumped into the combustion end of each cylinder by the pistons of a plurality of the other cylinders of the series, of means for cutting out at will the passage of the charge to the combustion end of a cylinder from one or more of the other cylinders.

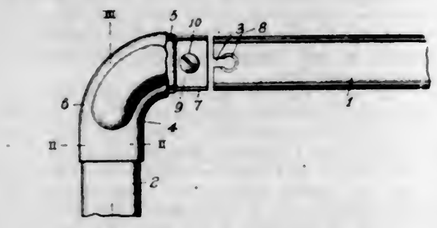
3. The combination, with an internal combustion engine having more than two cylinders each provided with a combustion and a pumping chamber, and in which the charge is pumped into the combustion end of each cylinder by the pistons of a plurality of the other cylinders of the series, of a carbureter, means for cutting out and permitting at will the passage of the charge to the combustion end of a cylinder from one of the other cylinders, and means for simultaneously regulating the discharge of gas from the carbureter.

4. The combination, with a multiple cylinder internal combustion engine in which each cylinder is provided with a combustion chamber, and a pumping chamber, of a rotary distributing valve provided with passages adapted to receive the explosive mixture from the carbureter and lead it into said pumping chambers, and having also a longitudinal passage arranged to receive the explosive mixture from said pumping chambers and to lead the same to said combustion chambers, and dividing means arranged in said discharge passage and operable at will to permit or prevent the mixture in one portion of said passage entering the cylinder communicating with the opposite portion, substantially as described.

5. The combination, with a multiple cylinder internal combustion engine in which each cylinder is provided with a combustion chamber and a pumping chamber, of a rotary distributing valve having passages arranged to receive the explosive mixture from the carbureter and to direct it to said pumping chambers, and having a longitudinal distributing passage, which receives the explosive mixture from said pumping chambers, and which communicates in turn with the combustion chamber of each cylinder in its respective order of ignition, and means for closing at will said distributing passage at a point near the middle thereof, preventing the gases from one end of said passage from entering the combustion chambers communicating with the other end thereof, substantially as described.

[Claims 6 to 13 not printed in the Gazette.]

1,065,492. JOINT FOR ELECTRICAL CONDUITS. CHAUNCEY W. ABBOTT, Auburn, N. Y., assignor to National Metal Molding Company, a Corporation of Pennsylvania. Filed Apr. 14, 1911. Serial No. 621,008. (Cl. 247—1.)



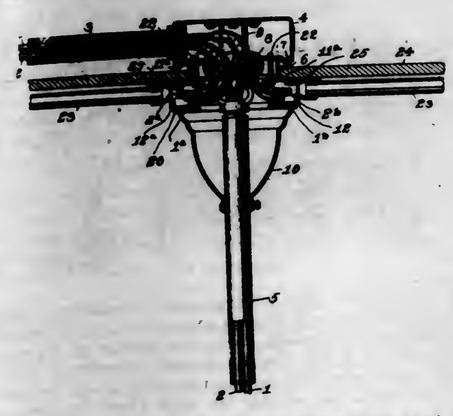
1. In a joint for electrical conduits, the combination with a box provided with an opening, and a conduit member secured to the box adjacent to said opening, of a closure-piece provided with oppositely disposed slots engaging the opposite edges of said opening and with oppositely disposed wings clamped upon said conduit member.

2. In a joint for electrical conduits, the combination with a metal conduit system member provided with a threaded hole, and a screw having a head and a shank adapted to be partially inserted and held in said hole, of a section of metal conduit provided at its end with an open-ended slot extending longitudinally thereof, said slot being adapted to be slipped around the shank of said screw projecting from the hole and beneath the head thereof, and said conduit section adapted to be clamped to said conduit member by the further movement of said screw.

1,065,493. CIRCUIT-EXTENSION BOX. CHAUNCEY W. ABBOTT, Auburn, N. Y., assignor to National Metal Molding Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 8, 1913. Serial No. 747,050. (Cl. 240—85.)

1. The combination with an outlet box for electrical conductors secured within a wall, and a conductor conduit extending from such box and sustaining an electrical fixture; of a circuit extension box consisting of a flat two-part bottom portion adapted to rest upon the surface of the wall adjacent to the opening therein, and a two-part cover portion having side walls and forming an opening around said conduit, means for securing said bottom portion to said outlet-box, and means for securing said cover portion to said bottom portion.

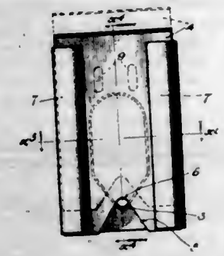
2. The combination with an outlet-box for electrical conductors secured within a wall, and having an annular shelf adjacent to an opening therein, and a conductor conduit extending through said opening; of a circuit extension box consisting of a flat bottom portion and a cover adapted to be secured to said bottom portion, a clamping strip bearing at its opposite ends upon said outlet-box shelf, and clamping members engaging said strip and the bottom portion of said extension box.



3. The combination with an outlet-box for electrical conductors secured within a wall and having an annular shelf adjacent to an opening therein, and a conductor conduit extending through said opening; of a circuit extension box consisting of a bottom and cover portions, a curved clamping strip bearing at its opposite ends upon said outlet-box shelf, and screws engaging said strip and the bottom portion of said extension box, said bottom portion being provided with open-ended slots to receive said screws.

4. The combination with an outlet-box for electrical conductors secured within a wall and having an annular shelf adjacent to an opening therein, and a conductor conduit extending through said opening, of a circuit extension box consisting of a two-part flat bottom portion and a two-part cover portion, said several box parts forming an opening around said conduit, a curved clamping strip bearing at its opposite ends upon said outlet-box shelf, and screws engaging said strip and the bottom portion of said extension box, said bottom portion being provided with open-ended slots to receive said screws.

1,065,494. FLUME-GATE. MINNIE BEDORIE ANDERSEN and MARTIN ANDERSEN, Redlands, Cal. Filed Jan. 22, 1913. Serial No. 743,679. (Cl. 61—46.)



1. A flume gate, comprising a conduit, the lower wall of which is V-shaped, a slide movable across the end of the conduit, said slide having a V-shaped opening arranged with its apex opposite the apex of the bottom wall of the conduit, and a plate extending laterally from the end of the conduit, said plate being formed with a pair of projections for guiding the lower end of the slide over the upper edge of the end of the conduit when the slide is pushed down.

2. A flume gate comprising a conduit the lower wall of which is V shaped, a slide movable across the end of the conduit, said slide having a V shaped opening arranged with its apex opposite the apex of the bottom wall of the conduit, a plate extending laterally from the end of the conduit, and means for guiding the lower end of the slide over the upper edge of the end of the conduit when the slide is pushed down.

1,065,495. CEMENT FOR PIPE CONNECTIONS, &c. JONAS W. AYLSWORTH, East Orange, N. J., assignor, by direct and mesne assignments, to Condensite Company of America, East Orange, N. J., a Corporation of New Jersey. Filed Feb. 11, 1910. Serial No. 543,237. (Cl. 106—22.)

1. A cement comprising a mixture of a fusible resin of phenolic origin, a non-volatile fluid solvent of the same, an inert filling material, and hexa-methylene-tetramin, substantially as described.

2. A cement comprising a mixture of a fusible resin of phenolic origin containing no free formaldehyde, a substance which combines with the same on application of heat to harden it, an inert filling material in the proportion of at least 50 per cent. of the said resin, and a normally non-volatile organic liquid solvent for the said resin and substance, the boiling point of which exceeds the reaction hardening temperature of said resin and substance, substantially as described.

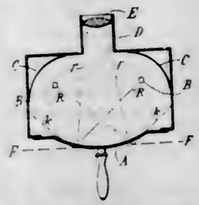
3. A cement comprising a mixture of a fusible resin of phenolic origin containing no free formaldehyde, a substance which combines with the same on application of heat to harden it, an inert filling material in the proportion of at least 50 per cent. of the said resin, and a non-volatile fluid solvent for the resin, substantially as described.

4. A cement comprising a mixture of substantially 100 parts by weight of phenol resin, 100 parts of a volatile solvent, 20 to 50 parts of a normally non-volatile fluid solvent, 7 to 11 parts of hexa-methylene-amin, and 50 to 300 parts of a finely divided inert filler, substantially as described.

5. A cement composition comprising substances capable of transformation by chemical reaction upon application of sufficient heat to form a hard infusible phenolic condensation product, and a solvent therefor, said solvent containing a readily volatile organic liquid and another organic liquid which is immiscible with water and whose boiling point exceeds that of water, substantially as described.

[Claims 6 to 11 not printed in the Gazette.]

1,065,496. REFLECTING-MACHINE. FREDERIC E. BALDWIN, New York, N. Y. Filed Mar. 30, 1910. Serial No. 552,366. (Cl. 88—26.)



1. A reflecting apparatus for projecting opaque pictures, having a curved picture holder, the curvature of the picture holder being in conformity with the focus of the lens.

2. In a reflecting apparatus for projecting opaque pictures, in combination, a projecting lens, and a curved picture holder, the curvature of the picture holder being in conformity with the focus of the lens and adapted to show pictures larger in field than the diameter of the lens.

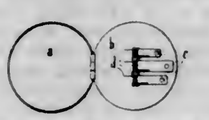
3. In a reflecting apparatus for projecting opaque pictures, in combination, a projecting lens, a picture holder back of the lens, and sources of light in front of the picture holder and on opposite sides of the same, the picture holder being curved to reflect light from said sources into the lens.

4. In a reflecting apparatus for projecting opaque pictures, in combination, a projecting lens, a picture holder back of the lens, and a source of light in front of the picture holder and to one side of the same, the picture holder being curved to reflect light from said source into the lens.

5. In a reflecting apparatus for projecting opaque pictures, in combination, a projecting lens, a lens-tube in which the lens is mounted, and a picture holder in rear of the lens and lens-tube, said picture holder being curved to bring the sides of a picture thereon into the field of the lens whereby light rays from the sides of the picture can enter the lens tube and lens.

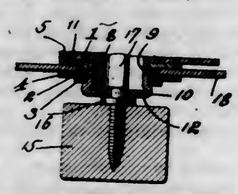
[Claims 6 to 9 not printed in the Gazette.]

1,065,497. ALARM DEVICE. JÁNOS BARTL, Hamburg, Germany. Filed Oct. 30, 1912. Serial No. 728,651. (Cl. 116—42.)



An alarm device comprising in combination with a foldable case, a plurality of spring actuated members hinged to one side of said case, said members being of different lengths, and a plurality of touch pans located on the same side of said case each touch pan arranged in the path of movement of each of said spring actuated members as and for the purpose set forth.

1,065,498. TWO-PART FASTENER FOR VEHICLE-TOPS, GLOVES, AND THE LIKE. CHARLES W. BECK, Rockville Center, N. Y., assignor, by mesne assignments, to Michigan Motor Specialties Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 27, 1911. Serial No. 651,510. (Cl. 24—211.)

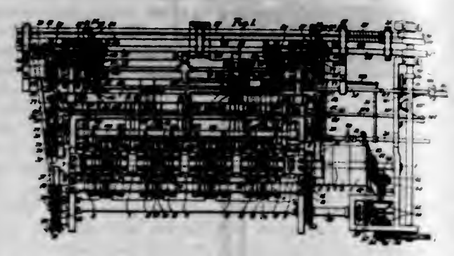


1. A fastener comprising a main non-rotatable member adapted to be secured to a curtain or the like and consisting of a tubular part adapted to extend through the curtain material and means for rigidly clamping said tubular part to said material, and a rotatable member mounted in said main member and consisting of a tubular part extending through the main member and having a wall at its inner end provided with a slot, a non-rotatable locking stud adapted to be passed through said slot of the rotatable member in one position of said member and to be locked thereto by a partial rotation of said rotatable member.

2. A fastener comprising a main tubular part having a flange at one end, said tubular part being expanded at its other end for attachment to the material carrying the fastener, a rotatable tubular part fitting the main part, said tubular part being expanded on its inner end to rotatably interlock it with the main part, said rotatable part having a wall at its inner end provided with a slot, stops formed on the flange of the stationary part and a stop piece carried by the rotatable part and adapted to engage the stops on the main non-rotatable part.

1,065,499. MACHINE FOR BLOWING GLASS BOTTLES, JARS, AND THE LIKE. ALBERT BEVERLEY, Gorringe Park, Mitcham, England. Filed June 15, 1912. Serial No. 703,932. (Cl. 49—9.)

1. In a machine for blowing bottles, a stationary hollow vertical core rod having perforations in it, means for admitting compressed air to the interior of the core rod, means for raising a cylindrical mold containing glass up to the core rod, and means for rotating the mold about its axis.



2. In a machine for blowing bottles, a stationary hollow vertical core rod having perforations in it, means for admitting compressed air to the interior of the core rod, a table, a socket thereon adapted to receive a cylindrical mold, means for raising the table up to the core rod, and means for rotating the mold about its axis.

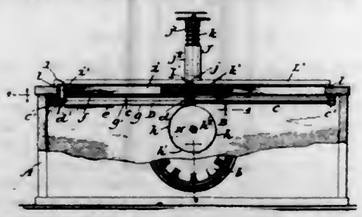
3. In a machine for blowing bottles, a stationary hollow vertical core rod having perforations in it, means for admitting compressed air to the interior of the core rod, means for raising a cylindrical mold containing glass up to the core rod, means for rotating the mold about its axis, means for lowering the empty mold, a divided finishing mold, and means for closing the finishing mold around the glass hanging upon the core rod.

4. In a machine for blowing bottles, a stationary hollow vertical core rod having perforations in it, means for admitting compressed air to the interior of the core rod, a divided neck ring, means for closing the neck ring around the core rod, means for raising a cylindrical mold containing glass up to the core rod, and means for rotating the mold about its axis.

5. In a machine for blowing bottles, a stationary hollow vertical core rod having perforations in it, means for admitting compressed air to the interior of the core rod, a divided neck ring, means for closing the neck ring around the core rod, means for raising a cylindrical mold containing glass up to the core rod, means for rotating the mold about its axis, means for lowering the empty mold, a divided finishing mold, and means for closing the finishing mold around the glass hanging upon the core rod.

[Claims 6 to 13 not printed in the Gazette.]

1,065,500. APPARATUS FOR EFFECTING CALCULATIONS. CLARENCE A. BISHOP, New York, N. Y. Filed Aug. 27, 1909. Serial No. 514,866. (Cl. 234—43.)



1. In a calculating apparatus, a card punching device for producing an aperture in a card, a card guide device adapted to position a card in the path of said punching device, a member of said guide coöperating with the perforation produced in the card whereby said perforation and member determine the position of the card for a subsequent punching operation, and a time train for imparting movement to one of said devices relative to the other.

2. In a calculating apparatus, a card punching device for producing a recess in the edge of a card, a time train, and a movable card guide operated by said time train, said card guide being operable to advance a card across the path of said punching device, said card guide having a member coöperating with the recess produced in the card whereby said recess and member determine the position of the card for a subsequent punching operation.

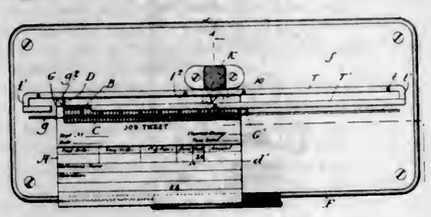
3. In a calculating machine, a card recessing device, a time train, a movable guide operated by said time train and adapted to advance a card across the path of the recessing device, and a second guide movable by said time train and positioned at a distance from the first guide substantially equal to the length of the record card operated upon.

4. In a calculating machine, a recessing device, a guide against which the end of a card is adapted to be placed, a time train for imparting movement to said guide and for feeding the card across the path of the recessing device, and a fixed member for determining the position of the card transversely of said card.

5. In a calculating apparatus, a card punching device, a card guide device including a plurality of members, one of said members conforming to the punch produced in the card by the operation of said card punching device, and a time train whereby relative movement is secured between the card punching device and the card guide device.

[Claims 6 to 12 not printed in the Gazette.]

1,065,501. METHOD OF CALCULATING AND MAKING UNALTERABLE RECORDS. CLARENCE A. BISHOP, New York, N. Y. Filed June 9, 1910. Serial No. 565,959. (Cl. 234—43.)



1. In the art of calculating elapsed time, amounts, etc., and making unalterable records, the method which consists in positioning a card, provided with time and rate scales, face upward with reference to a moving guide, then punching or otherwise marking said card so as to produce an index thereon for the purpose of determining the position of said card for a subsequent marking or punching operation, then, at a subsequent time, reversing the card end to end or face to face and positioning it with the said index in coöperative relation with the moving guide, and then punching or otherwise marking it with reference to the scales so that the time which elapsed between the two said punching or marking operations is indicated on said time scale and the amount represented by said elapsed time is directly readable on the rate scale.

2. In the art of calculating elapsed time and wages and making unalterable records, the method which consists in positioning a card, provided upon its face with time and rate scales, with reference to a moving guide and punching or otherwise marking said card so as to produce an index thereon for the purpose of determining the position of said card for a subsequent marking or punching operation, then, at a subsequent time, reversing the card and placing it in a position determined by the said index, and punching or otherwise marking the card with reference to the scales so that the time which elapsed between the two said punching or marking operations is indicated on said time scale and the wages represented by said elapsed time is directly readable on the rate scale.

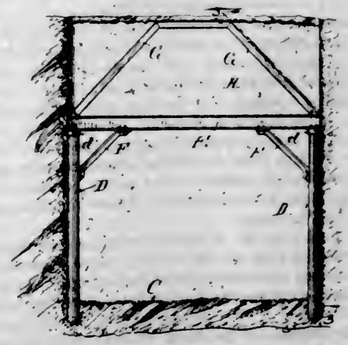
3. In the art of calculating elapsed time, amounts, etc., and making unalterable records, the method which consists in positioning a card, provided upon its face with time and rate scales, face upward with reference to a moving guide, then punching or otherwise marking said card so as to produce an index thereon for the purpose of determining the position of said card for a subsequent marking or punching operation, then, at a subsequent time, reversing said card and placing it in a position wherein the said index is in coöperative relation with a guide the movement of which corresponds to that of the first named guide, and then punching or otherwise marking it with reference to the scales so that the time which elapsed between the two said punching or marking operations is indicated on said time scale and the amount represented by said elapsed time is directly readable on the rate scale.

4. In the art of calculating elapsed time and wages and making unalterable records, the method which consists in positioning a card, provided with time and rate scales and with a permanent index near one end of said scales, so that said permanent index is in coöperative relation with a moving guide, then punching or otherwise marking said card so as to produce a second index thereon for the purpose of determining the position of the card for a subsequent marking or punching operation, then, at a subsequent time, reversing said card and placing it in a position determined by the said second index, and thereafter punching or otherwise marking the card with reference to the scales so that the time which elapsed between the two said punching or marking operations is indicated on said time scale and the wages represented by said elapsed time is directly readable upon the rate scale.

5. In the art of calculating elapsed time, amounts, etc., and making unalterable records, the method which consists in positioning a card, provided with time and rate scales and with a permanent index near one end of said scales, so that its permanent index is in coöperative relation with a moving guide, then punching or otherwise marking said card so as to produce an index thereon for the purpose of determining the position of said card for a subsequent marking or punching operation, then, at a subsequent time, reversing said card and punching or otherwise marking it with reference to the scales, and at a point intermediate the permanent index and the index produced by the first punching or marking operation, so that the time which elapsed between the two said punching or marking operations is indicated on said time scale, and the amount represented by said elapsed time is directly readable on the rate scale.

[Claims 6 to 20 not printed in the Gazette.]

1,065,502. TUNNEL CONSTRUCTION. FRANK BRADLEY, New York, N. Y. Filed Sept. 21, 1912. Serial No. 721,563. (Cl. 61—16.)

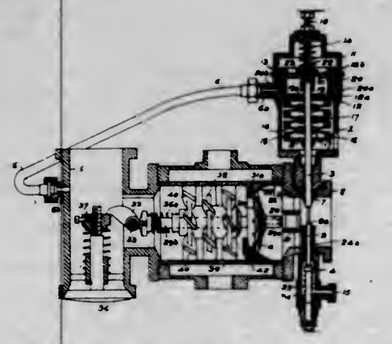


1. The hereinbefore described improvement in the art of tunnel construction which consists in forming vertical perforations along the proposed side lines of the tunnel to points below the rock floor of the tunnel, inserting posts, located in opposite pairs, in said perforations, extending the tunnel excavation to uncover the upper portions of a pair of said posts, rigidly separating said posts at their uncovered portion and finally completing the tunnel excavation between said pair of posts.

2. The hereinbefore described improvement in the art of tunnel construction which consists in forming vertical per-

forations along the proposed side lines of the tunnel, inserting posts located in opposite pairs in said perforations, extending the tunnel excavation to uncover the upper portions of a pair of said posts, inserting a transverse beam between said posts and a roof support based thereon and finally completing the tunnel excavation between said posts.

1,065,503. CARBURETER. JOHN BYROM, Liverpool, England. Filed June 3, 1912. Serial No. 701,180. (Cl. 48—155.1.)



1. In a carbureter: a throttle valve, a fuel supply valve located on the side of the throttle valve remote from the engine, a collapsible bellows comprising a series of disks eyeleted centrally together in pairs and peripherally coupled by rings; an operating rod fixed to one element of the bellows; an adjustable sleeve on the end of the rod serving to limit the movement of the rod in both directions; a compression spring engaging the sleeve and normally acting to open the petrol valve against the suction action of the engine, and a communication from the bellows interior to the engine side of the throttle valve.

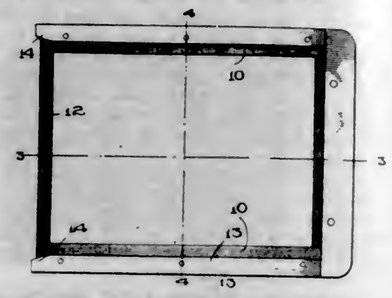
2. In a carbureter: a throttle valve, a central aperture in the valve; radial ports leading to the seating of the valve; a step in the valve face; a tube adapted when the throttle valve is fully opened to form with the central aperture a compound annulus; annular ridges on the throttle valve head; a small bore tube communicating with both sides of the throttle valve; a fuel supply valve located on the side of the throttle valve remote from the engine, fluid pressure means controlling said fuel supply valve, and a communication between the fuel valve controlling means and the engine side of the throttle valve.

3. In a carbureter: a series of baffle plates disposed centrally in the carbureter body so as to form an annulus therewith, helical fins or ledges on the baffle plates extending across the annulus; a central tube in the baffle plates forming a guide for a throttle valve spindle, a throttle valve, a fuel supply valve located on the side of the throttle valve remote from the engine, fluid pressure means controlling said fuel supply valve, and a communication between the fuel valve controlling means and the engine side of the throttle valve.

4. In a carbureter: a throttle valve, a fuel supply valve located on the side of the throttle valve remote from the engine, means controlling said fuel supply valve, a communication between the fuel valve controlling means and the engine side of the throttle valve, a third valve; an adjustable flange on the stem of said third valve; and a cam mounted in the carbureter adapted to operate both the throttle and said third valve.

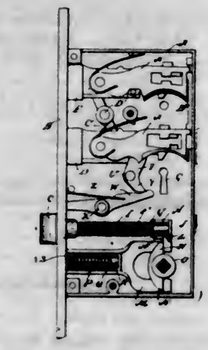
1,065,504. PLATE-HOLDER KIT. DONALD L. CAIN, Okoboji, Iowa. Filed Aug. 24, 1912. Serial No. 716,873. (Cl. 95—68.)

A plate-holder kit for cameras comprising a pair of spaced side bars, an end bar connecting the side bars at one end, overlapping strips projecting over the outer edges of said bars and spaced from the inner edges, a second end bar connecting the remaining ends of the side bars, said strips having their inner edges adjacent the second bar flared for constituting a guiding means for facilitating



the insertion of a plate into the holder and for preventing the corners of the plate from becoming nicked during the insertion.

1,065,505. LOCK. WILLIAM J. CARROLL, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Mar. 23, 1906. Serial No. 307,643. (Cl. 70—71.)



1. In a lock, the combination with a casing; of a bolt operable from the outside and a second bolt operable from the inside; a latch bolt; a hub for operating said latch bolt; and means for locking said hub against rotation upon the protraction of said second bolt from the inside, to indicate that the inside bolt is protracted, substantially as described.

2. In a lock, the combination with a plurality of bolts; a casing having a single key-hole on the outside thereof and a single key-hole on the inside thereof corresponding separately to said bolts; a hub; a rotatable member outside of said casing connected to said hub, and means for locking said hub against rotation upon the protraction of said second bolt from the inside of the casing, substantially as described.

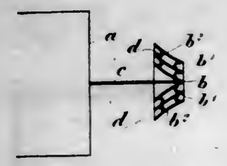
3. In a lock, dead bolt mechanism operatable from both sides of the door, a latch bolt, latch bolt retracting means, and means, inoperative when the door is locked from the outside by said dead bolt mechanism, to dog said retracting means automatically when the door is locked from the inside by said dead bolt mechanism; substantially as described.

4. In a lock, dead bolt mechanism operable from both sides of the door, a latch bolt, retracting means for said latch bolt including a hub operable from the outside of the door, and means inoperative when the door is locked from the outside by said dead bolt mechanism, to dog said hub automatically when the door is locked from the inside by said dead bolt mechanism; substantially as described.

5. In a lock, dead bolt mechanism operable by a key inserted at either side of the door, a latch bolt, latch bolt retracting means accessible at the outside of the door, and means, inoperative when the door is locked from the outside by said dead bolt mechanism, to dog said retracting means automatically when the door is locked from the inside by said dead bolt mechanism; substantially as described.

[Claims 6 to 29 not printed in the Gazette.]

1,065,506. MEANS FOR REDUCING THE RESISTANCE TO THE PASSAGE OF VEHICLES IN FLUIDS. LOUIS CONSTANTIN, Paris, France. Filed Mar. 18, 1912. Serial No. 684,585. (Cl. 244—1.)



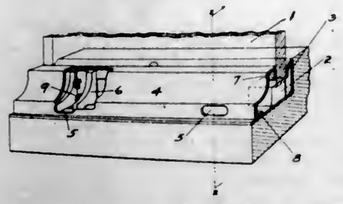
1. In combination with a vehicle, bows of smaller section than that of the vehicle, constituted by several inclined walls parallel one with the other and separated one from the other by a vacant space, the attachments connecting these walls one with the other and a support of smaller section than that of the bows fixed in front of the vehicle in line with its longitudinal axis and connecting the bows with the vehicle.

2. In combination with a vehicle, bows of smaller section than that of the vehicle formed by several inclined curved walls parallel one with the other and separated one from the other by a vacant space, attachments connecting these walls one with the other and a support of smaller section than that of the bows fixed in front of the vehicle in line with its longitudinal axis and connecting the bows with the vehicle.

3. In combination with a vehicle, bows of smaller section than that of the vehicle presenting a ridge and on each side thereof several inclined walls parallel one with the other and separated one from the other by a vacant space, attachments connecting these walls one with the other and a support of smaller section than that of the bows fixed in front of the vehicle in line with its longitudinal axis and connecting the bows with the vehicle.

4. In combination with a vehicle, bows of smaller section than that of the vehicle presenting a ridge and on either side thereof a number of inclined curved walls parallel one with the other and separated one from the other by a vacant space, attachments connecting the walls one with the other and a support of smaller section than that of the bows fixed in front of the vehicle in line with its longitudinal axis and connecting the bows with the vehicle.

1,065,507. METAL STORE-FRONT. FREDERICK C. COOK, Portland, Oreg., and CYRUS B. MCCROSKEY, San Francisco, Cal.; said McCroskey assignor to said Cook. Filed Jan. 4, 1913. Serial No. 740,119. (Cl. 189—78.)



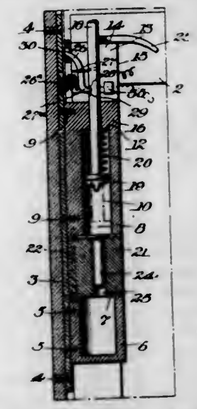
1. In a store front of the character referred to, in combination therewith, a face plate or molding, a holding block therein, said face plate having an opening therethrough, and a screw inserted bodily through said opening for securing said holding block and face plate in position.

2. In a store front of the character referred to, in combination therewith, a face plate or molding, a holding block formed to fit therein and provided with a screw-receiving opening, said face plate or molding having an opening at said holding block, and a screw inserted through said opening into said holding block, for the purpose referred to

3. In a store front of the character referred to, in combination therewith, a gutter plate or base, setting blocks mounted thereon, a glass resting upon said setting blocks, a face plate or molding resting against said glass and provided with openings therethrough, a holding block fitted within said face plate or molding at an opening therethrough and receiving a screw, and a screw inserted through said opening and in said face plate for securing said holding block and face plate in operating position.

4. In a store front of the character referred to, in combination with the gutter, glass and setting blocks therefor, of a face plate or molding bearing against said glass and provided with ventilating openings, one or more holding blocks fitted into said face plate or molding opposite said ventilating openings and having a holding engagement with said face plate or molding, and a screw inserted bodily through said ventilating opening and into said holding block for securing it and said face plate to said store front, substantially as illustrated and described.

1,065,508. BURGLAR-ALARM. ROBERT P. CRAWFORD, Allegheny, Pa. Filed Mar. 5, 1913. Serial No. 752,221. (Cl. 116—42.)



1. In a burglar alarm, the combination of a carrier, a plunger working therein provided with a shoulder, a latch device having engagement with said shoulder to temporarily retain the plunger in raised position, a lever adapted for connection with one of the window sashes having operative engagement with said latch, and means adapted for connection with the other window sash having operative engagement with said lever.

2. In a burglar alarm, the combination of a carrier, a plunger working therein provided with a shoulder, a pivoted latch having engagement with said shoulder, a lever having a fulcrum intermediately of its length adapted for connection with one of the window sashes and having operative engagement with said latch, and means adapted for connection with the other window sash having operative engagement with said lever.

3. In a burglar alarm, the combination of a carrier, a plunger working therein provided with a shoulder, a pivoted latch having an outturned end engaging said shoulder, a lever having a fulcrum intermediately of its length adapted for connection with one of the window sashes and provided with a slotted end portion having operative engagement with said latch, and a pin adapted for connection with the other window sash having operative engagement with said lever.

4. In a burglar alarm, the combination of a carrier, a plunger working therein provided with a shoulder and a handle projection, a latch device having engagement with

said shoulder, a lever adapted for connection with one of the window sashes having operative engagement with said latch, means adapted for connection with the other window sash having operative engagement with said lever, a cartridge-carrying block in line with said plunger, and electrical contacts having engagement with said handle projection, and means in connection therewith for ringing an alarm.

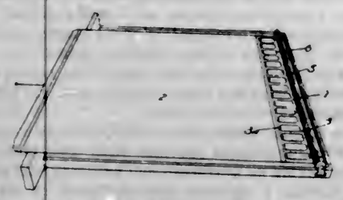
5. In a burglar alarm, the combination of a carrier having at its lower end an open-top box, a plunger-carrying block having a lower longitudinal recess, an upper longitudinal slot open at one side, and an intermediate portion provided with an aperture, a plunger working in said aperture, in said recess and in said slot and having a shoulder and a lower head working in said recess, a coiled spring surrounding said plunger and located between said head and the upper wall of said recess, said plunger having a handle projection extending through the open side of said slot, a hinged cartridge-carrying block between said box and the plunger-carrying block, a latch having engagement with said shoulder, a lever adapted for connection with one of the window sashes having operative engagement with said latch, and means adapted for connection with the other window sash having operative engagement with said lever.

1,065,509. NECKTIE-HOLDER. JOSIAH J. DEAL, Canton, Ohio; Oman F. Deal administrator of said Josiah J. Deal, deceased. Filed May 6, 1911. Serial No. 623,619. (Cl. 24—58.)



The herein described necktie holder consisting of the combination of a plate provided at its upper end with an elongated slot located midway between the edges of said plate, a pin detachably connected to the plate and adapted to bridge the slot, the lower portion of said plate provided with a roller spaced from the face of said plate, and means for supporting the roller, an elastic band located through said slot in the upper portion of the plate and adapted to be held by the pin located across the slot, a button-clip connected to the elastic strip and the strip adapted for contact with the roller carried by and located at one side of the plate, substantially as and for the purpose specified.

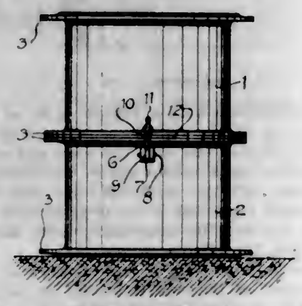
1,065,510. VENTILATING-FRIEZE FOR BLINDS. JOHN DOUGAN, Dunedin, New Zealand. Filed Apr. 10, 1912. Serial No. 689,875. (Cl. 156—10.)



1. As a new article of manufacture, a ventilating frieze for attachment to window blinds comprising spaced upper and lower horizontal strips adapted for connection, respectively, to the blind roller and the upper edge of the blind, and spaced vertical strips connecting the horizontal strips, the said lower horizontal strip consisting of a pair of parallel members arranged side by side to receive between them the said upper edge of the blind.

2. As a new article of manufacture, a continuous length of ventilating frieze for attachment to window blinds, from which sections of the proper size to fit the individual blinds may be cut, comprising spaced upper and lower horizontal strips adapted for connection, respectively, to the blind roller and the upper edge of the blind, and spaced vertical strips connecting the horizontal strips, the said lower horizontal strip consisting of a pair of parallel members arranged side by side to receive between them the said upper edge of the blind.

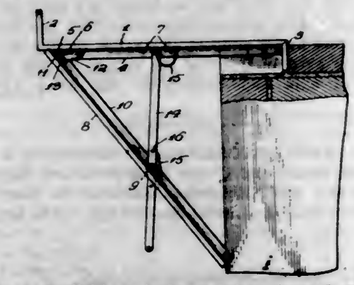
1,065,511. CUSPIDOR. HENRY W. EDWARDS, Mart, Tex. Filed Mar. 22, 1913. Serial No. 756,256. (Cl. 4—38.)



1. A device of the class described comprising an upper section and lower section, funnel members within said sections, a baffle member carried by one section and projecting into the opposite section between the small ends of the funnel members, and means for securing the sections together.

2. A reversible cuspidor comprising an inverted lower section, an upper section removably secured upon the lower section, funnel members carried by each section, and a curved baffle member carried by the upper section and extending at an angle into the lower section between the small ends of the funnel members.

1,065,512. SCAFFOLD. KARL A. ERICKSSON, Rockford, Ill. Filed Oct. 6, 1911. Serial No. 653,171. (Cl. 20—84.)



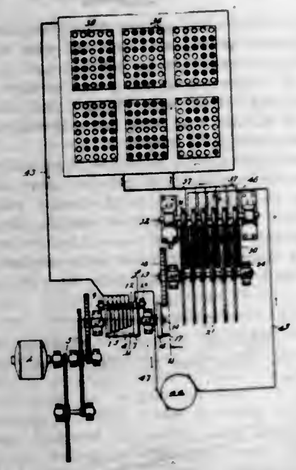
1. In a scaffold, a body member formed with oppositely projecting integral terminations, a longitudinal flange beveled at one extremity and provided with a longitudinal aperture at its beveled extremity and with a plurality of apertures between its ends, a leg having an oblique aperture below its vertical center, a longitudinal flange secured to the said leg beveled at one extremity and provided with an aperture in alinement with the aperture in the leg and means for adjusting and locking the aforesaid longitudinal flanges together.

2. In a scaffold, a body member formed with oppositely projecting integral terminations, a longitudinal flange beveled at one extremity and provided with a longitudinal aperture at its beveled extremity and with a plurality of apertures between its ends, a leg having an oblique aperture below its vertical center, a longitudinal flange secured to the said leg beveled at one extremity and provided with an aperture in alinement with the aperture in the leg, a link connecting the said longitudinal flanges, an arm provided with terminal apertures and pins adapted for removable insertion in the apertured portions of the several members.

3. In a scaffold, a body member formed with oppositely projecting integral terminations, a longitudinal flange beveled at one extremity and provided with a longitudinal aperture at its beveled extremity and with a plurality of apertures between its ends, a leg having an oblique aperture below its vertical center, a longitudinal flange secured to the said leg beveled at one extremity and provided with an aperture in alinement with the aperture in the leg, a link connecting the said longitudinal flanges, an arm provided with terminal apertures and with a plurality of apertures between its ends and pins adapted for engagement with the apertured portions of the device whereby they are locked in adjusted position.

4. In a scaffold, a body member formed with oppositely projecting integral terminations, a longitudinal flange beveled at one extremity and provided with a longitudinal aperture at its beveled extremity and with a plurality of apertures between its ends, a leg having an oblique aperture below its vertical center, a longitudinal flange secured to the said leg beveled at one extremity and provided with an aperture in alinement with the aperture in the leg, a link connecting the said longitudinal flanges, an arm provided with terminal apertures and with a plurality of apertures between its ends, pins adapted for engagement with the apertured portions of the device and a temporary cleat adapted for engagement with the aforesaid downwardly extending termination.

1,065,513. AUTOMATIC ELECTRIC DISPLAY-SIGN. JUDSON C. EUBANK, Kansas City, Mo. Filed Oct. 26, 1911. Serial No. 657,004. (Cl. 177—350.)



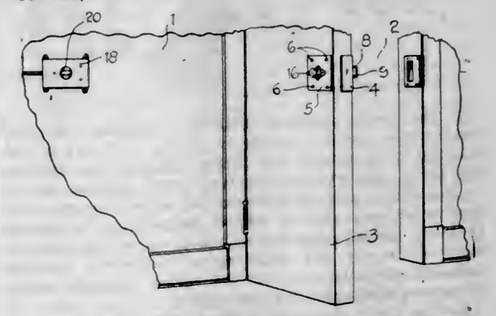
1. In combination, a group of lamp circuits, and automatic means to select any combination of circuits to cause the lamps to display any desired character, said means consisting of a rotary disk, a series of radial contact-bars carried by said disk, a row of fingers on each contact-bar to select a certain combination of circuits, and a stationary contact-member radially-arranged relatively to said rotary disk, and having contacts for each circuit to coact with said fingers in selecting the desired combination of circuits.

2. In combination, a group of lamp circuits, and automatic means to select any combination of circuits to cause the lamps to display any desired character, said means consisting of a rotary member, a series of interchangeable contact-bars radially-mounted upon said rotary member, a row of fingers on each contact-bar to select a certain combination of circuits, and a stationary contact-member radially-arranged relative to said rotary-member and having resilient contacts for each circuit to coact with the fingers in selecting the desired combination of circuits.

3. In combination, groups of lamp circuits, and automatic means to select any combination of circuits to cause the lamps to display any desired character, said means consisting of a plurality of disks spaced apart and mounted side by side upon a driven shaft, a series of radial contact-bars carried by each disk, a row of fingers on each contact-bar to select a certain combination of circuits, a finger-hold on each contact-bar, and a plurality of stationary contact-members radially-arranged relative to said rotary disk, said contact-members having contacts for each circuit to coact with the fingers in selecting the desired combination of circuits.

4. In combination, a group of lamp circuits, an automatic means to select any combination of circuits to cause the lamps to display any desired character, said means consisting of a rotary member having radial grooves, interchangeable contact-bars slidably-mounted in said grooves, tongues on said contact-bars to secure them to said rotary-member, fingers on each bar to select a certain combination of circuits, and a stationary contact-member radially-arranged relative to said rotary disk, and having contacts for each circuit to coact with the fingers in selecting the desired combination of circuits.

1,065,514. LOCK. THEODORE C. EVANS, Terre Haute, Ind. Filed Mar. 1, 1913. Serial No. 751,566. (Cl. 16—78.)



1. A lock of the class described consisting of a casing having an opening in the front wall thereof, a pair of pivoted jaw members carried in said casing and projecting across the opening in the latter, spring means to normally force said jaw members toward one another, and means to retain said jaw members in spaced relation to one another, said latter means also forming a means for separating said jaw members.

2. A lock of the class described comprising a casing having an enlarged opening in the front wall thereof, a pair of pivoted jaw members carried in said casing and adapted to project across said opening therein, spring means to normally force said jaw members toward one another, and a pivoted lever carried on said casing between said jaw members to retain the latter in spaced relation to one another, said lever projecting beyond the one end of said casing and affording a means for separating said jaw members.

1,065,515. PIPE-COUPLING DEVICE. HERMAN R. EWERT, Spooner, Wis. Filed Jan. 2, 1912. Serial No. 668,951. (Cl. 137—89.)

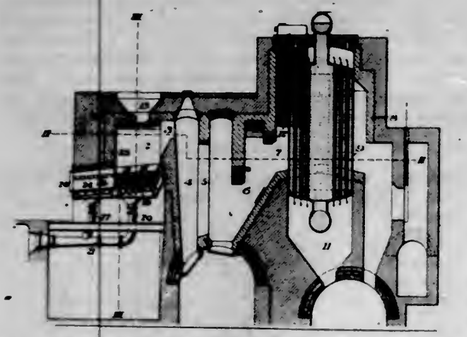
A pipe coupling consisting of counterpart detachable coupling sections having annular recessed coupling faces and lateral fluid openings therein having annular recessed walls, in combination with flexible gaskets having duplicate outwardly-turned flanges seated in the aforesaid recesses, the recess in the face of each coupling section

being of less depth radially than the gasket flanges and providing a small intervening annular channel between the body of the gasket and the wall of the coupling sec-



tion over which it is seated, whereby the gaskets of opposing coupling sections are pressed toward the joint by the expanding air pressure within, to maintain a non-leakable joint.

1,065,516. METHOD OF BURNING REFUSE. JOHANN ALOYS FRIED, Barmen, Germany. Filed Apr. 29, 1910. Serial No. 558,459. (Cl. 110—8.)



1. The herein described method of burning low grade combustibles, which consists in placing a charge of the material to be burned in a furnace chamber and igniting the same, supplying a relatively large amount of air to and within said mass during the primary stage of its combustion and until a critical temperature is reached at which slagging commences, then restricting the primary air supply and supplying air above the mass in sufficient quantity to burn the carbon monoxid rising therefrom, substantially as described.

2. The herein described method of burning low grade combustibles, which consists in placing a charge of the material to be burned in a furnace chamber and igniting the same, supplying a relatively large amount of air to and within said mass during the primary stage of its combustion and until a critical temperature is reached at which slagging commences, then restricting the primary air supply and supplying air above the mass in sufficient quantity to burn the carbon monoxid rising therefrom, then removing the partially burned mass to another furnace chamber and utilizing it to preheat the secondary supply of air which is supplied above a second charge interposed in the first named chamber and which is burned therein under substantially the same conditions as the first named charge, substantially as described.

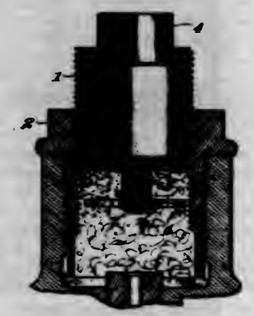
3. The herein described method of burning low grade combustibles, which consists in supplying a relatively large amount of air to the mass during the initial stages of combustion thereof and until a temperature of about 1000° C. is reached, then reducing the primary air supply to the mass and supplying air above the mass in sufficient quantity to burn the carbon monoxid rising therefrom, substantially as described.

4. The herein described method of burning low grade combustibles, which consists in placing a charge of the material to be burned in a furnace chamber and igniting the same, supplying a relatively large amount of air to and within said mass during the primary stage of its combustion and until a critical temperature is reached at which slagging commences, then restricting the primary air supply and supplying air above the mass in sufficient quantity to burn the carbon monoxid rising therefrom, and passing the burning carbon monoxid gases to a heater and there utilizing their heat, substantially as described.

5. The herein described method of burning low grade combustibles consisting in feeding air under pressure through a supporting surface to the said fuel, simultaneously feeding air under pressure through another supporting surface carrying heated material previously moved thereon from the first named supporting surface, supplying the heated air thus obtained to the atmosphere above the fuel on the first named supporting surface and successively moving the material from one supporting surface to the other; substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

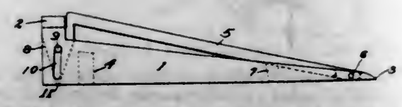
1,065,517. FORCE-FEEDER FOR GREASE-CUPS. CHARLES E. FULLER and GEORGE J. HATZ, Omaha, Nebr., assignors to Sterling H. Campbell, St. Louis, Mo. Filed Dec. 20, 1912. Serial No. 737,864. (Cl. 184—48.)



1. A force feeder for grease cups comprising a screw threaded plunger provided at one end with means whereby it may be engaged to be rotated and having at its other end a projecting spindle, and a disk secured on said spindle apart from said plunger and adapted to rotate on said spindle, said disk being provided with apertures for the passage of grease.

2. In combination with a grease cup having an outlet, a force feeder comprising a plunger adapted to adjustably engage the grease cup, said plunger being provided with a spindle adapted to project within the grease cup, a comparatively thin disk rotatably secured on said spindle and spaced apart from said plunger, said disk being provided with an aperture for the passage of grease.

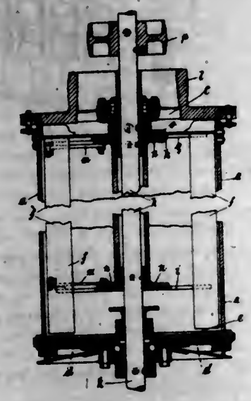
1,065,518. VEHICLE-CHOCK. ADOLPH GAMMELIN, Clark, S. D. Filed May 11, 1912. Serial No. 696,621. (Cl. 21—8.)



In a vehicle chock, an inclined hollow frame formed with vertical slots, a head made integral with said frame, a finger pivotally disposed within said frame, a tooth carried by said finger, a head made integral with said finger and disposed within the aforesaid frame and frame-head and a pin carried by the said finger-head engaging the slotted portions of the said frame.

1,065,519. APPARATUS FOR SEPARATION BY THE ACTION OF CENTRIFUGAL FORCE. WILLIAM JOHN GEE, Tulse Hill, London, England. Filed Nov. 1, 1912. Serial No. 729,012. (Cl. 83—87.)

1. An apparatus for separating material by centrifugal force comprising a rotary drum provided with a separating surface adapted to receive and retain the particles of material, means for rotating said drum, a weir-plate near the outlet end of said drum adapted to support a freely suspended annular wall of liquid, and centripetally unobstructed means for positively rotating said annular wall at a higher velocity than the drum; substantially as set forth.



2. An apparatus for separating ore by centrifugal force comprising a rotary drum provided with a separating surface adapted to receive and retain the particles of ore, means for rotating said drum, a weir-plate near the outlet end of the drum adapted to support a freely suspended annular wall of liquid, a central rotating shaft in said drum, blades extending radially from said shaft into said annular wall of liquid, there being centripetally unobstructed spaces between said blades, and means for rotating said shaft and blades; substantially as set forth.

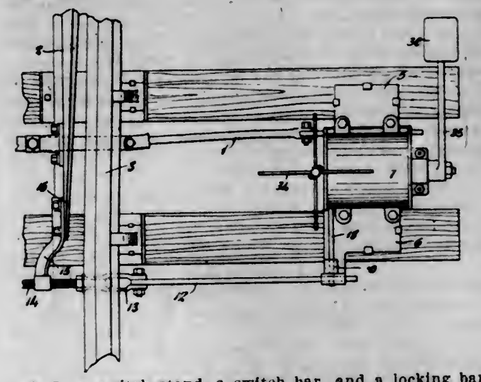
3. An apparatus for separating material by centrifugal force, comprising a rotary drum provided with a separating surface adapted to receive and retain the particles or ore, a weir-plate near the outlet end of said drum adapted to support a freely suspended annular wall of liquid, rotary blades extending radially into said annular wall, there being centripetally unobstructed spaces between said blades, and means for adjusting said blades in a radial direction, substantially as set forth.

4. An apparatus for separating material by centrifugal force comprising a rotary drum provided with a separating surface adapted to receive and retain the particles of material, a weir-plate near the outlet end of said drum adapted to support a freely suspended annular wall of liquid, rotary blades extending radially into said annular wall, there being centripetally unobstructed spaces between said blades, means for adjusting said blades in a radial direction, and means for locking said blades in their adjusted positions; substantially as set forth.

5. An apparatus for separating ore by centrifugal force comprising a rotary drum provided with a separating surface adapted to receive and retain the particles of ore, a weir-plate near the outlet end of said drum adapted to support a freely suspended annular wall of liquid, a central rotating shaft in said drum, disks on said shaft, there being radial slots in said disks, blades guided in said slots, there being centripetally unobstructed spaces between said blades, and links pivotally connecting said blades to said shaft, substantially as set forth.

1,065,520. SWITCH-STAND. NATHANIEL O. GOLDSMITH, Norwood, Ohio, assignor to The Weir Frog Company, Norwood, Ohio, a Corporation of Ohio. Filed Apr. 15, 1912. Serial No. 690,764. (Cl. 104—25.)

1. In a switch stand, a switch bar, and a locking bar, a revoluble block with cam surfaces lengthwise of and transverse the axis thereof, engaging means intermediate one cam surface and the switch bar and the other cam surface and the locking bar, whereby the rotation of the block will reciprocate the switch bar and locking bar in planes substantially at right angles to each other.



2. In a switch stand, a switch bar, and a locking bar, a revoluble block with cam surfaces lengthwise of and transverse the axis thereof, engaging means intermediate one cam surface and the switch bar and the other cam surface and the locking bar, with said cam surfaces formed respectively with straight and spiral portions for the one cam and eccentric and concentric portions for the other cam whereby the rotation of the block will reciprocate the switch bar and the locking bar intermittently in planes substantially at right angles to each other.

3. In a switch stand, a switch bar, and a locking bar, a revoluble block with cam surfaces lengthwise of and transverse the axis thereof, engaging means intermediate one cam surface and the switch bar and the other cam surface and the locking bar, with said cam surfaces formed respectively with straight and spiral portions for the one cam and eccentric and concentric portions for the other cam, and with the straight portion of one cam coöperating with the eccentric portion of the other, whereby the rotation of the block will reciprocate the switch bar and the locking bar intermittently and at different times, in planes at right angles to each other.

4. In a switch stand, a switch bar and an interlocking bar, each attached at right angles to the switch rails, a revoluble block, with switch handle for rotating said block, cam grooves on said block arranged longitudinally and transversely the axis thereof, a stud on the switch bar engaging one groove, a locking pin at right angles to the interlocking bar adapted to engage and lock the same, with a stud on the pin engaging the other groove, whereby the rotation of the block will release the locking pin and shift the switch bar and the interlocking bar.

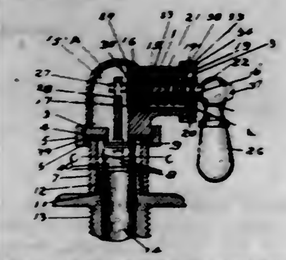
5. In a switch stand, a switch bar and an interlocking bar, each attached at right angles to the switch rails, a revoluble block, with switch handle for rotating said block, cam grooves on said block arranged longitudinally and transversely the axis thereof, with said grooves formed respectively with straight and spiral portions for the one groove and eccentric and concentric portions for the other groove, a stud on the switch bar engaging one groove, a locking pin at right angles to the interlocking bar adapted to engage and to lock the same, with a stud on the pin engaging the other groove, whereby the rotation of the block will release the locking pin and shift the switch bar in sequence.

[Claims 6 to 11 not printed in the Gazette.]

1,065,521. SELF-CLOSING FAUCET. PATRICK W. GORMAN, Salt Lake City, Utah. Filed Sept. 21, 1912. Serial No. 721,697. (Cl. 137—4.)

1. Self-closing cock comprising in combination, a casing having an inlet provided with a valve seat and also having

a spout leading therefrom, a valve for said seat, an extension for said casing having a threaded opening, a cylinder in said extension provided with an opening registering with the opening in said extension, a packing disposed between said cylinder and the wall of said extension, an operating stem extending through the opening in said cylinder and having threaded engagement with the threaded opening in said extension and provided with a connection with said valve, means for engaging said cylinder to force the same against said packing, and means for returning the stem to a starting position and assisting in maintaining said cylinder in engagement with said packing, substantially as described.



2. A self closing cock comprising in combination, a casing having an inlet provided with a valve seat and also having a spout leading therefrom, a valve for said seat, an extension for said casing having a threaded opening, a cylinder in said extension provided with an opening registering with the opening in said extension, a packing disposed between said cylinder and the wall of said extension, an operating stem extending through the opening in said cylinder and having threaded engagement with the threaded opening in said extension and provided with a connection with said valve, said stem having a flange engaging said cylinder to force the same against said packing, and a coil spring having one end connected with said stem and the other end connected with said extension for returning the stem to a starting position and assisting in maintaining said cylinder in engagement with the said packing, substantially as described.

1,065,522. PROCESS OF PRODUCING HYDROCARBONS WITH MORE THAN ONE DOUBLE BOND. KURT GOTTLOB, Elberfeld, Germany, assignor to Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany, a Corporation of Germany. Filed Aug. 12, 1911. Serial No. 643,713. (Cl. 23—24.)

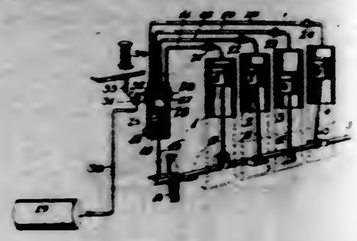
1. The process of producing aliphatic hydrocarbons with more than one double bond which comprises decomposing terpenes in such manner that the low boiling decomposition products are continuously removed while the undecomposed terpenes and higher boiling reaction products remain and are further treated, substantially as described.

2. The process of producing isoprene which comprises decomposing terpenes in such manner that the low boiling decomposition products are continuously removed while the undecomposed terpenes and higher boiling reaction products remain and are further treated, and isolating the resulting isoprene substantially as described.

3. The process of producing aliphatic hydrocarbons with more than one double bond which comprises decomposing turpentine oil in such manner that the low boiling decomposition products are continuously removed while the undecomposed turpentine oil and higher boiling reaction products remain and are further treated, and isolating the resulting hydrocarbons with more than one double bond, substantially as described.

4. The process of producing isoprene from turpentine oil which comprises decomposing turpentine oil in such manner that the low boiling decomposition products are continuously removed while the undecomposed turpentine oil and higher boiling reaction products remain and are further treated, and isolating the resulting isoprene, substantially as described.

1,065,523. GAS-ENGINE. GEORGE T. HANCHETT, New York, N. Y., assignor to Maxwell Motor Company, Inc., Detroit, Mich., a Corporation of Delaware. Filed Feb. 3, 1912. Serial No. 675,270. (Cl. 123—179.)

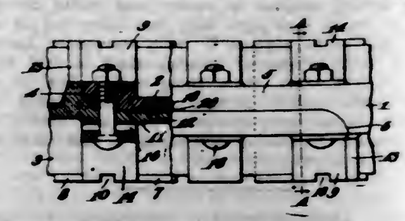


1. In a gas engine, the combination of a plurality of cylinders, pistons, piston rods and a crank shaft, with a ratchet mounted upon said crank shaft, a plunger having a limited throw adapted to operate said ratchet, a spring for retracting said plunger, the position of said ratchet being such that when said plunger is actuated to the limit of its throw the shaft will be suitably positioned for starting by means of gas supplied from an auxiliary source to the cylinders of the engine, and means for supplying such gas to said cylinders.

2. In a gas engine, the combination of a plurality of cylinders, pistons, piston rods and a crank shaft, with a ratchet mounted upon said crank shaft, a plunger having a limited throw adapted to operate said ratchet, a spring for retracting said plunger, the position of said ratchet being such that when said plunger is actuated to the limit of its throw the shaft will be suitably positioned for starting by means of gas supplied from an auxiliary source to the cylinders of the engine, pipes for supplying such gas to said cylinders, a piston head connected to said plunger, a plunger cylinder for said piston head, a source of gas under pressure, and a valve for connecting said plunger cylinder with said source or with said pipes at different times.

3. In a gas engine, the combination of a plurality of cylinders, pistons, piston rods and a crank shaft, with a ratchet mounted upon said crank shaft, a plunger having a limited throw adapted to operate said ratchet, a spring for retracting said plunger, the position of said ratchet being such that when said plunger is actuated to the limit of its throw the shaft will be suitably positioned for starting by means of gas supplied from an auxiliary source to the cylinders of the engine, pipes for supplying such gas to said cylinders, a piston head connected to said plunger, a plunger cylinder for said piston head, a source of gas under pressure, and a valve for connecting said plunger cylinder with said source or with said pipes at different times, and spring retracted means for operating said valve.

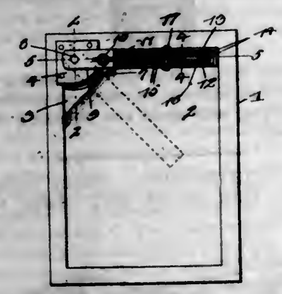
1,065,524. RAIL-JOINT. FRANCIS O. HELTZEL, Erie, Pa. Filed Apr. 11, 1913. Serial No. 760,519. (Cl. 239—8.)



1. A rail joint comprising overlapping ends, one being the complement of the other to thereby form a single rail-like structure, fixed and detachable web plates disposed along the sides of the meeting ends of the rails, holding bolts passing therethrough, web plates with upstanding flanges disposed beneath the rail ends adapted to interlock with the end web plates, said web plates and tie plates provided with alined notches at their outer ends for securing spikes.

2. An overlapping rail joint with the meeting ends thereof elongated, the said elongated ends provided with the extremities thereof rounded off, the curvature of which extending tangential to the longitudinal axis of the rail and the remote end of the curve extending at right angles to the rail end, the adjacent meeting rail provided with an end a complement thereof, the two rail ends uniting to form a single rail-like structure, web plates formed integral with the extreme ends of said rails, web plates detachably secured to the said rails intermediate the overlapping ends, means extending through said web plates and rail webs adapted to hold the same in fixed relation, and tie plates disposed beneath the rail flanges and projecting therebeyond, said tie plates provided with upstanding flanges interlocking with said web plates and adapted to hold the same against relative movement.

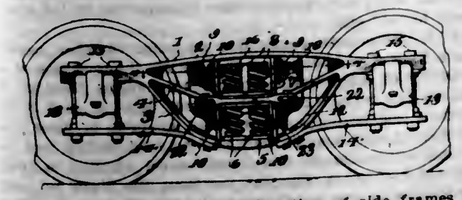
1,065,525. WINDOW-CLEANING DEVICE. GEORGE H. HENKEL, Nashville, Tenn., assignor of one-half to Perry G. Franklin, Nashville, Tenn. Filed Oct. 7, 1912. Serial No. 724,372. (Cl. 15—59.)



1. In a window cleaner, the combination with a support comprising a plurality of spaced plates adapted to be secured to a window frame, one of said plates being adapted to be substituted for a removed portion of the transparent pane thereof; of a pair of arms pivotally carried on the other plates of the support, connecting means between said arms, and cleaning members carried on said arms.

2. In a window cleaner, the combination with a support comprising a plurality of plates adapted to be mounted on a window sash, the intermediate plate thereof being adapted for substitution for a removed portion of the transparent pane thereof, said last mentioned plate being also provided with an arcuate slot; of a pair of arms pivotally carried on the other of said plates and having their inner faces slightly spaced from one another, means extending through the arcuate slot of the intermediate plate and said connecting arms to adjust the position of the latter with respect to one another, and cleaning members carried on said arms.

1,065,526. TRUCK. NICHOLAS E. HIRSCH, Wilmington, Del. Filed Aug. 24, 1912. Serial No. 716,896. (Cl. 105—243.)



1. In a car truck, the combination of side frames including top, intermediate, and bottom arch bars, column posts intersecting the said arch bars, and a bolster having its ends located between and interlocked with the said column posts.

2. In a car truck, the combination of side frames, including top, intermediate, and bottom arch bars, column posts formed integral therewith and intersecting the said arch bars, and a bolster having its ends located between and interlocked with the said column posts.

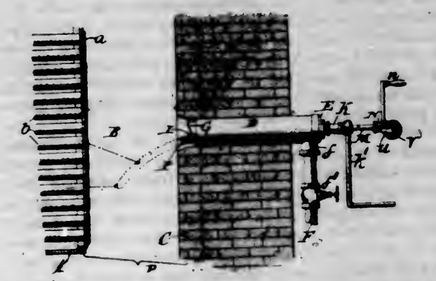
3. In a car truck, the combination of side frames including top, intermediate and bottom arch bars, column posts formed integral therewith and intersecting the said arch bars, lugs formed upon the inner faces of said column posts, and a bolster having its ends formed with recesses whereby it is interlocked with the side frames.

4. In a car truck, the combination of side frames, each of which is provided with a plurality of column posts, and with a plurality of spring supporting platforms, a bolster having bifurcated ends interlocked with said column posts, and springs seated upon each of said platforms and engaging said bolster.

5. In a car truck, the combination of side frames, each of which is provided with a plurality of column posts, and with a plurality of spring supporting platforms, a bolster having bifurcated ends interlocked with said column posts, and springs seated upon each of said platforms and engaging said bolster, each of said side frames being provided with an arch bar interposed between the said bolster.

[Claims 6 to 10 not printed in the Gazette.]

1,065,527. BOILER-TUBE CLEANER. ROBERT O. HODGE, Buffalo, N. Y., assignor, by direct and mesne assignments, to Diamond Power Specialty Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 15, 1909. Serial No. 528,260. (Cl. 137—97.)



1. The combination of a casing adapted to be secured within a wall, a carrier rotatably arranged in said casing, a curved steam-delivery nozzle slidable into and out of said carrier, means for movably connecting the nozzle with the carrier, and means for supplying steam to the nozzle.

2. A boiler tube cleaner comprising a rotatable carrier having a steam inlet and composed of a tubular rear section, a tubular front section slidable on the rear section at an angle to the axis of the latter, and a steam delivery nozzle slidable lengthwise on the front carrier section.

3. A boiler tube cleaner comprising a stationary casing having a steam inlet, a carrier having a tubular rear section which is rotatable in said casing but immovable lengthwise relatively thereto and a tubular front section which turns with the rear section but is slidable relatively thereto at an angle to the axis of rotation, and a steam delivery nozzle slidable lengthwise on said front carrier section.

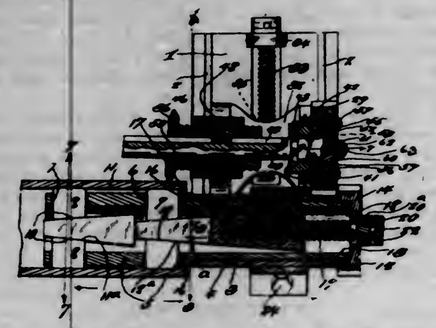
4. A boiler tube cleaner comprising a stationary casing having a steam inlet, a carrier having a tubular rear section which is rotatable in said casing but immovable lengthwise relatively thereto and a curved tubular front section which turns with the rear section but is slidable relatively thereto at an angle to the axis of rotation, and a curved steam delivery nozzle slidable lengthwise on said front carrier section.

5. A boiler tube cleaner comprising a stationary casing having a steam inlet, a carrier having a tubular rear sec-

tion which is rotatable in said casing but immovable lengthwise relatively thereto and a curved tubular front section which turns with the rear section but is slidable relatively thereto at an angle to the axis of rotation, and a curved steam delivery nozzle slidable lengthwise on said front carrier section, said carrier sections and nozzle being constructed to prevent relative rotation of these parts.

[Claims 6 to 28 not printed in the Gazette.]

1,065,528. PIPE-THREADING MACHINE. JOHN C. HOLLAND, Henderson, Ky. Filed Mar. 17, 1913. Serial No. 754,887. (Cl. 10—154.)



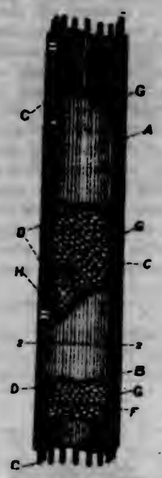
1. In a pipe threading machine, a tubular member adapted to be detachably clamped to a pipe and provided with a fixed gear at one end, a frame swiveled on the tubular member and provided with an adjustable carriage, means for adjusting the carriage toward and from the pipe in a radial direction, a feed screw mounted in one side of the carriage and provided with a cutting tool, a feed rod passing axially through the feed screw for operating the same and provided with a fixed gear at one end, said feed rod being swivelly mounted in the other side of the carriage, and an intermediate gear meshing with the first and second gear and carried by said frame.

2. In a pipe threading machine, a tubular member adapted to be detachably clamped to a pipe and provided with a fixed gear at one end, a frame swiveled on the tubular member and provided with an adjustable carriage, means for adjusting the carriage toward and from the pipe in a radial direction, a feed screw mounted in one side of the carriage and provided with a cutting tool, a feed rod passing axially through the feed screw for operating the same and provided with a fixed gear at one end, said feed rod being swivelly mounted in the other side of the carriage, and an intermediate gear meshing with the first and second gear, said frame having a bearing sleeve, a split sleeve adjustably clamped on the bearing sleeve, and upon which split sleeve the intermediate gear is mounted, and by the adjustment of the split sleeve the intermediate gear may be adjusted annularly in different positions, so that the second gear may be brought closer toward the first gear.

1,065,529. POLE, PILE, AND COLUMN OF REINFORCED CONCRETE. ROBERT M. JONES, Denver, Colo. Filed Jan. 16, 1912. Serial No. 671,533. (Cl. 72—85.)

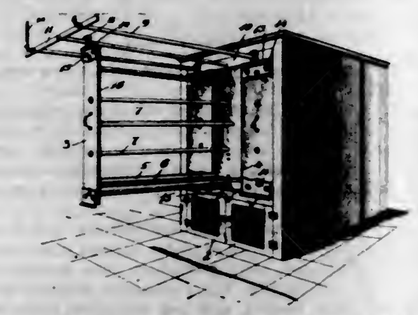
1. A pole, pile or column of plastic material comprising axially alined, hollow sections, spaced from each other, rods embedded in the wall of one section and projecting beyond an end thereof, the protruding portions of said rods being divided into two groups, those comprised in one engaging the end-surface of the adjacent section whereby to maintain them at a determinate distance from each other, and those in the other group extending within said adjacent section, and a filler of plastic material occupying said space and adjoining end portions of said sections.

2. A pole, pile or column of plastic material comprising axially alined, hollow sections, spaced from each other, rods embedded in the wall of each section and projecting beyond an end thereof, the protruding portions of said rods being divided into two groups, those comprised in one engaging the end-surface of the adjacent section whereby to maintain them at a determinate distance from each



other and those in the other group extending within the hollow of the said adjacent section, and a filler of plastic material occupying said space and adjoining end portions of said sections.

1,065,530. CLOTHES-DRIER. JULIUS JUDELSON, New York, N. Y. Filed Dec. 26, 1911. Serial No. 667,792. (Cl. 34—40.)



1. A clothes drier comprising a heating chamber, the front frame of which has a rack receiving opening, a plurality of racks mounted in said opening, said front frame having a sill at the bottom of said opening having apertures therein, each of said sections comprising front and rear panels, the front panel extending below said sill, the rear panel of said section being shorter than the front panel and adapted to close the portion of the opening occupied by said section when the section is entirely drawn out, means for supporting the forward panel, a guide bar exterior of the chamber, means for supporting the rear panel within said chamber, said section having a guide bar extending from the front to the rear at the bottom, said guide bar extending through one of the apertures in said sill.

2. A clothes drier comprising a heating chamber including a front frame having an opening for the reception of a plurality of drier sections, supporting means therefor, a sill at the bottom of said opening, each of said drier sections comprising a front panel adapted to close the portion of said opening occupied by said section and to extend below said sill and a rear panel adapted to close the space between adjacent sections, the walls of said chamber, said rear panel and said supporting means being so constructed and relatively arranged as to permit said rear panel to be drawn between the front panels of adjacent sections on either side and overlie said sill to completely close the opening between adjacent sections when said section is drawn out to its full extent.

3. A clothes drier comprising a heating chamber including a front frame having an opening to receive a plurality of drier sections, said front frame having a cap at the top of said opening and a sill at the bottom thereof, each section comprising a front panel of a length to extend below said sill, a guide-bar exterior of the chamber for supporting said panel and a rear panel of a length to close the opening between said cap and sill and of a width to close the opening between adjacent sections, means within said chamber for supporting and guiding said rear panel, said means and the walls of said chamber being constructed and relatively arranged to permit said rear panel to be drawn between adjacent sections and between said cap and sill when the section is drawn out to its full extent to completely close the opening occupied by said rack.

4. A clothes drier comprising a heating chamber including a front frame having an opening for the reception of a plurality of drier sections, each of said sections comprising a front panel adapted to close said opening when the sections are pushed in to their fullest extent, and a rear panel adapted to completely close said opening when said sections are drawn out to their fullest extent, overhead guide rails for supporting and guiding said forward panels exterior of the heating chamber, and guide rails within the heating chamber for supporting the rear panels of said sections, a guide bar extending from front to rear of each section and located below the sill of said frame opening, said guide bar and supporting means being so constructed and relatively arranged that the rear panel of each section may be drawn out between the front panels of adjacent sections and between the cap and sill of said opening to completely close the chamber when the section is drawn out to its fullest extent.

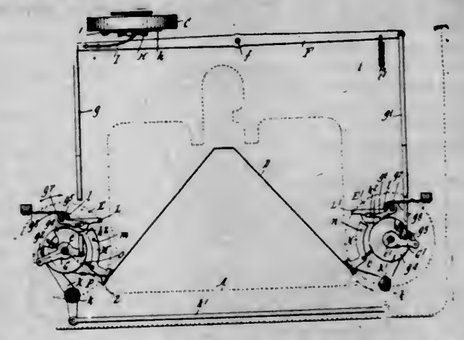
5. A clothes drier comprising a heating chamber including a front frame having an opening for the reception of a plurality of drier sections, said frame comprising a cap and a sill, each section comprising a front panel, the lower end of said panel extending below said sill, and overhead guide-bars exterior of said chamber for supporting said panels and a rear panel of a length to extend between said sill and cap when said section is drawn out to its fullest extent, a guide bar extending longitudinally of the lower end of said section and passing through said sill, means within said chamber for supporting and guiding the rear panel, the frame of said chamber, said guide bar, panel and supporting means being so constructed and relatively arranged that said rear panel may be drawn out between the front panels of adjacent sections and between said cap and sill to close the opening occupied by said section when said section is drawn out to its fullest extent.

[Claim 6 not printed in the Gazette.]

1,065,531. RIBBON MECHANISM FOR TYPE-WRITING MACHINES. OSCAR C. KAVLE, Syracuse, N. Y., assignor to Harvey A. Moyer, Syracuse, N. Y. Filed Nov. 17, 1909. Serial No. 528,574. (Cl. 197—165.)

1. In a typewriting machine, the combination of a ribbon, horizontally rotating spools therefor, horizontally moving driving connections for each spool, a spring actuated reversing lever for each spool which is arranged to swing horizontally adjacent to the spool and which in one position prevents the operation of the spool by the driving connections, a latch for holding each reversing lever against movement by the actuating spring, and a ribbon guide lever for each spool which is actuated by the ribbon when the ribbon is nearly exhausted from said spool to release the reversing lever for said spool from its latch, substantially as set forth.

2. In a typewriting machine, the combination of a ribbon, horizontally rotating spools therefor, a ratchet and pawl for driving each spool, means for oscillating said pawls horizontally, a spring actuated reversing lever for each spool which is arranged to swing horizontally adjacent to the ratchet wheel for said spool and which in one position holds the companion pawl out of driving relation to the ratchet wheel, a latch for holding each reversing lever against movement by the actuating spring, and means which operate when the ribbon is nearly exhausted from one spool to release the reversing lever for said spool from its latch, substantially as set forth.



3. In a typewriting machine, the combination of a ribbon, spools for the ribbon, driving connections for each spool, a reversing lever for each spool, which in one of its positions prevents the operation of its spool by the driving connections thereof, a latch for holding each reversing lever in the position mentioned, a ribbon-actuated lever for each spool which releases the reversing lever from its latch, and a spring which connects the reversing and ribbon-actuated levers of each spool and moves the reversing levers to reverse the feed of the ribbon, when said reversing lever is released from its latch, substantially as set forth.

4. In a typewriting machine, the combination of a ribbon, spools for the ribbon, driving connections for each spool, a reversing lever for each spool, which in one of its positions prevents the operation of its spool by the driving connections thereof, a latch for holding each reversing lever in the position mentioned, a ribbon guide lever for each spool, a spring which connects the reversing and ribbon guide levers for each spool and moves the reversing levers to reverse the feed of the ribbon when said reversing lever is released from its latch, and means connected to the ribbon for actuating the guide lever adjacent to one spool for tripping the latch for the adjacent reversing lever when the ribbon is nearly exhausted from said spool, substantially as set forth.

5. In a typewriting machine, the combination of a ribbon, spools for the ribbon, driving connections for each spool, a pair of levers for each spool connected by a spring, a latch for holding one of said levers in position to prevent the operation of one spool by its drive connections, means for moving the other lever to release the first lever from said latch when the ribbon is nearly exhausted from said spool, and connections between the latch-controlled levers of the spools whereby when one lever is unlatched the other lever is latched and the feed of the ribbon is reversed, substantially as set forth.

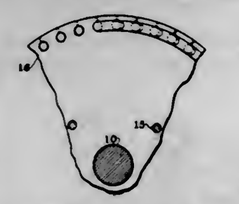
[Claims 6 to 21 not printed in the Gazette.]

1,065,532. DYNAMO-ELECTRIC MACHINE. EARLE R. KNIGHT, Norwood, Ohio, assignor to Allis-Chalmers Company, a Corporation of New Jersey. Filed June 7, 1909. Serial No. 500,655. (Cl. 172—120.)

1. In a dynamo-electric machine, the combination of a laminated core, a support for said core provided with open slots at its periphery, short-circuiting rings secured to the end laminations of said core and provided with closed slots alined with the slots of the core, and conductors carried by said core and extending through and engaging said short-circuiting rings, the complete end portions of adjacent conductors being wiped or bent over in the same direction.

2. In a dynamo-electric machine, the combination of a laminated core having open slots, short-circuiting rings

secured to the end laminæ of said core and provided with closed slots in line with the slots of the core, conductors located in said slots and having projecting end portions engaging said short-circuiting rings, the complete projecting end portion of said conductors being wiped or bent over in the same direction to overlap the projecting end portions of adjacent conductors to form a complete circuit through said end portions.



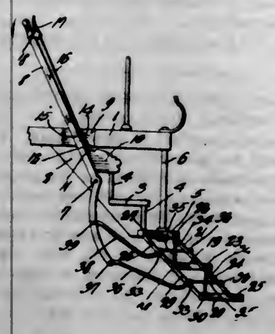
3. In a dynamo-electric machine, the combination of a laminated core having open slots, short-circuiting rings secured to the end laminæ of said core and provided with slots in alinement with the slots of the core, and conductors carried by said core and extending through the slots in the short-circuiting rings, the slots in the short-circuiting rings being formed to prevent radial displacement of the conductors, projecting end portions of said conductors being wiped or bent over in the same direction into engagement with the outer side of each short-circuiting ring.

4. In a dynamo-electric machine, the combination of a laminated core having open slots, short-circuiting rings secured to the end laminæ of said core and provided with slots in alinement with slots of the core, and conductors carried by said core and extending through the slots in the end short-circuiting rings, the slots in the end rings being formed to prevent radial displacement of the conductors, projecting end portions of said conductors being wiped or bent over in the same direction to overlap the projecting end portions of the adjacent conductors to form a complete circuit through said end portions.

5. In a dynamo-electric machine, the combination of a laminated core having slots, short-circuiting rings secured to the end laminæ of said core and provided with slots in alinement with the slots of the core, and conductors carried by said core and extending through the slots in the short-circuiting rings, the slots in the short-circuiting rings being formed to prevent radial displacement of the conductors, projecting end portions of said conductors being wiped or bent over in the same direction into engagement with the outer side of each short-circuiting ring.

[Claim 6 not printed in the Gazette.]

1,065,533. FOLDING STEP. ROBERT E. LEE and ROBERT L. POYTHRESS, Newington, Ga. Filed Nov. 30, 1912. Serial No. 734,371. (Cl. 105—86.)



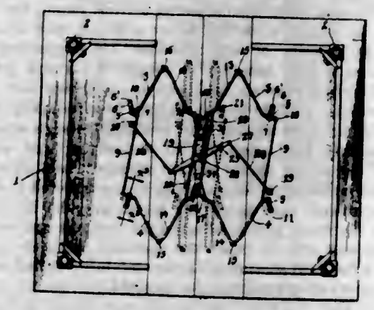
1. In a device of the class described, a super-structure; an auxiliary tread located below the super-structure; supports connecting the super-structure with the tread, the supports comprising coöperating parts adapted to knuckle together in alinement; pivot elements connecting the parts of the supports; a link connected with one pivot element; and a lever fulcrumed on the super-structure, the link being pivotally connected with the lever.

2. In a device of the class described, spaced treads; forward and rear supports; forward and rear pivot elements uniting the ends of the supports with the treads; a hanger mounted upon the forward pivot element of one tread and upon the rear pivot element of the other tread; the supports comprising coöperating parts having shoulders adapted to knuckle together; secondary pivot elements uniting the parts of the supports; a link connected with one secondary pivot element; a lever with which the link is connected; and means for fulcruming the lever.

3. In a device of the class described, spaced treads; forward and rear supports; forward and rear pivot elements uniting the ends of the supports with the treads; a hanger mounted upon the forward pivot element of one tread and upon the rear pivot element of the other tread; the supports comprising coöperating parts; secondary pivot elements uniting the parts of the supports; a brace uniting the secondary pivot elements; a link connected with one secondary pivot element; a lever with which the link is connected; means for fulcruming the lever; and means for holding the lever in adjusted positions.

4. In a device of the class described, spaced treads; front and rear foldable connections uniting the treads; a brace independent of the treads uniting the foldable supports; a hanger uniting the treads; and means for folding the supports.

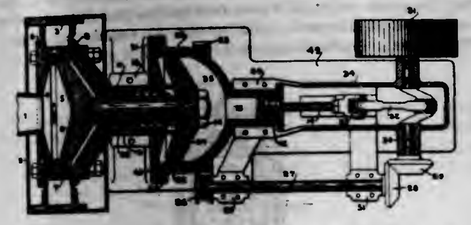
1,065,534. EXTENSION MEANS FOR TABLES, &c. CHARLES EDWARD LEWIS, Los Angeles, and CHARLES HINMAN, South Pasadena, Cal. Filed Dec. 21, 1911. Serial No. 667,234. (Cl. 45—9.)



1. The combination of two members to be extended, toggles connected to said members and extending and flexing in opposite directions, and rods connecting each lever of each toggle with the opposite lever of the opposite toggle, the pivotal connection of said rods to the respective levers being on opposite sides of the line connecting the pivots of the line extending between the pivotal connections of said levers to the table members to which they are connected.

2. The combination of two members to be extended, toggles comprising levers pivotally connected together and pivotally connected to said table members, said toggles extending and flexing in opposite directions, rods connecting each lever of each toggle to an opposite lever of the opposite toggle, the connection of said rod to one of said levers being at the outer side of the pivotal connection of said lever to the table member, and the connection of said rod to the other of said levers being at the inner side of the connection of said lever to the table member and out of line with the line joining said pivotal connection of said last named member to the table member with the pivotal connection of said lever to the other lever of the same toggle.

1,065,535. CRUSHER. WILLIAM H. LIBBER, Milwaukee, Wis., assignor to Allis-Chalmers Company, Milwaukee, Wis., a Corporation of New Jersey. Filed July 22, 1912. Serial No. 711,332. (Cl. 83—10.)



1. In a crusher, a plurality of crushing members, a casing connected with one of said members, a piston connected with another of said members and dividing said casing into a plurality of chambers, means for establishing pressure in one of said chambers to effect crushing of material, and manually operable means for permitting the passage of fluid from one of said chambers to another to adjust the size of the crusher discharge.

2. In a crusher, a plurality of crushing members, a casing connected with one of said members and having a normally closed passage formed therein, a piston connected with another of said members and dividing said casing into a plurality of chambers, means for establishing pressure in one of said chambers to effect crushing of material, and manually operable means for opening said passage to vary the relative volumes of said chambers to adjust the size of the crusher discharge.

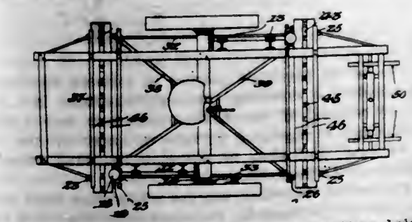
3. In a crusher, a plurality of crushing members, a casing connected with one of said members, a piston connected with another of said members and dividing said casing into a plurality of chambers, means for establishing pressure in one of said chambers to effect crushing of material, and a manually operable valve controlled by-pass from one of said chambers to another.

4. In a crusher, a plurality of crushing members, means for forcing fluid between opposed surfaces of said members whereby said members are caused to approach each other to crush material, and manually operable means for permitting change of amount of fluid from between said surfaces to adjust the size of the crusher discharge.

5. In a crusher, a plurality of rotatable crushing members, means for forcing fluid between opposed surfaces of said members whereby said members are caused to approach each other to crush material, and means for adjusting the extent of approach of said members, said fluid forcing means being operable directly in one of said crushing members.

[Claims 6 to 14 not printed in the Gazette.]

1,065,536. HARROW. OSCAR LINDQUIST, Everett, Wash. Filed June 20, 1912. Serial No. 704,841. (Cl. 55—19.)



1. In a harrow, in combination, an endless belt provided with projecting teeth, means for moving said belt transversely of the path of movement of the harrow, and a fixed guide for the lower run of said belt adapted to support it against the twisting action caused by the engagement of the teeth with the round.

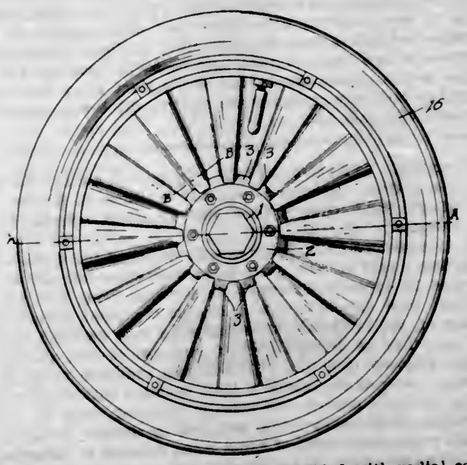
2. In a harrow, in combination, an endless belt provided with projecting teeth, means for moving said belt transversely of the path of movement of the harrow, and a fixed guide for the lower run of said belt adapted to support it against the twisting action caused by the engagement of the teeth with the ground, and means for raising and lowering said belt and its supporting mechanism.

3. In a harrow, in combination, a main frame, drive and supporting wheels mounted on said main frame, an auxiliary frame mounted on the main frame to be adjusted up and down, an endless belt mounted on said auxiliary frame to travel in directions transversely of the path of movement of the harrow, said belt having teeth projecting and adapted to engage the ground, and a guide carried by the auxiliary frame and engaging the lower run of said belt to support it against the rocking action caused by their engagement with the ground.

4. In a harrow, in combination, an endless belt having outwardly projecting teeth which have a rigid base extending transversely of the belt, means for supporting and traversing said belt in a direction transversely of the path of progress of the harrow, and a guiding support for the lower run of said belt having a T-shaped groove receiving said lower run of the belt and the base of the teeth.

5. In a harrow, in combination, a frame, a pair of driving and supporting wheels journaled in said frame, an auxiliary frame mounted upon the main frame to be adjustable vertically, an endless belt mounted upon the auxiliary frame to travel transversely of the path of progress of the harrow, teeth projecting from the belt, a guide carried by said frame and embracing the lower run of said belt to prevent its rocking because of engagement of the teeth with the ground, a shaft journaled on the main frame and extending in fore-and-aft direction, bevel gears connecting said shaft with the drive wheels, a vertical shaft connected with the fore-and-aft shaft by bevel gears, and driving connection of said vertical shaft with the belts having a vertically slidable connection with said vertical shaft.

1,065,537. VEHICLE-WHEEL. ANDREW W. LIVINGSTON, Oakland, Cal., assignor to Standard Steel Wheel and Tire Armor Company, Oakland, Cal., a Corporation of Arizona. Filed Sept. 25, 1911. Serial No. 651,200. (Cl. 21—69.)

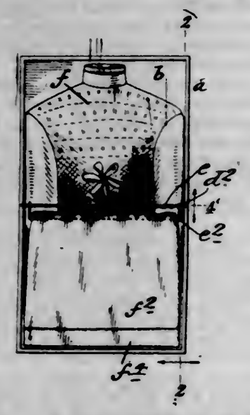


A spoke structure for a wheel provided with radial corrugations, the convolutions forming the corrugations being of substantially the same depth from the center to the periphery of the spoke structure.

1,065,538. DISPLAY-BOX. HARRY T. LOOMIS, New York, N. Y. Filed July 27, 1911. Serial No. 640,736. (Cl. 206—7.)

1. A display box for dresses having a closed bottom portion and being open at the top, said box being provided

with a skirt supporting yoke, pivotally and removably connected to the box sides near the top edges thereof, but sufficiently below said edges to permit the cover to be placed on the box, and having no other connection with the box, whereby said yoke will support the skirt portion of the dress, when in normal position, and hold it away from the other portions of the same, and whereby said yoke can be bodily and entirely removed from the box to permit the display of the skirt below the same and to facilitate replacing the skirt in folded position within the box.

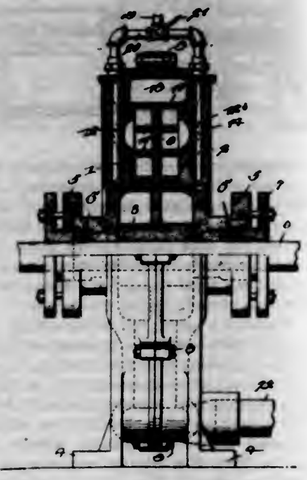


2. A display box of the class described comprising a body having a closed bottom portion and being open at the top, the side walls of the body being provided with horizontally and vertically disposed recessed portions in communication with each other, a detachable bar adapted to lie in said horizontal recessed portions and having projections for detachably engaging said vertically disposed recesses, the engagement of said projections and recesses forming the only connection between the bar and the box, and a yoke having portions parallel to said bar, and provided at each end with a perpendicular portion pivotally engaging said bar near the adjacent vertically disposed portion thereof and a cover for said box whereby said yoke, in normal position, will support the skirt portion of a dress and hold it away from the other portions thereof and whereby said bar and yoke may be bodily removed from the box to permit the display of the skirt below the box and to facilitate replacing the skirt in the box in engagement with said bar.

1,065,539. STEAM-TURBINE. FREDERICK LYTLE, North Bend, Oreg., assignor of one-half to George S. Hollister, North Bend, Oreg. Filed May 29, 1912. Serial No. 700,440. (Cl. 121—60.)

1. A turbine of the class described comprising a casing, having a pair of inlet ports in each face thereof, and disposed in opposite directions, said casing being also provided with an outlet port adjacent the outer periphery thereof, the faces of said casing being each provided with a plurality of arcuate pockets arranged in sets thereon and disposed in a line of substantial radiation from the axial center of the casing, a rotor mounted within the casing having a plurality of spirally designed vanes formed thereon, said vanes being arranged in circular series on said rotor, each series of vanes being adapted to coöperate with a particular pocket on each set formed on the faces of the casing and the inner series of vanes being also adapted for direct coöperation with the inlet ports formed on said casing, and means to supply an elastic fluid to said inlet ports.

2. A turbine of the class described comprising a casing having a plurality of pockets formed in the faces thereof arranged in sets thereon, each face of said casing being also provided with upwardly and downwardly inclined channels extending completely therethrough on opposite sides of the axial center thereof said inclined channels having removable caps on their outer ends, a rotor mounted within the casing having a plurality of spirally designed vanes thereon, said vanes being arranged in concentric circular series and each series being adapted to coöperate with a pocket of each set formed in the faces of said casing, the inner series of vanes communicating directly with said inclined channels, and means to supply an elastic fluid to said inclined channels.



3. A turbine of the class described comprising a casing having inlet and outlet ports thereon, a rotor mounted within the casing provided with a plurality of spirally designed vanes, said vanes being arranged in concentric circular series thereon and each series being adapted to coöperate respectively with one pocket of each set thereof, the vanes of each series being arranged alternate of the vanes of the adjacent series, and means to supply an elastic fluid to the inlet ports of the casing.

1,065,540. METHOD OF FORMING SAND MOLDS. HARRY P. MACDONALD, Montclair, and WILLIAM A. RODELL, Jersey City, N. J., assignors to The Snead and Company Iron Works, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 22, 1912. Serial No. 672,567. (Cl. 22—217.)



1. The herein described process of forming sand molds which consists in dumping the sand remaining in a flask after the removal of the casting therefrom into a receptacle through a screening surface to break up the solid body of sand, and then in dumping the sand from the receptacle into a flask for reuse.

2. The herein described process of forming sand molds which consists in dumping the sand remaining in a flask after the removal of the casting therefrom into a receptacle having an open end, in carrying the receptacle to a flask to be filled and then in tilting the receptacle to cause the sand to slide out the open end into the flask.

3. The herein described process of forming sand molds which consists in dumping the sand remaining in a flask after the removal of the casting therefrom into a receptacle having a screen on its top and an open end, in carrying the receptacle to a flask to be filled and then in tilting the receptacle to cause the sand to slide out the open end into the flask.

4. The herein described process of breaking up and preparing for re-use the sand remaining in a flask from which the casting has been removed, which consists in picking up the flask and dumping it into a receptacle to break up the sand, and then in again agitating the sand by picking up the receptacle and dumping the sand into a flask for reuse.

1,065,541. PATTERN-DRAWING APPARATUS. HARRY P. MACDONALD, Montclair, N. J., assignor to The Snead and Co. Iron Works, Jersey City, N. J., a Corporation of New Jersey. Filed Feb. 6, 1912. Serial No. 675,826. (Cl. 22—47.)



1. A pattern drawing apparatus comprising a flask support, a movable pattern support, a toggle means for raising and lowering the pattern support, and means for actuating the toggle means comprising a threaded shaft, a block having threaded engagement therewith, a rock arm connected to the toggle means, a link between the rock arm and the block, and means for rotating the shaft.

2. A pattern drawing apparatus comprising in combination, a flask support, a movable pattern support, toggles for raising and lowering the pattern support, a drive shaft, rocking arms, driving connections between the shaft and rocking arms, and connections between the said arms and the toggles.

3. A pattern drawing apparatus comprising in combination, a flask support, a movable pattern support, toggles for raising and lowering the pattern support, a threaded shaft, a movable block having threaded engagement with said shaft, rock arms connected at one end to the toggles, links connected to the rock arms and the block, and means for rotating the shaft.

4. A pattern drawing apparatus comprising in combination a main frame provided with a flask support, a pattern support movably mounted in the main frame, mechanism for raising and lowering the pattern support, and a counterbalance spring independent of the operating mechanism for supporting the pattern support in the main frame.

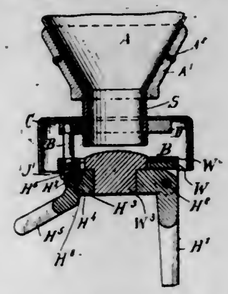
5. A pattern drawing apparatus comprising in combination, a main frame, a movable pattern support mounted therein, toggle members for raising and lowering the pattern support adapted to abut the frame and lock when in raised position, and means for actuating the toggle members.

[Claims 6 to 22 not printed in the Gazette.]

1,065,542. SETTLING-CONE. WILLIAM MAIN, Piermont, N. Y. Filed Mar. 1, 1912. Serial No. 680,991. (Cl. 83—82.)

1. In deep settling ore classifiers, a hoppered settling chamber, a distributing device to supply material thereto, an overflow coöperating with said settling chamber, an exteriorly threaded discharge throat at the lower end of said settling chamber, an adjusting nut coöperating with the thread on said throat, a series of spaced connectors on said nut, a valve plate detachably secured to said connectors, a pivoted frame mounted on said valve plate and having a downwardly projecting operating handle, a replaceable valve block mounted in said frame to normally coöperate with said throat and a pivoted latch coöperating with said frame to normally and releasably hold said block in operative position and form an annular discharge orifice around said throat and allow the emergency release of said block and frame to give free access to said throat.

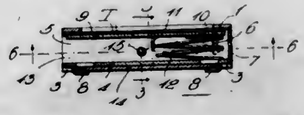
2. In deep settling ore classifiers, a settling chamber, a distributing device to supply material thereto, an overflow coöperating with said settling chamber, threaded adjusting means on said settling chamber, a discharge throat at the lower end of said settling chamber, an adjusting nut coöperating with the threaded means on said settling chamber, a series of spaced connectors on said nut, a valve plate secured to said connectors, a pivoted frame mounted on said valve plate and having a projecting operating handle, a valve block in said frame to normally coöperate with said throat and a latch coöperating with said frame to normally and releasably hold said block in operative position and form a discharge orifice for said throat and allow the emergency release of said block and frame to give free access upward to said throat.



3. In deep settling ore classifiers, a hoppered settling chamber, an upper discharge therefor, coöperating supplying means for supplying fine material suspended in water to the upper part of said settling chamber, a discharge throat adjacent the lower end of said settling chamber to which material from said supplying means has unobstructed access while undisturbedly settling, a valve device coöperating with said throat to form a normally constant annular orifice to effect the substantially uniform radially outward discharge of the more solid material from said throat and releasing means to manually effect the instantaneous emergency release of said valve device.

4. In deep settling ore classifiers, a hoppered settling chamber, an upper discharge therefor, coöperating means for supplying fine material suspended in water to said settling chamber, a discharge throat adjacent the lower end of said settling chamber, a loosely mounted valve device coöperating with said throat to form an annular orifice for the discharge of the more solid material from said throat and means to manually shake said valve device during operation to promote discharge of material therefrom.

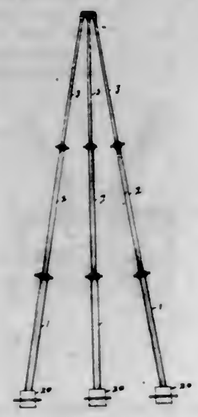
1,065,543. CAR-TICKET HOLDER. JAMES H. MARDOCK, Aledo, Ill., assignor of one-half to Edward M. Castle, Joy, Ill. Filed Dec. 3, 1912. Serial No. 734,703. (Cl. 206—40.)



In a device of the character described, the combination with an open ended main holding member having an apertured top section including two side sections each provided with a bottom supporting flange, of a carrying member held within said holding member comprising a bottom forming plate having parallel running side sections each side section near one end having an edge entering slot said bottom plate having an end forming section extending at right angles, a follow plate loosely and slidably held within said carrying member having outstanding ears arranged for co-action with said slot said follow plate having outstanding stop ears, and a coil spring held to said bottom plate and against

said follow plate and retained in position by means of said outstanding stop ears, said carrying member and holding member each being provided with registering snugs, as and for the purpose set forth.

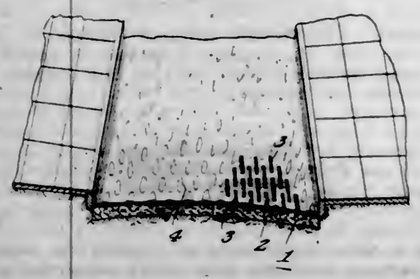
1,065,544. ELEVATOR. ACEPH B. MAYES, Houston, Tex. Filed Nov. 27, 1911. Serial No. 662,662. (Cl. 248—3.)



1. A device of the character described composed of a plurality of elevators each being composed of tubular telescoping sections, a base for each elevator upon which said elevator is hingedly mounted, a spider hingedly securing together the upper ends of said elevators, each of said elevators being provided with an orifice for the admission of fluid pressure therein.

2. A device of the character described composed of a plurality of elevators, each being composed of tubular telescoping sections, a base for each elevator upon which the same is hingedly mounted, a spider having radiating arms which are hingedly secured to the upper ends of the respective elevators and which secure said upper ends together, each of said elevators being provided with an orifice for the admission of fluid pressure therein.

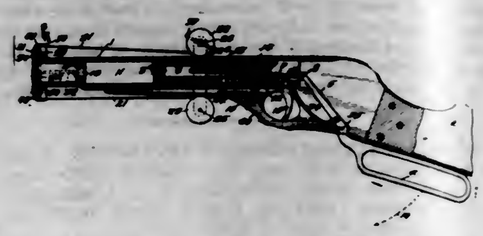
1,065,545. PAVING. RAY MCDONALD, Austin, Tex. Filed Jan. 20, 1912. Serial No. 672,508. (Cl. 94—1.)



1. A pavement comprising an unyielding, load carrying base having recesses in its surface, a bituminous substance contained in and overflowing slightly from said base, said bituminous substance overflow forming a thin cushion-layer on the surface of said base adjacent to said recesses.

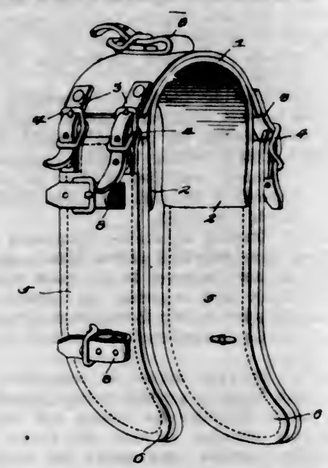
2. A pavement comprising a concrete load carrying base having recesses in its surface, a bituminous substance filling said recesses to overflowing, said recesses so spaced that the overflow shall form a thin, substantially continuous cushion-layer over the surface of said concrete.

1,065,546. PNEUMATIC GUN. JAMES A. PACKARD, Milwaukee, Wis. Filed Jan. 21, 1911. Serial No. 603,820. (Cl. 46—46.)



In a device of the described class, the combination of a gun barrel, a gun stock rigidly affixed to said barrel, means for clamping a piece of paper over and against the mouth of said barrel, a piston located in said barrel, a piston rod pivotally connected at one end to said piston, a lever pivotally connected with the opposite end of said rod, and additional means connected with said lever for simultaneously operating said paper clamping device as said piston is operated, whereby as said lever is moved in one direction, said clamping device will be opened for the reception of paper, and when moved in the opposite direction, said clamping device will be closed against the paper.

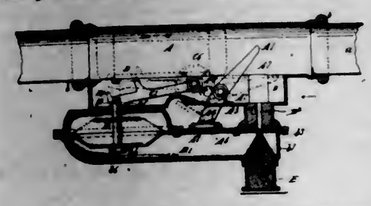
1,065,547. HARNESS-COLLAR ATTACHMENT. CHARLES W. PARSONS, Harper, Kans. Filed Sept. 3, 1912. Serial No. 718,350. (Cl. 54—19.)



A collar of the character described, comprising three sections, each of the said sections comprising laminated sheets of leather, means for adjustably connecting the sections together, the central section having extensions formed therewith and adapted to extend over the adjacent edges of the side members and the upper portion of said central section and means secured adjacent the forward sections of the collar for detachably securing the same to the hames substantially as described.

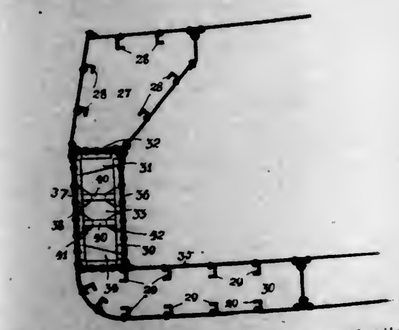
1,065,548. AUTOMATIC CARRIER SEPARATOR AND DESPATCHER FOR PNEUMATIC-DESPATCH-TUBE APPARATUS. ALBERT W. PEARSALL, Lowell, Mass., assignor to Lamson Company, Newark, N. J., a Corporation of New Jersey. Filed Oct. 1, 1906. Serial No. 337,018. (Cl. 243—38.)

1. In pneumatic despatch tube apparatus of the vacuum type, a transit tube for the transmission of carriers, a pivoted check lever, a spring tending to press said lever into the transit tube to engage approaching carriers, a casing provided with upper and lower chambers communicating through a restricted passage, said upper chamber opening into the transit tube so that air may be exhausted through said restricted passage from the lower chamber and said lower chamber having an opening to the outside air, a valve normally closing the opening of the lower chamber to the outside air, means actuated by a carrier passing through the transit tube for opening said valve to admit outside air into the lower chamber, a diaphragm in said lower chamber having on one side the opening to the outside air and the restricted passage, said diaphragm being connected with said check lever so that a depression of the diaphragm through the exhaustion of the air in the lower chamber will hold the check lever withdrawn from the transit tube against the action of its spring and so that the elevation of the diaphragm through the admission of outside air into the lower chamber will permit the check lever to be projected by its spring into the transit tube in the path of an approaching carrier.



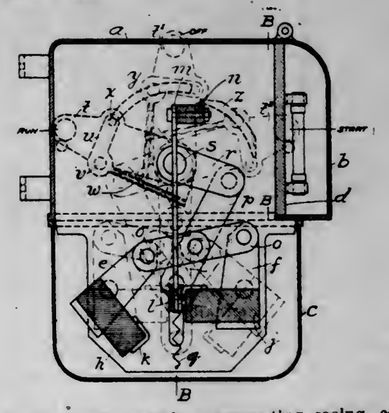
2. In a pneumatic despatch tube apparatus of the vacuum type, a transit tube for the transmission of carriers, a casing provided with upper and lower chambers communicating through a restricted passage, said upper chamber opening into the transit tube so that air may be exhausted through said restricted passage from the lower chamber and said lower chamber having an opening to the outside air, an adjustable screw for regulating the opening through the restricted passage connecting the two chambers, a diaphragm extending across the lower chamber having on one side the restricted passage and the opening to the outside air, a spring-pressed valve normally closing the opening of the lower chamber to the outside air so that the exhaustion of air from the lower chamber through the restricted passage will depress the diaphragm, a trip on said valve to be actuated by a carrier passing through the transit tube for opening the valve to admit outside air to the lower chamber to destroy the partial vacuum therein and thereby raise the diaphragm, a check lever pivoted in the upper chamber of the casing, a spring tending to press said check lever into the transit tube into the path of an approaching carrier, and a shaft connecting the free end of the check lever with said diaphragm so that when the latter is depressed the check lever will be held withdrawn from the transit tube against the action of said spring and so that when the diaphragm is elevated the check lever will be projected by the spring into the transit tube into the path of an approaching carrier.

1,065,549. SHIP. JOHN REID and GEORGE SIMPSON, New York, N. Y. Filed Apr. 24, 1911. Serial No. 623,001. (Cl. 114—125.)



In a device of the class described, in combination, a top side ballast tank having a main framing therewithin formed of fore and aft channel irons, a bottom ballast tank having a main framing therewithin, formed of fore and aft channel irons, and buttress framing extending from said bottom ballast tank to said top side ballast tank and forming reinforcing pillar frames at intervals throughout the length of the ship between said tanks, said buttresses being formed of vertical channel irons extending between brackets connected to said ballast tanks by angle irons and braces crossing between the verticals intermediate of the length thereof.

1,065,550. ELECTRIC SWITCH. ERNEST H. RIEKEN, Chicago, Ill. Filed Jan. 2, 1913. Serial No. 739,859. (Cl. 172—179.)



1. In an electric switch, a supporting casing, common to moving and stationary parts, a set of centrally situated spring supported stationary contacts mounted on an insulating support, two sets of movable contacts attached to movably pivoted insulating blocks, situated one on either side of said stationary contacts; means to cause said movable contacts to travel radially around their supporting pivots, so as to engage said movable contacts one at a time with the stationary contacts.

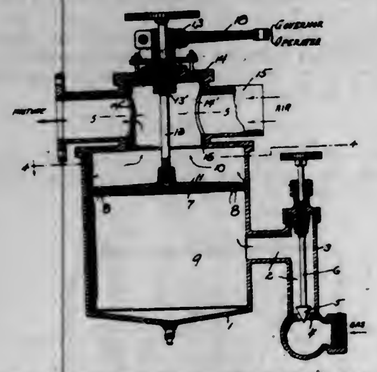
2. In an electric switch, a supporting casing common to moving and stationary parts, a set of centrally situated spring supported stationary contacts, two sets of radially movable contacts situated one on either side of said stationary contacts, the pivoted cranks supporting said radially movable contacts, a connecting rod with two projecting studs, a slot in casing engaging with one of said projecting studs, two toggle links both movably connected at one of their ends to said pivoted cranks and at their other ends to the other projecting stud on said connecting rod, a spiral tension spring attached at one of its ends to said supporting casing and at its other end to said connecting rod, a radially movable shaft supported crank to actuate said connecting rod, means to cause said crank to turn in either direction.

3. In an electric switch a supporting casing, a radially movable operating lever shaft supported on outside of said supporting casing, a radially movable latch pivoted to said operating lever, two curved ledges projecting from outside of said supporting casing, a stud projecting from said movable latch to engage said curved ledges, two flat springs fixed rigidly each at one end to hub of said controlling lever and at their free ends engaging with a tongue on said movable latch, the curved ledges and movable latch to control travel of said controlling lever.

1,065,551. GAS AND AIR MIXER. JOHN D. RUSS, Spencer, W. Va. Filed Aug. 9, 1912. Serial No. 714,241. (Cl. 48—180.)

1. In a gas and air mixer, an air-tube, a fuel-chamber communicating, at the top, with said air-tube, a partition dividing said fuel-chamber into two sections, said partition being provided with arcuate slots disposed near the

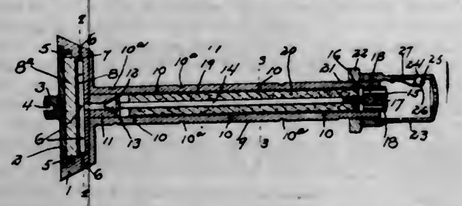
circumferential edge thereof, and an imperforate disk-valve disposed in said fuel-chamber and movable into and out of engagement with said partition to control the passage of gas through said slots.



2. In a gas and air mixer, an air-tube having an opening in its bottom, a fuel-chamber communicating, at the top, with said air-tube through said opening, a hollow, open-bottomed throttle-valve disposed in said air-tube and projecting, at its bottom, into said opening in the bottom of the air-tube, said valve being provided with oppositely-disposed side-ports in the side wall thereof and being provided, also, with an internally-threaded stem, a partition dividing said fuel-chamber into two sections, said partition being provided with arcuate slots disposed near the circumferential edge thereof, and an imperforate disk-valve disposed in said fuel-chamber and movable into and out of engagement with said partition to control the passage of gas through said slots, said disk-valve being provided with a partially-threaded stem engaging the internally-threaded portion of said throttle-valve.

3. In a gas and air mixer, an air-tube having an opening in its bottom, a fuel-chamber communicating, at the top, with said air-tube through said opening, a hollow, open-bottomed throttle-valve disposed in said air-tube and projecting, at its bottom, into said opening in the bottom of the air-tube, said valve being provided with oppositely-disposed side-ports in the side wall thereof and being provided, also, with an internally-threaded stem, means for automatically actuating said throttle-valve, a partition dividing said fuel-chamber into two sections, said partition being provided with arcuate slots disposed near the circumferential edge thereof, and an imperforate disk-valve disposed in said fuel-chamber and movable into and out of engagement with said partition to control the passage of gas through said slots, said disk-valve being provided with a partially-threaded stem engaging the internally-threaded portion of said throttle-valve.

1,065,552. CHECK-VALVE FOR INTERNAL-COMBUSTION ENGINES. JOHN D. RUSS, Spencer, W. Va. Filed Aug. 17, 1912. Serial No. 715,612. (Cl. 137—32.)



1. A check-valve comprising a hollow head, a communicating hollow stem, a lubricant-wick disposed in said stem for feeding lubricant therethrough to said head, and a disk of foraminous material disposed within said head and dividing the same into two compartments.

2. A check-valve comprising a hollow head, a communicating hollow stem, a lubricant-wick disposed in said stem for feeding lubricant therethrough to said head, a disk of foraminous material disposed within said head and dividing the same into two compartments, and a body of heat-resisting material disposed in one of said compartments.

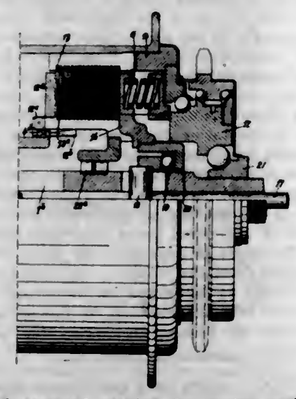
3. A check-valve, comprising a head and a stem, said stem being hollow and provided, at the end thereof toward said head, with an internal valve-seat, and a valve disposed within said hollow stem and engageable with said valve-seat, and having a stem provided with a butt at the end thereof, said butt engaging the interior surface of the wall of said first-mentioned stem, and being provided with longitudinally-extending holes therethrough.

4. A check-valve, comprising a head and a stem, said stem being hollow and provided, at the end thereof toward said head, with an internal valve-seat, a valve disposed within said hollow stem and engageable with said valve-seat, and having a stem provided with a butt at the end thereof, said butt engaging the interior surface of the wall of said first-mentioned stem, and being provided with longitudinally-extending holes therethrough, and a hollow, oil-reservoir cap disposed on the end of said first-mentioned stem.

5. A check-valve, comprising a head and a stem, said stem being hollow and provided, at the end thereof toward said head, with an internal valve-seat, a valve disposed within said hollow stem and engageable with said valve-seat, and having a stem provided with a butt at the end thereof, said butt engaging the interior surface of the wall of said first-mentioned stem, and being provided with longitudinally-extending holes therethrough, and a hollow, oil-reservoir cap screwed on the end of said first-mentioned stem.

[Claims 6 and 7 not printed in the Gazette.]

1,065,553. VARIABLE-SPEED GEARING. MONTAGU SAUNDERS, St. John's Wood, London, England. Filed Nov. 1, 1912. Serial No. 729,017. (Cl. 74—34.)



1. In a three-speed gearing for motor cycles and the like, a driving member, a driven member surrounding the driving member, epicylic gear-trains interposed between them whereby the driving member can rotate the driven member at either of two rates of angular velocity lower than its own angular velocity, a coupling member also interposed between them whereby the driving member can rotate the driven member at its own angular velocity independently of said gear-trains, and means for connecting the driving member with the driven member either by said coupling or by said gear-trains.

2. In three-speed gearing for motor cycles and the like, a driving member, a driven member surrounding the driving member, a coupling member interposed between them whereby they may be coupled so as to rotate at the same speed, epicyclic gear-trains interposed between them whereby the driven member will rotate at either of two different speeds of rotation both of which are lower than the speed of rotation of the driving member, and means for effecting the variations of speed between the driving and driven members.

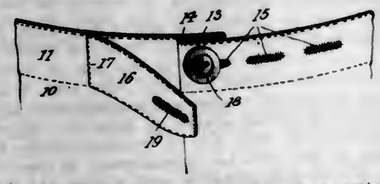
3. In a three-speed gearing for motor cycles and the like, a driving member, a driven member surrounding the driving member, an axially-movable member interposed between said driving and driven members for coupling them so that they will rotate at the same angular velocity, epicyclic gear-trains also interposed between said driving and driven members for connecting them so that the driving member will rotate at either of two different rates of angular velocity both higher than that of the driven member, and means for effecting the several speed variations.

4. In a three-speed gearing for motor cycles and the like, a driving member, a driven member, an axially-movable coupling member interposed between them, a stationary arbor, a sun-wheel thereon, a set of planet-pinions meshing therewith, an internally-toothed annulus meshing with said pinions, a second set of planet-pinions meshing with the first set, a second internally-toothed annulus meshing with said first set, means for connecting said first-mentioned annulus with the driving member and said second-mentioned annulus with the driven member, and means for moving the parts so as to effect the several speed variations.

5. In a three-speed gearing of the kind described, a driving member, a driven member, an interposed axially-movable coupling member having pins for planet-pinions on one side thereof and a sleeve on the other side thereof, a set of planet-pinions mounted freely on some of said pins, a stationary sun-wheel meshing with said planets, an internally-toothed annulus also meshing with said planets, other planets mounted freely on the other pins on said coupling member and meshing with first-mentioned planets and a second internally-toothed annulus, means for connecting the driving and driven members to the coupling member, other means for connecting first-mentioned annulus to the driving member and second annulus to the driven member, and means for operating said connections.

[Claims 6 to 9 not printed in the Gazette.]

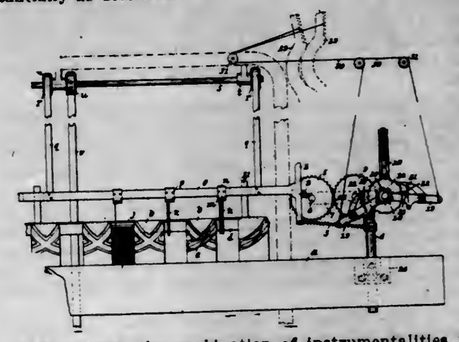
1,065,554. ADJUSTABLE GARMENT. ALEXANDER M. SCHNEIDER, New York, N. Y. Filed June 3, 1912. Serial No. 701,139. (Cl. 2—122.)



An adjustable garment provided with a waist band having a plurality of button holes, a button on the waist band adapted to engage either one of said button holes, and a tab secured to the waist band sidewise of said button holes but disconnected from the waist band at its top and bottom, said tab extending beyond the button and being provided with an additionad button hole which is also adapted to be engaged by said button.

1,065,555. LOOM. EDWARD SCHWESER, Paterson, N. J. Filed Sept. 25, 1912. Serial No. 722,194. (Cl. 139—17.)

1. In a loom, the combination of instrumentalities for supporting the warp and fabric, means to intermittently shift a pattern-thread through the warp from one side to the other of the weaving plane and then return the same including a pattern-thread-needle-carrying structure movable up and down and also laterally, means for forming a shed in the warp on the shifting of the pattern-thread therethrough, means for projecting the filling through the shed and across the path of return of the shifted pattern-thread, a batten-including support, and mechanism for imparting lateral movements in opposite directions to said structure including a rotary motion-imparting member journaled in the support and having an eccentric stud and said structure being held engaged with the stud, and means to rotatably shift said member back and forth arbitrary distances in each direction, substantially as described.



2. In a loom, the combination of instrumentalities for supporting the warp and fabric and forming sheds in the warp, a batten structure including spaced shuttle blocks, a reed arranged between the blocks, a shuttle guided in and by the blocks in a constant path forward of and spaced from the reed, a vertical pattern-thread needle arranged in a vertical plane extending through the space between the reed and the shuttle path, said batten structure including rigid vertical guides arranged relatively rearward of said plane, a horizontal rail arranged vertically opposite said space, having said needle rigidly attached thereto, provided with longitudinal slots receiving said guides and being confined by the latter to a single vertical plane of movement, means to move the rail up and down, and means to move the rail laterally from time to time, substantially as described.

3. In a loom, the combination of instrumentalities for supporting the warp and fabric and forming sheds in the warp, a batten structure, a reed carried by and a shuttle guided in said structure, a horizontal rail guided by said structure for movement laterally and vertically in an upright plane and having a vertical head, an upright pattern-thread needle carried by said rail, an upright post secured to said structure and having a head, a rotary member journaled in the post head and having an eccentric stud, a spring connecting the rail and said post and holding the former against said stud, means to rotate said member including another rotary member journaled in the post head and having two reversely cut sets of teeth, levers fulcrumed in the post head, pawls respectively engaging said sets of teeth of the last-named rotary member and carried by said levers, means for alternately actuating said levers, and means for moving said rail vertically, substantially as described.

1,065,556. MAGAZINE AIR-RIFLE. ELBERT HAMILTON SEARLE, Springfield, Mass. Filed Sept. 8, 1909. Serial No. 516,711. (Cl. 124—11.)



1. In a gun, the combination of the sheet metal gun member having its upper wall struck up to provide a pair of opposed tongues, and a sight projecting between the ends of the tongues and having an attaching base overfitting beneath said tongues; said attaching base overlapping the edges of the opening from which the tongues are struck to prevent downward displacement of the same, and having depressions into which the tongues fit to prevent lateral displacement of the sight after it is moved into place.

2. In a gun, the combination of a pair of resilient tongues struck up from a gun member, with their ends

spaced apart, and a sight extending upward between the ends of the tongues, said sight comprising a metallic sheet folded upon itself and having opposed base portions adapted to lie between the tongues and the gun member; said base portions being also adapted to overlap the sides of the opening from which the tongues are struck and being provided with recesses to receive the tongues and shoulders to engage the opening in the gun.

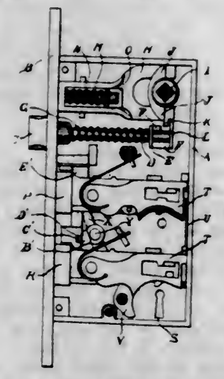
3. In an air gun, an air chamber comprising an open-ended tube having an inturned-end flange and an inwardly projecting annular rib, and an end-closure fitted in said air chamber and confined between said flange and rib.

4. In an air gun, the combination of the barrel, an air chamber, and a packing in the air chamber receiving the barrel; and an end closure fitting the air chamber and containing the packing; said air chamber being constructed with an inwardly projecting ridge confining the closure.

5. A gun having an expansible tubular bore section constructed with a reduced portion to prevent escape of the projectile, and having means for introducing the projectile in rear of the reduced portion of the bore, and a plunger preventing the escape of the projectile rearwardly and adapted, on discharging, to effect the expansion of the tube to permit the projectile to pass.

[Claims 6 to 22 not printed in the Gazette.]

1,065,557. LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Mar. 23, 1906. Serial No. 307,664. (Cl. 70—29.)



1. In a lock, dead bolt mechanism operable from both sides of the door, a projecting test member at the outside of the door normally movable as the same is touched or grasped by the hand, means including a sliding catch, inoperative when the door is locked from the outside by said dead bolt mechanism, to fix said test member against movement when the door is locked from the inside by said dead bolt mechanism; substantially as described.

2. In a lock, the combination of two bolts protractable exclusively from the outside and inside respectively of the door, means for retracting one bolt upon the protraction of the other, a manual test member at the outside of the door normally movable as the same is touched or grasped by the hand, and means including a sliding catch operated by the inside bolt to hold said test member stationary when said inside bolt is protracted; substantially as described.

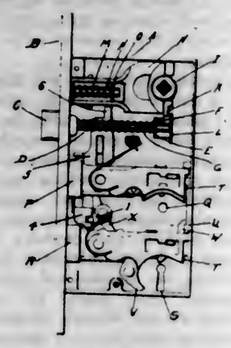
3. In a lock, dead bolt mechanism operable from both sides of the door, a latch bolt, retracting means for said bolt including a hub operable from the outside of the door, and means including a sliding catch inoperative when the door is locked from the outside by said dead bolt mechanism, to dog said hub automatically when the door is locked from the inside by said dead bolt mechanism; substantially as described.

4. In a lock, the combination of two bolts protractable exclusively from the outside and inside respectively of the door, means for retracting one bolt upon the protraction of the other, a latch bolt, a retracting hub therefor, and means including a sliding catch operated by the inside bolt to dog said hub as said inside bolt is protracted; substantially as described.

5. In a lock, dead bolt mechanism operable from both sides of the door, a latch bolt, and a sliding catch for deadlocking said latch bolt operated automatically when the door is locked from the inside by said dead bolt mechanism but inoperative when the door is locked from the outside by said dead bolt mechanism; substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

1,065,558. LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Mar. 31, 1911. Serial No. 618,184. (Cl. 70—29.)



1. In a lock, in combination with a door knob, a sliding yoke operatively associated therewith, a bodily movable yoke engaging member slidable in a straight line at right angles to the movement of the yoke, a locking bolt, and means of positive operating engagement between said bolt and yoke-engaging member to automatically actuate and release said member by the movement of said bolt, substantially as described.

2. In a lock, in combination with a door knob, a slide yoke controlled thereby, a sliding catch bar movable in a straight line at right angles to the line of movement of the yoke and adapted to engage said yoke, a locking bolt, and mechanism positively connecting said bolt and catch bar and having means to translate the sliding movement of the bolt into a perpendicularly sliding movement of the catch bar, substantially as described.

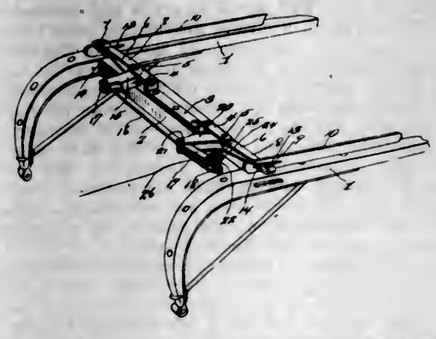
3. In a lock, in combination with a knob and its hub, a slide yoke operable by said hub, a latch bolt having a shank separate from and extending parallel to said yoke, means of engagement between said shank and yoke, a yoke locking slide bar movable in a straight line at right angles to the movement of the yoke, said yoke having means to engage the slide bar, a locking bolt, and means of operative connection between said bolt and slide bar, substantially as described.

4. In a lock, in combination with a knob, a sliding latch-bolt controlling yoke operatively associated with said knob, a slide bar to lock said knob against rotation, and means of direct engagement between said bar and yoke, a bolt operable directly by a key alone, and a keyhole for said bolt on the inside of the door only, and means of positive engagement between the bolt and slide bar, substantially is described.

5. In a lock, in combination with a bolt, a knob, a key for operating said bolt, a keyhole open only on the inside for the operation of said bolt by said key, and means for locking said knob by the protraction of said bolt to provide exterior means of indication of the protraction of the bolt consisting of a slide-bar, the knob yoke having a slot to receive said bar, and means of positive operative engagement between the bolt and slide-bar, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

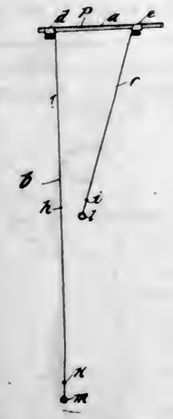
1,065,559. HORSE-RELEASING DEVICE. WALTER O. SIMMONS, Hartselle, Ala. Filed Mar. 22, 1913. Serial No. 756,168. (Cl. 21—75.)



1. In combination with a pair of vehicle shafts, a plate secured to the connecting bar of said shafts, bell crank swingle trees fulcrumed between the ends of said plate and the connecting bar having long and short arms, a link pivoted to a short arm of one of the swingle trees and having a connection with the short arm of the other swingle tree, spring connections between said link and said connection, and means for collapsing the link and said connection against the action of the spring means.

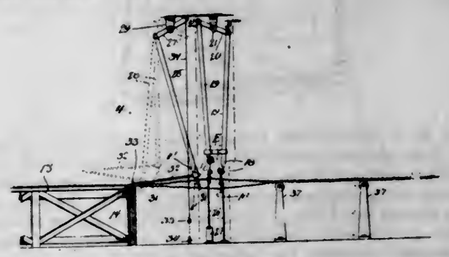
2. In combination with a pair of vehicle shafts, a plate secured to the connecting bar of said shafts, a pair of bell crank swingle trees fulcrumed between the ends of said plate and the connecting bar, one arm of each swingle tree adapted to act in alinement with the corresponding arm of the other swingle tree and to be connected by a trace, a link pivoted to the other arm of one of the swingle trees and having a rod connection with the corresponding arm of the other swingle tree, the pivotal connection between the link and the connecting rod being offset or out of alinement of the pivot between the link and its swingle tree, with the connecting rod in contact with the pivot bolt connecting the link to the swingle tree, thereby constituting means for the traces to pull against, spring means acting between the link and the connecting rod to hold the connecting rod against said pivot bolt, and means for collapsing said link and connecting rod against the action of the spring means.

1,065,560. PLOTTING DEVICE. FREDERICK A. SMITH, Chicago, Ill. Filed Jan. 23, 1908. Serial No. 412,262. (Cl. 33—8.)



A plotting device including one element bearing measuring scale-marks, a string or wire connected with said element, and a second string or wire also having connection with the said element, the points of connection of the strings or wires with said element being relatively adjustable along the length of said element, one of said strings or wires having marks *h k* thereupon located at different distances from said element, while the other one of said strings or wires has a mark *i* thereupon adapted for registry with the mark *h*, the mark *k* being substantially twice as far from said element as the mark *h*.

1,065,561. MACHINERY FOR WEAVING METAL FABRIC. JAMES D. SMITH, Chicago, Ill., assignor to Franklin P. Smith, Chicago, Ill. Filed Jan. 30, 1911. Serial No. 605,366. (Cl. 139—39.)



1. In a weaving machine, a harness section comprising a carrier bar having longitudinal guiding means, a plurality of rigid movable heddles arranged in groups and each having an eye therein for the reception of a fabric wire, said heddles being free and unconnected at one end, and bars rigidly connecting the other ends of the heddles of each group, and having means coöperating with the guiding means on the carrier bar to slidably connect the heddles therewith.

2. In a machine for weaving diagonal-strand fabric, the combination with a support arranged to receive the completed fabric woven by the machine, and means for temporarily holding said fabric in place, of harness mechanism arranged approximately parallel with one series of the diagonal strands of the fabric and comprising two vertically reciprocable open-ended trackways, heddles guided to move therein, supporting mechanism for said trackways, including means for reversing the direction of movement of one trackway with respect to the other and treadles for each trackway whereby either trackway may be drawn downward.

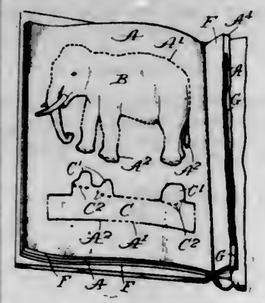
3. In a machine for weaving diagonal strand fabric, the combination with a support arranged to receive completed fabric woven by the machine, of a pair of vertically reciprocable open-ended trackways arranged approximately parallel with one series of the diagonal strands of the fabric, supporting bars therefor, each pivoted midway between its ends, and links connecting the ends of said bars with said trackways, whereby movement of one trackway is reversed with respect to the movement of the other trackway, slidable wire guiding heddles carried by said trackways, and treadles connected to each trackway whereby either one of the latter may be depressed.

1,065,562. SHADOW-PICTURE DEVICE. FREDERICK E. SPOERER, Chicago, Ill. Filed July 7, 1911. Serial No. 637,357. (Cl. 46—37.)

1. A pictorial device consisting of a sheet containing a picture and an outline of a base or standard therefor, the outlines of said picture and of said base being perforated to facilitate the removal of said picture and base portions from the remainder of the sheet, the base portion being provided with lugs adapted to be lapped upon the picture portion for attachment thereto, and said base portion being provided with perforations arranged to register with those portions of the picture outline which lie within the outline of the base after attachment of the picture thereto.

2. In a picture book, picture leaves having outlines of pictures to be cut out, said leaves being disposed in pairs

back to back, and a background sheet interposed between the adjacent backs of each pair of leaves in position to register with the openings left by removal of the picture portions from said leaves.



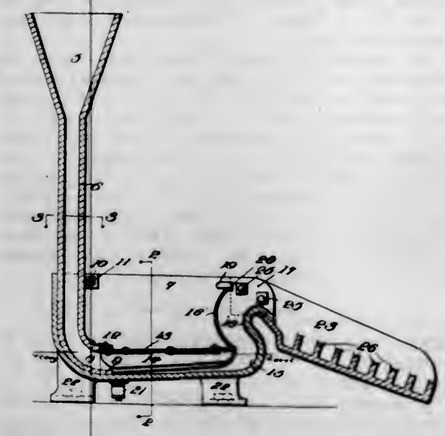
3. In a picture book, picture leaves having the outlines of their pictures perforated to facilitate removal of the picture portions from the remainder of the leaves, said leaves being disposed in pairs back to back, the back of one picture leaf being gummed along its margin for attachment to the next picture leaf, and a background sheet interposed between the adjacent backs of each pair of leaves in position to register with the openings left by the removal of the picture portions from said leaves.

4. A picture device comprising a 2-leaf folder and a background sheet interposed and secured between the leaves of such folder, the outer edges of each leaf of the folder having outlined thereon a picture partly severed at the outlines to facilitate detachment from the leaf.

5. A pictorial device comprising a pair of leaves connected together back to back, and a background sheet interposed between them, the outer face of each leaf having outlined thereon a picture partly severed at the outlines to facilitate detachment from the leaf.

[Claim 6 not printed in the Gazette.]

1,065,563. AMALGAMATOR. EUGENE E. THIBAULT, Butte, Mont. Filed Feb. 7, 1911. Serial No. 607,072. (Cl. 83—67.)



1. An amalgamator including a mercury receiving basin having its front wall curved vertically and provided with a discharge spout, a distributing table immersed in the mercury in the basin and terminating short of the front wall of said basin, means for forcing ore bearing materials through the bed of mercury beneath the distributing table and upwardly between the latter and the curved front wall of the basin, and an upstanding partition disposed within the basin and resting on the distributing table, said partition being spaced from the curved front wall of the basin and the discharge spout to form a tortuous passage for directing the materials through said discharge spout.

2. An amalgamator including a mercury receiving basin having its front wall curved vertically and provided with a discharge spout, a pivoted distributing table immersed in the mercury in the basin and having its free end terminating short of the discharge spout, means for forcing ore bearing materials through the bed of mercury beneath the distributing table and upwardly between the free end of the latter and the curved front wall of the basin, and an upstanding partition disposed within said basin and extending transversely of the distributing table at the free end thereof, said partition being spaced from the curved front wall of the basin and the discharge spout to form an intermediate tortuous passage for directing the materials through said discharge spout.

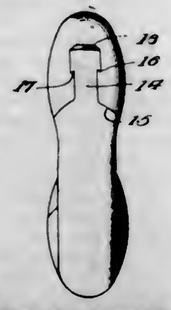
3. An amalgamator including a mercury receiving basin having a discharge spout, a distributing table immersed in the mercury in the basin, means for forcing ore bearing materials through the bed of mercury and beneath the distributing table, and a concave partition extending transversely of the distributing table and having its concave face spaced from the front wall of the basin to form an intermediate tortuous passage for directing the materials through said discharge spout.

4. An amalgamator including a mercury receiving basin having its front wall of S-shape formation and provided with a discharge spout, a distributing table pivotally mounted within the basin and immersed in the mercury therein, means for forcing ore bearing materials through the bed of mercury and beneath the distributing table, and a concave partition disposed within the basin and extending transversely of the distributing table at the free end thereof, said partition having its concave face spaced from the front wall of the basin to form an intermediate passage for directing the materials through said discharge spout.

5. An amalgamator including a mercury receiving basin having its front wall of S-shape formation and provided with a discharge spout, a distributing table pivotally mounted within the basin and partially immersed in the mercury in said basin, the free end of said distributing table being spaced from the front wall of the basin, means for forcing ore bearing materials through the bed of mercury beneath the table and upwardly between the free end of the distributing table and the front wall of said basin, and a concave partition disposed within the basin and having its lower edge bearing against the upper surface of the table at the free end thereof, said partition being arranged within the basin and having its concave face facing the front wall of the basin and spaced from the latter to form an intermediate tortuous passage for directing the materials through the discharge spout.

[Claims 6 to 8 not printed in the Gazette.]

1,065,564. SELF-LOCKING CHAIN-COUPLING. MAURICE TOBIN, Marion, Ohio. Filed May 1, 1912. Serial No. 694,562. (Cl. 59—85.)



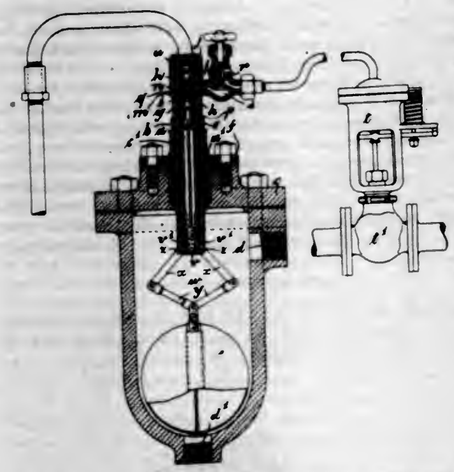
1. A link including two symmetrical half links, each having shanks of unequal length, the ends of said shanks being inclined at an acute angle to their axes and formed for sliding dovetailed engagement with each other.

2. A link including two symmetrical half links, each having shanks of unequal length, the ends of said shanks being inclined at an angle to their axes and formed for sliding engagement with each other, one end of each being mortised and undercut, while its other end is formed with a shouldered tenon.

3. A link including two symmetrical half links each having shanks of unequal length, the ends of said shanks being inclined at an angle to their axes and formed for sliding engagement with each other, one end of each being mortised and undercut, while its other end is formed with a shouldered tenon, the tenon of each half link being adapted for engagement in the mortise of the other half link with its shoulders seated in the undercut portion thereof, and means formed integrally with said half links for positively locking the two together.

4. A link including two symmetrical half links, each having shanks of different lengths, the longer shank of each half link being formed with a shouldered tenon, the free outer edge portion of which is cut-away, the shorter shank of each link member being formed with an undercut mortise adapted to receive the tenon of the other half link member and provided with a lip extending over the cut-away portion of the tenon when the link is in assembled position, said lip being capable of being struck down to engage against the beveled face formed by the cut-away portion.

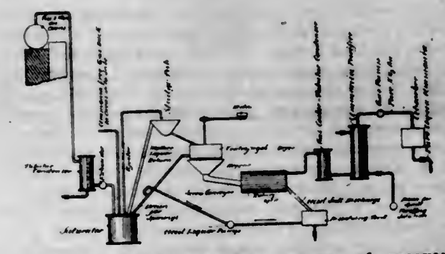
1,065,565. FEED-WATER REGULATOR FOR STEAM-BOILERS AND THE LIKE. ARTHUR RONALD TRIST, London, England. Filed May 14, 1912. Serial No. 697,134. (Cl. 137—101.)



1. In a feed water regulator for steam boilers and the like in combination, a float chamber, a steam control valve box adapted to be concentrically disposed in a vertical position in the upper part of said float chamber, means for adjusting the vertical position of said control valve box relative to the water level, a double valve seat as a separate unit having annular means of discharge through radiating passages from the central passage, clamping means for supporting said seat in a tight manner in said box, a double faced valve adapted to co-act with said double valve seat, a float in said float chamber, operative means mounted on the lower end of said valve box and means for connecting said operative means with said float, substantially as described.

2. In a feed water regulator for steam boilers and the like in combination, a float chamber, a steam control valve box adapted to be concentrically disposed in a vertical position in the upper part of said float chamber, means for adjusting the vertical position of said control valve box relative to the water level, a double valve seat as a separate unit having annular means of discharge through radiating passages from the central passage, clamping means for supporting said seat in a tight manner in said box, a double faced valve having a stem on to which one valve is initially attachable in an adjustable manner and adapted to be locked thereon permanently after adjustment, a float in said float chamber, operative means mounted on the lower end of said valve box and means for connecting said operative means with said float, substantially as described.

1,065,566. PROCESS OF OBTAINING PURIFIED AMMONIA FROM COAL-GAS. CHARLES G. TUFTS, Syracuse, N. Y., assignor to Semet-Solvay Company, Solvay, N. Y., a Corporation of Pennsylvania. Filed May 18, 1911. Serial No. 628,060. (Cl. 23—21.)



1. The hereinbefore described process of recovering purified ammonia from the gases obtained from the distillation of coal which consists in first treating the mixed gases as they come from the retort to separate the tar therefrom, then passing the gases through acid to form ammonium sulfate, drawing off the uncombined gases and leaving the ammonia with the remaining impurities in the sulfate; heating the ammonium sulfate so as to drive off ammonia in company with the volatilizable impurities and finally separating the ammonia from the impurities.

2. The hereinbefore described process of recovering purified ammonia from the gases obtained from the distillation of coal which consists in treating the mixed gases as they come from the retort with acid so that the fixed ammonia compounds are broken up and ammonium sulfate is formed; drawing off the uncombined gases and leaving the ammonia together with the remaining impurities in the sulfate; rapidly raising the ammonium sulfate to such temperature as to volatilize ammonia and volatile impurities and drawing off the volatilized products together and finally separating the volatilized ammonia from the accompanying volatilized impurities.

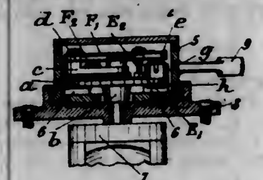
3. The hereinbefore described improvement in the art of recovering purified ammonia from coal gas which consists in passing the gas as produced through acid to form ammonium sulfate, quickly heating the ammonium sulfate so as to drive off ammonia with accompanying impurities, and leave acid ammonium sulfate, forming a solution of the residual acid sulfate and recharging the solution with ammonia to form ammonium sulfate in the same manner as before to repeat the operation.

4. The hereinbefore described improvement in the art of recovering purified ammonia from coal gases which consists in passing the gas as produced through acid whereby ammonium sulfate is formed; heating the ammonium sulfate in such manner as to volatilize ammonia content together with the volatile impurities and to leave behind the tar in the shape of pitch and charred product, withdrawing the volatilized ammonia with the volatilized impurities and finally separating the ammonia from the impurities.

1,065,567. CIRCUIT-INTERRUPTER FOR ELECTRIC IGNITION SYSTEMS. ROBERT WAGNER, Stuttgart, Germany, assignor to The Firm of Robert Bosch, Stuttgart, Germany. Filed Jan. 31, 1912. Serial No. 674,601. (Cl. 123—166.)

1. A circuit interrupter for electric ignition systems comprising a support, a contact terminal mounted on said

support, a relatively movable co-acting contact terminal, mechanism for periodically separating said contact terminals, and guiding means maintaining the contact surface of the movable contact terminal parallel with the contact surface of the other contact terminal in the circuit interrupting movement.



2. An electric circuit interrupter comprising a support, a contact terminal mounted on said support, a relatively movable coacting contact terminal, mechanism for periodically separating said contact terminals in substantially the direction of the axis of the support, and guiding means maintaining the contact surface of the movable contact terminal parallel with the contact surface of the other contact terminal in the circuit interrupting movement.

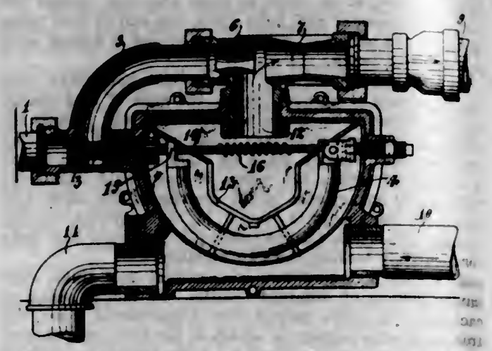
3. A circuit interrupter for electric ignition systems comprising a support, a contact terminal mounted on said support, a relatively movable co-acting contact terminal, mechanism for periodically separating said contact terminals, and guiding means comprising a plurality of superposed and separated members rigidly fastened together and to said support at one end, and rigidly fastened together and carrying the movable terminal near the other end, whereby the contact surface of the movable terminal is guided in a circuit interrupting movement of substantially parallel translation.

4. A circuit interrupter for electric ignition systems, comprising a support, a contact terminal mounted on said support, a relatively movable co-acting contact terminal, mechanism for periodically separating said contact terminals, and guiding means comprising a plurality of parallel and separated spring plates rigidly fastened together and to said support at one end, and rigidly fastened together and carrying the movable terminal near the other end, whereby the contact surface of the movable terminal is guided in a circuit interrupting movement of substantially parallel translation.

5. A circuit interrupter for electric ignition systems comprising a rotatable support, a contact terminal mounted on said support, two parallel and separated spring plates rigidly fastened together and to the support at one end, and rigidly fastened together at their outer end, a co-acting contact terminal mounted on said spring plates between the ends thereof, and mechanism for periodically separating said contact terminals in substantially the direction of the axis of rotation including an axially movable member guided in said support and adapted to lift the outer end of said spring plate when it is axially actuated.

1,065,568. STEAM-HEATING SYSTEM. JOHN E. WARD, New York, N. Y., assignor to Standard Heat and Ventilation Company, Inc., a Corporation of New York. Filed Nov. 10, 1911. Serial No. 659,509. (Cl. 237—12.)

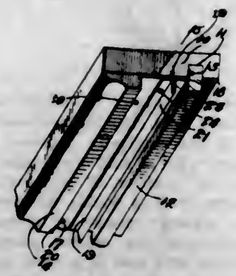
1. A heating system having a main pipe line, a radiator, a thermostatic device for controlling the flow of steam from the pipe line to the supply pipe leading to the radiator and a connection or conduit returning to the device from said radiator, said thermostatic device having a chamber, a thermostatic member therein and a passageway leading from said chamber to said supply pipe, a nozzle for directing steam to said supply pipe and arranged relative to said passageway in such a manner as to produce a decrease of pressure within said device, said thermostatic member being located below said passageway, the said chamber having therein and connected to the casing thereof a shield between a terminal of said passageway and the thermostatic member, which shield is arranged to prevent the water that passes through the passageway from contacting with said thermostatic member.



2. A heating system having a radiator line, a nozzle for directing steam to the radiator line, a casing having a chamber and a passageway which forms a communication between the said chamber and the radiator line at a place adjacent to the delivery end of the nozzle, a thermostatic member, in said chamber, the end of said passageway which is farthest removed from the nozzle terminating above the thermostatic member, and a shield on the chamber casing and extending between said last mentioned end of the passageway and the thermostatic member to prevent the splashing of condensed water which passes through the passageway against the thermostatic member.

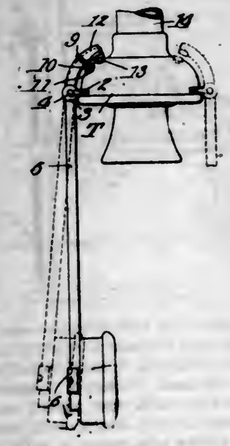
3. In a thermostatic device for heating, the combination of a casing having a chamber, a U-shaped thermostatic member in said chamber, a rod which extends between the ends of said thermostatic member, said casing being provided with a passageway leading to and from the interior of the chamber, the rod being located between a terminal of the passageway and the curved portion of the U-shaped thermostatic member, an apron or shield located between said terminal and the curved portion of the thermostatic member, to prevent water entering the chamber through said opening, from engaging the thermostatic member, and means on the rod to prevent water that passes through said passageway into the chamber from creeping along the rod and thence to the thermostatic member.

1,065,569. METAL WEATHER-STRIP. FRANK A. WENTZ and ALLEN L. CURTIS, Swanton, Ohio. Filed Dec. 30, 1911. Serial No. 668,656. (Cl. 20—69.)



A window attachment of the character described comprising a pair of attaching sections adapted to be secured to the frame of a window, one of said sections having its outer edge portion positioned beneath the inner stop of a window frame and the remaining section being bent longitudinally to form a flange positioned in the groove receiving the parting bead of a window frame, the free edge portions of said attaching strips being positioned in spaced relation to each other and in spaced relation to the window frame to form a pocket, and a strip bent longitudinally to form a tongue adapted to pass through a groove formed in a window sash and having its edge portions bent apart to form flanges fitting within the pocket beneath said attaching strips, said tongue extending through the space between the edges of said attaching strips, and means for removably attaching said strip to the frame.

1,065,570. TELEPHONE-RECEIVER SUPPORT. CLARENCE D. WIGHTMAN, Glenwood Springs, Colo. Filed Mar. 7, 1912. Serial No. 682,132. (Cl. 179—153.)



1. The combination with a transmitter casing, of a receiver support for attachment to the rim of the casing, including a tube having a curved end, a hinge for connecting said tube to the rim of the transmitter casing with the curved end adjacent the curved portion of the casing, said tube being limited in its inward movement by contact of the curved end with the casing, and a spring between the curved end of the rod and the transmitter casing for holding the curved end away from the transmitter casing.

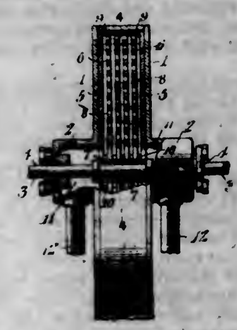
2. The combination with a transmitter casing, of a receiver support for attachment to the rim of the casing, including a tube having a curved end, a hinge for connecting said tube to the rim of the transmitter casing with the curved end adjacent the curved portion of the casing, said tube being limited in its inward movement by contact of the curved end with the casing, a spring between the curved end of the rod and the transmitter casing for holding the curved end away from the transmitter casing, and a receiver adjustably mounted upon the end of the tube and normally held slightly in front of the transmitter, whereby the positioning of the person into transmitting position will move the tube in opposition to the spring.

1,065,571. TURBINE. WILLIAM W. WONNER, York, Pa. Filed Nov. 5, 1912. Serial No. 729,707. (Cl. 121—60.)

1. In a turbine engine, a rotor comprising a series of axially spaced disks provided with a radially extended zone of perforations and exhaust passages interior to said zone.

2. In a turbine engine, a rotor comprising a series of disks spaced apart axially, each disk having a radially extended zone of perforations terminating adjacent the marginal portion thereof and having the side walls at the marginal portion exterior to said zone of perforations approaching to form an approximately sharp periphery.

3. A turbine engine comprising a cylindrical casing having central axial extensions inclosing chambers communicating with the interior of the casing, and a rotor mounted in the casing, said rotor being provided with a shaft having bearings in the axial extensions of the casing, and said shaft carrying a series of disks spaced apart axially with the outer disks imperforate and intermediate disks provided with numerous perforations, the rotor having adjacent the shaft a series of passages extending through all the disks and opening into the chambers in the axial extensions of the casing.

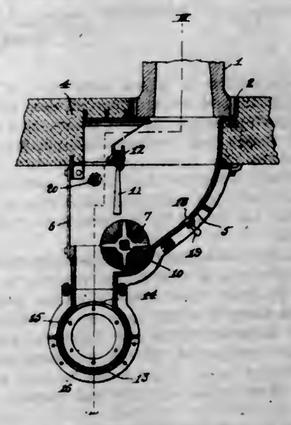


4. A turbine engine comprising a cylindrical casing having a peripheral offset, a rotor mounted in the casing and comprising axially spaced disks, and means for directing fluid under pressure to the peripheral portions of the rotor, said means being located within the offset of the peripheral portion of the casing and movable to project a stream of fluid under pressure in approximately tangential relation to the rotor in either direction of rotation.

5. A turbine engine comprising a cylindrical casing having a radial offset with walls gradually merging into the peripheral portions of the casing, an inlet pipe for fluid under pressure entering the offset and provided with a side outlet, said pipe being rotatable to direct the outlet to either side of a plane coincident with and radial to the longitudinal central axis of the casing, and a rotor mounted in the casing in position to be acted upon by fluid introduced thereinto.

[Claims 6 to 8 not printed in the Gazette.]

1,065,572. APPARATUS FOR DISCHARGING SUBSTANTIALLY VERTICAL RETORTS FOR THE DESTRUCTIVE DISTILLATION OF COAL. HAROLD WHITEMAN WOODALL, Wimborne, and ARTHUR McDOUGALL DUCKHAM, Upper Parkstone, England, assignors to Isbell-Porter Company, Newark, N. J., a Corporation of New York. Filed Feb. 1, 1909. Serial No. 475,474. (Cl. 202—5.)



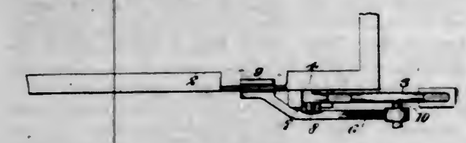
1. A coke discharging device comprising a substantially vertical retort having an open bottom, a downwardly inclined support directly under the open bottom, beginning at the lower end of one wall and terminating directly below the other wall of the retort, and adapted to sustain the weight of the coke in the retort, a rotary extracting or discharging roller having helical blades formed by a series of separate and independent sections secured to a shaft, said extracting roller being situated at and projecting

above the lower end of the inclined support and adapted to retain and engage the coke on the said inclined support, a gas tight coke receiving and discharging drum below the extracting roller, means for independently and intermittently operating said extracting roller and discharging drum.

2. A coke discharging device comprising a substantially vertical retort having an open bottom, a downwardly inclined support directly under the open bottom, beginning at the lower end of one wall and terminating directly below the other wall of the retort, and adapted to sustain the weight of the coke in the retort, a rotary extracting roller situated at and projecting above the lower end of the inclined support and adapted to retain and engage the coke on the said inclined support and a series of movable pendants supported above and terminating above and near the periphery of the extracting roller, a gas tight coke receiving and discharging drum below the extracting roller, and means for independently and intermittently operating said extracting roller and discharging drum.

3. A coke discharging device comprising a substantially vertical retort having an open bottom, a gas tight chamber connected with and attached to the bottom of the retort and provided with a downwardly inclined support directly under the open bottom, beginning at the lower end of one wall and terminating directly below the other wall of the retort, and adapted to sustain the weight of the coke in the retort, a sprinkler adapted to throw water on and quench the coke resting on the support, a rotary extracting roller of separate and independent sections and situated at and projecting above the lower end of the inclined support and adapted to retain and engage the coke on the said inclined support, a series of movable and independent pendants supported above and terminating near the periphery of the extracting roller, and a coke receiving and discharging drum below the extracting roller, and means for independently and intermittently operating said extracting roller and discharging drum.

1,065,573. BED CONSTRUCTION. CURTIS WRIGHT, Jr., Oakland, Cal. Filed Sept. 12, 1912. Serial No. 719,996. (Cl. 5—37.)

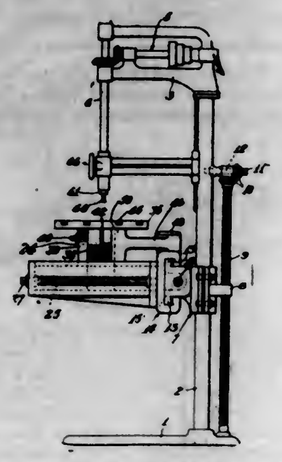


1. The combination in a bed structure, of supporting journals, a tiltable bed frame mounted upon said journals, means for counterpoising the bed frame, and connections between said means and the frame comprising levers with ends coupled to the counterpoising means and having seats engageable with the bed frame, said levers being pivoted upon said journals and maintained in engagement with the bed frame by the pressure of the counterpoising means.

2. A bed structure comprising substantially fixed brackets having journals, a bed frame tiltable to horizontal or vertical position upon the fulcrums, levers having seats for embracing the side rails of the bed frame, said levers being mounted upon the journals, and counterpoising means connected to the brackets whereby the levers are rocked upon their journals and held in engagement at their seats with the bed frame.

1,065,574. ATTACHMENT FOR DRILL-PRESSES. HUBERT C. WRIGHT, Los Angeles, Cal. Filed Sept. 19, 1912. Serial No. 721,311. (Cl. 77—63.)

1. An attachment for drill presses comprising a standard, a carrier slidably mounted on said standard, a longitudinally movable carriage mounted on said carrier, a transversely movable carriage mounted on said first named carriage, a table rotatably mounted on said transversely movable carriage, means for tilting said table on said carriage, and a single locking means for fixing said table against tilting and rotating.



2. An attachment for drill presses comprising a standard, a carrier in fixed horisontal relation to and vertically slidable on said standard, a longitudinally movable carriage mounted on said carrier, a transversely movable carriage mounted on said first named carriage, a table rotatably mounted on said transversely movable carriage, and means for tilting said table on said last named carriage.

3. An attachment for drill presses comprising a standard, a carrier slidably mounted on said standard, a longitudinally movable carriage mounted on said carrier, a transversely movable carriage mounted on said first named carriage, a table on said transversely movable carriage, means for tilting said table on said transversely movable carrier, and means for bracing said table in horisontal position, said bracing means consisting of a pair of levers pivotally mounted on said longitudinally movable carriage adapted to swing under and engage the underside of said table.

4. An attachment for drill presses comprising a standard, a carrier slidably mounted on said standard, a longitudinally movable carriage on said carrier, a stationary arm extending forwardly from said carriage, a transversely movable carriage mounted on said arm, a block pivotally mounted in said transversely movable carrier, a table on said block, and a stud on said table extending into said block.

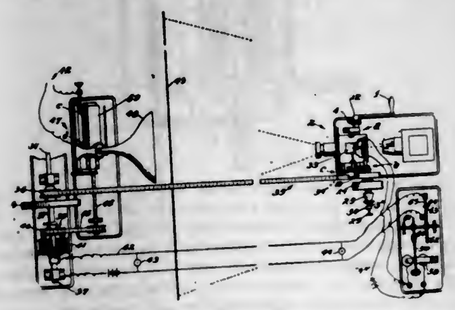
5. An attachment for drill presses comprising a standard, a carrier slidably mounted on said standard, a longitudinally movable carriage on said carrier, a stationary arm extending forwardly from said carriage, a transversely movable carriage mounted on said arm, a block pivotally mounted in said transversely movable carrier, a table on said block, a stud on said table extending into said block, and a single locking means for clamping said stud in said block and clamping said block in said transversely movable carriage.

[Claim 6 not printed in the Gazette.]

1,065,575. PROCESS OF PRODUCING DIGESTIVE FERMENT. HANUMMON YENJO, Nihonbashi-Ku, Tokyo, Japan. Filed Aug. 19, 1911. Serial No. 644,952. (Cl. 167—7.)

A process for producing digestive ferment which consists in boiling powdered bean, sodium phosphate, potassium nitrate, and magnesium sulfate with water under pressure, moistening wheat bran with the liquid thus produced, steaming the product, mixing the combined funguses of orange *Monilia* and *Aspergillus orygee* produced in a special process with bran of farinaceous substances which has been previously mixed with powdered bean and moistened with liquid produced as above, treating the "koji" obtained thereby with dilute alcohol, pressing the product, adding powdered germinated bean to the expressed liquid, adding alcohol of thirty five per cent. to the filtrate whereby all the phosphates and other impurities are precipitated, treating the clear liquid with strong alcohol, washing the precipitate obtained with alcohol and ether, and then drying the same.

1,065,576. COMBINATION APPARATUS FOR SYNCHRONIZING MOTION AND SOUND REPRODUCTIONS. EDWARD H. AMET, Redondo Beach, Cal. Filed Sept. 5, 1911. Serial No. 647,769. (Cl. 88—16.)



1. The combination with a motion picture machine provided with a ribbon, of pneumatic means to apply pneumatic pressure to one side of the ribbon; said ribbon being provided with perforations; a diaphragm arranged to be operated by pressure passing through such perforations; an electric circuit opened and closed by operation of said diaphragm; an electro-magnet in said circuit; an armature actuated by said electro-magnet; a sound reproducing machine; mechanism driven by the motion picture machine to operate the sound reproducing machine; and means controlled through said armature for operatively connecting and disconnecting the sound reproducing machine with said mechanism.

2. A motion picture machine comprising a ribbon and means for operating said ribbon; said ribbon being provided with picture spaces and with perforations on the lines between said picture spaces; means to supply pneumatic pressure on said picture ribbon, a sound reproducing machine and electro-pneumatic means actuated through said perforations to control the operation of the sound reproducing machine.

3. The combination with a motion picture machine and a sound reproducing machine, of mechanism for transmitting motion from the picture machine to the sound reproducing machine; an electro-magnet for controlling said mechanism; an electro-magnet controlled by the movement of the ribbon of the motion picture machine; and step by step mechanism operated by the last named electro-magnet for energizing and deënergizing the first named electro-magnet.

4. The combination with a motion picture machine and a sound reproducing machine of an electro-magnet; mechanism operated by the motion picture machine for operating the record device of the sound reproducing machine; means controlled by said electro-magnet to control the operation of the sound reproducing machine through said mechanism; a step by step circuit closer to control said electro-magnet and an electro-magnet controlled by the film of the motion picture machine to operate the step by step circuit closer.

5. In an apparatus of the class set forth a step by step circuit closer comprising a ratchet wheel and a contact wheel; said ratchet wheel having twice as many teeth as the contact wheel; a motion picture machine provided with a ribbon; an electrical circuit having contacts which are connected and disconnected by the operation of the picture machine ribbon; an armature to operate the ratchet wheel; a magnet in said circuit to operate the armature; a sound reproducing machine; mechanism for operating the sound reproducing machine in synchronism with the motion picture machine; means to operatively connect and disconnect said mechanism and the sound reproducing machine, and an electrical circuit opened and closed by said step by step circuit closer to control said connecting and disconnecting means.

[Claims 6 to 9 not printed in the Gazette.]

1,065,577. METHOD FOR THE MANUFACTURE OF OXALATES. LAUNCELOT W. ANDREWS, Davenport, Iowa. Filed Aug. 10, 1910. Serial No. 576,595. (Cl. 23—24.)

1. The method of heating the re-action mixture in the manufacture of oxalic acid by the action of an alkali on carbohydrates consisting in placing it in an atmosphere of superheated steam at substantially atmospheric pressure.

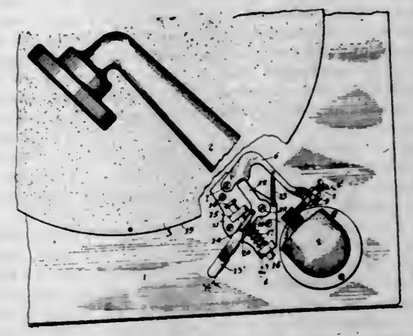
2. The method of producing oxalates consisting in mixing caustic alkali with a material of the carbohydrate class and placing the mixture in an atmosphere of superheated steam under low pressure.

3. The method of producing oxalates consisting in introducing a mixture of alkali and saw dust in a closed vessel, stirring the mixture and filling the vessel with superheated steam under low pressure.

4. The method of producing oxalates consisting in introducing saw dust and alkali into a closed vessel, introducing superheated steam under low pressure into said vessel and continually and gradually increasing the temperature of said steam.

5. The method of producing oxalates consisting in introducing a mixture of alkali and sawdust in a vessel, introducing superheated steam under low pressure into said vessel, and simultaneously applying heat to the exterior of the vessel.

1,065,578. AUTOMATIC GRAPHOPHONE-STOP. MAX H. BAETZNER, Chicago, Ill. Filed Sept. 22, 1911. Serial No. 650,794. (Cl. 74—46.)

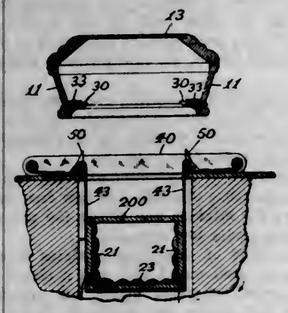


1. An automatic brake comprising a spring held trip lever adapted to oscillate about a stationary pivot and provided with an adjustable screw at the free end thereof; a bell crank lever the short arm of which is held in normal engagement with said trip arm and the long arm of which constitutes a finger piece; a fork formed in rigid relation with said finger piece and having horizontally extending sides; a spring pressed pin having a brake head and held in inoperative position by said fork; and means engaging said screw to operate said trip arm, substantially as described.

2. An automatic brake comprising a trip arm; an adjustable screw on the free end of said trip arm; a bell crank lever having a short arm for engagement with said trip arm and a long arm constituting a finger piece; a tension helical spring arranged in connection with said trip arm and adapted to maintain the engagement thereof with said lever; a fork provided on the upper side of said finger piece and having horizontally extending sides; a spring pressed pin having a brake head; a diametric pin provided in said spring pressed pin; a collar engaging said diametric pin and disposed on the side of said fork opposite said head, said diametric pin thus holding said

head in inoperative position during the engagement of said trip arm with said bell crank lever, the construction being such that when said trip arm is tripped, the spring on said spring pressed pin will cause the operative engagement of the head; and automatic means adapted to engage said screw and trip said trip arm, substantially as described.

1,065,579. BURIAL-CASKET. LEON W. BENTLEY, Brooklyn, N. Y. Filed May 31, 1912. Serial No. 700,603. (Cl. 27—3.)



1. A burial casket, comprising an outer shell, an inner body carrying receptacle, means detachably connecting the body and shell, a support for the outer shell that permits the receptacle to pass downwardly from the same, and means mounted on the support for detaching the receptacle from the shell when the casket is placed on the support.

2. The combination with a casket comprising an inner body-holding section and an outer shell section, of means for detachably securing the sections together, and means adapted to be placed at the mouth of a grave for automatically detaching the inner section from the outer section when the sections are placed over a grave and engaged with said means, to permit the inner section to be lowered into the grave independently of the outer section.

3. The combination with a casket comprising an inner body-holding section and an outer shell section, of devices for detachably securing the sections together, means for supporting the outer section over a grave, and means located in the path of said devices for operating the same to release the inner section from the outer section and permit it to be lowerd into the grave independently of the outer section.

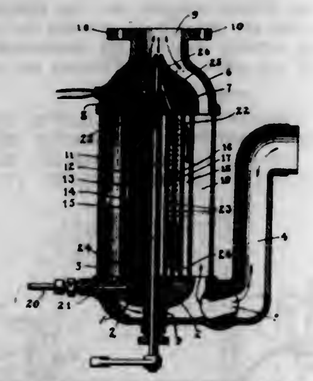
4. The combination with a burial casket comprising an inner body-holding section and an outer shell section having an open bottom, of bolts mounted on one of the sections and detachably engaging the other section for securing the same together, means for supporting the outer section over a grave, and devices carried by the supporting means and located in the path of the bolts for withdrawing said bolts to permit the inner section to be lowered into the grave while the outer section is so supported.

5. In combination an outer section of a burial casket having sides, and a top but no bottom, an inner section adapted to fit within the same and having sides and a bottom but no top and means for normally but temporarily securing the sides of the sections together, in combination with means for disengaging the parts by the movement of the parts with respect to the disengaging means.

[Claims 6 to 9 not printed in the Gazette.]

1,065,580. VAPORIZER. THOMAS BEUCUS, Cedar Springs, Mich. Filed Feb. 24, 1913. Serial No. 750,310. (Cl. 48—103.)

1. In a fuel vaporizer, a body having a series of concentric annular chambers one of which serves as an air passage and communicates with an eduction pipe and the remainder of the said concentric annular chambers being inter-communicable and serving as fuel chambers, and also being in communication with the said air passage, an electrical heating unit in one or more of said fuel chambers, and means for supplying the fuel chambers with hydro-carbon fluid.



2. In a fuel vaporizer, a body having a series of concentric annular chambers the outer one of which serves as an air passage and communicates with an eduction pipe, and the inner annular chambers serving as fuel chambers and being inter-communicable and also in communication with the said air passage, an electrical heating unit in one or more of said fuel chambers and means for supplying the fuel chambers with hydro-carbon fluid.

3. A fuel vaporizer comprising, a body having a series of concentric annular chambers, the outer chamber serving as an air passage and communicating with an eduction pipe, the other chambers serving as fuel chambers, the outer one of which is adapted to receive a supply of hydro-carbon fluid and the walls of the inner chambers being provided with openings through which the fluid may pass, and the innermost annular chamber being in communication with the said air passage, a coil of wire serving as an electrical heating unit located in one of the inner annular chambers, and means for supplying a hydro-carbon fuel.

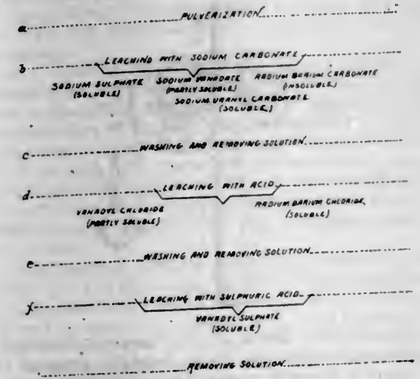
4. A fuel vaporizer comprising, a body having a series of concentric annular chambers, the outer one of which serves as an air passage and is adapted to communicate with an eduction pipe the remainder of said chambers serving as fuel chambers, the outer one of which is adapted to receive at its lower end a supply of hydro-carbon fluid, the walls of the inner chambers being provided alternately at their respective upper and lower ends with passages through which the fluid may pass, and the innermost annular chamber having an outlet into the said air passage, a valve in said outlet and a coil of wire serving as an electric heating unit in one of the inner annular chambers, and means for supplying hydro-carbon fluid.

5. A fuel vaporizer comprising, a body having a series of concentric annular chambers therein, the outer one of which serves as an air passage and communicates with an eduction pipe and the remainder of the chambers serving as fuel chambers, the outer one of which is adapted to be supplied at its lower end with hydro-carbon fluid, and the walls of the next inner chambers being provided alternately at their respective upper and lower ends with openings through which the fluid may pass, and the innermost annular chamber having an outlet into the said air passage, a valve in said outlet, a coil of wire in one of the inner annular chambers to serve as an electric heating unit, a valve in the air passage, and means for supplying hydro-carbon fluid.

[Claim 6 not printed in the Gazette.]

1,065,581. PROCESS OF EXTRACTING VALUES FROM ORES. WARREN F. BLEECKER, Canonsburg, Pa., assignor to The Standard Chemical Company, Pittsburgh, Pa. Filed May 24, 1912. Serial No. 699,594. (Cl. 75—18.)

1. The herein described process of extracting values from ores containing uranium, radium and vanadium, consisting in reducing the ore to a comminuted state, treating the same with an alkaline carbonate and recovering a uranium solution; then treating the ore with an acid other than sulfuric, and recovering a radium solution.



2. The herein described process of extracting values from ores containing uranium, radium and vanadium, consisting in reducing the ore to a comminuted state, treating the same with heated sodium carbonate, recovering a uranium solution, treating the ore with an acid other than sulfuric, and recovering a radium solution.

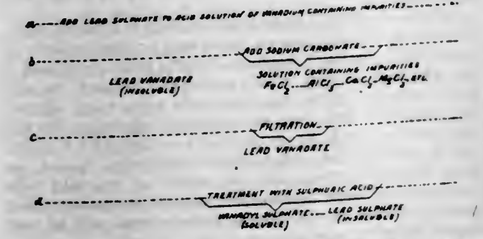
3. The herein described process of extracting values from ores containing uranium, radium and vanadium, consisting in reducing the ore to a comminuted state, treating the same with an alkaline carbonate, recovering a uranium solution, treating the ore with an acid other than sulfuric, recovering a radium solution, and again treating the ore with an acid solution and recovering a vanadium solution.

4. The herein described process of treating carnotite ores, consisting in reducing the ore to a comminuted condition, then treating the ore with an alkaline carbonate, recovering the resultant solution, treating the ore with a dilute solution of acid other than sulfuric and recovering the resultant solution, and finally treating the ore with a dilute solution of sulfuric acid and recovering the resultant solution.

5. The herein described process of treating carnotite ore, consisting in reducing the ore to a comminuted condition, then treating the ore to dissolve the uranium and a small amount of the vanadium and converting the radium into a form which is soluble by subsequent treatment, and recovering the resultant solution, and then treating the residual ore to dissolve the radium and some of the remaining vanadium, and recovering the resultant solution.

[Claims 6 to 8 not printed in the Gazette.]

1,065,582. PROCESS OF PURIFYING VANADIUM. WARREN F. BLEECKER, Canonsburg, Pa., assignor to The Standard Chemical Company, Pittsburgh, Pa. Filed May 24, 1912. Serial No. 699,597. (Cl. 75—18.)



1. The herein described process, consisting in adding a lead salt to an acid solution containing vanadium and impurities, then adding an alkaline carbonate to the solution, and removing from the solution, lead vanadate free from impurities.

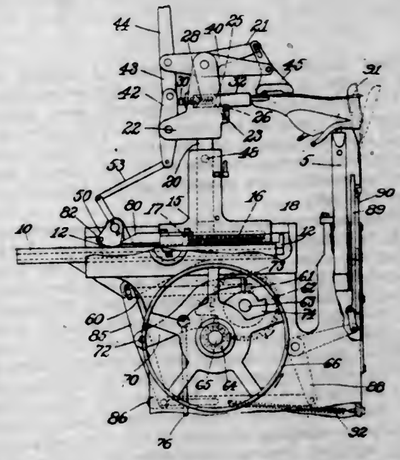
2. The herein described process, consisting in adding lead salt to an acid solution of vanadium, precipitating lead vanadate in said solution, and recovering vanadium from the lead vanadate precipitate.

3. The herein described process, consisting in subjecting vanadiferous ore to the action of an acid to form an acid solution containing vanadium and impurities, adding a lead salt to said solution, then treating the solution with an alkali, and recovering precipitated lead vanadate free from impurities.

4. The herein described process of purifying vanadium, consisting in adding lead salt to an acid solution containing vanadium, treating the solution to precipitate lead vanadate, removing the precipitated lead vanadate, treating the precipitated lead vanadate with acid, and recovering an acid solution of vanadium free from impurities.

5. The herein described process of purifying vanadium, consisting in adding lead salt to an acid solution containing vanadium and impurities, then adding to the solution, an alkaline carbonate until lead vanadate is precipitated, treating the lead vanadate precipitate with sulfuric acid, and recovering lead sulfate and an acid solution of vanadium free from impurities.

1,065,583. MACHINE FOR MOUNTING SHOES. MATTHIAS BROCK, Boston, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 13, 1910. Serial No. 597,055. (Cl. 12—15.)



1. A shoe mounting machine having in combination means for supporting a last, means shaped and arranged to engage a shoe in the welt crease around the toe, means for actuating the engaging means to force the shoe on to the last and other means engaging a different part of the shoe and actuated in a direction to coöperate with the first-mentioned means to force the shoe heelward on the last.

2. A shoe mounting machine having, in combination, means for supporting a last, means shaped and arranged to engage a shoe in the welt crease around the toe, coöperating means engaging a different portion of the shoe and power driven means to actuate said engaging means and the last relatively lengthwise of the last to force the shoe on to the last.

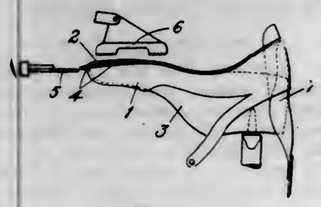
8. A shoe mounting machine having, in combination, means for supporting a last, means shaped and arranged to engage a shoe in the welt crease around the toe, means for engaging the shoe bottom over the forepart of the last, and means for actuating said two engaging means and the last relatively to force the shoe rearwardly on to the last.

4. A shoe mounting machine having, in combination, means presenting a concave acting edge to engage a shoe in the welt crease around the toe, means for engaging the shoe bottom over the toe, and means by which said first engaging means may be actuated with the second engaging means.

5. A shoe mounting machine having, in combination, means presenting a concave acting edge to engage a shoe in the welt crease around the toe, and power actuating mechanism having a predetermined stroke and arranged to impart a variable movement to said engaging means lengthwise of a partially inserted last to force the shoe on to the last.

[Claims 6 to 65 not printed in the Gazette.]

1,065,584. METHOD OF MAKING SHOES. MATTHIAS BROCK, Boston, Mass., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Original application filed Dec. 13, 1910, Serial No. 597,055. Divided and this application filed Feb. 24, 1913. Serial No. 750,279. (Cl. 12—142.)



1. That improvement in methods of making shoes which consists in entering a last into the toe portion of a shoe the upper of which has previously been connected with the sole, engaging the shoe in the welt crease at the toe and also engaging it on the sole face of its forepart, and applying pressure lengthwise of the shoe in the direction to complete the mounting of the forepart of the shoe on the last.

2. That improvement in methods of making shoes which consists in entering a last into the toe portion of a shoe, engaging the shoe in the welt crease around the toe and also engaging it at the toe end of its sole face and also over the ball and, while sustaining the last, effecting rearward pressure upon the shoe simultaneously in said crease and on the sole face until the toe of the shoe is mounted on the toe of the last and the crease is shaped.

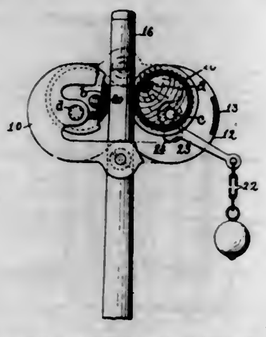
3. That improvement in methods of making shoes which consists in entering a last into the toe portion of a shoe the upper of which has previously been connected with the sole, engaging the shoe in the welt crease at the toe, and applying pressure lengthwise of the shoe in the direction to complete the mounting of the forepart of the shoe on the last.

4. That improvement in methods of making shoes which consists in entering a last into the toe portion of a shoe, engaging the shoe in the welt crease at the toe and also engaging it on the sole face of the forepart, moving the sole backwardly to draw the attached upper upwardly over the toe of the inverted last, and applying relative pressure to the last on one hand and both to the crease and the sole on the other hand in a direction lengthwise of the shoe to force the toe portion of the shoe and the last together.

5. That improvement in methods of making shoes which consists in entering a last into the toe portion of a shoe, engaging the shoe in the welt crease at the toe and also engaging it on the sole face of the forepart, and applying pressure lengthwise of the shoe in the direction to complete the mounting of the forepart of the shoe on the last and, while such pressure is being exerted, pulling rearwardly and downwardly on the heel end of the shoe relatively to the inverted last.

[Claim 6 not printed in the Gazette.]

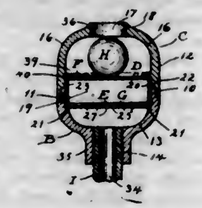
1,065,585. HOLDING DEVICE. ELI BROTHERS, Lynn, Mass., assignor of one-half to Frederic E. Bertrand, Swampscott, Mass. Filed May 13, 1912. Serial No. 696,815. (Cl. 46—6.)



1. In a holding device of the character described, in combination, a supporting frame, rotatable gripping members pivotally mounted in said frame with their pivots below the centers of said members and beyond vertical planes through said centers, a spring connecting said members, a releasing lever fast to one of said members and a link connecting said lever with the other of said members, substantially as described.

2. In a holding device of the character described, in combination, a supporting frame, rotatable gripping members pivotally mounted in said frame in proximity to each other with their pivots located below the centers of said members beyond vertical planes through said centers and arranged to be rotated toward each other by a device interposed between the same, and means for manually rotating said members in the opposite direction to release said device, substantially as described.

1,065,586. SANITARY DRINKING-FOUNTAIN. ELLSWORTH BURR, Middletown, Conn. Filed Aug. 30, 1912. Serial No. 717,926. (Cl. 137—110.)



1. A drinking fountain comprising a globular structure having an inlet and an outlet and a body portion intermediate thereto, the said body portion being appreciably enlarged relatively to the said inlet and outlet, mechanism housed in the said body portion operative to produce eddies in the water flow and to deliver the water from the said outlet in the form of a compact ball of large mass and uniform flow.

2. In a drinking fountain comprising a globular structure having an inlet and an outlet and an intermediate enlarged body portion, a perforated baffle plate positioned in the said body portion, a ball positioned between the said baffle plate and outlet, the said baffle plate being appreciably greater in area than the diametral section of the said ball and the said baffle plate being provided with a plurality of perforations substantially uniformly spaced one from the other throughout the extent of the said baffle plate whereby some perforations will be positioned underneath a portion of the said ball and others will be positioned laterally thereof.

3. A drinking fountain comprising a globular structure having an inlet and an outlet and a body portion intermediate thereto, the said body portion being appreciably enlarged relatively to the said inlet and outlet, mechanism housed in the said body portion operative to produce eddies in the water flow and to deliver the water from the said outlet in the form of a compact ball of large mass and uniform flow, and the said mechanism comprising a pair of baffle plates of perforated sheet metal separated by a water space and a ball positioned on the uppermost of the said baffle plates.

4. In a drinking fountain comprising a globular structure having an inlet and an outlet and an enlarged body portion intermediate thereto, a pair of perforated baffle plates positioned in the said body portion and separated by a water space, and a ball positioned between the uppermost of the said baffle plates and the said outlet the said baffle plates being appreciably larger than the diametral section of the said ball and provided with perforations positioned outward laterally from the horizontal diametral section thereof.

5. In a drinking fountain comprising a globular structure having an inlet and an outlet and an enlarged body portion intermediate thereto and a pair of baffle plates of perforated sheet metal positioned in the said enlarged body portion and separated by an appreciable space, the said baffle plates having different spacings and different dimensions of holes one from another.

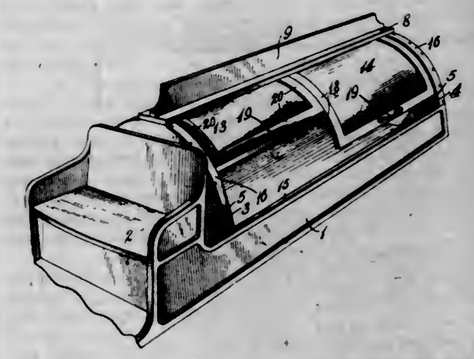
[Claim 6 not printed in the Gazette.]

1,065,587. BOTTLE CLOSURE OR CAP. SOLOMON CANTOR, Peekskill, N. Y. Filed Jan. 25, 1913. Serial No. 744,163. (Cl. 215—49.)

1. In combination, a sheet metal cap or closure adapted to fit the mouth end of a bottle, a pair of arms swiveled to the cap opposite one another and suspended along the neck of the bottle, one acting as a hinge arm, while the other constitutes a latch arm, a ring arranged on the neck of the bottle below a shoulder thereof, to which the hinge arm is pivoted, said ring having an undercut notch to be engaged by the latch arm, said latch arm adapted to be swung laterally upon its swiveled connection out of the way of the path of the notch, said hinge arm having a spring tail portion adapted to yieldably engage the neck of the bottle in order to automatically close the cap.

2. In combination, a sheet metal cap or closure having an inner cork filler adapted to fit the mouth end of a bottle, said cap having oppositely arranged tapering flanged openings, a pair of arms having tapering portions tapering toward shoulders, said portions being swivelly mounted in said flanged openings with the flanges of the openings contacting against said shoulders, one of said arms acting as a hinge arm, while the other constitutes a latch arm, a ring arranged on the neck of the bottle below a shoulder thereof, to which the hinge arm is pivoted, said ring having an undercut notch to be engaged by the latch arm, said latch arm adapted to be swung laterally upon its swiveled connection out of the way of the path of the notch, said cap, owing to its swiveled connection with the hinge arm, may be inverted when the cap is opened, said hinge arm having a spring tail portion adapted to yieldably engage the neck of the bottle, in order to automatically close the cap.

1,065,588. SANITARY COVER FOR WAGONS. CHARLES W. CARTER, Detroit, Mich. Filed Oct. 10, 1912. Serial No. 724,909. (Cl. 21—7.)



1. The combination with a wagon box having front and end boards of a top therefor consisting of a pair of segmental end plates adapted to rest on the front and end boards of the box, means detachably securing the plates in position, a top member connecting the upper portion of the end plates, and a pair of curved cover boards pivotally secured to the end plates to swing past each other, the upper margins of the cover boards overlapping and the lower margins contacting with the box side when the top is closed, each cover board being transversely divided between its ends to form sections and the adjacent margins of such sections having interlocking sliding engagement with each other whereby any one section may be raised without disturbing the other sections.

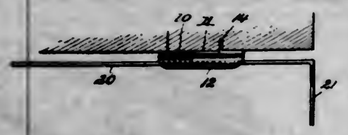
2. A wagon having a front board and an end board and a top therefor consisting of a pair of segmental end plates, guides for holding the end plates in alinement on the front and end boards respectively, means detachably securing the end plates in position, a longitudinally disposed top member connecting the upper portions of the end plates, a bearing member on each end plate in substantially axial coincidence with the center of curvature thereof, a pair of quadrant frames journaled on each bearing member to swing past each other from side to side of the box, and sections of cover boards carried at the outer ends by the oppositely disposed members of each pair of quadrant frames, and interlocked in sliding engagement at the inner, meeting margins, the sections when in closed position spanning the wagon box between the sides and end plates.

3. The combination of a wagon box having front and end boards therein, of a top consisting of a pair of end plates resting respectively on the front and end boards, means detachably securing the plates in position, a top member secured to the upper portions of the end plates, an inwardly projecting flange on the curved margin of each end plate, quadrant frames each pivoted at substantially the center of curvature of an end plate, a pair of curved cover boards divided transversely into sections, the outer end portions of which underlie the end plate flanges and are supported by the quadrant frames, and the inner end portions of which are in interlocked sliding engagement, the cover boards being adapted to inclose the box between the sides and end plates when the outer lateral margins of the several sections are in contact with the box sides, and each section of the top being movable independently of the other sections.

1,065,589. WINDOW-SHADE BRACKET. WILLIAM B. CASWELL, Newport, R. I. Filed Mar. 15, 1912. Serial No. 684,063. (Cl. 156—24.)

1. A shade roller bracket comprising a body having wings turned outwardly at the sides to form guides for a casing for a curtain rod support, said body having a reduced extension at one end and the reduced portion turned under the body to support and stiffen the same, spurs extending from the turned-under portion, and a fastening

device operating through the body and the turned-under portion.



2. A shade roller bracket comprising a body having wings turned outwardly at the sides to form guides and with the body curved outwardly between the guides at one end, said body having a reduced extension at one end and the reduced portion turned under the body to support and stiffen the same, and a fastening device extending through the body and the turned-under portion.

3. A shade roller bracket comprising a body having wings turned outwardly at the sides to form guides and with the body curved outwardly between the guides at one end, said body having a reduced extension at one end and the reduced portion turned under the body to support and stiffen the same, a fastening device extending through the body and the turned-under portion, and a curtain roller support including an uncurved plate adapted to be forced beneath the guides and in engagement with the curved portion of the body.

4. A shade roller bracket comprising a body having wings turned outwardly at the sides to form guide-ways for the base of a curtain rod support, said body having a reduced extension at one end divided into a plurality of portions and the outer portions of the reduced extension turned under the body to support and stiffen the same and the central portion of the reduced extension turned outwardly against the guides, spurs extending from the turned-under portions, and a fastening device operating through the body.

5. A shade roller bracket comprising a body having inwardly directed guideways in the side edges and a resilient tongue integral with the body and projecting into the space between the guideways and adapted to engage a plate supported between the guideways.

1,065,590. CONTRACTILE WELL-BORING TOOL. ASA G. COLLINS, Everett, Wash. Filed Nov. 15, 1909. Serial No. 528,076. (Cl. 166—6.)



1. A well boring tool comprising a conoidal-shaped body formed with a series of radially-disposed elongated slots each extending from a point removed from the upper end of the body to the lower end thereof, said body-portion having a central longitudinal bore extending from the upper end thereof and merging with said slots, said slots providing said body with more than two elongated contractible arms each having angular sides of the same height throughout, each of said arms further being sector-shaped in cross-section and having its lower end provided with an arc-shaped annular cutting edge at the outer marginal portion thereof and further provided with a tapered radial cutting edge extending from said annular cutting edge and bi-secting the angle included between the sides of the arms and said annular cutting edge of each of said arms being of a uniform width throughout at each side of the outer terminus of the other cutting edge of the arm, the inner termini of the radial cutting edges of the arms substantially meeting upon a complete contraction of the arms, and a pipe adapted to engage said contractible arms to hold the same in a closed position.

2. A well boring tool comprising a conoidal-shaped body formed with a series of radially-disposed elongated slots each extending from a point removed from the upper end of the body to the lower end thereof, said body portion having a central longitudinal bore extending from the upper end thereof and merging with said slots, said slots providing said body with elongated contractible arms, an uninterrupted combined curved and straight cutting edge upon the lower end of each of said arms, and the inner termini of the straight portion of said cutting edges of the arms substantially meeting at a point upon the complete contraction of all of the arms, and a pipe adapted to engage said contractible arms to hold the same in a closed position.

1,065,591. SCHEDULE FOR TRAINS, TICKET-RATES, AND TIME-TABLES. ALBERT DELMER COWDEN, Waterford, Cal. Filed Sept. 25, 1911. Serial No. 651,248. (Cl. 11—19.)

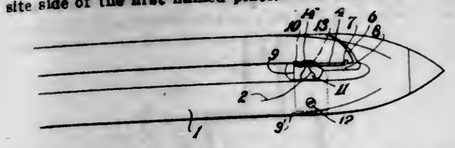


1. A schedule for the purpose set forth, consisting of a chart divided geographically into sequential ordered divisions, each division having an identifying sign, an index alphabetically arranged according to the geographical names upon the chart and provided with signs identical with the sequential signs upon the chart, and a schedule for each division bearing the division identifying sign, said chart, index and schedule checking one another.

2. A schedule for the purpose set forth, consisting of a chart divided geographically into sequential ordered divisions, each division having an identifying sign, an index alphabetically arranged according to the geographical names upon the chart and provided with signs identical with the sequential signs upon the chart, and a schedule for each division bearing the division identifying sign and setting forth the starting and arriving times of trains and the respective trains numbers, said chart, index and schedules checking one another.

1,065,592. SHUTTLE. JEAN BAPTISTE DAUDELIN and EUSEBE H. DAUDELIN, Fall River, Mass. Filed May 11, 1910. Serial No. 560,578. (Cl. 139—46.)

1. In a shuttle of the class described having a bobbin chamber, a transverse delivery opening, and a threading slot leading into said delivery opening, a slotted plate longitudinally disposed in said opening, a second plate in said opening and located longitudinally thereof but at right angles to said first named plate, said second plate having a recessed end extending through the slot in the first named plate, whereby the mouth of said recess opens on the opposite side of the first named plate.



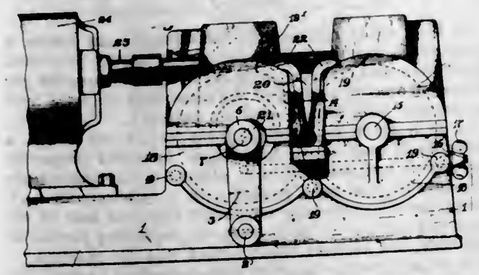
2. In a shuttle of the class described having a bobbin chamber, a transverse delivery opening, and a threading slot leading into said delivery opening, a plate longitudinally disposed in said opening and having a forward notch disposed centrally of the shuttle and a longitudinal slot near one side of the shuttle, a second plate at one side of said opening and located longitudinally thereof but at right angles to said first named plate, said second plate having a narrow mouthed recess in its end, said end extending through the slot in the first named plate, whereby the mouth of said recess opens on the opposite side of the first named plate.

3. In a shuttle of the class described, a plate having a notch centrally disposed on one of the edges and a slot near one end, and a second plate having a notched end, the notched end of said plate loosely entering the slot of said plate to form a thread trap.

4. In a shuttle of the class described having a transverse delivery opening, a longitudinal tongue having a slot therein and an upturned tip at its forward end, said tip being covered by a recess in the shuttle body but leaving a passage on each side of said tongue and a thread trap consisting of a plate having a forked end projecting through the slot of said tongue.

5. In a shuttle of the class described having a transverse delivery opening therein, a longitudinal tongue having a slot, said tongue located in said opening and having a thread passage on each side of it and a forked thread trap consisting of a plate having its open end projecting through the slot in said tongue.

1,065,593. CUTLERY-POLISHING MACHINE. PATRICK DAVIS, New York, N. Y. Filed Dec. 11, 1912. Serial No. 736,087. (Cl. 51—6.)



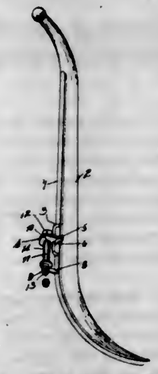
1. In a cutlery polishing machine, in combination, a frame, a pair of shafts rotatably mounted therein, rocking arms pivotally mounted on said frame and supporting one of said shafts whereby the latter is movable in a lateral direction, co-acting disks carried by said shafts, and means for rotating said shafts in opposite directions, said means comprising gear wheels mounted on said shafts and driving means engaging said wheels, the points of engagement of said driving means with said wheels and the pivotal points of support of said arms lying on opposite sides of the shafts, whereby the movable shaft will be constantly urged toward the other shaft.

2. In a cutlery polishing machine, in combination, a frame, a pair of shafts rotatably mounted therein, rocking arms pivotally mounted on said frame and supporting one of said shafts whereby the latter is movable in a lateral direction, co-acting disks carried by said shafts, worm wheels secured to said shafts, a driven shaft and oppositely disposed worms on said driven shaft operatively engaging said worm wheels, the points of engagement of said worms with said wheels and the pivotal points of support of said arms lying on opposite sides of the shafts, whereby the movable shaft will be constantly urged toward the other shaft.

3. In a cutlery polishing machine, in combination, a frame, a pair of shafts rotatably mounted therein, one of said shafts being movable in a lateral direction, co-acting disks carried by said shafts, worm wheels secured to said shafts, a driven shaft and oppositely disposed worms on said driven shaft operatively engaging said worm wheels, the worm which engages the worm wheel on said transversely movable shaft being arranged to constantly urge said shaft toward the other of said shafts.

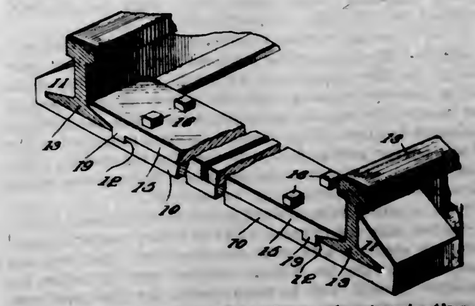
4. In a cutlery polishing machine, in combination, a frame comprising a base, an end plate detachably secured thereto and removable cover plates, and polishing disks rotatably supported in said frame.

1,065,594. ADJUSTABLE START FOR HAMES. WILLIAM F. DAVIS, San Francisco, Cal. Filed Dec. 14, 1911. Serial No. 665,733. (Cl. 54—31.)



The combination with a hame, of a stationary start fixed thereto and provided with a threaded eye, a rod extending along the hame and spaced therefrom, a start having a perforation receiving said rod whereby the start is adjustably mounted on the rod, said adjustable start having one end recessed to receive and straddle the adjacent surface of the hame and said adjustable start having an eye in the outer end, a bolt extending through the eyes of the fixed and movable starts and threaded into engagement with the eye of the fixed start, and a nut engaging the threaded end of said bolt.

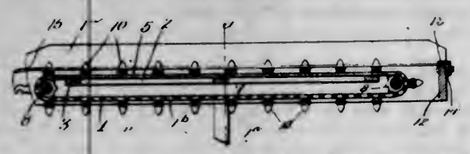
1,065,595. RAIL-HOLDING DEVICE. JOHN B. DEMARY, Plattsburg, N. Y. Filed May 13, 1912. Serial No. 697,022. (Cl. 238—5.)



A metallic tie including a body member terminating in upwardly and inwardly directed shoulders shaped to en-

gage over the outer flanges of the rails and to bear against the vertical webs thereof, said tie being provided with transversely extending channels in its upper face, the side walls of said channels being vertical, said tie being further provided adjacent said channels with tapped bores, and clamping plates adapted to be secured upon the tie and equal in thickness to the tie, the end faces of said clamping plates at their outer ends being beveled to engage over the inner flanges of the rails and being provided with downwardly depending shoulders adapted to seat in the channels and bear against the inner rail flanges, the side faces of said shoulders lying at right angles to the lower faces of the plates, said plates being provided with bores in alinement with the bores of the tie but greater in diameter, and a plurality of bolts passed through the bores of the plates and threaded into the bores of the tie to secure the plates to the tie and the rails to the tie.

1,065,596. CONVEYER. JOSEPH DICK, Canton, Ohio. Original application filed Aug. 3, 1912, Serial No. 713,085. Divided and this application filed Oct. 9, 1912. Serial No. 724,693. (Cl. 193—8.)



1. A fodder-cutter feed-conveyer including a frame with chain gearings mounted therein, cross strips on the gear chains having series of spaced teeth thereon, a bearing board in the frame between the upper strands of the chains for the cross strips, and longitudinal face bars forming the bottom of the conveyer secured to the frame at the forward end and extending thence freely between and beyond the teeth of the several strips, and below the points of the teeth.

2. A fodder-cutter feed-conveyer including a frame with chain gearings mounted therein, cross strips on the gear chains having series of spaced teeth thereon, and longitudinal face bars forming the bottom of the conveyer secured to the frame at the forward end and extending thence freely between and beyond the teeth of the several strips, and below the points of the teeth.

3. A fodder-cutter feed-conveyer including a frame, cross strips with series of teeth thereon traveling in the frame, and longitudinal face bars forming the bottom of the conveyer secured to the frame at the forward end and extending thence freely between and beyond the teeth of the several strips, and below the points of the teeth.

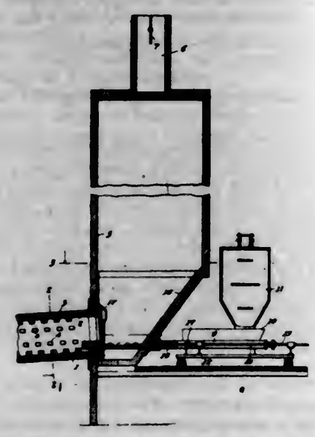
4. A cross strip for a fodder-cutter feed-conveyer having grooves in its edges, and a plate having a plurality of teeth thereon with tongues on its sides clamped in the grooves for securing the plate on the strip.

1,065,597. CEMENT-BURNING KILN. THOMAS A. EDISON, Llewellyn Park, Orange, N. J. Filed Jan. 27, 1906. Serial No. 298,270. (Cl. 222—7.)

1. In a cement burning apparatus, the combination with a rotary kiln, of a settling chamber with which the upper end of the kiln connects, a hopper in said settling chamber, a conveyer running from the bottom of the hopper to the bore of the kiln for returning to the kiln the material deposited by the settling chamber, a main conveyer outside of the hopper and leading into the kiln for feeding material thereto, and means for adjusting the position of the main conveyer, substantially as set forth.

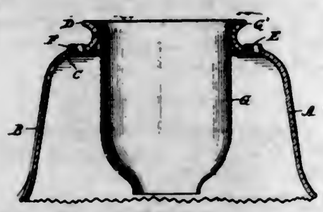
2. In a rotary kiln, a stack provided with a base having a chamber adapted to receive and to retain matter dropped from the stack, a kiln-tube connected with the base and terminating with its interior portion slightly below the chamber thereof, and movable means for positively conducting the descending matter from the stack-flue directly into said kiln.

3. In a rotary kiln, a kiln tube, a stack having a base provided with a chamber, the walls of the bottom portion whereof are downwardly inclined, a conveyer located in the bottom of said chamber and terminating in said kiln-



tube, the inclined walls of said chamber adapted to conduct matter dropping from said stack directly to said conveyer and said conveyer adapted to conduct the matter directly into said kiln-tube, substantially as set forth.

1,065,598. SHADE FOR INVERTED INCANDESCENT GAS-LAMPS. STEPHEN F. ELKINS, Pittsburgh, Pa., assignor to Elkins Glass Company, Limited, Pittsburgh, Pa. Filed Aug. 12, 1912. Serial No. 714,631. (Cl. 240—92.)



1. In a shade for inverted incandescent gas lamps, a glass shade body having an integral upwardly projecting supporting neck adapted to be secured to an inverted gas burner, the upper portion of the glass body outward from its integral neck formed with air passages.

2. In a shade for inverted incandescent gas lamps, a glass shade body having an integral upwardly projecting supporting neck adapted to be secured to an inverted gas burner, the glass body formed with a substantially horizontal shoulder extending outwardly from the base of the neck and uniting the latter with the depending portion of the body, said shoulder being formed with air passages.

3. In a shade for inverted incandescent gas lamps, the combination of a glass shade body and a glass supporting neck integral with and projecting upwardly from the body and adapted to be secured to an inverted gas burner, an inner chimney for the burner seated in and depending from the neck and closing the neck passage at the exterior of the chimney, the upper portion of the shade body below the neck formed with air passages.

1,065,599. TYPE-WRITER KEYBOARD-COVER. ALBERT E. ELLIOTT, Cincinnati, Ohio. Filed July 20, 1912. Serial No. 710,682. (Cl. 197—105.)

1. A keyboard cover comprising a cover member supported substantially in a horizontal plane above the keyboard, means at one end of said cover member to attach it in position relative to the keyboard, and means at the opposite end to attach said cover member to the operator.

2. A keyboard cover comprising a flexible cover member to extend from the type-writer to the operator above the keyboard, means at one end of said cover member to hold said cover member in position above the keyboard, and means at the opposite end of said cover member to attach said member to the operator.

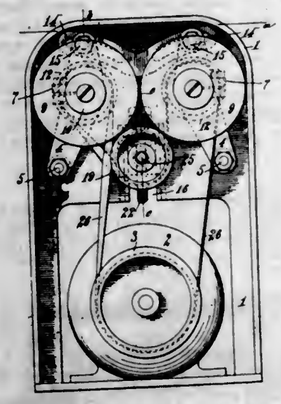


3. A keyboard cover comprising a flexible cover member supported substantially in a horizontal plane above the keyboard, means at one end of said cover member to detachably attach said cover member to a type-writer above the keyboard, and means to detachably connect the opposite end of said cover member to the operator.

4. A keyboard cover comprising a flexible cover member to extend from the type-writer to the operator above the keyboard, means at one end of said cover member to detachably support said cover member above the keyboard, and a flexible metal member to detachably connect the opposite end of said cover member to the operator.

5. A keyboard cover comprising a flexible cover member to extend from the type-writer to the operator above the keyboard, means at one end of said cover member to detachably support said cover member above the keyboard, and a flexible yoke to detachably connect the opposite end of said cover member to the operator.

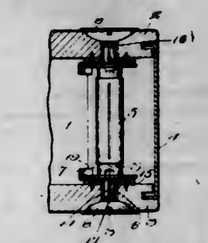
1,065,600. SWITCHBOARD-PLUG CLEANER. LUTHER J. EUCHENHOFER and WALTER C. B. ANDERSON, Dayton, Ohio. Filed Feb. 10, 1913. Serial No. 747,305. (Cl. 51—4.)



1. In a machine of the type specified, the combination with a suitable frame of cloth wheels, angular arms fulcrumed at their lower ends on said frame and having clamp bearings at their intermediate portion for the shafts of said cloth wheels, a slotted projection on the upper portion of said frame, and bolts penetrating the upper ends of said arms and the slots in said projection for adjusting the arms and therewith the cloth wheels relatively to each other, and suitable means for driving said cloth wheels, substantially as specified.

2. In a machine of the type specified, the combination with a frame, cloth wheels of buffers, angular arms fulcrumed on said frame and having their intermediate portion provided with bearings for the shafts of said cloth wheels, pulleys mounted upon said shafts between the arms and the frame, a slotted projection on the upper end of said frame, bolts passing through the upper ends of said arms and the slots in said projection for adjusting the relative positions of the cloth wheels, an idler mounted below said cloth wheels within an opening in said frame, means for adjusting said idler vertically, and a driven belt passing around the pulleys of the cloth wheels and said adjustable idler, substantially as specified.

1,065,601. FILM-SPOOL CENTER. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 9, 1911. Serial No. 664,730. (Cl. 242—71.)



1. In a film spool center, the combination with a socket member embodying a tube having a longitudinal slot therein provided with a recess in one of its walls, of a stem movable longitudinally within the tube between an inward spool engaging position and a retracted position, and a projection on the stem adapted to traverse the slot in the tube and to yieldingly engage in a direction laterally of the slot with the recess in the wall thereof, one of said engaging parts being resiliently mounted.

2. In a film spool center, the combination with a socket member embodying a resilient tube having a longitudinal slot therein provided with a recess and a transverse slot at one end thereof forming a resilient recessed jaw, of a stem movable longitudinally within the socket between an inward spool engaging position and a retracted position and a projection on the stem adapted to traverse the slot in the tube in contact with the resilient jaw and to be yieldingly engaged by the recess therein to maintain the stem in one of its positions.

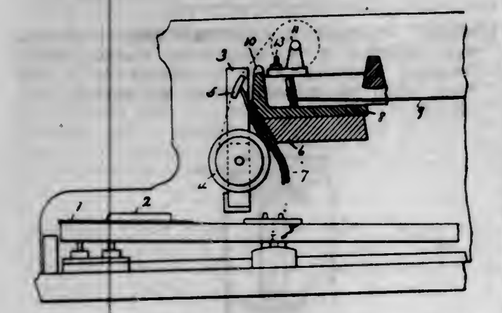
3. In a film spool center, the combination with a socket piece embodying a mounting plate and a tube secured therein at one end provided with a longitudinal slot and a transverse slot at the base thereof forming resilient jaws, said jaws being provided with oppositely arranged pairs of recesses, of a stem movable longitudinally within the tube between an inward spool engaging position and a retracted position and a pin on the stem adapted to traverse the slot between the jaws and to be yieldingly engaged by the respective pairs of recesses to maintain the stem in its respective positions.

1,065,602. MUSICAL-INSTRUMENT ROLL PARTS. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Dec. 21, 1912. Serial No. 737,959. (Cl. 84—161.)

1. A manual keyboard of a musical instrument having the front part of some of its keys higher than others; a wrest-plank and a front rail above said keys rearward of said high front parts of said keys, said wrest-plank and rail being adjacent to each other, and said rail having a cut-away part midway its front; and a take-up roller positioned partly within and partly below said cut-away part of said rail.

2. A manual keyboard of a musical instrument having the front part of some of its keys higher than others; a wrest plank and a front rail above said keys rearward of said high front parts of said keys, and having a cut-away part midway their fronts; and a take-up roller positioned partly within and partly below said cut-away parts.

3. A manual keyboard of a musical instrument having the front part of some of its keys higher than others; a wrest-plank and a front rail above said keys rearward of said high front parts of said keys, said wrest-plank and rail being adjacent to each other, and said rail having a cut-away part midway its front; and a tracker bar positioned within said cut-away part of said rail.

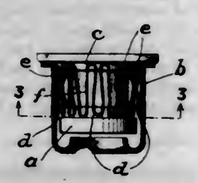


4. A manual keyboard of a musical instrument having the front part of some of its keys higher than others; a wrest plank and a front rail above said keys rearward of said high front parts of said keys and having a cut-away part midway their fronts; and a tracker bar having tubes thereto; said tracker bar positioned in said cutaway part of said rail, and said tubes extending through said cutaway part of said wrest plank.

5. A manual key board of a musical instrument having the front part of some of its keys higher than others; a wrest plank and front rail above said keys rearward of said high front parts of said keys, and having a cut-away part midway their fronts, a string supporting plate on top said wrest-plank and immediately rearward of said rail and having its front part reduced rearwardly adjacent said cutaway parts; and a tracker bar having tubes thereto, said tracker bar positioned in said cutaway part of said rail, and said tubes extending through said cutaway part of said wrest plank and the rearwardly reduced space in said front part of said plate.

[Claims 6 to 18 not printed in the Gazette.]

1,065,603. SPRING FOR SPRING-BEARINGS. CHARLES GOEBLER, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, a Corporation of New Jersey. Filed Oct. 24, 1910. Serial No. 588,593. (Cl. 64—48.)



1. An annular spring for insertion between an inner bushing member and an outer casing member, said spring comprising a wire composed of vertically-extending single wire sections integrally united alternately at top and bottom, whereby each vertically-extending single-wire section forms a part of two adjacent loops respectively closed at top and bottom, the closed upper ends of the loops comprising two sets arranged at two different distances from the axis of the spring and the closed lower ends of the loops comprising two sets also arranged at two different distances from the axis of the spring and alining respectively with the two sets of closed upper ends of the loops, whereby the spring is adapted to contact both at top and bottom with both members of the bearing.

2. An annular spring for insertion between an inner bushing member and an outer casing member, said spring comprising a wire bent zigzag to form a series of vertically extending single-wire sections, certain pairs of single-wire sections having their open upper ends at one distance from the axis of the spring and being bent downward between their ends so that their closed lower ends are at another distance from the axis of the spring, certain other pairs of single-wire sections having their open lower ends at the first-named distance from the axis of the spring and being bent upward between their ends so that their closed upper ends are at the second-named distance from the axis of the spring, whereby are formed double wire spring fingers each of which extends throughout the height of the spring from one bearing member to the other.

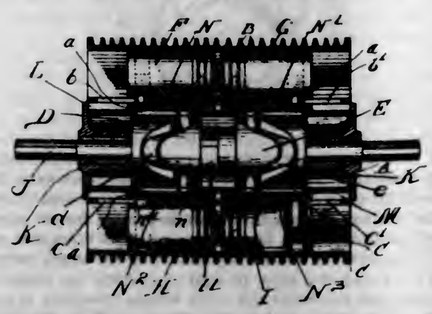
3. An annular spring for a spring bearing comprising a wire composed of vertically extending single wire sections integrally united alternately at top and bottom and formed as follows: two adjacent single wire sections bent to form a spring finger extending outward from the spring's axis and upward from its lower end, the next adjacent single-wire section extending substantially parallel to the spring's axis, the next two adjacent single wire sections bent to form a spring finger extending outward from the spring's axis and downward from its upper end, the next adjacent single-wire extending substantially parallel to the spring's axis, and so on throughout substantially the circumference of the spring.

4. An annular spring for a spring bearing comprising a wire composed of vertically-extending single wire sections integrally united alternately at top and bottom, certain pairs of single wire sections being bent at an angle to the plane of extension of the spring to form spring fingers extending downward from the upper portion of the spring, and certain other pairs of single-wire sections being bent on an angle to the plane of extension of the spring to form spring fingers extending upward from the lower portion of the spring, the bearing points of the spring fingers of each set being in alinement with each other but out of alinement with the spring fingers of the other set.

5. An annular spring for a spring bearing comprising a wire bent zig-zag to form a series of longitudinally-extending loops, said loops closed at their upper ends and bent between their ends at an angle to the axis of the spring, loops, alternating with the first named loops, closed at their lower ends and bent between their ends at an angle to the axis of the spring, and single wire sections connecting oppositely bent loops and extending substantially parallel to the axis of the spring.

[Claims 6 to 11 not printed in the Gazette.]

1,065,604. FLUID-MOTOR. THOMAS J. GRAY, Chicago, Ill. Filed Aug. 24, 1904, Serial No. 221,945. Renewed Nov. 29, 1912. Serial No. 734,196. (Cl. 121—51.)



1. A fluid motor comprising a cylinder, a reciprocating trunk piston therein, a rotary shaft parallel with said piston, a rotary cam on said shaft, said cam being positioned at one side of said piston and having a zigzag and endless cam-groove, a slide mounted directly between the adjacent sides of the piston and cam, together with means carried by the slide for engaging said cam-groove and for engaging the side of the piston, whereby the reciprocation of said piston is converted into rotation on the part of the said shaft.

2. An internal combustion engine comprising a cylinder, a rotary shaft, another cylinder, a pair of pistons disposed at one side of said shaft, in one cylinder, a pair of pistons disposed at the opposite side of said shaft, in the other cylinder, the members of each pair of pistons having an explosion chamber between their opposing ends, a pair of zigzag and endless cam-grooves carried by said shaft, and means carried on the circumference or periphery of the said pistons for engaging said cam-grooves, said shaft being thereby balanced against endwise thrust.

3. An internal combustion engine comprising a rotary shaft, a pair of pistons at each side of said shaft, a casing made in three parallel sections, the middle casing-section inclosing said shaft, and the other casing-sections each inclosing a pair of pistons, a pair of zigzag and endless cam-grooves carried by said shaft, reciprocating slides moving in spaces between the casing-sections, and projections on said slides engaging said pistons and grooves.

4. An internal combustion engine comprising a casing, a rotary shaft supported in said casing, a pair of pistons working in the casing at one side of said shaft, a pair of pistons working in the casing at the other side of said shaft, the members of each pair of pistons having an explosion chamber between their opposing ends, a pair of zigzag and endless cam-grooves carried by said shaft, means actuated by said pistons and adapted to engage said cam-grooves, admission and exhaust valves, a pair of parallel horizontally arranged reciprocating rods connected with the exhaust valves, reciprocating members having beveled ends adapted to engage suitable portions of said rods, and a cam on said shaft for engaging said members and thereby operating said exhaust valves, the shaft and pistons being parallel.

5. The combination of a reciprocatory piston, a rotatable member, and means for balancing said member against endwise thrust, and for converting the reciprocation of said piston into rotation on the part of said rotatable member, said means including rotary cams on said member, another piston, the two pistons opposing each other, and means carried on the circumference or periphery of the two pistons for engaging said cams, together with an explosion chamber between the opposing ends of said pistons.

[Claims 6 to 25 not printed in the Gazette.]

1,065,605. PROCESS OF REMOVING SULFUR AND PHOSPHORUS FROM IRON AND SIMILAR METALS. ALBERT E. GREENE, Chicago, Ill., assignor to American Electric Smelting and Engineering Company, St. Louis, Mo., a Corporation of Missouri. Filed Nov. 6, 1911. Serial No. 658,810. (Cl. 204—64.)

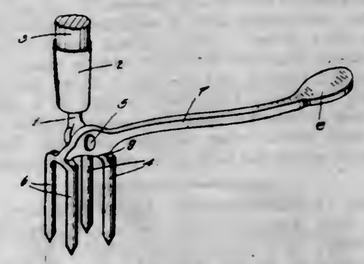
1. The process of eliminating phosphorus and sulfur from metals, which consists in subjecting lime to electric heat and thereby producing vapor of lime, and introducing said vapor into the body of the metal under treatment.

2. The process of eliminating phosphorus and sulfur from metals, which consists in subjecting lime to electric heat in the presence of a reducing agent, and introducing the resultant vapors and gases into the body of the metal under treatment.

3. The process of eliminating phosphorus and sulfur from metals, which consists in subjecting lime to electric heat in the presence of a gaseous reducing agent, and introducing the resultant vapors and gases into the body of the metal under treatment.

4. The process of eliminating phosphorus and sulfur from metals, which consists in heating lime in an electric furnace, withdrawing the resultant vapors by suction and thereby facilitating the vaporization of the lime, and introducing said vapors into the body of the metal under treatment.

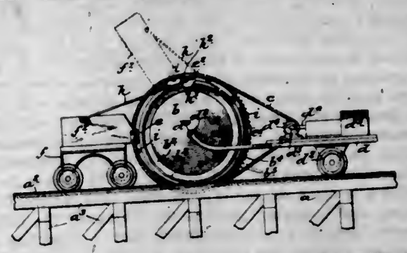
1,065,606. WEED-PULLER. MORRIS C. HAYES, Seattle, Wash. Filed Nov. 25, 1912. Serial No. 733,294. (Cl. 55—148.)



1. In a weed-puller, a jaw-member provided with a handle and a plurality of prongs in parallel offset relation thereto, another jaw-member pivotally connected to said first-named jaw-member and provided with a plurality of prongs, a lever integrally connected to the second named jaw-member extending in rectangular directions relative to the prongs integral therewith and also when inoperative extending in rectangular directions relative to said handle.

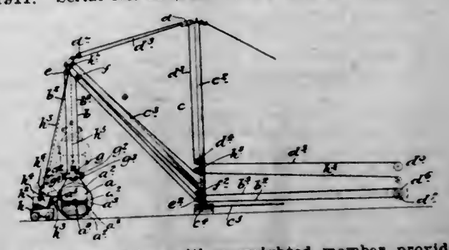
2. In a weed-puller, the combination of a jaw-member including a shank, a handle connected to said shank, a pair of prongs offset in parallel axial alinement with said handle and affording a protruding shoulder, another jaw-member pivotally connected to said shank provided with a pair of prongs oppositely disposed relative to said first named prongs, a lever integrally connected to the second named jaw extending in rectangular directions relative to the prongs integral therewith and adapted to rest upon said shoulder to limit the extent of separation of said jaws.

1,065,607. CONCRETE MIXER AND CONVEYER. PATRICK A. HENNESSY, Belvidere, N. J. Filed Oct. 23, 1911. Serial No. 656,234. (Cl. 83—73.)



In combination, a rotative mixing receptacle with means for rolling the same, and an independently supported filling device adapted to be operatively connected with said receptacle to discharge its contents thereinto, said filling device being discharged by the rolling movement of said receptacle.

1,065,608. CONCRETE MIXER AND CONVEYER. PATRICK A. HENNESSY, Belvidere, N. J. Filed Oct. 24, 1911. Serial No. 656,381. (Cl. 83—73.)

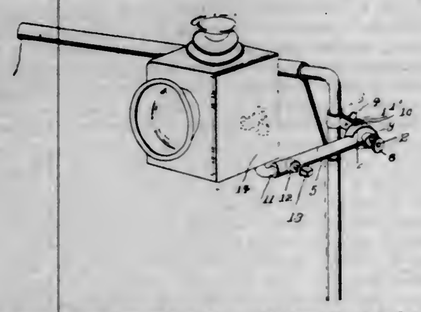


1. The combination with a weighted member provided with a cable pulley, of a cable engaging and passing nearly around the same, a separate device for inwardly deflecting

the cable, said device engaging and acting upon the cable at automatically varying distances above the said weighted member, and means connected with said cable to cause the same to rise and revolve said member.

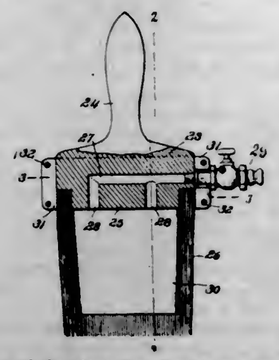
2. The combination with a weighted member provided with a cable pulley, a cable passing nearly around the same, means connected with said cable to cause the same to raise and revolve said member, a device for inwardly deflecting said cable above said member to a greater or less extent depending upon the weight carried by said cable, said device being movable upwardly from said member to enable the cable to be disengaged therefrom.

1,065,609. LAMP-SUPPORT. EDWIN G. HINES, Drums, Pa. Filed Apr. 18, 1912. Serial No. 691,586. (Cl. 248—3.)



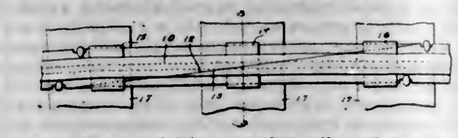
A lamp holder comprising a tubular member having one end thereof open and its other end closed and provided with a laterally extending enlargement, the face of which is formed with intersecting grooves, there being an opening formed in the enlargement at the intersection of said grooves and extending transversely through the tubular member, co-acting clamping members supported on the enlargement and provided with registering openings, one of said clamping members being formed with an angularly disposed flange having a rib thereon adapted to fit within the grooves of the enlargement, a clamping screw secured to the angular flange of said clamping member and extending through the opening in the enlargement and tubular member respectively, for securing the clamping members in position on said enlargement, a rod slidably mounted within the tubular member and provided with means for supporting a lamp, a set screw extending through the tubular member and engaging the rod for clamping the latter in different positions of adjustment, and a clamping screw extending through the co-acting clamping members for securing said members to a support.

1,065,610. FOUNTAIN-BRUSH. JOSEPH L. HOOKER, Anderson, Ind. Filed Mar. 13, 1912. Serial No. 683,430. (Cl. 15—49.)



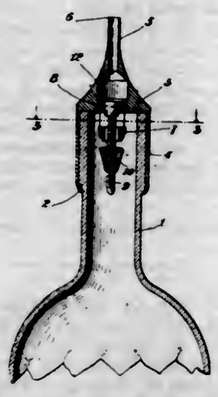
In a device of the class described a brush comprising a head having a handle at one end and reduced at the other end to form a shoulder intermediate the head and with a bore in the head and communicating through the reduced portion, a conduit connected into said bore, a flexible tubular nozzle member bearing around the reduced portion of said brush head and inclosing the outlet of said brush-head bore, bristles engaging over said nozzle member, clamp plates bearing around said brush head and projecting over the upper portions of the bristles, and means for clamping said plates upon said head, whereby the bristles and the nozzle are secured by the same clamping plates.

1,065,611. RAIL-JOINT. SETH B. HYATT, Sedalia, Mo. Filed Aug. 23, 1912. Serial No. 716,764. (Cl. 239—8.)



In a railway rail joint, coacting rails each formed from a plate bent upon itself longitudinally and with hollow heads and opposing half webs engaging face to face and opposing half flanges retaining their full size and engaging at their confronting edges, the rails at the ends being reversely beveled through the heads, webs and flanges of the rails, and clamp members comprising base portions extending beneath the beveled portions of the rails, and integral webs extending over the flanges and against the webs of the rails from opposite sides.

1,065,612. NON-REFILLABLE BOTTLE. GAETANO IMPELLITTERI and ANTONINO IMPELLITTERI, New York, N. Y. Filed Jan. 3, 1913. Serial No. 739,991. (Cl. 215—66.)

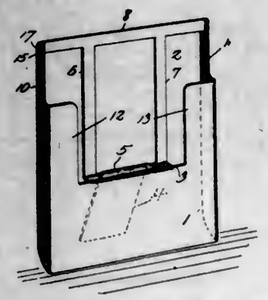


In a non-refillable bottle, the combination of a cap having a side wall engaging the outer surface of the bottle neck, a contracted tubular discharge orifice, a valve cage located in and having a screw-threaded engagement with the inner walls of said cap and having a valve orifice in its upper end communicating with intake orifices located on the sides of said cage, a valve adapted to close said valve orfice and open outwardly and having a stem arranged to extend through said cage and an adjustable stop mounted on and having a screw-threaded engagement with said stem, substantially as described.

1,065,613. CALENDAR-STAND. NELSON LEE JACOBUS, West Orange, N. J., assignor to Electro-Chemical Engraving Co., a Corporation of New York. Filed Feb. 28, 1913. Serial No. 751,210. (Cl. 40—122.)

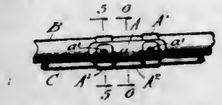
A stand for calendars or the like, made from a single piece of sheet material and comprising a front portion, a back portion cut out from the front portion on lines extending from the upper edge of the piece of sheet material down to a line short of the lower edge of the same, a

supporting member cut out from said back portion on lines extending from below the upper edge of said back portion to a line short of the lower end of said back portion, thereby forming the back portion with longitudinal bars connected at the top and bottom by transverse members, said back portion being first bent rearwardly substantially at a right angle and thence upwardly substantially parallel to the front portion, thereby forming a shelf out of



the bottom transverse member, and the supporting member being bent rearwardly and downwardly to form a support, sides on said front portion bent rearwardly from said front portion, inwardly extending wings on said front portion, whereby the back, sides, wings and shelf constitute a pocket for the reception of cards or the like, and means for securing the sides and back portion together.

1,065,614. SPRING-ATTACHING CLIP. SAMUEL J. LAVEZZI, Chicago, Ill., assignor of one-half to Irvin C. Lambert, Chicago, Ill. Filed Mar. 3, 1913. Serial No. 751,833. (Cl. 5—29.)



1. A clip of the character described comprising a body portion provided with a slot and having an extension adapted to encircle the parts to be connected and arranged to be passed through said slot with its free end doubled back upon said body portion both the body portion and extension forming a loop encircling said parts.

2. A clip of the character described comprising a body portion provided with a slot and having an extension adapted to encircle the parts to be connected and arranged to be passed through said slot with its free end doubled back upon said body portion, said free end having an opening to receive a tool both the body portion and extension forming a loop encircling said parts.

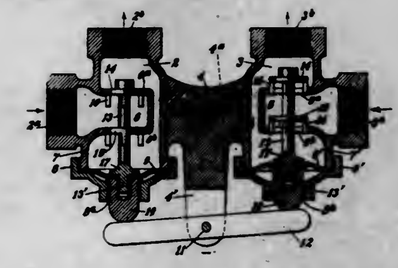
3. A clip of the character described comprising a body portion provided with a slot and having an extension adapted to encircle the parts to be connected and arranged to be passed through said slot and also having a short extension adapted to engage only one of said parts both the body portion and extension forming a loop encircling said parts.

4. A clip of the character described comprising a body portion provided with two slots near opposite ends and having two extensions projecting from the same edge of the body portion and located in line with the slots respectively, said extensions being arranged to encircle the parts to be connected and the free ends thereof to be passed through said slots and bent over upon said body portion.

5. A clip of the character described comprising a body portion provided with two slots near opposite ends and having two extensions projecting from the same edge of the body portion and located in line with the slots respectively, said extensions being arranged to encircle the parts to be connected and the free ends thereof to be passed through said slots and bent over upon said body portion, said free ends having openings to receive a tool in the act of applying the clip.

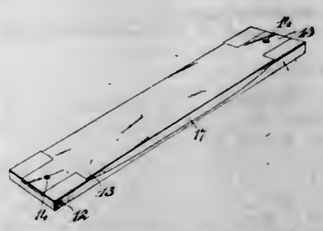
[Claim 6 not printed in the Gazette.]

1,065,615. EQUALIZING-VALVE FOR WATER. JAMES J. LAWLER, Pelham, N. Y. Filed Oct. 30, 1911. Serial No. 657,600. (Cl. 137—26.)



An equalizing valve comprising a body-portion having two parallel transverse chambers cast integral therewith, each chamber being provided with an inner chamber having two outlet ports, a member in each transverse chamber comprising a guided valve in each port, said members operating parallel to each other, a diaphragm detachably-connected to each member, a plunger connected to each of said members and extending outwardly from the body portion, means for holding the diaphragms on the lower ends of the transverse chambers, means for controlling said plungers so that they may be moved in opposite directions to each other, said last-named means being externally positioned upon the body portion, each transverse chamber having a terminal outlet alining with its respective plunger and also having an inlet entering between the two ports of its inner chamber, the said two inlets directed toward each other.

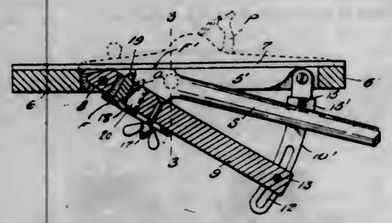
1,065,616. TICKET-HOLDER. ELMER E. MARLATT, Newark, N. J. Filed July 29, 1911. Serial No. 641,374. (Cl. 40—10.)



1. A ticket-holder comprising two rigid plates adapted to be placed one on the other, the bottom plate having its top face concave both longitudinally and transversely, the top plate having its bottom face formed convex both longitudinally and transversely, the opposed faces of the plates forming a transversely and longitudinally curved slot closed at the ends.

2. A ticket-holder comprising two rigid plates adapted to be placed one on the other, the bottom plate having its top face concave both longitudinally and transversely, the top plate having its bottom face formed convex both longitudinally and transversely, the opposed faces of the plates forming a transversely and longitudinally curved slot closed at the ends, the radius of the transversely curved face of the bottom plate being larger than that of the top plate, the radius of the longitudinally curved face of the top plate being larger than that of the bottom plate.

1,065,617. SPOKE-PLANING MACHINE. JAMES A. McDOUGALL, Seattle, Wash. Filed Sept. 14, 1912. Serial No. 720,831. (Cl. 144—147.)

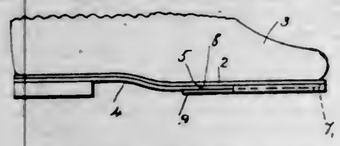


1. In a device of the character described, the combination of a frame comprising spaced side and end members and provided with a guide way for a plane, an arm hingedly secured to the frame in proximity to the forward end thereof, a stop provided upon said arm and means extending through one of the frame side members and cooperating with the other of such members for clamping the work therebetween.

2. A device of the character described, the combination of a frame provided in its upper face with a guide way for a plane, an arm hingedly connected with and extending below said frame, bars extending downwardly from the frame, means for securing said arm to the bars in adjusted angular relations with respect to the plane supporting surface of said way, a gage bar adjustably secured to one of the aforesaid bars, and an adjustable stop secured to said arm, and means for clamping the work within the frame.

3. A device of the character described, the combination of a frame provided in its upper face with a guide way for a plane, an arm hingedly connected with said frame, bars extending downwardly from the frame for supporting the free end of the arm, means for securing said arm to the bars in adjusted angular relations with respect to said frame, a stop secured to said arm, and means for clamping the work within the frame.

1,065,618. SHOE. CHARLES MINER, Wilkes-Barre, Pa. Filed Mar. 13, 1912. Serial No. 683,644. (Cl. 36—15.)

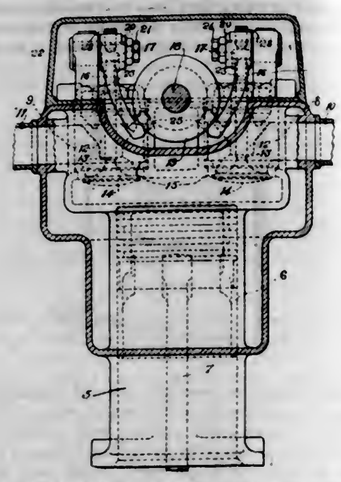


1. The combination, with the main portion of a shoe sole provided with a projecting stop under its instep, of a guide piece secured around the toe and front part of the sole, and a removable sole plate provided with a tongue around its toe and front portion which is slidable in the guide piece, said sole plate having a shoulder at its rear part which is sprung into engagement with the said stop, and having also a flap which overlaps the stop.

2. A shoe provided with a guide piece at the front end portion of its sole and having a stop under its instep, said shoe having also a removable sole plate which is slidable into and out of engagement with the said guide piece and which has a shoulder at its rear part which is sprung into engagement with the said stop, the said sole plate being held in position by frictional contact between the said shoulder and stop and its own elasticity.

1,065,619. EXPLOSIVE-ENGINE. RAYMOND C. MITCHELL, Springfield, Ohio. Filed Nov. 4, 1912. Serial No. 729,301. (Cl. 123—90.)

1. In a valve operating mechanism, the combination, with a cylinder having a port, and a valve including a stem for closing said port, of a positively operated valve-actuating lever fulcrumed on the cylinder and having one end disposed above and normally in direct contact with the upper end of the valve stem for positively unseating the valve upon the down stroke of said lever, and a connection between the lever and the stem for reseating the valve immediately following the limit of the up stroke of the lever.



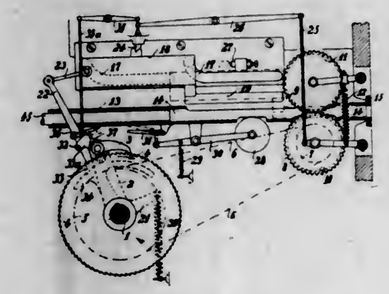
2. In a valve operating mechanism, the combination, with a cylinder having a port, and a valve including a stem for closing said port, of a positively operated valve-actuating lever fulcrumed on the cylinder and having one end disposed above and normally in direct contact with the upper end of the valve stem for positively unseating the valve upon the down stroke of said lever, and a connection including a yieldable element between the lever and the stem, said element being compressed during the up stroke of the lever and expanded to reseat the valve immediately following the limit of upward movement of said lever.

3. In a valve operating mechanism, the combination, with a cylinder having a port, and a valve including a stem for closing said port, of a positively operated valve-actuating lever fulcrumed on the cylinder and having one end disposed above and normally in direct contact with the upper end of the valve stem for positively unseating the valve upon the down stroke of said lever, an auxiliary lever fulcrumed intermediate its ends to the valve-actuating lever and having pivotal connection at one end with the valve stem, and a coil spring interposed between the valve-actuating lever and the other end of the auxiliary lever arranged to be compressed during the up stroke of the valve-actuating lever and to expand immediately following the limit of upward movement thereof to rock the auxiliary lever to reseat the valve.

4. In a valve operating mechanism, the combination, with a cylinder having a port, and a valve including a stem for closing said port, said stem being formed adjacent its end with a groove and at its end with a head, of a positively operated valve-actuating lever fulcrumed on the cylinder and having one end disposed above the head of the stem, an adjusting screw carried by said lever for engagement with said head, an auxiliary lever fulcrumed intermediate its ends to the valve-actuating lever and having one end forked to receive the grooved portion of the stem, and a coil spring interposed between the valve-actuating lever and the other end of the auxiliary lever arranged to be compressed during the up stroke of the valve-actuating lever and to expand immediately following the limit of upward movement thereof to lock the auxiliary lever to reseat the valve.

1,065,620. FEEDING DEVICE FOR CUTTING MECHANISM. HANS MÜLLER, Hagen, Westphalia, Germany. Filed Nov. 25, 1911. Serial No. 662,464. (Cl. 164—49.)

1. In combination with a pair of spring-pressed feed rolls, a guide passage arranged to direct the feed of metal thereto, a pusher bar carried by a movable part and arranged to be introduced thereby into said passage behind the feed, guides for said movable part, means for automatically moving said bar along to a predetermined point and means for automatically withdrawing said rod, lifting it out of the said channel and restoring it to its first position, these movements being governed by said guides substantially as set forth.



2. In combination with feeding means for metal cutters, a device for following behind the feed to and through said means, a detent for preventing said device from moving forward beyond a certain point, guides for directing said device into and out of position behind the feed and forward and back in its reciprocating travel, mechanism for automatically moving said device, as governed by said guides, into and out of such position and forward and back as set forth.

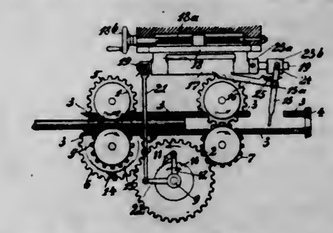
3. In combination with a pair of feed rolls for cutting devices, a movable bar adapted to coöperate therewith in feeding the metal and to pass between the said rolls, a stop preventing the said bar from being moved forward too far, a tube for guiding said bar to said rolls, the said tube being slotted on top to receive said bar, guides for directing said bar down into said slot and up out of the same, means for automatically moving said bar down into said tube and forward in the same and means for automatically moving said bar back through the tube and into its first position.

4. In combination with feeding means for cutting devices, an auxiliary pusher bar for the feed, a tube leading to said feeding means having a slot on top to admit said bar and an opening underneath, a carrier for said bar, guides for said carrier directing said bar through said slot alternately into and out of position behind the feed, a device entering said opening to receive the impact of said bar on its return movement and to be forced outward thereby, a movable catch for the said bar in its inoperative position, intervening connections whereby said catch is operated by the outward movement of said device and means for automatically reciprocating said bar substantially as set forth.

5. A pair of spring pressed feeding rolls for cutters and mechanism for intermittently operating the same, in combination with a pusher bar adapted to pass in between said rolls behind the feed and complete the feeding movement, a stop for preventing said bar from moving too far forward, a guide-passage directing the feed and pusher bar to said rolls, a reciprocating slide carrying said bar, guides for said slide directing said bar into said channel in its forward movement and out of the same in its return movement, mechanism for moving said slide and bar forward, mechanism for moving said slide and bar backward, a device automatically introduced into the said passage as said bar passes forward beyond it, mechanism for effecting the rearward movement of said bar and connections from said inserted device to such return-actuating mechanism whereby such insertion brings said mechanism into operative position.

[Claims 6 and 7 not printed in the Gazette.]

1,065,621. FEEDING AND CUTTING MECHANISM. HANS MÜLLER, Hagen, Westphalia, Germany. Filed Nov. 25, 1911. Serial No. 662,465. (Cl. 164—49.)



1. In the automatic feed mechanism of a cutting machine of the class referred to the combination therewith of a detent mechanism and of means adapted to actuate the same in conjunction with the traveling action of the feed the said detent mechanism being adapted to control the distance of the movement of the feed, substantially as described and for the purpose set forth.

2. In the automatic feed mechanism of a cutting machine of the class referred to the combination therewith of a detent mechanism, of means adapted to, in conjunction with the traveling action of the feed, operate the same, and of feeding devices operating at different speeds, substantially as described.

3. In an automatic feed mechanism for a cutting machine of the class referred to the combination therewith of a detent lever extending into the path of the feed, a spring adapted to actuate the said lever, an alternately rotating shaft, a box loosely turnable on the said shaft, an arm extending from the said box, the said lever being supported in the said arm and adapted to swing in the direction of the feed, a movable and rotatable coupling member connected with the said lever, another coupling member within engagement of the first-mentioned member, and of two sets of rollers adapted to be operated intermittently and at various speeds, substantially as described and for the purpose mentioned.

4. In combination, in automatic feed mechanism, a detent lever extending into the path of the feed, an alternately rotating shaft, a collar carried by said shaft, the upper end of said lever being slidably pivoted to said collar, an arm loosely mounted on said shaft and providing a fulcrum for said lever, a spring interposed between the upper part of said lever and said arm acting to force said arm and the upper part of said lever apart, an intermittently operated clutch connection between said collar and said shaft, and a pair of feeding rolls.

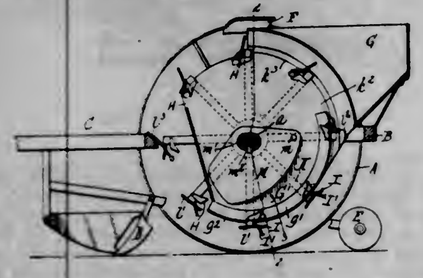
5. In combination, in automatic feed mechanism, a detent lever extending into the path of the feed, an alternately rotating shaft, a collar carried by said shaft, the upper end of said lever being connected to move with said collar, an arm loosely mounted on said shaft and providing a fulcrum for said lever, a spring interposed between said arm and the upper part of said lever, an intermittently operated clutch connection between said collar and said shaft and means for feeding the article to be operated upon.

1,065,622. POTATO-PLANTER. CLIFFORD H. PEEK, East Aurora, N. Y. Filed Feb. 12, 1913. Serial No. 747,873. (Cl. 111—27.)

1. In a potato planter, the combination of a hopper having a trough portion, and a device which is adapted to pass through said trough and which comprises a jaw having an inclined part forming a recess with the base of said trough into which the potatoes are caused to enter by the movement of said jaw through the trough, and means for holding the potatoes on said jaw, substantially as set forth.

2. In a potato planter, the combination of a hopper having inclined sides, and a trough into which the potatoes are directed by said inclined sides, said trough having a longitudinal slot and a device which comprises a jaw

which is adapted to pass through said trough and which has an inclined part forming a recess with the base of said trough into which the potatoes are caused to enter by the movement of said jaw through the trough, and means adapted to extend through said slot in the trough to hold said potatoes on said jaw, substantially as set forth.



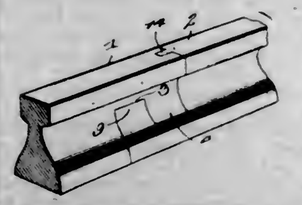
3. In a potato planter, the combination of a hopper for potatoes, a slot in the wall of said hopper, and a device comprising a jaw which is adapted to move through said hopper adjacent to said slot, and a plurality of holding arms of different lengths which are adapted to extend through said slot and retain a potato on said jaw, the shorter of said arms passing through the slot in advance of the longer arms, substantially as set forth.

4. In a potato planter, the combination of a hopper for potatoes, a slot in the wall of said hopper, a device comprising a jaw which is adapted to move through said hopper adjacent to said slot, and a plurality of holding arms of different lengths which are adapted to extend through said slot and retain a potato on said jaw, the shorter of said arms passing through the slot in advance of the longer arms, and a connection between said arms to prevent a succeeding arm from entering the slot after one of said arms has engaged a potato, substantially as set forth.

5. In a potato planter, the combination of a hopper for potatoes, a device comprising a jaw adapted to pass through said hopper into engagement with the potatoes, and a plurality of holding arms pivoted on said jaw and adapted to be moved toward said jaw one in advance of the other for holding the potatoes in place therein, and a connection between said arms to prevent the movement of succeeding arms toward the member after one of said arms engages a potato, substantially as set forth.

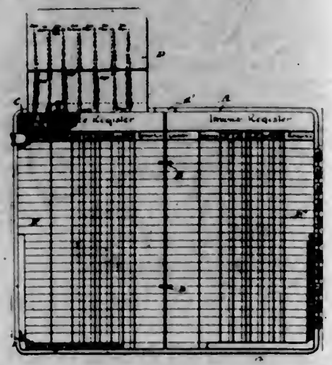
[Claims 6 to 14 not printed in the Gazette.]

1,065,623. RAIL-JOINT. ISAAC M. PECK. Tiffin, Ohio, assignor of one-half to James A. Funk, Tiffin, Ohio. Filed July 22, 1912. Serial No. 710,951. Renewed Apr. 28, 1913. Serial No. 764,262. (Cl. 239—8.)



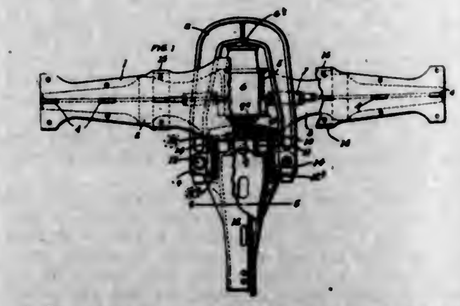
In a rail joint, a rail section cut away at its end from the base thereof to provide a depending projection and adjacent recess thereon, the extreme end of said rail being provided with a vertical slot therein, an opposed rail section cut away at its end from the tread portion thereof to provide an upwardly extending projection and recess adapted to respectively receive the recess and depending projection of the other rail section, the recesses of said rail sections being provided with grooves in certain of the walls thereof, ribs formed of certain of the walls of the projections of said rail sections adapted to enter the aforesaid grooves in the recesses thereof, and an additional rib formed on the one wall of the recess of said last mentioned section adapted to be received in the slot in the end of the first mentioned rail section.

1,065,624. INVOICE-REGISTER. CHARLES L. PETERS, Marinette, Wis. Filed Aug. 8, 1912. Serial No. 713,983. (Cl. 11—19.)



A loose-leaf invoice register comprising a suitable binder, a series of index-leaves on impaling-devices of the binder each provided at an outer edge thereof with an indicator denoting a month in a year, the indicators being arranged in calendar order; and an invoice-table in connection with each index-leaf comprising a left hand key-column of numerals indicating the days of the month of the relative index-leaf in regular order reading down as well as auxiliary columns of numerals to the right of the one aforesaid each indicating a progressive order of days in a month or months indexed thereon, the numerals in the several columns being in lines and the auxiliary columns indicated by a scale number denoting an arbitrary division of days of time ahead of the dates indicated in said key-column.

1,065,625. TRANSOM DRAFT-GEAR. HARRY M. PFLAGER, St. Louis, Mo., assignor to Transom Draft Gear Company, St. Louis, Mo., a Corporation of Delaware. Filed Sept. 28, 1911. Serial No. 651,803. (Cl. 213—42.)



1. In a transom draft gear, the combination of a bolster having a cylindrical boss for the reception of a spring cylinder, openings on each side of said boss for the passage of the yoke, and a transom draft gear comprising a draw bar yoke, draft springs and friction members, which draw bar yoke and draw bar are connected to the friction members so as to swing horisontally relative thereto.

2. In a transom draft gear, the combination of a bolster having a cylindrical boss at its center, lugs in advance of said boss, a follower plate bearing against said lugs, a spring cylinder having lugs bearing against the bolster, said spring cylinder extending through said cylindrical boss, a yoke passing through openings in the bolster and

engaging the rear end of said spring cylinder, and a draw bar to which the forward ends of said yoke are connected, said draw bar bearing against said follower plate, and which yoke and draw bar are mounted to swing horizontally with respect to the bolster and spring cylinder.

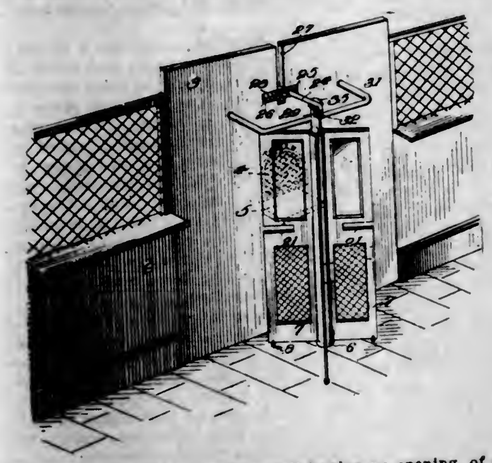
3. In a transom draft gear, the combination of a bolster, a spring cylinder slidingly mounted therein, a follower plate, a yoke engaging the rear end of said spring cylinder and adapted to swing horizontally relative thereto, a draw bar connected to the forward ends of said yoke and engaging said follower plate, and center springs arranged on each side of said draw bar and bearing against said bolster.

4. In a transom draft gear, the combination with a bolster, of a yoke, the legs of which extend through openings in the web of the bolster, a draw bar connected to said yoke, a friction spring cylinder positioned in the bolster and bearing against the rear portion of the yoke, a follower plate between the friction spring cylinder and the rear end of the draw bar carried by the yoke, which yoke and draw bar are adapted to swing horizontally relative to the bolster and friction spring cylinder, and centering springs between the draw bar and the bolster.

5. In a transom draft gear, the combination with a bolster having a centrally disposed cylindrical boss and having openings through its vertical web to the sides of said boss, of a spring cylinder positioned in the cylindrical boss, a draw bar yoke, the legs of which extend through the openings to the sides of the cylindrical boss, the inner rear face of which yoke is curved and bears against the rear end of the spring housing, a draw bar connected to the forward ends of the yoke, and a follower plate in front of the spring cylinder, which follower plate is provided with a curved bearing face against which the rear end of the draw bar engages.

[Claims 6 to 10 not printed in the Gazette.]

1,065,626. PROTECTIVE DEVICE FOR BANKS. WLADISLAUS RAKOWSKI, Davis, W. Va. Filed June 4, 1912. Serial No. 701,693. (Cl. 39—140.)



1. The combination with a wall having an opening, of a tubular rotatable member, radiating barriers carried by said rotatable member, a flange forming one end of the rotatable member and provided with a plurality of perforations, a lever having one end extending into the space behind said wall and the other end extending to a position in alinement with said flange, said last named end of the lever being formed with terminal teeth adapted to engage in said perforations when the lever is depressed to hold the rotatable member and barriers from rotation.

2. The combination with a floor, a wall extending upward from said floor and formed with an opening, of a rotatable tubular member extending through the floor and disposed opposite said opening, a plurality of radiating barriers mounted upon said tubular member and rotatable therewith, a terminal flange formed upon the lower end of the rotatable member below the floor and having perforations, supporting means for the upper end of the rotatable member, and an angular lever mounted below the floor having the inner end thereof projecting up into the space behind the said wall and econstituting a treadle, the other end thereof extending in alinement with the tubular member and being provided with teeth engageable with the perforations in said flange.

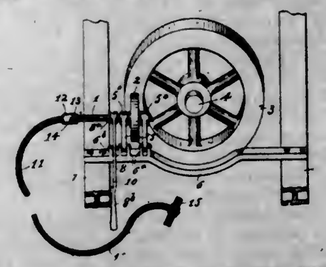
3. The combination with a wall having an opening therein, of a rotatable member mounted before said opening, a plurality of radiating barriers disposed on said rotatable member, a lever, one end of which is adapted to engage the rotatable member to hold it from rotation when the lever is depressed, and means for latching the lever in its depressed position.

4. The combination with a wall formed with a window opening, of a rotatable support mounted in front of the window opening, a plurality of radiating barriers carried by said support, a locking member vertically movable into or out of engagement with the rotatable member, means disposed behind the wall for operating said locking member, a shield supported on the inside of the wall above said window but adapted to shift into position in front of the window, a latch supporting the shield in its raised position, a detent engaging said latch, and a member disposed below the latch and into position to be engaged by the locking member in its vertical movement into engagement with the rotatable member to force the latch out of engagement with the detent to permit the shield to drop.

5. The combination with a wall formed with a window opening, of a tubular rotatable member disposed in front of the window opening and carrying one member of a clutch, radial barriers supported on the tubular member, a lever extending beneath the wall and projecting on the inside face thereof adjacent to the window, said lever carrying at its outer end the other member of said clutch, said last named member when the lever is depressed operatively engaging the first named member to prevent a rotation of the barriers, a shield disposed within the wall and normally supported above the window opening, a latch supporting said shield and projecting out through said wall and above the rotatable member, a detent detachably holding said latch in its latching position, and a member disposed within the tubular member at its upper end engaging said latch and at its lower end projecting below the tubular member into position to be engaged by the outer end of said lever to release the latch from the detent upon a movement of the lever to lock the barriers.

[Claims 6 to 10 not printed in the Gazette.]

1,065,627. DRIVING MECHANISM FOR POLISHING DEVICES. GEORGE W. REDBURN, College Place, Wash. Filed Mar. 4, 1912. Serial No. 681,392. (Cl. 74—26.)

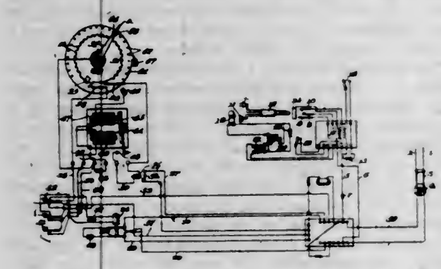


1. A driving mechanism for an automobile polishing device, comprising frame side members, a cross supporting member provided with bearing lugs, bearing arms pivotally mounted in said bearing lugs, a driving shaft mounted at the free ends of said bearing arms and extending above one of said frame side members, a friction pulley on said driving shaft between said bearing arms, an operating lever similarly mounted and connected to said cross supporting member and said driving shaft whereby the latter and said bearing arms may be simultaneously moved, and adjusting

mechanism for securing said operating lever in any desired adjusted position.

2. In a driving mechanism for an automobile polishing device, the combination with the fly wheel and the side members of the frame of an automobile; of a cross supporting member connected to said side members, bearing arms pivotally mounted and supported on said cross supporting member, a driving shaft mounted at the free ends of said bearing arms, a friction pulley carried by said shaft between said bearing arms and adapted to be thrown into and out of frictional engagement with said fly wheel, an operating lever pivotally mounted on said cross supporting member and connected to said driving shaft whereby the latter and said bearing arms may be moved to throw said friction pulley into and out of engagement with said fly wheel, said operating lever extending beneath and adjacent to one of said side members, and adjusting mechanism connected to said lever and said adjacent side member.

1,065,628. SIGNAL-SENDING DEVICE. HARRY O. RUGH, Sandwich, Ill., assignor, by mesne assignments, to The Hall Switch & Signal Company, a Corporation of Maine. Original application filed May 4, 1909, Serial No. 493,940. Divided and this application filed Nov. 13, 1909. Serial No. 527,858. (Cl. 179—85.)



1. In a signal sending device for selectively calling a plurality of stations, the combination with a movable member and means controlled thereby to select either one of a plurality of stations and to restore the apparatus thereat to normal after actuation, a handle to operate said member to send a call for a predetermined station, means to render ineffective the restoration controlling means, auxiliary switching means for including currents of given electrical character with the line circuit for selecting succeeding stations, auxiliary switching means for including currents of different electrical character with the line circuit for substation signal release purposes, and a line circuit to which said devices and means are adapted for association.

2. In a signal sending device for selectively calling a plurality of stations, the combination with a movable member and means controlled thereby to select either one of a plurality of substation signal receiving devices, means for operating said member to send a call for a pre-determined station, means controlled by said member whereby to restore said signal receiving devices when said member has completed its signal sending operation, auxiliary means to temporarily render said signal receiving device restoration controlling means ineffective, and auxiliary means to select succeeding stations.

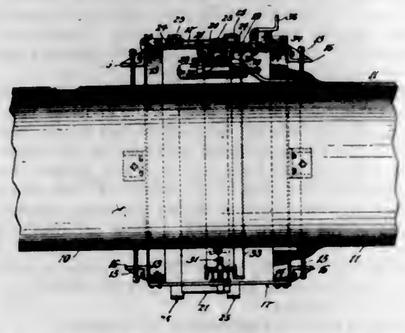
3. In a signal sending device for selectively calling one or more of a plurality of stations, the combination with a call box having means when actuated to select for operation any desired station and to control the restoration thereof upon completion of the call, auxiliary means to temporarily render ineffective the restoration controlling means, and auxiliary means to select succeeding stations.

4. In a signal sending device for selectively calling one or more of a plurality of stations, the combination with a call box having means when actuated to select for operation any desired station and to control the restoration thereof upon completion of the call, auxiliary means to temporarily render ineffective the restoration controlling means, said means including a circuit controlling switch, and auxiliary means to select succeeding stations.

5. In a signal sending device for selectively calling one or more of a plurality of stations, the combination with a call box having means when actuated to select for operation any desired station and to control the restoration thereof upon completion of the call, auxiliary means to temporarily render ineffective the restoration controlling means, and auxiliary means to select succeeding stations, said last aforesaid means including electrical switching devices.

[Claim 6 not printed in the Gazette.]

1,065,629. MACHINE FOR CALKING PIPE-JOINTS. COLIN C. SIMPSON, Jr., Flushing, N. Y. Filed Apr. 2, 1912. Serial No. 688,095. (Cl. 78—47.)



1. A device of the class described comprising a foundation frame adapted to be suitably centered and mounted upon a pipe, a guiding track supported thereon, an engine-carrying ring adapted to run in said track, a tamping engine carried by said ring, and means for causing said ring and engine to travel around said frame, substantially as described.

2. A device of the class described comprising a foundation frame adapted to be suitably centered and mounted upon a pipe, slides on said frame, a guiding track fastened to said slides, means for causing said slides and track to move transversely of the frame, an engine-carrying ring adapted to run in said track, a tamping engine carried by said ring, and means for causing said ring and engine to travel around said frame, substantially as described.

3. A device of the class described comprising a foundation frame adapted to be suitably centered and mounted upon a pipe, slides on said frame, one or more tamping engines supported by said slides, and means for causing said slides and engine or engines to move transversely of said frame, substantially as described.

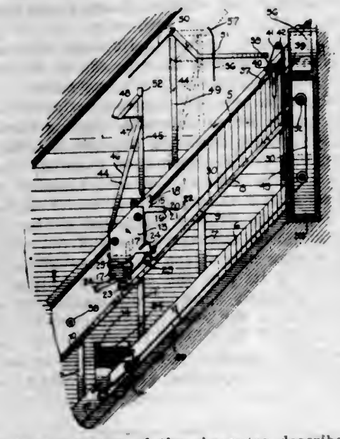
4. A device of the class described comprising a foundation frame adapted to be suitably centered and mounted upon a pipe, a guiding track supported thereon, an engine-carrying ring adapted to run in said track and having one or more open supports for engines, a tamping engine adapted to be carried by any one of said supports, and means for causing said ring and engine or engines to travel around said frame, substantially as described.

5. A device of the class described comprising a foundation frame adapted to be suitably centered and mounted upon a pipe, a guiding track supported thereby, an engine carrying track adapted to run in said first named track and having a suitable rack on its edge, a pinion engaging said rack, and one or more tamping engines carried by said ring, substantially as described.

[Claims 6 to 12 not printed in the Gazette.]

1,065,630. MAIL-DELIVERING APPARATUS. JOSEPH STEIN, Washington, D. C. Filed Jan. 22, 1913. Serial No. 743,597. (Cl. 214—4.)

1. In an apparatus of the character described, parallel inclined track ways, a weighted car to travel on one of said track ways, a carrier to travel on the other track way, a flexible connection between the car and the carrier, and a counter weight carried by said carrier to normally hold the same at the lower end of its inclined track way against the gravity movement of said weighted car.



2. In an apparatus of the character described, parallel inclined track ways, a weighted car to travel on one of said track ways, a carrier to travel on the other track way, a flexible connection between the car and the carrier, a counter-weight carried by said carrier to normally hold the same at the lower end of its inclined track way against the gravity movement of said weighted car, and means on the carrier to release the counter-weight therefrom substantially as and for the purpose specified.

3. In an apparatus of the character described, parallel inclined track ways, a weighted car to travel on one of said track ways, a carrier to travel on the other track way, a flexible connection between the car and the carrier, a counter-weight carried by said carrier to normally hold the same at the lower end of its inclined track way against the gravity movement of said weighted car, means on the carrier to release the counter-weight therefrom, and means for automatically resupplying a counter-weight to the carrier when the same reaches the upper end of its inclined track way, substantially as and for the purpose specified.

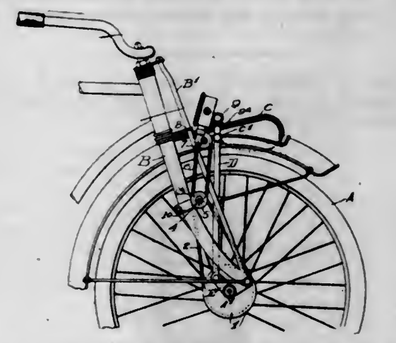
4. In an apparatus of the character described, parallel inclined track ways, a car to travel upon one of the track ways, an article carrier to travel upon the other track way, a releasable counter-weighting medium carried by said carrier to normally hold the same at the lower end of its track against the gravity movement of said car, a flexible connection between the car and carrier, means on the carrier to release the counter-weighting medium whereby the gravity movement of the car causes the carrier to ascend, and means automatically actuated by the carrier when the same reaches the terminus of its ascent to resupply the counter-weighting medium thereto.

5. In an apparatus of the character described, a track, a car to travel upon said track, means for propelling said car, a mail support mounted upon the car, a receptacle to receive the mail arranged adjacent to the track, stationary means mounted above the track to automatically remove the mail from the support, a directing member mounted above the track to direct the mail into the receptacle, and an automatically actuated movable member arranged above said directing member to insure the discharge of the mail thereon.

[Claims 6 to 18 not printed in the Gazette.]

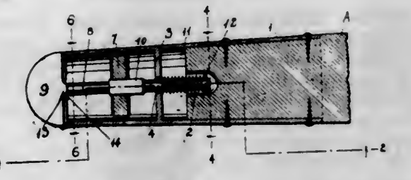
1,065,631. SPEEDOMETER DRIVING CONNECTION FOR MOTOR-CYCLES. JOHN K. STEWART, Chicago, Ill., assignor to Stewart-Warner Speedometer Corporation of Virginia. Filed Sept. 14, 1912. Serial No. 720,312. (Cl. 235—96.)

1. In combination with a motorcycle having a road wheel, a frame supported thereon, comprising a fork straddling said road wheel and a speedometer mounted on the frame, means for driving said speedometer from said road wheel, comprising a pulley on the road wheel, a pulley journaled on the fork substantially in the plane of said road wheel pulley, a driving belt connecting said pulleys, and means operatively connecting said upper pulley with the speedometer extending laterally outside the fork of the frame.



2. In combination with a motorcycle having a road wheel, a frame supported thereon, comprising a fork straddling said road wheel, and a speedometer mounted on the frame, means for driving said speedometer from said road wheel, comprising a pulley on the speedometer, a pulley on the road wheel, a countershaft supported on the fork and carrying two pulleys, one of said pulleys being substantially in the plane of the road wheel pulley, and the other being positioned laterally outside the fork of the frame, and driving belts connecting said pulleys, respectively, with the road wheel pulley and the speedometer pulley.

1,065,632. TRACE-FASTENER. JEREMIAH STOKES, Jr., Salt Lake City, Utah. Filed Oct. 17, 1912. Serial No. 726,292. (Cl. 21—79.)



1. A trace fastener for whiffle-trees comprising a casing having oppositely disposed openings in the side walls thereof, a rotary member mounted in said casing, and a trace engaging element on said member adapted to be projected through the openings in the casing on the turning of said member in one direction and to be housed within the casing on the turning of said member in the opposite direction.

2. A trace fastener for whiffle-trees comprising a casing having openings in its side walls, a shaft slidable longitudinally in said casing, resilient means for retaining said shaft within the casing, a trace engaging element mounted on said shaft within the casing and adapted to project beyond the outer face of the casing on the turning of the shaft in one direction and to be housed within the casing on the turning of the shaft in the other direction.

3. A trace fastener for whiffle-trees comprising a casing having openings in its side walls, a shaft slidable longitudinally in said casing, resilient means for retaining said shaft within the casing, a trace engaging element mounted on said shaft within the casing and adapted to project beyond the outer face of the casing on the turning of the shaft in one direction and to be housed within the casing on the turning of the shaft in the other direction, a thumb piece on said shaft, and coöperating means on said thumb piece and casing for holding the shaft in adjusted position

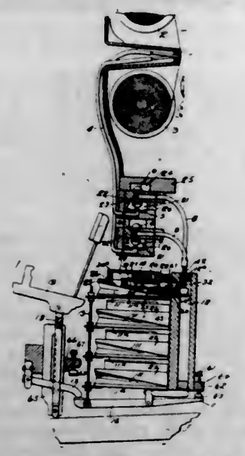
4. A trace fastener for whiffle-trees comprising a casing having an apertured transverse partition therein and openings in its side walls, a shaft rotatably and slidably mounted in said casing and extending through the aperture in the partition thereof, a coiled spring on said shaft beyond said partition, means for holding said spring in working position, a trace engaging element mounted on said shaft within said casing and adapted to project beyond the outer face of the casing on the turning of the shaft in one direction and actuating means for said shaft on its outer end.

1,065,633. DINNER-PAIL. CHARLES H. STONE, Manila, Philippine Islands. Filed Sept. 12, 1912. Serial No. 720,001. (Cl. 220—52.)



A dinner pail comprising a U-shaped handle member a frame pivotally secured to the free ends of its arms and disposed in the same plane therewith, supporting arms secured to the arms of the U-shaped handle member, said supporting arms having their free ends bent inwardly and upwardly, a plurality of superimposed compartments provided with eye members slidably engaged over the upwardly bent portions of the supporting arms, and a closure for the uppermost compartment adapted to be engaged by said frame in one position thereof to secure the compartments against movement upwardly of the supporting arms.

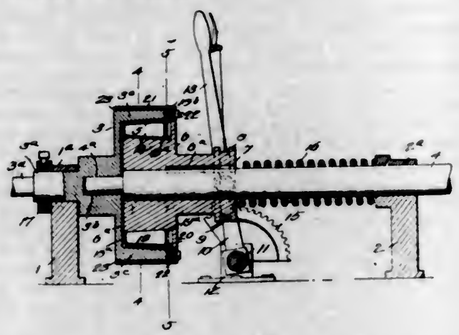
1,065,634. PNEUMATIC ACTION FOR AUTOMATIC PLAYING MECHANISM. EMIL SWANSON, Steger, Ill., assignor to Steger & Sons Piano Manufacturing Company, Steger, Ill., a Corporation of Illinois. Filed Jan. 8, 1913. Serial No. 740,768. (Cl. 84—233.)



1. The combination with the hammer action of a piano, a pneumatic action for an automatic playing mechanism comprising a vertically-extending exhaust chamber, power pneumatics mounted on and extending from the rear wall of said chamber one for each of the hammers to be operated having their moving walls arranged for collapsing upward and expanding downwardly; a lever for each power pneumatic fulcrumed between its ends and having its fulcrum supported by the exhaust chamber underneath the same; a manually operable stop adjustable for limiting the upward movement of the forward end of each of said levers mounted upon the exhaust chamber and overhanging said end; a support fixed with respect to the hammer action and a manually operable adjustable stop mounted on said support overhanging the rear end of the lever for limiting the collapsing stroke of the pneumatic.

2. In combination with the hammer action of a piano, a pneumatic action for an automatic playing mechanism, comprising a vertically-extending exhaust chamber, horizontally-extending power pneumatics mounted upon and protruding from the rear wall of said chamber and arranged for collapsing upwardly; a lever for each motor pneumatic having its fulcrum supported on the exhaust chamber at the lower side thereof and a rod connecting it with the moving wall of the power pneumatic for upward movement of its rear end upon the collapse of the pneumatic; a manually operable adjustable stop for the opposite movement of the lever mounted upon the exhaust chamber; a support fixed with respect to the hammer action; a manually operable adjustable stop on said support for limiting the hammer actuating stroke of the lever upon the collapse of the pneumatic.

1,065,635. CLUTCH. EDWARD J. SWEET, Tampa, Fla., assignor, by direct and mesne assignments, of three-twelfths to Walter T. Jaimeson, Tampa, Fla., and two-twelfths to T. Ed. Bryan and two-twelfths to J. H. Bonacker and W. A. Bonacker, the last two being co-partners under the firm-name of Bonacker Brothers, Hillsboro county, Fla. Filed May 28, 1912. Serial No. 700,149. Cl. 192—8.)



1. In a friction clutch, a pair of main clutch members, one of said members having a tapered recess, a plurality of tapered rollers carried by the other clutch member and arranged to engage the tapered walls of the recess of the first-named clutch member for frictionally holding said clutch members together.

2. In a friction clutch, a pair of main clutch members, one of said members being provided with a tapered recess, the other clutch member having a tapered body portion, an annular casing arranged to fit over the tapered body portion of the second-named clutch member, and a series of tapered rollers carried by said casing and arranged to engage the tapered walls of said first-named clutch member.

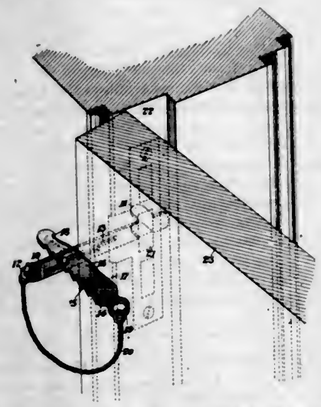
3. In a friction clutch, a pair of main clutch members, one of said clutch members having a tapered recess, the other clutch member having a tapered body portion, an annular casing arranged to fit over said tapered body portion and being provided with a series of tapered bores, and tapered rollers carried within the bores of said casing and arranged to engage the tapered walls of the recess of the first-named clutch member.

4, In a friction clutch, a pair of main clutch members, one of said clutch members having a tapered recess, the other clutch member having a tapered body portion, an annular casing arranged to fit over said tapered body portion and being provided with a series of tapered bores, tapered rollers carried within the bores and arranged to engage the walls of the tapered recess of the first-named clutch member, and means for locking the casing upon the tapered body portion of the second-named clutch member.

5. In a friction clutch, a pair of main clutch members, one of said clutch members having a tapered recess, the other clutch member having a tapered body portion, an annular casing arranged to fit over said tapered body portion and being provided with a series of tapered bores, said casing being also provided with a circumferential groove, a plurality of tapered rollers carried in the bores in said casing, each roller having a groove arranged to register with the peripheral groove in said casing, said rollers being arranged to engage the walls of the tapered recess in said first-named clutch member, and an expansion ring arranged to enter the registering grooves of said casing and said rollers.

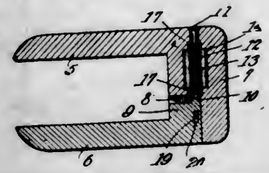
[Claim 6 not printed in the Gazette.]

1,065,636. SAFETY-LOCK. GEROME F. TADINI, New York, N. Y. Filed June 28, 1912. Serial No. 706,335. (Cl. 16—8.)



A safety lock for doors comprising a bar, lugs attached to the bar at one end thereof and adapted to enter a slot in the door jamb, the said bar being provided with a recess running longitudinally thereof and portions of which are staggered in relationship to one another, and a key adapted to enter any one of the staggered portions of the said recess and provided with a series of teeth along one edge thereof, and with a longitudinal recess in the other edge thereof, a spring running longitudinally of the said bar in the said longitudinal recess, and means for securing the said spring in position to one end thereof, the opposite end of the spring being permitted to move in a recess in the key provided for this purpose.

1,065,637. MICROMETER-GAGE. JAMES TAGUE, Chicago, Ill. Filed Oct. 3, 1912. Serial No. 723,732. (Cl. 73—77.)

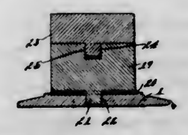


1. A micrometer gage comprising a shank, a jaw extending from the shank, said shank having a recess and a longitudinal bore extending therefrom, and an opening intersecting said bore, a jaw having a reduced portion which is slidably mounted in the recess, a stem extending from said reduced portion into the bore, said stem having a threaded portion and graduations at the ends thereof, and a non-traveling nut screwed on the threaded portion of the stem and seating in the aforesaid opening, said nut having a graduated surface, and the opening being reduced at its ends to expose the graduated portions of the stem.

2. A micrometer gage comprising a shank, a jaw extending from the shank, said shank having a longitudinal bore and an opening intersecting the same, a jaw having a stem which extends into the bore, said stem having a threaded portion and graduations at the ends thereof, and a non-traveling nut screwed on the threaded portion of the stem and seating in the aforesaid opening, said nuf having a graduated surface, and the opening being reduced at its ends to expose the graduated portions of the stem.

3. A micrometer gage comprising a shank, a jaw extending from the shank, said shank having a recess and a longitudinal bore extending therefrom, and an opening intersecting said bore, a jaw having a reduced portion which is transversely slotted and slidably mounted in the recess, a stem extending from said reduced portion into the bore, said stem having a threaded portion and graduations at the ends thereof, a non-traveling nut screwed on the threaded portion of the stem and seating in the aforesaid opening, said nut having a graduated surface, and the opening being reduced at its ends to expose the graduated portions of the stem, and a transverse pin carried by the shank and passing through the aforesaid slot in the inner portion of the second-mentioned jaw.

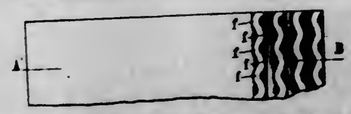
1,065,638. BOTTLE-CAPPING DEVICE. FRANK A. THELEN, Kewanee, Ill., assignor to Adolph Mohler, Kewanee, Ill. Filed Nov. 16, 1910. Serial No. 592,716. (Cl. 113—2.)



1. A bottle capping machine comprising a base, a standard, a capping plunger mounted on said standard and above said base, a supporting block for the bottle to be capped, a depending central portion on said block, there being an aperture in said base to receive the same, and an annular cushion between said block and said base and surrounding said depending portion, substantially as described.

2. In a bottle capping machine, a base, a standard, a capping plunger mounted on said standard above said base, said base having an aperture, a supporting block provided with a depending portion adapted to engage in said aperture and provided with a recess in its upper end similar to the aperture in the base, and a supplemental block, said supplemental block being provided with a depending lug adapted to engage in said recess, substantially as described.

1,065,639. CORRUGATED CARDBOARD FOR PACKING PURPOSES. CAMILLE THIÉBAUT, Paris, France, assignor to Xavier Pene, Ozone Park, N. Y. Filed Apr. 1, 1903. Serial No. 150,660. (Cl. 154—55.)

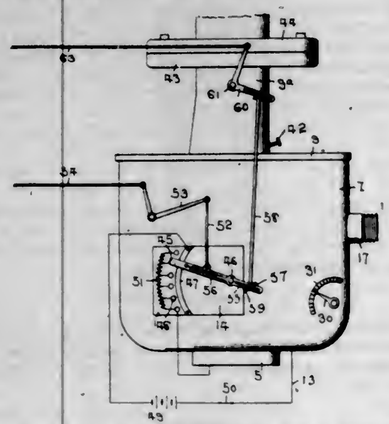


1. As a new article of manufacture, a sheet of corrugated cardboard having corrugations extending substantially in a line from one edge of the sheet to the opposite edge thereof, the walls of the corrugations extending sub-

stantially perpendicular to the plane of the sheet and each being provided with a series of reinforcing protuberances projecting at substantially right angles to the walls.

2. As a new article of manufacture, corrugated cardboard having parallel longitudinal corrugations extending substantially in a line from one edge of the sheet to the other, the walls of the corrugations extending substantially perpendicular to the plane of the sheet and each being provided with a series of reinforcing protuberances projecting at substantially right angles to the walls, the corrugations being of less elevation above the median plane of the sheet than the distance between the corrugations of the sheet.

1,065,640. FUEL-VAPORIZING DEVICE. JOHN A. THOMPSON, Oskaloosa, Iowa. Filed May 10, 1912. Serial No. 696,397. (Cl. 40—148.)



1. In a carbureter the combination with a receptacle, a fluid passage extending vertically therethrough, and a fuel outlet extending upwardly in said fluid passage; of a heating coil for said outlet, resistance sections in circuit with said heating coil, a valve in said fluid passage, and means to simultaneously vary said resistance sections and control said valve.

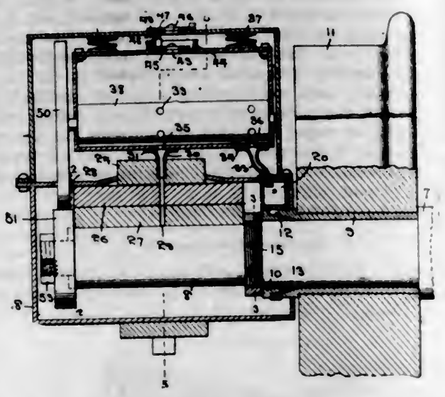
2. In a carbureter the combination with a receptacle, a fluid passage extending vertically therethrough, and a fuel outlet extending upwardly in said fluid passage; of a heating coil for said outlet, resistance section in circuit with said heating coil, a valve in said fluid passage, means for varying said resistance, and additional means to simultaneously vary said resistance and control said valve.

3. The combination with a receptacle adapted to contain liquid fuel, a fluid passage in said receptacle, a valve in said fluid passage, and a fuel outlet extending into said passage; of a heating coil for said outlet, a variable resistance in circuit with said coil, a movable contact arm for varying said resistance, means connected to said arm whereby the resistance may be varied at will, a resilient connection between said arm and said valve, means connected to said valve whereby the positions of the valve and arm may be simultaneously varied.

1,065,641. LUBRICATING DEVICE FOR CAR-AXLES. JUELL C. THOMPSON and GEORGE W. HALL, Brainerd, Minn. Filed Aug. 7, 1912. Serial No. 713,889. (Cl. 64—24.)

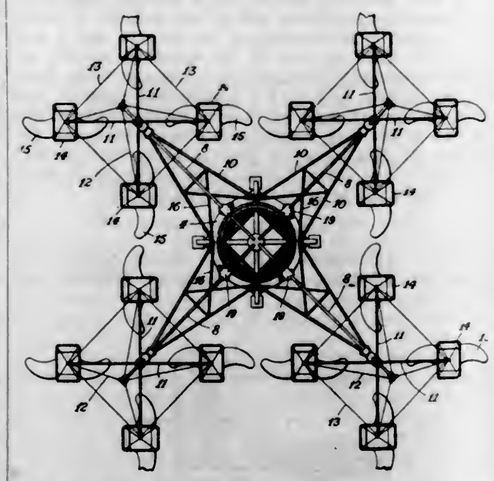
1. In combination with a rotatable axle, a peripherally grooved bearing surrounding the axle and adapted to rotate relative thereto and having a series of oil-ducts communicating with the peripheral groove and with the axle and an oil reservoir having an opening in communication with the peripheral groove of the first said bearing, means for supporting the oil reservoir, and a yoke having its medial portion fitted into the peripheral groove under the first said bearing.

2. In combination with an axle and a bearing therefor, a casing above the axle and bearing, a vertically movable oil-receptacle in the casing and having an oil conduit communicating therewith and with the surface of the axle, an oil-feeding member rotatably mounted in the oil-receptacle, a gear wheel for actuating the oil-feeding members, a gear wheel operatively connecting the axle with the first said gear wheel, and resilient means for holding the oil-receptacle down and assisting gravity in retaining the gear wheels in operative relation.



3. In combination with a rotatable axle, a peripherally-grooved bearing surrounding the axle and adapted to rotate relative thereto, a second bearing stationary with relation to the axle and the first said bearing, an oil reservoir, means associated with the second said bearing for supporting the oil reservoir, said reservoir having an opening in communication with the peripheral-groove of the first said bearing, the first said bearing having a series of oil-ducts communicating with the peripheral-groove and with the axle, and a yoke having its medial portion fitted into the peripheral groove under the first said bearing and having its end portions secured to the reservoir.

1,065,642. AMUSEMENT DEVICE. HARRY G. TRAVER, Woodcliff Lake, N. J., assignor to Park Engineering Company, New York, N. Y., a Corporation of New York. Filed Sept. 9, 1911. Serial No. 648,515. (Cl. 46—24.)



1. In an amusement device, the combination of a central support, a frame revolving about it, groups of cars carried by said frame, inclined shafts actuating said groups of cars, means for revolving the frame, and means for imparting a separate or individual revolution to the cars.

2. In an amusement device, the combination of a central support, a frame revolving about it, cars suspended on said frame, inclined shafts actuating the cars, a gear wheel secured to said frame, means for loosely supporting said gearing, and means for actuating the gear.

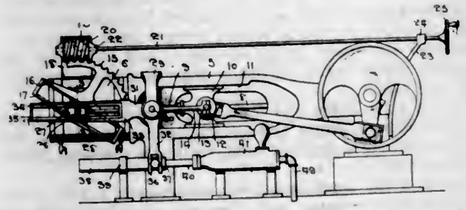
3. In an amusement device, the combination with a central support, of a frame revolving about it, a gear wheel secured to said frame, anti-friction rollers supporting the gear wheel, a pinion engaging gear, means for actuating the pinion, inclined shafts supported in the revolving frame, groups of cars actuated by said inclined shafts, all arranged so that each car is given a double movement.

4. In an amusement device, the combination with a central support, of a frame revolving about it, a horizontal wheel secured thereto, means for revolubly supporting said gear wheel, means for actuating the gear, inclined shafts supported in the revolving frame, a stationary gear on the central support, gearing between said stationary gear and the inclined shafts, and groups of cars actuated by the inclined shafts, all substantially as described.

5. In an amusement device, the combination of a central support, a revolving frame, groups of cars carried by said frame, inclined shafts actuating said groups of cars, a horizontal gear wheel on the revolving frame, means on the central support for loosely supporting said gear, means for actuating the gear, a stationary horizontal gear on the central support, and gearing connections between it and the several inclined shafts.

[Claims 6 and 7 not printed in the Gazette.]

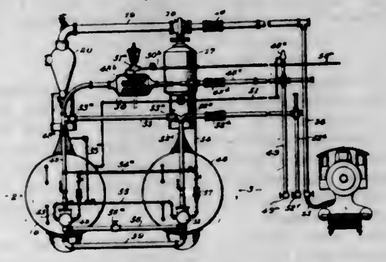
1,065,643. POWER-TRANSMISSION MECHANISM. THOMAS BOWMAN VALE, Rogers, Ohio. Filed Mar. 16, 1912. Serial No. 684,158. (Cl. 74—5.)



The combination with a motor comprising a member adapted to be rectilinearly reciprocated in fixed guides and a driven mechanism comprising a member likewise reciprocable in fixed rectilinear guides, of a transmission mechanism comprising a fixed pivot, a rocker member mounted centrally on the fixed pivot and provided with parallel guide bars on opposite sides of and extending longitudinally and equally in opposite directions from said fixed pivot, a second fixed pivot, an elbow lever pivotally mounted at its angle on said second fixed pivot, having one arm connected with the reciprocable member of the driven mechanism and the other arm formed into parallel guide bars, a link connected with the reciprocable member of the motor, a block carried by said link, a pivot pin in and projecting laterally from said block, a cross-head slidably fitted in the guide bars of the rocker member and pivotally mounted on said pivot pin, a second cross-head slidably fitted in the guide bars of the elbow lever and likewise pivotally mounted on said pivot pin, and means for adjusting the rocker member on its fixed pivot.

1,065,644. LOCOMOTIVE-BOILER WASHING-OUT AND REFILLING SYSTEM. AUGUSTAS T. VICK, St. Louis, Mo. Filed Nov. 6, 1911. Serial No. 658,716. (Cl. 122—396.)

1. In a locomotive boiler washing out and refilling system, the combination with a pair of tanks, one of which is adapted to contain water to be used in washing out the locomotive boiler and the other adapted to contain water to be used for refilling the locomotive boiler, means for separating the water from the steam blown out of the locomotive boiler and delivering said water to the wash out water tank means for condensing the steam after the water has been separated therefrom and immediately delivering all of said steam into the refilling water tank, means within each tank for effecting a precipitation of the sediment and slime contained in the water delivered thereinto, means in each tank for filtering the water after the steam has passed over the sediment precipitating means, and an automatically operating blow off means for effecting a discharge of the precipitated matter from each tank.



2. In a locomotive boiler washing out and refilling system, the combination with a tank adapted to contain washing out water, tubular means for conveying blown off water and steam from a locomotive boiler to said tank, means located in said tubular member for separating the water from the steam and delivering said water into the wash out water tank, means within said tank for precipitating the scale and sediment contained in the water delivered thereinto, and an automatically operating blow off means for effecting a discharge of the preecipitated matter from said tank.

3. In a locomotive boiler washing out and refilling system, a tank adapted to contain washing out water, means for separating the water from the steam blown off from a locomotive boiler and delivering said water into the wash out water tank, means within said tank for precipitating the slime and sediment contained in the water delivered thereinto, an automatically operating blow off means for effecting a discharge of the precipitated matter from said tank, means for admitting comparatively cold water into said tank to temper the hot water delivered thereinto, which cold water passes through the precipitating means with the hot water and means controlled by the degree of heat of the water within said tank for controlling the inlet of comparatively cold water.

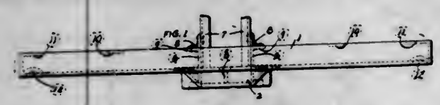
4. In a locomotive boiler washing-out and refilling system, a tank adapted to receive water to be used in washing out the locomotive boiler, which tank is provided with a precipitating compartment and a purified water compartment, means for delivering the hot water blown off from the locomotive boiler into the precipitating compartment, a series of baffle plates arranged in the upper portion of said precipitating compartment for effecting a precipitation of the slime and sediment contained in the water delivered into the precipitating compartment, and a means for filtering the water as it passes from the precipitating compartment into the purified water compartment.

5. In a locomotive boiler washing out and refilling system, a tank adapted to receive water to be used in washing out the locomotive boiler, which tank is provided with a precipitating compartment and a purified water compartment, means for delivering the hot water blown off from the locomotive boiler into the precipitating compartment, a series of baffle plates for effecting a precipitation of the slime and sediment contained in the water delivered into the precipitation chamber, a means for fil-

tering the water as it passes from the precipitating compartment into the purified water compartment, and an automatically operating blow off means for discharging the slime and precipitated matter from the precipitating compartment.

[Claims 6 to 27 not printed in the Gazette.]

1,065,645. END SILL. CHARLES T. WESTLAKE, St. Louis, Mo., assignor to Flory Carry Iron Company, St. Louis, Mo., a Corporation of Delaware. Filed July 27, 1911. Serial No. 640,964. (Cl. 105—76.)

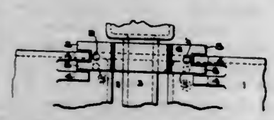


1. The hereindescribed cast metal end sill provided with an integral forwardly extending striking plate, integral lugs depending from the end portions of said striking plate, the lower portions of which lugs are bifurcated to receive the ends of a carry iron and integral webs within the end sill and striking plate for the attachment of center sills, which webs are continuations of the inner walls of the carry iron lugs.

2. The hereindescribed cast metal end sill provided with an integral forwardly extending striking plate, a vertically disposed strengthening web integral with and arranged between the front walls of the striking plate and the end sill, integral lugs depending from the end portions of the striking plate, the lower portions of which lugs are adapted to receive the ends of a carry iron, integral webs within the end sill for the attachment of center sills, which webs project rearwardly from the end portions of the striking plate and laterally projecting webs integral with the rear portions of said first mentioned webs and with the end sill, which second mentioned webs are adapted to receive attaching means carried by the center sills.

3. The hereindescribed cast metal end sill which is substantially channel-shaped throughout its length, a striking plate integral with and projecting forwardly from the central portion of said end sill, integral webs within the end sill, which webs extend rearwardly from the end portions of the striking plate, and laterally projecting webs integral with the rear ends of said first mentioned webs and with the upper and lower flanges of the end sill, which laterally projecting webs are engaged by parts carried by the center sills of a car underframe.

1,065,646. CARRY-IRON. CHARLES T. WESTLAKE, St. Louis, Mo., assignor to Flory Carry Iron Company, St. Louis, Mo., a Corporation of Delaware. Filed Apr. 29, 1912. Serial No. 693,947. (Cl. 213—42.)



1. The combination with supporting lugs arranged in pairs and spaced apart, of a carry iron, the ends of which are adapted to rest upon the pairs of lugs, the ends of which carry iron are notched to permit the removal of said carry iron from the supporting lugs by a backward or forward movement of said carry iron a distance of approximately half its width.

2. The combination with notched supports, of a carry iron having spaced lugs on its ends, which lugs normally rest upon the notched supports, and which lugs are adapted to pass between the supports when said carry iron is shifted backward or forward a distance of approximately half its width.

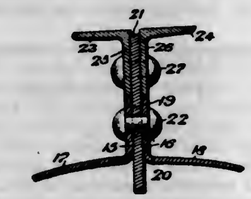
3. The combination with suitable supports, comprising oppositely arranged pairs of spaced lugs, of a carry iron having bifurcated ends which permits the removal of the carry iron from said supports by a backward or forward movement of said carry iron for a distance of approximately half its width.

4. The combination with an end sill, of pairs of spaced lugs arranged thereon on opposite sides of the draw-bar opening, and a carry iron having spaced lugs on its ends, which latter lugs are adapted to rest upon the pairs of spaced lugs on the end sill.

5. The combination with supporting lugs arranged in pairs, of a carry iron provided with notches in its ends and the end portions of which carry iron to the sides of the notches are adapted to rest upon the pairs of supporting lugs.

[Claims 6 and 7 not printed in the Gazette.]

1,065,647. TIE. GEORGE W. WHITEMAN, Philadelphia, Pa. Filed Sept. 27, 1912. Serial No. 722,660. (Cl. 238—5.)



1. The combination in a tie of angles forming laterally extending base flanges, a plate secured between said angles and having a portion extending beneath said base flanges, and rail supporting means comprising angles secured to said plate and having laterally extending top flanges.

2. The combination in a tie, of angles forming laterally extending base flanges, a plate secured between said angles and having a portion extending beneath said base flanges, and rail supporting means secured to said plate and comprising angles having vertically disposed flanges supported on said angles.

3. In a tie, upper and lower angles each having a vertically disposed flange and a laterally disposed flange, and a plate disposed between said vertically disposed flanges and secured thereto.

4. In a tie, upper and lower angles each having a vertically disposed flange and a laterally disposed flange, the vertically disposed flanges of the upper angles being supported upon the vertically disposed flanges of the lower angles, a plate between the vertically disposed flanges of said angles, and fastening devices for securing said plate with respect to said vertically disposed flanges.

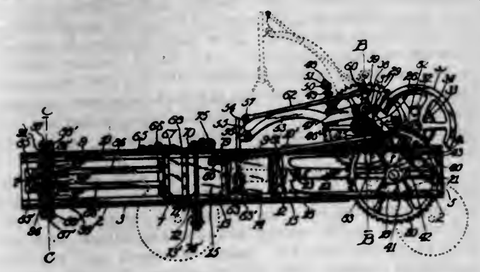
5. In a tie, upper and lower angles each having a vertically disposed flange and a laterally disposed flange, a plate disposed between said vertically disposed flanges, said plate terminating beneath the laterally disposed flanges of the upper angles, and means to secure the parts in assembled condition.

[Claims 6 to 8 not printed in the Gazette.]

1,065,648. BALING-PRESS. LEWIS B. WYGANT, Vincennes, Ind. Filed Dec. 6, 1911. Serial No. 664,250. (Cl. 100—25.)

1. A baling press including a frame having a chamber therein, a feeder mounted on the frame and having a head that is movable into or out of the chamber, the feeder being provided with an operating-arm, a supported tucker movable in the chamber, and an operating-rod connected with the tucker and the operating-arm.

2. A baling press including a frame, a rock-shaft rotatably mounted on the frame, a pivot rod supported by the frame above the rock-shaft, two feeder arms spaced apart and pivotally mounted on the rock-shaft, a feeder head pivotally connected to the two feeder arms, two rods spaced apart a greater distance than the two feeder arms and connected to the pivot rod and also pivotally connected to the feeder head, and means connected with the rock-shaft and the two feeder arms between the rods for moving the arms up or down and permitting the rock-shaft to rotate relative to the arms on downward movement of the arms.



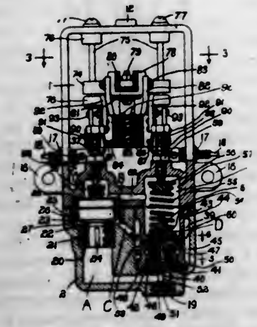
3. A baling press including a frame having a chamber therein, a rock-shaft rotatably mounted on the frame, a pivot-rod supported by the frame above the rock-shaft, a rocker-arm fixedly connected to the rock-shaft, a feeder-arm pivotally connected to the rock-shaft and normally resting on the rocker-arm, a feeder-head pivotally connected to the feeder-arm and movable thereby into or out of the chamber, a rod connected to the pivot-rod and also pivotally connected to the feeder-head, and yielding connections between the rocker-arm and the feeder-arm enabling the rocker-arm to move relative to and yieldingly force the feeder-arm downward.

4. In a baling press, the combination of a frame, a top plate hinged to the frame and spring-pressed thereto, a tucker movably mounted on the plate and provided with an operating-rod, and a feeder movably mounted on the frame and provided with an operating-arm that is connected with the operating-rod.

5. In a baling press, the combination of a frame having a chamber therein, the frame having a hinged top plate thereon partially covering the chamber, said plate having downward extending side flanges at the sides of the chamber, tension springs coöperating with the frame to yieldingly hold said plate down upon the frame, and a tucker mounted on the movable end of said plate.

[Claims 6 to 11 not printed in the Gazette.]

1,065,649. PNEUMATIC GOVERNOR. BURTON S. AIKMAN, Chicago, Ill., assignor to National Brake & Electric Company, Milwaukee, Wis. Filed Jan. 11, 1910. Serial No. 537,547. (Cl. 175—308.)



1. In a pneumatic governor, in combination, a piston chamber, a piston operating in said piston chamber, controlling mechanism operated by the movement of said piston, a primary pressure chamber, a high pressure valve controlling the connection between said piston chamber and said primary pressure chamber, and a low pressure valve operated by the pressure in said primary pressure chamber controlling connection between said piston chamber and the atmosphere.

2. In a circuit-controlling device, in combination, a switch, a piston chamber, a piston operating in said piston chamber and mechanically connected with said switch, a primary pressure chamber, a high pressure valve controlling the connection between said piston chamber and said primary pressure chamber, and a low pressure valve operated by the pressure in said primary pressure chamber controlling connection between said piston chamber and the atmosphere.

3. In a circuit-controlling device, in combination, a switch, a piston chamber, a piston operating in said piston chamber and mechanically connected with said switch, a primary pressure chamber, a valve operative to open by a predetermined maximum pressure in said primary pressure chamber and controlling connection between said primary pressure chamber and said piston chamber, and a valve controlling connection between said piston chamber and the atmosphere, said last-named valve being operatively connected with a diagraphm over said primary pressure chamber.

4. In a circuit-controlling device, in combination, stationary switch contacts, a piston chamber, a piston reciprocating in said piston chamber and carrying a bridge for electrically connecting said stationary contact members, a spring tending to hold said piston in position to close the switch, a primary pressure chamber, a valve controlling connection between said primary pressure chamber and said piston chamber, said valve being operative to be opened by the maximum pressure in said primary pressure chamber, a pressure chamber in which the pressure operates on the opposite side of said valve, said chamber having a restricted outlet to the atmosphere, a valve controlling the connection between said piston chamber and said last named chamber, and a diaphragm operated by the pressure in said primary pressure chamber and mechanically connected with said last named valve, said diaphragm being held in position to close said last named valve by at least the predetermined minimum pressure, a spring for said first named valve operating against the pressure in said primary pressure chamber, a spring for said diaphragm operating against the pressure chamber, and means for adjusting the tension of said springs.

5. In a circuit-controlling device, in combination, a switch, means for pneumatically operating said switch, a high pressure diaphragm, a low pressure diaphragm, tension means on each of said diaphragms, means for adjusting said tension means, and a valve operated by each of said diaphragms, the high pressure valve controlling connection between the pneumatically operated means and the pressure means and the low pressure valve controlling connection between the pneumatically operated means and the atmosphere.

[Claims 6 to 14 not printed in the Gazette.]

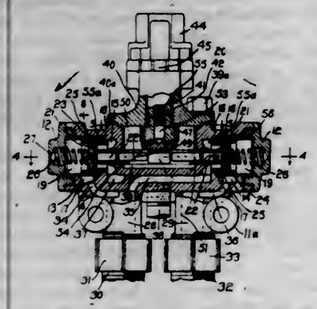
1,065,650. ENGINEER'S VALVE. BURTON S. AIKMAN, Chicago, Ill., assignor to National Brake & Electric Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 1, 1910. Serial No. 574,773. (Cl. 188—7.)

1. In an engineer's valve, a casing having a socket, a sleeve fitting in said casing, an air chamber at one end of said sleeve, an air chamber around part of the periphery of said sleeve, said sleeve having peripheral openings leading into the latter air chamber, a piston sliding in said sleeve, and a valve seat at the end of said cylinder near said first-named chamber, said piston being arranged to seat upon said valve seat and to slide past the openings in said sleeve.

2. In an engineer's valve, a casing, guides carried by said casing, a channel piece reciprocating in said guides, a stem mounted in the casing, a pinion mounted on said stem engaging with teeth on said channel piece, a valve, and mechanical connection between said valve and said channel piece.

3. In an engineer's valve, a casing, guides carried by said casing, a channel piece reciprocating in said guides,

a stem mounted in the casing, a pinion mounted on said stem engaging with teeth on said channel piece, a valve, and a stem extending from said valve and arranged for engagement by said channel piece.

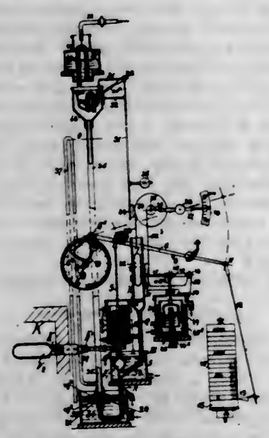


4. In an engineer's valve, an air chamber, an action chamber, a valve controlling the passage of air to and from said air chamber, a valve stem extending from said air chamber to said action chamber, said valve stem being in two parts, and a compressible member between the parts of said valve stem for forming a packing in the stem journal when longitudinal motion is imparted to said stem.

5. In an engineer's valve, a valve member, a two part stem for said valve member, said stem being mounted in a journal and a lead ring disposed between the parts of said stem, said ring being adapted to be compressed transversely and expanded radially when longitudinal motion is imparted to said stem.

[Claims 6 to 14 not printed in the Gazette.]

1,065,651. AIR-PYROMETER. MAX ARNDT, Aix-la-Chapelle, Germany. Filed Feb. 8, 1908. Serial No. 415,006. (Cl. 73—32.)



1. In a pyrometer of the type described, the combination of an air-chamber (v^1) adapted to be connected with the atmosphere, means for pressing a uniform quantity of liquid into said chamber, a second air-chamber (v^2) situated in the chamber of which the temperature is to be measured communicating with the former chamber, a receptacle containing liquid, an inverted jar dipping into the liquid, a pipe connecting the interior of the jar above the liquid with the former air-chamber, and means including a siphon and levers for measuring and registering the movements of said jar, as set forth.

2. In a pyrometer of the type described, the combination of an air-chamber (v^1), means for pressing a uniform quantity of liquid into said chamber, a second air-chamber (v^2) situated in the chamber of which the temperature is to be measured communicating with the former chamber, a receptacle containing liquid, an inverted jar dipping into the liquid, a pipe connecting the interior of the jar above the liquid with the former air-chamber, means comprising a siphon and levers for measuring and registering the movements of said jar, and means for eliminating the undesired action on the pyrometer due to varying atmospheric pressure, substantially as described.

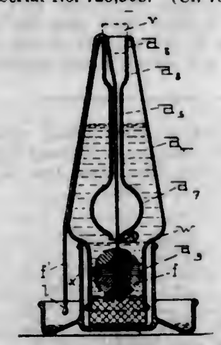
3. In a pyrometer, the combination with an air chamber and means adapted to place said chamber in communication with the atmosphere; of a closed chamber adapted to be heated and communicating with the first mentioned chamber, means to liquid seal the first mentioned chamber from the atmosphere, and a movable liquid sealed bell into which said second chamber discharges upon sealing the first chamber from the atmosphere.

4. In a pyrometer, the combination with an air chamber and means adapted to periodically place said chamber in communication with the atmosphere; of a closed chamber adapted to be heated and communicating with the first mentioned chamber, means to liquid seal the first mentioned chamber from the atmosphere, a water column for actuating said means and a movable liquid sealed bell into which said second chamber discharges upon sealing the first chamber from the atmosphere.

5. In a pyrometer, the combination with an air chamber and means adapted to periodically place said chamber in communication with the atmosphere; of a closed chamber adapted to be heated and communicating with the first mentioned chamber, means to liquid seal the first mentioned chamber from the atmosphere, a periodically established liquid column to operate said means, means to establish said column, a liquid sealed movable bell into which said second chamber discharges upon sealing the first chamber from the atmosphere, and means to compensate the movement of said bell for variations in barometric pressure.

[Claims 6 to 23 not printed in the Gazette.]

1,065,652. TESTING APPARATUS FOR AIR AND OTHER GASES. MAX ARNDT, Aix-la-Chapelle, Germany. Original application filed Sept. 11, 1911, Serial No. 648,634. Divided and this application filed Oct. 15, 1912. Serial No. 725,905. (Cl. 73—51.)



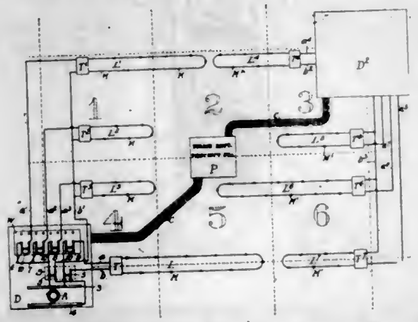
1. A testing apparatus comprising a conical barometric flask, a closure for the flask, a tube extending from the apex of the flask toward the closure and having an enlarged chamber at its end, and a wick extending through the tube.

2. A testing apparatus comprising a conical barometric flask having a neck at its larger lower end, a closure for the neck, a tube extending from the top to near the bottom of the flask having enlargements at both ends, a closure for the upper enlargement and a wick in said flask extending through the tube.

3. A testing apparatus comprising a conical barometric flask, a closure for the flask, a tube extending from the apex of the flask toward the closure and having an enlarged chamber at its end, a wick extending through the tube, and a holder for the flask comprising a vessel to receive the discharge from the wick.

4. A testing apparatus comprising a conical barometric flask having a neck at its larger lower end, a closure for the neck, a tube extending from the top to near the bottom of the flask having enlargements at both ends, a closure for the upper enlargement, a wick in said flask extending through the tube, and an annular vessel having a central tubular support for the flask, said vessel of larger diameter than the flask to permit the wick to lie on the sides of the flask and depend from the bottom thereof into the vessel.

1,065,653. MUNICIPAL LIGHTING AND POLICE SIGNALING SYSTEM. JOHN P. BARRETT, Chicago, Ill. Filed July 12, 1911. Serial No. 638,073. (Cl. 177—339.)



1. In combination, an electric power station, a plurality of circuits fed from said station, electric lamps in each of said circuits, a switch at said station for each circuit, an electric device for indicating each switch, circuits including said indicating devices, a second station, and selective switches at said second station for independently controlling said indicating circuits to designate which lamp circuit switch is to be operated.

2. In combination, a distributing station, a plurality of lighting circuits fed from said station, a switch at said station for each circuit, an electromagnet at each switch, means for selectively operating said electromagnets, a target and a switch contact controlled by each of said electromagnets, a loop adapted to be connected in any of said lighting circuits by its corresponding switch, make-and-break mechanism in said loop, contact mechanism for controlling said make-and-break mechanism, escapement controlled driving mechanism for said contact mechanism, means for normally preventing operation of said driving mechanism, and a release magnet for said means in circuit with said switch contacts in series.

3. In combination, a distributing station, a plurality of lighting circuits fed from said station, a switch at said station for each circuit, an electromagnet at each switch, means for selectively operating said electromagnets, a target and a switch contact controlled by each of said electromagnets, a loop adapted to be connected in any of said lighting circuits by its corresponding switch, the throwing of such switches being adapted to return said targets and switch contacts to normal, make-and-break mechanism in said loop, contact mechanism for controlling said make-and-break mechanism, driving mechanism for said contact mechanism, means for normally preventing operation of said driving mechanism, a release magnet for said means inserted with said switch contacts in series, and a pilot lamp in said release circuit.

4. In combination, an electric power station, a plurality of circuits fed from said station, electric lamps in each of said circuits, a switch at said station for each circuit, an electric device for indicating each switch, circuits for said indicating devices, and means for selectively operating said devices to indicate which lamp circuit switch is to be operated.

5. In combination, an electric power station, a plurality of circuits fed from said station, electric lamps in each of said circuits, a switch at said station for each circuit, an alternative circuit part arranged to be looped into any of said circuits, make-and-break mechanism in said alternative circuit part, an electric device for indicating each switch, circuits for said indicating devices, and means for selectively operating said devices to indicate which lamp circuit switch is to be operated.

[Claims 6 to 10 not printed in the Gazette.]

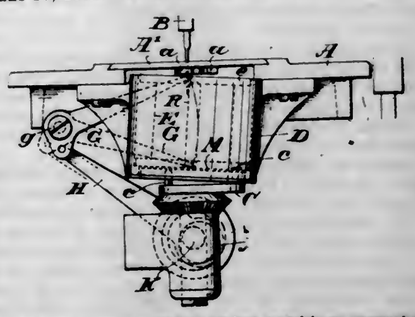
1,065,654. SURGICAL BANDAGE. ALECK BAUER, Chicago, Ill., assignor to Bauer & Black, Chicago, Ill., a Corporation of Illinois. Filed Jan. 31, 1912. Serial No. 674,577. (Cl. 128—3.)



1. A surgical bandage having transverse threads crushed along a longitudinal medial line to permit the bandage to be readily divided throughout a portion of its length without pulling the said transverse threads from their normal position and distorting the bandage.

2. A surgical textile bandage roll comprising a bandage having the transverse threads scored along a central longitudinal line extending throughout the length of the bandage forming the roll.

1,065,655. SEWING-MACHINE. FREDERICK J. T. BELL, Bury, and HARDY C. BELL, Padiham, England. Filed June 17, 1911. Serial No. 633,769. (Cl. 112—22.)



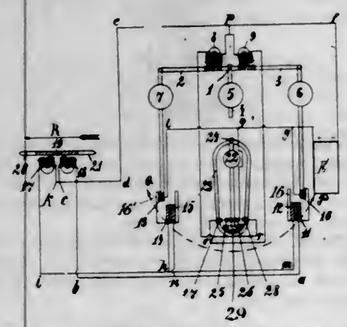
1. The improvements in sewing machines comprising a rotary bobbin casing having upper and lower hooks, a reciprocating arm for moving the needle thread loop from the upper hook to the lower one, and driving means for the rotary casing which driving means are intermittently in and out of engagement with the rotary casing in such a manner that the loop of needle thread passes completely over and around said casing, substantially as set forth.

2. The improvement in sewing machines, comprising a rotary bobbin casing having upper and lower hooks, a reciprocating arm for moving the needle thread loop from the upper hook to the lower one, and driving means comprising pins which alternately engage with and disengage from the bobbin casing in such a manner that the loop of needle thread passes completely over and around said casing, substantially as set forth.

3. The improvement in sewing machines, comprising a rotary bobbin casing having upper and lower hooks, a reciprocating arm for moving the needle thread loop from the upper hook to the lower one, driving means comprising pins which alternately engage with and disengage from the bobbin casing in such a manner that the loop of needle thread passes completely over and around said casing, and a guard plate to prevent the needle thread loop fouling the driving means, substantially as hereinbefore described.

4. The improvement in sewing machines, comprising a rotary casing having upper and lower hooks, a reciprocating arm for moving the needle thread loop from the upper hook to the lower one, driving means for the rotary casing which driving means are intermittently in and out of engagement with the rotary casing in such a manner that the loop of needle thread passes completely over and around said casing, a bobbin carrier contained in said rotary casing, and means for lifting the bobbin carrier in said casing, substantially as hereinbefore described.

1,065,656. AUTOMATIC MEANS FOR STEERING AND BALANCING AERIAL MACHINES. PAUL BENNI, Lublin, Russia. Filed Oct. 2, 1911. Serial No. 652,289. (Cl. 244—29.)

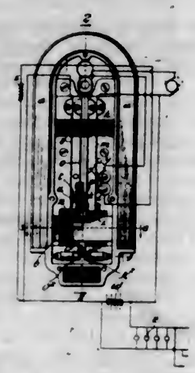


1. Device for automatically balancing aerial machines having a horizontal rudder, comprising a pendulum provided with two horizontal arms, two pendulums suspended from the extremities of said arms having a shorter period of oscillation than the first-named pendulum, weights upon each of said pendulums, electro-magnetic means for limiting the oscillation of the horizontal arms, means for limiting the oscillation of the two last-named pendulums, electro-magnetic means for adjusting the rudder or steering means in both directions, and auxiliary means for adjusting (raising or lowering) the pendulums influencing the ateering device, substantially as described.

2. Device for automatically balancing aerial machines having a horizontal rudder, comprising a pendulum provided with two horizontal arms, two pendulums suspended from the extremities of said arms having a shorter period of oscillation than the first-named pendulum, weights upon each of said pendulums, laminæ in boxes secured to the frame of the machine adapted to make contact with and limit the oscillation of the two last-named pendulums, electro-magnetic means for adjusting the rudder or steering means in both directions, and an auxiliary pair of penduluma arranged upon a common axis for adjusting (raising or lowering) the pendulums influencing the ateering device.

3. Device for automatically balancing aerial machines having a horizontal rudder, comprising a pendulum provided with two horizontal arms, two pendulums suspended from the extremities of said arms having a shorter period of oscillation than the first-named pendulum, weights upon each of said pendulums, laminæ in boxes secured to the frame of the machine adapted to make contact with and limit the oscillation of the two last-named pendulums, electro-magnets conductively connected to said laminæ for adjusting the rudder or steering means in both directions, an auxiliary pair of pendulums arranged upon a common axis for adjusting (raising or lowering) the pendulums influencing the steering device, and an oil receptacle connected to said auxiliary pendulums for braking the movement of said penduiums, substantially as described.

1,065,657. ELECTRIC CONTROLLER. ALBERT E. BERDON, La Fayette, Ind., assignor to Esterline Company, La Fayette, Ind., a Corporation of Indiana. Filed Jan. 6, 1911. Serial No. 601,226. (Cl. 171—313.)



1. An electric current controlling device, and an electric circuit controlled thereby, said device including a magnet of unchanging polarity, a movable pressure coil, a movable current coil, both of said coils being in coöperative relation with said magnet whereby the magnetic fields produced by said magnet and the current in said coils effect movement of said coils, means for restoring the coils to normal positions when deënergized, switching mechanism for opening and closing circuit connections through the pressure and current coils, and means coöperating with said switching mechanism to cause circuit to be opened and closed through the pressure coil before circuit is opened and closed through the current coil.

2. An electric current controlling device, and an electric circuit controlled thereby, said device including a magnet of unchanging polarity, a movable pressure coil, a movable current coil, both of said coils being in coöperative relation with said magnet whereby the magnetic fields produced by said magnet and the current in said coils effect movement of said coils, means for restoring the coils to normal positions when deënergized, switching mechanism for opening and closing circuit connections through the pressure and current coils, and electro-magnetic means coöperating with said switching mechanism to cause circuit to be opened and closed through the pressure coil before circuit is opened and closed through the current coil.

3. An electric current controlling device, and an electric circuit controlled thereby, said device including a magnet, a movable pressure coil, a movable current coil, both of said coils being in coöperative relation with said magnet whereby the magnetic fields produced by said magnet and the current in said coils effect movement of said coils, means for restoring the coils to normally positions when deënergized, switching mechanism for opening and closing circuit connections through the pressure and current coils, and means coöperating with said switching mechanism to cause circuit to be opened and closed through the pressure coil before circuit is opened and closed through the current coil.

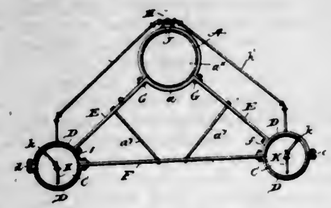
4. An electric current controlling device, and an electric circuit controlled thereby, said device including a magnet, a movable pressure coil, a movable current coil, both of said coils being in coöperative relation with said magnet whereby the magnetic fields produced by said magnet and the current in said coils effect movement of said coils, means for restoring the coils to normal positions when deënergized, switching mechanism for opening and closing circuit connections through the pressure and current coils, and

electro-magnetic means coöperating with said switching mechanism to cause circuit to be opened and closed through the pressure coil before circuit is opened and closed through the current coil.

5. An electric current controlling device, and an electric circuit controlled thereby, said device including a magnet, a pressure coil, a current coil, said coils being movable with relation to the magnet, switching mechanism for opening and closing circuit connections through the pressure and current coils, and means coöperating with said switching mechanism to cause circuit to be opened and closed through the pressure coil before circuit is opened and closed through the current coil.

[Claims 6 to 12 not printed in the Gazette.]

1,065,658. DREDGING DEVICE, (PONTOON.) EDWARD F. BERRY, New Orleans, La. Filed Oct. 29, 1912. Serial No. 728,514. (Cl. 37—46.)



1. In combination with a sectional flexibly connected dredging pipe, of pontoons for the pipe sections, each pontoon including an air cylinder, connections securing the cylinder to the adjacent pipe section, and means for supplying air to said air cylinders comprising a common sectional supply pipe flexibly connected at adjoining sections, and branches leading from said common supply pipe to the air cylinders, substantially as described.

2. In combination with a flexibly connected sectional dredging pipe, of a plurality of pontoons associated therewith, each pontoon comprising a pair of air chambers at opposite sides of a pipe section, means for securing the air chambers to the pipe section, and means for supplying air to the air cylinders including a common supply pipe of sections flexibly connected together, and branches from said common supply pipe to the opposite air cylinders, substantially as described.

3. In combination with a dredging pipe, of a pontoon associated therewith, said pontoon comprising an air cylinder located to one side of said pipe, a cradle connecting the pipe to said air cylinder, and means for supplying air to the cylinder, substantially as described.

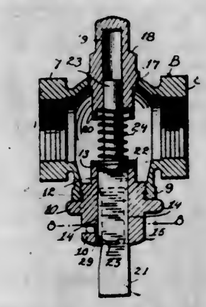
4. In combination with a dredging pipe, of a pontoon associated therewith, said pontoon comprising an air cylinder located to one side of said pipe, a cradle connecting the pipe to said air cylinder, means for supplying air to the cylinder, and a pipe leading from the inside of the cylinder to the outside thereof, substantially as described.

5. In combination with a dredging pipe, of a pontoon associated therewith, said pontoon comprising an air cylinder located to one side of said pipe, a cradle connecting the pipe and said air cylinder, means for supplying air to the cylinder, a pipe leading from the inside of the cylinder to the outside thereof at a point near the water line, the air pipe leading into the top of the cylinder, substantially as described.

[Claims 6 to 11 not printed in the Gazette.]

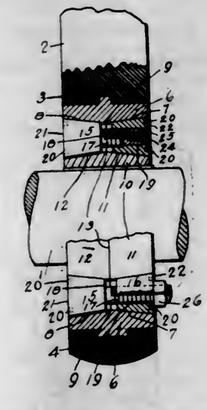
1,065,659. EMERGENCY RELEASE-VALVE. JOHN O. BOHANNON and DUEMONT P. PAGE, Birmingham, Ala. Filed July 31, 1912. Serial No. 712,480. (Cl. 137—4.)

A release valve mechanism comprising in combination, a casing having a plug detachably seated in the bottom thereof, said plug being formed with a longitudinal bore having a valve seat formed at its upper end, a spring actuated valve engageable with the seat and having a valve stem extending downwardly through the bore of the plug, said stem being centrally formed with a notch, said plug being also formed with a lateral slot communicating with



said bore, and a spring finger carried by the plug and operating in the lateral slot for engagement with the notch of the stem to releasably hold said valve in its unseated position.

1,065,660. BEARING. WILLIAM O. BRUSCH, Peoria, Ill. Filed Sept. 30, 1911. Serial No. 652,218. (Cl. 64—39.)



In a bearing, rollers made in frusto-conical sections, said sections being disposed with their smaller ends adjacent one of said sections being formed integrally with a stud or extension projecting from its smaller end, and said stud or extension being screw threaded and having its end split and formed with an inwardly tapered screw threaded opening, the other section having a screw threaded bore adapted to receive said screw threaded stud or extension whereby the sections may be adjusted relatively to each other, and an externally screw threaded locking pin adapted to be screwed into said screw threaded opening to lock the parts in adjusted position the outer face of said locking pins being flush with the outer of said soecnd mentioned sections.

1,065,661. HARP-TABORET. MELVILLE A. CLARK, Syracuse, N. Y., assignor to Clark Harp Mfg. Co., Syracuse, N. Y., a Corporation of New York. Filed Oct. 21, 1910. Serial No. 588,336. (Cl. 248—41.)

1. A harp taboret comprising a top; legs hinged to the top for folding toward its under side; a locking device for securing the legs in position perpendicular to the top; stops on the top adjustable for securing the legs at a series of oblique positions, and means for securing the harp to the top.

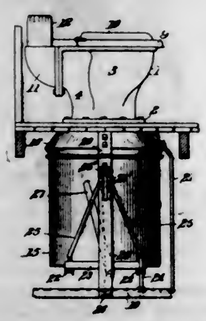
2. A harp taboret comprising a top; legs hinged thereto folding toward its under side; adjustable means on the top for holding the legs at a series of vertical and oblique positions supporting the top from the floor, said legs

having feet trending outward from the legs in their vertical position and approximately downward in the oblique



positions of the legs, and means for securing the harp to the top.

1,065,662. ODORLESS SANITARY DRY CLOSET. KITT COWAN, Fort Worth, Tex. Filed Aug. 20, 1912. Serial No. 716,010. (Cl. 4—20.)



1. In a dry closet, a movable receptacle and means for supporting said receptacle consisting of a hanger having upper and lower annular interior flanges, a double cone-shaped sealing connection having an annular interior flange attached to the lower flange of said hanger, a platform and strips attached to said platform and to the upper cone-shape of said sealing connection, and means operatively connected to said platform and to said strips for causing said receptacle to engage the lower cone-shape of said sealing connection.

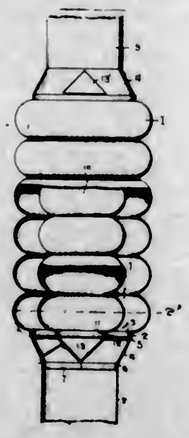
2. In a dry closet, a movable receptacle, a hanger having a horizontal flange for attaching to a support and having a funnel shaped lower end, a fixed platform and hanger bars attached to said platform and to said hanger, a movable platform resting on said fixed platform, said bars having vertical slots therein, levers having a fulcrum in said fixed platform, link bars pivotally connected to said levers, bridle rods connected to said movable platform and projecting through said link bars at their upper ends and through the slots in said hanger bars, and nuts for preventing displacement of said bridle rods.

3. In a dry closet, a movable receptacle, a sealing hanger and means for supporting the same, a fixed platform and hanger bars attached thereto and to said sealing hanger and having vertical slots therein, said sealing hanger having a funnel shaped lower end, a movable platform adapted to rest on said fixed platform, a fulcrum bar journaled in said fixed platform, levers engaging said fulcrum bar, link bars pivotally connected with said levers and projecting upwardly and having holes through their upper ends, bridle rods engaging said movable platform and extended upwardly and projected through said link bars and through said hanger bars, and nuts for preventing the displacement of said bridle rods.

4. In a dry closet provided with a movable receptacle, means for supporting and lowering and elevating said receptacle consisting of a fixed platform, a fixed sealing connection above said platform, hanger bars attached to said platform and to said sealing connection, a movable platform adapted to rest on said fixed platform and to support said receptacle, a fulcrum bar journaled in said fixed platform, levers engaging said fulcrum bar, link bars pivotally connected to said levers and projecting upwardly, bridle rods attached to said movable platform and extended upwardly and projecting through said link bars and through said hanger bars, said hanger bars having vertical slots for the movement of said bridle rods, and nuts for preventing displacement of said bridle rods.

5. In a dry closet provided with a movable receptacle, means for supporting and raising and lowering said receptacle consisting of a fixed platform, a fixed sealing connection above said receptacle, hanger bars attached to said fixed platform and to said sealing connection, a movable platform adapted to rest on said fixed platform and to support said receptacle, vertical guide rods fixed in said fixed platform and projecting up through said movable platform, a fulcrum bar journaled in said fixed platform, levers engaging said fulcrum bar, link bars pivotally connected to said levers and projecting upwardly, bridle rods attached to said movable platform and extended upwardly and then bent and projected through said link bars and through said hanger bars, said hanger bars having vertical slots for the movement of said bridle rods, and nuts for preventing the displacement of said bridle rods.

1,065,663. RADIATOR. JOHN M. CROMLEY, Lewisburg, Pa. Filed Jan. 20, 1912. Serial No. 672,276. (Cl. 126—188.)



1. In combination with a pipe adapted to have heated products of combustion passed therethrough, an air heater and radiator comprising a casing having outwardly converging frusto-conical heads fitted between two sections of said pipe and communicating therewith, air conduits of triangular cross section seated in the respective frusto-conical heads and extending diametrically therethrough and converging in the direction of convergence of the respective frusto-conical heads supporting them and thereby dividing the products of combustion that pass through the pipe sections and casing, the opposite faces of the air conduits being parallel and apertured, and an air chamber fitted between the apertures of the conduits and thereby communicating with the interior of the conduits so as to receive air through one of said conduits and to discharge air through the other of said conduits.

2. In combination with a pipe adapted to have heated products of combustion passed therethrough, an air heater and radiator comprising a corrugated casing having outwardly converging frusto-conical heads fitted between two sections of said pipe and communicating therewith, air conduits of triangular cross section seated in the respective frusto-conical heads and extending diametrically therethrough and converging in the direction of convergence of the respective frusto-conical heads supporting them and thereby dividing the products of combustion that ascend through the pipe sections and casing, the opposite faces of the air conduits being parallel and apertured, and a corrugated air chamber fitted between the apertures of the conduits and thereby communicating with the interior of the conduits so as to receive air through one of said conduits and to discharge air through the other of said conduits, the corrugations of said casing being opposite to those of said air chamber so as to provide a tortuous passage for retarding said products of combustion while ascending.

1,065,664. BLASTING-TUBE. GEORGE H. CROSBY and CHARLES H. JONES, Duluth, Minn. Filed Jan. 2, 1913. Serial No. 739,625. (Cl. 102—5.)



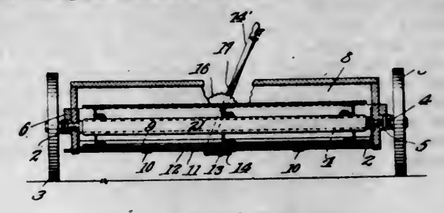
1. In a receptacle for lowering blasting cartridges into a drilled hole, a cylindrical tube of fibrous material, a metal cup secured to said cylindrical tube and a tubular metal element secured to the top of said tube and having a sling secured thereto, said tube being impervious to water, and said tube being joined water-tightly with the metal cup and tubular metal element.

2. In a receptacle for lowering blasting material into a hole, a tube of fibrous water-proofed material, a substantially hemispherical bottom member of sheet metal secured with a water-tight joint to said tube, and a tubular metal rim secured to the top of said tube, and being provided with means for securing a suspending element.

3. In a receptacle for lowering explosives into a hole, a hollow cylinder of waterproof fibrous material, a cup-shaped metal bottom of greater diameter than said cylinder secured to the latter by a water-tight joint and a tubular metal rim of greater diameter than said cylinder and being provided with means for securing a lowering element thereto.

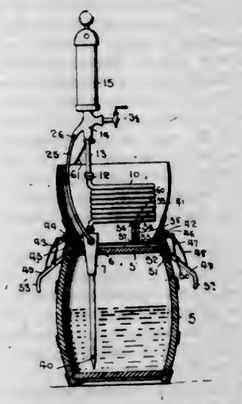
1,065,665. MACHINE FOR SPREADING LIME AND THE LIKE. CLEMENT J. CUNNINGHAM, Mount Vernon, Ill. Filed Oct. 10, 1912. Serial No. 725,079. (Cl. 111—34.)

1. The combination with an angular wheel supported axle mounted for rotation, of a receptacle supported by the axle, said axle extending longitudinally through the receptacle, there being outlet openings in the bottom of the receptacle, means for controlling the discharge of material through the openings, bands wrapped about the axle and having their ends detachably secured to clamp the bands upon the axle, arms radiating from the bands, and agitating blades connected to the arms and parallel with the axle, each blade lying in a plane disposed at a tangent to the path of movement of the outer terminals of the arms, said blades being adapted to assume positions parallel with the bottom of the receptacle during the rotation of the blades and axle.



2. The combination with a wheel supported axle mounted for rotation, of a receptacle supported by the axle, said receptacle having outlet openings in the bottom thereof, means for controlling the discharge of material through the openings, bands clamped around the axle and detachably mounted thereon, each band including terminal ears and means for detachably securing the ears together, arms radiating from the bands, and agitating strips or blades connecting the arms and parallel with the axle, said blades being movable close to the outlet openings.

1,065,666. COOLER FOR LIQUID-DISPENSING APPARATUS. ALBERT DADE, Frankfort, N. Y. Filed May 21, 1912. Serial No. 698,695. (Cl. 225—16.)



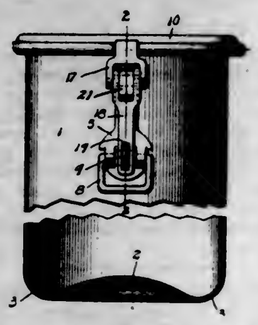
1. In a liquid cooling apparatus, the combination with a hoop-bound liquid container having a head, of a bottomless ice receiver seated upon the container and having means associated therewith for engaging one of the hoops and clamping it tightly to the receiver for making a liquid-tight joint, between said container and receiver.

2. In a liquid cooler, the combination with a liquid container having a head and having a chine surrounding the head of a bottomless ice receiver having an annular groove and having a packing ring fitted in the annular groove and adapted to be fitted upon the chine, and means for tightening the receiver upon the container, so as to make a water-tight joint between said packing and said chine.

1,065,667. MILK-CAN. WILLIAM F. DONNELL, Hematite, Mo. Filed Dec. 26, 1911. Serial No. 667,773. (Cl. 31—75.)

1. In a milk can, the combination with a seamless cylindrical receptacle formed of a single piece of sheet

metal, said receptacle having the same internal diameter throughout its length, a bead on the upper edge of said receptacle, the lower end of the wall of which receptacle is rounded inwardly, of a detachable one piece cover for said cylindrical body, the central portion of which cover is depressed with respect to the edge thereof to form a seat for the lower rounded end of a superimposed can, which cover is provided adjacent to its edge with an annular groove adapted to receive the bead on the upper edge of the body of the can, a pair of hooks fixed to the body of the receptacle near the upper end thereof, a hook pivotally connected to the edge of the cover and adapted to engage one of the hooks on the body of the receptacle, a link pivotally connected to the edge of the cover, a lever pivotally connected to said link, and a hook pivotally connected to said lever, which last mentioned hook is adapted to engage one of the hooks on the body of the receptacle to hold the cover thereon.



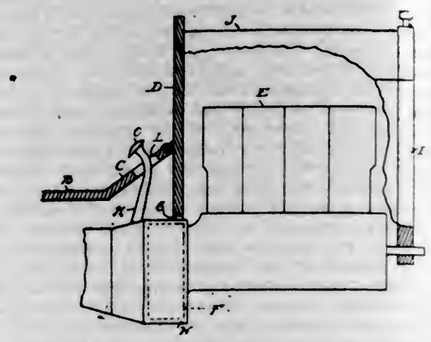
2. In a milk can, a seamless cylindrical body, hooks fixed to said body near its upper end and on opposite sides thereof, a cover provided adjacent to its edge with a groove which is of inverted U-shape in cross section and which receives the upper end of the wall of the cylindrical receptacle when the cover is positioned thereon, a link pivotally connected to the edge of the cover, a hook pivotally connected to said link and adapted to engage one of the hooks on the body of the receptacle, a second link pivotally connected to the edge of the cover, a lever pivotally connected to said second mentioned link, and a hook pivotally connected to said lever for engaging one of the hooks on the body of the receptacle to lock the cover thereon.

3. In a milk can, the combination with a seamless cylindrical receptacle, of a pair of plates fixed to said cylindrical receptacle on opposite sides thereof, hooks on the upper ends of said plates, which hooks are adapted to be engaged by the locking means carried by the cover for the receptacle, and a handle pivotally connected to the lower portion of each plate.

4. In a milk can, the combination with a seamless cylindrical body provided on its upper edge with a bead, of a removable cover for said body, which cover is provided adjacent to its edge with a groove adapted to receive the bead on the upper edge of the body, a hook on the cylindrical body, a hook depending from the edge of the cover and adapted to engage the hook on the body, and a plurality of fastening devices carried by the edge of the cover for engaging parts of the body of the can when said cover is applied thereto.

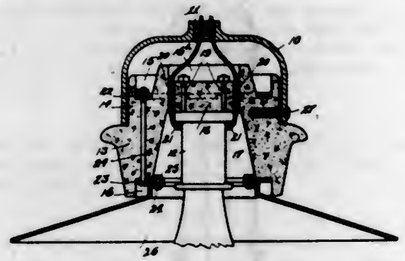
1,065,668. AUTOMOBILE. GEORGE W. DUNHAM, Detroit, Mich., assignor to Chalmers Motor Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 2, 1910. Serial No. 595,254. (Cl. 21—90.)

In an automobile, the combination with the engine or motor and the inclosing hood or bonnet therefor, of a footboard having a slotted opening therein, a movable foot pedal projecting through the opening in said footboard, and means secured to said footboard and pedal for preventing the passage of gases from the engine hood through said slotted opening to the portion of the vehicle above said footboard in all positions of adjustment



of said pedal, comprising an imperforate flexible boot surrounding the pedal connected at one end to the footboard and having the opposite end secured to the pedal.

1,065,669. STREET-HOOD FOR ELECTRIC LAMPS. GILBERT T. DUNKLIN, South Bend, Ind., assignor to George Cutter Company, South Bend, Ind., a Corporation of Indiana. Filed Oct. 30, 1912. Serial No. 728,659. (Cl. 240—115.)



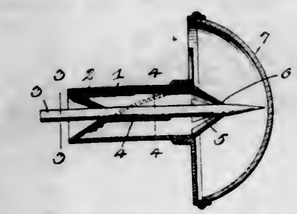
1. A street hood comprising a canopy, an insulating block, a reflector, means supported by said canopy for attaching the reflector to the insulating block, and means adapted to arrest separation between the reflector attaching means and canopy upon the insulating block becoming fragmented.

2. A street hood comprising a canopy, an insulating block supported by said canopy, a reflector, means for attaching the reflector to the insulating block, and means for attaching the insulating block to the canopy normally insulated by said block from the reflector attaching means, said attaching means coöperating to prevent separation of the reflector from the canopy upon the insulating block becoming fragmented.

3. A street hood comprising a canopy, an insulating block supported by said canopy, rings disposed on the upper and under sides of said block, means connecting said rings, means connecting the canopy and said block and disposed intermediate said rings and their connecting means, the connecting means and rings being relatively insulated from each other by said block, a reflector, and means for attaching the latter to the under ring.

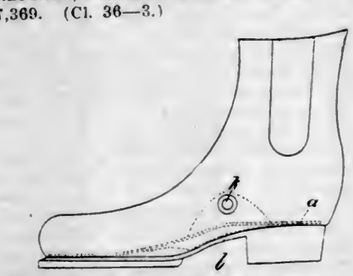
4. A street hood comprising a canopy, an insulating block, an annular groove formed in the upper side thereof, a ring seated in said groove, a recess formed in the under portion of the block for the reception of an electric lamp socket, a ring disposed against the under side of the block, means connecting the upper and lower rings, a reflector, means for attaching same to the under ring, and means connecting the canopy and block and disposed in the path of the upper ring to intercept the latter upon the insulating block becoming fragmented.

1,065,670. HAT-PIN PROTECTOR. JOSEPH HORACE EATON, Bordentown, N. J. Filed Oct. 9, 1912. Serial No. 724,890. (Cl. 24—155.)



In a device of the character described, the combination of a cylindrical body having a flange formed at one end which is inturned and provided with an opening centrally therein to form a perforated conical member, a flat spring having one of its ends secured to the inner inclined wall of the flange contiguous to the opening therethrough, whereby its inner end will normally extend obliquely across the opening and adapted to frictionally engage a pin point inserted within the body, the inner end of said spring being free, the tension of said spring being adapted to force the pin against the inner sharpened edge of the flange to prevent the removal until withdrawal force is applied, the other end of said body being provided with a plurality of slits the parts intermediate said slits being bent inwardly to form a series of converging pin gripping tongues arranged to provide a centrally arranged opening to receive the pointed end of the pin, the tongues serving to direct the point of the pin toward said opening, a head secured to the end of the body opposite the inturned flange to entirely conceal the point of the pin when disposed within the body and the wall of the head being spaced from said opening and serving to limit the inward movement of the pin.

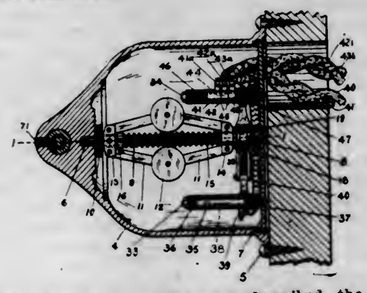
1,065,671. BOOT AND SHOE. WILHELM EICK, Essen-on-the-Ruhr, Germany. Filed Feb. 13, 1912. Serial No. 677,369. (Cl. 36—3.)



In a boot or shoe, the combination with the boot or shoe proper, of a sole adapted to be placed into the same; a bellows attached to the lower side of said sole; a spring located within said bellows and tending to expand the same; an air-connection between the interior of said bellows and the interior of the boot or shoe; an upwardly extending lug forming a lateral enlargement of the sole; an air-channel in said lug; another air-connection between the interior of the bellows and said channel; an air-connection between the latter and the outer surface of the boot or shoe, and a non-return valve located at the commencement of the said channel and opening in the direction to the aperture at the outer side of the boot or shoe.

1,065,672. AUXILIARY VISUAL INDICATOR. HARLIE R. ELLIOTT, Columbus, Ohio, assignor, by mesne assignments, to Auto Speed Signal Company, Los Angeles, Cal., a Corporation of California. Filed Jan. 22, 1912. Serial No. 672,781. (Cl. 175—310.)

1. In a device of the character described, the combination with a pair of spaced elongated electrical contact members, one of which is continuous throughout its length and the other of which is sub-divided longitudinally into a plurality of contact surfaces, of a centrifugally operated member which travels longitudinally of said contact members, a bridging element carried by said centrifugally operated member and lying transversely with relation to the contact members and establishing electrical communication therebetween, said bridging element being capable of rotary movement around the centrifugally operated member and comprising two terminal portions pivotally connected to move in a plane perpendicular to the axes of the contact members, and resilient means bearing between said terminal portions and tending to produce relative movement between them.



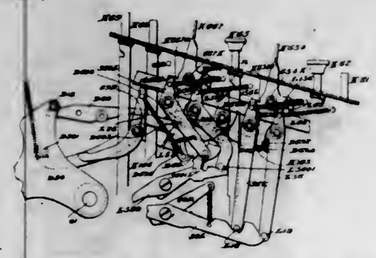
2. In a device of the character described, the combination with a pair of spaced, fixed contact members which lie in substantial parallelism with each other, of a bridging element extending transversely thereof and establishing electrical communication therebetween, a rotative shaft lying between said contact members and parallel therewith, means for imparting rotation to said shaft, a member slidably mounted upon said shaft and centrifugally operated elements actuated by the rotation of said shaft and connected to said slidably mounted member and serving to impart movement to said member longitudinally of said shaft, said bridging element being carried by said slidably mounted member, whereby bodily movement is imparted to the bridging element longitudinally of the contact member when said shaft is rotated, said bridging element being capable of movement around said slidably mounted member and comprising two parts pivotally connected to move in a plane perpendicular to the axes of the contact members, and resilient means bearing between said parts and tending to produce relative movement between said parts.

3. In a device of the character described, the combination with a pair of spaced fixed contact members which lie in substantial parallelism with each other, of a rotative shaft lying between said contact members and in parallelism with said contact members, a bridging element extending transversely between said contact members and establishing electrical communication therebetween, a member slidably mounted upon said shaft, centrifugally operated elements actuated by the rotation of said shaft and connected to said slidably mounted member to impart movement to said member longitudinally of said shaft, said bridging element being carried by said slidably mounted member whereby bodily movement is imparted to the bridging element longitudinally of the contact member when said shaft is rotated, said bridging element being capable of rotative movement around said slidably mounted member and comprising two pivotally connected terminal portions, one of which contacts with one of said contact members and the other of which contacts with the other of said contact members, both of said terminal portions lying upon the same side of the longitudinal axes of said contact members, and a spring bearing between said pivotally connected terminal portions and tending to cause relative movement between them.

4. As an article of manufacture, a bridging element comprising a pair of terminal portions, means for pivotally connecting said terminal portions, a yoke from which said terminal portions are supported, means for insulating said yoke from said terminal portions, and spring means bearing between said terminal portions and tending to produce relative movement between them.

5. As an article of manufacture, a yoke, a bridging element, means for insulating said bridging element from said yoke, said bridging element comprising a pair of pivotally connected terminal portions, a curved finger carried by one of said portions and extending into substantial parallelism with the other of said portions and in spaced relation thereto, and a spring bearing between said finger and said other terminal portion.

1,065,673. OPERATING-KEYS FOR ADDING AND LISTING MACHINES. HALCOLM ELLIS, East Orange, N. J. Filed Nov. 21, 1910. Serial No. 593,392. (Cl. 235—130.)



1. In a key mechanism for adding and listing machines, the combination with a key movable in opposite directions, of independent, independently movable members, and engaging devices on the key and said members, whereby when the key is moved in one direction one of the said members is adapted to be set by the key and when moved in the opposite direction the other member is adapted to be set by said key.

2. In a key mechanism for adding and listing machines, the combination with a pivoted key movable in opposite directions from its normal point of rest, of pivoted independent, independently movable levers, and engaging devices carried by the key and the said levers so arranged and adapted that when the key is moved in one direction one of the levers will be set by the key and when moved in the opposite direction the other lever will be set by the key.

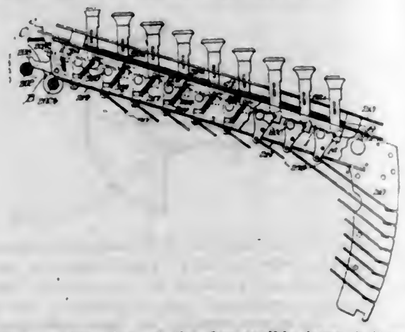
3. In a key mechanism for adding and listing machines, the combination of independent, independently movable keys each arranged for shifting in opposite directions from its point of rest, a plurality of operating members adapted for coöperation with each of the keys aforesaid and arranged for selective engagement with its key according to the direction in which the respective key is moved, and an interlocking device whereby when one of the keys is operated in either direction the other key will be locked against operation.

4. In a key mechanism for adding and listing machines, the combination of independent, independently movable pivoted keys, of operating means adapted for coöperation with the respective keys, and an interlocking device adapted for coöperation with said keys, whereby the key not operated is locked on the operation of the other key.

5. In a key mechanism for adding and listing machines, the combination of independent, independently movable pivoted keys, of operating means adapted for coöperation with the respective keys, and an interlocking member pivoted intermediate its ends whose end parts are arranged for coöperation with the respective keys so that when one key is operated the other key is locked against operation.

1,065,674. ADDING-MACHINE. HARVEY L. FISHER, Detroit, Mich., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed June 5, 1905. Serial No. 263,851. (Cl. 235—130.)

1. The combination of the depressible keys, the bell-cranks operated thereby, the longitudinally reciprocating detent plate provided with the detents having the inclined surfaces and rounded corners, the rounded pins or studs upon the bell-cranks coöperating with the detents, the resetting springs for the bell-cranks, and means for yieldingly holding the detent plate in and restoring it to normal position; substantially as described.



2. The combination of the depressible keys, bell-cranks operated thereby, and provided with pins or studs, a longitudinally reciprocating detent plate spring pressed to normal position and provided with detents having inclined surfaces with which said pins or studs coöperate, means for resetting the bell-cranks, a bell-crank operatively connected with the plate, and means for rocking the bell-crank to reciprocate the plate and thereby release any operated key and its bell-crank; substantially as described.

3. The combination of the depressible keys, bell-cranks operated thereby, and provided with pins or studs, a longitudinally reciprocating detent plate spring pressed to normal position and provided with detents having inclined surfaces with which said pins or studs coöperate, means for resetting the bell-cranks, a bell-crank 228 having a projecting arm 228^a which is operatively connected with the plate, and means under the control of the operator for rocking the bell-crank to reciprocate the plate and thereby release any operated key and its bell-crank; substantially as described.

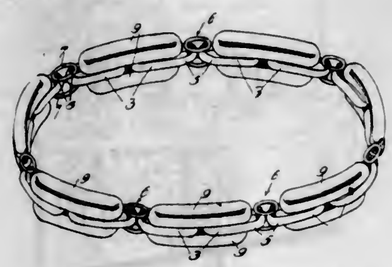
4. The combination of the depressible keys, bell-cranks operated thereby and provided with pins or studs, a longitudinally reciprocating detent plate provided with detents having inclined surfaces with which said pins or studs coöperate, means for resetting the bell-cranks, a bell-crank 228 which is operatively connected with the plate and spring-pressed to hold the plate to a normal position with a yielding pressure, and means for operating the bell-crank 228; substantially as described.

5. The combination of the depressible keys, bell-cranks operated thereby and provided with pins or studs, a longitudinally reciprocating detent plate provided with detents having inclined surfaces with which said pins or studs coöperate, means for resetting the bell-cranks, a bell crank 228 which is spring-pressed and provided with an arm 228^a, said plate being provided with a notch 1^b to receive the arm 228^a and thereby form an operating connection between the bell-crank 228 and the plate, and means for operating the bell-crank 228 to reciprocate the plate and thereby release any operated key and its bell-crank; substantially as described.

[Claims 6 to 26 not printed in the Gazette.]

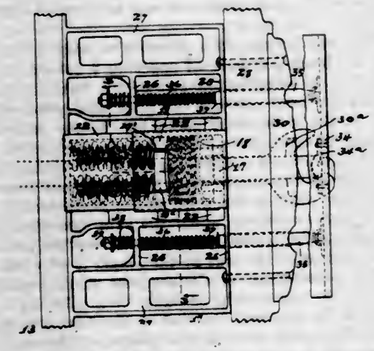
1,065,675. BRACELET. FRANS EDWARD FORSELL, Attleboro, Mass., assignor to Attleboro Chain Company, Attleboro, Mass. Filed June 4, 1912. Serial No. 701,493. (Cl. 63—5.)

1. In a bracelet, a slotted base member of rectangular form, a cap secured to the top and a cap secured to the bottom of said base member, a pair of connecting links having the sides of their inner end portions extending on opposite sides of the ends of the base member and having their inner ends projecting on the interior of the latter, each of said connecting links having a transverse pin secured thereto, which pins slide in the space between the top and bottom of the base member, a coiled spring engaging each pin and the adjacent end of the base member, and a coupling member for the outer ends of adjacent links, including top and bottom spaced ring-like parts and pins secured at their ends to said ring-like parts and being passed through the outer ends of adjacent connecting links.



2. In a bracelet, a hollow base member of substantially rectangular form having a slot leading into its interior, links having their inner ends admitted through said slot and located on the interior of the base member, springs between the inner ends of the links and the adjacent ends of said base member, and caps secured to the top and bottom of the base member.

1,065,676. STRAIN-RESISTING MECHANISM. GEORGE H. FORSYTH and ARTHUR C. DAVIDSON, Chicago, Ill., and FREDERICK S. GALLAGHER, Collinwood, Ohio, assignors to Forsyth Brothers Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 12, 1906. Serial No. 347,496. (Cl. 213—39.)



1. In a buffer for railway cars, a skeleton platform embodying as an integral portion thereof a housing for the resistance elements, the forward portion whereof is of box-like form and the rear portion whereof has a plurality of longitudinal cores, in combination with a plurality of coiled resistance springs in said cores and projecting forwardly thereof, and a pair of transverse followers and interposed plate-springs in said forward portion, a buffer-plate, and a thrust member between the latter and the forward one of said followers, substantially as described.

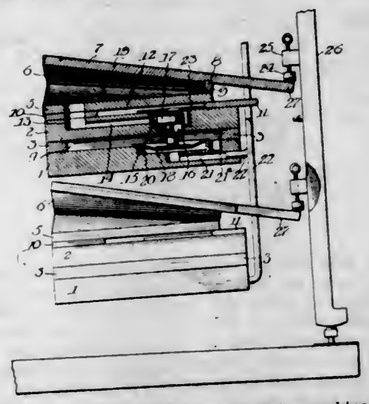
2. In a buffer for railway cars, a skeleton platform embodying as an integral portion thereof a housing for the resistance elements, the forward portion whereof is of boxlike form and the rear portion whereof is longitudinally cored, in combination with a resistance member in said cored rear portion projecting forwardly thereof, and a pair of transverse followers and interposed plate springs in said forward portion, a buffer-plate, and a thrust member between the latter and the forward one of said followers, substantially as described.

3. In a buffer mechanism for railway cars, a skeleton platform embodying as an integral portion thereof a housing for the resistance elements, the front portion of said housing being of box-like form and the rear portion thereof being longitudinally cored, a resistance member in said cored portion and projecting forwardly thereof, a pair of transverse followers in said front portion, a spring between said followers, a buffer plate, and a thrust member between said buffer plate and the front follower, substantially as described.

4. In a buffing device, the combination of a buffer, a housing, two sets of buffer springs within said housing, the front set comprising transversely-disposed bodily-movable spring plates of greater stiffness than the springs of the rear set, a transverse follower between said front and rear sets of springs, a fixed stop to limit the rearward movement of said follower, and a thrust transmitting means between the buffer and the front set of springs, whereby during buffing action the front set of springs moves bodily until the follower engages the stop, thereby compressing the rear set of springs without substantial flexing of the plate springs and upon further pressure the plate springs may be substantially flexed, substantially as described.

5. In a buffing mechanism for railway cars, the combination of a buffer having a buffer-stem, a housing, a pair of transverse followers within said housing, a rear spring member engaging the rear follower, bodily-movable transverse spring plates between said followers, a stop for limiting the rearward travel of the rear follower and spring plates, the buffer stem engaging the front follower, whereby during the initial buffing action said spring plates are bodily moved toward said rear spring member and the latter is compressed, until said rear follower engages said stop, and during the ultimate buffing action said spring plates are flexed in the line of thrust, substantially as described.

1,065,677. ACTION FOR PLAYER-PIANOS AND THE LIKE. ANDREW H. FOSS, Chicago, Ill., assignor, by direct and mesne assignments, of one-third to William C. P. Collignon and one-third to Albert McCausland, Chicago, Ill. Filed Feb. 26, 1912. Serial No. 679,937. (Cl. 84—178.)



1. In a device of the class described in combination, a pneumatic comprising a movable board provided with a finger projecting longitudinally of said board, a fulcrum member attached to said board and projecting laterally therefrom, said board being adapted to rock on said member, and a sticker rod extending substantially at right angles to said board provided with a contact member coöperating with said finger whereby said sticker rod is given a longitudinal movement, said sticker rod being adapted to move laterally when operated by said finger, whereby the slip between said finger and said contact member is reduced.

2. In a device of the class described, a pneumatic comprising in combination, a fixed bottom board, a movable top board, a fulcrum member rigidly attached to said top board for contacting with said bottom board, a flexible

hinge for attaching said fulcrum to said bottom board, said top board having a finger projecting beyond said fulcrum, and a sticker rod contacting directly with said finger.

3. In a device of the class described in combination, a pneumatic having a fixed board, a movable board, a fulcrum attached to said movable board near one edge of said fixed board upon which said movable board rocks, said movable board having a projection extending beyond said fulcrum, and a sticker rod having a contact member thereon contacting directly with said projection.

4. In a pneumatic instrument in combination, an upper and a lower wind chest, striking pneumatics mounted on top of said wind chests, boards mounted on said wind chests along the edges thereof spacing said pneumatics from said wind chests, the boards on the upper wind chest projecting beyond the edge thereof and having apertures, and tracker tubes mounted in said apertures.

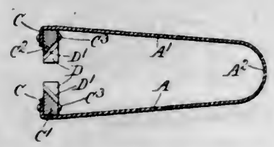
1,065,678. TREATMENT FOR THE PRECIPITATION OF ORE VALUES FROM THE EFFLUENT WATERS OF ORE CRUSHING AND CONCENTRATING PLANTS. ANDREW GORDON FRENCH, Nelson, British Columbia, Canada. Filed Nov. 18, 1911. Serial No. 661,006. (Cl. 210—1.)

1. The process of precipitating solids in liquids which consists in adding to water containing solids in suspension, a dilute solution of gelatin to form a colloid film over the suspended particles.

2. The process of precipitating mineral matter held in suspension, which consists in adding to water containing the mineral matter in suspension, a dilute solution of gelatin and a soluble sulfate of a metal, substantially as specified.

3. The process of precipitating mineral matters held in suspension in liquids which consists in adding to seventeen parts of the water containing the mineral matters in suspension, one part of a mixed solution of gelatin and a sulfate of a metal in the proportion of one part of gelatin and sulfate in 2500 parts of water, and then stirring the mass substantially as specified.

1,065,679. WIRE-STRIPPER. THOMAS L. GREGSON and JAMES I. PAYETTE, Chicago, Ill. Filed May 2, 1910. Serial No. 559,020. (Cl. 81—9.5.)

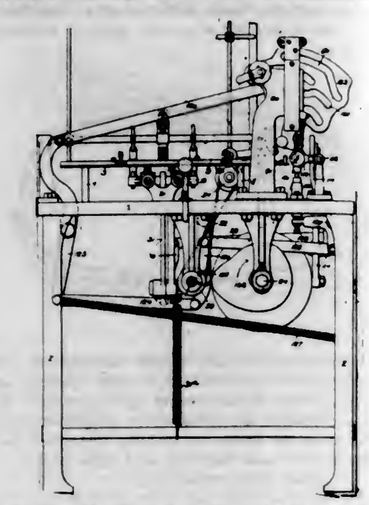


1. A wire stripper comprising a pair of rectangular recessed blocks and U shaped spring handle having one of said blocks at either end, recesses in each of said blocks registering one with the other and tapering knives upwardly projecting from the bottom of said recesses.

2. A wire stripper comprising a pair of rectangular recessed blocks and U-shaped handle having one of said blocks at either end, the recesses in each of said blocks being in register one with the other and tapering knives upwardly projecting from the bottom of said recesses.

1,065,680. PAPER-TUBE-MAKING MACHINE. HOMER N. GRISSINGER, Philadelphia, Pa. Filed Apr. 13, 1912. Serial No. 690,644. (Cl. 93—81.)

1. The combination, in a paper tube making machine, of means for feeding a paper strip, a rotating mandrel upon which said strip is wound, and means for securing the end of the final ply by means of a staple driven through the plies of the tube and clenched on the inner side of the same, said clenching mechanism including a clenching plate mounted so as to be movable radially in the mandrel, and means for imparting such radial movement to said clenching plate whereby it is caused to press the bent ends of the staple firmly against the inner face of the tube.



2. The combination, in a paper tube making machine, of means for feeding a strip of paper to a rotating mandrel, and means for securing the end of the final ply by means of a staple passed through the plies and clenched on the inside of the tube, said securing means comprising means for bending toward each other the ends of the staple which project into the tube, and a clenching plunger radially guided on the inside of the mandrel and having a clenching plate for acting upon said bent and projecting ends of the staple, whereby said bent ends will be pressed against the inner face of the tube.

3. The combination, in a paper tube making machine, of means for feeding a strip of paper to a rotating mandrel, and means for securing the end of the final ply by means of a staple passed through the plies and clenched on the inside of the tube, said clenching means comprising a clenching plunger laterally guided on the inside of the mandrel and having a clenching plate for acting upon the inner ends of the staple after the same has been driven through the plies of the tube, and a plate carried by the mandrel and serving to guide the said clenching plunger, said plate having beveled portions whereby the preliminary inward bending of the legs of the staple is effected.

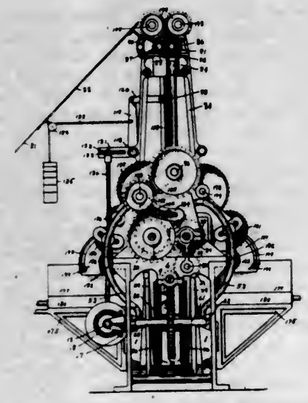
4. The combination, in a paper tube making machine, of means for feeding a strip of paper to a rotating mandrel, and means for securing the end of the final ply by means of a staple passed through the plies and clenched on the inside of the tube, said securing means comprising clenching mechanism contained in the plunger and having a stem extending to the outside of the plunger and an external presser operating on said stem through the medium of the interposed plies of the tube.

5. The combination, in a paper tube forming machine, of means for feeding a strip of paper to a rotating mandrel, and means for securing the end of the final ply by means of a staple passed through the plies and clenched on the inside of the tube, said clenching mechanism comprising a mandrel having a recessed face, a clenching plunger transversely guided in said mandrel and having a stem projecting into said recess, and an external plunger acting upon said stem through the medium of the interposed plies of the tube.

1,065,681. TUBE-MACHINE. JERVIS R. HARBECK, Detroit, Mich., assignor to Detroit Can Company, Detroit, Mich., a Corporation of New Jersey. Filed June 16, 1911. Serial No. 633,584. (Cl. 93—81.)

1. In a tube machine, the combination of a plurality of revoluble mandrels parallel to each other, each mandrel formed of two similar portions movable longitudinally toward and from each other, shafts whereon the parts

of the mandrel are mounted, longitudinally slidable carriers for the mandrels and shafts, sleeves through which the outer ends of the shafts are slidable and by which they are revolved, rack bars connected to the mandrel carriers, gears engaging the racks to reciprocate the mandrel carriers, a main shaft parallel to said mandrels, and gears connecting the main shaft to the sleeves on the mandrel shafts to revolve the same, and driving means connecting the main shaft and the gears which reciprocate the mandrels.



2. In a tube machine, the combination of a plurality of revoluble mandrels and shafts connected thereto, slidable carriers for the same, hoods in which the carriers are slidable, means to revolve the shafts within the slidable carriers, a pair of pedestals, feed rolls and their shafts mounted at the upper end of the pedestals, a plurality of bars suspended from each feed shaft and having a shaft connecting their lower ends, pulleys on the lower shafts, feed-belts passing around said pulleys and feed rolls, means to revolve the rolls so the adjacent faces of the belts move together, and means to swing the lower ends of the bars between the mandrels at regular intervals.

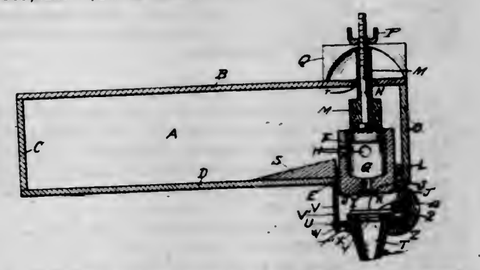
3. In a tube machine, the combination of two revoluble mandrels, each comprising two hollow half-mandrels having perforations, a sleeve concentric with each half-mandrel, a case in which each sleeve and half-mandrel is slidable, rack-bars connected to said sleeves, pivoted levers having segments of teeth at their free ends, pairs of connected gears connecting said segments to said racks, means to operate said levers to slide the half-mandrels toward and from each other, means to cause a partial vacuum in the half-mandrels and in the sleeves in which they are mounted, and means to feed the tube material alternately to said mandrels.

4. In a tube machine, the combination of a frame, a plurality of revoluble mandrels mounted thereon, a pair of pedestals mounted on the frame, feed rolls and their shafts mounted at the upper end of the pedestals, a frame suspended from each feed shaft comprising side bars and a shaft and guide plates at the lower end of the bars, pulleys on said last mentioned shaft, belts extending around said pulleys and said feed rolls, means to hold the frames together so that adjacent belts contact, means to revolve the rolls and to swing the lower ends of the frames between the mandrels at regular intervals.

5. In a tube machine, the combination of two revoluble mandrels, each comprising two hollow half-mandrels having perforations, means to slide said half-mandrels toward and from each other, a flat pendulum comprising pulleys and belts for feeding the tube material alternately to said mandrels, means to swing the pendulum, a case in which each of said half-mandrels is slidable, and means to cause a partial vacuum in the half-mandrels to cause the tube material to adhere to the mandrels at the perforations.

[Claims 6 to 16 not printed in the Gazette.]

1,065,682. GLASS-RUNNING DEVICE. JOHN WILLIAM HARDING, Brockwayville, Pa., assignor to Brockway Machine Bottle Company, Brockwayville, Pa., a Corporation of New York. Filed Jan. 4, 1912. Serial No. 669,415. (Cl. 49—55.)

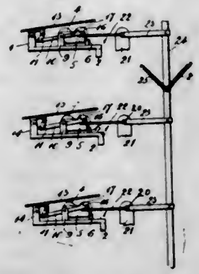


1. A glass working apparatus comprising a reservoir for molten glass, the reservoir having an opening in the bottom thereof, a nozzle having an outlet port, said nozzle extending into the opening, a dam spaced from the nozzle, a protecting ring in the space, a gate adapted to operate in the nozzle, a cutting device under the nozzle, and means for limiting the movement of the gate.

2. A glass working apparatus comprising a tank for molten glass, said tank having an opening in the bottom thereof, a nozzle having a plurality of inlet openings, said nozzle being removably supported within the opening in the tank, a gate having a screw threaded portion, operating in the nozzle, a hand screw on the threaded portion of the gate for limiting the movement thereof, and means for supporting a cutting device directly on the nozzle.

3. A glass working apparatus comprising a tank for molten glass, said tank having an opening in the bottom thereof, a nozzle having an outlet port and a reduced portion adjacent the said port, one end of the nozzle extending through the opening in the tank, means for holding a protecting ring into close engagement with the nozzle, a clay ring in the reduced portion of the nozzle, a gate operating in the nozzle, means for limiting the movement of the gate, and a shearing mechanism under the nozzle.

1,065,683. ANNUNCIATOR. HENRY J. HEENEY, Boston, Mass., assignor to Holtzer-Cabot Electric Company, Brookline, Mass. Filed Oct. 12, 1910. Serial No. 586,738. (Cl. 177—329.)



1. In an annunciator, a target, resilient means for moving the same to vertical or exposed position, an electromagnet, an armature therefor, a lever, a link pivoted to said target and to one end of said lever, and a catch on said lever, said catch being arranged to coöperate with said armature for holding said target in horizontal or unexposed position.

2. In an annunciator, a target, resilient means for moving the same to substantially vertical or exposed position, an electromagnet, an armature therefor, a lever connected with said target, and a catch on said lever, said catch being arranged to coöperate with said armature for holding said target in substantially horizontal or unexposed position.

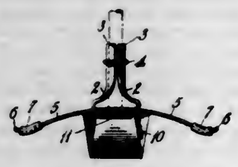
3. In an annunciator, a pivoted target, resilient means for moving the same to exposed position, an electromagnet having its axis parallel to a line passing through the pivots of said target, an armature for said electromagnet, a lever at right angles to the axis of said electromagnet, and a catch on said lever, said catch being arranged to coöperate with said armature for holding said target in unexposed position.

1,065,584. APPLICATION OF ADHESIVE SUBSTANCES TO TEXTILE FABRICS AND THE LIKE. FRITZ HESSE, Dresden, Germany, assignor to The Firm of Deutsche Kunstleder Aktien-Gesellschaft, Kötitz, near Coswig, Germany. Filed Nov. 13, 1911. Serial No. 660,078. (Cl. 91—68.)

1. A process for preparing artificial leather from one or several breadths of fabric which consists in applying adhesive substances in powder form upon or between the dry breadths of fabric and dissolving the adhesive substances by treating them with an appropriate solvent which has been brought to the consistency of oil by a slight addition of adhesive substances.

2. A process for preparing artificial leather from one or several breadths of fabric which consists in applying celluloid in powder form upon or between the dry breadths of fabric and dissolving the celluloid powder by treating it with an appropriate solvent which has been brought to the consistency of oil by a slight addition of celluloid.

1,065,685. HOLDER FOR FLAGSTAFFS, &c. JAMES M. HIBBARD, Detroit, Mich. Filed July 22, 1912. Serial No. 710,750. (Cl. 248—37.)



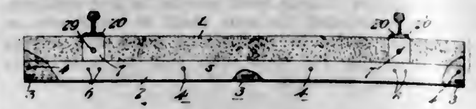
1. A holder for the purposes specified comprising a resilient crowned plate provided with oppositely disposed pairs of arms adapted to bear at their end portions only on a supporting member, and with an inbent tang transverse to the arms adapted to coact with the latter to yieldingly embrace such support, and a socket member extending from the crest of the plate.

2. A holder for the purposes specified comprising a resilient crowned plate, oppositely disposed pairs of arms thereon adapted to bear at their ends only on a supporting member, a tang from the plate transverse to the arms and bent transversely at substantially right angles and extended convergent to the underside of the plate, and a socket member extending from the crest of the plate.

3. A holder for the purposes specified comprising a resilient crowned plate with a pair of oppositely disposed strips struck up therefrom and transversely concaved to form mating sections, of a tubular socket extending from the crest of the plate, and with a tang that extends from the plate transversely to the arms formed by the turning up of the strips, the tang being downturned and inbent to coact with the arms as holding members.

1,065,686. RAILWAY-TIE AND RAIL-FASTENING. JACOB A. HYLE, Chicago, Ill., assignor to New York Steel Railway Tie Company, New York, N. Y., a Corporation of Delaware. Filed Mar. 11, 1913. Serial No. 753,595. (Cl. 238—3.)

1. A combined metallic and concrete railway tie comprising, a pair of angle irons extending lengthwise of the tie, one at each side of the base thereof, a tie plate rigidly secured to the angle irons at each end and at the central portion, a rail supporting chair or plate firmly secured to the angle irons near each end thereof, a concrete filling, and a tie plate embedded within the concrete extending lengthwise of the tie, said tie plate being rigidly secured to the underside of the rail supporting plate near each end of the tie plate.



2. A combined metallic and concrete railway tie comprising, a pair of angle irons extending lengthwise of the tie, one at each side of the base thereof, a tie plate rigidly secured to the angle irons at each end and at the central portion, a series of rods or rivets connected to the upper portion of each angle iron, a rail supporting chair or plate firmly secured to the angle irons near each end thereof, a concrete filling, and a tie plate embedded within the concrete extending lengthwise of the tie, said tie plate being rigidly secured to the underside of the rail supporting plate near each end of the tie plate.

3. A combined metallic and concrete railway tie comprising, a pair of angle irons extending lengthwise of the tie, one at each side of the base portion thereof, a tie plate rigidly secured to the angle irons at each end and at the central portion of said angle irons, a rail supporting chair or plate having a depressed central portion and firmly secured to the angle irons near each end thereof, a concrete filling, and a tie plate embedded within the concrete extending lengthwise of the tie, said tie plate being rigidly secured to the underside of the depressed portion of said rail supporting plate, and having an upright extended portion at each end thereof.

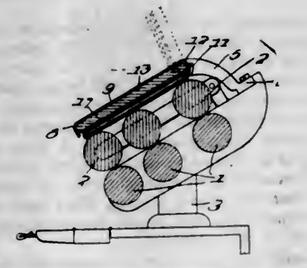
4. A combined metallic and concrete railway tie comprising, a pair of angle irons extending lengthwise of the tie, one at each side of the base portion thereof, tie plates and tie rods or rivets for firmly securing the angle irons together, a rail supporting chair or plate rigidly secured to the angle irons near each end thereof, a concrete filling, and a tie plate embedded within the concrete extending lengthwise of the tie, said tie plate consisting of two pieces riveted together and insulated apart at the inner end portion of each piece, and each piece having an upright extended portion at its outer end and a laterally projecting portion at its inner end, and firmly secured to the said rail supporting plate near its outer end.

5. A combined metallic and concrete railway tie comprising, a pair of angle irons extending lengthwise of the tie, one at each side of the base portion thereof, tie plates and tie rods or rivets for rigidly securing the angle irons together, a rail supporting chair or plate having a depressed central portion and firmly secured to the angle iron near each end thereof, a concrete filling, and a tie plate embedded within the concrete extending lengthwise of the tie and secured to the underside of the depressed portion of said rail supporting plate near each end of the tie plate, said tie plate consisting of two pieces, the outer end of each piece terminating with an upwardly extended portion, and the inner end of each piece terminating with a lateral projection, both pieces being riveted together and insulated apart at their inner ends, and having openings formed near the outer end of each piece.

[Claims 6 to 11 not printed in the Gazette.]

1,065,687. SPINNING-MACHINE CLEARER. JOHN JACKSON, Pawtucket, R. I., assignor to H. & B. American Machine Company, Pawtucket, R. I., a Corporation of Maine. Filed July 27, 1912. Serial No. 711,838. (Cl. 118—26.)

1. A clearer for spinning machines consisting of a metal base having its side edge portions curved, a wood board secured to said base in the space between its said curved sides, a series of pairs of parallel U-shaped rods having their ends secured in said board, endless fabric wipers supported by said rods, and a pair of stands for the base each consisting of a curved arm having a curved lug at one end to engage the inner face of one curved side of the base at one end thereof, each arm further having a pin and a curved lip spaced therefrom to receive the opposite end of the opposite curved side of the base.

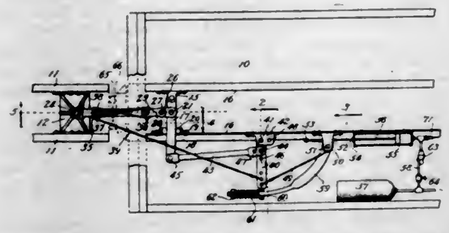


2. A clearer for spinning machines, including a wiper carrying member having its front and rear side at the ends thereof curved, and a pair of stands which have curved lugs to engage the inner faces of the front curved ends of the member, a curved lip carried by each arm to engage the outer faces of the rear curved ends of the member, and a pin also carried by each arm and located concentrically with respect to the lip, the pins being for engagement with the inner faces of the said rear curved ends of the member.

3. A clearer for spinning machines, including a wiper carrying member having its front and rear side at the ends thereof turned inwardly, a pair of stands having lugs to engage the faces of the front ends of the member, and means on the stands to engage the inner and outer faces of the rear ends of the member so as to pivotally support the latter.

4. A clearer for spinning machines, including a metal wiper carrying member having its rear side turned inwardly, a pair of stands, means carried by the stands to engage the member to limit the downward movement thereof, and means also carried by the stands to engage the inner and outer faces of said inturned rear side of the member to pivotally support the latter.

1,065,688. COUPLING FOR VEHICLES. OSCAR JOHNSON, Chicago, Ill. Filed June 29, 1911. Serial No. 635,965. (Cl. 213—42.)



1. The combination with vehicles arranged one in advance of the other, of coupling-means formed of a draft-bar operatively connected at its opposite ends with said vehicles and having a loose connection with one of the latter, pulley-equipped members one of which is connected with one of said vehicles and the other of which is connected with said draft-bar, cable-means extending about the pulleys on said members and means for yieldingly pulling on said cable to draw said members toward each other and hold the chafing-plates of said vehicles in abutting condition, for the purpose set forth.

2. The combination with vehicles arranged one in advance of the other, of coupling-means formed of a lever fulcrumed on one of said vehicles, a draft-bar connected at one end with said lever and at its opposite end with the other of said vehicles, pulley-equipped spaced members one of which is connected with said draft-bar and the other of which is connected with one of said vehicles, cable-means connecting said members together, means operatively connected with the said cable for drawing on the latter to move said pulley-equipped members toward each other and hold the chafing-plates on the vehicles in abutting condition and means for operatively connecting said lever with said first-named means, for the purpose set forth.

3. The combination with vehicles arranged one in advance of the other, of coupling-means formed of coupling members, and means operatively engaging with said coupling members for yieldingly holding the chafing plates of said vehicles in abutting condition comprising a cylinder adapted to be connected with a source of fluid-pressure, a piston in said cylinder, a cable operatively connected at one end with said coupling members and at its opposite end with said piston, and a pulley over which said cable extends operating to cause said cable to pull in the direction opposite to that in which the piston moves, for the purpose set forth.

4. The combination of vehicles arranged one in advance of the other, of chafing-plates on the respective vehicles, and means for holding the chafing-plates in contact comprising a yieldingly-supported lever on one of said vehicles, an attaching-support on the other of said vehicles, a coupler connecting said support and lever, piston and cylinder mechanism connected with the vehicle on which said lever is supported, and means connected with said piston and cylinder mechanism and with said lever for yieldingly pulling on the latter to draw said chafing-plates together and hold them in abutting condition, said lever and piston and cylinder mechanism being connected with the vehicle on which they are supported at opposite sides of the central line of said vehicle and at substantially the same distance from said central line.

5. The combination with vehicles arranged one in advance of the other, of coupling-means formed of members operatively connected, respectively, with said vehicles, cable-means extending from one of said members to the other thereof and connecting said members together, a lever fulcrumed on one of said vehicles and operatively connected with said cable, piston-and-cylinder mechanism on one of said vehicles operatively connected with said lever for pulling on said cable for drawing said members toward each other for holding the chafing-plates of the vehicles in abutting condition, and spring-means operatively engaging with said lever for supplementing the action of said piston-and-cylinder mechanism.

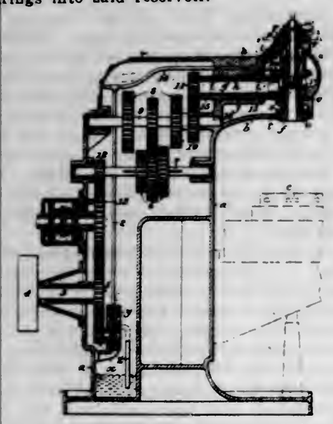
1,065,689. MEANS FOR LUBRICATING MACHINE-TOOLS. EDWARD J. KEARNEY, Wauwatosa, and THEODORE TRECKER, West Allis, Wis. Filed Dec. 22, 1911. Serial No. 667,421. (Cl. 184—6.)

1. In a machine tool the combination of a case or frame having a hollow overhanging arm provided with vertically disposed spindle bearings and an oil passage leading upwardly to the upper bearing, an oil reservoir located in said case or frame below said arm and a pump adapted to elevate oil from said reservoir and to deliver the same through said passage to the upper bearing, the hollow arm and case or frame forming a return conduit for the oil from said bearings into the reservoir.

2. In a machine tool the combination of a case or frame having a hollow overhanging arm provided with vertically disposed spindle bearings, an oil supply passage leading upwardly to the upper bearing and an overflow passage leading from the upper part of said supply passage, an oil reservoir located in said case or frame below said arm and a pump adapted to elevate oil from said reservoir and to deliver the same through said supply passage to the upper bearing, the hollow arm and case or frame forming a return conduit for the oil from said bearings and overflow passage into said reservoir.

3. In a machine tool the combination of a case or hollow frame having a hollow overhanging arm provided with vertically disposed spindle bearings and an oil supply pas-

sage leading upwardly to the upper bearing, said bearings being formed in their bores with longitudinal oil channels opening at their lower ends into the case or frame, an oil reservoir located in said case or frame below said arm and a pump adapted to elevate oil from said reservoir and to deliver the same through said supply passage to the upper bearing, the hollow arm and case or frame forming a return conduit for the oil from said bearings into said reservoir.

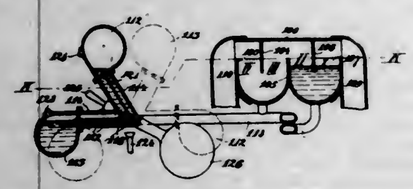


4. In a machine tool the combination of a case or frame having a hollow overhanging arm provided with vertically disposed spindle bearings and an oil passage leading to the upper bearing, an oil reservoir arranged in said case or frame below said arm to receive surplus oil flowing by gravity from said bearings into said arm and a pump adapted to elevate oil from said reservoir to the upper bearing through said passage, the hollow arm and case or frame forming a return conduit for the oil from said bearings into said reservoir.

5. In a machine tool the combination of a case or frame having a hollow overhanging arm provided with vertically disposed spindle bearings, a horizontally disposed bearing and an oil passage leading to the upper spindle bearing and to the horizontal bearing, a reservoir arranged in the case or frame below said arm to receive surplus oil flowing by gravity from said bearings into said arm and a pump adapted to elevate oil from said reservoir and to deliver the same to the upper spindle bearing and to the horizontal bearing through said passage, said hollow arm and case or frame forming a return conduit for the oil from said bearings into said reservoir.

[Claim 6 not printed in the Gazette.]

1,065,690. REGULATING AND REVERSING APPARATUS FOR REGENERATIVE GAS-FURNACES. HEINRICH KOPPER, Mülheim-on-the-Ruhr, Germany. Filed Aug. 19, 1912. Serial No. 715,816. (Cl. 75—124.)



1. A regulating and reversing apparatus comprising in combination, a rocking device having tubular arms disposed at an angle of less than 90° to each other and having containers at one extremity of each of said arms, said arms being rigidly connected together at their other extremities and swingingly pivoted to a third tubular member, so that in reversing the position of the containers, the container which is being lowered will have to pass its highest position before reaching its final position and shall keep approximately its highest position until the container which is being lifted shall have reached its highest position.

2. A regulating and reversing apparatus comprising in combination, a rocking device having tubular arms disposed at an angle of 60° and having containers at one extremity of each of said arms and being rigidly connected together at their other extremities, swingingly pivoted to a third tubular member, so that in reversing the position of the containers, the container which is being lowered will have to pass its highest position before reaching its final position, and shall keep approximately its highest position until the container which is being lifted shall have reached its highest position, and means for controlling the level of the liquid in the containers.

3. A regulating and reversing apparatus comprising in combination, a rocking device having tubular arms disposed at an angle of less than 90° and having containers at one end of each of said arms, means contained within said arms for controlling the level of the liquid in the containers, said arms being swingingly pivoted to a third tubular member so that in reversing the position of the containers, the container which is being lowered will have to pass its highest position before reaching its final position, and shall keep approximately its highest position until the container which is being lowered shall have reached its highest position.

4. A regulating and reversing apparatus comprising in combination, a rocking device having tubular arms disposed at an angle of less than 90° to each other and interconnected with the reversing valve and chamber, said tubular arms being connected with containers and containing means for regulating the level of the liquid within the containers, means for changing the position of said containers, and means for leading the discharge fluid away from the valve chamber.

1,065,691. LEATHER COMPOUND. FRANKLIN W. KREMER, Carlstadt, N. J. Filed July 31, 1912. Serial No. 712,549. (Cl. 106—23.)

1. A composition of matter for making horse pads and other articles comprising a vulcanized and condensed mixture of rubber and vulcanizable fibers.

2. A composition of matter for making horse pads and other articles comprising a vulcanized and condensed rubber compound having vulcanizable reinforcing fibers intimately mixed therethrough and vulcanized therewith.

3. A composition of matter for making horse pads and other articles, comprising a vulcanized and condensed mixture of new and reclaimed rubber, vulcanizable reinforcing fibers, antimony, lime, magnesia, and zinc oxid.

4. A composition of matter for making horse pads and other articles, comprising a vulcanized and condensed mixture of new and reclaimed rubber, vulcanizable reinforcing fibers, antimony, lime, magnesia, zinc oxid, and asbestos fibers.

5. A method of producing a composition of matter for making horse pads and other articles, which consists in mixing rubber and vulcanizable fibers, and condensing and vulcanizing the mixture.

[Claims 6 to 11 not printed in the Gazette.]

1,065,692. TROLLEY-WHEEL. JOHN KRESS, New Rochelle, N. Y. Filed May 20, 1911. Serial No. 628,391. (Cl. 64—70.)

In a trolley-wheel, the combination of a harp for supporting the trolley-wheel, a knuckle-joint at the lower end of said harp composed of semicircular side-portions and a central angular portion extending below the circumference of the semicircular portions, a socket-shaped portion at the other end of the pole provided with semicircular portions pivoted to the knuckle-portions of the harp, a spring-actuated block located in the socket-portion, and shoulders at adjacent ends of the harp and socket-



portion for arresting the lateral motion of the trolley-wheel.

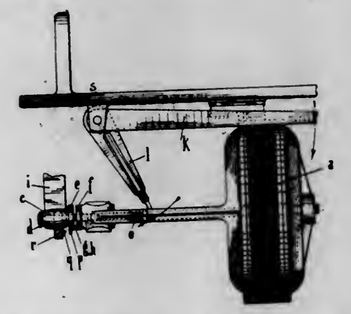
1,065,693. SNAP-HOOK FOR MAIL-CRANES. JAMES LANHAM, Owings Mills, Md. Filed Dec. 14, 1912. Serial No. 736,805. (Cl. 24—241.)



A device of the class described consisting of a single strand of resilient metal bent intermediate of its ends to form an eye, the sections of the strand at the lower terminal of the eye being disposed in contact with one another and secured together for a short portion of their length, the sections of the strand continuing from the contacting portions thereof being outspread and arcuately bent in opposite directions to form spring arms, the one terminal of said strand being bent to form a second eye, the other terminal thereof being bent inwardly and thence outwardly to form a catch disposed in a plane above the plane of said second eye, and a closed link engaged with the second eye and adapted for engagement with said catch, the extreme free end of the arm having the catch thereon being disposed below the plane of said second eye to form a finger piece thereon.

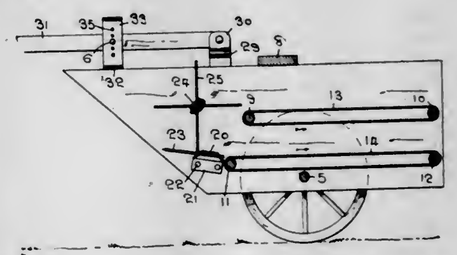
1,065,694. STOP MECHANISM FOR TALKING-MACHINES. CARL LINDSTRÖM, Berlin, Germany. Filed May 4, 1911. Serial No. 624,917. (Cl. 74—46.)

1. In a stop-mechanism for talking machines, the combination, with a motor and the shaft of the same, of a belt-pulley mounted loosely on said shaft, a motion-transmitting belt, a clutch between the shaft and the belt-pulley, a fulcrumed bell-crank lever, a stationary sleeve, a spring-actuated connecting-rod guided in said sleeve and interposed between the bell-crank lever and belt-pulley, and a stop-device between the fixed sleeve and the clutch on the belt-pulley for arresting the motion of the belt-pulley on releasing the clutch.



2. In a stop-mechanism for talking machines, the combination, with a motor and the shaft of the same, of a belt-pulley mounted loosely on said shaft, a motion-transmitting belt, a clutch, one member of which is located on the shaft and the other member located on the belt-pulley, a fulcrumed bell-crank lever, a stationary sleeve, a spring-actuated connecting-rod guided in said sleeve and actuated by said bell-crank lever, a connecting link between the connecting-rod and belt-pulley, and a stop-device between the fixed sleeve and the clutch-member on the belt-pulley, said stop-device consisting of a disk clamped to the fixed sleeve and provided with a stop-pin, and a stop-pin on the clutch-member on the belt-pulley.

1,065,695. HARVESTING-MACHINE. ELI B. LITTLE, Roosevelt, Okla. Filed Nov. 23, 1911. Serial No. 661,929. (Cl. 56—6.)



A pod or boll harvester comprising a main frame and a finger bar carried transversely thereof and within the same, said finger bar consisting of sheet metal with downwardly turned end flanges and front and rear inclined apertured edge portions, said flanges being secured to the opposite inner walls of the main frame, and fingers seated in the apertures of the inclined edge portions.

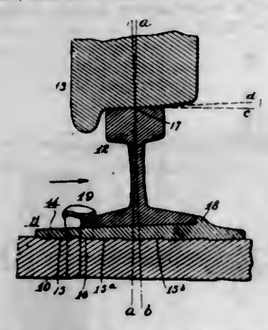
1,065,696. TIE-PLATE. JOHN LUNDIE, New York, N. Y. Filed Sept. 14, 1912. Serial No. 720,345. (Cl. 238—2.)

1. A tie-plate for railway rails, the same having an upper rail seat normal to the line of thrust of the standard coned tread car-wheel, and lower stepped surfaces parallel with said seat.

2. A tie-plate for railway rails, the same having an upper rail seat normal to the line of thrust of the standard coned tread car-wheel, and lower stepped surfaces parallel with said seat, said surfaces being joined by curves.

3. A tie-plate for railway rails, the same having an upper rail seat normal to the line of thrust of the standard coned tread car-wheel, and lower stepped surfaces parallel with said seat, said plate having a camber which is longitudinal to the line of said track.

4. The combination of a tie-plate having an upper rail seat which is normal to the line of thrust of the standard coned tread car-wheel and lower stepped surfaces parallel with said seat, and an inclined rail resting on said seat.



5. The combination of a tie of yielding material having no previously formed seat, a tie-plate constructed to produce its own seat in said tie by biting into it, and a rail, all of the bearing surfaces of which parts, that is to say said tie-plate and rail, are normal to the line of thrust of a standard coned car-wheel.

1,065,697. ANNEALING PROCESS, &c. ADOLPH W. MACHLET, Elizabeth, N. J. Original application filed May 25, 1906, Serial No. 318,678. Divided and this application filed May 25, 1910. Serial No. 563,286. (Cl. 148—23.)

1. The process of treating steel articles, consisting in heating and agitating them while confined in an atmosphere of gas which is not injurious to the steel, until the articles are annealed.

2. The process of treating steel articles, consisting in heating and agitating them until annealed and while confined in an atmosphere of gas which is not injurious to the steel, and permitting them to cool slowly.

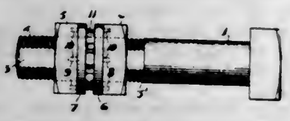
3. The process of treating steel articles, consisting in heating them while confined in a gas having a carbonous constituent, and agitating them during the heating, until the articles are annealed.

4 The process of treating metal articles, consisting in heating them while confined in a gas having carbonous and ammoniacal constituents, to anneal the articles, and agitating them during the heating, so as to secure uniformity of heating.

5. The process of treating metal articles, consisting in placing them in an iron retort, closing the retort, charging the retort with a mixture of ammonia and carbonous gas, heating the retort, moving the retort to agitate the articles during the heating until the articles are annealed, and permitting the articles to cool slowly in said atmosphere.

[Claims 6 and 7 not printed in the Gazette.]

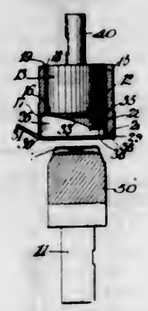
1,065,698. NUT-LOCK. JOHN E. MANGINE, Oakland, Cal. Filed Oct. 31, 1912. Serial No. 728,879. (Cl. 151—15.)



1. A locking means for securing nuts onto the threaded end of a bolt or similar structure, the same comprising an inner and outer nut provided with sockets on the opposing faces thereof, a pair of lock plates adjustably mounted on said bolt and held against rotation between the opposing faces of said nuts and provided on their outer faces with projecting pins which engage with the sockets of the nuts, and spring means encircling the bolt for holding the lock plates separated and with the pins carried thereby in locked engagement with the sockets formed in the respective nuts.

2. In combination with a threaded bolt having a longitudinally extending flattened section, a pair of nuts screwed thereon, said nuts being provided in the opposing faces thereof with sockets, a pair of lock plates fitted over the bolt and held from rotation thereon intermediate the said nuts, an engaging device projecting from the outer face of each lock plate for fitting within the socket of the nut associated therewith, and a spring clamp inserted between the lock plates for holding the same separated and with the engaging devices in locked engagement with the sockets formed in the nuts on the threaded bolt.

1,065,699. BUCKLE-ATTACHING MACHINE. JOSEPH MATHERS, New York, N. Y. Filed Sept. 2, 1911. Serial No. 647,328. (Cl. 1—4.)



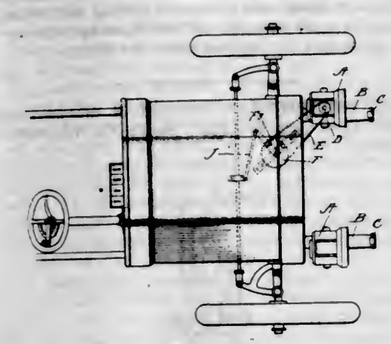
1. A machine for attaching buckles to fabrics comprising a die having a transverse curved recess arranged to receive the pronged crossbar of a buckle, a die having a transverse projection disposed opposite the recess of the first die and a buckle holder slidable on said second die and having an open chamber through which said dies coöperate, a feed slot open at one side for the admission of the buckle and means for holding the buckle in position for the dies to engage its crossbar longitudinally thereof.

2. A machine for attaching buckles to fabrics comprising two dies, having respectively a transverse curved recess arranged to receive the pronged crossbar of a buckle and a transverse projection adapted to coöperate with said curved recess, and a buckle holder having a feed slot at one side for admission of the buckle, an open bottom through which said dies coöperate, and a guide and holding slot adapted to prevent rotation of the buckle and hold it in position for the dies to engage its crossbar longitudinally thereof.

1,065,700. LAMP ATTACHMENT FOR AUTOMOBILES. ROBERT S. MATHESON, Lingayen, Philippine Islands. Filed Oct. 2, 1911. Serial No. 652,297. (Cl. 240—62.)

1. A lamp attachment, comprising in combination, a pivotally supported lamp provided with a pinion, a master wheel relatively larger than the pinion and provided with a rounded notch, a yielding spring actuated detent operating in said notch to hold the master wheel yieldingly in normal position, a sprocket chain connecting the master wheel with the pinion, a rocking lever swinging concentrically with the master wheel and provided with a pin, the master wheel having a slot receiving said pin, steering gear and connections between the rocking lever and the steering gear.

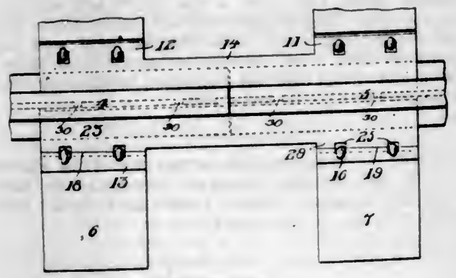
2. An apparatus, comprising a vertically pivoted lamp provided with a pinion, a master wheel geared with said pinion and provided with a rounded notch and with a slot, a spring actuated yielding detent operating in said notch and a lever adapted for connection with a steering gear and rocking concentrically with the master wheel and provided with a pin entering the slot of the master wheel.



3. The combination of a vertically pivoted lamp, a master wheel geared with the lamp and provided with a slot, and a rocking lever for operating said master gear, said lever being adapted for connection with a steering gear and being provided with a pin entering the slot of the master wheel, substantially as set forth.

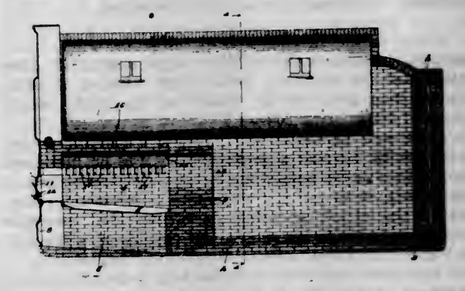
4. In a lamp attachment for automobiles, the combination of a lamp and a master wheel for operating the lamp, a yielding detent for holding the master wheel yieldingly in normal position and an arm for operating said master wheel and capable of a limited movement independent of the said wheel, substantially as set forth.

1,065,701. JOINT. JOHN MATKOVCIK, Michel, British Columbia, Canada. Filed Aug. 12, 1912. Serial No. 714,627. (Cl. 238—6.)



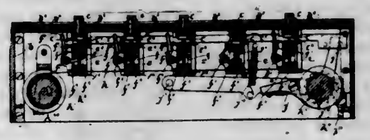
A combined rail chair and joint comprising a chair plate for supporting a pair of rails and of a length to extend from one tie to another, said plate having oppositely disposed offset portions at each end thereof and further cut away on one side to provide a seat extending from one end to the other and through the offset portions at said side, said seat at each end thereof having the outer wall thereof beveled and inclined and of greater height than the inner wall, the latter being arranged at the longitudinal center of said plate and continuous, the outer wall being cut away intermediate its ends, a clamping member including a depending portion terminating in a rail base supporting portion mounted upon said seat and further terminating in a fish plate provided with a base flange, said depending portion having lateral offsets, said offsets being beveled and inclined and engaging said outer wall of the seat, said offsets provided with notches, and means extending through said notches and the offset portions of said plate at one side of the latter and through the offset portions at the other side of the plate and engaging in the ties for securing the plate in position, the offset portions of said plate being flush with the side edges of the ties.

1,065,702. STEAM-BOILER FURNACE. JAMES MCMILLAN, Chicago, Ill. Filed Mar. 23, 1912. Serial No. 685,745. (Cl. 110—64.)



In a steam boiler furnace, the fire box, arch and bridge in combination with a downwardly extending off-set in said arch, a plurality of upwardly extending obstructions on said bridge having flat forward faces in the same transverse plane as said off-set and said obstructions terminating a slight distance below said arch, substantially as described.

1,065,703. VOTING-MACHINE. JOHN MCTAMMANY, Spencer, Mass., assignor, by mesne assignments, to McTammany Ballot Company, Portland, Me., a Corporation of Maine. Filed July 11, 1896. Serial No. 598,863. (Cl. 235—55.)



1. The combination of a tubular standard *a* having a ball-cup, a voting machine casing having a reduced spindle *a'* provided with a bearing-cone and projecting into the upper end of the said standard, anti-friction balls inserted between said cup and said cone, and a spring bolt *a⁴* carried by the said standard and adapted to enter one of a plurality of recesses or keepers in a portion of said spindle.

2. A voting machine comprising in its construction, a tally-sheet and a roll therefor, and a spindle connected with said roll and extending outside the casing and provided with arms carrying flexible material at their ends, for indicating to the eye that the roll is operated, said arms being located at a sufficient distance from the casing of the machine to permit of the waving of said flexible material.

3. A voting machine comprising a casing having provisions for receiving and supporting a plurality of vertical voting lists or captions, a plurality of vertical rows of actuators alternating with the voting lists or captions, vote-tabulating mechanism operated by the actuators, a separate independently supported positive resetting device for each row of actuators, and means for positively actuating said devices simultaneously.

4. A voting machine comprising a casing having provisions for receiving and supporting a plurality of vertical voting lists or captions, a plurality of vertical rows of actuators, alternating with the voting lists, vote-tabulating mechanism operated by the actuators, a separate positive resetting device for each row of actuators, and a movable member having provisions for positively actuating said resetting devices simultaneously.

5. A voting machine comprising a casing having provisions for receiving and supporting a plurality of vertical voting lists arranged in parallelism, a plurality of vertical rows of actuators alternating with said voting lists, a resetter behind each row of actuators for positively resetting all the actuators in the row, a movable member, and a

plurality of operative connections between said member and said resetters, whereby said actuators are positively reset simultaneously.

[Claims 6 to 45 not printed in the Gazette.]

1,065,704. FILM-COATED METALLIC ARTICLE AND METHOD OF MAKING THE SAME. RALPH D. MERSHON, New York, N. Y. Filed Dec. 21, 1911. Serial No. 667,200. (Cl. 204—4.)

1. As a new article of manufacture, a metallic article having on its surface a protective coating or film composed in part of the underlying metal and characterized by high density, close and firm adherence to the metal, resistance to the attack of acids, possessing high dielectric strength and specific resistance, and capable of withstanding high temperatures without substantial impairment.

2. As a new article of manufacture, a metallic article having on its surface a dense, closely adherent coating or film possessing high dielectric strength, specific resistance, and capability of resisting electrolytic attack at high temperatures, said coating or film being composed in part of the underlying metal in chemical combination with another element or elements.

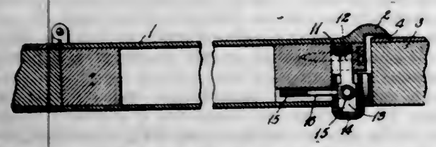
3. As a new article of manufacture, an aluminum article having on its surface a dense closely adherent film or coating composed in part of aluminum in chemical combination with another element or elements, characterized by high dielectric strength and specific resistance, and capable of withstanding electrolytic attack at high temperatures.

4. As a new article of manufacture, a metallic electrode having on its surface a dense, closely adherent, durable film or coating composed in part of the underlying metal, possessing high dielectric strength and specific resistance, and capable of maintaining its dielectric and resistant properties substantially unimpaired as the temperature increases in the apparatus in which the electrode is used.

5. As a new article of manufacture, an aluminum electrode having on its surface a dense, closely adherent, durable film or coating composed in part of aluminum, possessing high dielectric strength and specific resistance, and capable of maintaining its dielectric and resistant properties substantially unimpaired as the temperature increases in the apparatus in which it is used.

[Claims 6 to 9 not printed in the Gazette.]

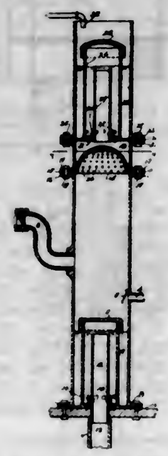
1,065,705. CARRIAGE-LOCK. CLARENCE R. MILLER, Flint, Mich. Filed Dec. 19, 1912. Serial No. 737,609. (Cl. 70—45.)



1. The combination with a swinging door and jamb therefor, of a latch plate inset in the jamb, and provided with oppositely inclined bearing faces, a latch casing on the door adapted to enter between the bearing faces of the plate and coact with the latter to draw the door to alinement, a spring latch in the casing adapted to engage the plate and draw the door yieldingly inward when the casing is approaching full engagement with the plate, a pivot member extending through a guide opening in the casing and engaging the body of the door on which the latch is pivoted, and a push member projecting from the face of the door and operating the latch.

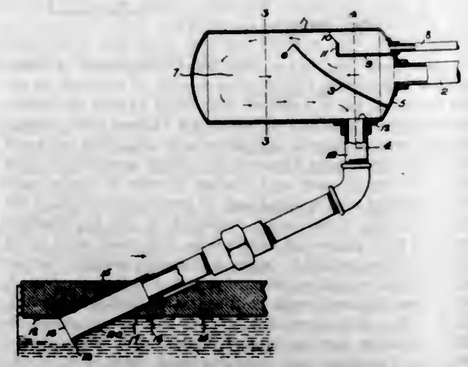
2. The combination with a swinging door and jamb therefor, of a latch plate inset in the jamb, and provided with oppositely inclined bearing faces, a latch casing on the door adapted to enter between the bearing faces of the plate and coact with the latter to draw the door into alinement, a spring latch in the casing adapted to engage the plate and draw the door yieldingly inward when the casing is approaching full engagement with the plate, a pivot member extending through a guide opening in the casing and engaging the body of the door on which the latch is pivoted, a link reciprocable in the body of the door and extending into the latch casing for lifting the latch, and a push member on the door operatively connected to the link for reciprocating the latter.

1,065,706. STENCH-TRAP. WILLIAM E. MILLER, Seattle, Wash. Filed Jan. 6, 1913. Serial No. 740,296. (Cl. 182—12.)



In a stench trapping device, the combination of a main stench receiving chamber, a numerously perforated dome therefor, an intermediate chamber into which said dome projects, a top chamber, a sub chamber within said top chamber having inlet holes, a pipe within said sub chamber and which communicates with said intermediate chamber, stench inlet pipes communicating with said main stench chamber, a sub chamber within the main chamber and a pipe within said last mentioned sub-chamber which communicates with an outlet pipe.

1,065,707. UNDER-WATER EXHAUST FOR EXPLOSIVE AND OTHER ENGINES. NICHOLAS W. MONTGOMERY, Gloucester, Mass. Filed Aug. 7, 1912. Serial No. 713,703. (Cl. 121—116.)



1. An under-water exhaust for explosive or other engines comprising a shoe adapted to project through the submerged portion of a boat's hull, said shoe comprising a pipe section having a rearwardly and downwardly inclined wall 20 terminating in an open discharge end 16 and having a downwardly directed lip 19 projecting angularly from the said inclined wall.

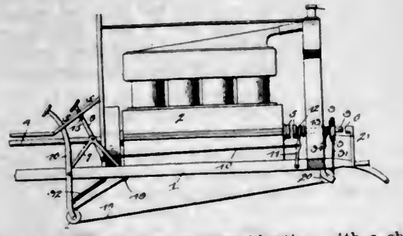
2. An under-water exhaust for explosive or other engines comprising a shoe adapted to project through the submerged portion of a boat's hull, said shoe comprising a pipe section having a rearwardly and downwardly inclined, imperforate, deflecting wall 20 terminating in an open discharge end 16 and having a terminal lip 19 extending substantially normal to said wall.

3. An under-water exhaust for explosive or other engines comprising a shoe adapted to protrude through the submerged portion of a ship's hull, the protruding portion of said shoe consisting of a downwardly and rearwardly inclined wall 20 terminating in a downwardly directed angular lip 19, and upright, substantially parallel side walls 21, 22 terminating forwardly in the plane of the face of said inclined wall, thereby permitting immediate upward discharge of the water at the lateral edges of the wall 20.

4. An under-water exhaust for explosive or other engines comprising a shoe adapted to project through the submerged portion of a boat's hull, said shoe having a rearwardly and downwardly inclined wall terminating in an open discharge end, and a water agitating lip.

5. An under-water exhaust for explosive or other engines comprising a shoe adapted to project through the submerged portion of a boat's hull, said shoe having a rearwardly and downwardly inclined wall and a rearwardly and downwardly directed discharge outlet, and a water agitating lip projecting from said inclined surface closely adjacent the said discharge end.

1,065,708. ENGINE-STARTER. AUGUST C. MORGAN, Groom, Tex. Filed July 31, 1912. Serial No. 712,551. (Cl. 123—185.)



1. In an engine starter, the combination with a shaft; of a wheel loosely mounted thereon, a ratchet wheel carried on said shaft and adapted to rotate therewith, an additional ratchet wheel also loosely mounted on said shaft and provided with internally arranged teeth, a pivoted pawl carried on said wheel and adapted to normally engage the teeth of said ratchet wheels, and means to rotate the first mentioned wheel, whereby said shaft will also be rotated.

2. In an engine starter, the combination with a shaft; of a wheel loosely mounted thereon, said wheel being provided with a cavity on the one face thereof, a ratchet wheel carried on said shaft and disposed within the cavity of said wheel, an additional ratchet wheel loosely mounted on the shaft and also disposed within the cavity of said first mentioned wheel, said latter ratchet wheel being provided with internally arranged teeth directed similar to the teeth of the other ratchet wheel, a pivoted pawl carried on the one face of the first mentioned wheel, the ends thereof being normally adapted to respectively engage the teeth of said ratchet wheels, and means to rotate said first mentioned wheel.

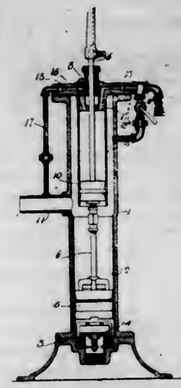
3. In an engine starter, the combination with a shaft; of a wheel loosely mounted thereon, a ratchet wheel carried on said shaft and adapted to rotate therewith, an additional ratchet wheel loosely mounted on said shaft and provided with internally arranged teeth, means carried on said first mentioned wheel and adapted for normal engagement with the teeth of said ratchet wheels, means to rotate said first mentioned wheel clockwise to correspondingly rotate said shaft therewith, and additional means to prevent the rotation of said additional ratchet wheel counter-clockwise.

4. In an engine starter, the combination with a frame and a shaft rotatably mounted thereon; of a wheel loosely mounted on said shaft, a ratchet wheel carried on the shaft and adapted for rotation therewith, an additional ratchet wheel loosely mounted on said shaft and provided with internally arranged teeth, means carried on said first mentioned wheel adapted to coöperate with the teeth of said ratchet wheels, to rotate the latter upon the rotation of the former, means to rotate said first mentioned wheel, laterally extending ratchet teeth carried on the outer face of said additional ratchet wheel, and a pair of dogs carried on said frame and adapted for engagement with said laterally extending teeth to prevent the counter-clockwise movement of said additional ratchet wheel when the shaft is rotated counter-clockwise.

5. In an engine starter, the combination with a shaft; of a drum loosely mounted thereon, a ratchet wheel carried on the shaft and disposed within said drum, a revoluble member loosely disposed in said drum, means carried on said drum coöperating with said ratchet wheel and said loosely mounted member to rotate said shaft upon the rotation of said drum in one direction, means to rotate said drum in one direction, and additional means to prevent the rotation of said revoluble member therein in the opposite direction.

[Claims 6 and 7 not printed in the Gazette.]

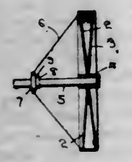
1,065,709. PUMP. PHILIP A. MYERS, Ashland, Ohio, assignor to F. E. Myers and Brother, Ashland, Ohio, a Copartnership. Filed June 21, 1911. Serial No. 634,551. (Cl. 103—79.)



1. A pump comprising two cylinders of different diameters arranged longitudinally one within the other, the larger cylinder being formed with a water inlet and a water outlet, the inner cylinder having one end in open communication with the larger cylinder and having its other end closed and formed with air inlet and outlet passages, a single piston-rod operating in said cylinders, and pistons carried by said rod and operating in the respective cylinders whereby the piston in the larger cylinder will pump water, and the piston in the smaller cylinder will pump air on one side and water on the other side thereof.

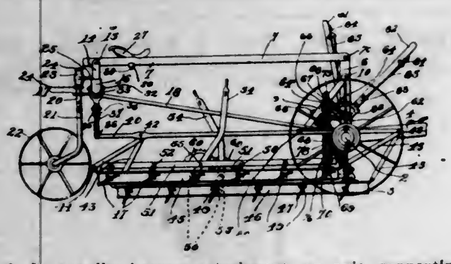
2. A pump comprising two cylinders of different diameters arranged longitudinally one within the other, the larger cylinder being formed with a water inlet and a water outlet, the inner cylinder having one end in open communication with the larger cylinder and having its other end closed and formed with air inlet and outlet passages, a single piston-rod operating in said cylinders, pistons carried by said rod and operating in the respective cylinders whereby the piston in the larger cylinder will pump water, and the piston in the smaller cylinder will pump air on one side and water on the other side thereof, a by-pass connecting the air inlet and the larger cylinder, and a valve in said by-pass adapted when open to prevent the piston of the small cylinder from pumping air.

1,065,710. PROPELLER. WILLIAM F. MYERS, Lansing, Mich. Filed Sept. 18, 1912. Serial No. 721,035. (Cl. 115—31.)



In a propelling mechanism of the character specified, the combination with a suitable body portion or rim section; of a plurality of blades obliquely disposed relative to the plane of the rim, and a plurality of valve like members carried by the overlapping edges of said blades whereby the valves will automatically close and open incident to the reciprocation of the propeller.

1,065,711. SULKY-HARROW ATTACHMENT. CHARLES AUGUSTUS NAYLOR, Jennings, La. Filed July 3, 1912. Serial No. 707,531. (Cl. 55—90.)



1. In a sulky harrow attachment, an axle, supporting wheels thereon, a frame including a rearwardly extending horizontally disposed portion and supported on the axle, a rear wheel having a substantially vertical rod relative to which the rear end of said horizontal portion of said frame is movable, a spring brace for yieldably supporting the rear end of said horizontal portion, a series of horizontal rods supported on the axle, a pair of toothed harrow frames suspended from said series of horizontal rods, connections between the rear ends of said series of horizontal rods and the rear end of said horizontal portion, and a seat slidable on said horizontal portion, adapted to be shifted forwardly or rearwardly, to increase or decrease the pressure upon the harrow frame.

2. In a sulky harrow attachment, an axle, supporting wheels thereon, a frame including a rearwardly extending horizontally disposed portion supported on the axle, the rear end of said horizontal portion having a guide, a rear wheel having a substantially vertical rod which is connected to said guide and relative to which vertical rod the rear end of said horizontal portion of said frame is movable, a spring brace for yieldably supporting the rear end of said horizontal portion, a series of horizontal rods supported on the axle, a pair of toothed harrow frames suspended from said series of horizontal rods, connections between the guide and the rear ends of said series of horizontal rods, and a seat slidable on said horizontal portion, adapted to be shifted forwardly or rearwardly, to increase or decrease the pressure upon the harrow frame.

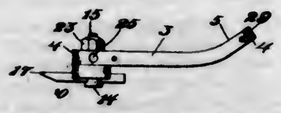
3. In a sulky harrow attachment, an axle, supporting wheels thereon, a frame including a rearwardly extending horizontally disposed portion supported on the axle, the rear end of said horizontal portion having a guide, a rear wheel having a substantially vertical rod which is connected to said guide and relative to which vertical rod the rear end of said horizontal portion of said frame is movable, a spring brace for yieldably supporting the rear end of said horizontal portion, said spring brace terminating in an additional guide for said vertical rod, a series of horizontal rods supported on the axle, a pair of toothed harrow frames suspended from said series of horizontal rods, connections between the guide and the rear ends of said series of horizontal rods, and a seat slidable on said horizontal portion, adapted to be shifted forwardly or rearwardly, to increase or decrease the pressure upon the harrow frame.

4. In a sulky harrow attachment, an axle, supporting wheels thereon, a frame including a rearwardly extending horizontally disposed portion and supported on the axle, a rear wheel having a substantially vertical rod relative to which the rear end of said horizontal portion of said frame is movable, a spring brace for yieldably supporting the rear end of said horizontal portion, a series of horizontal rods supported on the axle, a pair of toothed harrow frames adjustably swung from said series of horizontal rods, means for holding the harrow frames adjusted, connections between the rear ends of said series of horizontal rods and the rear end of said horizontal portion, and a seat slidable on said horizontal portion, adapted to be shifted forwardly or rearwardly, to increase or decrease the pressure upon the harrow frame.

5. In a sulky harrow attachment, an axle, supporting wheels thereon, a frame including a rearwardly extending horizontally disposed portion supported on the axle, the rear end of said horizontal portion having a guide, a rear wheel having a substantially vertical rod which is connected to said guide and relative to which vertical rod the rear end of said horizontal portion of said frame is movable, a spring brace for yieldably supporting the rear end of said horizontal portion, a series of horizontal rods supported on the axle, a pair of toothed harrow frames adjustably swung from said series of horizontal rods, means for holding said harrow frames adjusted, connections between the guide and the rear ends of said series of horizontal rods, and a seat slidable on said horizontal portion, adapted to be shifted forwardly or rearwardly, to increase or decrease the pressure upon the harrow frame.

[Claim 6 not printed in the Gazette.]

1,065,712. TOOL-HOLDER FOR LATHES, &c. ANDREW O'KEEFE, Newark, N. J. Filed June 27, 1912. Serial No. 706,163. (Cl. 29—99.)



1. A tool holder comprising a body portion or bar, a tool carrier adapted at one face to lie against the outer surface of either one of the opposite sides of said body portion or bar and at its other face to receive a tool, and a clamping bolt apertured to receive said tool extending through said carrier and bar and binding them together.

2. A tool holder comprising a body portion or bar having opposite flat sides substantially parallel to each other and an aperture of substantially uniform bore opening through said sides, a tool carrier adapted at one face to lie against either one of the opposite sides of said body portion or bar and at its other face to receive a tool, and a clamping bolt apertured to receive said tool extending through said carrier and bar and binding them together.

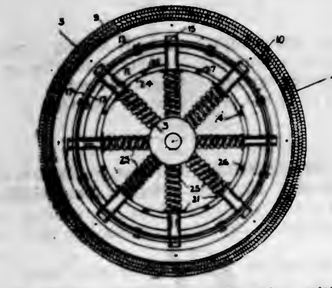
3. A tool holder comprising a body portion or bar having a transverse slot adjacent its end and a lateral recess between said slot and end, a tool carrier at the side of said body portion or bar having a stud to enter said recess and an aperture adapted to register with said slot, and a clamping bolt extending through said aperture and slot.

4. A tool holder comprising a body portion or bar, a tool carrier adapted at one face to receive a tool and having at its other face an eccentric stud to engage said body portion or bar, and means for clamping said tool carrier against the body portion or bar with its stud in engagement therewith.

5. A tool holder comprising a body portion or bar, a tool carrier slotted at one face to receive a tool and having at its other face an eccentric stud to engage said body portion or bar, and means for simultaneously clamping a tool in said slot and said carrier to the body portion or bar with its stud in engagement therewith.

[Claims 6 to 11 not printed in the Gazette.]

1,065,713. RESILIENT WHEEL FOR ROAD-VEHICLES. JAMES O'REILLY, Sr., and JAMES O'REILLY, Jr., Hunters Hill, Sydney, New South Wales, Australia. Filed July 1, 1912. Serial No. 706,969. (Cl. 152—28.)



1. In a vehicle wheel, the combination with the channeled rim carrying the solid tire, of a pair of flat parallel rings, angle iron bands secured to the felly of the wheel for connecting the outer edges of said rings to said rim, and forming an annulus, the spokes having reduced upper ends, coiled springs surrounding the spokes having their lower ends supported by the hub of the wheel, slotted angle iron bands, adapted to receive the reduced upper ends of said spokes within their slots for coupling the outer ends of the same, and concentrically curved washers upon each of said spokes resting upon the upper ends of said springs for supporting the rings by the intermediary of strengthening bands supported upon said washer, substantially as described.

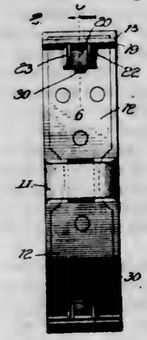
2. In a vehicle wheel, the combination with the channeled rim carrying the solid tire, of a pair of flat parallel rings, means for connecting the outer edges of said rings to said rim, and the felly of the wheel forming an annulus therewith, the spokes, coiled springs at the lower ends supported by the hub of the wheel and surrounding the spokes, means for resiliently supporting the inner edges of said ring upon the upper ends of said springs, means for coupling the outer ends of said spokes, and rollers within said annulus surrounding the upper ends of said spokes and secured to said rings by bolts, substantially as described.

1,065,714. BRAKE-SHOE. CLIFTON D. PETTIS, Chicago, Ill. Filed July 24, 1912. Serial No. 711,305. (Cl. 188—82.)

1. The combination with a brake shoe, of an attaching lug formed of ductile metal having a wall extending transversely of the shoe and having a central part projecting inwardly from said wall, said wall and said inwardly projecting part having members extending therefrom and adapted to be embedded in the cast metal body of the shoe.

2. The combination with a brake shoe, of an attaching lug formed of ductile metal and having a wall extending transversely of the shoe and projecting from the back thereof, a member formed integral with said wall and extending from the central portion thereof toward the center of the shoe, said member also projecting from the back to engage the brake head, and fastening members extending inwardly from said lug.

3. The combination with a brake shoe having a reinforced back, of an attaching lug formed of ductile metal having a wall extending transversely of the shoe and projecting from the back thereof, a member formed integral with said wall and extending from the central portion thereof toward the center of the shoe, said member also projecting from the back to engage the brake head, and fastening members extending inwardly from said lug and through the back plate of the shoe and interlocked therewith.

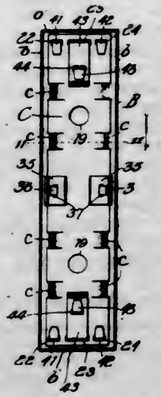


4. The combination with a brake shoe, of an attaching lug formed of ductile metal and having a wall extending transversely of the shoe and projecting from the back thereof, a member formed integral with said wall and extending from the central portion thereof toward the center of the shoe, said member also projecting from the back to engage the brake head, and fastening members extending inwardly from said lug and through the back plate, certain of said fastening members being interlocked with each other.

5. The combination with a brake shoe of a back plate having openings adjacent its end and an attaching lug formed of ductile metal and having a wall extending across said back plate and a part extending centrally from said wall toward the center of the shoe, and fastening members integral with said lug and extending through the openings of the back plate.

[Claims 6 to 8 not printed in the Gazette.]

1,065,715. BRAKE-SHOE. CLIFTON D. PETTIS, Chicago, Ill. Filed Aug. 3, 1912. Serial No. 713,175. (Cl. 188—82.)



1. A brake shoe comprising a cast metal body provided with a shallow reinforcing back or shell formed of thin ductile metal and having integral side and end walls surrounding the body of the shoe and terminating above the initial wearing face of the shoe, said shell being united directly to the metal body of the shoe in the casting operation.

2. A brake shoe comprising a cast metal body, a pan shaped ductile metal back and a supplemental reinforcing back plate located within said pan shaped back, said supplemental reinforcing plate being of smaller area than

the back wall of said ductile metal back to permit the cast metal of the body to unite with said back wall in the casting operation.

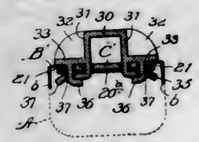
3. A brake shoe comprising a cast metal body having curved edges at the sides of its wearing face and being provided with a back of thin ductile metal bent to form a shallow pan or shell having integral side and end walls surrounding said cast metal body and terminating above the curved side edges of its wearing face, a supplemental reinforcing member of thicker ductile metal arranged within said pan or shell, and an attaching lug having parts extending through said pan or shell and said reinforcing member and interlocked therewith.

4. A brake shoe having a back of ductile metal, a supplemental reinforcing back member located within said back and extending approximately from side to side and from end to end thereof and center and end lugs having parts passing through said back and bent about said reinforcing member.

5. A brake shoe comprising a body having a ductile metal back and having a supplemental reinforcing back member located within said back, and end lugs having parts passing through said back and through said reinforcing member, the ends of said parts being bent to interlock said back and said reinforcing member together.

[Claims 6 to 8 not printed in the Gazette.]

1,065,716. BRAKE-SHOE. CLIFTON D. PETTIS, Chicago, Ill. Filed Aug. 3, 1912. Serial No. 713,176. (Cl. 188—82.)



1. A brake shoe comprising a body having a longitudinally recessed, ductile metal back and a supplemental back locked thereto by integral parts of said ductile metal back.

2. A brake shoe comprising a body having a longitudinally recessed, ductile metal back and a supplemental back of ductile metal within said recessed back, said recessed back being bent to engage and retain said supplemental back in position.

3. A brake shoe comprising a body having a back of ductile metal chambered substantially from end to end thereof and a supplemental back of ductile metal inclosed within said chambered back.

4. A brake shoe comprising a body having a back of ductile metal formed with a longitudinal chamber and a supplemental back located within said chamber, the walls of said ductile metal back being bent to engage and retain said supplemental back.

5. A brake shoe comprising a body having a ductile metal back bent to form a chamber opening from the exterior and a supplemental back located within said chamber.

[Claims 6 to 9 not printed in the Gazette.]

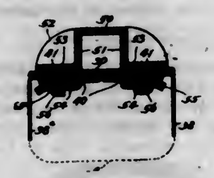
1,065,717. BRAKE-SHOE. CLIFTON D. PETTIS, Chicago, Ill. Filed Aug. 3, 1912. Serial No. 713,177. (Cl. 188—82.)

1. A brake shoe comprising a body having a reinforcing back formed of a plurality of plies of ductile metal, one of said plies extending outside the back surface of said body.

2. A brake shoe comprising a body having a reinforcing back formed of a plurality of plies of ductile metal plate integrally connected together and arranged one ply above another, the outermost ply extending across the back of the body.

3. A brake shoe comprising a body having a reinforcing back formed of a plurality of plies of ductile metal folded one ply upon another and having integral walls.

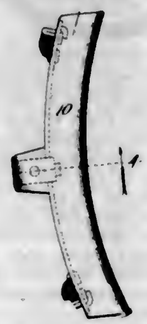
4. A brake shoe comprising a body having a reinforcing back formed of a plurality of plies of ductile metal folded one upon another lengthwise of the back, the outer one of said plies extending completely across the back surface of the body of the shoe.



5. A brake shoe comprising a body having a reinforcing back formed of a plurality of superposed plies of ductile metal and having integral side and end walls.

[Claims 6 to 17 not printed in the Gazette.]

1,065,718. BRAKE-SHOE. CLIFTON D. PETTIS, Chicago, Ill. Filed Oct. 25, 1912. Serial No. 727,806. (Cl. 188—82.)



1. A brake shoe comprising a ductile metal reinforcing back provided with laterally projecting parts and a ductile metal center lug having perforations in its lower end to receive said projecting parts, the ends of said lug being bent and interlocked with said projecting parts.

2. A brake shoe comprising a ductile metal reinforcing back provided with laterally projecting parts and a ductile metal center lug having perforations in its lower end to receive said projecting parts, the ends of said lug being bent and interlocked with said projecting parts and said projecting parts being bent downwardly and laterally.

3. A brake shoe comprising a ductile metal reinforcing back provided with an integral projection at its end narrower than and extending from said back and a ductile metal end lug perforated and through which said projection passes.

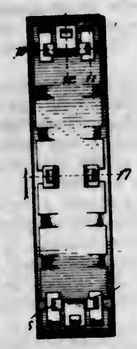
4. A brake shoe comprising a ductile metal reinforcing back provided with a projection at its end and a ductile metal end lug, said projection at the end of the back passing through and being bent downwardly about the lower part of said end lug.

5. The combination with the body of a brake shoe, of a ductile metal back provided at its end with a projecting part narrower than said back and a ductile metal end lug formed with a wall to extend transversely of the shoe and with an inwardly projecting, perforated member through which the narrow projecting part at the end of the back passes.

[Claim 6 not printed in the Gazette.]

1,065,719. BRAKE-SHOE. CLIFTON D. PETTIS, Chicago, Ill. Filed Oct. 25, 1912. Serial No. 727,807. (Cl. 188—82.)

1. A brake shoe comprising a reinforcing, perforated back provided adjacent its perforation with a projecting part and an attaching lug having a member passing through said perforated back and interlocked with said projecting part of said back.



2. A brake shoe comprising a reinforcing, perforated back provided adjacent its perforation with a projecting part and an attaching lug having a perforated member passing through said perforated back, said projecting part of said back passing through said perforated member of the lug.

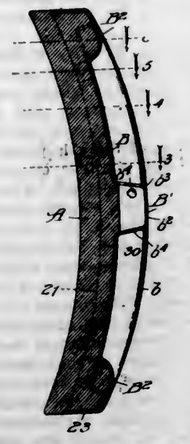
3. A brake shoe comprising a reinforcing back perforated adjacent its center and provided about its center with laterally projecting parts and an attaching lug having side members passing through the perforated back and having perforated ends through which said projecting parts of the back pass.

4. A brake shoe comprising a reinforcing back perforated adjacent its center and provided about its center with laterally projecting parts, and an attaching lug having side members passing through the perforated back and having bent lower ends interlocked with said projecting parts of the back.

5. A brake shoe comprising a reinforcing back perforated adjacent its center and provided about its center with laterally projecting parts and an attaching lug having perforated side members passing through the perforated back, said side members being bent laterally and said projecting parts of the back passing through said side members of the lug and bent laterally to interlock therewith.

[Claims 6 to 11 not printed in the Gazette.]

1,065,720. BRAKE-SHOE. CLIFTON D. PETTIS, Chicago, Ill. Filed Feb. 13, 1913. Serial No. 748,258. (Cl. 188—82.)



1. A brake shoe comprising a back of ductile metal having one at least of its side edges raised and reverted to form a rib extending lengthwise of the shoe.

2. A brake shoe comprising a back of ductile metal having one at least of its side edges raised and reverted to form a rib extending lengthwise of the shoe, said rib tapering from its central position to its ends.

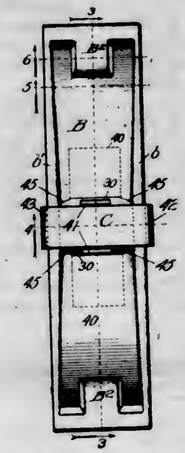
3. A brake shoe comprising a body and a back of ductile metal having one at least of its side edges raised and reverted to form a hollow rib extending lengthwise of the shoe, the body of the shoe being provided with a raised, longitudinal rib extending into said hollow rib of the back.

4. A brake shoe comprising a cast metal body and a ductile metal back united thereto in the casting operation, one at least of the side edges of said back being raised and reverted to form a hollow rib extending lengthwise of the shoe, the back of the body of the shoe being formed with a rib filling the hollow rib of the back.

5. A brake shoe comprising a body and a back of ductile metal having one at least of its side edges raised and reverted to form a rib extending lengthwise of the shoe, said reverted edge extending below the plane of the back of the shoe.

[Claims 6 to 21 not printed in the Gazette.]

1,065,721. BRAKE-SHOE. CLIFTON D. PETTIS, Chicago, Ill. Filed Feb. 13, 1913. Serial No. 748,259. (Cl. 188—82.)



1. A brake shoe having one at least of its side edges provided with a raised rib extending lengthwise of its back and a ductile metal fastening lug having projecting portions united to the body of the shoe in the casting operation, said lug having walls bearing against said raised rib and having a flange interlocked with said rib.

2. A brake shoe comprising a perforated back having one at least of its side edges provided with a raised rib and a center lug having depending members passing through the perforations in the back, the side walls of said lug abutting against said rib.

3. A brake shoe comprising a perforated back having one at least of its side edges formed with a raised rib extending lengthwise of the shoe, and a ductile metal center lug having parts projecting through said back, said lug abutting against said raised rib and interlocked therewith.

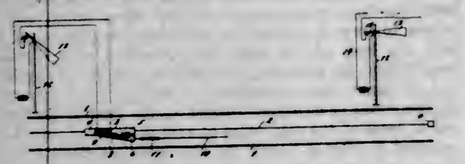
4. A brake shoe comprising a perforated back of ductile metal having raised ribs extending along each side thereof and a ductile metal center lug interlocked with said back, the ends of said center lug abutting against said ribs.

5. A brake shoe having one at least of its side edges provided with a raised rib and a ductile metal center lug united to the body of the brake shoe, said lug having a flange extending over the top of said rib and interlocked therewith.

1,065,722. TRAIN CONTROL. FRANKLIN M. RAYMOND. Saugatuck, Conn. Filed Mar. 21, 1913. Serial No. 755,864. (Cl. 191—38.)

1. A train control system comprising a main line, a branch conductor of different potential in close proximity

thereto, a car having a contactor carried thereby, and means for diverting said contactor from the main line onto said branch conductor.



2. A train control system comprising a main line, a dead section parallel to and in close proximity to said main line, a car having a contactor thereon, and means for diverting the contactor from said main line onto said dead section.

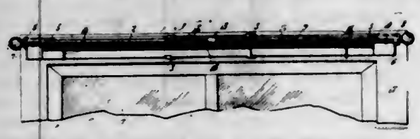
3. A train control system comprising a main line, a branch section of different potential in close proximity thereto, a car having power-supplying means including a contactor, and means automatically controlled by the passage of trains over the trackway for diverting the contactor from the main line onto the branch section to control the power-supplying means.

4. A train control system comprising a main line, a branch conductor of different potential in close proximity thereto, a car having a contactor, and electro-magnetic means for diverting the contactor from the said main line onto the branch conductor.

5. A train control system comprising a main line, a branch conductor of different potential in close proximity thereto, a car having a contactor, and electro-magnetic means for diverting the contactor from the said main line onto the branch conductor, said electromagnetic means being controlled by signals along the track.

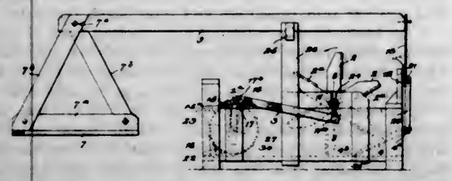
[Claim 6 not printed in the Gazette.]

1,065,723. WINDOW-SHADE. JOHN READY, Donora, Pa. Filed July 10, 1912. Serial No. 708,661. (Cl. 156—23.)



A curtain pole comprising an elongated member having a longitudinal semi-cylindrical socket therein, arms pivoted to the pole adjacent the ends thereof and adapted to seat in said socket, a rotatably mounted collar carried by the pole and adapted to overhang the free ends of the arms, said collar being notched on opposite sides to permit the independent disconnection of the arms therefrom, and means to prevent longitudinal movement of the collar on the pole.

1,065,724. FISH-SCREEN. RALPH WALDO REQUA, Chico, Cal. Filed Dec. 23, 1912. Serial No. 738,252. (Cl. 61—5.)



1. In combination, a screen, and means for rotating this screen; a tail gate and means for automatically varying the position of the gate according to the water level, substantially as described.

2. In combination, a cylindric screen, and means for rotating this screen intermittently; a tail gate, a float and connections for automatically varying the position of the gate, substantially as described.

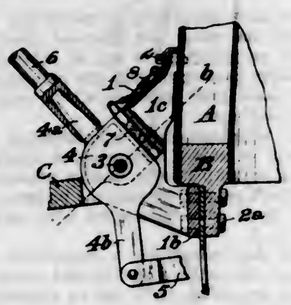
3. In combination, a screen, a water wheel and connections whereby the water wheel operates the screen, a tail gate and means for automatically varying the position of the gate according to the water level, substantially as described.

4. In combination, a screen, a water wheel and connections whereby the water wheel operates the screen intermittently in a direction opposite to the rotation of the water wheel; a tail gate and means for automatically varying the position of the gate according to the water level, substantially as described.

5. In combination, a screen, a water wheel and connections whereby the water wheel operates the screen intermittently in a direction opposite to the rotation of the water wheel; a tail gate and a float and a lever connecting the gate and float for automatically varying the position of the gate according to the water level, substantially as described.

[Claims 6 to 10 not printed in the Gazette.]

1,065,725. LOCOMOTIVE-GRATE SHAKER. SAMUEL S. RIEGEL, Scranton, Pa. Filed Apr. 2, 1913. Serial No. 758,302. (Cl. 126—169.)



1. A support for a plurality of grate shaking levers, comprising an inclined top plate having parallel recesses for the reception of grate shaking levers, and side plates extending downwardly therefrom and perforated for the insertion of a transverse fulcrum pin.

2. A support for a plurality of grate shaking levers, comprising an inclined top plate having parallel recesses for the reception of grate shaking levers, side plates extending downwardly therefrom, and ribs depending from the top plate between the recesses, said side plates and ribs being perforated for the insertion of a transverse fulcrum pin.

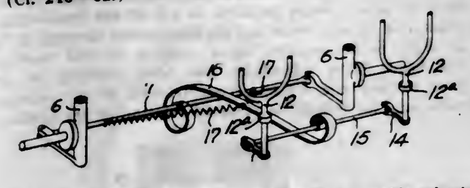
3. A support for a plurality of grate shaking levers, comprising an inclined top plate having parallel recesses for the reception of grate shaking levers, side plates extending downwardly therefrom and perforated for the insertion of a fulcrum pin, and bolting lugs projecting from the lower ends of the side plates.

4. A support for a plurality of grate shaking levers, comprising an inclined top plate having parallel recesses for the reception of grate shaking levers, side plates extending downwardly therefrom and perforated for the insertion of a fulcrum pin, bolting lugs projecting from the lower ends of the side plates, and a transverse flange extending across the lower end of the top plate and adapted to fit against a firing deck.

5. In a grate shaking appliance, the combination of a support adapted to be secured at its front to a firebox and comprising a top plate inclined downwardly from its front and provided with a plurality of parallel recesses separated by interposed ribs, side plates extending downwardly from the top plate, a plurality of grate shaking levers, each located in one of the recesses, and a fulcrum pin passing freely through said levers and fixed in the support.

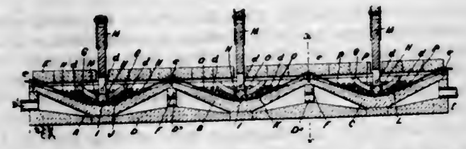
[Claims 6 to 10 not printed in the Gazette.]

1,065,726. ADJUSTABLE HEADLIGHT. HENRY E. A. ROCHE and CLEOPHAS ROY, Hawkesbury, Ontario, Canada. Filed Sept. 19, 1912. Serial No. 721,289. (Cl. 240—62.)



The combination with a vehicle having movable wheels and a rod connecting said wheels and arranged to move transversely of the direction of vehicle motion of a plurality of path illuminating lamps revolubly mounted on the vehicle, a rod connecting said lamps together, a reversely curved spring fixed at one end to the wheel connecting rod and at the opposite end to the lamp connecting rod, and resilient means connected to said spring extending from the approximate center of the spring in divergent directions toward and being connected to the extremities of the wheel connecting rod.

1,065,727. METHOD OF PLATING METAL. WALTER S. ROCKEY and HILLIARY ELDRIDGE, New York, N. Y., assignors to Metallurgical Research Company, a Corporation of Arizona. Filed Apr. 25, 1910. Serial No. 557,312. (Cl. 91—70.2.)



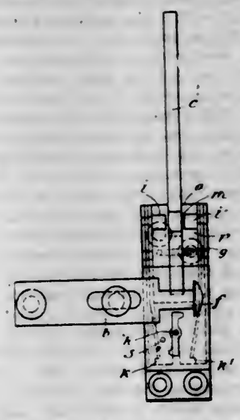
1. The method of plating a ferrous metal with copper or its alloys, consisting in passing said ferrous metal through a flux of boron trioxid into a molten bath of said copper and from said copper through a suitable flux comprising boron trioxid to coat the same with said last named flux, and thence through a second bath of said last named flux and said molten plating metal, the temperature of which is less than that of said first body of plating metal, and removing same therefrom through a second body of said flux to coat said metal with said flux to protect it from oxidation during its cooling period.

2. The method of plating a ferrous metal with copper or its alloys, consisting in passing said ferrous metal through a flux containing boron trioxid into a molten bath of said copper and from said copper through a flux of boron trioxid to coat the same, and thence into a second bath of said molten plating metal, and removing same therefrom through a second body of said flux to coat said metal with said flux to protect it from oxidation during its cooling period.

3. The process of coating a sheet of metal consisting in passing the sheet through a bath of molten boron trioxid, then through a bath of molten plating metal heated slightly above its melting point, then through a bath of molten boron trioxid to coat said plating, then through a second bath of molten plating metal heated to its melting point, then removing said sheet from the second bath through a bath of molten boron trioxid to coat said last named plating and protect the same from the atmosphere during its cooling period.

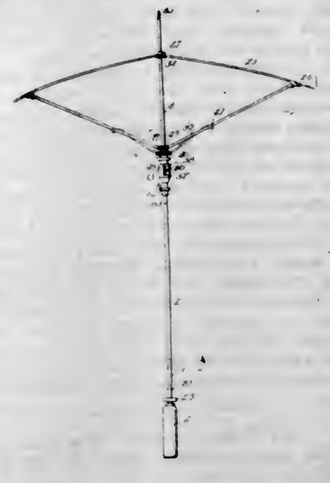
4. The process of plating ferrous metal consisting in first passing the metal to be plated through a flux of boron trioxid into a bath of metal having a copper base which is maintained at a temperature near its melting point and then withdrawing the ferrous metal from said bath through a flux of boron trioxid to coat said plating with said flux, then carrying said metal into a second bath of plating metal which removes said flux from said plating and deposits a coating of plating metal on said first coating of plating metal and then withdrawing said metal plated article from said bath through a flux of boron trioxid to coat said plating metal with said flux to protect the plating during its cooling period.

1,065,728. STOP FOR DOORS. WILHELM RÜCKERT, Hanover-Wülfel, Germany. Filed Feb. 12, 1913. Serial No. 747,948. (Cl. 16—81.)



In an automatic door-stop arranged for being opened from the outside, the combination with a snap-lock comprising a bolt mounted on the door-post, an eye piece mounted on the bolt, a hook having an oval eye mounted with play on the eye piece, a guide on the bolt for guiding the hook, and a pin mounted on the door and adapted to coact with said hook and rock the same down out of said guide, whereupon the hook automatically engages the pin; the bolt together with the hook being able to be removed from the lock after the lock has been unlocked by means of a key.

1,065,729. FOLDING UMBRELLA. ALEXANDER SALOF, Oakland, Cal. Filed Aug. 14, 1912. Serial No. 714,984. (Cl. 135—25.)



1. In a folding umbrella, a rib composed of alined sections, links arranged on opposite sides of the adjacent ends of the sections and pivotally connected thereto, a housing connected with the outer end of the inner section, said sections having their inner ends beveled in opposite directions to permit the outer section to fold upwardly upon the inner section, the said ends contacting when the sections are in alinement, said outer section having

an inwardly extending lug engaging beneath the adjacent end of the inner section, a brace pivoted to the housing between the connection of the links with the respective sections and having a cam shaped head for engaging the lug and holding it against the inner section when the umbrella is unfolded.

2. In a folding umbrella, a folding rib comprising inner and outer alined sections, the adjacent ends of the sections being oppositely beveled on their upper faces, a pair of links connecting the sections, the said ends contacting when the sections are in alinement, the outer section having an inwardly extending lug engaging beneath the outer end of the inner section, and a brace pivoted to the outer end of the inner section between the connection of the links with the sections and having means for engaging the lug and pressing it against the inner section when the umbrella is unfolded.

3. In a folding umbrella, a plurality of braces, each comprising alined inner and outer sections, a pivotal connection between the meeting ends of the sections, the outer section having a longitudinal recess at its inner end, said sections being of channel shape, a bar slidable in the channel of the inner section toward and from the recess and having a finger for engaging the recess to lock the sections in alinement, a runner comprising an inner sleeve having a notch at its upper end, the inner section of the brace being connected to the notch, a second sleeve slidable on the first sleeve, and provided with a notch, a link connecting the bar having the finger to the notch, an inclosing sleeve on the lower ends of the first and second sleeves, said first sleeve having an annular rib below the lower end of the second sleeve, a spring between the rib and the second sleeve for pressing the notches together, and means in connection with the second sleeve and the inclosing sleeve for locking said second sleeve to the inclosing sleeve with the notches separated.

4. In a folding umbrella, a plurality of braces, each comprising alined inner and outer sections, a pivotal connection between the meeting ends of the sections, the outer section having a longitudinal recess at its inner end, said sections being of channel shape, a bar slidable in the channel of the inner section toward and from the recess and having a finger for engaging the recess to lock the sections in alinement, a runner having notches movable toward and from each other, the inner section being connected to the upper notch, a link connecting the bar having the finger to the other notch, a spring pressing the notches together, and means for separating the notches to release the finger from the recess.

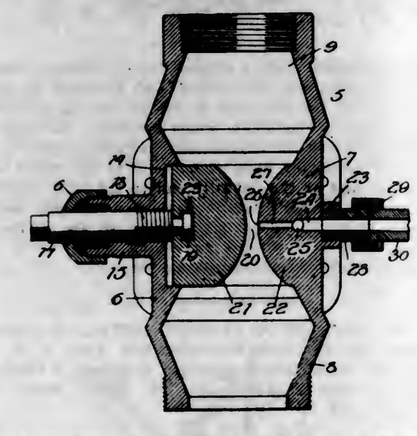
5. In a folding umbrella, a plurality of braces, each comprising alined inner and outer sections, a pivotal connection between the meeting ends of the sections, the outer section having a longitudinal recess at its inner end, said sections being of channel shape, a bar slidable in the channel of the inner section toward and from the recess and having a finger for engaging the recess to lock the sections in alinement, a runner having a notch for connecting the inner ends of the inner sections together, a second notch movable on the runner toward and from the first notch, a connection between the said second notch and the sliding bars of all the braces for simultaneously moving the said bars to engage and disengage them from the recesses, a spring pressing the second notch toward the first notch, and means for holding the said notch away from the first notch.

[Claims 6 and 7 not printed in the Gazette.]

1,065,730. JET-PUMP. JOSEPH SCHNEIBLE, Chicago, Ill. Filed Jan. 19, 1912. Serial No. 672,105. (Cl. 230—13.)

1. A jet-pump having the side-walls of its casing provided with opposing heads forming between them a constricted passage for the operating fluid rectangular in cross-section to maintain the opposite walls of said passage parallel in all of the head-adjustments, said heads being adjustable one with relation to the other to vary the degree of constriction of the passage, and means for fixing the adjusted relation of the heads.

2. A jet-pump having the side-walls of its casing provided with heads presenting bulging opposing faces forming between them a constricted passage for the operating fluid rectangular in cross-section to maintain the opposite walls of said passage parallel in all of the head-adjustments, one of said heads having an opening through it for the fluid to be operated upon leading to said passage, said heads being adjustable one with relation to the other to vary the degree of constriction of the passage, and means for fixing the adjusted relation of the heads.



3. A jet-pump having the side-walls of its casing provided with opposing heads forming between them a constricted passage for the operating fluid rectangular in cross-section to maintain the opposite walls of said passage parallel in all of the head-adjustments, one of said heads containing a chamber open to the supply of fluid to be acted upon and having a duct leading from it to said passage, said heads being adjustable one with relation to the other to vary the degree of constriction of the passage, and means for fixing the adjusted relation of the heads.

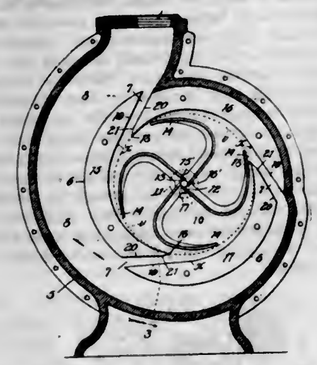
4. A jet-pump having the side-walls of its casing provided with heads presenting bulging opposing faces forming between them a constricted passage for the operating fluid, one of said heads having a groove extending across its face and containing a chamber open to the supply of fluid to be acted upon, with a duct leading from the chamber to said groove, said heads being adjustable one with relation to the other to vary the degree of constriction of the passage, and means for fixing the adjusted relation of the heads.

5. A jet-pump having one of its walls provided with a fixed head with an opening through it for the fluid to be operated upon, and its opposite wall provided with a head adjustable relative to the fixed head and forming therewith a constricted passage for the operating fluid traversing said opening rectangular in cross-section to maintain the opposite walls of said passage parallel in all of the head-adjustments, and a shaft journaled in said opposite wall and operatively connected with said adjustable head to move it back and forth and set it relative to the fixed head.

[Claim 6 not printed in the Gazette.]

1,065,731. CENTRIFUGAL FORCE-PUMP. JOSEPH SCHNEIBLE, Chicago, Ill. Filed May 31, 1912. Serial No. 700,640. (Cl. 103—43.)

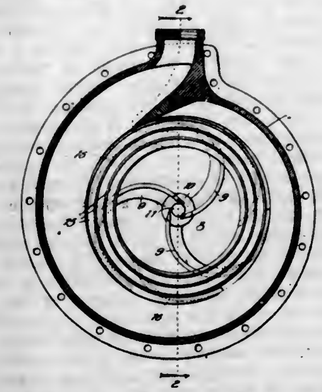
1. A centrifugal pump having in its casing an annular wall forming the inner pumping-chamber and outer delivery-chamber, said wall being in sections overlapping each other at their ends and forming ports with shearing-edges at corresponding ends of the sections on a circle having as its center that of the pumping-chamber, throats and entrance-chambers thereto expanding inwardly from the throats, the inner surface of each wall section extending from the shearing-edge end thereof as an arc of a circle eccentric to said first-named circle, and from the opposite end of the arc substantially at a tangent thereto and forming the outer port-wall.



2. A centrifugal pump having in its casing an annular wall forming the inner pumping-chamber and outer delivery-chamber, said wall being in sections overlapping each other at their ends and forming ports with shearing edges at corresponding ends of the sections on a circle having as its center that of the pumping-chamber, throats and entrance-chambers thereto expanding inwardly from the throats, the inner surface of each wall-section extending from the shearing-edge end thereof as an arc of a circle to the outer port-wall, said port-wall extending substantially at a tangent to said arc, and the diameter of said last-named circle being that of the circle having said center plus substantially the discharge-port height.

3. In a centrifugal pump having a casing provided with an inner annular wall containing ports at intervals and forming the inner pumping-chamber and outer delivery-chamber, and a rotary bladed impeller in the pumping-chamber, a port-width reducing-ring interposed between a side of the impeller and annular wall and the adjacent casing-head.

1,065,732. CENTRIFUGAL PUMP. JOSEPH SCHNEIBLE, Chicago, Ill. Filed June 18, 1912. Serial No. 704,381. (Cl. 103—43.)



1. In a centrifugal pump, an impeller adapted to prevent back-leakage of fluid through the clearance-space in the pump, comprising annular shroud-forming walls on opposite sides of the impeller-blades, provided on their outer faces with means producing and maintaining, by the rotation of the impeller, statical counter-pressure of fluid in the clearance-space for resisting back-flow without producing a radial outward flow through said space of the fluid discharging from the pump.

2. In a centrifugal pump, an impeller provided with means for preventing back-leakage of fluid through the clearance-space in the pump, said means comprising annular shroud-forming walls on opposite sides of the impeller-blades, having on their outer faces spiral runways constructed and arranged to produce and maintain, by the rotation of the impeller, statical counter-pressure of fluid in the clearance-space for resisting back-flow without producing a radial outward flow through said space of the fluid discharging from the pump.

3. In a centrifugal pump, the combination with the casing, of an impeller journaled therein, provided with means for preventing back-leakage of fluid through the clearance-space in the pump, said means comprising annular shroud-forming walls on opposite sides of the impeller-blades extending inwardly from the outer blade-extremities and having on their outer faces spiral run-ways extending from the inner edges of said walls outwardly and in the direction opposite the direction of rotation of the impeller to produce and maintain, by the rotation of the impeller, statical counter-pressure of fluid in the clearance-space for resisting back-flow without producing a radial outward flow through said space of the fluid discharging from the pump.

1,065,733. METALLIC CORE OR REINFORCE FOR CASTINGS. HEINRICH SCHUPPENER, Voelklingen-on-the-Saar, Germany. Filed Feb. 16, 1912. Serial No. 678,132. (Cl. 22—219.)



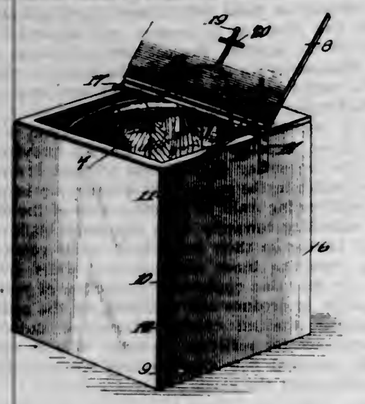
1. A metallic core or reinforce for castings consisting of groups of members wound spirally in opposite directions, the outer group being concentric to the inner group and adapted to be embedded in the molten metal while the inner group remains free.

2. A metallic core or reinforce for castings consisting of groups of tubular members wound spirally in opposite directions the outer group being concentric to the inner group, forming channels for the escape of gases from the mold, and said outer group being adapted to be embedded in the molten metal, while the inner group remains free.

1,065,734. LID-OPERATING DEVICE FOR CABINETS OR THE LIKE. GEORGE A. SCHWARTZ and ALBERT C. BABCOCK, Bessemer, Ala., assignors of one-third to James M. Dudley, Bessemer, Ala. Filed July 25, 1912. Serial No. 711,557. (Cl. 211—7.)

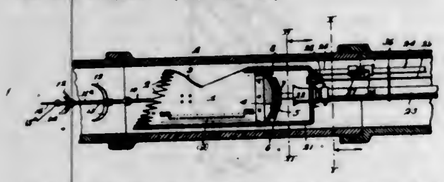
1. The combination of a treadle, a lid, a crank shaft connected with the lid to operate the same and movable off the center in one direction to open the lid and in the other direction to close the lid and intermediate devices between the shaft and treadle including a bell crank lever, all substantially as described, whereby the treadle may be operated to open the lid and to close the same and the said treadle will occupy substantially the same position both when the lid is open and when it is closed, substantially as set forth.

2. The combination of a casing, a hinged lid therefor and a crank shaft extending beneath the lid and journaled to the casing, the said crank shaft having beneath the lid a crank arm slidably engaged with the lid at the



underside of the latter whereby when the lid is closed, the shaft and its arm will be obscured thereby, and means for rocking the crank shaft, substantially as set forth.

1,065,735. SEWER-CLEANER. HENRY SIEBEN and WILLIAM J. STEVENSON, Kansas City, Mo., assignors, by direct and mesne assignments, to The Turbine Sewer Machine Renovating Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Dec. 31, 1910. Serial No. 600,294. (Cl. 182—2.)



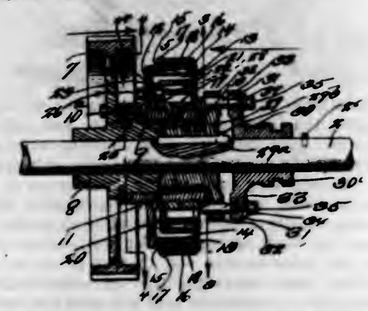
1. In an apparatus of the character described, a receptacle adapted to traverse a sewer and having an opening at its rear end, a nozzle adapted to discharge water through the said opening, and provided with a hose connection, a door to normally close the opening in the rear of the receptacle, runners on the receptacle to carry the same, and means to conduct the receptacle through the sewer.

2. In an apparatus of the character described, a receptacle adapted to traverse a sewer and provided at its forward end with a spreader, means for discharging water around said receptacle and against the spreader thereof, and means to conduct said receptacle through the sewer.

3. In an apparatus of the character described, a receptacle adapted to traverse a sewer and having an opening at its rear end, means to conduct said receptacle through the sewer, a door to close the opening at the rear of the receptacle, a spider at the rear end of the receptacle, and a nozzle carried by said spider and having a hose connection at its rear end.

1,065,736. FLEXIBLE-BELT COUPLING. HERRMANN I. SIMMONS, South Windham, Conn., assignor to The Smith and Winchester Manufacturing Co., South Windham, Conn. Filed June 15, 1912. Serial No. 703,902. (Cl. 64—13.)

1. In combination, a revoluble shaft, a driven member loosely journaled thereon, a sleeve element fixed on the driven member, a second sleeve element constituting a driving member loosely sleeved upon the first sleeve element, means for connecting the second sleeve element to the revoluble shaft, the first sleeve element constituting a bearing extending axially with said shaft for the second sleeve element, the sleeve elements having adjacent flanges, each terminating in a series of spaced apart broad claws, the ends of each of which terminate in rounded portions, said claws and rounded portions extending axially with said shaft, one series being arranged within the other, a flexible belt interlaced between the claws of both series to cause the two sleeve elements to rotate together, an annular ring carried by one series of claws and adapted to overlap the other series, to retain the belt interlaced upon the claws, an annular band cover secured on the flange of the first sleeve element to protect the flexible belt, the flange of the second sleeve element having a segmental slot, and a pin carried by the flange of the first sleeve element to extend into said slot, thereby constituting a safety device between the sleeve elements, in the event the flexible belt becomes incapable of performing its work.

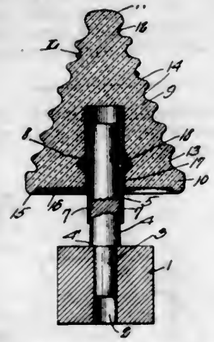


2. In combination, a revoluble shaft, a driven member loosely journaled thereon, a sleeve element fixed on the driven member, a second sleeve element constituting a driving member loosely sleeved upon the first sleeve element, means for connecting the second sleeve element to the revoluble shaft, the first sleeve element constituting a bearing extending axially with said shaft for the second sleeve element, the sleeve elements having adjacent flanges, each terminating in a series of spaced apart claws extending axially with said shaft, one series being arranged within the other, a flexible belt interlaced between the claws of both series to cause the two sleeve elements to rotate together, a ring carried by one series of claws and adapted to overlap the other series, to retain the belt interlaced upon the claws, an annular band cover secured on the first sleeve element to protect the flexible belt, the flange of the second sleeve element having a segmental slot, and a pin carried by the flange of the first sleeve element to extend into said slot, thereby constituting a safety device between the sleeve elements in the event the flexible belt becomes incapable of performing its work.

3. In combination, a pair of sleeved elements, one sleeved within and acting as a bearing for the other, one constituting a driving member, while the other acts as the driven member, said elements having adjacent flanges, each terminating in a series of spaced apart claws, one series being arranged within the other and overhanging the sleeved portions of said elements, a flexible belt interlaced between the claws of both series to cause the two sleeved elements to rotate together, a ring carried by one series of claws and adapted to overlap the other series to retain the belt interlaced upon the claws, an annular band cover secured on the driven element, arching over the belt and engaging said ring to protect the belt, the flange of the driving element having a segmental slot, and a pin carried by the flange of the driven element to extend into said slot, thereby constituting a safety device between the sleeve elements, in the event the flexible belt becomes incapable of performing its work.

4. In combination, a pair of sleeved elements, one sleeved within and acting as a bearing for the other, one constituting a driving member, while the other acts as the driven member, said elements having adjacent flanges, each terminating in a series of spaced apart broad claws, the ends of each of which terminate in rounded portions, said claws and rounded portions extending in surfaces concentric with the sleeve elements, one series being arranged within the other and overhanging the sleeved portions of said elements, a flexible belt interlaced between the claws of both series to cause the two sleeved elements to rotate together, a ring carried by one series of claws and adapted to overlap the other series to retain the belt interlaced upon the claws, an annular band cover secured on the flange of the driven element and arching over the belt and engaging said ring to protect the belt, the flange of the driving element having a segmental slot, and a pin carried by the flange of the driven element to extend into said slot, thereby constituting a safety device between the sleeve elements, in the event the flexible belt becomes incapable of performing its work, and means having connections with the driving element for driving the same.

1,065,737. INSULATOR AND SUPPORT. ABIRAM J. SLONECKER, Trenton, Mo. Filed July 31, 1912. Serial No. 712,540. (Cl. 173—28.)



1. An insulator and support, comprising a tubular supporting sleeve, a conical insulator rotatably mounted thereon, and coacting means carried by the sleeve and insulator to prevent the longitudinal movement of the insulator upon the sleeve, the outer surface of the insulator being provided with a spiral line wire receiving groove.

2. An insulator and support, comprising a tubular supporting sleeve, a conical insulator rotatably mounted thereon, and coacting means carried by the sleeve and insulator to prevent the longitudinal movement of the insulator upon the sleeve, the outer surface of the insulator being provided with a spiral line wire receiving groove, the base of the insulator providing means for rotating the insulator to tighten or slacken the line wire.

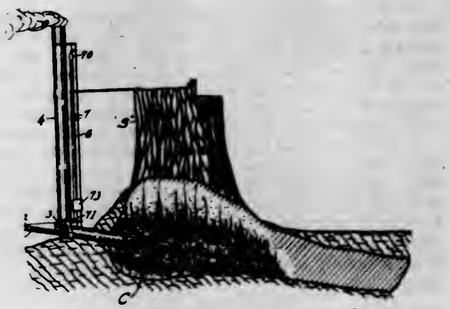
3. An insulator and support, comprising a tubular supporting sleeve, a conical insulator rotatably mounted thereon, and coacting means carried by the sleeve and insulator to prevent the longitudinal movement of the insulator upon the sleeve, the outer surface of the insulator being provided with a spiral line wire receiving groove, the base of the insulator being provided with a depending circumferential rib adjacent the periphery thereof to direct the moisture away from the under side of the base.

4. An insulator and support, comprising a tubular supporting sleeve, a conical insulator rotatably mounted thereon, and coacting means carried by the sleeve and insulator to prevent the longitudinal movement of the insulator upon the sleeve, the outer surface of the insulator being provided with a spiral line wire receiving groove, the base of the insulator constituting a means for rotating the insulator, to tighten or slacken the line wire and the base of the insulator body being provided with a depending circumferential rib adjacent the periphery thereof to direct the moisture away from the under side of the base.

5. A combination with a cross arm and a vertical insulator supporting pin carried thereby, of a metal insulator supporting sleeve capable of circumferential contraction and expansion, a conical insulator provided with a central bore to fit upon said sleeve said insulator being rotatably mounted upon said sleeve and co-acting means carried by the insulator and sleeve to retain the insulator against longitudinal movement.

[Claims 6 to 11 not printed in the Gazette.]

1,065,738. STUMP-BURNER. CLARK SMITH, Mount Vernon, Wash., assignor to Henry L. Reynolds, Seattle, Wash. Filed May 9, 1911. Serial No. 626,047. (Cl. 110—21.)



1. A stump burning device comprising a flue forming member adapted to be placed with one open end against a face of the stump and with its axis extending away from the stump, a draft-inducing stack adapted to be connected with said flue back from the end which is next the stump, an air supply or blast pipe adapted to be placed within the flue and movable lengthwise therein, said air supply or blast pipe being of a length permitting the projection of its inner end beyond the inner end of the flue.

2. A stump burner comprising a flue-forming member adapted to be placed with one end opening against the face of a stump, a draft-inducing stack, a stack-base adapted to connect said flue and stack to form a continuous and closed flue, an air supply or blast pipe, the stack base being provided with an opening for the passage of said air blast pipe and said air blast pipe being of a length greater than the flue permitting its extension through said flue and beyond its inner end, and means for controlling the draft within said flues.

3. In a stump burner, in combination, a hollow member having an open side and adapted to be placed with its open side against the stump to therewith form a closed combustion chamber, a draft inducing flue connected with said chamber, an air supply or blast pipe adapted to be passed through said chamber to the face of the stump, and means for automatically feeding said air supply pipe up to the stump as the latter burns away.

4. In a stump burner, in combination, a hollow member adapted, in conjunction with a part of the stump to form a closed combustion chamber, an air supply or blast pipe, and means for feeding the air supply or blast pipe up to the face of the stump as the latter burns away.

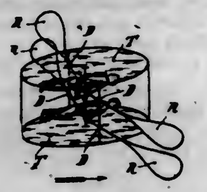
5. A device for use in burning stumps comprising a member adapted to form a gas discharge flue leading away from the stump, a draft-inducing stack connected with said flue, an air-supply or blast pipe longer than and passing through said flue to the face of the stump, and means for automatically feeding said air supply pipe forward as the stump burns away.

[Claims 6 to 8 not printed in the Gazette.]

1,065,739. FLYING-MACHINE. LUDWIG SOMMER, Munich, Germany. Filed July 14, 1911. Serial No. 638,498. (Cl. 244—13.)

1. In a device of the character described, the combination with a sustaining plane, of means whereby a human being may be supported by said plane with the center of gravity of said human being coinciding with the center

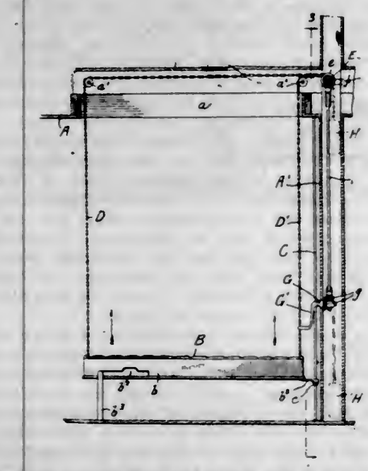
of gravity of said plane, and oar like actuating means supported at one point only and capable of being manually moved in any direction relatively to said plane.



2. In a device of the character described, the combination with a plurality of parallel planes, of means for supporting a human being so that the center of gravity of said human being coincides with the center of gravity of the plurality of planes, and oar like actuating means supported at one point only and capable of being manually moved in any direction relatively to said planes.

3. In a device of the character described, the combination with a sustaining plane, of a plurality of means each thereof being adapted to support a human being with his center of gravity coinciding with the center of gravity of said plane, and oar like actuating means supported by the device at one point only and capable of being manually moved in any direction relatively to said plane.

1,065,740. BED. THEODORE H. SORLIEN, Granite Falls, Minn. Filed Jan. 30, 1913. Serial No. 745,118. (Cl. 5—18.)

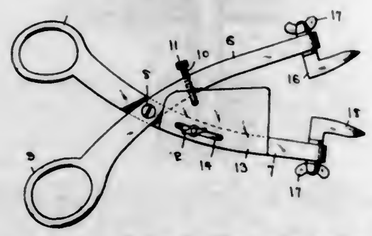


1. In combination with the ceiling of a room, of pulleys mounted within the ceiling, flexible connections extending over the said pulleys, a bed suspended by said flexible connections, said bed comprising side and end walls and a base, the former of which are provided with slots adjacent one end of the bed, angular legs normally positioned within the bed, a connection between the said legs and upon which the legs are movable outwardly in relatively opposite directions and with which the legs are rotatable to an upright position, other connections extending between the legs and adapted to cause movement of one leg when the other leg is moved, guide members extending from the opposite ends of the bed, means with which the said guide members are engageable whereby to form a support for the end of the bed when lowered in operative position, and means for manipulating the said flexible connections whereby to raise and lower the bed substantially as described.

2. In combination with a ceiling and side wall of a room, the former of which is provided with a bed receiving opening, of a pair of guide rods secured in an upright position along the side wall and adjacent to the ceiling opening, a bed frame having a pair of guide members slidably engaging the rod, pulleys mounted in the ceiling over its opening, flexible connections extending over the said pulleys and secured at one end to the bed for suspending the same in position, the said bed comprising a frame, and folding legs at one end of the frame, rigid stops carried by the upright rods and adapted to receive the guide members thereagainst whereby to form a support for the opposite end of the frame, and means engaging the said flexible connections for manipulating the same to raise and lower the bed frame.

3. The combination with the side walls and the ceiling of a room the latter of which is provided with a bed receiving opening, of a guide rod secured in an upright position along one side wall adjacent the opening, a bed frame having a guide member slidably engaging the rod, pulleys mounted in the ceiling over its opening, chains connected at one end to the bed frame and extending over said pulleys, a shaft mounted in the upper portion of one of the side walls, sprocket pulleys secured on said shaft and having recessed peripheries over which the chains also extend whereby they are prevented from slipping, weights in the side walls to which the opposite ends of the chains are fastened, and a crank shaft having connection with the said pulley shaft for rotating the latter.

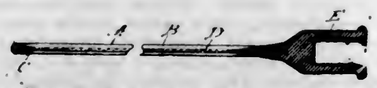
1,065,741. BUTTONHOLE-SCISSORS. JOSIAH SPARKS, University Place, Nebr. Filed Aug. 29, 1912. Serial No. 717,738. (Cl. 164—4.)



1. A pair of buttonhole scissors comprising a pair of handle members, a pair of blades, threaded shanks carrying said blades, and means for adjustably securing said shanks to said members.

2. A pair of buttonhole scissors comprising a pair of pivoted handle members, shanks adjustably mounted in the ends of said handle members, and laterally projecting blades carried by said shanks.

1,065,742. INSECT-DESTROYER. WILLIAM F. STEARNS, Evanston, Ill. Filed July 29, 1912. Serial No. 712,046. (Cl. 43—1.)



1. A device of the kind specified comprising a flat, flexible, foraminous member, a frame therefor consisting of a relatively heavy, soft, flexible, vulcanizable material, the peripheral edge portion of said foraminous member embedded in said frame, the latter continuous through the perforations in said peripheral portion of said foraminous member.

2. A device of the kind specified comprising a flat, flexible, foraminous member and a flexible frame therefor consisting of a vulcanized material completely embedding the peripheral portion of said foraminous member, the portions of said frame disposed upon opposite faces of said foraminous member continuous with each other through the perforations covered thereby.

3. A device of the kind specified comprising a flat, flexible, foraminous member and a flexible frame therefor consisting of a vulcanized material completely embedding the peripheral portion of said foraminous member, the portions of said frame disposed upon opposite faces of said foraminous member continuous with each other through the perforations covered thereby, and a flexible member integral with and projecting from said frame for attaching a handle to the latter.

4. A device of the kind specified comprising a flat, flexible, foraminous member having a corrugated edge portion, a frame therefor consisting of a relatively heavy, soft, flexible vulcanizable material, the peripheral edge portion of said foraminous member embedded in said frame.

5. A device of the kind specified comprising a flat, flexible, foraminous member having a corrugated edge portion, a frame therefor consisting of a relatively heavy, soft, flexible vulcanizable material, consisting of a relatively thick peripheral body portion and a tapering, inwardly projecting flange, the peripheral edge portion of said foraminous member embedded in said flange.

1,065,743. WINDOW-CATCH. MARK C. STOVER, Decatur, Ill. Filed July 16, 1912. Serial No. 709,738. (Cl. 16—16.)



1. A window catch for sashes, comprising a casing, a pivoted catch therein adapted to be projected through an opening in the casing and provided with jamb engaging teeth, a spring thrust wedge operating between the catch and a wall of said casing to press the catch into action, and a sash cord sustained plunger connected with said wedge and adapted to be released upon the breakage of the sash cord.

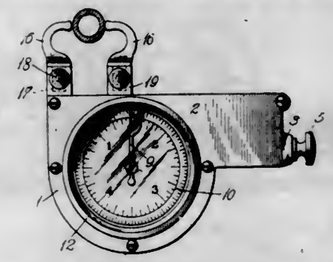
2. A window catch for sashes, comprising a casing, a pivoted catch therein adapted to be projected through an opening in the casing and provided with jamb engaging teeth, a spring thrust wedge operating between the catch and a wall of said casing to press the catch into action, and a sash cord sustained plunger connected with said wedge by a hinge joint and adapted to be released upon the breakage of the sash cord.

3. A window catch for sashes, comprising a casing, a pivoted catch therein adapted to be projected through an opening in the casing and provided with jamb engaging teeth, a spring thrust wedge for pressing the catch into action, a sash cord sustained plunger connected with said wedge and adapted to be released upon the breakage of the sash cord, and a thumb piece for retracting said wedge.

4. A window catch for sashes, comprising a casing, a pivoted catch therein adapted to be projected through an opening in the casing and provided with jamb engaging teeth, a spring thrust wedge for pressing the catch into action, a sash cord sustained plunger connected with said wedge and adapted to be released upon the breakage of the sash cord, and a thumb screw for retracting and fastening said wedge.

1,065,744. MICROMETER-GAGE. JOSEPH SUTORIK, Detroit, Mich. Filed Dec. 23, 1912. Serial No. 738,125. (Cl. 73—77.)

1. In a gage, the combination of a casing having a slot in one edge extending from end to end of the casing, a screw shaft in the casing extending longitudinally of the slot, means exteriorly of the casing on the shaft for turning the same, a fixed member on the casing at one end of the slot, a movable member extending into the casing into engagement with said screw shaft and adapted to be moved thereby along the slot toward and from the fixed member, caliper arms carried by said members, a dial on the casing at one side of the screw shaft, a transverse shaft in the casing with one of its ends projecting through the center of the dial, a worm gear on the transverse shaft engaging the screw shaft, and an indicator arm on the projecting end of the transverse shaft to sweep over the dial.



2. In a micrometer gage, the combination of a casing having a longitudinal slot in one edge and formed with a semi-circular enlargement at its opposite edge, bearings in the ends of the casing, a screw shaft mounted in said bearings and extending parallel with the edge of the casing in which the slot is provided, a head on the outer end of the screw shaft for turning the same, a fixed socket member on the casing at the end of the slot, a socket member movable longitudinally in the slot and provided with teeth at its inner end to engage the screw shaft, caliper arms detachably secured within the socket members, a transverse shaft mounted in the axis of the semi-circular enlargement of the casing, a worm gear on the transverse shaft in engagement with the screw shaft, a cover to close one side of the casing, provided with a laterally extending annular flange forming a chamber on the cover into which one end of the transverse shaft extends, a dial within said chamber formed by the flange, an index hand on one end of the transverse shaft to sweep over the dial, and a transparent closure engaging the flange and closing the chamber to protect the dial and index hand.

1,065,745. COMBINED HAIR-BRUSH AND COMB. JOHN T. SUTTON, Urbana, Ill. Filed July 17, 1912. Serial No. 709,952. (Cl. 15—29.)

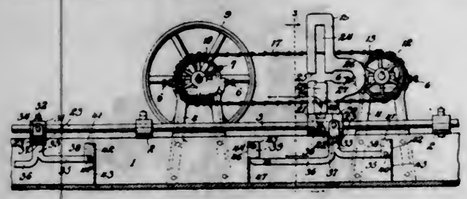


The combination with a brush stock, of spaced eyes integrally formed with the upper face thereof and rising from the same, a clip having a pintle eye disposed between the eyes on the stock, a pintle passed through the eyes on the stock and clip for swingingly connecting the latter to the stock, a comb detachably engaged in the clip, and a coiled spring surrounding the pintle and engaging the clip and brush stock for normally holding the comb in inoperative position.

1,065,746. CONVEYER. AUGUST SWANSON, Cedar Rapids, Iowa. Filed July 23, 1912. Serial No. 711,137. (Cl. 193—11.)

1. In a conveyer, a conveyer trough, a reciprocatory rod extending lengthwise thereof, and spaced pairs of adjacent blades, each pair of blades having a common mounting in turn carried by and movable with the rod, the blades of each pair being mounted for trailing in one direction and actively operating in the other direction.

2. In a conveyer, a trough, a rod mounted thereon for longitudinal reciprocation, and conveyer elements carried by the rod and each comprising oppositely directed members extending lengthwise of the conveyer trough, and a readily removable pivoted blade carried by the outer end of each member in position to trail when the member is moved in one direction and become active when the member is moved in the other direction.



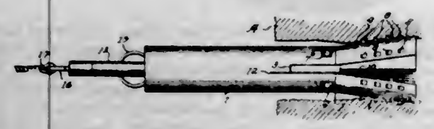
3. In a conveyer, provided with longitudinal reciprocatory rod, a conveyer element mounted on said rod for adjustment therealong and provided with oppositely directed extensions longitudinal of the rod, each extension having at the outer end a pivoted blade movable to trailing position when the element travels in one direction and into active position when the element travels in the other direction.

4. In a conveyer, a conveyer trough, a reciprocatory rod extending lengthwise thereof, a block carried by the rod and adjustable longitudinally thereof, spaced arms pivotally connected to the block and provided with oppositely directed portions extending lengthwise of the conveyer trough, each of said portions terminating in upturned ends, and a conveyer blade carried by the outer end of each extended portion of the arms, one blade being pivotally connected at substantially the outer ends of the upturned extensions and the other blade being pivotally connected at substantially the junction of the upturned ends with the corresponding longitudinally extended portions of the arms.

5. In a conveyer, a conveyer trough, a reciprocatory member movable lengthwise of the conveyer trough, associated pairs of conveyer blades adapted to the trough, a carrier common to each pair of conveyer blades and on which the latter are mounted for trailing in one direction of reciprocation, and supports between the carrier and reciprocating member, the distance between the carriers being related to the extent of travel of the reciprocating member to cause the forward blade of a pair of blades on its forward movement to overlap the rear limit of movement of the rear blade of the next preceding pair.

[Claim 6 not printed in the Gazette.]

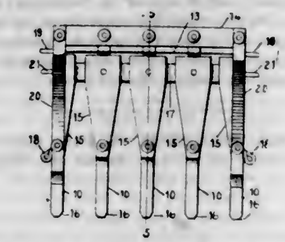
1,065,747. MACHINE-JACK. JOSEPH TUCK, Hawks Nest, W. Va. Filed Oct. 3, 1912. Serial No. 723,747. (Cl. 189—92.)



1. In a machine jack, a tubular member, clamping blocks pivotally secured to said tubular member, springs secured to said clamping blocks and to the tubular member, said springs normally tending to move said clamping blocks into close proximity to one another, the inner sides of said clamping blocks being formed with tapered angular grooves, a plunger slidably mounted in said tubular member, and a pyramidal head on said plunger and adapted to engage said grooves to expand the blocks outwardly.

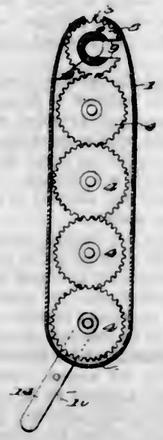
2. A machine jack comprising a tubular member having slots in one of its terminals diametrically arranged, clamping blocks, a longitudinally extending lug on each clamping block engaging one of the slots aforesaid, a pivot pin engaging said tubular member and longitudinally extending lug, springs secured to said clamping blocks and engaging the tubular member to normally hold said clamping blocks in close proximity to one another, the inner sides of said clamping blocks being provided with tapered angular grooves, a plunger slidably mounted in said tubular member, and a pyramidal head secured to said plunger and adapted to engage said angular grooves to expand the blocks against the resistance of said springs.

1,065,748. TINED SCRAPER. ALBERT VOLLERS, Guide Rock, Nebr. Filed Dec. 3, 1912. Serial No. 734,710. (Cl. 37—40.)



A scraper comprising a plurality of tapered tines, the rear portions of the tines being bent upwardly and rearwardly, transverse bars secured to the upwardly extending portions, downwardly and forwardly extending braces secured to the outer tines, a transverse bar secured to the inner ends of the tines, and outwardly tapering plates secured to the upper faces of the tines, the inner end portions of each of the said plates being widened and disposed close together.

1,065,749. DEVICE FOR MANIPULATING EXPLOSIVE-ENGINE VALVES. JOHN H. WALL, Bristol, R. I. Filed Oct. 1, 1912. Serial No. 723,376. (Cl. 51—4.)



1. In a tool of the type set forth, a casing having a cover, which casing and cover are rounded at one end, the casing bottom and the cover having their opposite ends formed with registering slots, a train of gears in the casing, shouldered studs on which the gears are mounted, the ends of the stud extending through the casing bottom and cover and being headed to hold the parts together, a lever secured to the gear at the rounded end of the casing and having finger engaging means at its free end, a pin on the lever to engage opposite sides of the casing to restrict the oscillatory movement of the lever, a gear at the free end of the casing having a boss that projects through an enlarged opening provided therefor in the cover, said boss and the last named gear having a slot that registers with the slot of the cover and casing, and said boss having diametrically opposed grooves to receive the pin of the spring pressed explosive engine valve, the slots of the casing, cover and boss being for the reception of the valve stem.

2. In a tool of the type set forth, a casing, a gear carried by the casing and having a boss, the gear and boss having U-shaped slots which receive the valve stem of an explosive engine, said boss having grooves to receive the pin of said valve stem, and means to oscillate said gear.

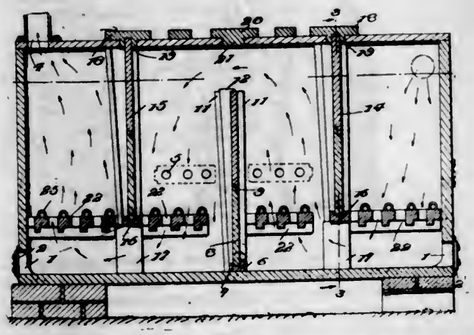
3. In a tool of the type set forth, a casing, a gear carried by the casing, and having a boss, the gear and boss having U-shaped slots which receive the valve stem of an explosive engine, said boss having grooves to receive the pin of said valve stem, and means for oscillating said gear consisting of a train of gears and a crank handle connected to one of the train of gears.

4. In a tool of the type set forth, a casing, a gear carried by the casing and having a boss, the gear and boss having U-shaped slots which receive the valve stem of an explosive engine, said boss having grooves to receive the pin of said valve stem, means for oscillating said gear consisting of a train of gears and a crank handle connected to one of the train of gears, and a pin carried by said crank handle to engage the casing and thereby restrict oscillatory movement of the crank handle.

5. In a tool of the device set forth, a device having a U-shaped slot to receive the valve stem of an explosive engine and also having grooves on opposite sides of the slot to receive the pin or said valve stem, and means to oscillate said device.

[Claims 6 to 8 not printed in the Gazette.]

1,065,750. AUXILIARY COMBUSTION-CHAMBER FOR SULFUR-BURNERS. DANIEL M. WHALEN, Lincoln, Me. Filed June 14, 1912. Serial No. 703,745. (Cl. 23—1.)



1. An auxiliary combustion chamber for sulfur burners having a plurality of sectional partitions removably fitted therein.

2. An auxiliary combustion chamber for sulfur burners having a plurality of transverse partitions fitted therein, the said partitions being spaced alternately from the top and the bottom of the chamber and consisting of superposed sections having their meeting edges overlapping.

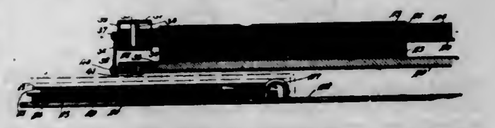
3. An auxiliary combustion chamber for sulfur burners having a plurality of partitions spaced alternately from its top and its bottom, and caps fitted in the top of the chamber over the partitions, some of said caps engaging the upper edges of the adjacent partitions.

4. An auxiliary combustion chamber for sulfur burners having pedestals on its bottom adjacent its sides, a plurality of transverse rests supported on and extending between said pedestals, transverse rests on the bottom of the chamber between the pedestals, partitions fitted to and supported by said rests, and detachable fastenings for the sides of said partitions.

5. An auxiliary combustion chamber for sulfur burners having guides arranged on the inner face of its walls, said guides being arranged in pairs and the members of the pairs converging downwardly, partitions fitted in said guides, and tapered locking keys bearing upon the said guides and the partitions fitting therein.

[Claims 6 and 7 not printed in the Gazette.]

1,065,751. MANIFOLDING SALES-BOOK. LINWOOD G. WHITNEY, New York, N. Y., assignor to Whitney Duplicating Check Company, New York, N. Y., a Corporation of New York. Filed Aug. 31, 1911. Serial No. 646,971. (Cl. 11—23.)



1. A manifolding sales-book comprising a back-section, a set of original check-slips secured thereto, a set of duplicate check-slips, a box-like member composed of upper and lower hinged-together members securing one edge of said set of duplicate check-slips, means hinging said box-like member to one edge of said back-section so that said member with said duplicate check-slips may be swung from off and below said section, and a carbon sheet on said duplicate check-slips, said original check-slips being secured by means adapting them, without detachment, to be independently placed on said carbon sheet on the duplicate check-slips; substantially as set forth.

2. A manifolding sales-book comprising a back-section, a set of original check-slips secured thereto, a set of duplicate check-slips, a box-like member composed of upper and lower hinged together members securing one edge of said set of duplicate check-slips, a link hinged to the outer side of said box-like member and hingedly connected to one edge of said back-section, and a carbon sheet on said duplicate check-slips, said original check-slips being secured by means adapting them, without detachment, to be independently placed on said carbon sheet on the duplicate check-slips, and said link permitting said duplicate check-slips to receive said original check-slips below them; substantially as set forth.

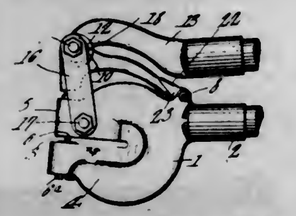
3. A manifolding sales-book comprising cover sections hinged together, a set of original check-slips secured on the upper end of the back cover section by means adapting them to be independently turned to lie upon either of said sections when the front section is opened from the back section, a set of duplicate check-slips, a box-like member composed of upper and lower hinged together members securing the left hand edge of said set of duplicate check-slips, means hinging said box-like member to the left hand edge of said back cover section, and a carbon sheet on said duplicate check-slips; substantially as set forth.

4. A manifolding sales-book comprising cover sections hinged together, a set of original check-slips secured on the upper end of the back cover section by means adapting them to be independently turned to lie upon either of said sections when the front section is opened from the back section, a set of duplicate check-slips, a box-like member composed of upper and lower hinged together members securing the left hand edge of said set of duplicate check-slips, a link hinged to the outer side of said box-like member and hingedly connected to the left hand edge of said back cover section, and a carbon sheet on said duplicate check-slips; substantially as set forth.

5. A manifolding sales-book comprising a base-member, a set of check-slips, a coöperating set of check-slips and a member securing one set of said check-slips at one edge and comprising a plate fastened to one edge portion of said base-member, a plate-link hinged to the outer edge of said plate, and a box-like part composed of upper and lower members hinged together and to said link and provided with means for latching them together in closed positions; substantially as set forth.

[Claim 6 not printed in the Gazette.]

1,065,752. HAND METAL-PUNCH. WILLIAM A. WHITNEY, Rockford, Ill., assignor to Whitney Metal Tool Company. Filed Feb. 17, 1912. Serial No. 678,253. (Cl. 164—96.)



1. In a punch, the combination with a slotted head having a punching tool slidable therein, a punch engaging member pivotally mounted thereon and connected with said punching tool, an operating handle for actuating said punch engaging member, and means connecting said operating handle to said slotted head so as to permit swinging movement of the operating handle, of eccentrically connected operating members attached to the operating handle and the punch engaging member.

2. In a punch, the combination with a slotted head having a punching tool slidable therein, a punch engaging member pivotally mounted thereon and connected with said punching tool, an operating handle for actuating said punch engaging member, and means connecting said operating handle to said slotted head so as to permit swinging movement of the operating handle, of a rotary member eccentrically connected with said connecting means and said punch engaging member and said operating handle.

3. A punch having a slotted head provided with a punching tool, a punch engaging member pivoted on said head and engaging said tool, said punch engaging member having a circular bore therein, a cylindrical member extending through said bore, straps eccentrically connected at one end to said cylindrical member and secured at the other end to said slotted head, and an operating handle rigidly connected to said cylindrical member.

4. A metal punch comprising a slotted head, a slidable punching tool therein, a punch-engaging member pivoted on said head at one end and engaging said tool at the other end, said member having a bore formed with a slot, the top wall of the bore being split longitudinally of the bore, from one end thereof to the slot, a cylindrical member fitted in said bore, an operating handle rigidly connected with said cylindrical member and extending through the slot in said bore, a bolt extending eccentrically through said cylindrical member, straps connected with said bolt at their upper ends and pivotally connected with said slotted head at their lower ends.

5. The combination with a punch having a slotted head, a punching tool, a tool engaging member pivoted on said head, and an operating handle for operating said tool engaging member, of a striker plate mounted on the back of said tool engaging member to receive the impact of said operating handle.

[Claim 6 not printed in the Gazette.]

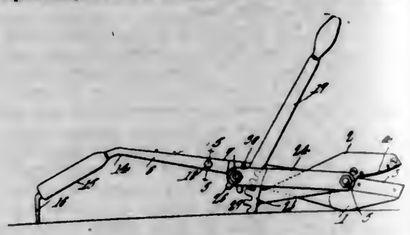
1,065,753. HAND METAL-SHEARS. WILLIAM A. WHITNEY, Rockford, Ill., assignor to Whitney Metal Tool Company. Filed Feb. 17, 1912. Serial No. 678,254. (Cl. 164—44.)

1. Shears having a pair of handles both adapted to be folded against the same side of the shears.

2. Shears having folding handles, one of said handles being adapted to be locked in alinement with one blade of the shears.

3. Shears comprising blades, handles, a blade fulcrum, a handle fulcrum securing both handles to one of said blades, the other of said blades being operatively connected with one of said handles.

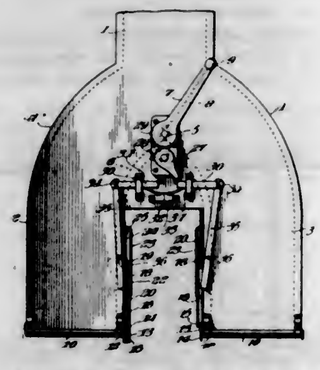
4. Shears comprising blades, a guiding handle, an operating handle, a blade fulcrum, a handle fulcrum connecting both of said handles with one of said blades, means for locking said guiding handle in alinement with one of said blades, and an operative connection between said operating handle and the other of said blades.



5. Shears comprising upper and lower blades, guiding and operating handles the guiding handle being bent away from the operating handle and said operating handle being straight, a blade fulcrum, a handle fulcrum connecting both of said handles to the lower blade, an operative connection between the operating handle and the upper blade, and a supporting member connected with the guiding handle, for the purpose specified.

[Claims 6 to 11 not printed in the Gazette.]

1,065,754. SACK-FILLING DEVICE. JOHN E. WILKERSON, Dallas, Oreg. Filed Apr. 12, 1912. Serial No. 690,292. (Cl. 83—26.)



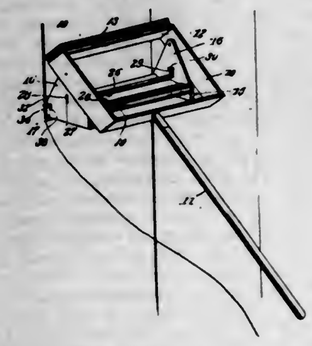
1. The combination with a chute provided with a plurality of nozzles, of a set of pivoted arms on each nozzle provided with sack supporting spurs, independent arm setting levers each operatively connected with one set of arms for simultaneously setting the latter in sack supporting position, catches engaging the setting levers and retaining the same in position to hold the spurs in sack supporting position, and means for independently tripping each setting lever.

2. The combination with a chute having two discharge nozzles, of an independent set of rock shafts for each nozzle having sack supporting spurs thereon and adapted for movement to supporting and non-supporting positions, arms on said rock shafts, independent setting levers connected with said arms for setting the rock shafts in sack supporting position, trip levers for releasing the setting levers, and a manually operated device for working each trip lever independently of the other.

3. The combination with a chute having two branches or discharge nozzles, of independent sets of sack supporting spurs therefor adapted for movement to supporting and non-supporting position, setting levers for moving said spurs, trip levers for releasing said setting levers, trip fingers on said trip levers, a trip adapted to coöperate with either finger, and a manually controlled device for operating the trip.

4. The combination with a chute having two brackets or discharge nozzles, of independent sets of sack supporting spurs therefor adapted for movement to supporting and non-supporting position, setting levers for moving said spurs, trip levers for releasing the setting levers, spring sustained trip fingers on said trip levers, a trip adapted to coöperate with either finger, and a manually controlled device for operating the trip.

1,065,755. PAPER-HANGING MACHINE. ALBERT WILLIAMS, St. Louis, Mo., assignor of one-half to Ferdinand Strodt, St. Louis, Mo. Filed Sept. 13, 1912. Serial No. 720,229. (Cl. 216—6.)



1. In a wall papering machine, the combination with a main frame, of a handle therefor, a brush carried by the main frame, a carriage mounted to swing on the main frame and adapted to receive and support a roll of wall paper, a plurality of rollers journaled on the said carriage and having the said wall paper passed therebetween, a trimmer revoluble with one of the rollers and in a groove of the other roller to trim the wall paper, a trough on the carriage, a pasting roller journaled on the carriage and extending within the trough with the said wall paper passing over the pasting roller to apply an adhesive to the wall paper, a carriage roller journaled on the carriage and adapted to operate over the wall to guide the carriage thereon, guide rollers journaled on the carriage, and a cutting member mounted on the carriage and movable thereon to cut the said wall paper into strips.

2. In a wall papering machine, the combination with a main frame, of a handle therefor, a brush carried by the main frame, a carriage mounted to swing on the main frame and adapted to receive and support a roll of wall paper, a plurality of rollers journaled on the said carriage and having the said wall paper passed therebetween, a trimmer revoluble with one of the rollers and in a groove of the other roller to trim the wall paper, a trough on the carriage, a pasting roller journaled on the carriage and extending within the trough with the said wall paper passed over the pasting roller to apply an adhesive to the wall paper, a carriage roller journaled on the carriage and adapted to operate over the wall to guide the carriage thereon, guide rollers journaled on the carriage, a cutting member mounted on the carriage and movable thereon to cut the said wall paper into strips, and a spring-engaged roller mounted to turn and to slide on the carriage and engaging the wall paper to retain the same in contact with the said pasting roller.

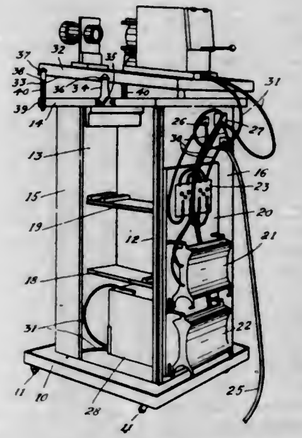
3. In a wall papering machine, the combination with a main frame, of a brush carried thereby, a carriage mounted to swing on the main frame and adapted to carry a roll of wall paper, a trimmer on the carriage for trimming the roll of wall paper as the same is unwound from the carriage, a pasting roller on the carriage for applying paste to a side of the said wall paper, and a trimmer movable on the said carriage to cut the said wall paper into strips.

4. In a wall papering machine, the combination with a main frame, of a brush carried thereby, a carriage mounted to swing on the main frame and adapted to carry a roll of wall paper, a trimmer on the carriage for trimming the roll of wall paper as the same is unwound from the carriage, a pasting roller on the carriage for applying paste to a side of the said wall paper, a trimmer movable on the said carriage to cut the said wall paper into strips, and a carriage roller journaled on the carriage to engage a wall and having the said wall paper contacting therewith.

5. In a wall papering machine, the combination with a main frame, of a brush carried thereby, a carriage mounted to swing on the main frame and adapted to carry a roll of wall paper, a trimmer on the carriage for trimming the roll of wall paper as the same is unwound from the carriage, a pasting roller on the carriage for applying paste to a side of the said wall paper, a trimmer movable on the said carriage to cut the said wall paper into strips, a carriage roller journaled on the carriage to engage a wall and having the said wall paper contacting therewith, and a spring-engaged roller mounted to turn and to slide on the said carriage and engaging the wall paper, adjacent the pasting roller to insure an even distribution of the said paste upon a side of the said wall paper.

[Claims 6 and 7 not printed in the Gazette.]

1,065,756. CABINET-STAND FOR ELECTRIC PICTURE-PROJECTION APPARATUS. FRANK T. WILSON, Stillwater, Minn. Filed Aug. 2, 1912. Serial No. 712,900. (Cl. 88—24.)



1. A cabinet stand for electric picture projection apparatus comprising an inclosed cabinet having doors in the sides thereof, means for adjustably mounting said picture projection apparatus upon the top of the cabinet, and electric controlling and connecting mechanism for effecting and regulating supply of current from a source of electric energy to said projection apparatus mounted upon the inside of one of said doors and movable therewith to the outside of the cabinet in convenient position for access and where the heat generated thereby cannot affect the cabinet.

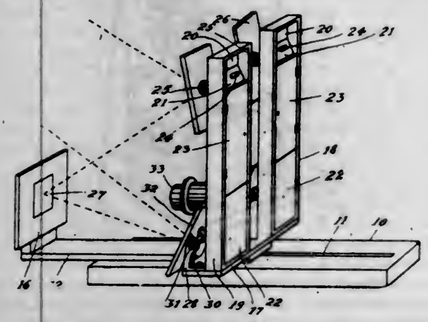
2. A cabinet stand for electric picture projection apparatus comprising an inclosed cabinet having doors in the sides thereof, shelves within said cabinet having the edges thereof spaced from said doors when closed, means for adjustably mounting said picture projection apparatus upon the top of the cabinet, and electric controlling and connecting mechanism for effecting and regulating supply of current from a source of electric energy to said projection apparatus mounted upon the inside of one of said doors within one of said spaces at the side of said shelves when the door is closed and movable therewith to the outside of the cabinet in convenient position for access and where the heat generated thereby cannot affect the cabinet.

3. A cabinet stand for electric picture projection ap-

paratus comprising an inclosed cabinet having doors in the sides thereof, shelves within said cabinet having the edges thereof spaced from said doors when closed, a tilting table top secured to one of said doors and occupying one of said spaces when the door is closed, and means for adjustably securing the same to the top of the stand for supporting said picture projection apparatus, and electric controlling and connecting mechanism for effecting and regulating supply of current from a sonrce of electric energy to said projection apparatus mounted upon the inside of one of said doors within one of said spaces at the side of said shelves when the door is closed and movable therewith to the outside of the cabinet in convenient position for accesa and where the heat generated thereby cannot affect the cabinet.

4. A cabinet stand for electric picture projection apparatus comprising an inclosed cabinet having doors in the sides thereof, shelves within said cabinet having the edges thereof spaced from said doors when closed, means for securing said picture apparatus upon said shelves and upon the floor of the cabinet so as not to extend into said spaces when said apparatus is not in use, a tilting table top secured to one of said doors and occupying one of said spaces when the door is closed and means for adjustably securing the same to the top of the stand for supporting said picture projection apparatus, and electric controlling and connecting mechanism for effecting and regulating supply of current from a source of electric energy to said projection apparatus mounted upon the inside of one of said doors within one of said spaces at the side of said shelves when the door is closed and movable therewith to the outside of the cabinet in convenient position for access and where the heat generated thereby cannot affect the cabinet.

1,065,757. **MACHINE FOR PROJECTING PICTURES BY SUNLIGHT.** FRANK T. WILSON, Stillwater, Minn. Filed Aug. 2, 1912. Serial No. 712,902. (Cl. 88—25.)



1. A solar illuminator comprising a table, a slide adjustably mounted on said table, means for holding a picture positioned for illumination at the end of the slide, and a plurality of mirrors carried upon said slide at a fixed distance and having the planes thereof adjustable to throw beams of sunlight upon the picture, some of said beams to be thrown from above and some from below the horizontal limits of the picture.

2. A solar illuminator comprising a table, a slide adjustably mounted on said table, means for holding a picture positioned for illumination at the end of the slide, a cross bar on the slide, and a plurality of mirrors mounted directly upon said cross bar to oscillate on horizontal and vertical axes each to throw a separate beam of sunlight upon the picture from below the horizontal limits thereof.

3. A solar illuminator comprising a table, a slide adjustably mounted on said table, means for holding a picture positioned for illumination at the end of the slide, a cross bar on the slide, a plurality of mirrors mounted directly upon said cross bar to oscillate on horizontal and vertical axes each to throw a separate beam of sunlight upon the picture from below the horizontal limits thereof, uprights carried by said cross bar, and a mirror mounted on each of said uprights and adjustable in horizontal and vertical planes each to throw a separate beam of sunlight upon the picture from above the horizontal limits thereof.

4. A solar illuminator comprising a table, a slide adjustably mounted on said table, means for holding a picture positioned for illumination at the end of the slide, a cross bar on the slide, a plurality of mirrors mounted directly upon said cross bar to oscillate on horizontal and vertical axes each to throw a separate beam of sunlight upon the picture from below the horizontal limits thereof, uprights carried by said cross bar and spaced apart thereon, a projecting lens in horizontal alinement with the picture and positioned to project the same between the said uprights, and a mirror mounted on each of said uprights and adjustable in horizontal and vertical planes each to throw a separate beam of sunlight upon the picture from above the horizontal limits thereof.

5. A solar illuminator comprising a table, a slide adjustably mounted on said table, means for holding a picture positioned for illumination at the end of the slide, a cross bar on the slide, a plurality of mirrors mounted directly upon said cross bar to oscillate on horizontal and vertical axes each to throw a separate beam of sunlight upon the picture from below the horizontal limits thereof, uprights carried by said cross bar and spaced apart thereon, a projecting lens in horizontal alinement with the picture and positioned to project the same between the said uprights, a mirror mounted on each of said uprights and adjustable in horizontal and vertical planes each to throw a separate beam of sunlight upon the picture from above the horizontal limits thereof, said uprights comprising frame members and doors opening from the back thereof to permit access to all of said mirrors, said picture and said projecting lens.

1,065,758. **DEVICE FOR ADJUSTING TIRE-CHAINS.** WILLIAM E. WOODWELL, Pittsburgh, Pa., assignor of one-fourth to John K. Woodwell, Pittsburgh, Pa. Filed Dec. 9, 1912. Serial No. 735,627. (Cl. 24—84.)



1. A device for adjusting tire chains to automobile wheels consisting of an embracing resilient loop having inwardly deflected binding shoulders and projecting chain attaching hooks.

2. A chain adjuster for automobile wheels formed of a continuous metallic body portion having a middle loop formed by embracing sides provided with inwardly extending shouldered portions adapted to engage the annular channels at opposite sides of the wheel and having projecting hook portions adapted to engage the chain links.

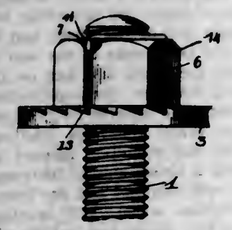
3. A chain adjuster for automobile wheels formed of a continuous metallic body portion having a middle loop formed by embracing sides provided with inwardly extending shouldered portions adapted to engage the annular channels at opposite sides of the wheel and having terminal projecting hook portions adapted to engage the chain links.

4. A chain adjuster for automobile wheels formed of a continuous wire body portion bent to provide an embracing loop, inwardly extending oppositely located gripping shoulders, and projecting terminal hooks.

5. In a device of the class described formed of spring wire, the combination of a middle embracing loop portion, terminal hook portions, and inwardly extending gripping shouldered portions between the loop portion and the hook portions.

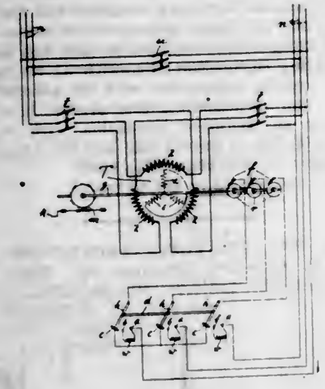
[Claims 6 and 7 not printed in the Gazette.]

1,065,759. **LOCK-NUT.** GEORGE L. YOUNG, Frankfort, Ind. Filed Dec. 28, 1912. Serial No. 739,094. (Cl. 151—40.)



In combination with a bolt having a longitudinal groove extending across its threads, a washer on the bolt having a stud engaging said groove, said washer also having ratchet teeth on its outer face, a nut on the bolt and having a bore near one corner and a groove in one side near the diagonally opposite corner, and a locking spring arranged on the face of the nut having an attaching arm secured in the bore and also having a locking arm arranged in groove of the nut and adapted at its free end to engage the ratchet teeth of the washer.

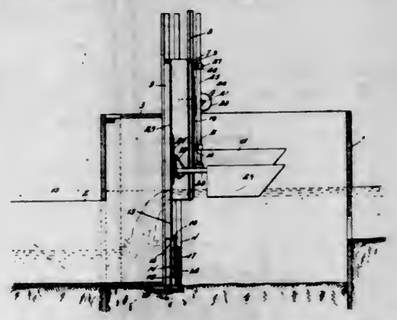
1,065,760. **MEANS FOR SWITCHING BOOSTER-TRANSFORMERS.** WILLY ZEDERBOHM, Charlottenburg, Germany, assignor to Siemens-Schuckert-Werke, G. M. B. H., Berlin, Germany, a Corporation of Germany. Filed Oct. 19, 1911. Serial No. 655,485. (Cl. 171—119.)



1. In an alternating current system the combination with the mains, of a booster transformer having a series winding connected in series with said mains, and an exciting winding and means comprising a system of switches for connecting said exciting winding with and disconnecting it from the mains, each switch comprising two contact pieces, a resistance connected between said contacts, and a third contact, said third contacts being all electrically connected together, said switches being mechanically interconnected to permit when the exciting winding of the transformer is being disconnected from the system, first the connecting of the resistances between the mains and the exciting winding, thereupon the disconnecting of the exciting winding from the system and its simultaneous short circuiting to prevent inductive action of the booster transformer upon the system and to permit separation of the series winding from the system.

2. In an alternating current system, the combination with bus bars, mains and a booster transformer having a series and an exciting winding, and means for connecting said series winding in series with and disconnecting same from said bus bars and mains, a system of switches each having a switch lever connected with the exciting winding, a bank of contact pieces, and a resistance connected between the first two of the contact pieces, the last contact pieces of the switches being connected together, and the first contact piece of each switch being connected to said mains.

1,065,761. **HEAD-GATE.** HENRY L. ZIEGLER and JOHN P. ZIEGLER, New Bridge, Oreg. Filed Oct. 8, 1912. Serial No. 724,565. (Cl. 61—46.)



1. In a device of the character described, a guide frame, a gate frame supported for vertical movement thereon, and a float frame mounted on the gate frame for vertical adjustment with respect thereto.

2. In a device of ths class described, a guide frame having a baseboard, a gate frame vertically movable on the guide frame, an extension gate supported movably by the guide frame, said gate and extension gate having interengaging flanges, and a float carrying frame associated with the gate frame.

3. In a device of the character described, a guide frame having a baseboard, a gate frame movable on the guide frame and having a gate, and a pressure board carried by the gate frame and adjustable with respect to the gate.

4. In a device of the class described, a guide frame having a baseboard, a gate frame vertically movable on the guide frame and having a gate, a pressure board vertically movable on the gate frame, and means for effecting adjustment of the pressure board with respect to the gate.

5. In a device of the class described, a guide frame having a baseboard, a gate frame vertically movable on the guide frame and having a gate, a vertically slidable pressure board on the gate frame, a float carrying frame adjustably connected with the gate frame, a vertically movable slide on the float frame, and means associated with the said slide for effecting adjustment of the pressure board.

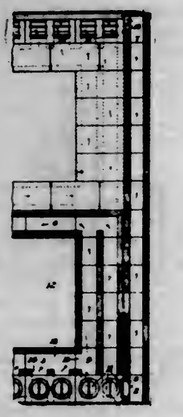
[Claims 6 and 7 not printed in the Gazette.]

1,065,762. **BUILDING CONSTRUCTION.** OMAR A. AINSWORTH and GUSTAF A. SKOOG, Youngstown, Ohio. Filed July 31, 1911. Serial No. 641,564. (Cl. 72—1.)

1. A wall consisting of superposed courses of rectangular units having spaced vertical openings, the openings of one unit registering with the openings of the adjacent units to provide vertically disposed parallel conduits, each of the units of the lowermost course having one side thereof provided with ventilating openings communicating with the vertical openings, metallic bands surrounding the openings in the sides of the units in the lowermost course, and pivoted dampers connected in said openings for controlling the passage of air through said ventilating openings.

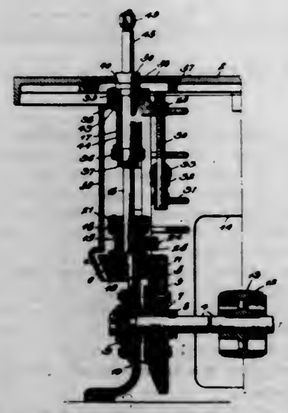
2. A wall consisting of superposed courses of rectangular units, each provided with spaced vertical openings, the openings of one unit registering with the openings of adjacent units to provide vertically disposed parallel conduits, each of the units of the uppermost course having one side thereof formed with vertically disposed slots of the same number as the number of vertical openings and opening into the vertical openings, said slots of a height less than the height of their respective unit and open at

their top, a plurality of superposed deflectors mounted in and extending transversely of each of said slots, and cap pieces mounted upon the units of the uppermost course for closing said conduits for further closing the upper end of said slots.



3. A wall consisting of superposed courses of rectangular units, each provided with spaced vertical openings, the openings of one unit registering with the openings of adjacent units to provide vertically disposed parallel conduits, each of the units of the uppermost courses having one side thereof formed with vertically disposed slots of the same number as the number of vertical openings of each unit and opening into the vertical openings, said slots of a height less than the height of their respective unit and open at their top, a plurality of superposed deflectors mounted in and extending transversely of each of said slots, and cap pieces mounted upon the units of the uppermost course for closing said conduits for further closing the upper end of said slots, the deflectors carried by one of the units being disposed at right angles with respect to the deflectors carried by the other of the units.

1,065,763. GEARING. HUBERT ANGEBRANDT, Jr., Toledo, Ohio. Filed Jan. 4, 1912. Serial No. 669,413. (Cl. 74—26.)



1. In a shaping machine, the combination with a horizontal power shaft, and a friction bevel gear thereon; of a vertical spindle, a friction bevel gear including an extended hub splined on the spindle, a sleeve surrounding said hub, and having a pair of flanges, guide ways for said flanges, and means for adjusting said sleeve therein.

2. In a shaping machine, the combination with a horizontal power shaft fixed against sliding, and a bevel friction gear fixed on the shaft; of a vertical spindle, a hollow bevel friction wheel having an extended hub slidably splined on the spindle, a sleeve inclosing the hub and having an enlarged lower end extending into the annular recess in the upper face of the wheel, ball bearings in said recess between the lower ends of the hub and sleeve, and means for sliding the sleeve and hub on the spindle.

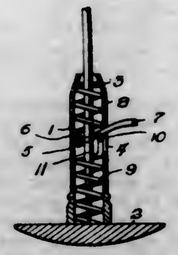
3. In a shaping machine, the combination with a horizontal power shaft, and a bevel friction gear thereon; of a vertical driven shaft, a beveled friction driven wheel having a tubular hub extending upward and splined on said driven shaft, a sleeve loosely inclosing the hub and having both its ends enlarged and the lowermost descending into the friction wheel, ball bearings inside said enlarged ends of the sleeve and outside the ends of the hub, the exterior of the sleeve having flanges, a main frame having guides in which said flanges are movably mounted, and means for adjusting the sleeve and with it the hub and the driven gear in said guides.

4. In a shaping machine of the character described, a main frame, a main drive shaft revolubly mounted therein, a friction gear mounted on said shaft, a spindle revolubly and adjustably supported in said frame, a friction gear slidably keyed to said spindle and adapted to be engaged with the gear on said main drive shaft, a sleeve having a ball bearing engagement with the gear on the spindle, and means to shift said sleeve whereby the gear supported thereon is engaged with and disengaged from the gear on said main drive shaft.

5. In a shaping machine of the character described, a main frame, a main drive shaft revolubly mounted therein, a friction gear fixed on said main shaft, a revolubly mounted spindle, means to adjustably support said spindle, a friction gear having an elongated hub and an annular recess, said hub being slidably keyed to the spindle, a gear supporting sleeve arranged on said hub and having a ball bearing engagement therewith at its upper end, and a ball bearing engagement with the annular recess in said gear, and an adjusting lever pivoted in said frame and having an operative connection with said sleeve whereby said gear is shifted into and out of engagement with the gear on said main drive shaft.

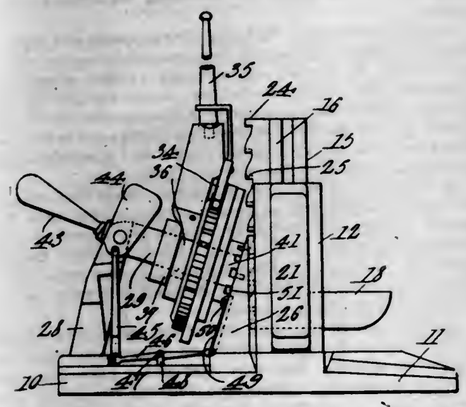
[Claim 6 not printed in the Gazette.]

1,065,764. HAT-PIN-POINT-PROTECTING DEVICE. EMERY P. ANTHONY, Tarentum, Pa. Filed Aug. 16, 1912. Serial No. 715,413. (Cl. 24—155.)



A hat pin point protecting device comprising a cylindrical shell having a contracted inner end, a head for closing the outer end of said shell, a pair of coiled springs arranged within said shell and opposing each other, the opposing ends of each of said springs being bent to extend parallel with the axis of the shell, said shell provided with a slot, a circular apertured head arranged within said shell and provided with a handle extending through said slot, the opening in said circular head adapted to receive the shank of a pin when the latter extends into said shell, the bent ends of said springs engaging the opposite faces of said circular head at diametrically opposite sides thereof for shifting the same at an inclination whereby the shank of the pin is retained in said shell.

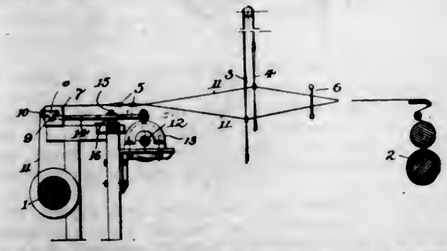
1,065,765. TRACK-JACK. GEORGE APGAR and JOHN E. DAVIS, White House, N. J. Filed June 20, 1912. Serial No. 704,799. (Cl. 57—102.)



1. In a jack the combination of a rack, a worm gear adapted to raise said rack, a disengaging member provided with beveled faces normally rotating with said worm gear, and means for locking said member to thereby force the worm out of engagement with the said rack.

2. In a jack the combination of a rack, a worm gear for raising said rack, means for operating said worm gear, a disengaging member provided with beveled faces adapted to engage similarly beveled faces upon said worm gear, said members normally rotating with said worm gear, and a manually operated lever actuating a stop to prevent the rotation of said member, to thereby force said worm gear away from said member and therefore out of engagement with said rack.

1,065,766. LOOM. LOUIS AUGUST AUMANN, Chicopee, Mass. Filed Aug. 5, 1911. Serial No. 642,471. (Cl. 139—81.)



1. A loom provided with means adapted to place some of the warp threads passing to one and the same side of the shed under stress in excess of others, combined with mechanism adapted to shift said means at varying rates of speed during the operation of the loom to bring it into operative relation with other warp threads.

2. A loom provided with means adapted to place a plurality of warp threads under stress in excess of others, combined with mechanism adapted to reciprocate said means in the plane of and transversely to the path of movement of the warp threads and to thus bring said means successively into operative relation with different warp threads.

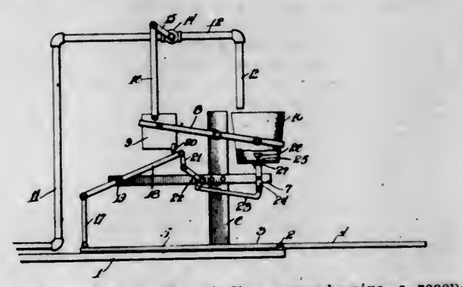
3. A loom provided with means adapted to place a plurality of warp threads under stress in excess of others, combined with mechanism adapted to reciprocate said means at varying rates of speed in the plane of and transversely to the path of movement of the warp threads and to thus bring said means successively into operative relation with different warp threads and to cause the stress on some to be maintained for a greater lapse of time than on others.

4. A loom provided with means adapted to place a plurality of warp threads under stress in excess of others, combined with a pattern device adapted to reciprocate said means in the plane of and transversely to the path of movement of the warp threads.

5. A loom provided with a bar having a plurality of projections over which projections some of the warp threads pass, combined with means for reciprocating the bar.

[Claim 6 not printed in the Gazette.]

1,065,767. WATERING-TROUGH. EDWARD A. BACKUS, Little Rock, Ark. Filed Jan. 29, 1913. Serial No. 744,951. (Cl. 119—76.)



1. A watering trough including a supply pipe, a receptacle, a weight connected with the receptacle, water controlling means in the supply pipe, a connection between said means and the weight, a lever connecting the receptacle and weight and pivoted intermediate the same, an animal operated platform, means carried by the platform to actuate the weight upon the animal leaving the platform, said means operating to discharge the contents of the receptacle.

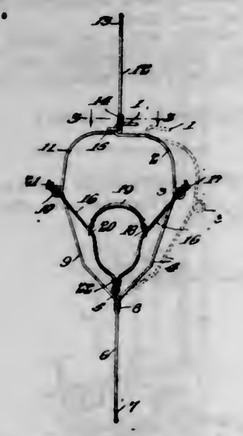
2. A watering trough including a supply pipe, a receptacle, a weight connected with the receptacle, water controlling means in the supply pipe, a connection between said means and the weight, a lever connecting the receptacle and weight and pivoted intermediate the same, an animal operated platform, means carried by the platform to actuate the weight upon the animal leaving the platform, and receptacle discharging means carried by the lever.

3. A watering trough including a pivoted platform, a lever pivotally supported above the platform, a supply pipe, a valve therefor, a weight carried by one end of the lever, a connection between said weight and valve, a receptacle carried by the opposite end of the lever, an upright carried by the platform, and a lever connected to the upright and operating to move the weight to valve closing position upon the relief of the platform from the animal's weight, a receptacle discharge means, the connection intermediate said lever and said discharge means to operate the same in the weight elevating movement of the lever.

1,065,768. HUMANE ANIMAL-POKE. WILLIAM E. BAKER, Guthrie, Okla. Filed Mar. 28, 1912. Serial No. 686,822. (Cl. 119—139.)

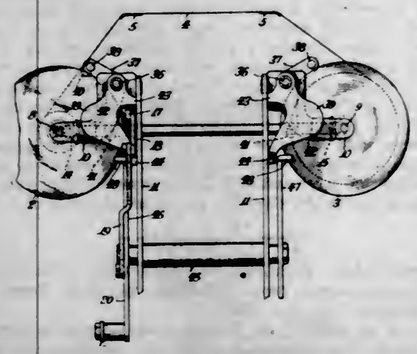
1. In an animal poke, a main frame adapted to encircle the neck of an animal, an upwardly extending arm provided with a hook at its end, a downwardly extending arm provided with a hook, an eye on each side of and at the bottom of said main frame, a flexible halter member secured to one of the eyes on the side of the main frame and extending thence through the eye in the bottom of the main frame and being secured to the other eye on the opposite side of the main frame, a nose band having one end slidably secured to the portion of said flexible halter member between one of the side eyes and the bottom eye, and the other end slidably disposed upon the flexible halter band between the other side eye and the bottom eye, and a slidable ring arranged to encircle both portions of the

flexible halter member on each side of said bottom eye and being disposed between said bottom eye and said slidable nose band.



2. In an animal poke, a main frame adapted to encircle the neck of an animal, an upwardly extending arm provided with a hook at its end, a downwardly extending arm provided with a hook, an eye on each side of said main frame, said arms and said eyes being made of a single piece of wire, the ends of said piece of wire forming hooks arranged to engage each other for holding the main frame together, a halter portion comprising a rope extended from said eyes to the bottom of said main frame, a nose band having rings at its ends arranged to encircle the rope between the eyes and the bottom portion of the frame, and a slidable member surrounding the portions of the rope between said nose band and the bottom portion of the frame for holding said portions of the rope together.

1,065,769. AUTOMATIC INK-RIBBON-REVERSING MECHANISM. GLENN J. BARRETT, Syracuse, N. Y., assignor to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 4, 1906. Serial No. 346,280. (Cl. 197—165.)



1. The combination with the ribbon spools and ribbon, of rotary driving mechanism shiftable to alternately turn the spools in opposite directions, ratchet means for operating said driving mechanism, a pair of devices for shifting the driving mechanism in opposite directions each such device being ribbon actuated and also directly operated by the ratchet means for operating the driving mechanism.

2. The combination with the ribbon spools and ribbon, of rotary driving mechanism shiftable to alternately turn the spools in opposite directions, ratchet means for operating said driving mechanism shifting means for the driving mechanism having a plurality of distinct movements including an initial movement derived from the traverse of the ribbon and a succeeding movement derived from the ratchet means for operating the driving mechanism.

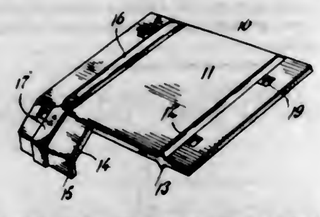
3. The combination with the ribbon spools and ribbon, of rotary driving mechanism to alternately turn the spools in opposite directions, reciprocating ratchet means for operating said driving mechanism, means for shifting the driving mechanism in opposite directions having a plurality of movements including an initial actuation derived from the traverse of the ribbon and a supplemental actuation by said ratchet means.

4. The combination with the ribbon spools and ribbon; of driving mechanism shiftable to alternately turn the spools in opposite directions, means for operating said driving mechanism, and devices set by movement derived from the ribbon and further actuated, in the same direction as in such ribbon-setting, by said operating means to shift the driving mechanism.

5. The combination with the ribbon spools and ribbon, of driving mechanism shiftable to alternately turn the spools in opposite directions, means for operating said driving mechanism, devices for shifting the latter normally held to inoperative position and movable by the ribbon to a limited extent without affecting the driving mechanism, and means for further actuating said shifting devices in the same direction by the operating means to effect the shift.

[Claims 6 to 19 not printed in the Gazette.]

1,065,770. RAIL-CHAIR. FREDERICK C. BAUER, East Camden, N. J. Filed Oct. 11, 1912. Serial No. 725,233. (Cl. 238—2.)



1. In a rail chair, the combination with a plate, of upper and lower ribs thereon, a curved rib on the plate, a flange extending obliquely from the plate, an auxiliary rib forming a continuation of the said curved rib and extending across the upper face of the said flange, and a lip formed on the free end of the said obliquely extending flange.

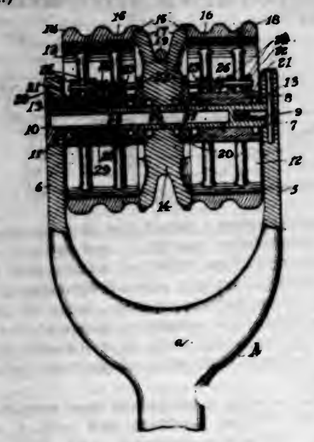
2. In a rail chair, the combination with a plate, of a rib thereon, a curved rib on the said plate and spaced from the first mentioned rib, a flange extending obliquely from one edge of the plate, and an auxiliary rib extending across the upper face of the said flange and forming a continuation of the said curved rib.

3. In a rail chair, the combination with a plate, of a rib thereon, a curved rib on the said plate and spaced from the first mentioned rib, a flange extending obliquely from an edge of the plate, a brace adapted to be supported on the said plate, and a head forming a part of the said brace and adapted to engage a rail to securely support the same on the said plate.

4. In a rail chair, the combination with a plate, of a rib thereon, a curved rib on the said plate and spaced from the first mentioned rib, a flange extending obliquely from an edge of the plate, a brace adapted to be supported on the said plate, a head forming a part of the said brace and adapted to engage a rail to securely support the same in the said plate, and a flange forming a part of the said brace and extending obliquely therefrom to project downwardly beyond an edge of the plate.

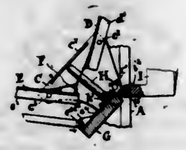
5. In a rail chair, the combination with a plate, of a rib formed therewith and projecting upwardly at an incline therefrom, a head formed integrally with the said rib, flanges extending obliquely from edges of the said plate and formed integrally with the plate, and lips integrally formed on the lower ends of the said flanges.

1,065,771. TROLLEY. MARTIN A. BORN, Oconomowoc, Wis. Filed Oct 7, 1911. Serial No. 653,330. (Cl. 191—61.)



The combination with a trolley harp, and an axle connected thereto; of a pair of restoring wheels journaled on the opposite end portions of said axle, and guides carried by the restoring wheels, a trolley wheel interposed between said restoring wheels, coöperating metallic contact elements interposed between said restoring wheels and the trolley wheel, and means for yieldingly holding said elements in contact with the trolley wheel and comprising spring-pressed pins arranged in said guides.

1,065,772. BED-SOFA. JOHN M. BOSTROM and AXEL G. BOSTROM, Milwaukee, Wis. Filed June 17, 1912. Serial No. 703,996. (Cl. 5—51.)



1. In a bed-sofa, the combination with the supporting sofa-frame of a seat-member pivoted at the front side thereof, a frame-member also pivoted at the front side of said supporting frame, two bed-bottom-halves pivoted to said frame-member, and a connection between said seat-member and one of said bed-bottom-halves, whereby the reversal of the former carries with it the latter, rotates said frame-member, and moves the other bed-bottom-half to a level and abuting position with the first.

2. In a bed-sofa, the combination with the supporting sofa-frame of a frame-member pivoted on trunnions at the front side of said frame, said frame-member having a pair of plates on its ends extending in the plane of rotation, a pair of bed-bottom-halves comprising frames pivoted to points on said plates distant from said trunnions, and a seat-member pivoted adjacent to said trunnions; said seat-member being reversible and having means for supporting it in a reversed position, and one of said bed-bottom-halves being also reversible and when so reversed extending over the reversed seat-member; the other bed-bottom-half having devices on which it is mounted to rise and fall and to be raised to a level with the first bed-bottom-half in the reversed position of the latter.

3. In a bed-sofa, the combination with the supporting sofa-frame of a frame-member pivoted upon trunnions at the front side thereof and having rearwardly extending plates lying in the plane of rotation, said plates having each a pair of pivots at the side distant from said trunnions, a bed-bottom-half comprising a frame pivoted to the lower or rear pair of pivots, link-work supporting and guiding the movements of said bed-bottom-half whereby as said frame-member turns upon its pivot the bed-bottom-half is raised and lowered in nearly parallel position, and a second bed-bottom-half comprising a frame turning on the upper or front pair of pivots and adapted for reversal; there being a connection between said frame-member and the said last named bed-bottom-half whereby the rotation of the latter through 180 degrees to the reversed position carries with it said frame-member through an angle sufficient to raise said first named bed-bottom-half to a level with the other bed-bottom-half.

4. In a bed-sofa, the combination with the supporting sofa-frame, of a frame-member pivoted upon trunnions at the front side thereof and having rearwardly extending plates lying in the plane of rotation, said plates having each a pair of pivots at the side of each plate distant from said trunnions, a bed-bottom-half comprising a frame pivoted to the lower or rear pair of pivots, link-work supporting and guiding the movements of said bed-bottom-half whereby as said frame-member turns upon its pivot the bed-bottom-half is raised and lowered in nearly parallel position, a second bed-bottom-half comprising a frame turning on the upper or front pair of pivots and adapted for reversal; there being a connection between said frame-member and said last-named bed-bottom-half whereby the rotation of the latter through 180 degrees to the reversed position carries with it said frame-member through an angle sufficient to raise said first-named bed-bottom-half to a level with the other bed-bottom-half; a seat member, and a folding leg at each end forming a connection between said seat-member and said last named bed-bottom-half adapted to support said last-named bed-bottom-half in the reversed position.

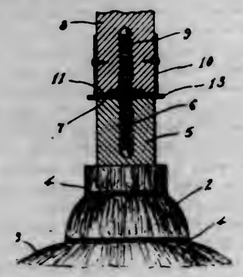
5. In a bed-sofa, the combination with the supporting sofa-frame of a frame-member pivoted upon trunnions at the front side thereof and having rearwardly extending plates lying in the plane of rotation, said plates having each a pair of pivots at the side distant from said trunnions, a bed-bottom-half comprising a frame pivoted to the lower or rear pair of pivots, link-work supporting and guiding the movements of said bed-bottom-half whereby as said frame-member turns upon its pivot the bed-bottom-half is raised and lowered in nearly parallel position, a second bed-bottom-half comprising a frame turning on the upper or front pair of pivots and adapted for reversal; there being a connection between said frame-member and said last-named bed-bottom-half whereby the rotation of the latter through 180 degrees to the reversed position carries with it said frame-member through an angle sufficient to raise said first named bed-bottom-half to a level with the other bed-bottom-half; a seat-member pivoted at the front side of said sofa-frame, a pair of folding legs pivoted on the ends of said seat-member and adapted to support the same in a reversed position, and a pin-and-slot connection between said seat-member and said reversible bed-bottom-half, whereby the reversing of the former carries with it the latter.

[Claims 6 to 12 not printed in the Gazette.]

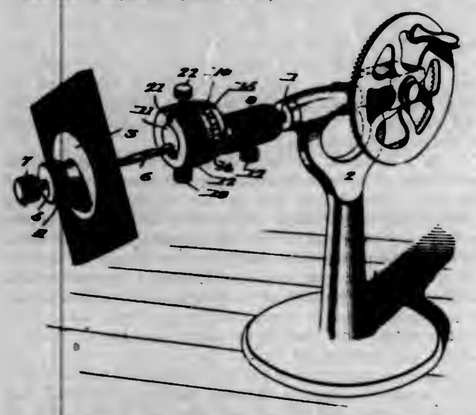
1,065,773. NUT-LOCK. HENRY BOYLE, Ottawa, Kans. Filed July 20, 1912. Serial No. 710,611. (Cl. 151—13.)

1. The combination of a fixed member having a threaded socket, a turning member, a screw fixed to the turning member and having a portion adapted to be adjustably extended into the socket, means for holding the turning member against rotation on the fixed member, the said means including a surface on the fixed member and resilient locking spurs projecting from the turning member, adjacent the screw, and revoluble means carried by the turning member adapted to depress the spurs for releasing the same from the surface of the fixed member.

2. The combination of a fixed member having a threaded socket, a turning member, a screw fixed to the turning member and having a portion adapted to be adjustably extended into the socket, means for holding the turning member against rotation on the fixed member, the said means including a surface on the fixed member and resilient locking spurs projecting from the turning member, adjacent the screw, and revoluble means carried by the turning member adapted to depress the spurs for releasing the same from the surface of the fixed member, said means being rotatably mounted between the meeting ends of the fixed and turning members.



1,065,774. MOLD-FORMING MECHANISM. GEORGE A. BREAULT, Fall River, Mass. Filed July 20, 1912. Serial No. 710,609. (Cl. 82—1.)



1. An apparatus of the character described comprising a hand operated work support, a tool holding chuck, and a drill adapted to pass through the work holder, the work thereon, and to be centered into the chuck, together with a tool carried eccentrically by the chuck.

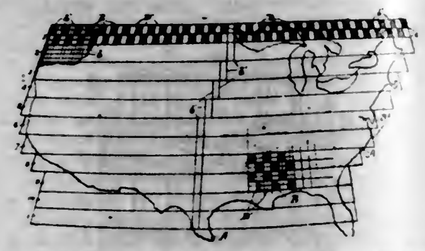
2. A chuck comprising a body having a longitudinal central bore, an eccentric head on the body, a concentric stud on the head, said bore passing through the stud eccentrically, a tool holding head mounted for rotation upon and concentric with the stud, an eccentrically mounted tool carried by the holder, and means to secure the holder in adjusted position on the stud.

1,065,775. GAME. CHARLES B. BREWER, Hyattsville, Md. Filed Mar. 17, 1913. Serial No. 754,905. (Cl. 46—63.)

1. A game including a base-map provided with units-of-area markings and with zone-division markings; a series of parcel-instrumentalities; and a plurality of dice.

2. A game including a base-map provided with units-of-area markings and with zone-division markings; a series of parcel-instrumentalities; and a plurality of distinctive dice.

3. A game including a parcel-post map provided with a series of zone-division markings and with a series of units-of-area indications embraced within said zone-divisions; a series of typical parcel-instrumentalities; and two series of die-instrumentalities, some of the series being of one distinctive coloring to indicate one thing and some other of the series being of a different distinctive coloring to indicate another thing.



4. A game including a parcel-post map provided with a series of zone-division markings and with a series of units-of-area indications embraced within said zone-divisions; a series of typical parcel-instrumentalities; and two series of die-instrumentalities, some of the series being of one distinctive coloring to indicate one thing and some other of the series being of a different distinctive coloring to indicate with other distinctively colored dice another thing.

5. A game including a parcel-post map provided with a series of zone-division markings and with a series of units-of-area indications embraced with said zone-divisions; a series of typical parcel-instrumentalities; and two series of die-instrumentalities, two of a white coloring indicative of weight, and one of a red coloring which with the two white are indicative of distance of travel.

1,065,776. DOLL. DAISY G. BROWN, Challis, Idaho. Filed July 23, 1912. Serial No. 711,120. (Cl. 46—40.)



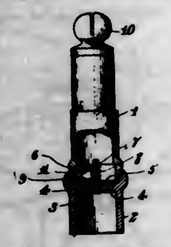
1. In combination, a body or shoulder piece, and a doll's head; a member inserted through the shoulder piece and extending into the head, and having a substantially universal-joint connection between its lower end and the shoulder piece, and a loose connection between the upper end of the member and the head.

2. In combination, a doll's body or shoulder piece having an opening in its top and a concavity at the upper end of said opening; a doll's head having a rounded neck adapted to rest in the said concavity, a rod having its lower end loosely confined to the body and extending upwardly therethrough into the head, and a resilient connection between the upper end of said rod and the head.

3. In combination, a doll's body or shoulder piece having an opening in its top and concavities at the upper and lower ends of said opening, a doll's head having a rounded neck adapted to rest in the upper concavity of the body, a rod having its lower end loosely confined in the lower concavity of the body or shoulder piece and extending upwardly therethrough into the head, and a connection between the upper end of said rod and the head.

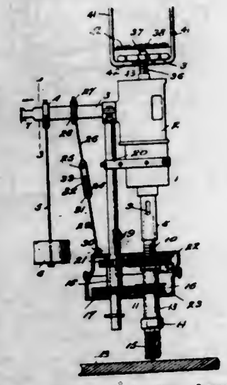
4. In combination, a body piece and a head piece, a rod having an enlargement on its lower end inserted through the body piece into the head and forming a substantially universal-joint connection between the rod and body, and means above the body connecting the rod and the head.

1,065,777. AUTOMATIC SAFETY GAS-JET. HARRY A. CHIPPENDALE, Wethersfield, Conn., and MABEL KIMMELL, Providence, R. I. Filed Oct. 15, 1912. Serial No. 725,910. (Cl. 67—115.)



In a gas burner, the combination of a burner tube, a substantially horizontally disposed valve for controlling the gas passage of the tube and arranged within the tube, said valve embodying a flat disk which is slit from its edges toward its center, and the material between the slits and the periphery of the disk being bent upwardly to provide blades, a resilient finger having an offset stop passing through an opening in the burner and engaging with one of the blades of the valve to rotate the valve to a closed position, and the said finger adapted to rotate the valve to an open position, and the valve adapted to be sustained in the said open position by the gas passing through the tube and impinging the blades of the valve.

1,065,778. DRILL. WILLIAM C. CLINTON, Brooklyn, N. Y. Filed Sept. 17, 1912. Serial No. 720,838. (Cl. 77—33.)

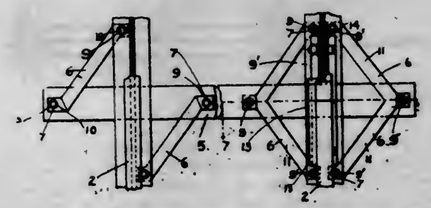


1. In apparatus of the character described, a driving motor, a hollow cutting tool, a vertically movable carriage, a feed screw driven by the motor and extending through the tool, and gearing between the motor and the feed screw for moving the carriage to advance the cutting tool.

2. Apparatus of the character described comprising, a fluid operated motor having a valve for regulating the admission of fluid thereto, means for normally holding the valve closed, a traveling carriage, means operated by the motor for moving the carriage, a tool carried by the carriage, and means operated on a predetermined adjustment of the carriage for closing the valve of the motor.

1,065,779. RAILWAY-RAIL AND TRACK CONSTRUCTION. GAETANO COCCIA, Pittsburgh, Pa. Filed Feb. 8, 1913. Serial No. 747,058. (Cl. 238—5.)

1. In railway track construction, the combination of rails having the usual base flanges, a depending flange portion extending longitudinally of each rail, means for joining the end of one rail to another, a tie bar extending beneath the depending flanges and transversely of the rails, and brace arms secured to the tie bar and extending angularly upwardly into engagement with the base flanges of the rails.



2. In railway track construction, the combination of rails having the usual base flanges, a depending flange portion extending longitudinally of each rail, means for joining the end of one rail to another, a tie bar extending beneath the depending flanges and transversely of the rails, brace arms secured to the tie bar and extending into engagement with the underside of the base flanges of the rails, and means for securing said brace arms to the base flanges.

3. In railway track construction, the combination of rails having the usual base flanges, a depending flange portion extending longitudinally of each rail, means for joining the end of one rail to another, a tie bar extending beneath the depending flange and transversely of the rails, and means for securing the rails to the tie bar and comprising brace arms extending into engagement with the base flanges of the rails; one of said brace arms engaging both of the contiguous rail ends.

4. In railway track construction, the combination of a plurality of rails having the usual base flanges, a depending flange portion extending longitudinally of each rail, means for joining the end of one rail to another, a tie member across the rails, and means connecting the base flanges of the rails to the tie member and engaging both of the contiguous rail ends.

5. In railway track construction, the combination with a plastic road bed, of a plurality of rails having the usual base flanges, a depending flange portion extending longitudinally of each rail, means for joining the end of one rail to another, a tie member extending across the road bed, and means connecting the base flanges of the rail to the tie member and engaging both of the contiguous rail ends.

1,065,780. BRAKE-RIGGING. SIMON C. COLLINS, Meadville, Pa. Filed July 3, 1912. Serial No. 707,547. (Cl. 188—44.)



A brake rigging comprising the combination with the bottom rail of a truck frame provided with a depending hanger, of a rock shaft mounted in the hanger and projecting from each side thereof, a crank depending from the outer end of said shaft and capable of being connected to an actuating mechanism for rocking the shaft, a brake shoe supporting crank connected to the inner end of said shaft and extending upwardly therefrom, a forwardly projecting lug integral with the front edge of said supporting crank intermediate its ends, a brake shoe provided with a rearwardly extending web formed with a recess into which extends said lug, means for pivotally connecting the lug to the web, a bolt having its forward end extending into and pivotally connected to said web above said lug, means for slidably connecting the other end of said bolt to said supporting crank, and a spring mounted upon the bolt and interposed between said means and said web.

1,065,781. SPINDLE-LUBRICATOR. DAVID A. COBBIE, Vincennes, Ind. Filed Mar. 16, 1912. Serial No. 684,212. (Cl. 64—27.)



An axle spindle having a central longitudinal bore, a detachable grease tube inserted with a sliding fit into the outer end of the spindle and provided with a longitudinal keyway and a lateral vent for the grease, a detachable plug closing the inner end of the grease tube, a nut threaded into the outer end of said bore and serving to hold the grease tube in place, a feed screw journaled in the grease tube and in the nut and adapted to be turned from the outside of the nut, said feed screw being longitudinally immovable with relation to the grease tube while in its operative position but detachable together with said tube, a piston movable within and lengthwise of the grease tube, said piston being threaded upon and actuated by the feed screw and having a key working in said keyway, and a grease stirring element fast on the feed screw adjacent to the lateral vent in the grease tube.

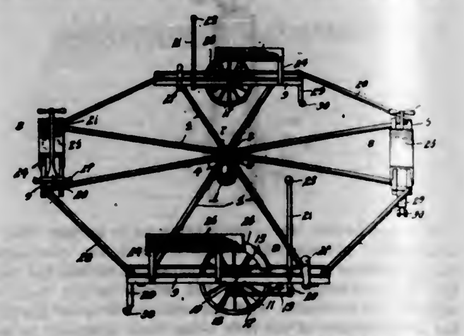
1,065,782. INSECT-DESTROYER. ADOLPHUS V. CRONK, Burwell, Nebr. Filed Feb. 5, 1912. Serial No. 675,542. (Cl. 43—34.)



An electrical insect destroyer, comprising a hollow cylindrical body having a plurality of rows of vertically alined perforations formed therein, a pair of wires wound spirally around the body in the same direction, and secured to the lower end of the body each perforation of each row being positioned between the wires, a cap for closing the upper end of the body said wires being connected to the cap, and to a source of induced electrical energy leading to said cap, and a bait receptacle having a tapered upper end adapted for insertion in the lower end of the body, to close the same so that the fumes from the bait will arise from the receptacle and pass through the perforations to attract the insects to the body, said bait receptacle being supported in a pan for catching the dead insects.

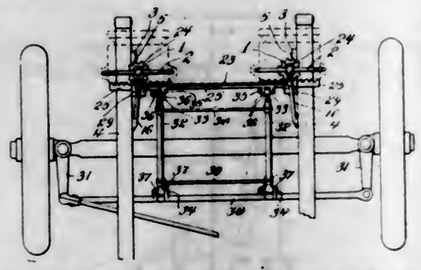
1,065,783. ROUNDABOUT. JAMES H. CROWE, Cleveland, Tenn. Filed Mar. 26, 1912. Serial No. 686,279. (Cl. 46—27.)

In a roundabout, the combination with a central post with a revoluble member and a plurality of arms connected to and radiating from the said member, of carriages secured to each part of said radiating arms, each of the said carriages embodying spaced longitudinal bars having their undersurfaces formed with V-shaped depressions, a bearing member having its upper face formed with a V-shaped extension adapted to be received within one of the V-shaped depressions, means for securing the bearing member upon the side bars of the carriage, each of the bearing members being bifurcated to provide a pair of downwardly extending spaced ears, an axle pass-



ing between the ears, a wheel connected with the axle, cotter pins for sustaining the axle between the ears, means connected with the carriage for revolving the axle and wheel, and each of the said carriages having its rear portion provided with a depending member having a caster wheel, and bars for connecting the front of one of the carriages to the rear of the adjacent carriage.

1,065,784. AUTOMOBILE HEADLIGHT CONTROL. CLARENCE M. CRUM, Hannah, N. D. Filed Oct. 1, 1912. Serial No. 723,382. (Cl. 240—62.)



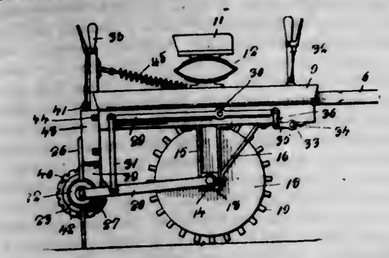
The combination with the steering arm connecting rod of an automobile, of headlights having their supporting shafts journaled to turn on vertical axes, a bar extending parallel to said rod and operatively connected with the lamp shafts, and a quadrilateral connecting frame embodying parallel bars connecting said rod and bar and arranged perpendicular thereto, said parallel bars being longitudinally extensible and being pivotally connected to said rod and bar on horizontal axes to admit of relative up and down movement of said bar and rod, and cross bars rigidly connecting said extensible bars whereby said connecting frame is adapted to effect an equal and simultaneous longitudinal movement of the said bar and rod.

1,065,785. LAND-ROLLER. JOHN W. DAVIS, Derby, Ind. Filed July 10, 1912. Serial No. 708,646. (Cl. 55—12.)

1. A land roller, comprising a main frame, a roller operating beneath said frame, a series of parallel draw bars journaled on the axle of the roller and extending rearwardly therefrom, a harrow shaft journaled in said draw bars, a notched circumferential flange fast on said shaft, and a thumb latch lever coöperating with said flange for turning and locking the harrow shaft.

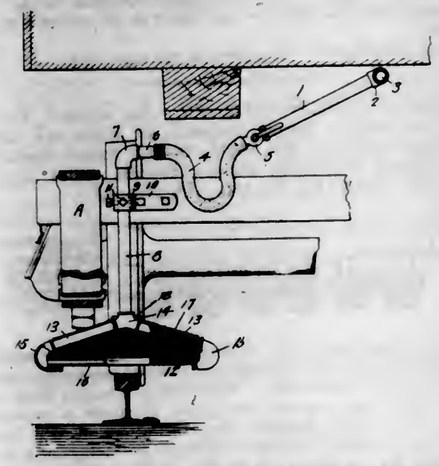
2. A land roller, comprising a frame, a sectional roller working under said frame, draw bars journaled on the ends of the roller axle, parallel central draw bars also journaled on the roller axle between the roller sections, a central sleeve journaled in said central draw bars and

having notches in the ends thereof, harrow shaft sections having their outer ends journaled in the end draw bars and their inner ends fitted in said sleeve, harrow teeth



passing through the harrow shaft and engaging the notches in the sleeve, a notched circumferential flange on said sleeve, and a thumb latch lever engaging said flange.

1,065,786. RAILWAY SAFETY DEVICE. SAMUEL G. DAVIS, Horatio, Ark. Filed Jan. 10, 1912. Serial No. 670,421. (Cl. 188—81.)



1. In a safety appliance for railway cars, the combination with a train line air pipe, of a frangible element arranged in communication with said pipe and adapted to be broken in the derailment of the car to reduce the pressure of the train line air whereby the brakes will be applied to the wheels, means for adjustably supporting said frangible element, and a guard designed to substantially inclose said frangible element to prevent accidental fracturing or mutilation thereof.

2. In a safety appliance for railway cars, the combination with a train line air pipe, of a frangible element arranged in communication with said pipe and adapted to be broken in the derailment of the car to reduce the pressure of the train line air whereby the brakes will be applied to the wheels, means for supporting said frangible element, and a guard composed of wire network designed to substantially inclose said frangible element to prevent accidental fracturing or mutilation thereof.

1,065,787. REPAIR DEVICE FOR PNEUMATIC TIRES, &c. TIMOTHY C. DOBBINS, Los Angeles, Cal. Filed Sept. 18, 1911. Serial No. 649,933. (Cl. 152—24.)

1. As a new article of manufacture, a tire repairing device comprising a plate adapted to lie in proximity to the tire alongside the rim and to detachably engage the latter, a similar plate adapted to lie upon the opposite side of the same portion of the tire, engaging the rim in like manner, and a series of slightly separated chains passing around the exposed surface of said portion and having their ends detachably connected to said plates, respectively.



2. The combination with a wheel rim and a pneumatic tire thereon, of an internal flexible patch for the tire, of a series of slightly separated chains connected with the rim upon opposite sides of the tire and passing around and binding closely that portion of the tire within which the patch lies; whereby the inner surface is protected and the body of the tire is held against material movement in any direction.

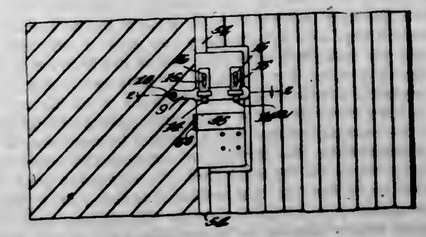
3. A tire repairing device comprising a relatively narrow plate adapted to lie alongside the wheel rim, conforming to the adjacent surface of the tire, and provided with a central hook to pass inward alongside the tire and detachably engage the inturned rim flange, a like plate adapted to be engaged in like manner on the opposite side of the same portion of the tire, and a series of slightly separated chains having their ends in detachable hooked engagement with the plates, respectively, and adapted to pass over said portions of the tire; whereby both the tread and the lateral surfaces of the tire are indented and the parts of the tire within the chains are held against material movement.

4. The tire repair device comprising a pair of anchor plates adapted to coöperate with the opposite sides of the tire and each provided with holding means adapted to cooperate with the inturned flange of the clencher rim of the pneumatic tire when inserted between the rim and tire, and a series of securing chains connected to said anchor plates and adapted to closely embrace and embed themselves in the resilient pneumatic tire under operating conditions.

5. The tire repair device comprising anchoring means secured to the wheel and adapted to coöperate with the sides of the tire and a series of relatively movable irregular shaped gripping securing members connected to said anchoring means and adapted to embrace and to embed themselves in adjacent parts of the resilient pneumatic tire under operating conditions.

[Claims 6 to 12 not printed in the Gazette.]

1,065,788. CAR-DOOR LOCK. JOSEPH B. DRISCOLL, Clifton Forge, Va. Filed Jan. 25, 1913. Serial No. 744,136. (Cl. 105—265.)



1. A car door lock comprising a casing adapted to be connected to the body of a car at one side of the door opening, said casing having on the front thereof a pair of transversely alined perforated lugs for engaging the openings of a hasp on the door, a locking bolt mounted for sliding movement on the casing above each lug and having a

reduced lower end for engaging the opening of the adjacent lug, a lever pivoted intermediate its ends within the casing between the lugs, a locking pin connected with each end of the lever, each lug having a longitudinal passage extending from within the casing and intersecting the perforation of the lug for receiving the locking pin, the reduced end of the locking bolt adjacent to the door opening having a transverse passage registering with the passage of the lug and the reduced end of the locking bolt remote from the door opening having a recess on its inner face registering with the passage of the lug, the locking pins being of such length that when the pin remote from the door opening is seated in the recess of the bolt, the other pin will be in engagement with the other passage of the other bolt, a spring connected with the end of the lever adjacent to the door opening and normally acting to swing the said end of the lever away from the front of the casing, an elbow lever pivoted within the casing, a link connecting one arm of the elbow lever with the locking pin lever on the opposite side of its pivotal connection from the spring, a cylinder in the casing having means at its lower end for connecting the cylinder with the train pipe of the car, a piston in the cylinder, and a connection between the piston and the other arm of the elbow lever for swinging the said elbow lever to move the locking pin lever against the resistance of the spring when the piston is acted upon by the pressure of the train pipe.

2. A car door lock comprising a casing adapted to be connected to the body of a car at one side of the door opening, said casing having on the front thereof a pair of transversely alined perforated lugs for engaging the openings of a hasp on the door, a locking bolt mounted for sliding movement on the casing above each lug and having a reduced lower end for engaging the perforation of the adjacent lug, a lever pivoted intermediate its ends within the casing between the lugs, a locking pin connected with each end of the lever, each lug having a longitudinal passage extending from within the casing and intersecting the perforation of the lug for receiving the locking pin, the reduced end of the locking bolt adjacent to the door opening having a transverse passage registering with the passage of the lug and the reduced end of the locking bolt remote from the door opening having a recess on its inner face registering with the passage of the lug, the locking pins being of such length that when the pin remote from the door opening is seated in the recess of the bolt, the other pin will be in engagement with the passage of the other bolt, a spring connected with the end of the lever adjacent to the door opening and normally acting to swing the said end of the lever away from the front of the casing, a piston in the casing adapted to be connected with the train pipe of the car, a piston in the cylinder, and a connection between the piston and the lever for swinging the lever against the resistance of the spring when the piston is acted on by the train pipe pressure.

3. A car door lock comprising a casing adapted to be connected to the body of a car at one side of the door opening, a pair of transversely alined perforated lugs on the outer face of the casing for engaging the openings of a hasp on the door, a locking bolt mounted for sliding movement above each lug for engaging the perforation thereof to lock the hasp in place, a lever pivoted in the casing between the lugs and intermediate the ends of the lever, a locking pin connected with each end of the lever, each lug having an opening for receiving the adjacent locking pin, each opening intersecting the perforation of the lug, one of the locking bolts having a transverse passage registering with the opening of the lug when the locking bolt is in engagement with the perforation thereof, the other bolt having a recess on its inner face for registering with the perforation of the lug, the locking pins being of a length to simultaneously engage the recess and the passage, fluid operated means adapted for connection with the air brake system of the car for swinging the lever to move the locking pin into the recess, and a spring acting on the lever to move it in the opposite direction.

4. A car door lock comprising a casing adapted to be connected to the body of a car at one side of the door opening, a pair of transversely alined perforated lugs on the outer face of the casing for engaging the openings of the hasp on the door, a locking bolt mounted for sliding movement above each lug for engaging the opening thereof to lock the hasp in place, a lever pivoted intermediate its ends in the casing between the lugs, a locking pin connected with each end of the lever, each lug having a longitudinal opening intersecting the perforation for receiving the adjacent locking pin, one of the locking pins having a passage registering with the perforation of the lug, and the other having a recess on its inner face registering with the perforation of the lug, said pins being of a length to simultaneously engage the recess and the passage, normally active means for swinging the lever in a direction to engage the locking pin with the recess, and fluid operated means acting to swing the lever in the opposite direction.

5. A car door lock, comprising a support having a pair of transversely alined perforated lugs, a locking bolt mounted to slide toward and from each lug for engaging the perforation thereof, a lever pivoted between the lugs, a locking pin at each end of the lever, each lug having a longitudinal opening intersecting the perforation for receiving the adjacent locking pin, one of the locking bolts having a transverse passage and the other a recess on its inner face for registering with the passage of the lug, normally active means for swinging the lever to engage the locking pin with the recess, and fluid operating means connected with the lever for moving it in the opposite direction.

[Claims 6 and 7 not printed in the Gazette.]

1,065,789. FILLING-MACHINE. JOB DUDLEY, Hamilton, Ontario, Canada, assignor, by direct and mesne assignments, to The Smith, Dudley, Stuart Company, Limited, Burlington, Ontario, Canada. Filed Mar. 4, 1912. Serial No. 681,604. (Cl. 226—9.)

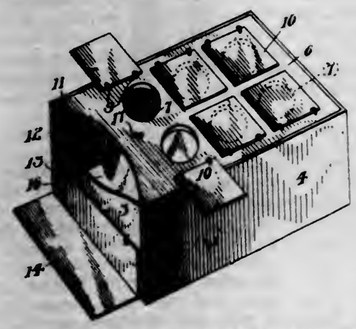


1. In a device of the character described, the combination with a vat, of a plurality of rows of measuring chambers leading therefrom, a valve casing mounted upon the bottom of each of said measuring chambers, a plurality of tubular valve members, there being one of said valve members passing through all of the valve casings of a row, means for actuating all of said tubular valve members simultaneously, said means comprising a connecting link, a slide, a slot formed therein, a rotative member, and a pin carried by said rotative member for engaging said slot to actuate said slide.

2. In a device of the character described, the combination with a vat, of a plurality of measuring chambers leading therefrom, of a common controlling slide to all of said measuring chambers located at the upper end thereof, controlling valves located at the lower ends thereof, a common actuating member for all of said controlling valves, a pair of slides to one of which the first named slide is connected, and to the other of which said actuating member is connected, each member of said pair of slides having a vertical slot formed therein, said grooves alining with each other and being formed in adjacent edges of said slide, a rotative member, and a pin carried by said rotative member and adapted to engage in said slots to actuate said slides.

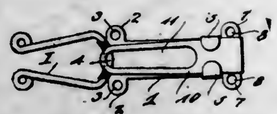
3. In a device of the character described, the combination with a vat, of a plurality of measuring chambers leading therefrom, of a common controlling slide to all of said measuring chambers located at the upper end thereof, controlling valves located at the lower ends thereof, a common actuating member for all of said controlling valves, a pair of slides to one of which the first named slide is connected, and to the other of which said actuating member is connected, each member of said pair of slides having a vertical slot formed therein, said grooves alining with each other and being formed in adjacent edges of said slide, a rotative member, and a pin carried by said rotative member and adapted to engage in said slots to actuate said slides, said measuring chambers being disposed in pairs of rows, and said controlling valves comprising elongated tubular members, each of which serves to control all of the measuring chambers of a row.

1,065,790. EGG-TESTING DEVICE. ALBERT D. DUNLEVY, Steubenville, Ohio. Filed Apr. 24, 1912. Serial No. 692,875. (Cl. 99—6.)



An egg testing device comprising a rectangular receptacle including top, bottom, side and end walls, said top wall being formed with parallel rows of openings for the reception of the ends of eggs, one upper corner of said receptacle being cut away transversely to provide a viewing opening arranged at the top and one end of the receptacle, oppositely disposed lids pivotally connected to the top of the receptacle and providing means for independently closing the egg receiving openings, an angle-shaped lid pivotally connected exteriorly of one end of the receptacle and capable of being swung onto the top of the receptacle for closing said viewing opening, and an inclined reflector arranged within the receptacle.

1,065,791. HOOK. KIYOMI EGUCHI, San Francisco, Cal. Filed Mar. 28, 1912. Serial No. 686,920. (Cl. 24—226.)

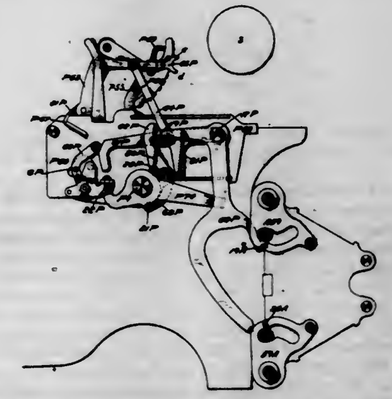


A hook constructed from a single strip of metal and having oppositely disposed outwardly projecting pierced ears arranged at one end and also at its central portion, said strip being also provided with oppositely disposed lugs adjacent to the central ears and spaced therefrom, a bill folded over one end of the strip in curved form to provide an engaging seat, said strip being folded over one portion of its length so as to have its terminal fold resting on the bill and said lugs being bent over said folded portion so as to clamp the same in contact with the unfolded portion of the strip whereby to give the end of the folded portion spring action in connection with the bill.

1,065,792. TOTAL-SIGNAL DEVICE. HALCOLM ELLIS, East Orange, N. J. Filed Oct. 24, 1908. Serial No. 459,380. (Cl. 235—60.)

1. In an adding machine, the combination with printing mechanism, and a plurality of accumulating mechanisms, of a total signal printing device, and operative connections between said accumulating mechanisms and said signal printing device whereby the signal printing device is set in different printing positions by the movement of said accumulating mechanism.

2. In an adding machine, the combination with printing mechanism, and a plurality of accumulating mechanisms, of a total signal printing device having different signals to designate totals when taken from the respective accumulating mechanisms, means for moving the accumulating mechanisms according as the total of one or the other is to be printed, and operating means for the total signal device coöperatively associated with the respective accumulating mechanisms for different degrees or extents of movement thereby according to which accumulating mechanism is operated for the purpose of printing the total thereof.



3. In an adding machine, the combination with printing mechanism, and a plurality of accumulating mechanisms, of a total signal printing device having different signals to designate totals taken from the respective accumulating mechanisms, means for moving the accumulating mechanisms according as the total of one or the other is to be printed, and a lever coöperatively related to the total signal printing device and to the respective accumulating mechanisms in such manner that it will be shifted by the movement thereof to different degrees or extents according to which accumulating mechanism is operated for the purpose of printing the total thereof.

4. In an adding machine, the combination with printing mechanism, mounted to move bodily toward the paper when printing, and means for so moving said printing mechanism, of a total signal printing device carried by and movable with said bodily movable printing mechanism, a plurality of accumulating mechanisms, and means for setting said signal printing device to print a signal to indicate the accumulating mechanism from which the total is being printed.

5. In an adding machine, the combination with printing mechanism mounted to move bodily when printing, and means for moving said printing mechanism, of a total signal printing device carried by and movable with said printing mechanism, a plurality of accumulating mechanisms, and operative connections between the respective accumulating mechanisms and said total signal printing device whereby the signal mechanism is set in different printing positions by the movement of said accumulating mechanisms.

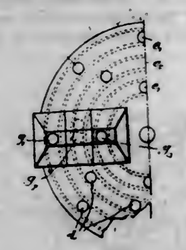
[Claims 6 to 9 not printed in the Gazette.]

1,065,793. DISTRIBUTING AND MIXING APPARATUS. KARL FERBER, Berlin, Germany, assignor to Siemens-Schuckertwerke G. M. B. H., Berlin, Germany, a Corporation of Germany. Filed Mar. 1, 1911. Serial No. 611,666. (Cl. 83—44.)

1. The combination with a hopper, of feed tubes arranged below said hopper, and a plate movably disposed between said hopper and said feed tubes and having a series of openings therein for each of said feed tubes, the number of holes in one of said series being different from that of another series.

2. The combination with a hopper, of feed tubes disposed below said hopper, a distributing plate disposed

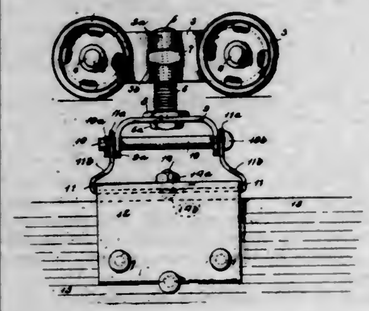
above said feed tubes and having openings discharging respectively into said feed tubes, and a plate disposed between said hopper and said distributing plate and having a series of openings therein for each of said feed tubes, the number of openings in one of said series being different from that of another series.



3. In distributing and mixing apparatus of the character described the combination with a feed hopper, of a horizontal distributing disk provided with channels and outlets discharging from said channels, a rotatable disk interposed between said hopper and said distributing disk, said rotatable disk being provided with holes arranged in a plurality of series, each of said series being caused by the rotation of said disk to traverse one of said feed tubes, the number of holes in one series being different from the number of holes in another series.

4. In distributing and mixing apparatus of the character described, the combination, with a feed hopper, of a horizontal distributing disk having annular, concentric channels and outlets opening into the channels, a rotatable perforated disk superposed on the former disk, mounted under the outlet of the hopper and having a plurality of perforations arranged in a plurality of circles concentric with the channels in the distributing disk, blades attached to the perforated disk and projecting into the channels, and tubes opening under the outlets in the channels.

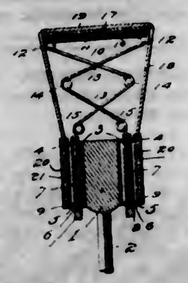
1,065,794. DOOR-HANGER. WILLIAM H. FITCH, Aurora, Ill., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed Mar. 17, 1913. Serial No. 754,674. (Cl. 16—90.)



1. In a door hanger, the combination of a wheel carrying truck composed of metal straps bent to provide a bolt way therebetween, a bolt adjustably mounted in said way, links pendant from said bolt and pivotally connected together, and door plates connected with said links.

2. In a door hanger, a wheel carrying truck composed of parallel metal plates arranged edgewise, expanded at their mid-lengths to provide a bolt way and slotted in said expanded portions, a nut non-rotatably arranged in said slot, a bolt mounted in said way and engaged by said nut, door supporting members connected with said bolt, and means for locking said bolt against rotation relative to said door-supprting members.

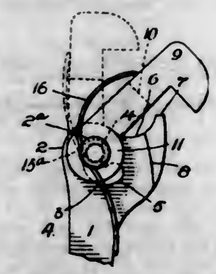
1,065,795. SPRING-TIRE. PORTER C. FOX, Spokane, Wash., assignor to The Fox Company, Inc., Spokane, Wash., a Corporation of Washington. Filed Jan. 24, 1912. Serial No. 673,007. (Cl. 152—8.)



1. A device of the character described comprising a felly, rim members attached to the sides of said felly, threaded cup-like devices adjustably arranged in said rim members, transversely extending springs having their terminals mounted in the cup-like devices, a tread member surrounding the springs, and transverse channeled devices carried by the tread member for holding and spacing the springs apart, said transverse channeled devices being in alinement with said adjustable cup-like devices.

2. A device of the character described comprising a felly, rim members mounted on opposite faces of said felly, each rim member having an interior and exterior face member with connecting flanges at their inner and outer edges, said connecting flanges supporting in threaded adjustment cup-like devices for holding the terminals of wire springs, coiled springs with crossed and recrossed strands and straight terminal strands seated in said cup-like devices, and a jacket or casing covering said springs and devices, having its end portions locked against the exterior face members of said rim members.

1,065,796. WRENCH. RICHARD C. FRIEND, Clairton, Pa. Filed Jan. 30, 1913. Serial No. 745,166. (Cl. 81—109.)



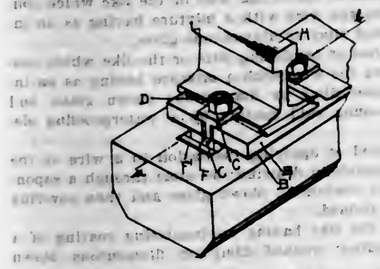
1. A wrench of the type described comprising a handle, a head carried thereby and provided with a C-shaped slot forming a pair of seats, one of said seats being concentric to the head and the other eccentric with respect to the head, a fixed jaw projecting laterally from said head, an inverted L-shaped adjustable jaw bifurcated to receive the head of said handle, and a pivot pin connecting said adjustable jaw to said head, said pin extending through the C-shaped slot of said head and capable of engaging in either one of said seats to change the position of said adjustable jaw with respect to the fixed jaw.

2. A wrench of the type described comprising a handle, a head carried thereby and provided with a C-shaped slot forming a pair of seats, a fixed jaw projecting laterally from said head, an inverted L-shaped adjustable jaw bifurcated to receive the head of said handle, a pivot pin connecting said adjustable jaw to said head, said pin extending through the C-shaped slot of said head and capable of engaging in either one of said seats to change the position of the adjustable jaw with respect to the fixed jaw, and means carried by said pivot pin and engaging said handle and said adjustable jaw for holding said adjustable jaw normally closed.

3. A wrench of the type described comprising a handle terminating at one end in a head, said head provided with a C-shaped slot forming a pair of seats, one of said seats arranged concentric with respect to the head and the other of said seats eccentric with respect to the head, a fixed jaw projecting laterally from said head and including a gripping face formed of a curved portion terminating in a flattened portion, an inverted L-shaped adjustable jaw straddling said head, and a pivot pin connecting said adjustable jaw to said head and capable of being mounted in either one of said seats to change the position of the adjustable jaw with respect to the fixed jaw.

4. A wrench of the type described comprising a handle terminating at one end in a head, said head provided with a C-shaped slot forming a pair of seats, one of said seats arranged concentric with respect to the head and the other of said seats eccentric with respect to the head, a fixed jaw projecting laterally from said head and including a gripping face formed of a curved portion terminating in a flattened portion, an inverted L-shaped adjustable jaw straddling said head, and a pivot pin connecting said adjustable jaw to said head and capable of being mounted in either one of said seats to change the position of the adjustable jaw with respect to the fixed jaw, said fixed jaw having its outer portion reinforced.

1,065,797. CONCRETE RAILWAY-TIE. HEINRICH GEBHARDT, Munich, Germany. Filed Dec. 5, 1910. Serial No. 595,742. (Cl. 238—4.)



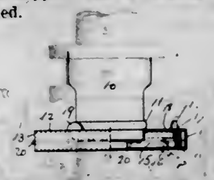
1. In combination, a concrete sleeper having formed therein a hole having a dove-tailed recess formed directly in the concrete itself, a screw-bolt having a dove-tailed head adapted to be received in said recess; exchangeable supporting plates interposed between said head and the concrete, and lateral inserts inserted in said hole to prevent the bolt head from leaving the recess.

2. In combination, a concrete sleeper having therein a T-shaped pocket comprising a transverse hole and a longitudinal undercut dove-tail recess communicating therewith; a screw-bolt having a dove-tailed head adapted to be loosely inserted in said recess and substantially conforming in shape thereto; a flanged rail on said sleeper; movable plates disposed between the inclined sides of said recess and head; a washer member on said bolt and engaging over the flange of the rail and having an extension engaging in said hole; a filling member in said hole and having a lug engaging under said extension; and an additional member between the filling member and the wall of the hole.

1,065,798. SHADE-HOLDER. GILBERT W. GOODRIDGE, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 25, 1912. Serial No. 693,200. (Cl. 240—115.)

1. A shade holder having a slotted body portion and a depending peripheral flange thereon, in combination with

inwardly projecting spring tongues tangentially mounted on said flange with their free ends normally at their innermost position, one of said tongues having an upwardly extending lug passing through said slotted body-portion of the shade holder and overlying the sides of the slot to form a support and actuating member, for the purpose described.



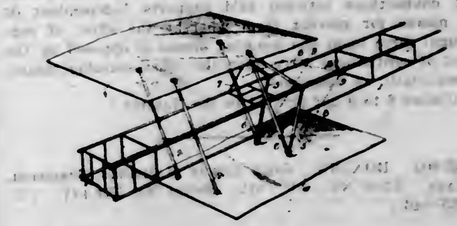
2. A shade holder comprising a body member with slotted disk top and peripheral depending skirt, a series of spring catches rigidly secured within said skirt with their free ends normally at their innermost position, together with supporting heads on the free ends of said springs passing through the slots in said disk and spanning the latter to support upon the disk the weight of a globe engaged by said spring catches, substantially as described.

3. A shade holder comprising a body member with depending skirt and inturned flange at the lower edge of the latter, in combination with spring catches rigidly secured within said skirt and supported at the lower edges of said flange, substantially as described.

4. A shade holder having a depending peripheral flange, and a series of tangential spring catches each rigidly secured within the same at one end and having at its free end a globe engaging tongue offset to lie in a substantially radial position, said tongues being normally in their extreme inwardly projecting position.

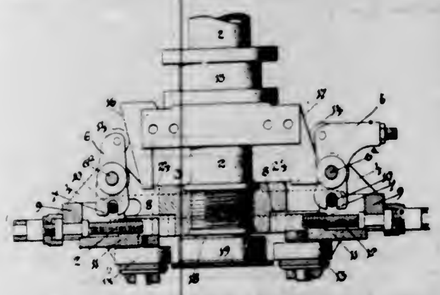
5. For use in a shade holder of the character described, a spring catch comprising a strip of resilient metal having at one end a globe-head-engaging tongue offset from the length of the spring and an upwardly extending arm with head adapted to project through a slot in the shade holder body and overlie the metal of the latter, for the purpose described.

1,065,799. AEROPLANE. AMBROISE GOUPY, Paris, France. Filed May 10, 1911. Serial No. 626,271. (Cl. 244—12.)



An aeroplane comprising a frame, upper and lower planes normally parallel with each other, arms pivoted to the frame and the planes, pivots connecting the arms to the frame and to the planes the said pivots being in alinement, other arms pivoted to the frame and the planes, pivots connecting said other arms to the planes and to the frame, the pivots between the arms and the planes fitting loosely in the arms to provide a slight lost motion, and the pivots between said second mentioned arms and the frame being located out of alinement with the pivots between said arms and the planes, and means for operating the planes and levers whereby the planes are moved edgewise so that their opposite end portions are projected beyond each other and assume an angular relation with each other and the frame.

1,065,800. SEAMING-HEAD OF DOUBLE-SEAMING MACHINES. JAMES JOSEPH GRIFFIN, San Francisco, Cal., and GORDON MOFFITT PEACOCK, South Yarra, Victoria, Australia. Filed Apr. 23, 1912. Serial No. 692,734. (Cl. 113—24.)



1. The combination with a seaming head comprising a seaming disk having slides carrying seaming rollers, or adjustable links extending between said slides.

2. In a seaming head, the combination with a seaming disk having slides thereon each carrying a seaming roller, of a cross pin carried by each slide and links extending between said pins.

3. In a seaming head, the combination of a rotating disk, independent supports mounted on said disk, seaming means on said supports, and means for moving said supports radially; with connections between said supports independent of the means for moving the supports whereby the effect of centrifugal force upon one support when its seaming means is operating on a can is opposed by the effect of centrifugal force upon the other support.

4. In combination, a seaming head comprising a seaming disk, independent sliding supports thereon, seaming means on said supports, and means for moving said supports radially; with devices connecting the said sliding supports independently of the means for moving them whereby when one of the said supports is moved inwardly the other is moved outwardly, and the effect of centrifugal force upon one of said supports is opposed by the effect of centrifugal force upon the other support.

5. In combination with a seaming head comprising a seaming disk, diametrically opposite radially movable sliding supports thereon, seaming means carried by said supports, and means for moving said supports radially; with link connections between said supports independent of the means for moving them whereby the effect of centrifugal force upon one seaming means is opposed by the effect of centrifugal force upon the other seaming means, substantially as described.

[Claims 6 to 9 not printed in the Gazette.]

1,065,801. BOXING. JOHN ERWIN HAMMERS, Scammon, Kans. Filed Nov. 14, 1912. Serial No. 731,441. (Cl. 255—46.)



1. A boxing comprising a stationary jaw, a movable jaw adapted to coöperate therewith, a pintle slidably disposed through portions of said jaws to pivotally connect the same together, said movable jaw having connection with the pintle to turn therewith, and means to cause said pintle to be partially rotated as the same is moved longitudinally of the jaws.

2. A boxing comprising a body, a stationary jaw formed thereon, a movable jaw adapted to coöperate therewith, a pintle extending through portions of said body and said movable jaw to pivotally connect the latter on said body, said pintle being slidable longitudinally of the jaws and having connection with said movable jaw to operate the latter upon the turning of said pintle, and means coöperating with a portion of said pintle and said body to cause said pintle to be partially rotated as the same is moved longitudinally of the body.

3. A boxing comprising a body having a pair of spaced knuckles formed thereon arranged in longitudinal alinement, a stationary jaw formed on said body, a movable jaw adapted for coöperation therewith having a knuckle formed thereon and disposed between the aforesaid knuckles, a pintle slidably disposed through the knuckles on said body and the knuckle of said movable jaw to pivotally mount the latter on the body, said last mentioned knuckle having connection with said pintle to be operated upon the partial rotation of the latter, said pintle being also provided with a spiral groove adjacent one end thereof, and means in connection with one of the knuckles of said body and said spiral groove to cause said pintle to be partially rotated as the same is moved longitudinally of the body.

1,065,802. FIRE AND WATER PROOF INSULATION. HERMAN HAMMESFAHR, Brooklyn, N. Y. Filed May 15, 1912. Serial No. 697,518. (Cl. 91—68.)



1. The method of insulating wire or the like which consists in coating the wire with a mixture having as an ingredient crushed filmy or filamentous glass.

2. The method of insulating wire or the like which consists in coating the wire with a mixture having as an ingredient crushed filmy or filamentous blown glass, and then waterproofing said coating by a waterproofing element.

3. The method of applying insulation to a wire or the like, which consists in drawing the same through a saponaceous mixture containing blown glass and then covering the film thus formed.

4. Wire or the like having an insulating coating of a mixture including crushed filmy or filamentous blown glass.

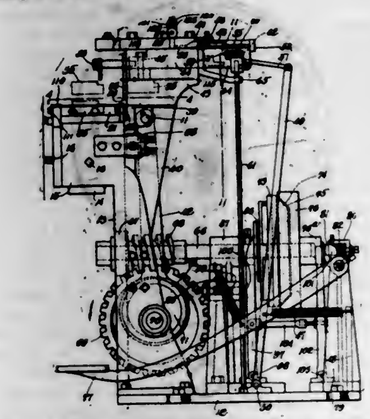
5. Wire or the like having an insulating coating of a mixture including blown glass crushed to matted flocculent condition.

[Claim 6 not printed in the Gazette.]

1,065,803. MACHINE FOR MAKING HEEL-LOGS. EDWIN HANSALPAKAR, Randolph, Mass., assignor to Brockton Heel Company, Brockton, Mass., a Corporation of Massachusetts. Filed Feb. 25, 1913. Serial No. 750,522. (Cl. 12—42.)

1. A machine of the character stated comprising a mold, a reciprocating carrier movable beside the mold and provided with elongated guides extending substantially at right angles with the path of the carrier, mechanism for reciprocating the carrier, a slide movable independently on said guides and engaged thereby with the carrier to move in unison with the carrier, a plunger attached to the slide, the slide and plunger being manually movable to an operative position locating the plunger over the mold and adapted to be retracted from said position, and means for confining the slide and plunger in said operative position.

2. A machine of the character stated comprising a mold, a reciprocating carrier movable beside the mold and provided with elongated guides extending substantially at right angles with the path of the carrier, mechanism for reciprocating the carrier, a slide movable independently on said guides and engaged thereby with the carrier to move in unison with the carrier, a plunger attached to the slide, the slide and plunger being manually movable to an operative position locating the plunger over the mold and adapted to be retracted from said position, means for confining the slide and plunger in said operative position, means for automatically releasing the slide and plunger after the operation of the plunger, and means for automatically retracting the slide and plunger.



3. A machine of the character stated comprising a mold, a reciprocating carrier movable beside the mold, mechanism for reciprocating the carrier, a slide on the carrier, a plunger attached to the slide, the slide and plunger being manually movable to an operative position locating the plunger over the mold, a latch on the carrier adapted to automatically lock the slide in said operative position, a latch tripper operated by a movement of the carrier to automatically displace the latch and release the carrier, and means for automatically retracting the slide and plunger from said operative position.

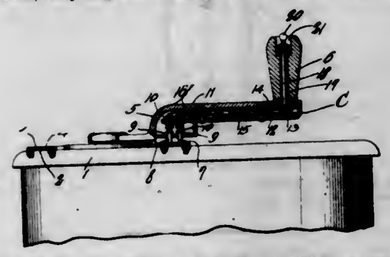
4. A machine of the character stated comprising a mold, a reciprocating carrier movable vertically beside the mold and having horizontal upper and lower guides, mechanism for reciprocating the carrier, a slide movable horizontally between said guides, a plunger attached to the slide, the slide and plunger being manually movable independently of the carrier, and antifrictional means coöperating with the said upper guides for pressing the slide upwardly and minimizing frictional resistance to the movement of the slide on the lower guides.

5. A machine of the character stated comprising a mold, a reciprocating carrier movable vertically beside the mold and having horizontal upper and lower guides, mechanism for reciprocating the carrier, a slide movable horizontally between said guides, a plunger attached to the slide, the slide and plunger being manually movable independently of the carrier, a shank attached to the slide and projecting between the upper guides, said shank having a chambered slotted head, antifriction rolls bearing on the upper guides, and mounted on an axle passing through the slotted head, and a spring interposed between said axle and an abutment on the head and exerting a yielding upward pressure on the slide.

[Claims 6 to 13 not printed in the Gazette.]

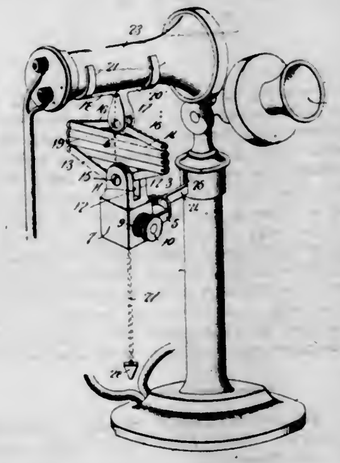
1,065,804. GONG-ACTUATING MECHANISM FOR ELECTRIC CARS. ROBERT A. HEFFLEY, Denver, Colo., assignor of one-half to Adolph Turner Hart, Denver, Colo. Filed June 24, 1912. Serial No. 705,658. (Cl. 177—10.)

In a gong actuator, the combination with a controlling box having a stem, an audible alarm, a source of electrical energy and two insulated concentric rings disposed upon the controller box and concentrically about the controller stem, of a circuit closing device including a controller handle for detachably engaging the stem, a casing detachably connected to the under side of the controller handle and having a projecting portion above and parallel with the two concentric rings, a projection carried by and within the casing above in spaced relation with the projecting portion, the projecting portion and the incased projection being provided with two vertically parallel apertures, two metal contacts mounted in the apertures of the parallel portions and disposed to ride upon the concentric rings, sleeves normally mounted in the apertures of the projections within the casing and insulated therefrom, a spring mounted in each sleeve for holding the



contacts resiliently in ring engaging position, a conductor led from each of the sleeves throughout the length of the handle, a stationary contact plate connected to one of the conductors, a spring contact plate connected to the other conductor and normally held out of engagement with the stationary contact, and a push pin slidably mounted in the gripping handle of the controller and for causing the closure of the contacts at will.

1,065,805. TELEPHONE ATTACHMENT. SIMON J. HEIMBUECHER, Jr., Pittsburgh, Pa. Filed June 29, 1912. Serial No. 706,750. (Cl. 179—150.)



A telephone attachment comprising a receiver support including a post disposed between the arms of the fork of the receiver hook, a pivot bolt passing through the post and through the arms of the fork whereby the post may be rocked laterally with relation to the transmitter, an extensible structure pivotally mounted on the post and adjustable forwardly with relation to the transmitter and adapted to be extended upwardly beyond the transmitter, a receiver holder pivotally mounted upon said extensible structure, and a clamping nut carried by the bolt and adjustable to cause the arms of the fork to impinge against the opposite sides of the post so as to hold the latter in its adjusted position.

1,065,806. CHURN. JOHN B. HOLLINGSWORTH, Waters, Ark., assignor of one-fourth to George Reynolds and Johnie Reed, Waters, Ark. Filed May 28, 1912. Serial No. 700,298. (Cl. 31—42.)

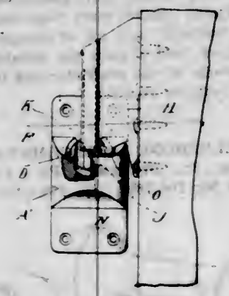
In a device of the class described comprising a churn having a concavo-convexed bottom, a closure for said

(churn, a bearing member extending through said closure, a shaft extending through said bearing and an adjustable



dasher carried by said shaft and provided with a sharp bearing portion adapted to rest on the convexed surface of the bottom of said churn.

1,065,807. GRAVITY-HINGE. WILLIAM JAMES HOPE, Tunica, Miss. Filed Dec. 18, 1912. Serial No. 737,528. (Cl. 16—163.)

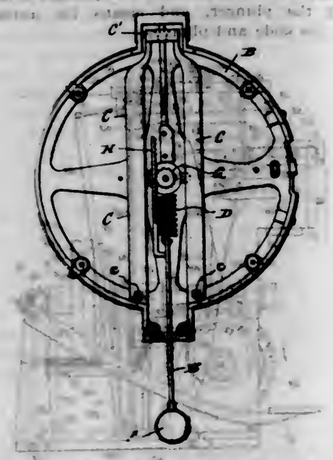


A self-lubricating gravity hinge comprising a plate adapted to be fastened to the jamb of a door and having a laterally projecting portion which is recessed, the bottom of the recess being inclined and having a groove in the bottom thereof, the wall of said recess being inclined, a pintle rising from the bottom of the recess, a hinge member having a recess in the bottom thereof adapted to fit over the outer edge of the projection, a portion of the lower edge of the recessed hinge member intermediate the recess and pintle adapted to ride upon said inclined ridge and dip into the lubricant of the receptacle, the ridge being provided with a notch for the reception of the part which rides upon the ridge, and a projecting hood fitted to the hinge member and adapted to cover said recess, as set forth.

1,065,808. SPRING-BALANCE SCALE. JOSEPH HOPKINSON, Dayton, Ohio. Filed Feb. 5, 1912. Serial No. 675,605. (Cl. 73—46.)

1. In a spring balance scale, the combination with a rotary indicator, a frame in which said indicator is journaled, a load supporting runner frame, and connections intermediate said runner frame and indicator whereby the indicator is rotated, of a counterbalancing spring, and a rigid supplemental frame from which said spring is suspended having its lower end rigidly connected with the frame in which the indicator is journaled and its upper end free to move vertically under the influence of variations in temperature, with connections intermediate said counterbalancing spring and runner frame.

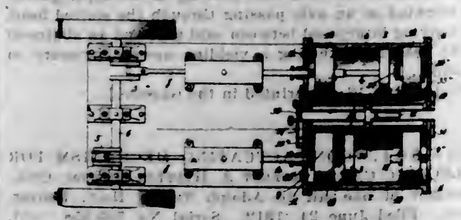
2. In a spring balance scale, the combination with a rotary indicator, frame in which said indicator is journaled, load supporting runner frame and operating connections intermediate the runner frame and indicator, whereby the indicator is rotated, of a vertically arranged rigid supplemental frame rigidly connected at its lower end with the frame in which the indicator is journaled at a point below the axis of the indicator and extending freely above said axis and a counterbalancing spring suspended from the upper end of said supplemental frame and extending downwardly below the axis of the indicator, with connections intermediate the lower end of the counterbalancing spring and runner frame.



3. In a scale, the combination with the rotary indicator, circular end frame having a central bearing in which said indicator is journaled, load supporting runner frame and operating connections between the runner frame and indicator whereby the indicator is rotated, of a supplemental frame embodying standards connected at their lower ends to the frame in which the indicator is journaled at a point below the axis of the indicator and extending upwardly to a point above the axis of the indicator, a bridge portion connecting said standards at the upper ends, a counterbalancing spring suspended from said bridge portion, and a connection intermediate the lower end of said spring and runner frame.

4. In a scale, the combination with a rotary drum indicator, end frames in which the indicator is journaled, load supporting runner frame and operating connections intermediate the runner frame and indicator, of supplemental frames embodying vertically arranged standards rigidly connected with the end frames at the bottom and projecting upwardly beyond the axis of the indicator, bridge portions connecting the end standards at the upper ends, and projecting laterally therefrom, counterbalancing springs suspended on said laterally projecting bridge portions of the supplemental frames and connections intermediate the lower ends of the springs and runner frame.

1,065,809. STEAM-ENGINE. WILLIAM HUNTER, Jr., Spartanburg, S. C. Filed Nov. 19, 1912. Serial No. 732,260. (Cl. 121—34.)



1. In an engine of the class described, the combination of a cylinder having closed ends and partition heads spaced from the ends and forming live chambers between the ends and partition heads, the cylinder having ports leading to the live steam chambers and the partition heads being each provided with an exhaust port and also with a working opening, a piston arranged to reciprocate in the cylinder between the partition heads, a pressure operated exhaust valve mounted for reciprocating movement in each partition head in the working opening thereof and provided with a port, a piston operated working valve also mounted for reciprocating movement in the working opening of each partition head, toward and from the exhaust valve, a spring acting on each working valve to cause the latter to normally close the intake end of the working opening, and a cut off valve for each working valve and exhaust valve to close the port of the latter when the exhaust valve is in open position.

2. In an engine of the class described, a cylinder having a head and also having a partition head spaced from the head and provided with a working opening and also with an exhaust port, a piston arranged to reciprocate in the cylinder, a working valve, and an exhaust valve arranged for operation in the said working opening, the said exhaust valve having a port through which live steam passes when the working valve is open, and a cut off valve to close said port of the exhaust valve when the latter is opened by the pressure of the exhaust steam.

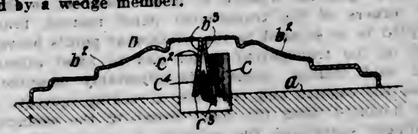
3. In an engine of the class described, the combination with a cylinder having a head and also having a partition head spaced from the head, the said cylinder having a live steam port discharging into the space between the head and the partition head and the said partition head having a working opening provided with an enlarged intermediate portion and being also provided with an exhaust passage leading from the enlarged portion of the working opening, a piston arranged to reciprocate in the cylinder, a working valve to open and close the intake end of the working opening, said working valve being provided with means to cause the same to be opened by the piston when the latter nears the partition head, a spring to close the working valve when the piston moves from the working head, an exhaust valve arranged to operate in the enlarged portion of the working opening and to be closed by live steam pressure; when the working valve is open, the said exhaust valve having a port through which live steam passes when the working valve is open, and a cut off valve operated by the pressure of dead steam in the cylinder to close the said port of the exhaust valve when the working valve is in closed position and the exhaust valve is in open position.

4. In an engine of the class described, the combination with a cylinder having a head and also having a partition head spaced from the head, the said cylinder having a live steam port discharging into the space between the head and the partition head and the said partition head having a working opening provided with an enlarged intermediate portion and being also provided with an exhaust passage leading from the enlarged portion of the working opening, a piston arranged to reciprocate in the cylinder, a working valve to open and close the intake end of the working opening, said working valve being provided with means to cause the same to be opened by the piston when the latter nears the partition head, a spring to close the working valve when the piston moves from the working head, an exhaust valve arranged to operate in the enlarged portion of the working opening and to be closed by live steam pressure, when the working valve is open, the said exhaust valve having a port through which live steam passes when the working valve is open, and a cut off valve operated by the pressure of dead steam in the cylinder to close the said port of the exhaust valve when the working valve is in closed position and the exhaust valve is in open position, the said partition head being also provided with a starting duct leading from the live steam space to the enlarged portion of the partition head working opening between the working valve and exhaust valve, and a starting valve to open and close the said starting duct.

1,065,810. MOLDING OR TRIMMING FOR BUILDINGS. JOHN F. JOHNSON, Elmhurst, N. Y. Filed Feb. 18, 1913. Serial No. 749,083. (Cl. 189—88.)

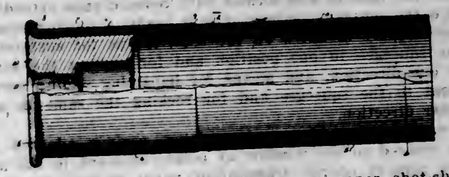
1. A molding or finishing strip composed of separate parts and the adjacent edges of which are provided with inwardly directed flange strips, and a locking plate having a slot adapted to receive said flange strips and provided with diverging slots forming an intervening wedge.

2. A molding or finishing strip composed of separate parts provided with parallel flange strips, and a locking plate provided with a slot adapted to receive said flange strips, said slot being provided with diverging slots separated by a wedge member.



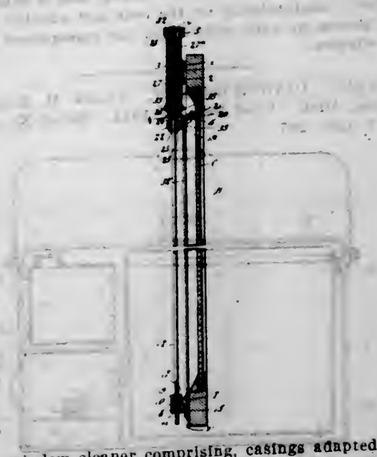
3. A molding consisting of separate parts having parallel flange strips and a locking plate provided with diverging slots adapted to receive said flange strips, and intervening wedge members adapted to separate said flange strips when the locking plate is driven thereonto.

1,065,811. PAPER SHOT-SHELL. THOMAS C. JOHNSON, New Haven, Conn., assignor to Winchester Repeating Arms Co., New Haven, Conn., a Corporation. Filed Jan. 14, 1913. Serial No. 741,919. (Cl. 102—16.)



As a new article of manufacture, a paper shot-shell comprising a paper tube, a flanged metal cap and a base-wad, and longitudinally arranged reinforcing fibers embedded in the paper of the tube and extending from the rear end thereof to a point in front of the edge of the cap when the tube is positioned therein, the said wad being condensed under pressure and forced outward to pinch the inner end of the tube between the wad and the cap, and to force the inner edge of the tube into the flange of the cap, whereby the inner ends of the fibers are anchored in the flange of the cap, and whereby the forward portions of the fibers by extending beyond the edge of the cap, prevent the tube from being cut off along the edge of the cap.

1,065,812. WINDOW-CLEANER. SHERMAN J. JONES, Chicago, Ill. Filed Sept. 11, 1912. Serial No. 719,849. (Cl. 15—59.)



1. A window cleaner comprising, casings adapted to be mounted upon the window at points adjacent to the upper corners of the transparent panel thereof, brackets adapted to be secured to the window at points below the edge of the transparent panel and in axial alinement with said casings, guide rods adjustably mounted be-

tween the casings and brackets, a rocking squeegee slidably mounted upon the rods, and means in the casings for yieldingly sustaining the squeegee in one position.

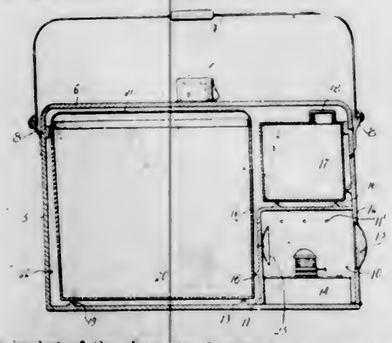
2. A window cleaner comprising, casings adapted to be mounted upon the window at points adjacent to the upper corners of the transparent panel thereof, brackets adapted to be secured to the window at points below the edge of the transparent panel and in axial alinement with said casings, guide rods adjustably mounted between the casings and brackets, a rocking squeegee slidably mounted upon the rods, means in the casings for yieldingly sustaining the squeegee in one position, and a buffer carried by the squeegee and adapted to contact with the casings.

3. A window cleaner comprising casings adapted to be secured to the window at points adjacent to the upper corners of the transparent panel thereof, said casings having open lower ends and upper ends provided with heads, the head of each casing having a central opening therein, brackets adapted to be secured to the window and disposed below the edge of the casings and arranged in axial alinement therewith, rods having other portions fitting in the brackets and having portions extending into the casings and formed with reduced ends extending into the central openings of said heads, a rocking squeegee slidably mounted on the rods, means for sustaining the squeegee in one position and for rocking the same in one direction, and means for imparting sliding movement to the squeegee and for rocking the same in another direction.

4. A window cleaner comprising, casings adapted to be secured to the window at points adjacent to the upper corners of the transparent panel thereof, brackets adapted to be secured to the window in alinement with the casings, rods connecting the brackets with the casings, a squeegee mounted for rocking and sliding movements respectively on the rods, springs embracing the rods and having their lower portions secured to the squeegee, shoulders formed on the rods within the casings, the said springs having upper reduced convolutions surrounding the upper ends of the rods, and adjustable means on the rods bearing against the said reduced convolutions and confining the same against said shoulders.

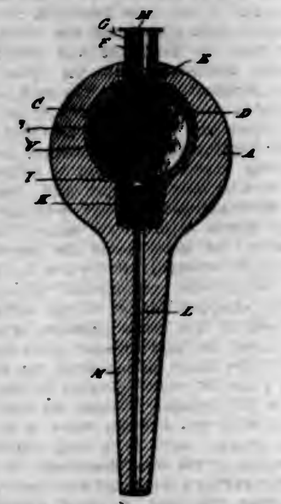
5. A window cleaner comprising casings adapted to be secured to the window at points adjacent to the upper corners of the transparent panel thereof, brackets adapted to be secured to the window in line with the casings, rods having upper portions connected with the casings and having lower portions extending through the brackets, the brackets having openings therein accommodating the lower portions of the rods whereby the latter may be rocked with relation to the window, and a squeegee adjustable longitudinally on the rods and adapted for rocking movement with relation to the transparent panel of the window.

1,065,813. DINNER BUCKET. FRANK M. KOLASA, Elmira, Mich. Filed Feb. 23, 1911. Serial No. 610,201. (Cl. 126—267.)



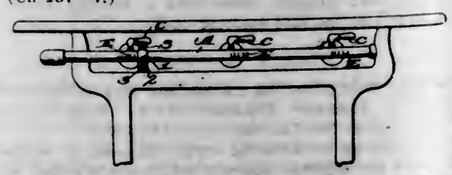
A bucket of the character described comprising a casing including a bottom, side walls and end walls, one of said end walls having a removable portion provided with a spacing lug upon its inner face, spacing lugs upon the upper face of the bottom, an L-shaped partition wall in one end of the casing to form a lamp compartment, the horizontal portion of the wall engaging against the removable portion of the adjacent end, spacing lugs formed upon the upper face of the horizontal portion of the partition, a receptacle positioned upon the last mentioned lugs, and against the lug on the inner face of the end wall, a receptacle positioned upon the lugs on the bottom of the casing and against the lugs of the vertical portion of the partition, a lamp within the lamp compartment, a reflector carried by the vertical portion of the partition, a bull's eye in the removable portion and a cover for said casing.

1,065,814. SCALP-TONIC COMB. ARTHUR E. LAMBERT, North Powder, Oreg. Filed Oct. 30, 1911. Serial No. 657,695. (Cl. 132—3.)



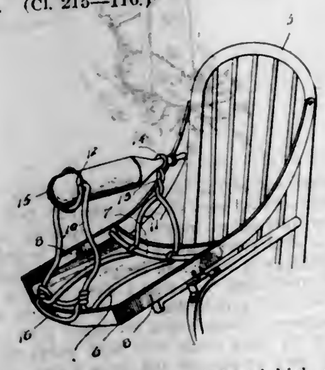
A comb comprising a hollow body provided with a series of hollow radial teeth, and an opening in its upper side, a liquid receptacle fitted in said body and having alined top and bottom openings registering with said first named opening, the body having also a longitudinal passage interposed between the teeth and the bottom opening of said receptacle, valves seating upward in the alined openings, a stem rigidly connecting said valves and extending through the first named opening, a spiral spring encircling the stem and pressing against the inner surfaces of the upper valve and the bottom of the liquid receptacle, and a hollow press-button secured on the outer end of the stem and extending into said first-named opening and having an air inlet in its projecting outer portion, the inner end being open and registering with the top opening when the button is pressed inwardly, the valves being at the same time forced downwardly so that liquid discharges into the passage and escapes thence through the teeth, as described.

1,065,815. GAGE FOR GAS-COCKS. JOHN LAMPLE, Baltimore, Md. Filed Aug. 21, 1912. Serial No. 716,300. (Cl. 137—7.)



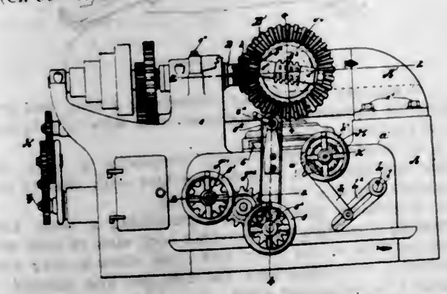
The combination with a gas range having a feed pipe, a branch therefrom and a gas cock in said branch and having a handle arranged to project across the feed pipe in any open position of the gas cock, of a gage adapted to be fitted on the feed pipe to indicate by its coincidence with said handle some determined open position of said gas cock and comprising a strip of sheet metal fashioned to provide a split sleeve which fits snugly on said feed pipe and which is provided at a point adjacent the upper side of said pipe with an upstanding projection, over which the handle is freely movable, as and for the purpose set forth.

1,065,816. NURSING-BOTTLE HOLDER. OLAF LEE, Spokane, Wash. Filed Aug. 31, 1912. Serial No. 718,118. (Cl. 215—116.)



A nursing bottle holder for infants' high chairs comprising a supporting pivot adapted to be mounted on the rest of said chair, a wire frame supported by the pivot member and bent to provide front and rear supporting yokes, the front yoke being formed with a downwardly bowed cross bar to afford a seat for the nursing bottle, the said rear yoke being twisted to provide an eye for receiving the neck of the bottle when resting in the seat, a cage frame connected with the bowed cross bar of the front yoke and receiving the bottom of the bottle, and a forwardly and downwardly curved bail connected with the front yoke for clamping engagement with a portion of the rest.

1,065,817. GEAR-CUTTING MACHINE. ERNEST J. LEES, Cleveland, Ohio, assignor, by mesne assignments, to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Filed Sept. 21, 1906. Serial No. 335,565. (Cl. 90—4.)



1. In a machine for cutting gears, the combination with a rotary cutter and a blank-receiving spindle mounted in operative relation thereto; of means adapted to rotate said cutter and spindle at desired relative rates of speed; means adapted to move said spindle to carry the blank across said cutter; and means adapted to support the edge of the blank, and connected to be moved in unison with aforesaid means.

2. In a machine for cutting gears, the combination of a live-spindle; a sliding carriage movable toward and from said spindle; a vertical sleeve rotatably mounted in said carriage; mechanism for positively rotating said sleeve and the live-spindle at the desired relative speeds; a spindle in said sleeve; tongue-and-groove connections between said sleeve and spindle; mechanism adapted to positively feed the latter upwardly at a predetermined speed relative to said live-spindle; and means geared to the live-spindle, adapted to support the edge of the work-wheel, and adapted to be fed upwardly at the same rate of speed as the sleeve-spindle.

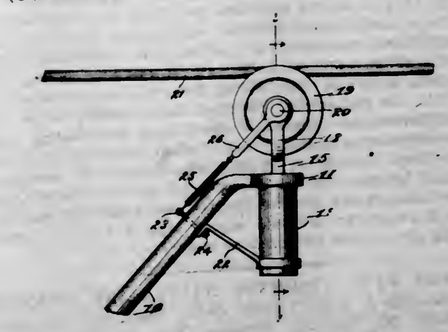
3. In a machine for cutting gears, the combination of a live-spindle; a sliding carriage movable toward and from said spindle; a vertical sleeve rotatably mounted in said carriage; mechanism for positively rotating said sleeve and the live-spindle at the desired relative speeds; a spindle in said sleeve; tongue-and-groove connections between said sleeve and spindle; mechanism adapted to positively feed the latter upwarly at a predetermined speed relative to said live-spindle; and means geared to said feeding mechanism in the ratio of one-to-one, adapted to support the edge of the work-wheel, and including a vertically-movable screw carrying a friction-roller adapted to engage with said work-wheel.

4. In a machine for cutting gears, the combination of a live-spindle; a sliding carriage movable toward and from said spindle; a vertical sleeve rotatably mounted in said carriage; mechanism for positively rotating said sleeve and the live-spindle at the desired relative speeds; a spindle in said sleeve; tongue-and-groove connections between said sleeve and spindle; mechanism adapted to positively feed the latter upwardly at a predetermined speed relative to said live-spindle; means geared to the live-spindle, adapted to support the edge of the work-wheel, and adapted to be fed upwardly at the same rate of speed as the sleeve-spindle; means adapted to disengage said supporting means from said live-spindle; and independent means adapted to vertically adjust said supporting means.

5. In a machine for cutting gears, the combination of a live-spindle; a sliding carriage movable toward and from said spindle; a vertical sleeve rotatably mounted in said carriage; mechanism for positively rotating said sleeve and the live-spindle at the desired relative speeds; a spindle in said sleeve; tongue-and-groove connections between said sleeve and spindle; mechanism adapted to positively feed the latter upwardly at a predetermined speed relative to said live-spindle; means geared to said feeding mechanism in the ratio of one-to-one, adapted to support the edge of the work-wheel, and including a vertically-movable screw carrying a friction-roller adapted to engage with said work-wheel; means adapted to disengage said feeding mechanism and said supporting means from said live-spindle; and independent means adapted to vertically adjust said sleeve-spindle and said vertical screw.

[Claims 6 to 8 not printed in the Gazette.]

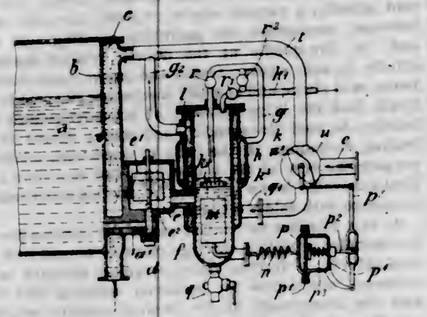
1,065,818. TROLLEY-POLE. AUGUSTE LEVESQUE, New Bedford, Mass. Filed Oct. 9, 1911. Serial No. 653,632. (Cl. 64—70.)



In a trolley, the combination with a trolley pole, a cylinder, means for connecting said cylinder to the trolley pole, a piston reciprocating in the cylinder, a spring

interposed between the piston and the cylinder, a harp supported by said piston, a trolley wheel mounted in the harp, a U-shaped yoke pivotally connected to the harp, a bolt passing through the trolley pole and having an eye formed on one end thereof, and a coil spring connecting said yoke to the bolt.

1,065,819. DEVICE FOR CARBURETING AIR. GASTON PAUL JEAN LION, Levallois-Perret, France. Filed Mar. 16, 1912. Serial No. 684,234. (Cl. 48—149.)



1. In a device for carbureting air with crude naphthalene vapors, the combination, with a supply tank and a carbureting chamber communicating therewith, of a heating jacket for the supply tank, a heating jacket for the carbureting chamber, an engine exhaust pipe communicating with the jacket of the carbureting chamber, a pipe leading from the jacket of the carbureting chamber to the jacket of the supply tank, and means independent of the carbureting chamber jacket for direct communication from said exhaust pipe to the jacket of the supply tank.

2. In a device for carbureting air with crude naphthalene vapors, the combination, with a supply tank and a carbureting chamber communicating therewith, of a heating jacket for the supply tank, a heating jacket surrounding and extending longitudinally of the carbureting chamber, an engine exhaust pipe communicating with the lower portion of the carbureting chamber jacket, a pipe affording communication between an upper portion of the carbureting chamber jacket and an upper portion of the jacket for the supply tank, and means of direct communication between the exhaust pipe and the upper portion of the jacket for the supply tank.

3. In a device of the class described, the combination, with a supply tank, of a carbureting chamber communicating therewith, a heating jacket surrounding the carbureting chamber, a hot air jacket surrounding the heating jacket, means for delivering heating medium to the heating jacket, means for delivering heating medium from the heating jacket to a point for heating the supply tank, and means for delivering air from the air jacket to the interior of the carbureting chamber for carburetion.

4. In a device of the class described, the combination, with a carbureting chamber and means for supplying naphthalene thereto, of a heating jacket surrounding the carbureting chamber, a hot air jacket surrounding the heating jacket, a tube leading from the hot air jacket to within the carbureting chamber and extending below the naphthalene level therein, a distributing tube leading from the carbureting chamber from a point above the naphthalene level therein, a by-pass affording direct communication between the air supply pipe and the distributing pipe, and valves for the by-pass and pipes for enabling the delivery through said supply pipe of hot air, carbureted air, or pure naphthalene vapors.

1,065,820. COMBINED HALTER AND WEANER. CHARLES J. LORD, Leedey, Okla. Filed July 19, 1912. Serial No. 710,522. Renewed May 12, 1913. Serial No. 767,192. (Cl. 119—130.)

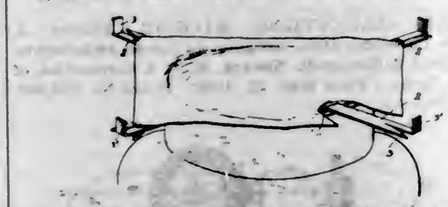
1. A halter embodying metallic cheek strips, each having a pair of opposed ears struck outwardly from its lower end portion forming an intermediate opening, and a nose piece and a chin strap having their ends looped through the said openings in the cheek strips, in combination with a weaning attachment including an arcuate member surrounding the nose piece and having prongs along its length, the ends of the said member being detachably engaged between the respective pairs of ears.



2. A halter embodying metallic cheek strips, each having a pair of opposed ears struck outwardly from its lower end portion forming an intermediate opening, and a nose piece and a chin strap having their ends looped through the said openings in the cheek strips, in combination with a weaning attachment including a metallic strip bent into arcuate form and surrounding the nose piece, said strip having staggered prongs along its edges bent outwardly, the ends of the strip being bent back outwardly and secured upon itself to provide end loops fitting between the respective pairs of ears, and removable locking pins passing through the respective pairs of ears and loops.

3. A halter embodying cheek strips, having ears struck outwardly from their lower end portions forming openings, and a nose piece and a chin strap having their ends looped through the said openings in the cheek strips, in combination with a weaning attachment surrounding the nose piece and detachably engaged to the said ears.

1,065,821. MILK-STRAINER RACK. ERNST MANDEL and GUSTAV C. MOLDENHAUER, Colby, Wis. Filed Sept. 6, 1912. Serial No. 718,921. (Cl. 210—16.)



1. A strainer cloth holder, comprising a hoop, and arms extending therefrom and provided with slits to hold marginal portions of the cloth.

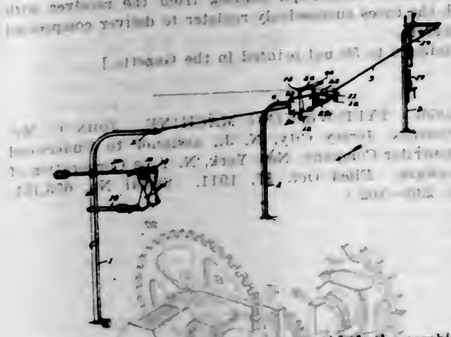
2. A strainer cloth holder, comprising a hoop, and upper and lower sets of arms provided with slits to hold marginal portions of strainer cloths.

3. A strainer cloth holder, comprising a hoop, arms extending therefrom and provided with slits to hold marginal portions of the cloth, and other cloth holding arms detachably connected with the first set and adapted to engage a superimposed cloth.

4. A strainer cloth holder, comprising a hoop, arms extending therefrom and provided with slits to hold marginal portions of the cloth, other cloth holding arms detachably connected with the first set and adapted to engage a superimposed cloth, and a band connecting the second set of arms.

5. A strainer cloth holder, comprising a hoop, arms extending therefrom and provided with slits to hold marginal portions of the cloth, tongues projecting from said arms, and a second set of cloth holding arms having sockets to receive said tongues.

1,065,822. MAIL-BAG CATCHING AND DELIVERING DEVICE. ADELAIDE F. MANTEL, Burlingame, Cal., assignor of one-half to George W. Gates, Burlingame, Cal. Filed Sept. 13, 1912. Serial No. 720,286. (Cl. 105—231.)



1. In a device of the character specified, the combination with a delivery member located on the car, a movable receiving member located along the track, and starting means on said movable member.

2. In a device of the character specified, the combination with a delivery member located on a car, a movable member located along the track, and combined catching and starting means mounted on said movable member.

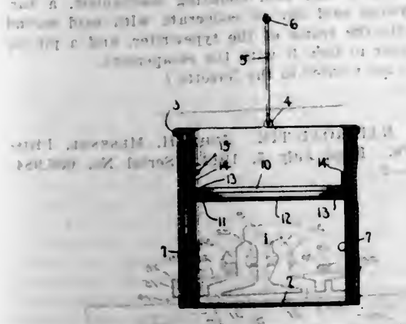
3. In a device of the character specified, the combination with a delivery member located on a car, a movable member located along the track and a lever on said movable member provided at one end with a catching device and at the other end a starting means.

4. In a device of the character specified, the combination with a delivery member located on a car and a movable member located along the track, and catching and starting devices consisting of a lever pivoted to said movable member, one end of which forms the catching means and the other end the starting means.

5. In a device of the character specified, the combination with a delivery member located on a car, a movable member located along the track, a catching and starting device consisting of a lever pivoted to said movable member one end of which forms the catching means and the other end the starting means, and means for supporting said movable member and adapted to gradually reducing the momentum of a mail bag or similar article on said catching device.

[Claims 6 to 20 not printed in the Gazette.]

1,065,823. PAPER-HANGER'S PASTE-BUCKET. ROBERT A. MATTHEWS, Greenfield, Ohio. Filed Mar. 11, 1912. Serial No. 683,128. (Cl. 91—66.)

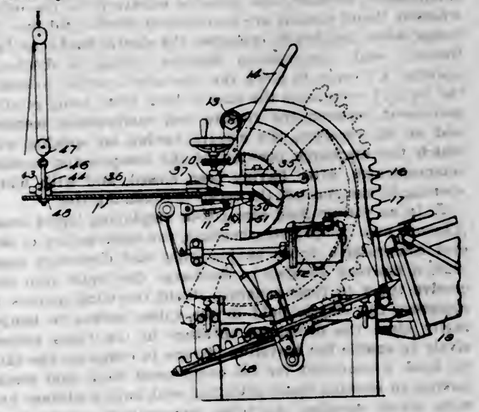


1. The herein described paste bucket comprising a cylindrical body, a plurality of upright heads projecting inward from the wall thereof, and a bail and handle; combined with a floating closure including a buoyant ring fitting slidably within the body and having notched guides loosely engaging said ribs, and a perforated plate within said ring.

2. The herein described paste bucket comprising a cylindrical body, and a pair of upright ribs projecting inward from the wall thereof; combined with a floating closure including a buoyant ring fitting slidably within the body and having notches in its periphery, guides secured in the notches and rising above the ring and having finger pieces at their upper ends, the guides being shaped so as to loosely engage said ribs, and a perforated plate within said ring.

3. The herein described paste bucket comprising an upright cylindrical body, and a plurality of upright ribs of V-shaped cross section with their angles disposed toward the axis of the body and their bases secured to its wall; combined with a floating closure comprising two wooden rings fitting slidably within the body and having notches in their periphery, upright metallic guides of V-shaped cross section secured at their lower ends in said notches and loosely engaging the angles of said ribs, and a perforated plate whose edges are clamped between said rings and whose center is depressed.

1,065,824. METHOD OF FLANGING. HUGH MCCABE, Lawrence, Mass. Original application filed Oct. 29, 1912, Serial No. 728,355. Divided and this application filed Apr. 9, 1913. Serial No. 759,908. (Cl. 153—16.)



1. The method of flanging the curved edge of a plate which consists in subjecting the edge of the plate to a transverse strain reverse to the direction in which the bending of the flange tends to transversely bend the edge and of such an amount that when the plate is released after the flange is bent, the plate near the edge will be substantially flat, and in flanging the edge of the plate while it is held thus strained.

2. The method of flanging the curved edge of a plate which consists in bending the plate in two opposite directions which are substantially at right angles to each other, one bend being longitudinal of the edge and exceeding the elastic limit of the material, and the other bend being concave on the same side of the plate as the first bend and being transverse to the edge of the plate and not exceeding the elastic limit of the material.

3. The method of flanging the curved edge of a plate which consists in flanging the edge of the plate and counteracting, by transversely bending the edge, the tendency of the plate to become warped, the flange and the transverse bend both being concave on the same side of the plate.

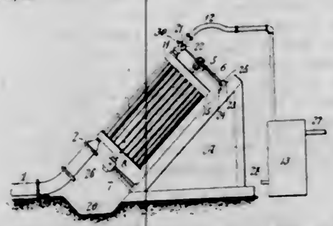
4. The method of flanging a curved edge of a plate which consists in bending the edge longitudinally to form the flange and counteracting the tendency of the plate to become warped by transversely bending the edge in a direction opposite to the direction in which the bending of the flange tends to transversely bend the edge.

5. The method of flanging a curved edge of a plate which consists in bending the edge of the plate longitudinally to form the flange and counteracting the tendency of the

plate to become warped by transversely bending the edge in a direction opposite to the direction in which the flanging of the plate tends to transversely bend the edge and holding the plate thus transversely bent while it is flanged.

[Claim 6 not printed in the Gazette.]

1,065,825. ELASTIC-FLUID COMPRESSOR. GEORGE C. MCFARLANE, Denver, Colo. Filed July 28, 1910. Serial No. 574,397. (Cl. 230—14.)



1. In an elastic fluid compressor employing a liquid under pressure as a compressing agent, the combination of a discharge member for the liquid under pressure, and a compression member, one movable relatively to the other, whereby liquid pistons are successively discharged into the compression member to compress the elastic fluid contained therein, such compression member having a discharge opening, a closure to block the discharge opening to enable the liquid to compress the elastic fluid, there being relative movement between the closure and compression member, and an air receiver, the closure having an opening with which the discharge opening of the compression member communicates, after having been closed, and with which opening in the closure, the receiver communicates.

2. In an elastic fluid compressor employing liquid under pressure as a compressing medium, the combination of several compression tubes having inlet and discharge openings, a delivery member to discharge the liquid into successive tubes to form separate liquid traveling pistons to compress the elastic fluid in the tubes, means to temporarily close the discharge openings in the tubes successively to enable the traveling pistons to compress the elastic fluid, a container for the compressed fluid, said means having an opening communicating with said container and with which opening the tubes successively communicate subsequently to the compression of the elastic fluid therein, to enable the compressed fluid to escape into the container.

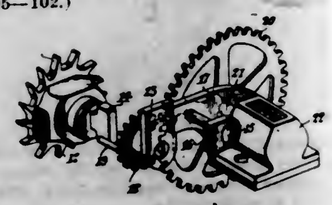
3. In an elastic fluid compressor employing liquid under pressure, as a compressing medium, the combination with a discharge member for said liquid, of several traveling compression tubes having inlet and discharge openings into the former of which, in succession, the liquid is intermittently discharged, to form liquid pistons to compress the elastic fluid in the tubes, means to temporarily close the discharge openings of the tubes successively, to enable the liquid pistons to compress the elastic fluid, a fluid pressure container, said means having an opening communicating with said container, with which opening the tubes communicate subsequently to the compression of the elastic fluid therein, and a check valve interposed between the opening and the receiver.

4. A hydraulic air compressor comprising a member to discharge liquid under pressure, a rotatable cage comprising several compression tubes having mouths so arranged as to successively pass across the stream of liquid under pressure, the impact of which against the inner peripheries of the tubes, turns the cage to enable the tubes to slice off slugs of liquid which travel along the tubes, said tubes having discharge openings, a closure past which the discharge openings of the tubes guide, to temporarily close said openings to enable the slugs to compress the air confined between the closure and said slugs, and an air receiver, said closure having an opening communicating with the receiver into which the compressed air is delivered.

5. In a hydraulic air compressor, the combination with a nozzle discharging a stream of liquid under pressure of a series of movable compression tubes successively presented in front of the nozzle to receive a slug of liquid, an air receiver, and a connection leading from the receiver with which the tubes successively register to deliver compressed air thereto.

[Claims 6 to 50 not printed in the Gazette.]

1,065,826. TYPE-WRITING MACHINE. JOHN C. MCLAUGHLIN, Jersey City, N. J., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 17, 1911. Serial No. 655,151. (Cl. 235—102.)



1. The combination with a typewriter, of an escapement wheel, a gear wheel having the same number of teeth as the escapement wheel, in free engagement therewith, a second gear wheel meshing with the first having the same number of teeth as there are letter spaces in a line, a registering mechanism driven by the axle of said second gear, and means turning said first wheel with the escapement.

2. The combination with the escapement mechanism of a typewriting machine, of a counting register in mechanical connection therewith, the gear wheel of the register having the same number of teeth as there are places or space on the platen scale.

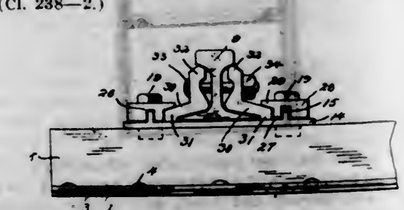
3. The combination in a typewriting mechanism, of an escapement wheel, a gear wheel in mechanical relation to said escapement wheel and connected to a counting mechanism, said gear wheel having teeth suitably numerically related to the number of spaces on the platen scale.

4. A registering mechanism comprising a gear wheel turning the counting wheels of the mechanism, the teeth in said gear wheel being in suitable numerical relation to the spaces in a line, a second gear meshing with the first, a pin on said second wheel to be driven by a rotating member, a body carrying said gears and wheels, and means for attaching said mechanism to a typewriter.

5. The combination with a typewriter, of an escapement wheel, a gear wheel having the same number of teeth as the escapement, a panel carrying said wheel, a gear wheel meshing with said first gear having the same number of teeth as there are letter spaces in a full line of writing, a counting mechanism, a panel carrying said first panel, said second gear and said counting mechanism, a bar, screws drawing said bar to coöperate with said second panel to grip the frame of the typewriter, and a pin on said first gear to turn it with the escapement.

[Claim 6 not printed in the Gazette.]

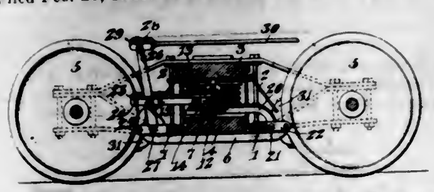
1,065,827. RAILROAD-TIE. JOHN H. MESSNER, Pittsburgh, Pa. Filed July 5, 1911. Serial No. 636,984. (Cl. 238—2.)



1. In a railway tie, a body, a rail seat comprising a plate secured upon the top of the body and provided with upstanding flanges extending in parallel relation to each other and in the general direction of the extent of the rail supported by the tie, the said plate projecting beyond the opposite sides of the body, and rail securing clamp members disposed upon the projecting portions of the rail seat and secured thereto in engagement with a rail upon the seat, each of the said members having a shoulder portion abutting against that side of the respective flange which is presented toward the rail.

2. In a railway tie, a body, a rail support comprising a base plate secured upon the top of the body and having its forward and rear edge portions projecting beyond the planes of the front and rear sides of the body, the said plate being provided with upstanding parallel flanges and rail clamping members secured upon the said supporting plate and each comprising a body having a groove receiving one of the flanges at the projecting portion of the plate and formed with a rail engaging lip, each of the said members being formed with a bolt-opening, and a bolt secured through each member and through the plate at one of its projecting edge portions.

1,065,828. CAR-BRAKE. CHRIST MINEART, East Pleasant Plain, and EDWARD E. WHITE, Brighton, Iowa. Filed Feb. 20, 1913. Serial No. 749,754. (Cl. 188—24.)



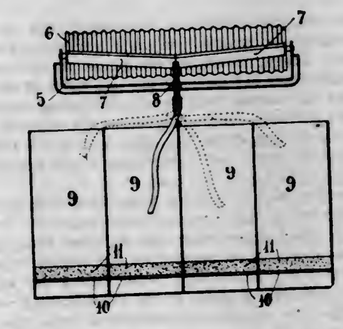
1. The combination with a car truck, of brake beams located at opposite sides of the spring plank and operating between the same and the car wheels, an upright lever connected at its lower end with one of the brake beams and extending upwardly therefrom, a transversely disposed equalizing lever located centrally of the truck, and links connected respectively at their outer ends with the upright lever and with the brake beam at the opposite side of the spring plank and having their inner ends adjustably pivoted to the equalizing lever.

2. The combination with a car truck, of brake beams located at opposite sides of the spring plank and operating in the spaces between the same and the car wheels, an upright lever connected at its lower end with one of the brake beams, a transversely disposed equalizing lever located in the space between the spring plank and the bolster and pivoted at one end, a guide or guard extending longitudinally of the truck and receiving the free end of the equalizing lever, and links pivoted at their inner ends to the equalizing lever and connected, respectively, at their outer ends to the said upright lever and to the brake beams at the opposite side of the spring plank.

1,065,829. APPARATUS FOR CONCENTRATING SOLUTIONS. EUDO MONTI, Turin, Italy. Filed Aug. 20, 1912. Serial No. 716,022. (Cl. 62—19.)

1. In an apparatus for concentrating a solution of the character described, a thermically insulated reservoir for said solutions, a pair of hollow cylinders adapted to contain a refrigerant and partially submerged in said reservoir and revolving in opposite directions, said refrigerant adapted to maintain a constant difference between the temperature of said fluid and the freezing temperature of said solution, a V-shaped trough situated in the space between said drums and with its ends higher than its middle, the sides of said trough forming scrapers for removing the frozen solution adhering to the drums, tanks for receiving the frozen solution and pipe connection from the lower part of said trough to said tanks.

2. In an apparatus for concentrating a solution of the character described; a thermically insulated reservoir for said solution, a pair of hollow cylinders adapted to contain a refrigerant and partially submerged in said reservoir and revolving in opposite directions, said refrigerant adapted to maintain a constant difference between the temperature of said fluid and the freezing temperature of said solution, a V-shaped trough situated in the space between said drums and with its ends higher than its middle, the sides of said trough forming scrapers for removing the frozen solution adhering to the drums, tanks for receiving the frozen solution and pipe connection from the lower part of said trough to said tanks; said tanks being provided with a grate near the bottom for a layer of gravel and a pump for drawing off the concentrated solution which has passed through the grate.

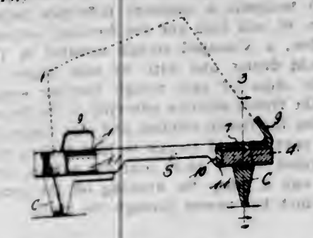


3. In an apparatus for concentrating a solution of the character described, a series of thermically insulated reservoirs for said solution, a pair of hollow cylinders adapted to contain a refrigerant and partially submerged in each of said reservoirs and revolving in opposite directions, said refrigerant adapted to maintain a constant difference between the temperature of said fluid and the freezing temperature of said solution, a V-shaped trough situated in the space between said drums and with its ends higher than its middle, the sides of said trough forming scrapers for removing the frozen solution adhering to the drums, a set of tanks for each reservoir for receiving the frozen solution and pipe connection from the lower part of said trough to said tanks.

4. In an apparatus for concentrating a solution of the character described, a series of thermically insulated reservoirs for said solution, a pair of hollow cylinders adapted to contain a refrigerant and partially submerged in each of said reservoirs and revolving in opposite directions, sair refrigerant adapted to maintain a constant difference between the temperature of said fluid and the freezing temperature of said solution, a V-shaped trough situated in the space between said drums and with its ends higher than its middle, the sides of said trough forming scrapers for removing the frozen solution adhering to the drums, a set of tanks for each reservoir for receiving the frozen solution and pipe connection from the lower part of said trough to said tanks; said tanks being provided with a grate near the bottom for a layer of gravel and a pump for drawing off the concentrated solution which has passed through the grate; the pumps in the previous set of tanks constructed to deposit said concentrated solution in the next reservoir in the series.

5. In an apparatus for concentrating a solution of the character described, a thermically insulated reservoir for said solution, a pair of hollow cylinders adapted to contain a refrigerant and with corrugated sides partially submerged in said reservoir and revolving in opposite directions, said refrigerant adapted to maintain a constant difference between the temperature of said fluid and the freezing temperature of said solution, a V-shaped trough situated in the space between said drums and with its ends higher than its middle, the sides of said trough forming scrapers for removing the frozen solution adhering to the drums, tanks for receiving the frozen solution and pipe connection from the lower part of said trough for selectively connecting the trough with any one of the tanks.

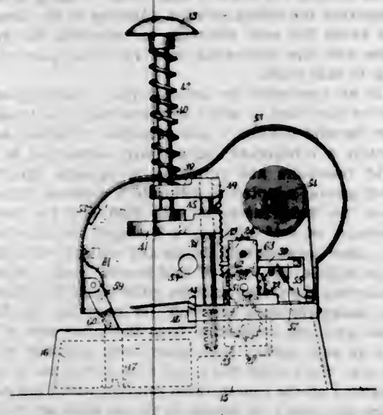
1,065,830. HORSESHOE-CALK. JABEZ MUNYE, Streator, Ill. Filed Feb. 18, 1913. Serial No. 749,093. (Cl. 168—40.)



1. The combination with a horse shoe calk having two upstanding studs grooved on their adjacent faces; of a horse shoe having a transverse recess in its upper face and upright holes intersecting the end walls of said recess, and a flat key whose body is of a thickness equal to the depth of said recess and whose edges are adapted to enter the grooves in said studs, the inner end of the key having a stop and its outer end being pliable and adapted to be turned upward against the hoof.

2. The combination with a horse shoe calk having two upstanding studs grooved on their adjacent faces and headed at their upper ends; of a horse shoe having a transverse recess in its upper face and upright holes intersecting the end walls of said recess, and a flat key whose body is of a thickness equal to the depth of said recess and whose edges are reduced in thickness to enter the grooves in said studs, the inner end of the key having a stop adapted to contact with the inner edge of the shoe, and the outer end of the key being reduced in thickness and of pliable material, adapted to be turned up to form a toe clip.

1,065,831. STAMP-AFFIXING MACHINE. JOHN WILLIAM NEARY, Saratoga Springs, N. Y. Filed Apr. 11, 1910. Serial No. 554,629. (Cl. 216—25.)



1. In a stamp affixing machine, a reciprocating stamp presser head, a fixed shearing blade, a shearing blade carried by the presser head, stamp feeding means to successively feed the stamps between the shearing blades, actuated on the upward stroke of the presser head, and a stop movable under the presser head to arrest the descent thereof before the shearing blades come together, until the stamp has been fed fully forward, coöperatively actuated by the feeding means.

2. In a stamp affixing machine, stamp feeding rollers, a stamp-applying plunger, stamp shearing blades, one of which is carried by the plunger, means to actuate the stamp-feeding rollers from the plunger, a cam driven from said means, and a stop pivotally supported to swing under the plunger under the influence of the cam and arrest the downward movement of the plunger preparatory to the cutting action of the blades, before the full feeding movement of the rollers.

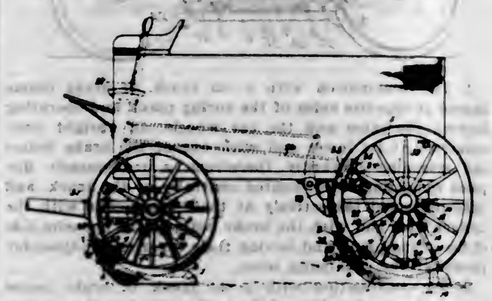
3. In a stamp affixing machine, a stamp-applying plunger, shear blades, one of which is carried by the plunger, stamp feed rollers, means to actuate the rollers from the plunger to successively feed the stamps between the blades, and a stop actuated from the plunger and projected thereunder during and until the full feeding movement of the rollers takes place.

4. In a stamp affixing machine, a stamp-applying plunger, shear blades, one of which is carried by the plunger, stamp-feeding rollers, means to actuate the rollers from the plunger on the return movement thereof to project the stamps successively between the blades, a stop pivotally supported to swing under the plunger and prevent the shear blades from coming together until the feeding movement of the rollers is completed, and a device for actuating the stop, operated by the roller feeding means.

5. In a stamp affixing machine, a stamp presser head, shearing members for severing the stamps, one of which is carried by the presser head, feeding rollers, means to actuate the rollers by the movement of the presser head, a stop to arrest the movement of the presser head before the shear blades come together, and a member frictionally connecting one of the feed rollers to the feeding means and actuating the stop.

[Claims 6 to 15 not printed in the Gazette.]

1,065,832. SLED-RUNNER ATTACHMENT FOR VEHICLES. WILLIAM PASSARELLA, Milnesville, Pa. Filed Dec. 7, 1911. Serial No. 664,445. (Cl. 21—96.)

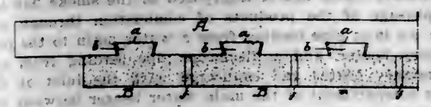


1. The combination with a wheeled vehicle, of a head fixed upon the axle and provided with an annular groove, a band in the groove and rotatable around the head, a wheel runner, a brace between the runner and the band, and locking means between the band and head to prevent rotation of the band in the operative and inoperative positions of the runner.

2. The combination with a wheeled vehicle, of a wheel runner, means to connect the runner to the axle of the vehicle and permitting of the runner being brought into operative and inoperative positions, the front end of the runner being inclined upwardly to fit against a wheel, a wheel clamp carried by the upwardly-inclined front end of the runner and adapted to detachably embrace the felly of the wheel, a brake plunger working through a vertical opening in the rear end portion of the runner, a bell crank lever fulcrumed upon the runner with one end connected to the brake plunger, and means connected to the other end of the bell crank lever for actuating the brake plunger.

1,065,833. STONE-SAW. JAMES PECKOVER, Philadelphia, Pa., assignor of one-third to John Scanlin and one-third to Humbert B. Powell, Philadelphia, Pa. Filed June 1, 1912. Serial No. 700,958. (Cl. 125—18.)

1. In a stone saw, the combination of a blade, a plurality of teeth formed of abrasive material carried by said blade, said teeth having their portions beyond the blade spaced apart a slight distance, means for securing said teeth to the blade, and an abrasive filling for the spaces between the teeth whereby a continuous cutting edge is formed.



2. The combination, in a stone cutting saw, of a blade having dovetail recesses, a plurality of teeth formed of abrasive material, each of said teeth having a dovetail projection for disposal within a recess in said blade and being spaced apart a slight distance beyond the blade, said projections being less in width than the recesses, bodies of self-hardening plastic material filling the spaces between the projections and blade whereby the tooth may be locked in place, and bodies of abrasive material between the teeth whereby a continuous cutting edge is formed.

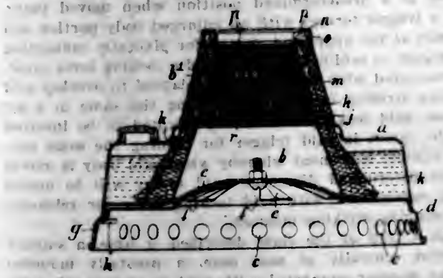
3. In a stone saw, the combination of a metal blade having dovetail notches at one edge, a series of teeth, each having a projection adapted to a notch of the blade, said teeth being made of an abrasive composition and the projections of the same being less in width than the notches of the blade and the teeth being spaced apart beyond the blade, and self hardening abrasive material filling the spaces between the teeth and between the teeth and blade and rigidly holding the teeth in place.

4. In a stone saw, the combination of a metal blade, a cutting edge formed of independent and separately set teeth, said teeth being spaced apart beyond the blade, and abrasive material filling the spaces between teeth whereby a continuous cutting edge is formed.

5. The combination, in a stone saw, of a blade having a series of notches therein, a series of teeth made of an abrasive material, each having an undercut projection adapted to one of said notches, V-shaped projections on the blade adapted to engage V-shaped recesses in each tooth, the ends of said teeth beyond the blade being spaced apart and having V-shaped projections, and abrasive material filling the spaces between the teeth and locked in place by the projections thereof whereby a continuous cutting edge is formed.

[Claim 6 not printed in the Gazette.]

1,065,884. LIQUID-FUEL BURNER. MANNING PIKE, London, England. Filed May 25, 1912. Serial No. 699,681. (Cl. 158—97.)



1. A lamp for burning spirit and like volatile fuel, said lamp comprising a fuel-container, a tubular wick having an exposed interior surface, a tube which completely incloses and supports the outer surface of said wick, a conduit for supplying air to said exposed interior surface of the wick, and a perforated diagram extending across the air-conduit substantially at the base of the exposed surface of the wick.

2. A lamp for burning spirit and like volatile fuel, said lamp comprising a fuel-container, a tubular wick having an exposed interior surface, a conduit for supplying air to said exposed surface, a woven wire diaphragm of small mesh extending across said conduit substantially at the base of said exposed surface, a perforated metal support for the interior of the wick, and a tube which completely incloses and supports the outer surface of the wick.

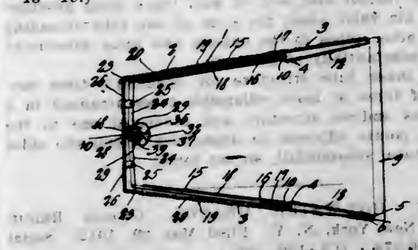
3. A lamp for burning spirit and like volatile fuel, said lamp comprising a fuel-container, a tubular wick having an exposed interior surface, a conduit for supplying air to said exposed surface, an open mesh diaphragm of woven material extending across said conduit substantially at the base of said exposed surface, a perforated metal support for the interior of the wick, a tube which completely incloses and supports the outer surface of the wick, and a valve for controlling the passage of air through said conduit.

4. A lamp for burning spirit and like volatile fuel, said lamp comprising a fuel container, a tubular wick comprising an outer portion of non-fireproof material and an inner portion of fire-proof material which has an exposed interior surface, a tube which completely incloses and supports the outer surface of the wick, a conduit for supplying air to said exposed interior surface of the wick, and a perforated diaphragm extending across the air conduit substantially at the base of the exposed interior surface of the wick.

5. A lamp for burning spirit and like volatile fuel, said lamp comprising a fuel container, a tubular fibrous wick comprising an outer portion of non-fireproof material and an inner portion of asbestos having an exposed interior surface, a tube which completely incloses and supports the outer surface of the wick, a conduit for supplying air to said exposed interior surface of the wick, and a perforated diaphragm extending across the air conduit substantially at the base of the exposed interior surface of the wick.

[Claims 6 and 7 not printed in the Gazette.]

1,065,835. ANIMAL-TRAP. JOHN A. POWER, Owingsville, Ky. Filed Dec. 9, 1912. Serial No. 735,866. (Cl. 43—19.)



1. A trap comprising a frame; doors hinged thereto; resilient means for closing the doors; levers fulcrumed upon the frame; means connected with the levers for holding the doors open; a trip pivoted to the frame; a bait holder; a single element connecting the bait holder with the trip; and slidable links uniting the connecting element with the levers, to permit the doors to be disposed separately in open position.

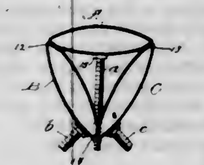
2. A trap comprising a frame; a door movably connected with the frame; resilient means for closing the door; a lever fulcrumed upon the frame; means for connecting the lever with the door operatively to hold the door open; trigger mechanism pivoted upon the frame; a pin mounted in the trigger mechanism and provided with an enlarged head, the lever being provided with an enlarged head; and a link engaged by the heads for sliding movement and for swinging movement.

3. A trap comprising a frame; a door hinged thereto; resilient means for closing the door; a guide on the frame; a plunger slidable in the guide and adapted to engage the door to hold the same open; an abutment on the plunger; a spring interposed between the abutment and the guide; trigger mechanism operatively connected with the plunger, the spring serving to assist the trigger mechanism in disengaging the plunger from the door.

4. A trap comprising a frame; a door hinged thereto; resilient means for closing the door; a guide on the frame;

a tubular shield supported by the guide; a plunger mounted to slide in the guide and located within the shield, the plunger being adapted to engage the door to hold the door open; an abutment on the plunger; a spring engaging the abutment and the guide to aid in retracting the plunger out of engagement with the door; and trigger mechanism operatively connected with the plunger to retract the plunger from engagement with the door.

1,065,836. INNER TUBE FOR PNEUMATIC TIRES. ALFRED RAYMOND and ALBERT RAYMOND, Washington, D. C. Filed May 26, 1913. Serial No. 769,867. (Cl. 152—22.)



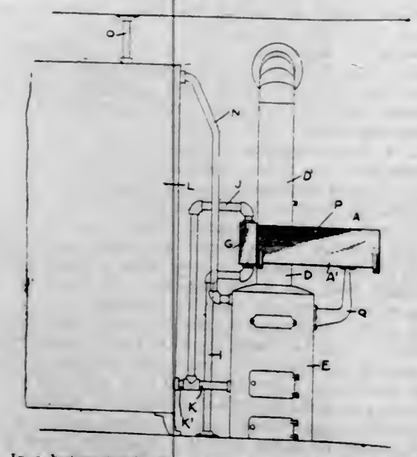
1. An inner tube structure for pneumatic tires comprising a series of inflatable tubes attached to each other at points adjacent to diametrically opposite sides of each tube, one tube being so attached to the other tubes on each side thereof in said structure, and means for inflating said tubes successively, substantially as set forth.

2. An inner tube structure for pneumatic tires comprising three tubes connected together along their contiguous faces at points adjacent to diametrically opposite sides of each tube, the said tubes being each connected to each of the other tubes, and means for inflating the same successively, substantially as set forth.

3. An inner tube structure for pneumatic tires comprising a multiplicity of tubes connected together along contiguous edges, each tube being connected to a tube on each side thereof and each of said tubes being provided with an air valve stem, the stem of one tube extending between other tubes to the outside and being detachably secured, substantially as set forth.

4. An inner tube structure for pneumatic tires consisting of three or more collapsible tubes arranged in a continuous endless structure and connected one to the other at points adjacent to diametrically opposite sides of each tube, substantially as set forth.

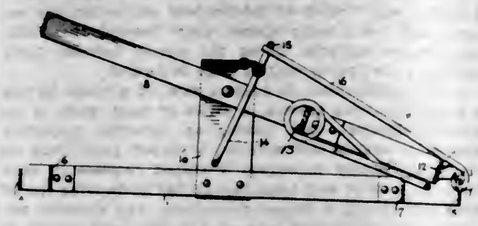
1,065,837. HOT-WATER HEATER. GEORGE REICHHARD, New York, N. Y. Filed May 29, 1912. Serial No. 700,374. (Cl. 126—362.)



1. In a hot water heating system, the combination with a main water heater having a combuation chamber, a smoke flue and a water compartment having an inlet and outlet, and a water reservoir with which the inlet and outlet of the said water compartment are connected, of a preliminary water heater interposed in the smoke flue for the passage of the products of combustion through the same, an inlet pipe leading from a water main to the preliminary heater, and a discharge pipe leading from the preliminary heater and connected with the inlet of the water compartment of the main water heater between the said heater and reservoir.

2. In a hot water heating system, the combination of an ordinary water heater having a combustion chamber, a water compartment provided with an inlet and an outlet, and a smoke flue for carrying off the products of combustion from the said combustion chamber, a water reservoir connected at one end with the inlet and at the other end with the outlet of the water compartment, the reservoir having an outlet for carrying off the hot water, and a preliminary water heater having a shell and water-circulating means within the said shell, the said shell being interposed in the said smoke flue for the passage of the products of combustion through the shell, and the said water-circulating means being connected at one end with a source of cold water supply and being connected at the other end with the said inlet to the said water compartment between the heater and reservoir.

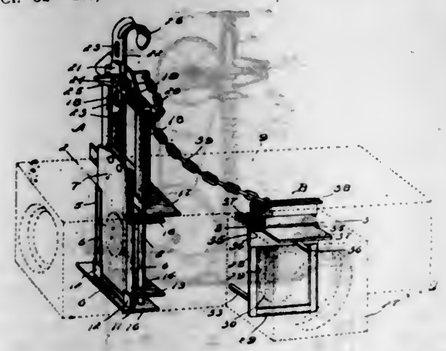
1,065,838. GOPHER-TRAP. ANTON F. RENKEN, Kramer, Nebr. Filed Dec. 31, 1912. Serial No. 739,474. (Cl. 43—21.)



1. In a trap of the class described, a base, a support connected with substantially the center of said base, a swinging striking member, means for pivotally connecting the same with said central base, a cross bar rigidly secured to said swinging striking member, a spring encircling said cross bar with one end engaging said swinging striking member and the other end engaging said base, for maintaining said swinging striking member under tension at all times and for tending to move the swinging striking member to a predetermined position when moved therefrom, a trigger formed with an enlarged body portion and an eyelet at the upper end, means for pivotally connecting said trigger to said central base, and a locking lever pivotally connected with said base and adapted to overlap said swinging striking member for holding the same in a set position, said locking lever being adapted to be inserted into the eyelet in said trigger for holding the same normally against movement whereby when said body is moved in a predetermined direction, said eyelet will be moved out of engagement with said locking lever for releasing said swinging striking member.

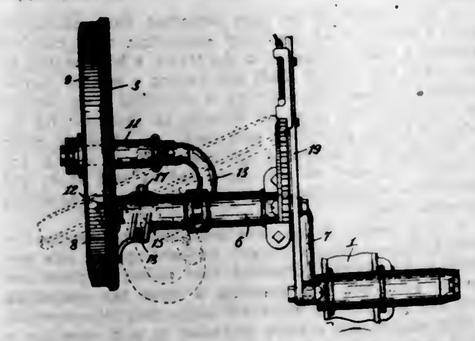
2. In a trap of the class described, a base, a support connected centrally of said base, a pivotally mounted striking member connected with said support, said striking member having its pivotal connection arranged centrally thereof so that when one end is moved downwardly against said base, the other end will be moved away from said base, a spring mounted on said striking member at one end and acting against the same and against said base whereby the end of said striking member carrying said spring is given a continual tendency to remain out of contact with said base, a locking arm pivotally connected with said base and arranged to overlap the end of said striking member carrying said spring for locking the same in contact with said base, and a trigger for holding said locking lever against movement, said trigger having one end projecting to a space immediately above said base whereby an animal passing from one end of the base to the other will release said trigger and said locking lever, this resulting in said spring actuating said striking member.

1,065,839. FLUME-GATE. LORENTZ RITZMAN, Canon City, Colo. Filed Nov. 13, 1912. Serial No. 731,154. (Cl. 61—46.)



A head gate comprising a frame having an open center, a gate slidably connected in the frame, means anchoring said frame in a conduit pipe, said means being projected exteriorly above the said pipe, a bridge plate connected with said means, a keeper plate carried by said bridge plate, a pull member connected to one end of said gate, and slidable between the bridge and keeper plates, and a key passed through said plates and adjustably engaging said member for regulating the gate.

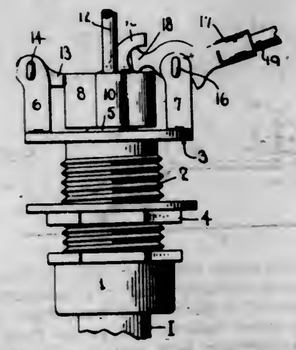
1,065,840. FRONT CASTER-WHEEL FOR PLOWS. SHELDON S. SPIRE, Syracuse, N. Y., assignor to Syracuse Chilled Plow Company, Syracuse, N. Y., a Corporation of New York. Filed Sept. 29, 1910. Serial No. 584,399. (Cl. 97—36.)



1. In a plow, a frame formed with a substantially upright bearing, a front caster wheel having a flange on the inner side thereof, the periphery of the flange forming a part of the tread of the wheel, the bearing of the frame being located within said flange, and a member for holding the caster wheel, said member having a substantially upright spindle journaled in the bearing, the axis of the spindle passing through the tread of the wheel above and below the spindle, a substantially horizontal axle for the caster wheel, and a part connecting the spindle and the axle, substantially as and for the purpose set forth.

2. In a plow, a frame formed with a substantially upright bearing, a front caster wheel having a flange on the inner side thereof, the periphery of the flange forming a part of the tread of the wheel, the bearing of the frame being located within said flange, and a member for holding the caster wheel, said member having a substantially upright spindle journaled in the bearing, the axis of the spindle passing through the tread of the wheel above and below the spindle, a substantially horizontal axle for the caster wheel, and a part connecting the spindle and the axle, said part having a portion thereof extending laterally from the spindle and located in a vertical plane parallel to the vertical plane of the axle, substantially as and for the purpose specified.

1,065,841. FLOAT-VALVE. FREEMAN RODEHAVER, Greensburg, Pa. Filed June 20, 1912. Serial No. 704,914. (Cl. 4—5.)



1. In a valve of the class described, the combination with the valve body having a nipple rising therefrom; of a cup-shaped valve head whose shell surrounds said nipple and has a lateral offset cored with a passage opening into the cup, a soft plug seated in the bottom of the latter above said passage, a fine pipe connected with the other end of such passage and adapted to be led to the outlet of a water-closet cistern, and means for opening said valve by raising its head a slight distance above said nipple.

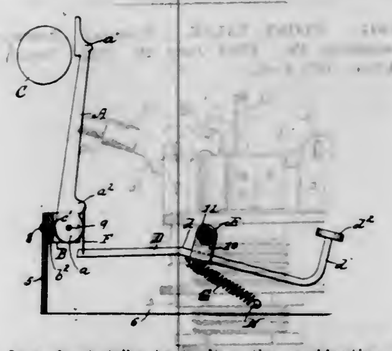
2. In a valve of the class described, the combination with the valve body having an upright nipple rising therefrom and lugs also rising vertically therefrom at opposite sides of the nipple, a lever pivoted between its ends to one lug and having a knob at its inner extremity, and means for raising and lowering the outer end of said lever; of a cup-shaped valve head whose shell surrounds said nipple and has a lateral offset cored with a passage opening into the cup, a hook rising from one side of said head and engaging said knob, an ear projecting rigidly from one side of said head, means for detachably pivoting it to one of said lugs in such position that the lower edge of the shell at the remote side of the head strikes the other lug when the valve opens, and a fine pipe led from said passage.

3. In a valve of the class described, the combination with the valve body comprising an upright nipple and upright forked lugs at opposite sides thereof; of the valve head adapted to close upon said nipple and having a perforated ear projecting rigidly from one side between the fork-arms of one of said lugs, a split pin through said arms and ear detachably pivoting the head to this lug in such position that its oposite edge strikes the other lug to prevent it opening unduly, actuating mechanism removably pivoted between the fork arms of the last-named lug for raising and lowering the valve-head on its pivot, and a refill pipe whose inlet end opens through the valve head, for the purpose set forth.

4. In a valve of the class described, the combination with the valve body having a seat; of a cup-shaped valve head whose shell has a lateral offset cored with a passage opening into the cup, a refill pipe connected with the passage and adapted to be led to the outlet of a water-closet cistern, means for opening said valve by raising its head a slight distance, and means for limiting said opening movement.

5. A valve of the class described comprising a fixed seat, a movable valve head coöperating therewith, means for actuating the head, and a refill pipe whose inlet end is connected with the head and opens adjacent said seat.

1,065,842. TYPE-WRITER. FRANK S. ROSE, Newark, N. J.; George F. Rose, administrator of said Frank S. Rose, deceased, assignor to Standard Typewriter Company, a Corporation of New York. Original application filed Feb. 11, 1903, Serial No. 142,628. Divided and this application filed Jan. 25, 1905. Serial No. 242,629. (Cl. 197—27.)



1. In a front-strike typewriter, the combination with pivotal type-bars normally lying in a substantially horizontal position, of a plurality of transversely extending supports, key-levers underhung in groups from said supports and having their body portions also extending in substantially a horizontal plane under the type-bars, vertically arranged links connecting the inner ends of the key-levers directly to the type-bars at a point adjacent to the pivots of said type-bars, and separate springs for said key-levers, said springs being held at one end at a point below and in front of the fulcrum of said key-levers and each spring being connected at its other end to its corresponding key-lever at a point close to and in the rear of the fulcrum of said key-lever.

2. In a front strike typewriter, pivoted type bars, underhung key levers each bent at a point intermediate its ends and provided with a rear arm which lies at an obtuse angle to the remainder of the key lever, the rearward extremity of said inclined arm of each key lever being below the pivot of one type bar, a link connecting the extremity of said inclined arm with one type bar, and a spring connected to each key lever at a point adjacent to the bent part thereof.

3. In a front-strike typewriter, the combination of pivotally held type-bars, a plurality of fulcrum rods positioned parallel to each other and all lying in the same horizontal plane, groups or banks of key-levers, the key-levers of each group being pivotally supported by one of said rods and underhung therefrom at a point intermediate the ends of said key-levers, each key-lever being arranged under the type-bars and substantially parallel thereto, separate links connected to the ends of the key-levers and to the type-bars at a point adjacent to the pivot of said bars, and separate springs each connected to one of said key-levers.

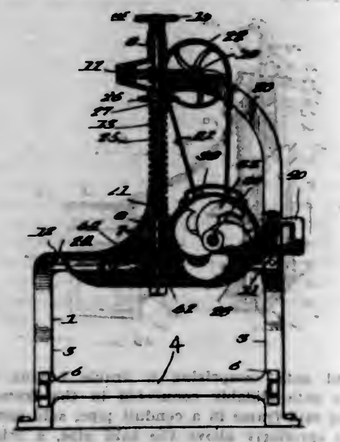
4. In a typewriter, a plurality of fulcrum bars, groups of key levers, the key levers of each group being underhung from one of said fulcrum bars, springs connected separately with the key levers, slidable tension means to which substantially all the springs are attached, and hand operated means for adjusting said tension means.

5. In a typewriter, key-levers, movable members, cross members carried by said movable members, and springs connected to said members and attached individually to the key levers.

[Claims 6 and 7 not printed in the Gazette.]

1,065,843. MEAT-CUTTER. JOHN RUNSER, Fort Wayne, Ind., assignor of one-fourth to Louis E. Aurentz and one-fourth to Carl H. Pierson, Fort Wayne, Ind. Filed July 25, 1911. Serial No. 640,397. (Cl. 17—19.)

1. In combination, a frame, a supporting plate therein having an aperture, a shaft journaled in the frame, a bowl carried by the lower end of said shaft and operating in the aperture, a mounting plate carried by the frame, a spring surrounding said shaft and operating to automatically take up wear between the bowl and the mounting plate and to hold the bowl in engagement with said mounting plate, means for rotating the bowl, and a plurality of vertically rotating knives carried by the mounting plate and operating within the bowl.



2. In a device of the class described, the combination with a frame, of a supporting table carried thereby, a mounting plate secured upon the supporting table, a shaft journaled in the frame, a meat receiving bowl carried upon the shaft and having a portion extended through the supporting table and abutting the mounting plate, means for rotating the shaft and bowl, a spring surounding said shaft and operating to automatically take up the wear between the mounting plate and bowl which supports the shaft and bowl, and auxiliary means carried by the shaft and adapted to coact with the frame to support the shaft and hold the latter in engagement with the mounting plate.

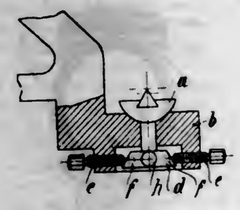
3. In a device of the class described, the combination with a frame, of an apertured supporting table mounted therein, a shaft journaled in the frame, a bowl carried by the lower end of said shaft and having a portion thereof extended through the aperture, a mounting plate secured on the top of the table and forming an abutment for the bowl, a spring encircling said shaft, an adjusting collar on the shaft for adjusting the tension of the spring, and a wheel threaded on the upper end of said shaft and adapted to support the same in the bowl when the spring becomes broken.

4. In a device of the class described, the combination with a frame having vertically disposed upright side portions and upwardly extending rear bowed portions connected with said side portions, a cross bar connecting said side portions, an apertured supporting table mounted within said frame, a shaft journaled in said cross bar, a bowl carried by said shaft and operating in said aperture, a mounting plate carried by said frame, a spring encircling said shaft, an adjustable collar mounted on the shaft below said cross bar, means for rotating the shaft, and an adjustable collar mounted on the shaft above said cross bar and adapted to be moved into engagement with the frame substantially as and for the purpose specified.

1,065,844. BALANCE. ERICH SARTORIUS, Göttingen, Germany. Filed Oct. 11, 1912. Serial No. 725,157. (Cl. 73—152.)

1. The combination in a balance of a supporting member for the pivot having a portion of its surface in the form of a segment of a sphere engaging with a corresponding bearing surface carried by the balance beam and means located in the end of the balance beam for oscillating said supporting member.

2. The combination in a balance of an adjustable supporting member for the pivot point or knife edge a portion of the surface of which constitutes an arc of a circle and engages with a coresponding bearing surface carried by the balance beam, means located on the beam for effecting a variation in the distance between the terminal pivot point or knife edges and the main knife edge and means for oscillating said supporting member.



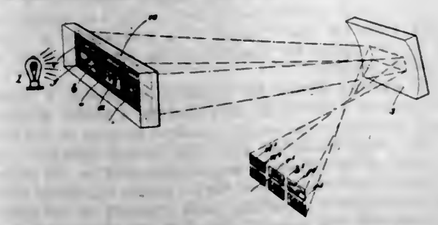
3. The combination in a balance of a pivot point or knife edge for each scale pan, supporting members adapted to be oscillated and to which said pivot points are rigidly secured, each of said members having a portion of its surface in the form of an arc of a circle, bearing surfaces for said members carried by the balance beam and engaging with the curved portions thereof, means for altering the distance between the pivot points for the scale pans and the main knife edge of the balance without removing the supporting members for the terminal pivot points from their bearings and means for oscillating said supporting member.

4. The combination in a balance of a supporting member for each terminal pivot located upon the end of the balance beam said supporting member having a portion of its surface in the form of an arc of a circle the completed circumference of which is outside of the knife edge of the pivot, bearing surfaces upon the balance beam to accommodate the curved portion of the supporting member carrying the pivot and adjusting devices for oscillating said supporting member.

5. The combination in a balance of a supporting member for each terminal pivots having a portion of its surface in the form of an arc of a circle engaging with corresponding bearing surfaces formed on the balance beam, the knife edge of the pivot being located within the circumference of the circle formed by completing the arc of the circle constituted by the bearing surface on the supporting member, means for effecting the oscillation of the supporting member within its bearings in a horizontal plane and means for effecting an adjustment in the position of the supporting member and holding the same in position.

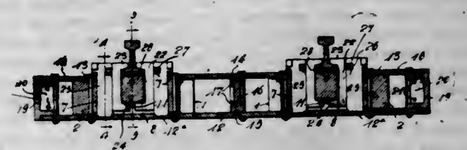
[Claims 6 to 12 not prined in the Gazette.]

1,065,845. OPTICAL INDICATING APPARATUS. FERNAND SAUVAGE, Marseille, France. Filed Oct. 24, 1910. Serial No. 588,836. (Cl. 88—24.)



In an advertising apparatus, the combination of a source of illumination, a convergent optical system, and a partially transparent panel interposed between said source of illumination and the convergent optical system, said panel having a plurality of separate legends or devices to be projected spaced from each other, and said convergent optical system adapted to receive the light rays from the panel and project images of the legends or devices in space without the use of a screen, so that the legend visible to a passer-by depends upon the latter's position with respect to the convergent optical system, substantially as described.

1,065,846. RAILWAY-TIE. JOHN N. SCHWALEN, Hudson, Wis. Filed Mar. 6, 1913. Serial No. 752,420. (Cl. 238—5.)

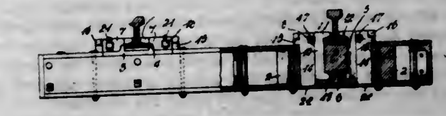


1. In a railway tie, rail supporting chairs comprising blocks having on their sides laterally projecting flanges and on their upper surfaces transversely disposed rail receiving seats, spacing lugs also arranged on the sides of said blocks, longitudinally disposed side, bottom and top connecting elements secured respectively to the sides, bottoms and tops of the chairs whereby the latter are connected and spaced suitable distances apart, cap plates having on their inner sides rectangular flanges engaged with and secured to the ends of said longitudinal connecting elements and forming the ends of the tie, stop flanges formed on said rail receiving seats and adapted to engage the opposite edges of the base flanges of the rails, and cushioning devices arranged on said seats between said stop flanges.

2. In a railway tie, rail supporting chairs comprising blocks having on their sides laterally projecting flanges and on their upper surfaces transversely disposed rail receiving seats, spacing lugs also arranged on the sides of said blocks, side plates secured to said side flanges and spacing lugs to form the sides of the tie, a base plate secured to the lower side of the chairs to form the bottom of the tie, a central top plate secured at its ends to the upper sides of the inner ends of the chairs, end top plates connected at their inner ends with the upper sides of the outer ends of the chairs, said central and end top plates having their ends engaged with the seats on said chairs and forming therewith the top of the tie and flanged cap plates secured to the ends of the side, bottom and end top plates to form the ends of the tie.

3. In a railway tie, rail supporting chairs comprising blocks having on their sides laterally projecting flanges and on their upper surfaces transversely disposed rail receiving seats, spacing lugs also arranged on the sides of said blocks, longitudinally disposed side, bottom and top connecting elements secured respectively to the sides, bottoms and tops of the chairs whereby the latter are connected and spaced suitable distances apart, cap plates having on their inner sides rectangular flanges engaged with and secured to the ends of said longitudinal connecting elements and forming the ends of the tie, and a cement casing molded around said chairs and connecting elements to form the main body of the tie.

1,065,847. RAIL-FASTENER. JOHN N. SCHWALEN, Hudson, Wis. Filed Mar. 6, 1913. Serial No. 752,421. (Cl. 238—5.)



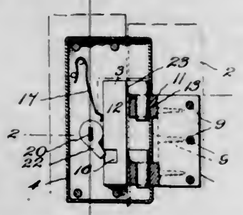
1. A rail fastener comprising a chair having therein vertically disposed passages and in its lower side a transverse recess connecting said passages, rail clamping members having on their upper ends rail engaging lugs and on their lower ends chair engaging lugs, said members being adapted to be inserted in the vertical passages of the

chairs to bring the lugs on the upper ends thereof into engagement with the base flanges on the rails and the lugs on the lower ends thereof into engagement with the upper wall of the recess in the lower portion of the chair, keys also adapted to be engaged with said vertical recesses in the chair and to firmly hold said clamping members in operative positions, and means to fasten said keys in operative position in the chairs.

2. A rail fastener comprising a chair having therein vertical passages and a transverse recess connecting the lower ends of said passages, a rail receiving seat on the upper surface of said chairs, stop flanges formed on said seats and adapted to engage the opposite edges of the base flanges of the rails, rail clamping members adapted to be inserted in said passages and having on their upper ends rail engaging lugs and on their lower ends fastening lugs adapted to be engaged with the upper wall of the recess in said chairs, keys also adapted to be engaged with said passages whereby said clamping members are held in operative position, and means to fasten said keys to the chair.

3. A rail fastener comprising a chair having therein vertical passages, and a transverse recess connecting the lower ends of said passages, a seat formed on the upper surface of said chair, parallel stop flanges formed on said seat and adapted to engage the opposite edges of the rail flanges, apertured lugs formed on said seats and projecting upwardly at the opposite sides of said passages, rail clamping members adapted to be engaged with said passages and having on their upper ends lugs adapted to be engaged with the base flanges on the rail and on their lower ends lugs adapted to engage the upper wall of the transverse recess in said chairs whereby the rails are securely fastened on said seats, keys also adapted to be engaged with said passages whereby said clamping members are held in operative position and having in their upper ends notches adapted to register with the apertures in the lugs on said seats, key fastening bolts removably engaged with said registering notches, and recesses whereby the keys are held in position, means to prevent the casual disengagement of said bolts from said lugs and keys, offset heads formed on the upper ends of said keys and adapted to engage the upper sides of the chairs and lugs formed on the heads of the keys whereby an instrument may be applied to forcibly extract the keys from said passages.

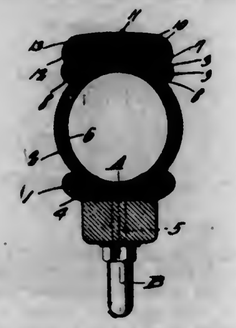
1,065,848. LOCK. SAMUEL SEGAL, New York, N. Y. Filed Dec. 3, 1912. Serial No. 734,743. (Cl. 70—31.)



A lock comprising a casing provided with openings and having an interiorly located shoulder, a bolt slidably mounted in the casing along said shoulder and having hooks adapted to move transversely across said openings, said bolt being provided with a slot located at its inner edge, a spring located in the casing and bearing against the bolt to hold the same against the shoulder, said spring adapted to enter the slot to hold the hooks beyond the edges of the openings, and a member mounted for turning movement in the casing and having a finger adapted to enter the slot to move the bolt along the shoulder.

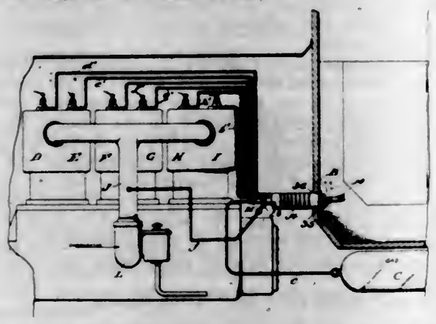
1,065,849. PNEUMATIC TIRE. GEORGE A. SHAW, Barberton, Ohio. Filed Oct. 22, 1912. Serial No. 727,241. (Cl. 152—33.)

A pneumatic tire including a casing having an annular peripheral opening and an inner opening, said openings dividing the casing into two separate oppositely disposed parts, the inner portions of the parts being spaced, a non-flexible ring bearing flat upon the periphery of the casing and having inturned marginal portions fitting snugly against the sides of the casing to hold the outer portions of the casing together, said ring being formed in a single piece free of lateral projections and having a transversely



convexed outer surface, a tread extending around the non-flexible ring and having its inner surface concaved transversely to embrace the non-flexible ring and engage the convexed surface of said ring, a ring bearing upon the inner surfaces of the casing sections for holding the inner edges of said sections spaced apart and in engagement with a wheel rim, and an inflatable inner tube within the casing and bearing upon the inner ring.

1,065,850. STARTING DEVICE FOR ENGINES. HENRY M. SHEER, Quincy, Ill. Filed Nov. 22, 1912. Serial No. 732,974. (Cl. 123—187.5.)



1. A starting device for engines, comprising a pump casing having a piston chamber therein, a piston working in said chamber, a gas supply chamber secured to the casing, fuel leads connected with said piston chamber, and with each of the cylinders, means controlled by the piston for opening and closing said leads, and means extending from the gas chamber to a position to be actuated by the piston for controlling the passage of gas to the piston chamber.

2. A starting device for engines, comprising a pump casing having a piston chamber therein, a piston working in said chamber, a gas supply chamber secured to the casing, fuel leads connected with said piston chamber, and with each of the cylinders, means controlled by the piston for opening and closing said leads, means extending from the gas chamber to a position to be actuated by the piston for controlling the passage of gas to the piston chamber, and means whereby the piston may be actuated and controlled with the foot.

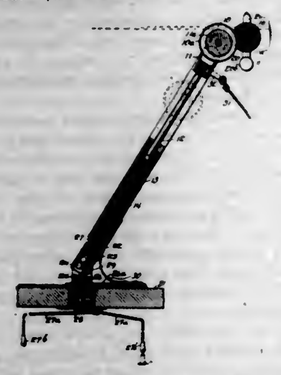
3. A starting device for engines comprising a pump casing having a piston chamber therein, a piston working in said chamber, a gas supply chamber secured to the casing, fuel leads connected with said piston chamber and with each of the cylinders, a fuel lead from the gas chamber to the intake manifold, means controlled by the piston for opening and closing the leads to the cylinders, and means actuated by the piston for controlling the passage of gas to the piston chamber.

4. A starting device for engines comprising a pump casing having a piston chamber therein, a piston working in said chamber, a gas supply chamber secured to the casing, fuel leads connected with said piston chamber and with each of the cylinders, a fuel lead from the gas chamber to the intake manifold, means controlled by the piston for opening and closing the leads to the cylinders, and means extending to a position to be actuated by the piston for controlling the passage of gas through the lead to the intake manifold, said last named means also controlling the passage of gas to the piston chamber.

5. A starting device for engines comprising a pump casing having a piston chamber therein, a piston working in said chamber, a gas supply chamber secured to the casing, fuel leads connected with said piston chamber, and with each of the cylinders, means controlled by the piston for opening and closing said leads, means located in the gas chamber and extending to a position to be actuated by the piston for controlling the passage of gas to the piston chamber, said means so constructed that when the piston is on its innermost stroke a direct passage is formed from the gas chamber to each of the cylinders.

[Claims 6 to 16 not printed in the Gazette.]

1,065,851. TROLLEY-REPLACER. GUSTAVE ADOLF SPAETH, Columbus, Ohio, assignor of one-third to Downs Schaaf, Columbus, Ohio. Filed Mar. 14, 1913. Serial No. 754,248. (Cl. 191—84.)



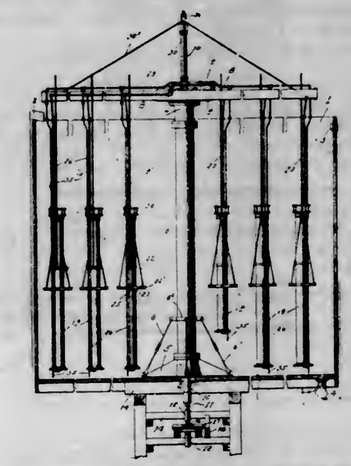
1. A trolley pole having a trolley wheel, a support for said wheel slidably mounted on the trolley pole, to move longitudinally therewith, and a relatively fixed replacer roller carried by the trolley pole adjacent to the outer position of the trolley wheel.

2. A trolley pole, having a trolley wheel, a shank carried by said wheel and slidably mounted on the pole for movement longitudinally of the latter, a spring normally tending to force the said shank and trolley wheel upward and outward on the trolley pole, a pull rope connected with the said shank whereby the latter may be pulled downward against the action of the spring, and a relatively fixed replacer roller carried by the upper end of the pole adjacent to the upper position of the trolley wheel.

3. A trolley pole having a trolley wheel, a fork carrying the trolley wheel, a plunger in which said fork is mounted, the trolley pole having a tubular portion in which the said plunger is slidable, a spring within the cylinder and normally tending to press the plunger outward, a pull rope extending from the plunger whereby a pull may be exerted on the plunger against the tension of the spring, and a replacer roller carried by the trolley pole adjacent to the upper position of the trolley wheel.

4. A trolley pole having a trolley wheel, a fork carrying the trolley wheel, a shank on which the fork is mounted, said shank being slidable axially of the trolley pole, and a relatively fixed replacer roller on the trolley pole adjacent to the outer portion of the trolley wheel and extending laterally at each end beyond the plane of said trolley wheel, the replacer roller being of double cone form to present a perimeter tapering from the ends toward the center, the replacer roller, the sides of the trolley wheel and the upper end of the trolley wheel fork being insulated from the pole.

1,065,852. AGITATING AND MIXING APPARATUS. WHITMAN SYMMES, Virginia City, Nev. Filed Dec. 13, 1912. Serial No. 736,543. (Cl. 75—86.)



1. In an apparatus for the described purpose, the combination with a receptacle for the material to be treated, of an open ended tubular agitator flexibly suspended therein, and extending into the material to be treated, means for moving the agitator relative to the material to be treated, and fluid pressure means coacting with the said agitator for forcing the material contained within the receptacle through said agitator and discharging the same from the upper end thereof into the said receptacle.

2. In an apparatus for the described purpose, the combination with a receptacle for the material to be treated, a rotatable structure supported above said receptacle, means for imparting rotation to said structure, an open ended tubular agitator suspended from the rotatable structure and depending into said receptacle, and fluid pressure means coacting with the said agitator for forcing therethrough the material contained within the receptacle and discharging it at the upper end thereof into said receptacle.

3. In an apparatus for the described purpose, the combination with a holding receptacle for the material to be treated, a supporting structure rotatably mounted above said receptacle, means for imparting rotation to said structure, an open ended tubular agitator flexibly suspended therefrom and depending into said receptacle, and fluid pressure means coacting with the said agitator for forcing therethrough the material contained within the receptacle and discharging the same from the upper end thereof into the said receptacle.

4. In an apparatus for the described purpose, the combination with a holding receptacle for the material to be treated, a supporting structure rotatably mounted above the said receptacle, means for imparting rotation to the supporting structure, an agitator for the material to be treated, the same comprising a plurality of open ended tubes flexibly suspended from the supporting structure and depending into the holding receptacle, and a pipe extended upwardly within the lower end of each of said open ended tubes and connected at its opposite end to a source of fluid under pressure for forcing the material contained within the receptacle upwardly through said tubes and discharging the same at the upper ends thereof into said receptacle.

5. In an apparatus for the described purpose, the combination with a holding receptacle for the material to be treated, means for feeding the material thereto, a supporting structure rotatably mounted above said receptacle, means for imparting rotation to said supporting structure, means for agitating the material contained in said receptacle, the same comprising a plurality of open ended tubes flexibly suspended from said supporting structure and depending into the material contained in said receptacle, an air supply pipe carried by said tubes and extending at its discharge end upwardly within the lower end thereof, an air feed pipe carried by said frame and connected to a source of air under pressure, and flexible valve controlled connections between said supply pipe and each of said air feed pipes.

[Claims 6 to 9 not printed in the Gazette.]

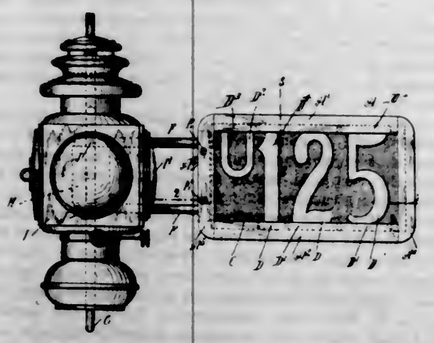
1,065,853. BATH-CABINET. DON L. THOMPSON, Spokane, Wash. Filed Dec. 23, 1912. Serial No. 738,311. (Cl. 4—13.)



1. A bath cabinet comprising sides, end walls and a bottom, a water tank supported below the bottom, a steam pipe located within the cabinet and having connection with the steam tank, flues formed in said tank, a burner supporting tube slidably mounted beneath the tank, said tube being slidably adjusted so that the burners carried thereby may be shifted under the flues.

2. A bath cabinet comprising sides, end walls, and a bottom, a body rest supported in the cabinet, a steam tank mounted below the bottom and connected to a steam pipe located within the cabinet, flues formed in the steam tank, hangers extending from the opposite ends of the steam tank, one of said hangers having spaced lugs carried thereby, a burner supporting tube slidably mounted in the hangers, one end of said tube being provided with a web for slidably engaging the lugs of the hanger to prevent accidental rotation of the burner supporting tube, said burner supporting tube being adapted to be shifted so that the burners carried thereby may be positioned under the flues of the water tank or bottom of said tank.

1,065,854. VEHICLE-SIGN. VENEMON LAWRENCE WALLACE, Salt Lake City, Utah. Filed Feb. 24, 1912. Serial No. 679,790. (Cl. 40—131.)



1. A sign for attachment to a lamp carrying bracket, comprising a frame, arms secured to one end of the frame to project horizontally therefrom one above the other and having portions intermediate of their ends curved away from the lamp, the ends of the arms having vertical and alined slots therein to receive a support, set screws in the arms at the slots thereof for engaging the support, and sign characters in the frame.

2. In a sign of the character described, the combination with a bracket adapted to support a lamp and provided with a vertical post, of a sign carrying frame, arms secured to one end of the frame and arranged one above the other and lying in parallel planes, said arms being provided in their ends with vertical and alined slots through which the post of the said bracket projects, and screws in the arms and engaging the post.

1,065,855. PROCESS OF MANUFACTURING ALLOYS. LUDWIG WEISS, Berlin-Charlottenburg, Germany. Filed Nov. 28, 1910. Serial No. 594,538. (Cl. 75—1.)

1. A process of manufacturing alloys consisting in intimately mixing a finely powdered constituent with an adhesive agglutinant whereby the particles of such powdered constituent are embedded in the agglutinant, mixing the mass with a coarsely comminuted constituent, the melting temperature of the agglutinant exceeding that of the least refractory constituent, forming the mixture into lumps by pressure and melting such lumps after setting substantially as and for the purpose described.

2. A process of manufacturing alloys consisting in intimately mixing a finely powdered constituent with an adhesive agglutinant whereby the particles of such powdered constituent are embedded in the agglutinant, mixing the mass with a coarsely comminuted constituent, the agglutinant having a melting temperature exceeding that of the least refractory constituent and being adapted to form a slag, forming the mixture into lumps by pressure and melting the said lumps after setting, substantially as and for the purpose described.

3. A process of manufacturing alloys consisting in intimately mixing a finely powdered constituent and an adhesive agglutinant consisting of water glass with the addition of metal compounds, whereby the particles of such powdered constituent are embedded in the agglutinant, mixing the mass with a coarsely comminuted constituent, the said agglutinant having a melting temperature exceeding that of the least refractory of the constituents, forming the mixture into lumps by pressure and melting the said lumps after setting, substantially as and for the purpose described.

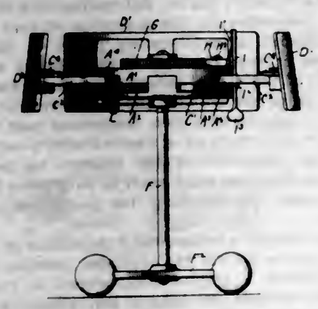
4. A process of manufacturing alloys consisting in intimately mixing a finely powdered constituent and an adhesive agglutinant consisting of water glass with an addition of metal oxids, mixing the mass with a coarsely comminuted constituent, the agglutinant having a melting temperature exceeding that of the least refractory of the constituents, forming the mixture into lumps by pressure and melting such lumps after setting, substantially as and for the purpose described.

5. A process of manufacturing alloys consisting in intimately mixing a finely powdered constituent and an adhesive agglutinant whereby the particles of the finely powdered constituent are embedded in the said agglutinant, mixing the mass with a coarsely comminuted constituent, the agglutinant having a melting temperature not exceeding that of the least refractory constituent, forming the mixture into lumps by pressure and melting the said lumps after setting in the presence of a metal, substantially as and for the purpose described.

1,065,856. HAT-STRETCHER. KARL WICKERSHEIM, New York, N. Y. Filed Oct. 31, 1912. Serial No. 728,800. (Cl. 223—38.)

1. A hat stretcher, comprising a central support provided with two sets of guideways one above the other and at an angle to the same, the guideways being spaced from the center of the support, stretching plates provided with rack-bars slidingly and interchangeably engaging the said guideways, and a gear wheel centrally arranged in the said support and in mesh with the said rack bars.

2. A hat stretcher, comprising a central support provided with two sets of guideways one above the other and at an angle to the same, the guideways being spaced from the center of the support, stretching plates provided with rack bars slidingly and horizontally engaging the said guideways, a gear wheel centrally arranged in the said support and in mesh with the said rack bars, a toothed locking wheel on the said gear wheel outside of the support, a double pawl pivoted on the said support, and means for manipulating the said pawl to throw either end into engagement with the said locking wheel.



3. A hat stretcher, comprising a central support provided with two sets of guideways one above the other and at an angle to the same, the guideways being spaced from the center of the support, stretching plates provided with rack bars slidingly and interchangeably engaging the said guideways, a gear wheel centrally arranged in the said support and in mesh with the said rack bars, a toothed locking wheel on the said gear wheel outside of the support, a double pawl pivoted on the said support, a lever fulcrumed on the said support, and a spring on the said lever and engaging the said pawl to manipulate the latter.

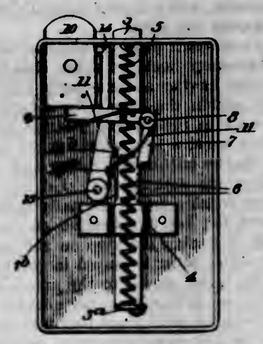
4. A hat stretcher, comprising a central support provided with two sets of guideways one above the other and at an angle to the same, the guideways being spaced from the center of the support, stretching plates provided with rack bars slidingly and horizontally engaging the said guideways, a gear wheel centrally arranged in the said support and in mesh with the said rack bars, and a key engaging the said gear wheel for turning the latter, the key having a supporting base and forming a stand for the hat stretcher.

5. A hat stretcher, comprising a central support having two sets of guideways one above the other and at right angles to each other, rack bars slidably mounted in the guideways and carrying stretching plates at their outer ends, a centrally arranged gear wheel engaging the rack bars, means for operating the gear wheel, a toothed wheel carried by the gear wheel, and a double pawl pivoted on the support and adapted to engage the toothed wheel to prevent it from turning in either direction.

[Claims 6 to 8 not printed in the Gazette.]

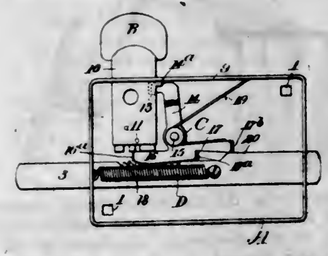
1,065,857. LOCKING-HOOK. LOUIS WILLIAMS, Denver, Colo. Filed Nov. 28, 1911. Serial No. 662,867. (Cl. 45—13.)

The combination with a casing and a supporting hook secured thereto, of a slide movable vertically in the casing and having a hook secured thereto, said slide having teeth on one edge and a recess and cam surface on its opposite edge, said cam surface being below the recess, a key-sheath extending into the casing parallel with the slide and adjacent the latter edge, a key adapted to fit said sheath and having a shoulder, a pawl for engaging said teeth pivoted close to the toothed edge of the slide and having an arm extending past the slide and into the plane of the key at the inner end of the key-sheath, a vertically arranged pawl, pivoted at its lower end and extending between the key-sheath and slide, for engaging the shoulder on the key, said pawl having a part above its pivotal point for engaging the adjacent edge of the slide, means



for constantly pressing said pawls toward the slide, and a spring for moving said slide to separate the hooks.

1,065,858. LOCKING DEVICE FOR UMBRELLAS, &c. LOUIS WILLIAMS, Denver, Colo. Filed Nov. 28, 1911. Serial No. 662,868. (Cl. 45—13.)



1. In a locking hook, the combination with a casing and a pair of hooks fixed to the front wall thereof at one end of the casing, said front wall having a longitudinal slot in a plane between the fixed hooks, of a hook slide extending through the end walls of the casing and a hook thereon projecting through said slot, said slide having rack teeth, a spring for moving the slide to separate the hooks, a key-sheath extending through a side wall of the casing, a key adapted to fit into said sheath, said key having a shoulder, a locking and tripping device pivoted within the casing, said latter device comprising a detent arm adapted to engage the rack, an arm adapted to engage the shoulder on the key and an arm projecting into the plane of the key at the inner end of the key sheath, and a spring normally pressing said detent arm against the slide.

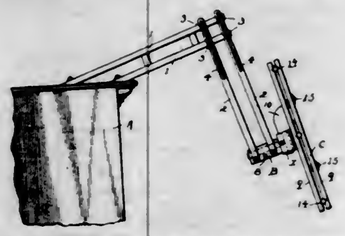
2. In a locking hook, the combination with a casing and a hook secured thereto, of a slide extending through the end walls of the casing and having rack teeth, a hook on said slide, a spring for moving the slide to separate the hooks, a key-sheath extending through a side wall of the casing, a key adapted to fit into said sheath, said key having a shoulder, a locking and tripping device pivoted within the casing, said latter device comprising a detent arm adapted to engage the rack, an arm adapted to engage the shoulder on the key, and an arm projecting into the plane of the key at the inner end of the key sheath, and a spring normally pressing said detent arm against the slide.

3. In a locking hook, the combination with a casing and a hook secured thereto, of a slide extending through the end walls of the casing and having rack teeth, a hook on said slide, a spring for moving the slide to separate the hooks, a key-sheath extending through a side wall of the casing, a key adapted to fit into said sheath, said key having a shoulder, a locking and tripping device pivoted within the casing, said latter device comprising a detent arm having two teeth adapted to engage the rack, an

arm adapted to engage the shoulder on the key and an arm projecting into the plane of the key at the inner end of the key-sheath, and a spring normally pressing said detent arm against the slide.

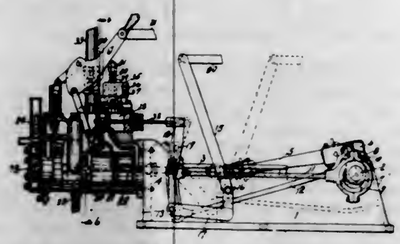
4. In a hat and coat lock, the combination with a casing having a stationary hook, of a bar slidably supported in the casing and having an exteriorly located coöperating hook, means within the casing for securing the said bar to hold its hook in the locking position with reference to the stationary hook, a key-sheath, a key adapted to enter the sheath, means within the casing and actuated by the key to release the locking bar, said key having a stop thereon, a key locking device normally spring held in position to unlock the key and bearing on one end a projection adapted to engage the stop on the key, the opposite end of said device being arranged in the path of the sliding bar as the latter moves to the unlocked position, and a cam surface on said sliding bar adapted to engage the said device to throw said projection into engagement with the stop on the key, substantially as described.

1,065,859. DISPLAY-RACK. FRANK L. BAILEY, Lancaster, N. H. Filed June 21, 1911. Serial No. 634,518. (Cl. 211—14.)



In a display rack, the combination with a support, of bars having elongated slots, a block pivotally connected to the bars, a rack removably supported by the block, means extending through the slots of the bars for connecting the bars to the support, said bars adapted to be adjusted with respect to the support through the elongated slots of the bars independently or together for changing the position of the block and rack.

1,065,860. REVERSING GAS-ENGINE. JOSIAH BARRETT and ARTHUR BARRETT, Bellevue, Pa.; Arthur Barrett executor of said Josiah Barrett, deceased; said executor assignor, by mesne assignments, of one-half to said Arthur Barrett. Filed Feb. 14, 1911. Serial No. 608,567. (Cl. 123—4.)



1. In an explosive engine, the combination of a cylinder, a reciprocating piston in said cylinder, a supply connection for the explosive mixture and connections between the ends of the cylinder so arranged that the piston on one stroke draws a charge into the outer end of the cylinder and on its next stroke compresses said charge and forces it to the explosion end of the cylinder, while the piston is moving to the out-stroke position, a valve for controlling the admission of the mixture to the cylinder, a connection from the main shaft to said valve for operating the latter, and means in said connection for controlling the time of intake.

2. In an explosive engine, the combination of a cylinder, a reciprocating piston therein, a supply connection for the explosive mixture and connections between the ends of the cylinder so arranged that the piston on one stroke draws a charge into the outer end of the cylinder and on its next stroke compresses said charge and forces it to the explosion end of the cylinder while the piston is moving to the out-stroke position, a reciprocating valve arranged to control the admission of the mixture to the cylinder, a connection from the main shaft to said valve for reciprocating the same, and means in said connection for varying the time of cut-off.

3. In an explosive engine, the combination of a cylinder, a supply connection for the explosive mixture to one end of the cylinder, a reciprocating piston in the cylinder, connections between the ends of the cylinder whereby the movement of the piston in one direction draws a charge into one end of the cylinder and the movement of the piston in the opposite direction compresses said charge and forces it to the other end of the cylinder, a valve for controlling the admission of the mixture to the cylinder, connections from the main shaft to said valve for controlling the intake, and reversing link mechanism in said connections.

4. In an explosive engine, the combination of a cylinder, a supply connection for the explosive mixture to one end of the cylinder, a reciprocating piston in the cylinder, connections between the ends of the cylinder whereby the movement of the piston in one direction draws a charge into one end of the cylinder and the movement of the piston in the opposite direction compresses said charge and forces it to the other end of the cylinder, a reciprocating valve for controlling the admission of the mixture to the cylinder, connections from the main shaft to said valve for reciprocating the same, and reversing link mechanism in said connections.

5. In an engine, the combination of a cylinder, a supply connection thereto for an explosive mixture, another connection thereto for a fluid pressure medium, a valve for regulating the time of intake of both of said mediums to the cylinder, and constantly operative connections from the main shaft for actuating said valve.

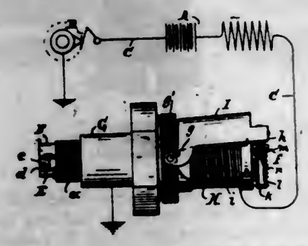
[Claims 6 to 18 not printed in the Gazette.]

1,065,861. BURGLAR-ALARM. GEORGE A. BREWSTER, New York, N. Y. Filed May 17, 1911. Serial No. 627,666. (Cl. 177—202.)



In a burglar alarm, the combination of an elongated frame having at one end thereof a clamp, the jaws whereof are electrically insulated; an operating screw for said jaws; an insulating block permanently mounted on said frame at the end thereof opposite said clamp; a closed metal ring bracket rigidly mounted on said block; a binding post mounted on said frame in electrical contact therewith; a second binding post mounted upon said block, having electrical contact with said bracket, said binding posts being adapted to receive the terminals of a metallic electric circuit; and a metallic end-weighted pendulum pivotally mounted on said frame and extending through said bracket in the closed ring thereof, said pendulum being adapted to maintain its vertical arrangement when said frame is moved from its normal position, and to be engaged by said bracket when said frame is so moved, to thereby complete the electric circuit incorporating said binding posts.

1,065,862. ELECTRICAL IGNITING DEVICE FOR EXPLOSIVE-ENGINES. ARTHUR R. BULLOCK, Cleveland, Ohio, assignor, by mesne assignments, to The Igniter Appliance Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 25, 1904. Serial No. 190,525. (Cl. 123—154.)



1. An igniter plug for explosive engines with fixed and movable electrodes, a winding and a pivoted armature, the said electrodes being arranged approximately at right angles to the pivots of said armature and the movable electrode carrying an arm which is arranged within contact reach of said armature the latter having a depending member adapted to control the movement of said armature in the manner and for the purpose as set forth.

2. In an igniter plug for explosive engines the combination with the movable electrode and a hinged armature of a depending member arranged in front of said armature for the purpose of controlling the movement of said electrode in the manner as set forth.

3. An igniter plug for explosive engines having a stationary and a movable electrode, a winding on said plug forming with a portion of said plug an electro-magnet, an armature upon said plug, and a connector forming the terminal of said winding said connector extending in a direction substantially axial of the coils of said winding and interposed between adjacent layers thereof.

4. In an igniter plug the combination with an electro-magnet an armature and a pivotal support therefor of a casing surrounding the said parts of said plug and serving as means to retain said support securely in position.

5. In a sparking igniter, the combination of a plug having a portion provided with a coil of wire forming an electro-magnet, and a curved armature mounted upon said plug and conforming in contour to the said coil of wire and adapted to be drawn toward said coil.

[Claims 6 to 10 not printed in the Gazette.]

1,065,863. SKINNING-KNIFE. ISAAC T. CARTER, Emmetsburg, Iowa. Filed May 13, 1912. Serial No. 697,071. (Cl. 30—10.)



1. In a device of the class described, the combination of a handle having a comparatively deep notch in one end thereof, with a hooked blade pivoted in the handle to swing across the notch, said blade having a blunt portion adjacent to the point thereof and having a comparatively long cutting edge between the said blunt portion and the pivotal point of the blade, and means for limiting the opening movement of said blade to a position where the point thereof is slightly above the handle outside the notch.

2. In a device of the class described, the combination of a handle having a comparatively deep notch in one end thereof, one side of which is substantially vertical, and the other side of which is inclined, with a hooked blade pivoted in the handle to swing across the notch, said blade having a blunt portion adjacent to the point thereof and having a comparatively long cutting edge between the said blunt portion and the pivotal point of the blade, and means for limiting the opening movement of said blade to a position where the point thereof is slightly above the handle outside the notch, so that the point and the blunt portions may travel close under a hide which is held toward said point and blunt portion by the portion of the handle adjacent to the notch on the side opposite the end of the handle in which said blade is pivoted.

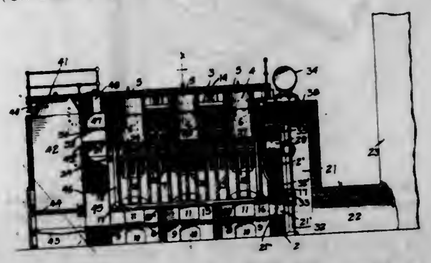
3. In a device of the class described, a handle having a notch in one side thereof, a hook member pivoted in said handle, and designed in various positions of its movement to swing across said notch and to swing to a point outside the notch, a sharp blade in the inner side of said hook member, and adjustable means for limiting the outward movement of said hook member.

4. In a device of the class described, a handle having a notch in one side thereof, a hook member pivoted in said handle, and designed in various positions of its movement to swing across said notch and to swing to a point outside the notch, a sharp blade in the inner side of said hook member, adjustable means for limiting the outward movement of said hook member, said means comprising a shoulder formed on said hook member, a shoulder formed on said handle and a screw in said handle extending through the shoulder thereon, designed to engage the shoulder on said hook member.

5. In a device of the class described, the combination of a handle having a comparatively deep notch in one end thereof, with a hooked blade pivoted in the handle to swing across the notch, said blade having a blunt portion adjacent to the point and having a comparatively long cutting edge between the said blunt portion and the pivotal point of the blade, and means for limiting the opening movement of said blade to a position where the point thereof is slightly above the handle outside the notch, so that the cutting edge of said blade is within said notch.

[Claims 6 and 7 not printed in the Gazette.]

1,065,864. INCINERATOR. FELIX L. DECARIE, ALEXANDER S. DECARIE, and LOUIS A. R. DECARIE, Minneapolis, Minn. Filed Feb. 9, 1909. Serial No. 476,970. (Cl. 110—17.)



1. In an incinerator, the combination, with a combustion chamber and a stationary grate therein, of a suspended or hanging grate arranged above said stationary grate and composed of oscillating sections arranged to swing toward or from one another, and means for operating said sections, each section including a series of bars hinged at their upper ends and having inwardly curved lower ends.

2. In an incinerator, the combination, with a combustion chamber, of a grate composed of depending opposing sections having inwardly turned lower portions, said sections being hinged and capable of swinging toward or from one another and a fire grate arranged below said first named grate.

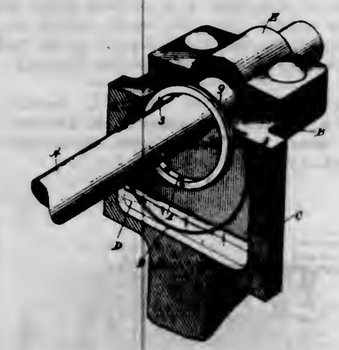
3. In an incinerator, the combination, with a combustion chamber, of a stationary grate in the lower part thereof, a second grate composed of oscillating vertical sections arranged above said first named grate and depending from the top of said chamber, and a third grate also composed of oscillating sections located in the upper part of said combustion chamber, said second and third grates being arranged to support a portion of the material deposited in said combustion chamber and support it in proximity to the material deposited on the lower grate, but without contacting therewith, for the purpose specified.

4. In an incinerator, the combination, with a combustion chamber having a lower stationary grate, of a hanging grate composed of sections suspended at their upper ends and depending vertically within said combustion chamber and having inwardly curved lower ends and capable of movement toward or from one another, and a third grate composed of sections arranged to oscillate in said combustion chamber and support the material above the lower portion of said second grate, substantially as described.

5. In an incinerator, the combination, with a horizontal combustion chamber and a basket grate composed of oscillating sections in said combustion chamber, of a vertical paper combustion chamber having a top filling opening and a grate in its lower portion, the walls separating said horizontal combustion chamber and said paper combustion chamber being provided with an upper flue near the top of said paper combustion chamber and a lower flue near the bottom of said chamber, said lower flue being below the level of the basket grate in said horizontal combustion chamber, and a damper arranged to close said upper flue and compel the products of combustion to pass through said lower flue.

[Claims 6 to 27 not printed in the Gazette.]

1,065,865. ADJUSTABLE-FEED OIL-RING. CARL WILLIAM EISENMANN, Chicago, Ill. Filed May 20, 1911. Serial No. 628,516. (Cl. 64—31.)

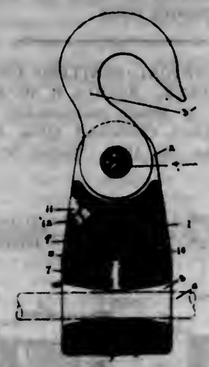


1. In a ring oil feed, a shaft, a ring loosely mounted on said shaft, said ring having apertures extending therethrough, and means for conveying oil to said ring, whereby said oil may be fed through said apertures to lubricate the shaft, said ring having auxiliary grooves therein to accommodate an overflow of oil.

2. In a ring oil feed, a shaft, a ring loosely mounted on said shaft, a second oil-conveying ring carried by said first-mentioned ring, said second ring having pins projecting therefrom, and means coacting with said pins stopping the rotation of said ring to retard the feeding of oil to said shaft.

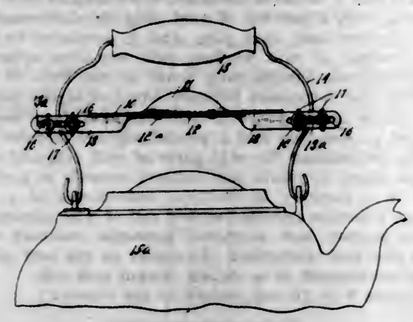
1,065,866. ROPE-CLAMP. DALLAS C. FRALEY, Kalama, Wash. Filed Oct. 31, 1912. Serial No. 728,859. (Cl. 24—125.)

1. An instrument of the character described comprising a block having an aperture therethrough, a cable movable through the aperture, a plunger loosely mounted in the block adapted to bear upon the cable to prevent relative movement thereof and means operable within the block for locking the plunger upon said cable.



2. An instrument of the character described comprising a block having a divided portion at one end and a transverse aperture flaring each way from its median point, at the other, a cable movable through said aperture, a plunger loosely mounted in an aperture at the center of the block and adapted to bear on the cable, a screw threaded aperture leading at an angle from the exterior of the block to the inner end of said central aperture, a screw threaded drive bolt having a cone-shaped end operable therein and adapted to bear upon said plunger, a pivot bar fixed transversely in said divided portion, and a hook mounted thereon adapted to engage said cable.

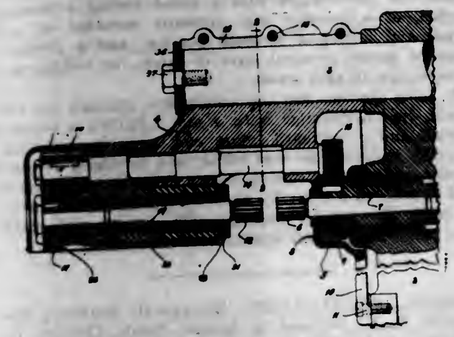
1,065,867. ATTACHMENT FOR COOKING UTENSILS. CHARLES GRAY, North Tarrytown, N. Y. Filed Sept. 20, 1912. Serial No. 721,368. (Cl. 53—9.)



1. An attachment for cooking utensils, having bails, comprising a shield presenting an approximately horizontal area sufficient to form a barrier to steam rising from the utensil, pairs of arms projecting from opposite sides of the shield, and clamping means carried by said arms to clamp the same to the bail of the utensil, said clamping means consisting of a pair of spaced bolts passing through each pair of arms and provided with nuts, the nuts of each pair of bolts being disposed on opposite sides of the said arms.

2. An attachment for cooking utensils having bails, comprising a shield in the form of a plate having turned-up edge members at two opposite points, a member secured to said plate and formed with forked ends presenting pairs of spaced arms extending in a line at about right angles to the up-turned edge members, said arms having alined slots, and a pair of clamp bolts passing through the slots of each pair of arms, the bolts of each pair of arms extending in opposite directions and provided with wing nuts at opposite sides of the pairs of arms.

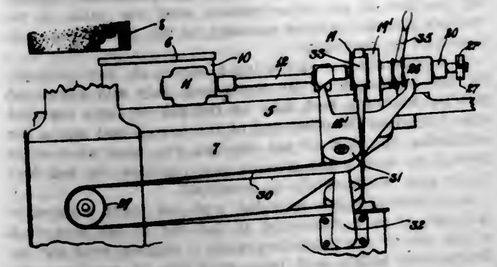
1,065,868. ATTACHMENT FOR MILLING-MACHINES. BENGT M. W. HANSON, Hartford, Conn., assignor to Pratt & Whitney Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 9, 1911. Serial No. 643,533. (Cl. 90—14.)



1. A milling machine comprising a framing, a main spindle constituting a permanent part of said machine, an overhanging arm on said framing, a member detachably supported by said overhanging arm, means below said detachably mounted member for sustaining the same, means for holding said detachably mounted member against movement, an auxiliary spindle carried by said detachably mounted member and coaxial with the main spindle when said detachably mounted member is held against movement, tools rotative with the respective spindles and facing each other when the spindles are coaxial, and means for rotating the two spindles together.

2. A milling machine comprising a framing, a spindle constituting a permanent part of said machine, an overhanging arm, a detachably mounted member supported for swinging movement by said overhanging arm, a device for upholding said detachably mounted member, said upholding device and detachably mounted member having engaging faces formed on an arc struck from the center of movement of said detachably mounted member, means for fixing said detachably mounted member against movement, an auxiliary spindle supported by said detachably mounted member and coaxial with the main spindle when said detachably mounted member is held against movement, tools rotative with the spindles and facing each other when said spindles are coaxial, and mechanism for rotating the auxiliary spindle by and on the rotation of the main spindle.

1,065,869. METAL-REDUCING MACHINE. BENGT M. W. HANSON, Hartford, Conn., assignor to Pratt & Whitney Company, Hartford, Conn., a Corporation of New Jersey. Filed June 13, 1912. Serial No. 703,562. (Cl. 51—12.)



1. The combination of a movably mounted main work support, an auxiliary work support movably mounted on the main work support, driving means for the auxiliary work support, and means for putting the auxiliary work support into and out of driving relation with the driving means therefor to start and stop the same, by the movement of the main work support.

2. The combination of a work support, means for driving said work support, said work support being also mounted for shifting movement, and means whereby the connection between the work support and the driving means can be controlled to stop and start said work support by and on the shifting movement of the work support.

3. The combination of a reciprocatory platen, a turn table on said platen, a power transferring member, a source of power, and mechanism for putting said power transferring member into and out of driving relation with said source of power by and on the movement of the platen and for also transferring the effect of said power transferring member to said turn table to rotate the same when the power transferring member is in driving relation with said source of power.

4. The combination of a rotary and shiftable work supporting member, a power transferring member, a source of power, and mechanism for putting said power transferring member into and out of driving connection with said source of power by and on the shifting movement of said work supporting member, and for rotating said shiftable member when said power transferring member is in driving relation with said source of power.

5. The combination of a reciprocatory platen, a turn table on said platen, a shaft provided with fast and tight pulleys, and mechanism for moving said pulleys by and on the movement of the platen and for also transferring the effect of the tight pulley to the turn table at a predetermined time.

[Claims 6 to 9 not printed in the Gazette.]

1,065,870. MECHANICAL MOVEMENT. GEORGE H. HOLDT, Pearl River, N. Y., assignor to Dexter Folder Company, Pearl River, N. Y., a Corporation of New York. Filed Nov. 22, 1911. Serial No. 661,729. (Cl. 74—16.)



1. In a mechanism of the character described, the combination of driving and driven members, a bearing freely journaled in one of said members and in operative engagement with the other of said members, an element freely journaled on said bearing, said element being adapted to form an interlocking connection between said members, and means interengaging between said bearing and said interlocking element to throw said element into and out of interlocking position.

2. In a mechanism of the character described the combination of a driven member having ratchet teeth and gear teeth, a driving member, bearing sleeves journaled upon said driving member, gears or pinions fixed upon said sleeves and meshing with the gear teeth of said driven member, pawls or dogs journaled upon said bearing sleeves in operative relation to the ratchet teeth of

said driven member, means carried by said pawls or dogs frictionally engaging said bearing sleeves, and means for operating said driving member.

3. In a mechanism of the character described, the combination of a toothed driven member, a driving member carrying a freely journaled bearing sleeve, a gear or pinion fixed upon said bearing sleeve, and meshing with said driven member, a pawl or dog journaled upon said bearing sleeve in operative relation to said driving member and a spring finger carried by said pawl or dog and frictionally engaging said bearing sleeve.

4. In a mechanism of the character described, the combination of a driven member having ratchet teeth and gear teeth, a driving member, a bearing sleeve journaled upon said driving member, a gear or pinion upon said sleeve meshing with the gear teeth of said driven member, a pawl or dog journaled upon said bearing sleeve, spring fingers carried by said pawl or dog and frictionally engaging said bearing sleeve and means for operating said driving member.

5. In a mechanism of the character described, the combination of a shaft, with fast and loose friction disks upon said shaft, said loose friction disk having ratchet teeth upon its periphery, a freely journaled pawl carrier, a pawl or dog movably mounted upon said pawl carrier in operative relation to said ratchet teeth, means for operating said pawl carrier, means actuated by relative movement between said pawl carrier and said loosely mounted friction disk for moving said pawl or dog toward and away from said ratchet teeth, and a reversing pawl or dog mounted upon said pawl carrier in operative relation to said fast friction disk and adapted to return said shaft to initial position.

[Claims 6 and 7 not printed in the Gazette.]

1,065,871. TUFT-YARN CARRIER. GEORGE F. HUTCHINS, Worcester, Mass., assignor to Crompton & Knowles Loom Works, a Corporation of Massachusetts. Filed Mar. 14, 1912. Serial No. 683,811. (Cl. 139—66.)



1. In a tuft yarn carrier for Axminster looms, etc., a bearing for the contiguous journals of two spools, comprising a stationary part, and a movable part, and a pivotally mounted spring actuated lever or latch having a handle portion, for locking the movable part to the stationary part, the actuating spring acting to hold the movable part locked to the stationary part in whatever position the spools may be.

2. In a tuft yarn carrier for Axminster looms, etc., a bearing for the contiguous journals of two spools, comprising a stationary part, and a movable part, pivotally mounted on said stationary part, and a pivotally mounted spring actuated lever or latch having a handle portion, for locking the movable part to the stationary part.

3. In a tuft yarn carrier for Axminster looms, etc., a bearing for the contiguous journals of two spools, comprising a stationary part, and a movable part, pivotally mounted on said stationary part, and a pivotally mounted spring actuated lever or latch having a handle portion, pivotally mounted on said movable part, to lock the movable part to the stationary part.

4. In a bearing for the contiguous journals on two spools, the combination with a stand having a recessed portion, of a movable cap, pivotally mounted on said stand, and having a recessed portion, and a pivotally mounted spring actuated lever or latch, for locking said movable cap to said stand.

5. In a bearing for the contiguous journals on two spools, the combination with a stand having a recessed portion and a flattened upper end, of a movable cap, pivotally mounted on said stand, and having a recessed portion and an extension to extend over the upper end of said stand, and a pivotally mounted spring actuated lever or latch, for locking said movable cap to said stand.

[Claim 6 not printed in the Gazette.]

1,065,872. FOUNTAN-PEN. EDWARD H. JOHNSON, New York, N. Y., assignor to Samuel Insull, Chicago, Ill. Filed Jan. 13, 1909, Serial No. 472,132. Renewed Nov. 21, 1912. Serial No. 732,745. (Cl. 120—46.)



1. A fountain pen provided with a barrel and an inert collapsible ink tube or sack located therein, said tube being connected at its lower end to the nib or pen; together with a suction vent connecting the interior of the barrel with the exterior air, and means for closing the vent when the tube is filled to the desired extent, substantially as described.

2. A fountain pen having a barrel, an inert collapsible tube or sack located therein and connected at the lower end to the nib or pen proper; together with a vent at the upper end of the barrel and adjustable means for regulating the flow of air in accordance with the value of the vacuum and the varying quantity of ink in the pen, substantially as described.

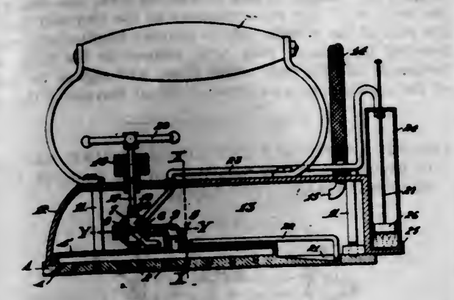
3. A fountain pen embracing a barrel, an inert collapsible ink tube open at its lower end only and connected directly with the feed duct of the nib or pen; together with a vent at the other end of the barrel, and means for regulating the flow of air through the vent when it is desired to modify the vacuum and regulate the ink feed to the pen, substantially as described.

4. A fountain pen provided with an inert collapsible ink tube or sack connected at one end of the feed duct of the nib or pen; together with a suction vent for inflating and filling said tube with ink by suction, substantially as described.

5. A fountain pen embracing an inert collapsible ink tube; a nib or pen connected thereto by a feed duct; together with a vent for filling it by suction, and a valve for maintaining it filled under the influence of a vacuum when established, substantially as described.

[Claim 6 not printed in the Gazette.]

1,065,873. SAD-IRON. SHINTARO KAKO, San Francisco, Cal. Filed Nov. 9, 1912. Serial No. 730,389. (Cl. 68—26.)



1. A sad-iron comprising a perforated pressing plate, a steam chamber on said plate, means for delivering steam into said chamber, a valve in the steam chamber adapted to direct the steam through the perforated plate or confine it to the steam chamber, and means controlled by said valve for allowing the steam to escape from the chamber other than through the perforations in the plate and for carrying away the condensed steam.

2. In a sad-iron the combination with a perforated pressing plate, a steam chamber thereon and means for delivering steam to said chamber, of a valve so constructed as to direct and control the flow of steam through the perforations in the plate, confine it in the steam chamber, or direct it exteriorly thereof other than through the perforated base.

3. In a sad-iron, the combination of a pressing plate formed with a series of perforations and manifold passages communicating with said perforations, a steam chamber carried on the pressing plate, means for directing the steam in the chamber into the manifold passages, a valve for controlling the flow of steam into said manifold passages and for confining the steam in the steam chamber, means controlled by said valve for discharging condensed steam from the steam chamber, a receptacle on the steam chamber for receiving the condensed steam, and means for indicating the quantity of liquid in said receptacle.

4. In a sad-iron, having a steam chamber therein, a perforated base, a series of manifold passages communicating with the perforations in the base, and means for delivering steam into the steam chamber; a valve casing having a passage opening to the steam chamber at one end and to the manifold passages at the other, ports on opposite sides of the casing opening to the passage therein, a pipe leading from one of said ports and terminating in a pocket formed at the base of the iron, an exhaust pipe leading from the other of said ports, a condensing chamber carried by the iron in which said pipe terminates, and a rotary valve member in the valve casing having a transverse port adapted to register with the port in the valve casing in one position to exhaust the steam and condensation from the steam chamber, and adapted to register with the passage in the valve casing to admit steam from the steam chamber to the manifold passages, and also adapted to be positioned intermediate the ports and the passages to close same and confine steam in the steam chamber.

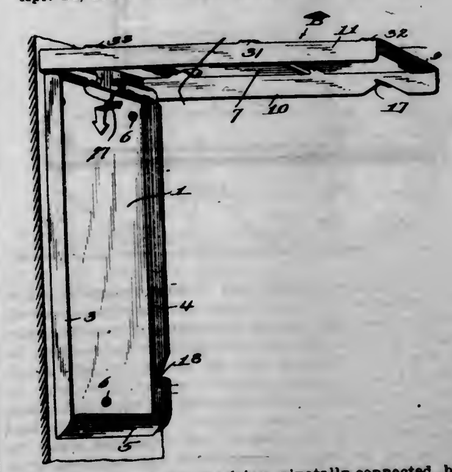
5. The combination in a sad-iron, having a steam chamber therein and a perforated base and means for delivering steam into said chamber, a rotatable valve, means whereby said valve will operate to discharge steam from the steam chamber to the perforated bottom of the iron when in one position; means whereby the steam condensed in the chamber will be discharged therefrom when the valve is in another position, and means by which the steam may be confined within the iron when the valve is in an intermediate position.

1,065,874. POST-HOLE DIGGER. MATTHEW KAUKEINEN, Tularosa, N. Mex. Filed June 11, 1912. Serial No. 703,045. (Cl. 255—67.)



A post hole digger comprising a rotatable cylindrical open ended body and a pair of spirally directed blades permanently secured at the lower end thereof in opposite relation and having straight cutting edges which adjoin substantially on a diameter of said body and are conjointly substantially coextensive with said diameter, the blades including substantially flat spiral portions which gradually increase in width toward said cutting edges and are gradually turned into the plane of said body, the blades adjacent said cutting edges being formed with curved attachment flanges which conformably lie against and are secured to said body, and below the body and adjacent their junctions with the cutting edges having bulged portions which project beyond the circumference of the body, the cutting edge of one blade confronting the spirally directed edge of the adjacent blade whereby throat ways of substantial extent are afforded through which the dirt displaced by said cutting edges passes in a relatively spiral direction along said flat spiral portions and into said body.

1,065,875. RAILWAY-CARD HOLDER. CHARLES O. KEAGY and JAMES R. CARMER, Wilmington, Del. Filed Apr. 24, 1912. Serial No. 692,973. (Cl. 40—14.)



1. A card holder comprising pivotally-connected body and cover elements, one of which is provided with a card-retaining device and the other with a recess into which said retaining device is adapted to project when the cover is closed and with a slit located adjacent said recess, and means carried by said element adapted to retain a card

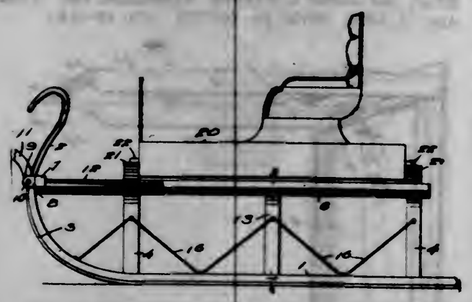
in position thereon, with one edge of the card projecting through said slit into engagement with said retaining device when said cover is closed.

2. A card holder comprising pivotally-connected body and cover elements, one of said elements being provided with a card-retaining device and the other element with a recess into which said retaining device is adapted to project when said cover is closed, and means carried by said other element adapted to retain a card in position thereon with one edge of the card in engagement with said retaining device when said cover is closed.

3. A railway card holder comprising body and cover elements each provided with marginal flanges, said elements having a loose pivotal connection at their upper ends to permit bodily endwise and swinging movements of said cover in opposite directions, and having a combined gravity and inertia latch connection adjacent their lower ends, said latch connection consisting of a slot formed in one of the flanges of one element and having an inclined wall leading thereto and a lateral finger provided upon the adjacent flange on the other element, said finger being adapted to leave said slot during the upward endwise movement of the cover, and to automatically ride over said wall and enter said slot at the termination of the downward swinging movement of said cover, consequent upon the inertia occasioned by such downward swinging movement.

4. A railway card holder comprising body and cover elements having a loose pivotal connection at their upper ends to permit bodily endwise and swinging movements of said cover in opposite directions, and having a combined gravity and inertia latch connection adjacent their lower ends, said latch connection consisting of a slot formed in one element and having an inclined wall leading thereto, and a finger provided upon the other element, said finger being adapted to leave said slot during the upward endwise movement of the cover, and to automatically ride over said wall and enter said slot at the termination of the downward swinging movement of said cover, consequent upon the inertia occasioned by such downward swinging movement.

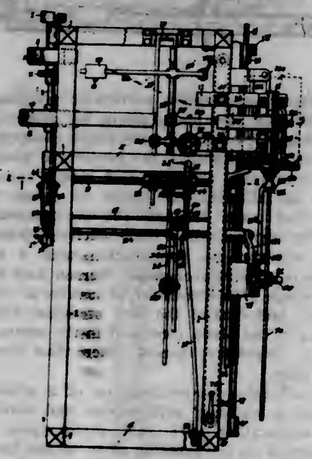
1,065,876. VEHICLE. LEROY KENNARD, Sharpsburg, Ohio. Filed Aug. 8, 1911. Serial No. 642,954. Renewed Nov. 19, 1912. Serial No. 732,344. (Cl. 21—48.)



1. A sleigh attachment for vehicles, comprising runners, arches secured to and connecting the runners near the front and rear ends thereof, longitudinally extending raves secured to the arches, knees secured to and curving inward from the runners near the central portion thereof, cross braces connecting the sides of the arches and the knees, a transverse brace connecting the raves and having portions secured to the runners, and thill attaching plates secured to the ends of said transverse brace, the position of the front and rear arch members being such that the body of the vehicle will fit down therebetween and will absolutely prevent longitudinal movement of the sleigh attachment relative to said body.

2. A sleigh attachment for vehicles, comprising runners, a plurality of arch members connecting the two runners, raves and braces connecting the runners and the various arch members, transverse braces connecting the sides of the arch members, and the central arch members having the arches thereof cut away to provide knees, whereby the vehicle body will fit down between the upper ends of the knees provided by cutting away the center of the arch, while the arch members at the end will engage the ends of the vehicle body to prevent longitudinal movement of the vehicle body with respect to the sleigh attachment, and the ends of the knees will engage the sides of the vehicle body and prevent lateral movement thereof.

1,065,877. GUMMING AND FILING MACHINE. ABRAHAM L. KIRKWOOD, Caddo Gap, Ark. Filed Sept. 18, 1911. Serial No. 649,812. (Cl. 76—41.)



1. A machine of the class described comprising means for holding a saw in position, grinding means embodying a movable frame having a movable abrasive member therein, means for moving the frame and member into and out of engagement with the teeth on the saw at or above a certain speed, and means for moving the saw in order to bring the teeth successively into position for grinding.

2. A machine of the class described comprising a frame having means thereon for holding a saw in position, a movable frame having a device therein for grinding the teeth on the saw, means whereby the said device may be operated, means for moving the frame and the device adjacent the teeth on the saw at or above a certain speed, and means for bringing the teeth on the saw successively into position to be ground.

3. A machine of the class described comprising a suitable frame having movable means thereon for supporting a saw, another frame having a grinding wheel thereon, means whereby the frame and grinding wheel may be brought adjacent the teeth on the saw, and means permitting such movement only at or above a certain speed.

4. A machine of the class described comprising a frame having a carriage thereon for supporting a saw, a frame having a sharpening wheel thereon adapted to engage the teeth on the saw, means for operating the grinding wheel, and other means whereby the grinding wheel may engage the teeth at or above a certain speed.

5. In a machine of the class described, a suitable frame, a shaft carried by the frame, a plurality of cams on the shaft, means for holding a saw in position on the frame, a sharpening device movably mounted on the frame, means actuated by one of the cams for raising and lowering the sharpening device, other means actuated by the same cam whereby the said raising and lowering occurs only at or above a certain speed, and means actuated by the other cam for successively bringing the teeth of the saw into sharpening position.

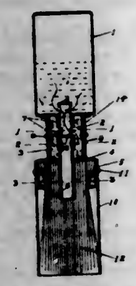
[Claims 6 to 18 not printed in the Gazette.]

1,065,878. BUG AND FLY TRAP. GEORGE W. KNAPP, Jr., Baltimore, Md., assignor to National Enameling and Stamping Company, Baltimore, Md., a Corporation of New Jersey. Filed June 8, 1912. Serial No. 702,445. (Cl. 43—22.)



A bug or fly trap having a base pan with a circular upwardly-extending wall said base pan also having an annular flanged wall encircling the pan in a plane below the upper edge of the circular wall of the pan and the annular wall around the circular pan wall having a series of circumferentially-extending segment slots,—the outer edge of each segment slot being in a plane lower than the inner edge of each slot and a wire-gauze dome having its lower edge sustained on the annular wall below and encircling the outer edges of all the segmental slots.

1,065,879. SHAVING-BRUSH. ERNST T. KREBS, Carson City, Nev. Filed Nov. 19, 1912. Serial No. 732,234. (Cl. 15—50.)



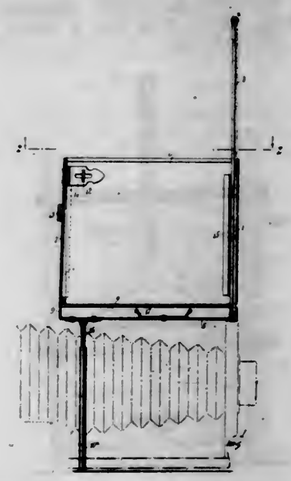
1. A shaving brush of the character described, comprising a reservoir chamber having a reduced tubular member at one end, provided with side openings, and a cylinder extending from the same end and surrounding said tubular member in concentric relation, a brush holder having a cylinder projecting from one end thereof and snugly telescoping within the cylinder of the reservoir chamber, a brush carried by the brush holder, a valve tube having one open end firmly secured within the brush holder and opening directly into the brush, and having its opposite end extending through the tubular member of the reservoir chamber, said valve tube being provided with an intermediate partition and with openings upon opposite sides of the said partition, for the purpose described.

2. A brush of the character described, comprising a brush holder, a brush carried thereby, a hollow handle forming a reservoir chamber movable toward and from the brush holder, means forming a measuring chamber formed between the brush holder and the reservoir chamber, and valve means controlled by relative movement of the brush holder and reservoir chamber for alternately establishing communication between the measuring chamber and the brush holder and reservoir chamber.

3. A shaving brush of the character described, comprising a reservoir chamber having a reduced tubular member extending from one end thereof and provided with side openings, a cylinder extending from the same end of the reservoir chamber and surrounding the tubular member in concentric relation, said cylinder being provided with longitudinal side slots intermediate its ends, and being also provided with angular slots, the inner ends of which communicate with said longitudinal slots and the outer ends of which extend through the free end of the cylinder, a brush holder, a brush carried by the brush holder, a cylinder also carried by the brush holder and adapted to snugly telescope within the cylinder of the reservoir chamber whereby to form a measuring chamber, said brush holder and cylinder having studs projecting outwardly through the slots of the reservoir cylinder, a valve tube having one end secured within the brush holder and opening directly into the brush and having its opposite end extending through the tubular member of the reservoir chamber, said valve tube having an intermediate partition which is located within the limits of the measuring chamber and being also provided with openings upon opposite sides of said partition for the purpose described.

4. A brush of the character described comprising a brush holder, a brush carried thereby, a hollow handle forming a reservoir chamber and movable toward and away from the brush holder, means forming a measuring chamber between the brush holder and the said hollow handle, and apertured telescoping tubes carried by the brush holder, and hollow handle and controllable by the movement of the latter for alternately establishing communication between the measuring chamber and the brush holder, and reservoir chamber.

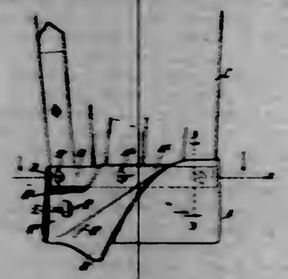
1,065,880. APPLIANCE FOR MAKING FLASH-LIGHT PHOTOGRAPHS. LUTHER DOUGLASS LITTLE, Jackson, Mich. Filed Oct. 14, 1910. Serial No. 587,015. (Cl. 67—28.)



1. A flash-light cabinet having a bottom, side walls, a rear wall, the said walls hinged to the bottom to fold inwardly, the side walls having guides at the front edges, and a screen adapted to slide between the said guides when the cabinet is set up.

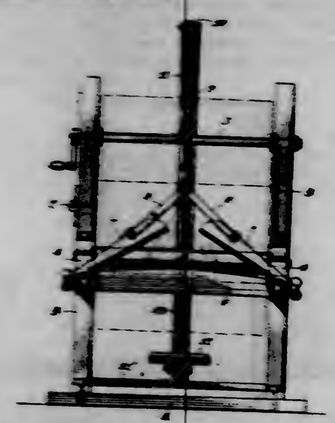
2. A flash-light cabinet having an open front and having a bottom with its side and rear edges bent up to form flanges, the flange along the rear edge of the bottom being of greater height than the flanges along the sides, side walls hinged to the upper edges of the flanges along the side edges, and a rear wall hinged to the upper edge of the flange along the rear edge of the bottom, whereby the side walls can be folded down upon the bottom and the rear wall folded down upon the side walls, the rear wall having forward-turned flanges at each end to overlap the rear edges of the side walls when the cabinet is set up, and to overlap the flanges at the side edges of the bottom when the cabinet is folded, the side walls having guides at the front edges, and a screen adapted to slide between said guides when the cabinet is set up.

1,065,882. DETACHABLE CUFF. LOUIS D. LIVINGSTON, New York, N. Y., assignor to Livingston & Lieberman, New York, N. Y. Filed Oct. 9, 1912. Serial No. 724,769. (Cl. 2—72.)



As a new article of manufacture a detachable cuff for shirt sleeves, comprising doubled-up outer and inner portions, of which the inner portion is provided along its rear edge with a pocket for the reception of the sleeve band, buttons secured to the inner face of the inner part of the pocket, and buttonholes in the outer part of the pocket and in register with said buttons, adapted to be engaged by the said buttons, the said buttons being adapted also to engage buttonholes in the sleeve band, the said outer portion of the cuff being of a greater width than the said inner portion to overlie and cover the said pocket.

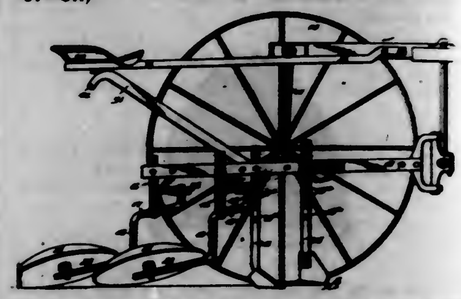
1,065,882. BAGGING-MACHINE. WILLIAM F. LOCKWOOD, Hollis, Okla. Filed Feb. 1, 1913. Serial No. 745,871. (Cl. 194—66.)



1. In a bagging cutting machine, the combination with uprights or standards having fluid rolls connected thereto, of a knife supported by the standards having the cutting edge inquiring from the center thereof, blades hinged to the standards and lying parallel with and in close proximity to the knife, and means for operating the blades for causing a cutting operation.

2. In a bagging cutting machine, the combination with standards having fluid rolls connected thereto, of a knife supported by the standards having the cutting edge thereof inquiring from the center toward the ends of the knife, blades pivotally connected to the standards and lying parallel and in close proximity to the knife, links connected to the blades, a rod connected to the links, an upright having a spring-controlled lever pivotally mounted thereon, said lever connected to the rod and normally holding the blades above the cutting edge of the knife, a foot lever supported by the standards, and a link connecting the foot lever and spring-controlled lever whereby the blades can be operated for producing a cutting operation.

1,065,883. DISK CULTIVATOR. GEORGE A. MANFULL, Brighton, Colo. Filed Nov. 1, 1911, Serial No. 657,958. Renewed Oct. 17, 1912. Serial No. 726,401. (Cl. 97—37.)



1. In a device of the class described, a cultivator frame mounted on wheels, disks, means for rotatably mounting the same on said frame in substantially horizontal position with their front edges slightly higher than the level of their rear edges, and with their inner edges slightly higher than the level of their outer edges, and adjustable yielding means for holding said disks against the surface of the ground.

2. In a device of the class described, a cultivator frame mounted on wheels, disks, means for rotatably mounting the same on said frame in substantially horizontal position with their front edges slightly higher than the level of their rear edges, and with their inner edges slightly higher than the level of their outer edges, and adjustable means for cutting furrows of varying depths in front of said disks.

3. In a device of the class described, a cultivator frame mounted on wheels, a downwardly extending arm on said frame, an extension extending downwardly and rearwardly from said arm, a disk formed with a hub, a sleeve said hub being rotatably mounted on said sleeve, a bolt in said sleeve having at one end an eye in which said extension is slidably mounted, a nut on the other end of said bolt, said sleeve being provided with opposite longitudinal slots to receive said eye, the end of said sleeve engaging said arm when said nut is screwed on said bolt.

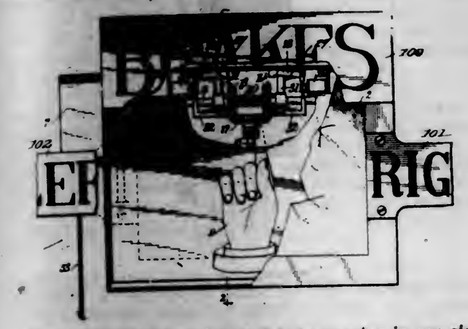
4. In a device of the class described, a cultivator frame mounted on wheels, a downwardly extending arm mounted on said frame, a substantially horizontal arm pivotally mounted on said first named arm, a downward extension on said second arm, a rearward and downward extension on said first extension, a disk formed with a hub, a sleeve the hub being rotatably mounted thereon, a bolt in said sleeve having at one end an eye in which said extension is slidably mounted, a nut on the other end of said bolt, said sleeve being provided with opposite longitudinal slots to receive said eye, the end of said sleeve engaging said arm when said nut is screwed on said bolt.

5. In a device of the class described, a cultivator frame mounted on wheels, a downwardly extending arm mounted on said frame, a substantially horizontal arm pivotally mounted on said first named arm, a downward extension on said second arm, a rearward and downward extension on said first extension, a disk formed with a hub, a sleeve in said hub, said hub being rotatably mounted thereon a bolt in said sleeve having at one end an eye in which said extension is slidably mounted, a nut on the other end of said bolt, said sleeve being provided with opposite longitudinal slots to receive said eye, the end of said sleeve engaging said arm when said nut is screwed on said bolt, and means for exerting yielding pressure to hold said disk against the surface of the ground.

[Claim 6 not printed in the Gazette.]

1,065,884. SIGNAL DEVICE. CHARLES F. MARSTON, New York, N. Y. Filed May 26, 1911. Serial No. 630,531. (Cl. 177—311.)

1. The combination of a casing, of marks supported in position adjacent the casing, an opening in one side of the casing, a plate within the casing and movable from one position to another, the plate being normally out of view, an index movably mounted on the plate, means for maintaining the index in one position on the plate, means for moving the plate and with it the index to exposed position, the index pointing to one of the marks, there being other means for moving the index on the plate as the plate moves, whereby the index may point to other marks.



2. The combination of a casing, an opening in one side thereof, marks supported adjacent the opening, each of the marks indicating a move to be made by the operator, a plate movably supported within the casing and normally out of view, an index movably supported on the plate, means for bringing the plate and the index into view adjacent the said opening with the index pointing to one of the marks, there being a plurality of separate means within the casing coöperating with each other and also with the index, operation of which will cause the index to point to other marks as the plate and the index are moved to exposed position.

3. The combination of a casing, an opening in one side thereof, a plurality of marks positioned adjacent the opening, a plate movably supported within the casing, the said plate having an index thereon, the index being movable on the plate to different positions, the plate and index being normally out of view, means for bringing the plate and index into view adjacent the opening with the index pointing to one of the marks, a plurality of separate means in operative relation with the said index and adapted for coöperation with the means for moving the plate, whereby the plate and index may be moved to exposed position with the index pointing to other marks.

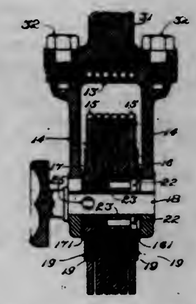
4. The combination of a casing having marks thereon, one side of the casing being provided with an opening, an index pivotally supported within the casing and adapted to be moved adjacent the said opening and into view, the said index being normally out of view, means being provided for effecting movement of the said index into exposed position and pointing to any one of the said marks.

5. The combination of a casing, marks adjacent the casing, the casing being provided with an opening, a plate pivotally supported within the casing, an index movably mounted on the plate, and means whereby the plate and index may be swung into position adjacent the said opening with the index pointing to one of the marks.

[Claims 6 to 24 not printed in the Gazette.]

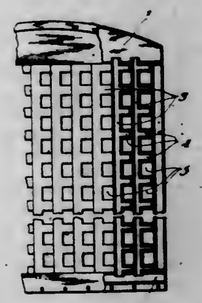
1,065,885. STAMPING, MARKING, OR NUMBERING MACHINE. FRANK W. MERRICK, Boston, Mass., assignor to Power Numbering Machine Company, Boston, Mass., a Corporation of Massachusetts. Original application filed June 12, 1907, Serial No. 378,609. Divided and this application filed Jan. 10, 1910. Serial No. 537,101. (Cl. 101—83.)

1. In a stamping or numbering machine, in combination, a series of settable type-wheels and a barrel constituting a carrier therefor, said wheels and barrel secured together and constituting an organized unit removable as a whole and remaining intact after removal, a central support for said unit, rotatable for effecting the setting of said type-wheels, and adapted to be disengaged from the said unit to permit removal thereof as a whole, and a type-head constructed to permit ready removal of said unit after such disengagement without disorganization of said type-head.



2. In a stamping or numbering machine, in combination, a series of settable type-wheels and a barrel constituting a carrier therefor, and on which said type-wheels are respectively rotatable for setting the same, said wheels and barrel combined and secured together to constitute an organized unit removable as a whole and remaining intact after removal, a type-head constructed to permit ready removal and replacement of said unit, and a rotatable shaft occupying bearings in connection with said type-head, passing through said barrel and supporting the latter in working position, serving as a means of turning the barrel and type-wheels in setting the latter, also adapted to be withdrawn to permit the said unit to be removed bodily from the type-head, and provided with locking means for securing it removably in working position.

1,065,886. PROCESS OF PRODUCING RADIATOR-SECTIONS. IVAR A. RANDEL, Chicago, Ill. Filed Jan. 24, 1912. Serial No. 673,056. (Cl. 204—8.)



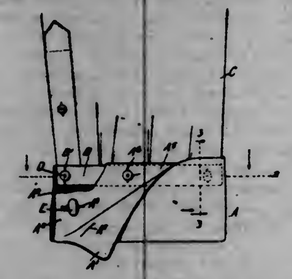
1. The process of constructing tubular sections, which consists in forming a core of fusible material, in forming around the said core a tubular shell of relatively high fusibility, in cutting the said shell into sections, and in removing the core from the shell sections by fusing the same.

2. The process of constructing open ended tubular sections, which consists in forming a core of fusible material, in forming around the said core a metallic shell of relatively high fusibility, by the electroplating process, and in removing the core from the shell sections by fusing the same.

3. The process of constructing tubular sections which consists in forming a fusible core, in forming around the said core a metallic shell of relatively high fusibility, by the electroplating process, in cutting the said shell and core into sections, and in removing the cores from the shell sections by fusing the same.

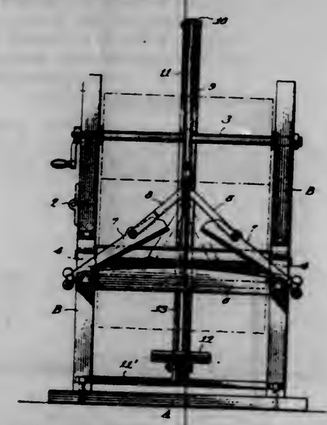
4. The process of constructing tubular metallic sections which consists in giving the desired form to a fusible core.

1,065,881. DETACHABLE CUFF. LOUIS D. LIVINGSTON, New York, N. Y., assignor to Livingston & Lieberman, New York, N. Y. Filed Oct. 9, 1912. Serial No. 724,769. (Cl. 2—79.)



As a new article of manufacture a detachable cuff for shirt sleeves, comprising doubled-up outer and inner portions, of which the inner portion is provided along its rear edge with a pocket for the reception of the sleeve band, buttons secured to the inner face of the inner part of the pocket, and buttonholes in the outer part of the pocket and in register with and adapted to be engaged by the said buttons, the said buttons being adapted also to engage buttonholes in the sleeve band, the said outer portion of the cuff being of a greater width than the said inner portion to overlie and cover the said pocket.

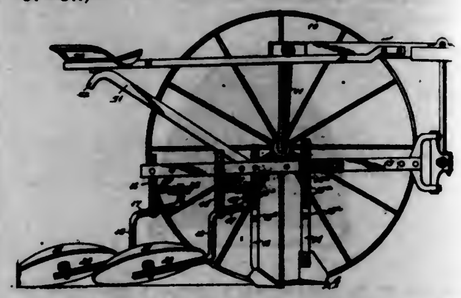
1,065,882. BAGGING-MACHINE. WILLIAM F. LOCKWOOD, Hollis, Okla. Filed Feb. 1, 1913. Serial No. 745,671. (Cl. 164—46.)



1. In a bagging cutting machine, the combination with uprights or standards having feed rolls connected thereto, of a knife supported by the standards having the cutting edge tapering from the center thereof, blades hinged to the standards and lying parallel with and in close proximity to the knife, and means for operating the blades for causing a cutting operation.

2. In a bagging cutting machine, the combination with standards having feed rolls connected thereto, of a knife supported by the standards having the cutting edge thereof tapering from the center toward the ends of the knife, blades pivotally connected to the standards and lying parallel and in close proximity to the knife, links connected to the blades, a rod connected to the links, an upright having a spring-controlled lever pivotally mounted thereon, said lever connected to the rod and normally holding the blades above the cutting edge of the knife, a foot lever supported by the standards, and a link connecting the foot lever and spring-controlled lever whereby the blades can be operated for producing a cutting operation.

1,065,883. DISK CULTIVATOR. GEORGE A. MANFULL, Brighton, Colo. Filed Nov. 1, 1911, Serial No. 657,958. Renewed Oct. 17, 1912. Serial No. 726,401. (Cl. 97—37.)



1. In a device of the class described, a cultivator frame mounted on wheels, disks, means for rotatably mounting the same on said frame in substantially horizontal position with their front edges slightly higher than the level of their rear edges, and with their inner edges slightly higher than the level of their outer edges, and adjustable yielding means for holding said disks against the surface of the ground.

2. In a device of the class described, a cultivator frame mounted on wheels, disks, means for rotatably mounting the same on said frame in substantially horizontal position with their front edges slightly higher than the level of their rear edges, and with their inner edges slightly higher than the level of their outer edges, and adjustable means for cutting furrows of varying depths in front of said disks.

3. In a device of the class described, a cultivator frame mounted on wheels, a downwardly extending arm on said frame, an extension extending downwardly and rearwardly from said arm, a disk formed with a hub, a sleeve said hub being rotatably mounted on said sleeve, a bolt in said sleeve having at one end an eye in which said extension is slidably mounted, a nut on the other end of said bolt, said sleeve being provided with opposite longitudinal slots to receive said eye, the end of said sleeve engaging said arm when said nut is screwed on said bolt.

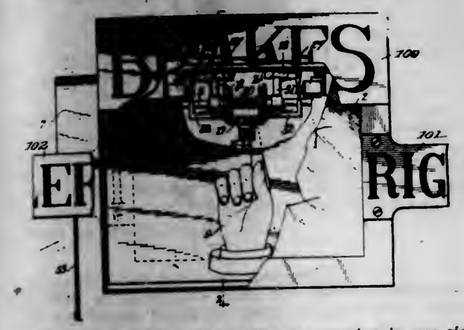
4. In a device of the class described, a cultivator frame mounted on wheels, a downwardly extending arm mounted on said frame, a substantially horizontal arm pivotally mounted on said first named arm, a downward extension on said second arm, a rearward and downward extension on said first extension, a disk formed with a hub, a sleeve the hub being rotatably mounted thereon, a bolt in said sleeve having at one end an eye in which said extension is slidably mounted, a nut on the other end of said bolt, said sleeve being provided with opposite longitudinal slots to receive said eye, the end of said sleeve engaging said arm when said nut is screwed on said bolt.

5. In a device of the class described, a cultivator frame mounted on wheels, a downwardly extending arm mounted on said frame, a substantially horizontal arm pivotally mounted on said first named arm, a downward extension on said second arm, a rearward and downward extension on said first extension, a disk formed with a hub, a sleeve in said hub, said hub being rotatably mounted thereon a bolt in said sleeve having at one end an eye in which said extension is slidably mounted, a nut on the other end of said bolt, said sleeve being provided with opposite longitudinal slots to receive said eye, the end of said sleeve engaging said arm when said nut is screwed on said bolt, and means for exerting yielding pressure to hold said disk against the surface of the ground.

[Claim 6 not printed in the Gazette.]

1,065,884. SIGNAL DEVICE. CHARLES F. MARSTON, New York, N. Y. Filed May 26, 1911. Serial No. 629,551. (Cl. 177—311.)

1. The combination of a casing, of marks supported in position adjacent the casing, an opening in one side of the casing, a plate within the casing and movable from one position to another, the plate being normally out of view, an index movably mounted on the plate, means for maintaining the index in one position on the plate, means for moving the plate and with it the index to exposed position, the index pointing to one of the marks, there being other means for moving the index on the plate as the plate moves, whereby the index may point to other marks.



2. The combination of a casing, an opening in one side thereof, marks supported adjacent the opening, each of the marks indicating a move to be made by the operator, a plate movably supported within the casing and normally out of view, an index movably supported on the plate, means for bringing the plate and the index into view adjacent the said opening with the index pointing to one of the marks, there being a plurality of separate means within the casing coöperating with each other and also with the index, operation of which will cause the index to point to other marks as the plate and the index are moved to exposed position.

3. The combination of a casing, an opening in one side thereof, a plurality of marks positioned adjacent the opening, a plate movably supported within the casing, the said plate having an index thereon, the index being movable on the plate to different positions, the plate and index being normally out of view, means for bringing the plate and index into view adjacent the opening with the index pointing to one of the marks, a plurality of separate means in operative relation with the said index and adapted for coöperation with the means for moving the plate, whereby the plate and index may be moved to exposed position with the index pointing to other marks.

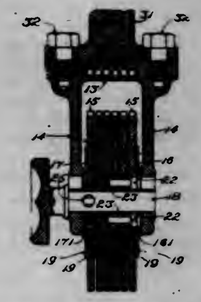
4. The combination of a casing having marks thereon, one side of the casing being provided with an opening, an index pivotally supported within the casing and adapted to be moved adjacent the said opening and into view, the said index being normally out of view, means being provided for effecting movement of the said index into exposed position and pointing to any one of the said marks.

5. The combination of a casing, marks adjacent the casing, the casing being provided with an opening, a plate pivotally supported within the casing, an index movably mounted on the plate, and means whereby the plate and index may be swung into position adjacent the said opening with the index pointing to one of the marks.

[Claims 6 to 24 not printed in the Gazette.]

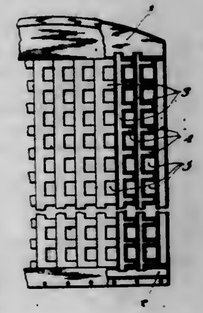
1,065,885. STAMPING, MARKING, OR NUMBERING MACHINE. FRANK W. MERRICK, Boston, Mass., assignor to Power Numbering Machine Company, Boston, Mass., a Corporation of Massachusetts. Original application filed June 12, 1907, Serial No. 378,609. Divided and this application filed Jan. 10, 1910. Serial No. 537,101. (Cl. 101—83.)

1. In a stamping or numbering machine, in combination, a series of settable type-wheels and a barrel constituting a carrier therefor, said wheels and barrel secured together and constituting an organized unit removable as a whole and remaining intact after removal, a central support for said unit, rotatable for effecting the setting of said type-wheels, and adapted to be disengaged from the said unit to permit removal thereof as a whole, and a type-head constructed to permit ready removal of said unit after such disengagement without disorganization of said type-head.



2. In a stamping or numbering machine, in combination, a series of settable type-wheels and a barrel constituting a carrier therefor, and on which said type-wheels are respectively rotatable for setting the same, said wheels and barrel combined and secured together to constitute an organized unit removable as a whole and remaining intact after removal, a type-head constructed to permit ready removal and replacement of said unit, and a rotatable shaft occupying bearings in connection with said type-head, passing through said barrel and supporting the latter in working position, serving as a means of turning the barrel and type-wheels in setting the latter, also adapted to be withdrawn to permit the said unit to be removed bodily from the type-head, and provided with locking means for securing it removably in working position.

1,065,886. PROCESS OF PRODUCING RADIATOR-SECTIONS. IVAR A. RANDEL, Chicago, Ill. Filed Jan. 24, 1912. Serial No. 673,056. (Cl. 204—8.)



1. The process of constructing tubular sections, which consists in forming a core of fusible material, in forming around the said core a tubular shell of relatively high fusibility, in cutting the said shell into sections, and in removing the core from the shell sections by fusing the same.

2. The process of constructing open ended tubular sections, which consists in forming a core of fusible material, in forming around the said core a metallic shell of relatively high fusibility, by the electroplating process, and in removing the core from the shell sections by fusing the same.

3. The process of constructing tubular sections which consists in forming a fusible core, in forming around the said core a metallic shell of relatively high fusibility, by the electroplating process, in cutting the said shell and core into sections, and in removing the cores from the shell sections by fusing the same.

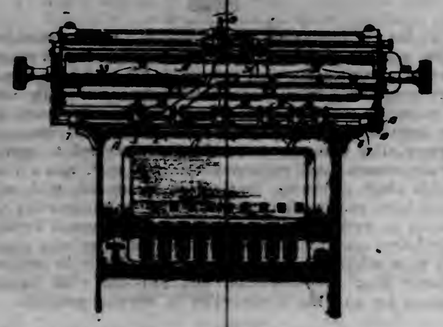
4. The process of constructing tubular metallic sections which consists in giving the desired form to a fusible core.

by means of cooperating dies, in subjecting said core to an electroplating bath and thereby forming thereon a metallic shell of relatively high fusibility, in cutting the said shell and core into sections, and in removing the core from the shell sections by fusing the same.

5. The continuous process of constructing metallic shells, which consists in displacing portions of a fusible strip to thereby form a core having the desired interior form of the shell to be formed thereon, in forming on the said core a thin metallic shell of relatively high fusibility, the said two operations being carried out during approximately coincident periods of time, and in thereafter removing said core from said shell by fusing the same.

[Claims 6 to 9 not printed in the Gazette.]

1,065,887. COMPUTING-MACHINE. FRANK C. RINSCHE, St. Louis, Mo. Filed June 8, 1907. Serial No. 377,976. (Cl. 235—84.)



1. In a machine of the class described, a transversely movable paper carriage, said carriage being also movable to and from printing position, and means to guide said carriage to the precise point desired for printing when it is moved from non-printing position to printing position.

2. In a machine of the class described, a movable paper carriage, an indicator adapted to show on the paper where printing will occur, means to shift the paper carriage to bring any desired part of the paper under said indicator, and adjustable setting means whereby the carriage may be subsequently set in the same position independently of the initial indicating means, said adjustable means having provisions for guiding the carriage to and holding it in a definite predetermined position.

3. In a machine of the class described, a paper carriage, an indicator whereby the paper carriage can be positioned to receive the impression of the printing mechanism at any desired position, and setting devices upon the carriage and upon the frame of the machine, part of said setting devices being adjustable and constructed to guide the carriage to and hold it in definite predetermined positions.

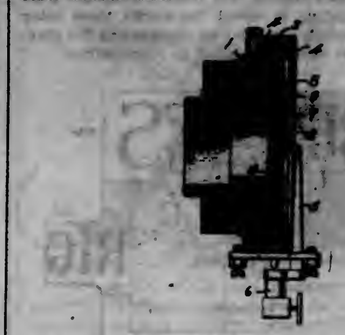
4. In a machine of the class described, a movable paper carriage, a positioning stud thereon, a stop bar on the frame of the machine, and a stop adjustably mounted on said stop bar, said stop being provided with a V-shaped notch.

5. In a machine of the class described, a movable paper carriage, a positioning stud thereon, a stop-bar on the frame of the machine, and a series of stops adjustably mounted on said stop-bar, said stops being provided with V-shaped notches.

[Claims 6 to 16 not printed in the Gazette.]

1,065,886. SOUND-MODIFYING DEVICE. WILLIAM G. SABINE, Youngstown, Ohio, assignor to Annie Perry Sabine, Youngstown, Ohio. Filed Nov. 20, 1912. Serial No. 732,572. (Cl. 181—11.)

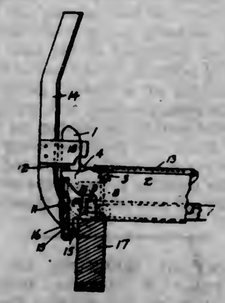
1. A modifying attachment for sound boxes, comprising, in combination with the main diaphragm, a laminated muffling unit clamped within the sound box at the inner side of the diaphragm and including a pair of rubber disks, one of which is arranged against the diaphragm, a metal disk arranged against one of the rubber disks, and a parchment disk interposed between the metal disk and the other rubber disk.



2. A modifying attachment for sound boxes, comprising, in combination with the main diaphragm, a laminated muffling unit clamped within the sound box at the inner side of the diaphragm and including a pair of rubber disks, one of which is arranged against the diaphragm, a metal disk located between the rubber disks and of less external diameter than the same, and a parchment disk interposed between the metal disk and one rubber disk and having an internal auxiliary sound clarifying chamber.

3. A modifying attachment for sound boxes, comprising in combination with the main diaphragm, a laminated muffling unit clamped within the sound box at the inner side of the diaphragm and including a pair of rubber disks of uniform diameter and having central openings therein, one of the rubber disks being arranged against the diaphragm, a metal disk arranged against one of the rubber disks and of less external diameter than the same, and also having a central opening, and a parchment disk of substantially the external diameter of the rubber disks and having a concentric hole of greater diameter than those of the other disks, said parchment disk being interposed between the metal disk and the other rubber disk.

1,065,889. LOGGING-CAR STAKE. EDWARD B. SHIELDS, Tacoma, Wash., assignor to Turtle-Back Log Bunk and Car Stake Company, Tacoma, Wash., a Corporation of Washington. Filed Mar. 20, 1913. Serial No. 755,673. (Cl. 105—173.)



1. In a car stake, the combination with a bunk extending across the car and having a stake guide at one end and a cross wall at the other end; a stake pivoted to said bunk and positioned within the stake guide; a compression bar secured to said stake and extending across the car and engaging the cross wall of the bunk whereby said stake is held in upright position; and a removable latch engaging the compression bar adjacent to said cross wall and adapted to prevent said bar from moving out of engagement with said cross wall.

2. In a car stake, the combination with a stake mounted on the car and having means whereby said stake is releasably held in upright position; of a standard engaging and supported by the car at its lower end; and a strap secured to said standard intermediate its ends and engaging the inner side of said stake, whereby said standard is held from outward movement.

3. In a car stake, the combination of a standard; the foot of said standard being shaped to engage the upper corner of the car sill to support the standard and to prevent the inward movement of the foot; and releasable means engaging said standard above its foot and holding it against outward movement.

4. In a car stake, the combination with a bunk having vertical walls formed in the end thereof, said walls forming a stake guide; a stake pivoted to the bunk and mounted within said guide whereby when it is in withdrawn position said stake will lie between said walls; and a spring friction surface secured to said stake and extending therefrom and adapted to engage said guide walls when said stake is in withdrawn position.

1,065,890. PROCESS OF PRODUCING METALS. SVEN EMIL SIEURIN, Höganäs, Sweden. Filed May 6, 1910. Serial No. 559,849. (Cl. 75—14.)

1. In the reduction of iron ore, the process which comprises assembling masses of such ore spaced by bodies of fuel, the size of such masses being such that the greater proportion of the material of such masses is out of contact with said fuel, and heating such assemblage under exclusion of air to a temperature insufficient to produce fusion but sufficient to produce a reduction of such ore to the metallic state.

2. The method of producing a body of iron free from fuel contaminations, which comprises assembling a substantial body of iron ore with one or more faces in proximity to a body of fuel but with the greater proportion of the ore in such ore body out of direct contact with said fuel, heating the assemblage by externally derived heat to a temperature below the melting point of iron until the ore is reduced, and then removing from the main metal body so produced the exterior faces contaminated by contact with solid materials from the body of fuel.

3. The method of reducing iron ore with low-grade sulfur-containing fuel without contamination of the produced iron by sulfur and other fuel impurities which comprises admixing such fuel with sulfur-retaining bases, assembling a body of such admixture in proximity to one or more faces of a substantial body of ore, the greater proportion of the material in such admixture and of the ore in such ore body being out of direct contact, and heating the assemblage by externally derived heat to a temperature below the melting point of iron until the ore is reduced.

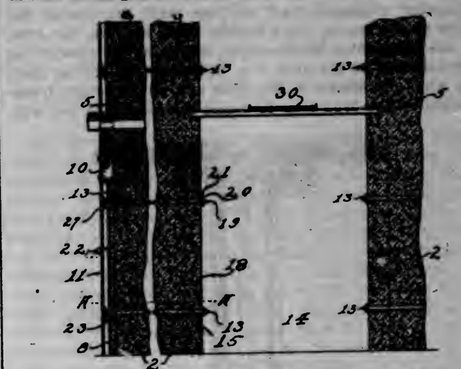
1,065,891. PROTECTING DEVICE FOR JAIL-FRONTS. FOLGER ADAM, Joliet, Ill. Filed Sept. 30, 1910. Serial No. 584,737. (Cl. 189—7.)

1. In combination with a cell having a door lock mechanism box recessed in one of its walls, said box having a plate forming the true outer surface of the front of said cell, a removable protecting front plate placed over said box and forming an outer front wall of said cell, and means passing through said outer surface to engage said front plate to lock it closed, said means being inaccessible from the front of said front plate.

2. In combination with a jail cell structure having a front facing a main corridor and a back facing a utility corridor, of locking devices on the front of said structure, a protecting front covering said devices, and means accessible from said utility corridor for locking and unlocking said front.

3. In a jail cell structure, the combination of a cell front having a removable protecting panel, and means extending back from said panel, to the rear of said structure and inaccessible from in front of said structure for locking said panel on said front.

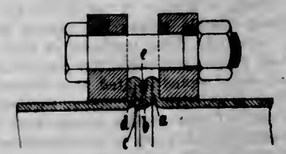
4. In combination with a jail cell structure including a partition wall and a front and back portion, of locking devices disposed on the front portion, a protecting front covering said locking devices, and means extending through said partition and accessible from the back portion of the cell for locking and unlocking said protecting front.



5. In combination with a cell having front and side walls and a door locking mechanism box recessed in said front wall, said box being open in front of said cell and having an inner plate forming the true outer surface of said cell front, a removable cover plate over said box and forming an outer front wall of said cell, a shaft passing through said inner plate and having means engaging the inner surface of said cover plate, and a casing through one of the walls of said cell surrounding said shaft.

[Claims 6 to 8 not printed in the Gazette.]

1,065,892. PIPE-JOINT. FRANZ ALBERT, Dusseldorf-Rath, Germany. Filed May 26, 1911. Serial No. 629,548. (Cl. 137—28.)



A pipe joint of the character described comprising butt-ended pipes having their ends folded outward to form radial abutment flanges for independent joint-clamping rings, said flanges being annularly recessed in register on their meeting faces to receive an interposed calking ring, one of said pipes having its end fold forwardly extended to form a centering and calking-protecting flange alined with the pipe and the other pipe end having its end fold shortened to afford a recess in which said forwardly projecting centering flange lies with its inner face flush with the inner face of the pipe, substantially as described.

1,065,893. CABLE-CARRIER APPARATUS. GEORGE A. AMSDEN, Littleton, Mass., assignor to Lamson Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 2, 1908. Serial No. 465,752. (Cl. 186—14.)

1. In a cable carrier apparatus, a way comprising forwarding and return tracks, means for supporting the tracks in close parallel relation, a carrier to travel on the way, an endless motor cable to propel the carrier along the way, a drop loop formed in the way extending at right angles from the same comprising closely associated narrow elongated U-shaped track-sections, means in the track-section of the forwarding member of the drop loop to deliver the carrier from the way, and means in the track-section of the return member of the drop loop to admit the carrier to the way.

2. In a cable carrier apparatus, a way comprising forwarding and return tracks, means for supporting the tracks in close parallel relation, a carrier to travel on the way, an endless motor cable to propel the carrier along the way, a drop loop formed in the way extending at right angles from the same comprising closely associated narrow elongated U-shaped track sections with the one of the arms of the return track-section offset between the arms of the forwarding track-section, means in the forwarding track-section of the drop loop to deliver the carrier from the way, and means in the offset arm of the return track-section of the drop loop to admit the carrier to the way.

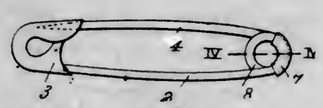


3. In a cable carrier apparatus, an elevated way having a drop station disposed at a distance relatively remote from the way proper, said way comprising both forwarding and return tracks, means for supporting said forwarding tracks substantially in parallel relation to said return tracks, a carrier to travel on the way, continuously driven flexible means for raising said carrier substantially vertically from the level of said station to that of the way proper and thereafter propelling said carrier along said way, means located at a determined point for interrupting propulsive engagement between said carrier and the part of said flexible means with which said carrier is in engagement when it encounters said engagement-interrupting means, said last mentioned means including provisions for displacing said carrier laterally with respect to the normal path of travel of said part at such point and for thereafter guidedly directing the movement of the disengaged carrier in a determined path, said continuously driven flexible means having a portion thereof running through said drop station, which portion raises the carrier from the lower to the higher level in manner aforesaid, said determined path being spaced from said portion to obviate any possibility of operative reëngagement between said portion and the so disengaged carrier at any time while the latter is traversing any part of said determined path, said path extending laterally but downwardly for a part at least of the length thereof, said way comprising closely associated narrow elongated U-shaped track sections with the one of the arms of the return track-section offset between the arms of the forwarding track-section, means in the forwarding track-section of the drop loop to deliver the carrier from the way, and means in the offset arm of the return track-section of the drop loop to admit the carrier to the way.

4. In a cable carrier apparatus, an elevated way having a drop station disposed at a distance relatively remote from the way proper, said way comprising both forwarding and return tracks, means for supporting said forwarding tracks substantially in parallel relation to said return tracks, a carrier to travel on the way, continuously driven flexible means for raising said carrier substantially vertically from the level of said station to that of the way proper and thereafter propelling said carrier along said way, and means located at a determined point for interrupting propulsive engagement between said carrier and the part of said flexible means with which said carrier is in engagement when it encounters said engagement-interrupting means, said last mentioned means including provisions for displacing said carrier laterally with respect to the normal path of travel of said part at such point and for thereafter guidedly directing the movement of the disengaged carrier in a determined path, said continuously driven flexible means having a portion thereof running through said drop station, which portion raises the carrier from the lower to the higher level in manner aforesaid, said determined path being spaced from said portion to obviate any possibility of operative reëngagement between said portion and the so disengaged carrier at any time while the latter is traversing any part of said determined path, said path extending laterally but downwardly for a part at least of the length thereof and being looped upwardly thereafter to gradually check the speed of the carrier upon its arrivel at said station.

[Claims 6 and 7 not printed in the Gazette.]

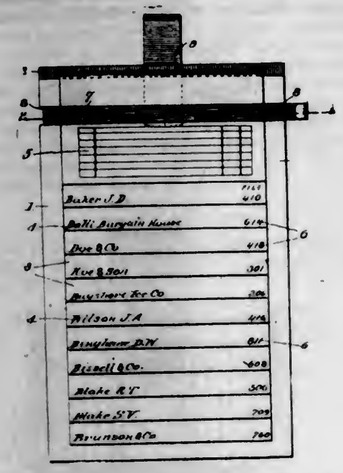
1,065,894. SAFETY-PIN GUARD. ROBERT M. BABIN and JULES MISEREZ, Waterbury, Conn., assignors to American Pin Company, Waterbury, Conn., a Corporation of Connecticut. Filed Aug. 15, 1912. Serial No. 715,247. (Cl. 24—161.)



The combination with a safety pin having a coil comprising laterally contacting convolutions and a material-engaging point extending from one of said convolutions, of a guard for said coil, said guard being depressed into the angular peripheral recess between said convolutions to extend the edge of said guard to a point adjacent to the line of contact between said convolutions at the point at which said material-engaging point diverges from the coil.

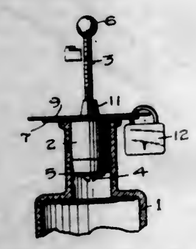
1,065,895. LOOSE-LEAF INDEX. JOHN AUSTIN BEST, Augusta, Ga. Filed Sept. 24, 1910. Serial No. 583,567. (Cl. 11—7.)

1. In a device of the character described, a card folded intermediate of its ends to form substantially parallel spaced portions, and separable sheets or leaves folded on the upper edge of one of said portions of the folded card, said sheets or leaves having one of their terminals confined between the two portions of the card, the other terminals of the sheets or leaves lying on the outer side of the card, means for holding the sheets and card in assembled positions, the edges of the last mentioned sheet terminals being in stepped relationship for the entry of indexing indicia.



2. In a device of the character described, a supporting card folded intermediate of its ends and providing substantially parallel spaced portions the rear portion of the card having its free terminal extending beyond the free terminal of the front portion of the card, a plurality of separable sheets or leaves mounted on the free terminal of the front portion of the card and bent to engage the front side of the card and to be confined between the front and rear portions thereof, the front edges of said leaves being in stepped relation, and means engaging said card and leaves to hold them together, said holding means being provided with an index tag.

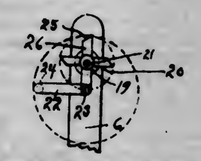
1,065,896. BOTTLE-STOPPER. JOHN W. CARTER, Brooklyn, N. Y. Filed July 17, 1911. Serial No. 638,804. (Cl. 215—33.)



1. In combination with a stopper, a rod extending through the latter and having a head engaging one end thereof; a disk, adapted to engage the end of a bottle-neck, fixed immovably to the other end of the stopper, said disk having a plurality of apertures therein; a plate above said disk, having an aperture to register with an aperture of the disk; means for causing expansion of the stopper laterally; and means coöperating with the plate and disk for locking the same together.

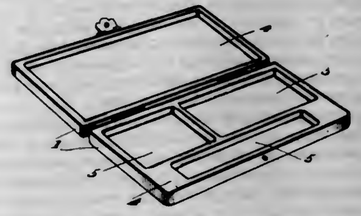
2. In combination with a stopper, a rod extending through the latter and having means engaging one end of the stopper; a disk at the other end of the stopper and centered by the rod and adapted to engage the end of a bottle-neck; means between the disk and stopper for holding them from relative circular movement; means for causing the disk and stopper engaging means to compress the stopper; a plate coöperating with said disk to hold the latter from movement; and means for locking the plate and disk together.

1,065,897. ADVERTISING-SIGN. GEORGE R. COLVIN, Spokane, Wash. Filed Feb. 19, 1910, Serial No. 544,935. Renewed Oct. 2, 1912. Serial No. 723,591. (Cl. 40—68.)



An advertising sign comprising a rotatable sign body, polygonal ends and glass sides set inwardly from the peripheries of said ends provided upon said body, a base member upon which said body is supported, a T-shaped stop member hinged to the base at a point exteriorly of the plane of the normally vertically positioned adjacent side of the body and having a horizontal portion thereof coextensive in length with said body and in constant exterior contact with said ends thereof in the same horizontal plane with the longitudinal axis of the body and incapable of contacting the glass sides thereof, a resilient member secured at one end to the stop at a point below the plane of the bottom of the body in its normal horizontal position and the other end of said resilient member secured to the base at a point beneath said body.

1,065,898. CASE. FREDERICK W. GOERDES, Newark, N. J., assignor to American Button Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 27, 1910. Serial No. 557,891. (Cl. 206—16.)



1. In combination, a case, a resilient sheet metal former therein having a flange about its periphery adjacent to the edges of said case and fitting closely therein, and a portion depressed from said flange portion and entering said case, and a fabric lining fitting closely to the contour of said former and clamped between the flange portion of the former and the walls of the case.

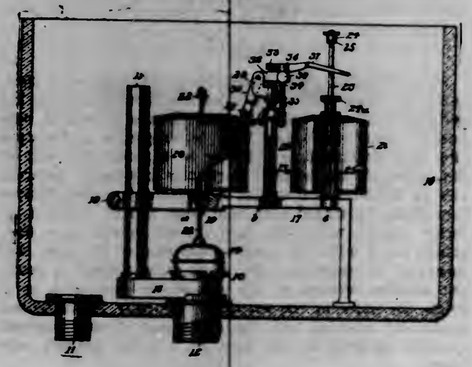
2. In combination, a case, a resilient sheet metal former therein having a flange about its periphery adjacent to the edges of said case and fitting closely therein, a portion depressed from said flange portion and entering said case, and a partition struck from said depressed portion and bent up substantially at right angles thereto, a fabric lining fitting closely to the contour of said former and clamped between the flange portion of the former and the walls of the case.

3. In combination, a case, a rigid former therein having a flange portion about its periphery adjacent to the edges of the walls of said case and fitting closely therein, a portion depressed from said flange portion and entering said case, a partition bent up substantially at right angles to the bottom of said depressed portion, and a lining substantially following the contour of said former and the partitions struck up therefrom and clamped between the flange portion of the former and the walls of the case.

1,065,899. FLUSHING APPARATUS. WILLIAM GUYTON, Avalon, and ROBERT STINSON, Pittsburgh, Pa. Filed June 15, 1911. Serial No. 633,236. (Cl. 4—5.)

1. In flushing apparatus and in combination, a valve-operating float, means for normally restraining the flota-

tion movements of said float, and a separate float adapted to release such restraining means when the water level has reached its predetermined height, a non-movable support extending axially of said float, and a bushing carried by and adjustable axially of said releasing float to vary the water level height at which said releasing operation takes place, said bushing and support coöperating to guide the releasing float during its movements.



2. In flushing apparatus and in combination, a valve-operating float, means for normally restraining the flotation movements of said float, a separate float adapted to release such restraining means, and a stationary guide for and on which said latter float travels, said restraining means including an element located in the path of movement of both floats, said element being free to move relatively to said guide formed of parts adjustably connected to move in unison, the adjustment varying the length of movement of the releasing float without affecting the normal position of either float.

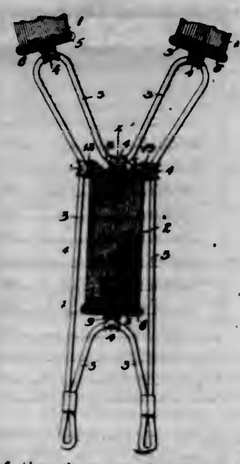
3. In flushing apparatus and in combination, a valve-operating float, means for normally restraining the flotation movements of said float, a separate float adapted to release such restraining means, and a stationary guide for and on which said latter float travels, said restraining means including an element located in the path of movement of both floats, and projecting over the valve float when the latter is restrained, said element being free to move relatively to said guide and including means for adjusting the element to vary the amount of such projection, whereby the length of releasing movement may be varied.

4 A controlling device for timing the operation of flushing apparatus, comprising a support, a rocking lever having a roller adapted to normally retain the valve-opening float against operation, said lever having an adjustable stop to control the movement of the lever in one direction, the adjustments of said stop controlling the sensitiveness of the tripping of said release of the float, a member carried by said lever and adapted to be moved by the rise of the water in the flushing apparatus in a direction to rock the lever in the opposite direction, said member being adjustable to vary the time of movement of the lever, and a float for moving said member in one direction.

5. A controlling device for timing the operation of flushing apparatus, comprising a support, a pivoted lever having a roller adapted to normally retain the valve-opening float against operation, a member carried by said lever and adjustable thereon, and a float independent of said member for moving it in one direction, said movement rocking the lever to release the valve-opening float, the adjustment of said member controlling the time of rocking of the lever, the movements of said member in the opposite direction being independent of the fall of the water level.

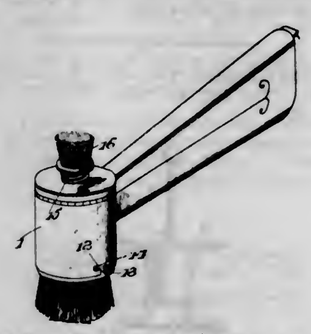
[Claims 6 and 7 not printed in the Gazette.]

1,065,900. SUSPENDERS. HENRY C. HINE, New Britain, Conn., assignor to the Trent & Hine Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 3, 1912. Serial No. 713,037. (Cl. 241—23.)



In a device of the character described, a loop plate having a cord guide pivoted thereon, an offset extending from the rear of said plate and located at the rear of said pivoted guide and lying in the arc of movement thereof.

1,065,901. FOUNTAIN-BRUSH. CLARENCE R. BAENDER, Fruitvale, Cal. Filed May 12, 1911. Serial No. 626,779. (Cl. 15—46.)

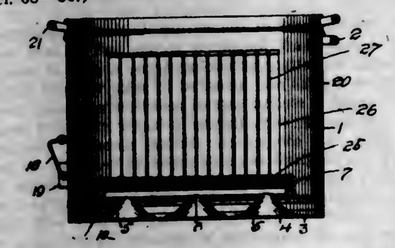


1. In a fountain brush, a reservoir having a bottom, a flange surrounding the bottom and formed with a slot opening at the lower edge of the flange and extending vertically therein and with a slot extending circumferentially of the flange and in communication at a point substantially midway between its ends with the upper end of the first mentioned slot, a dauber head rotatably mounted within the flange, the bottom of the reservoir being formed with an opening, and the dauber-head being formed with an opening arranged to register with the opening in the bottom of the reservoir, and a projection on the dauber-head working in the circumferentially extending slot, the openings in the dauber-head and reservoir being out of registration when the projection is seated in one end of the said slot and being in registration when the projection is seated in the other end of the said slot, the dauber head being removable when the projection is in registration with the upper end of the first mentioned slot.

2. In a fountain brush, a reservoir having a convex bottom formed with an opening and a flange surrounding

the bottom and formed with a slot, a dauber-head rotatably mounted beneath the bottom and having a concavity receiving the said bottom, the dauber head being formed with an opening, a packing disk secured upon the concave face of the dauber head and having an opening in registration with the opening in the dauber-head and arranged to register with the opening in the bottom of the reservoir, rotation of the dauber head to one position serving to cause registration of the opening in the bottom of the reservoir and the packing disk and rotation of the dauber head to another position serving to cause non-registration of the said openings, and a projection upon the dauber head working in the slot.

1,065,902. WASHBOILER. KAZIMIER BOROVSKI, Detroit, Mich. Filed Nov. 11, 1912. Serial No. 730,657. (Cl. 68—80.)

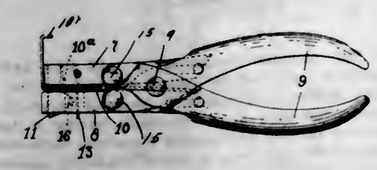


1. A wash boiler comprising a receptacle having its bottom formed with a series of longitudinally alining openings, cone-shaped nipples secured to the upper face of said bottom and arranged over said openings, a cylindrical longitudinally extending heat conduit having said nipples connected thereto and communicating therewith, a clothes holder mounted in said receptacle and having its bottom formed with an oblong opening, a semi-cylindrical perforated casing secured to the bottom of the holder and into which extends said conduit, said holder further having its bottom provided with perforations.

2. In a wash boiler, a clothes holder comprising a body portion having each of its sides provided with large openings, vertically disposed spaced parallel bars arranged within said body portion and at each of said openings, said body portion having its bottom formed with a longitudinally extending oblong opening, and a semi-cylindrical perforated casing secured to the upper face of said bottom and over said oblong opening, said bottom being further perforated.

3. A wash boiler comprising a receptacle for a clothes holder, said receptacle having its bottom provided with a plurality of longitudinally alining openings, cone-shaped nipples secured to the upper face of said bottom and arranged over said openings, and a longitudinally cylindrical closed heat conduit secured to the top of and communicating with said nipples.

1,065,903. FASTENING DEVICE. GEORGE P. BUMP, Newton, Iowa, assignor of one-half to J. C. Hawkins, Newton, Iowa. Filed May 14, 1909. Serial No. 495,985. (Cl. 93—1.)



1. A device for fastening sheets of paper, comprising cutting means constructed to form a tongue from the paper, which tongue is integrally united to the body of the paper at one end, means for penetrating the paper adjacent to the attached end of the tongue, and means for causing said penetrating means to draw the end of the tongue through the opening made thereby.

2. A paper fastening machine comprising means for cutting paper to form a tongue, means for making a perforation through the paper adjacent to said tongue, said perforating means having an opening or eye, and means operative while said perforating means is in the paper for placing the end of the tongue in said eye, whereby upon withdrawal, said perforating means is caused to draw the tongue through the perforation.

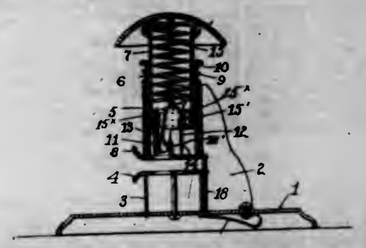
3. A paper fastening device comprising a cutter constructed to form a tongue in the paper, a piercing device adjacent to said cutter arranged to pass through the paper at the same time with the latter, said piercing device having a tongue engaging portion, and a tongue bender operative while said cutter and piercing device are in the paper for bending back the tongue into engagement with the piercing device whereby as said piercing device withdraws it pulls the end of the tongue through the opening which it had previously made.

4. A paper fastener comprising a pair of connected jaws or arms, a punch carried by one of said jaws, and a coöperating die on the other jaw having cutting edges arranged to form a tongue, a piercing device extending from one of said jaws besides said punch and adapted to penetrate the paper simultaneously therewith, means operative while the punch and piercing device are in the paper for bending back the tongue into such position that it is drawn through the paper upon withdrawal of said piercing device, and a stripper for stripping the paper from the punch and piercer.

5. A device for fastening together a plurality of sheets comprising jaws, one of which is movable in relation to the other, a cutter on one jaw, the other jaw having a recess to receive the cutter, a slitter adjacent the cutter and extending transversely in relation to the same, and to the tongue formed by the cutter to form a transverse slit in the paper adjacent the base of the tongue, said slitter and cutter bearing a fixed relation to each other, and said slitter having a portion to engage the tongue and a folder movable toward the slitter to move the end of the tongue into engagement with the slitter after the same passes through the paper, whereby, upon withdrawal of the slitter from the sheets, the end of the tongue will be drawn back trough the slit, substantially as described.

[Claims 6 to 22 not printed in the Gazette.]

1,065,904. MEANS FOR FASTENING PAPER SHEETS. GEORGE P. BUMP, La Crosse, Wis. Filed July 16, 1910. Serial No. 572,376. (Cl. 93—1.)



1. In a paper fastening machine, a stand, a shear plate thereon, a tongue cutter, needle and threader, a carrier for said parts, a guide on the stand, a stripper plate operating between the tongue cutter, needle and threader and the shear plate, a carrier for the stripper plate, both of said carriers operating within the guide and means for operating the carriers, substantially as described.

2. In combination with a stand, a shear plate supported thereon, a stripper plate with a carrier for the same, a second carrier, a punch, needle and threader carried by the second carrier, said needle having a tongue engaging portion, said punch being shaped to cut a tongue from the

paper, the needle being located adjacent the punch to form a slit near the base of the tongue and transverse to the longitudinal axis of the tongue, and the threader being arranged adjacent the needle to engage the tongue when the punch and needle are forced through the paper to turn the tongue backward into engagement with the needle, the said punch, needle and threader being movable in unison toward and from the shear plate.

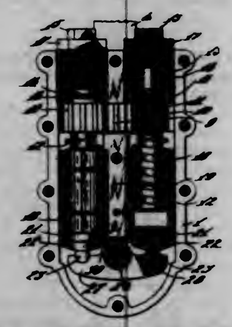
3. In combination, a stand, a shear plate, a stripper plate movable toward and from the shear plate, a carrier for the stripper, a punch, needle and threader, a second carrier upon which said punch, needle and threader are all mounted to move in unison therewith toward and from the shear plate, said carriers having movement relative to each other.

4. In combination a stand, a shear plate, a stripper plate movable toward and from the shear plate, a carrier for the stripper, a punch, needle and threader, a second carrier upon which said punch, needle and threader and all mounted to move in unison therewith toward and from the shear plate, said carriers having movement relative to said other, one of said carriers deriving its movement from the movement of the other carrier.

5. In a paper fastening device, the combination of a stationary support, an upright section slidably carried by said support, another section connected to and located at the lower end of said first section, a cutting knife and a slitting knife rigidly mounted on the section first mentioned and projecting into said lower section, said slitting knife having a tongue engaging portion near its slitting edge, a base on which said support is mounted, said base and said lower section having openings in alinement with said knives, means for operating said sections to cut a tongue from the paper and slit the paper near the base of the tongue, and a folder secured to the section first mentioned for bending the end of the tongue into engagement with the slitting knife, whereby the tongue is automatically drawn through the slitted sheets upon return movement of the sections.

[Claims 6 to 11 not printed in the Gazette.]

1,065,905. STEERING-GEAR. EMIL GNOETH, Madisonville, Ohio, assignor to William F. Harmon, trustee, Cincinnati, Ohio. Filed June 3, 1912. Serial No. 701,422. (Cl. 74—79.)



1. A device of the nature disclosed, combining a casing, a rock shaft journaled therein and having oppositely extending arms, a pair of abutments mounted in said casing, each oppositely distanced from said arms, a nut and screw intervening between one of said abutments and one of said arms, a second nut and second screw similarly arranged between the other abutment and arm, and means for elongating the one nut and screw and simultaneously shortening the other nut and screw to rock said shaft.

2. A device of the nature disclosed, combining a casing, a rock shaft journaled therein and having oppositely extending arms, a pair of abutments mounted in said casing, each oppositely distanced from said arms, a nut and screw intervening between one of said abutments and one of said arms, a second nut and second screw similarly arranged between the other abutment and arm, means for adjusting the position of said abutment to vary the extent of play in said parts, and means for elongating the one nut and screw and simultaneously shortening the other nut and screw to rock said shaft.

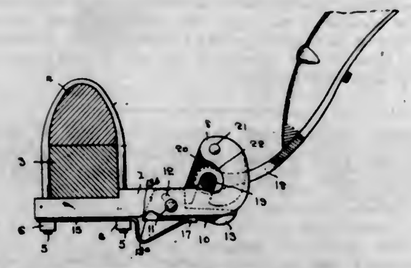
3. A device of the nature disclosed, combining a casing, a rock shaft journaled therein and having oppositely extending arms, a pair of abutments mounted in said casing, each oppositely distanced from said arms, a nut and screw intervening between one of said abutments and one of said arms, one of said parts being restrained against rotation and the other against translation, a second nut and second screw operatively arranged between the other abutment and arm, means for adjusting the position of said abutment to vary the extent of play in the parts, and means for elongating the one nut and screw and simultaneously shortening the other nut and screw to rock said shaft.

4. A steering-gear of the nature disclosed, combining a casing, a rock shaft journaled at one end of said casing and having oppositely extending arms, a pair of members abutting said arms and mounted to slide without rotating in said casing, a second pair of members rotatably mounted in said casing, each having a screw threaded engagement with the companion sliding member, abutments limiting the longitudinal movement of said second members, gears connecting said second members whereby they may be simultaneously rotated, and a steering post connected to rotate said second member whereby said sliding members may be translated in opposite directions to rock said shaft.

5. A steering-gear of the nature disclosed combining a casing, a rock shaft journaled at one end of said casing and having oppositely extending arms, a pair of members abutting said arms and mounted to slide without rotating in said casing, a second pair of members rotatably mounted in said casing, each having a screw-threaded engagement with the companion sliding member, abutments limiting the longitudinal movement of said second members, means for adjusting the position of one of said abutments for varying the extent of backlash in said parts, gears connecting said second members whereby they may be simultaneously rotated, and a steering post connected to rotate said second members whereby said sliding members may be translated in opposite directions to rock said shaft.

[Claims 6 to 11 not printed in the Gazette.]

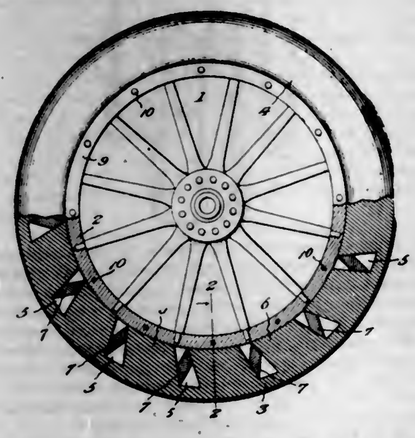
1,065,906. THILL-COUPLING. GEORGE T. HAMBRICK and EMIL B. PETERS, Georgetown, Ky. Filed Nov. 15, 1912. Serial No. 731,544. (Cl. 21—57.)



1. A thill coupling comprising a thill iron having a cross bar, a body portion provided with parallel hook terminals spaced apart, a latch member pivotally supported between said hook terminals having a bearing opening and an open slot leading therefrom to receive the cross bar of the thill iron, a detent pivotally mounted in the space between the lower edges of said terminals and having a shoulder to engage the latch member, and a spring bearing on the detent to maintain said engagement.

2. A thill coupling comprising a thill iron having a cross bar, a body portion provided with parallel hook terminals spaced apart and having notches in their bottom edges and transverse pin openings, a latch pivoted between the hook terminals provided with a transverse opening and laterally projecting bearings to fit in the hooks of the terminals and having a slot leading outwardly from the transverse opening to receive the cross bar, a detent between the hook terminals having a curved slot, a forward cross head bearing under the terminals, a rear cross head bearing in the notches of the terminals and a shoulder to engage behind the latch member, a pin passing through the pin opening in the terminals and the curved slot in the detent, and a spring bearing under the detent and maintaining the shoulder in engagement with the latch member and the rear cross head in the notches in the bottom edges of the terminals.

1,065,907. TIRE. FREDERICK W. REDDING, Jacksonville, Mo. Filed Dec. 1, 1911. Serial No. 663,343. (Cl. 152—1.)



A cushion tire for vehicle wheels comprising a resilient body having therein a series of transverse passages formed at an angle with the radius and providing between themselves obliquely disposed blocks or pillars and obliquely held bracing bars arranged in said passages and disposed at an angle opposite to the angle of the blocks.

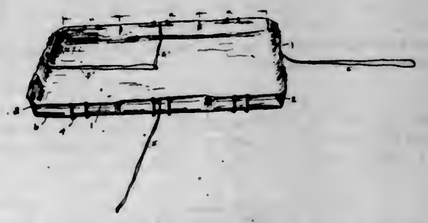
1,065,908. CHAIR. CHARLES J. TRAVERS, Chicago, Ill. Filed Sept. 14, 1910. Serial No. 582,088. Cl. 155—3.)



1. In an article of the class described, the combination, of wire legs for the same, each comprising a length of wire doubled upon itself at one side of its center and thereby producing a long and a short terminal, the longer terminal being bent upon itself to produce a brace having a loop at its outer end.

2. In an article of the class described, the combination, of wire legs for the same, each comprising a blank of wire doubled upon itself at one side of its center and thereby producing a long and a short terminal and the intermediate portion of the longer terminal bent upon itself to form a brace, the wires of the leg being twisted together above and below the brace and the wires of the brace likewise twisted together to near the outer end of said brace, leaving a loop.

1,065,909. BATH-MAT. RUDOLPH V. ZIMMERMAN, Alexandria, Ind., assignor of one-half to Alfred H. Woodward, Alexandria, Ind. Filed Nov. 14, 1912. Serial No. 731,350. (Cl. 4—27.)



1. A bath mat comprising a water tight fabric of rectangular form, stiffening rods composed of three separate lengths attached to each of the four edges of the fabric, formed wire edge supporting devices attached to the edges of the fabric centrally with each length of stiffening rod and means attached centrally to each of the four edges of the fabric for lifting the mat.

2. A bath mat comprising a water tight fabric of rectangular form, stiffening rods composed of three separate lengths suitably attached to each of the four edges of the fabric, wire supporting devices formed in loops and attached to each length of stiffening rod, the loop end of the supporting devices being bent at right angles near the center thereof to form supporting feet, and cords extending from each of the four edges.

3. A bath mat comprising a water tight fabric of rectangular form having its edges formed to provide a dish like receptacle and the corners doubled over or otherwise closed, stiffening rods secured to each of the four edges and composed of three lengths to each edge thereby permitting the edge to double over at two points in its length, devices for supporting the edges consisting of formed wire loops suitably fastened centrally to each length of the stiffening rods, the said loops being bent at an angle to form supporting feet, cords attached to the edges for lifting the mat wherein the corner rods cause the corner portion of the mat to double back permitting the central body to form a deep receptacle for retaining liquid contents.

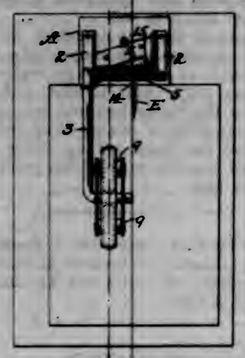
1,065,910. TOILET-PAPER HOLDER. EDGAR JEROME, Norwalk, Conn. Original application filed June 15, 1909, Serial No. 502,345. Divided and this application filed Feb. 21, 1911. Serial No. 610,027. (Cl. 24—154.)

1. A suspension wire for packs of paper sheets having a horizontal portion, a vertical portion, a hook extending laterally at an inclination to the vertical portion, substantially as described.

2. A suspension wire with a portion to extend through a paper pack from back to front, and turned up at its front end, said wire extending upwardly at right angles to the first portion and having a laterally extending inclined hook to lie in a plane parallel with the plane of the back face of a paper pack, substantially as described.

3. In devices of the class described, a suspension hook

having a substantially vertical portion, with an inclined laterally extending hook at its upper end and bearing



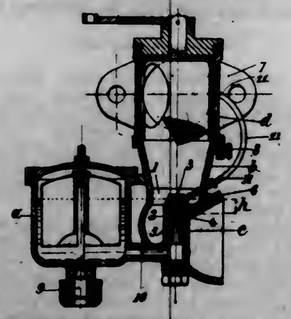
means to receive said hook arranged at an inclination, substantially as described.

1,065,911. BOTTLE OR JAR SEAL. RAYMOND C. DOLE and CHARLES H. HINEMEYER, Toledo, Ohio. Filed Oct. 11, 1912. Serial No. 725,296. (Cl. 215—14.)



A bottle or jar seal comprising a disk having a depressible portion formed by a slit or incision therein, said depressible portion being arranged wholly between the center and a portion of the periphery of the disk, the extremities of the slit or incision being relatively and continuously diverged toward and terminating short of the periphery of the disk, whereby the depressible portion is adapted to be depressed on a line of a rigid portion of the cap intersecting the diverging ends of the slit as an axis, and whereby the portion of the disk between the said depressible portion and the periphery of the disk is made rigid with said depressible portion and is adapted to be deflected upward without distortion of the remaining portions of the body of the disk when said depressible portion is depressed.

1,065,912. AUTOMATIC CARBURETER. GEORGES BINON, Paris, France, assignor to Joseph Boutelle, Neuilly-sur-Seine, France. Filed Oct. 26, 1910. Serial No. 589,139. (Cl. 48—155.1.)



In a carbureter for internal combustion engines the combination with a jet placed below the normal level of the fuel and superposed by a reservoir preventing the flooding of the liquid fuel, the whole located in a restricted space of the suction pipe, of a system of canals communicating with the said reservoir and leading, one to the suction chamber between the throttle valve and the motor and the other to the ambient air for the purposes given in the specification, all substantially as set forth.

REISSUES.

13,580. PRIMING DEVICE FOR CARBURETERS. JULIUS L. FRITZ, Philadelphia, Pa., assignor of one-half to Amos H. Oman, Philadelphia, Pa. Filed Apr. 26, 1913. Serial No. 763,943. Original No. 1,048,518, Dated Dec. 31, 1912, Serial No. 677,812. (Cl. 48—155.1.)



1. In an automatic priming device, the combination with a carbureter having a fuel supply in direct connection with a passage leading to the intake manifold of an internal combustion engine, of a valve controlling the flow of fuel from the supply to said passage, and devices controlling the flow of air and fuel through said passage adapted to be opened for air by the engine suction and to automatically close for fuel on a predetermined increase of the suction and the amount of opening of said devices inversely varying the amount of air and fuel.

2. In an automatic priming device, the combination with a carbureter having a float chamber and a passage leading to the intake manifold of an internal combustion engine, of a fuel conduit communicating with said chamber and said passage, a valve controlling said conduit, and a second valve controlling the flow of air and fuel through said conduit and adapted to be opened for air by the engine suction and to automatically close for air when said suction ceases and close for fuel at a predetermined increase of the suction.

3. In an automatic priming device, the combination with a carbureter having a float chamber and a passage leading to the intake manifold of an internal combustion engine, of a fuel conduit communicating with said chamber and said passage, a valve controlling said conduit, and a second valve controlling the flow of fuel and air through said conduit and adapted to be opened for air by the engine suction and to automatically close for air when said suction ceases and close for fuel at a predetermined increase of the suction, and devices for limiting the movement of said second valve.

4. In an automatic priming device, the combination with a carbureter having a float chamber and a passage leading to the intake manifold of an internal combustion engine, of a fuel conduit communicating with said chamber and said passage, a valve controlling said conduit, a second valve controlling the flow of air through said passage and fuel through said conduit and adapted to be opened for air by the engine suction and to automatically close for air when said suction ceases and close for fuel at a predetermined increase of the suction, and means for rendering the first valve inoperative.

5. In an automatic priming device, the combination with a carbureter having a float chamber and a passage leading to the intake manifold of an internal combustion engine, of a fuel conduit communicating with said chamber and said passage, a valve controlling said conduit, a second valve controlling the passage of air and fuel through said conduit and adapted to be opened for air by the engine suction and to automatically close for air when said suction ceases and close for fuel at a predetermined increase of the suction, and means for rendering the second valve inoperative.

6. In an automatic priming device, the combination with a carbureter having a float chamber and a passage leading to the intake manifold of an internal combustion engine, of a conduit communicating with said chamber and said passage, a valve controlling said conduit, and a counterbalanced compensating valve loosely mounted on and controlling said first valve.

7. In an automatic priming device, the combination with a carbureter having a float chamber and a passage leading to the intake manifold of an internal combustion engine, of a conduit communicating with said chamber and said passage, a valve controlling said conduit, and a compensating valve loosely mounted on said first valve and counterbalanced to provide for the automatic closing of the same, said compensating valve varying the amount of fuel passing through said first valve and also controlling admission of air to said passage.

8. In an automatic priming device, in combination with a carbureter having a float chamber and a passage leading to the intake of an internal combustion engine, of a by-pass communicating with the float chamber and said passage, a counterbalanced valve rotatably mounted and adapted to vary the amount of fuel entering said passage, and devices for rendering said counterbalanced valve inoperative.

9. In an automatic priming device, a carbureter having a fuel supply and a passage leading to the intake manifold of an internal combustion engine, a by-pass communicating with said fuel supply and said passage, a valve having an inlet port communicating with said conduit and having a discharge port within said passage, a counterbalanced valve rotatably mounted and adapted to automatically close and to be opened by the engine suction, and means for actuating said first valve to render the counterbalanced valve inoperative.

10. In an automatic priming device, a carbureter having a fuel supply and a passage leading to the intake manifold of an internal combustion engine, a by-pass communicating with said fuel supply and said passage, a valve having an inlet port communicating with said conduit and having a discharge port within said passage, a counterbalanced valve rotatably mounted and adapted to automatically close and to be opened by the engine suction, means for actuating said first valve to render the counterbalanced valve inoperative, and devices for visibly indicating the operative and inoperative condition of said valve.

11. In an automatic priming device, the combination with a carbureter having a fuel supply and a passage leading therefrom to the intake manifold of an internal combustion engine, of a conduit communicating with said fuel and with said passage, a valve rotatably mounted and controlling admission of fuel from said conduit into said passage, and a compensating valve loosely mounted on said first valve and having means for causing the same to automatically close, said compensating valve being opened by the engine suction.

12. In an automatic priming device, a carbureter having a fuel supply and a passage leading from the mixing chamber to an internal combustion engine, a valve rotatably mounted and having a port opening into said passage, a by-pass communicating with said port and with said fuel supply, a compensating valve loosely mounted on said first valve and controlling the port therein and operated by engine suction, and a connection for manually actuating said first valve.

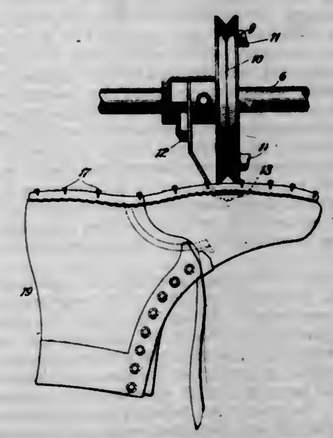
13. In an automatic priming device, a carbureter having a fuel supply and a passage leading from the mixing chamber to an internal combustion engine, a valve rotatably mounted and having a port opening into said passage, a by-pass communicating with said port and with said fuel supply, a compensating valve loosely mounted on said first valve and controlling the port therein and operated by engine suction and closing said port when in wide open position, and a connection for manually actuating said first valve.

14. In an automatic priming device, a carbureter casing having a fuel supply and a passage leading from the mixing chamber to an internal combustion engine, a valve having a conical bearing rotatably mounted in said casing and having a port communicating with said passage, a compensating valve loosely mounted on said valve and controlling the port therein, means for manually actuating said first valve, and devices carried by said first valve and interlocking with the casing to visibly indicate the position of said first valve.

15. In an automatic priming device, a carbureter having a fuel supply and a passage leading from the mixing chamber to an internal combustion engine, a valve rotatably mounted and having a port opening into said passage, a by-pass communicating with said port and with said fuel supply, a compensating valve loosely mounted on said first valve and controlling the port therein and operated by engine suction, a connection for manually actuating said first valve, and a throttle valve in said passage anterior to said valves.

16. In an automatic priming device, a carbureter having a fuel supply and a passage leading from the mixing chamber to an internal combustion engine, a valve rotatably mounted and having a port opening into said passage, a by-pass communicating with said port and with said fuel supply, an apertured compensating valve loosely mounted on said first valve and controlling the port therein and operated by engine suction, an arm adjustable on said first valve and engaging said compensating valve, and a connection for manually actuating said first valve.

13,581. LASTING-TACK PULLER. LESLIE V. MILLER, Chicago, Ill., assignor to United Shoe Machinery Company, Paterson, N. J., a Corporation of New Jersey. Filed May 8, 1909. Serial No. 493,761. Original No. 897,003, dated Aug. 25, 1908, Serial No. 395,087. (Cl. 12—16.)



1. In a tack-pulling machine for lasted shoes, the combination of a rotary shaft, a wheel supported on said shaft to adapt a lasted shoe to be moved in a path lengthwise of its series of side-tacks across the periphery of the wheel, and an extractor-blade projecting from a side of said wheel to rotate therewith in a plane intersecting said path for the purpose set forth.

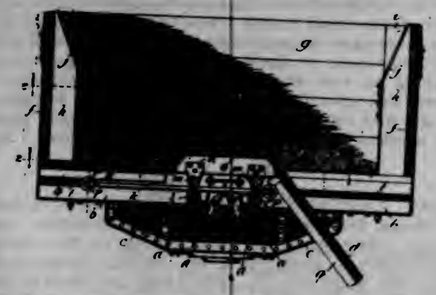
2. In a tack-pulling machine for lasted shoes, the combination of a rotary shaft, a wheel on said shaft having a circumferentially grooved periphery, and an extractor blade on said wheel extending crosswise of its periphery, for the purpose set forth.

3. In a tack-pulling machine for lasted shoes, the combination of a rotary shaft, a peripherally grooved wheel on said shaft, an extractor-blade extending across the periphery of the wheel and projecting beyond a side thereof, and a guide supported to extend adjacent to said periphery, for the purpose set forth.

4. A tack pulling machine for lasted shoes, having, in combination, a rotary hub having its periphery provided with one or more projecting tack extracting wiper blades, and means for engaging the shoe laterally of the blades arranged to permit the surface of the shoe to be protruded into the path of the blades.

5. A tack pulling machine for lasted shoes, having, in combination, a rotary wheel provided with a tack extracting wiper blade shaped and arranged to dig into the sole and extract sole tacks from a shoe, and means against which the shoe is held arranged to permit the surface of the sole to be protruded into the path of the blade, substantially as described.

13,582. DUMP-CAR. SPENCER OTIS, Chicago, Ill., assignor, by mesne assignments, to National Dump Car Company, a Corporation of Maine. Filed June 8, 1907. Serial No. 378,045. Original No. 780,759, dated Jan. 24, 1905, Serial No. 162,002. (Cl. 105—14.)



1. In a car of the class described, the combination of a supporting frame portion, a drop bottom therefor formed of a plurality of swinging sections pivotally secured thereto, a reciprocating rack bar for and in engagement with each swinging section, and pinion mechanism for reciprocating said rack bar and thereby opening and closing the swinging sections, substantially as described.

2. In a car of the class described, the combination of a supporting framework provided with a drop bottom formed of a plurality of swinging sections pivotally secured thereto at each side of the longitudinal center, a reciprocating rack bar having a bearing portion at each foward lateral edge in the framework of the car and contacting the under side of each swinging section, and pinion mechanism for reciprocating said bar, substantially as described.

3. In a car of the class described, the combination of a supporting framework provided with transverse beams, a drop bottom therefor formed of a plurality of swinging sections pivotally secured to the framework at each side of the longitudinal center, track mechanism supported in the supporting framework of the car, a movable rack bar having the forward lateral edge thereof, running in the tracks on the supporting framework and contacting the under surface of each swinging section, and pinion mechanism for reciprocating said rack bars and thereby opening and closing the swinging sections, substantially as described.

4. In a car of the class described, the combination of a supporting framework provided with a plurality of transverse deck beams, a drop bottom portion formed of a plurality of swinging sections pivotally secured at their inner edges to the supporting framework at each side of the longitudinal center, a rack bar for each and every swinging section provided with projections at its forward lateral edges and antifriction rollers thereon contacting the under portion of each swinging section, pinion mechanism for each rack bar to reciprocate the same, and track mechanism on the deck beams engaging the forward lateral edges of the rack bar so as to keep the same in contact with the under portion of the swinging sections to open and close the same, substantially as described.

5. In a car of the class described, the combination of a supporting framework provided with a plurality of transverse deck beams, a drop bottom for such car formed of a plurality of swinging sections pivotally secured to the supporting framework between the deck beams and at each side of the longitudinal center of the car, track mechanism on the under surface of each swinging section, a rack bar movably mounted in the supporting framework of the car and provided at its forward portion with antifriction wheels engaging the tracks on the under surface of the swinging sections, and pinion mechanism for reciprocating such racks to open and close the swinging sections, substantially as described.

6. In a car of the class described, the combination of a supporting framework provided with a plurality of transverse deck beams, a drop bottom for such car formed of a plurality of swinging sections pivotally secured to the supporting framework between the deck beams and at each side of the longitudinal center of the car, track mechanism on the under surface of each swinging section, a rack bar movably mounted in the supporting framework of the car and provided at its forward portion with antifriction wheels engaging the tracks on the under surface of the swinging sections, pinion mechanism for reciprocating such racks to open and close the swinging sections, roll mechanism between which and the pinion mechanism the rack bars are movably mounted and held in position, and track mechanism secured to the transverse deck beams for holding the forward portion of the rack bars in operative position, substantially as described.

7. In a car of the class described, the combination of a supporting framework formed of a plurality of longitudinal center sills, a plurality of transverse deck beams laid on the center sills and extending entirely across the car, floorwork arranged at the upper part of the transverse deck beams, a plurality of doors forming the dumping bottom of such car, bodily movable shafts for supporting and operating said doors, and means for operating said reciprocating members, substantially as described.

8. In a car of the class described, the combination of a plurality of center sills extending continuously from end to end of the car, a plurality of deck beams laid thereon extending continuously across the car from side to side, a floor portion at the upper part of the deck beams, side frames mounted upon the other ends of and supported by such deck beams, a dumping bottom portion formed of a plurality of swinging sections, bodily movable shafts for supporting and operating said doors, and means for operating said reciprocating members, substantially as described.

9. In a car of the class described, the combination of a supporting framework provided with a plurality of center sills extending longitudinally of the car from end to end, a plurality of transverse deck beams laid on the upper part of such center sill and extending entirely across the car from side to side thereof, a drop bottom or floor portion formed of a plurality of swinging sections pivotally secured to the supporting framework of the car at each side of the longitudinal center and at or near the upper part of and between the transverse deck beams, metal bars secured to the under side of each swinging section so as to form track mechanism, rack bars reciprocatingly mounted in the supporting framework of the car and provided with antifriction roll mechanism engaging the tracks of the swinging sections, pinion mechanism for reciprocating such rack bars, and track mechanism secured to the side faces of the transverse deck beams to hold the forward portion of the rack bars and thereby the antifriction rolls in operative engagement with the swinging sections, substantially as described.

10. In a car of the class described, the combination with a supporting framework comprising longitudinal central supporting means, of transverse members laid on the longitudinal supporting means and extending entirely across the car, a floor comprising longitudinally arranged dumping doors, bodily movable shafts for supporting and operating said doors, and means for operating said reciprocating members, substantially as described.

11. A car of the class described having a floor comprising a series of dumping doors and reciprocating shaft for supporting and operating the doors, means for operating the shaft, and means for holding the shaft at any position to which it may be adjusted.

12. In a dump car, the combination of a car frame, a dumping door mounted therein movable to open and closed positions, a reciprocatory shaft for operating such door, pawl and ratchet mechanism connected with such shaft, a lever for operating the pawl and ratchet mechanism and thereby the shaft and door, and means for holding the shaft and thereby the door in different adjusted positions.

13. In a dump car, the combination with a car frame, of a dumping door mounted therein movable to open and closed positions, a bodily movable shaft for operating said door, mechanism comprising a pawl and ratchet operatively connected to said shaft for moving the same to open and close said door, a lever for operating the pawl and ratchet mechanism and thereby said shaft and door, and means for holding said shaft and thereby said door in different adjusted positions.

14. In a dump car, the combination with a car frame, of a dumping door mounted therein movable to open and closed positions, a reciprocatory shaft for operating such door, mechanism comprising a pawl and ratchet operatively connected to said shaft for reciprocating the same and thereby opening and closing said door, a lever for operating the pawl and ratchet mechanism and thereby the shaft and door, and means for locking said shaft in any position to which it is reciprocated and thereby holding said door in different adjusted positions.

15. In a dump car, the combination with a car frame, of a dumping door mounted therein movable to open and closed positions, a bodily movable shaft for operating such door, mechanism comprising a pawl and ratchet operatively connected to said shaft for bodily moving the same, a lever for operating the pawl and ratchet mechanism and thereby moving said shaft to open and close said door, and means for holding said shaft and thereby said door in different adjusted positions.

16. In a dump car, the combination with a car frame, of a dumping door mounted therein movable to open and closed positions, a bodily reciprocatory shaft for engaging said door to open and close the same, mechanism comprising a pawl and ratchet operatively connected to said shaft for bodily reciprocating the same, a lever for operating said pawl and ratchet mechanism and thereby bodily reciprocating said shaft, and means for locking said shaft and thereby said door in different adjusted positions.

17. In a dump car, a hinged door, a bodily movable shaft for supporting and operating said doors, and actuating means for said shaft comprising a rack and pinion, said rack being positioned above said pinion.

18. In a car of the class described, the combination of a support, a floor comprising hinged dumping doors, door operating and supporting shafts bodily movable on said support and engaging the under side of the doors, and racks and pinions for imparting bodily movement to said shafts, said racks being arranged above the axis of the pinions.

19. In a car of the class described, the combination of a support, a floor comprising hinged dumping doors, door operating and supporting shafts bodily movable on said support and engaging the under side of the doors, and racks and pinions for imparting bodily movement to said shafts, said racks being provided with downwardly directed teeth and said pinions being mounted below said racks.

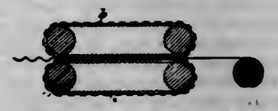
20. In a car of the class described, the combination of a longitudinal central supporting means, transverse deck-beams supported thereby, a plurality of swinging floor sections pivotally attached thereto, a bodily movable shaft for operating said doors, a lever, pawl and ratchet mechanism connected with said lever, and means by which said pawl and ratchet mechanism may impart a bodily movement to said shaft.

21. In a car of the class described, the combination of longitudinal central supporting means, transverse deck-beams supported thereby, a plurality of swinging floor sections pivotally attached thereto, a bodily movable shaft for operating said doors, a rotatable shaft, pawl and ratchet mechanism associated with said rotatable shaft, a lever for operating said pawl and ratchet mechanism, and means by which said rotatable shaft may impart a bodily movement to said operating shaft.

22. In a car of the class described, the combination of a longitudinal central supporting framework, a plurality of transverse deck-beams laid on said supporting framework and extending entirely across the car, floorwork arranged at the upper part of the transverse deck-beams, a plurality of doors forming the dumping bottom portion of such car, bodily movable shafts for supporting and operating said doors, and means for operating said reciprocating members.

23. In a car of the class described, the combination of a longitudinal central supporting framework extending continuously from end to end of the car, a plurality of deck-beams laid thereon extending continuously across the car from side to side, a floor portion at the upper part of the deck-beams, side frames mounted upon the outer ends of and supported by such deck-beams, a dumping bottom portion formed of a plurality of swinging sections, bodily movable shafts for supporting and operating said doors, and means for operating said reciprocating members, substantially as described.

13,583. CHAIN-MACHINE FOR THE MANUFACTURE OF CORRUGATED CARDBOARD. CAMILLE THIEBAUT, Vitry-sur-Seine, France, assignor to Xavier Pene, Ozone Park, N. Y. Filed Jan. 10, 1913. Serial No. 741,359. Original application filed Apr. 1, 1903, Serial No. 150,660. Divided and application filed Aug. 31, 1904, Serial No. 222,900. Original No. 810,891, dated Jan. 23, 1906. (Cl. 154—30.)



1. A machine for the manufacture of corrugated cardboard, having driving shafts provided with grooves throughout their entire length, chains passing over said driving shafts having on their under side grooves corresponding to the grooves of the shafts, and means for passing a sheet of cardboard between the chains of the machine.

2. In a machine for the manufacture of corrugated cardboard or paper, the combination of a plurality of endless belts having corrugated outer faces and grooved inner faces and arranged one above the other with their adjacent runs in contact, and a plurality of rollers for supporting and driving the belts, and provided with grooves co-acting with ribs formed by the grooves of the belts.

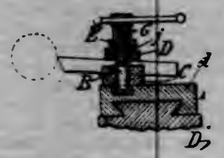
3. In a machine for the manufacture of corrugated cardboard or paper, the combination of a plurality of endless belts having undulatory corrugations on their outer faces and grooves on their inner faces and arranged one above the other with their adjacent runs co-acting.

4. In a machine for the manufacture of corrugated cardboard or paper, a pair of endless belts each having undulatory corrugated blades on the outer surface thereof, said belts being so arranged that a certain part of one belt will be adjacent to a part of the other belt and the corrugations of the blades of one belt will intermesh with the corrugations of the blades of the other belt, means for positively driving the belts adapted to keep the blades rigidly to their work.

5. In a machine for the manufacture of corrugated cardboard, a pair of endless belts having undulatory blades connected to the outer surface thereof, the opposite surface having a series of transverse grooves, a pair of rollers

supporting each belt and arranged transversely thereof, said rollers having longitudinal grooves meshing with ribs formed by the grooves of the belt, said rollers being so arranged that a certain portion of one belt will be adjacent to a part of the other and one roller of one pair will be adjacent a roller of the other pair, whereby the blades will intermesh and will be held with rigidity as they pass over the said rollers.

13,584. TOOL-HOLDER FOR LATHES. FREDERICK D. VAN NORMAN, Springfield, Mass., assignor, by mesne assignments, to Van Norman Machine Tool Company, Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 31, 1911. Serial No. 618,258. Original No. 979,903, dated Dec. 27, 1910, Serial No. 572,964. (Cl. 82—37.)



1. A tool holder comprising a base block and an upper clamping block and means for imparting a clamping bind thereto, the base block having a plurality of upwardly opening channels of varying depths with curved bases, and a tool supporting rocker member having a curved bottom and adapted for engagement in either of said channels.

2. A tool holder comprising a base and an upper clamping block and means for imparting a clamping bind thereto, the base block having a plurality of upwardly opening channels of varying depths and a tool supporting member adapted for engagement in either of said channels.

3. In a lathe tool holder the combination with a slide rest having an upright post adjustably engaged therein, of lower and upper clamping blocks having vertical apertures through which said post passes and whereby said blocks are swiveled on the post, the lower blocks having a plurality of upwardly opening channels of varying depths in portions at different sides of the post and means screw engaging on the post and operative against the upper block for confining it in its engagement with a tool in either of said channels.

4. The combination with a slide rest having an upright post adjustably engaged therewith, of lower and upper clamping blocks having vertical apertures through which said post passes, the lower block having to one side of the post a tool support adjustably engaged therein, and having on the opposite side of said post an outwardly extending and upwardly opening curved depression in the top thereof, and the upper clamping block having an extension to overlie the said curved depression provided with a vertical threaded hole and a screw having an operating head, engaged in said hole, the said screw having a rounded lower end for a rocking engagement in said curved depression, and means, screw engaging on the post and operative against the upper clamping block for confining it in its engagement with a tool in the said tool support.

5. The combination with a tool holder having an upright post, of lower and upper clamping blocks having apertures for said post, the upper block having on its upper face a curved faced rib surrounding the post aperture through said block, a collar surrounding the post and having a recess curved to fit said rib, and means screw engaging with the post and operative through said collar for exerting a clamping pressure against the upper clamping block.

6. The combination with a tool holder having an upright bolt, of lower and upper clamping blocks having apertures for said bolt, the lower block having two upwardly opening channels with curved bases, a tool supporting member adapted for engagement in either of the channels, the upper block having its one end formed for engagement on a tool shank and its opposite end adjustably supported on the lower block, and means carried by the bolt and located above the upper block for imparting a clamping bind thereto.

7. In a tool holder in combination, an upright bolt, a base block and an upper clamping block having apertures for said bolt, the base block being provided with an upwardly opening channel having a curved base, and a tool rest having a curved base supported therein, the upper block having on its upper face a curved faced rib surrounding the bolt aperture through said block, a binder nut screw engaged on the upper portion of said bolt and a collar surrounding said post, said collar being interposed between the said nut and upper block and having a recess curved to fit said rib.

8. A tool holder comprising a base provided with an adjustable tool support, an upper clamping block having its one end screw supported on the base and its other end adapted to overlie the tool support and having its upper central portion of raised curved rib formation, a collar-like member having a recess curved to fit said rib, and means engaging with said member and acting against said upper block for imparting a clamping bind thereto.

9. A tool holder comprising a base having a plurality of openings of varying depths and adapted for the reception of a tool support having a curved bottom, in either of said openings, means for permitting a rocking movement of the clamping block and means for imparting a clamping bind thereto.

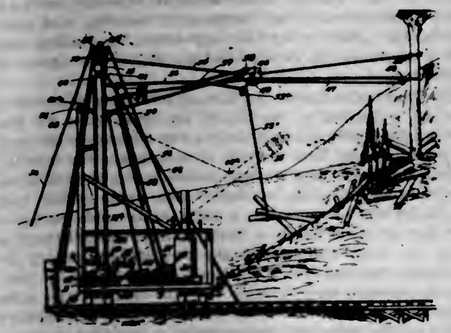
10. A tool holder comprising a base clamping block and an upper clamping block and means for imparting a clamping bind thereto, the base block having two upwardly opening channels of varying depths made with curved bases, and a tool rest bar to be engaged in either of said channels and having a curved bottom and a straight top.

11. The combination with a slide rest having an upright post, of lower and upper clamping blocks having vertical apertures through which said post passes, the lower block having to one side of the post a tool rest bar adjustably supported therein, and on the opposite side of said post an outwardly disposed and upwardly opening curved depression, the upper clamping block having an extension to overlie the said curved depression, a screw engaging with said upper clamping block extension and having its lower end rounded for engagement in said curved depression, the upper block having on its upper face and surrounding the post aperture an upwardly extending curved rib, the curved surface of which is generated from a point below the top of the said upper clamping block, a collar surrounding the post having a curved recess to fit the said rib and means screw engaging with the post and acting against said collar for imparting a clamping pressure to the upper clamping block.

12. The combination with a tool holder having an upright post, of lower and upper clamping blocks having apertures for said post, the base block being provided with a tool rest bar adjustably supported therein, the upper clamping block having on its upper face and surrounding the post aperture an upwardly extending curved rib, the curved surface of which is generated from a point below the top of the said upper clamping block, a collar surrounding said post and having a curved recess to fit the said rib, and means screw engaging with said post and acting through said collar for imparting a clamping bind to the upper clamping block.

13,585. APPARATUS FOR TRANSPORTING LOGS. FREDERICK W. VISKING, Davis, W. Va. Filed Oct. 16, 1912. Serial No. 726,163. Original No. 1,016,103, dated Jan. 16, 1912, Serial No. 648,706. (Cl. 212—144.)

1. In combination, a mast formed with an opening in its bottom which communicates with an open slot, a rotatable base for supporting the mast, said base having an opening which communicates with the opening in the lower end of the mast, a pulley located below the base to guide a cable through the openings, a pulley secured on the mast above the slot therein, a second pulley mounted on the mast above the first mentioned pulley, a cap on top of the mast, a support remote from the mast, a pulley mounted on the support, a cable passing through the opening and open slot and around the pulleys, a guy cable holder mounted on the cap, and means connected to the guy holder for bracing the mast.



2. In combination, a stationary support, a rotating base mounted on the stationary support, means for guiding the rotating base on the support, a mast hinged to the rotating base, means for holding the mast in locked vertical position on the rotating base, a cable guide under the support, said mast having an opening in its lower end, a pulley in the opening, a cap on the mast, a pulley mounted in the cap, a cable passing over the guide and the pulley, means for controlling the cable, and a guy cable holder forming a bearing for the upper end of the mast, and guys extending from the guy cable holder to brace the mast.

3. In combination, a car, a hoisting engine including a series of drums, a stationary base mounted on the car, said base having an opening, a revolving plate located above the stationary plate, said plate having an opening, a flange on the base for guiding and holding the plate in position, anti-friction rollers between the plate and the base, a base collar hinged to the plate, a detachable latch for securing the base collar in locked position, pulleys on the mast near the bottom of the latter, a swiveled pulley near the top of the mast, a swiveled pulley mounted remote from the car, a cap on top of the mast, a series of rollers in the cap, a stationary support remote from the car, a cable passing from one of the drums through the openings and over the aforesaid pulleys, guy ropes for the mast, a carriage mounted on the cable, and cables coöperating with the other drums of the hoisting engine and the carriage to lift and transport logs.

4. In combination, a mast formed with an opening, a base collar secured to said mast, a plate on which the base collar is hinged, means for locking the base collar and mast in vertical position, a base on which the plate revolves, said base having a flange to hold and guide the plate in position, a cap on the top of the mast, guide rollers mounted in the cap, a trunnion projecting from the cap, a guy holder loosely mounted on the trunnion, and means secured to the guy holder for bracing the mast.

5. In combination, a base formed with an opening, a plate mounted above the base and formed with an opening, anti-friction rollers between the base and the plate, a mast hinged to the plate, a locking device for holding the mast in vertical position, a cap on top of the mast, said cap comprising two spaced apart members, and a trunnion, pulleys mounted between the two spaced apart members, one of said pulleys being higher than others, a guy cable support loosely mounted on the trunnion, and pulleys on the mast to guide a cable to the pulleys in the cap.

6. In combination, a mast formed with an opening in its bottom which communicates with an open slot, a rotatable base for supporting the mast, said base comprising a lower stationary member formed with an opening and an upper rotating member formed with an opening, a pivotal connection between the mast and the rotating member, locking means for holding the mast in vertical position on the rotating member, the opening in the stationary and rotating members of the base and the opening in the mast communicating, a pulley under the base to guide a cable through said openings, a pulley secured on the mast above the slot therein, a cap secured on top of the mast, a guy cable holder on top of the housing, and means for bracing the mast.

7. The combination of a mast, a rotatable support for the mast, a cap fitted on the upper end of the mast, two spaced apart plates on the cap, two angle irons fitting against and secured to each of said plates, a horizontal plate having a vertical trunnion secured to the top of the angle irons, a guy cable support loosely mounted on the trunnion and a pulley mounted between the plates.

8. In combination a car, a hoisting engine including drums, a rotatable base mounted on the car, said base having openings, a mast hinged to the rotating base, means for locking the mast in vertical position, said mast having an open slot and an opening communicating with the open slot and the openings in the base, a guide pulley mounted below the base, guide pulleys mounted in the open slot, a cap secured to the top of the mast including spaced apart members and a trunnion, guide pulleys mounted between the members, a guy cable support loosely mounted on the trunnion, a guide pulley swiveled to the mast below the cap, means remote from the mast for guiding a cable to the guide pulleys on the cap, a cable passing from one of the drums around the guide pulleys, and through the openings, a support remote from the car on which the cable is secured, a carriage on the cable, and cables extending from the carriage to the remaining drums of the hoisting engine whereby to operate said carriage to raise and lower logs.

9. In combination, a stationary base, a track thereon, a rotatable plate above the base, a lug on the latter plate, a flange secured to the stationary base and overlapping the rotatable plate to hold the latter in relation to the said base, anti-friction rollers between the plate and base, said base and said plate having openings, a guide pulley mounted under the base, a base ring to receive a mast, means for pivoting the base ring to the rotating plate, a detachable flange on the plate to engage the lug to hold the base ring in vertical position, a mast mounted in the base ring, said mast having an open slot and an opening which communicates with the open slot and the openings in the plate and base, a cap on the mast, and means cooperating with the openings and the guide pulley for guiding a cable to the top of the mast.

10. In combination, a frame, a rotating base mounted on the frame including a hinged section and means for locking the hinged section in position, a mast mounted on the rotating base, said mast having an opening in its lower end and a communicating slot, a pulley mounted below the rotating base, pulleys mounted on the mast, guide pulleys mounted near the top of the mast, a support remote from the mast, a swiveled pulley mounted on the support, a cable passing through the opening in the mast and around the pulleys, means securing the free end of the cable, means for tightening the cable, a carriage mounted on the cable, and means on the frame and mast for controlling the movement of the carriage on the cable.

11. In combination, a revolving base, a mast mounted on the revolving base, said mast having an opening at its lower end, a cap on top of the mast, a series of pulleys mounted in the cap, pulleys, one of which is swiveled at a point remote from the mast, a cable passing through the opening in the mast and around the pulleys, means securing the free end of the cable, means for adjusting the cable, a swiveled guy cable suport loosely mounted on the cap, and means attached to the guy cable holder for bracing the mast.

12. In combination, a rotatable mast, a bearing supporting the bottom of the mast, a journal extending from the top of the mast, a stationary guy support mounted on the trunnion, guys secured to the guy support and rigidly fastened at their lower ends, a guide pulley near the top of the mast, a guide pulley near the bottom of the mast, a

drum, an engine for operating the drum, a main cable extending from the drum and over the two pulleys, means remote from the mast for securing the outer end of the main cable, a carriage mounted to travel on the main cable, a receding cable attached to the carriage, a pulley adjacent the means for securing the outer end of the main cable and around which the receding cable passes, a guide pulley on the mast around which the receding cable passes, a drum operated by the engine to reverse the receding cable, a pulley on the carriage, two hauling cable drums operated by the engine, a hauling cable extending from the two hauling drums and around the guide pulley on the carriage, pulleys on the mast for guiding the hauling cable, a swiveled pulley on the carriage, and a hoisting cable connected to the hauling cable and passing over the swiveled pulley.

13. In combination, a mast, a car on which the mast is mounted to rotate, a guy support mounted at the top of the mast and forming a bearing for the latter, guys for holding the guy support in fixed position, a main drum, a main cable guide pulley on the mast, a main cable extending from the main drum and over the main cable guide pulley, means for fastening the outer end of the main cable to a support remote from the mast, a carriage mounted on the main cable, a receding cable attached to the carriage, a receding cable drum, a receding cable extending from the drum to the carriage, guide pulleys over which the receding cable passes, cables for operating the carriage in the opposite direction and for hoisting a load, a hoisting drum to receive one of said latter cables, an engine for operating the drums, and means operating to brace the mast in opposition to the pull of the main cable.

14. In combination, a mast, means for rotatably mounting the mast, a guy support at the upper portion of the mast, guys securing the guy support, a main cable pulley near the top of the mast, a main cable pulley near the bottom of the mast, a main cable drum, a main cable passing from the drum and over the main cable pulleys, means for securing the free end of the main cable at a point remote from the mast, means for bracing the mast in opposition to the pull of the main cable including a connection to automatically adjust the bracing, a carriage mounted on the main cable, a receding cable attached to the carriage, a drum to receive the receding cable, a guide pulley remote from the mast over which the receding cable passes, a similar guide pulley mounted on the mast over which said receding cable passes, a hauling cable, a guide on the carriage around which the hauling cable passes, guide pulleys on the mast over which the hauling cable passes, two drums for receiving the opposite ends of the hauling cable, a hoisting cable attached to the hauling cable, a guide on the carriage over which the hoisting cable passes, and an engine for operating the drums.

15. In combination, a mast, a bearing at the bottom of the mast in which the latter rotates, a guy support at the top of the mast and in which the latter rotates, guys for bracing the guy support, a combined main and brace cable, means remote from the mast to secure the outer end of the combined main and brace cable, guide pulleys near the top and bottom of the mast over which the said cable passes, a guide pulley located at a point remote from the mast and between the two aforesaid pulleys, a drum on which the inner end of the said cable is wound, a carriage mounted to travel on the main cable, means including cables and drums for moving the carriage on the cable, a hoisting cable, a guide on the carriage over which the hoisting cable passes, and an engine for operating the drums.

16. In combination, a car, a stationary base on the car, said base having an opening, a rotating plate supported on the base, a mast mounted on the rotating plate, a trunnion on the upper end of the mast, a guy support on the trunnion, guys for securing the guy support, the lower ends of the guys being secured remote from the car, the guy support and base serving as bearings for the mast, a main cable guide pulley near the top of the mast, a main cable guide pulley near the bottom of the mast, a main cable drum, a main cable on the drum, said main cable passing around the lower main cable pulley and through the opening in the mast and around the upper main cable pulley, means remote from the car to support the outer end of the main cable, means extending to a point remote from the car for bracing the mast in opposition to the pull of the main cable, a carriage mounted to travel on the main cable, receding, hauling, and hoisting cables operating on the carriage, drums located adjacent the main cable drum for operating the hauling, receding, and hoisting cables, guide pulleys on the mast for guiding said latter cables to the drums, and an engine for operating the drums.

17. In combination, a car, a mast rotatively mounted on the car, a bearing at the top of the mast, guys for supporting the upper bearing, means for anchoring the guys at points remote from the car, pivotal means for laterally tilting the mast, said pivotal means being located above the rotative mounting, a main cable guide pulley near the upper end of the mast, a main cable guide pulley at the bottom of the mast, a drum, a main cable extending from the drum and around the two pulleys, means for anchoring the free end of the main cable, means for bracing the mast in opposition to the pull of the main cable, a carriage mounted to travel on the main cable, receding and hauling cables on the carriage, a hoisting cable attached to one of the latter cables, a guide on the carriage over which the hoisting cable passes, drums for receiving the hauling and receding cables, guide pulleys on the mast over which the hauling and receding cables pass, and an engine for operating the drums.

18. In combination, a mast, means for rotatively mounting the mast, a guide pulley near the top of the mast, a guide pulley at the bottom of the mast, a drum, a pulley located at a point remote from the mast, a main cable extending from the drum and around the pulleys and anchored at its free end at a point remote from the mast, said main cable extending from the opposite side of the mast from where the remote pulley is located, the portion of the main cable extending to and from the pulley located at the point remote from the mast serving to brace the mast in opposition to the pulley of the main cable between the mast and its anchored end when hauling a load, a carriage mounted to travel on the main cable, hauling, hoisting, and receding cables on the carriage, pulleys on the mast for guiding the last mentioned cables, drums to receive said cables, and an engine to operate the drums.

19. In combination, a mast, means including stationary bearings at the bottom and top of the mast, in which the latter may rotate, guys for bracing the mast, a cable track extending out from the mast, means for securing the cable track at a point remote from the mast, a remote guide, a carriage on the cable track, means including cables and drums for operating the carriage on the cable track, the main cable extending from the mast in the opposite direction to that of the portion of said cable used as a cable track and extending over the remote guide to brace said mast against the load strain when carrying a load, a drum adjacent the mast for adjusting the cable during operation of hauling a load and holding the same taut, and an engine for operating the drums.

20. In combination, a mast, means for rotatively mounting the mast, stationary guys for bracing the mast at its upper end, a guide pulley at the top of the mast, a cable track passing over the guide pulley, means for anchoring the cable track at a point remote from the mast, a drum around which the inner end of the cable track is wound, guides over which the cable track passes located between the drum and the guide pulley at the top of the mast, said guides being arranged to cause the cable track to pull the upper portion of the mast in opposition to the pull exerted on the cable track on the opposite side of the mast when strain of a load is applied, a carriage mounted to travel on the cable track, operating cables attached to the carriage to move same toward and from the mast, guides on the mast over which the operating cables pass, a hoisting cable attached to one of the operating cables, a guide on the carriage over which the hoisting cable passes, drums around which the operating cables are wound, and an engine for operating all the drums.

21. In combination, a mast, and a single cable extending therefrom, means including pulleys and a drum for simultaneously tightening the single cable and bracing the mast in opposition to the strain on the cable when hauling a load, means for rotatively mounting the mast, a carriage mounted to travel on the cable track, operating cables for the carriage, drums for the operating cables, and an engine for operating all the drums.

22. In a transporting apparatus, the combination of a mast, a single cable supported at a point remote from the mast and extending therefrom to a point beyond the mast, guides beyond and on the same side of the mast around which the single cable passes, a stationary support for one of said guides, means adjacent the bottom of the mast for receiving the end of the cable to regulate the tension of the same, that portion of the cable beyond the mast acting as a brace which will automatically brace the mast in opposition to the pull on the mast when a load is applied to the cable, a carriage mounted to travel on the cable between the mast and the point of securing said cable, and means for operating the cable.

23. In a transporting apparatus, the combination of a mast, a drum adjacent the bottom of the mast, a pulley near the top of the mast, a guide in the top of the mast, a pulley located at a point remote from the mast, a cable extending from the drum and around the pulleys and guide fastened at a point remote from the mast, a part of the cable between the drum and the pulley near the top of the mast being substantially parallel with the mast to exert a downward pull on the mast when a load is carried on the cable, a carriage mounted to travel on the cable track between the mast and the point of securing the cable, and means for operating the carriage.

24. In a transporting apparatus, the combination of a mast, a cable extending from the mast and secured at a point remote from said mast, a guide on the mast around which the cable passes, a drum adjacent the mast to receive the end of the cable, whereby the cable may be stored or fed out to the securing point, and guides on the opposite side of the mast from which the cable extends, said cable passing around said guides for bracing the mast in opposition to the strain when hauling a load, a carriage on the cable, and means for operating the carriage.

25. In a transporting apparatus, the combination of a mast, a single cable which extends from the mast to a point remote therefrom, a carriage on the cable, and means for operating the single cable for simultaneously tightening the said cable and bracing the mast in opposition to the strain of a load supported by the carriage.

13,586. TROUGH OR OPEN FLUME. WILLIAM LENNON, Manitou, Colo. Filed Mar. 31, 1913. Serial No. 758,037. Original No. 1,042,239, dated Oct. 22, 1912. Serial No. 667,837. (Cl. 61—5.)



1. The combination in a sectional metal flume, of stationary side members, hanger plates mounted on the side members and extending inwardly beyond the same, and clamping means applied to the adjacent extremities of the flume sections and connected with the inner extremities of the hanger plates for flume supporting purposes.

2. The combination in a sectional metal flume, of stationary side members, hanger plates mounted on the side members and extending inwardly beyond the same, and clamping means applied to the flume joints and connected with the inwardly projecting extremities of the hanger plates.

3. In a flume construction, side sills, hanger plates supported upon said sills and extending inwardly therefrom, flume sections the joints of which are located between said plates, inner and outer clamping members at said joints, the plates being adapted to bear against and press downwardly upon said inner clamping members, and the outer clamping members being hung from said plates.

4. In a flume construction, side sills, hanger plates supported upon said sills and extending inwardly therefrom, flume sections the joints of which are located between said plates, said joints being beaded outwardly, inner clamping bars located in said beads, outer supporting members engaging said beads, the plates being adapted to bear against and press downwardly upon said inner clamping bars, and the supporting members being hung from said plates.

5. In combination, side sills, hanger plates secured thereto, and extending inwardly beyond the same, flume sections arranged end to end, means applied exteriorly to the flume on each side of the joints between the sections and connected with the hanger plates for supporting the flume in place, the joint being beaded outwardly between said means, a clamping bar arranged within each of the beads, the extremities of said rods abutting against the inwardly projecting extremities of the hanger plates, the line of centers of said means passing through said clamping bar.

6. A flume built of sections, each section being bent near one extremity at least to form an outwardly extending bead at the joint between sections, a clamping bar arranged within said bead, supporting means arranged exteriorly upon each side of the bead, the line of centers of said means piercing said clamping bar, and hanger elements for the support of the flume at the joints, the extremities of the clamping bars being adapted to abut against the hanger elements upon the under surface and the supporting means being mounted therein.

7. A flume built of sections, the joints between the sections being beaded outwardly, a clamping bar arranged within said beaded portion, securing means arranged to extend along each side of the beads exteriorly, plates at the ends of the joints, the extremities of the clamping bar being arranged to abut against the plates, said exterior clamping means being secured to said plates on opposite sides of the bead, the line of centers of said securing means piercing the said clamping bar.

8. A flume built of sections, the joints between the sections being beaded outwardly, a clamping bar arranged within each bead, clamping rods arranged to extend along the sides of the beads exteriorly, plates at the ends of the joints, the extremities of the clamping bars being arranged to abut against the plates, said rods extending through openings in the plates and being threaded at their extremities and nuts applied to said threaded extremities, the line of centers of said rods piercing the clamping bar, substantially at its center line.

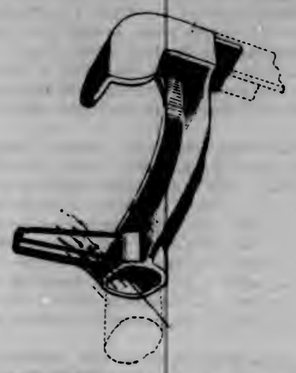
9. A flume including side sills, hanger plates secured thereto and extending interiorly beyond the same, flume sections having exteriorly-projecting overlapping and interlocking hollow beads, a clamping rod shaped to fill the interior cavity of the bead, the extremities of the said rod abutting against the interiorly-projecting extremities of the hanger plates, and means applied exteriorly to the flume on each side of the joint and connected with the hanger plates for supporting the flume in place, the line of centers of said means passing through said clamping rod, substantially as described.

10. A flume including side sills, hanger plates secured to the sills and projecting interiorly beyond the same, flume sections having their adjacent extremities equipped with hollow beads arranged to overlap each other in interlocking relation, a clamping rod in the interior cavity of the joint, the extremities of the rod engaging the overlapping extremities of the hanger plates, carrier rods applied to the securing member on opposite sides of the

joint bead and secured at their extremities to the hanger plates, said rods being so positioned that a straight line through their centers will pierce the clamping rod substantially at its median line, substantially as described.

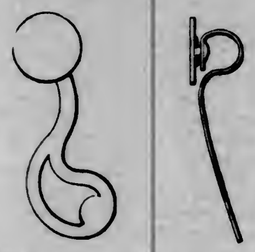
DESIGNS.

44,229. CORNER MEMBER FOR BED-SPRING FRAMES. JOHN M. ADAMS, Chicago, Ill. Filed Feb. 29, 1912. Serial No. 680,738. Term of patent 14 years.



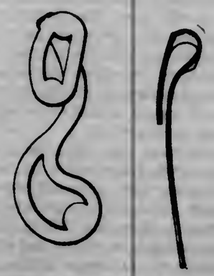
The ornamental design for a corner member for a bed spring frame, as shown.

44,230. NOSE-GUARD. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Corporation of Massachusetts. Filed Mar. 7, 1912. Serial No. 682,266. Term of patent 14 years.



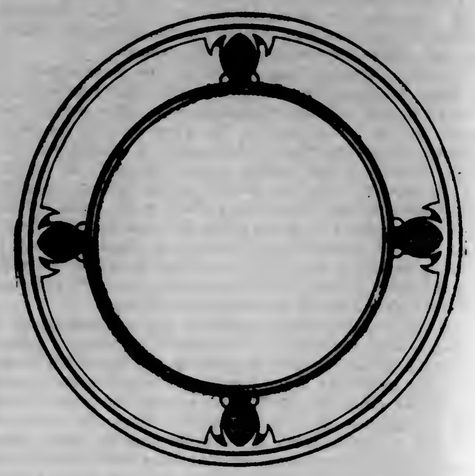
The ornamental design for a nose guard, substantially as shown.

44,231. NOSE-GUARD. NELSON M. BAKER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Corporation of Massachusetts. Filed Mar. 7, 1912. Serial No. 682,267. Term of patent 14 years.



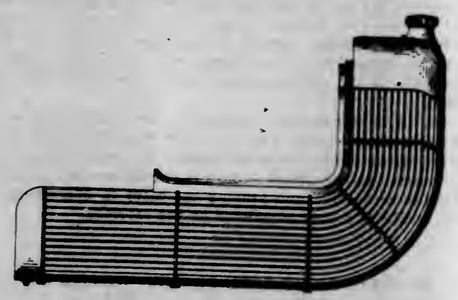
The ornamental design for a nose guard, substantially as shown.

44,232. PLATE OR SIMILAR ARTICLE. EDWARD BOOTH, East Orange, N. J. Filed Feb. 27, 1913. Serial No. 751,160. Term of patent 7 years.



The ornamental design for a plate, or similar article, as shown.

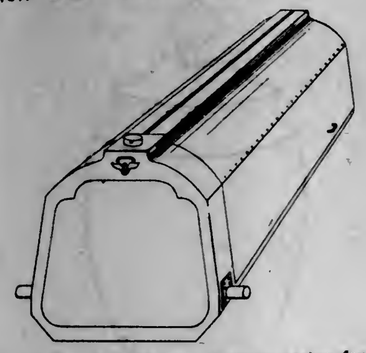
44,233. RADIATOR. JAMES SCRIPPS BOOTH, Detroit, Mich. Filed Feb. 13, 1913. Serial No. 748,248. Term of patent 14 years.





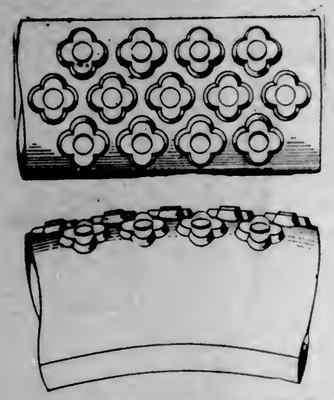
The ornamental design for a radiator as shown.

44,234. MOTOR-CASING FOR AUTOMOBILES. ROBERT E. CARSWELL, Minneapolis, Minn., assignor to Dispatch Motor Car Company, Minneapolis, Minn., a Corporation of South Dakota. Filed Apr. 21, 1913. Serial No. 762,737. Term of patent 7 years.



The ornamental design for a motor casing for automobiles as shown.

44,235. AUTOMOBILE-TIRE. JAMES CHRISTY, Akron, Ohio. Filed May 24, 1912. Serial No. 699,566. Term of patent 14 years.



The ornamental design for an automobile tire, as shown.

44,236. COMBINED STAND AND RACK. CHARLES DE YOOS, New York, N. Y. Filed Apr. 28, 1913. Serial No. 764,285. Term of patent 7 years.



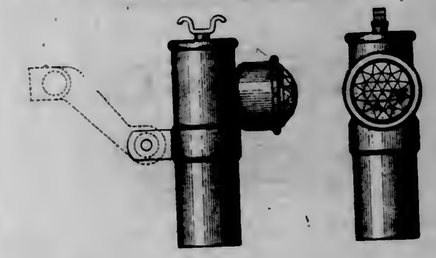
The ornamental design for a combined stand and rack, as shown.

44,237. NUMBER-DISPLAY CASING. SAMUEL GEE, Providence, R. I. Filed Feb. 3, 1913. Serial No. 746,058. Term of patent 7 years.



The ornamental design for a number-display casing as shown.

44,238. LAMP. ELLSWORTH A. HAWTHORNE, Bridgeport, Conn., assignor to The Hawthorne Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 6, 1912. Serial No. 735,236. Term of patent 14 years.



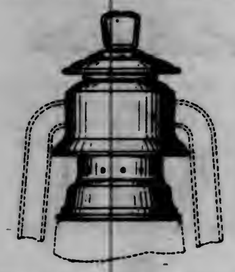
The ornamental design for a lamp, as shown.

44,239. BUTTON. ANDREW HENDERSON, New York, N. Y. Filed Dec. 23, 1911. Serial No. 667,550. Term of patent 14 years.



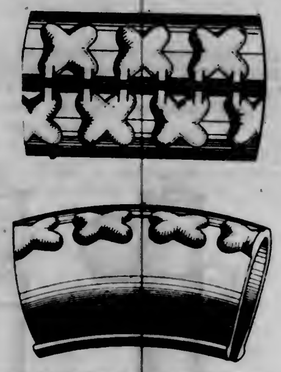
The ornamental design for a button, as shown.

44,240. LANTERN-DOME. JAMES H. HILL, Rochester, N. Y., assignor to Embury Manufacturing Company, Warsaw, N. Y., a Corporation of New York. Filed Jan. 24, 1913. Serial No. 744,028. Term of patent 7 years.



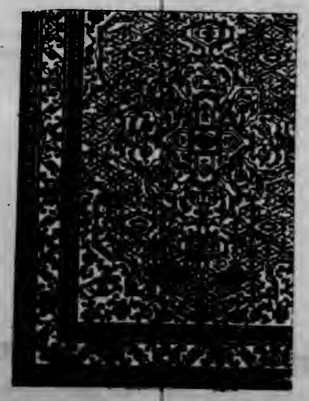
The ornamental design for a lantern-dome as illustrated in said drawing.

44,241. CASING FOR PNEUMATIC TIRES. FRANK E. HOLCOMB, Akron, Ohio, assignor to Consolidated Rubber Tire Company, Trenton, N. J., a Corporation of New Jersey. Filed Mar. 17, 1913. Serial No. 755,034. Term of patent 14 years.



The ornamental design for a casing for pneumatic tires, as shown.

44,242. CARPET OR RUG. HERBERT A. HOWE, Thompsonville, Conn., assignor to Hartford Carpet Corporation, Thompsonville, Conn., a Corporation of Connecticut. Filed May 13, 1913. Serial No. 767,451. Term of patent 3½ years.



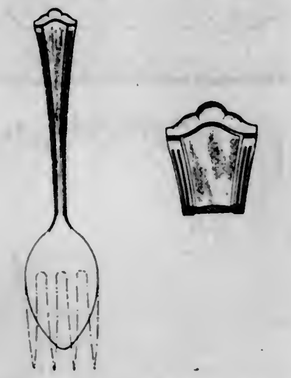
The ornamental design for a carpet or rug as shown.

44,243. JAR. DAVID C. JENKINS, Kokomo, Ind., assignor to D. C. Jenkins Glass Company, Kokomo, Ind. Filed Apr. 26, 1913. Serial No. 763,912. Term of patent 7 years.



The ornamental design for a jar, as shown.

44,244. SPOON, FORK, OR SIMILAR ARTICLE. ALFRED G. KINTZ, Wallingford, Conn., assignor to International Silver Co., Meriden, Conn., a Corporation of New Jersey. Filed May 19, 1913. Serial No. 768,674. Term of patent 7 years.



The ornamental design for a spoon, fork or similar article, as shown.

44,245. SHADE. NICHOLAS KOPP, Pittsburgh, Pa., assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 25, 1912. Serial No. 686,167. Term of patent 3½ years.



The ornamental design for a shade as shown.

44,246. SHADE. NICHOLAS KOPP, Pittsburgh, Pa., assignor to Pittsburgh Lamp, Brass & Glass Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Mar. 25, 1912. Serial No. 686,168. Term of patent 3½ years.



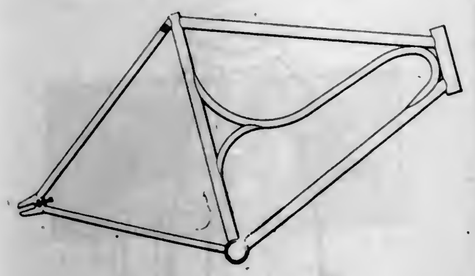
The ornamental design for a shade as shown.

44,247. SEAL. ALFRED DAVID LENZ, Mill Valley, Cal., assignor to Panama-Pacific International Exposition Co., San Francisco, Cal., a Corporation of California. Filed Apr. 29, 1913. Serial No. 764,451. Term of patent 3½ years.



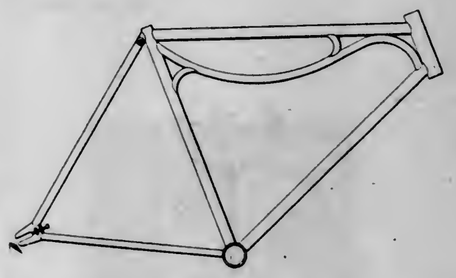
The ornamental design for a seal as shown.

44,248. BICYCLE-FRAME. EDWARD JULIUS LONN, Laporte, Ind. Filed Mar. 17, 1913. Serial No. 755,045. Term of patent 14 years.



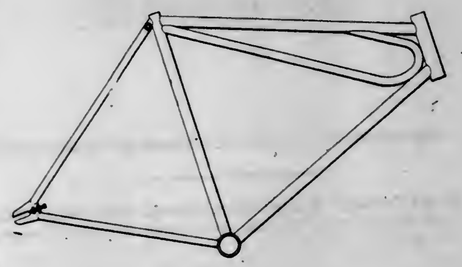
The ornamental design for a bicycle-frame, as shown.

44,249. BICYCLE-FRAME. EDWARD JULIUS LONN, Laporte, Ind. Filed Mar. 17, 1913. Serial No. 755,046. Term of patent 14 years.



The ornamental design for a bicycle-frame, as shown.

44,250. BICYCLE-FRAME. EDWARD JULIUS LONN, Laporte, Ind. Filed Mar. 17, 1913. Serial No. 755,047. Term of patent 14 years.



The ornamental design for a bicycle-frame, as shown.

44,251. WIND-SHIELD FOR MOTOR-VEHICLES AND THE LIKE. JACOB M. MCQUILLAN, Pittsburgh, Pa., assignor to Winterton Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 17, 1912. Serial No. 720,904. Term of patent 7 years.



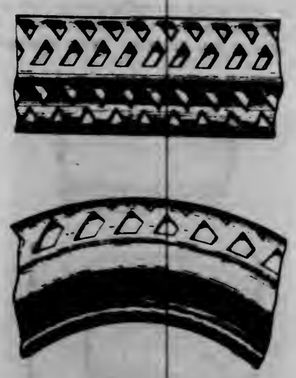
The ornamental design for a wind shield for motor vehicles and the like as shown.

44,252. CANDELABRUM. ROBERT PAGE NEWTON and THOMAS W. O'KEEFE, Middletown, Conn. Filed Mar. 20, 1913. Serial No. 755,805. Term of patent 7 years.



The ornamental design for a candelabrum, as shown.

44,253. TIRE. FRANK NOLTE, Akron, Ohio. Filed Feb. 18, 1913. Serial No. 749,276. Term of patent 7 years.



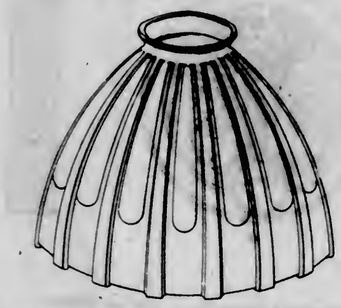
The ornamental design for a tire, as shown.

44,254. ELECTRIC SIGN. MORTIMER NORDEN, New York, N. Y., assignor to Electric Carriage Call & Specialty Company, New York, N. Y., a Corporation of New York. Filed Apr. 14, 1913. Serial No. 761,067. Term of patent 3½ years.



The ornamental design for an electric sign, as shown.

44,255. LAMP-SHADE. EUGENE H. PECK, New York, N. Y., assignor to Phoenix Glass Co., Pittsburgh, Pa., a Corporation of West Virginia. Filed Aug. 9, 1912. Serial No. 714,309. Term of patent 14 years.



The ornamental design for lamp shade, as shown.

44,256. LAMP-SHADE. EUGENE H. PECK, New York, N. Y., assignor to Phoenix Glass Co., Pittsburgh, Pa., a Corporation of West Virginia. Filed Aug. 9, 1912. Serial No. 714,310. Term of patent 14 years.



The ornamental design for lamp shade, as shown.

44,257. RUG. ADOLPH PETZOLD, Philadelphia, Pa., assignor to John H. Bromley and Edward Bromley, Copartners trading as John Bromley & Sons, Philadelphia, Pa. Filed May 8, 1913. Serial No. 766,452. Term of patent 7 years.



The ornamental design for a rug, as shown.

44,258. RUG. ADOLPH PETZOLD, Philadelphia, Pa., assignor to John H. Bromley and Edward Bromley, Copartners trading as John Bromley & Sons, Philadelphia, Pa. Filed May 8, 1913. Serial No. 766,453. Term of patent 7 years.

The ornamental design for a rug, as shown.

44,259. RUG. ADOLPH PETZOLD, Philadelphia, Pa., assignor to John H. Bromley and Edward Bromley, Copartners trading as John Bromley & Sons, Philadelphia, Pa. Filed May 8, 1913. Serial No. 766,454. Term of patent 7 years.



The ornamental design for a rug, as shown.

44,260. CARPET OR RUG. WILLIAM E. SAYERS, Thompsonville, Conn., assignor to Hartford Carpet Corporation, Thompsonville, Conn., a Corporation of Connecticut. Filed Apr. 30, 1913. Serial No. 764,696. Term of patent 3½ years.



The ornamental design for a carpet or rug as shown.

44,261. CARPET OR RUG. WILLIAM E. SAYERS, Thompsonville, Conn., assignor to Hartford Carpet Corporation, Thompsonville, Conn., a Corporation of Connecticut. Filed May 13, 1913. Serial No. 767,452. Term of patent 3½ years.



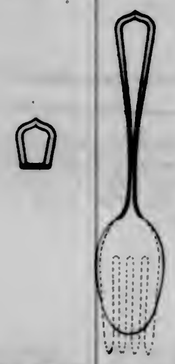
The ornamental design for a carpet or rug as shown.

44,262. CHAIR-SEAT. PETER A. SELIG, Chicago, Ill., assignor to Theo. A. Kochs Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 6, 1912. Serial No. 689,076. Term of patent 14 years.



The ornamental design for a chair seat, as shown.

44,263. HANDLE FOR SPOONS, FORKS, OR SIMILAR ARTICLES. CHARLES SELKIRK, Albany, N. Y., assignor to Rogers, Lunt & Bowlen Company, Greenfield, Mass., a Corporation of Massachusetts. Filed May 6, 1913. Serial No. 765,932. Term of patent 7 years.



The ornamental design for a handle for spoons, forks or similar articles, as shown.

44,264. GAS-LOG. JAMES A. WILLIAMS, Cincinnati, Ohio. Filed Mar. 20, 1913. Serial No. 755,800. Term of patent 14 years.



The ornamental design for a gas log as shown.

TRADE-MARKS

PUBLISHED JUNE 24, 1913.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 41,731. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) NARRAGANSETT FINISHING COMPANY, Cranston, R. I. Filed Apr. 12, 1909.

PRESS PROOF

Particular description of goods.—Cotton Piece Goods.
Claims use since Jan. 1, 1908.

Ser. No. 51,267. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE TROPICO CO., New York, N. Y., assignor to General Dehydrator Company, a Corporation of New York. Filed Aug. 5, 1910.

FRUTANA

Particular description of goods.—Imitation Coffee.
Claims use since Jan. 10, 1910.

Ser. No. 51,278. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HARRIS & POLLARD DEHYDRATED PRODUCTS CO., New York, N. Y., assignor to General Dehydrator Company, a Corporation of New York. Filed Aug. 5, 1910.

HP

Particular description of goods.—A Food Beverage.
Claims use since Jan. 10, 1910.

Ser. No. 60,784. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ATLANTIC MACARONI CO., Long Island City, N. Y. Filed Jan. 13, 1912. Under ten-year proviso.

Atlantic

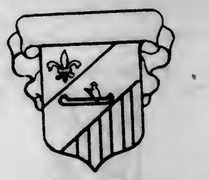
Particular description of goods.—Macaroni.
Claims use since about Jan. 1, 1895.

Ser. No. 61,772. (CLASS 38. PRINTS AND PUBLICATIONS.) UNITED ANCIENT ORDER OF DRUIDS, New Orleans, La., and Albany, N. Y. Filed Feb. 27, 1912. Under ten-year proviso.

United Ancient Order of Druids

Particular description of goods.—Printed Books and Printed Pamphlets.
Claims use since 1839.

Ser. No. 62,759. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE MARQUETTE COMPANY, Detroit, Mich. Filed Apr. 9, 1912.



Particular description of goods.—Automobiles and Motor-Trucks.
Claims use since about Dec. 1, 1911.

Ser. No. 63,034. (CLASS 31. FILTERS AND REFRIGERATORS.) AKTIENGESELLSCHAFT DER MASCHINENFABRIKEN ESCHER WYSS & CIE. FILIALE RAVENSBURG, Ravensburg, Germany. Filed Apr. 20, 1912.

Autòfrigor

Particular description of goods.—Refrigerating-Machines.
Claims use since Dec. 21, 1911.

Ser. No. 63,428. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) KINDLER & COLLINS, New York, N. Y. Filed May 9, 1912.

CHORALTONE

Particular description of goods.—Pianos and Piano-Players.
Claims use since Apr. 12, 1912.

Ser. No, 63,494. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) IOWA STOCK FOOD CO., Jefferson, Iowa. Filed May 11, 1912.



Consisting of the representation of a wild rose.

Particular description of goods.—A Remedy for Roup, a Dip for Sheep, Cattle, Horses, Hogs, and Poultry, a Worm-Powder for Hogs, Lambs, and Horses, a Food Tonic for Stock and a Food Tonic for Poultry, and Medicinal Dehorners for Animals.

Claims use since April, 1900.

Ser. No. 63,529. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) EINSTEIN-WOLFF CO., New York, N. Y. Filed May 14, 1912.



Particular description of goods.—Embroidery.

Claims use since Apr. 26, 1912.

Ser. No. 63,668. (CLASS 39. CLOTHING.) OTTO H. HASSEL, Chicago, Ill. Filed May 20, 1912.



Particular description of goods.—Shoes, Slippers, and Boots Made Wholly or in Part of Leather or Canvas.

Claims use since July, 1885.

Ser. No. 63,710. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) DRÄGERWERK, HEINR. & BERNH. DRÄGER, Lübeck, Germany. Filed May 22, 1912.

Pulmotor

Particular description of goods.—Mechanical Respiratory Apparatus and Devices for Administering Oxygen.

Claims use since February, 1909.

Ser. No. 64,084. (CLASS 17. TOBACCO PRODUCTS.) REPUBLIC OF FRANCE, Paris, France. Filed June 8, 1912.



Particular description of goods.—Cigarettes.

Claims use since Apr. 25, 1910.

Ser. No. 64,127. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE WIZARD MFG CO., Indianapolis, Ind. Filed June 11, 1912.

WISWA

Particular description of goods.—Cleaner for Wall-Paper, Frescos, Calcimine, and Window-Shades, Metal-Polish, and Wax Belt-Dressing.

Claims use since Apr. 1, 1910.

Ser. No. 64,848. (CLASS 46. FOODS, AND INGREDIENTS OF FOODS.) U. H. DUDLEY & COMPANY, New York, N. Y. Filed July 20, 1912.



Particular description of goods.—Dates.

Claims use since July 15, 1912.

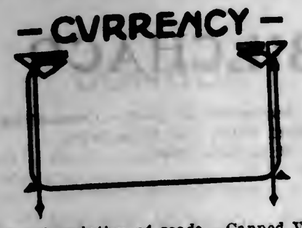
Ser. No. 65,022. (CLASS 10. FERTILIZERS.) PACIFIC BONE COAL & FERTILIZING CO., San Francisco, Cal. Filed Aug. 1, 1912.

"CERES"

Particular description of goods.—Fertilizer.

Claims use since January, 1902.

Ser. No. 65,087. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRENCH & BEAN COMPANY, St. Johnsbury, Vt. Filed Aug. 2, 1912.



Particular description of goods.—Canned Vegetables.

Claims use since on or about May 1, 1912.

Ser. No. 66,144. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHEMISCHE FABRIK ALTHERZBERG, ALWIN NIESKE, Dresden and Dresden-Loschwitz, Germany. Filed Oct. 5, 1912.

Molyform

Particular description of goods.—Ointment and Vulnerary Powder.

Claims use since November, 1900.

Ser. No. 66,429. (CLASS 10. FERTILIZERS.) AMERICAN AGRICULTURAL CHEMICAL COMPANY, New York, N. Y. Filed Oct. 21, 1912. Under ten-year proviso.



"THE DARK WILL WIN"

SWEEPSTAKES

No claim being made to the exclusive use of the phrase "The Dark Will Win."

Particular description of goods.—Fertilizers.

Claims use since 1884.

Ser, No. 67,220. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) STERLING LABORATORY, Los Angeles, Cal. Filed Dec. 4, 1912.



Particular description of goods.—Beef, Iron, and Wine, Liquid Corn Remedy, Dyspepsia-Tablets, Stomach and Liver Tablets, Dandruff Remedy, Eye-Water, Headache Remedy, Hair-Tonic, Liniment, Milk of Magnesia, Shampoo Preparation, Salve, Sedlitz-Powders, Sarsaparilla Extract, Cold and La Grippe Remedy, Cough Remedy, Toothache Remedy, Blackberry Cordial, Syrup Hypophosphite Compound, Aromatic Castor-Oil, Cod-Liver Oil, Jamaica Ginger, Carbolic Salve, and Witch-Hazel Salve.

Claims use since Oct. 1, 1912.

Ser. No. 67,301. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DIRECT IMPORTING COMPANY, Boston, Mass. Filed Dec. 9, 1912.

BENEFIT

Particular description of goods.—Tea, Coffee, Cocoa, Chocolate, Candy, Spices, Extracts for Flavoring Foods, Rice, Cereal Breakfast Foods, Shredded Cocoanut, Corn-Starch, Gelatin Used for Food, Tapioca, Macaroni, Spaghetti, Vermicelli, Olive-Oil, Table Sauce, Celery-Salt, Condensed Milk, and Canned Soups.

Claims use since Jan. 1, 1907.

Ser. No. 67,778. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) VOM CLEFF & CO., New York, N. Y. Filed Jan. 7, 1913.

DIAMONDINE



Particular description of goods.—Razors.

Claims use since Dec. 6, 1887.

Ser. No. 67,968. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE HALL-VAN GORDER CO., Cleveland, Ohio. Filed Jan. 17, 1913.



HAVANCO

Particular description of goods.—Dental Cream, Petrolatum, Borated Chap-Jelly, Toilet Cream, Liquid Shampoo Preparation, Almond Lotion, and Theatrical Cream.

Claims use since May, 1912.

Ser. No. 67,982. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DIAMOND "H" MFG. CO., New York, N. Y. Filed Jan. 18, 1913.

RHR

Particular description of goods.—A Preparation for Treating Rheumatism and Gout.

Claims use since June 15, 1911.

Ser. No. 68,807. (CLASS 39. CLOTHING.) JACOB FRANK MERCANTILE CO., St. Louis, Mo. Filed Feb. 4, 1913.

ST L MD

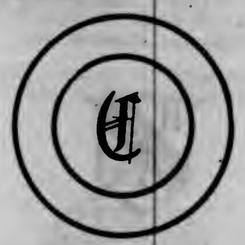
Particular description of goods.—Knitted Hosiery, Shirts, Vests, Coats, Pants, Drawers, and Union Suits.
Claims use since Oct. 1, 1912.

Ser. No. 68,821. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MAAS & CO., Chicago, Ill. Filed Mar. 3, 1913.

MACCO

Particular description of goods.—Liquid Cough Remedy.
Claims use since August, 1912.

Ser. No. 68,842. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAM H. COOK, Pomona, Fla. Filed Mar. 5, 1913.



Particular description of goods.—Citrus Fruits—Namely, Oranges, Grape-Fruit, Tangerines, Limes, and Lemons.
Claims use since November, 1906.

Ser. No. 68,997. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GELFMAN GROCERY CO., Springfield, Mass. Filed Mar. 13, 1913.

May-fair

Particular description of goods.—Tomato Catsup, Powdered Cocoa for Use in Making a Beverage, Canned Vegetables, Succotash, Baked Beans, Salmon, Coffee, and Wheat-Flour.
Claims use since November, 1912.

Ser. No. 69,081. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE BILLINGS-CHAPIN COMPANY, Cleveland, Ohio. Filed Mar. 17, 1913.

BILCHACO

Particular description of goods.—Cement-Floor Paint, Varnishes, Mixed Paint, and Floor-Paint.
Claims use since June, 1910.

Ser. No. 69,152. (CLASS 39. CLOTHING.) THOMAS CAMPBELL CULLEN, Bradford, England. Filed Mar. 18, 1913.

KREMLAINE

Consists of the word "Kremlaine."
Particular description of goods.—Hats, Caps, Hosiery, Leather and Rubber Boots and Shoes, Gloves, Collars and Cuffs, Men's, Women's, and Children's Outer Suits, Trousers, Corsets, Knitted Underwear, Textile Underwear—viz., Shirts, Drawers, Union Suits, Petticoats, and Corset-Covers—Vests, Dresses, Dress-Skirts, Dress and Shirt Waists, Dress, Negligée, and Work Shirts, Capes, Overcoats, Rain-Coats, Mufflers.
Claims use since about the 12th of November, 1908.

Ser. No. 69,183. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FREDERIC S. MASON, New York, N. Y. Filed Mar. 19, 1913.

GERALDINE FARRAR



Particular description of goods.—Perfumes.
Claims use since Dec. 1, 1912.

Ser. No. 69,192. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) EDUARD SIPPACH & SOHN, GESELLSCHAFT MIT BESCHRÄNKTER HAFTUNG, Eisenberg, Germany. Filed Mar. 19, 1913.

Elfenit

Particular description of goods.—Jacket-Plates for Mouth-Harmonicas, Keys for Pianos, Harmoniums, Organs, Accordions, and Harmonicas.
Claims use since February, 1910.

Ser. No. 69,282. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) MAUDE DICKINSON, Brighton, England. Filed Mar. 24, 1913.

DONGOR

Consists of the invented word "Dongor."
Particular description of goods.—Metal Hat-Pins and Protectors for the Points of Same Made of Base Metal.
Claims use since about 1910.

Ser. No. 69,317. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) DEMPSEY CANDY COMPANY, Kansas City, Mo. Filed Mar. 25, 1913.

Crispy Nibbles

No exclusive right to the word "Crispy" being claimed.
Particular description of goods.—Candy.
Claims use since about Mar. 1, 1912.

Ser. No. 69,403. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE ACME FIRELESS COOKER CO., Quincy, Ill. Filed Mar. 29, 1913.



Particular description of goods.—Fireless Cookers.
Claims use since Jan. 10, 1912.

Ser. No. 69,488. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.



Particular description of goods.—Tacks.
Claims use since about Jan. 1, 1911.

Ser. No. 69,489. (CLASS 33. GLASSWARE.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.

Nokomis

Particular description of goods.—Glass Lamp-Chimneys.
Claims use since about Jan. 1, 1904.

Ser. No. 69,495. (CLASS 35. BELTING, HOSE, MACHINERY, PACKING, AND NON-METALLIC TIRES.) STONE-ORDEAN-WELLS COMPANY, Duluth, Minn. Filed Mar. 31, 1913.

Wamhum

Particular description of goods.—Fruit-Jar Rings.
Claims use since about Jan. 1. 1907.

Ser. No. 69,510. (CLASS 39. CLOTHING.) MCKNIGHT TAILORING COMPANY, St. Louis, Mo. Filed Apr. 1, 1913.



Particular description of goods.—Tailored Clothing for Men—Namely, Men's Coats, Waistcoats, Trousers, and Overcoats.
Claims use since about Feb. 1, 1910.

Ser. No. 69,526. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE COLORADO SANITARIUM FOOD COMPANY, Boulder, Colo. Filed Apr. 2, 1913.

TRI-GRANO

Particular description of goods.—A Cereal Breakfast Food.
Claims use since Jan. 1, 1903.

Ser. No. 69,528. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE COLORADO SANITARIUM FOOD COMPANY, Boulder, Colo. Filed Apr. 2, 1913.

Nut-Cero

Particular description of goods.—A Cereal Breakfast Food.
Claims use since Jan. 1, 1908.

Ser. No. 69,552. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Apr. 3, 1913.



Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Mar. 10, 1902.

Ser. No. 69,598. (CLASS 39. CLOTHING.) LINCOLN OVERALL & SHIRT COMPANY, Lincoln, Nebr. Filed Apr. 4, 1913.

Mary Jane

"Mary Jane."
Particular description of goods.—Dresses and Kimonos for Women, Misses, and Children, also Children's Play-Suits and Romper-Suits.
Claims use since October, 1911.

Ser. No. 69,604. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLS-ARMS CO., Brooklyn, N. Y. Filed Apr. 4, 1913.

COLONO

Particular description of goods.—An Effervescent Saline Laxative and Liver Corrective for Rheumatism, Constipation, Stomach, Liver, and Intestinal Ailments.
Claims use since Oct. 1, 1912.

Ser. No. 69,610. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BAKER, HARRIS & KEHRHAHN, Boston, Mass. Filed Apr. 5, 1913.



Particular description of goods.—Canned Fish.
Claims use since Mar. 26, 1912.

Ser. No. 69,641. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) AUGUSTUS T. SCHLATER, Philadelphia, Pa. Filed Apr. 7, 1913.



Particular description of goods.—Automobiles.
Claims use since Feb. 1, 1913.

Ser. No. 69,655. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FLEMING & CHRISTIAN CO., Richmond, Va. Filed Apr. 8, 1913.

SHIRLEY

Particular description of goods.—Canned Fruit, Canned Vegetables, Canned Beans and Pork, Canned Fish-Roe, Spice, Cheese, Candy, Peanuts, Vinegar, Macaroni, and Buckwheat-Flour.
Claims use since about 1875.

Ser. No. 69,657. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) EMIL HERMES, Merscheid, Germany. Filed Apr. 8, 1913.



Particular description of goods.—Steel Table-Knives, Scissors, Scythes, Sickles, Daggers, Machine-Needles, Razors, and Safety-Razors.
Claims use since Nov. 5, 1908.

Ser. No. 69,692. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. B. CANOSA & CO., New Orleans, La. Filed Apr. 10, 1913.

EL GALLITO

Particular description of goods.—A Cooking Compound Composed of Cotton-Seed Oil, Stearin Made from Cotton-Seed Oil, and Oleo-Stearin.
Claims use since Feb. 1, 1913.

Ser. No. 69,712. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ZEINHELD FLOUR COMPANY, St. Louis, Mo. Filed Apr. 10, 1913.

ZIRCO

Particular description of goods.—Wheat-Flour.
Claims use since Mar. 21, 1913.

Ser. No. 69,827. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) GERHARD T. JARDEN, Brooklyn, N. Y. Filed Apr. 14, 1913.

DRES-A-LUSTER

The word "Luster" not being claimed.
Particular description of goods.—A Detergent Polish for Furniture, Woodwork, Carriages, and Similar Surfaces.
Claims use since Dec. 18, 1912.

Ser. No. 69,832. (CLASS 39. CLOTHING.) SWISS AMERICAN KNITTING MILLS, Grand Rapids, Mich. Filed Apr. 16, 1913.

Swissam

Particular description of goods.—Knitted Union Underwear—Namely, Vests and Drawers.
Claims use since Jan. 1, 1913.

Ser. No. 69,847. (CLASS 10. FERTILIZERS.) CONSUMERS FERTILIZER COMPANY, New York, N. Y. Filed Apr. 17, 1913.



Particular description of goods.—Fertilizers.
Claims use since December, 1912.

Ser. No. 69,887. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) CHARLES G. BLUH, Brooklyn, N. Y. Filed Apr. 18, 1913.

Eclipse

Particular description of goods.—Belts for Personal Wear.
Claims use since about Mar. 15, 1913.

Ser. No. 69,895. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HADLEY MILLS, South Hadley Falls, Mass. Filed Apr. 18, 1913.



Particular description of goods.—Cotton and Woolen Piece Goods.
Claims use since Apr. 7, 1913.

Ser. No. 69,898. (CLASS 2. RECEPTACLES.) CHARLES E. NORTH, New York, N. Y. Filed Apr. 18, 1913.

MILKING HOD

No claim is made to the exclusive use of the word "Milking."
Particular description of goods.—Milk-Pails.
Claims use since July 1, 1912.

Ser. No. 69,920. (CLASS 7. CORDAGE.) HENRY C. KELLEY COMPANY, New York, N. Y. Filed Apr. 19, 1913. Under ten-year proviso.

HICKORY

Particular description of goods.—Cords, Twines, Ropes, and Lines, Said Lines Being of the Nature of Clothes-Lines Made of Cotton or other Yarn.
Claims use since a date prior to May, 1877.

Ser. No. 69,972. (CLASS 37. PAPER AND STATIONERY.) SAUQUOIT TOILET PAPER CO. INC., New Hartford, N. Y. Filed Apr. 21, 1913.



Particular description of goods.—Toilet-Paper.
Claims use since Jan. 1, 1906.

Ser. No. 70,046. (CLASS 9. EXPLOSIVES, FIREARMS, EQUIPMENTS, AND PROJECTILES.) ST. LOUIS FIREWORKS CO., Memphis, Tenn., and St. Louis, Mo. Filed Apr. 24, 1913.

DIXIE

Particular description of goods.—Fireworks.
Claims use since about Aug. 15, 1912.

Ser. No. 70,058. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) T. LYE & SONS, Luton, England. Filed Apr. 25, 1913.

MYO

Particular description of goods.—Partly-Prepared Straw and Partly-Prepared Chip.
Claims use since the 7th of February, 1913.

Ser. No. 70,059. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) T. LYE & SONS, Luton, England. Filed Apr. 25, 1913.

MYO

Particular description of goods.—A Preparation for Bleaching Straw Plait.
Claims use since Feb. 7, 1913.

Ser. No. 70,060. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) T. LYE & SONS, Luton, England. Filed Apr. 25, 1913.

MYO

Particular description of goods.—Straw Plait and Chip Plait.
Claims use since Feb. 7, 1913.

Ser. No. 70,071. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) ATLANTIC SOUTHWESTERN BROOM CO., Baltimore, Md. Filed Apr. 26, 1913.

MONOGRAM BRAND

Particular description of goods.—Brooms.
Claims use since Apr. 22, 1913.

Ser. No. 70,073. (CLASS 28. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) E. C. ATKINS & Co., Indianapolis, Ind. Filed Apr. 26, 1913.

PHŒNIX

Particular description of goods.—Saws of All Kinds.
Claims use since Jan. 1, 1913.

Ser. No. 70,092. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THOMAS FLYNN, Pawtucket, R. I. Filed Apr. 28, 1913.



Particular description of goods.—A Remedy for Rheumatism.
Claims use since Aug. 1, 1908.

Ser. No. 70,146. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) GEO. BORGFELDT & Co., New York, N. Y. Filed May 1, 1913.

Transpercoid

Particular description of goods.—Hair, Tooth, and Nail Brushes Having Celluloid Handles or Backs.
Claims use since about Apr. 1, 1913.

Ser. No. 70,204. (CLASS 48. MALT EXTRACTS AND LIQUORS.) THE DEPPEN BREWING CO., Reading, Pa. Filed May 3, 1913.



The word "Quality" not being claimed.
Particular description of goods.—Beer.
Claims use since May 1, 1912.

Ser. No. 70,213. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE NARROW FABRIC CO., Wyomissing, Pa. Filed May 8, 1913.



Particular description of goods.—Weighted Material Used by Dressmakers.
Claims use since about October, 1912.

Ser. No. 70,245. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ARTHUR J. LANDRY, Kankakee, Ill. Filed May 5, 1913.



The trade-mark being a portrait of myself.
Particular description of goods.—A Shampooing Preparation.
Claims use since July 19, 1912.

Ser. No. 70,344. (CLASS 2. RECEPTACLES.) THE DYAR SUPPLY COMPANY, Cambridge, Mass. Filed May 10, 1913.

CIVIC PRIDE

Particular description of goods.—Garbage and Refuse Cans.
Claims use since on or about Feb. 14, 1913.

Ser. No. 70,370. (CLASS 39. CLOTHING.) ANNA M. GUTSCHE, Philadelphia, Pa. Filed May 12, 1913.

G-E-T

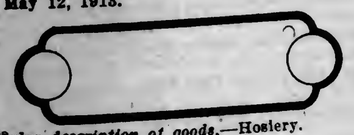
Particular description of goods.—Sweaters, Sweater-Coats, Cardigan Jackets, Shawls, Caps, Bathing-Suits, Mufflers, Gloves, and Hosiery.
Claims use since Mar. 22, 1913.

Ser. No. 70,372. (CLASS 39. CLOTHING.) INTERWOVEN STOCKING COMPANY, New Brunswick, N. J. Filed May 12, 1913.



Particular description of goods.—Hosiery.
Claims use since Nov. 30, 1912.

Ser. No. 70,373. (CLASS 39. CLOTHING.) INTERWOVEN STOCKING COMPANY, New Brunswick, N. J. Filed May 12, 1913.



Particular description of goods.—Hosiery.
Claims use since Nov. 30, 1912.

Ser. No. 70,406. (CLASS 39. CLOTHING.) NORWICH KNITTING CO., Norwich, N. Y. Filed May 13, 1913.

Pioneer

Particular description of goods.—Knit Underwear.
Claims use since about Nov. 1, 1910.

Ser. No. 70,439. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) BENJAMIN WEISBERG, Philadelphia, Pa. Filed May 15, 1913.

THE CORNET

Particular description of goods.—Cravats and Neckties and Neckscarfs.
Claims use since May 7, 1913.

Ser. No. 70,607. (CLASS 39. CLOTHING.) BURROW, JONES & DYER SHOE CO., St. Louis, Mo. Filed May 24, 1913.

Billiken

Particular description of goods.—Misses' and Children's Leather Shoes.
Claims use since Oct. 1, 1910.

Ser. No. 70,608. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) S. F. BOWSER & Co. INC., Fort Wayne, Ind. Filed May 24, 1913.

RED SENTRY

Particular description of goods.—Measuring Oil-Pumps.
Claims use since Apr. 15, 1913.

Ser. No. 70,612. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) JENNIE DUQUETTE, Chicopee, Mass. Filed May 24, 1913.

JEANETTE

Particular description of goods.—Collar-Stays.
Claims use since on or about Jan. 15, 1911.

Ser. No. 70,647. (CLASS 32. FURNITURE AND UPHOLSTERY.) ACME MATTRESS COMPANY, Kansas City, Mo. Filed May 26, 1913.

ROTARY

Particular description of goods.—Mattresses.
Claims use since Jan. 15, 1913.

Ser. No. 70,664. (CLASS 39. CLOTHING.) JORDAN MARSH COMPANY, Boston, Mass. Filed May 26, 1913.

"BILLY BOY"

Particular description of goods.—Coats, Hats, Dresses, and Rompers.
Claims use since Feb. 1, 1913.

Ser. No. 70,665. (CLASS 39. CLOTHING.) JORDAN MARSH COMPANY, Boston, Mass. Filed May 26, 1913.

"DOTTY DIMPLE"

Particular description of goods.—Coats, Hats, Dresses, and Rompers.
Claims use since Feb. 1, 1913.

Ser. No. 70,671. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) MYSTIC RUBBER COMPANY, Medford, Mass. Filed May 26, 1913.

DMD

Particular description of goods.—Hospital Rubber Sheeting.
Claims use since Dec. 16, 1912.

Ser. No. 70,726. (CLASS 39. CLOTHING.) I. & R. MORLEY, London, England. Filed May 28, 1913.

THETA

Particular description of goods.—Hosiery.
Claims use since 1896.

Ser. No. 70,741. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) FRANZ BONFIGT, Aachen, Germany. Filed May 29, 1913.

"Herkules"

Particular description of goods.—Fret-Saws for Gold and Silver Smiths.
Claims use since July 1, 1904.

Ser. No. 70,797. (CLASS 47. WINES.) NIEPOORT & Co., Oporto, Portugal. Filed May 31, 1913.



No claim being made to the words "In Vino Veritas" and "Niepoort & Co."
Particular description of goods.—Port-Wine.
Claims use since Dec. 1, 1902.

Ser. No. 70,798. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) DAVIS OSAIFOFF, New York, N. Y. Filed May 31, 1913.

ABSORBO

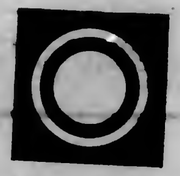
Particular description of goods.—Hand-Operated Vacuum-Cleaners.
Claims use Apr. 30, 1913.

Ser. No. 70,808. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE ROCKFORD WATCH CO. LTD., Rockford, Ill. Filed May 31, 1913. Under ten-year proviso.

Rockford

Particular description of goods.—Watch-Movements.
Claims use since 1889.

Ser. No. 70,814. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) VAUGHAN & BUSHNELL MANUFACTURING COMPANY, Chicago, Ill. Filed May 31, 1913.



Consists of a red circle or ring upon a circular field the field being surrounded and defined by a relatively dark surface.

Particular description of goods.—Plain Braces, Ratchet-Braces, Corner-Braces, Drill-Braces, Ratchet-Drills, Hammers, Scutches, Chuck-Bits, Reamers, Countersinks, Machine-Punches, Belt-Punches, Nail-Sets, Rivet-Sets, Machinists' Chisels, Carpenters' Chisels, Saws, Drawing-Knives, Planes, Snips, Tongs, Pincers, Pliers, Nippers, Wire-Cutters, Meat-Triers, Meat-Stringers, Meat-Hooks, Hay-Hooks, Box-Hooks, Cotton-Hooks, Earth-Augers, Hoof-Parers, Wrenches, Awls, Hardies, Headers, Flatters, Swages, Cold-Cutters, Hot-Cutters, Block-Scrapers, Screw-Drivers, Star-Drills, Claw-Bars, Crate-Openers, Horse-shoers' Knives.
Claims use since May 26, 1913.

TRADE-MARKS

REGISTERED JUNE 24, 1913.

92,154. MOUTH-WASH, TOOTH-CREAM, TOOTH-PASTE, TOOTH-POWDER, AND TOOTH-SOAP. AKTIEBOLAGET GRUMME & SON, Stockholm, Sweden.
Filed February 14, 1913. Serial No. 68,541. PUBLISHED APRIL 22, 1913.

92,155. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed April 9, 1912. Serial No. 62,788. PUBLISHED APRIL 22, 1913.

92,156. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed June 29, 1912. Serial No. 64,470. PUBLISHED APRIL 22, 1913.

92,157. TOILET-PAPER. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed August 13, 1912. Serial No. 65,233. PUBLISHED APRIL 22, 1913.

92,158. POLISH FOR FURNITURE, HARDWOOD FLOORS, AND OTHER WOODEN SURFACES. THE ALLEN-WILLIAMS COMPANY, Pittsburgh, Pa., and Wheeling, W. Va.
Filed March 6, 1913. Serial No. 68,860. PUBLISHED APRIL 22, 1913.

92,159. CERTAIN CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. GEORGE U. S. ALLGOWER, New York, N. Y.
Filed October 11, 1912. Serial No. 66,247. PUBLISHED APRIL 22, 1913.

92,160. FERTILIZERS. AMERICAN AGRICULTURAL CHEMICAL COMPANY, New York, N. Y.
Filed March 17, 1913. Serial No. 69,074. PUBLISHED APRIL 15, 1913.

92,161. MAGAZINE. THE AMERICAN HUMANE ASSOCIATION, Albany, N. Y.
Filed January 20, 1913. Serial No. 68,004. PUBLISHED APRIL 15, 1913.

92,162. AUTOMOBILES. AMERICAN MOTOR CAR CO., Indianapolis, Ind., assignor to American Motors Company, Indianapolis, Ind., a Corporation of Indiana.
Filed December 18, 1905. Serial No. 15,487. PUBLISHED MARCH 11, 1913.

92,163. MACARONI. THE ATLANTIC MACARONI CO., Long Island City, N. Y.
Filed January 23, 1912. Serial No. 60,987. PUBLISHED APRIL 22, 1913.

92,164. SPARK-PLUGS. AURORA & VULCAN CO., Bridgeport, Conn.
Filed March 26, 1913. Serial No. 69,346. PUBLISHED APRIL 22, 1913.

92,165. CERTAIN CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. J. C. AYER COMPANY, Lowell, Mass.
Filed July 16, 1912. Serial No. 64,750. PUBLISHED APRIL 22, 1913.

92,166. CERTAIN CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. J. C. AYER COMPANY, Lowell, Mass.
Filed July 16, 1912. Serial No. 64,752. PUBLISHED APRIL 22, 1913.

92,167. PREPARED ROOFINGS. BARRETT MANUFACTURING COMPANY, New York, N. Y.
Filed August 27, 1912. Serial No. 65,453. PUBLISHED APRIL 22, 1913.

92,168. TRUNKS, TRAVELING-BAGS, AND SUIT-CASES. P. BECKER & Co., Chicago, Ill.
Filed February 20, 1913. Serial No. 68,646. PUBLISHED APRIL 22, 1913.

92,169. HARNESS, BREAKING AND TRAINING HARNESS, AND SADDLES. THE JESSE BEERY COMPANY, Pleasant Hill, Ohio.
Filed October 12, 1912. Serial No. 66,271. PUBLISHED APRIL 15, 1913.

92,170. BREAD. LUDWIG OTTO BIANCHI, Jersey City, N. J.
Filed February 28, 1913. Serial No. 68,769. PUBLISHED APRIL 22, 1913.

92,171. TEMPORARY BINDERS AND LOOSE-LEAF FILES OR BINDERS. THE BIGELOW BINDER CO., New York, N. Y.
Filed March 3, 1913. Serial No. 68,811. PUBLISHED APRIL 22, 1913.

92,172. DIURETIC. ERNST BISCHOFF CO., INC., New York, N. Y.
Filed March 3, 1913. Serial No. 68,810. PUBLISHED APRIL 22, 1913.

92,173. LINIMENT OR LOTION FOR CERTAIN NAMED DISEASES. EDWIN P. BOND, New York, N. Y.
Filed January 25, 1913. Serial No. 68,111. PUBLISHED APRIL 22, 1913.

92,174. CERTAIN NAMED MEDICAL AND SURGICAL APPLIANCES. GEO. BORGFELDT & Co., New York, N. Y.
Filed January 18, 1913. Serial No. 67,973. PUBLISHED APRIL 22, 1913.

92,175. COMMON AND SAFETY PINS. GEO. BORGFELDT & Co., New York, N. Y.
Filed January 27, 1913. Serial No. 68,136. PUBLISHED APRIL 29, 1913.

92,176. SHIRT-WAISTS, HOUSE-DRESSES, AND APRONS. BOTTUM & TORRANCE CO., Bennington, Vt.
Filed March 17, 1913. Serial No. 69,075. PUBLISHED APRIL 15, 1913.

92,177. CERTAIN NAMED CONSTRUCTION MATERIALS. BRITISH CORK ASPHALT LTD., London, England.
Filed January 31, 1912. Serial No. 61,165. PUBLISHED APRIL 15, 1913.

92,178. FISH-LINES. LEONARD A. BURNHAM, Gloucester, Mass.
Filed October 4, 1912. Serial No. 66,139. PUBLISHED APRIL 15, 1913.

92,179. HOSIERY. BURNHAM-MUNGER-ROOT DRY GOODS CO., Kansas City, Mo.
Filed March 17, 1913. Serial No. 69,079. PUBLISHED APRIL 22, 1913.

92,180. PREPARED DOUGHNUT COMPOUND FLOUR. THE CABELL COMPANY, Baltimore, Md.
Filed November 15, 1912. Serial No. 66,904. PUBLISHED FEBRUARY 4, 1913.

92,181. QUARTERLY MAGAZINE. J. I. CASE PLOW WORKS, Racine, Wis.
Filed February 10, 1912. Serial No. 61,397. PUBLISHED APRIL 15, 1913.

92,182. NON-METALLIC AIR-INFLATED VEHICLE-TIRES MADE WHOLLY OR PARTLY OF RUBBER. CENTURY RUBBER TRADING COMPANY, Plainfield, N. J.
Filed March 10, 1911. Serial No. 54,977. PUBLISHED APRIL 22, 1913.

92,183. STOCK FEED. CHAMPION FEED MILLING COMPANY, Clinton, Iowa.
Filed August 17, 1910. Serial No. 51,430. PUBLISHED APRIL 22, 1913.

92,184. TEA. CHASE & SANBORN, Boston, Mass.
Filed March 7, 1912. Serial No. 62,017. PUBLISHED JULY 9, 1912.

92,185. ANILIN COLORS, AMMONIUM ICHTHYOSULFONATE, PHENOLPHTHALEIN, DIMETHYLAMINOANTIPYRIN, AND SACCHARIN. CHEMICAL WORKS FORMERLY SANDOZ, Basel, Switzerland.
Filed September 25, 1912. Serial No. 65,981. PUBLISHED APRIL 22, 1913.

92,186. PAPER BOXES. CHICAGO FOLDING BOX COMPANY, Chicago, Ill.
Filed February 13, 1913. Serial No. 68,531. PUBLISHED APRIL 15, 1913.

92,187. LEATHER BOOTS, SHOES, AND SLIPPERS. CHURCHILL & ALDEN CO., Brockton and Campello, Mass.
Filed April 6, 1912. Serial No. 62,698. PUBLISHED APRIL 29, 1913.

92,188. CANNED LOBSTER, KIPPERED HERRING, CRAB-MEAT, MACKEREL, SARDINES, CLAMS, AND BLUEBERRIES. COCHRAN, BURNS & FARNSWORTH CO., Boston, Mass.
Filed November 16, 1911. Serial No. 59,754. PUBLISHED FEBRUARY 6, 1912.

92,189. OVERALLS, WORK-COATS, AND WORK-SHIRTS. THE C. B. CONES & SON MANUFACTURING COMPANY, Indianapolis, Ind.
Filed March 23, 1912. Serial No. 62,385. PUBLISHED APRIL 15, 1913.

92,190. PAPER BAGS. CORNELL & WARD, New York, N. Y.
Filed January 25, 1913. Serial No. 68,112. PUBLISHED APRIL 22, 1913.

92,191. TABLE-SYRUP PREPARED FROM CORN-SYRUP AND MOLASSES. CORN PRODUCTS REFINING COMPANY, New York, N. Y.
Filed February 21, 1913. Serial No. 68,649. PUBLISHED APRIL 22, 1913.

92,192. COTTON-SEED COOKING-OIL. DALLAS OIL & REFINING CO., Dallas, Tex.
Filed January 28, 1910. Serial No. 47,441. PUBLISHED DECEMBER 24, 1912.

92,193. BICYCLE-TIRES, RUBBER TUBES FOR AUTOMOBILE AND MOTOR-CYCLE TIRES. THE DIAMOND RUBBER COMPANY, Akron, Ohio, assignor to The B. F. Goodrich Company, a Corporation of New York.
Filed June 13, 1912. Serial No. 64,155. PUBLISHED APRIL 22, 1913.

92,194. TIRES, TIRE-TUBES, AND RUBBER TUBES FOR CERTAIN VEHICLES. THE DIAMOND RUBBER COMPANY, Akron, Ohio, assignor to The B. F. Goodrich Company, a Corporation of New York.
Filed June 13, 1912. Serial No. 64,156. PUBLISHED APRIL 22, 1913.

92,195. CERTAIN CHEMICAL PREPARATIONS FOR LAUNDRY PURPOSES. DIRECT IMPORTING COMPANY, Boston, Mass.
Filed December 9, 1912. Serial No. 67,298. PUBLISHED APRIL 22, 1913.

92,196. HOSIERY. THE DORMER BROTHERS CO., Cincinnati, Ohio.
Filed July 8, 1912. Serial No. 64,609. PUBLISHED APRIL 29, 1913.

92,197. COTTON GOODS IN THE PIECE. DYKEMAN, NEILL & LOEB, Philadelphia, Pa.
Filed March 21, 1913. Serial No. 69,219. PUBLISHED APRIL 29, 1913.

92,198. REMEDY FOR DANDRUFF AND SCALP DISEASES. EATON & CO., Allen, Mich.
Filed January 13, 1913. Serial No. 67,871. PUBLISHED APRIL 22, 1913.

92,199. METALLIC RUBBER-COVERED FLOORINGS AND STAIR-TREADS. ELCHEMCO MANUFACTURING CO., Jersey City, N. J.
Filed October 21, 1911. Serial No. 59,278. PUBLISHED APRIL 22, 1913.

92,200. STEEL PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MFG. CO., Camden, N. J.
Filed March 17, 1913. Serial No. 69,090. PUBLISHED APRIL 22, 1913.

92,201. STEEL PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MFG. CO., Camden, N. J.
Filed March 17, 1913. Serial No. 69,091. PUBLISHED APRIL 22, 1913.

92,202. STEEL PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MFG. CO., Camden, N. J.
Filed March 17, 1913. Serial No. 69,092. PUBLISHED APRIL 22, 1913.

92,203. STEEL PENS OF ALL KINDS. THE ESTERBROOK STEEL PEN MFG. CO., Camden, N. J.
Filed March 17, 1913. Serial No. 69,093. PUBLISHED APRIL 22, 1913.

92,204. EXPANDED METAL. THE EXPANDED METAL COMPANY LIMITED, London, England.
Filed December 30, 1912. Serial No. 67,632. PUBLISHED FEBRUARY 18, 1913.

92,205. COTTON AND WORSTED PIECE GOODS. FARR ALPACA CO., Holyoke, Mass.
Filed March 27, 1913. Serial No. 69,377. PUBLISHED APRIL 29, 1913.

92,206. CHAIR-PADS. GEORGE E. FOX, Chicago, Ill.
Filed February 3, 1913. Serial No. 68,279. PUBLISHED APRIL 15, 1913.

92,207. MEN'S OUTER SUITS. RICHARD A. FRASER, Fremont, Ind.
Filed November 2, 1911. Serial No. 59,502. PUBLISHED APRIL 29, 1913.

92,208. COFFEE. FRITZE, LUNDT & CO., SUCCS., Mayaguez and Ponce, Porto Rico.
Filed January 31, 1913. Serial No. 68,231. PUBLISHED APRIL 22, 1913.

92,209. BAKERS' OVENS. GENERAL OVEN COMPANY, New York, N. Y.
Filed February 15, 1913. Serial No. 68,561. PUBLISHED APRIL 22, 1913.

92,210. CANNED SALMON. THE GEORGE & BARKER CO., Point Roberts, Wash.
Filed February 15, 1912. Serial No. 61,505. PUBLISHED JULY 30, 1912.

92,211. QUARTERLY PUBLICATION RELATING TO MARKET CONDITIONS FOR HARD WOODS. THE HARDWOOD MANUFACTURERS ASSOCIATION OF THE UNITED STATES, Cincinnati, Ohio.
Filed July 24, 1911. Serial No. 57,792. PUBLISHED APRIL 22, 1913.

92,212. KNITTING-YARNS, CROCHET COTTONS AND YARNS. MAX HAUSCHILD, Hohenfichte, Germany.
Filed December 6, 1912. Serial No. 67,264. PUBLISHED APRIL 29, 1913.

92,213. ELECTRIC LAMPS. THE HAWTHORNE MANUFACTURING COMPANY, INCORPORATED, Bridgeport, Conn.
Filed December 19, 1912. Serial No. 67,499. PUBLISHED APRIL 22, 1913.

92,214. PAINT AND VARNISH REMOVER. H C RED LABEL CHEMICAL COMPANY, Brookline, Mass.
Filed January 23, 1913. Serial No. 68,082. PUBLISHED APRIL 22, 1913.

92,215. GELATIN IN CERTAIN FORMS FOR USE AS FOODS. HEIDELBERGER GELATINE-FABRIK STOESS & CO., Ziegelhausen, near Heidelberg, Germany.
Filed September 14, 1912. Serial No. 65,744. PUBLISHED APRIL 22, 1913.

92,216. HOSIERY. GOTTFRIED HERMSDORF, Chemnitz, Germany.
Filed August 14, 1912. Serial No. 65,250. PUBLISHED APRIL 22, 1913.

92,217. ELECTRIC COFFEE-MILLS, MEAT-CHOPPERS, BONE-GRINDERS, AND TOOL-GRINDERS. THE HOBART ELECTRIC MFG. CO., Troy, Ohio.
Filed March 17, 1913. Serial No. 69,100. PUBLISHED APRIL 22, 1913.

92,218. CORRUGATED PAPER IN CERTAIN FORMS. DE WITT HOLT, Philadelphia, Pa.
Filed November 20, 1912. Serial No. 67,012. PUBLISHED APRIL 22, 1913.

92,219. OIL PREPARATION FOR SOFTENING LEATHER. E. F. HOUGHTON & COMPANY, Philadelphia, Pa.
Filed December 19, 1912. Serial No. 67,493. PUBLISHED APRIL 22, 1913.

92,220. COFFEE AND FLAVORING EXTRACTS FOR FOOD. HUMPHREYS, CANNON AND CO., Memphis, Tenn.
Filed January 2, 1913. Serial No. 67,671. PUBLISHED APRIL 22, 1913.

92,221. COTTON PIECE GOODS. A. G. HYDE & SONS, New York, N. Y.
Filed March 24, 1913. Serial No. 69,288. PUBLISHED APRIL 29, 1913.

92,222. ART-GLASS. INTERNATIONAL SHADE CO., Springfield, Mass.
Filed February 19, 1913. Serial No. 68,620. PUBLISHED APRIL 22, 1913.

92,223. HATS. VICTOR JAY & CO., London, England.
Filed September 7, 1912. Serial No. 65,618. PUBLISHED APRIL 22, 1913.

92,224. CANDY. JOHNSON BISCUIT COMPANY, Sioux City, Iowa.
Filed February 25, 1913. Serial No. 68,724. PUBLISHED APRIL 22, 1913.

92,225. CERTAIN ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES. JONES ELECTRIC STARTER CO., Chicago, Ill.
Filed December 19, 1912. Serial No. 67,500. PUBLISHED APRIL 22, 1913.

92,226. BICYCLES. F. M. JONES, Oakland, Cal.
Filed September 18, 1912. Serial No. 65,848. PUBLISHED APRIL 15, 1913.

92,227. MEDICINAL PREPARATION FOR THE TREATMENT OF EMACIATION. WYLIE B. JONES, Binghamton, N. Y.
Filed February 25, 1913. Serial No. 68,723. PUBLISHED APRIL 22, 1913.

92,228. SUBSTANCE FOR USE AS A DISINFECTANT, DEODORANT, GERMICIDE, AND INSECTICIDE. KAR BRAK CHEMICAL COMPANY, Wellsboro, Pa.
Filed December 20, 1911. Serial No. 60,377. PUBLISHED APRIL 15, 1913.

92,229. LEATHER SHOES. KAUT REITH SHOE CO., St. Louis, Mo.
Filed March 17, 1913. Serial No. 69,115. PUBLISHED APRIL 22, 1913.

92,230. HORSESHOE-CALKS. KEY-CALK HORSESHOE MANUFACTURING COMPANY, Green Bay, Wis.
Filed March 3, 1913. Serial No. 68,817. PUBLISHED APRIL 22, 1913.

92,231. OINTMENT. KLOCZEWSKI & COMPANY, Washington, D. C.
Filed February 25, 1913. Serial No. 68,725. PUBLISHED APRIL 22, 1913.

92,232. COUCHES AND BEDS. THE KODAY COMPANY, East Cleveland, Ohio.
Filed February 26, 1912. Serial No. 61,746. PUBLISHED APRIL 22, 1913.

92,233. CERTAIN NAMED FURNITURE AND UPHOLSTERY. KOKEN BARBERS' SUPPLY CO., St. Louis, Mo.
Filed February 6, 1913. Serial No. 68,351. PUBLISHED APRIL 15, 1913.

92,234. ADHESIVE SIZING, ADHESIVE GUMS, AND ADHESIVE PASTES. WALTER E. KRIEL, Baltimore, Md.
Filed December 27, 1912. Serial No. 67,603. PUBLISHED APRIL 15, 1913.

92,235. AUTOMOBILE SHOCK-ABSORBERS. ROBERT R. LACEY, Binghamton, N. Y.
Filed January 20, 1913. Serial No. 68,013. PUBLISHED APRIL 22, 1913.

92,236. REMEDY AGAINST CERTAIN NAMED DISEASES. MARY LANGMEYER, New York, N. Y.
Filed October 14, 1911. Serial No. 59,157. PUBLISHED APRIL 22, 1913.

92,237. CANNED OYSTERS, FRUITS, AND VEGETABLES. J. LANGRALL & BROTHER, INC., Wilmington, Del., and Baltimore, Md.
Filed July 10, 1908. Serial No. 36,043. PUBLISHED NOVEMBER 12, 1912.

92,238. CERTAIN NAMED CONSTRUCTION MATERIALS. WOLF LAUFER, Mickinia, near Cracow, Austria-Hungary.
Filed September 19, 1912. Serial No. 65,863. PUBLISHED APRIL 15, 1913.

92,239. SEDLITZ-POWDERS. THE LEMON SEIDLITZ COMPANY, Baltimore, Md.
Filed February 1, 1912. Serial No. 61,179. PUBLISHED APRIL 22, 1913.

92,240. WHEAT-FLOUR. LEXINGTON MILL & ELEVATOR CO., Lexington, Nebr.
Filed November 12, 1912. Serial No. 66,869. PUBLISHED APRIL 22, 1913.

92,241. PIANOS, PLAYER-PIANOS, AND ATTACHMENTS THERETO. HENRY & S. G. LINDEMAN, New York, N. Y.
Filed October 1, 1912. Serial No. 66,082. PUBLISHED FEBRUARY 18, 1913.

92,242. BODY-BRACES. ROBERT F. MACCLEMMY, New Haven, Conn.
Filed March 5, 1913. Serial No. 68,849. PUBLISHED APRIL 29, 1913.

92,243. BODY-BRACES. ROBERT F. MACCLEMMY, New Haven, Conn.
Filed March 7, 1913. Serial No. 68,901. PUBLISHED APRIL 29, 1913.

92,244. CANS. THE MANUFACTUBERS CAN CO., Newark, N. J.
Filed February 5, 1913. Serial No. 68,327. PUBLISHED APRIL 15, 1913.

92,245. LIME. MARBLEHEAD LIME COMPANY, Chicago, Ill.
Filed January 13, 1913. Serial No. 67,888. PUBLISHED APRIL 22, 1913.

92,246. LIME. MARBLEHEAD LIME COMPANY, Chicago, Ill.
Filed January 13, 1913. Serial No. 67,889. PUBLISHED APRIL 22, 1913.

92,247. LINIMENTS. BENJAMIN FLETCHER MAYHEW, Chilmark, Mass.
Filed December 6, 1912. Serial No. 67,262. PUBLISHED APRIL 22, 1913.

92,248. PERFORATED NOTE-SHEETS FOR AUTOMATIC MUSICAL INSTRUMENTS. MELVILLE CLARK PIANO COMPANY, Chicago, Ill.
Filed February 20, 1912. Serial No. 61,625. PUBLISHED APRIL 22, 1913.

92,249. MENSTRUAL PROTECTORS. EVELYN G. MCGINLEY, Roxbury, Mass.
Filed December 27, 1912. Serial No. 67,604. PUBLISHED APRIL 22, 1913.

92,250. CORSETS. E. C. MCWATTY COMPANY, INCORPORATED, New York, N. Y.
Filed March 19, 1913. Serial No. 69,184. PUBLISHED APRIL 15, 1913.

92,251. CORSETS. E. C. MCWATTY COMPANY, INCORPORATED, New York, N. Y.
Filed March 19, 1913. Serial No. 69,185. PUBLISHED APRIL 15, 1913.

92,252. CORSETS. H. C. McWATTY COMPANY, INCORPORATED, New York, N. Y.
Filed March 19, 1913. Serial No. 69,187. PUBLISHED APRIL 22, 1913.

92,253. BISCUIT. NATIONAL BISCUIT COMPANY, Jersey City, N. J., and New York, N. Y.
Filed December 20, 1911. Serial No. 60,380. PUBLISHED APRIL 23, 1912.

92,254. NEGLIGÉE, DRESS, AND PLAITED SHIRTS. NEW COLUMBIA SHIRT COMPANY, New York, N. Y.
Filed January 4, 1913. Serial No. 67,718. PUBLISHED APRIL 15, 1913.

92,255. CANNED FRUIT, CANNED VEGETABLES, CANNED OYSTERS, SPICES, PEPPER SAUCE, AND TABLE-SYRUP. J. H. NEWBAUER & Co., San Francisco, Cal.
Filed September 5, 1912. Serial No. 65,585. PUBLISHED APRIL 22, 1913.

92,256. EXPANDED-METAL LATH. NORTHWESTERN EXPANDED METAL Co., Chicago, Ill.
Filed September 27, 1912. Serial No. 66,007. PUBLISHED FEBRUARY 18, 1913.

92,257. PEROXID OF HYDROGEN. THE OAKLAND CHEMICAL Co., New York, N. Y.
Filed January 2, 1913. Serial No. 67,678. PUBLISHED APRIL 22, 1913.

92,258. CERTAIN NAMED CLOTHING FOR MEN, YOUTHS, BOYS, WOMEN, AND CHILDREN. PHILLIPS-HENDON Co., Birmingham, Ala.
Filed February 6, 1913. Serial No. 68,366. PUBLISHED APRIL 29, 1913.

92,259. LEATHER MATCH-HOLDERS. LOUIS M. PICK, New York, N. Y.
Filed January 28, 1913. Serial No. 68,168. PUBLISHED APRIL 15, 1913.

92,260. CERTAIN RECEPTACLES, BOOK-COVER PROTECTORS, PIN-TRAYS, AND PEN-TRAYS. CHARLES PROSSCHER, New York, N. Y.
Filed November 15, 1912. Serial No. 66,911. PUBLISHED APRIL 15, 1913.

92,261. BATHING-SHOES. S. RAUH & COMPANY, New York, N. Y.
Filed February 28, 1913. Serial No. 68,788. PUBLISHED APRIL 15, 1913.

92,262. TEA. THE RELIANCE TRADING Co., New York, N. Y.
Filed January 18, 1913. Serial No. 67,999. PUBLISHED APRIL 22, 1913.

92,263. FLAKED CODFISH. ROBINSON FISHERIES Co., Anacortes, Wash.
Filed February 28, 1913. Serial No. 68,789. PUBLISHED APRIL 22, 1913.

92,264. KERCHIEFS AND HANDKERCHIEFS. J. ROBINSON & COMPANY, New York, N. Y.
Filed March 29, 1913. Serial No. 69,433. PUBLISHED APRIL 29, 1913.

92,265. SWEET CHOCOLATE. RUNKEL BROTHERS, INC., New York, N. Y.
Filed February 10, 1913. Serial No. 68,446. PUBLISHED APRIL 22, 1913.

92,266. BOWLING-BALLS. SAGAMORE RUBBER MANUFACTURING COMPANY, Saugus, Mass.
Filed October 8, 1912. Serial No. 66,200. PUBLISHED APRIL 15, 1913.

92,267. RIFLES. ADOLPH SAURER, Arbon, Switzerland.
Filed February 19, 1913. Serial No. 68,624. PUBLISHED APRIL 15, 1913.

92,268. CANDY. SCHAEFFLER & MERLE, New York, N. Y.
Filed February 27, 1913. Serial No. 68,765. PUBLISHED APRIL 22, 1913.

92,269. TOOTH-PASTE AND MOUTH-WASH. JOHN H. SCHELL, Brooklyn, N. Y.
Filed February 5, 1913. Serial No. 68,384. PUBLISHED APRIL 22, 1913.

92,270. ELECTRIC HORNS FOR AUTOMOBILES AND OTHER VEHICLES. SEARS, ROEBUCK AND Co., Chicago, Ill.
Filed March 17, 1913. Serial No. 69,123. PUBLISHED APRIL 22, 1913.

92,271. SHEET-METAL STOVEPIPES, ELBOWS, FURNACE-PIPES, HEATING-PIPES, AND FITTINGS THEREFOR. SHEET METAL SPECIALTY Co., Pittsburgh, Pa.
Filed January 4, 1913. Serial No. 67,731. PUBLISHED APRIL 22, 1913.

92,272. STRAIGHT RYE WHISKY. THE SHERWOOD DISTILLING Co., Baltimore, Md.
Filed January 25, 1913. Serial No. 68,126. PUBLISHED APRIL 22, 1913.

92,273. STRAIGHT RYE WHISKY. THE SHERWOOD DISTILLING Co., Baltimore, Md.
Filed January 29, 1913. Serial No. 68,191. PUBLISHED APRIL 22, 1913.

92,274. MEN'S LEATHER SHOES. SMITH & HERRICK Co., Albany, N. Y.
Filed March 20, 1913. Serial No. 69,213. PUBLISHED APRIL 29, 1913.

92,275. CIGARETTE-PAPERS. SOCIÉTÉ ANONYME DES ANCIENS ETABLISSEMENTS BRAUNSTEIN FRÈRES, Paris, France.
Filed October 2, 1912. Serial No. 66,096. PUBLISHED APRIL 15, 1913.

92,276. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES. SOCIÉTÉ ANONYME DES CELLULOSES PLANCHON, Lyon, France.
Filed February 7, 1912. Serial No. 61,330. PUBLISHED APRIL 22, 1913.

92,277. EMBLEM-PINS AND DISPLAY-EMBLEMS NOT MADE OF PRECIOUS METAL. THE SOCIETY FOR THE PREVENTION OF USELESS GIVING, New York, N. Y.
Filed December 6, 1912. Serial No. 67,268. PUBLISHED APRIL 29, 1913.

92,278. PORTLAND CEMENT. SOUTHWESTERN STATES PORTLAND CEMENT COMPANY, Dallas, Tex.
Filed October 5, 1912. Serial No. 66,159. PUBLISHED APRIL 15, 1913.

92,279. CERTAIN NAMED SPORTING GOODS. A. G. SPALDING & BROS., Jersey City, N. J., and New York, N. Y.
Filed November 16, 1912. Serial No. 66,944. PUBLISHED APRIL 15, 1913.

92,280. REMEDY FOR CATARRH. DANIEL S. SPICHER, Hillsdale, Pa.
Filed March 6, 1913. Serial No. 68,875. PUBLISHED APRIL 22, 1913.

92,281. BISCUITS FOR DOGS, CATS, POULTRY AND OTHER ANIMALS. SPRATT'S PATENT, LIMITED, London, England.
Filed December 19, 1910. Serial No. 53,355. PUBLISHED MARCH 19, 1912.

92,282. FRUIT-TREES, FRUIT-PLANTS, AND HARDY ORNAMENTALS. STARK BRO'S NURSERIES & ORCHARDS Co., Louisiana, Mo.
Filed January 9, 1913. Serial No. 67,802. PUBLISHED APRIL 22, 1913.

92,283. CIGARETTES. STEPHANO BROTHERS, INCORPORATED, Richmond, Va., and Philadelphia, Pa.
Filed March 27, 1913. Serial No. 69,381. PUBLISHED APRIL 22, 1913.

92,284. RAZOR-HONES. BRAINARD W. STEVENS, San Francisco, Cal.
Filed February 23, 1912. Serial No. 61,682. PUBLISHED APRIL 22, 1913.

92,285. CHEWING-GUM. TEXAS GUM COMPANY, Temple, Tex.
Filed September 7, 1912. Serial No. 65,621. PUBLISHED JANUARY 21, 1913.

92,286. ALLOYS OR COMPOSITIONS CONTAINING TITANIUM OR ITS COMPOUNDS. THE TITANIUM ALLOY MANUFACTURING COMPANY, New York, N. Y.
Filed March 6, 1913. Serial No. 68,876. PUBLISHED APRIL 22, 1913.

92,287. AUTOMOBILES AND WHEELS, RUNNING-GEAR, FRAMES, AND BODIES THEREFOR. THE TOLEDO CARRIAGE WOODWORK Co., Toledo, Ohio.
Filed February 3, 1913. Serial No. 68,297. PUBLISHED APRIL 15, 1913.

92,288. HOSIERY AND CERTAIN NAMED KNITTED UNDERWEAR. E. M. TOWNSEND & Co., New York, N. Y.
Filed February 26, 1913. Serial No. 68,755. PUBLISHED APRIL 29, 1913.

92,289. FABRIC BELTING. TRANSPORTATION UTILITIES COMPANY, New York, N. Y.
Filed March 1, 1913. Serial No. 68,807. PUBLISHED APRIL 22, 1913.

92,290. MILK-FOOD CARAMELS. UNGEMACH A. G. ELS. CONSERVEN-FABRIK & IMPORT-GESELLSCHAFT, Strassburg, Germany.
Filed November 16, 1912. Serial No. 66,935. PUBLISHED APRIL 22, 1913.

92,291. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,452. PUBLISHED APRIL 22, 1913.

92,292. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,464. PUBLISHED APRIL 22, 1913.

92,293. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,471. PUBLISHED APRIL 22, 1913.

92,294. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,473. PUBLISHED APRIL 22, 1913.

92,295. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,474. PUBLISHED APRIL 22, 1913.

92,296. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,475. PUBLISHED APRIL 22, 1913.

92,297. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,476. PUBLISHED APRIL 22, 1913.

92,298. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,477. PUBLISHED APRIL 22, 1913.

92,299. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,478. PUBLISHED APRIL 22, 1913.

92,300. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,479. PUBLISHED APRIL 22, 1913.

92,301. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,480. PUBLISHED APRIL 22, 1913.

92,302. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,481. PUBLISHED APRIL 22, 1913.

92,303. PULVERIZED GRAPHITE. THE UNITED STATES GRAPHITE COMPANY, Saginaw, Mich.
Filed February 10, 1913. Serial No. 68,488. PUBLISHED APRIL 22, 1913.

92,304. CERTAIN CONSTRUCTION MATERIALS. WARREN CHEMICAL & MANUFACTURING COMPANY, New York, N. Y.
Filed March 17, 1913. Serial No. 69,143. PUBLISHED APRIL 22, 1913.

92,305. CERTAIN NAMED CONSTRUCTION MATERIALS. WHEELING CORRUGATING COMPANY, Wheeling, W. Va.
Filed January 13, 1913. Serial No. 67,910. PUBLISHED APRIL 1, 1913.

92,306. OINTMENTS AND SALVES. FREDERICK FULLER WYATT, Parsons, Kans.
Filed March 7, 1913. Serial No. 68,909. PUBLISHED APRIL 22, 1913.

92,307. MAGAZINE PUBLISHED ON INDEFINITE FREQUENT DATES. JUD YOHO, Seattle, Wash.
Filed February 10, 1913. Serial No. 68,491. PUBLISHED APRIL 15, 1913.

LABELS

REGISTERED JUNE 24, 1913.

17,081.—*Title:* "NEW LIFE." (For Beer.) GOENNER & Co., Johnstown, Pa. Filed November 22, 1912.

17,082.—*Title:* "CLEANSER." (For a Preparation to Keep the Scalp Healthy.) GARRETTA HONEYMAN, Plainfield, N. J. Filed June 6, 1913.

17,083.—*Title:* "BISMARCK BEER." (For Beer.) INTERBORO BREWING COMPANY, INC., New York, N. Y. Filed May 22, 1913.

17,084.—*Title:* "KLOMA." (For a Hair-Tonic and Scalp-Renovator.) THE KLOMA COMPANY, Redondo Beach, Cal. Filed May 7, 1913.

17,085.—*Title:* "MATTONI WATER." (For a Mineral Water.) HEINRICH MATTONI, A. G., Carlsbad, Austria-Hungary. Filed May 27, 1913.

17,086.—*Title:* "MAYFLOWER." (For Coffee.) HENRY MAY & Co. LTD., Honolulu, Territory of Hawaii. Filed May 28, 1913.

17,087.—*Title:* "SAN-TANA." (For Cigars.) THE O'FLAHERTY TOBACCO CO., Kansas City, Mo. Filed May 22, 1913.

17,088.—*Title:* "KWALITY KAKES." (For Cakes.) O. C. ORR BAKING COMPANY, New Castle, Pa. Filed May 1, 1913.

17,089.—*Title:* "KREAM-FLAKE." (For Bread.) O. C. ORR BAKING COMPANY, New Castle, Pa. Filed May 1, 1913.

17,090.—*Title:* "ENSIGN." (For Raisins.) ROSENBERG BROS. & Co., San Francisco, Cal. Filed May 22, 1913.

17,091.—*Title:* "EDGAR THOMSON WHISKEY." (For Whisky.) HENRY SHERMER, Braddock, Pa. Filed January 23, 1913.

17,092.—*Title:* "RED RACER AEROPLANE." (For Toy Aeroplanes.) STRAUSS MANUFACTURING COMPANY, New York, N. Y. Filed June 3, 1913.

17,093.—*Title:* "ORCHARD BRAND." (For Fungicides and Insecticides.) THOMSEN CHEMICAL CO., South Baltimore, Md. Filed May 31, 1913.

17,094.—*Title:* "VAN CAMP'S CHICKEN SOUP." (For Soup.) THE VAN CAMP PACKING COMPANY, Indianapolis, Ind. Filed June 6, 1913.

PRINTS

REGISTERED JUNE 24, 1913.

3,306.—*Title:* "BROOK HILL." (For Whisky.) THE AMERICAN ART WORKS, Coshocton, Ohio. Filed May 24, 1913.

3,307.—*Title:* "MOTHER'S FAVORITE." (For Flour.) CHAS. P. MATTHEWS & SONS, INC., Scranton, Pa. Filed May 20, 1913.

3,308.—*Title:* "HICKSITE - FINISHED. INSURED-BRASS." (For Brass Beds.) PITTSBURGH-HICKSON COMPANY, East Butler, Pa. Filed June 10, 1913.

3,309.—*Title:* "NEWTON COAL." (For Coal.) S. H. ROBISON Co., Philadelphia, Pa. Filed May 6, 1913.

3,310.—*Title:* "CALIFORNIA BLAIR." (For an Alcoholic Beverage.) ROSENBLATT Co., San Francisco, Cal. Filed April 24, 1913.

3,311.—*Title:* "SWIFT'S PREMIUM HAMS AND BACON." (For Hams and Bacon.) SWIFT AND COMPANY, Chicago, Ill. Filed June 2, 1913.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE HENRICH.

Decided June 12, 1913.

1. APPLICATION—PROSECUTION—ABANDONMENT.

Following a rejection the applicant filed a substitute specification, which the Examiner held could not be entered and notified applicant that proper response to the prior letter was awaited; but no further action was taken by the applicant until more than a year after the rejection. *Held* that as applicant was notified by the Examiner that the case awaited proper response to the first Office letter the application is abandoned unless the delay in the prosecution was unavoidable.

2. SAME—SAME—SAME.

Where the record shows that the attorneys have an elaborate system for keeping track of pending applications and employ reasonable checks for the purpose of preventing through oversight the time for action expiring without such action being taken and that through the failure of a clerk to make a proper entry on such records action was not taken until after the year allowed by law had expired, *Held* that the prosecution of the application was unavoidable within the meaning of section 4894, Revised Statutes.

ON PETITION.

MACHINE FOR ROLLING FINGER-RINGS.

Messrs. Goepel & Goepel for the applicant.

MOORE, *Commissioner:*

This is a petition that the above-entitled application be held not abandoned.

The record shows that following the Examiner's action of September 26, 1911, applicant on March 7, 1912, filed a substitute specification and set of claims. This substitute specification the Primary Examiner in an action dated May 13, 1912, refused to enter on the ground that but few objections were made to the original specification and a new specification was uncalled for and cited in support of his action the decision in *ex parte Orewiler*, (170 O. G., 481.) The Examiner concluded this letter with the statement—

proper response to the Office letter of September 26, 1911, is awaited.

No further action was taken by the applicant until April 4, 1913, when he filed an amendment correcting the errors noted by the Examiner in the original specification, but making no change in the claims. This amendment the Examiner refused to enter, holding that the application became abandoned by failure to presecute the same within the year following the Office action of September 26, 1912.

The action of the Examiner in refusing to enter the substitute specification and claims filed by the applicant on March 7, 1912, was in accordance with the holding in the case of *ex parte Orewiler*, noted above. In view of the fact that the applicant took no further action in the case within the year following September 26, 1911, notwithstanding the notice given to him by the Examiner that the case was awaiting proper response to the Office letter of that date, it must be held that the application is abandoned unless applicant has shown that the delay in the prosecution was unavoidable within the meaning of section 4894, Revised Statutes.

Accompanying the petition is the affidavit of Carl P. Goepel, of the firm of applicant's attorneys, in which he states that their system of records of pending applications comprises a file-wrapper record and a book record; that the Office letters of September 26, 1911, and April 13, 1912, were entered on both the file-wrapper record and the book record by the clerk in the employ of deponent's firm; that it is the practice where there is any doubt that an action is a complete rejection and that further action must be taken by applicant in the prosecution of the case in less time than one year for the clerk to enter the word "Letter" opposite the date of the questionable action for the purpose of calling attention to the fact that the action is only a letter and that a previous rejection must be looked to as the date from which the case must be prosecuted; that in the present case the entry of the word "Letter" was not made by the clerk in the records, nor was any entry made which would indicate that the case would require action prior to April 13, 1913.

It appears from the showing that applicant's counsel has an elaborate system of records for keeping track of pending applications and has employed all reasonable checks that could be required for the purpose of preventing through oversight the time for action upon an application from expiring without giving the case attention. The circumstances in this case are believed to clearly show that the delay in the prosecution of the application was unavoidable within the meaning of the statute. The application is accordingly held not to be abandoned, and the Examiner is directed to enter the amendment to the specification filed April 4, 1913, and to enter and act upon the substitute set of claims filed June 9, 1913.

The petition is granted.

EX PARTE EHRLICH AND BERTHEIM.

Decided April 21, 1913.

1. APPLICATION—PROSECUTION—GROUND OF REJECTION SUFFICIENTLY STATED.

Where the Examiner required that certain claims be canceled on the ground that applicant had elected to prosecute a different invention and thereafter an amendment was filed canceling these claims and substituting a claim in place thereof and requesting reconsideration, *Held* that in view of the fact that the attorneys of record were familiar with the practice of the Patent Office and highly skilled in the art to which this application relates the contention that the Examiner did not comply with Rule 65 was without merit, especially as the Examiner was not requested to explain his position.

2. SAME—SAME—SUBSTITUTION OF CLAIM SUBSTANTIALLY SAME AS CLAIM REJECTED—FINAL ACTION SHOULD BE GIVEN.

Where in response to a requirement that certain claims be canceled as for an invention different from that elected applicant presented a claim which the Examiner held substantially the same as the claims canceled, *Held* that his action with respect to such action should have been made final and the application not held abandoned.

ON PETITION.

DIHYDROCHLORID DIAMINODIOXYARSENOBENZENE.

Messrs. Byrnes, Townsend & Brickenstein for the applicants.

TENNANT, *Assistant Commissioner:*

This is a petition from the action of the Examiner holding the above-entitled case to be abandoned for lack of proper prosecution.

The record shows that the application was filed on November 13, 1911, and contained a single claim. An amendment, however, accompanied the application, directing the insertion of two additional claims. In the first action upon the case the Examiner required the cancelation of these claims on the ground that they—

could not have been prosecuted with claim 1 if they had appeared in the original specification, they cannot now receive consideration and should therefore be canceled.

On December 21, 1912, one year later, an amendment was filed directing the cancelation of claims 2 and 3 and substituting a claim numbered 2 and merely requesting reconsideration. The Examiner held this action to be non-responsive and stated:

Former claims 2 and 3, inserted by preliminary amendment, were required to be canceled for the obvious reason that since they could not have been prosecuted along with claim 1 if they had occurred in the original, they had no standing whatever in the case. Applicant has canceled these two claims and at the same time reinserted one of them in a slightly modified form, without giving any reasons which might warrant him in so doing.

He therefore held the case to be abandoned.

It is contended in support of this petition that the Examiner did not comply with Rule 65 in pointing out the reasons for his rejection and that therefore the holding that the case was abandoned was improper. This contention is clearly without merit. As pointed out by the Examiner, the attorneys of record in this case are familiar with the practice of the Patent Office and are highly skilled in the art of chemistry. That there was no doubt in the minds of the attorneys in respect to the Examiner's action is clearly affirmed by the fact that in their amendment filed December 21, 1912, the Examiner was not requested to explain his position.

The Examiner states in his answer that the applicants in canceling the claims objected to merely replaced one of them by another claim, which means exactly the same thing and covers the same subject-matter. If this be true, the proper action for the Examiner to have taken would have been to require its cancelation, making such action final, instead of holding the case to be abandoned. The petition that the case be held not abandoned is granted. The Examiner is, however, authorized upon the entry of the claim to make his action final if in his opinion it is for the same invention as that covered by the claims presented November 13, 1911.

It is to be noted that the claim presented by amendment appears on its face to be broader than the statement of invention or the original claim and that if found to be allowable will require the support of a supplemental oath.

DECISIONS OF THE U. S. COURTS.

Supreme Court of the United States.

BAUER & CIE. AND THE BAUER CHEMICAL COMPANY *v.* O'DONNELL.

Decided May 26, 1913.

1. PATENTS—STATUTE—RIGHTS CONFERRED THEREBY.

"The right to make, use and sell an invented article is not derived from the patent law. This right existed before and without the passage of the law and was always the right of an inventor. The act secured to the inventor the *exclusive* right to make, use and vend the thing patented, and consequently to prevent others from exercising like privileges without the consent of the patentee. (*Bloomer* v. *McQuewan*, 14 How., 539, 549; *Continental Paper Bag Co.* v. *Eastern Paper Bag. Co.*, 210 U. S., 405, 425.)"

2. SAME—SAME—SAME—DEFINITION.

"The right to use is a comprehensive term and embraces within its meaning the right to put into service any given invention. And Congress did not stop with the express grant of the rights to make and to use. * * * To vend is also a term readily understood and of no doubtful import. Its use in the statute secured to the inventor the exclusive right to transfer the title for a consideration to others."

3. SAME—INFRINGEMENT—SELLING AT PRICE LESS THAN THAT FIXED BY OWNER OF PATENT—DOES NOT CONSTITUTE.

The owner of a patent sold an article covered thereby with a notice thereon that it was "licensed by us for sale and use at a price not less than one dollar ($1.00.) Any sale in violation of this condition, or use when so sold, will constitute an infringement of our Patent No. 601,995." A purchaser of such article sold it at less than the price specified. *Held* that such sale did not constitute an infringement of the patent. (*Henry* v. *Dick*, 224 U. S., 1, distinguished.)

Mr. E. J. Prindle for the appellant.

Mr. Frederick P. Fish and *Mr. T. W. Pelham* representing the Gillette Safety Razor Company, *Mr. Nathan Matthews*, representing the Waltham Watch Company, and *Mr. Horace Pettit*, representing the Victor Talking Machine Company, filed briefs as *amici curiæ*.

Mr. D. W. Baker and *Mr. F. J. Hogan* for the appellee.

Mr. Justice DAY delivered the opinion of the Court.

This case is on a certificate from the Court of Appeals of the District of Columbia. The facts stated in the certificate are:

Bauer & Cie., of Berlin, Germany, copartners, being the assignees of Letters Patent of the United States, dated April 5, 1898, No. 601,995, covering a certain water soluble albumenoid known as "Sanatogen" and the process of manufacturing the same, about July, 1907, entered into an agreement with F. W. Hehmeyer, doing business in the city of New York under the trade name of The Bauer Chemical Company, whereby Hehmeyer became and has since been the sole agent and licensee for the sale of said product in the United States, the agreement contemplating that Hehmeyer should have power to fix the price of sale to wholesalers or distributers and to retailers, and to the public. The agreement further contemplated that said product should be furnished Hehmeyer at manufacturing cost, the net profits obtained by him to be shared equally by the parties to the agreement. Since April, 1910, this product has been uniformly sold and supplied to the trade and to the public by the appellants and their licensees in sealed packages bearing the name "Sanatogen," the words "Patented in U. S. A., No. 601,995," and the following:

"Notice to the Retailer.

"This size package of Sanatogen is licensed by us for sale and use at a price not less than one dollar ($1.00.) Any sale in violation of this condition, or use when so sold, will constitute an infringement of our Patent No. 601,995, under which Sanatogen is manufactured, and all persons selling or using packages or contents will be liable to injunction and damages.

"A purchase is an acceptance of this condition. All rights revert to the undersigned in the event of violation.

"THE BAUER CHEMICAL CO."

The appellee is the proprietor of a retail drug-store at 904 F street, N. W., in this city. He purchased of The Bauer Chemical Company for his retail trade original packages of said Sanatogen bearing the aforesaid notice. These packages he sold at retail at less than one dollar and, persisting in such sales, appellants in March, 1911, severed relations with him. Thereupon appellee, without the license or consent of the appellants, purchased from jobbers within the District of Columbia, said jobbers having purchased from appellants, original packages of said product bearing the aforesaid notice, sold said packages at retail at less than the price fixed in said notice, and avers that he will continue such sales.

The question propounded is:

Did the acts of the appellee, in retailing at less than the price fixed in said notice, original packages of "Sanatogen" purchased of jobbers as aforesaid, constitute infringement of appellants' patent?

The protection given to inventors and authors in the United States originated in the Constitution, section 8 of Article I of which authorizes the Congress—

to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.

This protection, so far as inventors are concerned, has been conferred by an act of Congress passed April 10, 1790, and subsequent acts and amendments. The act of 1790 (1 Stat., 109) granted—

the sole and exclusive right and liberty of making, constructing, using and vending to others to be used, the said invention or discovery.

In 1793 (1 Stat., 318) the word "full" was substituted for the word "sole," and in 1836 (5 Stat., 117, sec. 5) the word "constructing" was omitted. This legislation culminated in section 4884 of the Revised Statutes, the part with which we are dealing being practically identical with the act of 1870 (16 Stat., 198, sec. 22). It provides that every patent shall contain—

a grant to the patentee, his heirs and assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the invention or discovery.

The right to make, use and sell an invented article is not derived from the patent law. This right existed before and without the passage of the law and was always the right of an inventor. The act secured to the inventor the *exclusive* right to make, use and vend the thing patented, and consequently to prevent others from exercising like privileges without the consent of the patentee. (*Bloomer* v. *McQuewan*, 14 How., 539, 549; *Continental Paper Bag Co.* v. *Eastern Paper Bag Co.*, 210 U. S., 405, 425.) It was passed for the purpose of encouraging useful invention and promoting new and useful improvements by the protection and stimulation thereby given to inventive genius, and was intended to secure to the public, after the lapse of the exclusive privileges granted, the benefit of such inventions and improvements. With these beneficent purposes in view the act of Congress should be fairly or even liberally construed; yet, while this principle is generally recognized, care should be taken not to extend by judicial construction the rights and privileges which it was the purpose of Congress to bestow.

In framing the act and defining the extent of the rights and privileges secured to a patentee Congress did not use technical or occult phrases, but in simple terms gave an inventor the exclusive right to make, use and vend his invention for a definite term of years. The right to make can scarcely be made plainer by definition, and embraces the construction of the thing invented. The right to use is a comprehensive term and embraces within its meaning the right to put into service any given invention. And Congress did not stop with the express grant of the rights to make and to use. Recognizing that many inventions would be valuable to the inventor because of sales of the patented machine or device to others, it granted also the exclusive right to vend the invention covered by the Letters Patent. To vend is also a term readily understood and of no doubtful import. Its use in the statute secured to the inventor the exclusive right to transfer the title for a consideration to others. In the exclusive rights to make, use and vend, fairly construed, with a view to making the purpose of Congress effectual, reside the extent of the patent monopoly under the statutes of the United States. (*Bloomer* v. *McQuewan*, *supra*, 549.) We need not now stop to consider the rights to sell and convey, and to license others to sell or use inventions, which rights have been the subject of consideration in the numerous reported cases to be found in the books. We are here concerned with the construction of the statute in the aspect and under the facts now presented.

The case presented pertains to goods purchased by jobbers within the District of Columbia and sold to the appellee at prices not stated, and resold by him at retail at less than the price of one dollar fixed in the notice. The question therefore now before this court for judicial determination is: May a patentee by notice limit the price at which future retail sales of the patented article may be made, such article being in the hands of a retailer by purchase from a jobber who has paid to the agent of the patentee the full price asked for the article sold?

The object of the notice is said to be to effectually maintain prices and to prevent ruinous competition by the cutting of prices in sales of the patented article. That such purpose could not be accomplished by agreements concerning articles not protected by the patent monopoly was settled by this Court in the case of *Dr. Miles Medical Co.* v. *Park & Sons Co.*, (220 U. S., 373,) in which it was held that an attempt to thus fix the price of an article of general use would be against public policy and void. It was doubtless within the power of Congress to confer such right of restriction upon a patentee. Has it done so? The question has not been determined in any previous case in this Court, so far as we are aware. It was dealt with under the copyright statute, however, in the case of *Bobbs-Merrill Co.* v. *Straus*, (210 U. S., 339.) In that case it was undertaken to limit the price of copyrighted books for sale at retail by a notice on each book fixing the price at one dollar and stating that no dealer was licensed to sell it for less and that a sale at a less price would be treated as an infringement of the copyright. It was there held that the statute, in securing to the holder of the copyright the sole right to vend copies of the book, conferred a privilege which, when the book was sold, was exercised by the holder, and that the right secured by the statute was thereby exhausted. The court also held that it was not the purpose of the law to grant the further right to qualify the title of future purchasers by means of the printed notice affixed to the book, and that to give such right would extend the statute beyond its fair meaning and secure privileges not intended to be covered by the act of Congress. In that case it was recognized that there are differences between the copyright statute and the patent statute, and the purpose to decide the question now before us was expressly disclaimed.

Section 4952, Revised Statutes, a part of the Copyright Act, secures to an author, inventor, designer or proprietor of books, maps, charts or dramatic or musical compositions the sole liberty of printing, reprinting, publishing, completing, copying, executing, finishing and vending them. While that statute differs from the patent statute in terms and in the subject-matter intended to be protected, it is apparent that in the respect involved in the present inquiry there is a strong similarity between and identity of purpose in the two statutes. In the case of patents the exclusive right to vend the invention or discovery is added to the like right to make and use the subject-matter of the grant, and in the case of copyrights the sole right of multiplying and reproducing books and other compositions is coupled with the similar right of "vending the same." So far as the use of the terms "vend" and "vending" is concerned, the protection intended to be secured is substantially identical. The sale of a patented article is not essentially different from the sale of a book. In each case to vend is to part with the thing for a consideration. It is insisted that the purpose to be subserved by notices such as are now under consideration—keeping up prices and preventing competition—is more essential to the protection of patented inventions than of copyrighted articles; and it is said that the copyrighted article may be and usually is sold for a lump consideration by the author or composer and that he has no interest in the subsequent sales of the work, while patented inventions require large outlays to create and maintain a market. To some extent this contention may be based upon fact, nevertheless it is well known that in many instances the compensation an author receives is the royalties upon sales of his book or a percentage of profits, which makes it desirable that he shall have the protection of devices intended to keep up the market and prevent the cutting of prices. But these considerations could have had little weight in framing the acts. In providing for grants of exclusive rights and privileges to inventors and authors we think Congress had no intention to use the term "vend" in one sense in the patent act and "vending" in another in the copyright law. Protection in the exclusive right to sell is aimed at in both instances, and the terms used in the statutes are to all intents the same.

It is apparent that the principal difference in the enactments lies in the presence of the word "use" in the patent statute and its absence in the copyright law. An inventor has not only the exclusive right to make and vend his invention or discovery, but he has the like right to use it, and when a case comes fairly within the grant of the right to use, that use should be protected by all means properly within the scope of the statute. In *Bement* v. *National Harrow Co.* (186 U. S., 70) the owner of a patent granted a license to the defendant to manufacture and sell harrows embodied in the invention covered by the patent. The license provided for the payment to the licensor by the licensee of a royalty of one dollar for each harrow or frame sold and stipulated that the licensee was not to sell to any person for a less price than that named, and that the license was subject to change from time to time. The case was one arising upon license agreements, originating in a State court, and did not involve the construction of the Patent Act in the circumstances now disclosed.

Chief reliance, however, of the plaintiff in this case is upon the recent decision of this Court in *Henry* v. *Dick Co.*, (224 U. S., 1.) An examination of the opinion in that case shows that the restriction was sustained because of the right to use the machine granted in the patent statute, distinguishing in that respect the Patent from the Copyright Act. In that case a patented mimeograph had been sold which bore an inscription in the form of a notice that the machine was sold with the license restriction that it might only be used with stencil, ink and other supplies made by the A. B. Dick Company, the owners of the patent. The alleged infringer sold to the purchaser of the mimeograph a can of ink suitable for use with the machine with full knowledge of the restriction and with the expectation that the ink sold would be used in connection with the machine. It is expressly stated in the opinion that the machine was sold at cost or less and that the patentee depended upon the profit realized from the sale of the non-patented articles to be used with the machine for the profit which he expected to realize from his invention, (224 U. S., 26.) After commenting upon the copyright statutes and the resemblance between the author's right to vend copies of his work and the patentee's right to vend the patented thing, it was said, (p. 46:)

> To the inventor, by section 4884, Revised Statutes, there is granted "the exclusive right to make, *use* and vend the invention or discovery." This grant, as defined in *Bloomer* v. *McQuewan*, (14 How., 539, 549,) "consists altogether in the right to exclude every one from making, *using* or vending the thing patented." Thus, there are several substantive rights, and each is the subject of subdivision, so that one person may be permitted to make, but neither to sell nor use the patented thing. To another may be conveyed the right to sell, but within a limited area, or for a particular use, while to another the patentee may grant only the right to make and use, or to use only for specific purposes. (*Adams* v. *Burke*, 17 Wall., 453; *Mitchell* v. *Hawley*, 16 Wall., 544; *Rubber Co.* v. *Goodyear*, 9 Wall., 788, 799.) (Italics in the original opinion.)

That case was distinguished from *Bobbs-Merrill* v. *Straus*, *supra*, construing the Copyright Act, because of the difference in the terms of the copyright and patent statutes, the Patent Act conferring not only the right to make and sell, but the exclusive right to *use* the subject-matter of the patent. It was under the right to use that the license notice in question was sustained, and it is obvious that the notice in that case dealt with the use of the machine and limited it to use only with the paper, ink and supplies of the manufacture of the patentee. While the title was transferred, it was a qualified title, giving a right to use the machine only with certain specified supplies. It was said in the Dick case that—

> there is no collision whatever between the decision in the Bobbs-Merrill case and the present opinion. Each rests upon a construction of the applicable statute, and the special facts of the cases.

It is contended in argument that the notice in this case deals with the use of the invention, because the notice states that the package is licensed "for sale and use at a price not less than one dollar," that a purchase is an acceptance of the conditions, and that all rights revert to the patentee in event of violation of the restriction. But in view of the facts certified in this case, as to what took place concerning the article in question, it is a perversion of terms to call the transaction in any sense a license to use the invention. The jobber from whom the appellee purchased had previously bought, at a price which must be deemed to have been satisfactory, the packages of Sanatogen afterward sold to the appellee. The patentee had no interest in the proceeds of the subsequent sales, no right to any royalty thereon or to participation in the profits thereof. The packages were sold with as full and complete title as any article could have when sold in the open market, excepting only the attempt to limit the sale or use when sold for not less than one dollar. In other words, the title transferred was full and complete with an attempt to reserve the right to fix the price at which subsequent sales could be made. There is no showing of a qualified sale for less than value for limited use with other articles only, as was shown in the Dick case. There was no transfer of a limited right to use this invention, and to call the sale a license to use is a mere play upon words.

The real question is whether in the exclusive right secured by statute to "vend" a patented article there is included the right, by notice, to dictate the price at which subsequent sales of the article may be made. The patentee relies solely upon the notice quoted to control future prices in the resale by a purchaser of an article said to be of great utility and highly desirable for general use. The appellee and the jobbers from whom he purchased were neither the agents nor the licensees of the patentee. They had the title to, and the right to sell, the article purchased without accounting for the proceeds to the patentee and without making any further payment than had already been made in the purchase from the agent of the patentee. Upon such facts as are now presented we think the right to *vend* secured in the patent statute is not distinguishable from the right of *vending* given in the Copyright Act. In both instances it was the intention of Congress to secure an exclusive right to sell, and there is no grant of a privilege to keep up prices and prevent competition by notices restricting the price at which the article may be resold. The right to vend conferred by the patent law has been exercised, and the added restriction is beyond the protection and purpose of the act. This being so, the case is brought within that line of cases in which this Court from the beginning has held that a patentee who has parted with a patented machine by passing title to a purchaser has placed the article beyond the limits of the monopoly secured by the Patent Act.

In *Adams* v. *Burke* (17 Wall., 453) Mr. Justice Miller, delivering the opinion of the Court, pertinently said, (p. 455:)

> The vast pecuniary results involved in such cases, as well as the public interest, admonish us to proceed with care, and to decide in each case no more than what is directly in issue. * * *
>
> The true ground on which these decisions rest is that the sale by a person who has the full right to make, sell, and use such a machine carries with it the right to the use of that machine to the full extent to which it can be used in point of time.
>
> The right to manufacture, the right to sell, and the right to use are each substantive rights, and may be granted or conferred separately by the patentee.
>
> But, in the essential nature of things, when the patentee, or the person having his rights, sells a machine or instrument whose sole value is in its use, he receives the consideration for its use and he parts with the right to restrict that use. The article, in the language of the court, passes without the limit of the monopoly. That is to say, the patentee or his assignee having in the act of sale received all the royalty or consideration which he claims for the use of his invention in that particular machine or instrument, it is open to the use of the purchaser without further restriction on account of the monopoly of the patentee.

(*Bloomer* v. *McQuewan*, *supra*; *Goodyear* v. *Beverly Rubber Co.*, 1 Cliff., 348, 354; 10 Fed. Cases, 638; *Chaffee* v. *Boston Belting Co.*, 22 *How.*, 217, 223; *Keeler* v. *Standard Folding Bed Co.*, 157 U. S., 659.)

Holding these views, the question propounded by the court of appeals will be answered in the negative, and it is so ordered.

Dissenting: Mr. Justice McKENNA, Mr. Justice HOLMES, Mr. Justice LURTON, and Mr. Justice VAN DEVANTER.

ADJUDICATED PATENTS.

(U. S. C. C. A.) The Stockheim patent, No. 378,379, for a filtering process for beer, claims 1, 2, and 4 *Held* valid and a verdict and judgment finding infringement sustained. *Doelger* v. *German-American Filter Co. of New York*, 204 Fed. Rep., 274.

(U. S. C. C. A.) The Madden patent, No. 570,224, for a machine for making secondary-battery grids, construed and *Held* not infringed. *Electric Storage Battery Co.* v. *Gould Storage Battery Co.*, 204 Fed. Rep., 280.

(U. S. C. C. A.) The Wilson patent, No. 585,944, for a memorandum-calendar, *Held* valid and infringed. *Poole Bros.* v. *Isaac H. Blanchard Co.*, 204 Fed. Rep., 285.

(U. S. C. C. A.) The McClellan patent, No. 603,406, for a bookbinding-machine, *Held* void because the machine disclosed is inoperable. *Manhattan Book Casing Mach. Co.* v. *E. C. Fuller Co.*, 204 Fed. Rep., 286.

(U. S. C. C. A.) The Sachs patent, No. 660,341, for a safety-fuse. *Held* valid and infringed. *E. H. Freeman Electric Co.* v. *Johns-Pratt Co.*, 204 Fed. Rep., 288.

(U. S. C. C. A.) The Lindquist patents, No. 744,773 and No. 764,608, each for an electromagnet, *Held* valid and infringed. *Sundh Electric Co.* v. *General Electric Co.*, 204 Fed. Rep., 277.

Changes in Classification.

(ORDER No. 2,057.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 12, 1913.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In Division VI, class 106, Plastic Compositions, establish the following subclass and definition:

7.5. **Tractive-surface type.**

7.5. TRACTIVE-SURFACE TYPE. Compositions to constitute a contacting surface, at least, of pulleys, drawing rolls, wheels, clutches, brakes, or the like.

Search classes—

106—PLASTIC COMPOSITIONS, subclass 28, Artificial rubber, for compositions alleged to be of general utility as substitutes for rubber.

64—JOURNAL BOXES, PULLEYS, AND SHAFTING, subclass 45, Pulleys, Non-metallic rim coverings, for composite rims, sometimes comprising plastic compositions.

152—RESILIENT TIRES AND WHEELS, especially subclass 12, Tires, Pneumatic, for composite tires, sometimes comprising plastic compositions.

In Division XV, class 25, Plastic Block and Earthenware Apparatus, establish the following subclass and definition:

Molds—
Centering—
131.6. Wheel-mounted.

131.6. MOLDS, CENTERING, WHEEL-MOUNTED. Centerings having supporting wheels or the like to permit an advance, in a collapsed condition, for further use, as in the lining of a tunnel.

The patents in the above subclass have been taken from subclasses 32, Pipe machines, *in situ*, and 131.5, Molds, Centering, in the same class.

ERRATUM.

In the GAZETTE of May 27, 1913, under Classification Order No. 2,052, on page 1026, at the top of the second column, in directing the establishment of certain subclasses in class 189, Metallic Building Structures, subclass 32.2, Poles and posts, Braced, Compound, should read—

Poles and posts—
Braced—
31.2. Compound.

EDWARD B. MOORE,
Commissioner.

Citation of Decisions.

UNITED STATES PATENT OFFICE,
Washington, D. C., June 17, 1913.

The citation of decisions of the Court of Appeals of the District of Columbia rendered between May 6, 1912, and February 3, 1913, published in the OFFICIAL GAZETTE and in volume 39, *Appeal Cases of the District of Columbia:*

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